A HISTORY OF PHILOSOPHY
WITHOUT ANY GAPS

PHILOSOPHY
IN THE ISLAMIC
WORLD

PETER ADAMSON

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A history of philosophy without any gaps, Volume 3

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For Ursula

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PREFACE

With any luck, you are not merely browsing this volume in a bookstore or online, but are a proud owner who has just lovingly taken it down from the special shelf you reserve for books likely to impress house guests. With even more luck, it resides there alongside the first two installments of *The History of Philosophy Without Any Gaps*. If so, you may already have noticed that it is somewhat fatter than the second volume—*Philosophy in the Hellenistic and Roman Worlds*—which was, in turn, already fatter than the initial offering, *Classical Philosophy*. Like a middle-aged parent whose work and family duties allow no time for regular exercise, the *History of Philosophy* has good excuses for its weight gain. In the second volume, we devoured a whole millennium of philosophy, stretching from contemporaries of Aristotle in the fourth century BC to the end of late antiquity with Boethius and Maximus the Confessor. In a further bid to satisfy your appetite for philosophy, this book will cover an even larger time-span, and a far larger geographical area to boot.

Like its predecessors, the volume you're about to read is aimed at a general audience. You need to be armed with nothing but interest in the topic. I've tried not to assume familiarity with the territory covered in the first two volumes, though this certainly wouldn't hurt. As ever, my approach is chronological, though certain themes act as leitmotifs for the story as a whole. (For a briefer survey which instead adopts a thematic structure, see my recently appeared *Very Brief Introduction to Islamic Philosophy*.[1]) Some of the themes are predictable: reactions to the Greek philosophical tradition; and the use of philosophy to defend and interpret Islam; proofs of God's existence; and the nature and fate of the human soul. Some, I think, may be less expected. Among recurrent philosophical themes, one of the more prominent is the critique of *taqlīd*, or blind acceptance of traditional teaching. I was so struck by the frequency with which this issue arose that, while revising the book, I decided to add further material on *taqlīd* in the Ottoman empire (Chapter 58).[2]

For many readers, the most unexpected feature of the book will probably be the attention I devote to non-Muslim thinkers in the Islamic world. Other introductory volumes have been devoted to either "Islamic philosophy" or

"Jewish (medieval) philosophy," and these may glance along the way at the faith tradition not in focus.[3] But as far as I know this is the only general introductory volume that offers detailed and dedicated coverage of philosophy in the Islamic world among all the Abrahamic faiths. Most of the material on Jewish philosophy will be found in the second section on Andalusia, though there are discussions of earlier Jewish thinkers in the first part too. This allows me to present medieval Jewish philosophy in its proper cultural and intellectual context. Of course there will be more to say about the history of Jewish philosophy in future volumes, with Renaissance Jews and figures like Spinoza and Mendelssohn still to come. But covering philosophy in the Islamic world "without any gaps" means examining one of the most important stretches in the history of Jewish philosophy. Less extensive but no less important to the volume is the discussion of Christian philosophy in the Islamic world, especially the so-called "Baghdad School" of Christian Aristotelians.

The book is based on the scripts for the *History of Philosophy* podcast,[4] though as with the earlier volumes I have revised these substantially and added some material, for instance the aforementioned consideration of *taqlīd* under the Ottomans. This version also has the advantage of giving references to the primary texts I am discussing, as well as additional notes and suggestions for further reading. I hope that this will inspire and assist you to read more widely about a topic that has become a dynamic and exciting field within the history of philosophy over the past couple of decades. With the increasing number of reliable translations, it is no longer necessary to know Arabic (or Hebrew, or Persian) to familiarize yourself with the amazing quantity and quality of philosophical literature in the Islamic world. Indeed, when I launched this series of podcasts and books, part of my aim was to build up an audience with curiosity about ancient philosophy, who I hoped might stick with me once I reached the less widely known territory covered in this book. If you are indeed coming to this after reading the first two books, then thank you for continuing the journey. If you are new to the series, then hopefully you'll agree that the book does stand on its own. Either way, I now invite you to embark on the third volume of the *History of Philosophy*, without any gaps.

ACKNOWLEDGEMENTS

DATES

All dates given here are AD. Dates in the Muslim calendar (AH) are approximately the dates given here minus 622, though this will not give you an exact figure because the Muslim calendar uses a lunar year and is thus a slightly different length.

For historical events, use has been made of G. Endress, *Der Islam in Daten* (Munich, 2006).

Abbreviations used: death date (d.); flourished (fl.).

Philosophers and Other Authors		Selected historical events	
Sergius of Resh'aynā	d. 536	Emigration of Muslims to Medina, which marks start of Islamic calendar	622
Jahm ibn Ṣafwān	d. 745/6	Death of the Prophet Muḥammad	632
Wāṣil ibn 'Aṭā'	d. 748		
Rābi'a al-'Adawiyya	d. ca. 790s	Muslim army defeats Byzantines at the Battle of Yarmūk	636
David al-Muqammiṣ	early 9th c.	Murder of 'Alī, cousin and son-in-law of the Prophet, seen as rightful leader by Shiite Muslims	661
al-Naẓẓām	d. 845/6	Beginning of Umayyad caliphate	661
Abū l-Hudhayl	d. 849	Beginning of 'Abbāsid caliphate	749
al-Kindī	d. after 870	Caliphate of al-Manṣūr	754–75
Ḥunayn ibn Isḥāq	d. 873	Caliphate of Hārūn al-Rashīd	786–809
Umm 'Alī of Balkh	d. second half 9th c.	Caliphate of al-Ma'mūn	813–33
Isḥāq ibn Ḥunayn	d. 910/911	Death of Aḥmad ibn Ḥanbal	855

al-Ḥallāj	d. 922	Sāmānid takeover of Khurāsān	900
Abū Bakr al-Rāzī	d. 925		
Abū Ḥātim al-Rāzī	d. 934		
Abū Zayd al-Balkhī	d. 934		
Abū al-Ḥasan al-Ashʿarī	d. 935/936		
Abū Bishr Mattā	d. 940	ʿAbd al-Raḥmān III declared caliph in Islamic Spain	929
Saadia Gaon	d. 942	Caliph al-Muʿtaṣim relocates capital from Baghdad to Samarra	836
Isaac Israeli	d. ca. 950		
al-Fārābī	d. 950/951	Būyids take power in Iraq	945
Brothers of Purity (Ikhwān al-Ṣafāʾ)	10th c.		
Abū Yaʿqūb al-Sijistānī	d. ca. 971	Establishment of Cairo as capital of the Fāṭimids	973
Yaḥya ibn ʿAdī	d. 974		
Abū Saʿīd al-Sīrafī	d. 979		
al-ʿĀmirī	d. 991	Incursion of Maḥmūd of Ghazna into north-west India; al-Bīrūnī writes about Indian culture	998–1030
al-Bāqillānī	d. 1013		
al-Kirmānī	d. after 1020	Last Umayyad caliph in Spain followed by political fragmentation	1031
ʿAbd al-Jabbār	d. 1024/5		
Miskawayh	d. 1030	Seljūqs take power in Baghdad	1055
Ibn Sīnā (Avicenna)	d. 1037		
Ibn al-Haytham	d. 1039		
Abū al-Faraj ibn al-Ṭayyib	d. 1043		
Abū Saʿīd Ibn Abī l-Khayr	d. 1048	End of Fāṭimid dynasty in Egypt	1076

Solomon Ibn Gabirol	d. 1057/8	Beginning of Almoravid rule in Spain	1090
al-Juwaynī	d. 1085		
Ibn Ḥazm	d. 1063		
Abū Ḥāmid al-Ghazālī	d. 1111		
Aḥmad al-Ghazālī	d. 1126		
'Ayn al-Quḍat al-Hamadhānī	d. 1131	The First Crusade culminates in a massacre at Jerusalem	1099
Moses Ibn Ezra	d. after 1135		
Ibn Tūmart	d. 1130	Disintegration of Seljūk state	1118
Ibn Bājja (Avempace)	d. 1139		
Judah Hallevi	d. 1141	Defeat of Almoravids by Almohads	1147
al-Shahrastānī	d. 1153		
Baḥya Ibn Paqūdā	d. ca. 1156		
Abū l-Barakāt al-Baghdādī	d. 1160s	Second Crusade ends in failure	1148
Abraham Ibn Ezra	d. 1167		
Abraham Ibn Daud	d. ca. 1180		
Ibn Ṭufayl	d. 1185	Saladin founds the Ayyūbid sultanate	1171
Moses Ibn Tibbon	fl. 1244–83		
Suhrawardī	d. 1191		
Ibn Rushd (Averroes)	d. 1198	Saladin smashes Crusader army at the Battle of Hattin	1187
Abraham ben David (Rabad)	d. 1198		
Moses Ibn Maymun (Maimonides)	d. 1204	Death of Saladin	1193
Fakhr al-Dīn al-Rāzī	d. 1210		

Afḍal al-Dīn al-Kāshānī (Bābā Afḍal)	d. 1213/14	Mongols attack Khurāsān	1220
ʿAbd al-Laṭīf al-Baghdādī	d. 1231	Death of Genghis Khan	1227
Isaac the Blind	d. ca. 1235	Mongols attack Anatolia	1242
Ibn ʿArabī	d. 1240		
Athīr al-Dīn al-Abharī	d. 1265	Mongols attack Anatolia	1242
Naḥmanides	d. 1270		
Jalāl al-Dīn al-Rūmī	d. 1273		
Ṣadr al-Dīn al-Qūnawī	d. 1274	Mongols take Baghdad under leadership of Hülegü	1258
Naṣīr al-Dīn al-Ṭūsī	d. 1274		
Najm al-Dīn al-Kātibī al-Qazwīnī	d. 1276		
Ibn Kammūna	d. 1284	Mamluks dislodge Crusaders from Palestine and Syria	1265–71
Bar Hebraeus	d. 1286		
Ibn al-Nafīs	d. 1288		
Shams al-Dīn Shahrazūrī	d. after 1288		
Isaac Albalag	fl. 1280s–1290s	Mamluks end Mongol advance in Syria	1303
Abraham Abulafia	d. ca. 1291		
Shem Tov Ibn Falaqera	d. ca. 1295		
Moses de Leon	d. 1305		
Solomon Ibn Adret	d. 1310		

Quṭb al-Dīn al-Shīrāzī	d. 1311	Death of Osman, founder of Ottoman dynasty	1326
ʿAbd Allāh al-Bayḍāwī	d. 1316		
ʿAllamā al-Ḥillī	d. 1325	Tughluq dynasty in Delhi	1351–1414
Ibn Taymiyya	d. 1328		
Levi Ben Gershom (Gersonides)	d. 1344	Ottomans victorious at Battle of Kosovo	1389
ʿAdud al-Dīn al-Ījī	d. 1355	Tamerlane (Tīmūr) invades northern India	1398
al-Taftazānī	d. 1390		
Ibn Khaldūn	d. 1406		
Ḥasdai Crescas	d. 1410/11	Tamerlane defeats Ottomans at Ankara	1402
Mullā Fanārī	d. 1431		
Joseph Albo	d. 1444	Death of Tamerlane	1405
Ḥōṭer ben Shelōmō	fl. 1430s		
ʿAlāʾ al-Dīn al-Qūshjī	d. 1474	Building of observatory at Samarqand	1425
ʿAlāʾ al-Dīn al-Ṭūsī	d. 1482	Constantinople falls to Ottomans	1453
Khwāja Zāda (Khojazāda)	d. 1488	Muslims and Jews expelled from Spain	1492
Muḥammad ibn Yūsuf al-Sanūsī	d. 1490		
Ṣadr al-Dīn Dashtakī	d. 1498	Savafids established in Azerbaijan and Iran	1501–24
Jalāl al-Dīn Dawānī	d. 1501		
Isaac Abravanel	d. 1508	Ottomans defeat Mamluks in Egypt	1517
Najm al-Dīn al-Nayrīzī	d. after 1526		
Ghiyāth al-Dīn Dashtakī	d. 1541	First siege of Vienna by Ottomans	1529
Ṭāşköprīzāde	d. 1561		
Muṣliḥ al-Dīn al-Lārī	d. 1572	Reign of Tahmāsp in Iran	1524–76

Name	Death	Event	Year
'Alī Çelebi Kinalizāde	d. 1572	Uniting of Muslim states in the Dekkan	1565
Meḥmed Bergevī	d. 1573		
Moses Almosnino	d. ca. 1580	Death of Suleyman the Magnificent	1566
Fathallāh Shīrāzī	d. 1589	Expansion of Safavids under Shah 'Abbās	1588–1629
Shaykh Bahā'ī	d. 1621		
Mīr Damād	d. 1631	Death of Meḥmed Kādīzāde, leader of a popular religious movement in the Ottoman empire	1635
Aḥmed Rūmī Āḥisārī	d. 1632	Second siege of Vienna	1683
Mullā Ṣadrā (Ṣadr al-Dīn al-Shīrāzī)	d. 1640	Death of Mughal emperor Aurangzīb	1707
Maḥmud Jawnpūrī	d. 1652	End of effective Safavid rule	1722
Kātib Çelebi	d. 1657	Invasion of India by Nādir Shāh	1738
Dārā Shikūh	d. 1659		
al-Ḥasan ibn Mas'ūd al-Yūsī	d. 1691	British take control of Calcutta	1757
Muhibballāh al-Bihārī	d. 1707	Napoleon invades Egypt	1798–1801
'Abd al-Ghanī al-Nābulusī	d. 1731	Russian–Iranian War	1804–13
Niẓām al-Dīn Sihālvī Farangī Maḥallī	d. 1748	Muḥammad 'Alī reigns in Egypt	1805–48
Shāh Walī Allāh	d. 1762	End of Mughal dynasty	1858
Muḥammad Ibn 'Abd al-Wahhāb	d. 1792	Founding of the Young Turks	1865
Aḥmad Aḥsā'ī	d. 1826	Written constitution as climax of *tanzimat* reforms	1876
Faḍl al-Ḥaqq Khayrābādī	d. 1861		

Sabzawārī	d. 1878	British invade Egypt	1882
Jamāl al-Dīn al-Afghānī	d. 1897	Death of Sayyid Aḥmad Khān, modernist founder of Aligarh University	1898
Sayyid Aḥmad Khān	d. 1898		
Muḥammad ʿAbdūh	d. 1905	Armenian genocide in Turkey	1915
Ahmed Hilmi	d. 1914		
Ziya Gökalp	d. 1924	Sykes–Picot Agreement formalizes post-Ottoman arrangements	1916
Abdullah Cevdet	d. 1932		
Fatma Aliye	d. 1936	Founding of Turkish Republic	1923
Muḥammad Iqbāl	d. 1938	End of Qajar rule in India	1925
İzmirli İsmail Hakkı	d. 1946		
Said Nursi	d. 1960	Death of Mustafa Kemal (Atatürk)	1938
Ṭabāṭabāʾī	d. 1981		
ʿĀʾisha ʿAbd al-Raḥmān (Bint al-Shāṭiʾ)	d. 1998	Egyptian revolution	1952
Mohammed Arkoun	d. 2010		
Seyyed Hossein Nasr	born 1933	Iranian revolution	1979
Fatema Mernissi	d. 2015		

Map 1. Expansion of the Islamic Caliphate

Map 2. The Ottoman, Safavid and Mughal Empires

PART I
THE FORMATIVE PERIOD

1

THE STRAIGHT PATH PHILOSOPHY AND ISLAM

Like a policeman following a silverware thief with a hole in his pocket, we have reached a fork in the road. At the end of the previous volume in this series, we reached the end of antiquity, and looked ahead to three traditions of the medieval age. First, there is Byzantine philosophy, which we left with Maximus Confessor. Greek-speakers in the Eastern empire did not get a memo from some headquarters, telling them that antiquity was over and that they had to stop philosophizing. To the contrary, scholars of the Byzantine empire simply carried on what had been business as usual in late antiquity. They commented on Aristotle. They applied the tools of Hellenic thought to expound Christian doctrine. And they copied out manuscripts in Greek, which is why so much ancient philosophy survives today in its original language. Meanwhile, in most of the former Western empire, Latin became the sole language of philosophy, and knowledge of Greek became rare. As a result, philosophers of late antiquity who wrote in Latin, such as Augustine, Martianus Capella, and Boethius, were indispensable sources in this part of the world. Most of Aristotle and nearly all of Plato were inaccessible in Latin for several centuries.

We will reach these Byzantine and Latin traditions in further installments of the series. But first we're going to venture down a third road, one that you need to travel from right to left: philosophy in Arabic. It unfolded in the lands dominated by a new faith that announced itself as the "straight path": Islam.[1] We will, of course, be talking about philosophers who were Muslims, and about the impact of Islam itself on philosophy. But exploring philosophy in the Islamic world also means looking at Christian and Jewish thinkers. Christians played a major role in the early development of philosophy in Arabic. They served as translators, and some of the leading early exegetes of Aristotle in Arabic were Christians. Meanwhile, Jewish philosophy between the ninth and thirteenth

centuries took place almost entirely within the territories dominated by Islam. Nowadays, scholarship on philosophy written in the Islamic world generally deals with these two faith traditions separately. But a more revealing approach is to look at the whole history of philosophy in the Islamic world in chronological order. This will allow us to situate Jewish philosophy in Islamic culture. You cannot, for instance, understand the thought of the great early Jewish philosopher Saadia Gaon without knowing something about early developments in Islamic theology. An even more prominent example is Maimonides. He was one of the two greatest exponents of philosophy in the Iberian peninsula, or "Andalusia," in the twelfth century; the other was a Muslim, Averroes.

Our story begins several centuries earlier. Of all the dates provided in the table at the beginning of this book, the one most worth committing to memory is AD 622. This is the year in which the Prophet Muḥammad led his followers away from the city of Mecca, to the definitively named Medina (*madīna* just means "city"). The Islamic calendar is dated beginning from this event. You might see years of that calendar labeled with "AH," which stands for the Latin phrase *anno hegirae,* that is, the year of the *hijra* ("emigration"). So if you take an AD year and subtract 622 you'll be in the general ballpark of the corresponding AH date, albeit not exactly right—because the Islamic calendar is lunar, so that one of its years doesn't have quite the same length as one year in a solar calendar. (Throughout this book I'll be using dates from the AD calendar, on the assumption that this is what would be of use to most readers.) The emigration to Medina was taken as the starting point for the calendar because it marked the beginning of a distinct Muslim society. From this beginning would grow a great empire. Within just a few generations, the religion of Islam spread with spectacular speed across not just the Arabian peninsula, but also to the West across northern Africa and ultimately into Iberia, and to the East through Iraq, and then further still into Persia and central Asia.

With Islam spread the Arabic language. The Koran is, of course, written in the language spoken by Muḥammad, and several verses call attention to this fact. God says to Muḥammad such things as "we have made it for you an Arabic Koran."[2] The very name of the Holy Book draws our attention to the importance of language in this new faith. "Koran" (*Qurʾān*, if you transliterate it properly) means "recitation," and the first word that the Prophet heard from the angel Gabriel, who delivered God's message to him, was the command *iqraʾ*, "recite!" When Christianity emerged in antiquity, it quickly became acceptable to read the Bible in languages other than the original—especially authoritative was the Greek Septuagint, whose authors were supposedly under divine inspiration as

they worked. Not so with the Koran, which gave Arabic the divine seal of approval when it was given to Muḥammad, the seal of the prophets. In much of the Islamic world, Arabic duly became and remained the primary language. Even in places that held on to their local tongue, like Persia, Arabic became an important and even dominant language for writing literature, including philosophy. This is why philosophers from Persia and central Asia—including no less a thinker than Avicenna—wrote in Arabic, which was not necessarily their native language.

Nor was the use of Arabic restricted to Muslims. The Christian exegetes of Aristotle wrote Arabic commentaries on Arabic translations of Aristotle's logical works and his *Physics*, and the two Jewish authors just mentioned, Saadia and Maimonides, also wrote in Arabic. On the other hand, it would be a mistake to equate philosophy in the Islamic world with philosophy in Arabic. That's largely true for the earlier period. But Maimonides wrote in Hebrew as well, and this became even more common among Jewish thinkers in the generations after him. A third important language for philosophy in the Islamic world was Persian. Users of this language already resisted the hegemony of Arabic as Islam spread into the Persian realms. As I say, even in these areas Arabic established itself as the main language for philosophy. But Avicenna did use Persian for one of his treatises; at about the same time the Ismāʿīlī author Nāṣir Khusraw also wrote in this language. Starting with al-Ṭūsī in the thirteenth century, Persian will become an increasingly common language for philosophical writings in the Iranian sphere.

What I've said so far explains why the title of this book is *Philosophy in the Islamic World*, rather than *Islamic Philosophy* or *Arabic Philosophy*. You'll see both of those phrases used, and I have been known to use them myself. But speaking of "Islamic philosophy" excludes the Christians and Jews who will be such an important part of our story; "Arabic philosophy" is closer to the mark, but wouldn't cover texts in other languages. (By the way, please don't confuse the words "Arabic" and "Arab": "Arabic" refers to a language, not the people among whom Islam first began. Actually very few of the philosophers we'll be looking at were Arabs, yet almost all of them wrote mostly or exclusively in Arabic.) Thus the title indicates the broad aims of the book, which covers philosophers from three religions, who wrote in several languages, and lived across a swathe of land from modern-day Spain to modern-day Afghanistan.

Like this geographical territory, the intellectual territory to be covered is vast and complex. Yet the most illuminating way to divide it chronologically is a simple division into two periods: before Avicenna and after Avicenna. His career

ends what I call the "formative period" of philosophy in the Islamic world.[3] During this formative period, the main concern of philosophers was the translation and interpretation of Greek philosophical texts, especially Aristotle. Figures like al-Kindī and al-Fārābī championed these texts and insisted that they contained truths of paramount importance for any reader—whether pagan, Christian, or Muslim. Yet these same thinkers pondered the question of how the Hellenic philosophical heritage could be reconciled with the teachings of Islam, and whether it might offer answers to questions being posed by contemporary Muslim theologians. This dynamic too went beyond the confines of the Islamic faith, as Jewish and Christian authors staged their own appropriation of Aristotle and Neoplatonism. Not unlike Philo of Alexandria and the Christian Fathers in the ancient world, they used philosophy to explain the descriptions of God in the Old Testament, or expound the doctrine of the Trinity.

Then Avicenna came along, and changed everything. He was a philosopher of considerable self-confidence, which is a polite way of saying that he was arrogant. But, to be honest, he merited his high opinion of himself. Drawing together themes from Aristotle, from Neoplatonism, and from Islamic theology, he forged something new. His self-consciously original works had something to contribute on nearly every major area of philosophy, from logic to physics to metaphysics. He also found time to become the single most influential medical author of any medieval tradition (a film released in 2013, *The Physician*, picks up on this part of his legacy by portraying him primarily as a doctor—and a rather saintly one, at that). After Avicenna, philosophy in the eastern heartlands of the Islamic empire was consumed with the task of responding to him, instead of Aristotle. The very language of philosophy became distinctively Avicennan, even in authors who opposed his ideas strenuously. His terminology and ideas were woven into the fabric of Islamic theology and into the mystical tradition of the Sufis. One of the most seminal figures of the post-Avicennan generations, Suhrawardī, founded yet another tradition within this tradition: "Illuminationism." It can best be understood as an intricate critique and reworking of Avicenna, much as Avicenna had offered a critique and reworking of Aristotle.

But in the eleventh century, news traveled slow, and texts often failed to travel at all. That is one reason we see a mostly autonomous tradition arising on the far western fringe of the Islamic empire, in Andalusia. If you take Jewish and Muslim philosophy together, as I am doing, then you see just how enormous were the contributions of philosophers living on the Iberian peninsula from the eleventh to the thirteenth century. This was the time and place not only of the

aforementioned philosophical giants, the Jew Maimonides and the Muslim Averroes, but also numerous other figures from both religions. Avicenna's works did reach and influence Andalusian philosophers, but much less so than philosophy in the East. In Andalusia, it was still possible for thinkers of both faiths to adopt broadly Aristotelian or Neoplatonic systems of thought—even to complain that this confounded Avicenna was ruining everything, and that right-minded philosophers should return to Aristotle. That pretty much sums up the attitude of Averroes, though his associate Ibn Ṭufayl had a far more positive attitude towards Avicenna. Meanwhile, the greatest mind in the history of philosophical Sufism was Ibn ʿArabī—and he too hailed from Andalusia.

To take account of all this, once we get past Avicenna I'm going to devote a series of chapters to Andalusian philosophy, before returning to the eastern tradition and following it all the way to the time we think of as "early modernity." Ultimately, we will see the Islamic world fracturing into three great empires: the Ottomans, the Safavids in Persia, and the Mughal empire in India. All three empires offered something to the history of philosophy, though I should warn you that when we reach that late period we will be entering territory that has barely been touched by modern scholarship. So that's a historical sketch of the journey ahead: a formative period of engagement with both Greek philosophy and Islamic theology; a decisive intervention by Avicenna, the greatest philosopher of the Islamic world; and then another forking path, leading on the one hand west, to Muslim Spain and the continued use of Hellenic materials, on the other hand east, with Avicenna having become the new king of the road.

As for the philosophical issues that will be occupying our attention along the way, some of them have to do with where we started: the philosophical milieu of late antiquity. Both Muslim and Jewish philosophers will have a great deal to say about whether or not the universe is eternal. Not only will they remind us of the late ancient dispute between John Philoponus and upholders of eternity like Aristotle and Proclus—they will actually be drawing directly on these very arguments, since Philoponus' anti-eternity polemic was available to read in Arabic. Appropriately enough, therefore, the eternity debate didn't really stop after late antiquity, but went on and on. An equally long-running issue was the problem of how to understand Aristotle's remarks on the human intellect in the third book of his work *On the Soul*. This will provide us with a particularly prominent illustration of the continuity of the Greek and Arabic traditions of commentary on Aristotle.

But of course, philosophy in the Islamic world wouldn't deserve a whole

book to itself if it offered nothing but rehashed debates and puzzles from the ancient world. In late antiquity, paganism and Christianity were powerful spurs to philosophical innovation. We'll now see that the same is true of Islam. To start thinking about why, we can do no better than to begin with the *shahāda*, or Muslim profession of faith: "There is no God but God, and Muḥammad is His prophet." In the first half of that sentence we have the core Muslim theological commitment to monotheism. *Tawḥīd,* the Arabic word for "oneness," is at the core of both the Islamic faith and of philosophy in the Islamic world. The Prophet Muḥammad clearly taught the centrality of *tawḥīd*, not only with his words but also with his actions—as when he entered the holy shrine of the Kaaba in his home city of Mecca, and emptied it of the pagan idols that stood there.[4] Monotheism gave Muslims something in common with members of other faiths, notably Christians and Jews, but also Zoroastrians, who were still numerous in the lands that fell under the sway of this new faith.

Yet God's oneness could also be the basis for interreligious dispute. From a Muslim point of view the Christians' admirable acceptance of *tawḥīd* was fatally undermined when they went on to insist that God is three, as well as one. Accordingly, we're going to see Muslim philosophers using the tools of their trade to attack the Trinitarian doctrine. Christians writing in Arabic responded to these attacks and also defended their own particular conception of the Trinity against the views of other Christians. It's not only the tradition of debate over the Trinity that continues from late antiquity, but also the emphasis on the oneness of God. When Greek sources came to be translated into Arabic, Muslim readers immediately detected resonances between the Muslim doctrine of *tawḥīd* and certain Hellenic ideas. In particular, it looked tempting to find agreement with Plotinus and other Neoplatonists, who likewise taught that the first cause of all things was a transcendent One.

More potentially problematic, for both interfaith agreement and the appropriation of the philosophical tradition, was the second half of the *shahāda*: "and Muḥammad is His prophet." Muslims recognized Jesus and the prophets of the Hebrew Bible as genuine messengers from God, while of course denying the Christian claim that Jesus was the Incarnation of God. But Christians and Jews were, naturally enough, not going to return the favor and admit that Muḥammad was the final prophet that God would send to mankind. The Koran itself identifies Christians and Jews, among other groups, as "peoples of the book"— communities favored by God with a revelation.[5] But the Koran was a book whose status as revelation was accepted by Muslims alone. As for philosophy, there soon arose the difficulty of how, and indeed whether, prophecy could be

explained within rational theories of knowledge. What was the mechanism by which Muḥammad and other prophets had come to possess a wisdom beyond other humans? Did this wisdom go beyond any understanding that can be achieved through human resources? How do prophecy, and knowledge more generally, serve to legitimize the political power wielded by leaders like Muḥammad? And, not to put too fine a point on it, but once God has sent numerous messengers with divinely revealed books to bring us the truth, do we really need Aristotle and Plotinus too?

Islam, in fact, gave rise to philosophical reflection in the absence of any explicit reference to Hellenic thought. We can see this by looking at the earliest representatives of the tradition known as ʿ*ilm al-kalām*. This phrase literally means "science of the word," and may allude to the fact that the theologians were trying to understand God's word.[6] But the phrase, usually shortened simply to *kalām*, is typically translated more loosely as "rational theology." *Kalām* was indisputably theological in character, consisting mostly of disputes over the correct understanding of Islamic revelation, albeit that these disputes often appealed to rational intuition and argument. For this reason *kalām* is often sharply contrasted to philosophy. Indeed, philosophers who wrote in Arabic themselves drew this contrast, with figures like al-Fārābī and Averroes comparing the dialectical debates of *kalām* unfavorably to the demonstrative knowledge offered by Aristotelian philosophy. Yet *kalām* is going to play an important part in our story. Not only because it exercised a huge influence on philosophers—among Jews as well as Muslims—but also because *kalām* was eventually fused together with philosophy to form a unified tradition. Especially important will be the way that theologians of the Ashʿarite school took over and criticized ideas from Avicenna. But well before that happened, there emerged another tradition of philosophically minded Muslim theologians. Collectively, they are known as the Muʿtazilites.

2

ALL FOR ONE THE MUʿTAZILITES

History teaches some lessons the hard way. For instance, the lesson that the strongest leaders often leave the most disruption and discord when they die. The Greeks learned this from the chaos that followed the death of Alexander the Great. The same was brought home to the Romans by the demise of Constantine, and a few centuries later early Islamic society faced a similar experience. In this case the question of political legitimacy was compounded by a problem of religious authority. When the Prophet Muḥammad died in the year 632, it was not entirely clear who should succeed him, nor was it even clear what principles of legitimacy might justify one candidate over another. Was it crucial that the next leader be from the family of the Prophet, or were personal qualities and suitability for the post decisive? On the religious front, who would guide the Muslim community now that Muḥammad was gone, and with him the direct link to divine revelation? The Koran by itself could not provide all the answers. Like any text, it stood in need of interpretation. But who should be recognized as an authoritative interpreter? And who could be trusted to extrapolate from the Koran to settle issues not addressed explicitly in the revelation itself?

These questions would dominate much of the history of Islam, including the fundamental division between Sunnis and Shiites. This split did not occur immediately, but its origins can be traced back to events immediately following Muḥammad's death. The Prophet's cousin, and husband to his daughter Fāṭima, was ʿAlī. Shiite Muslims believe that rightful leadership of the Muslim community is inherited through a familial line, beginning with ʿAlī. In fact, the word "Shiite" comes from the phrase *shīʿat ʿAlī*, meaning "the party of ʿAlī." ʿAlī did succeed to the caliphate eventually, but only after being passed over for three other caliphs, Abū Bakr, ʿUmar, and ʿUthmān. These four are known as the *rashidūn* or "rightly guided" caliphs, and they played an enormous role in shaping Islamic society. During their reigns, the Muslims launched startlingly

effective military and cultural conquests from their base in what is now Saudi Arabia. Within a few generations the Islamic empire would stretch from the Iberian peninsula to central Asia. The sequence of rightly guided caliphs ended with the assassination of ʿAlī in the year 661 by one of the Khawārij, former supporters of ʿAlī who had broken with him over his willingness to accept arbitration between himself and his political opponents. About twenty years later ʿAlī's son Ḥusayn was killed in civil war over the caliphal succession.

When Ḥusayn died, so did the prospect that the house of ʿAlī might hold political rule. The next few centuries would see two lines of caliphs, neither of which was descended from him. The word "caliph" derives from the phrase *khalīfat rasūl Allāh*, "successor to the Prophet of God." From 661 until 749 the succeeding would be done by the Umayyads from their capital in Damascus. And they were, in fact, fairly successful: this period saw continued expansion of the Islamic empire. Indeed, the Umayyad line continued in the far West, maintaining a foothold in Iberia even when the Umayyads were otherwise vanquished by the ʿAbbāsids in the mid-eighth century. This new line of caliphs drew their strength from the East—from the central Asian lands known as Khurāsān and from Iraq, which had already been a power base for ʿAlī. The ʿAbbāsids could not claim descent from ʿAlī himself, but at least took their name from their forefather ʿAbbās, an uncle of the Prophet. Thus they could say that they were keeping the caliphate in the family. Accordingly, much more than the Umayyads, the ʿAbbāsid caliphs made explicit claims to religious as well as political authority.[1] For example, the caliph al-Maʾmūn claimed the title of *imām* while contending with his brother in a civil war over the caliphate. The supporters of the house of ʿAlī would likewise refer to the figures they recognized as rightful leaders as *imām*s, and ascribe to them unique status as interpreters of Islam, as well as secular legitimacy.

Al-Maʾmūn is important not only for political history, but also for the history of Islamic theology and philosophy. At the end of his reign in AD 833, al-Maʾmūn lay down the so-called "*miḥna*"—a "test" or "inquisition."[2] He instructed that judges and scholars should be required to admit that the Koran was created by God, and not eternal like God Himself. This may seem a rather abstract point, but al-Maʾmūn thought it important enough to persecute and imprison anyone who disagreed. It's worth emphasizing how unusual this was. Tests of religious orthodoxy had not been imposed by caliphs before al-Maʾmūn. Rather, the rights and wrong of religious belief had usually been determined by the judgment of scholars, men who were steeped in the study of the Arabic language, the life and deeds of Muḥammad, and the text and context of the

Koran itself. It was no doubt part of al-Maʾmūn's objective to assert his own authority over that of the scholars, and towards that end he may even have liked the idea of denying divine status to the Koran itself. But this doctrine of the Koran's createdness was not invented by al-Maʾmūn. He took it from a group of thinkers who can with some justice claim to be the first philosophers of Islam—the Muʿtazilites.

Justice was, in fact, one of the main concerns of the Muʿtazilites. They liked to style themselves *ahl al-tawḥīd wa-l-ʿadl*, "the upholders of oneness and justice." Like Augustine arguing that the whole message of the Bible boils down to charity, for Muʿtazilites the core teaching of Islam was that God is one and that He is just. Their most distinctive positions came directly from these two principles. Before we get to those distinctive positions, though, I should explain the sense in which one might reasonably describe these thinkers as "philosophers." They certainly were not spending most of their time reading Aristotle, albeit that some of them did show (or at least claim) that they were familiar with his works. Rather, these were theologians, and their sacred texts were not Hellenic philosophical treatises, but actual sacred texts: the Koran itself, of course, and also the collected sayings and anecdotes about the Prophet known as ḥ*adīth*. Muslims are enjoined to follow the example of the Prophet (Koran 6:90, 33:21). On this basis, the practice of collecting ḥ*adīth* emerged in order to address the problem mentioned above: if the Koran is silent on a given question, whether it deals with practical arrangements or abstract religious belief, how should we know the Islamic teaching on that question? An obvious strategy was to follow whatever Muḥammad had said or done in his lifetime, insofar as this could be ascertained through reliable reports. Ḥ*adīth* scholarship, which blossomed during the ʿAbbāsid era, determined which reports were reliable by recording chains of testimony all the way back to eyewitnesses and Companions of the Prophet. The accepted ḥ*adīth*, alongside the Koran, became a second principal source for both Islamic law and Islamic theology.

The Muʿtazilites certainly did base their theories on these two sources, but they also drew on a third resource: ʿ*aql*, or reason. It is really this that distinguishes the kind of theology we call *kalām*, and separates its practitioners (the *mutakallimūn*) from other Muslim scholars who often had a more conservative, traditionalist bent. Muʿtazilite *mutakallimūn* had no hesitation in adopting a figurative reading of Koranic descriptions of God as having a face, or sitting on a throne—since reason shows that God has no body. Traditionalists instead accepted such statements at face value. This point connects to the first of the Muʿtazilites' principles: God's unity. Here their signature teaching was that

God must be recognized as "one" not only in the sense that He is unique—all Muslims would, after all, affirm that there are no other gods but God—but also one in the sense that He is utterly free from multiplicity of any kind. It was not only the Christian doctrine of the Trinity that fell afoul of this restriction, but also certain views concerning a central issue of *kalām*: the status of God's attributes, such as His knowledge and power.

The Muʿtazilites tended to deny the reality of attributes, or at least, deny that they had any reality distinct from God's own reality. The role of reason here was to explain how it could still be true to say that God is "knowing" or "powerful," if there is no distinctly existing knowledge or power that belongs to Him. In this, God is unlike the things He creates. As we'll see shortly, Muʿtazilite theologians did not always agree about the physical make-up of created things. But in general, they endorsed a theory according to which God connects certain attributes to atomic bodies.[3] These atoms are indivisible bearers of properties, which are distinct from the atoms themselves in precisely the way that God's attributes are *not* distinct from Him.

When it came to the second core principle of God's justice, reason again lay down a fundamental ground-rule: no one can be morally responsible for actions that are not in their own power. Thus if humans are to be responsible for what they do, and if God is therefore to be just in rewarding and punishing them for what they do, then humans must have free will. This was sometimes expressed in terms of the physical theory. A human is an atom or compound of atoms, and the human's actions or choices are attributes or properties that inhere in the atomic subject. Since the human is responsible for these actions or choices, it must be up to the human, and not to God, whether the relevant attributes come to belong to that human. Some Muʿtazilites even admitted that humans "create" their actions, whereas everything else is created by God.

All of this relates to the apparently obscure teaching on the Koran's createdness, the one enforced in al-Maʾmūn's inquisition. Theologians understood the Koran as being a sort of divine attribute—as God's "word." So in denying the eternity of the Koran, the Muʿtazilites were simply adhering to their standard position on God's attributes. To make God's "word," the Koran, a separately existing thing that is co-eternal with God, would be to deny *tawḥīd*, God's uniqueness and oneness, and would in fact be tantamount to *shirk*, or "polytheism". The createdness of the Koran was also important for God's justice. It includes verses that condemn specific opponents of Muḥammad as sinners who are surely destined for hellfire (e.g. 111:3). The Muʿtazilites worried that, if such verses had been eternally established as part of God's word, then the

sinners in question would simply be doing what had always been inevitable, rather than exercising their free will. In that case, God's justice would be compromised. He would be eternally promising damnation to people who had no choice in sinning.

In part because of the political situation out of which they emerged, the Muʿtazilites and other *mutakallimūn* had a particular interest in this question of sin and moral responsibility. In fact, the origins of the name "Muʿtazilite" are supposedly bound up with this issue. According to tradition, the man who began the Muʿtazilite school in the first half of the eighth century was Wāṣil ibn ʿAṭāʾ (d. 748). One day he was sitting with another early theologian named Ḥasan al-Baṣrī, discussing the moral status of sinners. Ḥasan al-Baṣrī held that sinners still count as "believers," which Wāṣil found too generous. He did not go so far as other hardline theologians who condemned sinners as "non-believers," but instead offered what would become the standard Muʿtazilite position: that Muslim sinners occupy an "intermediate position," neither believers nor non-believers. To express his disagreement, Wāṣil "withdrew" from the circle gathered around Ḥasan al-Baṣrī and walked away, taking some new followers with him—they were the Muʿtazilites, meaning "the ones who withdrew." An unkind observer might think that Wāṣil's "intermediate position" looks less like a solution and more like dodging a politically and theologically fraught issue. That is typical of *kalām*. Theologians frequently offered positions that seem designed mostly to defuse intractable debate. In this respect, *kalām* could be compared to late ancient debates over the Trinity, where verbal compromises were put forward in an attempt to satisfy rival groups who would never really agree. But also as in late antiquity, many theologians persisted in wanting a rigorous and detailed, and indeed philosophical, account of the matters at hand.

We should not allow this story, with its pleasingly vivid etymology of the term "Muʿtazilite," to mislead us into thinking that the Muʿtazilite movement had a history like that of the Hellenistic philosophical schools, with a founder laying down a set of doctrines that subsequent members took pride in following. Indeed, even calling these early theologians "Muʿtazilites" is to some extent anachronistic, a habit borrowed from later authors who wanted neat classifications of theological groups. Eventually, the Muʿtazilites did cohere into two stable groups, associated with the cities of Baghdad and Basra. The two groups agreed about the main principles of Muʿtazilite *kalām*, including the points just sketched—a denial of real and separate divine attributes, an insistence on human freedom, and an analysis of created things as atoms that bear properties. But there were points of dispute too, and there had been even more

disagreement among earlier so-called Muʿtazilites. To reconstruct those early views we unfortunately have to depend on later accounts, often written by hostile theologians. (Our knowledge of early *kalām* is, in this respect, not unlike our knowledge of the Pre-Socratics or early Stoics.) For a really complete overview of Muʿtazilite doctrine we need to wait for the enormous and aptly named *Sufficing Work*, or *Mughnī*, of the Basran theologian ʿAbd al-Jabbār, who lived around the turn of the first millennium (935–1025).[4]

The lack of unanimity among early theologians of a "Muʿtazilite" persuasion is well illustrated by an eighth-century theologian named Jahm ibn Ṣafwān (d. 745/6).[5] Jahm put forward a view on divine attributes like the one I just described, which led some later authors to see him as linked to Muʿtazilism. But if card-carrying Muʿtazilites might have liked his stance on attributes, they would have been appalled by his remarks on freedom, which look straightforwardly determinist. Jahm remarked that belief in God is bestowed by the choice of God, not of the believer himself. Without pushing the point too far, it might be helpful to think of the standard Muʿtazilite view as being akin to that of the Pelagians. They were late ancient Christians who insisted that humans must have it within their power to be righteous or to sin, since otherwise God could not punish sinners with justice. Jahm's view was more like that of Augustine, in maintaining that God alone could bestow the gift of faith.[6]

Muʿtazilite discussions of this issue attained a remarkable level of sophistication, which would not embarrass a modern-day metaphysician working on the free-will problem (not that modern-day metaphysicians are easily embarrassed). Consider the aforementioned Basran Muʿtazilite, ʿAbd al-Jabbār. He identified a problem that is familiar in the free-will debate nowadays, when he worried that our choices might be determined by our own motivations.[7] Suppose I see an almond croissant and stuff it eagerly into my mouth. It seems to be my powerful desire for the croissant that causes me to perform this action. Where then is free will? Whether my action is caused by my desire, or by God, there was no possibility that I would do anything different; and if my action is inevitable, how can it be freely chosen? ʿAbd al-Jabbār solves the puzzle by saying that even if some motivations compel us to act, not all motivations are like this. We can see this from the fact that people sometimes reflect on their already existing desires—perhaps with the help of external advice—and form a view as to whether those motivations are appropriate ones. In such a case, what began as a weaker motivation (such as the desire to lose weight) might wind up trumping an originally stronger motivation (like the desire to eat delicious pastries). Motivations, then, are causally relevant to action, but not irresistible

causes. So there remains space for free will.

Similar ingenuity was applied in the other areas of Muʿtazilite theory. An impressive early example is Abū l-Hudhayl (d. 849). To draw another analogy to late antiquity, he might be seen as the Chrysippus of Muʿtazilism. Chrysippus was not the founder of Stoicism, but an early member of the school who systematized the teachings of the movement.[8] Abū l-Hudhayl played something of the same role for the Muʿtazilites. One of his teachings concerned the much-debated issue of divine attributes.[9] On the one hand, for the reasons already mentioned, he wanted to deny that the attributes have real and distinct existence. On the other hand, the Koran itself describes God as "knowing," "powerful," "merciful," and so on. How can such statements be true, if there is no such thing as divine knowledge, power, or mercy? Abū l-Hudhayl's suggested solution was that God is, as Abū l-Hudhayl put it, "knowing with a knowledge that is nothing other than God." This yields the desired result that God is really knowing, even though His knowledge has no independent reality: for He simply *is* knowledge. Of course, the same analysis can be applied to other attributes.

But that leads to a further problem: if God is identical to both His knowledge and His mercy, for instance, then won't His knowledge be the same thing as His mercy? That doesn't sound right. Here Abū l-Hudhayl remarked that the attributes are neither the same as nor distinct from one another. Again, this at first looks uncomfortably like someone playing with words. But it is a more sophisticated solution than it seems. Abū l-Hudhayl meant that it is only in relation to the things God creates that His knowledge becomes distinct from His mercy. He knows exactly how many hairs are on my head (not many), but this is not an object of His mercy (though perhaps of His pity). In itself, however, God's essence remains one. A related Muʿtazilite distinction contrasts the so-called "attributes of essence" to the "attributes of action," with the former describing the unity that is God Himself, and the latter relations that God bears to the things He creates.

When it came to the nature of those created things, we see a similar dynamic of innovation and disagreement among early Muʿtazilites. Like *mutakallimūn* of all persuasions, both during this period and later in the tradition, Muʿtazilites emphasized the radical dependence of such bodies on God. They even devised an argument for God's existence on the basis of their atomist physics. Since bodies cannot exist without possessing properties, and since the properties themselves come into and out of existence, bodies themselves must be created. And if the universe is made of created bodies, then the universe itself must have a Creator.[10] Again, though, broad consensus masks extensive dispute concerning

the details of the physical theory. There was disagreement, for instance, about how many atoms were the minimum needed to make up a discrete body. (Abū l-Hudhayl, like an expert cricket batsman, went for six.) A particularly radical version of *kalām* physics was put forward by al-Naẓẓām (d. 845/6), who was the nephew of Abū l-Hudhayl and one of the most innovative of the ninth-century Muʿtazilites. Al-Naẓẓām questioned the rigorous distinction between bodies and properties, using the word "body" to describe even things like colors, tastes, hardness, coldness, and so on. What we naively consider as bodily substances are nothing but interpenetrating properties. Some of these properties remain "latent" until they are caused by God to become "manifest." When, say, wood lights on fire its latent heat and brightness suddenly manifest themselves.

Not content with this rather daring theory, al-Naẓẓām went on to deny the underlying atomic theory embraced by other Muʿtazilites, asserting instead that bodies are infinitely divisible. This left him with a problem that had already bedeviled anti-atomist philosophers in antiquity, familiar from the paradoxes of motion proposed by Zeno. If bodies and spatial intervals are infinitely divisible, then won't motion be impossible? After all, any given body will have to pass through an infinite number of points to complete even the smallest motion, but nothing can finish an infinite series of tasks. Al-Naẓẓām avoids the difficulty by proposing that bodies do not glide continuously over all points in an interval. Rather, they "leap" from one position to another. Thus the physical world around us is like a motion picture, with seemingly continuous motion in fact emerging from a more fundamental reality of discontinuous bodily arrangements.

Of course, with these examples of early philosophical *kalām* I am, like one of al-Naẓẓām's bodies, skipping over a lot. But I hope I've managed to persuade you that Muʿtazilism offers plenty of material for the historian of philosophy. As I've said, figures like Abū l-Hudhayl and al-Naẓẓām did not engage carefully with the legacy of Greek philosophy, though some have suggested possible Hellenic sources, such as the Stoics. Their project was more akin to that of the more rationalist Church Fathers, like Origen or Augustine in some of his moods: they believed in order to understand, placing their trust in God's gift of reason. Here too, some scholars have claimed to find more than a parallel, and pointed to the possibility of real historical influence of Christian theology on early Islamic *kalām*. This is not impossible. Greek ideas, including those of the Fathers, were kept alive in places like Syria in the seventh and eighth centuries. Indeed, it can be hard *not* to think of ancient thought when reading about early Muʿtazilism; Abū l-Hudhayl's move of identifying God with His attributes is very like what we can find in Boethius.

Still, it would be a mistake to reduce Muʿtazilism to a mere echo of Christian theology or Greek philosophy. In fact, the direction of influence is at least as much the other way. Muʿtazilites and other *mutakallimūn* had a great impact on the way that Greek ideas were used and understood by more explicitly philosophical authors in the Islamic world, like al-Kindī and Avicenna. Of course, for that to happen the Greek texts first needed to be translated into Arabic. This too took place in the same period that saw the high point of the ʿAbbāsid caliphate, and the first flowering of *kalām* and of ḥ*adīth* scholarship. It happened, in part, thanks to our new friend al-Maʾmūn. Legend relates that he once had a dream in which he was visited by Aristotle. The legend goes on to say that, once his alarm clock went off, al-Maʾmūn decided to sponsor a massive translation movement. He would make Aristotle and the rest of Hellenic philosophy and science accessible to Islamic civilization. This story doesn't have much historical credibility, sadly, and not just because I added the bit about the alarm clock. But it is true enough that al-Maʾmūn and his fellow ʿAbbāsid caliphs supported translations from Greek, even as they were imposing the Muʿtazilite-inspired *miḥna* on their subjects.

3

FOUNDED IN TRANSLATION FROM GREEK TO SYRIAC TO ARABIC

One of the remarkable things about Germany, where I live, is that so much of what they see on TV and in cinemas was originally in English. American sitcoms and crime serials, romcoms and action blockbusters, are put before the public, with the significant difference that it is all dubbed into German. They even use the same German actors to dub characters played by the original, English-speaking characters—so that stars like Will Smith or Meryl Streep always sound the same in every movie. Of course, German is a rather different language than English, and the translators of these movies and TV shows occasionally have to make difficult choices. Like French, Spanish, and Italian, it distinguishes between a formal and informal version of "you." Thus, every time anyone in an original version addresses anyone else, the translators must decide what sort of relationship is in play—and render the scene accordingly, with an informal *du* or formal *Sie*.

As the Germans would say, "das ist doch nichts Neues." More than a millennium ago, another civilization did their level best to import the entire output of another culture—and did a fair bit of interpretation in the process. I refer to the Greek–Arabic translation movement. It began in the late eighth century AD, at the behest of the wealthy and influential elite of the ʿAbbāsid era. When the second ʿAbbāsid caliph al-Manṣūr founded his new capital at Baghdad, he made it a round city, perhaps inspired by the geometry of Euclid. The translation movement is more often associated with the later caliph al-Maʾmūn, who had the dream in which he met Aristotle. But that's more a reflection of the success of propaganda put out by admirers of al-Maʾmūn than of historical reality. Indeed, the dream is itself a carefully constructed bit of propaganda, and not one intended to justify the translation movement.[1] We know that translations in fact began already under al-Manṣūr, who reigned from the

750s to the 770s. The later al-Maʾmūn is also given credit for the famous Baghdad institution known as the *Bayt al-Ḥikma*, or "House of Wisdom." Sometimes rather inflated claims are made about the *Bayt al-Ḥikma*, even that it was like a research university. Actually, though some research did go on there, like astronomical observations, it seems to have been mostly a library, staffed more by copyists and bookbinders than chemists and biologists.

But never underestimate the power of libraries, copyists, and bookbinders. By the end of the translation movement, in the tenth century, an astonishing range of Greek scientific and philosophical texts had been rendered into Arabic. Their influence would last far beyond the ʿAbbāsid caliphate. The translations included works on mathematics by authors like Euclid and Ptolemy, medical writings by Galen and other Greek authorities, and pretty much the same range of works by Aristotle that we can read today. Without al-Manṣūr, his successor caliphs, and other rich patrons of the ʿAbbāsid age, there would have been no tradition of Hellenizing thought in the Islamic world. The very word for philosophy in Arabic is telling: it is *falsafa*, which is simply a loan word from the Greek *philosophia*. While we're on the subject of etymology, I'll mention that the translation movement has left its traces even in modern English. Our word "alchemy" comes ultimately from the Greek *chēmeia*, and the *al-* at the beginning is simply the Arabic definite article.

So why did they do it? The answer is complex and much debated, but let's start with a few basic and uncontroversial points. First, it was not a mere whim or the casual fancy of idiosyncratic caliphs. The translators were handsomely paid for their services, and the process stretched over more than a century, representing a sustained effort sponsored at the highest levels. This was, quite literally, a major investment in the value of Hellenic culture. Second, the translations were to some extent motivated by common-sense usefulness. We don't need to invoke some kind of ideology to explain why people might want to be able to read the great works in such practical disciplines as medicine, geography, and engineering. Just as useful, if not more, was the tradition of Greek astrology and its sister science astronomy—the two were both called by the same Arabic phrase, ʿ*ilm al-nujūm*, "the science of the stars." As in antiquity, astrology was desired for use in imperial propaganda, and of course to predict the future—which would be pretty useful if it could actually be done.

But that doesn't explain why the ʿAbbāsids would have wanted an Arabic version of, say, Aristotle's *Metaphysics*. Some Aristotle may have been translated early on for pragmatic reasons, since his logical works provided weapons to be deployed in disputation over the relative merits of the Muslim and

Christian faiths. (This might explain why the now-obscure *Topics*, Aristotle's study of dialectic, was one of the first texts translated into Arabic.[2]) Cultural one-upmanship may also have played a part. The new Islamic empire had a large, and hostile, neighbor in the shape of the Byzantine empire. What better way to demonstrate superiority than to translate works of Greek science, and show a better understanding of them than the Greeks themselves? Efforts were also made to provide a lineage for Hellenic culture that traced the wisdom of Aristotle, Plato, Pythagoras, and so on back to a much earlier time. Much as Church Fathers like Clement of Alexandria had done, the ʿAbbāsids were claiming not to take wisdom from the Greeks, but to take it *back* from the Greeks.

If it's true that the translation movement was in part inspired by cultural rivalry with the Christian Byzantines, then there is an irony here worth savoring: the movement depended extensively on the involvement of Christians. If you had already heard of the translation movement before reading this chapter, you may have had the following idea about it. With the collapse of the Roman empire in late antiquity, Greek philosophy and science fell into disuse. Several centuries passed in which the Hellenic heritage was effectively ignored. Finally, Muslims got hold of precious texts, blew the dust off, and started a cultural renaissance that could rival the goings-on in Europe in the fifteenth century. What this story leaves out is the crucial role of Christian intermediaries, who most often came from Syria. They wrote in Syriac, a dialect of Aramaic and thus, like Hebrew and Arabic, a member of the Semitic language group. As in much of the Eastern Roman empire, Greek also remained a commonly used language in Syria. Thus this region boasted bilingual scholars who produced Syriac translations and commentaries on Greek philosophical literature.

A model for their work was provided by the fifth-and sixth-century school of Neoplatonic commentators in Alexandria, and its leader Ammonius. At the same time, philosophy was already being done in Syriac, notably by Ammonius' contemporary Sergius of Reshʿaynā. Like his colleagues in Alexandria, Sergius concentrated on logic, with forays into physics and metaphysics. For instance, he produced a Syriac paraphrase of a work on cosmology by the Aristotelian commentator Alexander of Aphrodisias.[3] It's worth noting that Sergius didn't yet translate Aristotle—instead, he wrote in Syriac about the meaning of Aristotle's works, which he assumed would still be read in Greek. But already in the sixth century, other translators were producing versions of works from Aristotle's logic. And as the generations progressed, knowledge of Greek decreased and Syriac translations became increasingly necessary. Scholars

connected with the monastery of Qenneshre in the seventh and eighth centuries continued the process of putting Aristotle's logical writings into Syriac. These scholars bridge the time between the school of Alexandria and the Arabic translation movement. As a result, the transmission of Hellenic ideas to the Islamic world occurred just in the way this book series would want: without any gap.

Of course, these Christians were not motivated by a desire to prepare the way for a future philosophical tradition in Arabic. So we can ask, as we just did about the ʿAbbāsid translation movement: why did they do it? It's commonly assumed that their interest in logic must have been for the sake of theological dispute. That may have been one motive for the later Arabic translations, as already mentioned. But there's little evidence that it spurred on our Syriac authors. Rather, it seems likely that they concentrated on logic for the same reason the pagan Neoplatonists did: they thought it was the first thing you needed to learn in order to become a philosopher. But there was at least one difference between their approach and that of pagan thinkers like Proclus and Ammonius. For these Christians, philosophy would culminate not with Plato, but with the Pseudo-Dionysius. His *Divine Names*, a meditation on the possibility and ultimate impossibility of describing God, was translated into Syriac in this period. Another influence was the philosophical asceticism of late antique Christian authors like Evagrius, whose writings were likewise translated. Though our textual evidence for this Syriac interlude in the history of philosophy is not as rich as we would like, enough survives to show that these were men with a systematic plan for doing Christian philosophy.[4]

The continuing significance of Syrians and Syriac in the translation movement is clear from the personnel of the two most important groups of translators into Arabic, both of which were active in the ninth century. One was gathered around a Christian of Syrian extraction who lived in Iraq: Ḥunayn ibn Isḥāq. He specialized in the works of the Greek medical authority Galen. We have a fascinating report from Ḥunayn's own pen which tells us what he translated, and recounts his efforts to track down manuscripts of Galen and his strategies for producing the best possible versions of the works he could find. Ḥunayn occsionally translated from Greek into Arabic, but mostly from Greek into Syriac. If an Arabic version was needed, this would typically be provided by another member of the circle. Ḥunayn ibn Isḥāq's son, the confusingly named Isḥāq ibn Ḥunayn, produced a number of highly skillful Arabic versions of Aristotle and other philosophical texts. When philosophers like Avicenna and Averroes read Aristotle, it was never in Greek—a language of which they were

ignorant. They were in the hands of the translators, and if the translator was Isḥāq those were good hands to be in.

Less widely admired, even in the medieval Arabic tradition itself, were the Arabic versions of Greek texts executed by a group we call the "Kindī circle." Their name comes from their leader al-Kindī, who is usually recognized as the first philosopher to write in Arabic. He was a Muslim, but he collaborated with Christians of Syrian background, like the members of the Ḥunayn translation circle. These Christians could offer expertise in the relevant language, and also the intellectual background needed to understand what was going on in a work like Aristotle's *Categories* or *On the Soul*. Nonetheless, the translations of the Kindī circle were frequently criticized as being overly literal. A faithful, word-by-word translation might be a useful crutch if you're trying to decipher a difficult Greek text. But if you don't know any Greek or the Greek version is not available, such a translation is decidedly unhelpful.

A good example is the Kindī circle version of the *Metaphysics*. Admittedly, that's not the easiest work to understand, in any language. But this version of the *Metaphysics* is at times almost incomprehensible. I add the word "almost" only because I have read Averroes' commentary on it. For some parts of the *Metaphysics*, Averroes was dependent solely on the Kindī circle translation. His deep understanding of Aristotle allowed him to make plausible sense of passages that you'd think would seem total gibberish to anyone who is not in a position to compare them with the original Greek. By the way, that version of the *Metaphysics* supplies us with a nice example of how translation could affect philosophical interpretation. One of the most important technical terms used by Aristotle is *eidos*: we would translate it either as "species" or as "form," depending on context. Likewise, Arabic translators had to use two different words to render *eidos*—either *nawʿ*, corresponding to "species," or ṣūra, the Arabic for "form"—the way a German translator needs to decide between formal *Sie* and informal *du* every time someone says "you" in an American movie. Thus the translators of the *Metaphysics* effectively decided for future readers what Aristotle had in mind every time he used the word *eidos*—"form" or "species"—without the readers even knowing that any decision had been taken.

Though the standard complaint about the Kindī circle was that their style was overly literal, some of their translations went the other way and took startling liberties with their source texts. The most famous example is their version of the works of Plotinus. The works of Plato were not well known in Arabic, and to some extent the Arabic Plotinus filled the gap left by their absence.[5] It was apparently part of a collection of Hellenic works on the soul and other topics of

advanced philosophy—what the scholar Fritz Zimmermann called al-Kindī's "metaphysics file."[6] Other items in the collection included selections from Alexander of Aphrodisias, and an Arabic version of Proclus' overview of Neoplatonism, the *Elements of Theology*. Through a process of edition and reworking that scholars are still trying to piece together, some of the Proclus materials were presented as a newly organized text called the *Book of the Pure Good*. Later, it would be translated again into Latin, and called the *Book of Causes* (*Liber de Causis*). In this guise, it would become one of the most influential sources of Neoplatonic ideas in Latin medieval philosophy.

The story of the *Book of Causes* teaches us an important lesson, which is that if you want to make a text influential in medieval Latin philosophy, it's a good idea to say that it was written by Aristotle. (Unfortunately, that advice probably comes too late to help you now.) It may, though, have been only an accident of mislabeling that led to some of the contents of al-Kindī's metaphysics file being falsely ascribed to Aristotle. The Arabic version of Plotinus begins with a prologue, which explains that what we are about to read provides a capstone to Aristotle's philosophy. Perhaps this confused a later scribe into thinking that the text before him was actually *by* Aristotle. But whatever the reason, parts of both the Arabic Proclus and the Arabic Plotinus were presented as Aristotelian works. A selection of materials from the Arabic Plotinus was even called the *Theology of Aristotle*—"Theology" because it dealt with higher divine causes like the soul, intellect, and first cause. Other chunks of Plotinus in Arabic have survived, but without the aura of Aristotle's name. Some are simply ascribed to a "Greek sage," which, I've just realized, sounds like something you'd find on a spice rack. But the *Theology* was the most widely read bit of the metaphysics file, still being made the subject of interpretation and commentary as late as the Safavid period (Chapter 53).

As I say, the *Theology of Aristotle* is not a particularly faithful version of Plotinus.[7] I don't mean that, as in a German version of an English-language comedy, so much is lost in translation that the exercise becomes pointless. Rather, original phrases and whole paragraphs of interpretive material were deliberately inserted into this version, the equivalent of filming new scenes in German and splicing them into the original movie. The changes made in the Arabic Plotinus are anything but philosophically innocent. Consider its version of a passage in which Plotinus discussed Aristotle's theory of soul. Aristotle had defined the human soul as the actuality or perfection of a living body. Plotinus disagreed, if only because this would mean that the soul must go out of existence when the body dies. So he mounted a series of criticisms against Aristotle's

definition. In the Arabic version, Aristotle is carefully protected from Plotinus' refutation, by the very way that this refutation is translated. When Aristotle's characterization of soul as the body's perfection is first mentioned, the Plotinus who has been dubbed into Arabic says that this is the view of the "most excellent philosophers." The translation goes on to reframe Plotinus' criticism as a warning against a possible *misunderstanding* of Aristotle. His definition could be taken to indicate a strong dependence of soul on body, because a perfection needs the thing that it perfects. But it should instead be understood to mean that the soul is the source of the body's perfection, a source that transcends the body. Thus Aristotle's definition is not just quietly defended from Plotinus, but even assimilated to Plotinus' own theory of soul.[8]

Another example comes from the other end of Plotinus' system: the first cause, or One. Plotinus offers a strenuously negative treatment of this principle. His advice for understanding the One is to "take away everything,"[9] and with a few exceptions he consistently presents the One as beyond anything we can say or think. The Arabic Plotinus makes several changes here. The most obvious is that it refers to the One as "the Creator," so that Plotinus' philosophical theology is itself unified with that of the Abrahamic faiths. Furthermore, the first principle is described much more positively than in Plotinus. God is, in fact, presented more or less the way that Plotinus presented his second principle, namely *nous* or mind. The Creator is said, for example, to think all things, and is equated with being itself—whereas Plotinus had insisted, quoting Plato's *Republic*, that the One is "beyond being."[10] Occasionally, Plotinus' remarks about the intellect are simply translated as descriptions about the One. Meanwhile, the translator borrows language from the contemporaneous theologians we looked at in the last chapter, the Muʿtazilites. For instance, it speaks of ṣifāt, divine attributes, using their *kalām* terminology.

It's not entirely clear what inspired these changes, or even who made them. One possibility is that they were introduced by al-Kindī himself, since the prologue to the *Theology* says that he "corrected" the text. Perhaps some of his corrections were philosophical ones. But I think the changes are partially or entirely the work of the translator himself, a Christian member of the Kindī circle named al-Ḥimṣī. Either way, the Arabic version takes liberties with its source, helping Plotinus speak to the theological and philosophical needs of a ninth-century readership. That intended readership included Aḥmad, the son of the ʿAbbāsid caliph al-Muʿtaṣim—the prologue tells us that the Greek text was rendered into Arabic for him (it brings a whole new meaning to the phrase "render unto Caesar"). When you have friends in such high places, fidelity to a

Greek philosophical source is probably not going to weigh as heavily on your mind as making the source seem interesting and useful for the intended reader. The customer is always right, especially when the customer's father controls one of the largest empires in the history of mankind.

4

PHILOSOPHER OF THE ARABS AL-KINDĪ

This chapter is devoted to a man I've spent much of my adult life coming to know. He was a pioneer in his field, who drew inspiration from an earlier tradition but expressed that inspiration in a new medium. In so doing he created some of the earliest, and still classic, works of their kind. I refer of course to my favorite silent film star, Buster Keaton. No, just kidding! I'm actually talking about al-Kindī, one of the few historical figures who has occupied more of my attention than Keaton has over the last couple of decades. I've written a book about al-Kindī and, with my colleague Peter Pormann, translated all of his philosophical works into English.[1] In fact, maybe my enthusiasm for al-Kindī can be explained by his having a lot in common with Keaton. Apart from their names beginning with K, they were indeed both pioneers. Buster used ideas from his vaudeville youth in the new medium of silent film, while al-Kindī was the first to make explicit use of Greek philosophy while writing in Arabic. Whether al-Kindī walked the streets of Baghdad wearing a pork-pie hat, though, is more doubtful.

Al-Kindī could, of course, read the Greek philosophical works hot off the presses, so to speak, as they were translated into Arabic. A devout Muslim, he oversaw the work of a circle of Christian translators. It seems he did not himself read Greek, but he improved the translated texts—possibly just in terms of style, possibly also with respect to content—and may have played some role in choosing the works selected for translation. Certainly, he was an intermediary between the translators and the patrons whose wealth was making the whole thing possible. Al-Kindī's family background put him in touch with the higher echelons of the ʿAbbāsid society of ninth-century Iraq. His name "al-Kindī" indicates that he belonged to the Arab tribe of the Kinda, which had been very powerful in earlier times, including the period before the coming of Islam. Our al-Kindī was, we are told, a direct descendant of their kings, one of whom had

been a Companion of the Prophet. Al-Kindī's own father was emir of the city of Kufa. To emphasize his noble lineage, al-Kindī was honored in the later tradition with the epithet "philosopher of the Arabs." The honorific also alludes to the fact that he was unusual among philosophers in claiming descent from an Arab tribe.

On the strength of this privileged background, al-Kindī ascended about as high as a philosopher could at this time, becoming attached to the court of at least one caliph, al-Muʿtaṣim. He was tutor to this caliph's son Aḥmad, and dedicated several works to him. Al-Kindī's masterpiece, *On First Philosophy*, was addressed to the caliph himself—even though al-Muʿtaṣim was more the type to crack together the skulls of enemies like the Byzantines than to crack his own skull against the formidable ramparts of Aristotelian metaphysics. In *On First Philosophy* and other works, al-Kindī was doing not just philosophy, but also public relations. He was explaining in detail why the newly translated texts emanating from his circle were valuable for a Muslim readership, especially the wealthy elite who sponsored the translations. In *On First Philosophy* al-Kindī responds stridently to certain unnamed critics, religious scholars who protested against the use of Hellenic philosophical materials (§III.1–2). These opponents may have thought that the revelation of the Koran made such materials superfluous, at best. Al-Kindī responds that the truth is valuable, wherever we find it. He puts that sentiment into practice in his philosophical writings, showing that Greek ideas can provide support and explication for Muslim beliefs, ranging from the oneness of God to the immortality of the soul.

The title *On First Philosophy* indicates that al-Kindī is here giving us his version of the highest philosophical science covered in Aristotle's *Metaphysics*. But whereas that work deals with a variety of topics that have to do with principles, from principles of reasoning to the nature of substance, al-Kindī seems to understand metaphysics rather narrowly as philosophical theology.[2] For him, first philosophy should study the first cause, which is of course God. Thus one of the main topics of the work is what we can say about God—or rather, what we can't say. The other main topic is the eternity of the universe. Why is this on the agenda? One might expect his reason to be that if the universe is not eternal, it must have been created, which proves that there is in fact a Creator God. But if this is what al-Kindī is thinking, he keeps that to himself. Instead, the point would seem to be that if God alone is eternal, then His eternity distinguishes Him from everything He creates. If we consider again the motives of the Muʿtazilites in denying the eternity of the Koran, we may be struck by a parallel. They too wanted to say that nothing is eternal other than God, not even God's own word. This might help account for al-Kindī's interest in the eternity

question.

But when al-Kindī comes to give arguments against the eternity of the universe, he does not draw on contemporary theologians. His main source is instead the late ancient Christian philosopher John Philoponus.[3] Philoponus wrote works against the eternity of the universe, aiming refutations at both Aristotle and Proclus. Al-Kindī borrows from Philoponus extensively in *On First Philosophy*, but avoids mentioning that Aristotle was one of Philoponus' targets. (What with all this reticence, maybe the comparison to silent film stars isn't so far-fetched.) Of course, as a public-relations man for Hellenic thought, it would hardly do for al-Kindī to criticize the great Aristotle. Indeed, he seems to be trying to agree with Aristotle as far as he can. He provides a meticulous proof that no body, including the body of the universe, can be infinitely large (§VI.1–5). He then asserts, with less argument than we might ideally have liked, that any feature of a finite body must itself be finite. Since time measures motion, as Aristotle said, and since motion applies to body, neither motion nor time can ever be infinite (§VI.6).

Aristotle would agree with almost all of this, up until the last step. He would want to distinguish between the kind of infinity at stake in an unending body—where the infinite is actually present in its entirety—and the kind of infinity involved in unending time. The second kind of infinity is not actual, but potential. It is like the infinity of numbers: just as you can count as high as you want without ever reaching an actually infinite number, so you can count backwards how many years have already elapsed, without reaching a time when the universe began. By simply assuming that eternal time is on a par with infinite size, al-Kindī misses the whole point of the Aristotelian distinction between actual and potential infinity. Somewhat more convincing is another consideration that al-Kindī takes from Philoponus. If the universe has already existed eternally, then an infinite time must *already* have elapsed in order to reach the present moment. But an infinite time cannot finish elapsing. This proves that the past is not eternal (§VIII.1–2).

Despite the central role played by Philoponus in this discussion, al-Kindī continues his selective silence by saying nothing about the biggest point of contention between Philoponus and Aristotle: the nature of the celestial sphere. Aristotle had argued that the heavenly bodies are made out of a so-called "fifth element" which, unlike air, earth, fire, and water, can be neither generated nor destroyed. Philoponus spent most of his refutation of Aristotle arguing against this conception of the heavenly bodies. Al-Kindī, by contrast, wrote a little treatise *defending* Aristotle's conception of the heavens as being made from a

unique, indestructible material. This at first seems inexplicable, until we get to a little caveat towards the end of that treatise. The heavenly spheres are indestructible, al-Kindī says, so they will exist forever…for as long as God wants them to (*On the Nature of the Celestial Sphere* §13). He's changed the rules, by implying that even a body whose nature is not subject to destruction will vanish if God stops making it exist. Perhaps this is why al-Kindī thinks the universe's eternity is a matter for metaphysical theology, and not physics. It is not the nature of the universe that determines how long it exists, but the will of God.

When it comes to the question of how that divine will is exercised, al-Kindī again thinks he can mostly agree with Aristotle. Drawing on works by Aristotle's most faithful ancient commentator, Alexander of Aphrodisias, al-Kindī says in several treatises that the heavens serve as an instrument of divine providence. They move at God's command, and their motions stir up the four elements in our realm—good old air, earth, fire, and water—so that they come together to form more complex bodies like rocks, plants, and giraffes. This means that al-Kindī's God is a rather stand-offish chap. He does not directly cause things to happen down here among us, but works indirectly through the heavens, which al-Kindī calls the "proximate" cause of such things. That may seem like a high price to pay for fidelity to Aristotle. Theologians like the Muʿtazilites conceived God as a much more "hands on" deity, seeing Him as the direct cause for all created things and events in our world, except perhaps freely willed human actions. But al-Kindī had an ulterior motive to say that the heavens are an instrument of providence. He was a staunch believer in astrology, and thought that observing heavenly motions would allow us to predict specific events in our lower world. Like Ptolemy before him, al-Kindī thus managed to get astrology and Aristotelianism into a single theory, along with an emphatic endorsement of divine providence.[4]

It's looking as though al-Kindī has a lot to say about God. But if we take a closer look, this has all concerned God's effects in our world. We have learned that they are providentially ordered through divinely commanded heavenly motion. But we haven't learned much regarding God Himself, and we aren't going to. Indeed, a Keatonesque silence is forced upon us, once we take seriously al-Kindī's portrayal of God as what he calls a "true One." This theme takes up the rest of *On First Philosophy*. Al-Kindī offers us a proof that there must be such a true One, on the basis that all the things we see in our world are characterized by both unity and multiplicity. A single body will have multiple parts. A single species, like humanity, will have many particular instances, like

Buster Keaton, Charlie Chaplin, and Harold Lloyd. The single genus of animals to which human beings belong will contain other species, like goat, horse, and giraffe. In general, al-Kindī insists that anything we can conceive as a unity will also involve some kind of many-ness.

Al-Kindī knew his Neoplatonism. After all, the works of Plotinus and Proclus were translated in his circle. So he has no hesitation in drawing the same conclusion they did, namely that there must be a principle of unity, which bestows oneness on all these things that are both one and many (§XVI). This will be the "true One," which al-Kindī wants to identify with God. Although the Greek sources of the doctrine are clear, what al-Kindī is doing here also resonates with Islam, and with the ideas of those Muʿtazilite theologians I keep mentioning.[5] We've seen how much emphasis they placed on the doctrine of *tawḥīd*, the oneness of God. One can only imagine how pleased al-Kindī must have been to leaf through the translated works produced in his circle, the ink still wet on the page, and to discover the harmony between the unrestricted unity of the Neoplatonists' first principle and the utter oneness of the Muslim God. Here's something he *isn't* going to keep quiet.

Ironically, though, the message he is eager to deliver is precisely one about not being able to speak. He now addresses the concerns of theologians who denied the applicability of divine attributes to a simple God. At the same time, he continues to draw on Neoplatonists like Plotinus and possibly the Pseudo-Dionysius—given his prominence among authors of the Syriac tradition, Dionysius may have influenced the Kindī circle as well. The Muʿtazilites and the Neoplatonists both indulged in "negative theology," which stresses God's transcendence of human understanding and human language. In this same spirit, al-Kindī launches into a complete catalogue of every kind of speech or predicate we can use (§§XII–XV, and XVII–XIX). For this, he draws on logical works like Porphyry's *Introduction*. These would have been well known to him, given that logical writings were among the first texts translated into Arabic and had already been a focus of attention among Syriac authors. In fact, there's another brief work by al-Kindī which uses Porphyry's *Introduction* to refute the Christian doctrine of the Trinity.[6] Going through each of the types of predicates recognized by Porphyry, such as genus, species, accident, and so on, al-Kindī argues that none of these are applicable to God. But to call God a Trinity is to apply terms to Him like "father" and "son," and these would have to fall under one or another of Porphyry's types of predicate. Al-Kindī adds that he has used Porphyry's work here simply because the Christians he is attacking are familiar with it.

On First Philosophy makes the same point, but without applying it specifically to Trinitarian predications. Rather, it looks like he has all predicates in his sights. We have already seen why: language always refers to things that possess both unity and multiplicity. And God is the true One—only a unity, with no multiplicity at all (§XX.1–2). The rest is, apparently, silence. But wasn't al-Kindī just telling us that God is unique in being "eternal"? So there's a predicate that applies to Him. Or what about the word "one"? It seems that we're allowed to apply that to God too. While we're at it, elsewhere al-Kindī says that God is a pure agent, with no trace of passivity, much as He is a pure unity, with no trace of multiplicity.[7] In this He is unlike the heavens, for instance, which do act upon us but are also acted upon by God. So it looks as though al-Kindī's thoroughly negative theology is not so thorough after all. There are a few predicates—at least "one," "eternal," and "agent"—that do apply to God.

Al-Kindī's treatment of God is not the only context in which he uses Aristotelian logic to do a bit of metaphysics. He also wrote a short treatise deploying ideas from Aristotle's *Categories* to prove that the soul is immaterial.[8] Here we can see him straining to use his still rather incomplete library of Greek philosophical texts to establish rational grounds for the core beliefs of Islam. He has a relatively poor knowledge even of Aristotle—who will in due course be the most widely read Hellenic thinker in Arabic translation. His incomplete acquaintance is clear from a catalogue of Aristotle's books, written by al-Kindī.[9] Whereas he is able to give detailed information on what happens in a work like the *Categories*, he sometimes seems to know very little about the treatises he is describing. (In my favorite example, he tells us the title of the Aristotelian work *On Shortness and Length of Life*, and then adds simply: "it is about the shortness and length of life." Thanks for that.)

Although he must eventually have gained access to Aristotle's work *On the Soul*, al-Kindī's own writings about the soul mostly emphasize Platonist ideas.[10] The soul is, as we just saw, immaterial; it has three powers, as Plato said, with the chief part being reason. Our goal as humans should be to make this rational part dominant, and to wean ourselves away from concern with the body (§II.3). This is like cleaning the mirror of the soul of its stains and rust. What will we reflect, or rather reflect upon, once this process is complete? As any good Platonist would tell you, the answer is the things in the "world of the intellect" (§III.2), a phrase al-Kindī takes from the version of Plotinus produced in his circle. This disdain for the body was presumably restated in some of the numerous works on ethics and political philosophy we know were written by al-Kindī. A highly informative list of works known in Arabic in the tenth century,

compiled by the bookseller Ibn al-Nadīm,[11] lists quite a few entries on these topics, but along with literally hundreds of other treatises by al-Kindī, they are mostly lost. One Kindian ethical work does survive, though. It is called *On Dispelling Sorrow*, and provides numerous bits of advice and memorable anecdotes to help us avoid sadness over the trials and tribulations of this world. Much of it could have been written by a Stoic author with a popular touch, but it begins with the standard invocation of the world of the intellect—if we value only intelligible things, which are stable and cannot be taken away from us, then we need never fear losing what we cherish, and so will never be sad (§I.3).

This Platonist psychological theory, along with its made-to-match ethics, doesn't look particularly Aristotelian. But what may be al-Kindī's best-known work in this area, a *Letter on the Intellect*, engages directly with the tradition of commentary on Aristotle's treatment of the intellect in the third book of *On the Soul*. Here al-Kindī manages, as so often, to get there first. He inaugurates a long tradition in which Muslim philosophers explain human knowledge in terms of a superhuman, separate intellect. The basic theory is that the human mind starts out in a state of merely potential knowledge, and is then activated or illuminated by this separate intellect. Al-Kindī calls it the "first intellect" (§6), but later in the tradition it will frequently be called the "active intellect." We'll be talking about this in more detail when we get to thinkers like al-Fārābī, Avicenna, and Averroes. In fact, the standard itinerary for the study of Islamic philosophy would go just like that: al-Kindī, al-Fārābī, Avicenna, Averroes, and then we'd be ready to move on to the Latin European tradition. But, although we've now looked at the "philosopher of the Arabs," we've only begun to examine early philosophy in Arabic. For one thing, I've promised to deal with Jewish philosophers along the way, and we're now in an excellent position to start doing just that.

5

THE CHOSEN ONES PHILOSOPHY AND JUDAISM

A devout man is caught in a terrible flood, and retreats to the roof of his house as the waters rise inexorably towards him. As the water reaches the level of the roof, a rowboat comes past. The people in the boat offer to rescue him but the man says, "No need, I put my trust in God." The water keeps rising, up to his knees. Two Boy Scouts come past in a canoe, and offer to rescue him. The man says, "No need, I put my trust in God." The water rises to his neck, but just in time a helicopter flies overhead, and they throw down a rope. He shouts up, "No need, I put my trust in God!" The helicopter flies off, and the man drowns. He goes to heaven and says to God, "My Lord, I put my trust in you, why didn't you save me?" God says, "What are you talking about? I sent a rowboat, a canoe, and a helicopter!"

I know it's an old joke, but I tell it nonetheless because it brings us to an issue that has been central in the history of both Islam and Judaism. Both of these faiths presuppose the reality of prophetic revelation. But once God has sent His prophets, what comes next? Does He keep trying to deliver the message to humankind, sending help again and again, until we finally accept it? It might seem that the teaching of Islam on this point is clear: God did send many prophets, and Muḥammad was the last of them. The Koran would be the last book revealed to mankind. Of course, Muslims can still believe that God continues to work His will in the world in other ways. I've already mentioned the Shiite belief that ʿAlī and his descendants should be recognized as the divinely sanctioned interpreters of the Prophet's message. This doctrine, and its rejection by the Sunnis, has had particularly momentous implications for the history of Islam.

A similar controversy raged among Jews just at the time Greek philosophy was being imported into Arabic-speaking culture. The parallel is certainly not

exact, but this too was a controversy about whether an original revelation should be understood in the light of later, authoritative interpretation. This was the position of the Rabbinic Jews, who remain dominant in Judaism today. Of course, they accepted the written canon of Scriptural writings, including the Torah. But they also believed that the revelation to Moses at Mount Sinai included more than what we find in the written Torah. The parts of the revelation that were not set down at that time were passed on through the generations by word of mouth. This "Oral Torah" became the basis for the texts of commentary and law composed by rabbis in late antiquity. The authority ascribed to these texts was questioned by another group of Jews, known as the Karaites. For them, the late ancient texts could claim no special authority, no divine sanction. They were just attempts by fallible humans to expound the meaning of the written Torah.

To understand the development of philosophy among Jews living in the Islamic world, we need to glance back at the late antique writings that were at the center of this debate.[1] The texts themselves are of considerable philosophical interest. They represent the most crucial intellectual development in Judaism between Philo of Alexandria in the first century AD and the beginnings of medieval Jewish philosophy in the ninth century. Also, the history of Jewish philosophy has mostly unfolded within Rabbinic Judaism. So the religious sources drawn on by Jewish philosophers were not restricted to the Hebrew Bible. They also engaged with the late ancient tradition of law and commentary. Above all, we need to consider the text known as the Mishnah, and the bodies of commentary that emerged in its wake: Talmud and Midrash.

These texts were composed during a time of considerable uncertainty and disruption for the Jews. In antiquity, Jewish ritual had for centuries centered on the Temple in Jerusalem. It was destroyed by the Babylonians in the sixth century BC, but rebuilt when control over Jerusalem passed to the more benign Persians. This ushered in the period known as "Second Temple Judaism," which ended in scenes of carnage and despair when the Romans wrecked the Second Temple in AD 70. The land of Judea was also devastated in this period, with a significant loss of population. Things then went from bad to worse, to even worse. In the first half of the second century AD there were Jewish uprisings all across the Roman world, which led to renewed reprisals. An unsuccessful uprising in the time of Trajan provoked a backlash so severe that the Jewish population of Egypt was virtually wiped out. Yet Jewish "patriarchs" were still allowed a measure of political power in the Holy Land, and served as intermediaries between the restive Jews and the Roman authorities.

We might assume that the coming of Christianity would mean further bad news for the Jewish faith. Certainly, ancient Christian intellectuals like Justin Martyr subjected Judaism to severe critique, and there was severity at the legal and political level too. There are plentiful examples of discriminatory laws, to say nothing of hostile rhetoric, being directed against the Jews by Christian emperors. On the other hand, Christians were aware of the Jewish roots of their own faith, and under the Christian Roman imperium laws were passed to protect their property and their religious practices. Nonetheless, it was a moment of great hope for Jews when the pagan Julian the Apostate became emperor. In an effort to embarrass the Christians, he declared his intention to restore the Temple in Jerusalem. The hope was short-lived. Hardly any progress had been made on the new construction when he died in battle, ending his brief reign. The Temple would not be rebuilt. But a different kind of edifice was already being erected: a structure of laws and of texts, built one upon the other.

The first to be set down was the Mishnah, at around AD 200. Credit for this text is given to Judah the Patriarch, but this is no monograph written by a single religious leader or scholar. Instead, it records the teachings of many scholars, called "rabbis" (*rabbi* means "my master"). At first glance it seems to be a book of legal judgments, which are divided into six large sections, or "orders," covering the offering of crops, times of religious observance such as the Sabbath, which prayers to say in which circumstances, and so on. These judgments are obviously intimately related to the texts of the written revelation, but they are not presented as a commentary on Scripture, which is rarely mentioned explicitly. Instead, we are told what various rabbis decided about a wide range of legal questions. Legal issues concerning women—marriage, purity laws, and the like—loom large in the Mishnah, and the text recognizes the possibility of allowing women to study Torah.[2] Later Talmudic texts even name women scholars who spent years studying Torah, in an intriguing parallel to well-educated Christian women in late antiquity, like the Cappadocian Macrina and the "Desert Mothers" of the ascetic movement.[3] This was not the first time that women were able to play a role in the intellectual culture of ancient Judaism. It has been argued that the *therapeutae* mentioned by Philo of Alexandria, some of whom were women, were part of the development towards allegorical readings of the Bible that is so striking a feature of Philo's own work.[4]

Rather surprisingly, given that the Mishnah was formed more than a century after the destruction of the Temple, much of the material gathered in it deals with fine points of rituals that could only be carried out by priests while the

Temple still stood. In this respect, the Mishnah seems to have an almost timeless frame of reference.[5] Yet this magisterial and ahistorical aspect of the Mishnah is balanced by other features. It is written in a very different kind of Hebrew from the language of the Torah, and there are signs of its origin in oral teaching. Indeed, the written version may have been intended primarily as an aid to memory. And of course, oral traditions change over time. No one reading the Mishnah can miss this point, because it frequently records disagreements between rabbis, conveying a vivid sense of ongoing debate over the prescriptions and application of the Jewish law.

Although the Mishnah is no commentary, it fills gaps left by Scripture, significantly extending the Jewish legal teaching through interpretation of the written revelation and through newly offered legal reasoning. Already during late antiquity, and well before the challenge of the Karaites, the rabbis needed to stake a claim to authority, to justify their right to make binding legal judgments. Ultimately, the authority of the Mishnah is grounded in its claim to set down the Oral Torah, revealed at Sinai to Moses and his followers but not included in written Scripture. But Rabbis were also said to be wonder-working sages, capable of killing a man with a glance or magically causing a field to bring forth a crop of cucumbers.[6] (Whether this event led to the invention of the dill pickle is not recorded.) The working of miracles further bolstered the rabbis' claim to authority. In Rabbinic Judaism the Mishnah would be seen not as just the collection of some learned legal opinions, but as a sacred text in its own right.

Inevitably, the Mishnah itself became an object of study and commentary, alongside the written Torah that was seen as the revelation given to Moses. So it was that, even as Christianity came to dominate the Roman empire, two further bodies of Jewish texts arose: Midrash and Talmud. Midrash is commentary on the Scriptures, and is standardly divided into two types, *halakhah*, which deals with actual legal rulings, and *aggadah*, which provides religious teachings on non-legal subjects. These texts exploit the interpretive possibilities envisioned in a saying about Scripture found in the Mishnah: "turn it and turn it, for everything is in it" (*Avot* 5.25). The Mishnah offered its own fertile ground for reflection and commentary, which led to the writing of Talmud. There are actually two such texts, the Babylonian and the Palestinian Talmud, which comment on the Mishnah much as the midrashim comment on the written Torah.

Like the Mishnah, the Talmud gives a sense of ongoing, subtle engagement with fine points of law, attempting to resolve discrepancies within the rabbinic teachings and, where possible, to smooth over the explicit disagreements found in the Mishnah. Yet in this search to establish firm legal rulings, Talmud

preserves further evidence of careful dialectical debate between scholars. Both for this reason and because of the sort of topics covered—legal and moral responsibility, classification of certain objects and practices into one category or another, epistemology—some scholars have even described the Mishnah and Talmud as philosophical texts.[7] There is some debate as to the interest of rabbinic scholars in Hellenic or Roman philosophical traditions.[8] Though the texts do not make use of terminology from philosophical texts, there is evidence of personal encounters between rabbis and philosophers.

And there are certainly themes of philosophical interest in the rabbinic texts. A good example is the legal status of intentions. Obviously it is not easy to enforce laws having to do with inward intention. Thus the rabbis sometimes try to eliminate talk of intentions from the law, as when they interpret the injunction not to "covet" another's property as an injunction not to steal. On the other hand, we find them teaching that rituals require *kavvanah*, or "sincere intention"—going through the motions is not enough (for a later Jewish reflection on this topic, see Chapter 32). Though the texts are not written in the style of philosophical treatises, their open acknowledgement of unresolved debate invite the reader to apply his or her own scholarly and philosophical reflection. The Talmud will sometimes offer Scriptural proof texts to support rival legal views. At one point we find the saying, "both sides [of a controversy] are the word of God."[9]

So the magnificent structure bequeathed to later Jews by the rabbis of late antiquity was something of a maze. The complex, dialectical, and unsystematic nature of the Talmud meant there was not just room, but a need, for yet another layer of interpretive legal writing. This call would be answered by the tradition of further commentary on the Talmud and Mishnah, including the exegetical writings of the twelfth-century Andalusian thinker Maimonides. The greatest philosopher of medieval Judaism, Maimonides was also a legal scholar. His most important contribution in this field was the *Mishneh Torah*, or *Second Law*, a systematization and rationalization of the legal teachings of these rabbinic texts. As we'll see (Chapters 33 and 34), a central issue in Maimonides' writings is the relationship between human reason on the one hand, and divine revelation and rabbinic teachings on the other. This had already been a vexed issue in late antiquity. The midrashim assumed that the revealed text would never say anything in vain or superfluous. From this, some rabbis inferred that Scripture does not bother to lay down rules that can be discovered by unaided human reflection. On this reading, Scripture is never in disagreement with reason, yet its whole purpose is to supplement reasoning by revealing what would otherwise

remain inaccessible to us. Nonetheless, legal reasoning must also be used to bring together Scriptural materials and the oral tradition to reach concrete judgments. It was said that the Torah is like wheat made into flour, or flax made into a garment.[10] It provides the indispensable materials for constructing Jewish law and belief, not the finished product.

If the history of philosophy teaches us anything, though, it is that the deliverances of reason differ from time to time and place to place. For the ninth-century Jews who first wrote about philosophy in the Islamic world, reason was embodied above all by two non-Jewish traditions. First, the Greek philosophical works that were then being translated into Arabic. Second, the rational theology offered by the Muʿtazilites. We can see the impact of Hellenic philosophy most clearly in the output of a man named Isaac Israeli.[11] His long life began in Egypt in the middle of the ninth century, and is said to have extended for about 100 years. He traveled beyond the confines of Egypt, at least to modern-day Tunisia, and may also have journeyed to the eastern provinces of the Muslim empire. Somehow, on his travels he became acquainted with the writings of al-Kindī. Drawing extensively on him and on Greek works in Arabic translation, Isaac became the first thinker of a type we'll be meeting several times in chapters to come: a Jewish Neoplatonist.

The most famous of the Jewish Neoplatonists is probably Ibn Gabirol, who lived in the eleventh century (Chapter 29). Isaac anticipates Ibn Gabirol's metaphysical system in some respects.[12] In particular, he introduces a novel twist to the scheme of emanation that became available to readers of Arabic when Plotinus and Proclus were translated. For the Greek Neoplatonists, all things pour forth necessarily from a highest principle which is absolutely one, like light shining from a source of illumination or water gushing from a fountain. In Plotinus' system, the first principle is followed by a universal mind, in Greek *nous*. Isaac, and later Ibn Gabirol, agree with that, but they interpose a stage between God and the mind. In Isaac, this intermediary stage consists of two principles emanated by God: matter and form.[13] These two then come together to constitute a perfectly wise mind, which knows all things. This mind in turn produces a universal, rational soul through another process of emanation. The chain of emanation continues, with the emergence of the lower types of soul, and finally the physical universe. As in al-Kindī, the heavenly bodies are causally primary, and bring about bodily substances and events down here on earth.

Isaac does not really solve one central problem that had always faced the Greek Neoplatonists: how it is that many things come forth from a principle that is purely one. Instead, he simply assumes that God is followed immediately by

two principles, the so-called "first matter" and "first form." On the other hand, the existence of matter at this exalted level of the system can help to explain why things progressively fall away from the perfection and unity of the first principle. For Isaac, emanation is not just a shining of light but a casting of shadow. Darkness increases as God's originating activity becomes more mediated by the intervening influence of mind, then soul, then the heavenly bodies. At this point, you might be wondering what any of this seems has to do with Judaism. Isaac does describe his first principle as a creator God, who unlike all other causes can produce things by bringing them to be out of nothing. Both he and al-Kindī refer to this special kind of causation as *ibdāʿ*, or "origination." In the case of Isaac, there has been some scholarly controversy as to whether God's originating act is necessary, as in Plotinus, or freely and arbitrarily willed. Isaac does not make it easy to tell, since he refers to God's creation as both an emanation and an act of will. My hunch is that, like Plotinus, he simply thought that God could necessarily give rise to all things, but still be free in doing so, insofar as no other cause was forcing Him to create.[14]

Another reason Isaac foreshadows developments in later Jewish philosophy is that he was not just a philosopher; he was also a doctor. Supposedly, when asked whether he regretted not having children, he responded that his medical writings would be a better legacy than any human offspring. He might have added that medical writings don't come home drunk in the middle of the night, after claiming they were going to the library to do schoolwork. Isaac himself probably never worried his parents like that. Even from the small amount of his work that survives, we can tell that he was a conscientious student, not just of medicine and philosophy but also of Jewish religious texts. In one partially preserved work, called *On Spirit and Soul*, he brings together all three traditions in the space of only a few pages. For him, "spirit," in Arabic *rūḥ*, is a subtle physical substance pervading the body—a conception that comes down to him from medical writers like Galen. But unlike Galen, who was reluctant to state any firm views on the soul's nature, Isaac sharply distinguishes soul from spirit, identifying the former as an immaterial principle which can survive the death of the body.[15]

Around this same time, other Jewish thinkers turned to a different source of inspiration in constructing a rational version of Judaism: not Neoplatonism and Galen, but the Islamic theology espoused by the Muʿtazilites. One instance is David al-Muqammiṣ, who was already active in the early ninth century and thus has a good claim to be the very first medieval Jewish philosopher. He follows the Muʿtazilites on several issues central to their teaching. He uses their proof of

God's existence, inferring the need for a divine Creator from the need for substances to be joined to their accidents. He also broadly accepts their ideas about how language applies to God, or rather, fails to apply to Him—like the Muʿtazilites, he tends to deny the existence of real attributes distinct from God's essence.

Islamic *kalām* was such a rich source of inspiration for Jewish thinkers in these early centuries that it could be embraced by both parties to the debate I mentioned at the beginning of this chapter. With its valorization of human reason, Muʿtazilism was an obvious fit for Karaite Judaism, which gave no special authority to the rabbinic writings of antiquity. For these Karaites, the Torah could best be interpreted through the power of human rationality. Against that standard, they frequently found rabbinic texts to be wanting. Among other things, they accused the rabbis of presenting God in an anthropomorphic way. It was perhaps to answer such criticisms that Saadia Gaon, the greatest Jewish philosopher of this period, wrote his masterpiece, a rational account of Jewish belief. He too was deeply influenced by the Islamic current that was then swirling into the stream of Jewish intellectual history. His positions on a range of philosophical and theological issues clearly reflect the impact of ideas flowing from Muʿtazilism. Yet he was a passionate defender of Rabbinic Judaism, and wrote attacks which poured scorn on his Karaite contemporaries.

6

REASONED BELIEF SAADIA GAON

When you hear the world "medieval," various things may leap to mind. Knights in shining armor; monks laboring in monasteries; peasants working in unrelieved squalor on feudal estates; lords and ladies eating huge chunks of meat without the aid of a fork. Productive interreligious dialogue is probably pretty far down on your list. We tend to assume that such dialogue is a recent development, made possible by today's more enlightened and tolerant attitude—ecumenicism is in, persecutions and crusades are out, or at least we'd like to think so. But I hope to persuade you to give up this prejudice about the medieval era. In the next volume of the series, we'll see how Christian medieval thinkers writing in Latin drew extensively on Muslim and Jewish authors. And in the Islamic medieval world, conditions were especially good for interfaith discourse and debate.

For the most part, Muslims were happy for Jews and Christians to live peacefully in the vast swathe of territory dominated by Islam. Admittedly, these other "peoples of the book" were subject to special conditions, such as higher taxes. This occasionally had the ironic result that Muslim rulers quietly discouraged members of other faiths from converting to Islam, because they needed the added revenue. (One might compare the way governments nowadays are secretly quite happy for people to keep smoking, since it brings in extra funds through tax on cigarettes.) Of course, one shouldn't be blind to the hardships and oppression that were sometimes visited on non-Muslims. We'll see an extreme case of that when we get to the rule of the Almohads in Muslim Spain. Also, interfaith discussion often took the form of vigorous refutation, as we saw already with al-Kindī's critique of the Trinity. Still, there's an unanswerable case to be made that Jewish and Christian philosophers in the Islamic world creatively engaged with Muslim thinkers, and vice versa. Exhibit A is a man who decided more than a few cases of his own: the judge, biblical

commentator, linguist, and philosopher Saʿīd ibn Yūsuf al-Fayyūmī, more commonly known as Saadia Gaon.

The last part of his name indicates that he hailed from Fayyūm in upper Egypt. He was born there in 882, just a few years after the death of al-Kindī (with whom Saadia has a good deal in common, intellectually speaking, despite their different faiths). At the age of 23 Saadia left Egypt for Palestine, and thirteen years after that he moved to Iraq, where he was appointed the Gaon of the Jewish academy in the city of Sura. Which raises the question: what is a Gaon? Well, the Geonim were heads of the rabbinic academies in Babylon from the sixth to the eleventh centuries. This means that Saadia was first and foremost a scholar of Jewish law, with expertise concerning not only the Hebrew Bible, but also the oral traditions collected in the Mishnah and the vast commentary of the Talmud. Saadia was a staunch defender of the value of these teachings in the face of the Karaites, and wrote works of refutation against them. This was only one of several controversies that consumed his energies. A dispute over one legal decision saw the local Exilarch, a leader of the Jewish community in Babylonia, try to remove Saadia from his post. Along with his expertise in law, Saadia was also a leading exponent of linguistics. He produced a much-used Arabic translation of the Hebrew Bible and the earliest surviving work of Hebrew grammar.

It's appropriate that Saadia was such an expert on words, because in his philosophical writings he was much influenced by the Islamic "science of the word," ʿilm al-kalām. He is often thought of, not so much as a philosopher, but as a Jewish *mutakallim* (that is, an exponent of *kalām*). Since he seems especially close to the theologians known as the Muʿtazilites, you'll even find scholars calling him a "Jewish Muʿtazilite." In this respect, he is comparable to the earlier David al-Muqammiṣ. It may seem amazing that these Jewish thinkers should have had such intellectual affinity with Islamic theologians. But Saadia was not signaling his allegiance to the Muʿtazilites as such. Indeed, as I've already pointed out, in the ninth century the Muʿtazilites were not yet a unified school or movement to which one could declare allegiance, but independent-minded theologians who argued amongst themselves, even if they did so on the basis of shared assumptions. Furthermore, Saadia seems to be not so much a "Jewish Muʿtazilite" as an intellectual magpie. He used all the materials available to him to develop a systematic, rational account of Jewish belief. It was the beliefs of his Scriptures, and of his legal tradition, that claimed his allegiance.

So it's again appropriate that Saadia's main philosophical treatise should be

called *Kitāb al-Amānāt wa-l-Iʿtiqādāt*: the *Book of Doctrines and Beliefs*.[1] In this treatise, he does not just set out the fundamental beliefs of Judaism. He explains how these beliefs are in accordance with reason. If he draws on Muʿtazilites and Greek authors in Arabic translation, it is because he thinks they have done a good job in establishing principles of reason, and arguing on that basis. Saadia shows his interest in correct philosophical method at the very beginning of his work.[2] He tells us that when we are in search of knowledge, we should begin by coming to our senses—literally. Sensation is the first means by which humans can grasp truth. By this Saadia means, in the first instance, everyday experiences like seeing that a giraffe is standing in the field. Sensation also gives rise to general concepts of reason, such as the concept *giraffe* (4). However, reason can also grasp certain truths on its own, without using the senses. Here we might be expecting an example like mathematical truths or laws of logic, but Saadia instead mentions how we instinctively approve of the truth itself, and disapprove of falsehood (16). Such immediate rational insights, then, are a second source of knowledge. A third resource is inference from the first two sources, as when I see smoke and infer that there is fire (21), or build up more complex mathematical truths from the simple ones I can grasp immediately.

Finally, these three means to knowledge are supplemented by what we can learn from testimony (*khabar*, 18). Here, as we might expect, Saadia is thinking above all of truths gleaned from religious texts. But the idea could also be applied to more banal examples—as when you believe that Saadia lived in Iraq and died in 942, because I just told you so. Banal or not, though, Saadia seems to have strayed into more controversial ground with this fourth route to knowledge. Certainly we acquire *beliefs* by means of testimony, but can we really acquire *knowledge*? That is a question that will turn up frequently in this book, in fact already in the next chapter when we look at the doctor and philosopher al-Rāzī. As we'll see, he disdained uncritical dependence on authority, which in Arabic is called *taqlīd*. Al-Fārābī too will be unimpressed by claims to knowledge based on authoritative testimony, and we'll even see theologians like al-Ghazālī throwing the accusation of *taqlīd* at their opponents. For many proponents of *kalām*, just as for philosophers, we understand the truth by using our capacity for reason, not by believing what others have said.

But Saadia is not saying that we should blindly follow whatever tradition tells us. Rather, tradition itself is verified through the three other routes to knowledge. Not only did prophets perform miracles, giving sensible demonstrations of their authenticity, but the message of the Scriptures is in harmony with reason. We

can figure out for ourselves that murder is wrong, so when the Ten Commandments include the order not to kill, we don't need to just take God's word for it. We know that the commandment is right (141). A thoughtful reading of the Bible shows that its messages are uniformly in keeping with the deliverances of reason. This may make it sound like human reason is standing in judgment over a divinely revealed text. But Saadia hastens to add that the process of confirmation also goes the other way. He supplies quotes from the Bible to prove that the Scriptures endorse the use of sensation, reason, and inference, just as these three sources ratify the truth of prophetic revelation (18–19). There is, then, a virtuous circle of mutual support between our inborn capacity to reach knowledge and the revealed truths that have been granted to us.

Systematic thinker that he is, Saadia goes on to apply the lessons of this methodological discussion, starting with the most important objects of human knowledge: God and His creation of the universe. Unfortunately, this most important case of knowledge also presents the greatest difficulties. Unlike giraffes, God does not present Himself to the senses, so we might worry that the first route of sensation will be completely useless here. But as Saadia points out, not everything accessible to us through the senses is *immediately* accessible. He gives the example of snow (90), which upon inspection proves to derive from water, while water in turn comes from condensed vapor. Our inquiry goes from the less to the more "subtle," in both the basic physical sense of what is less dense, like water vapor, and in the broader sense of what is abstract and difficult to experience. The same procedure works with the universe as a whole. We begin by observing the world around us, and realize that it must derive from some cause—this, of course, will be God. As with snow and water vapor, we begin with the senses, but come to accept the existence of something that cannot be sensed (92–3).

At the risk of raining on Saadia's parade, we should consider a potential problem with his view before we steam on ahead. If God's existence is only inferred from what we can experience with the senses, then won't we remain completely in the dark as to God's actual nature? He will be simply an unknown principle, postulated to explain where sensible things came from. But this would be to forget the second source of knowledge, the immediate deliverances of reason. These can tell us several things about God and His relation to the world. First, using nothing but reason we can prove that the universe is not eternal (38). In fact, as the Muʿtazilites argued, we can establish that every body must be created, and this implies that there is an incorporeal and eternal cause. Saadia provides a whole battery of arguments for this, which are eerily reminiscent of

the arguments given by al-Kindī (41–5). This is no coincidence, since both are reproducing proofs against the eternity of the universe devised by John Philoponus.[3] Al-Kindī, by the way, also made the point that the question whether the universe is eternal is one that is settled by intellectual speculation alone.[4] There are other points of overlap. Both follow the eternity discussion with a proof that nothing can cause itself, and then go on to provide a consideration of God's attributes. So the historical connection between them may go beyond the fact that they are both drawing on Philoponus.

We have not yet exhausted the resources of reason in coming to understand God. We just saw that He is eternal and incorporeal. Further reflection shows that He must also have several other features.[5] For one thing, as al-Kindī also said, God must be perfectly one. After all, He is not a body and thus has no parts, so He is completely simple (95–6). Also, as a Creator He must be alive, powerful, and knowing—alive in order to be able to create anything at all, possessed of the immense power needed to summon an entire universe into being from nothing, and knowing in order to make the world as well designed as we see it to be. Again, Saadia insists that all this is grasped by reason itself (101), though it is also confirmed by Scriptural authority (94–5). But he is also showing his Muʿtazilite sympathies. Saadia agrees with them that ascribing numerous features to God would compromise His oneness (*tawḥīd*). He says many times that anyone who applies positive characteristics to God thereby reduces Him to a body (111–12).

But didn't Saadia just tell us that God has numerous features, which include at least power, knowledge, and life? Indeed, but he insists that the apparent distinction between these three divine properties is an illusion (101–2). Though it seems to us that God's power couldn't be the same thing as His knowledge and His life, that is simply a sign of our limited perspective. In God, all three are the same. Saadia even suggests that it is specifially the limitations of our *language* that cause the problem. If we had a single word for something's being alive, powerful, and knowing, we could use that to describe God and there would be no appearance of multiplicity. This may seem a rather dubious line of thought, but remember that Saadia asserts these three features of God purely on the basis that He created the world; we have no other means of access to God or His attributes. At the level of reason, then, we are simply grasping God as a Creator. It is only when we try to explain what that means in words that we get into trouble, since our language leads us to speak of Him in terms of three aspects, so compromising His unity.

You may already be suspecting a lurking anti-Christian agenda here, and if

so, you're right. Saadia criticizes Trinitarian theology in much the way that al-Kindī had done, but adds an explanation about where the Christians went astray.[6] He even seems sympathetic to the more sophisticated breed of Christian. They understand God to be a Trinity not because they crassly think of Him as a body, but because they have grasped the necessity that there is a Creator who is alive, powerful, and knowing. Their error is to infer that there is genuine threeness in God, by assigning each of these attributes to a distinct divine Person. An easy enough mistake to make, Saadia admits, but a mistake nonetheless. He helpfully points out to them that if God had any form of multiplicity, He would be a body, something this more sophisticated type of Christian rightly rejects. This shows again how, for Saadia, there is an absolute distinction between created, limited, bodily things characterized by multiplicity, and the Creator, who is eternal, incorporeal, and utterly one.

By now it should be clear why people connect Saadia so strongly with Muʿtazilism. His insistence on divine unity, even in the face of the apparent diversity of God's attributes, is reminiscent of thinkers like Abū l-Hudhayl. His remarks on the topic of human action also recall the Muʿtazilites. For Saadia too, God must give us freedom over our actions if we are to be morally responsible for what we do. Using Muʿtazilite terminology, he remarks that it belongs to the justice of God to give man the "capacity" to do what God has commanded, and to avoid what God has forbidden (186). Saadia also adds a discussion of the divine foreknowledge problem, which is familiar from late ancient discussions in Augustine and Boethius. The gist of Saadia's remarks on this point is that, although God does know what I will do before I do it, His knowledge doesn't actually *cause* me to do what I do. Rather, I may act on the basis of a long process of deliberation, and what God foreknows is the decision I will ultimately make using my own power of choice (191).[7]

Saadia borrows so heavily from the Muʿtazilites in these parts of his *Book of Doctrines and Beliefs* that one could almost forget that one is reading a Jewish author, if it weren't for his constant allusions to the Bible as confirming his philosophical claims. Even his style of writing is typical of a *kalām* author. He often proceeds by listing all possible positions on a given topic, and then pedantically itemizing the ways that each of the wrong positions can be refuted. Paging through the work, you'll see him describing Plato's ideas about the creation of the world and then asserting that Plato can be refuted in no fewer than twelve ways, all of which Saadia will be more than happy to explain (51). This dialectical style of writing, where one advances by means of refuting all other theories, to leave the true one standing at the end, will be a feature of

kalām writing for centuries to come. Still, for all his borrowings from *kalām*, Saadia sharply differs from Muslim theologians on a variety of points. For instance, Muslims believed that some provisions of the Koranic law were "abrogated," which means that they were effectively repealed by a subsequent revelation. Some Jews also accepted the possibility of abrogation (158), but Saadia firmly denies it, insisting that God's law can never be overturned (157–73). One might suppose that this only stands to reason—literally, given that reason and God's commandments are in full accord. If the law and the deliverances of reason always agree, it seems that to change His law God would have to go against reason.

Things are a bit more complicated than this, though, because in fact not all of God's commandments line up with things we can discover by reason. Saadia thinks that much of the Jewish law does simply endorse what reason can determine without revelation. But a whole class of laws, which would have been inaccessible to reason, are additionally laid upon the Jewish people. God's reason for this is to increase our happiness. Laws concerning purification may seem arbitrary, but they encourage us to think little of our bodies and to concentrate on God. Likewise, the stipulation to keep one day as a Sabbath helps us by giving us respite from our labors and leading us to pray more than we otherwise would (143–4). Other laws offer additional specificity to a general rule of reason. Reason tells us that man and woman should commit to one another, and that stealing is wrong, but reason alone cannot determine exactly how a marriage ceremony should be carried out, or figure out exactly when something counts as one person's property, so that it will be theft if another person takes it (146). What Saadia is saying here is to some extent commonsensical. Think of how the British drive on the left, whereas people in countries like Germany and the United States drive on the right. It's clear that you need to pick one side or the other to drive on, but which side you pick is an arbitrary matter. This need for arbitrary stipulation in law-making leaves space for Scripture to lay down commands that go beyond what reason would independently have affirmed. Of course, as a Rabbinic Jew, Saadia would also grant this status to the legal judgments preserved in the Mishnah and Talmud.

Thus even Saadia recognizes that reason does have its limits. By giving humans the power of reason, God has given us a tool by which we can discover most of what we need to know. But God goes further than that, and reveals commands and laws we could not otherwise have known. Though Saadia is trying to explain something about the Jewish law, the moral of the story applies to Islam and Christianity too. Philosophers of all three faiths were typically very

optimistic about reason and its ability to discover the most important truths. That's what made them philosophers, after all. But many of them also carefully defined boundaries past which reason could not go, at least, not without help in the form of revelation. Though that is the most common stance we find among medieval philosophers, some are more rationalist still. Soon we'll come to a famous example, the Muslim thinker al-Fārābī, who thought of religion as nothing but a user-friendly version of the truths discovered by philosophy. Before we get to him, we'll be looking at a thinker who is less renowned today, but was downright notorious in his own time.

7

HIGH FIVE AL-RĀZĪ

One, they say, is the loneliest number. But I find that hard to believe. After all, it has an infinite number of companions, and that's only counting the positive integers. And it has only to turn around to see that another infinity of negative numbers has got its back. But that's all assuming there is more than just one number. It would take a bold mathematician to doubt this, and a bold philosopher to raise the same doubt in the context of metaphysics. Some have doubted it, nonetheless: we call them monists. These are people who believe that all reality is one, like the Pre-Socratic thinker Parmenides and (in a very different way) the early modern philosopher Baruch Spinoza. In between Parmenides and Spinoza, we occasionally find medieval thinkers flirting with a kind of monism. For instance, the ninth-century Irish philosopher John Scotus Eriugena was accused of being a monist, because he suggested that God can ultimately be identified with all that He creates. For the most part in medieval philosophy, though, monism (if it is mentioned at all) is seen as a danger to be avoided, rather than a doctrine to be embraced.

Yet most medieval thinkers would have thought it at least *possible* for there to be only one thing, namely God. God would just have to decide not to create anything other than Himself. Certainly some, especially in the Islamic world, did hold that God necessarily gives rise to the universe. The Neoplatonists had claimed as much with their doctrine of emanation. We just saw that Isaac Israeli might have held such a view, and this "necessitarian" understanding of God as a cause will be asserted with great force and sophistication by Avicenna. But for the most part, Jews, Muslims, and Christians wanted to say that the universe is created in a gratuitous, freely willed act of divine generosity. As we've already seen and will be seeing again (especially in Chapters 21 and 34), medieval philosophers paid a good deal of attention to the question of whether the universe is eternal. This was partially because it seemed to them that denying the

eternity of the universe would prove that it is not necessary. If the universe came into existence after not existing, that could only be because God chose for it to exist, rather than giving rise to it automatically—as light would always shine forth from an eternally existing light source. Thus, although it would indeed have taken a bold thinker to assert actual monism in this period, it would also have been bold to deny the *possibility* of monism, the possibility that God might have chosen to remain by Himself, alone to enjoy His perfection.

All of which brings us to one of the boldest philosophers in the Islamic world: Abū Bakr Muḥammad ibn Zakariyyāʾ al-Rāzī. He devised a theory according to which the universe was created in time, but was preceded by no fewer than five entities, all of them eternal principles. Before the universe came to be, God was never in danger of being lonely. He was eternally in the company of four other principles: soul, matter, time, and place. In putting forward this innovative and rather shocking theory, al-Rāzī showed that he cared little for convention. Perhaps he felt free to speculate in this way because he was not primarily a philosopher. His main vocation was that of a doctor. Here too, though, he showed an irreverent attitude towards authorities of the ancient medical tradition. Ironically enough, he may have learned this irreverence from the greatest of those authorities: Galen.

Al-Rāzī agrees with Galen that, while respecting one's predecessors, one should never hesitate to question their views and modify those views in light of one's own ideas and experience. He applies that policy to Galen himself in a work called *Shukūk ʿalā Jalīnūs—Doubts about Galen*.[1] He begins by affirming his great admiration for Galen, but reminds us that nothing could be more Galenic than the criticism of predecessors, even the ones we admire. After this tactful introduction, al-Rāzī can't resist going on to a sarcastic and biting enumeration of mistakes he has discovered in Galen's works. His critique ranges over both philosophical issues like the eternity of the universe and the possibility of void space, as well as medical topics like Galen's list of the types of pulse, and the ancient debate as to whether the body is ruled from the heart or brain.

Actually, we know from al-Rāzī's voluminous surviving writings on medicine that he broadly accepted Galen's medical ideas. His work titled *Introduction to Medicine* could easily have been called *Introduction to Galenic Medicine*.[2] More in-depth medical works by al-Rāzī likewise base themselves closely on Galen's anatomy, methodology, therapeutics, and so on. Al-Rāzī's independence of mind is also on show when it comes to medicine, however. He wrote a pioneering work on differential diagnosis, explaining how to tell the difference between smallpox and measles, and carefully collected observations

from his medical practice. Practice is something he had plenty of, since he worked in hospitals in both Baghdad and the Persian city of Rayy—his name "al-Rāzī," by the way, simply means that he came from Rayy. Many of his clinical observations are recorded in the staggeringly huge Ḥāwī, or *Comprehensive Book*, along with notes on learned medical literature of the ancient world. Al-Rāzī certainly earned his esteem as an outstanding contributor to the history of medicine. In this respect his only rival from the Islamic tradition was another philosopher, Avicenna. These two became the greatest medical authorities of the Arabic tradition, and were also used extensively in Latin translation by medical scholars of Europe, who called our man "Rhazes." Avicenna's systematization of medical learning would be even more influential than the writings of al-Rāzī, but it's clear that the man from Rayy was far more active and experienced in hands-on medicine.

Unfortunately for al-Rāzī's later reputation, but fortunately for us, he also turned his hand to philosophy. It's striking that, whereas his medical writings survive today in extraordinary abundance—the volumes of the modern printing of his *Comprehensive Book* will fill a bookshelf—his philosophical writings are almost entirely lost. This is presumably because they were thought to be outrageous, even heretical. Yet the hostility provoked by his views also explains why we know anything about them at all. Though his writings on the five eternal principles are lost, his theory is discussed by a number of other authors so that they can then go on to refute him.[3] Reconstructing the theory is a bit like gathering the evidence concerning Pre-Socratic thinkers or early Stoics on the basis of later critics like Aristotle and the Church Fathers. We are at the mercy of witnesses who are often hostile, and who always tell us less than we'd like to know.

One hostile witness was a philosopher who actually debated al-Rāzī in person. Rather confusingly, this other man was also from Rayy, so he is also called al-Rāzī—Abū Ḥātim al-Rāzī. He was a member of a group within early Shiite Islam called the Ismāʿīlīs, who will be discussed properly in Chapter 14. In a work called *On the Signs of Prophecy*, Abū Ḥātim recounts the heated and occasionally hilarious arguments he had with our al-Rāzī.[4] They debated two main issues. The first was the theory of the five eternal principles, the second, the topic of prophecy. Abū Ḥātim depicts al-Rāzī as a convinced opponent of all prophetic revelation. After describing his face-to-face encounters with al-Rāzī, he goes on to quote and refute a book al-Rāzī had written on the subject. Between his denial that God is unique in having the status of an eternal principle, and his supposed rejection of the validity of prophecy, you can

certainly see why Abū Ḥātim and other authors wished that al-Rāzī had stuck to medicine. In fact, Abū Ḥātim and others frequently refer to him not by name, but simply as "the heretic."

Nonetheless, the evidence at our disposal is sufficient to reconstruct the Five Eternals theory in some detail. To repeat, the five principles recognized by al-Rāzī are God, soul, matter, time, and place. He is serious in holding that the last four are eternal, and in this respect on a par with God, even if God is superior to them in certain ways. God does not create any of them. Rather, they are the principles that need to be in place in order for God to create a world at all. Let's try to see why this should be the case, taking the principles one by one. We'll start with matter. Already Aristotle had assumed that if there were a first-ever event in the cosmos, then there would have to be something already existing before that event, with the potential for changing or moving (*Physics* 8.1, 251b). By the time of al-Rāzī, many philosophers had already denied this, and insisted that God is capable of creating things with no need for matter. Ancient Christian philosophers frequently said as much, even though the idea of creation from nothing was not yet thematized in the biblical Scriptures themselves.[5]

More recently, both al-Kindī and Isaac Israeli had stated that God alone is capable of absolute origination. If you or I want to start a ball rolling, then we first need to have a ball; and if there's no ball, we need to go find some material ingredients for one. God, by contrast, can set the cosmos spinning even as He creates the cosmos out of thin air—or rather, out of nothing at all. Al-Rāzī, though, thinks there did need to be some potential or passive principle out of which God created the universe. It's worth repeating that, unlike Aristotle, he does think the universe was created. It began to exist after not existing. But for this to happen, there had to be something for God to make into a universe, and this is matter. Much as Aristotle describes matter as a principle of potentiality, al-Rāzī says that matter is a "passive" principle, which receives form or determination from God, who is an "active" principle. Of course, on this view, matter itself cannot be created, since that would give us a regress—God would have to create the matter out of something else, that is, out of some other kind of matter, which itself would have to be created out of some other matter, and so on.

In all of this, al-Rāzī is probably influenced less by Aristotle than by Plato, and in particular his *Timaeus*. In that dialogue, Plato has the main character explain that the universe came to be when a divine "craftsman" imposed form on a so-called "receptacle" (48e–52d). There was an ancient debate as to whether Plato had in mind an actual event of creation, or whether the universe is eternally

brought into being by this divine craftsman. Unlike the Neoplatonists, al-Rāzī apparently understood Plato to say that the universe came into being at some first moment. He would have known the *Timaeus* thanks to his love–hate object Galen, who wrote a commentary and summary of the *Timaeus*, both of which were known in Arabic. We can be fairly sure that al-Rāzī was inspired by the *Timaeus*, because in his debate with Abū Ḥātim he says he is following the lead of Plato.[6] He has taken over not only Plato's idea that God fashions the universe out of matter, but also that this matter is atomic. There is a slight difference here, in that al-Rāzī conceives the atoms not as geometrical shapes as in the *Timaeus*, but as particles moving in the void, more like the atomism of the Pre-Socratics Democritus and Leucippus. Nonetheless, it seems that al-Rāzī took himself to be in fundamental agreement with the physical theory of the *Timaeus* on this point.[7]

The mention of void takes us on to the next two eternal principles: what al-Rāzī calls "absolute time" and "absolute place." There must already be time before God creates the universe, because He will need to perform His creating action at some moment, which implies that time is already present. If you're wondering why God can't just create time along with the universe, the answer is simple. To create time is to do something, and you can't do something without doing it at a time. Likewise, God will need a place to put the universe He is going to create. Again, He cannot first create a place for the universe, because He would need somewhere to put the place He wanted to create. So in the case of both time and place, he can argue in much the same way he did for matter. These things must be eternal, since otherwise we would have an infinite regress, with time created at some other time, place created in some other place, or matter made out of some other matter.

One of the most interesting and novel features of al-Rāzī's theory is his comparison of the eternal, or "absolute," time and place that God requires in order to create a world, and the sort of time and place we experience in daily life. When Abū Ḥātim asks al-Rāzī to explain what he means by absolute place, al-Rāzī simply says, "it is this where we are"—one imagines him gesturing vaguely about him as he says this.[8] Elsewhere, he more helpfully describes it as the infinite void into which God places the universe, like putting a liquid into an empty vessel. As for absolute time, it is independent of any body, and of any motion or change in the universe. Absolute time simply passes, like a kind of cosmic metronome. By contrast, what he calls "relative time" and "relative place" are the time and place that depend on bodies and their motions. A day is an example of "relative" time: it is a segment of absolute time that is marked off by one motion of the sun around the earth. A relative place would be, for

example, the location of your body just as you read this. Relative time and place are thus the sort of time and place recognized and discussed by Aristotle, who emphasized the dependence of place and time on physical things and physical change. So in a way, al-Rāzī accepts Aristotle's understanding of time and place. But with his typically critical attitude and desire to improve on the ancients, he also exposes this understanding as superficial. The "Platonic" absolute time and place are more fundamental than times and places that are relative to specific motions and bodies.

Now, four was a number beloved of ancient philosophers. They recognized four elements, four bodily humors, four ages of man, and four quarters of the heavens. Al-Kindī pointed out the prevalence of the number four in a work on music, and said that this is why the lute has four strings, from which I infer that his favorite Motown group would have been the Four Tops. Why, in the face of these facts and an excellent singing group from Detroit, does al-Rāzī feel the need to posit a further, fifth principle, an eternal soul? The answer is not that the Five Eternals would also have been a great name for a Motown band, though this is true enough. Rather, it may have to do with al-Rāzī's day job as a doctor. As anyone in that line of work might be, he was very struck by the large amount of suffering in the world. Since he assumed that God is perfectly benevolent and wise, he could not believe that the universe of his experience was simply willed into existence by God. Many people nowadays would contend that the degree of suffering in the universe shows that it was not created by an unhampered, benevolent Creator. So it's striking to see a thinker of the early Islamic world saying precisely the same thing.

Of course, al-Rāzī is not led into atheism by this problem of suffering. Rather, he says that to explain the creation of such the defective universe we see around us, we need to posit not just the perfectly wise active principle that is God, but another active principle which is foolish and ignorant. This is the eternal Soul. Again, al-Rāzī seems to be thinking here of the *Timaeus*, since there Plato likewise ascribes a soul to the entire universe (34b–c). But again, there are differences: in Plato the world soul is created by a divine craftsman, not eternal, nor does Plato not depict the world soul as foolish and ignorant. In this respect al-Rāzī seems closer to some late ancient Platonists, especially Plutarch, who does talk about a foolish soul that is responsible for imperfections in the cosmos.[9] At any rate, in al-Rāzī's theory this Soul at some point foolishly conceives of a desire to entangle itself with matter. This explains why the creation of the universe can happen at an arbitrary moment within eternal time. Whereas God, being perfectly wise, would need a good reason to choose the first

moment for the universe to exist, the foolish soul can simply lurch towards matter with no warning or good reason. In his debate with Abū Ḥātim, al-Rāzī satirically compares the sudden, unwise motion of Soul towards matter to a sudden, unwanted eruption of flatulence.[10] This brings their discussion to an end, as the audience breaks up in appalled recriminations against al-Rāzī for his scandalous remark.

Al-Rāzī's God, being wise and powerful, knew that an ill wind would blow if He allowed the Soul to fulfill its desire to be with matter. So why didn't he stop the Soul, and prevent the existence of our universe, with its abundance of evil and suffering? Al-Rāzī answers this challenge by comparing the Soul to a child and God to a wise father.[11] Just as the father might allow his child to go into a beautiful but dangerous garden full of thorns and stinging insects, in order to teach the child a lesson, so God allows Soul to envelop itself in matter. Mercifully, God intercedes to bestow form on matter. This explains why there is order and beauty in the world, and not only the chaos and suffering that would have resulted from an unassisted engagement of eternal Soul with eternal matter. Now that the universe exists, our purpose is to work towards the liberation of soul from matter. Humans can do this by living a life which ignores bodily concerns and pleasures, and ultimately achieving an afterlife of bliss, when the soul will finally be free from the body. Al-Rāzī refers to this as a kind of "liberation," which lies at the core of his ethical doctrines (see Chapter 13).

Al-Rāzī draws a further consequence from his conviction that God wants us to be free of suffering. He holds that God, in his benevolence and justice, has bestowed upon all humans the gift of reason or mind, in Arabic ʿaql. In this emphasis on justice and reason, we may see a sign that he is drawing on ideas from contemporary Muʿtazilite theologians. In fact we know that he debated with such theologians, as well as with his Ismāʿīlī opponent Abū Ḥātim. In his debate with Abū Ḥātim, al-Rāzī goes on to say something that would outrage a Muslim theologian of any persuasion. He observes that it would be unjust, and counter-productive, for God to single out only certain people as prophets, such that only they would receive a divine revelation that is withheld from the rest of us. That would only lead to strife, as groups gather around the various prophets and wage war against each other. We should therefore put our trust in reason, and not in prophecy.[12]

This is the most notorious aspect of al-Rāzī's thought. Not only did he deny God's uniqueness as an eternal principle, questioning the central Islamic tenet of divine oneness or *tawḥīd*. He also denied the very prophetic revelation given to Muḥammad, and to the biblical prophets recognized by Jews, Christians, and

Muslims alike. It's hard to imagine a more fundamental rejection of Islam. No wonder they called him a "heretic." But we need to be careful here, because Abū Ḥātim may well be misrepresenting al-Rāzī's view. His critique may have been aimed not at Islam or revealed religion in general, but at more focused targets, including the Ismāʿīlī teaching espoused by Abū Ḥātim. Certainly, as we know from his attitude towards Galen, al-Rāzī was a staunch opponent of the uncritical acceptance of authority, or *taqlīd*. The Ismāʿīlīs, with their dependence on the guidance of inspired Imams, would have seemed to al-Rāzī the ultimate practitioners of *taqlīd*. This may explain the bitterness of his dispute with Abū Ḥātim. As for his attitude towards Islam more generally, there is good evidence that al-Rāzī in fact emphasized the agreement between the Koran and his theory of the five eternals.[13] He probably welcomed the Koran, not as something to be accepted on faith, but because his rational reflection showed its teachings to be true. If this was his attitude, he was not far from the rationalist view of his near contemporary, the more famous al-Fārābī.

8

ARISTOTELIAN SOCIETY THE BAGHDAD SCHOOL

As you've probably gathered, I'm the kind of guy who likes to keep his finger on the pulse of the younger generation. Many has been the time that I have found myself clubbing, and had a fresh-faced youngster come up to me and say, "Your books about the history of philosophy are the *bomb*. Mad props!" So I'm always abreast of the latest slang that the "hip kids" are using "out on the street." One example is "old skool"—ah, the insouciant disregard for orthography that makes the youth of today so charming! I am reliably informed that if you are "old skool," or indeed "kickin' it old skool," this means you are evoking an earlier era, like the early hip-hop of the 1980s.[1] Sometimes the trendiest thing is what existed before you were even born. In fact, nothing is more old school than kickin' it old skool. They were already doing it on the mean streets of tenth-century Baghdad.

Well, maybe not on the actual streets, which were no doubt terribly crowded and noisy. As the center of the sprawling ʿAbbāsid empire, Baghdad was one of the largest cities in the pre-modern world, and larger than any medieval European city. It attracted merchants and strivers from near and far, members of different language groups and faiths. Most importantly for our story, it became a meeting place for scholars and scientists, literary stylists and theologians. In this and the next few chapters we'll begin in Baghdad and then cast a wider geographical net, looking at aspects of the intellectual ferment of the tenth century. The wide range of possible philosophical approaches on offer in this period formed the background for the innovations of Avicenna, a thinker of such power and influence that he foreclosed many of those possibilities for future generations, while opening new ones.

Among the philosophical movements in the tenth century, the most old

school, and the one most frequently criticized by Avicenna, was the so-called "Baghdad Peripatetics." They were a group of mostly Christian thinkers who staged a revival of the philosophical activities of late ancient Alexandria. Unlike al-Kindī and other scholars of the ninth century, the Baghdad school was able to draw on a full range of texts from the Aristotelian tradition. Of course, this included Arabic versions of Aristotle's own works, often made by members of the translation circle gathered around Ḥunayn ibn Isḥāq. They also used translations of commentaries from the Alexandrian tradition, and made their own contributions to the transmission of philosophy into Arabic. The man usually credited with being the founder of the group was Abū Bishr Mattā, and the leading member of the school in the tenth century was Yaḥyā ibn ʿAdī. Both were Christians, and both translated works by Aristotle and various Aristotelian authors like Alexander and Themistius. However, it seems that they were making their Arabic translations mostly, or always, from Syriac rather than Greek. This shows that, among Christians, the Syriac language was still important for the study of Aristotelian thought right up into the tenth century.

For the later tradition, though, the most famous member of this group was one who, exceptionally, was a Muslim: al-Fārābī. I suspect that his fellow Baghdad Peripatetics would have been stunned to learn that of all the philosophers in the school, only his name would loom large in the history of philosophy. There are several reasons why he is better-known than his Christian colleagues. For one thing, he was, unlike them, a major contributor to political philosophy. His writings on politics, and especially the relation between philosophy and religion, influenced later thinkers in Andalusia, including the great Averroes and Maimonides. For another thing, his contributions in logic were outstanding enough to be commended by Avicenna, who was otherwise quite scornful of the output of the Baghdad school.[2] Ultimately, some of al-Fārābī's works would be translated into Latin and used by medieval thinkers in Christian Europe, something we cannot say of Abū Bishr Mattā or Yaḥyā Ibn ʿAdī.

Thus the Baghdad school followed the lead of its Alexandrian model by bringing together philosophers of disparate faiths. Just as in Alexandria the pagan Ammonius taught Christians like John Philoponus, so in Baghdad Muslims like al-Fārābī could have Christian students like Ibn ʿAdī. Though none of the core members of the school were Jews, we can add that Yaḥyā Ibn ʿAdī wrote replies to questions on philosophical topics that came to him from a Jew named Ibn Abī Saʿīd al-Mawṣilī.[3] Their polite and learned correspondence can still be read today. As we'll see (Chapter 10), al-Fārābī's views on religion are

perfectly designed to allow philosophers to exchange ideas at a universal level which transcends sectarian disagreement. Yet, as in the case of late antiquity, this pleasant narrative of collaborative intellectual activity does not tell the whole story. Pagans like Ammonius had to tread carefully so as not to annoy the Christian authorities in Alexandria, lest they suffer the same fate as the Platonists at Athens, who saw their Academy shut down by imperial edict.[4] The Christians at Baghdad were under no comparable pressure from Muslim political authorities, as far as we know, but there is evidence of heated interreligious debate as well as interreligious cooperation. Al-Kindī's attack on the Christian doctrine of the Trinity is preserved only because it was quoted by Yaḥyā Ibn ʿAdī in a counter-refutation. Ibn ʿAdī also seems to have had a surprisingly intense interest in Islamic theology, or *kalām*. He discusses *kalām* arguments in several works, including another refutation of the doctrine of "acquisition." According to this doctrine, God creates the actions which humans then "acquire," so as to bear moral responsibility.[5] Not enough work has been done on Ibn ʿAdī for us to be sure why he engages with Islamic theologians in this way, but he doesn't seem to be too impressed.

More generally, it is certainly not the case that the Baghdad Peripatetics all understood philosophy to reside at a lofty height of abstraction transcending religious concerns. Ibn ʿAdī wrote numerous treatises defending his conception of the Trinity. Since antiquity, a debate had been raging between the partisans of two ways to understand the person of Christ.[6] On the "Monophysite" view, Christ was a full unity of man and God. The Monophysite position was diametrically opposed to that of the Nestorians, for whom Christ had two natures and two so-called *hypostaseis,* a duality that could preserve his full humanity and full divinity. Centuries after this disagreement first broke out, Ibn ʿAdī was still fighting the same battle, writing apologetic works in Arabic that use Aristotelian philosophical ideas to defend Monophysite Christianity and criticize Nestorianism.

Another example of someone who fused philosophical and theological activity into one career was Abū l-Faraj Ibn al-Ṭayyib, who lived well into the eleventh century—in fact, he died a few years after Avicenna did. That makes him the last member of the Baghdad school. Before he turned out the lights and locked up, he found time to write commentaries on books of the Bible and also on Aristotelian logical works. Good follower of the Alexandrian tradition that he was, he devoted his attention to the first two works you would have studied in late antiquity: Porphyry's *Introduction* and Aristotle's *Categories*. His commentaries on both texts survive.[7] Though they do contain some new

material, Ibn al-Ṭayyib depends extensively on the previous commentary tradition, and there are many passages which are little more than Arabic versions of the remarks of earlier Greek commentators. That this was still possible in the early eleventh century vividly demonstrates the continuing vitality of late ancient Aristotelianism.

The most famous single event associated with the Baghdad school highlights the tensions that could exist between members of different faiths at this time, even as it illustrates the possibility of interreligious intellectual exchange. For this event we need to go back a century or so from the later Ibn al-Ṭayyib, back to the school's founder, Abū Bishr Mattā. We have a report of a public debate involving Abū Bishr, held at the court of a vizier named Ibn al-Furāt.[8] It seems to have begun as a social gathering to exchange ideas and rhetorical flourishes, called a *majlis*—a talking session that was a very rough equivalent of the salons of seventeenth-century France.[9] For another example of a *majlis*, think of the full and frank exchange of views in which Abū Bakr al-Rāzī defended his Five Eternals theory against his Ismāʿīlī opponent Abū Ḥātim al-Rāzī.

Abū Bishr was drawn into a more formal debate than the one involving the two Rāzīs, when the vizier asked those present whether someone would be willing to step forward and refute the grand claims Abū Bishr made for the Aristotelian science of logic. Unfortunately for Abū Bishr, the man who volunteered was the highly articulate and capable Abū Saʿīd al-Sīrāfī. He was a learned expert on the Arabic language, one of many scholars who were at that time pushing forward the study of grammar. Also unfortunately for Abū Bishr, our surviving account of what then transpired comes down to us from reporters who were much more sympathetic to al-Sīrāfī's side of the story. So we do not hear much of the case for logic, but instead get an amusing and detailed tirade from al-Sīrāfī, who explains that a knowledge of Arabic grammar makes the study of Greek logic superfluous. Adherents of Aristotle are simply being pretentious when they extol the power of logic, priding themselves on mastering this art from another culture. As al-Sīrāfī points out, in a dig at Abū Bishr's Christian beliefs, all this expertise in logic hasn't prevented him from thinking the same thing can be both one and three.

Al-Sīrāfī's arguments go beyond mere insult, though. He wants to break down Abū Bishr's stated view, according to which linguistic expressions are mere representations of thoughts. For Abū Bishr, what happens at the level of thought is universal and shared by all mankind, and logic is the study of this trans-linguistic intellectual activity. Though our record of the event doesn't give him a chance to explain this in detail, he seems to mean that a given

philosophical demonstration will be sound so long as its premises are true and its argumentative structure valid. It is irrelevant which language one uses to then state the demonstration. Here Abū Bishr would be thinking of a passage in Aristotle's *On Interpretation* (16a), which says that what happens in the soul is the same for everyone, whereas linguistic utterance varies from one person to another.

Against this, al-Sīrāfī argues, quite plausibly, that even if logical inferences have some kind of universal validity, those inferences will do no good unless we are in a position to express them in precise Arabic, Greek, or whatever. Doing so is not the child's play or afterthought Abū Bishr would like to think it is. It is a matter of fine judgment and expertise to know the right way to express a given logical relation in Arabic. Furthermore, language has a powerful effect on our thought, since it is full of ambiguity and subtle differences in meaning. In an Arabic-speaking culture, it is expertise in Arabic that will save you from making mistakes—both as you put your own thoughts into language and as you try to understand what is meant by the expressions other people produce. Al-Sīrāfī proves this with a series of linguistic puzzles, which trick Abū Bishr into making basic conceptual errors. For instance, Abū Bishr admits that it is fine to say in Arabic something like "Zayd is the tallest of his brothers," but this would imply that Zayd is his own brother. The conclusion is obvious: if you only have enough *dirham* in your bank account to afford one course of instruction in tenth-century Baghdad, you'll be much better off spending your hard-earned cash at al-Sīrāfī's grammar school than Abū Bishr's logical academy, no matter how old school it is.

As I say, our evidence concerning this debate is highly biased, written by partisans of al-Sīrāfī. But it seems that the whole event really was a public-relations disaster for Abū Bishr. This is shown by the reaction among what the hip kids might call his "posse" of logicians. Both al-Fārābī and Ibn ʿAdī have some scornful things to say about grammar, and it is easy to imagine that they are trying to win the debate for Abū Bishr after the fact. Al-Fārābī makes two improvements to Abū Bishr's rather naive claim that logic transcends language completely and operates at the level of thought. First, he points out that thought itself is linguistically structured—he uses the phrase "interior discourse" to describe what is happening in the mind. Second, he says that logic operates *both* with this kind of interior discourse *and* at the level of the external speech we use to communicate with one another. Logic remains universal, though, just as Abū Bishr said. When it deals with actual linguistic expressions it concentrates on features that occur in all languages. It simply ignores those features that are

specific to the language being used, which are the object of grammar. These are indeed a potential source of confusion, but no part of the rigorous search for truth. Thus grammar is relegated to the study of the parochial and superficial, leaving logic to be the indispensable tool for all mankind.

Al-Fārābī's defense of logic not only avoids an implausibly sharp distinction between language and thought. It also makes better sense of what Aristotle says —always a big advantage for members of the Baghdad school. After all, the *Organon*, as Aristotle's logical works were collectively called, is full of observations about language, and not only about logical validity. In ancient Aristotelianism, there was a debate about the subject-matter of first work of the *Organon*, the *Categories*: is it about words or things?[10] The prevailing view was the compromise offered by Porphyry: it deals with words insofar as they refer to things. This is still the formulation we find in the Baghdad group, so they could hardly exclude the analysis of language from the study of logic.

This comes through strongly in Yaḥyā Ibn ʿAdī's contribution to the debate about the relative merits between logic and grammar. He wrote a short treatise devoted specifically to this topic. He admits that grammar and logic have a lot in common, as they both deal with verbal expressions. They differ in their goals, however. Grammar is, again, a relatively superficial and unimportant discipline. It ensures that we follow conventional rules—he has in mind things like agreement between subject and verb, or, in languages such as Arabic, making sure that feminine nouns get modified by adjectives that are also feminine. But grammar by itself will not help you say anything true. If you ask a grammarian whether you can say, "Buster Keaton is a giraffe," he will give you the go-ahead, because what you have said is not grammatically wrong. (This is not Ibn ʿAdī's example, by the way.) Logic, though, is the study of—you guessed it—verbal expressions insofar as they refer to things, and has as its objective the production of demonstrations and hence of truth.

That might make it sound as if logic is not just indispensable to philosophy, but is in fact simply the same thing as philosophy. If I can attain demonstrations of the truth by using logic, then what else is left for the rest of philosophy to do? That impression might also be given by a slogan about logic, which is found in ancient commentators and then repeated by Abū Bishr and other members of the Baghdad school: logic is an instrument by which one knows true from false, and good from bad. As grand as that sounds, it's important to note that it is still only an "instrument"—indeed, this is the meaning of the Greek word *organon*. It does not identify truth or the good by itself, but is the indispensable tool that helps us to do so. How exactly does it help? For a well-considered answer we can turn to

another short treatise by Ibn ʿAdī.[11] He explains that logic allows us to extend what we already know to be true, by combining together these truths to reach new conclusions. Logic will tell you, for instance, that if you know that A is a B, and that every B is not C, then you can infer that A is not C. But that won't provide you with any truths about the world until you substitute in verbal expressions for the variable letters. If you already know that "Buster Keaton is a silent movie comedian," and that "every silent movie comedian is not a giraffe," this logical scheme will allow you infer that "Buster Keaton is not a giraffe." Try doing that with grammar.

Ibn ʿAdī was nicknamed "the logician," from which you might already expect that this defense of logic against the rival claims of grammar was not his only contribution to the field. Another interesting logical work of his is called *On the Nature of the Possible*.[12] It is devoted to dealing with the "sea-battle argument" that Aristotle discusses in *On Interpretation*. Very unusually, Ibn ʿAdī combines an independent treatise on the topic with a commentary on the relevant chapter from Aristotle. The argument is that if there are already truths now predicting what will happen in the future (like "there will be a sea battle tomorrow"), then the future events (in this case, the sea battle) cannot fail to occur; they are inevitable. For Ibn ʿAdī, what this means is that there will be nothing that is merely *mumkin*, an Arabic word that is usually translated "possible" but could more exactly be rendered as "contingent." What is *mumkin*, or contingent, is neither impossible nor necessary. We naturally think that it is merely contingent, and not necessary, that you're reading this right now, since you could have been doing something else (unwise though that would have been).

Ibn ʿAdī is particularly concerned with the version of the sea-battle argument that invokes God's knowledge of the future, rather than truths about the future in general. He wants to show that what God knows can be merely contingent even though God's knowledge has the full force of necessity. For the features of the knower are not shared with the features of what is known. After all, God can without changing know about things that involve change. He has eternally and unchangingly known about your reading first the beginning, then the middle, and now nearly the end of this chapter. If this is right, then God can likewise know necessarily things that are in themselves contingent. If this is right, then the only reason to fear that God's knowledge makes things necessary would be if God actually caused them to happen by knowing them. This is, however, not the case, as Ibn ʿAdī shows by going through the four types of cause recognized by Aristotle—form, matter, final cause, and efficient cause—and showing that God's knowledge does not fall under any of the four types.

All of this is highly reminiscent of the treatment of the sea-battle problem we find in the late antique commentator Boethius.[13] There was no Latin–Arabic translation movement for Ibn ʿAdī to draw on, so obviously he is not actually being influenced by Boethius. The overlap between their solutions is instead explained by the fact that both are making careful use of the Greek texts written at the end of antiquity by Neoplatonic commentators on Aristotle. In fact, these two Christians, Boethius and Ibn ʿAdī, are, ironically enough, making use of a distinction originally introduced by the arch-pagan Neoplatonist Iamblichus. It was he who first argued that the features of knowledge (such as necessity, or immutability) are those appropriate to the knower, not to what is known. The remarkably close engagement of the Baghdad school with these late ancient scholars is also abundantly clear from one of the most fascinating manuscripts we have for this period of philosophy. Held in the Dutch city of Leiden, it contains an Arabic translation of Aristotle's *Physics*, further translation of comments by Greek thinkers like Philoponus, and additional commentary by the Baghdad Peripatetics.[14] In such texts the old school of Alexandria was revived in the new school of tenth-century Baghdad. Of course, this does not mean that the Baghdad philosophers were unoriginal, any more than the Alexandrians themselves should be accused of unoriginality because they devoted their energies to commenting on Aristotle. With all due respect to Ibn ʿAdī, one Baghdad Peripatetic in particular seems to have outstripped the others in his acuity and originality: al-Fārābī.

9

THE SECOND MASTER AL-FĀRĀBĪ

One of the things I like about working on the history of philosophy is that it naturally leads you to learn about all areas of philosophy. Contemporary philosophy is so specialized that it is becoming rare for one and the same person to work on, say, ethics and metaphysics, never mind these two areas plus epistemology, philosophy of science, logic, and so on. But specialists in the history of philosophy often work on many or all of these areas. In fact, you're almost forced to do this if you are researching the most outstanding historical thinkers. Part of their greatness is often their ability to make innovations within many branches of philosophy, and to show how these branches are part of the same tree. You can't really understand Plato's ethics without understanding his metaphysics and theory of knowledge, nor can you work on Kant's *Critique of Pure Reason* without grasping how it prepares the way for the Kantian ethical teaching.

The first Muslim philosopher to offer us this kind of holistic and original philosophical system is al-Fārābī. We did see al-Kindī tackling a wide range of topics in philosophy, but it's up the reader to figure out how his ideas on these topics might fit together. Al-Rāzī seems to have been more systematic, but the loss of the writings in which he put forward his daring cosmology leave the interpreter with even more work to do—never mind the additional task of relating that cosmology to his surviving ethical treatises (on which, more in Chapter 13). From al-Fārābī, though, we have ambitious treatises which set out and interrelate views on metaphysics, cosmology, human nature, ethics, and political philosophy. He also wrote about logic, and even that aspect of his thought clearly relates to the rest of his system.

In this, al-Fārābī makes an interesting contrast not just to the earlier Muslim thinkers we've examined, but also to his Christian colleagues in the Baghdad school. Of these, the most significant is Yaḥyā ibn ʿAdī. More research is

needed into Ibn ʿAdī, especially in light of new writings of his that were recently discovered in a manuscript preserved in Tehran.[1] We might, among other things, come to a better understanding of how his treatises on Aristotelian philosophy relate to his Christian theological output. But the impression so far is that Ibn ʿAdī was more like al-Kindī, writing occasional works on well-defined topics and rarely giving us a view of the bigger picture. Al-Fārābī's system-building ambitions helped him to exercise a much greater influence, to the point that he was honored with the title "the second master." The first master, of course, was Aristotle, who provided the frame within which al-Fārābī hung his big-picture theories.

Given his significance, it would be nice if I could paint you a detailed picture of al-Fārābī's life. But we unfortunately don't know much about that. His name provides a first clue, and indicates that he came originally from central Asia— either from Fārāb in Khurāsān or Faryāb in Turkistān. It's reported that he was associated with the Baghdad Peripatetic school, and in particular that he was the teacher of Yaḥyā ibn ʿAdī. This was not his only Christian colleague; he tells us himself that he studied with another Christian, named Yuḥannā ibn Haylān. We also know that, later in life, he traveled to Syria and Egypt. He died in Damascus in the year 950 or 951. Here he enjoyed the patronage of Sayf al-Dawla, who fought wars against the Byzantines and other enemies to establish a kingdom in northern Syria, with Aleppo at its center.

With his itinerant career and his dependence on the support of warlords, al-Fārābī's biography anticipates that of Avicenna, who was likewise forced to spend his life moving from one city and patron to another. The broad outines of Avicenna's philosophical system also look back to al-Fārābī. Both were talented logicians, who wholeheartedly embraced the late ancient idea that philosophy must be grounded in the study of logic. From al-Fārābī, Avicenna took a vision of God as a First Cause who creates the rest of the universe by emanating it from Himself necessarily, and through a series of intermediaries. Al-Fārābī also anticipates Avicenna by integrating a theory of knowledge into that emanationist system, and making one and the same separate intellect responsible for both human knowledge and the forms of things down here on earth. There can be no doubting Avicenna's originality, but some of what seems to be new with him is actually original with al-Fārābī.

Avicenna and later thinkers, like Averroes and Maimonides in Andalusia, single out al-Fārābī as the most important thinker of the early Arabic tradition, and mostly ignore or disdain other predecessors. Modern scholars have unfortunately tended to follow suit, and given little thought to al-Fārābī's own

intellectual context. But he was in some respects a typical member of the Baghdad school,[2] even if he went beyond their core project of imitating the late ancient commentators on Aristotle. He did write commentaries of his own. These include a now lost treatise devoted to Aristotle's *Ethics*, and numerous surviving writings on logic. Many of these are just summaries or paraphrases, of the sort that was produced in late antiquity by the rhetorician Themistius, and will be produced again in the twelfth century by Averroes. But we do have al-Fārābī's full commentary, as well as his paraphrase, for Aristotle's *On Interpretation*.[3]

Inevitably, this leads al-Fārābī to tackle a philosophical puzzle from Aristotle's logic, the sea-battle argument for determinism that so fascinated Ibn ʿAdī. In his commentary on Aristotle's *On Interpretation*, al-Fārābī challenges the usual assumption that Aristotle is trying to defeat an argument for determinism. That can't be right, because determinism is a topic that would be appropriately discussed in physics or metaphysics—whereas here, Aristotle is doing logic. So we should understand things the other way around. When Aristotle denies that the present truth of propositions about the future shows that future events are necessary, he is simply *assuming* that the future events are not necessary. According to al-Fārābī, this is blindingly obvious, and the sort of thing only doubted by the more disreputable sort of Islamic theologian. (As we'll see later, Islamic theology and disrepute are rarely far apart, as far as al-Fārābī is concerned.) On al-Fārābī's interpretation, Aristotle is bringing up the deterministic argument only to make a point about the truth of propositions, which is of course relevant in logic. The point would be that propositions about the future cannot yet be settled as true or false, since otherwise the absurd consequence of determinism would follow.

Al-Fārābī admits, though, that this solution will be awkward for someone who thinks that God knows the future. After all, if there is no truth now concerning the future sea battle, how can God already know about it? It's actually not clear whether al-Fārābī would accept that God knows such things. Yet he offers a second solution of his own, which has great philosophical merit. He says that present truths seem to make future events necessary only because the occurrence of those events is implied by the truth of the present propositions predicting them. In other words, if I say "there will be a sea battle tomorrow," then that of course implies that there will be a sea battle tomorrow. But although there is a necessary connection between the statement and the event, the truth of the statement itself is *not* necessary. Rather, my statement "there will be a sea battle tomorrow" is contingently true, if it is true at all. So if it is true, it only

implies that the sea battle will take place contingently, not necessarily. By contrast, if I say "2+2 will equal 4 tomorrow," what I say now is necessarily true, because what it predicts is necessary. Hence, God knows in advance that the sea battle will indeed happen even though things could have gone otherwise.

Knowledge is another topic typically taken up by Aristotelians under the rubric of logic. Reasonably so, since the *Posterior Analytics*, the crowning glory of his logical writings, is the closest thing we have to a work by Aristotle on epistemology. We have a detailed paraphrase of it by al-Fārābī, and also a fascinating little treatise called *On the Conditions of Certainty*.[4] Here he lays out the various kinds of belief we can have, culminating in the perfectly certain beliefs envisioned by Aristotle in the *Analytics*. According to al-Fārābī, we should only count ourselves as "absolutely" certain when what we believe is necessarily, essentially, and permanently true. Apparently, then, there is no absolute certainty about future events like sea battles, since those are certainly not permanent or essential—and as we just saw, they are not necessary either. In light of this, it may be that al-Fārābī wasn't entirely convinced that God does know the future. If future events aren't the sort of things one can know with absolute certainty, and all God's knowledge is absolutely certain, then future events just won't be part of what God knows.

Al-Fārābī also draws on the *Posterior Analytics* when he lays out his conception of the philosophical curriculum as a whole. He does this in several of his works, for instance in his *Philosophy of Aristotle*, an overview of Aristotle's philosophical writings. Al-Kindī also wrote a work along these lines, but al-Fārābī seems to be considerably better informed. He's more in the dark when it comes to Plato, but that didn't stop him from writing a companion piece to this work on Aristotle, called the *Philosophy of Plato*.[5] Given that Plato's dialogues were probably never known in complete translations in Arabic, al-Fārābī is at best working from paraphrase summaries here. In fact, most likely not even that: he is probably drawing on an Arabic version of an ancient introduction to Plato. He simply goes through the dialogues title by title, often restricting himself to a dubious etymological explanation of each title. By the way, there's a third work often considered to form a trilogy along with the works on Plato and Aristotle, which argues for the harmony between the teachings of these two philosophers. But fairly convincing arguments have been made that it is inauthentic,[6] or perhaps an early work whose contents al-Fārābī later came to reject. So I won't say any more about it here.

In the *Philosophy of Aristotle*, and in another work, called *The Attainment of Happiness*, al-Fārābī sets out his understanding of the late antique philosophical

curriculum. In his version of this course of study, one should unsurprisingly begin with logic, thereafter progressing to physics and then metaphysics. Finally one should turn to the practical subjects of ethics and political philosophy. The *Posterior Analytics* is important for this course of study. In it, Aristotle explained how philosophical sciences can be built one upon another, with higher sciences providing the principles or assumptions on which lower sciences are built. A common example is that geometry provides the principles for the subordinate science of optics. That is, we need to use geometry to study things like reflections in mirrors, whereas the reverse is not true; geometers have no need to know about optics. Ideally, the whole body of possible human knowledge can be envisioned as a hierarchy of sciences, with metaphysics or "first philosophy" establishing the highest principles upon which all other sciences depend.

So why not start at the top by doing metaphysics, instead of logic and physics? Because, as Aristotle also pointed out, what is primary to us is usually not what is primary in itself. The most dramatic example is God: He is first among causes, but certainly not the first cause we are aware of, or the easiest cause for us to understand. Rather, we begin with the everyday, physical objects in the world around us, and having understood these, work our way towards understanding more fundamental principles, including God. But al-Fārābī resists the temptation to say that "first philosophy" is simply the study of God as First Cause of all things. In a little essay he wrote on the purposes of Aristotle's *Metaphysics*, al-Fārābī remarks that many people are confused by this work because they assume first philosophy must be nothing other than theology.[7] Al-Kindī is an obvious culprit: he said precisely this at the beginning of his *On First Philosophy*. Instead, al-Fārābī wants to insist, Aristotle's *Metaphysics* is devoted to *all* the topics that are most primary among the sciences. That includes theology, insofar as God is the First Cause of being for all other things, but also such principles as the law of non-contradiction, which Aristotle duly tackles in the fourth book of the *Metaphysics*. Brief though this little essay is, Avicenna found it invaluable. He tells us that he read the *Metaphysics* dozens of times, but never understood it until he came across al-Fārābī's explanation. Presumably, what he found so helpful was al-Fārābī's rejection of the purely theological reading of Aristotle that was so prevalent in the Arabic tradition.

So now we know what al-Fārābī would like us to do: fully realize our potential for knowledge, by working our way up from familiar things to genuinely primary things, and grasping all the sciences as one interlocking system. This constitutes what he calls "ultimate happiness" for mankind (hence

the title of his work, the *Attainment of Happiness*). But how do we get from where we are now, as mere philosophy enthusiasts, to where al-Fārābī would like us to be? To answer that question, we need to turn from his systematic account of the philosophical curriculum to his systematic account of the universe. It is laid out in his two most ambitious works, which have the not particularly punchy titles *Principles of the Opinions of the Inhabitants of the Virtuous City* and *The Political Regime*.[8] Both begin with accounts of the entire cosmos before moving on to discuss mankind and the ideal political arrangements in our cities.

In these works al-Fārābī begins not from what is familiar to us, but from what is truly primary. In just a few brilliantly innovative paragraphs, al-Fārābī begins by fusing together the emanationist scheme of Neoplatonism with ideas taken from Aristotle. For him, God is a pure mind, and the First Cause of motion for the entire universe. Aristotle posits not just this highest separate intellect, but one intellect for each of the simple motions of the heavenly bodies. Broadly following this idea, al-Fārābī tells us without argument that every heavenly sphere has its own intellect. The Neoplatonic part comes in when he adds that these intellects and spheres descend from God in a kind of cascade of causation. God kicks things off by emanating a first intellect, which is associated with the outermost sphere of the heavens. This sounds a lot like Plotinus, who believed that an intellect came forth from his first principle, the One. But unlike Plotinus, al-Fārābī has a whole series of celestial intellects proceeding one by one, each one giving rise to the next, much as the first intellect came from God. The intellects are associated with the nested heavenly spheres, which are like transparent glass balls one inside the other. Their motions around the earth are revealed to us by the visible planets seated upon them.

This goes on until we arrive at the lowest of the intellects, which has responsibility for our world down here, below the heavens. With all due respect to the Farabian God, the lowest separate intellect is arguably the most important and interesting entity in his entire system. It may not be First Cause of all things, but it plays crucial and unique roles both in al-Fārābī's cosmology and in his theory of knowledge. It is able to carry out these roles because, not unlike Plotinus' single intellect, it is thinking about the whole range of universal, intelligible forms that can be exemplified in our world. It has a perfect understanding of these forms, so that it is like a complete library of possible knowledge. But since it is a thinking intellect, if we compare it to a library, we should imagine it as a library that is always reading its own books.

Its cosmological function, then, is to bestow its forms upon things here on

earth, which are made of the four elements. When elemental matter is suitably mixed together so that it is prepared to be a baby giraffe, the intellect emanates the form of giraffe onto the matter. Zookeepers will scoff at this. They will insist that in their experience you get giraffes from mother and father giraffes, not from celestial intellects. But al-Fārābī knows better. What mother and father giraffes do, perhaps after a romantic candlelit dinner of dried grass and lukewarm water, is prepare some matter to be just right for receiving the form of giraffe. Then, the form is emanated from the lowest celestial intellect. This idea was extremely influential, on Avicenna and others. In Arabic philosophical literature the intellect is often honored with the phrase *wāhib al-ṣuwar*, which came into Latin as *dator formarum*: the "giver of forms."

Influential or not, I suspect that al-Fārābī's theory will strike you as being nuttier than the snacks at an elephant's birthday party. But it actually solves a philosophical problem that rumbled along through antique philosophy. Plato introduced his famous theory of Forms in part because he wanted to explain the "one over many" phenomenon: all giraffes participate in the one form of giraffe, which explains why they have a shared nature distinct from the one shared by elephants. But al-Fārābī is well aware of Aristotle's searching critique of this, and agrees that we should not posit a second, transcendent world of perfect exemplars to solve the one-over-many problem. Because his own idea of a "giver of forms" is introduced in the context of a theory of emanation, it is often described as being Neoplatonic or Platonist. But al-Fārābī himself would see it as *anti*-Platonist. According to his account, unity is provided not by Platonic Forms, but by forms that are simply ideas in a mind. It's just that this mind is a single, transcendent one.

Furthermore, al-Fārābī's theory offers an explanation of the most controversial passage in all of Aristotle's writings, *On the Soul* 5.3. In this chapter, we are told that there is an eternally active, separate intellect, which makes other kinds of thinking possible. Unlike me, al-Fārābī is pretty sure what Aristotle is talking about here: the giver of forms, which he therefore also calls the "Active Intellect." As al-Fārābī explains in his *Letter on the Intellect*,[9] the human mind goes through several stages as it works towards realizing its capacity for knowledge. It begins in a state of potentiality, and is actualized through philosophical inquiry. Though he follows Aristotle in recognizing a role for sense-experience in this process, ultimately al-Fārābī believes that the high degree of necessity and certainty required for true knowledge can only be secured through another sort of emanation from the giver of forms. This time, the forms will not be bestowed upon appropriately prepared matter, but instead

on the appropriately prepared human mind.

In part, what al-Fārābī is saying here was already stated by al-Kindī in his own *Letter on the Intellect*, which likewise spoke of a transcendent intellect that actualizes the human mind. But al-Kindī did not have the idea of giving the Active Intellect a cosmological role, as well as a function in bringing about human knowledge. By making that move, al-Fārābī is able to explain why my mind's receiving the form of giraffe or elephant from a separate intellect should allow me to know about the physical giraffes and elephants we see in zoos. In both cases, the same form is derived from the same source. It's just that in the knowledge case, that form is actualizing the potential of my mind, whereas in the zoo case, it's actualizing matter's potential to become an animal. And al-Fārābī makes one more innovative move we have not found in al-Kindī or anyone else thus far. He uses his theory of the intellect to explain prophecy. A prophet, he thinks, is basically someone whose mind has been fully actualized by the Active Intellect, and who is in a position to share the resulting knowledge with the rest of mankind. As we'll now see, this has far-reaching consequences for al-Fārābī's understanding of religion and society.

10

STATE OF MIND AL-FĀRĀBĪ ON RELIGION AND POLITICS

If you were going to compare the leaders of your nation to a part of the body, which part would you choose? The fingers, perhaps, since they deftly remove money from your wallet? The skin, because they are so superficial? The tongue, because all they want is a taste of power? Or maybe you can think of an even less favorable comparison, which would bring a whole new meaning to the phrase "seat of power." Let's not be cynical though. Most politicians probably mean well, and some even do well. A good leader can be the face of the nation, representing its people to the world, and also its brain, thinking through the issues that confront it. Al-Fārābī would broadly agree with this last comparison, except that he would instead refer us to the heart. Not because his ideal ruler would constantly administer beatings. Rather, because he follows Aristotle in believing that the so-called "ruling faculty" of the human body is located in the heart, rather than the brain. He even wrote a little treatise answering Galen's criticisms of Aristotle on this point.[1] So when al-Fārābī frequently compares the well-run society to a healthy human body, he has it in mind that the presence of an effective ruler prevents the city from being heartless, rather than brainless.

Al-Fārābī takes this comparison between the city and the body so seriously that he also compares the good ruler to a doctor. As the doctor uses the medical art to impose good order on the body, so the ruler imposes good order on the citizens under his rule. Finding a point of agreement between Aristotle and Galen, al-Fārābī says that in both cases the goal is a kind of balance or moderation. In Galen's medical theory, the doctor seeks to balance the four humors in the patient's body. And in Aristotle's ethical theory, each of us should be aiming for a balance, with each virtue defined as a mean between extremes. Al-Fārābī also follows Aristotle in thinking that good political rule can help citizens to be happy by bringing them to virtue. In fact, he goes so far as to say

that happiness is impossible for anyone who does not live in a well-run society.

We can see how deeply al-Fārābī was influenced by ancient writings about politics by considering what sort of society he had in mind. Ignoring the examples of the Roman and Islamic empires, he unhesitatingly took the individual city to be the fundamental setting for political affairs. His writings about the best arrangement of a society are "political" in the most etymological of senses: like Plato and Aristotle, he is talking about the affairs of a city, or *polis*.[2] (This etymology works in Arabic too: the term often translated "political" in al-Fārābī, *madanī*, has the same root as the word *madīna*, meaning "city.") Nearly every page of his writings on political subjects betrays the influence of Greek philosophy, and above all Plato. Though there was no complete Arabic translation of the *Republic*, al-Fārābī clearly knows the broad outlines of its argument, and adopts its teaching that a city can become good only if it is ruled by philosophers. He also recognizes the possibility that an entire city can be "virtuous," just as a person can be. A virtuous city is one in which the citizens, with the help of their ruler, have acquired the right opinions and perform the right actions. By contrast, "ignorant" cities are full of people doing the wrong things because they hold the wrong opinions. Echoing Plato's *Republic* yet again, he speaks of ignorant cities that pursue honor, wealth, or pleasure rather than genuine happiness.[3]

Notice that al-Fārābī speaks in terms of the *opinions*, rather than the knowledge, that should ideally be possessed by citizens. This thought even appears in the title of his work *On the Principles of the Opinions of the Inhabitants of the Virtuous City*. He finds it unrealistic, or even impossible, to expect that all the inhabitants will have real knowledge. His conception of knowledge follows the highly demanding constraints laid down by Aristotle. Truly to know something, you must have possession of necessary and universal truths reached through valid demonstrations. This goal is so demanding, and talent and opportunity so scarce, that only a few people can hope to possess genuine knowledge. In fact, al-Fārābī thinks it is rather optimistic to suppose that *anyone* in a city will really have complete knowledge of all the truths that are merely believed by the inhabitants of the virtuous city. They must settle for true opinions about God, as the source of all truth and perfection in the world, about the heavenly bodies and the intellects that move them, the formation of mankind, the right arrangements of political affairs, and the afterlife.[4]

In the best-case scenario, they will get these opinions from someone who is in possession of knowledge. As in Plato, this will be the true ruler of the city: not just a king, but a philosopher. His intellect is completely realized by receiving an

emanation from the separate Active Intellect.[5] Since the ideal ruler knows everything anyone might need to know, he can help his subjects to form virtuous opinions and perform virtuous actions. Without his guidance, the citizens will lack the right goals, because of the false opinions they have regarding practical affairs.

Following late ancient classifications of knowledge, al-Fārābī divides up philosophy into theoretical and practical. For him, the practical is defined as the sphere of the voluntary, so practical philosophy is relevant wherever choices must be made.[6] Since it is a kind of philosophy, it will involve the grasp of necessary, universal truths. So, on the practical front, what the philosopher, and hence the perfect ruler, possesses is general knowledge about practical affairs. This allows him to establish the right goal to be pursued by the citizens, namely true happiness, as opposed to wealth, honor, or pleasure. But as al-Fārābī points out, it isn't enough to have the right goal if one can't deliberate well about how to attain that goal.[7] Good deliberation involves applying the general deliverances of reason to practical affairs and individual cases. So the perfect ruler will need this capacity too. Again, al-Fārābī compares the ruler to the doctor. Galen had emphasized that good doctors do not just know generalities about medicine. They are also able to draw on their experience to tailor remedies to the needs and bodies of individual patients. In the same way, ethical virtue and the virtuous rule of cities means being able to judge each case in light of previous experience.

As becomes especially clear in a work by al-Fārābī called *The Book of Religion*,[8] the practical abilities of the ideal ruler are realized above all in the handing down of laws. These represent an application of the general to the particular, in a way appropriate for the city and its inhabitants—any given city will have specific needs because of its location, its climate, and the temperament of its people. The ruler will legislate accordingly, and also be able to react appropriately as new situations arise. The ruler's lawgiving function may seem a distinctively Islamic feature of al-Fārābī's theory, and there is some truth in that. But Plato too discussed the philosophical basis of laws several times, not just in the *Republic* but also in his final work, the *Laws*. It would have been known to al-Fārābī, probably in the form of another paraphrase by Galen.[9]

So far, then, the Farabian political theory looks to be a subtle reworking and interweaving of themes from Plato and Aristotle, along with analogies drawn to Galenic medicine. All this sets the scene for al-Fārābī's most dramatic contribution to the history of political philosophy: his claim that the ideal ruler is not only a philosopher, but also a prophet.[10] Al-Fārābī's cosmology, in which God is a rather remote First Principle who affects humans through a chain of

intermediary celestial intellects, provides the context here. The Active Intellect, which bestows knowledge upon individual human knowers, is also the conduit through which God gives a revelation to the prophet. Such a revelation distinguishes the best possible ruler from a mere philosopher. The philosopher has perfectly realized the human capacity for knowledge, which is nothing to sneeze at. Indeed, it means that the prophet is not *intellectually* superior to the philosopher. The two are alike in having all the universal knowledge that any human could possess, a state that al-Fārābī refers to as "acquired intellect."

Instead, what distinguishes the prophet from the philosopher occurs in a lower part of the soul: the imagination. What the prophet receives in revelation comes in the form of symbolic images. He may have visions of what is to come in the future. Here al-Fārābī is in broad agreement with his predecessor al-Kindī, who wrote a work on prophetic dreams. According to al-Kindī, a sleeping person's soul can receive images from the intellect into the imagination. These images may in some cases be like riddles, which need to be decoded; a dream about flying might signify that a voyage is in your near future.[11] To some extent, these ideas about god-given prophetic visions were already worked into the Arabic translation of Aristotle's writings about dreams.[12] So al-Fārābī is drawing on Arabic literature of the previous century here. Still, he does something new by seeing the possible implications for religion and political affairs. Thanks to the symbolic images the prophet receives from God through the Active Intellect, he is able not just to foretell the future, but also to represent what he knows in a way that his subjects can appreciate.

For this purpose, the prophet's revelation takes the form of images and symbols, not demonstrative proofs. Though the citizens of the virtuous city need to have a whole range of beliefs about God, celestial intelligences, the afterlife, and so on, they do not need a philosophical understanding of any of these matters. They just need to be convinced. So it's sufficient if their opinions rest on the literal acceptance of symbols. The citizens might, say, believe in celestial intelligences, but think of them as angels. In Islam it is said to be the angel Gabriel who delivered the revelation of the Koran to Muḥammad. For al-Fārābī, the angel would presumably be a symbol of the Active Intellect, in its role as the intermediary between God and the Prophet's soul. Similarly, the bliss attained by souls freed from body is presented in Islam as a garden of delights—a material symbol of the immaterial bliss that awaits the virtuous soul once it is freed from body.

I should hasten to add that these are my examples, not al-Fārābī's. His discussions of religion studiously avoid any explicit allusions to Islam, or any

other actual faith. He always addresses the topic in abstract and general terms. But it's pretty clear that when he describes the ideal, prophet-philosopher ruler who brings a revealed religion, he is thinking of Muḥammad as a primary example. The prophet-ruler is also a lawgiver, which should put us in mind of Islamic law and its basis in Muḥammad's revelation and teachings. The *Book of Religion* strongly suggests this when it addresses the question of what the virtuous society should do when the prophet-ruler is no longer alive. Ideally, he would be replaced by another such ruler, or failing that, a group of people who collectively have the traits the prophet-ruler combines in his single, and singular, person.[13] When the gifts of universal understanding, excellence in deliberation about particulars, and revelation are possessed by no individual or group of leaders, the citizens should adhere to the laws previously laid down by the perfect ruler or rulers. Mostly this means following the letter of those laws as closely as possible. But circumstances change, and problems may arise that have no clear solution in the existing law.

When this happens, al-Fārābī says, we turn to jurisprudence. This art extends the legal rulings of the prophet to new questions and situations, and is grounded in a thorough study of the prophet and his legal judgments. To some extent this is another borrowing from Plato, who also raised the question of what do in generations following an ideal lawgiver's death.[14] But the details of al-Fārābī's discussion here leave little doubt that he has in mind Islamic jurisprudence (*fiqh*; see further Chapter 23). Thus does al-Fārābī find a place in his political theory for jurisprudence, which in his day had become a considerable social and political force in Muslim society. Al-Fārābī's attitude towards the jurists might best be described as condescending, yet tolerant. He explains why jurisprudence is necessary, but it clearly plays a much less exalted role than philosophy. After all, philosophy gives us a way to understand for ourselves the true basis of the prophet-ruler's laws, the truths that lie behind the merely symbolic images offered in a text like the Koran. The jurist, by contrast, stays within the legal framework and symbolic world of a religion. Jurisprudence is the art of making careful guesses about how best to extend these teachings, without probing into their actual foundations. In this sense, the jurist never ventures beyond the parochial confines of his own religion.

As several scholars have pointed out, one can draw an analogy here to the discipline of grammar.[15] For al-Fārābī and the other Baghdad Aristotelians, grammar is culturally specific, because it is tied to the language of a single people, whereas logic is universal and uncovers the structure of human reason itself. Likewise, religion and the religious law are bound to one culture, inducing

true opinions and laying down injunctions in a way tailored to that culture. The jurist wrongly assumes that this culturally specific material offers a universal, absolutely true revelation, just as the grammarian thinks he can get at truth merely by studying the language he happens to speak. Ironically, a similar accusation is sometimes thrown at today's analytic philosophers, who tend to think that we can do philosophy by studying language, but feel no need to learn any language other than English. Farabian philosophy, by contrast, is ostentatiously and self-consciously universal. Every prophet-ruler and every philosopher understands the same truths: the oneness of God as First Principle, the descent of His providential influence through the heavens and celestial intellects, and so on. These truths are symbolized in different ways by different prophetic revelations, which form the basis of the belief systems al-Fārābī calls "virtuous religions."

Having put jurisprudence and grammar firmly, and literally, in their place, al-Fārābī turns to a third intellectual tradition which was also blossoming in his day. This is rational theology, or *kalām*. In principle, al-Fārābī leaves an opening for *kalām* to play a similarly limited, but still useful role. He associates theology with dialectic, the practice of arguing from agreed premises rather than offering demonstrations that can be traced back to solid first principles. Dialectic can be of great use, to defend a virtuous religion from its detractors. Unfortunately, in al-Fārābī's eyes, the theologians of Islam mix this useful enterprise with a good deal of counter-productive nonsense. In an amusingly disdainful treatment of theology in his *Enumeration of the Sciences*, al-Fārābī lists the different kinds of theologian, or practitioners of *kalām*.[16] None of them are conscious of the dialectical nature of their enterprise, and the modesty of its aims in comparison to the demonstrative majesty of philosophy.

Instead, some theologians are of the view that even the most advanced human is like a child compared to God. So there is no point using human reason to guess at the truths underlying God's message, or even to ratify those truths. Instead, we should accept the prophet's veracity on the basis of the miracles he performed and take his revelation at face value. Other theologians are more troubled by the surface meaning of revelation and try to eliminate its apparent implausibilities. Here al-Fārābī's theologians may be thinking, for instance, of passages in revealed texts that depict God as a physical being. These more critically minded theologians turn to sense-perception, reason, and tradition, and assimilate the message of the prophet to the deliverances of these three sources. (Notice that this is almost exactly what we found in Saadia Gaon. No surprise there, since al-Fārābī surely has in mind the Muʿtazilite theologians who so

deeply influenced Saadia.) Next, there are some theologians who are just interested in interreligious debate. They content themselves with pointing out implausibilities in other religions, to distract opponents from the implausibilities of their own faith. Still others will stoop to mendacious tricks to win in debates with members of other religions. This is no-holds-barred dialectic, which al-Fārābī compares to the fact that all is fair in war. These schemers seem to be the most despicable representatives of *kalām*. But all the groups described here are subject at least to self-deception, even if they don't deliberately deceive others. None of them can hope to attain knowledge, as the philosopher does.

Knowledge, in fact, seems to be a central theme, if not *the* central theme, of al-Fārābī's philosophy. The most interesting entitity in his cosmology is the Active Intellect, which both gives forms to things in our world and gives knowledge to humans. His political philosophy is predicated on the possibility of a ruler with perfect demonstrative knowledge, while his portrayal of religion shows how it relates to, but falls short of, such knowledge. This is unsurprising, insofar as al-Fārābī devoted so much of his energy to the study of Aristotle's logic. In keeping with the ancient commentary tradition, he and the other members of the Baghdad school understood the logical works to reach their climax with the *Posterior Analytics*, which in Arabic was simply called the *Demonstration*, and which contains Aristotle's most elaborate discussions of epistemology. So far, we've been seeing how this approach to demonstrative knowledge, or "science" (*'ilm*), played out in fields like metaphysics, cosmology, ethics, and politics. But in this period, the sciences included a range of disciplines wider than what we would normally include under "philosophy" today—something illustrated by a work of al-Fārābī bearing the self-explanatory title *Enumeration of the Sciences*. In the next couple of chapters, we'll be looking at two examples.

11

EYE OF THE BEHOLDER THEORIES OF VISION

If the history of science teaches us anything, it is to beware of the obvious. Many things that once seemed self-evident are now known to be false: that the earth is not moving, or that women are less intelligent than men. Conversely, history teaches us that some things we now take to be obvious are in fact nothing of the sort. My favorite example is the fact that we think with our brains. We might assume that humans can just somehow feel that our thoughts are happening (literally) in our heads. But apparently this is not so; if it were, there would have been no ancient debate about whether the soul's ruling faculty was in the heart or the brain. Another example is eyesight. You probably just take it for granted that when you see something, it is because light is bouncing off what you are seeing, and being directed to your eyes. And you're right: that is more or less what is happening. But so far is this from being obvious that no one even in the ancient world even proposed such a theory of vision. It wasn't for lack of trying. In ancient Greek and Roman science there were at least three rival theories to explain human eyesight, associated with three philosophical sources: Plato, Aristotle, and the atomists. But the first author to set down something like the correct theory of vision wrote neither in Greek nor in Latin, and he did not live in antiquity. His name was Ibn al-Haytham (rendered in Latin as "Alhacen"), he lived in Cairo in the tenth and eleventh centuries, and he wrote in Arabic.

Something else the history of science teaches us is that such innovative leaps nearly always depend on the work of previous thinkers. Ibn al-Haytham was no exception. His treatise *Kitāb al-Manāẓir*, or *Book of Optics*, draws on ancient treatments of eyesight and human anatomy, while also exploiting ideas put forward in the earlier Arabic tradition. Of course that detracts nothing from his achievement, but it means that if we are to understand his breakthrough, we will need to consider a range of previous optical theories. Let's begin with Plato. He

proposed a theory of eyesight in his *Timaeus* (45b–46c, cf. 67c–68d on colors). This deals with the providential design of the universe as a whole, and also of the human body. Within this account, vision is particularly important, because according to Plato philosophy itself would never come about if we could not see. For it is our observations of the heavens that lead us to discover number and to investigate the nature of the universe (47a–b).

The dialogue tells us that we see thanks to an invisible stream of very pure fire that is emitted from our eyes. In order for eyesight to take place, this stream must encounter a kindred fire outside, namely light. The resulting connection causes a motion in the soul, namely our seeing. Thus Plato can answer the most basic questions one might want to pose about sight: why can we only see what we are directly looking at, and not what is behind us? And, why can't we see in the dark or when our eyes are shut? His answers would be that we see whatever the stream of fire from the eyes can reach, which means that the eyes must be open and the visible objects in front of us, and that without external illumination the fire has nothing akin with which it can connect. Plato also takes up a question that will play a major role in subsequent discussions of eyesight: how do mirrors work? The answer is that the visual stream meets an external illumination on the surface of the reflective body. Plato even tries to explain why mirror images are reversed, and why curved mirrors yield different kinds of reflections.

Historians of optics call this sort of theory "extramissionist," because it involves something being sent out of the eyes. We find a later extramissionist theory in one of Plato's biggest fans, the doctor Galen.[1] He supplements the *Timaeus* account with his own anatomical ideas. Unlike Plato, he is writing after the discovery of nerves, and he's aware that there are nerves that connect the brain to the eyes. Also unlike Plato, he adopts a Stoic-inspired understanding of the human body which sees many functions of soul as being carried out by a very fine sort of breath, or *pneuma*, that pervades the body. The finest kind of *pneuma*, the sort involved in perception, is distilled in the brain out of the less subtle breath taken into the lungs and then circulated around the body by the heart. Thus Galen modifies Plato's theory by proposing that the brain is sending *pneuma* to the eyes. So refined is this *pneuma* that it has a nature akin to that of light itself. Yet Galen doesn't claim that the *pneuma* itself is emitted out of the eyes to whatever we see, like Plato's fiery visual stream. Instead, the *pneuma* affects the air in front of the eyes, transforming it into an instrument that brings the visual organ into contact with the visual object.

This allows Galen to avoid a standard objection to extramissionist theories,

which is that the human body could never generate the visual stream required to see out over a whole countryside or as far as the heavens. To this, Galen would say that the *pneuma* causes a chain reaction in which the whole transparent medium, even as far as a distant horizon or the heavens, is transformed into an instrument for seeing. In common with Plato, though, he has an intuition that underlies all ancient extramissionist theories of vision: in order to see a distant object, we need somehow to get into *contact* with that object. The extramissionists are effectively saying that seeing is a special way of reaching out to touch other things, even if they are as remote as the vault of the heavens. We use either the air, or a stream of visual fire, to do this. To make this point, the Stoics compared the visual stream to a walking-stick, which the viewer uses to "tap" whatever is seen.

Other ancient philosophers took, if you'll pardon the expression, a different view. For them, when Muḥammad sees a mountain, it is not Muḥammad's sight that goes to the mountain, but the mountain that comes to Muḥammad. Such a view is "intromissionist," that is, holds that something from the outside world is sent *into* the eyes. A prominent example is found in atomist authors, notably the Epicureans. They believed that very thin films of atoms are constantly being shed by all visible objects. The atomic sheets are called *eidola*, or "images." When such an atomic image reaches the eyes, it collides with atoms of the soul through the portal of the eye. Again, sight is effectively being reduced to touch, but in this case we are touching something that reaches us from a distance, instead of our somehow reaching out to make contact. One advantage of the atomic theory was that it could claim to account for some visual illusions. A famous example is the square tower that looks round from a distance. The explanation would be that the atomic image is buffeted by the air on its way to us, the sharp corners being knocked off in the process. The same process might also explain how the images are reduced in size by the time they reach us, so that they can fit into the eye.

Critics were quick to point out the numerous weaknesses of this theory.[2] To give just one example, if these atomic films are so flimsy, wouldn't they entangle with one another in mid-air, being destroyed or mixing together? Fortunately for the in crowd, though, there was another candidate theory for intromissionists to adopt: that of Aristotle. For him, we see when the potential of our vision is activated by some external form. In order for this to happen, there must be an illuminated transparent medium, like a stretch of air filled with sunlight, between the viewer and what is seen. Yet again, we see the need for some kind of contact. The illuminated air fills the gap between seer and seen,

and by being in touch with both transmits the visual form from the object to the eye. This theory solves some puzzles well, for instance, by explaining why we can't see in the dark: it is because unilluminated air is incapable of carrying the image. Notice by the way that, for Aristotle, we couldn't see through a void, because there would be no medium to carry the image to us.

Again, there is room for criticism here. John Philoponus, the late ancient Christian who attacked Aristotle concerning the eternity of the world, also complained about the Aristotelian account of eyesight.[3] He pointed out that Aristotle doesn't solve that most basic of questions: why can we only see what is in front of us? After all, something that is behind me in a well-lit room is touching the illuminated air that touches my eye, so the air should convey the image to me. Yet, with the exception of those of us who are primary-school teachers, we are not able to see what is happening behind our backs. Much better positioned to deal with this problem were those authors who applied the tools of geometry to explain vision. The tradition of geometrical optics begins just after Aristotle with the work of Euclid, who, I guess I don't need to say, was pretty good at geometry.[4] He saw that you could use this branch of mathematics to model what is happening in human vision. It's been claimed that this technical branch of applied geometry might have originated in Greek theater, when they were figuring out the sight lines for the audience.

The dramatic insight here, at any rate, is that we can see only those objects that lie on a straight, unobstructed line drawn to the eye. As a whole, the visual field can be modeled as a cone whose vertex is at the eye, and broadens out from there to cover everything we can see, with the limits of the cone corresponding to the edges of our peripheral vision. If something falls inside the cone and is not blocked by an opaque object, then we will see it. The only exception is what we see in a reflective surface like a mirror, which of course does let us see what is behind us. Here geometry is again useful: if you look into a mirror obliquely from the right, you'll see what is located to the left, and at the corresponding angle. We can make diagrams representing what happens here, by drawing a line from the eye to the surface of the mirror to the object seen. With this Euclidean theory, we are really talking about a mathematical *model* of vision. There is not much hint as to the physical process being modeled, albeit that it seems to go nicely with the kind of view found in Plato: the visual cone could represent the flow of rays from the eyes to what is seen, and the straight line within the cone would abstractly represent the visual rays.

That possibility was exploited by the other great ancient figure in the history of Greek geometrical objects: Ptolemy, who is also known for his work on

astronomy and astrology.[5] He puts some physical meat on the bones of Euclid's account, making it clear that the lines of the model do represent visual rays emitted from the eyes. He can thereby account for a range of otherwise inexplicable phenomena. How do we tell how far away something is? Within his Platonic and Euclidean model, this is easy to explain: since we are touching something with rays sent out from our eyes, we can tell how far the rays must travel before they light upon each object. We can also explain refraction, as with the infamous straight stick that looks bent in water: this is because the visual rays are being slowed and dragged away from their straight path when they meet a medium that is denser than air.

The promise of this geometrical model, and the transmission of Euclid and other optical works from Greek into Arabic, meant that in the Islamic world this general approach underlay all serious philosophical theories of vision.[6] Ever ready to reflect on every topic under the sun, al-Kindī wrote extensively on optics, including numerous works on mirrors. Like Ptolemy, he adopts the extramissionist theory, and makes the lines of the model correspond to visual rays. He repeats a powerful objection to Aristotle's intromission theory, already suggested by the ancient scientist Theon of Alexandria. If Aristotle were right that objects transmit visual forms through the air, they would look the same from every angle. But consider what happens when we look at a circle from an oblique angle: we don't see a circle but an oval. One consequence of al-Kindī's rejection of the Aristotelian theory is that he no longer has much use for the idea of a transparent medium. Aristotle thought that illuminated air must be present to serve as a carrier of forms, and that air's transparency consists in its being able to do this job. For him, air is only "potentially" transparent when there is no light; illumination makes it "actually" transparent, that is, actually able to transmit visual forms. By contrast, al-Kindī thinks of the transparency of air in negative terms, as we would today. The transparent is just that which does not stop us from seeing what is on the far side of it.

Al-Kindī would understand this in terms of the visual ray theory. For him, air is transparent because it does not "block" our vision. When something intercepts the visual ray, then we see it, instead of seeing through it. In particular, al-Kindī tells us, it is the element earth that gives rise to visibility in objects. Unlike air, fire, and water, it is dense enough to intercept the rays from our eyes. That gives rise to yet another puzzle, which should be familiar to anyone who has spent time with a 4-year-old child: why is the sky blue? After all, it is presumably made of air, which should have no color at all. Al-Kindī rises to this challenge too, writing a little treatise specifically on the question.[7] He explains that there

are exhalations from the ground which ascend into the air, and that the blue color we see is the result of earthy particles suspended in the atmosphere. More generally, the different colors around us are the result of different elemental proportions, with dark colors belonging to things that have more earth in them. Highly polished surfaces, like mirrors, do not only intercept the rays, but actually reflect them so that they fall on other objects placed in appropriate positions. Finally, al-Kindī explains why we can't see in the dark, by saying that even dense objects are seen only when their surfaces are illuminated. Sight only occurs when the visual ray and a ray of light fall on the same spot. So it is not the air between me and what I see that needs to be lit up, as Aristotle thought; rather, the surface of what I am seeing must be illuminated. In principle, then, I could see through a void after all, though as it happens al-Kindī didn't believe that void could exist.

So powerful was the geometrical version of the visual ray theory that even staunch Aristotelians like al-Fārābī relied on it. In his *Enumeration of the Sciences*, he devotes a brief section to optics and actually says that its main purpose is to account for such phenomena as optical illusions. He also alludes to its use for determining such things as the height of mountains—another topic that had been discussed by al-Kindī. Still, it's not hard to mount a challenge to the visual ray theory. One of the biggest difficulties is this: if we are sending rays *out* of our eyes, then all the action seems to be happening at the far end, where the rays make contact with the visible object. But the sensation is happening at our end. If we want to see, it isn't enough to send something out that makes contact with a distant object. Information also has to return to the eye from the object, so that we can register what the visual ray has touched. In that case, every extramission theory must also suppose some kind of intromission— from object to eye, not only eye to object. But that seems pointless: if something comes from the object to the eye anyway, what is the point of supposing that anything at all comes out of the eye?

This objection is found in two authors who were contemporaries: the philosopher Avicenna, and the hero of our story, Ibn al-Haytham.[8] They abandon the extramission view entirely, but continue to exploit the advantages of geometrical optics. This means accepting the same visual cone postulated by Euclid, with its vertex at the eye, and spreading to cover the whole visual field. But the direction of flow is different. Now, instead of the eye sending a cone of rays to the things it sees, it will be the visible objects that send rays to the eye. Furthermore, both Ibn al-Haytham and Avicenna (finally!) suggest, these will be rays of *light*. No special visual emanation or *pneuma* is needed. Rather, as now

seems so obvious, vision occurs when light bounces off objects and travels in straight lines to our eyes. Of course, the illuminated surfaces are in fact sending light in all directions, not just to the eyes of whoever is looking at them. You might think that the result would be nothing but blurred confusion, since every point on our eyes should be getting light from every point on every visible surface. But Ibn al-Haytham, adapting an idea al-Kindī had used in describing the visual ray, explains that the points on the surface of the eye register only the light rays that fall on them most directly. So each point on the eye's surface will be affected only by the light that hits it along a perpendicular path. The result is that the effect on the eye is a perfect map of the world, with each point on the eye corresponding to one and only one point on the surfaces in the field of vision.

Ibn al-Haytham's theory was not only much closer to the truth than those of his predecessors; it also played a crucial role in the later development of optics. The medieval Latin translation of his work on optics inspired thinkers like Roger Bacon and Kepler. As a leading historian of medieval optics has remarked, "modern optical thought issues, by direct descent, from the work of Ibn al-Haytham and his immediate followers."[9] This was only one of the bright ideas to emerge from mathematical thought in the Islamic world, and to illuminate the European scientific tradition. Ibn al-Haytham's whole project, in the tradition of authors like Euclid and Ptolemy, was an application of geometry to the problem of explaining sight. Geometry was only one of the mathematical sciences. Since antiquity, usually four such sciences were recognized: arithmetic, geometry, astronomy, and harmonics. The last of these disciplines has an application which we may not think of as a branch of mathematics, but it was that, and much more, for thinkers of the Islamic world: music.

12

STRINGS ATTACHED MUSIC AND PHILOSOPHY

In antiquity and the Islamic world, mathematical disciplines were often described as preliminary or "propaedeutic," to be studied in preparation for the chief philosophical sciences such as physics and metaphysics. The precedent for this was about as good as precedent gets. Plato declares in the *Republic* that students of philosophy should begin with mathematics, which will lead their souls to contemplate intelligible things (525b–c). His *Timaeus* adds that humans started to do philosophy thanks to the mathematical science of astronomy (47a–b). On the other hand, in an influential passage of his *Metaphysics*, Aristotle includes mathematics in philosophy itself, which he divides into three branches: physics, mathematics, and theology (1026a). Whereas physics studies things in the material world, and theology deals with things free of matter, mathematics considers things that are in matter but can be separated from them. An example might be the circular shape that exists in, say, a well-made pancake. We can abstract the circle from such objects and apply the discipline of geometry to it, though to be honest I'd rather leave the circle where it is and apply some maple syrup.

The same goes for music. On a stringed instrument, you can create notes at different intervals by plucking strings of different lengths or blowing into a tube stopped at different positions. The ancient science of "harmonics" studied the mathematical proportions that are physically realized in string instruments like the lyre or the zither, or wind instruments like the Greek flute known as the *aulos*. Philosophers sometimes looked down on the actual making of music. It was often seen as a lower-class activity, especially when certain instruments were involved. Aristotle tells us of a legend that the goddess Athena invented the *aulos*, but then threw it away because playing it made her face contort grotesquely (*Politics* 8.6, 1341b). This same instrument is among those excluded

from the ideal city in Plato's *Republic*. Yet these rather disdainful remarks about actual music-making did not stop harmonics from being included as one of the four standard mathematical disciplines in late antiquity.

In the Islamic world, authors inspired by the Hellenic tradition followed suit by mentioning harmonics or music in their overviews of the philosophical curriculum. In his overview of the works of Aristotle, al-Kindī faithfully records it as one of the four mathematical sciences that serve as preliminaries to philosophy.[1] He tactfully avoids mentioning that there are nonetheless no works on mathematics by Aristotle. We even see the emergence of the Arabic word *al-mūsīqī*, a loan-word from the Greek *mousike*. Naturally, one didn't need to read Greek works in translation to have the idea of making music: the Arabs had their own musical culture that went back to before the advent of Islam. One story making the rounds by the ninth century reports that an ancient tradition of singing to camels began when a man with a beautiful voice fell off his camel, broke his hand, and burst out in melodious Arabic, *yā yadāh*, "oh, my hand!"[2] This had a beneficial effect on his camels' emotional state, proving that music soothes even the beast that isn't so savage, or possibly just that camels are capable of schadenfreude.

Following the spread of Islam, various musical traditions swirled together, much as did cultural streams in literature, religion, science, and language. Persian music exerted a particularly strong influence, as we can see from the names of the four strings on a kind of lute used in the Islamic world—the oud. Its highest and lowest strings have Persian names, *zīr* and *bamm*, whereas the two middle strings are called *mathnā* and *mathlath*, which simply come from the Arabic for "second" and "third." Much as the piano nowadays tends to figure centrally in the study of music theory, the oud plays the key role in philosophical treatments of music in the Islamic world.[3] As so often, al-Kindī was the first to tackle the topic. He wrote several musical treatises that survive today.[4] In one, he talks about the symbolic meaning of the number of strings on each string instrument. The four-stringed lute stands for a wide array of fourfold divisions in the world around us. Al-Kindī mentions the quarters of the sky, the four elements, the four winds, the seasons, and so on. Despite this widespread rule of four, not all cultures adopt four strings. Rather, every people has used an instrument with a number of strings appropriate to their beliefs. For instance, in India they had a one-stringed instrument, reflecting their belief in monism.

Al-Kindī would say that it isn't only camels that can be deeply affected by music, but also humans. To some extent this is common sense—everyone has had the experience of being cheered up by joyful song, or saddened by a

mournful dirge. But al-Kindī goes well beyond this everyday observation, explaining that the skilled musician can affect others by influencing the bodies and souls of the audience. One of the parallels he mentions for the four strings of the oud is the four humors of the body. He spells this parallel out in detail and believes that it explains the influence of music on our temperament. The highest string, the *zīr,* corresponds to yellow bile, and the *mathnā* or second string to blood. Since our emotional states depend in part on the balance of humors in our body, the musician can manipulate our bodies and thus our emotions, simply by playing the strings of his oud. A story handed down about al-Kindī illustrates how this might work in practice. It seems a merchant's son, who kept track of his father's accounts, was struck by an illness which rendered him catatonic. The father had always despised al-Kindī, but turned to him in his hour of need. Al-Kindī instructed some of his students to play the oud to the boy. The boy revived, and sat up for long enough to give crucial information about the family business. But when the students stopped playing, the son fell back into his former state, and then died. Al-Kindī explained that God sets the term of each life, and that this is beyond the power of music to change.

This sounds like magic, but a reasonably sophisticated and even plausible theory underlies it. Let's think about why al-Kindī might believe that the strings of the oud correspond to the four humors. The strings are in a certain mathematical relationship, a proportion, and there is also a proportion between the humors. By creating a harmonious or discordant proportion in the oud, one can induce corresponding proportions to arise sympathetically—to "resonate," more or less literally—in the body. For al-Kindī, it is no coincidence that the same mathematical structures would be found in such different things. Under the influence of mathematical works of Pythagorean authors like Nicomachus of Gerasa, al-Kindī sees the whole universe as having a mathematical structure. He even wrote a treatise explaining why Plato's *Timaeus* relates the fundamental elements of physics—fire, air, and so on—to geometrical shapes. No wonder, then, that he tells us to study the mathematical disciplines, including harmonics or music, before moving on to engage in philosophical study of the natural world. Thanks to the workings of divine providence, the natural world itself is full of mathematical structure and harmony.

Al-Kindī's theories about music struck a chord with later authors, especially a group of mysterious thinkers writing in the tenth century who called themselves the "Brethren of Purity." They were a group of anonymous authors based in the Iraqi city of Basra, who wrote a collection of letters covering a huge array of philosophical, scientific, and religious topics. Following the traditional

curriculum, they devote the opening epistles in their collection to the mathematical disciplines. The fifth letter deals with music, and closely follows al-Kindī's ideas.[5] The Brethren too match the strings of the oud to the elements, the four humors, and so on. They even claim that its proportions match those between the sizes of the elemental spheres. For instance, the ratio of the highest and second-highest string is said to be equivalent to that between the thickness of the spheres of elemental fire and air.

I've been suggesting that music affects us emotionally by affecting our bodies, and certainly that is one mechanism that could be invoked by al-Kindī and the Brethren of Purity. But the Brethren make it clear that music can also have an influence on our immaterial souls—something al-Kindī too would accept, given the long-standing Platonic and Pythagorean idea that the soul is somehow characterized by mathematical proportion. (Plato's student Xenocrates even said that the soul is nothing more nor less than a number.[6]) To illustrate the way musicians can influence us, the Brethren talk about music being used to defuse a drunken brawl. Yet, despite their idea that music has the power to affect the immaterial soul, the Brethren are very clear that music itself is a physical phenomenon. They tell us that sound spreads like ripples through air in all directions, like an expanding sphere, something they rather beautifully compare to the expansion of a ball of molten glass when it is being worked by a glassblower. They use another analogy that brings a whole new meaning to the term "songwriter": air is like paper, songs like what is written on the paper, the notes of the song being like letters and the playing of strings like the strokes of a pen.

As that comparison suggests, the Brethren tend to explain music using concepts borrowed from the analysis of language. This is especially true when it comes to their account of rhythm. So far, our discussion has centered on pitch, and the relations between pitches—like the intervals between notes produced by plucking strings of the oud. But music unfolds over time, which introduces the dimension of rhythm. The Brethren tell us that there are certain standard rhythmic sequences which they understand as combinations of attacks on an instrument, which may or may not be followed by a pause. Think of the famous opening notes of Beethoven's Fifth Symphony. The Brethren's lingustic analogy would compare the rhythm to a repeated cycle of three syllables with short vowels, followed by a syllable with a long vowel. Given that songs, then and now, are frequently accompanied by words, we thus have an intimate double relationship between music and language. They match structurally, and this facilitates the matching of words to the tune.

And that brings us to poetry, which was often paired with music. Another author who wrote about music and, like the Brethren of Purity, lived in the tenth century, was the historian Abū l-Faraj al-Iṣfahānī. He spent fifty years producing a vast collection of poems that had been set to music, listing the melodic and rhythmic modes used. At that time, no other form of entertainment and no other form of writing had the cultural centrality of poetry.[7] Writers in all genres, including philosophy, frequently quoted Arabic poetry, sometimes from poets who wrote before the advent of Islam. The close association of music with poetry tells us that music wasn't just used to calm down camels. Thanks to its strong links to poetry, it had a central place in the culture of the Islamic lands. It is a frequent topic in works of what is called *adab*—a difficult word to translate, but perhaps "refined and improving culture" would be close to the mark. The word can simply mean "education," but came to refer to a whole genre of writing in Arabic, which used literary flair to fuse edification with entertainment.

Adab could also mean an instructive anecdote or saying, hence the title of a collection ascribed to the translator and doctor Ḥunayn ibn Isḥāq, *Ādāb al-Falāsifa*, or *Sayings of the Philosophers*. This is an early example of a common genre of popular philosophical literature in Arabic, which puts amusing or wise remarks into the mouths of various sages, often figures chosen from the Greek philosophical pantheon.[8] The average aristocrat of, say, tenth-century Baghdad, probably thought of Hellenic philosophy as consisting primarily of this so-called "wisdom literature," rather than logical or metaphysical treatises by Aristotle and Plotinus. Proving the connection between *adab* and music, Ḥunayn's collection includes a whole section of wise sayings on music. Al-Kindī and the Brethren of Purity also include such wisdom sayings about the topic in their writings on the subject. My favorite item is found in the Brethren. Upon hearing an incompetent musical performance, a philosopher remarks that the sound of an owl is said to foretell death, "and this musician is foretelling the death of the owl."[9]

Though it contains no story that amusing, the most philosophically interesting work on music from the formative period is al-Fārābī's *Great Book of Music*.[10] Characteristically, he sets out to apply to music the understanding of the philosophical sciences he takes from the Aristotelian tradition. Al-Fārābī may seem to be applying his philosophical acumen to a relatively uncontroversial topic here (for a change). But in fact, the delights of song were not welcomed with a universal chorus of approval in Islamic lands. Already in al-Kindī's day, a theologian named Ibn Abī l-Dunyā had written an attack on musical entertainment,[11] and there continued to be figures who found music at best

frivolous and at worst impious. Even the Brethren of Purity remark that most people use music for mere pleasure, like at weddings. You can almost hear the disappointment in their voices, as they draw attention to this rather debased use of an art that should exploit and celebrate the divinely imposed harmony of the cosmos.[12]

The dispute concerning the permissibility of music in Islam would continue for centuries to come, with figures like Ibn Taymiyya joining the critics. There was religious ammunition for both sides of the debate. Some anecdotes about the Prophet seemed to indicate his approval of music. Drawing a strong connection between music and the more universally admired practice of poetry, as the Brethren do, was another strategy. It is one that al-Fārābī also adopts. In fact, he says that the most perfect kind of music always involves poetry that has been set to melody and rhythm. In giving music the dignity of a full-blown science, he further seeks to burnish its reputation. But al-Fārābī is not saying that every oud player is on a par with an Aristotelian philosopher. Rather, we must distinguish between the practical and theoretical sides of music. A music theorist needn't even be able to sing or play an instrument, something al-Fārābī illustrates by referring to Ptolemy, the great mathematician: he wrote on harmonics, but supposedly confessed to having a tin ear. Conversely, the practice of music doesn't require a theoretical understanding. Indeed, al-Fārābī says, music was practiced for ages before the underlying theory was eventually discovered.

The practical side of music has two further subdivisions: composition and performance. In fact, it isn't clear that there was a rigorous distinction in his contemporary musical culture between inventing a tune and playing it, since the performers had considerable scope for improvisational variation. Nonetheless, al-Fārābī depicts these as two different abilities, something explained in terms of the differences between the imaginative faculties of various people. For it is in the imagination that music is conceived. Though music can be used merely to give pleasure, it also has the power to represent things symbolically. For instance, one might represent a certain emotion with a certain kind of music. People with very powerful imaginations might be able to sit quietly and invent a song within their souls, while others need props to help them compose. Whereas we might imagine the songwriter trying out melodies on a piano, al-Fārābī gives the considerably more picturesque example of a musician who composed by tying bells to his clothing and ringing them with bodily motions.

All of this should itself ring a bell: it chimes well with al-Fārābī's account of prophecy. He told us that a prophet is precisely someone with a very powerful imaginative power, who uses it to devise symbols for the truths grasped more

explicitly and adequately at the level of intellect. This helps to explain why the theory of music and its practice are so distinct, to the point that they may be found in different people.[13] Musical theory involves the intellect, whereas musical practice uses the imagination. And nothing guarantees that intellectual ability must go hand-in-hand with a powerful imagination. In fact, al-Fārābī goes so far as to say that it is not essential to music theory that it can actually be put into practice. In this it is like geometry. As it happens, geometry can be used for practical purposes like designing houses, but it is not intrinsically a practical science. A contrasting case would be medicine, which is inextricably bound up with the practical business of healing human bodies. This close association of practical affairs with medicine is, again, something we've seen before in al-Fārābī, with his comparison of the ideal ruler to a doctor. We find a similar idea in other authors of this period. In and around the tenth century, a number of authors put forward the idea that ethics is like medicine, or rather, *is* medicine— a kind of medicine that aims at treating souls rather than bodies.

13

BALANCING ACTS ARABIC ETHICAL LITERATURE

Next to the room where I am writing this, there is a bathroom in which you can currently see a bar of soap, still in its wrapping. The label promises that this soap can help to "re-establish the balance between the mind and the body." Amazingly, it was only slightly more expensive than normal soap, which contents itself with helping you wash your hands. We're fortunate to live in a day and age when one can not only get soap for one's mind, but also "chicken soup for one's soul," as in the title of a line of popular self-help manuals. This sort of thing hasn't been possible since the ʿAbbāsid empire. During the formative period of philosophy in the Islamic world, we find several authors writing their own popular self-help manuals, with titles like *On Dispelling Sadness, Benefits for Bodies and Souls, Refinement of Character,* and most tellingly of all, *Spiritual Medicine.*

That last one is a work by Abū Bakr al-Rāzī, which may come as a surprise after his controversial, even provocative, theory of Five Eternals. On a casual reading his *Spiritual Medicine* seems to be a rather harmless, if rather hectoring, collection of ethical advice. It was written as a partner piece to one of al-Rāzī's large medical treatises, the *Book for al-Manṣūr,* the patron to whom both texts were dedicated. The *Book for al-Manṣūr* tells you everything you need to know to have a healthy body, and the *Spiritual Medicine* completes the job by telling you how to have a healthy soul. To some extent, this parallel still has currency. We routinely talk about "mental" or "psychological" health. Less familiar, though, is the idea that ethics itself might be a kind of medicine.

Here, al-Rāzī is looking back to his chief influence from the Greek tradition, who was neither Plato nor Aristotle, but Galen. The greatest of ancient doctors, Galen wrote voluminously on every area of his art, creating a body of work that

would underlie medical literature for many centuries.[1] Galen also expressed an idea that was prevalent in the ancient world: that the soul, like the body, can be ill or healthy. The Epicureans lived by a "fourfold remedy" of ethical precepts that summed up their hedonist ethics. In Galen, ethical advice is part of what a skilled physician is able to offer his patient. Indeed, there can be no sharp divide between caring for the body and caring for the soul. In his self-explanatorily titled *The States of the Soul Depend on the Mixtures of the Body*,[2] Galen gives the example of the effects of alcohol, which show that bodily states can affect even the rational part of the soul (if I had tried to write this chapter while drunk, you'd presumably notice). Because of this intimate relation between body and soul, doctors can modify a person's ethical character by prescribing certain diets.

The goal of Galenic ethics is not just, as my bar of soap would have it, establishing a balance between mind and body. It is also a matter of achieving balance within the soul, much as the doctor tries to balance the four humors in the body. As an admirer of Plato, Galen adopted the theory we find in dialogues like the *Republic* and *Timaeus*, according to which every person's soul has three aspects: reason, spirit, and desire.[3] Ethically speaking, health consists in the appropriate interrelation of these three parts: reason should dominate desire, with the assistance of the righteous indignation provided by spirit. Psychological disorders happen when the lower soul is out of control, as when one is particularly prone to anger because of a strong spirited part, something Galen admits affected his own mother. Libertines and gluttons, similarly, allow their desire to dominate their reason. Galen speaks at length about these failings of character in ethical works that were known in the Arabic tradition. In fact one, called *On Character Traits*, is lost in Greek but survives in Arabic.

Al-Rāzī alludes to Galen's ideas with the very title *Spiritual Medicine*, and in the text itself he exploits and expands on the Galenic program of psychological medicine.[4] He begins by telling us that God's greatest gift to mankind is ʿ*aql*, meaning "intellect" or "reason" (§1). It is in virtue of reason that we differ from non-human animals, as we can observe from the fact that they plunge headlong after pleasures such as food or sex, without bothering to consider the consequences of what they are doing. On the other hand, animals naturally limit their pursuit of pleasure. They will stop eating once they are no longer hungry, and mate only when in heat. By contrast, there are many humans who can never fulfill their immoderate desires. As al-Rāzī says: offered power over half the world, many would still want to conquer the other half (§2). From his own experience, al-Rāzī tells the story of eating dates with a glutton, who stuffed himself to bursting and then lamented that he could not go back to the beginning

and start eating all over again. Al-Rāzī chastised him, pointing out that the pain caused by such overeating was bound to outweigh the pleasure of the food (§13).

Remarks like that have led some to see al-Rāzī as a kind of sophisticated hedonist, along the lines of Epicurus—advising us to plan ahead to maximize our pleasures, rather than heedlessly grabbing every pleasure that comes along.[5] But in fact al-Rāzī was no hedonist at all. He accepted Plato's analysis of pleasure as resulting from the restoration of the body to its natural state, out of a state of deficiency. When you drink, it is pleasant because you are remedying the dryness of your body. Thus, pleasure is only possible because of the harmful states you are trying to remedy. So serious was he about this that he supposedly offered the following explanation of what happens when you enjoy seeing a beautiful face: it's because you've been hanging around with ugly people, and are yearning for a change. The good life, though, lies not in the restoration of the body to its natural condition, but in a life of reason that is entirely free of the body. As al-Rāzī says, the lower parts of the soul are given to us only to help keep us alive, so that we can keep trying to acquire knowledge. Ultimately we should look forward, not to any bodily pleasure, but to the freedom from body we will enjoy in the afterlife (§2). If al-Rāzī cautions us to think about long-term pleasure rather than short-term pleasure, that is only a first stage of moral improvement in which we become better, at least, than irrational animals. The philosophical way of life is to go beyond this first stage, and value only knowledge and justice.

That, of course, fits with his theory of the Five Eternals, which likewise sees it as imperative for soul to free itself from entanglement with the body. The teaching of the *Spiritual Medicine* also fits nicely with another, shorter work of al-Rāzī on ethics, whose title is none other than *The Philosophical Way of Life*.[6] Here, al-Rāzī responds to some unidentified detractors, who blamed him for refusing to lead a life of ascetic self-restraint. They said that he was failing to live up to the example of a philosopher he claims greatly to admire: Socrates. We know, said these critics, that Socrates was highly ascetic, lived out in the wilderness in a large wine jar, eating nothing but grass, and fearlessly speaking his mind to the hypocrites of his society. So why doesn't al-Rāzī do the same? All this sounds familiar, but not from what we know of Socrates. Rather, the detail about the wine jar shows that al-Rāzī's critics have confused Socrates with Diogenes the Cynic, a common mistake in the Arabic tradition.[7] Al-Rāzī accepts that this picture of Socrates is historically accurate, but then adds that it describes him as a young man, when enthusiasm for philosophy led him to utter disdain for the body. As he matured, Socrates relaxed into a life of moderation,

such as al-Rāzī himself leads. This is sufficient to demonstrate that one has achieved mastery of desire through reason, the goal also recommended in the *Spiritual Medicine*.

Al-Rāzī was not the first writer in the Islamic world to valorize Socrates as a moral exemplar. He had also appeared, in his guise as a Cynic-style ascetic, in the works of al-Kindī. Al-Kindī gathered a collection of reports and sayings attributed to Socrates, and this too assigns to Socrates ancient anecdotes that had once belonged to Diogenes.[8] We are told how Socrates ordered a great king to stop blocking his sunlight (§6). Socrates is credited with other one-liners worthy of Diogenes, such as, "God gave man two ears but only one tongue, so he would listen more than he talks" (§23). Al-Kindī also worked some of this Socratic material into a little treatise on ethics that itself offers a kind of spiritual medicine, specifically against the malady that is sadness. This treatise, called *On Dispelling Sorrows*,[9] quotes Socrates saying that he is never sad because he has nothing whose loss he would regret (§IX.5). He is teased about living in a wine jar by someone who asks what he'd do if his jar broke, and replies that he'll still have somewhere to call home, since "the place where it is won't break" (§IX.9). Al-Kindī also relays stories about Alexander the Great. On his deathbed, he tells his distraught mother to invite to his funeral everyone who has never suffered misfortune. She does so, and no one shows up, teaching his mother that her loss is simply the universal condition of mankind (§VI.1–4).

This material, which wraps its tough-love message in a pleasing package of memorable anecdotes, may seem philosophically lightweight. But just as al-Rāzī's *Spiritual Medicine* quietly upholds a set of values motivated by his theory of the Five Eternals, so al-Kindī is basing his advice on the Platonist philosophy we know from his other works. He says, right at the beginning of *On Dispelling Sorrows*, that if we really want to be immune to sorrow, the only surefire method is to place no value whatsoever on things that can be destroyed (§I.3). That goes not only for fancy soap and wine jars, but everything that exists in the physical world around us—even the life and welfare of our loved ones, presumably. Al-Kindī doesn't dwell on that potentially disturbing implication of what he is saying (whereas al-Rāzī does caution against forming romantic entanglements on this basis: *Spiritual Medicine* §5). Instead, he recommends that we cherish things in the intelligible world, valuing eternal objects of knowledge rather than the passing things of this life. Apart from this Platonist rationale, though, al-Kindī's advice resonates strongly with Stoic authors like Epictetus.[10] In fact, al-Kindī also relates a parable found originally in Epictetus, which compares life to a brief disembarkation during a journey by sea. Whoever is ready to race back to

the boat without distraction or regret when the voyage home begins again—in other words, when we die—will get the best seats on the ship of the afterlife (*On Dispelling Sorrows* §XI).

It's possible that there is a link between al-Kindī and al-Rāzī, in the form of a student of al-Kindī's named Abū Zayd al-Balkhī. That last part of his name, al-Balkhī, simply means that he was from the city of Balkh in modern-day Afghanistan, just as the name al-Rāzī means someone from the Persian city of Rayy. We know that our al-Rāzī studied with someone named al-Balkhī, but not whether it was this al-Balkhī. It's chronologically possible, certainly. So it's intriguing that the Abū Zayd al-Balkhī who studied with al-Kindī produced a medical and ethical work that is highly reminscent of al-Rāzī's matched treatises on bodily and spiritual medicine.[11] In the case of al-Balkhī, the two types of medicine are placed side by side in a single work. Again, both sections are clearly influenced by Galen. The part on medicine for the soul deals with disorders like anger, sorrow, and pathological, obsessive thinking, known in Arabic by the rather wonderful word *waswas*. Like his master al-Kindī and his possible student al-Rāzī, we find al-Balkhī giving a range of practical advice for combating these difficulties. He also emphasizes the link between the body and the soul, saying that those obsessive thoughts can be the result of a build-up of yellow bile. On the other hand, they can also be caused by demons, an allusion to the Koran's idea of the "whisperings of the devil" (7:20).

Of course, Galen was not the only Hellenic source for writing about ethics in Arabic. There was also Aristotle. The ten books of his *Nicomachean Ethics* were translated into Arabic, with a bonus eleventh book of inauthentic material sandwiched in the middle.[12] This extended disco version of Aristotle's *Ethics* also had an impact on ethical writing in Arabic. Al-Fārābī wrote a commentary on it, which is unfortunately lost, and later on so did Averroes. His commentary is also lost in Arabic, but survives in Hebrew and Latin translations, which, as we'll see later, is not atypical for his commentaries. Back in the tenth century, you'd expect Aristotle to have a particularly powerful influence on the Baghdad school, such as the Christian thinker Yaḥyā ibn ʿAdī. So it's puzzling to turn to Ibn ʿAdī and find him still working mostly within the Platonist ethical framework bequeathed to the Arabic-speaking world by Galen. He wrote a treatise called *Tahdhīb al-Akhlāq,* usually translated as the *Refinement of Character*—the word *akhlāq* is also sometimes translated as "character traits" or even simply "morals."[13] Here again we find the Platonic distinction of soul into reason, spirit, and desire, along with an insistence that ethical goodness is subduing the lower aspects to the judgments of reason (§IV.22). The reason that

people become evil is simply that they give in to their animal nature. In fact, Ibn ʿAdī rather pessimistically remarks that most people tend towards evil because human nature has so much of the animal in it (§I.6–7).

One striking aspect of Ibn ʿAdī's treatise is its remarkably flexible attitude towards morality. He allows that what is virtuous for one person might be evil in another. It is wrong for almost everyone to amass wealth ostentatiously, and to conceal ill-will towards others or plot treachery against them. But all of these behaviors are necessary for kings, who thus seem to be in a kind of special moral category (§III.23 and 35). Passages like this raise the question of the intended audience of the work. In fact, all the other writers we have looked at—al-Kindī, his student al-Balkhī, and al-Rāzī—include anecdotes or advice about virtuous kings in their ethical writing. That doesn't necessarily mean that these works were directed at royalty, but we know that al-Kindī had connections to the caliph's family, and al-Rāzī's *Spiritual Medicine* is explicitly dedicated to a powerful patron. Our authors are at least aspiring to reach an aristocratic audience, a readership that itself aspires to be thought of as kingly. There is a genre of literary ethical works known as "mirrors for princes," which can sometimes be philosophical (just think of Machiavelli's *Prince*), and our authors to some extent fall into that category. At any rate, they often suggest that noble persons operate under rather special moral constraints. Al-Rāzī states that a person raised as a prince cannot be expected to adopt the kind of ascetic lifestyle of a poorer person, even if he devotes himself to philosophy.

As we saw, al-Rāzī was in any case rather unimpressed by the idea of asceticism. Here Yaḥyā ibn ʿAdī is different, because he seems to take the radical ascetic as the ultimate ethical hero. He no doubt looks back to the late ancient Christian tradition of asceticism.[14] For most people, Ibn ʿAdī would recommend a life of moderation. But unlike al-Rāzī, he thinks that radical asceticism could be the right lifestyle for a select few, and that these ascetics would be particularly admirable. This is clear not only from his remarks about ascetics in the *Refinement of Character* (III.43, 45), but also from a fascinating little treatise he wrote on the subject of abstaining from sex.[15] Muslims were frequently critical of the Christian ideal of celibacy, and al-Rāzī tends to agree. It would lead to the extinction of the human race if carried out on a universal scale, because no sex means no children, and before long, no children means no humanity.[16] Confronting this problem, Ibn ʿAdī again says that asceticism is best, but not for everyone. Only those with particularly powerful intellects should turn their backs on moderation with respect to sex and other pleasures, and devote themselves wholly to the life of the mind. Since this will be a very

small number of people, philosophically motivated celibacy won't make a dent in the population.

Finally, let's turn to one last ethical work with a familiar name: the *Refinement of Character,* by the Muslim Platonist philosopher and historian Miskawayh, who lived well into the eleventh century.[17] His work shares not only the title of Ibn ʿAdī's ethical treatise, but many of the same ideas. Yet again, Miskawayh emphasizes that reason should dominate the lower soul. He also would agree with Ibn ʿAdī that we can envision more than one ethical standard to pursue. We might want to live lives of worldly virtue, in which case we should adopt a life of moderation, as recommended by Aristotle's theory of the golden mean. Alternatively, we could pursue a life of pure intellectual contemplation, though Miskawayh seems to think that this would not need to mean being a radical ascetic like the Christian heroes of Ibn ʿAdī. Both kinds of life would be lived in accordance with reason. To act moderately in the world may involve a concern with the body and not just the soul, but it still means letting one's action be governed by reason.

That sounds fairly Aristotelian, and indeed, of all the authors I've discussed Miskawayh is the one that does the most with Aristotle's *Ethics*. He clearly knows the Arabic translation of this work very well, and refers to it often. On the other hand, he is still drawing on Galen, the indispensible source for Platonic ethics. The three-part soul is alive and well in Miskawayh, as is the idea that ethics is a kind of medicine for the soul, as in al-Rāzī and al-Balkhī. This is typical of Miskawayh, who was not a particularly original philosopher but was extremely well-read. His philosophical works tend to weave together themes from a wide range of sources, everything from Plotinus and Aristotle to Islamic religious proverbs.[18] He thus represents a kind of cultured, popular understanding of philosophy that was current in the tenth and early eleventh centuries.

This was philosophy taken from Greek sources, freely mixed together with Islamic religious themes and displayed with literary style. It was a kind of philosophy that lacked the technical edge offered by sharper minds like al-Fārābī and Ibn ʿAdī. But it might have endured as the dominant style of Hellenizing philosophy in the Islamic world, if not for a contemporary of Miskawayh's: Avicenna. We'll be getting to him soon, but first I want to dwell a bit more on the context that led up to him. What sorts of philosophical options were there outside of the unblended Aristotelianism of the Baghdad school? We'll find out by looking further at Miskawayh, and at other authors who sought to achieve a balance between the Hellenic philosophical heritage and the teachings of Islam.

I'd like to see the bar of soap that could manage that.

14

UNDERCOVER BROTHERS PHILOSOPHY IN THE BŪYID AGE

So far in this book, I've mostly been discussing the confrontation between Hellenic philosophy and the Arabic-speaking culture spread by Islam, a confrontation that played itself out in the works of Jews and Christians, as well as Muslims. As if that hasn't been complicated enough, I'd now like to pay tribute to another culture that I've so far mentioned only in passing, but which has immense significance for our story: Persia. Persia tends to play the role of the great Other in European historical narratives. The Persians were the rivals of the Greeks, heroically defeated when the invading army of Xerxes was repelled in the fifth century BC. After being the base of the Seleucids, one of the imperial powers that emerged after the death of Alexander the Great, the Persians became rivals of the Romans too. First the Parthians, then the Sassanids went through cycles of war and peace with the Roman empire and the Byzantines. In fact, one reason they succumbed to the Arab armies in the mid-seventh century was that they had been weakened by conflict with the Greek Christians of the Byzantine empire.

But even as Persia passed into the hands of Muslim rulers, its proud culture continued to assert itself. There was literary rivalry between the Persian and Arabic languages, and the Zoroastrianism of the Persians lived on within the Muslim empire. As late as the 930s, it was possible for a warlord of Iran to reject the authority of the ʿAbbāsid caliphs and the faith of Islam, and attempt to proclaim a Zoroastrian revival. More than a century earlier, Persian culture probably helped to spark the translation movement which rendered Greek works of philosophy and science into Arabic. Already under the Sassanids, scientific works from India, on topics like mathematics and astronomy, were rendered into Persian. At this same time we see Greek texts being translated for the Sassanids. Of particular interest for the history of philosophy is the Sassanid ruler

Anūshirwān, who reigned in the mid-sixth century. He offered shelter to the Neoplatonist philosophers who left Athens after the emperor Justinian closed down the Academy there. He was also the recipient of works on Aristotelian logic by a man we call Paul the Persian. (Among medieval scholars, the only one whose name brings a smile to my lips more easily is the Arabic–Latin translator Hermannus Alemannus, which means "Herman the German.") So the early ʿAbbāsid caliphs were simply continuing the policies of Sassanid Persia when they sponsored the translation movement. Carrying on the cultural activities of the Sassanids helped to establish the legitimacy of ʿAbbāsid imperial rule.[1]

In the later ʿAbbāsid caliphate, the Persians could exert not just cultural influence, but also political power. This was especially true in the tenth century and first half of the eleventh century, a time dubbed the "Iranian intermezzo" by one historian.[2] In much of this period the central Asian lands of Khurāsān and Transoxania were controlled by the Persian empire known as the Sāmānids, while in the Islamic heartlands of Iraq and Iran, a new force came to be dominant: the Būyids. The Būyids began as three sons of a fisherman from the region around the Caspian Sea. Not content with fishing expeditions, the three brothers turned to military expeditions instead, and were so successful that the Būyid clan became the real power of the ʿAbbāsid empire for more than a century. There was still a caliph, but what authority he retained was strictly religious. Military and political power was now in the hands of the Būyids. Both the Sāmānids and the Būyids revived Persian political practices, for instance by claiming for themselves the traditional Sassanian title "king of kings." Unlike the Sāmānids, the Būyids were Shiite Muslims; in other words, they recognized a sequence of Imams beginning with the Prophet's cousin ʿAlī and passing down through the family line. Nonetheless, they were content to allow the ʿAbbāsid caliphs to remain on their thrones. This may be because they feared the backlash from non-Shiite Muslims if they deposed the caliphs, or because they would not have been able to control a caliph who could claim descent from ʿAlī's family, as they did with the ʿAbbāsids.

The reign of the Persian Būyids and Sāmānids provides us with a context for understanding philosophy during this time. Philosophy in the ninth century is epitomized by al-Kindī: an Arab, a native of Iraq, and an intimate of the caliphs who reigned at the height of ʿAbbāsid power. In the tenth and early eleventh centuries, Iraq continued to be a center for philosophy, not least thanks to the Baghdad school. But this was also a time when philosophy was blossoming in Persian cities like Rayy and still further east, including places under the dominion of the Sāmānids. Philosophers from these cities traveled throughout

the empire, attaching themselves to the courts of local rulers as political power became more fragmented. At this same time, we also see a growing relationship between philosophy and Shiite Islam.

All of this is evident if we look at the impact of al-Kindī himself, and of the texts translated in his circle. Two of his most important followers hailed from the eastern province of Balkh, where the Sāmānid rulers also originated. One of these was Abū Maʿshar al-Balkhī, the greatest astrologer of Islamic history.[3] Supposedly, Abū Maʿshar was at first an enemy of al-Kindī's, but al-Kindī won him over to the mathematical arts, and from there his career was, so to speak, written in the stars. The other was al-Kindī's student Abū Zayd al-Balkhī, who wrote on a variety of philosophical issues—including ethics, as we saw in the last chapter. Abū Zayd was in turn the teacher of al-ʿĀmirī, the most significant member of this group of thinkers we might call the "Kindian tradition."[4] Like al-Kindī's students from Balkh, al-ʿĀmirī came from the Persian province of Khurāsān, in this case hailing from the city Nīshāpūr. He complained of the prejudice against easterners he encountered when visiting the ʿAbbāsid capital of Baghdad, and was glad to return home.[5]

With him he brought ideas taken from the Neoplatonic texts that had been translated in the Kindī circle. Al-ʿĀmirī was fascinated by the Arabic version of Proclus that would later be influential in Latin as the *Liber de Causis*, or *Book of Causes*. You may be familiar with the game "Telephone," where a row of children whisper a message into each other's ears one after another, and then giggle at the much different version that results at the end. Something similar happened here with Proclus, as the Kindī circle's reworking of his *Elements of Theology* was reworked again by al-ʿĀmirī.[6] The Kindī circle's version brought Proclus into line with the simpler Neoplatonic system of Plotinus, and with Islam too, by making the First Cause into a Creator. In al-ʿĀmirī's hands, the Islamicization is made yet more explicit: the Intellect and Soul of the Neoplatonic hierarchy are given the Koranic names "Pen" and "Tablet." The emanation of all things from God is no longer presented as automatic, like light from a source or water from a fountain, but instead as issuing from a divine command.

If we follow the Kindian tradition down to the eleventh century, we come to another of our authors on ethics, Miskawayh. He was born in Rayy, the home of everyone's favorite heretical doctor al-Rāzī. Miskawayh was no heretic, and no doctor either, although he did know works by Galen. In fact, he knew works by just about anyone you'd care to name, having been in charge of a library at Rayy that belonged to a vizier of the Būyids. As one of the best-read scholars of the

era, he was well placed to write philosophical works on ethics and metaphysics that combined Aristotle with the Neoplatonic texts produced by the Kindī circle. Like al-Kindī, Miskawayh saw the resulting philosophical synthesis as fully compatible with Islam. One of his more interesting treatises, called *On Soul and Intellect*, presents and refutes the views of an impressively skeptical and idiosyncratic philosopher.[7] This unnamed opponent proposed that we can explain all the things we see in the world around us by appealing to the physical forces of heat and light, instead of immaterial entities like soul and God. To prove that heat is the principle of life, he pointed out that a heart removed from the body of an animal will continue to beat if thrust into hot ashes.

In the face of these provocative ideas, Miskawayh contents himself with reasserting the Aristotelian and Neoplatonic doctrines that had become standard within this Kindian tradition. In this and other respects, Miskawayh typifies what philosophy was becoming under the Būyids. Like the Būyids themselves, he was a Shiite from Persia, and he enjoyed the support of patrons of the day, who built up impressive libraries and enjoyed the company of intellectuals. A court philosopher could be a kind of status symbol—the eleventh-century equivalent of an expensive artwork that is admired, but not necessarily understood. At the same time, no less a thinker than Avicenna spent much of his life within this kind of patronage relationship. Could we imagine such a thing nowadays, with fabulously rich patrons lavishing their wealth on philosophers, of all people, and making them the star attractions of a luxuriously well-paid entourage? To be honest, I'm imagining it right now.

Philosophers like Miskawayh moved in refined circles not only in socio-economic terms, but also in terms of literary style. Miskawayh was not just a philosopher, but also a historian (on this score, he might be compared to the ancient writer Plutarch). His attitude towards philosophy, where it is just one of numerous topics a cultivated author might discuss, is again typical of the Būyid age. We do find more "professional" philosophers, in particular the members of the Baghdad school. But the less technical, Islam-friendly philosophy embraced by the Kindian tradition was more culturally prevalent. We see it not just with Miskawayh, but also with Abū Ḥayyān al-Tawḥīdī, one of the great literary figures of the age. He seems to have known almost everyone, and his gossipy works are a rich source of anecdotes and witty remarks. In fact he's our source for the report of the debate over the merits of logic and grammar between the Baghdad philosopher Abū Bishr Mattā and the grammarian al-Sīrāfī (see). Al-Tawḥīdī also recorded stories involving people like al-ʿĀmirī and Miskawayh, and wrote a series of questions on philosophical topics which were

answered by Miskawayh, in an exchange which still survives today.

With Miskawayh and al-Tawḥīdī, we see the interpenetration of philosophy and the refined and improving culture blossoming under the rubric of *adab*.[8] Authors had been combining intellectual speculation with stylish Arabic prose since the ninth century. The best example here is the outstanding writer al-Jāḥiẓ, a student of Muʿtazilite theology who became one of the most imitated and important figures of early Arabic literature.[9] The phenomenon of "philosophical *adab*" may have been the most significant vehicle for the cultural dispersion of ideas drawn from the Greek–Arabic translation movement. Al-Tawḥīdī tells of learned exchanges at court and elegant excursions into the countryside, where conversation might turn to such topics as the ideas of the Pre-Socratic Empedocles. In the ancient world, philosophy had been a way of life; now it was a way of spicing up your dinner conversation. Then again, the same was sometimes true in the Roman empire, especially during the so-called "Second Sophistic."[10] In both periods, there was direct interaction between the committed philosophers and those who appropriated philosophy for more elegant literary productions. Ancient aristocrats could frequent the school of an Epictetus or Plotinus. Now, in the age of the Būyids, al-Tawḥīdī could back up his style with substance if he chose to do so: he had attended the lessons of Ibn ʿAdī in Baghdad.

All these developments—Persian culture and literary culture, and the integration of philosophy with Islam—come together spectacularly in a collection of writings by a group called Ikhwān al-Ṣafāʾ: the Brethren of Purity.[11] They composed a set of fifty-two *Epistles*, each one devoted to a specific topic or branch of knowledge. The *Epistles* begin with the mathematical sciences, which for them include geography and, as we've already discussed, music. The Brethren then proceed through the departments of natural philosophy, dealing with everything Aristotle had covered and more, with treatises on minerals and plants. A third group of *Epistles* deals with soul and intellect, and a final section treats religious questions and magic. The Brethren thus bring together an unparalleled range of material, and provide a valuable window on the state of intellectual culture under the Būyids.

It would be nice to be more specific about when the *Epistles* were written, but there is no scholarly agreement on that. Nor do we know for sure who these Brethren of Purity were. Al-Tawḥīdī, ever a source of intriguing hearsay, preserves the most specific and plausible account. He identifies several of the Brethren and puts them in the Iraqi city of Basra, in the company of an official of the Būyid government. Some scholars today are skeptical about the details of

al-Tawḥīdī's story. For our purposes, it's enough to note that even if the Brethren worked in Iraq, they may have had an eastern cultural background. For one thing, they occasionally use Persian terminology. And then there is their name. The phrase "Brethren of Purity" derives from a collection of animal fables that was, in Arabic, called *Kalīla wa-Dimna*. Here we have another example of playing Telephone: it was an ancient Indian work which was translated into Persian, then Syriac, and finally into Arabic. The Brethren take their name from a passage in the fables which refers to some birds of a feather who decide to flock together, and call themselves "pure brothers."

The most celebrated epistle in the collection by the Brethren is itself a zoological fable.[12] It imagines a debate between humans and the other animals, in which the animals attempt to persuade a neutral judge—a benevolent king of demons—that they should no longer be oppressed by humans and subjected to maltreatment at their hands. What follows is an inventive, amusing, and richly detailed discussion amongst the animals, in which groups like the insects, the birds, and the predatory animals put forward their claims to equality, or even superiority, relative to humans. The result is one of the most favorable portrayals of non-human animals in Arabic literature, which ascribes to them a kind of rationality and the ability to worship God. The animals claim several times to be convinced monotheists, and even Muslims. The cries of some creatures are said to be prayers in praise of God, which humans of course fail to understand (cf. Koran 24:41, 21:79, 34:10, 38:19). In the end, the humans prevail in the contest, not because they alone are rational, but because only humans have produced truly outstanding, saintly figures, rare though individuals may be. All this is reminiscent of the late ancient author Porphyry, who argued that animals are rational and so should not be used for food.[13] But the prologue to this epistle of the Brethren presents a much more traditional contrast between rational humans and non-rational animals. So maybe the more favorable portrayal of animals in the fable is occasioned by the literary context, rather than any deeply held views on animal psychology. In the end, the Brethren seem most interested in commenting indirectly on humankind, as when they show the animals debating the nature of perfect kingly rule.

That brings us to another controversial question about the Brethren: what sort of Muslims were they? Their works contain numerous clues that they may have been Shiites of some kind, and the *Epistles* were later avidly read by Ismāʿīlīs. The Ismāʿīlīs were a branch within Shiite Islam which achieved an unprecedented political success around the time that the Būyids dominated in the ʿAbbāsid realm. The Fāṭimid caliphate, which held control of Egypt from the

early tenth until the later twelfth century, was Ismāʿīlī. This created a base from which missionaries could be sent into the rest of the Muslim empire, seeking converts. It's possible that the Brethren of Purity were themselves Ismāʿīlīs, and if so, they were not the only philosophers of the time to subscribe to this variety of Shiism. Several of the *dāʿīs*, or "proselytizers" who promoted the cause of Ismāʿīlism, drew on Hellenic philosophy to provide a systematic account of their religious beliefs. We have already met one of them: Abū Ḥātim al-Rāzī, the sparring-partner of Abū Bakr al-Rāzī, who accused his fellow townsman of rejecting the validity of prophecy.

In Abū Ḥātim, and even more so in two other early Ismāʿīlī thinkers named al-Nasafī and al-Sijistānī, we find a range of distinctive philosophical and theological positions that take as their starting point the Neoplatonic system introduced to the Islamic world by the Kindī circle.[14] These Ismāʿīlī thinkers accept the production of a universal intellect and soul from God. Like al-ʿĀmirī, they apply Koranic epithets, such as "throne" and "pen," to these Neoplatonic entities. The Ismāʿīlīs are determined to emphasize the transcendence of God, and find even Plotinus' Neoplatonic system insufficient for this purpose. In a presumably unwitting replay of a move made by the later Greek Neoplatonist Damascius, they interpose a further level between the highest ineffable One and the intellect. In the case of the Ismāʿīlīs, this additional level is called God's "word" or "command," echoing passages in the Koran that describe God saying the word "Be!" to whatever He wants to create.

Abū Ḥātim is so intent on emphasizing God's transcendence that he goes beyond denying attributes as inappropriate to God, and denies even these denials. Thus God is not only not perfect, but also *not* not perfect. Abū Ḥātim's proposal was taken up by al-Sijistānī, who spoke of worshipping God through the expression *lā wa-lā lā*, "not and not-not."[15] For al-Sijistānī, this provides a correction to the simpler negative theology of thinkers like al-Kindī and the Muʿtazilites, who were content simply to caution against applying human language straightforwardly to God. But why would saying "not-not perfect" be any better than saying simply "not perfect"? Al-Sijistānī's point must be that the double negation brings home to us the complete inappropriateness of human language and concepts for God. The sense in which God is "not perfect" is like the sense in which the color blue is "not heavy". The question of heaviness does not even arise for colors. So it is misleading to say that blue is not heavy, as if it might have been heavy but turns out not to be (the way you might say of a piece of furniture you've dreaded lifting: "Oh, it's not heavy after all"). Thus we might say that the color blue is not even not-heavy: the concept is simply not relevant.

The same rationale applies to God, but for any concept or word you care to name, because of His total transcendence beyond language and thought.

The Ismāʿīlī philosophers faced a challenge other thinkers of their day did not: as Shiites, they needed to explain the need for guidance from an Imam. They integrated religious revelation into their Neoplatonic cosmos, with the Prophets recognized by Islam presented as legislators whose teachings are founded in the truths of the universal intellect. This sounds very like al-Fārābī's view of prophecy, and indeed at least one Ismāʿīlī thinker seems to have been powerfully influenced by him. This is the somewhat later al-Kirmānī, who shifted away from the traditional, Plotinus-style Neoplatonism of figures like al-Sijistānī to embrace a system more like that of al-Fārābī, with his series of celestial intellects.[16] But the Ismāʿīlīs further insisted that a law handed down by a Prophet is not enough. This law also needs to be interpreted. This is the role of subsequent figures who explain the inner meaning of the Prophet's revelation: the Imams. In the case of the Islamic revelation, the needed interpretation was of course brought by ʿAlī and his descendants.

These claims were robustly attacked by some other Muslims. They accused the Ismāʿīlīs and other Shiites of demoting the importance of the Prophet himself, by suggesting that his revelation would be useless without guidance from later, divinely appointed intepreters. They further accused the Ismāʿīlīs of having an "esoteric" view of Islam, on which what really mattered was the "inner" meaning of the revelation. Since this could be known only to the Imams, they must be followed blindly by normal folk who lack their divine insight. To stave off this accusation, Ismāʿīlīs like al-Sijistānī and al-Kirmānī were careful to insist on the importance of the "outer" aspects of Islam. By this they meant above all ritual practices such as prayer, and following the letter of the law as laid down by the Prophet. In an echo of the debate over the merits of logic and grammar, al-Sijistānī compared this relation of inner and outer religion to the relation between a conceptual meaning and its verbal expression.[17]

The same theme was later taken up by Nāṣir Khusraw, a fascinating character who lived in the eleventh century and was among the first to compose philosophical works in Persian. His embrace of Ismāʿīlism led him to give up on his career as a tax collector, to take up the new career of collecting converts for the Ismāʿīlī cause. He traveled to Fāṭimid Egypt, and then extensively throughout the Islamic realms—in fact his best-known book is one that recounts his travels. But like other missionaries sent out by the Fāṭimids, he also wrote on philosophical subjects. In one work, he explains the harmony between Ismāʿīlī teachings and the doctrines of the philosophers, on a wide range of issues such

as creation, God's oneness, aspects of the physical world, and logic.[18] His synthesizing project exploits the traditional Ismāʿīlī contrast between an "exoteric" and "esoteric" teaching. The philosophers have delivered the former, attaining to truths gleaned through human reason rather than divine inspiration. The Ismāʿīlīs, with their recourse to the teachings of the Imams, of course have access to the interior or "esoteric" truths. Despite this advantage, the Ismāʿīlīs would not prevail. The lands of the Būyids and Sāmānids would not be converted to Ismāʿīlī belief. During the lifetime of Nāṣir Khusraw, the rule of the Būyids would instead give way to a new hegemony, as the political and theological scene saw what has been called a "Sunni revival."

15

GOD WILLING THE ASHʿARITES

If there were any justice in this world, most major philosophical problems would be named after Platonic dialogues. There would be the "*Phaedo* problem" of the relationship between soul and body; the "*Cratylus* conundrum" of how words acquire their meanings; the "riddle of the *Republic,*" which asks what reason we have to be moral. But as the *Republic* itself shows, there probably isn't any justice in this world. So Plato has to be content with lending a name to only two famous philosophical difficulties: Meno's paradox and the Euthyphro dilemma. Meno's paradox shows that it is impossible to seek knowledge, because you either know what you are seeking and then the search is pointless, or do not know it and then have no way to get started.[1] As for the Euthyphro dilemma, it takes its name from the dialogue of the same name, in which Socrates asks a man named Euthyphro to define piety. When Euthyphro suggests that whatever the gods love is pious, Socrates asks whether this may not be the wrong way around (*Euthyphro* 9e–10a). Don't the gods love pious things *because* they are pious?

   Just like that, Plato set down a problem which still concerns philosophers of religion: does God determine what is moral? Some say yes, holding that if God is dead, everything is permitted. Philosophers call this the "divine command theory" of morality, according to which certain actions become morally good and evil because God declares them to be so. In general it is evil to kill your children, but when God commanded Abraham to kill Isaac it became right for him to do so (until the command was revoked at the last moment). Others have a hard time believing this theory. Could God really make it a good thing to murder the innocent, or a bad thing to offer help to suffering children? If we are believers, shouldn't we rather say that God wants us to help children and avoid murdering them *because* the first is good and the second bad? Indeed, doesn't God Himself have to obey certain moral rules, if He is not to be a wicked, all-

powerful tyrant?

The dilemma takes central stage in a theological debate that took place more than a millennium after Plato. We have already met one party to the dispute, the Muʿtazilites. They assumed that there are moral laws that we can discover using our own reason, and by which even God is bound. It was an assumption implicit in their argument for free will: since we know that God cannot justly punish those who have no choice about their actions, and know that God does punish sinners, then humans must have a power to choose. But working out in greater detail how God's justice must function is no easy matter. A famous story discussed by several Islamic theologians illustrates the point. In the afterlife, three brothers find themselves in Paradise, Hell, and Limbo. The first led a virtuous life, the second was a sinner, and the third died in childhood before he could come to deserve either reward or punishment. This third brother complains that God should have allowed him a longer life, giving him a chance to earn a place in Paradise. God replies that had he been allowed to live to adulthood, he would have sinned and gone to Hell. By letting him die early, God was doing him a favor. At which point the second brother cries out, "Why didn't you kill me as a child too? Then I wouldn't be in Hell!"

Supposedly, this story helped to turn one of the greatest of all Muslim theologians away from the Muʿtazilite way of thinking. This was Abū l-Ḥasan al-Ashʿarī, who lived in Iraq from 874 to 936, making him a rough contemporary of philosophers like al-Rāzī and Saadia Gaon and a generation younger than al-Fārābī. Al-Ashʿarī was at first a Muʿtazilite theologian, in fact a student of al-Jubbāʾī, head of the Muʿtazilites in the city of Basra. This student–teacher relationship worked out much like the one between Plato and Aristotle: al-Ashʿarī devised his own rival theological theory, which rejected nearly every tenet of Muʿtazilism, despite retaining its rational approach and its conceptual tools. He drew also on previous theologians who were at least in the orbit of Muʿtazilism. His most famous doctrine centers on the use of a technical term, "acquisition," that had already been used by several other theologians.[2] Yet his synthesis, and his critique of the Muʿtazilites, was original and coherent enough that he would lend his name not just to a puzzle or two, but to the dominant theological tradition of Sunni Islam: Ashʿarism. Al-Ashʿarī himself wrote several works that survive today, including a vast survey of previous theological opinions that remains one of our main sources for previous thinkers. (In fact, when I was telling you about the early Muʿtazilites, a lot of what I said was based on reports found in al-Ashʿarī.) His ideas were then further developed by generations of like-minded theologians, like al-Baqillānī and al-Juwaynī, both of

whom lived around the time of Avicenna and died in the early eleventh century. Others took on the Ashʿarite tradition by engaging extensively and critically with Avicenna, most notably in the cases of al-Ghazālī and Fakhr al-Dīn al-Rāzī (–1 and).

One of the positions held in common by the Ashʿarites is the divine command theory of morality. Al-Ashʿarī has no hesitation in embracing the most counterintuitive aspects of this theory, saying that God could torment innocent children in the afterlife, if He so chose. He could also punish those who believe in Him and reward the unbelievers. Indeed, not only *could* He do these things; if He did them, His actions would be just.[3] For justice means nothing more nor less than agreement with God's will. Al-Juwaynī gives an ingenious argument to support these Ashʿarite claims. If actions did not get their moral character from God, they would have to have that character in their own right, as intrinsic features. For instance, murder would be wrong all by itself. But in fact, context makes all the difference: were you to kill someone in self-defense, that would be morally justified.[4] Thus killing in its own right is morally neutral. Whether a given killing is right or not inevitably depends on some context or other—and for al-Juwaynī, that context is provided ultimately by God's law.

That argument, with its focus on how the attribute of justice or injustice belong to actions, illustrates a more general feature of the Ashʿarites' theology. Following the Muʿtazilites, they understand created things as atomic bodies which have properties or "accidents" that belong to them only for one moment at a time.[5] Both schools also used this physical theory as a basis for a proof that the world was created by God. Accidents have only a fleeting existence, so obviously they cannot be eternal. Atoms might seem more stable, but they cannot exist without their accidents. From this the theologians infer that atoms cannot be eternal either. After all, atoms need accidents to exist, and accidents come in and out of existence. Surely, therefore, atoms come in and out of existence too. For example, no atom can exist without being either in motion or at rest—inevitably, one of these two accidents must belong to any atom. But anything moving started to move at some point, and anything that is at rest started to be at rest. Thus, the atom must have started to exist, whether or not it first existed in a state of motion or in a state of rest. From this we can conclude that the world of atoms and their properties was brought into existence by some creator, namely God. It is He who creates every atom and every one of its attributes, giving them existence at each moment they exist.

In Ashʿarism the radical implications of this conception become clear, as they emphasize the fleeting and utterly dependent nature of the accidents that belong

to created things. In each and every instant, God has to choose to create every single attribute "from scratch." Things possess no stability or continuity in themselves. Rather, the fact that certain atoms continue to have certain motions and colors is due to God's creating similar motion or color attributes in those atoms at successive moments. If I hit you in the face, it's not only the moral badness of this act that depends on God. Also the motion of my hand, the pain in your nose, the red of the blood on your shirt and my knuckles—all these things are created by God. If He wished, He could create things differently, so that when I hit you, it caused intense pleasure instead of pain, or turned you into a giraffe. The stability we experience in our everyday lives is thanks only to God's choice to make things appear stable, something promised in the Koran in verses stating, "you shall find no change in the way of God" (17:77, 33:62).

This picture of constant creation, freely and arbitrarily willed by God at every moment, is often called "occasionalism." It's especially associated with early modern thinkers such as the seventeenth-century philosopher Malebranche, but al-Ashʿarī articulated the view already here in the tenth century. He did so in full awareness of the awkward implications of the theory, implications he was happy to accept. If it is God causing every attribute at each moment, then the apparent causes we see in the world around us are just that—only *apparent* causes. As we just saw, if I were to hit you, it wouldn't be me causing your nose to hurt or your shirt to be bloody. The Muʿtazilites would find this consequence intolerable. They believed that through our actions, we "engender" certain effects, even chains of linked effects. A big-game hunter might decide to pull a trigger, which causes his finger to move, which causes a gun to fire, which causes the motion of a bullet, which in turn causes the death of Hiawatha the giraffe. The hunter is the cause of all these events, not God, and the hunter bears moral responsibility.

Against all this, another ingenious argument was offered by the Ashʿarites.[6] Suppose that the hunter fires his gun but then has a well-deserved heart attack, and dies before Hiawatha does? It seems absurd to propose that the hunter is causing Hiawatha's death, given that the hunter doesn't even exist at the moment that she expires. No: what is really happening is that all these events and attributes—from the pulling of the trigger to the last, mournful flutter of Hiawatha's eyelashes—are being created by God.[7] This brings us to the crux of the disagreement between the Muʿtazilite and Ashʿarite schools. The reason that the Muʿtazilites were so keen to say that the hunter, and humans in general, are genuine causes of effects in the world is that they wanted us and not God to be morally responsible for those effects. Better to say that a dead giraffe hunter takes the blame for this heinous crime, than to blame it on God. The Ashʿarites

were more concerned to preserve God's untrammeled power. Somewhat tendentiously, they characterized their opponents' position as follows: when God has power over something, it is outside human control, and when humans have power over something, it is outside God's control.[8]

It might seem that there is an attractive third alternative for the Muʿtazilites: why not say that both God and humans have power over human actions? If God chooses to stop the giraffe hunter, He would have any number of ways to do so —including a slightly earlier heart attack. But if God refrains from interfering, the hunter can carry out his nefarious crime. Against this, the Ashʿarites argue that there can never be two causes for one and the same event or action. This would be what philosophers nowadays call "overdetermination." In our example, God and the hunter cannot *both* be the causes or creators of Hiawatha's cold-blooded murder. Here, the Ashʿarites seem to have a point. If God is omnipotent, then ultimately it is up to God and not the hunter whether or not the giraffe dies, precisely because His unlimited power can inevitably trump the hunter's finite power. Thus God is the creator of the events in question, and the hunter is just playing out a role in a situation that is, in the last analysis, beyond his control.

Of course, that is just what we would expect, if God is the cause of the existence of all atoms and all their attributes. If He is the creator of all things, then nothing can happen without His willing it to happen. Here al-Ashʿarī refers to the Koranic verse which states, "never say 'I will do that tomorrow' without adding 'God willing (ʿ*inshallāh*)'" (18:23).[9] Al-Ashʿarī adds that if humans could create their own actions, as the Muʿtazilites claim, this would undermine the argument for God's existence used by both schools. If attributes can be created without God's direct intervention, but instead by something like a human action, then the need for all atoms and attributes to be created does not imply a single Creator for all things. So there are significant advantages to the occasionalist view the Ashʿarites put forward. On the other hand, there seems to be at least one huge disadvantage too: God winds up murdering giraffes. Indeed, He winds up being the agent of all injustice and evil in the world.[10] It looks as though the Ashʿarites have secured God's unchallenged power at the price of His goodness.

It was to deal with this problem that al-Ashʿarī put forward his most famous, or perhaps I should say "notorious," doctrine, the theory of acquisition. This word "acquisition," in Arabic *kasb* or *iktisāb*, would become a hallmark of Ashʿarism. The basic idea is that even if God creates an evil action, the human agent can nonetheless be morally responsible for that action by "acquiring" it. One might also put the point by saying that the human "carries out" or

"performs" the action. This doctrine is often dismissed as playing with words, but in fact it makes a good deal of sense, at least within the Ashʿarite system. A good analogy might be color. Consider Hiawatha's eyes, which are a beautiful and mysterious blue. On the Ashʿarite analysis, God is the creator of this color, but obviously He doesn't thereby become colored or take on any of the derivative features of Hiawatha's eye-color. For instance, God is not visible, and does not call to mind the pellucid clarity of a summer sky over the African savannah. In just the same way, God creates evil actions without acquiring their derivative features. When He creates the action whereby I hit you, it is my arm that moves, while God remains unmoving. Likewise, I bear the responsibility and, you'll be glad to know, will be justly punished in the afterlife.

Yet surely there is still a problem here, in that I have *no choice* but to hit you? Perhaps not. On al-Ashʿarī's story, what happens here is that God creates in me the *power* to swing my arm and land my fist on your nose. And I can easily tell the difference between this kind of case, where I am voluntarily swinging my fist, and a different case, where I am forced to hit someone by an external power. The Ashʿarites also contrast voluntary motions to the motion involved in shivering from fever, and similar cases.[11] There's an obvious difference here, and the difference is precisely that in the voluntary case I am intentionally using a power God has created in me, whereas in the involuntary case I am not. On the other hand, the Ashʿarites are happy to admit that I *must* use this power that I have been given. If God determines that I will hit someone, He'll give me the power to do it, and I'm going to use that power come what may. This ensures that the entire event remains subject to God's will.

But why not just say that it is up to me whether or not to use the power God gives me? God could empower me to hit you, but I might think better of it and shake your hand instead, leaving the power to hit you unused. This is exactly the Muʿtazilite view. They spoke of a so-called "capacity" to act, which humans can use to perform an action if they choose to do so. Equally, they can refrain from using the capacity and do nothing. Against this, al-Ashʿarī and his followers produce more clever arguments, which show that there can be no such thing as an unrealized power. Consider my situation just before I decide whether to hit you. I have the power to hit you, and I am either going to use it or not. Clearly, my power to hit you isn't by itself sufficient for my hitting you (otherwise I would already have done it). Rather, I need to have a further power: a power actually to use the power of hitting you. This second power will be what enables me to realize the first power and hit you. But what about this second power? Won't I need yet another power, in order to use *that*? This leads to an infinite

regress, suggesting that if I really had an unrealized power to do something, I would need to deploy an infinite number of further powers in order for me to do that thing.[12] But if there are no unrealized powers, then obviously I cannot have both the power to hit you *and* the power to refrain from hitting you. Both powers would need to be realized, and then I would be both hitting you and not hitting you simultaneously, which is obviously absurd.[13]

With this line of argument, the Ashʿarites are denying what is nowadays sometimes called the "principle of alternative possibilities," that is, the principle that voluntary action and moral responsibility require the chance of acting in more than one way. In fact, they are denying that this principle is even coherent. For I can never have the power to do two inconsistent things at the same time. By the way, as al-Juwaynī adds, even if the Ashʿarite reasoning is wrong here and God winds up punishing us for actions we did not choose freely, then that doesn't really matter. It won't be unjust for God to punish us for things we couldn't help doing, because whatever God does will be just by definition— justice is nothing more nor less than conformity to His will. It may be inscrutable to us why He should determine that some people sin while others are righteous, but we're in no position to stand in judgment over God's decrees.

On this point, the Ashʿarites are exploiting another idea of their opponents, the Muʿtazilites, in holding that God transcends human understanding. But they stop short of the Muʿtazilite position when it came to divine attributes. For the Ashʿarites, it is no solution to deny the divine attributes entirely, or to reduce attributes like God's knowledge and justice to the essence of God Himself, as some Muʿtazilites proposed. Yet the Ashʿarites were also unhappy with traditionalist theologians who accepted, for example, that God literally has hands, because of passages in the Koran which speak of God reaching out with both hands (38:75). Like the Muʿtazilites, the Ashʿarites proposed a figurative reading of such texts, in this case suggesting that the "hands" refer to God's power.[14] But unlike the Muʿtazilites, they recognized that the power in question has a reality of its own. As to the question of how the attributes relate to God, this is a case where human comprehension fails. When we say that God has power, we should add the expression *bi-lā kayf*, meaning "without saying how." This phrase is often taken to express a willfully obtuse or anti-rationalist position. And certainly, the Ashʿarites are here trying to demarcate the limits of our understanding. But adding *bi-lā kayf* is better understood as a caution against assuming that the familiar way—the "how," or *kayf*, with which attributes belong to created things—is appropriate to the divine case.

Thanks to al-Ashʿarī and his first generations of disciples, there was a

permanent change in Islamic theology. Muʿtazilism certainly did not die out, but Ashʿarism would become the dominant school in centuries to come, a development with enormous consequences also for the history of philosophy. As I hope this chapter has shown, the Ashʿarites put forward numerous arguments of great philosophical interest. They did defend their system by quoting the Koran and the sayings of the Prophet, but the core of their method was rational argument, usually aimed dialectically against opponents. Still, they did not consider themselves to be *falāsifa*, or "philosophers." That name was reserved for thinkers adopting methods and concepts drawn from the Greek texts that had been rendered into Arabic. And yet, when the Ashʿarite theologian al-Ghazālī wrote a work attacking the *falāsifa*, he did not direct his critique at Aristotle, Plato, or Plotinus. His target was instead the greatest, and most influential, thinker of the Islamic world: Avicenna.

16

THE SELF-MADE MAN AVICENNA'S LIFE AND WORKS

"My father was a man of Balkh." That's the first sentence of Avicenna's autobiography.[1] As opening lines go, it isn't exactly a classic—no "Call me Ishmael," or "I sing of arms and a man." But it's a significant line nonetheless. It places us directly into the context in which Avicenna lived his life, which was not the Baghdad of al-Kindī and al-Fārābī, but the eastern reaches of the Islamic empire. He was born in a small town near the city of Bukhārā, in what is now Uzbekistan—in Avicenna's day it belonged to the vast area known as Khurāsān. This eastern realm had once been a power base for the revolution that saw the ʿAbbāsids overthrow the Umayyads to become the second caliphate of Islamic history. But by Avicenna's day, the ʿAbbāsids no longer exercised any authority over the east, or for that matter over any part of the Islamic empire. With real political authority being held by the Būyids in Iraq and Iran, and the Sāmānids in the east, the power of the caliphs was nominal. This has direct relevance for Avicenna's life story, because his father worked for the Sāmānids as the governor of a village near Bukhārā.

The eastern setting is important for understanding Avicenna's further career. For one thing, it means that he had a Persian cultural background. Though he almost always wrote in Arabic, which had already been established as the dominant language of literature in the Islamic empire, he spoke Persian natively and did use it to write philosophy. As we saw in Chapter 14, the eastern lands of the Muslim empire had seen an influx of Hellenic philosophy and science in the ninth and tenth centuries. We even mentioned two associates of al-Kindī from Balkh, the hometown of Avicenna's father. Because of this, and because of the wealth of the local Sāmānid rulers, the eastern Islamic lands were fertile ground for a budding genius like Avicenna. He mentions in his *Autobiography* that, in his capacity as a physician, he was invited to attend the Sāmānid ruler Nūḥ ibn

Manṣūr when he was ill. This gave him the opportunity to visit the ruler's library in Bukhārā, where Avicenna could see books he had never come across before, and would never find again.

That the young Avicenna was indeed a budding genius is a point made crystal clear in the *Autobiography*. His contemporaries would not necessarily have expected modesty from him. To the modern reader, though, the *Autobiography* is such a self-aggrandizing document that it becomes almost comic. Avicenna first tells us how he was recognized as a prodigy early on, having learned the Koran by heart by the age of 10. He learned arithmetic from a local grocer and also studied jurisprudence. His father then had him tutored by a philosopher by the name of al-Nātilī, but he quickly outstripped his teacher, proving himself superior in logic and in astronomy. Avicenna furthermore claims to have taught himself to be a doctor. This took hardly any time at all, since, as he says, "medicine is not one of the difficult sciences." Of course, he also moved on to study the higher philosophical disciplines of physics and metaphysics, not just reading books but also engaging in what he calls "verification" of their contents. And all of this by the time Avicenna was 16 years old, an age at which most of us were busy verifying whether our latest crush was reciprocated. (High-school romance: definitely one of the difficult sciences.)

So what does Avicenna mean when he says he was "verifying" what he found in the philosophy books? Some flavor of it is given by the next thing he says in the *Autobiography*. He would stay up late into the night making files, like note-cards, of arguments in syllogistic form. This was an ambitious experiment in applied logic. Aristotle's theory of scientific knowledge had depicted perfect understanding as consisting of chains of syllogisms, tracing back to indubitable first principles.[2] The links in these chains are called "middle terms." If you want to explain why all giraffes have four chambers in their stomachs, you need to see that they are ruminants. That will allow you to build an Aristotelian demonstration, which will be the following syllogism: "all giraffes are ruminants, all ruminants have four-chamber-stomachs, therefore all giraffes have four-chamber-stomachs." Ruminant is what fills the gap between "giraffe" and "four-compartment-stomach," hence it is called the "middle term." Avicenna tried to "verify" the traditional Hellenic sciences from the ground up, beginning from first principles and building syllogistic inferences by finding middle terms. Genius that he was, he was intimately familiar with the dawning of sudden insights, where such a middle term would simply come to him as if unbidden. It was obvious to him that not everyone was as blessed as he in this respect, though. So he coined a term for the special faculty, by which gifted people like

him are suddenly able to find the missing syllogistic link: "intuition" (ḥ*ads*).[3]

When intuition did not come, he would often go to the mosque and pray to God for inspiration. And when he grew tired with his nighttime study, he would drink wine to restore his strength. The *Autobiography*'s mention of wine-drinking scandalized many later Muslim readers, who leapt on the passage to accuse Avicenna of lax morality, despite the immediately preceding reference to prayer at the mosque. But the wine-drinking should be understood within the context of the ancient, Galenic medical theory Avicenna had mastered so easily. For him, drinking wine was not a means to get drunk. It was more like drinking coffee for us, to stay awake studying for an exam. Having said that, I reserve the right to make jokes about his wine-drinking; I don't think he'd mind. Or maybe he would actually, because he was rather thin-skinned. One time Avicenna was insulted at court by a scholar of Arabic.[4] Avicenna went off and laboriously compiled a text made up of ridiculously obscure information about Arabic linguistics, and returned to court. He claimed he had come across the book by chance, and then publically asked the scholar to explain it to him. All of this was just in order to embarrass his rival—the material in the compilation was far too obscure for the linguist to recognize.

This story comes not from the *Autobiography* itself, which naturally enough stops partway through his life (even he wasn't enough of a genius to write his own life story posthumously). Instead, the anecdote appears in the completion of Avicenna's life story, contributed by his student al-Jūzjānī. This last part also contains rather sensational information about Avicenna's death. Al-Jūzjānī relates a rumor that Avicenna was poisoned by servants who were afraid they would be caught stealing from him. Then he explains that Avicenna, having engaged in some self-diagnosis, realized that he needed to abstain from sexual activity for his own health. But he found himself unable to do this, and duly passed away, dying in 1037 in the city of Hamadhān in modern-day Iran. It turns out, though, that the bit about being unable to refrain from sex is almost certainly a later addition to the text of the biography, by someone who wanted to make Avicenna look bad.[5] It's a first example of something we'll be seeing often: Avicenna was influential but also controversial, and attracted admiration and criticism in equal measure.

Despite these salacious later interventions, al-Jūzjānī's concluding section to the *Autobiography* does preserve a good deal of useful information. He tells us of Avicenna's movements and the circumstances under which he wrote his philosophy. The general picture is that of a man who moved from one patron to another, often because he was forced to.[6] I've already mentioned his connection

to the Sāmānid ruler Nūḥ ibn Manṣūr. Avicenna says tersely that he was forced to leave him and thereafter moved from one city to another, finally winding up in Jurjān in northern Iran, not far from the city of Rayy and from modern-day Tehran, on the southern coast of the Caspian Sea. It was here that he met his student and future biographer al-Jūzjānī. While in Jurjān, Avicenna engaged in one of his many, frequently bitter, disputes with an intellectual rival—the polymath al-Bīrūnī, who is remembered today not so much for his dispute with Avicenna as for his work on mathematics and a voluminous and pathbreaking treatise about the culture of India (see Chapter 56). Avicenna was always up for a good dispute, also clashing with a representative of the Baghdad school of Aristotelian philosophers. This opponent, Abū Qāsim al-Kirmānī, was not one of the leading Baghdad Peripatetics, but Avicenna saw him as symptomatic of the weak standards of the school as a whole. The only member of the school who won his praise was al-Fārābī, whom he took seriously when it came to logic, and whose little essay on the purposes of Aristotle's *Metaphysics* he found so valuable.

On the other hand, one should never take Avicenna at his word when it comes to his influences. His admission in the *Autobiography* that he could not understand the *Metaphysics* without al-Fārābī's help is unusual. More typically, he is keen to conceal his dependence on other thinkers, and to explain how his native intelligence and hard work allowed him to reach an almost unprecedented level of insight all on his own. We should approach these claims skeptically; he seems to have got quite a bit out of reading Yaḥyā ibn ʿAdī. He also tells us in the *Autobiography* that in his youth he was exposed to the philosophical ideas of the Ismāʿīlīs because his father developed an allegiance to their cause. Avicenna insists that he immediately rejected these teachings in his youth, and there is no reason to doubt this. Nonetheless, it is worth noting that it could have been a route by which Neoplatonic ideas could have come to Avicenna's attention.

Still, the greatest influence on Avicenna was undoubtedly, and unsurprisingly, Aristotle. Avicenna's most widely read work, *The Healing* (*al-Shifāʾ*), was an enormous reworking and rethinking of Aristotelian science, with separate volumes on every topic Aristotle had covered, and mathematics thrown in for good measure. It was explicitly intended as a "Peripatetic" work, that is, one that broadly follows an Aristotelian method and agenda of topics. Some recent research on the *Healing* has shown how Avicenna wrote the masterpiece that is the section on metaphysics.[7] It deals with pretty much every topic taken up in Aristotle's *Metaphysics*, but in a different order, giving original arguments and conclusions. Avicenna went out of his way to be innovative, deliberately

overthrowing centuries of philosophical tradition to forge a new and distinctive philosophy. At one point in his career, he even gave this innovative reworking of Aristotelianism a brand name. It was the "Eastern" or "Oriental" philosophy, so called to distinguish it from the more traditional and less impressive kind of philosophy practiced in the "West," that is, by the Aristotelians of Baghdad.[8] He even wrote a summation of his philosophical doctrines called *The Easterners*, which is partially lost. Another characteristic work, also preserved only in part, was the *Fair Judgment*, which explained what Avicenna did and did not find acceptable in the previous philosophical tradition.

The circumstances in which Avicenna wrote his magisterial *Healing* are characteristic of another aspect of his career: constant upheaval. He spent most of his life traveling from place to place in search of physical and financial security, so that he could concentrate on his modest project of shattering the entire philosophical tradition and building something new out of the shards. He found himself in the city of Hamadhān, where he had been employed by the Būyid warlord Shams al-Dawla. When Shams al-Dawla died, his son wanted to retain Avicenna's services, but Avicenna rejected the offer. To avoid reprisals, he had to go into hiding with another, less powerful patron. Astoundingly, it was under these difficult circumstances that he wrote the *Healing,* often relying on nothing but his memory to give him access to the texts he was so creatively rethinking. Finally, he managed to find a more stable situation with a rival of the Būyids, ʿAlāʾ al-Dawla. Avicenna died in the year 1037, still in Hamadhān and still in the service of ʿAlāʾ al-Dawla. For him, Avicenna wrote a summary of the contents of the *Healing* in Persian; a second abbreviated version, in Arabic, was called the *Salvation*. These texts are a good way to get into Avicenna's system, because they are relatively brief and clear.

Of course, brevity and clarity don't necessarily go hand-in-hand. The proof is another work of Avicenna's, called *al-Ishārāt wa-l-Tanbīhāt*, or *Pointers and Reminders*. As the title suggests, this is a deliberately elusive and difficult treatise, which offers the reader mere hints and prods to reconstruct arguments that Avicenna may have given in a fuller version elsewhere, either in discussion or in his longer treatises. The compressed and deliberately obscure style of the *Pointers* meant that it would wind up being perhaps his most popular treatise. It called out for later authors to explain it, provoking a long tradition of commentary. This is just one example of a more general phenomenon. Aristotle had formed the basis of the late ancient philosophical curriculum, so it was only natural that in Syriac, and then in Arabic, the study of philosophy and the study of Aristotle would remain nearly synonymous. Even highly original thinkers like

al-Fārābī were content to devote a good deal of their activity to the interpretation of the Aristotelian corpus. But once Avicenna came along, things changed. The tradition of writing commentaries on Aristotle largely ground to a halt, with a couple of minor exceptions in the Eastern empire and the major exception of Averroes far to the West, in Islamic Spain. Centuries in the future, there would be a revival of interest in Hellenic sources in Safavid Persia (Chapter 53). But for the time being, it was a Persian from Khurāsān who would have commentaries lavished upon him. Avicenna would be known by the honorific of "leading master" (*al-shaykh al-rāʾis*).

It's clear that Avicenna harbored ambitions of founding a new tradition in philosophy, and not just from his adoption of the phrase "Eastern philosophy." His *Autobiography* claims that his philosophy did not change in its fundamentals since the time he was 18 years old. But the style in which he presented that philosophy certainly did. In some texts, like the *Healing* and *Fair Judgment*, he engaged more or less explicitly with the Peripatetic tradition. In the *Pointers*, he wrote elliptically as a challenge to train his students and readers. In still other works, he set his philosophy in the form of symbolic fables, one of which bears the enigmatic title *Ḥayy ibn Yaqẓān*, or *Living, Son of Awake*. (We'll be seeing that title again.) So Avicenna worked hard to earn the legacy that would be his. I suspect that if you informed him that people would soon think of him, instead of Aristotle, as synonymous with philosophy itself, he would simply have nodded with the satisfaction of a man whose carefully laid plans have come to fruition.

But there was a price to pay too: critics of philosophy now had a new target to aim at. When the next great thinker of the Islamic East, al-Ghazālī, wrote the *Incoherence of the Philosophers*, it was Avicenna he had in his sights. Attempting to retrench to the Aristotelian old school of the Baghdad Peripatetics, Averroes responded that al-Ghazālī's arguments were beside the point. Philosophy means Aristotle, insisted Averroes, and in his thought you will find no incoherence. But he was fighting a losing game. Respect for Aristotle would never die completely, and there was certainly an awareness that Avicenna himself was in some sense an Aristotelian. Still, in the East Avicenna, and not Aristotle, was the indispensable philosopher. His ideas were absorbed into a variety of intellectual traditions: Illuminationism, *kalām*, and even Sufism. There are passages of Avicenna which allude to the terminology of what was in his day already a burgeoning Sufi tradition, and to this day there are interpreters who think that, under the hard-nosed rationalism of Avicenna's philosophy, you can discover the beating heart of a mystic. In my view this interpretation is deeply misguided. But there is no denying that Avicenna's philosophy would become a

major point of reference for Sufi thinkers, including al-Ghazālī in fact, but also the great mystic thinker Ibn al-ʿArabī and those who carried on his legacy (Chapters 27 and 48).

First though, we should turn our attention to the ideas that made such an impact on the later tradition. Some of these were almost universally adopted, while others scandalized readers just as surely as the references to wine and sex in Avicenna's life story. For instance, Avicenna demonstrated God's existence with a widely admired proof. The implications of that proof, though, will dismay Jewish and Christian readers, as well as Muslims. In Avicenna we will find stunningly original thought experiments, and fundamental distinctions that will provide the basis for the metaphysical theories of thinkers ranging from Maimonides to Aquinas to the Safavid thinker Mullā Ṣadrā. Indeed, for all the criticism he provoked, it is hard to deny that he is the single most influential medieval philosopher. He was the only medieval thinker to exert significant influence in all three Abrahamic traditions— Islam, Judaism, and Christianity.[9] In his *Autobiography*, Avicenna tells us that his student and amanuensis al-Jūzjānī applied the following lines of poetry to Avicenna's disruptive life, pulled as he was from one patron to another: "when I became great, no city was big enough for me; when my price went up, no one would buy me." He became great indeed, to the point that there has been no greater philosopher in the Islamic world.

BY THE TIME I GET TO PHOENIX
AVICENNA ON EXISTENCE

I can't believe I haven't yet mentioned my sister. She's a few years younger than me, and also used to study philosophy. But she wanted a more exciting life, and ran off to join the circus. Before long she became a skilled trapeze artist, and married the bearded lady (after some initial confusion, the marriage was annulled). Her restless spirit led her to quit the circus though, and she moved into my basement, where she spends most of her time writing these books about the history of philosophy, which I pass off as my own. Oh, one other thing you should know about my sister: she doesn't exist. I have never had a sister and, barring some very surprising news, am never going to have one. Yet it seems pretty clear that this sister of mine *could* exist. Everything I told you about her would be, if not likely, at least possible—well, apart from the idea that anything could be more exciting than philosophy.

It isn't just my trapeze-artist, basement-dwelling sister who doesn't exist but could have. There are infinitely many things that will never exist, even though they apparently could quite easily exist. They needn't be people—unicorns and centaurs, the fourth of the five moons that are orbiting around the earth, a mountain made entirely of gold—it seems obvious that such things could have existed, yet they never will. Then, on the other hand, there are the things that do get to exist, but might just as easily not have existed. You and I, and every human who has ever lived or ever will, would fall into this category. In fact, if you look around you, you won't see anything that absolutely had to exist. Rather, the world is full of what philosophers would call *contingent* things. To call something contingent is just to say that it is neither necessary nor impossible. An impossible thing would be, for instance, a round square, or an activity even more worthwhile than philosophy. And what would a necessary existent be like? We'll find out when we see what my non-existent sister came

up with for the next chapter.

Philosophers refer to necessity, contingency, and impossibility as "modal" concepts, and to the whole phenomenon as "modality," because these are three "modes" that can apply to things or to statements. You might find it strange to think about the existence of things in this context, and quite a few modern-day philosophers would agree. For them, it would be statements or propositions that are characterized by necessity, contingency, or impossibility. You can best think about this in terms of truth. A necessary proposition is one that is guaranteed to be true, an impossible proposition one that must be false, a contingent proposition one that might be true or false: "I have a sister who was a trapeze artist" is false, but could have been true. We already find this in Aristotle, who talks quite a bit about modality in his logical works, as when he tells us that if the two premises of a syllogism are necessarily true, then the conclusion that follows from them will also be necessarily true. Modality also turns up in his epistemology, when he says that knowledge in the strict sense must involve necessary truths.[1]

This was an aspect of Aristotle's logic that particularly interested Avicenna.[2] His own extensive writings on logic respond to Aristotle and to his commentators, up to and including al-Fārābī. But as usual, Avicenna's respect for and use of his predecessors from Aristotle onwards didn't prevent him from putting forth innovative ideas of his own. Logic was certainly no exception. This was also one area where Avicenna was especially successful in supplanting Aristotle. Theologians and others trained in the later *madrasa* educational system were brought up on a diet of Avicennan logic, much as the philosophy students of late antiquity had begun with the Aristotelian *Organon*. Some of Avicenna's influential ideas in logic have to do precisely with modality, and constitute an advance on what we find in Aristotle. On the one hand, Aristotle strenuously insists that there are some things that could be the case but aren't. He scornfully refutes a group of philosophers called the Megarians, who believed that there is no such thing as unrealized possibility. As Aristotle points out, this would eliminate the difference between being blind and just not seeing anything at the moment. In fact, it's perfectly possible to be *able* to see, without actually seeing, like when one's eyes are closed (*Metaphysics* 9.3). On the other hand, Aristotle says in other contexts that what is eternally the case is also necessarily the case. He believes that if the heavens exist eternally, then it follows that they exist necessarily (*On the Heavens* 1.12). That may be a seductive thought, but notice the apparent implication: if it is eternally the case that something *doesn't* exist, then it necessarily doesn't exist. In other words, my

sister, who never has existed and never will, turns out on this theory to be impossible.

That way of thinking of things seems unfortunate from our point of view. But generations of logicians and metaphysicians in antiquity and the early medieval period were happy to follow Aristotle on this score. It is sometimes called the "statistical" or "frequentist" view of modality.[3] According to this statistical view, to say that something is impossible is nothing more nor less than saying that it never occurs, and to call something necessary is just to say it always occurs. Rather uncomfortably, this leaves us with only one remaining option regarding the contingent things in the middle: we'll have to say that they sometimes occur, but not always. For instance, to say it is contingently true that a human sleeps would be to say that sometimes humans sleep and sometimes they don't. That sounds fine when you apply it to general types of things like humans. Probably if no humans anywhere ever went to sleep, we would indeed be tempted to conclude that it is impossible for humans to sleep. But if you apply it to individual things that don't occur, it looks much less plausible. As I say, it doesn't seem to follow from the fact that my sister never exists that she couldn't possibly exist.

In Avicenna's logical system, it remains the case that propositions have statistical implications, even if they may seem not to.[4] In fact, he criticizes philosophers like the members of the Baghdad school for overlooking this point. If I say "the giraffe is tall," Avicenna would take this to imply that the giraffe is tall at some time or other. However, he also ties modality to the natures, or essences, of things. If I say that it is possible for humans to be trapeze artists, that will mean that it is compatible with human nature to be a trapeze artist. This will apply to every human, including humans like me who wouldn't even consider attempting to become a trapeze artist. Thus we can now apparently say that there are some things that could be the case, but never are.

So far, I've been talking about this as if it were solely an issue of logic. But it is also an issue about what exists—an issue of metaphysics. For, just as it is compatible with my nature for me to be a trapeze artist or not, it is also compatible with my nature to exist or not. Here, we have arrived at what may be Avicenna's most famous philosophical distinction, the distinction between essence and existence.[5] He makes the point with the example of a triangle. If you just consider the nature or essence of a triangle, and if you were paying attention in geometry class as a kid, you'll be able to see that a number of things follow from that essence: it must have an odd number of sides, and it must not be round. If you were paying more attention than I was, you might even be able to deduce

that its internal angles are equal to the sum of two right angles. But one thing the essence of triangle will *not* tell you is whether it exists or doesn't exist.

So here is something I share with triangles (albeit not the only thing; they don't have sisters either): both the triangle and I are contingent existents. This simply means that we have essences that are compatible with both existence and non-existence. In this we are unlike, say, round squares or carnivorous giraffes. These things cannot exist, because their essences preclude their existence, which is just to say that they are impossible. That's pretty obvious with the round square, since its being round will prevent it from being square, and vice versa. We might express the point by saying that the existence of such a thing would yield a contradiction. You might object to my other example though, on the basis that you're perfectly able to imagine a meat-eating giraffe, so this can't be an impossible existent. But I think Avicenna would disagree. As any good Aristotelian knows, it is essential to giraffes that they be vegetarian. The test for metaphysical possibility is not sheer conceivability, but what is compatible with the essence of a thing. Hence, not only are round squares impossible, but also non-rational humans and carnivorous giraffes.

The upshot of this is that we can envision three kinds of things: existents that are necessary, contingent, and impossible. They have their "modal" features because of what their essence tells us about whether or not they exist.[6] An impossible thing has an essence that rules out its existence. A necessary thing would have an essence that guarantees its existence. So far we haven't talked about whether there is anything like that, but Avicenna thinks there is just one such thing, namely God. In between would be what is in Arabic called *al-mumkin*—the "possible" or "contingent." Avicenna speaks of such things as having essences that neither "deserve to exist" nor "deserve not to exist". Obviously, pretty much everything that does exist falls into this category. As I said, if you just look around you'll find nothing but contingent things as far as the eye can see or the mind can contemplate. For Avicenna, such things need to be, as he puts it, "preponderated" to exist or not to exist. Since they do not exist under their own steam, so to speak, they will require something else to bring them into existence if they are going to exist. This is what it means for one thing to be a cause of another, or at least, a cause of its existence.

With all these distinctions in hand, it would seem that Avicenna is in a position to give a straightforward metaphysical account of my non-existing sister. She could exist, but doesn't. This should mean that her essence is compatible with existence, but unluckily for her, she has not been preponderated to exist. Here though, things get a bit tricky. Avicenna says in several contexts

that those things that never exist at all are impossible. He gives the example of the mythical bird known as the phoenix.[7] This looks like a mistake. Surely what he should say is that there are two kinds of things that never exist. First, there are things like round squares, whose essence immediately rules out their existence. But then there are also things that might have existed but don't, like the phoenix. Why would Avicenna also call these items impossible, as if they were like round squares?

Well, Avicenna himself had something in common with triangles: he was pretty sharp. So it's unlikely that this is just a mistake on his part. In fact, there are several reasons he might want to say that *all* the things that never exist, and not just obvious absurdities like round squares, are impossible. For one thing, there is more than one way to exist. So far we've been thinking about what Avicenna calls "external" or "concrete" existence, that is, existence out there in the world. But he also has the notion of "mental" existence.[8] In this sense, my sister on the flying trapeze does exist. We've been thinking about her throughout this chapter, so she exists in our minds. By contrast, something that really didn't exist *at all* would be something that never existed in any mind, anywhere, at any time—perhaps because the mere thought of it would be absurd. That would give Avicenna a good reason to say that something that never exists must be impossible. If it really never exists, not even in the mind, then it must be inconceivable, and hence impossible. This is, however, not Avicenna's rationale. When he talks about the phoenix example he explicitly says that, although it is impossible, it *does* have mental existence, which is actually pretty obvious. People do think about phoenixes, after all, though not as often as they used to. According to Avicenna, then, even things that are impossible can have mental existence. They just can't exist in concrete reality.

So let's try something else. Consider again the contrast between two kinds of impossible things. Some, like round squares, must be non-existent by virtue of their very essences. Merely to suppose that such a thing exists would land you in absurdities. Not so for the phoenix. No contradiction would arise if there were such a bird. But it might be impossible in a different way: something apart from its essence might prevent it from ever existing. As we'll see in the next chapter, Avicenna talks about things that are contingent in themselves as being made "necessary through another," that is, given a kind of guaranteed existence thanks to an external cause. The converse might be true for things that are caused not to exist. They may be contingent in themselves, but "impossible through another." Perhaps God prevents them from existing by not including them in His providential plan for the universe, in which case they are prevented from ever

coming to be.

Again, this would apply only to concrete existence in the world. The phoenix seems to be possible, and it has mental existence because we can think about it. But God has arranged the world in such a way that the phoenix can never be really existent outside the mind, and in that sense it is impossible. Here it's worth remembering that, in and of itself, a contingent thing doesn't "deserve" to exist, but neither does it "deserve" *not* to exist. Neither existence nor non-existence will be a default situation for it. Rather, it will have to be preponderated one way or another. So for every contingent essence, there are two ways things could go. Either there is a cause that makes it exist, in which case it necessarily follows that it will exist—and then it is necessary through another. Or there is a cause that makes it *not* exist—in which case it is rendered impossible. I should hasten to add that Avicenna doesn't spell this out the way I've just done. In particular, he doesn't give us the nice distinction between two kinds of impossible things, the absurd ones like round squares and the apparently possible ones like phoenixes. He just says that, in general, what never exists is impossible. The line of thought I've just sketched, though, would explain why he says that. Some things that never exist could have, but were caused not to; others could not have been caused to exist, even by God, because they are intrinsically absurd. And both kinds are in a sense impossible. But the first kind (like the phoenix) is made impossible by the chain of causation that ultimately flows from God, which prevents the thing from existing. The second kind (like a round square) is impossible all by itself, because the thing's own essence guarantees that it will never exist.

This solution prompts the following question: what does God have against my sister? Was it really part of God's providential plan to exclude her from the universe, along with all those other unfortunate people who don't exist? This seems a bit harsh, especially since now that she doesn't exist I have in fact had to write these books myself. It is more likely, though, that Avicenna is not thinking of the whole issue at such a fine level of detail. After all, humans all share the same nature, as would all phoenixes if they existed—albeit that only one would exist at any given time. Avicenna's deliberations about what is and is not possible are probably at the level of the universal and not the particular. They have to do not with me and my sister, but with the universal type "human being." This relates to one of Avicenna's most controversial philosophical discussions, which concerns precisely this question of how God relates to particulars. After all, if God didn't go out of His way to make my sister not exist, then apparently He also didn't make any special effort or decision to make sure

that I *do* exist. Does God's providence even extend down to the level of particular things? Or is He only concerned that the right *types* of things exist? In that case, He providentially ensures that there will be humans but not phoenixes, while giving no attention to the question of which humans exist and which don't. This too is an issue we'll address in the next chapter, as we turn our attention to Avicenna's philosophical account of God.

18

BY ALL MEANS NECESSARY AVICENNA ON GOD

There are, we are told, fifty ways to leave your lover. And there are probably at least that many ways of attempting to prove the existence of God. Some are the equivalent of telling your lover you just need a bit of time to yourself: not very persuasive, and unlikely to work unless stronger measures are taken further down the line. Others are like moving to a new city without leaving a forwarding address. If this strategy doesn't work then nothing will, but on the other hand, it raises more questions than it answers. In this chapter we're going to look at a proof like that, the one offered by Avicenna. Along with the famous ontological argument mounted only a few years later by Anselm of Canterbury, Avicenna's proof is probably the most influential and interesting medieval attempt to show that God exists. It was enthusiastically received, repeated, and modified by medieval thinkers writing in Latin, like Thomas Aquinas and Duns Scotus. In the Arabic tradition, meanwhile, it would be known as *al-burhān al-ṣiddiqīn*: "the demonstration of the truthful." One sign of its pervasive influence is the widespread later habit of referring to God as *wājib al-wujūd*, the "Necessary Existent," a phrase we find even in the writings of staunch critics of Avicenna.

One reason the proof was so popular, I think, is that it rigorously captures an underlying rationale for many people's belief in God. (In this respect it is unlike Anselm's proof, which tends to strike readers more as a clever trick than as a philosophical articulation of the grounds of faith.) Avicenna exploits our intuition that the things around us, from giraffes to planets, and indeed the universe as a whole, could quite easily not exist. Anticipating Leibniz, whose ideas can in part be traced back to Avicenna, we might say that there should be some "sufficient reason" why anything at all exists, rather than not existing. God would provide that reason. Ultimately, everything other than God would exist because of Him. We might be tempted to press on, and ask why God exists. The

answer is that the explanatory buck stops with Him. Unlike giraffes and planets, God cannot fail to exist. He is, in other words, a necessary being, and in fact the only necessary being.

That's basically the line of thought Avicenna follows, but of course his version is going to be rather more complicated and tightly argued.[1] It draws on the distinctions introduced in the previous chapter, especially the contrast between contingent things that need a cause to "preponderate" them to existence, and the necessary existent whose essence guarantees its existence. What Avicenna wants to do is to prove that there is indeed a necessary existent. This, of course, will be God. To deny that there is any such thing would, of course, mean insisting that everything that exists is contingent (clearly no impossible things exist). So let's consider that scenario: could it really be the case that everything that exists, exists contingently? It might seem so. Of course, each contingent thing will need some cause other than itself, which will preponderate it to exist. Since that cause will itself be contingent, it will in turn need another cause to make it exist, and so on. An infinite regress seems to be looming here— where will the sequence of preponderating causes end? But it would be too quick immediately to conclude that some necessary cause is needed to end the regress. Let us suppose that the cause of your existence is your mother. She had a cause too, namely your grandmother, who was caused by your great-grandmother, and so on. This sequence may go off into infinity, but so what? Each mother has a mother, so nothing is uncaused. The only problem would be if the causal sequence cannot be infinite for some reason, perhaps because the universe has not always existed. But Avicenna is hardly going to say that, because he thinks the universe is indeed eternal, as is the human species.

Instead, Avicenna asks us to think about the *entire* collection or aggregate of all contingent things. In other words, we should consider the sum total of every contingent thing that exists now, has ever existed, or ever will exist. What is the status of this collection of things? Obviously it isn't impossible, because it does exist. Rather, the collection as a whole is presumably contingent. This is the point where Avicenna is articulating the intuition that the whole universe, with its entire history, could have failed to exist: that's just what it means to say that the aggregate of contingent things is itself contingent. But if this is so, then the aggregate must obey the rules that apply to any contingent thing. In other words, it must have a cause that preponderates it to exist. Of course, there are again three options: the cause of the aggregate is impossible, contingent, or necessary. We can easily reject the first option, since something impossible cannot exist in order to serve as a cause. Nor can it be contingent, since then it would already be

included within the aggregate of all contingent things that it causes. That leaves only one possibility, namely that the external cause is necessary. Thus we have shown there is a necessary existent. Q, as Euclid would say, ED.

Does the proof work? It might seem that we could avoid the conclusion by rejecting Avicenna's assumption that the aggregate of contingent things is itself contingent. Sure, each thing inside the collection is contingent, but does that mean that the collection as a whole is contingent? We might consider a mathematical parallel here. Avicenna's aggregate is reminiscent of a mathematical set, and sets frequently have features that their members do not. For instance, the set of numbers is not a number. Or if you are math allergic and don't like that example, think of a clock: the parts of the clock might each be small, even though the clock as a whole is big. In general, then, wholes don't automatically share the features of their parts. So maybe the whole collection of contingent things isn't contingent after all; it might be necessary. Translating that into less technical language, this would mean that the universe, past, present, and future, has no external cause. Instead, it simply *must* exist, and requests for an explanation of its existence are wrong-headed.

That sounds like the sort of thing that a modern-day atheist might say, so it's surprising to see that Avicenna is fairly relaxed on the point. He sees that an opponent might raise this objection against his proof and, as if shrugging his shoulders, says that in that case the opponent would just be giving him what he wants. After all, he is out to prove that there is a necessary existent. The opponent has actually admitted that: it's just that the opponent thinks that this necessary existent is the universe itself. So, as Avicenna says, "in a certain way, this is the very thing that is sought."[2] The objection is no objection at all, but a capitulation. Unfortunately for Avicenna, though, we can now see that his ingenious proof has not gotten him as far as he might have hoped. Perhaps there is a necessary existent, but it turns out to be the universe itself. Or maybe there are even many necessary existents. Perhaps there are many gods, as in pagan belief, or necessary things that aren't even divine. We might think that numbers necessarily exist, or Platonic Forms. Avicenna may as well go around wearing something that says, "I proved there is a necessary existent, and all I got was this lousy t-shirt."

Unless, that is, he can show us that the necessary existent established by his argument is to be identified with the God worshipped in Islam. Avicenna now turns to this further task with great energy, devoting lengthy sections of his various works on metaphysics to showing that a necessary existent must indeed have all the attributes we would associate with God.[3] It turns out, or so he will

argue, that necessary existence implies a wide range of other features, such as uniqueness, immateriality, wisdom, power, and generosity. Necessity thus becomes the core idea in Avicenna's understanding of God. In this, he is radically departing from the Aristotelian tradition. Before Avicenna, it was traditional to prove the existence and features of God by reasoning from features of the world we see around us. Aristotle himself had argued that we need an immaterial, divine mover to explain the eternal motion of the heavens. Other arguments invoked the perfect design of the universe, to prove that there is a wise and powerful creator. Avicenna instead argues that there must be a necessary existent if anything whatsoever is to exist at all. Then, he extracts the entire range of familiar divine attributes from that notion of a necessary cause.

Which turns out to be a rather laborious enterprise, because Avicenna needs to argue for each individual attribute one at a time. I'll just give you a couple of examples. The first thing he needs to do, of course, is show that there is only one necessary existent, since God is unique.[4] Avicenna's argument is ingenious: he asks us to imagine that there are more than one necessary existents, and then he'll show that this would lead to absurd consequences. To make it simple, let's just suppose that there are two necessary existents, and to make it fun, let's call them Buster and Charlie. Now, obviously neither of them can be in any way a cause for the other. If Buster were a cause for Charlie, then Charlie would be causally dependent on Buster. But being causally dependent means being contingent, and we are supposing that Charlie is necessary. Obviously, the reverse is also true: Buster cannot be dependent on Charlie either. For both to be necessary, Buster and Charlie must be entirely causally independent.

But now we can ask, what makes Buster different from Charlie? After all there are two of them, and there must be some explanation for this difference. Obviously, neither Buster nor Charlie can be the cause of the difference: then whichever one was responsible for the difference between them would be causally prior to the other. Nor can some third thing explain why they are different. If Charlie has a moustache and Buster doesn't, then Charlie's moustache is causing Charlie to be different from Buster, and causing Buster to be different from Charlie. So the moustache is a cause for both of them, and *neither* of them are necessary! As Avicenna would put it, there has to be some distinguishing or individuating feature that prevents our two necessary existents from being identical, and if both are uncaused then this cannot happen. But if there is no way to explain how multiple necessary existents could be made distinct from one another, we must reject the idea that there are more than one. The necessary existent is therefore unique.

Avicenna uses the same sort of reasoning to show that the necessary existent must be simple, and without parts. His idea here is that, if a single necessary existent had parts, then something would need to distinguish those parts from one another. Then the parts would have to be caused to different from each other, and so would not be necessary; but how can a necessary existent have contingent parts? The necessary existent, then, is not only unique but also simple. Avicenna uses the same word for both features, saying that the necessary existent is *wāḥid*, or "one." This makes it clear, in case we missed it, that he has just given us a philosophical version of the doctrine of God's "oneness" (*tawḥīd*)—a typical illustration of how he conceives of philosophy's relationship to the faith of Islam. On this basis he can quickly take another step towards establishing the divinity of the necessary existent, by pointing out that a simple thing must be immaterial, since all material things have parts.

So far, then, Avicenna claims to have shown that something exists necessarily; and that with necessary existence, just as in the movie *Highlander*, there can be only one. The necessary existent is unique, simple, and immaterial. It is starting to sound more and more like God, and the next step will get us closer still. Avicenna continues to pursue the line of thought we've just been following, by emphasizing that the necessary existent can have no connection to matter whatsoever. After all, matter in the Aristotelian framework is one of the four kinds of cause, and a necessary existent can have no cause. What would such an immaterial thing be like? Well, it would have to be an intellect, because, as we'll see in the next chapter, Avicenna equates thinking with immaterial activity. Indeed, it must be a perfect, separate intellect, not an intellect like the one you or I have, impaired by being related to a physical body.[5] Now we have a reason to affirm such traditional divine attributes as "knowing" and "wise." But is it a move Avicenna is entitled to make? Even if we agree with him that intellects are always immaterial, is it really so obvious that anything immaterial has to be an intellect? Yes, says Avicenna. Thinking is an activity that will belong to any immaterial thing, as long as it is not obstructed by being involved with matter.

That's just a sampling of Avicenna's arguments for his claim that a necessary existent would have all the features we associate with God. Of course, each of the arguments needs to be assessed on its own merits. Personally, I find some more convincing than others. I am not particularly impressed by that last move of claiming that anything immaterial is an intellect, since Avicenna seems simply to assume that intellectual thinking is the only immaterial activity there could possibly be. Notice also that, since Avicenna adopts a piecemeal approach

and derives each traditional divine attribute from necessity one at a time, someone might accept the initial proof for the necessary existent while rejecting his arguments for the various attributes. Such a critic could thereby stop short of accepting the existence of God. Or, the critic might agree that there is such an existent and that it has some of the attributes Avicenna tries to establish, but not all of them. Perhaps it is unique and simple, but not an intellect.

Another line of attack might focus on the original proof itself. One obvious potential point of weakness is Avicenna's fundamental assumption that if something does exist, and might not have existed, then it must have some external cause. The atheist objector might say that the universe just happens to exist, with no explanation, and no cause, yet without being necessary. This would be an incoherent proposal on Avicenna's understanding of contingency, since for him something's being contingent just means that the thing needs a cause to "preponderate" it to exist. The challenge for the atheist, then, would be to propose another conception of contingency, according to which the universe could just happen to exist, without being necessary and without having any cause. The universe would be like the *Highlander* sequels, whose existence is inexplicable.

Avicenna's philosophical theology certainly was attacked later in the Islamic world, but not really from that direction. His fundamental proof of the necessary existent was popular, if not universally accepted. One critic was Averroes, who was enough of a dyed-in-the-wool Aristotelian to object to the proof on methodological grounds. He insisted that God's existence has to be shown on the basis of features of the natural world, as Aristotle had done. Thus, for Averroes, we need to go through physics to prove that God exists; we can't do it with this independent metaphysical argument devised by Avicenna.[6] The more mainstream view, though, was that Avicenna had gone too far by trying to infer all of God's features from His necessity. After all, you can think that God necessarily exists without thinking that *everything* about God is necessary. But this is precisely what Avicenna thought, and it led him to some rather controversial conclusions.

The most obvious problem is that, for Avicenna, God must cause the universe to exist. God can have no features, or relations, that are contingent, so His causing the universe must be something He does necessarily. Out with freely willed, gratuitious, and generous creation, and in with a necessary emanation of the universe, such as we find in late antique Neoplatonism. As Avicenna says, God is necessary in Himself, but the things that come from Him are "necessary through another." In other words, their own essences are contingent, so in

themselves they could fail to exist. But once God is in the picture, they absolutely have to exist, because God makes them exist and everything He does, He does necessarily. As we'll see (Chapter 21), authors like the theologian and philosopher al-Ghazālī were appalled by this suggestion, and chose to fight Avicenna on the ground of the eternity of the universe.

A further sore point in the later tradition concerns Avicenna's claim that God is an intellect. That in itself was not an unpopular claim; at least, few Muslims would want to deny that God is wise and knowing. The difficult was rather the manner in which God knows. In one of the most heavily criticized and frequently discussed parts of his treatment of God, Avicenna raises the question of whether, and how, God can know about particular things.[7] There is good reason to think He cannot. Suppose that I go to the zoo, admire the giraffes, and then go home and watch a Buster Keaton film. Ironically, given that that sounds like a perfect way to spend a day, God's very perfection would prevent Him from tracking my movements with His knowledge. To do so, He would have to change, first knowing that I am at the zoo, then a few hours later knowing that I am chuckling at Keaton's sublime slapstick. But for Avicenna God cannot change, because everything about Him is necessary. In order for a thing to change, it has to be possible for that thing to be different, but with God there are no as-yet-unrealized possibilities, there is only necessity.

Nor is God's unchanging nature the only problem here. Avicenna adheres to Aristotle's doctrine that the best kind of knowledge is universal and necessary in nature. We humans are able to apply this kind of high-grade knowledge or understanding to the world around us by becoming aware of particular things that fall under universal concepts. I might universally know that giraffes are ruminant animals. When I come across Hiawatha, who is a particular giraffe, I can deploy this understanding and conclude that Hiawatha is a ruminant. But God, being a perfect, separate intellect, should have only the most perfect kind of cognition, namely knowledge that is universal and necessary. Of course that fits perfectly with Avicenna's general claim that everything about Him is necessary. So this is one bullet Avicenna is willing to bite. He says that God does know particulars, but "in a universal way." He gives the example of a particular eclipse, which God could know about by timelessly knowing the necessary laws of celestial motion. As the creator of all things, God has a universal knowledge which covers all of what He has created. Again, this would provoke massive criticism among later authors. The Koran states that not even "an atom's weight in the earth or in heaven" is hidden from God (10:61). Avicenna quotes this verse himself, proclaiming that he has once again supplied

a philosophical elucidation of Islamic belief. But for many readers, this was a bluff. For them, a necessary existent that knows things only universally and not one at a time could not be equated with the personal, untrammeled God of the revelation.

19

INTO THIN AIR AVICENNA ON THE SOUL

One of the most popular weapons in the arsenal of contemporary philosophy is the thought experiment. It's gotten so you can't venture into a department of philosophy without being asked whether you'd be willing to shove someone off a bridge to block a train before it hits a bus full of schoolchildren. Or, suppose that your best friend stepped into a "Star Trek"-style teleportation device, and two identical people popped out at the far end instead of just one. In such a circumstance, would you be willing to buy both of them a birthday present? Thought experiments are nothing new, though. Already in antiquity, Aristotle had asked what would happen if there were another universe—he concluded that the earth in that universe would need to converge on the same natural place as the earth here, since they share a nature. Thus, the two universes couldn't possibly remain distinct (*De Caelo* 1.8). Which reminds me of my favorite example of a thought experiment from late antiquity. Plotinus wonders whether an eye on the outside of a second universe placed next to ours would be able to see our own universe. He concludes that it would not, since sensation works through a universal sympathy that binds our single universe together (*Enneads* 4.5.3).

What is the use of considering situations that are so remote from our experience? It may help to draw a distinction between strict impossibility and inconceivability. It's not interesting to ask what would happen if two plus two were five—that's just incoherent, and so inconceivable. But it is possible and philosophically fruitful to think about conceivable scenarios like the ones I've mentioned. They are almost certainly never going to come about, no matter how long we hang around on railway bridges. Yet they elicit our intuitions about various philosophical issues, from ethics to morality to cosmology. And intuitions are crucial in philosophical reflection, often providing its starting points, or objections to what seemed to be a promising theory.

So it makes sense that in the Islamic world, the champion of thought experimentation was the champion of philosophy itself: Avicenna. No thinker in any medieval tradition makes more eager or effective use of such scenarios. He was convinced that real intellectual progress is made by finding the linking, or "middle," terms of syllogistic arguments, and a thought experiment is not a syllogism. But it could trigger an intuitive insight of that elusive middle term. More modestly, the experiment might just guide you towards the right conclusions, for which you could then seek good demonstrative proof. Hence Avicenna was a devoted user of thought experiments, among other ways of prompting himself and his readers to reach new insights. His *Pointers and Reminders* asks the reader to do most of the work by just hinting and alluding to the arguments that constitute Avicenna's philosophy, without actually laying out those arguments. And his most famous thought experiment is explicitly labeled as such a pointer or reminder (*tanbīh*). It appears in several of his works, and it's clear that he was very pleased with it.

Avicenna asks us to imagine someone being created out of thin air, and indeed into thin air, all at once and as a perfectly functioning adult.[1] (In one version, he actually tells you to imagine *yourself* suddenly being created this way, but I'll stick with the third-person version.) The man is suspended, or flying, or falling, in mid-air. His vision is somehow veiled, and there is no noise. Also he isn't touching anything, not even the ground, and his limbs are splayed out so that he is not even in contact with his own body. Thus, he is in a state of total sensory deprivation. Furthermore, he has only just been created, so he has no memory of ever using any of his senses. So now the big question: will this person be aware of anything at all? He won't know that his own body exists, whether his limbs or his internal organs. And yet, Avicenna insists, he will nonetheless be *self-aware*. He will have a knowledge, Avicenna says, of his own essence or self.[2]

So what does that prove, other than that Avicenna's late-night wine-drinking sessions bore some serious fruit? The flying man thought experiment is sometimes compared to Descartes' *cogito* argument—"I think, therefore I am"— because it appeals to the inevitability of grasping one's own existence. But Avicenna is not trying to defeat radical skepticism, which is the purpose of the *cogito*. His argument is a different kettle of fish. In fact he is out to fry more than just one fish. Most obviously, the flying man draws our attention to the phenomenon of self-awareness. Avicenna was fascinated by the fact that we are all always able to become aware of our own existence. The difference between us and the flying man is that our souls are full of the deliverances of sensation,

of memories and thoughts. This might fool us into supposing that when we are self-aware, we are aware only that we are having some sensory experience, some memory, some thought. But Avicenna insists that self-awareness is more fundamental than any such mental activity. Indeed, all other mental activity presupposes self-awareness, since whatever I think or experience, I must always be recognizing it as *my* thought or experience.[3]

Of course, we are not always fully conscious of being self-aware. We don't spend all day constantly narrating our own lives to ourselves: "here I am drinking a coffee…here I am drinking another coffee…and now here I am wondering whether I should stop drinking so much coffee." Rather, our primitive self-awareness is a kind of background foundation for our entire mental life. Avicenna claims that it goes on even while we are asleep. To become actively conscious of it, we need to focus on it deliberately. The flying man thought experiment is one way Avicenna helps us to do that, but this isn't all he wants to get out of it. He also points out that with the flying man, we have a situation where someone is aware that *he* exists, but is not aware that *his body* exists. This, Avicenna claims, shows that he is not his body—in other words, that his self, or essence, is an incorporeal soul. He's invoking a general rule here, which goes like this: if I'm aware of Thing 1, and not aware of Thing 2, then Thing 1 and Thing 2 are not identical.[4] But is the principle really right? Consider an analogy: Avicenna could have known that he was drinking a glass of water instead of wine (for a change). But given that modern chemistry hadn't yet been invented, he could not know that he was drinking H_2O. He was aware of the water, but entirely unaware of the existence of hydrogen and oxygen atoms, or the molecules they make up. Obviously that doesn't prove that water is not the same thing as H_2O. Likewise, perhaps the flying man is aware of a bodily self, without realizing that his self is a body.

For this reason, some interpreters have emphasized that Avicenna calls the thought experiment a mere "pointer," a prompt that might help to shake us out of our materialist assumptions.[5] And in fact, if Avicenna really wants to prove that the soul is immaterial, he has other ways of doing it. His favorite argument for this is not the flying man thought experiment, but one that cleverly uses Aristotle's theory of knowledge for metaphysical ends. We've seen numerous times that, in the Aristotelian tradition, knowledge in the strict and proper sense should be directed at universals. So if I know about giraffes, I am grasping the universal *giraffe* rather than a given individual giraffe, such as Hiawatha. But what makes Hiawatha an individual giraffe, distinct from all the other giraffes? The traditional answer, which Avicenna accepts, is matter. Because Hiawatha

consists of one batch of matter arranged as a giraffe, while her cousin Harold consists of another batch of matter, Hiawatha is distinct from Harold. So if our minds take on a universal, rather than particular, form, then our minds must be immaterial.[6]

Here, we might again be tempted to see a bit of Descartes in Avicenna. Though I'm sure Avicenna would have enjoyed being French, what with all the wine, I think we should again fight off the temptation to see him as a Descartes *avant la lettre*. At least the cliché version of the Cartesian soul, a substance radically separate from the body which can interact with it in only a rather mysterious way, is not what Avicenna has in mind. Rather, Avicenna considers only the intellectual part of the soul—what he calls the "rational soul"—to be separate from body in its activity. In fact, just like giraffes, the human soul needs matter in order to be the specific soul that it is. What makes your soul different from mine is that they are two separate forms given by the Agent Intellect to two different parcels of matter. Whenever the matter is prepared in the right way, an appropriate form will emanate into it, just as in al-Fārābī's cosmological theory. Before this emanation into some particular matter, the soul doesn't exist. So seriously does Avicenna take this point that he uses it to show the impossibility of reincarnation. If a pre-existing soul turned up to inhabit a new body, then that body would wind up with two souls: the old one that is being reincarnated, and the new one that has just been given by the Agent Intellect.

This causes Avicenna some problems at the other, more tragic end of the life cycle. Since the only aspect of the soul that operates without bodily organs is the intellect or rational soul, it is only this rational soul that will survive the death of the body. But once there is no matter to be connected to, how will my immaterial soul be distinguished from yours, or from any other soul? The answer seems to be that the soul has its own individual mental life, including the self-awareness highlighted by the flying man thought experiment. The soul needed a connection to the body when it first existed, in order to be the soul that it is; but once it exists as an individual it is capable of activities that do not require the body.[7] It's worth noting, however, that, in an indirect way, the soul needs to have had a connection to a body in order to continue some of its post-mortem activities. Once disembodied, the soul will retain the knowledge it acquired during life, and this is knowledge that could never have been acquired in the first place without the use of the body. For, with the exception of a few basic first principles and concepts, Avicenna thinks that everything we know is derived from sense-experience.[8] Platonists had often portrayed the body as a hindrance to wisdom and knowledge. Unlike them, Avicenna thinks that we absolutely need the body

if we are to activate our intellects and live the life of the mind, whether during our embodied existence or thereafter.

Avicenna innovates further when he explores our other psychological abilities. It's obvious that our mental lives do not consist solely of sense-experience and intellection. There are also the faculties of memory and imagination. Developing proposals first made by antique authors, including the renowned Galen and the fairly obscure Nemesius of Emesa (bonus points if you remember him from the last volume[9]), Avicenna puts forward his theory of the "inner senses." The basic idea here is that, just as we have five outer senses, like vision, hearing, and so on, so we have five "inner senses." These include memory and imagination. But Avicenna's most significant proposal here is the inner sense he calls *wahm*. The word is often translated into English as "estimation," because the medieval Latin version of Avicenna's term was *aestimatio*.[10]

Wahm, however, has nothing to do with "estimating" in the sense of, say, guessing how much something might weigh. Rather, *wahm*'s basic function is to grasp certain features of the world that are too abstract to be perceived by sensation, but not fully abstract and universal like the things grasped in the intellect. His favorite examples involve animals. When a sheep sees a wolf, it does not just perceive the wolf's great big eyes and frightfully long teeth, but also the wolf's hostility. So the sheep must have some capacity other than sensation, a faculty through which it can become aware of hostility. That's why the sheep runs away, albeit not at a speed that will challenge the wolf much. This faculty is something that humans too share. Like sheep, even those woolly-minded people who never attain intellection are capable of perceiving features of the world that are not available to sense-perception. The hostility of a wolf is easily noticed even by little girls in fairy tales, so long as the wolf is not cunningly disguised in a grandmother's bonnet.

Avicenna uses another word here which is difficult to translate, when he is talking about such features of the world: *maʿnā*. In some contexts this could be rendered as "meaning," or more broadly something that someone has in mind. For this reason, it came into medieval Latin translations as *intentio*, and you'll often see it translated into English as "intention." But as should be clear by now, Avicenna doesn't really have in mind things you would "intend" to do. Rather, he is trying to explain how it is that our mental life can be so rich, by adding to the traditional Aristotelian faculties of sensation, imagination, and intellect. By postulating this new power of *wahm*, Avicenna can more easily explain how both animals and humans experience the world as something more than colors,

sounds, smells and so on. On the other hand, the word *wahm* also has a more negative connotation. It can refer to a misleading or wrongheaded notion. So Avicenna invokes this same faculty of *wahm* to explain the spurious impressions we form, including those that we can hardly resist even when we know they are wrong. This usage will be significant in later thinkers who take on Avicenna's ideas.

I'd like to linger over the importance of non-human animals in the story Avicenna is telling here. I just suggested that, were it not for the relatively sophisticated behavior of sheep and other animals, Avicenna might not have felt the need to posit the faculty of *wahm*. But once he did, he inferred that it should belong to humans too, and found other functions for it to carry out. Though it may not be obvious, we're seeing here how the history of medicine has an impact on philosophy. Galen had proved that the soul's ruling faculty is seated in the brain, by doing dissections of animals, not people. The implications for human psychology seemed simply obvious, without Galen needing to cut open human beings. Avicenna's writing on medicine is deeply influenced by Galen, and it's no coincidence that his theory of the internal senses makes an appearance in that context too.[11] Inspired by Galen, he assigns his five inner senses to different parts of the brain. One of many sub-plots in the history of philosophy and science is the long-running debate about how much we have in common with animals. Perhaps the greatest push in the direction of seeing animals as kindred to ourselves has come from anatomical research and the psychological theories based on that research.

But of course, Avicenna recognizes that we are capable of something that no non-human animal can do: we can think. This is thanks to our intellects, which have the job of grasping universals. If we are like animals in having outer and inner senses, we are like God in that we have this ability to engage in intellection —also because we are able to grasp ourselves using our intellects, just as God grasps Himself.[12] In a point closely related to the conclusions of the flying man argument, Avicenna observes that whenever we know something, we can also know that we know that thing. All knowledge, in other words, is at least potentially accompanied by self-knowledge. God's case is not so different. He is better than us in that His self-knowledge is of a better object, namely Himself, and that it never ceases. But His knowledge does have an intellectual nature.

Given that we are not God, and don't have an eternal and perfect grasp of everything we could possibly know, how is it that we go from not knowing things to knowing them? This is one of the most hotly debated areas in research on Avicenna, because he seems to give two answers.[13] The first is an answer we

might call "empiricist." He thinks we use induction to generalize from our sensory experiences to understand universal truths about the world. After seeing a number of giraffes, we might be able to make the universal judgment that all giraffes are tall. And that seems like a pretty good answer to the question of how we acquire knowledge. Why, then, does Avicenna also give a second answer, and one that is apt to strike us as considerably less good? Namely, that we receive forms as an emanation from the separate Agent Intellect, the lowest of the intellects of the celestial spheres. Usually philosophers have a hard time explaining how knowledge comes about. Avicenna is so good at this philosophy business that he's come up with *two* explanations.

But if we abstract universal forms from sense-experience, why do we need the Agent Intellect? Conversely, if we have an emanation from the Agent Intellect, why do we need to go through the laborious process of abstracting from sense-experience? Probably the answer is that the two accounts are aimed at explaining different things. The "bottom up" process of abstraction explains why we do need sense-experience to arrive at knowledge, whereas the "top down" story about emanation helps to build a strong link between Avicenna's theory of knowledge and his cosmology. As in al-Fārābī, Avicenna's Agent Intellect is a "giver of forms" emanated into matter, as when plants, animals, and humans are generated. If the Agent Intellect is the origin of forms in such material things and also an origin of the forms in our souls when we engage in intellection, that would guarantee a perfect match between our minds and the outside world.

Another advantage of the Agent Intellect is that the forms we come to understand will have somewhere to reside when we are not thinking about them. Suppose I come to understand all about giraffes, then take a break to think about sheep for a few months, but then I revisit my knowledge about giraffes. Where has the universal form of giraffe actually been existing this whole time? Not in my soul, since I was thinking about something else, and not out in the physical world, since there is no universal form of giraffe out there, only particular giraffes like Hiawatha. The Agent Intellect is a kind of permanent home or storehouse for these forms, guaranteeing that they are always available, ready to be "downloaded," if you will, by those who have managed to get access to them. Here, Avicenna is adopting and transforming the theory of knowledge we found in al-Fārābī. It's yet another example of how he innovates within the framework provided by the Aristotelian tradition.

20

SPECIAL DELIVERY AL-GHAZĀLĪ

You're about one-third of the way through this book. How has it made you feel? Hopefully entertained, and occasionally even enlightened. But philosophy doesn't always produce beneficial effects. Some people, unbelievably enough, actually think it is pointless and boring. Others find it all too gripping. Philosophy bothers them, and can even cause anxiety and a kind of existential paralysis. We might associate that with characters in twentieth-century novels by Camus, Sartre, or Kafka, but it's something that happened already long ago to one of the greatest and most complex thinkers of the Islamic world: Abū Ḥāmid Muḥammad ibn Muḥammad al-Ghazālī. In his philosophical autobiography, the *Munqidh min al-Ḍalāl*, or *Deliverer from Error*, al-Ghazālī speaks of a crisis brought on by reflection on the nature of knowledge.[1] This was philosophy as illness, and the diagnosis was a bad case of skepticism.

Ancient proponents of Skepticism like Sextus Empiricus claimed that it could be a road to *ataraxia*, or "freedom from disturbance."[2] He reported that suspending judgment about all possible topics of inquiry would yield a deep and lasting peace, a release from the stressful search for knowledge. But one man's calm is another's calamity. When al-Ghazālī argued himself into a skeptical corner, he found the intellectual stalemate not liberating but frustrating. This is one of two life crises he speaks of in the *Deliverer from Error*, the other being a far more serious breakdown in the summer of the year 1095. In that case, religious reflection on the meaninglessness of his daily occupation as a teacher caused him to stop eating, and even rendered him unable to speak. Only after deciding to devote himself fully to God and give up on his teaching position in Baghdad, did he find peace in spiritual retreat. In much the same way, it was by seeking refuge in God that al-Ghazālī was able to overcome his crisis of skepticism.

The argument that led al-Ghazālī to his impasse is reminiscent of a report

about the Pre-Socratic philosopher Democritus, who drew rather skeptical conclusions from his atomic theory.[3] Our senses tell us that honey is sweet, but the sweetness is only a matter of convention; really there are only atoms and void. Democritus then imagined sensation saying to the mind that it is in no position to overturn the deliverances of sense-experience like this. For without the senses, the mind could know nothing at all. Similarly, al-Ghazālī imagines sense-perception complaining after it is corrected by the mind (23). He gives the example of how shadows look to our eyesight as if they are standing still, but are known by the mind to be slowly moving as the sun crosses the sky. Another example, taken from Aristotle, is that the sun looks very small, yet is known to be very large on the basis of astronomy. Stung by this chastisement, sense-perception might say to the mind: how do you know there is no higher court of appeal that could correct you, the way you have corrected me? You might be like a man asleep and dreaming, blissfully unaware that you could awake and understand things as they truly are.[4]

This argument undercut al-Ghazālī's confidence in the deliverances of his own reason. Formerly, not unlike an ancient Skeptic (as Sextus emphasized, in Greek "skeptic" means "someone who is seeking"), al-Ghazālī had been relentlessly searching after certain knowledge. He was, he tells us in the *Deliverer from Error*, simply born with an innate thirst for understanding (21). He proposed a kind of test that certain knowledge would need to pass. Consider one of your beliefs, such as the belief that ten is more than three. Now suppose someone comes along with a staff and says, "I tell you that three is really more than ten, and here is my proof." Then he casts down his staff, which suddenly and miraculously becomes a snake. As al-Ghazālī says, you would be bewildered, but that would not tempt you to believe that three really is more than ten (22). Even such snake-proof deliverances of the mind, though, could fall prey to the skeptical doubt raised about the mind as a whole.

I just expressed doubts of my own about comparisons between Avicenna's flying man argument and Descartes' *cogito*. By contrast, al-Ghazālī's skeptical argument does seem to do more or less the same job as the radical doubt at the beginning of Descartes' *Meditations*. Like Descartes, al-Ghazālī sees skepticism as a challenge to be overcome, not as the reassuring outcome the ancient Skeptics took it to be. But al-Ghazālī does not point to anything like the Cartesian *cogito* to get himself out of his skeptical fix. Instead, he tells us that it was God who released him: a light was unexpectedly cast into his bosom (25). It is through this light that we must seek the "unveiling" (*kashf*) of truth, and it is given only by divine generosity. Here, we have al-Ghazālī's life story in a

nutshell: a philosophical train of thought winds up being derailed, then put back on track with divine assistance, once al-Ghazālī is granted a mystical insight that both transcends and guarantees the truths of reason.

As the whole anecdote suggests, al-Ghazālī's attitude towards philosophy was an ambivalent one. He made careful study and careful use of philosophy in his writings, but also criticized its pretensions. Ultimately, philosophy was only one facet of his many-sided thought. His various intellectual allegiances were disdainfully described by Averroes: "an Ashʿarite with the Ashʿarites, a philosopher with the philosophers, and a Sufi with the Sufis."[5] This is unkind, but anyone who has spent time with al-Ghazālī's works will probably be tempted to agree. He was a protean thinker, and each of his works seems to show the reader only one part of a larger picture. In trying to understand how the puzzle pieces might fit together, we should start where Averroes does in this quip: Ashʿarism. Al-Juwaynī, one of the greatest Ashʿarite theologians and among the first members of the school to engage with the ideas of Avicenna, taught a young al-Ghazālī in the city of Nishapur, in the north-east of modern-day Iran.

The setting of this encounter was one of a system of schools, or *madrasas*, called *Niẓāmiyya* in honor of their sponsor, the pro-Ashʿarite vizier Niẓām al-Mulk. They are something new in our history of philosophy in the Islamic world. We've seen philosophy in court settings, with thinkers like al-Kindī, al-Fārābī, and Avicenna all receiving support from various aristocrats and even from royalty. But, though I have described some groups as "schools," for instance the Baghdad Peripatetics, and for that matter the Ashʿarites themselves, we have not actually seen philosophy being done in the context of state-sponsored educational institutions. The *Niẓāmiyya* schools changed that. Some parts of philosophy, especially logic, became a standard part of the curriculum in the *madrasas* that educated legal scholars and theologians beginning around this time. The presiding force behind all this, Niẓām al-Mulk, was not only a contemporary of al-Ghazālī's but even had him in his entourage for some time, until he was assassinated in the year 1085. After that, al-Ghazālī came to Baghdad to teach at the *Niẓāmiyya* school there, only to give up his post in the wake of the aforementioned spiritual crisis.[6]

As with Avicenna, then, the cultural ambitions of political rulers set the scene in which al-Ghazālī was formed. We have now moved on from the time of Avicenna, though. In al-Ghazālī's day, the reigning power was no longer the Būyids or the Sāmānids, but the Turkish Seljūqs, who had the dubious fortune of being the dominant force in the Islamic heartlands when those lands started to come under attack from the European Crusaders. Niẓām al-Mulk was vizier

under the Seljūqs for about thirty years. His educational system was part of the development sometimes called the "Sunni revival." Power had been held for generations by the Shiite Būyids, but now fell into the hands of the Seljūqs, who were Sunni Muslims. This helped Ashʿarite theology to become dominant across much of the Islamic empire. Meanwhile, even as the Seljūqs were establishing and extending their power throughout Persia and as far as modern-day Turkey, the ideas of Avicenna were being established and extended throughout the eastern Islamic lands. They penetrated into *kalām* just in time to reach al-Ghazālī. Al-Ghazālī added yet another ingredient to this already rather heady mixture: Sufism. I'll be introducing Sufism properly in Chapter 27; for now, I'll just say that al-Ghazālī was drawing on a rich wellspring of Sufi tradition with his mystical leanings. In fact, he at one point resided in a Sufi convent in Baghdad across from his sometime employer, the *Niẓāmiyya* school.

All this provides us with a social and intellectual context for the *Deliverer from Error*, in which al-Ghazālī tells us the story of his own development as a thinker. Ironically, it needs to be read with a good dose of skepticism. He is using well-worn tropes in describing his spiritual journey. Some of these are borrowed from Galen, who likewise told of how he needed to overcome an intellectual impasse brought on by skepticism.[7] Furthermore, the *Deliverer from Error* is structured not so much by al-Ghazālī's life story as by an evaluation of four different paths to the truth. Three of them we have already mentioned—*kalām,* philosophy, and Sufism—and the fourth is also familiar to us, the Shiite tradition known as Ismāʿīlism. Whereas al-Ghazālī finds something to recommend in both *kalām* and philosophy, and finds his ultimate rest in the mystical union of the Sufis, the Ismāʿīlīs can offer him nothing apart from uncritical acceptance of authority, or *taqlīd*.

We've seen accusations of *taqlīd* being thrown around constantly in the formative period. Theologians regularly accused other theologians of slavish adherence to authority, while philosophers like al-Fārābī happily tarred non-philosophers with the *taqlīd* brush. Al-Ghazālī repaid the compliment, pointing out that the philosophers are apt to follow Aristotle wherever he leads.[8] This is not to say that he would always consider authority a bad thing. Like al-Fārābī, he considers acceptance of authority appropriate for most people. But those who claim to be scholars should, he believes, earn that title through careful personal reflection, in the form of "independent judgment (*ijtihād*)." Even Muḥammad's status as a prophet is something he encourages us to confirm for ourselves. By learning about his deeds and sayings as gathered in ḥ*adīth* literature, we can see for ourselves that he was a paragon of wisdom and virtue (66). In this way,

independent reflection can wind up giving us a reason to depend on authority. In such a case, our acceptance of that authority no longer falls under the heading of *taqlīd*, since it is not uncritical or slavish.

Of course, al-Ghazālī claims that the Ismāʿīlīs represent the opposite of this approach, since they encourage us to depend on the teachings of a divinely appointed Imam for our understanding of Islam. He mocks them by asking what a pious Muslim should do if he finds that it is time to pray, and does not know which direction to turn in order to face Mecca (47). If he waits until he gets an authoritative judgment from the Imam, he will violate his obligation to pray at the appointed hour. So he should just do his best to work out the right direction to face during prayer. This is a persuasive argument that religion does sometimes require independent judgment, or *ijtihād*, but it doesn't really touch the Ismāʿīlīs. They needn't insist that we rely on the Imam for *all* decisions in religious practice, only that on certain issues the Imam's guidance is indispensable.

When it comes to *kalām*, al-Ghazālī yet again sounds like the hard-line philosopher al-Fārābī. For him, rational theology could play a useful, albeit limited, role by defending a virtuous religion against its detractors. In other works, al-Ghazālī writes as an Ashʿarite theologian, albeit an independent-minded and innovative one. So it's quite surprising to see him giving the same, rather reductive defensive role to *kalām* here in the *Deliverer from Error* (27). His complaint about the theological tradition is more or less what you might find in al-Fārābī or Avicenna, or later in Averroes, namely that the arguments offered by theologians do not rise to the level of demonstrative proof. Here we are witnessing a significant change in the *kalām* tradition. Earlier theologians were usually happy to restrict themselves to dialectical disputes with one another. Starting with al-Juwaynī and al-Ghazālī, though, theologians will be far more self-conscious in their methods, rising to the challenge laid down by Avicenna's rigorous and influential studies in logic and epistemology. Later Ashʿarites, like Fakhr al-Dīn al-Rāzī (Chapter 43), will write works that preserve the dialectical character of the *kalām* tradition, but also strive for argumentative rigor and proof, rather than just trying to score points off of their theological rivals.

It was from the philosophers that al-Ghazālī learned to be so strict about demonstration. Avicenna was certainly the main influence here, though Aristotle's rigorous definition of demonstrative knowledge in the *Posterior Analytics* is the ultimate source. It is also worth mentioning Galen again. In a now-lost work called *On Demonstration*, he had turned Aristotle's strictures against their author, complaining that many of Aristotle's supposed proofs were actually nothing of the sort. They say that history repeats itself, and so does the

history of philosophy. Al-Ghazālī likewise complains that the philosophers fall short of their own high standards with many of their arguments. By "philosophers," he of course means Avicenna, whose metaphysics receives a searching criticism in al-Ghazālī's famous *Incoherence of the Philosophers*. But he is not a man to throw out logical babies along with the metaphysical bathwater. In the *Deliverer from Error*, he has nothing but scorn for people who doubt the utility and reliability of logic (34–5). Indeed, he ranks the rules of logic along with his snake-proof beliefs in mathematics, as being totally certain.

The stakes here are in any case like your average snake: pretty low. Al-Ghazālī emphasizes that logic has no bearing on religious belief, and it would be a misunderstanding of both logic and religion to think they could come into conflict. Yet again, al-Ghazālī is rather unexpectedly taking the side of the Baghdad school in a heated cultural debate. Had he been present when the Christian logician Abū Bishr Mattā clashed with the grammarian al-Sīrāfī, it seems he would have been on Abū Bishr's side! Still, the certainty of mathematics and logic has unfortunate consequences in al-Ghazālī's view. It can lead people into thinking that the philosophers always attain the same kind of certainty (33), whereas actually their writings are stuffed full of errors, especially when it comes to metaphysics (37). Alluding to his earlier *Incoherence of the Philosophers*, al-Ghazālī reminds us that he has already diagnosed the failings of Avicenna in this regard. By contrast, the philosophers' views concerning natural philosophy can mostly be accepted, while their theories on ethics and politics are simply plagiarized from earlier prophetic traditions. Here al-Ghazālī issues another warning. Just as one should not think that all of philosophy has the snake-proof certainty of mathematics and logic, so one shouldn't disdain these two rigorous arts because of the company they keep. This, he says, would be like refusing to taste honey because it is being served out of a glass that is also used in surgical operations (41).

Al-Ghazālī, then, wants to do a bit of surgery of his own on the tradition, removing the falsehoods and leaving behind what is demonstrative. That makes him sound like a typical philosopher, albeit a rather critical one. But we musn't forget that al-Ghazālī doubted even mathematical certainties until he received reassurance from God. Such direct contact with the divine can offer something beyond even demonstration. It is impossible to express this level of insight fully to those who have not attained it. Al-Ghazālī uses the Sufi term *dhawq,* or "taste," for the immediate perception of divine truth afforded the true mystic (55). He also offers a visual analogy: for the mystic to tell the non-mystic about what he has grasped would be like trying to explain colors to a blind person (64).

What about the rest of us, who are not so fortunate as al-Ghazālī and have not tasted the sweetness of God, or seen His radiance? Well, we should demonstrate whatever we can, following the philosophers as far as they can take us—which is not nearly as far as they claim. But we must also trust in the guidance of true prophets, who should be assessed and verified through careful reflection on their words and deeds.[9] To those who say that it is impossible for prophets to receive a knowledge beyond that normally available to mankind, al-Ghazālī asks: if you did not see it, would you think that there was a substance so dangerous that a tiny speck of it could destroy a whole town? Yet a spark of fire can start a conflagration that levels great cities (79). Or take the lethal power of opium, which is beyond human reckoning (78). In short, there are many things we cannot understand and predict; so there is no reason to reject the possibility of prophecy out of hand. Thus al-Ghazālī pulls epistemological rank on the philosopher in two ways. He lays claim to a mystical insight that is beyond the reach of their arguments, no matter how solid, and he also points out that many of their arguments aren't that solid anyway. They say that pride goes before a fall, and according to al-Ghazālī, Avicenna's hubris led him to stumble more than once.

21

MIRACLE WORKER AL-GHAZĀLĪ AGAINST THE PHILOSOPHERS

In the *Deliverer from Error*, al-Ghazālī considers a piece of advice given by the religious authority Aḥmad Ibn Ḥanbal (44–5): if you're arguing with someone, you shouldn't carefully explain their views and then go on to refute them. After all, your readers might stop before you get to the refutation part. Better just to deny them the air of publicity. This is a lesson the history of philosophy had already taught. In late antiquity, the pagan Neoplatonist Simplicius painstakingly copied out quotations from his arch-enemy, the Christian thinker John Philoponus. His goal was simply to display their idiocy, but the result was that modern-day scholars are able to read the otherwise lost words of Philoponus, which they have usually found far more interesting than Simplicius' accompanying polemic. In the words of Mrs O'Leary's cow, who kicked over a lamp and started a fire that burned down the city of Chicago in 1871: oops.

After repeating Ibn Ḥanbal's counsel, al-Ghazālī explains that he did not follow it when he was attacking the Ismāʿīlīs, because everyone knows what they think anyway. When it came to attacking philosophy, though, perhaps he should have taken the advice to heart. Repeating Simplicius' tactical error, al-Ghazālī wrote a work summarizing the views of Avicenna, and called it *Maqāṣid al-Falāsifa*, which means *Aims of the Philosophers*. This was followed by a second treatise called *Tahāfut al-Falāsifa*. This is usually translated *Incoherence of the Philosophers*, even though *tahāfut* doesn't quite mean "incoherence," but rather something like a reckless stumble into error.[1] The *Tahāfut*, then, is a study of cases where the philosophers have arrogantly gone astray by teaching false doctrines or simply asserting doctrines without sufficient proof. Al-Ghazālī's summary and critique had an ironic legacy in Latin Christendom, where for a long while only the *Maqāṣid* was known. More than a century went by until the appearance of a Latin version of Averroes' rebuttal of

al-Ghazālī, the *Tahāfut al-Tahāfut*, or *Incoherence of the Incoherence*; in Latin it was known under the exciting title *Destruction of the Destruction*.[2] There was a further irony here. Latin readers knew of al-Ghazālī's polemic only thanks to Averroes, who had (will they never learn?) quoted the work in its entirety in order to refute it. Prior to this translation, Latin readers took "Algazel," as they called him, to be a faithful follower of the philosophical tradition, useful for his lucid and apparently sympathetic presentation of the theories of Avicenna.

It is, of course, the *Tahāfut* that reveals al-Ghazālī's true intentions concerning the philosophers. There has been a good deal of misunderstanding about this, even among people who have been able to read the work. According to the myth which teaches that philosophy more or less died out in the Islamic world after the twelfth century, Averroes was the last to defend philosophy from the fires of religious criticism. The myth has al-Ghazālī setting the blaze with his *Tahāfut*. But in fact, as we'll be seeing in great detail, philosophy was alive and well in the later tradition. There's even a case to be made that, far from playing the role of Mrs O'Leary's cow in Islamic intellectual history, al-Ghazālī even helped philosophy to survive and stay relevant in the East. He made the tacit, but crucial, assumption that explaining and then criticizing Avicenna is the same as explaining and criticizing philosophy itself. This helped Avicenna to replace Aristotle as the main point of reference. Also, while al-Ghazālī did criticize Avicenna, he did so selectively. His *Deliverer from Error* makes it abundantly clear that some aspects of philosophy should be welcomed, especially logic. This is why I noted that the title of the *Tahāfut* doesn't refer to any systematic "incoherence" in Avicennan philosophy. Rather, it identifies the places where Avicenna has gone wrong, often by attempting to go beyond what can be established with rational demonstration.

Which is not to say that these are only minor and forgiveable mistakes in al-Ghazālī's eyes. At the end of the *Tahāfut*, he identifies three philosophical teachings that are completely unacceptable and qualify for the label of heresy. They are the claims that the universe is eternal rather than created; that God has no knowledge of particular things, but only of universals; and that only the soul lives on after death, with no possibility of bodily resurrection (226).[3] All these, and especially the second doctrine concerning God's knowledge, can be associated with Avicenna. So al-Ghazālī is saying here that Avicenna and his followers have actually abandoned Islam. They are not merely wrong, they are apostates, and can be punished accordingly.[4] The philosophers have made errors on other topics too, but no more so than other wrongheaded Muslims such as the Muʿtazilites. In still other cases the philosophers have argued for the right

conclusion using the wrong arguments. An example is their attempt to prove that the soul is immaterial. Al-Ghazālī probably agrees that the soul is not a body, he just doesn't think Avicenna and friends have managed to prove it beyond doubt.[5]

Al-Ghazālī is very interested, one might almost say obsessed, with the question of whether arguments are demonstrative. This is another legacy he passes on to later Muslim theologians. The way he proceeds in the *Tahāfut* anticipates what we will find among generations of authors in the Ashʿarite tradition. Doctrines and arguments, especially from Avicenna, will be laid out and then criticized as false or simply inadequate. We often find al-Ghazālī saying that a certain philosophical argument is the product of the faculty of "estimation" (*wahm*). This is the faculty that sheep use to perceive the hostility of wolves, but in humans it is also responsible for misleading impressions that we find almost impossible to resist. Estimation would tell you that there must be empty space surrounding the physical universe, something Avicenna firmly denies. Turning this idea against its author, al-Ghazālī says that Avicenna's philosophical arguments to prove the eternity of the world proceed on the basis of estimation and misleading supposition. More careful reflection shows that the universe need not be eternal, and in fact, that anyone who says it is eternal is effectively denying that God created it.

This is the first topic taken up in the *Tahāfut*. Establishing the dialectical pattern he'll use throughout, al-Ghazālī summarizes several arguments to show that the universe is eternal, then refutes each one in turn. The arguments are drawn from Avicenna, so al-Ghazālī is on rather shaky ground when he claims that all "the philosophers" would endorse them. We've seen plenty of philosophers denying the eternity of the universe: among Muslims there were al-Kindī and al-Rāzī, and we could add Miskawayh to this list. Among Jews there was Saadia Gaon, who like al-Kindī borrowed arguments from Philoponus to show that the universe was created with a first moment in time. In fact I'd go so far as to say that this was the mainstream philosophical view before Avicenna. But al-Ghazālī isn't going to let that bother him: he mentions only Plato and Galen as exceptions to the supposedly universal philosophical belief in eternity.

Al-Ghazālī identifies one particular argument in favor of eternity as the most persuasive (14). "The philosophers" have argued that a temporally limited effect cannot come from an eternal cause. God is eternal, so His will should likewise be eternal. And if He has an eternal will to produce the universe, then surely the universe too will be eternal? Not necessarily, replies al-Ghazālī. God could eternally will that something happen at a certain time, like by determining that you would be reading this book right now (in which case I guess I owe Him a

cut of the royalties). The philosophers aren't persuaded. If nothing exists yet, what could lead God to choose one moment rather than another for the universe to begin? Something must change to make the moment He chooses be the right moment for Him to create. We are given the culturally resonant example of a man pronouncing that he will divorce his wife. This must be effective either immediately, or contingent on some other event. The husband could, for instance, say that the divorce will be official as soon as the woman enters their house. But in God's case there are no other events that could trigger the creation. So the universe must exist whenever God wills it, that is, eternally.

Seductive though the argument is, al-Ghazālī condemns it as falling below the level of demonstration. The divorce case is just an example, not a proof that eternal decisions must produce eternal effects. Unless the philosophers can give further argument for their claim, they and al-Ghazālī will just have to follow the lead of the divorcing couple, and go their separate ways because of irreconcilable differences. The philosophers are allowed to make the further observation that before the universe exists, all moments of time are indistinguishable (21). Any moment would do as well as any other to be the time at which the universe begins to exist. This means that in order to create, God would have to choose one moment arbitrarily. But how can God do anything arbitrarily?[6] For Avicenna, the argument would be particularly convincing, since he thinks that all aspects of God are necessary. And how could God's selection of a moment for the start of the universe be both necessary and arbitrary?

This brings us to the real core of al-Ghazālī's disagreement with Avicenna. Against Avicenna's necessitarianism, al-Ghazālī wants to uphold God's untrammeled power and choice. Here his Ashʿarite training is showing through. Al-Ashʿarī and his followers, like al-Ghazālī's teacher al-Juwaynī, wanted to make all things subject to God's inscrutable and unfettered will (Chapter 15). Indeed, al-Ghazālī is downright eager to say that God can arbitrarily choose a moment for creating the world. That would be the clearest possible case of free choice: when somebody is presented with more than one option, and just picks one. Al-Ghazālī gives the example of being offered two equally succulent dates, of which you can only have one. You wouldn't just stand there, unable to take either date because they both look so delicious, you'd just grab one. (Here al-Ghazālī is anticipating a famous thought experiment associated with the medieval Christian thinker John Buridan, which instead envisions a donkey standing between two equally appealing bales of hay.) The moral of the story is clear. If we humans are able to choose one of two dates, then certainly a free God can arbitrarily choose a date to create the universe. In fact, the philosophers

themselves make a similar assumption when it comes to the formation of the universe. Surely it could be just a little bit bigger or smaller, for instance, or the poles of the heavens could have different locations? Repeatedly al-Ghazālī accuses the philosophers of a double standard (e.g. at 24–7, 34–8, 40). They allow arbitrary choice when it comes to the universe's spatial properties, like its size, but not when time is at stake.

Later in the *Tahāfut*, al-Ghazālī contends that unless God is freely choosing in this way, He cannot be counted as the real "agent" or "maker" of the universe. For what we mean by an "agent" is someone who does something out of choice, with an understanding of what he does (56). The philosophers instead abuse language by applying the word "agent" even to lifeless things like fire, when it burns what it touches. Al-Ghazālī is alluding to the fact that, in Arabic, the word for "agent," *fā'il*, was used to refer to Aristotle's notion of an "efficient cause." Against this usage, al-Ghazālī insists that we should restrict talk of agency to causes which act out of well-informed choice. By this standard, the great fire of Chicago apparently was caused by no agent at all, since the fire that broke out was not choosing to burn anything. Nor was Mrs O'Leary's cow acting as an agent when she started the fire, since cows are famous for their lack of understanding and choice.

If it seems unacceptable that the fire has no agent at all, then Ashʿarite theology is ready with a different answer: God is the agent. If only He can create things after they do not exist, then He is really the sole efficient cause of the universe and of everything in it. Al-Ghazālī returns to this question towards the end of the *Tahāfut*, in a famous section devoted to the possibility of miracles. The philosophers, he says, deny miracles because they want causes to give rise to their effects necessarily. When Mrs O'Leary's cow kicked over a lamp and the flames touched the hay in her stall, burning was the necessary consequence (as was the disappointment of her neighbor the donkey, whose bales of hay were incinerated before he could decide which one to eat). Al-Ghazālī, though, denies that it is necessary for something flammable to burn when touched by fire. We habitually expect to see burning, because every time we've seen fire touch something like cotton or hay, it has burst into flame.

But that doesn't mean the fire really makes the burning necessary. Rather, God simply creates these two things "side by side" (166), with the result that we infer a necessary connection between them. Yet God could always create things differently. For instance, when Abraham was thrown into fire, he miraculously survived unscathed (Koran 21:69). We can explain the miracle by saying that God broke from His usual routine, and declined to create burning consequent to

the presence of fire. This has frequently reminded readers of the famous treatment of causation by the Scottish philosopher David Hume. He will likewise say that it is only habit that leads us to expect apparent effects to follow from their apparent causes. The causation itself is something we can never observe. Of course, the context of al-Ghazālī's discussion is very different from that of Hume. Where the empiricist Hume will be investigating the extent to which causation can be encountered through perception, al-Ghazālī is asserting an Ashʿarite, occasionalist picture of reality.

Or is he? In fact, one of the most long-running controversies about philosophy in the Islamic world concerns this part of the *Tahāfut*, and al-Ghazālī's understanding of causation.[7] One possible interpretation does have him asserting the Ashʿarite view, and saying that God does everything. Miracles are simply rare events in which God chooses not to create things in the way we expect. If this is his point, then he wants to say that fire exercises no causation whatsoever. Instead, God creates burning when and where He has also created fire. This interpretation is encouraged by a passage which imagines the philosophers objecting that, if al-Ghazālī were right, then our world would be chaos and we would never know what might occur. If we left our house and then returned, we might find that our slave-boy has turned into a dog, that one of our books has turned into a horse, or that a glass of water has become an apple tree (170). To this al-Ghazālī calmly replies that God has spared us from such skeptical worries, precisely by creating things in a predictable and regular sequence. Thanks to His following regular habits in His creative actions (apart from the odd miracle), we have developed habits of expectation about what will occur.

Other interpreters find a less radical al-Ghazālī in these pages. They point out that it is one thing to say that causes do not *necessitate* their effects, and quite another to say that causes do nothing *at all* to produce their effects. Suppose that a cow knocks over a lamp (yes, I'm going to milk this example for all it's worth). God could intervene and stop the flame in the lamp from setting the hay alight, so the flame by itself does not make the burning necessary. But the flame is still what burns the hay, so long as God does not interfere. On this reading, al-Ghazālī is characteristically chastising the philosophers for seeing necessity where there is none. Fire does burn unless something prevents it from doing so, but that condition is only fulfilled if God allows the burning to go ahead. He is still involved in every event, but not usually as the direct cause of the event—rather, because His tacit permission is required for the event to occur.

At stake in this debate is al-Ghazālī's whole intellectual stance. Is he

basically an Avicennan philosopher, albeit one who is far more aware of the limitations of philosophy than Avicenna was? Or is he basically an Ashʿarite?[8] It's hard to tell just from the *Tahāfut*, since, as al-Ghazālī himself says, his aim in this work is not to establish positive doctrine but only to identify the philosophers' mistakes (76). His main target for most of the work is Avicenna's picture of God as a necessary cause, who eternally gives rise to a chain of further causes that necessitate their own effects. He has numerous complaints about this picture. It rules out genuine agency on God's part, and also removes God from any direct relationship with almost all of His creation. As al-Ghazālī says, the philosophers adhere to the rule that "from one thing comes only one thing" (64), which will become notorious in Latin medieval philosophy. Because of this rule, Avicenna had God necessarily emanating only one single effect, namely the celestial intellect associated with the highest heavenly sphere. God's causal influence would then be passed down through the heavens, until the lowest celestial intellect, the so-called Agent Intellect, which is responsible for giving forms to things in this world.

Our interpretive problem, then, is that there is more than one way for al-Ghazālī to reject Avicenna's necessitarian theory. It would certainly do the trick if he were to adopt Ashʿarite occasionalism, and insist that God directly makes everything happen, in each case choosing freely to do so. But it would be just as effective to admit that God creates things as secondary causes whose efficacy can be trumped by a miracle. They would cause their effects, but not necessarily so, since they would always be subject to God's interference. This would leave God's power unfettered and also preserve at least the possibility of a direct relation between God and each of His effects. Al-Ghazālī may even want to leave both options open here: either will give him the result he needs, and cow the Avicennans into submission. This would explain why he writes the section on miracles the way he does. First, he dismisses the claim that fire necessitates burning, by insisting that we are dealing here with something habitual and not something necessary. But he goes on to present two alternative versions of what might be going on, an occasionalist one and then another one that retains secondary causation.[9] So when Averroes complained that al-Ghazālī was a rather slippery character, "an Ashʿarite with the Ashʿarites, a philosopher with the philosophers," and so on, he may have been missing the point. The dialectical method of the *Tahāfut* is designed not to demonstrate doctrine, but to puncture philosophical pretension. He comes not to praise his own theories, but to bury those of Avicenna. This nuanced, critical stance towards Avicenna is one important thing that al-Ghazālī bequeathed to his successors.

PART II
ANDALUSIA

22

PHILOSOPHY'S REIGN IN SPAIN
ANDALUSIA

What do the following words have in common? "Alcohol," "saffron," "coffee," "hashish," and "artichoke." Well, they could all be elements in a night to remember, or perhaps a night to try to forget. And here's another one, which is close to my heart: the word "arsenal" derives from the Arabic phrase *dār al-ṣināʿa*, meaning "house of manufacture," in other words, the place where you make weapons. So rumors that "arsenal" comes from the Old French for "second-best team in north London" turn out to have been spread by nefarious Tottenham fans (as if there were any other kind). These are only a few of the English words that derive from Arabic. Some others practically contain all of world history in them. Take "orange," which came into Arabic from Sanskrit via Persian. Or "guitar," which has the same origin as the word "zither," namely the Greek *kithara*. This passed into Arabic as *qītār*, thence into Spanish as *guitarra*, and then finally into English through French!

Notice the intermediary role of Spanish there, which isn't a unique case. Words like "adobe," "aubergine," and "tuna" came into our language from Arabic via Spanish or Catalan. Other words stayed in Spanish without being borrowed by English-speakers. In Arabic the word for "until" is *ḥatta*, which became "hasta," as in, "hasta la vista, baby." (Well, I say it stayed in Spanish; it did make the occasional foray into the Austrian dialect of English spoken by Arnold Schwarzenegger.) Indeed, the number of Arabic-based words in English is as nothing compared to what we can find in Spanish. If you learned only the words that come from Arabic, you could probably do pretty well on a Spanish vocabulary exam. Next time you're near a Spanish dictionary leaf through the words starting with "Al-." Many of these come from Arabic, and have kept the Arabic definite article *al-* as a first syllable.[1]

The presence of all this Arabic in the Spanish language is, of course, due to the fact that the Iberian Peninsula was mostly under Muslim rule for several centuries. They arrived in a year that will be easy to remember for American convenience-store patrons: 711. I can't resist telling a legend about this conquest. It's said that the kings of the Christian Visigoths had a tower sealed with many locks. When each king came to power, he would add another lock, until there were twenty-seven of them keeping safe the secret inside. Finally, a king could not restrain his curiosity and had the locks opened to see what was inside the tower. Inside he found paintings of Arab warriors on horseback, and a scroll that said: "When this chamber is violated…the people painted on these walls will invade Spain, overthrow its kings, and subdue the entire land."[2] Thus did curiosity kill the Catalans.

It was an event worthy of a good legend. This former Roman province, the birthplace of no less a philosopher than Seneca, had been taken by the Visigoths in the fifth century. Protected by the straits of Gibraltar to the south and the Pyrenees to the north, the Christian Visigothic kingdom survived nicely until the Muslim invasions of the early eighth century. This was not simply an extension of the Arab conquests that saw so much territory fall into the hands of Muslim rulers. The bulk of the invading force that conquered modern-day Spain and Portugal were Berbers, who had been channeled into the conquest by Arab Muslims.[3] It would take centuries of gradual conversion until Islam would be the dominant religion in the Iberian peninsula, or *al-Andalus* as it was called in Arabic (hence the word "Andalusia"). The new territory did not play a major role in the politics of the Islamic world until the year 756. This was the time when the ʿAbbāsid caliphate supplanted the Umayyads as rulers of the Muslim lands in the East. The Umayyad ʿAbd al-Raḥmān managed to escape to the West, and set up a last outpost for his otherwise defunct caliphate in Cordoba.

The Umayyad caliphs would rule Andalusia from that city for generations, but in 1031 the last of them was deposed, the final outcome of a general collapse of central authority on the peninsula. In place of the Western caliphate, Andalusia saw the rise of the so-called *taifa* kings, rulers of individual cities and small territories. *Taifa* is another Spanish word that comes from Arabic: it derives from the word for "faction," emphasizing the fractured condition of political power in this period. We've seen how the imperial agenda of the ʿAbbāsids led to the Greek–Arabic translation movement. In this case, it was the rise of smaller mini-states that sparked intellectual development, as regional princes competed to gather intellectuals at their courts. We especially see developments in medicine during the eleventh century, the time of the *taifa*

kings. And we'll shortly be looking at a thinker from the first half of the eleventh century, by the name of Ibn Ḥazm. But for historians of philosophy, the really crucial period starts at the end of this century, with the coming of yet another invasion from Morocco.

The way was unwittingly paved by the Christians. There was constant threat of military conflict, and not infrequently actual conflict, between Muslims and Christians along the border of the two realms in northern Spain. Christian successes led the *taifa* kings to seek support from northern Africa, and the Berber group known as the Almoravids was only too happy to help. If you've ever invited guests to stay and had trouble getting them to leave, then you know how the *taifa* kings felt. Representing themselves as a military arm of the caliphate in faraway Baghdad, the Almoravids re-established a centralized authority in Andalusia. But they would rule for less than a century. Starting in the middle of the twelfth century, they were in turn replaced by yet another Berber power invading from Morocco. They bore the (annoyingly similar) name Almohads. The earlier group, the Almoravids, take their name from a religious retreat or *ribāṭ*, and were thus called in Arabic *al-murābiṭūn*. The new arrivals, the Almohads, are in Arabic *al-muwaḥḥidūn*, from the Arabic *wāḥid*, meaning "one." These were, then, the latest self-proclaimed defenders of God's oneness (*tawḥīd*). Inspired by religious fervor, the Almohads eliminated the Almoravids first in Morocco, and then in Andalusia. Hasta la vista, baby.

The Almohads are one of the few powerful groups in the earlier history of Islam that might merit comparison with modern-day fundamentalists. It will be worth our while to say something about their origins and ideology, because they dominated Andalusia starting about 1170 and for almost 200 years—with important consequences for the history of philosophy. Eventually their star would fall too, thanks to the Christians. After taking Andalusia away from the Almohads bit by bit, the Christian "reconquest" will be almost complete by 1252, with only an outpost of Islamic dominion remaining in the far south until 1492. But before the reconquest the Almohads held Andalusia during the lifetimes of such thinkers as the Aristotelian commentator Averroes, the mystic Ibn ʿArabī, and the towering figure of Jewish thought, Maimonides.

The Almohad movement was founded by a Berber named Ibn Tūmart, a strict and charismatic religious leader who came from the mountains in Morocco. From there he traveled to the East, where he supposedly met al-Ghazālī; in any case, al-Ghazālī seems to have influenced Ibn Tūmart's thought. He had chosen a moment of great upheaval for his journey. The city of Jerusalem had recently been taken, and its people massacred with a staggering display of violence, by

the Christian armies of the First Crusade in the year 1099. Perhaps fired by his experiences in the tumultous East, Ibn Tūmart returned to his native land and gathered supporters around him. Like the Prophet Muḥammad, he received a kind of religious mission while meditating in a cave. He emerged not with a revelation, like that of the Prophet, but with a righteous cause. Proclaimed by his followers as the *mahdī* or savior, Ibn Tūmart set out to undermine Almoravid power and culture in Morocco. He mocked what he saw as the effiminacy of these desert Berbers, whose men wore veils like women should do. He broke up wedding parties and smashed musical instruments, railed against hypocrisy and injustice, and claimed it was more important to depose the Almoravids than to fight the Christians. He was, in other words, seriously bad news, at least from an Almoravid point of view.

He sounds like pretty bad news for philosophy, too. Humorless, self-righteous religious zealots aren't known for their encouragement of innovative intellectual inquiry. Yet there was something of a rationalist streak within the Almohad ideology. Their name, with its allusion to God's oneness, stood for their ambition to strip religion down to its fundamentals. For Ibn Tūmart, the basic truths of Islam are present to each human "from the day of birth." Here he followed a famous saying of the Prophet, that every child is born with a natural aptness for right belief: "it is his parents that make him a Jew, a Christian, or a pagan."[4] This idea that society corrupts our natural ability to discover the truth about ourselves and, above all, about God, will be dramatically represented in a fable written by the Andalusian Muslim thinker Ibn Ṭufayl (Chapter 24). He had links to the Almohad rulers, and it seems likely that his fable was meant at least to fit with, if not promote, the Almohad religious ideology.

But if there was good news for philosophy, there was also bad news. Before the coming of the Almohads, Andalusia had been host to a cultural flowering among Jews, who often wrote in Arabic. Maimonides was only the greatest of many significant philosophers and scientists who represented Andalusian Jewry. Back in the eleventh century, the time of the *taifa* kings, the thinker Ibn Gabirol was espousing Neoplatonism with an enthusiasm and intellectual sophistication not seen in Judaism since Isaac Israeli in the ninth century. Under the Almoravids we can point to Judah Hallevi, a critic of philosophy who adopted within Judaism something like the posture of al-Ghazālī in Islam. He takes us almost up to the middle of the twelfth century, dying in 1141. The next decades would be a highpoint for Jewish thought, with numerous figures appearing around the time of the transfer of power from the Almoravids to the Almohads.

Unfortunately the Almohads had little or no tolerance for members of other

faiths, and coerced Jews to convert, on pain of exile. This triggered a kind of diaspora within the Jewish diaspora, with the expulsion of long-existing communities of Jews from Spain. So came to an end the celebrated *convivencia*, in which members of all three faiths were quite literally "living together" in this westernmost of the Islamic lands.[5] There had already been Jews on the peninsula before the coming of the Muslim armies back in the eighth century, and for centuries Jews and Muslims had lived together peacefully in Andalusia. Christians too were in the mix. These were the so-called "Mozarabs," the Iberian Christians who lived, and often flourished, under Muslim rule. The *convivencia* brought with it the sharing of ideas and debate across religious divides. The debating aspect is memorably captured at the beginning of Judah Hallevi's book *Cuzari*, which depicts a king choosing between the teachings of philosophy, Islam, Christianity, and Judaism. The more positive side is especially evident in the Jewish appropriation of ideas from Muslim thinkers.

Averroes, in particular, was embraced by the Jews, as his sophisticated commentaries on Aristotle were translated into Hebrew and even made the subject of further commentaries. This is one example of how philosophy in Andalusia developed independently, and in very different ways from what was happening far away in the eastern lands of Iraq and Persia. We could say something similar about the religious movement embodied by the Almohads. The geographical remoteness of Morocco and Spain allowed for Ibn Tūmart's idiosyncratic teaching first to gain a foothold, and then to achieve political dominion. Andalusian philosophy is likewise a world unto itself, something dramatically illustrated by the relatively weak impact of Avicenna in Spain. In twelfth-century Andalusia, Avicenna was known to some extent, but he had nothing like the influence he was already having in the East. In fact, Ibn Ṭufayl, the Muslim thinker of Andalusia most friendly to Avicenna, admitted that he had not been able to read many Avicennan writings. Even more striking is the relative neglect of Avicenna among Jewish thinkers. They were far more inspired by the stricter Aristotelianism of al-Fārābī and, in due course, of Averroes.

The coming of the Almohads, at any rate, disrupted the harmony between the faiths that had been the norm in Andalusia. We shouldn't exaggerate the harmony, of course. For one thing, there was almost constant conflict with the Christian powers to the north of Muslim-held territory in Spain. For another, there were episodes of violence against Jews within Andalusia before the coming of the Almohads, for instance a pogrom in Granada in 1066. But broadly speaking, until the Almohad conquest Andalusia was a place where Jews could

flourish, building numerous synagogues, and wielding social and political influence. Jewish scholars were valued by Muslim rulers and served as esteemed members at court, often valued for their expertise in medicine, much like Avicenna himself. After the Almohads, by contrast, many Jews fled to the Christian-held territory in Spain or to other lands entirely. Maimonides decamped with his family to Jerusalem and then to Cairo.

Some expatriates went to southern France, creating a new context for philosophy. For it was especially there that we see works of philosophy and science being translated from Arabic into Hebrew. This was an important step, since the Andalusian Jewish scholars had been able to read Arabic natively, whereas Jews living in Christendom could usually work only with Hebrew or Latin. Averroes' works were crucial in this new translation movement, whereas Avicenna's works were hardly translated into Hebrew at all. His ideas were still known, but usually indirectly, and only because they had been used by authors like Maimonides.[6] In covering this spread of Jewish philosophy into medieval Europe, I'll have to step beyond the borders of the Islamic world. But it seems obvious that I should discuss the so-called "Maimonidean controversy" that raged among European Jews in the thirteenth century after I've discussed Maimonides himself. I'll be trying to give a full picture of the development of medieval Jewish philosophy, since it mostly occurred in Andalusia or responded directly to texts written there.

Again, this doesn't mean separating off Jewish philosophy as if it were some kind of isolated phenomenon. Rather, we should think of Andalusian philosophy in its entirety as a tradition within the larger tradition of philosophy in the Islamic world. There were several reasons for the distinctive nature of Andalusian thought: the specific context provided by Almoravid and then Almohad culture, the geographical remoteness of this region from the Islamic heartlands, and the *convivencia* of Christians, Jews, and Muslims. As a result, Spain became a major center for the transmission of Aristotelian philosophy and science from the Arabic into the Latin language. Sometimes with the collaboration of Jews and Muslims, Christian translators like Gerard of Cremona and Dominicus Gundassalinus took advantage of the multicultural setting of Toledo to produce Latin versions of works by such authors as Aristotle, al-Kindī, Isaac Israeli, al-Fārābī, Avicenna, and Ibn Gabirol. Thanks in part to these translations from Arabic, the course of philosophy in Latin Christendom was fundamentally changed.[7]

Whereas this phenomenon is well known to historians of philosophy, they tend to overlook another striking case of Andalusian intellectual exchange. I've

already mentioned that Andalusia was the home of the great mystic Ibn ʿArabī, albeit that from there he traveled to the East, just like Ibn Tūmart and Maimonides (two men who wouldn't enjoy appearing in the same sentence). The Sufi teachings of Muslims like Ibn ʿArabī influenced the mystical Jewish tradition known as Kabbalah, which first blossomed in Spain and southern France. Thus the situation with mysticism mirrors, to some extent, the situation with Aristotelian philosophy. We have Jewish thinkers taking ideas from Muslim thinkers, and showing how they could be woven into long-standing Jewish intellectual traditions like Torah commentary, in the case of the philosopher Maimonides, or like mystical Judaism in a work like the *Zohar*. We'll be investigating the philosophical significance of these mystical traditions in due course. But we're going to start our look at philosophy in Andalusia with something a bit more down to earth, and something specific to the faith and practice of Muslims: Islamic jurisprudence, or *fiqh*.

23

LAYING DOWN THE LAW IBN ḤAZM AND ISLAMIC LEGAL THEORY

When we examined al-Fārābī's political philosophy (Chapter 10), we saw that he gave jurisprudence the role of extrapolating from laws laid down by an original ideal ruler. His idea that this authoritative legislator should be a philosopher was by no means typical in the Islamic world. But in giving a significant role to jurisprudence, in Arabic *fiqh*, al-Fārābī was (for once) agreeing with mainstream Muslim attitudes. Law is central to Islam, just as for Judaism, and that has had far-reaching implications for the history of philosophy in the Islamic world. Some of the figures we've already examined (like al-Ghazālī) and many who are yet to come (like Averroes and a great many of the later eastern philosopher-theologians) were trained in and contributed to the legal tradition. We can also find philosophically interesting material in works of Islamic legal theory, especially in the genre of *uṣūl al-fiqh* ("the roots of jurisprudence"). In this context, jurists have often explored the sources of legal obligation and the epistemological question of how a jurist can arrive at principled decisions.

The topic will also allow us to look at our first representative of Andalusian intellectual history, Ibn Ḥazm. He was among other things the major author of a minor legal school called Ẓāhirism. But before we get to him, I want to look at the gradual emergence of the four most successful legal schools in Sunni Islam. Despite their differences, these schools attained a broad consensus on the sources and methods of Islamic law, a consensus which was rejected by Ibn Ḥazm and his fellow Ẓāhirites. It should incidentally be noted that Shiite Islam has its own legal traditions. Much of what I am going to say about the four leading Sunni schools will apply to Shiite jurisprudence too, though there are significant differences. Notably, the Shiites of course ascribe a unique religious standing to ʿAlī and other Imams, seeing them as moral exemplars and also authoritative interpreters of the Islamic revelation. Though Shiite and Sunni law

of course agree on many points, there are concrete divergences over issues ranging from marriage to ritual purification to the observance of feast days for Shiite martyrs.[1]

The fundamental problems of legal methodology and legitimacy that confronted Islam are familiar to us from our look at the Jewish tradition (Chapter 5). Both faiths possessed revealed books containing a great deal of law, so that there was at best a blurry distinction between a religious scholar and a legal scholar. Indeed, as we saw, the rabbis of ancient Judaism were basically interpreters and makers of law, whose achievements are recorded in the Mishnah, Talmud, and Midrash. We also saw how Rabbinic texts claimed to draw on an uninterrupted tradition of religious wisdom, going back to the original revelation at the time of Moses. Finally, we mentioned the Karaites, who rejected this development in favor of a return to the less abundant, but divinely sent, resource of the Torah itself.

I don't want to make any claims here about the historical connection, if any, between Jewish and Islamic law. I just want to observe that the way Islamic jurisprudence developed is bound to remind us of the evolution of late ancient Judaism. The parallel is recognized by the Koran itself, which contains a verse (5:48) stating that God has laid down a separate law for the Jews, for the Christians, and for the Muslims. Such statements helped to foster a multi-faith society, and a multi-faith development of law, in the Islamic world. Jews and Christians could usually practice their own faiths with little obstruction or harassment from their Muslim neighbors, and of course for the Jews there was no real distinction between religious observance and carrying out the law. As the Muslim armies conquered their empire, they were under instructions to let the conquered peoples continue their social and legal customs unmolested, though it was also known for Muslim judges to decide cases involving Jewish or Christian litigants if the need arose.

As with Jewish law, the defining feature of Islamic law is the religious foundation on which it is built. First and foremost, that foundation was provided by the Koran. The holy book contains hundreds of verses giving specific legal injunctions, covering everything from divorce and orphans to prayer, dietary laws, and taxation. Many of the legal prescriptions appear in the chapters of the Koran revealed in Medina, after Muḥammad led his followers there away from Mecca. The Medinan chapters are on average longer than those revealed in Mecca, and make more detailed provisions for the new community led by the Prophet. One famous example of a legal provision in the Koran is a verse (5:90) that identifies gambling and wine as the work of Satan. Such declarations seem

to be so explicit as to leave little for the legal theorist to theorize about. So why did Sunni Islam need not just one, but four major schools of legal theory?

Well, it didn't, at least not at first. It was only in about the tenth century, the fourth century of the Islamic calendar, that the schools were clearly distinguished.[2] Yet it had never been the case that all legal questions could be answered by recourse to the Koran. Specific though it is about many issues, it leaves many others unaddressed. Even when it does pronounce on a certain topic, the pronouncement may stand in need of subtle interpretation. Just consider that ban on gambling and wine. To apply the rule, you need to decide what counts as gambling, and for that matter, what counts as wine. The word used here, *khamr*, can be taken to refer specifically to wine made from grapes. So perhaps it is licit to drink wine made from dates? (Not to be confused with a romantic night out in Paris: that would be a date made from wine.) Or perhaps the injunction is laid down against all intoxicating beverages? Or even all intoxicants, period? How are Muslims to decide such issues?

In the generations after Muḥammad's death there was as yet no attempt to give a systematic answer to this question. But several answers were implied by legal practices. To some extent, these practices grew out of pre-Islamic Arab society. The Arabian peninsula had sophisticated trading networks and settlements, so there were legal arrangements already in place, albeit that they were sometimes rather informal. Many of these arrangements were revised in the Koran. For instance, the revelation laid down various improvements concerning the property rights of women, while taxation (*zakāt*) was codified as a required charitable donation, one of the five "pillars of Islam."[3] The legal culture of the pre-Islamic society depended on custom, and early Muslims looked especially to the customs of especially pious or blessed men for an indication of their legal obligations. These included the Prophet himself, of course, but also the first, "rightly guided" caliphs and pre-Islamic prophets recognized as genuine by the new faith. A further potential source of legal judgment was, appropriately enough, "judgment" (*raʾy*, which can also be translated as "opinion"). The idea is that a judge might, in the absence of any customary consensus, simply make up his own mind by applying common sense.

That may seem innocuous enough. But the use of independent judgment would become a central debating point of Islamic jurisprudence over the coming centuries. On the one hand, it may seem that there is no avoiding the use of independent judgment. If the Koran does not answer a legal question, and there is no consensus on the question either, surely the jurist is simply forced to find the best solution he can? Such decisions, if accepted by other jurists, could then

extend the existing body of consensus, like legal precedents being cited in court cases nowadays. The problem was the potentially arbitrary nature of the legal decisions, and of course their lack of any grounding in a religious source. What seemed to one jurist to be an obvious application of common sense might seem to another to be a case of making it up as you go along.

Here there were two options, and the Muslim community tried both. On the one hand, they could try to extend and establish the resources offered by authoritative religion. On the other, they might defend the practice of judgment from the charge of arbitrariness. The first strategy was practiced by scholars who made an effort to collect reliable reports of things the Prophet had said and done. Since it says in the Koran itself that the Prophet is to be emulated (33:21), even the smallest fact about his life could potentially have consequences for correct behavior and law. A report about his deeds or remarks is called a ḥadīth, so the collectors and verifiers of these traditions are known as ḥadīth scholars. As such reports acquired importance and authority, many thousands were fabricated and disseminated, for instance to support controversial theological positions. The scholars intervened in order to sort the genuine from the bogus. They did so by establishing chains of transmission. Ideally, the scholar would write down a report received from a trustworthy source, who in turn got it from a trustworthy source, and so on all the way back to a Companion of the Prophet who witnessed the deeds and sayings of Muḥammad at first hand. Traditions transmitted through multiple chains were considered especially reliable. The scholars were rigorous with their methods. It's been estimated that from among half a million circulating traditions, only about 4,000 to 5,000 were retained as sound, which means that 99 percent were labeled untrustworthy.[4]

Obviously, this development made it possible to answer many more questions about law and practice without the use of independent judgment. This was stressed by one of the great founders of Islamic legal theory, al-Shāfiʿī, who died in the year 819. His groundbreaking *Epistle on Legal Theory* attempted to show how apparent conflicts in the sources of the law can be resolved.[5] Once this consistency was discovered, and once a body of sound ḥadīth had been verified as supplementing the Koran, it would be possible to get by with a minimal and carefully restricted use of judgment. In fact, al-Shāfiʿī disdained the independent decisions that went under the name of *raʾy*, and allowed only what he referred to as "reasoning," in Arabic *qiyās*. This represents the second strategy mentioned above, where the jurist does exercise judgment, but in a constrained and cautious fashion. One important type of reasoning was analogy; in fact, in some contexts the word *qiyās* can simply be translated as "analogy." This method could be

used, for instance, to deal with our problem about wine made from grapes. The key would be to determine the "reason" (ʿ*illa*) why wine is forbidden. If the reason is that it intoxicates, then by analogy all other intoxicants would also be forbidden. More controversial was reasoning in light of the general welfare of the community. Some jurists thought it would be acceptable to exercise judgment to avoid obviously unwelcome results. Others, while perhaps agreeing about the right conclusion, thought that it was absolutely necessary to reach it by invoking a religious text.

It will, I hope, be obvious that all of this is significant not just for the history of law, but also for the history of philosophy. Effectively, these theorists were setting out a legal epistemology. They in fact began doing so before most Greek philosophical texts were available in Arabic translation. Some of their terminology matches technical terms found in philosophy. Their word for "reasoning" or "analogy," *qiyās*, was used by philosophers to refer to syllogistic arguments and even used as the Arabic title of Aristotle's logical work the *Prior Analytics*. Another example is ʿ*illa*, the "reason" or "rationale" for an analogy. This was one term used for the notion of a "cause," for instance in Aristotle's theory of the four kinds of cause. Such linguistic parallels would facilitate interpenetration of legal and philosophical discourse as the centuries went by. Nor were the resonances merely terminological. Jurists had to develop sophisticated ideas about language in order to determine which objects a given Koranic word might refer to. There were also implications for epistemology and ethics: the method of establishing authoritative chains for the reports of ḥ*adīth* was an attempt to lay down conditions for certain knowledge on the basis of testimony, and the idea that a good outcome can justify a legal judgment implicitly assumes a consequentialist approach to the law.

These sorts of methodological and philosophical issues were precisely the ones at stake in debates between the schools of Islamic law. To oversimplify, there were three schools which contended for dominance in the Eastern empire: the school of al-Shāfiʿī; a second school known as the Ḥanifīs after their founder Abū Ḥanīfa, which tended to be somewhat more open to the use of independent judgment; and finally the rather stricter Ḥanbalīs. They took their name from a widely admired religious figure who was not really a legal scholar, named Aḥmad Ibn Ḥanbal; we met him in passing a few chapters back, when al-Ghazālī considered his advice against quoting your enemies. He was famous for resisting the *miḥna* of the ʿAbbāsid caliphs, which attempted to compel acceptance of the Muʿtazilite claim that the Koran is created (see Chapter 2). Meanwhile a fourth school flourished further west, in northern Africa and

Muslim-controlled Spain—these were the Mālikīs, named for the late eighth-century jurist of Medina, Mālik ibn Anas.

Though it would be nice to say that the four schools are clearly differentiated in terms of method or legal doctrine, it would be closer to the truth to say that these four survived because they adopted some version of the moderate line pioneered by al-Shāfiʿī. Some degree of reasoning was allowed, albeit that debates continued about the details of how to apply reason, and the pre-eminence of ḥadīth, along, of course, with the Koran, was accepted by all the schools. Thus the differentiation between them had less to do with doctrine than with geography and political affiliation. By the end of our formative period, we have the Mālikī school dominating in the West, including in Spain, while the Ḥanafīs did well in Iraq and central Asia, eventually being adopted by the Turkish Seljūq rulers. The Shāfiʿīs meanwhile flourished in Egypt and also Persia, with many Ashʿarite theologians belonging to this legal school. The division between the schools continues down to the present day.[6]

There were, however, other approaches to law which did not accept this moderate orthodoxy. In what follows I'll be concentrating on one of them, the aforementioned Ẓāhirīs,[7] and on an author who wrote its defense: Ibn Ḥazm. In this case the name of the school does not come from a founder's name, but from his nickname. A student of al-Shāfiʿī by the name of Dāwūd ibn Khalaf was dubbed "al-Ẓāhirī" because of his robust insistence on using the surface meaning of the Koran and ḥadīth as the sole source of law. Ẓāhir means "evident" or "manifest," so this nickname could be translated as "Mr Manifest," if we were in a somewhat frivolous mood. (If we were in a very frivolous mood indeed, we might even be inspired to imagine a superhero named Mr Manifest. He could fight crime by keeping careful track of the cargo on boats.) Much of what we know about the doctrine of this school is derived from the Andalusian thinker Ibn Ḥazm, who lived quite a bit later, in the eleventh century. His life spanned the transition from the rump Umayyad caliphate to the regional *taifa* kings. Ibn Ḥazm's eventful life story was bound up with this transition, as he tried several times to support claimants to the Umayyad throne. For his trouble he sometimes found himself in prison, while at other points he rose to the level of vizier. Ultimately, though, Ibn Ḥazm's political ambitions came to nothing, and the latter part of his life was spent in relative seclusion, devoted to scholarship.

Ibn Ḥazm first developed an interest in law out of embarrassment, after he failed to follow the correct rituals of prayer at a funeral. Stung by this humiliation, he sought out a teacher and studied the writings of al-Mālik. But he did not become a Mālikī jurist. Instead, after a flirtation with the Shāfiʿīs, he

came to advocate the Ẓāhirī legal theory, eager to point out the deficiencies of the leading schools of *fiqh*.[8] As a Ẓāhirī jurist, Ibn Ḥazm rejected even the moderate use of reasoning and independent judgment embraced by al-Shāfiʿī. Instead, all legal reasoning must be based explicitly on the evident or manifest meaning of a religious proof text. There is no recourse to legal consensus, apart from unanimous judgments of the immediate Companions of the Prophet. Thus Ibn Ḥazm's legal manifesto recognizes no system of legal precedent, only the explicit injunctions of the Koran and the *ḥadīth*. And by the way, he has very stringent requirements for the soundness of *ḥadīth*.

This might make Ibn Ḥazm sound like a rather extreme fundamentalist, and indeed mainstream legal scholars at the time did see the Ẓāhirī movement as extreme. But the overall effect of the theory could in fact be a sort of liberalism, because the theory winds up greatly restricting the scope of Islamic law. If you can't find a straightforward command or prohibition of something in a proof text, declares Ibn Ḥazm, then you can infer that it is allowed, but not required. After all, if God did want us to do something in particular, or want us to avoid doing it, He would have set it down in revelation. Ibn Ḥazm supports this with Koranic verses which state that the book is "complete" or "comprehensive" (6:38, 16:89), which he takes to mean that no command or prohibition is left out. An interesting example of how Ibn Ḥazm applied his principles to specific cases is homosexuality.[9] Homosexual acts are the subject of disapproving remarks in both the Koran and *ḥadīth,* and most legal scholars had said that such acts are punishable by death, for instance by stoning. But in one of his legal works, Ibn Ḥazm reviews the proof texts for this view and finds them baseless. The explicit texts that list acts punishable by death make no mention of homosexuality. Also, as an opponent of analogical reasoning Ibn Ḥazm has no sympathy with attempts to see homosexual activity as analogous to some other sin that is punishable by death, like adultery. Thus homosexuality cannot be a capital offense, though Ibn Ḥazm does think it is sinful and should be punished in some way.

Ibn Ḥazm also deploys rather more philosophical considerations in defense of Ẓāhirism. For instance, he says that once we open the door to metaphorical or extended meaning of the language found in the Koran and *ḥadīth,* we will end up in skepticism. Taking words at face value whenever possible is the only way to be absolutely certain of the deliverances of the law. So, within a legal context, Ibn Ḥazm provides us with an example of the obsessive interest in certainty that also characterized theologians like al-Ghazālī and Aristotelian philosophers like al-Fārābī. In the rest of this book we'll be seeing how the high standards placed

on certain knowledge, in philosophy, theology, and law, did indeed lead to skepticism, or at least modesty concerning the possibility of knowledge. For now, I want to note that the link I just suggested between Ibn Ḥazm and al-Fārābī may have a sound historical basis. Ibn Ḥazm himself tells us that he studied with teachers of logic who had learned this art at the feet of masters of the Baghdad Peripatetic school (probably meaning Yaḥyā Ibn ʿAdī, and perhaps Abū Bishr Mattā).[10] Ibn Ḥazm speaks of this educational background in a work of his own on logic, which seems to show only indirect acquaintance with Aristotle's logical writings.

Logic and law are only two of the many topics to which Ibn Ḥazm devoted himself. His most famous work is on another subject beginning with L: love. Titled *Ring-Collar of the Dove*, it is a literary tour de force about the nature, perils, and virtues of love, drawing attractively on Ibn Ḥazm's own experiences. He also tried his hand at poetry, notably on an occasion when a political enemy had his books burned; his verses state that though the paper might burn, the ideas written on the paper would live on in his soul.[11] Many of his other writings are polemical in nature, Ibn Ḥazm apparently having been a rather ornery and contentious man. He composed a refutation of al-Kindī's *On First Philosophy*, denouncing him for calling God a "cause" of created things. Nothing can be a cause without having effects, so in giving God the nature of a cause al-Kindī has mistakenly implied that God necessarily creates the universe by His very nature. Not content to attack other Muslim jurists and philosophers, Ibn Ḥazm enthusiastically engaged in interfaith dispute too. He was disdainful of the other Abrahamic faiths, Christianity and Judaism, taking an unusually severe view concerning the falsehood and inauthenticity of their Scriptures. Early in his career he debated religion with a Jewish thinker. Later he wrote a response to a set of criticisms of the Koran, purportedly written by a Jewish contemporary from Andalusia. In yet another famous work, called *On the Sects of Religion*, he discusses the errors of the Jews and Christians, of Muslim theologians, and of just about anyone else he can think of.

With his many-sided activity, Ibn Ḥazm serves as a good introduction to what we'll be seeing in Andalusian philosophy. To start with the last point, there is the uneasy rivalry and interchange between Muslims and Jews. Ibn Ḥazm was quite firm in his criticisms of Judaism, and was also known to complain of their ability to acquire high social status in the Andalusia of his day. But, of course, the very fact that Jews were attaining such status is significant, and a harbinger of the extraordinary developments on Jewish philosophy on the peninsula. Ibn Ḥazm also provides us with our first glimpse of the influence of the Baghdad

Aristotelian school in Andalusia, something that will be on display among later thinkers, including Averroes and Maimonides. The fusion of legal and philosophical interests we see with Ibn Ḥazm is likewise a foreshadowing of Averroes' activity in both fields. Finally, the literary side of Ibn Ḥazm's output is typical of Andalusia, where many intellectuals were also poets. This is especially true of the Jewish thinkers. For a philosophical literary work in prose, meanwhile, there is little doubt that the most outstanding text produced in Islamic Spain was written by a Muslim: Ibn Ṭufayl.

FANTASY ISLAND IBN BĀJJA AND IBN ṬUFAYL

An engineer, a geologist, and an economist are stranded on a desert island. They have some precious food from their wrecked ship, but it is all lodged in tin cans. Somehow they need to get at the food before they starve to death. "Let's find a sharp rock and use it to open the cans," suggests the engineer. "No, let's put them in the surf, and let erosion do the work for us," suggests the geologist. The economist smiles at their naive proposals and says, "Why not just assume we have a can opener?" Ah yes, the remote desert island, mainstay of joke-tellers and cartoonists. Perhaps you yourself have wondered how you might fare if stranded alone on an island. I think that if I had my copy of Plato's collected dialogues I'd be just fine, at least until my utter practical incompetence led me to die of starvation, thirst, or exposure, whichever came first. That's assuming that I wound up on the island at my current, relatively advanced age. If I had arrived as a newborn infant, I could have done much better. Even without a copy of Plato's dialogues, I might have transformed myself into a perfect philosopher and visionary mystic. All I would need is a little bit of help from a gazelle.

I take this optimistic assessment of my chances from one of the most memorable and entertaining philosophical texts produced in the Islamic world. Its title is the name of the main and almost only character, Ḥ*ayy ibn Yaqẓān*, which means *Living, Son of Awake*.[1] Its author was Ibn Ṭufayl, who lived in twelfth-century Andalusia, serving two Almohad caliphs in the city of Granada. Apart from his philosophical island fantasy, he composed poetry in support of the Almohads and also wrote a poem on medicine. Unlike the setting of his most famous work, no man is an island, and Ibn Ṭufayl was certainly a product of his intellectual environment: I've already suggested (Chapter 22) that Ḥ*ayy ibn Yaqẓān* seems to reflect Almohad ideology. As for Ibn Ṭufayl's philosophical influences, he lets us know a good deal about this himself, in a fascinating

preface he wrote to Ḥ*ayy ibn Yaqẓān* (3–20). It shows that there were basically three main philosophical influences on Ibn Ṭufayl. First, Avicenna. This may come as no surprise to you, given how much I have emphasized Avicenna's wide-reaching influence. But as I've also mentioned, Avicenna's works were rather incompletely transmitted to Andalusia. Ibn Ṭufayl seems to know them as well as anyone in Spain. The very title Ḥ*ayy ibn Yaqẓān* is taken from a symbolic treatise written by Avicenna (20), and he tells us in the preface that he has been able to consult Avicenna's *Healing*. He adds, though, that this is not necessarily the crucial text for understanding the thought of the great *shaykh*. Rather, one should turn to his *Oriental Philosophy*, and realize that Avicenna's system leads one to mysticism (14–15). So here we see Ibn Ṭufayl playing a significant role in creating the image of a mystical Avicenna, whose Sufi-style insights were captured above all in the mostly lost work on "*Oriental*" wisdom.[2]

In presenting mystical vision as an attainment beyond what philosophy can offer, Ibn Ṭufayl is betraying that he has had a bit of help too: not from a gazelle, but from al-Ghazālī. This is his second main philosophical source, as he explains in the preface (15–18). Again, his textual knowledge is incomplete, but he knows enough about al-Ghazālī to complain that his works tend to be inconsistent, leaving us in the dark as to al-Ghazālī's most deeply held beliefs. Ibn Ṭufayl worries that the most decisive texts may be unavailable to him in Andalusia. Nonetheless, he is convinced that al-Ghazālī was one of those who reached the highest stages of mystical knowledge, stages Ibn Ṭufayl himself has only been able to glimpse. When we turn to the island story of Ḥ*ayy ibn Yaqẓān*, we see this influence from Avicenna and al-Ghazālī playing itself out and culminating in a portrayal of the mystic at work.

But before we do turn to the story, I want to dwell for a bit on Ibn Ṭufayl's third main influence, a man named Ibn Bājja. Ibn Ṭufayl is rather critical of him, seeing him as a limited mind, incapable of the mystical heights reached by Avicenna and al-Ghazālī (5). But Ibn Bājja deserves more credit than that. He was the first Muslim thinker in Andalusia who wholeheartedly adopted the Aristotelian style of philosophy that will reach its fulfillment in the writings of Averroes. Ibn Bājja harks back to a pre-Avicennan phase in the history of philosophy, adhering more to the style of thought we found in al-Fārābī. In this, he was again anticipating Averroes, who likewise takes over philosophical themes from al-Fārābī, such as the demonstrative nature of philosophy compared to the rhetorical and symbolic discourse of religion. Of course, Averroes also carried on the characteristic Baghdad school activity of writing commentaries on Aristotle. Ibn Ṭufayl knew Averroes personally, and supposedly even played a

role in launching the commentary project that would take up so much of Averroes' time and energy. So it is natural to see a smooth sequence of three major Muslim philosophers in Spain: Ibn Bājja, Ibn Ṭufayl, and Averroes. Natural, but misleading, not only because it leaves out other Muslim Andalusian thinkers, but also because Ibn Bājja and Averroes have much more in common intellectually with each other than with Ibn Ṭufayl. We should rather think of Ibn Ṭufayl not as the second of three Aristotelians, but as the proponent of a mystically spiced Avicennism that finds itself inserted into the Farabianism of Ibn Bājja and Averroes. He is, if you will, the chorizo in their Peripatetic paella.

Yet Ibn Ṭufayl does take over at least one major theme from his Spanish predecessor. Ibn Bājja wrote on a range of philosophical and scientific topics, including logic and medicine. He also contributed a work on the nature of the intellect, which influenced the notorious theory of intellect put forward by his successor Averroes.[3] But his best-known work is titled *Rule of the Solitary*, and it's no coincidence that Ibn Ṭufayl's island story is all about a solitary philosopher.[4] Like al-Fārābī's major works, Ibn Bājja's *Rule of the Solitary* combines metaphysical speculation with political philosophy. He sees the cities of his time as irredeemably corrupt. So he focuses not on the perfect prophet and philosopher-ruler of al-Fārābī's theory, but on the isolated philosopher living amidst a morally bankrupt population. He praises the philosopher by applying to him the faintly damning expression "weed." This indicates the philosopher's tendency to undermine the values of the society in which he lives. Here Ibn Bājja harks back to the teachings of Plato's *Republic*, and like Plato, gives some attention to the question of how a philosopher could come to rule a city. But he does not seem to be particularly optimistic that this will come about. Despite agreeing with al-Fārābī that a "virtuous city" is at least theoretically possible, he focuses on the more realistic situation of the philosopher in an imperfect city. Ibn Ṭufayl's support for the ruling Almohads did not prevent him from expressing a similarly bleak view about the prospects of bringing philosophical wisdom to Muslim society, as we can see from the final section of Ḥ*ayy ibn Yaqẓān*.

But we should turn first to the beginning of this island tale. The strangeness and intrigue of the text is immediately evident, as it starts with not one but two stories about how Ḥayy ibn Yaqẓān came to be on the island in the first place. One story tells of how, on a different, nearby island, the sister of a mighty king conceived a child in secret (24–6). Fearing scandal, she placed the infant in a chest which she sent floating away across the sea. The child, Ḥayy ibn Yaqẓān, thus came to his island, where he was the only inhabitant. The second,

alternative story is very different (27–33). It explains that the island lies in an ideal climate, so that its earth is capable of spontaneously giving rise to a human. Ibn Ṭufayl describes the process in considerable detail, with a bubble forming inside the earth and dividing into parts that will become Ḥayy's organs.[5] This is one of several passages where we can see Ibn Ṭufayl showing off his medical knowledge. Another, more memorable one is only a few pages away, and will feature the most appealing character in *Ḥayy ibn Yaqẓān*: a gazelle.

It is thanks to the gazelle that Ḥayy survives in his island paradise, and by the way, it is thanks to the Arabic language that we have the word "gazelle" (from *ghazāl*). Ibn Ṭufayl makes a point of saying that with the arrival of the gazelle, the two alternative stories come together: she either finds the baby washed up on shore, or discovers him after he is spontaneously generated. From then on we have a united narrative, in which the gazelle nourishes the baby. Her actions are described in strikingly sympathetic terms. She has lost her own fawn, which was snatched away by an eagle, and treats Ḥayy as a surrogate child. She also seems to be quite clever, realizing that she needs to crack open shelled fruits to feed Ḥayy and to keep him warm at night (34). Lest Hiawatha the giraffe start to get jealous, I'll hasten on to the tragic scene in which the gazelle dies (38). As she lies on her deathbed, Ḥayy is nearly overcome with grief but resolves to try to cure her. Using a sharp stone as an impromptu scalpel, he cuts into his adoptive mother's chest in search of the diseased part (kids, *definitely* don't try this at home). He's unable to save her, but does manage to discover some rudimentary anatomy, learning about the placement of the lungs and the ventricles of the heart. Further investigation performed on other animals leads our medical prodigy to the conclusion that life is maintained through a kind of warm air pervading through the body from its center in the heart (50–1). This is what Galen called *pneuma*, meaning "breath." Showing an early talent for philosophy, Ḥayy also concludes that the rest of the body is nothing but an instrument for this controlling substance.

At this stage, though, our budding scientist and philosopher still fundamentally sees himself as an animal, like his gazelle mother. In fact, he is mortified to notice that he is completely naked, whereas other animals are well-clothed with fur or feathers. Aiming to rectify this shortcoming, he garbs himself in eagle feathers. The other animals find this intimidating. It is only the first of several steps that will ultimately see Ḥayy attain mastery over the living things on his island: he learns to control fire, to hunt, and so on. Before long, his superiority over other animals becomes clear through less practical means, as Ḥayy starts to engage in theoretical investigation about the world around him.

He works out a theory of the four elements, and comes to understand the animal and plant kingdoms as wholes or unities. In a rather lovely image, Ḥayy compares the soul-breath divided among all animals to a single quantity of water that has been meted out in individual portions to each living thing (57). He then compares the life principle of plants to water that has been frozen, because of their more rudimentary nature. Ultimately, he sees that the whole cosmos, from the elements and living things on up to the heavenly bodies above, is a single unity. All of this seems to prepare the way for a more intense experience of oneness Ḥayy will have later on, when he has a mystical union with God.

It is indeed God who next attracts Ḥayy's attention, as he comes to see that the entire universe must have an incorporeal first cause. Ḥayy gets to this conclusion much as he came to the island: in two alternative ways. It is unclear to Ḥayy whether the physical universe has always existed. So first he assumes that it has not. In that case, there must have been some immaterial cause that brought material things into being (81). The other option is that the universe has existed eternally. In that case, it has been given an infinite power for motion and existence. But no body can contain infinite power, so the power must have been bestowed on the universe from an immaterial cause (85). This is pretty good work on Ḥayy's part, because he has on his own managed to rediscover the arguments for God's existence offered by Islamic theologians and by Aristotle, who is the author of the infinite power argument. Of course we can't give the same credit for originality to Ibn Ṭufayl, who is simply weaving these traditional arguments into his island narrative. Nonetheless, Ibn Ṭufayl is doing something unusual and important here: he is effectively telling us that the eternity of the universe debate does not need to be resolved. If you can prove the existence of an immaterial First Cause either way, then it becomes unnecessary to decide the eternity question. We'll find a similar position later on in Maimonides.

Once he has proved God's existence, Ḥayy really begins to see himself as superior to the other animals. They have no awareness of such a First Cause, but busy themselves with mere bodily survival. Ḥayy also realizes that his true self is not, after all, a physical breath pervading his body, but a soul which is like God in being immaterial (91–2). In this respect, he can see himself as partaking of the perfection of the celestial bodies, which affect the lower world through their motions. At this point, then, he's managed to figure out the basics of the Platonized Aristotelian theory already familiar to us from so many thinkers in the Islamic world. But Ḥayy's next conclusions will seem rather less familiar. Reflecting on the fact that he has an animal nature, yet also similarity to the heavens and to God, he resolves to become as perfect as possible at all three

levels (114). At the animal level, he decides to become a vegetarian, to avoid thwarting God's will by destroying what He has created. He also imitates the heavenly spheres which carry out God's providential order, by going around his island and caring for animals and plants. He even goes so far as to prevent plants from having their growth stunted by excessive shade. In a notorious passage, he also spins around in imitation of the heavenly motion, something often seen as an allusion to the spinning dance of certain Sufis (116).[6] I want to dwell instead, though, on what one might call the "ecological ethics" of this part of the story. There aren't many medieval authors who pay any attention to animal ethics. The other main example we've seen so far is al-Rāzī, who insisted that we should avoid harming animals. Even more rare is to include care for plant life, as Ibn Ṭufayl does here. It's worth noting that Ḥayy is said to reach these ethical conclusions by reflecting on divine providence. The old Platonic injunction to "imitate god insofar as is possible" has become a reason to care for the environment.[7]

But Ḥayy's green period is short-lived. He soon turns his attention away from nature to its Creator, and decides to retreat into a cave on the island in order to contemplate God (119). The cave is a significant detail. It might call to mind the cave in which the Prophet Muḥammad first received the revelation, or the pivotal moment in the career of the Almohad founder Ibn Tūmart, when he conceived his religious mission after meditating in a cave. After days without food or even motion in the cave, Ḥayy achieves an experience of complete unity with God. In terms clearly drawn from the Sufi tradition, Ibn Ṭufayl speaks of all things disappearing for Ḥayy, with only God remaining. Even Ḥayy's own self is dissolved in this mystical union. Of course, this is not something Ibn Ṭufayl can describe adequately—it is something that we would need to experience ourselves. Ibn Ṭufayl compares Skeptics who reject this transcending of reason to bats who are blind in the light of the sun (125). Ironically, this analogy is drawn from Aristotle (*Metaphysics* 993b), who is so often presented as the main rival to mysticism in philosophy.

That would seem to give Ibn Ṭufayl a pretty good place to end his story. If he did end here, his tale would be thoroughly Avicennan, at least, on his understanding of Avicenna. What Ḥayy learns on his island is more or less what you could learn from reading Avicenna: Galenic anatomy juxtaposed with an immaterialist theory of soul, a necessary First Cause which may give rise to an eternal universe, all crowned with the mystical union Ibn Ṭufayl sees as the culmination of Avicenna's philosophy. Also deeply Avicennan is the idea that a sufficiently talented person, even if abandoned on the island without the

dialogues of Plato or any other book, could become a perfect philosopher. Avicenna had presented himself in his autobiography as a largely self-taught thinker. *Ḥayy ibn Yaqẓān* can be seen as a dramatization of this idea that the philosopher can do it all on his own, dispensing not only with blind acceptance of authority (*taqlīd*), but even with revelation itself. We might think back to the twofold account of Ḥayy's arrival on the island. The spontaneous generation theory is like a physical version of Ḥayy's self-guided journey to enlightenment. And which philosopher in the Islamic tradition thought humans could be spontaneously generated? Avicenna, who considered it possible at least in principle. Since humans are generated when forms are sent from the Agent Intellect to suitably prepared matter, they could arise by chance, if matter just happened to be concocted in the right way.[8]

All this is daring on Ibn Ṭufayl's part. We can imagine his much-admired source al-Ghazālī applauding the rejection of *taqlīd*, but reacting with horror to the idea that prophecy is superfluous. If we keep reading, though, we'll see that Ibn Ṭufayl has made room for religion in his tale. He refers back to the other island presupposed by the first story, which had Ḥayy being conceived normally and abandoned by his mother. On this island is a corrupt society. It has a religion, which here remains unnamed. But as in al-Fārābī, it seems obvious that the unidentified, generic religion is meant to represent Islam. The wickedness of this island's society provokes two virtuous men to opposite reactions (136–7). One, named Salāmān, follows the scriptures of that society literally, and tries to bring his fellow citizens to a more faithful religious life. The other, Absāl,[9] is given more to a figurative understanding of the scripture. But he despairs of communicating the hidden truths he has discovered to his benighted countrymen. So he leaves his island and, seeking solitude, comes to Ḥayy's island.

The two meet (130), in scenes apt to remind us of Robinson Crusoe's encounter with Friday. (By the way, it's thought that an early modern English translation of *Ḥayy ibn Yaqẓān* may have influenced Defoe, and given him the idea for *Robinson Crusoe*.) Once Absāl has encountered Ḥayy and taught him to use language, the two realize that they share the same beliefs. Ḥayy becomes a follower of Absāl's faith, showing that philosophy and mysticism do not require religion, but do not rule it out either. Absāl, meanwhile, accepts Ḥayy as a profound teacher. The two agree to return to Absāl's island in an attempt to disseminate the truths they have come to understand. But they find that even the most enlightened members of the populace are unable to accept their teaching (152). Only now does Ḥayy realize why Absāl's religious texts involve so many prohibitions and detailed practical instructions. The members of this society

need such guidance, whereas the spontaneous philosopher Ḥayy does not. The happy ending, such as it is, has Ḥayy advising Salāmān and his ilk simply to adhere to their previous religious beliefs and practices (153), and sailing off with Absāl to resume a life of seclusion on their island. As Ibn Bājja might say, the two of them will there practice the rule of the solitary.

It strikes me as significant that the second island, where Absāl and Salaman dwell, is first introduced within the framework of the tale about the king's sister. In the spontaneous-generation version of the tale there need be no second island. Perhaps Ibn Ṭufayl is telling us something here. The second island introduces the element of politics and religion to the narrative. The implicit message may be that the more fairy-tale version of the story, with Ḥayy's mother placing him in a chest and setting him adrift on the water, is acceptable and convincing to those people who would hesitate to accept the surprising scientific truth that humans can spontaneously generate, as Avicenna claimed. If so, then these two stories relate to one another as religion relates to philosophy: one more generally convincing, the other grounded in demonstration. Be that as it may, we can see from the juxtaposition between Ḥayy's path to enlightenment and the religion of Absāl that, for Ibn Ṭufayl, religion is indeed a rhetorical version of philosophical truth. Revelation needs to be understood figuratively, and is filled with guidance for non-philosophers, who need to have their hands held if they are to avoid going astray. In this Ibn Ṭufayl has something in common with al-Fārābī, and with his more famous colleague Averroes.

25

BACK TO BASICS AVERROES ON REASON AND RELIGION

In the unlikely event that you are invited to an audience before a king or queen, here are some guidelines to follow. *Do not* make casual jokes about regicide, or remark that the monarch's crown would go really well with what you yourself are wearing. *Do* avoid direct eye contact, and compare the monarch favorably to other outstanding royal figures—Alexander the Great is always a favorite. *Do not* snap your fingers and say, "That reminds me, I need to buy postage stamps!"[1] *Do* display your comprehensive knowledge of the works of Aristotle, and feel free to give favorable mention to this series of books, which sadly has yet to receive patronage from any of the crowned heads of Europe. Actually, that bit of advice about Aristotle may or may not be applicable, depending on the taste of the king or queen in question. But it was just the trick if you wanted to impress Abū Yaʿqūb Yūsuf, who served as the Almohad ruler of Muslim Spain for about twenty years starting in 1163.

Or so was the experience of a scholar who appeared before him, introduced to the emir by Ibn Ṭufayl, who was the emir's doctor and thus in a position to arrange an interview for his friend and fellow philosopher, Abū l-Walīd Ibn Rushd. Ibn Rushd, or "Averroes" as he was known in Latin and is usually called in English, hailed from Cordoba and came from a family of legal scholars of the Mālikī tradition, the dominant legal school in Andalusia. Averroes followed in their footsteps, eventually becoming the chief judge of Cordoba. So he was a well-connected individual. Still, meeting the Almohad ruler would have been a nervous occasion. After he was quizzed about his family background, Averroes became especially nervous when the emir asked him a question about the heavens. Are they, according to the philosophers, created or are they eternal? You don't have to have read al-Ghazālī's *Incoherence of the Philosophers* to know that this is a rather touchy issue, and Averroes decided to play safe by

playing dumb. So the emir turned to Ibn Ṭufayl instead, engaging with him in a wide-ranging conversation that displayed the emir's considerable philosophical knowledge. Now reassured, Averroes joined the discussion, and so impressed Abū Yaʿqūb Yūsuf that the emir bestowed upon him lavish rewards, including a fine steed.

I hate to look a gift horse in the mouth, but I'm skeptical whether this story has any basis in truth. It's derived from a history of Andalusia written in the following century, whose author, al-Marrākushī, presents the anecdote as having been told by Averroes himself to one of his students. Like a good ḥadīth scholar, we should be cautious about the reliability of this chain of transmission. Likewise for another story from the same source, which states that Ibn Ṭufayl prompted Averroes to write elucidations of Aristotle's works because the emir found them difficult to understand. It's certainly plausible that readers of Aristotle would feel the need for some help. But Averroes' project of explaining Aristotle went well beyond the likely needs of the emir. It culminated in five line-by-line commentaries on Aristotle's major works, covering the *Posterior Analytics, On the Soul*, the *Physics, On the Heavens*, and the *Metaphysics*. So detailed and sophisticated are these commentaries that you could be forgiven for wondering whether there was anyone in Averroes' immediate environment, of any social rank, who could make much use of them.

For the less ambitious, or perhaps we should say, less obsessed reader of Aristotle, Averroes prepared two other sorts of text. First, brief summaries that explain the main points of Aristotle's works. Second, running paraphrases, like those written in late antiquity by the rhetorician Themistius. It's common to call Averroes' three sorts of exegesis "short, middle, and long commentaries," but apart from the fact that the line-by-line commentaries are most definitely long, this terminology is rather misleading.[2] More helpful would be to talk of epitomes and paraphrases, reserving the word "commentaries" for the five massive works of exegesis that represented the peak of Averroes' achievement. On the strength of these writings, Averroes was known in medieval Latin Christendom simply as "the Commentator," much as Aristotle was spoken of simply as "the Philosopher." When figures like Albert the Great or Thomas Aquinas read Aristotle, they would often have done so with a Latin translation of Averroes quite literally open on their desk. In fact, in a few cases Aristotle's works were first made available through versions of Averroes' commentaries, which of course included Latin translations of the passages Averroes was commenting on.[3] He was, if anything, even more influential among Jewish authors. His exegetical works were extensively translated into Hebrew, and Jewish authors

even wrote commentaries on Averroes' commentaries (Chapter 36).

And it's a good thing too. Without the Latin and Hebrew translations, much of Averroes' output would be lost. Of his line-by-line commentaries, we have only a tiny handful of Arabic manuscripts, and the treatments of *Physics* and *On the Soul* are lost entirely in Arabic but survive in Latin and Hebrew. This is eloquent proof of Averroes' failure to make an impact on his fellow Muslims.[4] He was read for some generations in Arabic, but mostly by Jews. When they turned to using Hebrew as the favored language of philosophy, there was hardly anyone left who wanted to read the Arabic originals. This is a significant fact about the Islamic philosophical tradition. Sometimes Averroes is given credit for rescuing philosophy from the assault launched on it by al-Ghazālī. But if Averroes was trying to rescue anything, it was a rather old-fashioned version of philosophy. He looked back to the project of al-Fārābī and other members of the Baghdad school, who had likewise dutifully written summaries, paraphrases, and commentaries on Aristotle in the antique fashion. His was a doubly outdated endeavor, an attempt to revive the Baghdad revival of late antique Alexandria. But we are now in the twelfth century, by which time the eastern heartlands of Islam were deep into the process of grappling with Avicenna.

Averroes talks about Avicenna too, but is much less favorable towards him than his Andalusian colleague Ibn Ṭufayl. He usually mentions him only in order to complain that Avicenna is departing from Aristotle, and hence from the truth. This is the constant refrain of his response to al-Ghazālī's *Incoherence of the Philosophers*, the *Incoherence of the Incoherence*.[5] Even if al-Ghazālī succeeds in refuting Avicenna, it doesn't really matter, because real philosophy is what we find in Aristotle. In his commentaries too, Averroes is dismissive of Avicenna's achievement. He rejects the famous Avicennan proof of God's existence out of hand. The proper way to establish God is through the science of physics, by proving that there is a first cause of motion, just as Aristotle had done. Avicenna's attempt to do so in metaphysics is obviously wrongheaded, because God is part of the subject-matter of metaphysics, and it is a rule of Aristotelian methodology that no science can prove the existence of its own subject-matter.[6]

What Averroes offered, then, was a throwback to a philosophical approach that was simply no longer relevant for mainstream intellectuals in places like Persia. His project of commentary was not too little, but it was definitely too late. It didn't help either that Averroes worked so far west. His failure to make an impact in the East could in part be thanks to the practical difficulties of copying such enormous texts and carrying them across such a large distance. In

fact, it's generally true that Andalusian thinkers had little impact on the eastern tradition, unless they actually went east themselves, like the great mystical thinker Ibn ʿArabī. Still, I think the basic explanation for Averroes' failure to find an Arabic readership is an intellectual one, not a practical one. For Latin Christendom, Averroes was a cutting-edge author, who offered the most subtle and expert account available for works of Aristotle that were once again becoming available in the twelfth and thirteenth centuries, thanks to new Latin translations from Arabic and Greek. But for a post-Avicenna, post-Ghazālī audience of Muslim thinkers, Averroes' commentaries were the equivalent of silent films made after the invention of sound.

Averroes' allegiance to the old-school approach of the Baghdad Aristotelians is clear not only from his commentaries, but also from his most popular and frequently read work. Its full title is *Faṣl al-Maqāl wa-Taqrīr mā bayna al-Sharīʿa wa-l-Ḥikma min al-Ittiṣāl*, which is a bit of a mouthful, especially considering how short the work is. The title means something like *Decision of the Discussion and Determination of the Relationship between the Religious Law and Philosophy*. A bit of a mouthful even in English, then, and people usually just call it the *Decisive Treatise*. This version of the title is not much more illuminating than calling his works on Aristotle "short," "middle," and "long" commentaries. (While I'm at it, silent movies weren't silent either, they were shown along with live music. It's a hard world for us pedants.) One good thing about calling it the *Decisive Treatise*, though, is that this little text is indeed decisive. In fact, it is a legal decision or judgment, so that we here see Averroes in his guise as jurist. As often with a general legal judgment or *fatwā*, the treatise asks whether Islam condones a certain practice. Standardly, the jurist needs to determine whether the practice is obligatory, encouraged, allowed, discouraged, or forbidden. We had a taste of this classificatory system with Ibn Ḥazm, whose Ẓāhirī theory of jurisprudence led him to say that anything not explicitly decided by the canonical sources of the law is by default "allowed."

The issue decided in the *Decisive Treatise* is going to be the status of philosophy according to Islamic law. Given what we've seen about Averroes thus far, we'd hardly expect him to say that philosophy is forbidden or discouraged. It's also hard to believe that he would want to say that philosophy is obligatory, like prayer or the charitable tax paid by Muslims. So presumably he'll want to say that it is encouraged, or merely allowed. But, hard to believe or not, it turns out that he does think philosophy is obligatory, at least for those who have the talent and opportunity to pursue it. He supports this by quoting Koranic passages such as "take heed, you who have eyes" (59:2) and "do they not

consider how the camel was created, how heaven was lifted up?" (88:17–18).[7] Ibn Ḥazm would probably find that such verses fall far short of an explicit command to study philosophy. But Averroes is no Ẓāhirī. Taking a more flexible approach, he sees in these lines a requirement to investigate all created beings using the most powerful instrument God has given us, namely the intellect. And what is philosophy, if not the intellectual investigation of beings?

The revelation must, of course, want us to arrive at the best possible understanding that can result from such an investigation. So the first thing we need to do is determine what the best possible understanding might be. Luckily, we already know the answer: demonstrative knowledge, as described in the *Posterior Analytics* (not coincidentally, one of the five texts to which Averroes devoted a full commentary). In admittedly oblique language, then, the Koran is instructing us to study logic, in order to learn what standards need to be met by demonstration (*Decisive Treatise* 45–6). But Averroes still isn't done. Our only hope of fulfilling the divine command in question is to call on the help of our predecessors. It doesn't matter whether these predecessors were Muslims or not, just so long as their works can assist us in climbing to the epistemological peak that is demonstrative knowledge. Thus the Koran turns out to be commanding all Muslims to read Aristotle, if they are in a position to do so.

The *Decisive Treatise* is, however, a legal judgment, so Averroes is not here talking to all Muslims, or for that matter to philosophers seeking reassurance. He speaks rather to his fellow legal scholars. This explains much of what happens in the *Decisive Treatise*. For one thing, he has not even attempted to give a *philosophical* defense of philosophy. Rather, he has appealed to the Koran, as his fellow jurists would expect. Likewise, when Averroes considers objections against the practice of philosophy, he answers them not with philosophical proofs but with dialectical arguments. These are arguments aimed squarely at legal scholars. If the critic of philosophy says that the Companions of Muḥammad did not engage in philosophy, which casts doubt on the necessity of doing so, then Averroes will retort that the Companions did not engage in legal theory either (46). If the critic complains that the pursuit of philosophy has led some people into unbelief—as al-Ghazālī claimed happened to Avicenna—then Averroes will respond that the single-minded study of law has also led some jurists astray (49).

So far, then, we've learned that God wants us to do philosophy. (Were he alive today, would Averroes therefore think that God wants you to read these books? Probably only the chapters on Aristotle in the first volume.) Averroes realizes that this is not a command that everyone can carry out. In his social

context, it was obvious that a vanishingly small proportion of Muslims could have any hope of doing philosophy, never mind studying logic with the help of works by Aristotle translated into Arabic. Fortunately, God has mercifully provided for all the non-philosophers. It was for their sake that he sent revelation not in the form of demonstrative syllogisms, but as a message full of powerful symbols, deploying language that everyone can appreciate. Averroes thus sees the Koran as a fundamentally rhetorical text. It is persuasive, whereas philosophical discourse is demonstrative. The Koran induces conviction and belief, not ironclad knowledge. This is no insult to the Koran, at least not as Averroes sees it. Rather, the perfection of the book lies precisely in its overwhelming persuasiveness.

This is why I say that the *Decisive Treatise* shows Averroes carrying forward the agenda of the Baghdad school, and specifically of al-Fārābī. For al-Fārābī, the ideal ruler is both prophet and philosopher, able to grasp truth with certainty thanks to his powerful intellect, and able to represent truth symbolically thanks to his powerful imagination (Chapter 10). Averroes is thinking along the same lines, except that his focus is less on the person of the prophet, and more on the nature of the words revealed to the prophet. Again, this may be due to the legal context. Having shown that philosophy is made obligatory in Islam, Averroes wants to push his argument forward into the realm of textual interpretation. If the Koran really has a rhetorical or symbolic nature, as he has claimed, then who is in the best position to determine the true meaning of its symbols and rhetoric? The traditional answer was, of course, the religious scholar, who can draw on expertise in the Arabic language, the supplementary information provided by Prophetic ḥ*adīth*, and the previous tradition of Koranic commentary.

Averroes has a different answer: the philosopher. For the philosopher, or at least the successful philosopher, has access to something the religious scholar lacks, namely certain knowledge achieved through demonstration. After all, one thing we know for sure about the Koran is that it's true. And as Averroes says, quoting Aristotle without mentioning his source, "truth does not contradict truth" (50).[8] This means that we can use demonstration as a check on possible interpretations of the revealed text. Some interpretations can be ruled out, since they would have the Koran saying something false. To take a standard example, we may reject out of hand any interpretation which involves God having a body, since philosophy can demonstrate that He is incorporeal. Other interpretations, which would establish agreement between the message of Scripture and the philosopher's conclusions, would be ratified, albeit not necessarily confirmed as correct. After all, there might be multiple interpretations of a single text, which

interpret it as teaching different truths. So long as the various interpretive meanings are all really true, though, there isn't much harm in that. Besides, the interpreter gains some merit by establishing any possible interpretation, even if it is not the right one. Here Averroes echoes a well-known ḥadīth stating that a judge who tries sincerely to rule correctly is rewarded once; if he succeeds, he is rewarded twice (57).

Unfortunately, others have treated their philosophically minded co-religionists rather more harshly: step forward, al-Ghazālī. He is mentioned and chastised numerous times in the *Decisive Treatise*, although Averroes admits that he presumably had good intentions (61). But it's intentions like these that famously pave the road to hell, and al-Ghazālī's damnation of the philosophers has been hugely counter-productive in Averroes' eyes. His error was to write dialectical works like the *Incoherence*, and in so doing to address questions that can only be tackled adequately through demonstration. These would include the eternity of the world, the nature of divine causation, and the manner in which God knows about His creation. Never do al-Ghazālī's discussions rise to the level of demonstrative proof, which is typical of a theologian like him. For Averroes, as for al-Fārābī, the practitioners of *kalām* only manage to do dialectic. This is the unfortunate middle ground between the exalted heights of demonstrative philosophy and the modest level of those who are content to accept rhetorical symbols. Worst of all, untutored readers who should just accept rhetorical teachings may come across the writings of men like al-Ghazālī. This is liable to mislead them into outright false belief, if they are made to doubt the symbols they previously accepted at face value. Averroes compares al-Ghazālī and other theologians to someone who makes patients question the advice given them by their doctor, by raising doubts that could only be adequately answered by someone with an expert understanding of medicine (67).

Averroes' critique of al-Ghazālī involves an irony, in that al-Ghazālī's critique of Avicenna had been very similar. He saw Avicenna as failing to measure up to the demonstrative standards required by philosophy. Not for the first time, we see intellectuals accusing each other of failing to offer demonstrative proofs. This relates to the equally common accusation of *taqlīd*, since uncritically following authority is a sure way to fall short of demonstration. But the modern reader of the *Decisive Treatise* is more likely to aim a rather different accusation at Averroes. Isn't this all horribly elitist? Particularly objectionable is his idea that the vast majority of believers should content themselves with symbolic versions of the truth, without even being exposed to the dangers of more advanced philosophical discussion. It might put us in mind

of Plato's *Republic*, in which the population is kept in line by being taught a so-called "noble lie," a myth which persuades them to maintain social order. Here it is worth noting that Averroes wrote a paraphrase of Plato's *Republic*, since he couldn't get his hands on Aristotle's *Politics*. The paraphrase is, again tellingly, lost in Arabic but preserved in Hebrew.

It's not easy to defend Averroes from the charge of elitism. One response might be to point again to the different social circumstances of his day, when even basic literacy was uncommon, and also to bear in mind how high his expectations were when it came to philosophy. When he talks in the *Decisive Treatise* about the "philosopher," he means not just someone who is striving after wisdom, but someone who has already got it. This is a person who has achieved systematic demonstrative insight. By this standard Avicenna wouldn't make the grade, according to Averroes, and in fact it isn't clear who might, apart from Aristotle himself.[9] Fortunately, Averroes didn't believe that it was crucial for everyone to achieve philosophical insight. This is because of another theory he developed, in the context of commenting on Aristotle's *On the Soul*. This theory is anything other than elitist, though it has the disadvantage of being frankly unbelievable. After long and careful reflection, Averroes came to the view that all of humankind shares one single intellect. Why would he say such a thing, and what could he possibly have meant by it? I have a pretty good idea, which apparently means that you already do too—but better read on, just in case.

26

SINGLE MINDED AVERROES ON THE INTELLECT

When I was finishing my studies in philosophy and preparing to apply for a job, I got some advice about what to say in the interviews I was hoping to get. Given my area of interest, I should expect to be asked why it is worth studying the history of philosophy at all. The right answer, I was told, is that we can mine the history of philosophy to discover arguments and positions that would speak to today's concerns. A good example might be the way that Aristotle's ethics have given inspiration to many philosophers working in ethics in the last few decades. So I prepared myself to say, preferably with a straight face, that contemporary philosophers of the 1990s could learn a thing or two from my doctoral dissertation. Not the easiest argument to make, given that my topic was the Arabic translation of Plotinus. "You may think that mental states supervene on states of the brain," I prepared myself to tell hiring committees, "but there is a surprisingly good case to be made that we have an immaterial, immortal soul, which knows through a direct emanation from the universal intellect."

In my heart, I never really believed that this is the only, or even the best, rationale for studying the history of philosophy. Certainly, historical texts have contributed to contemporary debates, as with Aristotle's ethics. Others seem almost to transcend the time they were written: no one can read Epictetus without considering how his teachings might apply to their own lives. But to me, much of the fascination of the historical figures is how far they were from our ways of thinking, rather than how up-to-date we can make them seem. Indeed, I've always been drawn to thinkers whose views seem a bit far out, at least from today's vantage-point. I find it fascinating that long-dead philosophers assumed certain things to be obviously true which now seem obviously false, and that they built elaborate systems on these exotic foundations. To be useful, historical ideas don't always need to fit neatly into our ways of thinking. They can shake

us out of those ways of thinking, helping us to see that our own assumptions are a product of a specific time and place.

If this is the sort of thing you want from the history of philosophy, then it is hard to beat Averroes' philosophy of mind. Here we have the greatest medieval commentator on Aristotle, conducting a sustained inquiry into the meaning of Aristotle's remarks about the intellect, and ironically changing his own mind several times before finally reaching the conclusion that *there is only one human intellect*. All of us share in its activity, and through its thinking humankind is brought to its highest fulfillment. Averroes' proposal was greeted with derision and hostility in Latin Christendom. The doctrine of "the unity of the human intellect" was officially condemned by church authorities, and no less a writer than Thomas Aquinas composed a detailed attack on Averroes.[1] Not only was his theory self-evidently false in its own right, but it was also wrong as an interpretation of Aristotle.

But before we follow Aquinas in heaping scorn on Averroes's doctrine, we should try to understand it. After all, this was no casual notion mentioned only in passing. Averroes developed it in the longest of his three exegeses of Aristotle's work *On the Soul*. It was one of only three works to receive the full treatment, with an epitome, a running paraphrase, and a "long" commentary. This shows how important it was to him, and also provides an opportunity to see Averroes' ideas developing. It is only in the last, full commentary for *On the Soul* that we find the notorious doctrine that all mankind shares a single intellect. Averroes came to it only after lengthy and careful consideration of both the philosophical and interpretive issues facing him. He must, then, have had very good reasons for his apparently insane proposal. So what were they?

First of all, the idea that there is a single intellect involved in all human knowledge was nothing new. We can go back at least as far as Plotinus. As I explained at several unsuccessful job interviews, he postulated an intellect which is divine but below the absolute first principle, and is identical with the world of Platonic Forms.[2] For Plotinus, human souls come to have knowledge through their relation to this single intellect. This has a clear affinity with the theory we've seen in al-Fārābī and Avicenna, who speak of a so-called "Agent Intellect." They postulate an intellect that gives forms to matter, facilitating the generation of things like sunflowers and giraffes, and is also involved in the process of human knowledge. No doubt their theory did have late ancient roots. But it emerged not so much through reading Plotinus, as from interpreting Aristotle. Following the antique commentators on Aristotle, al-Kindī, al-Fārābī, and Avicenna envisioned a superhuman intellect that enables us to think.[3] They

themselves were thinking of an infamous chapter of Aristotle's *On the Soul* (3.5), which speaks of a "maker intellect" that is like light. Just as light makes seeing possible by rendering things visible, the maker intellect makes thinking possible by rendering things intelligible.

It's worth reminding ourselves why this theory seemed so plausible to so many clever philosophers. For one thing, it made good sense of a difficult and important passage in Aristotle; always a bonus. It also explained how universal knowledge is possible. According to Aristotle, we can only count ourselves as having knowledge in the strict and proper sense when we have universal and necessary understanding. It's hard to see how that can emerge from our experience of things in the world around us, since these things are particular and contingent. Though the details vary from author to author, the single Agent Intellect was always used to explain how we are able to attain universal understanding on the basis of our encounter with particular things. To this extent, Averroes is doing nothing innovative when he invokes a single intellect to explain human knowledge. The new twist is to identify the single intellect with the human mind itself. Averroes' Muslim predecessors may have accepted the existence of a single, universal intellect, but they also believed that each human has their own intellect or rational soul. You have such a power, and so do I. This is why, once you have examined enough giraffes, and once the Agent Intellect lends you a helping hand, you come to understand giraffes and I don't. In your intellect the potential knowledge of giraffes has been realized, while my intellect remains woefully ignorant of giraffes because I've been wasting my time watching television and changing the channel every time a nature documentary comes on.

So we can now say more specifically what Averroes' controversial thesis amounts to. In his long commentary to *On the Soul*, he claims that there is only one, single human *capacity* for universal knowledge.[4] Using the traditional technical terminology, he puts the point by saying that there is only one human "material intellect." Here the word "material" doesn't necessarily mean that we are literally dealing with a physical object, just that we are dealing with an intellect that is potential in character. This is the intellect that can take on an object of thought, the way that a material like wood can take on the form of a table or a toy giraffe. However, one might be tempted to say that this material intellect is material in the more literal sense of being actually connected to a body. This is how Averroes understood the position of his esteemed fellow commentator Alexander of Aphrodisias (397).

A related view was proposed by his esteemed fellow Andalusian philosopher

Ibn Bājja.[5] Averroes' first attempt to explain Aristotle's psychology appears in his *Epitome* devoted to *On the Soul*. Here, he more or less follows Ibn Bājja's suggestion that the material intellect is markedly inferior to intellect properly speaking. Since it gives us only the potential to think about universal truths, why not say that the material intellect resides in our storehouse of particular experiences? After all, it's thanks to your encounters with particular giraffes like Hiawatha that you are able to arrive at scientific knowledge about giraffes in general. Following this line of thought, Ibn Bājja associated the material intellect with the imagination, where we keep and manipulate particular images, like our remembered image of Hiawatha galloping across the savannah. For Ibn Bājja, these imaginary forms prepare the way for what he called a "unification" with the universal Agent Intellect. Once this unification occurs, the human soul is able to think universally, as a good giraffologist should.

In his *Epitome* of Aristotle's *On the Soul*, Averroes expresses his admiration for Ibn Bājja's interpretation, and basically adopts it himself. The view does have its attractions. It makes good sense of the phrase "material intellect" itself, in that the imaginary forms in the soul serve as potential for actual thinking, like wood that is turned into a table. After further reflection, though, Averroes decided he could not accept Ibn Bājja's teaching. Upon revisiting the crucial passages in *On the Soul*, Averroes was impressed by the argument Aristotle gives to show that the intellect has no bodily organ.[6] Aristotle pointed out that the intellect must be able to take on any form, because all things are thinkable. So it cannot have any form by its own nature. Otherwise, it wouldn't be able to acquire that form after not having it. For instance, if the intellect were seated in the brain and if brains are cold, then we would not be able to start thinking about cold after not thinking about cold. Rather, coldness would always be present in the intellect.

Pondering this, Averroes was moved to separate even the "material" intellect more completely from connection to matter. The imagination, as long since established in the medical tradition, is a power seated in part of the brain. If intellect is immaterial, how could it be identified with a bodily faculty, as Ibn Bājja claimed? For this reason, in the paraphrase (the so-called *Middle Commentary*) of *On the Soul* Averroes sets out a second position about the intellect. This time, he adopts something more like the view we find in al-Fārābī and Avicenna. Now the idea is that each human has his or her own material intellect, which is a power completely free of connection to the body. It seems rather mysterious where such a power could come from, if it has nothing to do with the body. Averroes finds the solution in the Agent Intellect, which actually

has to do two things for us. It first gives each of us our power for universal understanding, which is the individual material intellect. Then it activates that power when we unite to it. Of course, as in the earlier theory, this will happen only when we have gone through the necessary empirical investigation, by looking at giraffes, for instance.

Pondering the issue yet further, and probably reading *On the Soul* a few dozen more times just to be on the safe side, Averroes arrives at the realization that this theory makes no sense. At its heart is a confusion about the difference between particular and universal things. That my own particular experiences of giraffes are mine is easy to understand: they are stored in my imagination, and this is seated in my brain. And my brain belongs only to me and not to anyone else, barring the eventuality of grave-robbers stealing it for a mad scientist who wants to build a monster capable of writing books about philosophy. How, though, could my *intellect* belong just to me and no one else, if it has no such connection to my brain or any other bodily organ? And there's another problem. Suppose that, jealous of your expertise, I go off and acquire a knowledge of giraffes equal to yours. Now that both of us are giraffologists, you and I should be having exactly the same universal understanding of giraffes. If this knowledge is truly universal, and not particular, then it can't be that you have one knowledge of giraffes, and I another. Rather, we should be sharing the same knowledge. As Averroes puts it, the thing you are understanding and the thing I am understanding must be numerically identical, not two individuals of the same type (411).[7] Otherwise understanding giraffes would be like seeing giraffes, where it is possible for you to look at Hiawatha, while I look at her cousin Harold. The point is especially clear when we consider the case of one person teaching another. Obviously, it must be the very same knowledge that is first had by the teacher, and then acquired by the student (411–12).

Here Averroes is returning to a fundamental problem that confronts all those who try to follow Aristotle's theory. On the one hand, knowledge is universal; on the other, it belongs to one individual person at a time, and on the basis of individual experiences. How can we explain both of these facts? According to Ibn Bājja and the earliest interpretation offered by Averroes, the material intellect itself is bound up with individual experiences through the imagination. This explains very nicely why you understand and I don't, but it violates the nature of intellect itself, which is supposed to be "unmixed" with the body. The second interpretation of Averroes solves this problem by saying that, despite its name, even the "material" intellect is completely free of connection to matter. But that leaves unexplained how the intellect belongs to one person rather than

another. What we need, then, is to accept the universality of all intellect—even material intellect—while still explaining the obvious fact that different people have the experience of thinking about different things.

Which brings us finally to Averroes' notorious doctrine. The material intellect will be a single, shared capacity for having universal and scientific understanding. It will not be some separate, superhuman thing, but rather the highest power that belongs to humans.[8] Less notorious, but equally vital to Averroes' theory, is his explanation of how it can be that you seem to be thinking about giraffes, while I am not, given that we share the same intellect. Since this experience is particular to you, it must somehow be linked to your body, since it is your body that gives you your particularity. Averroes' solution is ingenious. When the particular thought processes happening in your brain are being used as a basis for universal knowledge, then you have the experience of universal knowing. These thought processes could include not only the imagining and remembering of things you have seen, but also a lower kind of thinking which Averroes calls "cogitation" (476; the Arabic is *fikr* or *tamyīz*, translated into Latin as *cogitatio*). This is not proper, universal understanding, but the active consideration of particular things we have seen or otherwise experienced.

In this way, Averroes manages to have his cake and eat it too. The involvement of faculties seated in the brain takes care of the particular experiences of thinking had by different people, while the single intellect guarantees universality and explains how different people can know exactly the same thing. There is, admittedly, a price to be paid. If all the lower faculties that provide the universal intellect with a basis for its thinking are in the brain, then they will perish along with the body. This means that any immortality humans might have will be rather attenuated. I cannot have any afterlife that is particular to me. Rather, the only sense in which I will exist after death is that the universal intellect is my highest form, just as it is your highest form and the highest form of everyone who has ever lived. That intellect isn't going anywhere: it is eternal, and continuously thinking about all possible objects of thought (448). In order to ensure this, Averroes must say that at every single moment in the history of the world, somebody somewhere is using his or her brain to enjoy a universal grasp of each of the objects of thought. Otherwise, the universal intellect would be idle, at least concerning whichever objects no one is thinking about.

The failure of Averroes' theory to provide for personal immortality was one of the main reasons Aquinas found it unacceptable, not to say outrageous. But, of course, that's no argument against the theory, only a possibly unwelcome

consequence. Realizing this, Aquinas mounted a detailed response to Averroes, fighting fire with fire by providing a careful exposition of Aristotle to show that the Averroist reading was misconceived. But let's leave aside the question of who has Aristotle right, and think about the position in philosophical terms. Aquinas repeatedly accuses Averroes of being unable to explain the individual experience of thinking. As he says several times, we must explain how it is that "this man understands" (*hic homo intelligit*). But this is unfair. We've already seen that Averroes does have a good explanation: when the universal intellect draws on the images and particular thoughts in my brain to have understanding, then it is I who experience the understanding.

A better objection, I think, would be that Averroes is confusing different sorts of universality. We should distinguish between two ways in which a thought could be universal. On the one hand, it might be a universal act of thinking—one shared by everyone. On the other hand, the *content* of the thought might be universal. Consider a parallel case, where I utter a sentence like "giraffes are mammals." My utterance is obviously particular. It is said at a given time in a given place, using my particular mouth. But the sentence is about a universal fact, one that applies not just to Hiawatha or Harold, but to all giraffes. Similarly, I should be able to have a particular thought about a universal fact. This may seem fairly obvious. But it's surprisingly difficult to make sense of what I've just said within an Aristotelian theory of mind. Part of the problem is that matter or body is meant to be the so-called "principle of individuation." In other words, it is what explains particularity.[9] So if intellect is not realized physically, it's hard to see how it could have a particular thought, whatever the content of that thought. A further problem is that, in the Aristotelian tradition, the intellect is supposed to be identical with its object. The material intellect is nothing but a capacity to take on, and indeed to *become*, certain forms. If those forms are universal, then the capacity too should be universal.

So, with his apparently crazy doctrine, Averroes was simply following certain Aristotelian ideas through to their logical conclusion. That isn't to say that his position really is a correct interpretation of Aristotle. But it is a reasonable response to problems that had emerged after many centuries of attempts to understand Aristotle. This is worth emphasizing, because Averroes' view is often taken as a lurch in the direction of Platonism. It's a natural enough suspicion, given that Plotinus too had a universal intellect. But it's also a complete misunderstanding of what led Averroes to his position. To accept the different theory I was just urging—where we have particular thoughts with universal content—Averroes would have had to abandon fundamental premises

of the Aristotelian theory of mind. That just wasn't going to happen, because he was stuck to Aristotelianism like spots on a giraffe.

27

A MATTER OF TASTE IBN ʿARABĪ AND SUFISM

Never let it be said that an obsession with Aristotle prevents you from getting out and meeting people. Take Averroes. There are not one, but two famous stories about his encounters with contemporaries. We've already had the one about his audience with the Almohad emir, and here's the other one.[1] Averroes has heard tell of a young man who received revelatory insight while engaged in a spiritual retreat. He is eager to meet the youth, and upon seeing him gives him a warm embrace. "Yes," says Averroes, and the youth replies, "Yes." Thus far the discussion is going very positively, so Averroes smiles. But the youth now says, "No." Averroes is troubled by this and asks the young man about his revelatory experience: has it taught him the same things that one can learn through reason? "Yes and no," replies the youth, sticking with the succinct approach he's adopted so far. But then he adds, "Between the yes and the no, spirits fly from their matter and heads from their bodies." Averroes is impressed. Like Ibn Ṭufayl's fictional character Ḥayy ibn Yaqẓān, the young man has achieved wisdom without having to study Aristotle or any other books. Averroes can only give thanks to God that he was given a chance to meet this extraordinary individual. The youth's name? Muḥyī al-Dīn Muḥammad ibn ʿAlī ibn al-ʿArabī.[2] Averroes was right in his glowing assessment: Ibn ʿArabī will be honored with the title *al-Shaykh al-Akbar* ("Greatest Master") and recognized as the towering genius of the Islamic mystical tradition known as Sufism.[3]

The story is obviously more flattering to Ibn ʿArabī than to Averroes, and puts the latter's hard-won rational scholarship at a distinctively lower level than the former's mystical vision. So you may not be surprised to hear that it is not Averroes but Ibn ʿArabī himself who relates the anecdote.[4] Here he is looking back on his younger days in his homeland of Andalusia. He was born in the year

1165, in Murcia, and, like Averroes, belonged to a fairly eminent family. He encountered Averroes after his spiritual enlightenment but before he left Andalusia to go east, at the age of 30. He went on the ḥ*ajj* (pilgrimage) to Mecca and never came back, eventually taking up residence as a Sufi master in Damascus. Was he a philosopher? As Ibn ʿArabī himself might say, yes and no. His writings are packed with technical terms borrowed from the philosophical tradition. He also uses vivid imagery to represent concepts familiar to us from philosophers, especially Avicenna. Yet it would be reductive and misleading to see Ibn ʿArabī as an Avicennan philosopher with an unusual flair for metaphor. He thought that the rational methods of philosophy are limited in what they can achieve. He seeks not the well-grounded, logically valid demonstration extolled by Avicenna or Averroes, but rather truths that would seem mere contradictions to such plodding purveyors of rational proof.

One might more plausibly say that Ibn ʿArabī should be credited with bringing philosophy into the Sufi tradition. As I have just mentioned, he does show mastery of philosophical ideas and use them for his own purposes. But it would again be misleading to see him as the first "philosophical Sufi." For one thing, he does not yet present Sufism as an explicit philosophical system. That will be left to his followers, and especially his stepson and commentator al-Qūnawī (Chapter 48). For another thing, philosophy influenced Sufism before Ibn ʿArabī came along. We're in the twelfth century here, by which point Sufism has had a long time to develop. The word "Sufi" derives from the Arabic word ṣ*ūf*, meaning "wool," a reference to the rough garments worn by these mystics. This tells us something about the outward appearance and behavior of the Sufis: like many Church fathers and mothers of late antique Christianity, they were ascetics. And like the Christian ascetics, the Sufis were the subject of an extensive body of literature, with anecdotes highlighting their heroic self-restraint, their piety, their intimate relationship with God, and their indictment of the hypocrisy of fellow Muslims.

Here is an example, which illustrates not only the asceticism of Sufis but also the one-upmanship that often features in this literary genre. A Sufi from Khurāsān tells a Sufi from Iraq how abstemious he and his colleagues are. If God provides them with food, they give thanks, but if not, they go hungry without complaint. The other Sufi says this sort of thing is known in his land of Iraq, too: it's what dogs do there. As for the Iraqi Sufis, when God sends them food they give it away to the needy, and when He doesn't they give thanks. And here's another story, which could easily have been a story about an ancient Cynic philosopher. A prince is told that a man has been climbing around on the

roof of his palace. The prince has the man brought before him, and demands to know what he was doing up there. "Looking for my lost camel," says the man. When the prince laughs, the man replies that the prince is engaged in an equally absurd task, by trying to live a pious life while surrounded by wealth and luxury. In a twist ending you've probably already seen coming, the prince repents and becomes an ascetic.[5]

Perhaps it is not a coincidence that all three ascetic movements—Cynicism, antique Christianity, and Sufism—counted women among their greatest sages. The Cynics had Hipparchia, the Christians heroines like Macrina and Melania, and the Sufis had Rābiʿa al-ʿAdawiyya.[6] Alive already in the eighth century, she played a pivotal role in the evolution of Sufism by introducing a discourse of love and erotic longing for God. We have no surviving writings by Rābiʿa, but some lines of verse are ascribed to her and she is a favorite protagonist in later Sufi literature. In one such literary portrayal,[7] she says that the lover seeks a togetherness with the beloved so intense that nothing separates the two. Someone who consummates such an erotic relationship with God has experienced something that cannot be expressed in language. It is like "taste" (*dhawq*), which became a standard Sufi term for direct contact with God. Other stories tell of how she was oblivious to the beauty of the world around her, because of her exclusive love for God. She remarked that "the love of God inhibits me from the love of His creatures."[8]

Passionate love (ʿ*ishq*) features in the writings of later Sufis, not least in the great Persian poet al-Rūmī. It is also prominent in the most famous of the early Sufis, the mystic martyr al-Ḥallāj, whose name actually means someone who cards wool. (I'm not exactly sure what "carding wool" is, to be honest. Maybe some kind of sheep-related gambling.) Al-Ḥallāj led an eventful life, traveling from his home in the Persian province of Fars to travel widely, including in India, where Sufism would blossom in centuries to come. But he is better known for the grotesque manner of his death in the year 922. After he set himself up as a religious teacher in Baghdad, he ran afoul of the authorities, making a particular enemy of the vizier Ḥāmid, who served the ʿAbbāsid caliph al-Muqtadir. At the vizier's instigation, al-Ḥallāj was imprisoned and, according to one account, burdened with chains, assaulted with stones, and then cut to pieces, with his tormentors removing his hands and feet, then his eyes, ears, and nose. This spectacularly brutal murder was perhaps motivated more by political considerations than doctrinal ones. But certainly al-Ḥallāj shocked fellow Muslims with his teachings. He is most famous for a remark he made to his more moderate teacher, al-Junayd: when he knocked on his master's door, al-Junayd

asked who was there and al-Ḥallāj called out, "*anā l-ḥaqq*": "I am the truth." Since *al-Ḥaqq* is one of God's revealed names, this was a rather shocking remark, and one that the master al-Junayd repudiated.

Another major figure of the earlier Sufi tradition was Abū Saʿīd ibn Abī l-Khayr. He helped to build the social institutions of Sufism, introducing a set of rules to be followed by members of Sufi orders and also the idea of listening to music during Sufi gatherings. This tradition of "listening" (*samāʿ*) is connected to the famous dance of the whirling dervishes. Given that the enjoyment of music was controversial for pious Muslims (as mentioned in), it was bold of Abū Saʿīd to associate music and dance with the asceticism of the Sufis; it even attracted criticism from Ibn ʿArabī. In a kind of foreshadowing of the anecdote that brings together Averroes and Ibn ʿArabī, no less a philosopher than Avicenna supposedly made a visit to meet Abū Saʿīd. The two got on famously, and after he departed Avicenna was asked what he made of Abū Saʿīd. He answered simply, "Everything I know, he sees." Meanwhile, Abū Saʿīd's students similarly wanted to know what he thought of Avicenna. His reply? "Everything I see, he knows."

These earlier figures give us a taste, if you'll pardon the expression, of the richness of, and perhaps the contradictions within, Sufism up to the time of Ibn ʿArabī. These men and women were recognized as sages, admired for their total devotion to God and renunciation of the things of this world. They often received support from the society around them, especially under the Seljūqs, when they were sponsored by the famous vizier Niẓām al-Mulk, patron of the Niẓāmiyya schools. Yet the theology of the Sufis could also provoke hostility, even if it remained largely implicit. Most problematic was the suggestion that the Sufis themselves had attained some kind of divinity. This would be one possible interpretation of al-Ḥallāj's statement, "I am the truth": he was claiming to be identical with God. In fact, we might even take the Sufis to be teaching that the whole created universe is nothing but God. For they often describe the universe, with all its variety and multiplicity, as an illusion or veil concealing an underlying divine unity, which alone is real.

Is this the teaching we find in the much more elaborate and sophisticated works of Ibn ʿArabī? The answer is inevitable: yes and no. He frequently speaks of God as *al-Ḥaqq*, "the Truth" or "the Real," and does present the created universe as a veil that conceals God. On the other hand, the universe is also a manifestation of God. It is the form in which God shows Himself. This sort of idea had occasionally been proposed in antiquity, for instance by the Pseudo-Dionysius, but it appears with unprecedented detail and power in Ibn ʿArabī's

works. His writings attempt to hold two apparently contradictory ideas in a kind of dialectical tension. On the one hand, being or reality is nothing but God, who is utterly one. On the other hand, this single divine reality shows itself forth as a multiplicity of things that are real in their own way.

Ibn ʿArabī was not the first to use philosophical materials in the service of mystical theory. Just think of al-Ghazālī, who apparently saw Sufism as a higher path of understanding than philosophy.[9] But if we're judging by sheer quantity, no one can compete with Ibn ʿArabī. His most ambitious and massive work, the *Meccan Revelations*, has received a modern edition which managed to cover only about a quarter of its chapters in about a dozen volumes.[10] It wasn't really Ibn ʿArabī's fault that he wrote so much. He was just setting down what had been directly revealed to him from a divine source. In the preface to his most frequently read treatise, titled *Ringstones of Wisdom*,[11] he explains that what we are about to read was delivered to him in a dream by none other than the Prophet Muḥammad. Ibn ʿArabī's stories of religious revelation constituted a powerful claim to authority, and a successful one. Much as philosophy in the later eastern tradition will frequently take the form of commentary on Avicenna, so philosophical Sufism will often be presented as commentary on Ibn ʿArabī. His *Ringstones of Wisdom*, far briefer than the gargantuan *Meccan Revelations*, has been the subject of hundreds of commentaries, stretching right down to the twentieth century.

The *Ringstones of Wisdom* consists of twenty-seven chapters, each of which discusses a prophet recognized by Islam. The point of the title is that every prophet is like a different setting on a ring, into which the jewel of God's word is set. This explains why the different prophets bring superficially different messages, despite receiving their prophecy from the same source. The book begins with the first man, Adam, and explains how God created him in order to see Himself in an image. Naturally the last chapter concerns Muḥammad, the seal of the prophets. Ibn ʿArabī's scripturally based method is closely related to his philosophical stance. The core of his teaching is that God is, in Himself or in His essence, unknowable to us. We grasp Him only insofar as he shows Himself to us. This is why mere reasoning, according to Ibn ʿArabī, inevitably tends towards a kind of emptiness, in which philosophers discover that God eludes all language and thought. Ultimately this leads to *tanzīh*, the denial of God's attributes because of His absolute transcendence.[12] Equally, Ibn ʿArabī rejects a contrary tendency he finds in some theologians, *tashbīh*: assimilating God's nature to what God has created. Again, Ibn ʿArabī wants to strike a balance between yes and no, negotiating between the naive positive language of *tashbīh*

and the blank negation of *tanzīh*. This is possible for us only because God has revealed Himself. Ibn ʿArabī is particularly glad to find verses in the Koran like this: "there is nothing like unto Him, and He is the seeing, the hearing" (42:11). In this single sentence we have an apparent case of *tanzīh*—there is nothing like God—and then an apparent case of *tashbīh*—God is hearing and seeing, like you and me.

Ibn ʿArabī's favorite way to explore, if not resolve, these tensions is to consider the divine names. Actually God's names are infinite, but only a finite number have been revealed to us. It is by these names, and these names alone, that we can speak of God. In itself this is not a particularly unusual idea. But in Ibn ʿArabī's hands it becomes a radical notion, because he sees the created universe itself as nothing more nor less than the interplay of the divine names. Each name marks a certain relationship between God and the world He has created, as when He is said to be "merciful" because of the care He shows to His creatures. The reason there are many names is that God relates to creatures in a variety of different ways. This strikes me as an interesting answer to a long-standing philosophical problem, familiar especially from antique thinkers like Plotinus, Proclus, the Cappadocians, and the Pseudo-Dionysius. All these thinkers wanted to say that God or the First Principle gives rise to the universe, but also that He transcends this universe. Various analogies had been proposed as models of the relationship between God and creation. Usually, the analogies involved relations of cause and effect: God is like a light shining forth rays, a mind giving rise to ideas, and so on. Ibn ʿArabī's brilliant and deeply Koranic idea is instead to think of this relationship as that between a thing and its names.

The suggestion has many virtues. It helps to explain how a God who is purely one can give rise to a multiplicity. This most fundamental of puzzles in the Neoplatonic tradition can now be solved, since it is easy for us to understand that a single thing might have many names while itself remaining one. The names can even be in apparent tension with one another, because God can bear contrary relations to things in the universe. Ibn ʿArabī goes out of his way to emphasize this, dwelling on opposed names like "the merciful" and "the vengeful." In God Himself there is no opposition or multiplicity, yet we find conflict and variety in the way He shows Himself, which is to say, in His names. Another advantage is that names have a rather ambiguous metaphysical status. Ibn ʿArabī's handling of this issue turns on a threefold distinction. There is the meaning or bearer of the name, in this case God; then the name in itself; and only then, as a third item, the linguistic expression which we actually utter. He calls this linguistic manifestation the "name of the name," and compares it to a cloak covering the

name of God.[13]

All this captures the situation we find ourselves in, relative to God. Usually we see only an outward, surface appearance of God's self-manifestation. When we remove this first veil we come to God's names, which are the ways in which God has shown Himself, the ways He relates to His creation. But even here, we have not arrived at full-blown reality or being. That would be God Himself, which is why one of His names is "the Truth." Rather, we are here in the realm of "yes and no," a kind of compromise between reality and illusion, between existence and non-existence. This is as real as created things can get, since they are only a manifestation or representation of what is really real, namely God. Ibn ʿArabī has several ways of articulating this idea. One is borrowed from Avicenna. In the idea of a contingent thing that exists by being "necessary through another," Ibn ʿArabī sees an example of the kind of halfway house he is looking for, between genuine being and total non-being. With characteristically beautiful imagery, he talks of non-existent things as suffering from a kind of restriction or constraint, and then finding relief as God "breathes them out" into their state of dependent existence. He refers to this process with a phrase taken from prophetic ḥ*adīth,* the "breath of the Merciful."[14]

Because of the ambiguous and even self-contradictory status of created existence, Ibn ʿArabī thinks it can be best grasped by what he calls "imagination." This is something we access most frequently through dreams, whose conjuring of impossible images gives us a better insight into created "reality" than any Aristotelian syllogism. Consistently with this, when Ibn ʿArabī comes to consider specific philosophical problems he often seems to revel in paradox, especially if he can ground the paradox in Scripture. A nice example is what he has to say about human action. He's well aware of the dispute between the Muʿtazilites and Ashʿarites, with the Muʿtazilites ascribing to humans a power freely to "create" their actions, whereas the Ashʿarites thought that we can only "acquire" actions whose true agent is God. Ibn ʿArabī instead draws our attention to an episode in the life of the Prophet, when the tide of a battle turned after Muḥammad symbolically threw a handful of sand towards the enemy. Subsequently it was revealed to him, "you threw not, when you threw, but it was God who threw, that He might test the believers" (8:17). An Ashʿarite would embrace this Koranic verse as proof that God was really the one who performed the action of throwing. Ibn ʿArabī instead points out that the verse does say to Muḥammad, "when you threw." In other words, Muḥammad did throw the sand, but only *because* God threw it.[15] As always, created things are nothing but a manifestation of divine truth and reality.

There's a widespread perception that philosophy in the later Islamic tradition becomes entirely suffused by mysticism, that rational argument was gradually set aside in favor of a direct vision or "taste" of God, which cannot be put into words. Some celebrate this development, ascribing to Ibn ʿArabī and his heirs the discovery of insights deeper than anything rationalist philosophy can offer. Others lament the slide of Islamic intellectual traditions into paradox-mongering and obfuscation. In fact, things were more complex. Ibn ʿArabī himself saw philosophy as fundamentally limited, yet he wove it into mystical Islam. And though his historical influence would be enormous, it is not as if Sufism and later Islamic philosophy are identical. Sufism will be a major player in the development of philosophy after the formative period, but only one major player, alongside Ashʿarite *kalām* and Avicennism. Nor did the post-formative period lack thinkers who devised whole new ways of approaching and appropriating philosophy. It's a point nicely illustrated by another intellectual of the western Islamic world, who was active in the fourteenth century: Ibn Khaldūn.

28

TEAM SPIRIT IBN KHALDŪN

Practically every movie ever made about sports has the same plot. A team of lovable losers gathers around an inspirational leader, overcoming their previous differences and going on what these Hollywood types call a "journey of self-discovery." Finally, they must face a seemingly insurmountable foe, and are victorious. It's obvious why we like these "zeroes to heroes" narratives: everyone likes to root for the underdog. But how is that we find them plausible? We'll need more than mere suspension of disbelief if a film like *A League of Their Own* is going to persuade us that a baseball team featuring Madonna and Rosie O'Donnell could win games, with or without the help of Tom Hanks. We fall for these stories, I think, because we can't help believing in team spirit. Real-world evidence to the contrary, we persist in thinking that togetherness and solidarity can help the underdogs to overcome any height disadvantage in basketball, any fastball-pitching ace, any collection of overpaid mercenaries who play soccer in Manchester.

And we're right to believe this, according to the fourteenth-century judge, historian, and philosopher Ibn Khaldūn. He developed a simple but powerful theory to explain the rise and fall of empires, caliphates, whole civilizations—and the key to his theory is basically team spirit. The Arabic term he uses for this concept is ʿaṣabiyya, which comes from a verb meaning "to bind or tie together." An ʿaṣaba is thus a group of people who are bound together in "a league of their own," if you will. When he talked about ʿaṣabiyya, Ibn Khaldūn especially had in mind the feeling of solidarity and group identity possessed by tribal groups, such as the Arabs who originally spread Islam. Ibn Khaldūn believed that this feeling of solidarity is the key to explaining both the rise and fall of new political powers. Political changes, he argued, come in cycles. At the beginning of each cycle, a group or tribe achieves military and cultural conquest at the expense of another, fading group. They manage this because their feeling

of solidarity makes them all but irresistible on the battlefield. Having achieved victory, they hand on power to the next generation, which consolidates power. But a taste for luxury sets in, leading to inexorable decline. This group becomes the next fading power, ready to be laid low by another tribe, hungry for domination and inspired by their own group feeling.

Sound familiar? It should, because what Ibn Khaldūn is describing here happened in Andalusia. First there was the Muslim invasion of Iberia in the early eighth century, powered by Berber military strength. This invasion created a protected realm where the Umayyad caliphate could survive after the ʿAbbāsids rose in the East. The western caliphate succumbed to internal strife, and was ripe for the plucking. The Almoravids came storming from the Moroccan desert to reap the harvest, but within a century power was wrested from their grip by the next tribal invaders from northern Africa, the Almohads. By the time Ibn Khaldūn was born, in the year 1332, Almohad control over the western Islamic world, or Maghreb, had already been lost. Christians had succeeded in claiming most of Spain and Portugal, taking the crucial city of Seville in 1248. The south of Spain and the north African lands were still in Muslim hands, but no single power prevailed. Rather, three groups split control of the lands from Marrakesh to Tripoli.

Ibn Khaldūn spent much of his very eventful life trying to help someone— anyone—claim unchallenged domination over the Maghreb.[1] At times he supported the Ḥafṣids, who carried on the Almohad ideology and controlled Ibn Khaldūn's home territory of Tunisia. But at one period he also threw his lot in with the Marinids, who held Morocco. Thanks to a series of political intrigues and embassies, he traveled also to Granada in Andalusia, still under Islamic control. In 1364 he even undertook a diplomatic mission to Seville, to meet with the Christian ruler Pedro the Cruel (which, coincidentally, is what my students call me when they are unhappy with their grades). Ibn Khaldūn traveled east too, to Mecca when he made his *ḥajj* or pilgrimage, and to Damascus. Eventually he wound up in Cairo, which he recognized as the foremost city of Islamic civilization in his day. He died there in the year 1406.

Ibn Khaldūn's project as a historian was in part to chronicle, and explain, the political environment in which he moved. His theory of solidarity, or ʿaṣabiyya, has obvious relevance for the rise and fall of successive powers in Andalusia and north Africa. During his own lifetime Ibn Khaldūn thought he might be witnessing the next power to achieve domination through tribal solidarity. At this time the Mongols were finishing their sweep through the Islamic lands, led by the fearsome Tamerlane. Ibn Khaldūn even met Tamerlane personally, in

Damascus in 1401. He expected that Tamerlane's Mongols might invade and crush the existing powers of northern Africa, just as they had done throughout central Asia and the Islamic heartlands (Chapter 51). Ibn Khaldūn was nothing if not unsentimental in his appreciation of conquest. So, despite the legendary brutality of the Mongol conquerors, he looked forward to the prospect of a united Maghreb under Tamerlane's leadership.[2] It was not to be, thanks to the so-called "slave rulers" of Egypt, the Mamluks, who stopped the Mongol invasion and thus preserved the thriving culture that Ibn Khaldūn enjoyed during his final years in Cairo.

Ibn Khaldūn's theory of political cycles powered by *ʿaṣabiyya* fits Andalusian history so well that it can easily seem a "just-so story," a theory designed to fit a specific historical setting. But he thought it could also explain the fading of the Greeks and Persians, and perhaps most importantly, the original Islamic conquests in the generations after the Prophet Muḥammad. The theory is explicitly based on close observation of history, but also meant to be universal in its applicability, and even to have predictive power. Indeed, when you read Ibn Khaldūn you often have the impression that more recent political leaders could learn something from him. He was doubtful that one can impose a unified political authority on ethnically and religiously diverse populations, because such power will inevitably be destabilized by expressions of *ʿaṣabiyya*, group solidarity. Had the architects of the new political orders in the wake of World Wars I and II been careful readers of Ibn Khaldūn, the rest of twentieth-century history might have been very different.

So, just in case you are going to be in charge of drawing the borders of a new country anytime soon, let's have a closer look at Ibn Khaldūn's theory. It is set out in a lengthy treatise called the *Introduction* (*Muqaddima*).[3] What it introduces is an even lengthier treatise called *The Book of Observations* (*Kitāb al-ʿibar*). Ibn Khaldūn wrote this monumental history in response to the upheaval of his age. The world as he knew it had been had just been reshaped by the coming of the plague earlier in the fourteenth century. It was a good moment to take stock, following the lead of several other historians admired by Ibn Khaldūn, such as the earlier al-Ṭabarī and al-Masʿūdī. They likewise authored vast histories that survive today and provide the basis for modern-day reconstructions of Islamic history. Though Ibn Khaldūn does mention such figures with respect, in general he is rather unimpressed by what passes for the writing of history in his day. Too often it just uncritically repeats fabulous legends. Even the respectable al-Masʿūdī tells of how Alexander the Great had himself lowered to the bottom of the sea in a glass box to look at the monsters

dwelling there. Ridiculous, says Ibn Khaldūn. Not only would anyone who tried to do this run out of air, but even if Alexander had formulated such a plan, he obviously wouldn't have been so foolhardy as to risk his royal person by getting into the box himself.

With such passages Ibn Khaldūn attempts to purge history-writing of that most familiar of intellectual sins in the Islamic world: *taqlīd*. When we are assessing historical reports, common sense is a more important check than the reputation of the sources we are consulting. History should not be verified through chains of transmission, like reports about the Prophet gathered by ḥ*adīth* scholars. It is a science, indeed a branch of philosophy. It shares something with both rhetoric and political theory, but is a unique discipline and one that has never really been practiced correctly, at least until Ibn Khaldūn came along. The very fact that he undertook to write a lengthy theoretical *Introduction* to his history is telling. He presents himself as the first historian who has reflected explicitly on what it means to write about history, and who has explained how it should be done. His *Introduction* explains why and how civilizations arise, the factors that explain variation between one society and another, the structures of leadership that inevitably emerge, the cultural practices that arise once people have settled in towns and cities, and so on. Thus the *Introduction* has a good deal in common with works like Plato's *Republic* and Aristotle's *Politics*. Ibn Khaldūn's account of how dynasties rise and fall is reminiscent of Plato's classification of the types of city, corrupting from one type of constitution to another as the generations pass. At a more detailed level, he agrees with Plato that the expansion of cities is inextricably linked to luxury (§2.1, and see *Republic* 373a–b).

But even if his *Introduction* can be read as a work of political philosophy, Ibn Khaldūn is not in the business of arguing for any particular political arrangement. This is not a "normative" account, an explanation of the best way to run a society. Rather, it is relentlessly descriptive, with Ibn Khaldūn occupying the role of the all-seeing, detached observer rather than the role of political advocate. This is particularly striking, given that he spent so much of his own life advocating one or another political power in the Maghreb. So I prefer to see Ibn Khaldūn not so much as a political philosopher, as a kind of *natural* philosopher. Searching for the causes that underlie dynastic change, he anatomizes society and history with a practiced empirical eye, the way that Aristotle investigated animal life in his zoological works. Indeed, he frequently stresses that the phenomena he describes are natural. As Aristotle had said, the human is a political animal—solitary life is impossible, or nearly so, for

humans.[4]

Furthermore, all the key elements of Ibn Khaldūn's theory of rise and fall are said to be natural to humankind. It is natural that there should be a contrast between the sedentary folk of the city on the one hand, and rootless, country-dwelling folk like the bedouin on the other hand (§2.2). It is natural that social groups—especially the latter kind who are bound by tribal loyalty—will develop and draw strength from ʿaṣabiyya, the feeling of solidarity (§2.8). It is natural that single leaders within such tribes will emerge as kings (§3.21). It is even natural that, once the generation of tribal conquerors has settled down and begun to indulge in city life and its attendant luxuries, decline should set in (§3.44). Hence the entire cycle of dynastic change unfolds in accordance with human nature. We can expect each dynasty to go through five stages (§3.15): first, conquest on the basis of group solidarity; then the emergence of a single ruler; followed by a period of wise rule in which the king looks to the good of his tribe; a period of overconfidence and luxury as rule passes to a new generation; and the final, inevitable collapse of the dynasty, with a new tribal group waiting in the wings to seize control.

Ibn Khaldūn provides many examples to illustrate his theory. As you might expect, the first generations of Islam provide his favorite example of a nomadic tribe that achieves military conquest. Their success was especially due to religious fervor, an ingredient that can intensify and focus the already potent force of group solidarity. The charismatic leadership of Ibn Tūmart, who inspired the Berber Almohad movement, would have provided Ibn Khaldūn with another obvious case. But Ibn Khaldūn says far more about the early Muslims, dwelling not just on their commitment to the cause of Islam, but also on their unrefined virtue and their illiteracy, which he takes as a hallmark of the earliest generation. (The Koran was at first always recited from memory, and only written down under the rightly guided caliphs.) At one point Ibn Khaldūn tells of how the early Muslims were nonplussed the first time they encountered a pillow, which they took for a bundle of rags (§3.13). Like an underdog sports team united by indomitable spirit, these unsophisticated Arabs were able to overcome seemingly impossible odds, time and again defeating far larger military forces.

But their unity was short-lived. When critics asked ʿAlī why the first rightly guided caliphs had ruled by universal agreement, whereas his own leadership was hotly contested, he replied: "Because they ruled over men like me, whereas I rule over men like you" (§3.28). Alongside political fractures within the Islamic community, there was an increasing tendency to settle down. This was no coincidence. According to Ibn Khaldūn's theory, the victorious group

inevitably becomes more sedentary as power is consolidated, often by occupying the cities and towns of the previous, fallen dynasty and taking over their customs. This is the cue for the equally inevitable political decline. Illnesses are apt to breed in the bad air of urban centers (§§3.49, 5.28). When you see citrus trees growing, the end of the dynasty's fortunes cannot be far off, since this presupposes a well-established sedentary culture (§4.18). In the halls of power too, it will be clear that the leadership is running out of juice. The ruler will indulge in luxury and seclude himself from the people, wishing to speak only with intimates who have been chosen for their loyalty rather than their ability (§§3.17, 3.42, 4.6). The military, of course, likewise weakens, something Ibn Khaldūn has observed in the case of the Muslims of Andalusia, who have gone from the conquerors to the vanquished as their armies have shrunk in size (§3.35).

All this may seem to contradict my earlier claim that Ibn Khaldūn is merely describing political processes, rather than evaluating their merits. The contrast between the harsh virtue of the nomads and the soft decadence of the city-dwellers may seem to be an endorsement of the former and condemnation of the latter. But sedentary culture brings many good things with it, too. In particular, the arts and sciences cannot flourish among the warlike nomads. Philosophy and the other intellectual disciplines are most advanced in the cities that have enjoyed the longest periods of stability. In a previous era this would have been Alexandria or Baghdad, but in Ibn Khaldūn's own day it was Cairo (§6.42). No surprise, then, that he wound up living there at the end of his life. Conscious though he was of the political vulnerability of urban culture, Ibn Khaldūn was an outstanding product of sedentary society.

The history of philosophy itself illustrates his theory. It is no surprise, he says, that among Muslims the greatest figures in philosophy and other disciplines, like grammar, have been non-Arabs (§6.42). Overlooking al-Kindī and thinking instead of Persians like Avicenna, Ibn Khaldūn says that the Arabs were too nomadic to contribute to such a quintessentially sedentary art as philosophy. Because the arts and sciences are a hallmark of the settled life, Ibn Khaldūn has much to say about them in his *Introduction*. Some of what he says comes as a surprise. So far he has seemed a committed rationalist, an Aristotelian of history who uses empirical observation to devise a universal theory. Yet he also speaks of such "occult" phenomena as divination by dreams and prophecy, and states unequivocally that those who enjoy such insight have a resource that outstrips human reasoning. He's highly critical, in fact, of thinkers like Avicenna who tried to give naturalistic explanations of prophecy (§6.15).

This fits well with another aspect of Ibn Khaldūn's intellectual outlook: his attitude towards Sufism. Here our evidence points in two, apparently contradictory directions. On the one hand, he issued a legal ruling (*fatwā*) against recent Sufis like Ibn ʿArabī, stating that their books should be burned. On the other hand, in his *Introduction* he frequently speaks positively of the Sufis, and credits them with the ability to achieve divine truth in a way the philosophers cannot. He was also linked to Sufi orders and even buried in a Sufi cemetery. There has been a good deal of controversy about this among modern-day scholars.[5] I think the conflict can be resolved by seeing his judgment of Sufism as analogous to his theory of history. He admires the early Sufis who led lives of simple asceticism, like the Prophetic Companions, and kept to themselves any supernatural insights they achieved. But he condemns more recent authors who have spoken openly of the mystical path (§6.16). This is a corruption of what should have been an honest, straightforward intimacy with God—another slide into decadence and self-indulgence.

So, despite his critique of Ibn ʿArabī and friends, Ibn Khaldūn has a good deal of sympathy with the Sufi approach. He even proposes a general critique of rationalistic philosophy that could help vindicate mysticism (§6.30). According to the Aristotelian philosophers, rational science means thinking universally about things that we have perceived with the senses. Because philosophy always operates with these universal mental conceptions, we can never be sure that there is a perfect match between philosophical teaching and the world of particulars outside. In any case, natural knowledge depends ultimately on our sensory experiences of individual things, so that rational philosophy can never rise above the level of sensation. To do that, an entirely different path is needed, the higher one traveled by saints and prophets.[6]

It may seem strange that the relentlessly empirical and critically minded Ibn Khaldūn should favor mystical insight over reason in this way. Yet even his treatment of Islamic history acknowledges the limits of reason. He admits that, however well his theory may describe the rise of Islam, it must make allowance for the genuinely miraculous nature of Muḥammad's revelation. As a general rule, tribal forces can overwhelm fading powers only after years of preparation and struggle. It took a decade before the ʿAbbāsids were even ready to clash with the Umayyads, for example. So it was a sign of divine intervention that the early Muslim conquests were achieved so rapidly (§3.48). Only after Muḥammad and his early followers passed from the scene did the miraculous character of early Islamic history cease, allowing the usual cycle of dynastic change to play out as normal (§3.28).

In this respect Ibn Khaldūn's *Introduction* is, appropriately enough, a good introduction to the way philosophy will play out in later Islamic history. On the one hand, we will see rational philosophy pursued along Avicennan lines, with all the intensity of a squad of athletes fired up by a great halftime team talk. On the other hand, philosophers will display the same penchant for skepticism found in Ibn Khaldūn, and often on the same basis. Exploiting Avicenna's own rigorous distinction between mental and actual existence, they will wonder whether our concepts are an adequate match for things in the outside world. Such skeptical arguments will help make room for the higher kind of perception discussed within mysticism. The abiding question of the later tradition is not, "Philosophy: yes or no?" but rather, "Philosophy: how far can it take us, and what will carry us the rest of the way?"

29

MATTER OVER MIND IBN GABIROL

Philosophy's history is a winding lane
Upon which we find ourselves partway through Spain.
We've looked at some Muslims, like Ibn Ṭufayl,
With his desert-set autodidactical tale.
To say nothing of Averroes' theory of mind,
Which thinks there's one thinking for all humankind.
But we certainly cannot leave al-Andalus,
Until we've considered ideas among Jews.
So let's stay in Iberia, not in south Tirol,
With a philosopher poet: Ibn Gabirol.

I actually thought about writing this entire chapter in rhyming verse, but decided that this would be lots of work for me, and rather annoying for you. Still, in principle setting philosophy into poetic form is a good idea, and one with a long pedigree. For precedent we can look back to early Greek philosophers like Parmenides and Empedocles, or more recently to Avicenna, who composed poems for his students on logic and medicine. I love that idea. Imagine turning up to a class on introductory logic or at medical school, and being assigned a poem instead of a textbook:

The human has bones also found in the lemur
For instance the tibia, sacrum, and femur.

Putting science or philosophy in poetic form could also be a way of bringing it to a wider audience—the medieval version of social media. Of course, poetry is also far easier to memorize than prose, and the sheer beauty and power of poetic verse can help to make philosophical ideas more compelling. In the case of Ibn

Gabirol, we have a figure who was valued first and foremost for his poetry, at least among later Jewish readers.[1] His poetic masterpiece is also a philosophical work, the *Kingly Crown*, which deals with the transcendence of God and the celestial bodies that move at His command. Like other poems from his pen, the *Kingly Crown* was written in Hebrew, whereas his two surviving prose works of philosophy were composed in Arabic.

Of these two, the more famous is titled *Fountain of Life*.[2] It is often referred to under its Latin name, *Fons Vitae*, because the original Arabic version is lost. Apart from the medieval Latin translation, we have only a summary composed later in Hebrew by the Jewish philosopher Ibn Falaquera. In addition there is another work on ethics, titled *On the Improvement of Character*, which does still survive in Arabic. It's a fascinating text, as we'll see shortly, but it was not as important for Ibn Gabirol's later reception as his poetry and the *Fountain of Life*. One might say that Ibn Gabirol lived on in the later imagination as two separate authors. For Jewish readers, he was above all a great Hebrew poet, renowned especially for his liturgical poetry and a philosophical work in verse called *The Kingly Crown*. For readers in Latin Christendom, he was the author of the *Fountain of Life*. Only in the nineteenth century was it realized that Ibn Gabirol the poet was the same man as the philosopher readers of Latin called "Avicebrol" or "Avencebrol."[3]

His real name was, in Arabic, Sulaymān ibn Yaḥyā ibn Jabīrūl, or in Hebrew Shelomoh ben Yehudah ibn Gabirol. Born in 1021 or 1022 in Malaga, he was educated in Saragossa and gained patronage from another poet, the court official Samuel ha-Nagid. We don't know a great deal about his life, though we learn from his own poetry the memorable detail that he suffered from a misery-inducing skin disease. Even the date of his death is uncertain, though most sources seem to indicate that he died in the 1050s. So, with Ibn Gabirol we're resuming the story of Jewish philosophy in the first half of the eleventh century. We're picking up pretty much where we left off, with Isaac Israeli. Like him, Ibn Gabirol draws heavily on the Neoplatonic tradition.

In Ibn Gabirol's case, there another rather intriguing possible source: the Pre-Socratic philosopher Empedocles. In one of the stranger transformations of the Greek–Arabic philosophical transmission—far weirder than the confusion of Socrates with Diogenes the Cynic, though that is weird enough—Empedocles became the spokesman for a version of Neoplatonic metaphysics. In some Arabic texts he is also presented as the very founder of Hellenic philosophy, teacher of Pythagoras and thus the source of all Greek wisdom. In the theory of this "Pseudo-Empedocles," God creates all things out of a primordial matter and

uses His own divine will as an intermediary in this creative act. Ibn Falaquera, the thirteenth-century philosopher who summarized the *Fountain of Life* in Hebrew, already pointed out that Ibn Gabirol's ideas have a good deal in common with these supposed teachings of Empedocles. In light of this, a number of scholars have identified Pseudo-Empedocles as the main source for Ibn Gabirol's philosophy. Yet he never mentions the name "Empedocles," and it may be that he and the authors who put Neoplatonic words into the mouth of the Pre-Socratic Empedocles were drawing independently on a broader tradition.[4] By the way, I know you're wondering how to say "Empedocles" in Arabic. It's *Anbaduqlīs*, which is fun to say out loud, though not as much fun as my favorite Arabicized name of a Greek philosopher, namely *Furfūriyūs* ("Porphyry").

At the beginning of the *Fountain of Life* (2), Ibn Gabirol asks the question that will, with luck, be answered by the rest of the work: for what purpose was humankind created? Well, I say that Ibn Gabirol asks this question. Actually, the *Fountain of Life* is a dialogue, between an unnamed teacher and an unnamed student (in Latin, *magister* and *discipulus*, neither of which, since we're keeping score, is anywhere near as much fun to say as *Furfūriyūs*). So, the student asks what the purpose of human existence might be. The basic answer is given only a few pages later: it is so that we can achieve "knowledge of all things as they are, and above all knowledge of the first essence" (6), which of course is God. This is the knowledge that is going to be conveyed by the teacher to the student in the rest of the dialogue, with or without the help of *Anbaduqlīs*.

Now, here we immediately have a problem. This way of describing the purpose of humankind is awfully intellectualist. Our whole life, apparently, should be devoted to nothing but knowledge. Yet Ibn Gabirol also wrote the ethical treatise I mentioned, *On the Improvement of Character*,[5] which would seem at first glance to adopt a much more practical approach to human happiness. Like earlier authors such as al-Rāzī, Abū Zayd al-Balkhī, and Miskawayh (Chapter 13), it presents ethics as a kind of medicine, with virtue or good character seen as parallel to bodily health. Ibn Gabirol is highly systematic in his use of this parallel. He treats twenty different character traits, some good and some bad, assigning four traits to each of the bodily senses. For example, the sense of hearing is associated with love, hate, mercy, and hard-heartedness.

This scheme allows Ibn Gabirol to integrate Galenic ethics with the teachings of Scripture. Each character trait, along with its link to sensation, is illustrated by quoting the Bible (37–41). To prove that hearing is connected to hard-heartedness he cites Exodus 9:12, "The Lord hardened the heart of Pharaoh, and he hearkened not." On the other hand, Ibn Gabirol is using the same, originally

Galenic idea found in other Arabic works on ethics: our character depends on the temperament of the body and its humors. If yellow bile dominates, you are likely to be prideful (55) and impudent (66–7), whereas black bile will make you anxious (78). (He doesn't say which bodily humor causes misery-inducing skin disease, incidentally.) The character traits are correlated not only with sensation, but also with heat, cold, dryness, and moisture, the qualities that describe the four bodily humors. Knowing this will help us to fine-tune our bodies and our character, and ultimately to possess the noble traits that please God (48).

So, which is it then? Are we created for the sake of physical and ethical health, as this treatise *On the Improvement of Character* seems to be saying? Or for the sake of knowledge, as stated in the *Fountain of Life*? Well, that may be something of a false contrast. Like the earlier Arabic ethicists, Ibn Gabirol is firmly committed to the idea that virtue means the domination of desire by reason. In fact, he cites Adam's sin in the Garden of Eden as a paradigmatic case of giving in to desire (*Improvement of Character*, 37). So we can harmonize Ibn Gabirol's remarks on the human good in his two prose philosophical works, by saying that in ethics we should make sure that the rational soul is not undermined by lower desire. That clears the way for the attainment of knowledge, a presumably higher goal pursued in the *Fountain of Life*. While this ethical theory does draw on the Galenic ethical tradition, Ibn Gabriol would situate it within the wider context of his Neoplatonic metaphysical system. In agreement with Plotinus and other late ancient Neoplatonists, he understands the soul to be intermediate between the physical world of bodies and the spiritual world of the universal intellect. Also like Plotinus, Ibn Gabirol thinks that God is a completely unified first principle that is beyond this intellectual realm.

With Ibn Gabirol, we are returning to a purer version of Neoplatonism than what we found in Muslim authors like al-Fārābī and Avicenna. God's transcendence above intellect is a good example. Whereas al-Fārābī and Avicenna follow Aristotle in making God a supreme intellect, Ibn Gabirol places his God above all thought and, for that matter, pretty much everything else. In coming to know Him, we are mostly doing something negative: denying that His essence is subject to inappropriate descriptions. Occasionally, Ibn Gabirol will sound a more positive note. He does allow the possibility of special divine, or as the Latin translation says, "theological" characteristics that belong to God (*Fountain of Life*, 104). Usually, though, Ibn Gabirol stresses that God is beyond what we can say or understand. He has a good reason for this, which is that a description always implies a relationship between two things, a subject and the descriptive property that belongs to the subject. For instance, if I say that the

giraffe is tall, I am alluding to two items: the giraffe and its tallness. Since God is absolutely one, this sort of relationship is ruled out in His case.

That sort of point is familiar from earlier thinkers, whether among the original Neoplatonists or the Muʿtazilites. But Ibn Gabirol has a startling new way of seeing the issue. He thinks that whenever we have some feature describing a subject, we can speak of a relation between matter and form. Although no such relation exists in God, this duality appears in all that He has created, including spiritual things like soul and intellect. Thus we have Ibn Gabriol's most distinctive philosophical idea. *Everything* apart from God Himself consists of a subject and its properties, which is to say, of matter and form. Modern scholars call this idea "universal hylomorphism," which may sound like a misery-inducing skin disease but actually comes from the Greek words *hule,* or "matter," and *morphe,* meaning "form." In the Latin tradition Ibn Gabirol was notorious for this claim. Christian philosophers like Aquinas mention him as a useful opponent, to be refuted while proving such things as the immateriality of angels.[6]

We may be rather more sympathetic to Ibn Gabirol. Materialism is respectable these days, in a way it just wasn't in the thirteenth-century Paris of Aquinas. But if Ibn Gabirol is a materialist, he's a materialist of a rather unfamiliar kind. For one thing, of course, he is excluding God from this universal analysis of things into matter and form. But even leaving that aside, this is a materialism which accepts the existence of incorporeal things, like soul and intellect. How can something be made of matter if it is incorporeal? Well, even at the level of our physical world Ibn Gabirol sees a clear difference between matter and body. Bodies inevitably have a variety of properties. For instance, they are extended in space. Or, to say that in the Aristotelian language regularly used by Ibn Gabirol, they have accidents in the category of quantity. This just means that any body will have a certain length, breadth, and depth. These are forms, albeit forms of a basic kind, which must be presupposed if the body is to have other properties like color or temperature. Matter, by contrast, is that which underlies all forms, even the quantitative dimensions (26). It's what you are left with if you perform a thought experiment first suggested in Aristotle's *Metaphysics* (1029a), and repeated by Ibn Gabirol (14): imagine stripping away all the properties and forms from something until nothing is left, apart from the subject to which these forms belonged. That is matter.

Obviously, this sort of matter is rather abstract and difficult to conceive. You wouldn't be able to come upon a heap of matter lying in the middle of a room, since anything you could find in a room would have size, color, weight, and so

on. This might make it a bit easier to believe that there will also be matter in "spiritual" or incorporeal things. But Ibn Gabirol doesn't just ask you to believe it, he argues for it, and at great length. In the third book of his *Fountain of Life*, he provides no fewer than fifty-six arguments to show that there must be some sort of intermediary between God and the physical world.[7] This intermediary level will not have the complete unity and transcendence of God, but neither will it have spatial extension like bodies. Rather it will, as the Neoplatonists argued, consist of incorporeal substances that possess multiple forms. These will, of course, be the soul and intellect. In fact, Ibn Gabriol sees a hierarchy of four levels below God, which consist of different kinds of forms in combination with different grades of matter: intellectual forms in spiritual matter; souls; the heavenly bodies; and finally bodies down here on earth, which are made of the four elements. As these levels proceed down from God they become progressively less unified, like water streaming forth from a fountain and getting more and more muddy (63).

Of course, someone might be willing to agree with Ibn Gabirol and earlier Neoplatonists that there are incorporeal things between God and the physical world, but still question his idea that those things possess matter. Again, though, he has several arguments to offer. One depends on that old Platonist favorite, the idea that the corporeal world is an image or copy of the spiritual world. Given that things in our lower world are fundamentally matter possessing form, presumably the same will go for the paradigms of which these things are copies (217). This line of argument may give rise to a creeping suspicion. Is Ibn Gabriol simply, and simple-mindedly, applying to spiritual things concepts that are only appropriate to bodies? He seems to have given in to a rampant Aristotelianism, according to which even spiritual substances are understood along the lines proposed by Aristotle for physical things. Ibn Gabirol does say a number of things that could encourage this suspicion. In particular, he remarks that matter has the features Aristotle associated with substance. It exists by virtue of itself, it has an essence, and it underlies various sorts of form (13, see also 35, 42, 45; cf. Aristotle, *Categories* 2b).

But on closer inspection, Ibn Gabirol turns out to be following a line of thought already explored by Plotinus.[8] He envisioned the intellect coming forth from his First Principle, the One, in a two-stage process. First, the One produces an effect that is completely simple. Only when this turns back towards the One in an unsuccessful attempt to return to its source does it become intellect properly speaking, by grasping the multiplicity of Platonic Forms instead of the One. Plotinus himself sometimes spoke of the simple principle that becomes

intellect as if it were a kind of matter. After all, like matter, it has a potential or power for realizing forms, in this case by thinking. Tentative suggestions to this effect in Plotinus now become the explicit teaching of Ibn Gabirol. He even suggests that matter has a kind of precedence or priority relative to form. Until matter is on the scene, having been emanated by God, there is no subject that can come to possess a form, and there is no form without a possessor. This is true at each level of Ibn Gabirol's cosmos. Conceptually speaking at least, matter comes first and then receives form. Of course, as Ibn Gabirol would hasten to add himself, this doesn't mean that matter ever actually exists without form. Rather, if you have one you have the other, since matter cannot exist without actually being something and that means having a form. The two must always be created together (334).

This mention of "creation" leads us to a final issue, which may already have been bothering you. None of this seems to have anything to do with Judaism. The transcendent, emanating God of the *Fountain of Life* is very different from the God of the Hebrew Bible. If this has indeed been bothering you, you aren't alone. Later Jewish readers of the *Fountain of Life* objected to its lack of biblical quotations. Its reader would be hard pressed even to tell what religion the author espoused. But Ibn Gabirol did see his philosophy as compatible with Judaism, as we can tell from his poem the *Kingly Crown*.[9] Although it doesn't, say, set out fifty-six arguments in favor of a spiritual world in Hebrew verse, it does resonate strongly with the teaching of the *Fountain of Life*. Especially striking is its praise of God's oneness and transcendence (§§1, 8, 40) and the hierarchical structure of the poem, which ascends through the heavenly spheres and a realm of intellect before ending with God. It also uses standard Neoplatonic imagery, saying, for example, that God creates like sending forth a ray of light (§9; in this case from an eye, not a light source).

Thus does Ibn Gabirol introduce into Judaism the Neoplatonic idea of divine emanation, the way al-Fārābī and Avicenna brought it into Islam. That could lead to still further misgivings. Is his God really a Creator, or rather an automatic cause like a source of light, or indeed a fountain? Certainly, Ibn Gabirol does use the language of emanation to describe the relation between God and His creation. Yet he also gives a central role to divine will, which is said to be a sort of intermediary between God and the intellectual realm (*Fountain of Life*, 335), much as intellect is an intermediary between God and the physical world. Though his *Fountain of Life* does not explicitly address the relation between faith and philosophy, it would seem that Ibn Gabirol saw no tension here. For him, there was no need to choose between Judaism and philosophical theory.

Other Jewish intellectuals of Andalusia were not so optimistic.

30

CHOOSING MY RELIGION JUDAH HALLEVI

We choose some things about ourselves, while others are thrust upon us. I, for instance, did not choose to be born male, American, or devastatingly handsome. Yet two out of these three things happened anyway. Then there are some features of our lives that we usually grow up with, but are in our power to change. Many sports fans develop their allegiance as children, but I became a fan of Arsenal football club more or less on a whim, after noticing that they played near where I used to live in London (which taught me the lesson that even casual choices can lead to great emotional upheaval in the long term). Another example would be religion. Though most religious believers were raised in their faith, it's obviously possible to convert. One can even imagine a person surveying a wide range of religions and picking among them, like someone moving to north London and deciding whether to support Arsenal or Tottenham. Of course, in the latter case the stakes would be considerably lower, and the choice would be far easier, since no sane person would voluntarily choose to be a Tottenham fan.

It is tempting to assume that in the medieval era, when religion was so powerful a factor in defining each person's social group, such a neutral and dispassionate selection between faiths would have been inconceivable. But people certainly did convert from one religion to another in the classical period of Islam, and did so voluntarily. In fact, at least one significant philosopher, Abū l-Barakāt al-Baghdādī (Chapter 42), was a convert from Judaism to Islam. We'll also see al-Ṭūsī, another major eastern thinker, shifting allegiance between different strands of Shiite Islam (Chapter 46). Conversion took place under varying degrees of duress, as with the Jews who were pressured to become Muslims under Almohad rule. Centuries earlier, and across the world from Andalusia, there had been a famous case of voluntary conversion towards Judaism. In the eighth century, a group called the Khazars, whose power was

centered in the Caucasus between the Black Sea and the Caspian Sea, converted to Judaism. It's not clear how deeply this conversion penetrated into Khazar society. The conversion may have been limited to the ruling class, who even issued coins bearing the saying, "There is no God but God, and Moses is His messenger." This, of course, reproduces the Muslim profession of belief, with "Muḥammad" replaced by "Moses."

The conversion of the Khazars inspired a text which imagines exactly the scenario we have been considering, where someone tries to make a reasoned choice between belief systems. Its author was Judah ben Samuel Hallevi, a poet, doctor, and philosopher who lived in Spain from the eleventh to the twelfth century. In his *Kuzari*,[1] he depicts the king of the Khazars adjudicating between the rival claims of four belief systems: philosophy, Islam, Christianity, and Judaism. At the risk of ruining whatever suspense still remains, I'll reveal that the king of the Khazars does indeed decide to convert to Judaism. The choice between faiths is the most famous part of the *Kuzari*, but Judah Hallevi devotes most of the text to a series of conversations between the king and the Jewish advisor, the scholar who persuades him that Judaism has the strongest claim on the king's allegiance. Thus the *Kuzari* is, for the most part, a dialogue between the converted king and this scholar. Nonetheless, the entire work presents a sustained and often polemical defense of the Jewish faith against its rivals, and also of rabbinical Judaism against the enemy within: the Karaite Jews. Hallevi invents spokesmen who argue in favor of philosophy, Christianity, and Islam, but does not deem Karaism worthy of this treatment. Instead, the Karaites are attacked within the dialogue between the king and the scholar.[2]

The *Kuzari* could only have been written by someone who lived in a multicultural and multi-religious society, like Spain under the domination of Islam. Hallevi came from the city of Tudela in the north, as did a man who was his younger contemporary and friend, Abraham Ibn Ezra (Chapter 31). After traveling south, Hallevi won renown for his poetry, meeting and impressing fellow poet and philosopher Moses Ibn Ezra. This launched a career that would see Hallevi becoming a figure celebrated for his expertise in poetry and medicine. For a time he would establish himself as a court doctor in Toledo. But his life was to be a peripatetic one, and not in the Aristotelian sense. When Hallevi was still quite young, possibly even a teenager, the Almoravids invaded from northern Africa and took control of the *taifa* principalities of southern Spain. Even if this was not nearly as unfavorable a development for Jews as the later coming of the Almohads, it still caused some instability for men like Hallevi. Along with Moses Ibn Ezra, he was forced to leave Granada when they

sacked the city. Thereafter he traveled from place to place, first within Spain (Toledo, Cordoba, Almeria), and at the end of his life to Egypt and finally to the Holy Land, where he died in 1141.

Hallevi wrote hundreds of surviving poems in Hebrew, which reflect his sense of the state of Jewry in his own life. His own wanderings might have given him extra reason to focus on the theme of exile, and it was a happy ending to his story that he eventually found his way to Israel, the land glorified in many of his verses. But it was not just the perennial situation of exile that troubled Hallevi. His poems allude to the Jews' vulnerability as Christian and Muslim armies clashed for control of Spain. These same themes animate the *Kuzari*, which places the conflict between faiths in an intellectual setting, as their respective merits are judged by the king of the Khazars. As it develops, the *Kuzari* reflects Hallevi's pride in his own faith and in the Holy Land, as well as his sadness about the tribulations of the Jews. He compares Israel's status among the nations to that of the heart in the body, but adds that, just as the heart is affected by illnesses, so have the Israelites suffered mightily though the ages (108–9).

Another striking feature of the king's judgment in the *Kuzari* is that it is not only religions that bid for his approval. There is also philosophy, a confirmation of the cultural prominence it had attained in Andalusia. Of course, the kind of philosophy envisioned here is that known to Hallevi, not one appropriate to the eighth-century fictional setting. So it is presented as a highly rationalist theory committed to the eternity of the universe, which is depicted as the necessary effect of a remote and impersonal God. Several times, Hallevi alludes critically to Avicenna's view that God does not know about the particular things in our world (36, 198, 200). This view was greeted with widespread opposition among Muslim readers of Avicenna, and Hallevi is likewise deeply unimpressed by it. It's worth noting, though, that philosophy is here presented not just as a list of abstract ideas, which we are being invited to reject. Rather, it is a full-fledged alternative to religion, placed on equal footing with the Abrahamic faiths in the intellectual beauty pageant staged for the king of the Khazars.[3]

Of course, this is a back-handed compliment, if it is a compliment at all. Hallevi is implying that the philosophers see their doctrines as an *alternative* to the three Abrahamic faiths. For them, religions can at best be second-class versions of the truth. Here we see that the universalist rationalism set out by al-Fārābī could not just inspire fellow philosophers like Averroes, who will live in the generations just after Hallevi. It could also provoke pious Jews and Muslims into treating philosophy as a belligerent rival, rather than the friend of faith that most philosophers wanted it to be. In Hallevi's own immediate background, the

universalist approach of a writer like Ibn Gabirol may have seemed to pose a threat within Judaism itself. Thus Hallevi wastes no time in depicting philosophy in a negative light: it is the first option considered by the king of the Khazars as he begins his search for wisdom.

He does so in response to a dream, in which the king has been told that "his intention is pleasing to God, but his action is not" (35). As Hallevi shows the philosopher advertising his intellectual wares to the king, stress is placed on the aspects of philosophy most incompatible with Judaism: its denial of creation, its claim that God is ignorant of particular things, its condescending suggestion that religion could still prove useful for forming the king's habits and keeping his subjects in line, even if it does not establish truth as philosophy does (38). The king reacts unfavorably to some of these proposals, and his own experience also undermines what the philosopher has said. After all, he has just had a vision handed down to him from above, and the philosopher is trying to convince him that he needs to engage in deep study in order to unify with the Active Intellect.[4] The king already has a hotline to God, and the philosopher is telling him to go read the phone-book. More importantly, the king knows from the dream that it is only his actions that need amendment, not his "intention." His failings are at the level of practice, and this is something the philosopher can discuss in only the broadest of terms. This anticipates a theme that Hallevi will later emphasize in opposition to the Karaites. Purity of soul and the sincere application of reason cannot tell us how God wants to be worshipped. For that, we need revelation and tradition. But which revelation, and which tradition?

That's the cue for the speeches of the Christian and Muslim scholars, who enter next. The king finds the Christian religion incoherent, and remarks that in order to believe such things he would need have to been raised in the faith from childhood. Hallevi believes Christianity could never be endorsed by anyone considering it rationally "from the outside." It is the Tottenham Hotspur of the Abrahamic religions. Not much detail is given here as to why Christianity is literally incredible, but perhaps Hallevi has in mind such paradoxical teachings as the Incarnation and Trinity. Once the Christian is sent packing, Islam gets a hearing. This time, the king complains that the main argument for Islam's truth is the miraculous nature of the Koran. But the king cannot appreciate this, since he is not a speaker of Arabic (43). That's a fascinating point for Hallevi to put into the king's mouth. For one thing, it is a much less critical remark than what was said about Christianity. For another, Hallevi himself certainly did know Arabic: the *Kuzari* itself is written in Judeo-Arabic, not in Hebrew. So this rationale for rejecting Islam is not one that could be given by Hallevi himself.

A second rationale given here is one Hallevi would surely share, though: that although the Prophet Muḥammad did supposedly perform other miracles, these were witnessed only by small numbers of people. Far more convincing would be reports about supernatural interventions by God in support of a faith, which were experienced by so many people that no skepticism regarding them is possible. It is this that finally leads the king to turn to the Jewish spokesman, since the Old Testament is full of such miracles, like the parting of the Red Sea. The king does so with some reluctance. He wasn't originally planning to consult the Jews, since he has heard such bad things about them (40). This is one of those passages where Hallevi reflects on the sorry condition of Judaism, embattled by other faiths and disdained by many people. The idea is present even in the official title of the *Kuzari*, which is wonderfully alliterative in Arabic: *Kitāb al-Radd wa-l-Dalīl fī l-Dīn al-Dhalīl*, meaning *Book of Refutation and Proof on Behalf of the Despised Religion*.

The rabbinic scholar manages to convert the king in relatively short order. He refers not only to Judaism's unparalleled arsenal of miracle stories, but above all spurs the king on to consider the historical primacy of the Jewish faith. Echoing claims of primacy already made by Jews and Christians in antiquity, Hallevi insists that what good there is in philosophy derives ultimately from figures of the Hebrew Bible.[5] Philosophy derives ultimately from Adam himself, who passed it on to his sons; I'd like to point out that this makes my last name an appropriate one for a historian of philosophy. Wisdom was then handed on to the Persians and the Chaldeans, and only then to the Greeks and Romans (53, 124). No wonder that the teachings we find in Aristotle are to some extent garbled and false. His culture had a far less direct connection to this great tradition of learning than the one enjoyed by the Jews. To illustrate, Hallevi again mentions the philosophers' conviction that the universe is eternal. Anticipating Maimonides, he states that reason can prove neither the eternity nor non-eternity of the world (54), so that only prophetic testimony can decide the issue.[6] But poor Aristotle didn't have the benefit of such testimony.

This passage is typical of Hallevi's stance regarding philosophy. Instead of unrestrained, anti-rational polemic, he offers a careful diagnosis of reason's limits. Without teachings sent from God and preserved through authentic tradition, there is no way to transcend these limits. So nuanced is Hallevi's attitude that he even cites Hellenic sources in support of his own position and against the confident knowledge claims made by the philosophers of his own day. He quotes the Hippocratic maxim "life is short but art is long" (248), as well as Aristotle's uncharacteristically poetic remark that in our search for

wisdom we are like bats blinded by the light of the sun (214, quoting *Metaphysics* 993b). Hallevi also alludes to a passage from Plato's *Apology* (20d), in which Socrates claimed to have only human, but not divine, wisdom (218, 272). Here one may be reminded of the ancient Skeptics. Taking Socrates as a model, they were similarly hesitant about what humankind can know.[7] Hallevi even refers to the incessant disagreement between various philosophers as a way to undermine their theories, another tactic frequently deployed by the ancient Skeptics (273). Like Aristotle, but unlike the Jews, the ancient Skeptics had no access to a tradition based on prophetic revelation. So from Hallevi's point of view they were right to suspect that doubt could never be overcome.

Hallevi's insistence on the need for tradition also lies at the heart of his critique of another group of opponents: the Karaites, who rejected the authority of the oral tradition preserved in rabbinic texts such as the Mishnah and Talmud (Chapter 5). A letter survives in which Hallevi modestly says that his *Kuzari* is a mere trifle, which he wrote only to win over a so-called "heretic."[8] Scholars tend to think that this refers to a Karaite opponent, and the *Kuzari* does indeed take aim at the Karaite Jews. Against them, Hallevi insists again that the resources of human reason are insufficient. How could we use it to discover the rules governing the ritual sacrifice of animals? No amount of reasoning will lead us to the right answer, so we must turn to tradition. Unsurprisingly, by relying on their individual judgments the Karaites are beset by mutual disagreement, just like the philosophers. This is in stark contrast, Hallevi proudly states, to the harmony found amongst the rabbinic scholars (170). This is scarcely a persuasive move on Hallevi's part, since the Talmud in fact records in great detail the disagreements and disputes between scholars, rather than setting out a single body of unchallenged teaching. Hallevi could, however, turn this to his advantage. The sages may have debated among themselves, but ultimately the truth emerged as a consensus view.

What distinguishes the rabbinic Jews from both the Karaites and philosophers, then, is not a blanket rejection of reasoning. Rather, it is the insistence that reason must at the very least be supplemented by wisdom passed down through an inspired tradition. Nonetheless, Hallevi can on occasion sound like a convinced anti-rationalist. He castigates the Karaites for reasoning about Scripture at all, citing the biblical text, "there is no wisdom nor understanding nor counsel against the Lord" (Proverbs 21:30, cited at 164, cf. 183). Elsewhere, he emphasizes the features of nature that cannot be understood or reproduced by humans. We cannot anticipate, for example, when an egg might be spoiled and unable to hatch (181). For that matter, even nature, whose complexity already

outstrips human understanding, cannot suffice as an explanation for the creation of humans. After all, humans are capable of rationality and thought, so how can they be the results of a mindless natural process? Only divine causality provides a sufficient explanation (56). Likewise, he unfavorably compares Aristotle's speculations in zoology to the more profound observations about animals laid down in the Jewish law (122).

Yet, in still other passages, far from contrasting the deliverances of reason to prophetic truth, he says that prophecy corrects our false beliefs *in the same way* that reason can correct our naive, everyday beliefs. It is only through careful reasoning that we would be able to disprove the possibility of void space, or realize that every body is in principle infinitely divisible (178). Both of these claims are familiar from Aristotle's natural philosophy. Hallevi also likes to use philosophy against itself, sounding like many a Platonist when he says that the soul's connection to matter is what prevents it from attaining knowledge more easily (206). Ultimately, then, Hallevi believes not that the philosophers are wrong to seek truth or that they have been wrong about everything. But they are bound to make mistakes and fall short of their lofty aims, because they do not avail themselves of divine assistance.

If this is all sounding familiar to you, it may be because you were king of the Khazars in a former life. Or more likely, it's because you remember the chapters about al-Ghazālī. Hallevi delivers a nuanced critique of Aristotelian philosophy: like the king himself, it is admirable in its intentions, but arrogant and misguided in carrying out these intentions. It's no coincidence that this is highly reminiscent of al-Ghazālī.[9] As Ibn Ṭufayl informs us, al-Ghazālī's works were known in Muslim Spain. These were apparently used by Judah Hallevi to formulate his critique of philosophy. A particularly striking parallel is Hallevi's accusation that, for all their boasts about reason, the philosophers in fact engage in *taqlīd*. This may be a fair accusation against some strict Aristotelians. But it is almost comically inapposite as a critique of Avicenna, the chief target of both al-Ghazālī and Judah Hallevi, and anything but an uncritical follower of authority. Indeed, if Avicenna could have read the *Kuzari*, I imagine he would have been happy to throw the accusation of *taqlīd* back at Hallevi himself. It is, after all, Hallevi who insists that one must depend upon tradition in seeking the truth! Of course, Hallevi would insist that his tradition is supported by divine revelation, as proven by numerous miracles. Not for the first time, we see that one man's *taqlīd* is another man's humble submission to the guidance of rightful authority.

31

BORN UNDER A BAD SIGN FREEDOM AND ASTROLOGY IN JEWISH PHILOSOPHY

If Abraham Ibn Ezra didn't have bad luck, he would have had no luck at all. He was born under a bad sign, as he reports in a poem he wrote about his unfortunate time of birth. Had he become a candle-maker, the sun would never set again; if he were a dealer in shrouds, people would stop dying.[1] When Ibn Ezra spoke of his bad birth sign, he meant it quite literally. He was a convinced astrologer, a subject on which he wrote numerous works, and he believed that all events here on earth, involving individuals both great and humble and entire nations, are steered by the heavenly bodies. They say that there's nothing new under the sun, and Ibn Ezra's belief in astrology is a good example. Scientists of antiquity, notably Ptolemy, contributed to both the science of astronomy and what most people would now consider to be the pseudo-science of astrology.[2] Astrological teachings came into the Islamic world not only from Hellenic culture but also from India, and the science assumed great cultural importance. Like the Roman emperors, caliphs used astrology for imperial propaganda. And like the philosophers of the Roman empire, thinkers of the Muslim world combined astrology with the cosmological teachings of Aristotelianism and Platonism.

Astrology was already a major interest of al-Kindī, and he helped to launch the career of one of the most important early astrologers, Abū Maʿshar al-Balkhī. Abū Maʿshar, like al-Kindī, drew on philosophy to give a methodological and cosmological rationale for this science.[3] This is not to say that all philosophers of the Muslim faith accepted the validity of astrology. It was criticized, even mocked, by al-Fārābī. Avicenna also wrote a refutation of the claims of astrologers. We find a similar situation among Jews, with both advocates and critics of this science of the stars. In the century before al-Kindī and Abū

Maʿshar, there was already a major Jewish astrologer named Māshāʾllah. (His works and those of Abū Maʿshar, in Latin translation, would go on to exercise considerable influence in medieval Christendom.) But it would be in Andalusia that astrology really came to the fore as a subject of debate between Jews. It was a question of considerable philosophical interest, since astrology seemed to undermine human freedom, yet was also often considered to have a solid foundation in Aristotelian natural philosophy. This chapter is devoted to three thinkers of twelfth-century Andalusia who contributed to that debate. First, the aforementioned astrological hardliner Abraham Ibn Ezra. Next will come Abraham Ibn Daud, a philosopher whose major work, *The Exalted Faith*, is an exploration of the question of human freedom. After these two Abrahams, it will make sense to turn to a Moses: Moses Maimonides, that is. He wrote a withering criticism of astrology, and went so far as to blame astrological activities for the ancient misfortunes of the Jews.

Our first thinker, Abraham Ibn Ezra, had plenty of reason to suspect that he was star-crossed. Like many other Jews of Andalusia, including Maimonides, Ibn Ezra was forced to flee his home when the political situation there became untenable under the rule of the Almohads. This personal misfortune for Ibn Ezra became good fortune for the Jews of Christian Europe. Ibn Ezra was one of the earliest authors to expose Jews in France and Italy to the highly advanced culture of Arabic-speaking Andalusia. As Ibn Ezra traveled far and wide—to Rome, Lucca, Rouen, and even London—he encountered Jewish communities who were in need of guidance in both religion and science. But these co-religionists knew no Arabic, so he wrote for them in Hebrew. Most important for the history of Judaism were his commentaries on the Bible. He presented these as an improvement on all other available commentary. He judged the early medieval commentaries of the Geonim, like Saadia Gaon, to be full of extraneous matter drawn from non-religious science. Meanwhile the Christians' attempts to understand the Bible were marred by an excess of figurative and symbolic exegesis.[4] Ibn Ezra, by contrast, claimed to strike the right balance between explaining the surface and underlying meanings of the text.

He lamented the decline of expertise in the Hebrew language among his readers, and indeed all Jews since the nation had been exiled from the promised land so many centuries ago.[5] To remedy this, he offered detailed analysis of difficult grammatical points and vocabulary in Scripture. As a product of the cutting-edge culture of Andalusia, he could also weave scientific points into his commentaries when appropriate, which happened more frequently than you might expect. For Ibn Ezra, being a good biblical commentator was like being a

good Hollywood journalist: you need intimate knowledge of the stars. Take, for instance, the timing of Jewish holidays. Ibn Ezra used his astronomical knowledge to refute Karaite claims about the Jewish calendar. Against them, Ibn Ezra was able to show that the resources of rational astrology are by themselves insufficient to settle all questions concerning the calendar, which means that we must depend on the authority of the rabbinic teachings recorded in the Talmud.[6]

Ibn Ezra also saw astrology as central for understanding the plight of the Jewish people, whose exile is due to the malign influence of Saturn. In this sense, all Jews are born under a bad sign, to such an extent that an individual Jew's horoscope can be trumped by the more general misfortune that has befallen his people as a whole. Thus a Jew whose time of birth indicates kingship will manage to reach a position within a royal court, but not actually sit on the throne himself.[7] He also invoked astrology when explaining God's description of himself to Moses as the liberator of the Jewish people. This may seem to be a case of God damning Himself with faint praise, since He could have called Himself, for instance, the Creator of all things. (Read the end of the Book of Job if you want to see God itemizing a more impressive résumé.) Ibn Ezra says though that the liberation of Jews was truly miraculous, since it overturned otherwise irresistible astral influence.[8]

Interestingly, Ibn Ezra presented these ideas in a debate with his colleague and acquaintance Judah Hallevi. Theirs was a remarkable relationship, given that Hallevi and Ibn Ezra seem to stand at opposite ends of the intellectual climate among Jews of this period. In his *Kuzari* Hallevi emphasized the limits of reason, one factor which underlay his dismissal of astrology—a sharp contrast with Ibn Ezra's account of God's relationship to the Jewish people in terms of astral influence. Of course, astrology had more quotidian uses too. In addition to casting birth horoscopes like Ibn Ezra's, which forecast that bad luck and trouble would be his only friends apart from Judah Hallevi, one could also use astrology to make day-to-day decisions. Wondering whether to take a journey? Worried you might be getting ill? Hoping to find the location of some buried treasure? The stars will give you the answers to such questions, or at least, a qualified astrologer will once he has consulted them.[9] With this kind of help, we have a better chance of leading a healthy, successful life. For instance, you might use the stars to see that an illness is indicated for you, and change your diet to ward it off. Ibn Ezra hastens to stress, though, that a righteous person will be even more securely guarded against suffering and distress. For the righteous are protected by divine providence, a more powerful ally than any skill in astrology.[10]

Here Ibn Ezra seems to be suggesting that it is, after all, possible for human beings to escape astral influence. The astrologer may still fall ill, but because he's been watching what he eats and drinks his symptoms will at least be milder. By contrast, the righteous man seems to have transcended the sphere of physical influence entirely, enjoying a beneficial influence that comes directly from God rather than suffering the malign influence of the stars. Evidently, when God wants to look after His favored servants He can run rings around Saturn. This question of how much influence the stars do have on us, and whether we can elude that influence, usually arises only implicitly in Ibn Ezra. But it is front and center for our next twelfth-century Jewish author and the second Abraham of this chapter.[11] I now want to look at Abraham Ibn Daud, who lived about a generation before Maimonides, and paved the way for him by showing how Judaism and Aristotelianism could be harmonized.

He may also have paved the way for the further journey of Aristotelianism into Christianity. It seems likely, though not certain, that Ibn Daud is the same man as the Jewish scholar who was known in Latin as "Avendauth." In the city of Toledo, this Avendauth worked with the Christian translator Dominicus Gundissalinus to produce Latin versions of Arabic philosophical works. We know that Ibn Daud did travel to Toledo from his home in southern Spain, in what may have been another case of flight from the Almohads. Assuming that Ibn Daud and Avendauth were the same man, he should on this basis alone be recognized as a significant contributor to the history of philosophy. As we'll be seeing in the next volume of this series, the transmission of scientific and philosophical thought from Arabic into Latin had a huge impact on Christian medieval philosophy, just like the earlier introduction of Hellenic philosophy into Arabic—and, for that matter, like Ibn Ezra's dissemination of Arabic philosophical literature among the Hebrew-reading Jews of Christian Europe.

Aside from his possible role in the Arabic–Latin translations, Ibn Daud's main achievement in philosophy is a book called *The Exalted Faith*.[12] It was written in Arabic, but that version is lost, so it can be read today only in later Hebrew translations. The goal of the work is not unlike that of Maimonides' most famous philosophical treatise, *The Guide for the Perplexed*. Like Maimonides, Ibn Daud wants to resolve tensions that seem to arise between Aristotelianism and Scripture. Thus he often emphasizes the agreement between philosophy and revelation, following Saadia Gaon's lead by mining Scripture for examples of the ten Aristotelian categories (17b), and confidently identifying angels with the heavenly intellects of the Aristotelian system as it has come down to him (200b). His method is usually to establish philosophical doctrines

rationally, and then quote Scripture in confirmation of those doctrines.

Having said that, Ibn Daud's *Exalted Faith* is not on a par with *The Guide for the Perplexed*. Of course, Ibn Daud is a less powerful and original thinker than Maimonides—who isn't? But I mean more that *The Exalted Faith* is directed at a narrower question. This is a guide for people perplexed specifically about free will. He identifies such puzzlement over this issue as the occasion for the whole work, and returns to solve it at the end, seeking to vindicate both human freedom and divine providence. In between Ibn Daud runs through a wide range of topics, pausing occasionally to criticize his predecessors, especially Ibn Gabirol. He believes that we can only understand human freedom if we have first grasped the principles of Aristotelian cosmology, the nature of prophecy, the sense in which our language applies to God, and so on.

When it comes to free will and the stars, Ibn Daud agrees with Ibn Ezra that events in our earthly realm are indeed caused by the heavenly motions (156a). He speaks in rather astrological terms of the "powers" exercised by individual heavenly bodies. But he does not go into anything like the detail provided by Ibn Ezra, who was willing to explain exactly which stars have which effects, for instance by heating and cooling objects down here where we live. That fever you have, for instance, might have been caused by Mars, which stirs up hot yellow bile.[13] (It can't be a coincidence that you can also make yourself ill by eating too many Mars bars.) Unlike Ibn Ezra, Ibn Daud frequently invokes the Agent Intellect, or "giver of forms," familiar from Muslim thinkers like al-Fārābī and Avicenna (103b, 119b, 158b). It might look like Ibn Daud has too many explanations on offer here. Is it the stars that cause things to happen through physical means, or rather the celestial intellect that does so by giving forms? But as Ibn Daud points out, two kinds of cause is exactly the right number. As every Aristotelian knows, substances are combinations of matter and form. The role of the Agent Intellect is to give form to suitably prepared matter, whereas physical processes—the ones ultimately caused by the stars—prepare the matter. He draws a comparison to the building of a ship, which requires not just physical labor but also the guiding principle of the idea of a ship in the shipbuilder's mind (145b).

Because the stars' motions play such a crucial role in causing things to happen in our lower world, and because their motions are caused by God (146b), Ibn Daud sees the heavens as the instruments of divine providence. They are, he says, the "servants of God's decree" (91b). It may seem obvious to us that this "mediated" conception of divine action is problematic. Not only does it abolish any direct connection between God and most of His creatures. It also apparently

leads to determinism. Everything will necessarily flow forth from God, His influence cascading relentlessly and inevitably down through intermediary principles, like water rushing down the levels of a fountain. Yet Ibn Daud thinks the exact reverse. It is precisely the presence of intermediaries in his cosmic system that allows for free will and contingency in our lives. His rationale is that God, being simple, can give rise only to a simple effect. Here again is the "only one from one" principle criticized in al-Ghazālī's *Incoherence of the Philosophers* (Chapter 21). For Ibn Daud, the principle means that God cannot give rise to opposed contraries. Being simple, He cannot, for instance, create both black and white. This, presumably, is why God doesn't publish His own newspaper. More to the point, God cannot give rise to both good and evil, which is one reason He must be absolved of responsibility for evils in our world.

Another reason is that evils are, for Ibn Daud, associated with privations. Following a tradition that goes back to Plotinus, he sees evil as the lack of goodness, especially in the human intellect. And again, privation is not the sort of thing that could be caused by God. Ibn Daud illustrates this with a memorable example: God does not need to create the absence of an elephant in Spain (202b). We might say that, for Ibn Daud, the problem of evil is the elephant that is not in the room. It is simply impossible for God to give rise to evils, so we must explain evil with reference to other causes. These will be the intermediary, heavenly causes that affect our world more directly. The movements of the heavens and the emanation of forms from the Active Intellect bring about natural and chance events. Human actions are not steered by these natural causes, though. Rather, we act voluntarily (207a). Like all good managers, the God of Ibn Daud's philosophy is willing to delegate. He oversees a providential order by appointing the heavens as His deputies, and then gives humans the capacity to act of their own accord.

Ibn Daud walks a careful line with respect to astrology. His system shows that the stars do cause some events, so that there could be a basis for this controversial science. But it also ensures that we humans are not the mere playthings of the stars. A far more hostile line was taken by Maimonides. We'll be turning to him properly in Chapter 33, but here and in the next chapter we'll already get a glimpse of his wide-ranging and influential writings. Most important for the topic of astrology is a letter he wrote to some Jews in Provence, who had solicited his opinion on this very subject.[14] Maimonides' response is unequivocal: whereas astronomy is an admirable science, the claims of astrologers are entirely baseless and false. Their supposed art even played a decisive role in the tragedy of the Jewish people. He blames the destruction of

the Temple on the idolatrous practices of astrologers among early Jews, who placed their trust in the stars when they should have been arming themselves against their enemies. Maimonides also sees a close link between astrology and idolatry, a somewhat unfair accusation, given that in his own era astrological beliefs had been carefully woven into the fabric of Judaism by authors like Ibn Ezra.

But Maimonides' diatribe is not solely religious. He explains to the rabbis in Provence exactly why astrologers cannot predict the future as they claim. Like Ibn Daud and other Aristotelians of the Islamic world, Maimonides accepts that the stars do have an influence on our world. For him too, the heavens are the servants and instruments of divine providence. But he follows the ancient commentator Alexander of Aphrodisias in thinking that the stars only bring about the general regularities of nature.[15] In Aristotle's jargon, the celestial world perpetuates species, but does not bring about events at the level of individuals. In my jargon, the stars ensure that there are giraffes, without ensuring that Hiawatha has blue eyes. Individual events, according to what Maimonides states as the common consent of "the philosophers," are simply down to chance. So they cannot be predicted by astrologers. Maimonides himself prefers a different view, albeit one with the same consequences for astrology: individual events are brought about by divine providence, but not through the influence of celestial motion. Using an example from Talmudic literature,[16] Maimonides says that it is not the stars that determine that Reuben is a poor tanner whose children have died whereas Simon is a rich perfumer with a healthy family. Rather, this is a matter of chance, if the philosophers are to be believed, or alternatively the will of God, which is the teaching of faith.

Once the claims of astrology are falsified, we can rest assured that there is room for free human action. The heavens bring about only the continuation of natural species, and the operation of chance or divine providence would not impede our capacity for choice. Not that this settles all the issues we might be worrying about. In particular, if divine providence does oversee the lives of individuals, as Maimonides suggests, Reuben the childless tanner will want to know why his lot in life is so much worse than that of Simon the perfumer and family man. In this letter on astrology Maimonides only briefly alludes to his preferred answer: suffering is sent as a punishment or to allow for a later, compensating reward. Elsewhere he expands on this problem of suffering at great length (Chapter 38). For now, I want to look at a rather different question: let's assume that Ibn Daud and Maimonides are right, and that we do have free will. In that case, what should we do with it? To find out, we must turn to a

different branch of Jewish philosophical literature in the lead-up to Maimonides: ethics.

32

WITH ALL YOUR HEART ETHICS AND JUDAISM

One day, a silent-film comedian named Charlie decided he wanted to kill a rival for the affections of the girl he was sweet on. He chose a weapon that had served him well in the past: a banana skin, to be dropped on the street just in front of an open manhole as the rival passed by. But at the last minute the rival veered away to buy a newspaper, escaping harm and not even noticing his brush with death. As fate would have it, across town another silent-film comedian, named Buster, was also plotting murder most foul. He too wanted to bump off a rival, and likewise selected a banana skin as his instrument. In this case the plan worked, and the rival slipped to a sewery doom. Buster thought it was the perfect crime, but he was arrested and, at the trial, the banana skin was presented in evidence, covered with his fingerprints. (Yes: he lost on a peel.) Fate was not yet satisfied, though. On that very same day, a third comedian named Harold finished eating a banana and negligently tossed the skin onto the street rather than depositing it in a litter basket. A complete stranger happened by, slipped on the banana skin, and fell into an open manhole, to Harold's horror.

How should we judge our three comedians from an ethical point of view? Should we evaluate their actions on the basis of their intentions, or the consequences their actions produced? If we go with intentions, then it looks like Buster is no worse than Charlie. Both of them intended to kill their rival, and the fact that Buster succeeded is a matter of luck. Yet, at least in the law, we do place some weight on consequences. Charlie would be guilty of attempted murder, and face a lesser sentence than the successful murderer Buster. On the other hand, if it's consequences that matter then it looks like Harold should be blamed for bringing about a death, even though he had no intention of doing so. And maybe we do blame him, at least a little. Certainly he's guilty of littering, and we might think he has an obligation to be more careful with his banana

peels. It seems abundantly clear, though, that he is less morally blameworthy than Buster, who deliberately killed someone—despite the fact that the outcome of their actions was the same—and for that matter, less blameworthy than Charlie, who sought to kill but failed.

Our examples seem to show two things. First, there may be a case for restricting the possession of bananas by silent-film actors. Second, in moral deliberations both intention and consequence matter. This applies to the good just as much as the bad. If I intend wholeheartedly to *save* someone's life, but don't manage it, I will not be seen as a hero. But neither am I a genuine hero if I save someone's life, but without meaning to, or out of the wrong motive. Imagine someone who rescues a drowning child solely in the hope that the child's parents will offer money as a reward. So goodness has both an external and an internal aspect. It's not enough to do the right thing, you must do it for the right reason. This is the central point of a wonderful treatise which gets too little attention from historians of philosophy: *The Book of Direction to the Duties of the Heart*, written at the end of the eleventh century by a Jewish philosopher of Andalusia, Baḥya Ibn Paquda.[1] We don't know much about him or his life, apart from the fact that he served as a judge. But Ibn Paquda's treatise on the duties of the heart became a favorite text among later Jews, a highlight of what is sometimes called "pietistic" literature.

Ibn Paquda explains the purposes of his treatise in the same terms I have just used, by saying that good actions—the actions that are pleasing to God—have an internal as well as an external aspect (89, 97, 183, 260, 367). Whether we are performing a religious ritual or helping a neighbor, we cannot simply go through the motions. We must act sincerely, avoiding any taint of hypocrisy. Though this may seem a rather obvious point, it is one Ibn Paquda thinks has been widely ignored in the writings of his co-religionists (88). They have written only of our outer duties, such as the motions and actions to be performed in sacrifice or in our relations to other people. But they have barely touched upon the internal duties, the duties of the heart, and these are limitless (184). In concentrating on the obvious, the visible, the external, previous authors have missed what is decisive in good action, which is like focusing on the expression of words at the expense of their meaning (388).

This is the gap Ibn Paquda wants to fill, by giving his readers guidance and encouragement in purifying their desires, intentions, or will—what he calls the "heart." For him, the actions we perform and their consequences do matter, but not nearly as much as the intentions that underlie them. In fact, he insists that a good intention that is thwarted "may be balanced against many a good deed

carried out by others" (99). So his treatise is a work of ethical exhortation and advice, which should bring us to have the right intentions. It is, however, not a general work of ethics. The context is explicitly a religious one, not only because Ibn Paquda frequently quotes Scripture and Jewish legal texts, but also because the duties he has in mind are laid on us by God. As we've seen in previous Rabbinic polemics against the Karaites, human reason is not in a position to discern the full range of our obligations (186). This is why the Law was revealed. Different people are given different duties, corresponding to the blessings God has given them. God expects more from those who can do more, and from those He has helped. Thus, the Jews have many external duties, such as the obeying of dietary laws, that other people do not have, because it was the Jews whom God delivered from Egypt to the promised land. Likewise, prophets are placed under obligations to God that do not apply to the rest of us (204–6).

But of course, Ibn Paquda is not here to tell us about the external duties required by the Law. That is what earlier authors have done. Rather, he is here to explain what it means to have good intentions, and how we can develop them. So the theological presuppositions of the work do not prevent Ibn Paquda from making use of a wide range of ethical material. Some of this is drawn from popular philosophical literature. In the previous volume of this series, I mentioned that Seneca tells an anecdote about Plato, in which he refused to beat a slave on the grounds that he was still angry.[2] This story reappears in Ibn Paquda, but is assigned to an anonymous ruler rather than Plato (305). It's only one of many memorable and compelling stories offered by Ibn Paquda. Maybe my favorite is a parable about a city in India, where the people would choose a new king each year, but then without warning exile him. One canny ruler discovered what the people had in mind. So he used his time on the throne to seize wealth from the city and send it abroad. When he was exiled, he happily went off to find his amassed wealth waiting for him. In the same way, we should spend our limited time on earth focusing on a heavenly reward, rather than a fortune in this life (213–14).

As the use of such stories suggests, Ibn Paquda is the most user-friendly of writers. He even presents his advice in the form of numbered lists, to make them easier to memorize. And that advice is deeply humane. Admittedly, he demands much of his reader. Every action we perform, no matter how small, should be performed in such a way as to please God. He often compares our relation to God to that between a subject and a king, or between a servant and a master (e.g. at 429). He assumes that a perfect servant will think of nothing but the interests of his master. Still, Ibn Paquda realizes that this is expecting a lot, and identifies

many steps we can take along the path to that goal. Ideally, we should be motivated by obedience to and love for God, yet Ibn Paquda often gives us other reasons that we might find more persuasive, given our human frailties. It is better to act rightly, even if we only do so in hope that God will reward us with wealth or a large family. Only at a higher stage of ethical development will we learn to make our happiness independent of such things. Here it is instructive to compare Ibn Paquda's stance to that of the Stoics. They too rejected external goods as being unnecessary; the Stoic sage can be happy without wealth and a flourishing family, since his happiness resides in virtue alone. But unlike most of the Stoics, Ibn Paquda is willing to meet the non-sage halfway, with his encouraging message that we can make real progress even while our values remain imperfect. Furthermore, he thinks that one of the most important and praiseworthy duties of the heart is repentance, which presupposes that we have done wrong either in our intentions or in our actions (328).

The philosophical interest of Ibn Paquda's writing does not lie just in its unprecedented focus on intentions. He also applies his idea about internal duty to beliefs. We should not be satisfied to believe the truth, if we can go further and actually establish, or demonstrate, what is true. Knowledge and proof relate to true beliefs the way that good intentions relate to right actions. So like many other authors we've looked at in the Islamic world, he attacks *taqlīd*, the uncritical acceptance of authority. Characteristically, he offers a nice parable to illustrate the point. If a servant were asked to weigh money for a king and lazily assigned this important task to someone else, he would be blameworthy even if the king still wound up with the right answer (94). Ibn Paquda puts his own beliefs in the balance by deploying the arguments of philosophy to prove central tenets of Judaism. In particular, he argues against the eternity of the world and for the oneness of God. Like Muslim theologians, he sees God's oneness as the most important doctrine of his faith (109). The arguments in this part of the text are remarkably similar to those given in al-Kindī's *On First Philosophy*.[3]

With his emphasis on the need to demonstrate what other Jews merely believe, Ibn Paquda is more like a later Muslim philosopher, his fellow Andalusian Averroes. It's significant that the core idea of Averroes' *Decisive Treatise* shows up generations earlier in a deeply pious work of Jewish ethics. The valorization of proof over belief, of philosophical demonstration over obedience to authority, seems to be a general feature of philosophy in Andalusia, embraced by Jews and Muslims alike. Averroes is only the most famous example of this "do it yourself" attitude in epistemology. That's not to say that Ibn Paquda was as rationalist an author as Averroes: we've already seen that he

thinks reason is incapable of establishing most of our God-given duties. Yet it was not impossible for Jewish thinkers to embrace Aristotle in something like the way Averroes did. Jews started to do precisely this in the twelfth century, the age of Averroes.

In this light, Maimonides' ethical writings make for an interesting contrast to Ibn Paquda. As we saw in Chapter 13, the main sources for philosophical ethics in the formative period were Aristotle and Galen. There is little trace of either in Ibn Paquda, though at one point he does speak in rather Aristotelian terms of moderation concerning things that are neither forbidden nor commanded by the Law (189–90). Maimonides, by contrast, draws on Aristotle's ideas in practically every page of his writings on ethics, and is also powerfully influenced by Galen. Yet he did not dedicate any work solely to ethics. The subject is instead discussed in parts of larger works, notably a section of his *Commentary on the Mishnah* often called the *Eight Chapters*.[4] Here and elsewhere, he follows Galen's ethical writings by encouraging us to "cure the soul" of its ills, which are, of course, vicious character traits. Like al-Rāzī and others who adopted Galenic ethics, Maimonides describes this process as a subordination of the lower parts of the soul to reason. He thinks, therefore, that knowledge is indispensible for the goodness of soul (62–4).

Maimonides follows this ethical tradition again when he says that we are already born with ethical tendencies, a result of our innate physical make-up (84). Fortunately, we can overcome these tendencies by training. If you're the sort of person who gets angry easily—angry enough to try to kill people with fruit—you aren't doomed to be a bad seed. You can cultivate good character traits by practicing to hold your temper. This idea of habituation provides a convenient link between Galenic ethics and Aristotelian ethics (29). Maimonides is an enthusiastic proponent of Aristotle's ethics, to a greater extent than any of the earlier ethicists of the Islamic world, with the exception of Miskawayh and al-Fārābī (who is an important source for Maimonides here). He finds the theory of the mean particularly fruitful. Normally, the best ethical disposition is the one that lies between two extremes, for instance, courage between cowardice and rashness, or modesty between impudence and shyness (67). But it won't do for Maimonides simply to reassert the Aristotelian theory. Since these ethical discussions are situated within larger treatises, where his wider goal is to give an account of the Law, he cannot just overlook possible tensions between the Jewish tradition and the Aristotelian ethical theory. Where Ibn Daud insisted on the total agreement between philosophy and the Torah, Maimonides has a more nuanced view, freely admitting that there are differences of opinion between

Athens and Jerusalem. Still, in his ethical writings his main goal is to reconcile his philosophical and religious sources.

The most obvious problem concerns precisely the Aristotelian idea of virtue as a mean between extremes. In Judaism, the virtuous man often seems to be one whose character traits are extreme, rather than moderate. In the Book of Genesis, Abraham restrains himself from gazing upon his own wife, Sarah, and from taking any spoils of war after victory in battle.[5] Such actions are above and beyond the call of duty, and seem to show Abraham as a kind of ascetic. Maimonides obviously doesn't want to deny that they are admirable, but neither can he plausibly portray them as illustrating Aristotle's doctrine of the mean. But of course, every good Aristotelian knows that the solution to a problem with Aristotle is always more Aristotle. His *Nicomachean Ethics* advises us deliberately to tend towards one of two extremes, depending on the character traits we find in ourselves, like bending an already bent stick in the other direction in order to straighten it (1109b). This advice is much like Galen's. If you diagnose yourself as an angry sort of person, you should practice enduring humiliation with patience. When your rival hits you with a banana cream pie, do what Charlie, Buster, and Harold would do—stay silent.

This, according to Maimonides, is the strategy adopted by the virtuous men valorized in the ancient texts of Judaism. As he puts it, they would stay "inside the line of the law" by erring on the ascetic side. This makes sense, since few of us need to train ourselves to seek enough food, sex, or wealth. Rather, almost all people tend to give in to pleasure, a point also made by Aristotle (1109a). The wise ancients, understanding this, steered a course towards asceticism, but without going too far from the moderate behavior that remained their ultimate goal. It may seem surprising that even prophets like Abraham would need to take such precautions. But Maimonides openly admits that the prophets were no paradigms of virtue. Solomon, for instance, had many wives, a sure sign that he was given to lust (81). When Abraham refused to look at his own wife's body, he was guarding himself against just such tendencies. Maimonides thus calls this tactic a "precaution" against vice (69), and says that people who adopt the tactic are displaying "piety" (ḥasidut). Some see such pious acts and, misunderstanding the purpose of the exercise, infer that they should become extreme ascetics. They may indulge in extreme fasting, wear unpleasant clothing, or withdraw from society to lead a life of isolation (34, 70). This goes too far, by rejecting activities that are nowhere forbidden in the Torah.

Here Maimonides is more or less in agreement with Ibn Paquda. It may not seem so, given that Ibn Paquda speaks rather favorably of asceticism in his work

on the duties of the heart. But he strikes a note that would harmonize well with Maimonides when he says that the purpose of ascetic practice is to establish soul's authority over the body (405). Given a choice between the life of an extreme ascetic and that of a moderate person who errs on the ascetic side, Ibn Paquda too would give his approval to the second, more moderate approach. And perhaps we should expect that Maimonides and Ibn Paquda would have a similar understanding of virtuous action. After all, they are both trying to provide us with a theory that supports and explains the commandments of the Law and the judgments found in the Mishnah and Talmud. Yet, already with Ibn Daud, and more decisively with Maimonides, we are seeing a major shift in the Jewish intellectual tradition. No longer will rational philosophy take the form of Neoplatonism, as in Ibn Gabirol, or of pious exhortation, as in Ibn Paquda. Maimonides' embrace of Aristotle is going to be more divisive than these earlier developments, if only because of his standing in the Jewish community as a leading religious scholar. Much as with Avicenna's impact on philosophy in the East, Maimonides' version of Aristotelianism will come to define philosophy for generations of later Jewish readers. It will also force them to take sides, for or against philosophy—as Maimonides understood it.

33

THE GREAT EAGLE MAIMONIDES

In Judaism, there's a saying: "from Moses to Moses, there was no one like Moses." I guess you won't need me to tell you who the first Moses was. The second Moses is the subject of the next several chapters: Rabbi Moses ben Maimun, known in Hebrew with the honorific acronym "Rambam," and known in English usually by his Latinized name: Maimonides. Whether you call him Moses, Rambam, or Maimonides, this is a man with some claim to being the most important figure of medieval Judaism. As we've already seen, Maimonides had predecessors who fused philosophy with Jewish religious teachings. But none of these predecessors reached Maimonides' importance philosophically, and none of them attained his standing as a rabbinic scholar. In short, Maimonides was both the greatest Jewish religious authority of the medieval period, and the greatest Jewish philosopher of the medieval period—perhaps the greatest of all time.

Maimonides was an almost exact contemporary of the great Aristotelian commentator Averroes. They died only six years apart, and they both hailed from Cordoba. Maimonides was born in 1138, into the family business, which was Jewish law. His father, Maimun, was an authoritative legal scholar, which helps to explain how it is that Maimonides was already able to write vastly learned works on rabbinical law by the time he was in his twenties. By that time, the family had left Cordoba and transplanted itself to Fez, in Morocco. They seem to have left Spain in hopes of finding a climate more hospitable to Jews after the Almohad invasion. Actually, the Almohads also controlled Morocco, which had been their launching pad for the invasion of Spain, but conditions there may have been slightly less repressive for Jews. Alternatively, it is alleged in some sources that Maimonides and his family pretended to be Muslims for some years, before finally traveling across the Mediterranean to Jerusalem and settling in Cairo. It was here that Maimonides spent the latter part of his life, and

here that he wrote his greatest works of law and philosophy. Needless to say, it's a somewhat sensitive question whether Maimonides, honored as "the great eagle" of Judaism,[1] ever hid his faith under the guise of Islam. Scholars have argued the point in both directions.[2] Some hold that it's inconceivable that his family could have survived in Almohad territory for so long living openly as Jews. Others say that the evidence for forced conversions is not overwhelmingly strong anyway, and that the historical testimony in favor of Maimonides' counterfeit Islam is found only in Muslim authors, who can hardly be trusted on this point.[3]

Be all that as it may, it was in Cairo that Maimonides came into his own and earned his well-deserved reputation as a great rabbinic scholar. This calling defined him as a thinker at least as much as his interest in philosophy. As a young man he already wrote a commentary on the Mishnah. Like most of Maimonides' works, this commentary was written in Judeo-Arabic. But Maimonides used Hebrew to write his greatest work on Jewish law, the *Mishneh Torah*, a work whose ambition is in proportion to its importance. It seeks to help Jews to find clear guidance on all matters of ritual and observance, without trawling through the deep and majestic waters of the classical texts. This is not to say that Maimonides sought to supplant the Mishnah and Talmud, or to render them obsolete. To the contrary, he would have considered it a great spiritual calling to study the classical texts in detail. But his *Mishneh Torah* gathers together the teachings of these texts, eliminating apparent contradictions and providing the tacit general principles underlying the law. Thus the title of the work: *Mishneh Torah* means "the second law." For most religious purposes, this second law will provide clear and sufficient guidance. Trying to decide a fine point of dietary law, or the rules governing property, or marriage? Look no further than the *Mishneh Torah*, which gathers together all the legal instructions in one convenient package.

It's common to see Maimonides as a thinker with two sides, the rabbinic and the philosophical. But in fact his religious thought is not easily separated from his philosophy, nor can we separate his philosophy from his teachings on the Bible and the rabbinic tradition. We just saw that ethical remarks in his rabbinical writings are obviously grounded in Aristotle's teachings on ethics. He even goes so far as to say that intellectual perfection is the highest fulfillment of human nature.[4] Thus the valorization of philosophy, which we found all the way back in Aristotle's *Ethics*, is presented by Maimonides as the core of an even older tradition, preserved in the revealed texts of the Jewish Bible and the teachings of the rabbinic tradition. One might wonder how Maimonides could

reconcile Aristotelian ethics with his own project of setting out the requirements of legal theory. Which is it, am I supposed to devote my life to following the *halakha* (the law set down in the Jewish tradition) or to achieving Aristotelian virtue and ultimately theoretical contemplation? But Maimonides sees no tension here. For him, the Jewish law offers a kind of training instituted by divine providence in order to bring us closer to our highest end. Even pagan ancient philosophers believed that one needed to condition the soul to make it virtuous and self-controlled, and that this was a precondition for intellectual perfection. Maimonides agrees, and sees in the law an elaborate and well-designed system for this conditioning of our souls.

Maimonides' harmonizing project is on full display in the first book of the *Mishneh Torah*, which lays down certain principles that serve as a foundation for the legal teachings in the rest of the work. Called the *Book of Knowledge*, it contains a distillation of Aristotelian philosophy as it was known to Maimonides.[5] He surveys not only ethics, but also cosmology, the theory of the four elements, and a rationalist conception of God as simple and immaterial. Like Averroes, if less explicitly, Maimonides seems to hold that the truths of religion and the truths of philosophy are one and the same. If the rabbis taught truth—as they surely did—and if Aristotelian philosophy discovers truth—as it surely does, despite some limitations—then the sages among the Jews, even those who lived well before Aristotle, must already have understood the core truths of the Aristotelian system. For instance, Maimonides teaches that Aristotle's idea of matter underlying form can be found lurking in the Bible and rabbinic literature. This is how he elsewhere understands a biblical reference to a "married harlot": matter, like this adulterous wife, is promiscuous in that it takes on one form after another (*Guide* §3.8).

Just as Maimonides' monumental guide for religious practice drew on philosophy, so his philosophy takes the form of a guide for understanding religious texts. And when I say "guide," I mean it. Maimonides gave his greatest philosophical work the title *Guide for the Perplexed*. This title makes the work sound like a self-help book, but if so, it's help for a very particular kind of person. The *Guide* was written to dispel the specific perplexity that arises for devout Jews who are also students of philosophy. Such students learn from philosophical argument certain truths that look incompatible with Scripture. In particular, they learn that God has no body, and is utterly transcendent, completely unlike His creation by being simple and perfect in every way. Well might they be perplexed when they turn to their Bible and find it saying that God has a face, or a back, or gets angry, or sits upon a throne. The *Guide* is addressed

to a student of Maimonides named Joseph, and promises to solve this apparent contradiction between philosophy and Scripture for Joseph and any other reader in his position.

The central problem of the *Guide* is thus familiar to us from our discussion of several Muslim authors and movements. In particular, the Muʿtazilites held that God's simplicity and uniqueness make it impossible for us to describe Him with the language we use for created things. Maimonides was no fan of Islamic speculative theology, but on this point he was basically in agreement with the Muʿtazilites. Incidentally, he was also in agreement with the Almohads, even if their repression of the Jews of Spain led Maimonides to comment in one letter, "no religion was so cruel to us as" Islam.[6] Despite his disdain for Islam as a religion, he agreed with Muslim theological hardliners in upholding the absolute simplicity, immateriality, and transcendence of God. Unlike Averroes, Maimonides considered this rationalist understanding of God to be of paramount importance for all believers. The fact that God has no body needs to be understood by all Jews, not only an elite group of philosophers.

So what are we to do with those passages in the Hebrew Bible and rabbinical texts which seem to say otherwise? Here Maimonides has a threefold strategy (*Guide* §1.51–60). First, he explains that many apparently positive statements about God are in fact concealed negations. If we say that God is powerful, this indicates merely that He is not weak, and if we say that He is all-knowing, this indicates merely that He is not ignorant. But if God isn't ignorant, then mustn't He have knowledge? No, because to say that something has knowledge would be to put it at the level of creatures. Whereas you or I can have knowledge, God cannot. He is exalted above this very notion. But that doesn't mean that He *lacks* knowledge, as would be implied by claiming that He is ignorant. Of course, not all the problematic statements about God in Scripture lend themselves to this kind of analysis. But Maimonides is ready with his second strategy. In some cases statements may seem to be about God, but actually they are about what God has created.[7] If we say that God is providential, what we mean is that the world is well ordered and well designed. If we say that God is angry, what we mean is that things are happening here in the created world that are unfriendly to us. When things seem more conducive to our happiness, we say God is merciful. Strictly speaking, though, God Himself is neither providential, nor angry, nor merciful. Again, these are properties that you or I might have, but God is too transcendent to possess such attributes. Finally, the third strategy: there are certain other statements about God which just need to be taken allegorically or symbolically. When we are told that God sits upon a throne, this is meant simply

to convey symbolically that God is the ruler of the world. Of course, we can't really say that God is "the ruler of the world" either. This must in turn be understood either negatively (for instance, by saying that God is not subject to any authority) or as a concealed description of what God has created, rather than of God.

This analysis of theological discourse may seem to us rather disappointing. It seems to suggest that the language of Scripture is empty, that it tells us nothing about God. But Maimonides anticipates this objection, and tries to respond to it. The attributes that refer to God's actions—that He is providential, for instance— are not empty, because they tell us something true about creation, in this case, that it is well designed. What about the negative attributes, for instance, that God is strong in the sense of "not weak" or knowing in the sense of "not ignorant"? Maimonides explains that even negations can be informative, giving the example of a ship (§1.60). Imagine that someone is trying to describe a ship to me, but only using negations and denials. I am told that this unnamed thing is neither animal, nor plant, nor human, nor small, nor made of stone, and so on and so forth. I will, according to Maimonides, get steadily closer to the idea of a ship.

Of course, the difference is that in the case of the ship there is some positive concept I could also have. In this rather perverse version of "Twenty Questions" the game could end when I say, "OK, I think I know: it's a ship." In God's case that isn't possible. Process of elimination is all we have. In the end, wisdom consists in eliminating everything and being left with nothing, a transcendent nothing that is superior to all other things, rather than being simply the lack, or absence, of those things. This seems to impose a significant limitation on the power of human reason to know God. But maybe that's just tough. Who says that human reason should be able to know God, any more than a giraffe can understand trigonometry? You might be disappointed by Maimonides' theory, but disappointment is not a philosophical objection. Ultimately, we must accept that any attribute will impute a deficiency to God if taken in the sense with which we are familiar. He cites apposite passages of Scripture to underscore this point: "silence is praise to Thee," and "God is in heaven and thou upon earth, therefore let thy words be few" (Psalms 65:2 and Ecclesiastes 5:2, both cited in *Guide* §1.59).

Besides, Maimonides can point to something else that should dispel our disappointment. In our perplexity we have received guidance, not just from Maimonides but from prophets, first and foremost among them Moses. Like the ancient Jewish thinker Philo of Alexandria, Maimonides considered his namesake, the original Moses, to be the greatest of prophets. Indeed,

Maimonides devoted much of his life to the correct exposition of the Mosaic prophetic revelation. Yet he adhered to what may seem a surprisingly naturalistic explanation of prophecy (*Guide* §2.35–48).[8] He used allegorical interpretation to defuse any suggestion in the Bible that God literally spoke to prophets, or that He was seen by them. Prophets receive truth intellectually, not through the senses, as a kind of natural emanation upon the prophet. Following such Islamic thinkers as al-Fārābī and Avicenna, Maimonides believed that prophecy occurs in the person who is adequately prepared for such a bestowal. In fact, he argued that God would need to intervene miraculously to *prevent* such a suitably prepared person from receiving prophetic insight (§2.32).

It might seem strange that God would do such a thing, but Maimonides suggests that it could occur if there was some greater good in view. More generally, he accepted the possibility of miracles. Yet he sought to protect Aristotelian science from the potentially disastrous implications of such an admission. In commenting on al-Ghazālī's discussion of miracles, Averroes worried that the universality and necessity of science could be undermined by the existence of miracles. Maimonides insightfully shrugs this off by pointing out that, for Aristotle, the truths of natural philosophy hold always or for the most part.[9] Aristotle did not mind the occasional accidental departure from nature, the odd five-legged giraffe. But if such exceptions can be allowed or rather ignored by the Aristotelian natural philosopher, then surely there would also be room for the occasional miracle. Here one wants to object that a miracle is not just an accidental departure from nature, where things have gone badly, but a deliberate violation of nature and its laws at the hands of God. In one work, Maimonides suggests that in fact nature contains within it the seeds of miracles. It is somehow a part of the Red Sea's nature to part at just the right time to allow the Israelites passage to the other side. Elsewhere, though, he admits that the natures of things do change in a miracle, but only temporarily.[10]

With all these issues—divine attributes, prophecy, miracles—we again see Maimonides negotiating between Judaism and Aristotelianism. He sees these two traditions as fundamentally in agreement, but tensions constantly threatened to arise. In the generations to come, Jewish philosophy will oscillate between the poles of Aristotelianism and anti-Aristotelianism. Many Jews will try to recruit Maimonides to their own outlook, by emphasizing either the philosophical underpinning of his rabbinical teaching or the more skeptical side of his thought, which is emphasized in the *Guide*. Others will condemn Maimonides for his philosophical excesses, which led him to depart from a literal understanding of Scripture. But Maimonides was in fact neither a radical Aristotelian nor an anti-

rational Skeptic. Rather, he sought carefully to determine not only the truths accessible to reason, but also the line beyond which reason cannot pass. It would be wrong to demand that the world or its Creator should be fully intelligible to us, and wrong to expect ourselves to understand everything. As Maimonides says in the ethical section of his *Book of Knowledge*, the Torah does not demand more of us than we can manage. And neither does Maimonides.

34

HE MOVES IN MYSTERIOUS WAYS
MAIMONIDES ON ETERNITY

I don't like to complain, but studying the history of philosophy can sometimes be pretty difficult. Authors, both great and small, wrote in all these inconvenient other languages until they finally learned English, were careless about making sure their works were reliably preserved, and generally gave very little thought to the plight of future historians. On the bright side, philosophers have usually at least tried to tell us what they think about philosophy. This being, you might think, the whole point. Yet at some places and times there have been philosophers who deliberately concealed their true opinions on philosophical topics. In some cases they left clues or warnings for their readers, to help those in the know see through the veil of confusion to the true doctrines underneath. How widespread a phenomenon is this? It's a difficult question to answer. Certainly, if we fast-forward to the modern era, some philosophers were pretty clearly atheists, or atheists by the standards of their day, but nonetheless professed faithful obedience to religious doctrine. Concerning the pre-modern era, though, even the suggestion of so-called "dissimulation"—that is, concealing one's true doctrines—is apt to get historians fighting amongst themselves.

One of the main instigators of these interpretive controversies has been Leo Strauss. In his 1952 book *Persecution and the Art of Writing,* he suggested that when reading Maimonides, among other figures, dissimulation ought to be at the forefront of our minds. For Strauss, who was reacting to recent events in Europe, philosophy is, or at least ought to be, inherently subversive of entrenched political order. The proper philosopher is always at risk of persecution from the reigning authority, so that he must on occasion cloak his true teachings. One must read between the lines and pay attention to pregnant silences in order to divine the text's true meaning. Strauss applied this reading to numerous thinkers,

including Plato and al-Fārābī. But it has been especially influential in the case of Maimonides. I should put my cards on the table and say that I tend to be suspicious of the Straussian approach. It seems to me a bad methodology to privilege what philosophers don't say above what they do say. Too much latitude is left to the historian to determine which remarks the philosopher might have been expected to make, but didn't. When Straussian interpretive subtleties are applied to thinkers like Plato, it often strains credulity. After all, Plato explicitly proposed things like putting women in charge of the ideal city and sharing children and property equally among the ruling class. If these were the ideas he was willing to state openly, what were the ones he kept secret? The mind boggles.

In the case of Maimonides, the Straussian reading has a bit more going for it, because of what Maimonides says himself. In his introduction to the *Guide for the Perplexed*, Maimonides cautions the reader that some care will need to be taken with the book. It may not provide all the premises necessary to reach some of the conclusions he will argue for, or it may employ premises that Maimonides doesn't actually accept. This may be for pedagogical reasons. Also, some topics are so sensitive and advanced that they should be explained only among a select few, and not before the wider public. If we think back to Averroes' *Decisive Treatise*, and his worry that exposure to philosophical arguments could endanger the necessary faith of simple believers, we'll get a sense of the threat that worries Maimonides here. These comments pretty obviously encourage a Straussian reading of the *Guide*. Of course, it is a bit strange that Maimonides would warn the reader in this clear and explicit way, if the point is to keep things secret. But it does put us on alert that the *Guide* may not offer to guide us along the most straightforward of paths.

In this chapter, I want to look at a kind of test-case for this problem of how to read the *Guide*: the eternity of the created universe. We've already seen that this was a much-debated issue in the Arabic philosophical tradition, with everyone from al-Kindī to Avicenna and al-Ghazālī expressing a view, while drawing on arguments that go back to ancient figures like Plato, Aristotle, and Philoponus. Maimonides instead adopts a modest position anticipated by the earlier Andalusian philosophers Hallevi and Ibn Ṭufayl: philosophy is simply incapable of determining whether the universe is eternal or not. He's well aware that there have been many arguments offered on both sides. But after careful consideration, Maimonides finds that each argument can be countered with an effective response. We are left in a state of uncertainty, which can be dispelled only by recourse to the sacred Scriptures. These tell us that the world was in fact

created, and is not eternal. Without this revealed information, we would never have known for sure.

But this is the same Maimonides who encourages us to make full use of the allegorical and figurative readings of the Bible that were pioneered by Philo of Alexandria. We've just seen him telling us to take descriptions of God in the Bible and reinterpret them in a way compatible with philosophical truth. If the Bible suggests that God has a body, we should just find an interpretation that removes this suggestion. Why not do the same with passages that seem to say the world was created with a first moment of time? In fact, matters are even more complicated. As Maimonides tells us (§2.26), some of the ancient rabbis who commented on Scripture believed that the world as we see it was created from some kind of pre-existing material. The beginning of Genesis seems to say that before God made the world there was only chaotic formlessness, *tohu va-bohu*. He then made heaven and earth—did he make it out of this chaos? Some rabbis thought so. Others proposed that God used his own garments as a material for the heavens. Genesis also talks about the six days of creation. This suggests that time itself, at least, was already present, so that God's creative process could unfold over the course of a whole week. Maimonides observes that these rabbinical interpretations of Genesis seem to agree with Plato's *Timaeus*, according to which the universe was created by a god out of eternal matter.

All of this suggests that if Maimonides had wanted to read the Bible figuratively, as containing the hidden teaching that the universe is eternal, he would have had little trouble doing so. But he didn't. Why not? Perhaps he *did* think that the universe is eternal or created from pre-existing matter, and just didn't want to say so. He remarks that such a teaching would "undermine the whole of the law" (§2.25), apparently because it would undercut our sense that God is a personal deity who intervenes in our world, who can arbitrarily decide to create, to reward, to punish. God would seem to be a kind of automatic, necessary cause, like the one envisioned by Avicenna. How could such an impersonal deity be the lawgiver who chose the Jewish people and gave them the promised land? On this reading, then, Maimonides is worried that Jews who are not philosophers would begin to doubt the Law if they learned that the universe is actually eternal, and so he conceals the truth.

But if he's concealing this belief, how are we meant to know that Maimonides believes it? Well, he has warned us to read the *Guide* carefully, on the lookout for omitted or bogus premises. Our interpretive wits will need to be sharp when we get to the second part of the work, in which Maimonides proves that God exists, that He is purely one, and without body. He announces that, in

order to prove these things, he will simply assume something false, namely that the universe is eternal. This gives him the chance to use Aristotelian arguments for the existence of an immaterial first cause, arguments that presuppose the eternity of the universe. For instance, if the universe is eternal, and thus exists for an infinite time, it cannot be produced by something that is finite. But all bodies are finite. Therefore, the cause of the universe cannot be a body. Why would Maimonides argue in this way from a premise he doesn't even accept? Perhaps as a way of signaling to the more alert readers—the ones who heeded the warnings at the beginning of the *Guide*—that the universe really *is* eternal?

But this isn't the only way of reading the *Guide*, nor is it the way I myself would endorse.[1] Rather, we should notice that Maimonides also says that if the physical universe is *not* eternal, then it is simply obvious that it has been caused by an immaterial first cause (§2.2). After all, the cause existed before all bodies had been created, so clearly it is not a body. If he instead argues on the assumption of an eternal universe, he's deliberately choosing the more difficult path. Once we've shown that God's existence and immateriality can be shown even in this way, we will have proven these things beyond all doubt. This interpretation would take Maimonides at his word when he says that he assumes eternity for the sake of these proofs, and when he says that he doesn't in fact believe in the premise that is so assumed. Notice that, on this reading, the strategy used by Maimonides is exactly the same as the one adopted by Ibn Ṭufayl, who likewise proved God's existence twice, both the easy way assuming a created universe, and the hard way assuming that the universe is eternal (Chapter 24).

This returns us to our earlier question. The Bible seems to be susceptible to many readings, no less than Maimonides himself is. And Maimonides does not hesitate to look past the superficial meaning of the Bible in interpreting it. So if it is really true that reason cannot decide the eternity issue, why think that the Bible's description of creation settles the matter? One reason can be discerned from the surface meaning of the *Guide*. Maimonides goes through numerous arguments in favor of the world's eternity, and rejects them all. They all make the mistake of assuming that the rules governing God's creation are the same as the rules that operate within the created world (§2.17). We see that created causes need to operate on pre-existing material. A tailor can't make a suit without cloth to work with. This is what led people like Plato and the rabbis to assume that the whole universe is made out of some material that existed before it. But who says that God is like a tailor? To the contrary, the ability to create from nothing is a distinctive feature of divine causation. If we have a hard time

imagining this, it is because of our own limitations as humans.

Maimonides is rather impatient with those who fail to understand this, which puts him in a bit of a quandary. Some of the philosophers who upheld the eternity of the universe are great heroes of his. In particular, he is now in the awkward position of claiming that Aristotle's arguments for the world's eternity in works like the *Physics* and *On the Heavens* commit the rather crass mistake of putting God on a par with created causes. But Maimonides finds a way out. Engaging in some alert reading of his own, he finds places in Aristotle's works where Aristotle suggests that the eternity of the universe is a particularly intractable problem (§2.15). In particular, there is a passage in Aristotle's *Topics* (104b) which says that the problem is a dialectical one, which we are called to investigate even though its difficulty seems to defy proof. Seizing on this rather convenient remark, Maimonides insists that it shows Aristotle to have been well aware that he could not really prove the eternity of the world. If the issue is dialectical, all one can do is offer more or less persuasive arguments. Full demonstration is like the eleven of diamonds: simply not on the cards.

This is not to say that Maimonides believes the issue to be perfectly balanced as far as reason is concerned. Actually he is pretty convinced that the universe is *not* eternal, and does not need Scripture to reach this conviction. He points out that there are many apparently permanent features of the universe that seem to be unnecessary (§2.18). For instance, why are there exactly the number of stars we see in the night sky? Surely it would have been just as reasonable for God to create one or two more stars, or one or two less. When we consider this, we see that the universe was almost certainly fashioned by a God who was to some extent arbitrary in His choices about what to create. The caveat "almost certainly" is needed, because we cannot presume to look into the inner recesses of God's wisdom and know all that He knew in creating. But the world does look very much as if it was created by unconstrained divine will, rather than by a God who was following some kind of ironclad law of necessity.

It may not be immediately obvious why this is relevant to the eternity question. The connection lies in the assumption that anything eternal is necessary and vice-versa. If the number of stars in the world is exactly such-and-such and if the world is eternal, then it was *necessary* that the number of stars was exactly such-and-such. But this seems absurd. It just seems obvious that there could have been a few more stars, that this was a choice that was in God's power. In that case, the number of stars is not necessary; hence, neither is it eternal. Here Maimonides has very cleverly turned the age-old Aristotelian equation of necessity and eternity against Aristotle, or anyone else who asserts

the eternity of the world. The world might turn out to be eternal after all, and hence necessary. But if so, there is an awful lot we don't understand about it, starting with the reason why the number of stars couldn't have been different.

As clever as this is, Maimonides is walking a fine line. He wants to emphasize that these things could have been otherwise, which shows that they aren't eternal. But, on the other hand, he doesn't want to say that God makes these choices just on a whim. Rather, Maimonides is after the idea that the world displays signs of both wisdom and volition.[2] God does make choices, but the choices are purposeful, and yield a providentially ordered world. This endangers Maimonides' position to some extent. Avicenna would say that God's creation is indeed necessary, and necessarily results in a providentially well-ordered world. To say that God could have made a different world by choosing differently is, from this point of view, tantamount to criticizing the choices God did make as being frivolous whims, rather than a working out of what must be the case if the best results are to be achieved. Here we see a tangle of problems that will reappear in later philosophers such as Spinoza and Leibniz.

It's no accident that Maimonides fastens on to features of the heavens above us when he is exploring the mysteries of God's creation. He believed that celestial motions provide one of the biggest challenges to Aristotelian science, in fact a challenge that had gone unmet.[3] Aristotle taught that the planets and fixed stars are embedded in spheres rotating around our earth, but observation of celestial motion had never really cohered with this picture. If you observe the planets night after night, you will not see them moving in a steady, stately fashion around the earth. Instead, they appear to slow down and speed up, acting like anything but a body embedded in a huge transparent revolving sphere, as Aristotle had claimed. Ancient astronomers like Ptolemy had proposed systems for the heavens which explained this, but these were at odds with Aristotle's picture. The Ptolemaic system still puts earth in the center, but also postulates spheres within spheres—so-called "epicycles"—to explain some phenomena, and also the existence of eccentric spheres, that is, spheres whose center is not the midpoint of the cosmos. These tensions plagued Maimonides, as they plagued his contemporary Averroes.

Maimonides concluded that celestial motion is simply beyond the power of the human mind to understand. While he accepted that the astronomical theories that came down to him were useful, he could not accept that their implied account of the physical make-up of the universe was correct. How, for instance, can we say that earth moves towards the center of the universe, but then say that some heavenly spheres are eccentric? Either the universe has a center point or it

doesn't, and Maimonides understood the best science of his day to be having it both ways. Some think that he made yet another brilliant move here, by proposing that we think of the scientific theories offered by his predecessors as merely instrumental in nature.[4] That is, they would provide a kind of explanation and prediction that matches what we see, enabling us, for example, to forecast where a given star will be on a given night. But the theories would be only useful fictions, not descriptions of the situation as it really is. Though I hesitate to wade into the waters of subatomic physics, one might compare the way we sometimes think of electrons surrounding the nucleus of an atom in a cloud, and sometimes as being like orbiting planets. Neither picture quite captures what is going on, but both are useful.

Perhaps it is appropriate that Maimonides, who has occasioned such controversy among his interpreters, was himself so keenly aware that our knowledge has its limits. We do not fully understand the cosmos around us. Still less do we understand the God who created that cosmos. In both cases we select useful, yet potentially misleading, concepts to get a handle on something we wish we grasped more fully. For Maimonides, wisdom frequently consists in realizing the pitfalls involved in using such concepts: the dangers of depicting God as a lion or as having a face; the misleading assertions made by Aristotelian physics once it strays above the more easily comprehensible territory of the world below the heavens. He guides the perplexed by explaining to them why they are perplexed in the first place, and cautioning them that their perplexity may never be fully dispelled.

35

BURNT OFFERINGS THE MAIMONIDEAN CONTROVERSY

I've been wondering whether this series of books should have a minimum-age restriction. I try to keep things family-friendly, but it isn't always easy. There have been scenes of a sexual nature, with Plato's erotic dialogues and the Cynics copulating in public, to say nothing of the steamy interaction of unity and multiplicity in Pythagorean metaphysics. There's been violence too, in late antiquity with the brutal treatment meted out to the pagan Platonist Hierocles and the Christian theologian Maximus the Confessor, and we haven't even gotten to the Mongols yet. As for philosophy itself, it certainly involves making things explicit. Nonetheless, I'm a firm believer that it's never too early to start doing philosophy. If you've ever discussed ethics or Zeno's paradoxes with a child, you'll know that they have some pretty good ideas. So it's hard for me to hold on to my historian's sense of detachment when I consider what happened in Barcelona in the year 1305. In a foreshadowing of FC Barcelona's ban on letting the other team ever touch the ball, in that year the Jewish authorities laid down a ban on touching books about philosophy.

Specifically, it stated that anyone under the age of 25 should be forbidden from reading Greek works on physics or metaphysics, either in Greek or in translation.[1] Here we are about 1,700 years after the death of Socrates, and philosophy is still being accused of corrupting the youth. The rabbinic judge who imposed the ban was named Solomon Ibn Adret (also known as "Rashba"), and he was responding to calls for help from southern France. Solomon Ibn Adret and his French allies hoped this would set a good example and lead to a ban on philosophy there, too. Not only did this fail to occur, but the Barcelona prohibition provoked other Jews in France into excommunicating anyone who tried to *stop* people from studying philosophy. Members of the pro-philosophy camp were duly targeted with a counter-excommunication, amidst confusion

about which decision carried legal force. The whole sorry event ended when the (ironically named) French king Philip the Fair decided to exile all the Jews from his realm in southern France.

Since I'm a historian of philosophy, you wouldn't expect me to have much sympathy with Solomon Ibn Adret and his allies, and you'd be right. Not only were they opponents of philosophy, but they weren't much good at learning from history. Their move against rationalist currents in Judaism was a reprise of a more famous sequence of events that happened back in the 1230s: the so-called Maimonidean controversy, which saw Maimonides' *Guide for the Perplexed* being burnt in the French city of Montpellier, after it was denounced to Christian authorities by Jews who were opposed to the study of philosophy. The two controversies had several things in common. In both cases Jews energetically, and tragically, attacked one another, even as a far greater danger loomed in the form of the local Christian authorities. In both cases the critics of philosophy were surprisingly polite about Maimonides himself, the leading figure of recent Jewish intellectual history. In fact, the supporters of the 1305 ban quoted Maimonides himself in favor of the prohibition, seizing on a passage where he mentioned the danger of exposing youthful readers to advanced philosophical ideas.[2] And in both cases, conservatives were reacting against the spread of philosophical ideas among Jews, made possible because of translations of Maimonides, Aristotle, Averroes, and other authors into Hebrew.[3]

These controversies involved not just the place of philosophy in Judaism, but the question of whether different communities of Jews needed to have the same laws. Solomon Ibn Adret was reluctant at first to impose the ban on studying philosophy, not because he had a secret soft spot for Aristotle but because, as a Spanish rabbi, he had misgivings about responding to a debate that began among Jews in France. The Maimonidean controversy of the 1230s likewise raged in both Spain and southern France. Indeed, one can see the event as a reaction by conservative French Jews against the importation of philosophy from Andalusia. This process began already during Maimonides' lifetime, as did the controversy over Maimonides himself. He now occupies an unparalleled role in Jewish intellectual history, a leading authority not just in philosophy but also in rabbinic law. So it's a surprise to see him being greeted with even measured hostility by his contemporaries.

His forbiddingly learned and provokingly rationalist works spread far and wide, winning adherents and opponents. One opponent was Samuel ben ʿAlī, the Gaon of the Baghdad rabbinic academy. Samuel was shocked by what he took to be Maimonides' understanding of the afterlife as a mere metaphor. Many

philosophers of the Islamic world, notably Avicenna and Averroes, had seen life after death as a purely intellectual affair, and Samuel took Maimonides to follow these ideas. Maimonides himself replied to the charge that he was denying the possibility of a bodily resurrection, with that characteristic subtlety that tended to leave lingering questions about his actual doctrine. On the one hand, said Maimonides, I do accept the resurrection of the body. On the other hand, even if I took talk of resurrection metaphorically, that would still preserve the doctrine's truth.[4]

He made the further point that one's view on bodily resurrection should go hand-in-hand with one's view on God's creation of the universe. If God created the universe from nothing with a beginning of time, He may just as well re-create our bodies in the hereafter. On the other hand, if, as the philosophers think, the universe has existed eternally, then there is no reason to think God would suddenly start creating things from nothing just to give us a body again after we die. "Well exactly," his opponents might have responded, "and we couldn't help noticing that the eternity of the universe is another topic on which you seem to be rather slippery." The twentieth-century interpretation that suspects Maimonides of secretly believing the universe to be eternal has a precedent in his own time. One of his greatest supporters, Samuel Ibn Tibbon, was probably an eternalist. On this and other topics, Samuel and other Maimonideans thought that a true understanding of the *Guide for the Perplexed* would reveal adherence to radically Aristotelian doctrines.

Samuel Ibn Tibbon was not just a careful reader and proponent of Maimonides' *Guide*, he was also its translator. He was one member of a staggeringly productive family which generated many translations from Arabic over the course of the late twelfth and thirteenth centuries. They were sort of like a medieval Jewish version of the Jackson 5, if the Jacksons had been spread over several generations instead of being brothers, and if Jermaine had specialized in rendering Averroes into Hebrew. Their activity began with Samuel's father, Judah Ibn Tibbon, who translated authors like Saadia Gaon, Ibn Paquda, and Judah Hallevi—hardly a list of hardcore Aristotelians. But with Samuel, the process of Hebrew translation ventured into more contentious territory. He produced a Hebrew version of the *Guide* in 1205, following this a few years later with the first Hebrew version of a work by Aristotle (rather strangely, the text he chose was the *Meteorology*). Samuel also wrote his own philosophical works. For instance, he composed a treatise on a question which I know has been bothering you: why do some parts of the land stick up above the water of the seas, if, as Aristotle says, earth is heavier than water and thus has a greater

tendency to move down towards the center of the universe?[5] The family business was carried on by Samuel's son Moses Ibn Tibbon, and his son-in-law Jacob Anatoli, both of whom continued the project by tackling Averroes and his commentaries on Aristotle.

The upshot was that Aristotelian and Maimonidean philosophy became widely available to Hebrew-reading Jews in Christian Europe, where previously such texts could be read only in Arabic, either in Spain or elsewhere in the Islamic world. The Tibbonids completed the process begun already in the twelfth century by figures like Abraham Ibn Ezra, whose Hebrew compositions brought astrology and other sciences from Andalusia to Italy and France. Those ideas too had provoked opposition and criticism, not least from Judah Hallevi. But now, in the thirteenth century, the stakes are higher. Not only is Aristotelian philosophy (mostly in the form of the sophisticated commentaries of Averroes) gradually finding its way into Jewish culture, but the philosopher Maimonides has become one of the central figures in the Jewish community.

Maimonides' Hebrew writings, especially his major work of Jewish law, the *Mishneh Torah*, of course did not need to be translated. So they were already being read by Jews during his lifetime. Some complained of the presumption of Maimonides' project, seeing his work as an attempt to replace the Talmud by rearranging and systematizing its contents. Yet most gratefully accepted it as a towering achievement, which helps to explain why even the anti-Maimonideans in the controversies had such nice things to say about the man himself. They bent over backwards to excuse him for writing the provocatively rationalist *Guide for the Perplexed*. In the first Maimonidean controversy of the 1230s, the one that led to the burning of the *Guide* in France, the leader of the critics was a man with the unbeatably biblical name Solomon ben Abraham. (He's not to be confused with Solomon Ibn Adret, protagonist of the later 1305 ban on teaching philosophy to the young.) Solomon ben Abraham did not attack Maimonides for writing the *Guide*. He reserved his ire for those who had translated it and disseminated it widely among a French readership.

It's not clear who was responsible for the burning of the *Guide*, which probably took place in 1232 or 1233. Pro-Maimonideans blamed Solomon and his allies, but this charge has been questioned in modern scholarship.[6] Whoever the culprit was, it was a member of the Jewish community in southern France, who appealed to the Christian authorities for help in stopping the spread of Maimonideanism from Spain. The clerical authorities who actually had the *Guide* burned were also involved in the violent supression of a group called the Cathars, who were considered heretical Christians. It may, therefore, be that the

conservative Jewish appeal to the local Christian bishop, which resulted in the burning of Maimonides' books, was a reaction to a general atmosphere of religious suppression. In fact, an author writing on behalf of the Maimonideans accused his opponents of having said to the Christians: "since you are destroying heretics among you, destroy ours as well."[7] The proponents of philosophy were infuriated. For a Jew to inform on other Jews to Christians was unprecedented, to say nothing of the outrage of subjecting the writings of the great Maimonides to such abuse. The philosophical camp's answer came from Spain, more specifically Saragossa, where a ban was pronounced against Solomon ben Abraham and his allies.

What was needed, clearly, was a calm head. It turned out to belong to Moses ben Naḥman, usually known as Naḥmanides (or "Ramban"). He was a relatively conservative legal scholar, and a significant contributor to the burgeoning literature of Kabbalah (see Chapter 39). In his writings, he does not outright reject the possibility of using reason to understand the universe around us. But he insists on the possibility that God intervenes within nature to work His will. In fact, many events that we take to be mere chance occurrences or coincidences are, as Naḥmanides puts it, "hidden miracles": God working through the mechanisms of nature He has put in place. On the whole, his position is much like al-Ghazālī's, at least according to the more rationalist reading of his *Incoherence of the Philosophers*. Like that version of al-Ghazālī, Naḥmanides would accept explanations in terms of natural causes, but insist on the fact that God can always trump nature, and indeed is regularly doing so.[8]

Given this intellectual profile, and his eminence in the community, Naḥmanides seemed a natural ally for the critics of Maimonides. They wrote to him requesting him to join them in declaring war on the Great Eagle. He replied by encouraging them to release the doves of peace. Naḥmanides pointed to the admirable features of Maimonides' writings—not only his mastery of rabbinic law, but also his ability to show the appeal of Judaism for philosophically minded readers. Naḥmanides understood that the purpose of Maimonides' *Guide* was not to corrupt pious Jews by exposing them to philosophy, but on the contrary, to show those already in danger of such corruption that Aristotle could be reconciled with the Torah. Characteristically, Naḥmanides made his point by paraphrasing a biblical passage: "how many outcasts from faith has he gathered?" (Isaiah 56:8).[9] He was also mindful that it was politically awkward, and also legally dubious, for Jews in one area to act against the practices of other communities. The Talmud says that "it is forbidden to declare a ruling on the population unless the majority of the population is able to abide by it." For

Naḥmanides, Maimonides might well fill a need among philosophy-enthusiasts in Spain, and it wasn't the place of Jews in Provence to attack that local practice. One might compare this to the fact that polygamy was at this time accepted among Jews living among Muslims, but not by those in Christian lands. Naḥmanides was consistent and even-handed in his localism, and also chastised the pro-Maimonideans for their counter-ban against the anti-Maimonidean ringleaders of Provence.

Of course, there's something slightly condescending about Naḥmanides' attitude towards the philosophers: that's just how they do things down south. But he was fighting fire with fire, albeit in a more figurative sense than the book-burners of Montpellier. The Maimonideans were more than a little condescending themselves, since they taught that no one can understand the Torah properly without a mastery of philosophy. During his lifetime, Maimonides had already provoked hostility by saying it is heresy to think that God has a body. This accusation is itself heretical, complained one rabbi of Provence. Of course it's true that God has no body, but that doesn't invalidate the faith of simple folk who cannot understand this fact.[10] Here we have the key difference between radical Maimonideans like Samuel Ibn Tibbon, and men like Solomon ben Abraham who fretted about the corrosive effects of philosophy. The Maimonideans followed the idea pioneered in an Islamic context by al-Fārābī and later embraced by Averroes, that Aristotelian philosophy establishes with proof what religion can express only in persuasive symbols. On this view, it is not philosophy but religion and the religious law that are "local," since a prophetic revelation is tailored for a certain group of believers.

For a particularly vivid example of a philosopher who adopted this Averroist line on the relationship between reason and faith, we can turn briefly to the later thirteenth-century thinker Isaac Albalag. He was part of the aforementioned process in which philosophical works were translated from Arabic into Hebrew. He executed a Hebrew translation of al-Ghazālī's overview of Avicenna's thought, the *Intentions of the Philosophers*—and then indicated where he departed from its teachings in a work of his own, titled *Tiqqun ha-Deʿot*, meaning *The Correction of Doctrines*. Under the influence of Averroes, Albalag was convinced that Aristotelian philosophy and science represented the greatest achievement of human reason. Its distinctive doctrines, including the eternity of the universe, had been demonstrated by adamantine proofs. Maimonides was thus wrong to doubt the success of Aristotle's arguments, and to assert that this question could be settled only by revelation. Albalag's approach to Scripture likewise followed the lead of Averroes: the Torah is written not for elite

philosophers but for the common folk, so its true meaning is hidden beneath the literal sense of the text.[11] It is, of course, the philosopher who is in the best position to determine that true meaning, by showing that the Torah and philosophical demonstration teach the same lessons. On the other hand, Albalag, unlike Averroes in his *Decisive Treatise*, allows for the possibility that revelation may contain truths inaccessible to philosophy. The prophets of old may have been given knowledge that we simply cannot attain with reason alone. In such cases all we can do is accept their teachings by faith, without hoping to ratify them using our natural powers of reasoning.

These ideas of Isaac Albalag show that, in the battle over the value of philosophy for Jews, the Torah itself was at stake. Consider the legal injunctions laid down in Scripture, and painstakingly expounded in the Mishnah and Talmud. We saw Maimonides drawing on Aristotle and Galen to argue that the purpose of the law is to encourage virtue (Chapter 30). One might say that, for him, God plays the role played by the ideal human legislator in Aristotle: both devise laws that will lead humans to perfection. This means that, at least in general terms, human reason can grasp the rationale underlying the divine law. For other Jewish legal scholars these ideas smacked of arrogance. Like the Ashʿarites in opposition to their fellow Muslim theologians the Muʿtazilites, Maimonides' critics responded that the commands and ways of God are inscrutable to reason.[12]

In the end, the Maimonidean controversy of the 1230s was not ended by the peacemaking efforts of Naḥmanides, or by a lasting consensus concerning such questions. That much is shown by the similar tensions surrounding the Barcelona ban on teaching philosophy some seventy years later. Instead, it seems that the community agreed to disagree, but more quietly, simply because they were horrified by the intervention of Christian authorities and the scandal that this intervention was provoked by Jews. The participants in these events seemed painfully blind to the greater danger posed to them by Christian institutions. A decade or so after the burning of Maimonides' books, the Talmud itself would be publicly burned in Paris. But that isn't to say that Jewish philosophy could flourish only in the context of Islamic political rule. Philosophy among Jews continued in Spain after the Christian reconquest, and was also pursued in France and Italy, where the works of another great thinker of twelfth-century Andalusia would be subjected to intense scrutiny.

36

MAN AND SUPERMAN GERSONIDES AND THE JEWISH RECEPTION OF AVERROES

If you want to bring the ideas of a long-dead philosopher to a wider audience, you have three basic choices. You can translate the philosopher's writings into a new language. You can produce writings of your own that present the philosopher's ideas, perhaps applying them to new problems to show the philosopher's perennial relevance. Or, you can write commentaries. These methods were practiced already in the ancient world—let's hear it for Boethius in particular, who did all three of these things for Aristotle—and are still practiced today. We've also seen translations, independent treatises, and commentaries among philosophical authors writing in Arabic. Now that we've arrived at philosophy in Hebrew, there's a fourth approach to consider: the supercommentary. This is not a commentary that comes from the planet Krypton or has been bitten by a radioactive spider. It's something more mundane, a commentary about another commentary.

If Averroes was simply "the Commentator," one scholar in particular deserves the title of "the Supercommentator": Levi ben Gerson, usually known as Gersonides or by the acronym "Ralbag," for Rabbi Levi ben Gerson. When it came to understanding Aristotle, Averroes was the man, which would make Gersonides superman. He didn't hail from Krypton, even though "Ralbag" would be a good name for a comic-book space alien. Rather, he lived in Provence in southern France, where he may have worked as a moneylender alongside his philosophical and religious scholarly activities. I'm not sure how well the moneylending business treated him, but those scholarly activities definitely paid dividends. In addition to his supercommentaries on Averroes, he produced commentaries on books of the Bible, treatises on mathematics, and one of the greatest treatises of medieval Jewish thought. the *Wars of the Lord* (*Milḥamot ha-Shem*), which brings together the richness of the Aristotelian

tradition with the ideas of Maimonides in an effort to show that there is no contradiction between philosophy and faith. A particularly impressive aspect of his writing is his contribution to astronomy, in honor of which a crater on the moon has been named "Rabbi Levi." (See, I told you he could be from outer space.)

You might imagine that Gersonides' commentaries on Averroes were unfeasibly enormous. After all, Averroes' so-called "long" commentaries were very long indeed. How huge would a commentary on such a commentary be? But Gersonides focused on the epitomes and paraphrases Averroes had devoted to Aristotle. He seems to have been especially interested in logic and psychology, writing seven supercommentaries on Averroes' paraphrases of the *Organon*, or Aristotelian logical writings.[1] These exegetical works of Gersonides represent the high-water-mark of response to Averroes among Jews. He lived in the first half of the fourteenth century, dying in 1344, which meant that he had access to the fruits of the Hebrew translation movement. Across Europe, the commentaries of Averroes were attracting intense attention; for instance, Hebrew versions of the logical paraphrases were produced by three separate translators in Naples and southern France.[2]

We can get an impression of Averroes' impact not only from Gersonides, but from a range of other figures, such as Shem Ṭov ben Falaquera, who probably lived in Andalusia and died at the end of the thirteenth century. He wrote a lovely little treatise in Hebrew called the *Epistle of the Debate*,[3] which adapts the ideas of Averroes' *Decisive Treatise* for a Jewish audience. Falaquera imagines a debate between a philosophically minded Jew and a religious scholar who thinks that Jews have no business reading Aristotle and Averroes. The defender of philosophy does not try to insist that everything philosophers have said can be reconciled with Judaism. Instead, he compares himself to someone eating the fruit of a pomegranate, and discarding the peel, or taking honey from bees (18–19, cf. 41). In particular, we should discard the philosophers' denial of miracles, though this can be excused since they did not have the benefit of a tradition relating the miracle stories (47). On the point that matters most, philosophers agree with the Jewish faith when they argue that the world is produced by a single Creator. To this the religious scholar retorts that there is no need to *argue* for creation at all, since it is stated clearly in revelation (22).

Here's where Falaquera's Averroism starts to show. He has his proponent of philosophy say that, without rational proof, religious beliefs are only being accepted blindly by authority. To believe on the basis of philosophical proof is like seeing something with your own eyes rather than relying on the testimony of

others (23). Indeed, the religious scholar himself, for all his learning, is no better than the common ignoramus who mouths the teachings of Judaism without a proper understanding of what he says (27–8). Of course, this is in full agreement with the message of Averroes' *Decisive Treatise*. Even the tactics deployed by Falaquera's protagonist are reminiscent of Averroes. Since Averroes was writing a legal treatise, he based himself on Koranic quotations, and gave arguments that were directed squarely at fellow jurists. Falaquera's *Epistle* is not a legal document, but he too cites Scripture in support of philosophy, for instance from Deuteronomy: "unto you it was shown, that you might know the Lord is God" (4:35). Like Averroes, he also argues dialectically, trying to hit anti-philosophy legal scholars where it hurts. In addition to suggesting that such a scholar has a status no better than that of the average Jew, he compares philosophical understanding to the use of reason to extrapolate from rabbinic texts when laying down new legal judgments (31).

If Falaquera's *Epistle* shows that Averroes found an eager reception among Jews, it also shows that the Hebrew philosophical movement he helped inspire was controversial. You don't write a dialogue like that if there are no real opponents of philosophy to be won over. With even the works of Maimonides sparking both metaphorical and literal fires of controversy, what would the community make of non-Jews with problematic teachings, like Aristotle and Averroes? Enter Gersonides. As an expert on the Jewish Law, he was well-placed to judge Aristotle's compatibility with the Torah. And as an expert mathematician and astronomer, he was in a good position to pass judgment on the epistemology and science that came down through the Aristotelian tradition. Following the lead of Maimonides, he did not take the philosophers' word for anything, but evaluated their arguments and suggested improvements where needed. The title of his chief philosophical work refers to this task. Using the language of the Bible (Numbers 21:14), he says that he is fighting "the *Wars of the Lord*" by overturning the mistakes of philosophical predecessors.[4]

If Gersonides hoped to silence once and for all the debate about philosophy, he was not successful. One later critic sarcastically referred to Gersonides' treatise as the *Wars "Against" the Lord*.[5] But certainly, no one could ever accuse Gersonides of uncritically following his philosophical authorities. Anyone who reads the *Wars of the Lord* will immediately be struck by his method of exhaustively listing of all the arguments on each topic he tackles, followed by problems confronting each of the positions he has listed, and finally a declaration of his own position. This approach may be inspired by Averroes' commentaries, though it is also strikingly reminiscent of the "disputed question"

format used in contemporary Latin Christendom.[6] Himself adopting the policy of late ancient commentators, Averroes would frequently explain all the previous interpretations of a given passage in Aristotle before setting out his own reading. A case in point would be his notorious discussions of intellect in his three works of exegesis devoted to Aristotle's *On the Soul*. Reading those commentaries, one can learn not only what Averroes thinks Aristotle meant, but also what other commentators, ranging from Alexander to Ibn Bājja, had said.

The *Wars of the Lord* goes this one better, by summarizing many of the same views and then throwing Averroes' own position into the mix.[7] Actually Gersonides was not able to read Averroes' "long" commentary to *On the Soul*, since it hadn't yet been translated into Hebrew. But thanks to revisions Averroes himself added to his earlier epitome of *On the Soul*, Gersonides was aware of his shocking thesis that all of humankind shares one intellect. Like the earlier Aquinas, Gersonides objects that, on this theory, we cannot explain how one person knows while another does not. I've already said that Averroes anticipated and answered this objection: I experience thinking when the universal intellect uses my sensation, imagination, and memory as a basis for thought (Chapter 26). Gersonides understands Averroes well here, so he gives a better version of the objection, saying that if Reuben's intellect is the same as Simon's, then Reuben's intellect can use Simon's sensation just as well as Simon's intellect can (§1.4).

Even though Gersonides has no sympathy with Averroes' idea of a single human intellect, he does accept the long-standing philosophical theory that there is a celestial intellect beyond the human mind, the so-called Agent Intellect. (Being a supercommentator, he was bound to endorse the idea of a superhuman intellect.) Like al-Fārābī and Avicenna, he gives this celestial intellect the role of activating human thought and of giving forms to material things here on earth (§1.6). He notices a problem here that previous philosophers had not sufficiently discussed. So focused were they on the theoretical knowledge achieved by philosophers that they never worried about where we get practical knowledge (§§1.4, 1.7). He fills the gap by saying that the Agent Intellect helps carpenters know how to build wooden models of giraffes, just as much as it helps biologists understand the essential nature of giraffes. The Agent Intellect itself thinks in practical terms too, as when it provides Hiawatha with a long neck to get at those tasty leaves high up on the trees (§1.7).

Since the Agent Intellect is causing everything to happen on earth on the basis of its universal knowledge, you would think that nothing would escape its notice. It should know every last detail of every event and being that falls under

its influence, and that without needing to tap anyone's phones or steam open envelopes to read people's mail. But if this is the case, then a couple of familiar philosophical problems would seem to be looming. First, will the Agent Intellect know what is going to happen in the future, for instance, what I am going to do tomorrow? If so, then it looks like I will have no choice about what I do. Second, if the Intellect's knowledge is really *universal*, then how will it know about particular things? It might know all about giraffes and even be able to give the form of giraffe to suitably prepared matter, but it couldn't know that Hiawatha is right now taking a nap, because that's a bit of information about a particular giraffe.

This is just a version of the problem faced by Avicenna, who raised the same issue concerning divine knowledge. For Avicenna, God only has general knowledge of the universe, a knowledge God has only by knowing Himself as the cause of the universe. This may have been the most controversial position taken by Avicenna, and that's against some stiff competition. It was rejected by many philosophers from all three Abrahamic faiths, including Maimonides among the Jews.[8] Maimonides wanted to insist that God does know about particulars, albeit not in the way that we humans do. As Gersonides relates (§3.2), in the *Guide for the Perplexed* Maimonides names five ways in which God's knowledge differs from ours. Whereas we have many acts of knowledge for many things, God knows all things with a single act. He also knows things that don't exist, but might have, whereas we know only what exists. God can know infinity, whereas we can't. God knows changing things without changing, as we do. And finally, God knows what will happen in the future, without ruling out the possibility that things will be different.

One of the most interesting parts of *The Wars of the Lord*, and that's also against some stiff competition, is Gersonides' critical discussion of Maimonides' distinctions. He has especially interesting things to say about the supposed infinity of God's knowledge, and about the question whether God could know the future while leaving open alternate possibilities. Concerning the first point, Gersonides flatly rejects the notion that any knowledge, even God's, could embrace something that is actually infinite. To know something is to place it within a certain definition or limit, the very antithesis of the indefiniteness that characterizes infinity. In a sense, even we puny humans can know infinity, as when we know bodies to be infinitely divisible. What this means is not that we could know an infinite number of actually divided parts in a body. Rather, we understand the essence of bodies, and thereby realize that it is in principle *possible* to divide bodies an indefinite number of times. No matter how small,

every body is divisible; the only alternative would be atomism, which Gersonides rejects.

Gersonides' solution to the problem of future knowledge is similar.[9] We have no idea what will happen in the future, but the Agent Intellect and God certainly do. Yet they do not now know in full and complete detail all that will occur tomorrow, or a week from now, or in coming years. Rather, they understand the cosmic order and structure within which those events can happen. This is really just a version of Avicenna's theory: God does not know particulars as such, but rather knows the universal causal system that gives rise to them. This may be a controversial view, but it is preferable to Maimonides' solution, which Gersonides finds barely comprehensible. If God knows that Hiawatha will take a nap tomorrow, how can it still be possible that she does not take a nap? This so-called "solution" makes it sound like God is just making educated guesses, since He is still open to the possibility that things will go otherwise than He predicts. This would be mere belief, not knowledge.

Unfortunately for Gersonides, he happens to have some beliefs of his own that sit uneasily with his own theory. He thinks that astrologers frequently forecast events accurately, that people have dreams that represent things to come, and that prophets can know the future thanks to revelation. In fact he devotes the whole second book of the *Wars of the Lord* to precisely these phenomena. Astrologers, prophets, and prophetic dreamers certainly seem to be foretelling particular events—how is this possible? Gersonides is nothing if not a consistent thinker, so like a cowboy who has been assembling model airplanes, he sticks to his guns. In the case of astrology, he contends that the stars signify only the cosmic order, and that humans may exercise freedom to depart from what has been predicted (§2.2). In some cases prophecies have a conditional form—if one thing happens, another will follow—which again depends not on certain knowledge of particular events but on an implicit understanding of the cosmic order. He gives the biblical example of Joseph interpreting the Pharaoh's dream by predicting a seven-year famine.[10] This leaves it up to the Pharaoh whether he will act in such a way as to avoid the dire consequences of the famine by storing up grain in advance.

Although Gersonides wound up covering all these topics and more in the *Wars of the Lord*, it seems that his original plan was to focus on that most controversial of topics for medieval Jews: creation, and the question of the eternity of the universe. On this point Gersonides firmly rejects the position of his two main influences, Maimonides and Averroes. The world is not eternal, as Averroes and possibly Maimonides thought. Gersonides argues that this is

impossible, deploying a range of arguments familiar from Philoponus, al-Kindī, and al-Ghazālī. He also adds an argument of his own, which has some deep philosophical consequences.[11] Since Aristotle denies that anything can be actually infinite, debate had always centered on the question of whether past eternity would constitute an actual infinity. The opponents of eternity claimed that an infinite time would *actually* need to elapse to get to the current moment. The response from Aristotle's partisans had been that past eternity doesn't count as an actual infinity, since past moments, humans, and events have ceased existing. So they can't all join together to form part of an actual infinity. Against this, Gersonides argues that in a sense, past things do still exist, or are real (§6.1). If the event of Socrates' death has now receded into utter nothingness, what would make it true to say, for instance, that "Socrates died of hemlock"? Metaphysicians still debate this question of what must exist now in order to make statements about the past come out true.

Rather than accepting the possibility that the universe was created out of nothing at some specific time, or accepting that the universe is eternal, Gersonides adopts the view that the universe has existed for a finite period of time but was created from formless matter (§6.1).[12] This is similar to the view traditionally associated with Plato's *Timaeus*, except that Gersonides has no time (if you'll pardon the expression) for Plato's idea that there was disorderly motion prior to the formation of the universe. The formless body that pre-existed creation was completely inert. It is hard for us to know anything else about it, since we have no experience of formless matter. But we know that it must have been there, by process of elimination. Creation from nothing is impossible, because it presupposes an empty void before the universe, and as Aristotle already showed, it is absurd to suppose that there could ever be void. (But watch this space: in the next chapter Crescas will beg to differ.) It is likewise impossible that the universe has always existed, a possibility against which Gersonides provides numerous arguments. My favorite is that if an eternity of time had already elapsed, humankind would have had time to perfect itself and learn all possible knowledge, yet we see that this has not in fact occurred!

As this argument suggests, Gersonides was alive to the imperfections in the philosophical tradition that came down to him. He was no slave to Aristotle, Averroes, Maimonides, or any of his other sources.[13] He sought to establish agreement between the Torah and philosophy, but saw that this would require placing philosophy on firmer foundations than had been built by his predecessors. Along with Samuel Ibn Tibbon and Falaquera, Gersonides thus represents the rationalist wing of the response to Maimonides. But you need two

wings to fly, so naturally there was another, more critical current of Jewish response to the Great Eagle.

37

NEITHER THE TIME NOR THE PLACE
ḤASDAI CRESCAS

In the construction business, they'll often dynamite an old building to make room for a new one, and something similar has often happened in the history of science. We're still some centuries away from the rise of modern physics, but in this chapter we'll be looking at someone who helped clear the ground so that modern physics could be built. His name was Ḥasdai Crescas. The writings of Maimonides and Gersonides provoked him into a stunning assault on the assumptions underlying Aristotelian physics. His criticisms were not wholly new. Some are prefigured in Ibn Bājja and earlier still in the late ancient Christian critic of Aristotle, John Philoponus. But Crescas went further than them, both in the daring of his arguments and in his historical reach. Though his daring physical speculations caused little excitement among Jews in the following generations, he would be cited by Renaissance philosophers like Pico della Mirandola and later still by Spinoza.[1] It would be going too far to say that without Crescas there would have been no modern science. But it would not be going far enough if we failed to credit Crescas with some part in the gradual demise of Aristotelian science.

As scientific revolutionaries go, Crescas cut a somewhat unlikely figure. For one thing, his intentions concerning natural philosophy were mostly destructive. He was more demolition man than architect. Yet, in arguing that Maimonides and Aristotle had failed to rule out such things as void and actual infinity, he was indirectly led to contemplate possibilities that had been almost universally rejected since antiquity. For another thing, Crescas led a life dominated more by the discontents of his people than the contents of Aristotle's *Physics*.[2] He hailed from Barcelona, where he rose as a scholar at the city's *yeshiva*. This was in the mid-to late fourteenth century, so we are talking here about Spain under the rule

of Christians after the reconquest. Christian rule was, during this period, rather favorable to Jews in general, and to Crescas in particular. He moved to Saragossa, capital of Aragon, and the king and queen appointed him as the highest legal authority for Jews in their realm.

Then, in the year 1391, disaster struck. It came in the form of pogroms against the Jews in many Spanish cities, with the Christian authorities incapable of checking the violence.[3] The Jewish community of Crescas' former home in Barcelona was destroyed, and Crescas' own son was killed there. Many thousands of Jews were massacred, and there was an unprecedented mass conversion, with a staggering number of others becoming Christian to avoid martyrdom. This calamity was a foretaste of what would come almost exactly a century later, with the total expulsion of Jews from Spain. As a high-ranking Jewish leader, Crescas worked to find safe havens for his co-religionists. He also went on the offensive against the Christians, at least in writing. Among his works is a treatise, written in Catalan, which criticizes ten principles of the Christian faith such as original sin, the doctrines of the Trinity and Incarnation, the virginity of Mary, and so on. Under the circumstances, this may sound remarkably provocative. But the intended audience was probably Crescas' fellow Jews, or converts whom he hoped might recant and return to Judaism.

Within Judaism too, Crescas' great preoccupation was the principles of religion. His greatest work, the one that contains his reflections on Aristotelian natural philosophy, is titled *Light of the Lord* (*Or Hashem*). It was occasioned by the philosophical approach to the Jewish law that Crescas found in Maimonides.[4] Maimonides followed the traditional count of 613 commandments in the Torah. Among these he put one before all others: the commandment to acknowledge God's existence. In addition, he itemized thirteen "principles" of the Jewish religion. These again included the existence of God, as well as God's incorporeality, divine providence, prophecy in general and the special prophethood of Moses in particular, and so on. Following previous authors who had simplified this list, Crescas gave three claims the status of "roots" (*shorasim*) for religious belief: God exists, He is one, and He has no body. Naturally, Crescas deemed all three of these claims to be true. Indeed, he thought they are held in common by all reasonable religions, never mind the true religion which is Judaism. But he did not think that Maimonides, or for that matter Aristotle or Gersonides, had managed to prove them.

One purpose of the *Light of the Lord* was thus to expose the flaws in Maimonides' arguments, which were drawn largely from Aristotle. Thereby Crescas intended to make room, not for modern physics, but for a clearer

understanding of how and why we should accept the paramount principles of Judaism. Crescas worried that Maimonides had placed the majestic edifice of the Law on the shaky foundations of Aristotelian science. The *Light of the Lord* offers an explosion of arguments designed to knock down this whole condemned structure. Crescas already makes a fundamental point against Maimonides' handling of the first and chief principle, the existence of God. He already quarrels with Maimonides' claim that belief in God is a commandment laid upon us by God Himself.[5] For one thing, why would anyone follow a command from God without already believing that God exists? The existence of God as a commander is presupposed by the commandments of the Law. Furthermore, it is not just up to us to choose what we believe. And if something is not a matter of choice, then it is incoherent to issue commands about it.

Here Crescas has made an interesting philosophical point about the nature of belief: that it responds to things like evidence or good reasons, and not to willful choices made by the believer. Suppose I command you to believe that Buster Keaton is the greatest figure in the history of cinema. In fact, suppose I offer you a tall stack of money to believe that. No matter how much you like the deal, you can't just *decide* to believe this or anything else. Our beliefs respond not to bribes or threats, but to what we find convincing (a point lost on those Christians who tried to compel Crescas and his fellow Jews to convert). If you were minded to accept my bribe, the most you could do would be to seek out good evidence that Keaton really is as great as I claim, for instance by watching some of his films. Likewise, Crescas says, we believe in God because we have reasons to do so, not because it is commanded.

All this is merely a skirmish before the main battle, which is fought over the premises used by Maimonides to demonstrate what he thinks we are commanded to believe: that God exists, is one, and is immaterial. Maimonides had offered two methods for proving God's existence. The easy method is to presuppose that the cosmos began in time, and infer from this that such a cosmos would need a Creator. The other method is the one attacked by Crescas. In this case, we instead begin by arguing that the heavens are eternally moving. Since time is the measure of motion, as Aristotle tells us, time must be eternal too. On the other hand, the body of the cosmos is finite in size. It has an edge, namely the outer surface of the furthermost heavenly sphere which is surrounded by nothing, not even empty void. Since the cosmos is finite in this way, it cannot contain within itself the power needed to generate an eternal motion. Instead, there must be an immaterial mover capable of causing the everlasting motion of the heavens—and this is God.

To his credit, Maimonides is very forthcoming about the principles that need to be accepted or established if this argument is to work. He counts twenty-six of them, and sets them out at the beginning of the second part of his *Guide for the Perplexed*. These principles include the core ideas of Aristotle's physics: the eternity and finite size of the universe, the nature of time, and the impossibility of void. Crescas is going to raise serious doubts about these points and the arguments that had been used to support them. He will thus threaten to sweep away much of natural philosophy as it was known in the medieval period. Again, he does so not because he has a better physics to put in its place, but simply because he sees the Aristotelian system as an inadequate basis for belief in God. Since there are twenty-six principles to consider, I won't go through them all. But a look at the highlights, like a viewing of one or two Buster Keaton movies, should be ample proof of greatness.[6]

At the risk of making it sound like this chapter is going to be awfully long, let's start with infinity. Aristotle accepted the possibility of what is called a "potential" infinity, which is when you have a situation of indefinite increase, like counting up through numbers. The process is endless in theory, but in practice you will never get to an actually infinite number, so the procedure involves no absurdity. It's impossible, though, that anything be *actually* infinite, for instance, that the body of the universe be unlimited in size. Aristotle devised clever arguments to show the impossibility of such a scenario (*On the Heavens* 271b–273a). Imagine, for instance, an infinitely large disc that is rotating around a central point. Now picture an endless line drawn from that centerpoint across the disc, like an infinitely long spoke in an infinitely large wheel. Aristotle realizes that in a rotating circle, a point further from the center will move faster than one closer to the center. For instance in a normal, finitely sized wheel, a point on the wheel's rim moves faster as the wheel spins than a point on a spoke right near the middle. So a point infinitely distant from the center on our infinitely long line would need to move *infinitely* fast, if it is to move along in this rotation. But infinitely fast motion is absurd. So there cannot be an infinitely large body.

Against this sort of argument, Crescas uses a tactic Aristotle himself had employed in thinking about potential infinity. Aristotle admitted that any finite body can always be divided, then divided again, and again. In principle there is no limit to how small the divisions can be, though of course there is a practical limit to how finely we can chop things up. Similarly, Aristotle could explain the infinity of the eternal past as follows: for any number of years you choose to name, the universe has existed for longer than that number of years. In other

words, if you say, "has the world existed for one million years?" Aristotle will be willing to say, "indeed, and in fact for longer than that." He'll give you the same response no matter what number you choose. Just as with dividing a body or counting upwards through the numbers, you never have to stop, but neither do you ever finish the process by arriving at an actually infinite number of past years.

Now Crescas proposes that the same thing can be applied to Aristotle's thought experiment of the infinitely long line on the infinite disc. Take any point on the line you like. It will always be true to say that the line extends past that point as it stretches away from the center of the disc. Yet there is no particular point that is infinitely far from the center, no point that would need to be moving infinitely fast for the rotation to succeed (207). Rather, the points on the line are at indefinitely increasing, yet in each case finite, distances from the center of the disc. In a stroke of genius, Crescas thinks to compare this to an already well-known result in geometry, in which two lines can approach each other indefinitely, getting closer and closer without ever meeting. (If you remember the word "asymptote" from your schooldays, that's what Crescas is referring to.) Given that the distance between two lines can get smaller and smaller forever, without ever going to zero, why can't an infinitely long line be supposed to extend indefinitely, while remaining limited at any given point?

Like this imaginary line, Crescas isn't done. He adds several more points of his own that controvert age-old assumptions about infinity. He rejects an assumption made even by other critics of Aristotle, like al-Kindī in his arguments against the eternity of the universe (Chapter 4). Al-Kindī, along with pretty much everyone else, had assumed that one infinite quantity cannot form only a part of another infinite quantity, while both are equal in size. Imagine an infinite pile of marbles, half of which are red and half of which are black. Before Crescas most philosophers would see this as impossible, because the red marbles would be infinite in number, yet only half as many as the total number of marbles. Crescas, by contrast, would see no problem with such a scenario. He tackles the problem with another geometrical thought experiment: imagine a line that is bounded in one direction but infinite in the other (191). For Crescas, such a line would be no shorter than a second line that extends infinitely in both directions. After all, both lines are of indefinite and unmeasurable length; this is all that "infinite" means, "without a limit" (211). Aristotle and al-Kindī would probably say that Crescas has lost his marbles. But in fact he has made a fundamental breakthrough, one that would make it possible to accept, say, that the set of all the positive integers is the same size as the set of just the even

positive integers.

Crescas' new conception of infinity has implications for our understanding of the physical universe. Aristotle, Maimonides, and friends assumed that the cosmos ends at the sphere of fixed stars, with no empty space beyond that sphere. But Crescas again sees no problem with supposing an infinite void around the cosmos (189), as the Stoics had suggested in antiquity. After all, he's shown with the example of the infinite line on the disc that there is nothing absurd in supposing that space extends indefinitely. He can't leave it at that, though, because Aristotle has another way of blocking this move. He argued that, infinite or not, void space is impossible. His most persuasive argument was that the speed of any motion is inversely related to the density of the medium it passes through. Take the well-known phenomenon that giraffes lope more quickly through the fresh air of the savannah than they do through oatmeal. A void space has zero density, so the speed of any motion through it should be so fast as to be "beyond any ratio"—which is clearly impossible (*Physics* 215b). Against this, Crescas deploys an idea that had already been suggested by Philoponus and Ibn Bājja: the effect of a dense medium is only to slow down a motion's intrinsic speed (183). In a void there would be no slowing effect, but there is no prospect of an infinitely fast movement, since every motion's intrinsic speed is finite.

Crescas sees another problem for Aristotle and Maimonides here. We've just said that motions are impeded and slowed down by the friction of the media they pass through. But this is never going to happen in the case of the rotation of the heavens in Aristotle's cosmology, since there is no friction applied to them. Why, then, do we need an infinite power to make them move? It would be one thing if the heavens moved infinitely *quickly*. That would indeed call for a power of infinite intensity to make them go.[7] But, on Aristotle's own reckoning, the heavens are only moving at a finite speed, albeit for an infinitely long time. No infinite or immaterial cause is needed to explain this (273). A finite amount of power can be applied to set them into motion, and they will just go on rotating forever, with nothing to slow them down or stop them. And while we're at it, it doesn't actually seem that *any* external cause is necessary to move the heavens, whether the cause would be finite or infinite in power. The heavens are surely alive and capable of moving themselves; if not, they would be less impressive than even a humble insect down here on earth.

Maimonides' proof for God's existence is by now in tatters, and Aristotelian natural philosophy as a whole has suffered a lot of collateral damage in the process. This is what Crescas set out to achieve. But he goes further still,

remarking that, given the shakiness of Aristotle's physics, we could easily imagine our universe to be radically different from the one supposed in the philosophical tradition. If actual infinity is possible, and if there can be infinite void, as Crescas has argued, there could well be other worlds out there in an unending emptiness (217). In fact, our own cosmos might be only one in an infinite series of worlds created and then destroyed by God! Of course, this would presuppose that time stretches back beyond the existence of our world, something Aristotle would reject. But, as I'm guessing you won't be surprised to hear, Crescas sees no problem here either. Like the much earlier al-Rāzī (Chapter 7), he abandons the Aristotelian understanding of time as dependent on motion, and of place as the limit surrounding a body. Rather, place is simply the void or emptiness whose possibility Crescas has now established (199).

As for time, Aristotle had defined it as the measure of motion in respect of prior and posterior. Wrong yet again, says Crescas. For one thing, time could measure bodies at rest too, or even the extended existence of immaterial things (287, 291). He admits that one may define time as a measure, so that Aristotle was right on this score (a rare concession, but then, even a stopped clock is right twice a day). But Crescas disagrees about the sort of measure involved here. Time is really something we ourselves impose when we evaluate the interval between any two moments, as when we say that the starting point and end point for one revolution of the sun are a year apart. Here Crescas would not agree with al-Rāzī, for whom time was an independent, eternal principle of the universe. For Crescas, time is instead brought into being by our mental activity, and exists "only in the soul" (289). As a result, Crescas has no trouble in supposing that time stretches back before our cosmos existed: this just means that we can mentally entertain longer periods than the finite time during which the cosmos has been around. If he is serious about all this and not just describing an abstract possibility, Crescas is proposing that God creates a universe containing infinitely many worlds existing now, and a further infinity of worlds in the past and in the future.[8] Which just goes to show how lucky we are to live in the one world that had Buster Keaton in it.

Crescas' dismantling of Aristotelian physics is a breathtaking achievement. But it should not distract us from the important fact that he actually accepts the point Maimonides was trying to prove with his twenty-six principles: God does exist, and we can even prove it. How? Well, basically by using Avicenna's method.[9] If we consider the whole of Crescas' universe with all its worlds, we may be grappling with something infinite, but it is still something that could have failed to exist. There must be a Necessary Existent to explain why this

infinite contingency has been realized, and of course that Necessary Existent is God. Actually, Maimonides knew and made use of Avicenna's proof too. But, always the critic, Crescas thinks he didn't understand it properly. In his version of Avicenna's argument, Maimonides mentioned that if all things are possibly non-existent, then at some point in eternal time this possibility would be realized —and at that point there would be nothing.[10] Crescas disagrees, seeing (I think rightly) that the proof from contingency needs to assume nothing about eternity, or for that matter about whether the things God has created are finite or infinite.

This shows that Crescas was no implacable foe of philosophy in all its forms. Rather, like al-Ghazālī in the eastern Islamic world, he held philosophers to their own standards, pointing out the holes in their supposedly demonstrative arguments. Yet he made use of philosophical ideas himself when he turned to the question of how the Jewish Law could be grounded. It's tempting to caricature Gersonides and Crescas, the two great thinkers of medieval Judaism after Maimonides, as standard-bearers for the rationalist and anti-rationalist paths open to Jews in this period. There may be something to that idea (it's easy to remember, for one thing). Yet Gersonides, despite his enthusiasm for Averroes, was also a critic of the previous philosophical tradition, and Crescas structured his *Light of the Lord* in pretty much the same way as Gersonides structured his *Wars of the Lord*. Both proceed by listing classic arguments of philosophy and then passing judgment upon them. For Crescas, there is a time and place for everything, even philosophy.

38

WHEN BAD THINGS HAPPEN TO GOOD PEOPLE SUFFERING IN JEWISH PHILOSOPHY

As universes go, this one does have its good points. There is the occasional promotion at work, the odd open-air screening of Buster Keaton's *The General*, the opportunity to enjoy friends, family, and philosophy. But on the other side of the balance is the enormous amount of suffering endured by humans. Poverty, war, sickness, pain: these things have always been prevalent in human life, and show no sign of being banished anytime soon. It's a matter of dispute whether the good outweighs the bad, but there's no disputing the reality and extent of suffering. So theologians and philosophers of all religious persuasions have always felt the need to offer what is called a "theodicy," from the Greek words *theos* ("god") and *dike* ("justice"). To offer a theodicy is to justify God, that is, to explain how it can be that the world does contain evil and suffering even though it was fashioned by a wise, good, and powerful divinity.

Obviously this issue is nothing new in our history of philosophy. Plato's appeal to the principle of "Necessity" in his *Timaeus*, Plotinus' idea that evil is a kind of privation or non-being, the Greek Church Father Origen's idea of fallen souls—these are only a few of the prominent theodicies we've discussed in previous volumes.[1] But the problem of suffering might nonetheless be said to occupy an especially central place in the Jewish philosophical tradition. The narrative of Judaism embodies the problem at its most paradoxical. A chosen people are selected by God, yet wind up suffering more than any other people, their Temple destroyed, their homeland lost, scattered in exile. How providential then (perhaps literally?) that the Hebrew Bible should include one of the classic religious texts on suffering, namely the Book of Job. I don't know if you've read it recently, but if not, you might want to. It's not terribly long, and has a poetic

power that is awesome in every sense of the word. I'll summarize it for you now, occasionally quoting from Lenn Goodman's translation of the Arabic version by Saadia Gaon, which is a nice Job if you can get it.[2] It begins in "once upon a time" mode, with the following words: "A man there was in the land of Uz, whose name was Job; and that man was blameless and upright, God-fearing and shunning evil" (1:1). Here we already have one of the key thematic and philosophical points of the Book: Job is a good man. So surely God will shower favors upon him, right? At first that's exactly what He does. Job has a large family and plentiful livestock, and conscientiously sacrifices to God to thank Him for this bounty.

But then our second character turns up: Satan. He suggests to God that Job only shows due reverence to his Lord because he has been so highly favored. Take away his prosperity and his family, and he will sing a different tune, cursing God's name. God agrees to test Job, and arranges for his wealth and family to be lost. Job reacts by tearing his clothing, shaving his head, and crying out while prostrate, "naked came I from my mother's womb, and naked shall I return to the grave" (1:21). Yet he does not curse God. So Satan urges God to take away Job's bodily health. God agrees, instructing only that Job's soul be left unharmed (2:6), and Job is struck down with illness, covered from head to toe with sores. Now Job laments at greater length. He still does not curse God, but does curse the day he was born (3:1–3, 3:11), and in general bewails his fate.

At this stage, things turn more in the direction of a debate. Three friends of Job appear, with the rather wonderful names Eliphaz, Bildad, and Zophar. Rather than offering comfort and sympathy, they berate Job. Surely he has committed some sin, or God would not be visiting such misery upon him. Job denies this, insisting that he has remained righteous. A fourth friend, named Elihu, having listened to this and been unimpressed by Job's critics (32:12–13), joins the conversation. He puts it to Job that God, in his majesty, may be inscrutable to us in His ways, but can never be accused of injustice (34:10). If God sees fit, He may send down the greatest of suffering on any man, "until his soul retch at food, even the choicest aliments, and the bulk of his flesh perish from sight, his bones ground until invisible." Yet He may also reward this same man later in compensation (33.19–21). Job is silenced by this speech, but a far more impressive speaker is yet to come. From the midst of a great storm the voice of God comes to Job, saying in effect, "who are you to complain?" Where was Job when God was fashioning the world? Suitably chastised, Job agrees that the Lord's power is invincible and recants his lament, "taking solace in dust and ashes" (42:6). God is now satisfied that Job has passed the test, and commands

that he be restored to health, regain wealth and a large family, and in general live happily ever after.

This riches-to-rags-to-riches story can be read as a kind of philosophical dialogue, albeit not of the sort preferred by Socrates. There is no question-and-answer exchange or detailed refutation. Rather, the cast of characters mostly declaim at one another in long, accusatory speeches. On the other hand, the Book of Job does have something in common with a Socratic dialogue: it leaves a central question apparently unanswered. There's no straightforward message about why a just God would allow suffering to be inflicted on a good man. What does come through loud and clear, like a voice from the whirlwind, is God's might and unquestionable majesty. Perhaps the answer to our question about why God allows evil is that, as mere humans, we have no right to ask.

But Jewish commentators on the Book of Job were not content to leave it at that. It received some attention in antique Judaism, but came to be an object of especially intense scrutiny in the medieval period.[3] Many commentaries were written on Job, often dealing more with the linguistic or "surface meaning" of the book. But philosophers too were attracted to it. Like late ancient commentators on Plato, they thought the text's failure to provide any clear doctrine was only skin deep. A philosophically informed reading could discover a rich teaching on divine providence, often on the basis of small but crucial clues. Looking at these treatments of Job will allow us to do two worthwhile things at once: follow the key philosophical theme of suffering through the history of medieval Jewish thought, and see how Scriptural commentary could be a means of philosophical reflection (and vice-versa). I'm going to look at several readings of Job, beginning with the one offered by its Arabic translator, Saadia.

He discusses the problem of suffering in the work we discussed earlier (Chapter 6), *The Book of Doctrines and Beliefs,* but he also wrote a commentary on the Book of Job itself. Like later philosophical commentators, Saadia thinks it contains a positive teaching about God and evil. He avoids the most tempting and easy resolution of the problem, which is to agree with Job's friends Eliphaz, Bildad, and Zophar (love those names) that Job must have done something to deserve his torment. There is something right about their view, in that God does indeed punish the wicked with suffering. But there is another purpose for suffering: to test the righteous. This is the hidden message of the speech given by Job's fourth and wisest friend, Elihu. Saadia's reading is fairly plausible, since in the dialogue between God and Satan, God does seem to agree to wreak havoc upon Job as a way of testing his devotion. The idea is also faithful to

Jewish tradition, since late ancient rabbinic thought had offered a similar interpretation of the infamous episode in which Abraham is commanded to sacrifice his own son, Isaac. There too, Abraham is being tested by God.[4] Like Abraham, Job passes the test with flying colors.

To maintain this reading, Saadia needs to quash any suspicion that Job's lament in the book is itself a kind of sin, a failure to accept what God has sent, however unwelcome it may be. It may seem unjust for God to test Job in this way, especially if he is being arbitrarily singled out for such an ordeal. But this overlooks the fact that Job will be rewarded later on, to recompense him for his pains. That's what happens at the end of the story, when Job has his family, health, and considerable wealth restored to him. On Saadia's interpretation, it's crucial that God does *not* explain his whole strategy in the final speech from the whirlwind. Suppose He were to say, "look here Job, all of this is like a scheduled fire-drill: only a test. You just need to be patient and you are guaranteed to win out in the long run." In that case, Job would not really be tested at all, since it would be obvious that the smart play is to display devotion and humility until his trials are over. Hence, God simply declares His own unchallenged power, to see whether Job will submit as he ought to. Once Job does so, he gets his reward. Of course, none of that is to be found at the surface level of the text. As one scholar has put it, "Saadiah is often the philosopher, reading ideas into the biblical text, rather than the exegete, reading them out of it."[5]

Not just any philosopher either, but a philosopher who was deeply influenced by Islamic *kalām*. We know already that Saadia borrowed extensively from the Muʿtazilites.[6] Of course, they too had to say something about suffering and divine justice, and sometimes they even did so in the context of discussing Job, whose travails are mentioned in the Koran (21:83–4, 38:42–5). As self-styled "upholders of divine justice," the Muʿtazilites would never admit that God deals unfairly with His creatures. Just as any evil we commit in this life will be punished, either before we die or in the hereafter, so any suffering we undergo in this life will be recompensed either in this life or the next. The Muʿtazilites went so far as to extend this idea to animals, stating that those who suffer will be rewarded in paradise, for instance with food. The Muʿtazilite God has been compared to a cosmic bookkeeper, always making sure the scales are balanced, with evil going punished and suffering made good by compensation.[7] As so often, a contrast is provided by the rival *kalām* school, the Ashʿarites. Their view would correspond to the "don't ask, don't tell" reading of God's final speech in the Book of Job. We should simply accept God's choices, without presuming to evaluate how well these conform to our human expectations of justice.

Saadia lived too early to see this opposition become entrenched in Islamic *kalām*, but it was well known to later Jewish philosophers, including Maimonides. Given that his *Guide to the Perplexed* is meant to help resolve philosophical difficulties arising from Scripture, it is no surprise to see him include in it a discussion of the philosophically difficult Book of Job (§3.22–3). Where Saadia saw Job's three friends as sharing a single view, Maimonides thinks that they represent three different ideas about divine providence. On his reading, only Eliphaz thinks Job is being punished for previous sins. Maimonides agrees with Saadia that Eliphaz is mistaken. As it says right at the start of the narrative, Job is a righteous man; he has committed no sins for which he could be punished. Next comes Bildad, who for Maimonides is espousing the fire-drill theory of Saadia and the Muʿtazilites, that suffering is only a test. Zophar, meanwhile, adopts the Ashʿarite view that God's ways are simply inscrutable (*Guide* §2.23).[8]

More remarkable still, Maimonides sees Job himself as espousing a theory of providence. Maimonides thinks of the theory as being that of Aristotle, following here the interpretation of Aristotle offered by Alexander of Aphrodisias.[9] According to this Aristotelian theory, divine providence looks to the general good order of the universe, but has no application at the level of the individual. To this one could add Avicenna's question about whether God even knows about the things that befall individual people, never mind whether He actually chooses them. So when Job laments, he is not really blaming any divine plan. He is just cursing the fact that the natural order has by chance visited particularly harsh suffering on him. What this theory misses, according to Maimonides, is the fact that humans may be granted reprieve from the vicissitudes of the natural order.

This is the point he finds in the speech of the fourth friend, Elihu. At one stage Elihu refers to an angel who will speak on behalf of the afflicted (Job 33:23). What does this angel represent? Apparently some intervening force that can rescue people like Job from their distress.[10] The angel could represent a prophetic vision of future events, which allows the recipient of the vision to avoid future evils. But more fundamental for Maimonides is the idea that the intellectual part of each human transcends the physical realm where suffering occurs. So Maimonides does, after all, diagnose a failure of sorts on the part of Job. When we first meet Job he is righteous and without sin, but is no philosopher. This means that he conceives of happiness in terms of the material goods of wealth, health, and family, and can only lament when these material goods are suddenly lost. What he ought to do is seek refuge in intellectual life,

identifying himself with that part of him which is invulnerable. We are given a hint in this direction early in the Book of Job, when God tells Satan that he can ruin Job's body, but must spare his soul (2:6). Ultimately, Job learns through his trials and comes to a "certain knowledge of God" (*Guide for the Perplexed* §3.23).

The lesson discovered by Maimonides shares much with earlier ethical teachings. Ultimately, it draws on the late antique Platonist reworking of the ethical ideal of Stoics like Epictetus. We should value only what is invulnerable, namely the immaterial, intellectual soul. Within the Islamic world, it may remind us of figures like al-Kindī, al-Balkhī, al-Rāzī, and Miskawayh (Chapter 13). They argued that all goods apart from intellect are inevitably lost, so that valuing them leads inevitably to sorrow. For subsequent Jewish philosophers, though, this intellectualist ethics would be first and foremost associated with Maimonides. His interpretation of the Book of Job was taken up by two rationalist Maimonideans, Samuel Ibn Tibbon and Gersonides.

Both of them adhere fairly closely to Maimonides' reading of Job, albeit that they turn his ideas in rather different directions. Ibn Tibbon wants to stress the irrelevance of the material sphere for the happiness of the right-thinking person, and focuses especially on the immortality of the human soul. Like Maimonides, Ibn Tibbon thinks that Job laments because he lacks philosophical understanding. If he were a philosopher, he would know that he is going to live on after death and be free of suffering. The surest way for him to avoid misery in this life is to identify himself with that intellectual part of him that will survive, since it is already beyond the bodily realm. This doesn't seem to justify the bodily sufferings that are visited upon him. To state the obvious, pain hurts, and the fact that one has an immortal soul doesn't make it hurt any less. But Ibn Tibbon thinks the Maimonidean theory can help explain why God would allow suffering. It is actually good for us to suffer, not because we are being tested as Saadia proposed, but because it teaches us not to seek happiness in this world. If our earthly lives consisted of nothing but pleasure and comfort, what reason would we have to turn towards our true happiness, which lies in intellectual perfection?

Gersonides takes a rather different tack in his *Wars of the Lord*, as well as a commentary he devoted to the Book of Job.[11] He agrees that we should pursue intellectual perfection, as the philosophers say. But this is not the ultimate lesson of the Book of Job. It is merely the assumed background. Unlike Maimonides and Ibn Tibbon, who thought that Job laments because he lacks philosophical insight, Gersonides thinks that Job is a philosopher from the start. What he needs

to learn is that God not only offers us an afterlife free of suffering, but also helps us in this life. When Job begins his lament by cursing the day he was born (3:1), Gersonides takes this to represent a belief in astrological determinism. As an Aristotelian philosopher Job thinks that our bodies, though not our intellectual souls, are at the mercy of nature and its workings. The speech of Elihu and the declaration of God from the whirlwind are supposed to remind Job, and us, that it is within God's power to favor individuals if He so chooses, as when He selects His prophets. Gersonides is correcting the excesses of Aristotelian rationalism, where too little room is left for miraculous divine intervention.[12]

Gersonides has good reason to establish harmony between the Maimonidean approach and more traditional conceptions of divine providence. Maimonides and his followers did not step into an intellectual void. Generations of thinkers in Andalusia had already tried to marry the philosophical and Jewish traditions. This could take the form (or should I say, matter and form) of Neoplatonic revival in the work of Ibn Gabirol. But the mainstream approach was more that of an author like Ibn Paquda. In his ethical work on the duties of the heart, he adopted a view on human suffering much like that of Saadia Gaon. The mere fact of embodiment, which makes it possible for us to suffer, is a test sent to humankind by God (403, 427).[13] The right response is not to develop some kind of complex theory of providence or to seek unity with an Active Intellect. Rather, it is to endure whatever God decrees for us with patience and humility, with no thought of reward (198, 392). This leads Ibn Paquda to adopt a very simple reading of the Book of Job. For him, it just shows a righteous man accepting the suffering that has been inflicted on him (433–4). Job's friends are simply wrong to say that this is in any way a punishment that Job has deserved.

In the fourteenth century at least one author reasserted this sort of traditionalist interpretation against the rationalist exegesis of the Maimonideans: Simon ben Ṣemaḥ Duran. He was, I regret to say, not one half of a late medieval music duo called Duran Duran, but rather a rabbi and legal scholar of Spain and Algeria who opposed rationalist developments within Jewish philosophy. One of Duran's works is a commentary on the Book of Job, and in it he retrenches to a viewpoint much like that of Saadia and Ibn Paquda: suffering is a divine test sent by providence. Unlike them, though, Duran thinks that Job must have done something wrong to bring on this test. He finds the prospect of completely unprovoked suffering sent by God intolerable. Duran finds it easy to assume that Job must have sinned at least a little, since after all, he was a rich man who lived a life of comfort.[14] For that matter, the very fact that Job gives voice to his anger and distress can itself be counted as a sin.

By so forthrightly rejecting Maimonides' reading of Job and returning to a more traditional Jewish theodicy, Duran gives us a small glimpse of a wider phenomenon. Maimonides' philosophy provoked mixed reactions, from the enthusiastic approval of Ibn Tibbon to the disquiet of the "Maimonidean controversy." It was in the face of this sort of hostility that Gersonides sought to soften the edges of Maimonides' rationalism. Further reactions to Maimonides came from a more radical direction, as we saw with Crescas. Perhaps surprisingly, the Jewish mystical tradition did not simply join in rejecting Maimonides' project. The authors of the movement known as Kabbalah did criticize him on occasion, but they also incorporated ideas from Maimonides, and from the philosophical tradition more generally.

39

CHARIOT OF FIRE KABBALAH

I think I won't offend any religious sensibilities if I point out that the Bible contains some passages that are, shall we say, hard to understand. Fresh in our minds are deep moral and theological puzzles posed by the Book of Job; we saw Maimonides worrying about physical descriptions of God; and in the last volume in this series, there was some worry about an episode in which Noah drinks himself into unconsciousness.[1] But for sheer tantalizing incomprehensibility, it is hard to beat the beginning of the Book of Ezekiel (1:1–28). It begins where the Book of Job ended: in a storm, with the Prophet Ezekiel beholding a cloud full of flame. Within the cloud were four figures with four faces and four wings apiece, the faces those of humans, lions, bulls, and eagles. These beings moved next to the wheels of a great domed chariot bearing a throne, upon which sat a fiery, brilliantly shining figure—the Lord Himself.

If you're expecting me to explain this vision, then I'll have to disappoint you. I don't know what it means, and if I did I wouldn't be allowed to tell you. The Mishnah and Talmud lay down the following restriction: "the laws of incest may not be expounded in the presence of three people, the story of creation in the presence of two, nor the chariot in the presence of one, unless he is a sage."[2] I know my readers are wise, but they might not qualify as sages, and I certainly hope there are more than one of them. Despite this prohibition on teaching—or perhaps in part because of it?—a genre of interpretive literature devoted to the Chariot (*merkabah*) already developed in late antiquity. These esoteric treatises described the journey of the mystic to behold God sitting upon His throne. Such texts helped to inspire the most famous tradition of writing produced by medieval Jews: Kabbalah.

The Hebrew word *qabbalah* means "tradition." It refers to the fact that mystical ideas and interpretations of Scripture were handed down through the generations. Much as the Mishnah bans open teaching concerning the Chariot,

Kabbalists emphasized the secretive nature of their teaching. The influential Ashkenazi esotericist Eleazar of Worms referred specifically to the Chariot when he said that the tradition (*qabbalah*) of such interpretations can be transmitted only orally. No wonder, then, that Eleazar and the Kabbalists made themselves rather hard to understand when they did write down their ideas. I've looked at some strange and difficult texts in this history of philosophy, like Iamblichus' defense of pagan theurgy and the paradoxical writings of Ibn ʿArabī. But Kabbalah outdoes them, offering a welter of symbolic images, numerological analysis, and biblical exegesis that is usually more dumbfounding than the passages being interpreted. This stuff makes Iamblichus look like Bertrand Russell.

I hope, nonetheless, to convey something of the underlying philosophical content of the Kabbalah, and something of its relation to medieval Jewish thought more broadly. That Kabbalah is part of the story of *medieval* Jewish thought is already a point of controversy. The most celebrated Kabbalistic text, the *Zohar*, is written in Aramaic and narrates the journey of several rabbis through the Holy Land as they have a series of mystical encounters. In other words, it presents itself as a work from antiquity. But the great modern scholar of Kabbalah, Gershom Scholem, showed that the *Zohar* must be a medieval text. He carefully analyzed the language used in the text to show that it couldn't reflect ancient usage, and also pointed out that whoever wrote the *Zohar* was pretty vague on the geography of the Holy Land. So it's now generally accepted that it was produced in the late thirteenth century. Scholem thought it was the work of a Kabbalist named Moses of Leon, but it may rather be a joint production of the group gathered around him.

The enormous size and complexity of the *Zohar* would already be enough to suggest that it did not emerge from nowhere. Indeed, it is (aptly enough) drawing on a long-standing "tradition" of mystical literature.[3] Among genuinely antique writings, we have the aforementioned texts devoted to the Chariot, and also a work called the *Book of Creation* (*Sefer Yeṣirah*). Its origins are even more shrouded in uncertainty than those of the *Zohar*, but it is certainly far older than the medieval texts of Kabbalah proper; Saadia Gaon already wrote a commentary on it. The *Book of Creation* anticipates some of the key themes of Kabbalistic literature. It refers to "thirty-two paths of wisdom" by which God created the universe, a reference to the numbers from one to ten plus the twenty-two letters of the Hebrew alphabet. These numbers and letters are at the core of the Kabbalah.

In part because of its late antique sources of inspiration, Kabbalah offers a

revival of ideas from antiquity, not only from avowedly Jewish texts, but also from Gnosticism and Neoplatonism. It revives the rich symbolic language of Gnosticism, mocked by Christians like Irenaeus, who suggested that his Gnostic opponents might as well worship a divinity called "Pumpkin."[4] The historical connection between Gnosticism and Kabbalah is hard to work out in detail, but seems real enough. In the case of Neoplatonism, things are a bit clearer. Kabbalists built on the philosophical writings of men like Ibn Gabirol, Abraham ibn Ezra, and especially Maimonides, all of whom transmitted Neoplatonic ideas about the ineffability of God. The Kabbalist Moses of Burgos duly remarked that he and his associates planted their feet at the spot reached by the heads of the philosophers.[5]

That nicely encapsulates the Kabbalists' attitude towards philosophy. Figures like Maimonides had gone as far as they could with human reason, and even pointed out the inability of reason to grasp God. The Kabbalists could go further, by following one of two paths. Following a distinction already made in the medieval period, scholars now speak of "contemplative" versus "ecstatic," or "theosophical" versus "prophetic," Kabbalah.[6] The first, "contemplative" kind begins with the earliest significant Kabbalistic text, the *Book of Brilliance* (*Sefer ha-Bahir*). It seems to have been produced in southern France in the late twelfth century, but again looks back to antique mystical literature, referring, for example, to Ezekiel's vision of the Chariot.[7] It also anticipates the most central and celebrated teaching of the Kabbalah, by enumerating powers within the structure of the divine.[8]

These are the so-called *sefirot*.[9] Kabbalists typically recognized ten of them. Though the *sefirot* are associated with the first ten arithmetical numbers and with letters of the Hebrew alphabet, they are most frequently designated by ten names, beginning with *keter*, *ḥokhmah*, and *binah*, meaning "crown," "wisdom," and "understanding." There are hints of this in the ancient *Book of Creation* and in the *Book of Brilliance*. But it is in the *Zohar* and other writings produced in the twelfth and thirteenth centuries that the teaching of the *sefirot* emerges in all its glory. Particularly important in developing the theory was a circle of rabbis in Provence, gathered around Abraham ben David ("Rabad") and his son Isaac the Blind. This group has been credited with creating the first fusion between Kabbalistic teaching and Jewish philosophical sources.[10]

To see why, we must start at the top, with divine ineffability. Philosophers like Ibn Gabirol and Maimonides had been willing to admit that God lies beyond our grasp. We can understand Him only indirectly, by knowing the things He has

created or by speaking of Him negatively. The Provençal Kabbalists basically agree. They refer to God in Himself as *ein sof*, the "infinite," about which we can have no knowledge or speech. But they add a caveat that makes all the difference, namely that God does show Himself in the guise of the *sefirot*. So these play something like the role of divine attributes, or of relations between God and the universe. We might (loosely) compare the contrast between the philosophers and Kabbalists here to that between the two groups of Muslim theologians we looked at, the rigorously negative Muʿtazilites and the more attribute-friendly Ashʿarites. Or, to make a comparison with more like-minded Islamic literature, we might think of the *sefirot* as being analogous to the names of God in Ibn ʿArabī's mysticism.[11]

Like the names in Ibn ʿArabī, the *sefirot* do not just represent God to His creation, but also interrelate and even come into conflict. The dynamic interaction between the *sefirot* is one of the most striking aspects of Kabbalah. We find the Kabbalists evoking the Neoplatonic idea of a cycle of procession and return—all things coming from the First Principle and going back to it—but within the divine *sefirot* themselves.[12] The first two *sefirot* look especially Neoplatonic. The first, *keter* or "crown," shares God's infinity and ineffability. For this reason there was debate among the Kabbalists about whether the "crown" could even be associated with a Hebrew letter, as are the other *sefirot*.[13] Thus we might tentatively compare the "crown" to the Neoplatonic One,[14] with the following *sefirot*, "wisdom" and "understanding," analogous to the Neoplatonists' Intellect and Soul. Thus "wisdom" contains the essences of things and also emanates the subsequent *sefirot*, just as Plotinus' intellect is the realm of Forms and gives rise to the rest of the Neoplatonic hierarchy.

Such analogies may help to reassure us that it is worth including a discussion of Kabbalah in a history of philosophy. But we shouldn't push the analogies too far. The full set of ten *sefirot* is distinctive. The importance of a set of ten powers is emphasized already in the ancient *Book of Creation*, which warns the reader: "do not say that they are eleven or that they are nine."[15] Also unique to Kabbalah are the welter of symbolic resonances assigned to the *sefirot*. One *sefira* may stand to another as male to female, with frankly erotic language being used to describe the relationship. The *sefirot* are also associated with the parts of soul or the human body, and of course with the parts of the Chariot from Ezekiel's vision. The vivid and concrete language used in speaking of the *sefirot* and the numerology used by the Kabbalists evoke another sort of ancient Jewish mystical literature, which assigned huge numerical values to the size of God's limbs. There's a contrast here to Jewish medieval philosophers from Saadia to

Maimonides, who insisted that the incorporeality of God is absolutely fundamental to a correct understanding of Judaism. The Kabbalists agreed, of course, that God is in Himself utterly beyond body or any other created thing. Yet they were more relaxed about the application of corporeal and even sensual language to the divine through the medium of the *sefirot*. Rabad acidly remarked, regarding Maimonides' intolerance of Jews who describe God in bodily terms, "many [have done so], and his betters."[16]

This tradition within the tradition that was Kabbalah, the so-called "contemplative" or "theosophical" strand, developed in Provence but found its way into Spain. This was thanks to Isaac the Blind, whose students brought the sefirotic theory to the Catalonian city of Gerona at the beginning of the thirteenth century. From there Kabbalistic ideas were taken up by a number of Spanish Jewish scholars, not least among them Naḥmanides, whom we saw trying to keep the peace during the Maimonides controversy (Chapter 35). Given his standing in the Jewish community, Naḥmanides' endorsement of Kabbalah gave it a major push. The momentum would eventually culminate with the writing of the *Zohar* towards the end of the thirteenth century. Northern Spain, which by this point had passed from Muslim into Christian hands, became the new center of Kabbalistic activity. The initial circulation of the *Zohar* occured there. Scholem's lead suspect for its authorship, Moses of Leon, hailed from the north-central region of Spain. And a significant number of other Kabbalistic authors wrote in that region from the thirteenth to the fourteenth century.

One is worth picking out in particular: Abraham Abulafia, greatest representative of the "ecstatic" or "prophetic" variety of Kabbalah. His life stretched from 1240 to the 1290s, and was rather eventful, though not quite as eventful as he expected it to be.[17] After experiences he took to be prophetic in nature, Abulafia declared himself to be the Messiah, and he supposedly tried to get an audience with Pope Nicholas III in Rome in order to announce the good news. This should set up a fantastic anecdote, but unfortunately there isn't one. The Pope died before there could be an encounter between the two; plus Abulafia may have made the whole thing up. Abulafia moved on to Sicily, where he acquired some followers but also provoked sufficient outrage that the locals appealed to Solomon Ibn Adret, another expert in Kabbalah, who hailed from Barcelona (he was involved in the ban on teaching philosophy to the young mentioned in Chapter 35). The two Kabbalists disagreed on several points. The touchiest issue was that Abulafia claimed to be the Messiah, whereas Ibn Adret claimed that he, you know, wasn't. But also, Ibn Adret represented the more theoretical brand of Kabbalah as we know it from the *Zohar* and from Rabad and

his circle. Against this, Abulafia proposed a new set of traditional values.

When he wasn't provoking Popes, Abulafia was trying to provoke a direct vision of God through the use of certain meditation techniques, emphasizing a side of Kabbalah that has been compared to the ancient practices of theurgy defended by Iamblichus.[18] Through such ritualistic practices, the mystic could facilitate a union or "cleaving" together with God, or if not God then at least the Active Intellect, which was associated with one of the divine *sefirot*. Abulafia called the resulting brand of Kabbalah "prophetic," and explicitly contrasted his approach to the contemplative, more theoretical style of Ibn Adret. Rather than just investigating the symbolic relationships among the *sefirot*, Abulafia would do things like repetitively chanting the letters of the Tetragrammaton (the "four-letter" Hebrew name of God, YHWH), joining its four consonants to all the Hebrew vowels in sequence. Physical practices like head-shaking, weeping, and fixed hand gestures would accompany the chanting. All this was in part inspired by rituals described by the aforementioned Eleazar of Worms.

This may sound like an anti-rationalist critique of contemplative Kabbalah. Forget sefirotic theory, let's chant meaningless syllables and shake our heads until God grants us a vision! And then tell the Pope about it! But that would be unfair to Abulafia, who knew his way around philosophy (he wrote no fewer than three works commenting on Maimonides' *Guide*), and who retained elements of theoretical Kabbalah alongside his meditative practices. Hence his identification of the Active Intellect as the target of mystical union; he also associated the ten *sefirot* with the ten heavenly intellects of the Aristotelian cosmology. So it might be better to think of the practical side of "prophetic" Kabbalah as a complement, or completion, of the theory of the *sefirot*. The ritual practices recruit the body into the soul's efforts to reach God. This helps to explain why Abulafia so frequently sounds like a Platonist, much like the other Kabbalists. One of his favorite themes is the opposition between our intellect and our imagination, something Abulafia compares to the relation between a rider and a horse that needs to be controlled with a whip.[19] The same image had been used in the Platonist tradition to represent reason's control over the lower parts of the soul. Like the Platonists, Abulafia sees the lower psychological faculty—he calls it "imagination"—as a power closely tied to body, which needs to be dominated by the intellectual part of the soul.

But of course this is Kabbalah, so Abulafia's account of intellectual perfection comes packaged in the images and tropes of the Jewish tradition. Our flight from body towards God is like the flight of Moses and the Jews from Egypt. Abulafia also refers to the biblical character Enoch, who was transformed

into the angel Metatron. In just the same way, the right mystical practices will enable us to transform into Active Intellect.[20] Such details show us that Abulafia, like Kabbalists more generally, shared Maimonides' goal of finding agreement between the Jewish and philosophical traditions. But from a Maimonidean point of view, the Kabbalists are like British drivers from an American point of view: going in the wrong direction. In Kabbalah, philosophy is absorbed into a coded and recoded language of Scriptural images and esoteric terminology. Maimonides had done the reverse, offering guidance to those who were perplexed by biblical language by translating that language into rationalist Aristotelianism. A nice example is the one we began with: Ezekiel's vision of the Chariot. Maimonides proposed reading this passage as a metaphysical theory dressed in symbolic robes. A student of Abulafia's rejected this, insisting that the Chariot conveys to us the secrets of the emanations among the *sefirot*.[21]

Yet that reference to "emanation" strikes another Platonist note. And for some observers, the contrast between Maimonides and Kabbalah was not so much about rationalism as opposed to mysticism. It was instead about different approaches to philosophy: Kabbalah's Platonism or Maimonides' Aristotelianism? One partisan of the Aristotelian approach was the fifteenth-century Renaissance thinker Elijah del Medigo. He was struck by the neat fit between Kabbalah and the Platonist texts that were just being made available in his day, thanks to new translations from Greek into Latin.[22] In the Renaissance, Jewish philosophers will continue to take up both the Maimonidean and Kabbalistic sides of this debate, and the tradition will also make its influence felt among so-called "Christian Kabbalists." In subsequent centuries Kabbalah would, appropriately enough, appear in numerous manifestations, of which the most famous is probably Hasidic Judaism. In short, Kabbalah is like Sufism: a topic of such richness and historical scope that I can give you only a taste of it here. Having hopefully succeeded in doing so, I'll now turn to the last phase of medieval Jewish philosophy, by taking its story up to the brink of the Renaissance.

40

A MATTER OF PRINCIPLES JOSEPH ALBO AND ISAAC ABRAVANEL

As every American schoolchild knows, "in 1492, Columbus sailed the ocean blue." He was dispatched on his voyage of discovery by Ferdinand and Isabella, famous as heroes of the Christian reconquest of the Iberian peninsula. But "heroic" isn't really the right word for them, if you ask me. In the same year, they offered the Jews and Muslims remaining in Spain a stark choice: convert to Christianity, leave our realms, or die. Many Jews converted, and many left, sometimes choosing the Islamic world as the safest haven. The ultimatum was a departure from earlier Christian policy. A century earlier, the rulers of the Christian principalities in Spain had tried, albeit unsuccessfully, to stop a spasm of violence targeting Jews in the year 1391. The view from the top typically saw Jews as valuable members of the community, serving an especially useful role in economic terms. On the other hand, throughout the medieval period Jews were often seen as being akin to Muslims. Often they were respected as Abrahamic peoples, much as Muslims designated the Christians and Jews as fellow "people of the book." But for the same reason, chasing the last Muslims out of Spain seemed to the rulers to go hand-in-hand with the removal of the Jews.

Before this final act of religious cleansing, there had of course been centuries of tension, cooperation, and competition between the three faiths that flourished in Andalusia, frequently spilling across the border into southern France. One particularly remarkable illustration of the fraught tension between Christians and Jews occurred in the early fifteenth century.[1] It was a debate, or rather series of debates, convened by one of the "antipopes" of Avignon over a nearly two-year period. From February 1413 to November 1414, sixty-nine sessions were held in the Spanish city of Tortosa. At these sessions, Jewish rabbis had the opportunity to defend their religion against a particularly knowledgeable opponent. He was a Christian who had converted from Judaism, taking the rather wonderful new

name of Jerónimo de Santa Fe. Drawing on expert knowledge of the Talmud, Jerónimo was able to argue that statements in this Rabbinic text prove that the Messiah, still expected by his Jewish contemporaries, had in fact already appeared, in the person of Jesus of Nazareth. Some of the rabbis who debated with Jerónimo eventually capitulated, signing a document abandoning the authority of the Talmud. This suggests that they converted to Christianity.

But not all the Jewish scholars were willing to sign. One who did not was Joseph Albo, a native of Aragon in Spain who had studied under Ḥasdai Crescas. Albo's participation in the debate left a mark on his writings. He composed a now lost attack on Christianity, and a surviving treatise called the *Book of Principles* (*Sefer ha-ʿiqqarim*). This was a contribution to what can fairly be described as the dominant debate *within* later medieval Jewish philosophy, never mind debates with the Christians: the question of the principles that ground the Jewish Law. We already saw Albo's teacher Crescas objecting to Maimonides' list of principles in the *Light of the Lord*. Albo followed his master's critical approach, but with his own *Book of Principles* he was still pursuing the broadly Maimonidean project of trying to establish the basis on which belief must rest.

From a historical point of view, we can see this as a reaction to the challenges that faced the Jewish communities of Spain and southern France in the medieval period. The Muslim Almohads chased Maimonides and many other Jews out of Andalusia, and the situation of Jews later under Christian rule was not particularly comfortable either. Constant pressure to convert, either to Islam or Christianity, was answered with polemical writings against the rival faiths, but also with attempts to show that the Jewish Law rests on certain well-defined and well-demonstrated principles.[2] Maimonides was the greatest exponent of this strategy. In pursuing it he was applying to his religion the lessons of philosophy. Like a demonstrative science as defined by Aristotle, the Judaism of Maimonides would have a solid foundation in first principles, which play a role like axioms in mathematics. In fact, we might compare the discussions of principles in Maimonides and his heirs to a feature of late antique philosophy. The pagan thinker Proclus wrote a work called the *Elements of Theology* in which he imitated the axiomatic method of Euclid to present Neoplatonism as a demonstrative science.[3] Just as Proclus was responding to the rising tide of Christianity in antiquity, so the competition of the Almohads' brand of Islam and the Christianity of the reconquest led Maimonides, Crescas, Albo, and others to investigate and establish the principles of their own faith.

Another benefit of their approach was to lay down exactly what it means to

be Jewish. What would Jews give up by converting, and what beliefs must they maintain to avoid heresy? Maimonides' ideas about the principles were highly intellectualist. For him Judaism was, of course, about law and practice, but it was also a matter of assenting to a range of doctrines, doctrines that just happen to bear a striking resemblance to the ideas of the philosophers. Hence his controversial claim that Jews *must* believe in the incorporeality of God. Albo tends to be less rigorous in drawing the line between orthodoxy and heresy. Perhaps because of his experiences in the Tortosa debate, which had focused on the question of whether Jesus was the Jewish Messiah, Albo does not think that belief in the future appearance of Messiah is a litmus test for membership in the Jewish faith. Jews are supposed to believe this, all right, but denying it does not make you a heretic.[4] Albo gives the same status to belief in bodily resurrection, another flashpoint in criticisms of Maimonides. As long as one accepts some form of reward and punishment after death, one is within the scope of Jewish belief as far as Albo is concerned.

When we imagine someone laying down a religion creed or list of doctrines, we don't usually think of it as a plea for flexibility and tolerance. But as these examples show, the laying down of principles and non-negotiable beliefs can widen the boundaries of orthodoxy, just as much as it can tighten them. As a student of Crescas, Albo is particularly dubious that reason can establish the wide range of doctrines promised by Maimonides. Of the three claims central to Maimonides' philosophical theology—God exists, He is one, and He is immaterial—Albo thinks only the first can be proven demonstratively.[5] For this purpose Albo favors a regress argument already found in Aristotle, to the effect that there must be some uncaused cause that can first activate potential for change. It's consistent with this proof that the matter out of which the universe is made might be eternal rather than created. This is the view that was adopted by Gersonides. Albo doesn't believe it, but neither does he think that it can be ruled out by reason.

Happily, the beliefs that Albo recognizes as true, but not susceptible to rational demonstration, are on his reckoning not necessary principles anyway. You absolutely need to believe that God exists if you want to be Jewish, and you also need to believe that God created the universe. But these beliefs have a different status. The Torah has three fundamental "roots" (ʿ*iqqarim*): God exists, the Torah is revealed from heaven, and we will be rewarded and punished in the next life.[6]

Then there are further beliefs derived from these principles, which are derivative of one or the other of these three primary beliefs. For instance, God's

incorporeality and unity are subordinate to His existence, while belief in the Messiah still to come is aligned to the providential promise of reward and punishment. Albo notes that the coming of Messiah is not only excluded from the class of three primary "roots," but even an idea that has been used by Christians to abrogate the Torah, insofar as they claimed that it was superseded by the new Law brought with the coming of Christ.

Albo thus disagrees with Maimonides about the status of certain specific beliefs within the law, but also regarding the power of reason to establish these beliefs. Yet on one more general point he is a faithful Maimonidean. Like Maimonides, he conceives of the Jewish Law as having the same structure as an Aristotelian science.[7] His slimmer portfolio of principles still performs the function that the principles of Maimonides had played: they are like axioms or first principles in a demonstrative system. In fact, Albo explicitly mentions Aristotle's work on demonstrative science, the *Posterior Analytics,* when he is explaining the relationship between his principles and the doctrines derived from those principles. In the coming generations, this conception of the Law would be challenged by a figure who might fairly be described as the last significant Jewish thinker of the medieval period, Isaac Abravanel.[8]

Abravanel was born in 1437, in the city of Lisbon. So if you have been wondering when these chapters on philosophy in Andalusia would include someone from Portugal instead of Spain, the moment has arrived (and not a moment too soon, since we're almost done). However, Abravanel's family was Spanish, and in the 1480s he moved to the kingdom of Aragon and Castille, ruled jointly by the aforementioned Ferdinand and Isabella. That feeling of dread you are now experiencing, since you know what is about to happen in 1492, is one that Abravanel apparently lacked. He blithely went to work for the royal couple as a tax official. When the crisis of 1492 came, he lost his position and his second homeland when he chose exile over conversion. Eventually he wound up in Venice, where he died in 1508. His son Judah Abravanel would become a significant philosopher in his own right. But reflecting the Abravanel family's new Italian home, his ideas seem more at home in the Renaissance rather than the medieval Andalusian tradition we've been following.[9] (This just goes to show you how blurry are the boundaries between periods of philosophy: in this case, we're drawing a line between medieval and Renaissance philosophy that winds up separating a father from his son!)

Confirming that the attempt to understand the principles of Judaism was a core issue for thinkers of this period, Abravanel wrote a work titled *Principles of the Faith*. This was, however, only one of numerous compositions he produced,

among them commentaries on the Bible and Maimonides' *Guide to the Perplexed.* Speaking of perplexity, a strange feature of Abravanel's writing is that he seems to be further away from Maimonides' intellectualist approach than Crescas and Albo were, yet he presents himself as defending Maimonides from their criticisms. How can this be? Well, let's start with Abravanel's disagreement with the way his predecessors had pursued their principle project.[10] He narrows down the list of principles even more than Albo had done, getting the number of fundamental doctrines down to the tidy sum of just one: belief in the creation of the world from nothing. He expects even less of rational demonstration than Albo did, stating that not even this single principle can be proven. Then he seems to change his mind, and abandons even the core principle of creation, leaving us with a grand total of zero principles. (Well, at least it's a round number.)

This is not because Abravanel thinks that, in matters of religious belief, anything goes. To the contrary, he is as strict about matters of orthodoxy as Maimonides had been, and thus stricter than Albo. Instead, he is abandoning the whole idea that the Law is built on certain foundational beliefs, whether these can be rationally proven or not. Instead, he holds that *all* the truths given to us in the Torah should be accepted. He explicitly mentions the idea that the Law could be structured like a demonstrative science,[11] but denies that this is the right way to understand the revelation. It all comes from God, it's all true, and no one truth it contains is more fundamental than any other. Or for that matter, more optional. Abravanel insists that Jews are not permitted to disbelieve even the smallest thing in the Torah, and where there is no doubt, there is no need to appeal to grounding principles. Our attitude towards the Law should ideally be that of "faith" (*emunah*), which here means total and unshakable certainty.[12] This sort of certainty could be induced by, for instance, witnessing a miracle. The whole of the Law, not just some favored set of beliefs, merits and demands faith. It is the believers who have this complete and unflinching commitment, not those who have convinced themselves of thirteen or three or one particular doctrine, who will be rewarded in the next life.

That certainly explains why Abravanel would agree with Maimonides' rigorous stand on matters of orthodoxy, while disagreeing with him on the matter of principles. The disagreement is, of course, a sizable one. Yet Abravanel speaks out in defense of Maimonides against the criticisms of Crescas and Albo, by suggesting that Maimonides had portrayed the Law as consisting of principles and derived beliefs for merely pedagogical purposes. Those who need guidance can be started out with a set of basic principles—Maimonides used

thirteen—and then brought to accept the rest of the Law on that basis. But one shouldn't confuse a useful teaching strategy with an analysis of the nature of the revelation itself. Abravanel finds other points of agreement with Maimonides, too. Perhaps the most interesting concerns his response to Crescas, who had castigated Maimonides for claiming that god "commands" us to believe in Him. Crescas argued that this makes no sense, because you can't reasonably command someone to believe something. Abravanel disagrees. We are under an obligation to believe, and may be severely punished if we fail to do so. This doesn't mean that one can just change one's beliefs at will in response to a threat or command. But one can take steps that might lead to belief. It's interesting to note that Abravanel is here making a suggestion later found in the French philosopher Blaise Pascal. When Pascal produces his famous "wager" argument, that it would be a better bet to believe in God than not, he admits that one cannot just change one's belief in response to such an argument. Instead, one should, for instance, go to church regularly and in general live as a Christian, hoping that real belief will come in due course.

It's appropriate that our discussion has wound its way to a French thinker. As you may have noticed, our look at Jewish philosophy in Islamic-controlled Spain has overspilled its borders. We've looked at figures who lived in Spain under Christian rule, like Crescas, or who lived outside Spain, most often in southern France, like Gersonides. Most poignantly representative are those who were forced to relocate, living anew the ancient Jewish story of exile. The Almohad regime was so unwelcoming to Jews that Abraham Ibn Ezra and Maimonides fled. The Christians who replaced the Almohads were sometimes more favorable, but as Isaac Abravanel learned, sometimes they were not. Yet the story I've been telling is a unified one. Medieval Jewish thought is not neatly bounded by political or geographical limits, but it has a recognizable shape, a narrative arc, with Maimonides at its apex and the Andalusian culture of *convivencia* as its cultural setting.

There were Jewish thinkers in this period that do not fit into that story, because they lived far outside the orbit of Andalusian culture. We'll meet two significant examples when we turn back to the eastern Islamic world, namely Abū l-Barakāt al-Baghdādī and Ibn Kammūna, both of whom are fully integrated into philosophical developments in the wake of Avicenna. Still other Jewish thinkers responded to other currents within the stream of Islamic intellectual history. Take, for instance, the development of Karaite Judaism. The Karaites have been mentioned several times as the targets of refutation by Rabbinic Jews, from Saadia to Judah Hallevi. But they were not content to be targets. Karaite

communities in Jerusalem, in Egypt, and even in Christian Byzantium developed their own theology by drawing on ideas from the Muʿtazilite tradition. This happened from the tenth to the twelfth centuries, around the same time that Aristotelian philosophy began to be pursued by Jews in Andalusia.[13]

Philosophy could flourish among Jews in other places, too. One that has gone unmentioned so far is Yemen. For the first half of the fifteenth century, as Joseph Albo was defending Judaism in debate and in writing in the far West, the Jewish community in Yemen enjoyed a benign environment under Zaydī Shiite rule. From this period we have works by a little-known philosopher named Ḥoṭer ben Shelomoh, from the Yemenite city of Dhamār.[14] At first glance he may remind us of Albo, since Ḥoṭer also wrote a work responding to Maimonides' thirteen principles. But on closer inspection, it turns out that Ḥoṭer is reacting not just to Maimonides but to the peculiar strain of Neoplatonism handed down within Ismāʿīlī Shiism. He thus shows knowledge of ideas familiar from earlier authors like the Brethren of Purity and the Ismāʿīlī philosopher-missionaries like al-Kirmānī (Chapter 14). To this already heady mixture of Maimonides and Islamized Platonism, Ḥoṭer added allusions to Islamic mystics like al-Ḥallāj and Jewish mystical texts such as the *Book of Creation*, mentioned above as a forerunner of the Kabbalah (Chapter 39). As a result, it has been proposed that Ḥoṭer represents a distinctive, "eastern" strand of medieval Jewish philosophy.[15] He shared the obsession with Maimonides that we see among Spanish and French Jews, but combined this with a range of other influences. The Yemeni intellectual setting offers a kind of alternate reality of Jewish philosophy, in which Averroes was never born and the Aristotelian cosmology of Maimonides is fused with the cosmic hierarchy of Neoplatonism.

PART III

THE LATER TRADITIONS

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GOLDEN AGES THE LATER TRADITIONS

Recently the biologist and atheist *provocateur* Richard Dawkins posted the following comment on the social media website Twitter: "All the world's Muslims have fewer Nobel Prizes than Trinity College, Cambridge. They did great things in the Middle Ages, though." If Dawkins was trying to unleash anger and controversy, he certainly succeeded. Furious reactions focused on the first sentence, the part about the Nobel Prize. But I was more struck by the second sentence. It's a standard caveat you'll hear from people who want to criticize Islam as a religion or Muslim culture, but who are enlightened enough to realize that once upon a time—a long, long time ago, like in the "Middle Ages"—Muslims were capable of scientific discovery, fabulous works of art, and all the other things we expect from a great civilization. Of course, we are here in the realm of political and religious polemic, rather than sober and careful history. But behind this "What have the Muslims done for us lately?" question is a serious historical puzzle.

The puzzle would go something like this. From the seventh to twelfth centuries, which I suppose is what people like Dawkins mean by the "Middle Ages," the Muslims conquered a vast empire, produced scientists and mathematicians like Ibn al-Haytham and al-Khwārizmī, and philosophers like Avicenna and Averroes. Sadly, starting in the thirteenth century or so, a situation of terminal decline set in, both politically and intellectually. The Muslims were pushed back in Spain and then pushed out completely. In the eastern heartlands, the ʿAbbāsid caliphate ended with the murder of the last caliph by the invading Mongols. Philosophy and science were forgotten, with Averroes the last to engage seriously with the ideas of the Greeks. Thankfully, the Latin world woke just in time from its medieval slumber. Following the translation of the precious works of Aristotle, Avicenna, Averroes, and others into Latin, medieval Europe surged into its own golden age, with scholastic philosophy gracing thirteenth-

century Christendom, only to be later displaced by the rise of modern science.

Rather than offering you an explanation of this decline, I'm going to tell you that there is no decline to explain. To the contrary, a good case can be made that the very period in which philosophy and science supposedly died in the East was actually a "golden age" of philosophy in the Islamic world. This was proposed by Dimitri Gutas, who put the end of the golden age in about 1350, a full century after the height of the Mongol invasion.[1] As Gutas pointed out, things did not end there either. By the fourteenth century we are already seeing the rise of the Ottomans in Anatolia. Along with the Safavids in Persia and the Mughals of India, the Ottomans will be one of three great Muslim powers of the fifteenth to nineteenth centuries. All three of these dominions made contributions to the history of philosophy and science. This is not to say that Muslim culture went from strength to strength in the entire period from the fall of the ʿAbbāsids down to the time of colonialism. The Mongols did cause enormous destruction and chaos. But even this often led to the movement of ideas within the Islamic lands, as philosophically minded scholars moved at speed to escape the Mongol depredations, bringing their ideas with them.

Furthermore, the Mongols were capable of building, not just tearing down. After the pillaging was over, Mongol princes had to settle down and rule, and were known to sponsor science and serve as patrons for philosophers, just as the ʿAbbāsids, Būyids, and Seljūqs had done before them. Patronage relations will also feature when we look at the Ottomans, Safavids, and Mughals. So court culture continues to be a factor in the history of philosophy. Equally important will be *madrasa* culture. We saw already that educational institutions, set up as charitable foundations, were a major feature of the Seljūq period, with the vizier Niẓām al-Mulk giving his name to the network of Niẓāmiyya *madrasas*, which employed, among others, the theologian al-Ghazālī. These schools did focus on the Islamic sciences, like Koran interpretation, the study of the sayings of the Prophet or ḥ*adīth*, and so on. But they also taught logic, always a gateway drug leading to the intoxications of metaphysics.

There's a parallel here that is hard to resist. As the *madrasas* were becoming an ever-more dominant part of the intellectual scene in the Islamic world, the universities were rising in Latin Christendom.[2] In both settings, we see the development of something that could fairly be called "scholasticism." Like their Latin-writing, Christian contemporaries, Muslim philosopher-theologians in the East were producing enormously sophisticated treatises full of finely drawn distinctions, always depending on their mastery of logic. Also as in late medieval Christendom, the commentary emerges as a primary vehicle for philosophy.[3] So

instead of imagining the Islamic world lapsing into decline while Europe surges forward towards the Renaissance, we should take note of the parallel developments within the two realms. The difference is that, in Europe, scholastic philosophy and commentary responded above all to Aristotle. In the Islamic heartlands, from Syria to central Asia, Aristotle had by now been displaced by Avicenna. The most original philosophical minds will almost always express their originality by attacking, adapting, and adopting his ideas. I suggest calling this phenomenon, which dominates the development of philosophy in the Islamic East in the post-formative period, "Avicennan scholasticism."

It would, however, be too simple to think in terms of just one Avicennan tradition in these later centuries. Better, although even this is a bit of a simplification, would be to think of four branches sprouting and intertwining from the twelfth century onwards, with all four responding to Avicenna. The seeds for three of these branches were planted in the formative period. The first grows out of Islamic theology, or *kalām*, especially among the Ashʿarites. A massively influential theologian who lived into the early thirteenth century, dying in the year 1210, was Fakhr al-Dīn al-Rāzī. He is an outstanding example of the scholastic tendency I just described, his lengthy works full of deft dialectical maneuvering as he negotiates between classic Ashʿarite positions and the ideas of Avicenna. Among al-Rāzī's major works is a commentary on Avicenna, which would go on to provoke further commentaries by like-minded Ashʿarite philosopher-theologians and their intellectual rivals.

One rival in particular stands out: Naṣīr al-Dīn al-Ṭūsī. He's such a complicated figure that it is difficult to see him as growing from just one branch of the tradition. But for at least part of his career, al-Ṭūsī espoused Ismāʿīlī Shiism, and he will not be the only Shiite thinker in these later centuries. This is the second branch I have in mind: philosophy among Shiites, of both the Ismāʿīlī and Twelver varieties. In the Safavid period we'll see numerous thinkers doing their philosophy within the framework of Twelver Shiism. Among these was Mullā Ṣadrā, the most famous Muslim philosopher of the post-formative centuries. Ṣadrā is noteworthy for the way he draws together nearly all the strands of philosophy in the Islamic world up to his time. He was not only a Shiite, and one whose philosophy is deeply engaged with Avicenna. He also stands at the intersection of our third and fourth branches: Sufism and Illuminationism.

With Sufism we again know where we stand, since we have already seen how philosophy and mysticism came together in the voluminous writings of Ibn ʿArabī. His influence will rival that of Avicenna; it is felt in the writings of such

figures as the renowned Persian Sufi poet Jalāl al-Dīn al-Rūmī, who lived at about the same time as the aforementioned Naṣīr al-Dīn al-Ṭūsī. In fact they died within one year of each other, as did another Sufi philosopher, named Ṣadr al-Dīn al-Qūnawī. It is really al-Qūnawī who can be credited with fusing the Sufism of Ibn ʿArabī together with the metaphysical system of Avicenna. Sufism will remain important, exerting influence not only on Safavid thinkers like Mullā Ṣadrā but also in the Ottoman and Mughal empires.

That leaves the fourth branch, which is something new: a tradition of thought inaugurated by another leading thinker of the twelfth century, Suhrawardī. Using the richly evocative language of light and shadow, he claimed for his philosophy the title *ishrāqī*, usually translated as "Illuminationist." For Suhrawardī, God is the "Light of lights," and emanates forth further immaterial lights whose brilliance falls upon the shadowy world of bodies, which are described as dark "barriers" to illumination. Suhrawardī draws on ideas from Neoplatonic and Sufi sources, but insists that his main inspiration comes from Plato and other ancient thinkers of Greece, Persia, and India. Nonetheless, his works fit the pattern of his age, when philosophizing meant thinking about Avicenna. His metaphysics of light is developed in the shadow of Avicenna's metaphysics, with his Light of lights serving as a particularly brilliant adaptation of the doctrine that God is the Necessary Existent.

This sort of philosophical theology will continue to be a main theme as we look at the later period. Many of the thinkers we'll be examining were card-carrying members of a *kalām* school, most often the Ashʿarites. Logic too will come up frequently, since, as I've said, it was a basic part of a scholarly education. There will also be contributions in psychology, with critical discussions of Avicenna's theory of soul. And there will be ethics, notably in a highly influential treatise by al-Ṭūsī written for one of his Ismāʿīlī patrons. Great strides will be made in the sciences as well. Al-Ṭūsī was only one of many outstanding mathematicians and astronomers of the later Muslim world. A group of philosophers, theologians, and mathematicians gathered round his person and the observatory he led at Marāgha in the mid-to late thirteenth century. Astronomy will feature again in the scientific achievements made after the Islamic world is divided amongst the Ottomans, Safavids, and Mughals. Those Muslims: they did do great things in the Middle Ages, and then they kept on doing them. And not just Muslims, either. In the formative period, especially in Andalusia, Christians and Jews contributed to the history of philosophy in the Islamic world. That will continue to be the case, even if the vast majority of thinkers we'll be considering were Muslims.

The later period will be distinguished by long-running debates concerning metaphysics and epistemology. On the metaphysical side, Avicenna's proposed distinction between existence and essence will spark sophisticated argument about the nature of being. In epistemology, there will be continued focus on the problem of attaining certainty. Were the arguments of "the philosophers"—in other words Avicenna—really watertight? Did they offer demonstration or merely make a plausible case for their conclusions, if that? What was a preoccupation for al-Ghazālī will become something like an obsession for theologians like al-Rāzī and al-Ṭūsī. Ever more attention is paid to method, with the demands placed on philosophical argumentation becoming ever more stringent. The result will be a tendency towards skepticism and emphasis on the limits of philosophy, as various thinkers conclude that, on many topics, human reason simply cannot rise to the standard expected by Avicenna and his heirs.

In this sense the later eastern tradition picks up where we left off in the formative period, with critics of philosophy following the lead of al-Ghazālī. A good example is al-Shahrastānī, who was also trained in Ashʿarite theology and in fact was, like al-Ghazālī, at the Niẓāmiyya *madrasa* in Baghdad. (It should be noted, though, that there is some debate over his religious allegiance, with strong evidence that he really accepted Ismāʿīlism rather than the Sunnism of the Ashʿarites.) He is best known for compiling a work surveying the ideas of various groups within the Islamic world, including not only the philosophers but also religious factions, the *kalām* schools, and so on.[4] But he also composed a withering attack on Avicenna, whose title compares his project to a "wrestling match" with the philosophers.[5] In five sections, al-Shahrastānī grapples with Avicenna over the nature of God and the creation of the universe. Each section begins with a summary of Avicenna's position and ends with a statement of al-Shahrastānī's own view. But most compelling are the middle parts of each section, where he exposes contradictions in Avicenna's system and devises objections against him.

On the issue of existence, al-Shahrastānī presciently anticipates a later debate as to whether God and created things "exist" in the same sense. Al-Shahrastānī thinks that Avicenna gets himself into all sorts of trouble here, by supposing that God exists in something like the same way as created things. By this reckoning, God would be multiple rather than truly one. For He would be distinguished from other existing things only through the addition of the characteristic of necessity (34–5). In other words, if God is the Necessary Existent, as Avicenna claims, then God will consist of two things: existence and necessity. To avoid this consequence, we should just admit that God's existence has nothing in

common with created existence at all (43). Al-Shahrastānī also takes issue with Avicenna's notorious idea that God knows everything universally by knowing Himself as their cause. Again, this proposal would compromise divine unity. When Avicenna says that God knows Himself, that gives us not one but three things, God as a thinker, God's act of thinking, and God as that which is being thought (63–4). Inevitably, this reminds al-Shahrastānī of the Christians, who likewise said that God is three things in one. The comparison is not, of course, meant to be a flattering one. Then there's Avicenna's idea that God creates things just by thinking about them. It's unclear, complains al-Shahrastānī, whether God first thinks about each thing and then creates it, or whether He has to create it in order to know about it. Neither of those options looks particularly good for Avicenna. Worse still (67), if God creates things by thinking about them, then does that mean He creates *Himself* when He thinks about Himself?

This "wrestling match" is only the second round of a sustained contest between Avicenna and the theologians, with al-Ghazālī and al-Shahrastānī laying the ground for more intricate attempts to grapple with Avicenna, notably in Fakhr al-Dīn al-Rāzī. But they were not the only ones trying to come to grips with him. Perhaps no one in the twelfth and thirteenth centuries was more infuriated by Avicenna than ʿAbd al-Laṭīf al-Baghdādī.[6] There's no deeper disappointment than the one felt by a former admirer, and this was the situation of ʿAbd al-Laṭīf. In the teenaged years of his remarkably eventful life,[7] he studied at the same Baghdad *madrasa* which hosted al-Ghazālī and al-Shahrastānī. Following the standard curriculum of study for a religious scholar, he learned by heart works on grammar, law, and ḥ*adīth*. This practice of rote memorization sounds tiresome to us, but ʿAbd al-Laṭīf swore by it, commenting that if you really know a book it should make no difference whether you lose your physical copy of it. (This recalls a story told by al-Ghazālī: as a young man he was mugged for his books, and then mocked by the thief for not having memorized them.)

As ʿAbd al-Laṭīf went on with his studies he traveled widely, visiting Mosul, Cairo, and Damascus. In his own account of his journeys, he emerges as a late twelfth-century version of the title character in Woody Allen's *Zelig*: he meets everyone, at one point encountering Maimonides, of all people, in Cairo, and at another point becoming a member of Saladin's entourage. Through it all, ʿAbd al-Laṭīf was of the view that everything worth knowing could be found in the works of Avicenna. Finally, serious study of the ancients convinced him otherwise. The true philosophers lived simple, ascetic lives, unlike the wine-drinking, sexually voracious Avicenna.[8] In a sign that ʿAbd al-Laṭīf is no

follower of al-Ghazālī, he argued that the ethical burden of philosophy is actually *heavier* than that placed on us by the religious law. Like his near-contemporary Averroes, ʿAbd al-Laṭīf came to the view that one should go beyond Avicenna into the past, studying the wisdom of the ancients and their more faithful Muslim interpreters, like al-Fārābī. For this reason, ʿAbd al-Laṭīf wrote a paraphrase on one book of the Aristotelian *Metaphysics*, a rare expression of interest in Aristotle in the Islamic East after his works had been otherwise eclipsed by Avicenna.[9]

But this was more flash in the pan than the dawning of a new era of Aristotelian scholarship. Not until the Safavid period will we witness a true resurgence of interest in the philosophical works that had been translated from Greek into Arabic under the ʿAbbāsids. A more typical thinker for this earlier, transitional period would be a man like Afḍal al-Dīn al-Kāshānī, known as Bābā Afḍal.[10] About a generation younger than ʿAbd al-Laṭīf, Bābā Afḍal was not a remarkably original thinker, but he was a harbinger of things to come in some respects. For one thing, his writings combine philosophy with Sufism; for another, he writes in Persian rather than Arabic. This would become common only later, in the wake of the more influential al-Ṭūsī, who helped to integrate Avicenna's Arabic philosophical terminology into the Persian tongue. Bābā Afḍal anticipated this linguistic shift, even translating a few philosophical works from Arabic into Persian. In his own philosophical writings, meanwhile, Bābā Afḍal tackled topics from logic to psychology to ethics to humankind's relation to God, drawing variously on Aristotle, al-Ghazālī, and of course Avicenna.

Philosophy of this period, from the death of al-Ghazālī to the Mongol invasions of the mid-thirteenth century, is reminiscent of the tenth century under the Būyids. It's a time of variety in the history of philosophy. In the tenth century there was the professionalized Aristotelianism of the Baghdad school, the open-minded Platonism of the Kindian tradition, the *kalām* of quarreling Muʿtazilites and Ashʿarites. For about a century there were several directions philosophy could have gone. Avicenna put an end to that, serving as a one-man filter through which ideas would pass to the later traditions. Now, though, things are again growing more diverse. Some scholars, like al-Shahrastānī and ʿAbd al-Laṭīf al-Baghdādī, struggled against Avicenna with all their might and decried his pernicious influence, both intellectual and moral. Others, like Fakhr al-Dīn al-Rāzī, were more temperate critics, borrowing as much as they rejected. Avicenna provoked synthesis with other intellectual traditions, notably Sufism, and creative adaptation, as in Suhrawardī's new Illuminationist philosophy. Philosophy was once again branching in different directions, and this time no

single thinker was going to intervene to prune it back to a single stalk. With all this going on, why is it widely thought that philosophy in the Islamic world goes into steep and terminal decline after Ghazālī and Averroes? The answer is simple: subsequent thinkers from the Islamic world had little or no influence on European philosophy, so European historians of philosophy have, until recently, paid them little or no attention. The narrative of decline and the notion that Muslim philosophy and science ended in the Middle Ages make for bad history, the kind that involves thinking something never existed simply because you haven't looked for it.

42

ALL THINGS CONSIDERED ABŪ L-BARAKĀT AL-BAGHDĀDĪ

As we turn to the first major figure of this series of chapters on philosophy in the later Islamic world, a few warnings are in order. First, there will as always be some wince-inducingly bad puns, but if you've gotten this far you're presumably willing to put up with these. Second, even more than in the earlier parts of the book, there will be a lot of unfamiliar names coming at you. I suspect that most readers will recognize at best a handful of the many thinkers I'm going to discuss, like Rūmī, Ibn Taymiyya, and Mullā Ṣadrā. Among the less prominent figures, you'll have to try to avoid confusing the founder of Illuminationism, Suhrawardī, with one of his followers, Shahrazūrī; a Sufi named al-Qūnawī with a logician named al-Khūnajī; and the great theologian of the twelfth century, Fakhr al-Dīn al-Rāzī, with the earlier unorthodox philosopher and doctor al-Rāzī (Chapter 7). The timeline of thinkers in the Dates section at the start of the book may be a useful reference point as you go along.

A third warning is more substantive: the chapters to come are going to be looking at figures and movements that are unknown even to most academic experts, never mind the wider public. Research on philosophy in the Islamic world has nearly always focused on texts written up to the twelfth century or so. Averroes, Maimonides, and al-Ghazālī are the most recent thinkers who have been adequately studied and who are accessible in good editions and English translations. As I've just been insisting, this isn't because there is no philosophy happening later on. If anything, part of the challenge is dealing with the enormous mass of surviving material, which consists mostly of unstudied manuscripts housed in libraries around the world, from Europe to Cairo, Istanbul, Iran, and India. For many of the topics I'll be considering, it is only within the last decade or so that scholars have made significant progress in understanding this material. The most egregious cases are the philosophical

traditions of the Ottoman and Mughal empires, which remain almost entirely untouched by secondary literature in European languages. Naturally, I am still going to try to cover all this "without any gaps," and to show the philosophical interest of the later authors. But everything I will say is, even more than usual, subject to significant revision by future research.

These warnings already apply as we turn to our first major figure, Abū l-Barakāt al-Baghdādī. Let's start with his name, al-Baghdādī. As you might guess, this just means he was from Baghdad, which as you might also guess, gives us further opportunities for confusion. We just met a critic of Avicenna named ʿAbd Laṭīf al-Baghdādī. The two were not contemporaries: ʿAbd Laṭīf died in 1231, whereas Abū l-Barakāt's exact death date is not known, but was probably in the 1160s. Despite his considerable importance, Abū l-Barakāt also exemplifies the problem of understudied later thinkers. The main publication on him is a collection of articles by Shlomo Pines, published way back in 1979, when I was 7 years old.[1] (So if you like, you can now work out my age before proceeding—it's not on the timeline, by the way.) You'd think that in the decades since then research on him would have made a lot of progress, but it hasn't really.

Abū l-Barakāt emerged from the same cultural context that produced Avicenna and al-Ghazālī. We are still in the period of the Seljūqs, when regional courts frequently supported philosophers even as an extensive system of *madrasas* for religious scholars was blossoming. Like Avicenna, and unlike al-Ghazālī, Abū l-Barakāt found more support at the courts (including the caliphal court at Baghdad) than at the schools. This is another case of a Jewish thinker who managed to flourish in the majority Muslim society; Abū l-Barakāt converted to Islam only towards the end of his life. Alongside his philosophical writing he even produced a commentary on Ecclesiastes, a book of the Jewish Bible. So when he wrote about philosophy, he did not approach it from the point of view adopted by most Avicennan thinkers, who were typically trained as jurists and Islamic theologians. Still, he shows a mastery of the dialectical methods employed by such authors. Here we might detect an echo of the earlier Saadia Gaon, another Jewish author who was influenced by the argumentative methods and ideas of *kalām*.

Abū l-Barakāt's conversion to Islam is the most intriguing thing about his life story. We hear about it only in Muslim sources, and there is no consensus among these sources about how exactly the conversion occurred.[2] The one thing the accounts agree about is that the conversion was not motivated by a change in religious conviction. We are variously told that he craved more respect from his

Muslim colleagues, or that he converted out of fear for his life, either after being captured as a prisoner of war or because he failed in his duties as a physician. One version has it that the Sultan's wife died while under his care, and he was afraid he would be executed if he didn't do something dramatic, and fast. But we also hear that he set it down as a condition for his conversion that his daughters could still inherit his wealth without themselves converting. That casts some doubt on the idea that it was a desperate act of self-preservation. Rather, Abū l-Barakāt seems to have been in a position to convert on his own terms or not at all.

In any case, Abū l-Barakāt's philosophical masterpiece shows few overt signs of his Jewish background, though the Bible is cited occasionally. Its title is *Kitāb al-Muʿtabar*, which means the *Book of What Has Been Carefully Considered*. This is explained at the beginning of the text, where Abū l-Barakāt tells us how he came to write the work (98; 262). He says that he has carefully studied both the ancients and the moderns—this would mean, at least in the first instance, Aristotle and Avicenna. He didn't find either particularly illuminating, he says, and is now setting out to give us the fruits of his own reflections on all the main departments of Avicenna's philosophy. Of course, Abū l-Barakāt's insistence here on his own originality is, ironically, not very original. He is harking back to the self-conscious independence of figures like al-Ghazālī, Avicenna, and al-Rāzī. This is in keeping with the disdain of *taqlīd* that we've found throughout intellectual life in the Islamic world. And like Avicenna, and al-Rāzī, Abū l-Barakāt was a doctor. Perhaps he was, like them, following the lead of the great medical writer Galen, who was similarly keen to stress his independence of mind.[3]

What, then, were the issues on which Abū l-Barakāt felt the need to make like a lonely baseball player, and strike out on his own? (I did warn you about the puns.) A full answer would take a book rather than a single chapter; I'll only mention ideas drawn from his physics and his views on the human soul. Let's start with physics, and the rather basic question of what happens when something moves. Suppose you throw a stone into the air (warning: do not attempt this in a glass house). Why does it first move up, then stop moving up, and begin to fall back down? We know what Aristotle's answer would be, more or less. The force applied by throwing the stone makes it move unnaturally, that is to say, up. But since it is an earthy body, the stone has a natural tendency to move down towards its natural place at the center of the universe. At some point this natural tendency kicks in, and it starts to fall. The difficulty is explaining in detail why the stone moves up as far as it does before beginning to fall. It seems

clear that, somehow, the initial force of the throwing motion is being extinguished as the stone moves, until its natural motion can take over and make it fall. But why?

In his typical fashion, Avicenna considered and rejected various answers to this question before formulating his own theory. That theory centers on the Arabic term *mayl*, usually translated as "inclination."[4] Avicenna is here taking over and further developing an idea from the late ancient Christian critic of Aristotle, John Philoponus. Philoponus had suggested that when you throw a stone, you temporarily give it a power for forced, unnatural motion. The stone stops moving upwards once this power wears off. Avicenna partially agrees. He thinks that you do give the stone a so-called "inclination" to move upwards. But it doesn't just get used up, like fuel running out. Rather, air resistance gradually wears away at the stone's inclination. Then the stone comes to rest in mid-air ever so briefly, before beginning to fall as its natural tendency gives it a new inclination to move downwards.

The story told by Avicenna has seemed exciting to historians of science, because it sounds quite a lot like modern impetus theory: once something is set in motion it will continue, unless it is prevented or slowed by something else. The resonance with impetus theory is especially strong when it comes to what Avicenna says about motion in a void. In that case, the stone would just keep moving indefinitely, because there would be no resistance to slow it down and overcome its inclination. The catch is that Avicenna doesn't think this can happen. In fact, he introduces the point about inclination and indefinite motion precisely to show that there cannot be void: if there were, then a finite source of motion like your throwing arm could in theory give rise to an infinite motion, setting a rock sailing off forever through the void with a mere flick of the wrist. And that, thinks Avicenna, is absurd.

What does Abū l-Barakāt do with all this? On the one hand, he broadly accepts Avicenna's idea of an inclination. But he thinks that things are more complicated. For him, the whole time the stone is moving upward, it has *two* inclinations simultaneously: the one imparted by the thrower, which causes it to move up, *and* the natural inclination, that makes it tend downwards. Here he's exploiting another point made by Avicenna, namely, that not all inclinations are actually effective in causing motion. Suppose you are holding something heavy in your hand, like a copy of this book after you purchase it. Actually, make it two copies. Even when you hold them still, the books have an inclination to move down, which means you have to exert force to keep them from falling. On Abū l-Barakāt's analysis, what's happening here is that the two forces, or

inclinations, are in perfect balance. The exertion needed to keep the books still is whatever it takes to counteract their natural downward inclination.

Something like this happens in the case of the stone. When it is at the top of its arc, the stone's natural inclination for downward motion has just gained equilibrium with the externally imposed inclination to go up. Against what some predecessors had claimed, there is no moment of rest between the stone's rising and its falling. Rather, one inclination is fading as the other gains the upper hand, so that there is no extended time—however brief—where the stone hovers motionless. This is a brilliant proposal, in that it can explain deceleration and acceleration. As the stone is moving up, its motion gets slower and slower due to the steady influence of its natural downward inclination. Then, as the inclination imposed by the thrower wears off, it not only stops but begins to accelerate downwards. This might just be the best explanation of these phenomena anyone managed to offer prior to the modern concept of gravity.

On other points, Abū l-Barakāt's ideas in physics sound rather familiar. Unlike Avicenna, he affirms that void is indeed possible, and he also argues against the Aristotelian doctrine that time is the measure of motion. Broadly speaking, these views are akin to those put forward by the Jewish philosopher Crescas (Chapter 37). On anyone's theory of time, though, it can't be the case that Abū l-Barakāt was taking his ideas from Crescas. If anything, it would have to be the other way around, because Crescas comes along about two centuries after Abū l-Barakāt. Given that Abū l-Barakāt was Jewish (for most of his life), it is tempting to connect the two thinkers, but as far as I'm aware this is a question that has not yet been settled. We can at least say that they are probably drawing on the same sources, such as Philoponus.

With his insistence on the possibility of void and independence of time, Abū l-Barakāt may also remind us of the earlier Muslim philosopher and doctor Abū Bakr al-Rāzī, and his infamous theory of five eternal principles (chapter 7). Both additionally stress the fact that time is something we grasp immediately. We don't need to see anything moving to be aware of time passing. Rather, it is something that is just obvious to us (112). The two also refer to the beliefs of common, everyday people to prove the point. Just as al-Rāzī got everyday people to agree that time would exist even if the universe were to vanish, Abū l-Barakāt points to the way Arabic speakers wish each other a long and healthy life by saying "may God let you go on longer." What this expression reveals, suggests Abū l-Barakāt, is a dim awareness that time measures not motion but *existence* (117).[5] Though the immediacy of time to our minds does sound like al-Rāzī—and like Immanuel Kant, for that matter—Abū l-Barakāt's argument has

Avicennan roots too. Avicenna held that existence is something that does not need to be proven or grasped on the basis of anything else. It is, rather, something of which we have immediate awareness. We also saw with the famous "flying man" thought experiment that, for Avicenna, the existence of one's own self is just immediately obvious. Abū l-Barakāt has had the ingenious idea to claim the same kind of immediacy for time (112–16, 289).

Another innovation made by Abū l-Barakāt concerns exactly this topic of the self. It's a rather slippery word, especially in Arabic: the word *nafs* can mean both "self" and "soul" (similarly, the word *dhāt* can mean both "self" and "essence"). So if Avicenna and Abū l-Barakāt are right, and you are immediately aware of "yourself," then in Arabic at least it seems to follow that you are immediately aware of your soul. Abū l-Barakāt is happy to follow Avicenna this far. In fact, like a stone thrown through the void, he is happy to go quite a bit further. Avicenna and the other Aristotelians had tried to understand the soul in terms of the capacities and faculties that belong to living things. Your soul gives you the ability to nourish your body by digesting food, to reproduce, to grow, to move around, to see, hear, and so on, and of course, to think. The Aristotelians also sharply distinguished between these faculties, though. Some of them we have in common with plants, others with animals, while thinking is reserved for us humans.

Abū l-Barakāt thinks this is all wrong. Our souls are not just bundles of disparate capacities. Rather, what the soul is—what the self is, what you and I are—is a single seat of *awareness*. It is the same soul that sees and hears, that imagines and thinks and dreams and initiates motion by throwing rocks. It is, if you will, the principle that gives you a first-person perspective on things. And that means it must be a unity, rather than something divided rather arbitarily into different faculties as the Aristotelians had done. Why say that there is one faculty for seeing and another for imagining, but not say that there is one faculty for seeing yellow and another for seeing red? Abū l-Barakāt again appeals to everyday speech, pointing to commonly used Arabic expressions like "my soul is pleased" (219–20). The fact that the soul is the subject of all our awareness proves, first, that the soul exists, and second, that it is one single thing. Its unity also proves that it is not a body, since the body, unlike the soul, is nothing but a bundle of various distinct parts. To this Abū l-Barakāt adds that, if your soul were your body, then you would lose part of it if you lost a hand or limb; but this is absurd (222). Of course, the body does play a role in conditioning our experience. The fact that your eye faces an object in good lighting conditions explains why you see that object and not anything else (238). This accounts for

the variety of sensations that are brought to the awareness of the self. Yet the self that is aware remains an immaterial unity.

Much like Avicenna's theory of inclination, Abū l-Barakāt's theory of the self sounds strikingly modern, but that impression is to some extent qualified by his wider purposes. Avicenna wanted to use his impetus-like idea of inclination to show that void is impossible. In the same way, I suspect that Abū l-Barakāt developed his theory of the single unified self—what we might be tempted to describe as a "seat of consciousness"—above all for theological reasons. Having sketched this theory of the human soul, he can go on to apply the same principles to the divine mind. In fact, he explicitly affirms that our thinking is like God's (251, 314–15). With his idea that an external multiplicity of objects can be brought to the awareness of a single self, he can now say that God remains one, even though God is aware of the many things in the universe He has created. This will help to solve the problem faced by Avicenna, who struggled to explain how his necessary God could know anything apart from Himself.

As this small sample shows, Abū l-Barakāt exemplifies a movement as real as that traced by a thrown stone: doing philosophy by way of thoughtful consideration of Avicenna. Like al-Ghazālī, Abū l-Barakāt often contributes to philosophy by offering criticisms of Avicenna. But where al-Ghazālī attacked philosophy from the outside, from his standpoint as an Ashʿarite theologian or Sufi mystic, Abū l-Barakāt was in some sense an Avicennan philosopher. And there was nothing more Avicennan than questioning the traditional authorities and adopting new and innovative positions when it seemed like a good idea. Many other philosophers of the later eastern tradition duly practiced philosophy by using, and occasionally abusing, Avicenna. Abū l-Barakāt was among the earliest and most influential exponents of the strategy. Not long after him would come the true master of this sort of critical engagement with Avicenna—with the stress on the word "critical"—a man with a familiar method and a familiar name, but a nearly unprecedented capacity for argument.

43

FOR THE SAKE OF ARGUMENT FAKHR AL-DĪN AL-RĀZĪ

The comedy sketches of *Monty Python's Flying Circus* seem at times to be aimed specifically at an audience of philosophers. Of course there's "The Philosophers Song," about how all famous philosophers were alcoholics, which inevitably ascribes to Descartes the sentiment: "I drink, therefore I am," and the football match pitting the great Greek philosophers against their German counterparts. But my favorite is "the Argument Sketch," in which a man goes to an Argument Clinic and is dissatisfied with the service he receives, because the professional arguer simply disagrees with everything he says. ("Argument is an intellectual process. Contradiction is just the automatic gainsaying of any statement the other person makes!" "No it isn't.") I think that in the whole history of philosophy in the Islamic world, the person best qualified to work at an Argument Clinic would have been Fakhr al-Dīn al-Rāzī. His works are almost inaccessible to the English reader, because they have hardly been translated. This is a shame, because an arguer of his talents is ideally designed for today's audience of professional philosophers. Like a twenty-first-century analytic philosopher, he delights in the deft distinction, the counter-example, the terminological clarification that will defeat an opponent.

Here's an example.[1] Al-Rāzī was chatting with a colleague who was impressed by a passage in which the great al-Ghazālī had refuted an argument put forward by a Shiite theologian. The Shiite had tried to force an unwelcome consequence on his Sunni opponents: either the human intellect can know God with natural resources, or guidance from an Imam is needed. This is a dilemma for Sunnis, especially those of the Ashʿarite theological school like al-Ghazālī, since they deny the need for an Imam but do not believe our intellect is able to grasp God. Al-Ghazālī's response was that the intellect would itself be needed to adjudicate between the rival claims of the intellect and the Imam; thus the Shiite

has to accept the need for intellect as well. Asked what he makes of this, al-Rāzī responds with an entirely characteristic remark: "the [original] argument is false, and the objection of al-Ghazālī is pointless." Al-Rāzī is no defender of the Imam —in fact he is an Ashʿarite theologian, just like al-Ghazālī. But he has no hesitation in irreverently dismissing the move made by his great predecessor. Al-Ghazālī gains nothing by showing that intellect is *necessary*. The Shiite opponent might very well admit this. What al-Ghazālī needs to do is show that intellect is *sufficient*, because that would show that there is no need for an Imam.

This little anecdote tells you most of what you need to know about al-Rāzī. He constantly tested the arguments of others, no matter eminent they might be, and regardless of whether it would cause offence. He was adept at seeing both sides of any debate. In the case I just described, he provided a counter-refutation of al-Ghazālī even though he himself agreed with al-Ghazālī's point of view. And he had a very sharp philosophical mind, maybe the sharpest in the eastern realms of Islam since Avicenna himself. His contrast between a necessary and a sufficient condition is one that philosophers nowadays wield, often with the same dialectical delight displayed by al-Rāzī. Woe betide you if you show up at an American philosophy department to give a talk, and confuse one of these with the other. Today's philosophers often annoy people with their aggressive argumentative behavior, and al-Rāzī likewise found that his methods won him more arguments than friends. The scene just described occurred during a tour of Transoxiana in central Asia, during which al-Rāzī seems to have arrived in each new city looking for people to refute. He wrote up an account of his trip called *al-Munāẓarāt*, meaning (of course) *Debates*. A sentence from the beginning is telling: "As to the city of Bukhārā, when I arrived at it, I argued with a number of people."[2]

As his name indicates, Fakhr al-Dīn al-Rāzī was a stranger in these lands. As we know from looking at the earlier "al-Rāzī," this name means someone from the northern Persian city of Rayy.[3] The later al-Rāzī who concerns us now was a legal scholar and theologian. In this he carried on the family occupation: Fakhr al-Dīn's father could trace his intellectual lineage back to al-Juwaynī, the teacher of al-Ghazālī, and through him to al-Ashʿarī himself. Fakhr al-Dīn was thus steeped in a long tradition of Ashʿarite *kalām*. This shows in all his works, especially his early ones, which adhere closely to the school's traditional doctrines. As he matured he seems to have developed a great appreciation for Avicenna's philosophy. Even more than al-Ghazālī, Fakhr al-Dīn al-Rāzī grasped not only the challenge that Avicenna posed to Ashʿarite theology, but also its power. He wrote enormous, and enormously influential, works in which

he examined pretty well every topic dealt with in Avicenna's physics and metaphysics, as well as Ashʿarite theology.

In these writings his controversialist personality found its ideal literary expression. Each topic he takes up is subjected to a detailed dialectical consideration, with arguments, counter-arguments, counter-counter-arguments, and so on being listed and evaluated. Often, al-Rāzī's opinion appears only as a perfunctory conclusion, if he sees fit to betray his own view at all. He used this procedure even in his masterful commentary on the Koran, regarding which the jurist Ibn Taymiyya tartly noted, "his exegesis contains everything, apart from exegesis."[4] Then there were the works al-Rāzī himself called "philosophical (*falsafī*)," including a massive commentary on the *Pointers* of Avicenna. Because of the size and complexity of his writings, research on his thought is only just beginning. I'm going to give you a sample of what he offers by running through his remarks on several hotly debated issues from Avicenna, before ending with subject that has been particularly well explored, namely, al-Rāzī's ethics.

Let's begin with an issue from natural philosophy: time.[5] Al-Rāzī discusses this in several of his large "philosophical" works, including the especially interesting *Exalted Topics of Inquiry* (*Maṭālib al-ʿāliya*). In this work he evaluates the conceptions of time put forward by a range of thinkers, including Aristotle, Avicenna, previous theologians, and the earlier Abū Bakr al-Rāzī. The latter made time one of his five "eternal principles," and claimed that eternal or "absolute" time is simply obvious to us. We need no demonstration or proof to know that it exists. Perhaps because these ideas had been echoed by the more recent Abū l-Barakāt al-Baghdādī, Fakhr al-Dīn al-Rāzī finds this proposal intriguing. Before he even gets to the question of how time can be defined, he dedicates a long discussion to the question of how we know that time exists. Pursuing his usual policy, he subjects this question to a forbiddingly thorough analysis, even considering seriously the possibility that time does not exist after all. Interestingly, al-Rāzī seems to think that the burden of proof lies on the person who thinks time does exist. In other words, its real existence must be proven, unless we are persuaded that its real existence is so obvious that it needs no proof. This may strike us as odd: shouldn't the burden of proof be on the person who makes the surprising claim that time *doesn't* exist?

Al-Rāzī's approach here can be understood better if we notice the way he poses the problem. The Skeptic about time, he says, would be someone who thinks that time does exist, but only *mentally*. In other words, time would be only subjective, a feature of the way we perceive the world, but there would be

no time out there in reality. Here he is using Avicenna's distinction between mental and real existence. Think again of my trapeze-artist sister, who only exists mentally and not out in the world. In her case we know that she does not exist, but some mentally existing things have a strong purchase on our minds. We can hardly help believing that they are real, even though they are not. What if time is like that? Well, al-Rāzī provides no fewer than twelve proofs to show that time is indeed like that, and has no real existence. He then gives twenty-one arguments to show that time can be grasped directly and stands in no need of proof, as the earlier al-Rāzī and Abū l-Barakāt al-Baghdādī had claimed, before finally moving on to four ways of proving that time does exist, one of which is Avicenna's. In some cases, though not all, al-Rāzī adds refutations of the proofs and arguments being listed. Finally, he makes a terse remark approving of the fourth and final proof that time exists, which is borrowed from the theological tradition. It claims that time must exist, because we need it to coordinate two otherwise unconnected events. For instance, if I say to you that I will meet you when the sun rises, the possibility of connecting my arrival and the rising of the sun shows that time must be real.

In this discussion of time's existence we see two things that tend to push al-Rāzī towards a rather more skeptical stance than we might expect from a theologian, or for that matter, an Avicennan philosopher. First, there is his dialectical method, which involves examining all possible arguments for and against every thesis. The sheer abundance of proofs and counter-proofs tends to induce uncertainty, or at least bewilderment. This aspect of his approach was not lost on observers. Critics complained that al-Rāzī was far better at explaining the arguments in support of heretical views than he was at refuting them.[6] A second and deeper reason for his skeptical methodology is the way that mental existence comes into the discussion. Al-Rāzī assumes that the concept of time must be *proven* to have some external reality to which it applies—in the absence of proof, merely mental existence is the default. Especially given the stringent standards of proof used in post-Avicennan philosophy and theology, this amounts to a major concession to the Skeptic.[7] Here I must mention an anecdote about al-Rāzī, even if it is probably not authentic. A friend came upon him weeping, and asked what was the matter. Al-Rāzī answered that he had just discovered that a belief he had held as certain was in fact false. If this was the case, then how could he be sure that any of his beliefs are true?[8]

Al-Rāzī's demand for ironclad demonstration is a hallmark of his treatment of Avicenna on other topics, too. Consider, for instance, his handling of the "flying man" thought experiment (Chapter 19).[9] Avicenna proposed that a

person created in mid-air, without any sensory awareness, would nonetheless be aware of his own existence. For Avicenna, self-awareness is fundamental to our mental life, to the point that it must continue even when we are deeply asleep. In his commentary on the passage where Avicenna proposes these ideas, al-Rāzī first carefully explains what Avicenna is up to, and then starts raising questions. As with time, he demands clarification as to how we know about self-awareness: is it just obvious or does it need to be proven? If the latter, then the flying man thought experiment doesn't seem to constitute such a proof. Yet it seems far from obvious that we are self-aware while asleep; compare this assertion to a genuinely evident truth, such as the fact that the whole is greater than the part. Furthermore, even if it is true that we *are* always aware of ourselves, even that would not show that we *must* be aware of ourselves. It's a leap from saying something is always true to saying that it is necessarily true.

Speaking of necessity, what does al-Rāzī make of Avicenna's most famous proof, the demonstration that there is a Necessary Existent? As usual with al-Rāzī, there's an "on the one hand" and an "on the other hand." On the one hand, like many other theologians in the later period he is happy to accept Avicenna's characterization of God as the Necessary Existent. In fact, he likes to refute philosophical proposals by showing that they imply God's contingency, or make something other than God necessary.[10] On the other hand, al-Rāzī raises problems for Avicenna's proof every step of the way. Concerning the basic argument that there is a Necessary Existent, he (controversially) thinks that Avicenna is trying to prove this by analyzing the very concept of existence.[11] And this, he believes, cannot be done. You can show that God exists, but not as a matter of conceptual necessity. Rather, we must first observe that there are some contingent things, and trace back an explanatory chain to their first and ultimate cause, which is the Necessary Existent. Even then, al-Rāzī challenges Avicenna's attempt to show that the traits we expect to find in God are implied by the necessity of this first cause. He is not even convinced by Avicenna's arguments in favor of the uniqueness of the Necessary Existent.[12]

Avicenna's most contentious ideas about God concerned divine thought. His God's knowledge is directed primarily at Himself, and applies to individual created things only "in a universal way." As you would expect by now, al-Rāzī greets this proposal with a long list of complaints.[13] It's not clear to him that Avicenna even succeeded in proving that God thinks. For Avicenna, this followed from God's being immaterial, which in turn followed from the fact that God is undivided. As the Necessary Existent, God can have no parts, since if He did His existence would be dependent on those parts. To this al-Rāzī retorts that

some undivided things are in bodies anyway, like the geometrical point, which resides in a solid. As far as the nature of God's thinking goes, al-Rāzī finds this especially problematic. If God has even universal knowledge, then this knowledge will reside in God's essence. This sounds to al-Rāzī more like the theory of divine attributes defended by Ashʿarite theologians like himself, than the more austere theology of an utterly simple God intended by Avicenna.

When he turns to God's knowledge of particulars as such, al-Rāzī presents a whole battery of arguments on all sides of the question.[14] Some are drawn from earlier theologians, others from Avicenna and his partisans. Particularly interesting are considerations as to whether God could eternally know about things that happen at a particular time. Perhaps so: al-Rāzī asks us to consider someone's knowledge that Zayd enters a city at a given moment. This knowledge will be the same whether one knows it before Zayd's arrival, at the time of the arrival, or afterwards. The same could apply to God, so that He unchangingly knows things that change. But al-Rāzī wouldn't be al-Rāzī if he didn't also ask us to consider a counter-argument. Suppose that someone doesn't know what time it is. In that case he will not be able to know whether Zayd's arrival is future, current, or past. To know *that*, our knower does need to change, by becoming aware that the time of Zayd's arrival has itself now arrived. Finally, Fakhr al-Dīn concludes on a rather flat-footed note. He points out that everyone who prays to God is asking for Him to intercede concerning something particular. I don't pray that there are giraffes, but that Hiawatha will recover from her recent neck-reduction surgery. This sort of prayer only makes sense if Avicenna is wrong, and that, al-Rāzī says, is good enough for him.

This is another typical feature of al-Rāzī's dialectical procedure. When he does come to tell us what he himself thinks, it is often rather underwhelming. His last-second appeal to common opinion and religious practice would hardly strike Avicenna as decisive. We may even be tempted to ask whether al-Rāzī is being serious. Is he, in his heart of hearts, quietly suspending judgment, a skeptic in the end? Or just more interested in the cut-and-thrust of dialectical debate than in staking out a view of his own? On at least some topics, he does develop a more robust positive theory. A nice example is his stance in ethics.[15] As in other areas, early in his career he follows the Ashʿarite teaching, in this case the "divine command" theory on which good and bad are whatever God decrees them to be (Chapter 15). But as al-Rāzī's thought develops under the influence of Avicennan philosophy, he is increasingly tempted by the thought that humans are just using words like "good" and "bad" to express what they find beneficial and harmful. In fact, he says in several of his works that our moral language has

no meaning apart from a reference to what we find pleasant and painful, whether physically or psychologically.

This sounds like yet another skeptical, or even relativist, move. Ethical judgments would turn out to be merely subjective, just a matter of certain people expressing a preference concerning certain things. But al-Rāzī is no skeptic when it comes to pleasure and pain. There really are such things, and they really do motivate us to act in certain ways. He finds a way to connect this with Islamic law. Al-Rāzī thinks everything we do is intended to win us pleasure, or to spare us pain, and that applies to the next life as well as this one. Once one has accepted the revelation brought by Muḥammad, one subjects oneself to a whole raft of commands and prohibitions, and one acknowledges the threats and promises that come with them. Violate God's law and you will be punished in eternal fire; obey and you will go to paradise. Thus it turns out that you should follow God's law precisely in order to maximize pleasure and minimize pain. The Ashʿarites may be right that divine law is laid down arbitrarily, but there is nothing arbitrary about our reasons for obeying.

Here we see al-Rāzī adopting a version of what is nowadays called "consequentialism": the right thing to do for each person is whatever leads to the maximally beneficial results. In his version it is the consequences for this specific agent that matter, not what would benefit humans generally. In the course of responding to a potential objection, al-Rāzī anticipates a move made in twentieth-century consequentialism. Sometimes people do things that are not in their interest, for instance, by telling the truth when it would be advantageous to lie. This shows that they take the goodness of an action to turn on considerations apart from individual advantage. His answer is that, in such acts, one is following a rule that *in general* maximizes benefit for all concerned. If everyone felt free to lie all the time, that would be disastrous. So we all agree to adopt honesty as a general policy, and to disapprove of and punish liars. The apparently selfless do-gooder is just looking to the bigger picture, promoting a policy that is beneficial over the long haul, even if it is counter-productive in terms of his narrow concerns on this particular occasion.

As this whole discussion shows, Fakhr al-Dīn did develop interesting positive philosophical theories. So it would be wrong to think of him as nothing other than a one-man argument clinic. It can be hard, though, to see through the maze of thrusts and counter-thrusts in his voluminous writing. The main impression he gives to us is the one he gave to his contemporaries: he writes for the sake of argument, in every sense of the phrase. His debating style was sufficiently provocative that, by the time of his death in the year 1210, he had to ask to be

buried in a secret location so that a group of outraged opponents would be prevented from desecrating the site.[16] He annoyed not just other theologians, but also partisans of Avicenna. Of these the most important was Naṣīr al-Dīn al-Ṭūsī (Chapter 46). He wrote a commentary on Avicenna answering the criticisms of Fakhr al-Dīn, whom al-Ṭūsī aptly and archly called "prince of the controversialists." But for all his ability to annoy, Fakhr al-Dīn became a widely read figure. Many commentaries were written on his philosophical writings, which were chock-full of Avicennan terminology and argumentation. Even when philosophers and theologians weren't writing commentaries on Avicenna, they were often engaging with Avicenna anyway through the medium of al-Rāzī. And this is all in addition to his stature as one of the leading commentators on the Koran. In sum, al-Rāzī has a good claim to be the most significant and influential thinker in the eastern lands of Islam in the twelfth century. But there is at least one other philosopher who could lay claim to this title: Suhrawardī.

44

LET THERE BE LIGHT SUHRAWARDĪ

The years right around 1190 were busy ones for Saladin, the famous Kurdish Sultan of Egypt and Syria, whose real name in Arabic was Salāḥ al-Dīn. In an assault culminating at the Battle of Hattin in the year 1187, Saladin shocked European Christendom by taking almost all of the Holy Land back from the Christian rulers who had held it for nearly a century, ever since the First Crusade. Saladin's recapture of Jerusalem and its surroundings provoked the Third Crusade, which succeeded in taking back much of the territory for the Christians, though Jerusalem itself remained in Muslim hands. Given how much he had on his plate at this time, the last thing Saladin needed was a charismatic and brilliant, but religiously unsound, philosopher exerting influence over his son. So he had the philosopher killed, probably in the year 1191. The philosopher's name was Shihāb al-Dīn al-Suhrawardī, sometimes called "al-Maqtūl," meaning "the murdered one."

This dramatic story is an unusual one, in that philosophers seem to have faced remarkably little threat of persecution or political harassment in the Islamic world. For most of Islamic history, political conditions seem to have encouraged, or at least allowed, intellectual and scientific experimentation. The early, unorthodox thinker al-Rāzī was deemed a heretic by some, and al-Ghazālī pronounced Avicenna's ideas to constitute a departure from Islam so grave that it would merit a death sentence.[1] But neither faced political persecution for their ideas; to the contrary, both had high-ranking patrons. If anything, Avicenna's problem was that powerful men were competing to claim him for their courts. Even Suhrawardī, who was an unusually provocative philosopher, probably ran into trouble only because of his position as the pet philosopher of Saladin's young son.

Why do I say that he was provocative? Well, here's a story that may give you an idea. As his name implies, Suhrawardī probably came from the small town of

Suhraward in north-western Iran. He studied elsewhere in Iran and then traveled to Syria, winding up in the city of Aleppo in 1183. It had just fallen to Saladin's forces, who captured the city from the rival Muslim force known as the Zengids. What happened next is summarized nicely by Suhrawardī scholar John Walbridge:

> He entered the city in clothes so shabby that he was mistaken for a donkey driver. He took up residence at a *madrasa*, where the director quickly realized that he was a man of learning and tactfully sent his young son with a gift of decent clothes. Suhrawardī brought out a large gem and told the boy to go to the market and have it priced. The boy came back and reported that the prince-governor, a teenaged son of Saladin, had bid thirty thousand dirhams for it. Suhrawardī then smashed the gem with a rock, telling the boy that he could have had better clothes had he wished.[2]

It was this teenaged son who took Suhrawardī into his court, with the aforementioned fatal consequences. The story suggests that Suhrawardī was more traveling magician than philosopher. But he was good for more than precious stones. Indeed, he was among the most multifaceted thinkers in the history of philosophy in the Islamic world, able to provide cutting-edge logical analysis alongside flashes of mystical wisdom. The combination was powerful enough to inspire a whole philosophical tradition, the "Illuminationist" (*ishrāqī*) strand within the tapestry of later Islamic philosophy.

Suhrawardī looked back to his predecessors even as he indulged in the rhetoric of new beginnings. Like Fakhr al-Dīn, he responded especially to Avicenna.[3] In his works Suhrawardī speaks frequently of "the Peripatetics," defining his own position in opposition to theirs. Here "Peripatetic" no longer means "Aristotelian," but "Avicennan." In his greatest work of philosophy, the *Philosophy of Illumination* (*Ḥikmat al-Ishrāq*),[4] Suhrawardī admits to having been in the thrall of Avicenna's philosophical system when he wrote his earliest treatises (§166). Now though, he wants to base himself on more ancient thinkers. He looks to figures of the Greek tradition, like Hermes and Empedocles, the Stoics, and above all Plato, and to the eastern traditions of Persia and even India. We should take this with a grain of salt, though. Already in his earlier, so-called "Peripatetic" works Suhrawardī began to sketch some of his more distinctive doctrines. As for the magisterial *Philosophy of Illumination*, it does embrace at least one authentically Platonic doctrine, the theory of Forms. And Suhrawardī does distance himself from the "Peripatetics" more than he had done before. Yet Suhrawardī's philosophy, and by extension Illuminationism more generally, is above all a re-imagining and critique of Avicennism, even if it is packaged as a revival of archaic wisdom.

A fundamental case is Suhrawardī's very conception of philosophy. He recognizes two approaches, which he calls the paths of "inquiry" and "intuition." The path of inquiry is that of the "Peripatetics." The reader who is interested only in their approach is advised to stop reading the *Philosophy of Illumination* and turn to their works instead (§6). But this is far from a dismissal of the path of inquiry. Rather, it represents one half of Suhrawardī's philosophical method. He insists that the perfect philosopher will have mastered both inquiry and intuition. In a remark reminiscent of the political ideas of al-Fārābī, he adds that such a perfect philosopher would be the rightful caliph (§5). As for intuition, this involves not the discursive argumentation of Avicenna and like-minded thinkers, but direct apprehension of God and other principles. Here Suhrawardī praises earlier thinkers, including Sufis and the sages of Greece, India, and Persia (§165). Plato in particular is credited with having enjoyed an unmediated vision of what Suhrawardī calls the "lights" of the immaterial world, culminating in the Light of lights, in other words, God (§274). But the ghost of Plato should not rejoice prematurely: in one passage where his authority is cited, the words put in Plato's mouth are actually a quote from the *Theology of Aristotle*, which is to say, the Arabic translation of Plotinus (§171).

Plotinus might not mind. He might even recognize something of himself as Suhrawardī zealously corrects "Peripatetic" thought, even while stealing the best of the Aristotelians' ideas. The critical part begins already in the first section of the *Philosophy of Illumination*, which is devoted to topics in logic and epistemology. Suhrawardī makes some proposals for simplifying Avicenna's logical system, as I'll explain in Chapter 49. But his most striking innovations here concern knowledge. For one thing, Suhrawardī makes some skeptical remarks about definitions, which are, of course, crucial to the whole enterprise of Aristotelian science (§15). From the Peripatetics' point of view, giving a definition involves stating the essential features of the thing defined, and thus establishing both the wider class to which something belongs and the specific aspects that belong to it, but not the other things in that class. For instance, emeralds belong to the wider class of gemstones, and are specified by being green. Thus it is essential to emeralds to be gemstones, and to be green. We can define them, at least in part, as green gemstones.

Sounds good as gold, right? But Suhrawardī thinks it is more like fools' gold. He reminds us that Aristotle himself laid down the rule that you can only know something on the basis of something else you already know. So if I already know about the essential features that enter into the definition, then presumably I know the defined thing already. In our example, if I know all about gemstones

and green, then surely I already know about emeralds.[5] What further knowledge could be gained by actually formulating the definition? Another worry is that the search for essential features is open-ended. How can I be sure that there aren't further, as yet undiscovered essential features that distinguish emeralds from everything else? If there are other kinds of green gemstones, then our definition is so far incomplete. And in principle we can never know that it is complete, no matter how many more features we may add (§15). This may make Suhrawardī sound like a thorough-going skeptic. If I can't ever define anything, how will I know what anything is? But to the contrary, he wants to say that the process of seeking definitions is pointless, because we *already* know what things are. If I know that emeralds are green gemstones, then my knowledge ultimately rests, not on a *definition* of emeralds or the color green, but rather on direct apprehension of emeralds and the color green. And this seems plausible, at least for some cases. As Suhrawardī points out, no one thinks they need to define a color to know what it is (§70). He generalizes the point, arguing that direct apprehension is the basis of all our knowledge. Definition is therefore useless, at best a concatenation of things we already know directly.

What exactly is happening when we "directly apprehend" something like the green of an emerald? This is where Suhrawardī polishes off the Aristotelians with a new epistemology: his theory of "knowledge by presence." The paradigm case is eyesight. Suhrawardī mentions and rejects the various theories of vision offered by his predecessors (Chapter 11), and replaces them with a breathtakingly simple account, according to which is just the presence to the eye of something visible and illuminated (§145). Similarly, you know something when it is "present" to your mind, and presence is defined negatively as the absence of an obstacle that blocks apprehension. As Suhrawardī puts it at one point, presence is simply "the non-existence of absence" (§134). This sounds rather mystifying, so it's appropriate that the idea was enthusiastically taken up by later, mystically inclined thinkers.[6] Yet Suhrawardī was already developing his idea of "knowledge by presence" in his so-called "Peripatetic" works, and he sees the basic idea as part and parcel of the Peripatetic tradition.

In fact, Suhrawardī tells us of a dream he had, in which none other than Aristotle explained to him the idea of knowledge by presence. I suspect that the dream came to him when he fell asleep reading Avicenna in bed, because the dream Aristotle seems to be acquainted with the "flying man" argument, and the attendant idea that we are all permanently aware of ourselves. Suhrawardī agrees with Avicenna on this point (§116). When you are aware of yourself you are not grasping yourself through some kind of representative image, or by thinking of

yourself as falling under some sort of universal description or definition. Rather, you just immediately grasp yourself. Suhrawardī's dream, and his theory of knowledge by presence, applies this Avicennan insight more widely. Given that you can directly apprehend yourself, then why not admit that you can also apprehend other things directly, such as the color green, or any particular object you might see or hear?

This expansion of direct *self*-awareness to direct awareness of *other* things is a real epistemological breakthrough.[7] It enables Suhrawardī to present individual acts of sense-perception as the foundation of all our knowledge. This is in sharp contrast to the Aristotelians, who, since Aristotle himself, had supposed that genuine knowledge is always universal in character, and who had thus had difficulty explaining how knowledge can be grounded in encounters with particular things in the sensible world around us. In Suhrawardī's theory, there is no need to worry about getting from my experience of Hiawatha or Harold to a universal understanding of giraffes. My visual encounter with Hiawatha or Harold already counts as fully blown knowledge, knowledge that consists in a particular giraffe being present to my awareness. We can apply the point to God's knowledge too. Avicenna's notorious claim that God knows about particular things only universally can now be rejected. Instead, we can say that particular giraffes, particular gemstones, and all other particulars are simply present to God's all-seeing eye (§162).

This brings us to the idea that gives Suhrawardī's "Illuminationist" philosophy its name: God and a whole range of other immaterial things are lights. His metaphysics describes the emanation of all things from God, who is the "Light of lights." From Him radiate a large number of other, lesser lights, including the angelic beings that govern the heavenly spheres, the Platonic Forms, and the souls that command the bodies of humans and animals. Bodies themselves are described as "dark" or "shadowy" things which form a barrier or obstruction to the light shed by higher, luminous beings. Suhrawardī insists that he is not using the word "light" metaphorically (§109). He is drawing on images of emanation found in authors like Plotinus, as well as Islamic sources, such as the Koranic verse stating that "God is the light of heaven and earth" (24:35). But unlike these sources, when he talks about light he really means it.

However, Suhrawardī does distinguish between two kinds of light, which he calls "accidental" and "separated" or "pure" (§109). Accidental light is the light we see in the physical world, whereas pure lights are immaterial beings. Still, both are kinds of light, which Suhrawardī understands as that which is immediately manifest to whoever or whatever beholds it (§107). Avicenna had

said that souls, separate intellects, and God are all capable of permanent self-awareness. In fact, Avicenna argued, and Suhrawardī agrees, that to be aware of anything else, something must first be aware of itself (§121). Again, this makes a certain amount of sense. Anyone who can think, "oh look, it's a giraffe," must also be able to think, "oh, here I am looking at a giraffe," and so must be self-aware. Suhrawardī infers that all these self-aware things, from souls to God, must be lights that are manifest to themselves, because light is simply that which is immediately evident (§114).

Suhrawardī's Illuminationist revolution is starting to look less revolutionary than it pretends: more an extension and modification of Avicennan philosophy than an overthrowing of the whole system. This suspicion at first seems to be confirmed by Suhrawardī's cosmology. He again agrees with Avicenna that God, the Light of lights, is a necessary existent that gives rise to just one cause, which is, of course, a further light. There are then a sequence of other lights emanating forth, like the chain of intellects recognized by al-Fārābī and Avicenna, followed by eternally moving celestial bodies and the physical things in our world below the heavens, called by Suhrawardī "dark barriers." All of this may seem to suggest that what Suhrawardī is calling "light" is just what Avicenna called "existence." There is the ultimate source of existence, God, which is now the ultimate source of light. Then there are the dependent lights that are illuminated, in other words, given existence, by that first Light. Furthermore, Avicenna holds that existence is something that is immediately evident and primary to our minds, which is precisely what Suhrawardī thinks is so special about light.

But it would be a mistake to see Suhrawardī's theory as nothing more than Avicennan metaphysics with a higher electricity bill. "Light" is not just a different word for existence.[8] For one thing, Suhrawardī doesn't think there is any such thing as "existence." To say that something exists is just a mental judgment, a point Suhrawardī makes in his criticism of Avicenna's distinction between essence and existence (we'll come back to this in Chapter 47). For another thing, Suhrawardī recognizes different degrees of purity or intensity in light. Your soul is a self-aware light, and in that respect of the same nature as God, but God is a much purer, "brighter" light than any soul. In addition to this fundamental difference between a light-based metaphysics and a metaphysics of existence, Suhrawardī's system involves a number of smaller, but still significant, departures from Avicenna. Where the Peripatetics had recognized four elements, Suhrawardī has only three. He argues that physical fire is simply very hot air (§196), perhaps because he doesn't want there to be any confusion

between the source of illumination in things and a material element. Where the Peripatetics postulated one immaterial intellect to move each celestial sphere, Suhrawardī recognizes a vast multiplicity of lights whose complex interrelations give rise to the complicated motions of the heavenly bodies (§§150, 181). Aristotle had admitted to being unsure whether there need to be forty-nine or fifty-five movers in total to explain the observed motions of the planets (*Metaphysics* 1074a). As Suhrawardī notes, Al-Fārābī and Avicenna reduced this to ten, with only one mover for each sphere. In what could almost be a parody of Aristotle's uncertainty, Suhrawardī remarks that the number must be "more than ten, or twenty, or two hundred, or two thousand, or a hundred thousand" (§151). Anyway, we won't be running out of them anytime soon.

More remarkably, Suhrawardī returns to a doctrine that had been universally rejected by the followers of Aristotle in the Islamic world: the Platonic theory of Forms (§94). Things in this world are mere images of incorporeal lights, perfect exemplars only imperfectly realized by the bodies we see. Characteristically, Suhrawardī devises his own terminology for the idea, calling the physical images "talismans," while the Forms are "dominating lights" or "archetypes" (§153). But apart from the vocabulary, his version of the theory is a true image of its Platonic archetype. What Suhrawardī adds is mostly a set of responses to Peripatetic arguments against the existence of such Forms. He corrects the widespread assumption that Forms are like universal ideas existing outside of minds, something the Peripatetics deemed absurd. No, says Suhrawardī, they are not like the universals in our minds, but universal only in the sense that they are a single cause that emanates form into many bodily individuals (§169).

This shows that Suhrawardī not only took over ideas from the Platonic tradition, but understood Plato's original intent very well, and this without being able to read the Platonic dialogues. Still, Suhrawardī's philosophy does draw more from Avicenna than from Plato, or any of the other sages he prides himself in following. A good example is his treatment of reincarnation, something he considers at least possible, in agreement with, as he says, "Buddha and the Eastern sages" (§230). Yet in developing this topic, he uses an argument borrowed from Avicenna (Chapter 17), to the effect that, in the case of humans as opposed to animals, a new soul is provided to each person by the celestial "giver of forms." There is no transmigration of souls into the human body, since if there were, the human would wind up with two souls (§231). And when it comes to souls, one is company for the body, but two is most definitely a crowd.

This is to take nothing away from Suhrawardī's originality. Nor should we underestimate the rhetorical power of his claim to be reviving ancient wisdom.

This helped his ideas to become a viable alternative to Avicenna, which could be embraced by thinkers who sought to attach themselves to a rival tradition. They were the thinkers who adopted Suhrawardī's sobriquet "Illuminationist" (*ishrāqī*). Ironically, the gesture of self-description is itself reminiscent of Avicenna. We saw him experimenting with a new designation for his own philosophy, which as it happens comes from the same Arabic root: *mashriqī*, or "eastern." Whereas Avicenna's flirtation with this label has caused more confusion than anything else (Chapter 16), Suhrawardī's exercise in branding would be a great success. Centuries later, we will find Iranian thinkers like the great Mullā Ṣadrā still drawing heavily, and explicitly, on the Illuminationist tradition. But Suhrawardī's influence is already felt in the generations immediately after him.

45

BRIGHT IDEAS ILLUMINATIONISM

What do you expect to happen to you after you die? Perhaps you do not believe in an afterlife and think there will be nothing. Or maybe you adhere to the traditional Christian options of hell, purgatory, and heaven, destinations that received the ultimate travel guides in Dante's *Divine Comedy*. I myself am hoping to be reincarnated. If I get to be a human next time around, I'd like to write books again, but without tackling such an enormous topic: I could do a series on dentistry called the "History of Gaps, Without any Philosophy." This idea that the soul will live on but pass into a different body is sometimes called "transmigration" or "metempsychosis," and it features now and again in the history of philosophy. We probably associate it especially with the Indian tradition, but also with the ancient Pythagoreans. It is usually taken as a sign of their influence that, in the *Phaedo* and other dialogues, Plato has Socrates speak of human souls being reborn into non-human animal bodies.

In the Islamic world, the doctrine of transmigration was itself reborn among the Illuminationists. Very few philosophers or theologians had embraced it before Suhrawardī, and even he was tentative on the subject.[1] Invoking not only the sages of India and Greece, but also his own Persian forefathers, in the *Philosophy of Illumination* Suhrawardī declared it at least possible that humans are reborn as animals. He did not, however, think that souls can go the other way, from animal into human bodies. Meanwhile, in other works, he ruled out the first sort of transmigration from human to animal. Yet he is consistent in rejecting the idea that the souls of humans existed before coming into human bodies. Despite (or perhaps because of) the uncertainty of his position, the theme becomes a distinctive feature of the Illuminationist tradition, alongside other Suhrawardian ideas such as his doctrine of knowledge by presence, his rejection of Avicenna's essence–existence distinction as applying to things in reality outside the mind, and his critique of "Peripatetic" logic on such topics as

definition.

It is, however, an oversimplification when later authors in the Islamic world, and for that matter today's historians of philosophy, speak of an "Illuminationist school" initiated by Suhrawardī. We can certainly point to several philosophers who were inspired by Suhrawardī in the generations after his death, and who wrote favorable commentaries on his works. We're going to look at three of them in this chapter. But they were not direct successors or students of Suhrawardī, nor did they agree with him about everything. While they did engage carefully with his innovative writings, they drew on a wide range of other sources, sometimes showing more sympathy to Avicenna than Suhrawardī had, and taking over arguments and positions from other critics of Avicenna like Abū l-Barakāt al-Baghdādī.

This is especially true of our first so-called "Illuminationist," Ibn Kammūna.[2] He was no straightforward follower of Suhrawardī, in fact not even a member of the same religion. Along with the Jewish-Muslim convert Abū l-Barakāt al-Baghdādī, Ibn Kammūna provides us with more evidence that Jews contributed to philosophy in the Avicennizing traditions of the East as well as in the more Aristotelian setting of Andalusia. Some sources allege that, like Abū l-Barakāt, Ibn Kammūna converted to Islam. But it seems more likely that he remained a Jew to the end of his life.[3] In works on Jewish religious topics, such as a treatise on the difference between Karaite and Rabbinical Judaism, he draws on Andalusian thinkers including Judah Hallevi and Maimonides. But along with Fakhr al-Dīn al-Rāzī and other thinkers we'll be looking at in the coming chapters, he largely fits into the development I am calling "Avicennan scholasticism." Ibn Kammūna carefully dissects and tests philosophical arguments for their demonstrative value—and usually finds them wanting. Though he is usually thought of as an Illuminationist, he does not shy away from applying this rigorous strategy to Suhrawardī himself.

An excellent example is this whole question of the soul. He dismisses all the arguments for and against transmigration as inadequate, suggesting that philosophy is incapable of resolving the issue. But he's more confident regarding the question of whether our souls existed before we were born. Against Suhrawardī, Ibn Kammūna answers this question positively. In this respect he adheres more closely to the position of Plato than Suhrawardī had done, even though Plato was supposedly a key source for Suhrawardī's Illuminationist philosophy. Ibn Kammūna sets out an ambitious and complex proof to show that the soul must be eternal in the past as well as the future.[4] In fact, his primary motivation in asserting the eternal pre-existence of soul seems to be that he

wants to safeguard the future immortality of the soul. If your soul only came into existence with your body, reasons Ibn Kammūna, then it is liable to go out of existence when your body dies.

Ibn Kammūna's argument for the soul's pre-eternity depends on a fundamental idea of Avicenna's, which Ibn Kammūna articulates by introducing the terminology of a "complete cause." This means a cause that guarantees its resulting effect. Clearly, many of the things we call "causes" are not "complete causes" in this sense. My shoehorning philosophy into yet another conversation may cause a wry smile among friends and family members, who have experienced this obsession of mine often before. But it is not a "complete cause" of the wry smiles, since the effect may well not follow, as when my loved ones instead grimace because they would like to get through dinner just once without hearing the name "Aristotle." Putting the idea into more technical language that will help reveal the connection to Avicenna, we can say that a complete cause "necessitates" its effect. Avicenna thought that God, the Necessary Existent, necessitates contingent things to exist so that they become, as he puts it, "necessary through another." On this view, God's existence is a complete cause for all other things. He is sufficient for and guarantees His effects whenever He exists, which is always. An obvious consequence is that the universe is eternal.

Like an Otis Redding fan forced to listen to disco music, you may be wondering what any of this has to do with soul. The answer is that, for Ibn Kammūna, God is the "complete cause" of the soul. Therefore the soul is guaranteed to exist whenever God exists, which is to say, eternally. Ibn Kammūna is exceedingly proud of this argument, repeating it in several works and emphasizing that it is original with him. To get the demonstration to go through, he of course needs to show that God is indeed the cause of the soul, something he achieves with a complicated line of reasoning that establishes the soul's simplicity, along with further argument to the effect that anything simple must have a simple cause. He also has to defeat Avicenna's rival view that each soul needs a body in order to exist, since if that were true the soul obviously could not pre-exist the body. Avicenna insisted that a soul needs a body in order to be "individuated" from other souls. In other words, since all souls are of the same kind, they would be identical to one another if they were not differentiated by their relations to different bodies. Your soul got to be different from my soul because it came into existence when *your* body and not *my* body was prepared to receive a soul. Since Ibn Kammūna can't avail himself of this explanation of the soul's individuality, he instead revives a proposal from Abū l-Barakāt al-Baghdādī, who had suggested that souls are not really all of the same kind.

Rather, just as a human soul would differ in species from the soul of a giraffe, so my soul differs in species from yours. That means they are different by their very nature, regardless of which (if any) body they might belong to.[5]

Ibn Kammūna develops his proof without ever claiming that he can *define* the soul, whether it is your soul, my soul, or a giraffe's soul. Indeed, in other contexts, where he talks about the logical ideas of Avicenna and other so-called "Peripatetics," he is skeptical that anything can be perfectly defined. He adds that we can't even make positive universal judgments based on experience, since we never know whether a counter-example might come along in the future.[6] As we can see from this, Ibn Kammūna's disagreement with Suhrawardī over the pre-existence of soul didn't stop him from upholding the Illuminationist position on other topics. And from a historical point of view, he was a pivotal figure in the history of Illuminationism. Though he would not have known Suhrawardī personally, he seems to have been instrumental in carrying Illuminationist ideas from Syria (where Suhrawardī wrote his major works and was executed) to the eastern regions of the Islamic world.[7]

We can see his Illuminationist sympathies emerging again in an interesting exchange of ideas with his contemporary, the Shiite Avicennan philosopher and astronomer Naṣīr al-Dīn al-Ṭūsī. In the exchange, Ibn Kammūna respectfully poses a series of puzzles to al-Ṭūsī. At one point he explicitly refers to Suhrawardī, and in general he gives the impression of wanting to test al-Ṭūsī, a leading "Peripatetic," to see whether he can deal with Illuminationist criticisms. The correspondence between Ibn Kammūna and al-Ṭūsī illustrates an awkward feature of thirteenth-century philosophy in the Islamic East. All the significant thinkers seem to have known each other, so that it's hard for me to avoid mentioning figures I haven't yet covered properly. Al-Ṭūsī in particular—who will be the topic of the next chapter—had all the other interesting philosophers of the time in his address book. He corresponded with Ṣadr al-Dīn al-Qūnawī, a leading philosophical Sufi we'll be considering in Chapter 48. Also one of his students was a major Illuminationist. This was Quṭb al-Dīn al-Shīrāzī.[8]

Like al-Ṭūsī himself, Quṭb al-Dīn was a man of many parts. He wrote not only on philosophy but also on the sciences, producing sophisticated works on astronomy, medicine, and optics. From a young age he was trained as a Sufi, so mystical themes also make themselves felt in his philosophy. If stories concerning Quṭb al-Dīn's personality may be believed, he was apparently quite a character, with a penchant for chess, music, and magic tricks, and a rather sharp sense of humor. When he heard that a Jewish colleague was writing a commentary on the Koran and had offered an interpretation of the line "we have

no knowledge, except what you have taught us" (2:32), Quṭb al-Dīn remarked, "he should have stopped at the first half of the verse."[9] But he was open-minded enough to make use of the works of his Jewish colleague Ibn Kammūna, alongside another Illuminationist by the name of Shahrazūrī. Both Shahrazūrī and Quṭb al-Dīn wrote commentaries on Suhrawardī's *Philosophy of Illumination*.[10] Quṭb al-Dīn made liberal use of Shahrazūrī's ideas, to the point that much of his commentary just repeats what Shahrazūrī had already said. Another major work, the *Pearl of the Crown* (*Durrat al-Tāj*), similarly quotes from a wide range of other sources, in many cases Arabic texts which Quṭb al-Dīn has translated into Persian.[11] Since he was a student of al-Ṭūsī, still known today for his staunch defense of Avicenna against his critics, it's unsurprising that that Quṭb al-Dīn sometimes departs from the Illuminationist position and returns to orthodox Avicennism. He restores fire to its place alongside the other three elements, where Suhrawardī had proposed that fire is nothing but heated air. And though he accepts Suhrawardī's skeptical attack on the theory of definition, he suggests that we can make do with mere descriptions of things and proceed with our science much as the Aristotelians had intended.[12]

But what we really want to know is, what are our prospects of being reborn as giraffes? Whereas Quṭb al-Dīn emphasizes that the Illuminationist founder Suhrawardī was rather tentative on the issue, Shahrazūrī has no hesitations. He thinks Suhrawardī was convinced that human souls can definitely go into animal bodies, and accepts this doctrine himself.[13] He admits Ibn Kammūna's point that there is no certain demonstration available on this score, but the truth of the theory is validated by the mystical experiences of great sages. Which great sages? The same ones named by Suhrawardī, including the Buddha and Plato. Shahrazūrī mentions here the arguments for the eternity of soul in Plato's *Phaedo*. As for how he would know anything about Indian beliefs in transmigration, we should remember that by this point the Islamic world has had cultural exchange with India for centuries. The science of India played a role in the development of mathematics, astronomy, and astrology already during the early ʿAbbāsid era, and Indian society had already been made the object of a detailed study by the scientist al-Bīrūnī (see further Chapter 56).

The sages of India and Greece, as well as Persia, are also invoked by these Illuminationists in defense of another distinctive theory: the so-called "world of images."[14] It may sound like a media superstore, but it is actually a metaphysical realm first postulated by Suhrawardī, then further developed by his commentators. Where many of the Illuminationists' innovations were put forward as criticisms of Avicenna, the "world of images" instead constitutes a

major revision to the longer-established hierarchy of Neoplatonism. Since Plotinus, Platonists and those influenced by them had recognized three degrees of existence below the First Principle. A world of intellect is followed by the natural or bodily realm below, with the soul as a transitional principle that can turn up towards intelligible things or down towards sensible things. The problem with this scheme, from the Illuminationists' point of view, is that it has no place for such supernatural beings as the *jinn* of Islamic tradition, or for the demonic beings known in Arabic as *shayāṭīn* (compare our word "satan"). Furthermore there are the objects seen in visions by prophets and in dreams.

What are these things? Not mere illusions, that's for sure. We have the authority of the Koran itself for *jinn* (72:1), and visions have been enjoyed not only by the prophets but also by those Greek, Persian, and Indian sages who were so venerated by the Illuminationists. Demons and the objects of dream visions fit badly into the traditional Platonic metaphysical hierarchy, as they seem to be neither bodies, nor souls, nor intellects. This was already recognized in antiquity, with Neoplatonists like Proclus treating demonic entities as mediating principles above the human soul but below the truly divine. Still, there is no exact ancient equivalent to the idea that there should be a whole fourth realm to house these mediating entities, as Suhrawardī proposed. This world of images is populated with things that are immaterial, and thus distinct from bodies. Humans can grasp more transcendent items like Platonic Forms using the intellectual aspect of the soul. For these intermediary "image" entities, we must instead do what children had to do before the invention of television: use our imaginations. The imaginative faculty of a prophet is like a polished mirror that shows things from the world of images. This isn't far from an idea accepted by the "Peripatetic" philosophers. Al-Fārābī already made the influential claim that prophecy is realized by a particularly powerful human imagination. The Illuminationists improve on that theory—or at least they think it's an improvement—by assigning a special metaphysical status to the images themselves.

There's a connection here to the debates over the soul discussed above. Both Shahrazūrī and Quṭb al-Dīn think that, after death, some human souls manage to avoid transmigration into animal bodies, instead reaching the world of images, where they take up residence alongside the demons and so on. To be honest, I think I'd rather be a giraffe. But the Illuminationists would disagree, since they see animal bodies as a punishment for evil behavior in a previous life. At the other end of the scale, the purest of souls can go beyond even the world of images at death, enjoying a direct vision of the lights of the intelligible realm.

All this illustrates an interesting tension within Illuminationist philosophy, with rather fanciful speculation sitting alongside hard-nosed disputation. They are not just willing but eager to accept the direct, visionary testimony of authoritative sages. Suhrawardī invokes such direct vision in support of his fundamental idea that the higher principles are lights, and such exotic teachings as reincarnation and the world of images are "proven" in the same way. Yet the Illuminationists are unforgiving critics when it comes to the proofs of rationalist philosophy.

This is so even when those proofs are put forward by Suhrawardī. We find Ibn Kammūna complaining that Suhrawardī's arguments against the pre-existence of soul fall below the standard of true demonstration, and even worse, that they reach the wrong conclusion. More typically, the Illuminationists hold the Avicennan "Peripatetic" thinkers to the high standard envisioned by the Peripatetics themselves. And the arguments are nearly always found wanting. Are the Illuminationists being inconsistent, then? Credulous in the face of mystical visions, but hyper-critical when anyone actually attempts to demonstrate something? I don't think so. Their epistemology is consistent with, indeed demands, both attitudes. Suhrawardī dismissed the Peripatetics' methods not just because they wouldn't work, but because they were superfluous. When you have the option of directly beholding the way things are through knowledge by presence, why go the long way around by using dubious syllogisms to prove these same truths?

With their philosophical posture, the Illuminationists reconcile two major currents in twelfth-and thirteenth-century thought. The ideal of direct vision is, of course, borrowed from the Sufis, and Illuminationism is accordingly often seen as a part of the mystical tradition within Islam. Equally important, though, is the rigorous side of Illuminationism, where they contribute to Avicennan scholasticism. Authors like Ibn Kammūna pick up on the more technical side of Suhrawardī, and echo the scrupulous methods and relentless demand for certainty that we find in other twelfth-century philosophers, like Fakhr al-Dīn al-Rāzī. At one point, Quṭb al-Dīn comments that whereas Avicenna thought that every distinction valid in the mind must reflect a distinction that is real out in the world, after Suhrawardī this confidence that our concepts would match reality had been permanently shaken.[15] With the bar being raised for philosophical argument, and Avicenna's notoriety provoking as much criticism as admiration, it looks like his philosophy could use a defender. And that is just what it is going to get, in the shape of Quṭb al-Dīn's teacher. He was no Illuminationist, but at one point or another in his career he was just about everything else: al-Ṭūsī didn't need to die to reinvent himself radically.

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A MAN FOR ALL SEASONS NAṢĪR AL-DĪN AL-ṬŪSĪ

Just as Blanche DuBois in *A Streetcar Named Desire* has always depended on the kindness of strangers, philosophers have almost always depended on the kindness of the rich and powerful. Already in the ancient world, Plato and Aristotle consorted with political leaders—Plato with the tyrant Dionysius of Syracuse, and of course Aristotle with Alexander the Great. Even Plotinus fraternized with senators and called on their support for his plan to found a new city. In later European thought, patronage plays a decisive role in Renaissance philosophy, and Descartes will die shortly after moving to Sweden to tutor the queen. Isn't this a bit unsettling, not to say tawdry, not to say outrageously hypocritical? Surely the true philosopher ought to disdain the compromises, flattery, and diplomacy involved in a life at court. Philosophy should be a dispassionate inquiry into the truth, not an attempt to flatter the powerful. It's an issue that still confronts us today, with philosophers and other academics wary of any government or university policy that might infringe on their intellectual freedom.

If the spectacle of the court philosopher seems unsettling, then the Islamic world offers plenty of reason for disquiet. Many of the major figures we've met benefited from patronage relationships, from al-Kindī tutoring the caliph's son to Averroes (supposedly) writing his commentaries at the behest of the Almohad emir. Even worse, there's good reason to think that political pressures affected the ideas put forward by these philosophers. Consider, for instance, the striking resonances between al-Kindī's ideas and those of the Muʿtazilite theologians. Acceptance of the Muʿtazilite position on the createdness of the Koran was being made compulsory by the very same caliph that engaged al-Kindī's services as a tutor. That might be a coincidence, but I tend to doubt it. A more subtle effect of patronage is its influence on the literary form philosophers choose for

their writings. Avicenna and others constructed their works with an eye fixed firmly on the pedagogical needs and interests of their readers, and that often meant the needs and interests of wealthy patrons.

No thinker of the Islamic world brings these issues to the fore more than Naṣīr al-Dīn al-Ṭūsī. To this day, controversy rages over the question of just how much his political connections influenced, even determined, the content of his writings. Al-Ṭūsī espoused different opinions at different times, and rather conveniently, those opinions tended to match the ones promoted by his masters. Were his changing ideas nonetheless held sincerely? Or was he a philosophical weathervane, changing direction with the gust of new political winds? The main shift in his writings concerns his religious allegiances, and in particular, whether he joined the Ismāʿīlī community of Shii Muslims out of sincere conviction, or rather as a hypocritical career move. Somewhat surprisingly, the charge of hypocrisy has often been pressed by *admirers* of al-Ṭūsī. So great a scholar would be a prize to be claimed for one community or another. So Twelver Shiites have often been eager to say that al-Ṭūsī held to their version of Shiism throughout his life, and only claimed to adopt Ismāʿīlism while he was enjoying the patronage of Ismāʿīlī rulers. Once they were swept away by the Mongols, he was free to repudiate that branch of Shiism openly and to proclaim the Twelver beliefs he had secretly held all the while. The debate extends even to the authenticity of those works ascribed to al-Ṭūsī which most obviously uphold Ismāʿīlī teachings.

Before passing judgment, we are going to need to understand the political and religious situation a bit better. In fact, a flowchart might be helpful:

Shiites

Ismāʿīlīs   Ithnāʿasharīs ("Twelvers")

Nizārīs

Apart from the Nizārīs, we've seen all these groups before. To review: Shiites are Muslims who believe that rightful authority is passed down through the family of the Prophet, beginning with his cousin ʿAlī. Different groups of Shiites accept different lines of Imams, or rightful successors to ʿAlī. The Ithnāʿasharīs and Ismāʿīlīs broke with one another over the question of succession, with the

two groups championing two different sons of the Imam Jaʿfar al-Ṣādiq, who died in the year 765. The name of the "Ithnāʿasharī" or "Twelver" Shiites refers to the line of twelve Imams recognized by this group, while the Ismāʿīlīs get their name from Ismāʿīl, the older brother whose claim they accepted. Finally, the Nizārīs were a group that broke off from other Ismāʿīlīs; again, the split was over a question of succession in the line of Imams.[1]

Which brings us to al-Ṭūsī. He was raised as a Twelver Shiite, but he may have had leanings towards Ismāʿīlism early in life. A decisive moment came in the year 1220, when the Mongol threat reached his native province of Khurāsān. He fled to the shelter of the Nizārī rulers, whose conflicts with other Muslims had given them good reason to build nearly impregnable fortresses, a base from which the Nizārīs sometimes ordered targeted deaths for their political and religious opponents. (Our word "assassin" comes from the group of killers who carried out these missions.) While al-Ṭūsī was enjoying the protection, and even friendship, of the Nizārī leaders, he wrote works with clear Ismāʿīlī commitments. One is an intellectual autobiography titled *Contemplation and Action*.[2] It is apt to remind us of the life stories written by Avicenna and al-Ghazālī, except that in al-Ghazālī's *Deliverer from Error* the Ismāʿīlīs are mercilessly attacked, whereas al-Ṭūsī tells of how this community finally offered him the truths he had been seeking since childhood.

By the time he was under the sheltering wing of the Nizārīs, al-Ṭūsī was already a formidable scholar, a polymath whose speciality subjects were the mathematical sciences and philosophy, especially the theories of Avicenna. He did not hesitate to use these tools to defend the Ismāʿīlī view of things. Already the earlier Ismāʿīlī philosophers had promoted the idea that God in Himself remains utterly transcendent, and relates to the world only through a "command" (Chapter 14). Now al-Ṭūsī supports this line of thought with a claim taken straight from Avicenna: God, being purely one, can have only one effect. This effect will not be, as in Avicenna, a first celestial intellect. Instead, a chain of intellects is preceded by the divine command, which serves as an intermediary between God and the universe that He creates (§§24–6).

Philosophy is also deployed to prove the central Shiite doctrine of the Imamate. For al-Ṭūsī, Avicennan epistemology proves the possibility of such a perfectly enlightened teacher by explaining what it would mean for a human to have a completely actualized intellect (§§20–1). It also shows that the rest of us, who are not perfect, need an external teacher. As Avicenna, and indeed Aristotle, have shown us, potentiality can be realized only through some external cause that is already actual. So a potential learner needs a teacher on the outside—that

teacher being, of course, the Imam (§§11–12). These same arguments are put forward in another explicitly Ismāʿīlī work, called *Paradise of Submission*.[3] This is one of the works whose authenticity is questioned by those who would prefer al-Ṭūsī not to be such a forthright defender of the Ismāʿīlī community. But it again does what you would expect al-Ṭūsī to do: mount a defense of that community using the arsenal provided by philosophy. He argues against the view that all humans are equal in intellect. This would inevitably lead to a kind of relativism in which all believers would be equal, and there would be no point sorting true from false (§§67, 69). Thus, the more imperfect minds should look to a perfect mind to help them. Again, this will be the Imam. Nor is this guidance a matter only of belief; we also need the Imam to help us perfect our moral character (§§268–9).

Moral character is the topic of another work from al-Ṭūsī's Ismāʿīlī period, titled *Ethics for Nāṣir*.[4] The title refers to the fact that it is dedicated to the Nizārī ruler Nāṣir al-Dīn Ibn Abī Manṣūr—yes, this ruler was called Nāṣir al-Dīn while al-Ṭūsī was named Naṣīr al-Dīn. That's just in case you weren't sufficiently confused by the Shiism flowchart. In this treatise, al-Ṭūsī sets out to provide a complete discussion of what Aristotelians called "practical philosophy." As already suggested by Aristotle (*Politics* 1252a–53a), philosophy's contribution to our practical affairs is divided into three parts, concerning the individual, the household, and the city. Thus, the title *Ethics* (*Akhlāq*)—a more literal translation would be *Character Traits*—really only applies to the first major section of the work, on individual action. Here, al-Ṭūsī sticks closely to Miskawayh's *Refinement of Character* (see Chapter 13). Concerning the household, he uses a work written by Avicenna, and for politics he draws especially on al-Fārābī.

Though the treatise is thus heavily dependent on earlier authors, it had a huge popularity in subsequent centuries. This is in no small part because of the simple fact that it was written in Persian. Al-Ṭūsī's decision to write many of his works in Persian is in itself symptomatic of the Nizārī context in which he was writing. They have sometimes been seen as a self-consciously Iranian movement, and they promoted the use of Persian in their writings. Though others had written about philosophy in Persian (including the earlier Ismāʿīlī thinker Nāṣir Khusraw and Avicenna himself), al-Ṭūsī really launched Persian as a philosophical language, in part by integrating Arabic terminology into works written in this language. Another characteristic feature of his *Ethics* is occasional, usually rather subtle, allusion to Ismāʿīlī doctrines.[5] Unsurprising perhaps, given the intended recipient of the work, but still a piece of evidence in

support of the idea that al-Ṭūsī was sincere in his support of the Nizārī cause at this stage of his career.

It's interesting to note that Avicenna plays a relatively small part in this work by al-Ṭūsī. Indeed, it would be fair to say that ethics and politics are the *only* areas of philosophy in which Avicenna did not dominate the later eastern tradition.[6] The fact that an Avicenna expert like al-Ṭūsī turned to Miskawayh for ethics and al-Fārābī for political philosophy is telling in this regard. And there's certainly no doubting that al-Ṭūsī was an expert when it came to Avicenna, as we can see from yet another work he wrote during his stay with the Nizārīs: a commentary on the *Pointers and Reminders*. In effect, this offers a response to al-Rāzī's commentary, answering the doubts raised there or exposing them as mere sophistical quibbles. The result is one of the most staunchly pro-Avicennan works produced in the whole long history of responding to Avicenna.

Let's go straight to the top and consider how al-Ṭūsī responds to Fakhr al-Dīn al-Rāzī's complaints about Avicenna's portrayal of God.[7] We saw in Chapter 43 that, confronted with Avicenna's claim that God is an intellect, al-Rāzī inferred that God would have objects of knowledge distinct from Himself. And this would imply something like the Ashʿarite understanding of God. After all, the Ashʿarite theologians recognize divine attributes that have their own distinct reality but reside in God's essence. In just the same way, Avicenna must admit that there are real objects of knowledge residing in God's mind. To this al-Ṭūsī replies that there is no distinction between God and what God knows. Rather, as Avicenna said quite clearly, God knows all other things by knowing Himself as their cause. Of course, this is a particularly exalted case of self-knowledge, but as al-Ṭūsī points out, it does share something in common with our more humble self-knowledge. When you think or know yourself, there is no distinction between the thing that knows and the thing that is known. Rather, as al-Ṭūsī puts it, you "occur" to yourself without being a second thing residing in your own mind. The same is true of God, except that He needs no further knowledge apart from self-knowledge, the way that we do. For in knowing Himself, He already knows everything.

The two commentators fight a similar battle when it comes to Avicenna's famous identification of God as the Necessary Existent. On this point, al-Rāzī again detects a kind of composition or multiplicity in Avicenna's supposedly simple God. For Avicenna, the difference between God and created things is that God's essence guarantees His existence, whereas a created thing like Hiawatha the giraffe (or anything else apart from God, for that matter) has an essence that needs to receive existence from some external cause. Fine, says al-Rāzī, but in

that case the essences of God and Hiawatha both receive the same thing: existence, and in both cases this is something distinct from the essence. It's just that God supplies Himself with His own existence whereas Hiawatha, for all her charms, cannot manage this trick. Much as al-Rāzī claimed before that God's knowledge would be something distinct that resides in God, he claims now that God's very existence would have to be a distinct thing attached to His essence.

Al-Ṭūsī's reply has far-reaching consequences, both philosophically and historically. He identifies a crucial premise in al-Rāzī's attack, namely that Hiawatha and God must both receive the *same kind* of existence for their essences, if they are to exist. This is wrong, says al-Ṭūsī. God's existence is of a fundamentally different kind from created existence. In particular, His existence is in no way distinct from the essence to which it belongs. Perhaps this would be clearer through an analogy. On al-Rāzī's interpretation, the difference between Hiawatha and God is like the difference between me and the nice man who drives the ice-cream truck. We can both get ice cream, but I need to get it from the nice man, whereas the nice man can supply it to himself. On al-Ṭūsī's understanding, the difference is more like that between me and a banana split. Whereas I need to get ice cream from some other source, the banana split just *is* ice cream. So if we say that I "have ice cream" and also that the banana split "has ice cream," we are using the phrase in rather different ways. Likewise, if I say that Hiawatha exists and that God exists, I am using the word "exists" in two ways: Hiawatha receives existence, whereas God just *is* existence. On the other hand, al-Ṭūsī believes that the two uses of the word are related. As al-Ṭūsī says, using terminology also found in Avicenna, there is a relation of "analogy" (*tashkīk*) between created existence and divine existence. Like the nice man giving me a free sample of ice cream, al-Ṭūsī has given us a mere taste of something bigger and better here, as the "analogy" theory will be a recurring theme in the rest of this book ().

The *Pointers* commentary, like the Ismāʿīlī works and *Ethics for Naṣīr*, was written while al-Ṭūsī lived in the strongholds of the Nizārī leaders. But even the strongest leader tends to lose his hold when the Mongols come to town. So it was in this case. Led by Hülegü, this particular horde arrived in 1256 at the main Nizārī fortress of Alamūt in northern Iran. Al-Ṭūsī was sent as a negotiator to speak to the Mongols, and I don't know about you, but I'm giving him serious points for bravery there. But like a grocery shopper who refuses to get a store card, al-Ṭūsī doesn't earn many points for loyalty. Once Alamūt fell, al-Ṭūsī announced that he had never really sympathized with the Ismāʿīlīs after all, made his services available to Hülegü, and accompanied him to Baghdad, where the

Mongols successfully overwhelmed the city and executed the last of the ʿAbbāsid caliphs, al-Mustaʿṣim. It's even reported that al-Ṭūsī suggested the brutal means by which the caliph was executed, to avoid spilling his blood: roll him to death in a carpet. (Other versions of the story have him being rolled up in a carpet and then trampled by elephants or horses.)

While this may make it sound as if al-Ṭūsī sold his soul to the devil, at least he got a good deal. As a Shiite, whether Twelver or Ismāʿīlī, he may well have welcomed the end of the line of Sunni caliphs. And perhaps he really did spend his years with the Ismāʿīlīs under duress, in which case the coming of the Mongols may have been welcome. Whatever his private feelings, his intellectual career blossomed, thanks to his friendly dealings with the Mongols. The execution of the caliph occurred in early 1258. Just one year later, with Hülegü's support, al-Ṭūsī became director of a research center and observatory at Marāgha in modern-day Azerbaijan. Re-creating something of the intellectual ambition of ancient Alexandria, Marāgha would in due course have an enormous library as well as the observatory, and attract scholars from across the Islamic world. The work done there has been called a "scientific revolution before the Renaissance."[8] One part of the case for that claim would be al-Ṭūsī's own writings, among them a work dedicated to the Mongol ruler Hülegü.

So was al-Ṭūsī a hero or a villain? A turncoat or a turning point in intellectual history? Perhaps all of the above. After all, nothing prevents a great thinker from switching teams when there's suddenly a new playing field. It's even been proposed that we should not apply the usual standards of political or even religious allegiance to a man like al-Ṭūsī. Some have argued that he was answering a higher calling, seeing himself primarily as a philosophical advisor to kings, a role he could play for rulers of very different religious persuasions as long as they were enlightened enough to accept his counsel.[9] Perhaps. But it speaks against that interpretation that, in his Ismāʿīlī phase, al-Ṭūsī stridently argued that philosophy cannot reach truths that are available through the Imams recognized by Shiite Islam. In some of these works, assuming they are authentic, he also defended a specifically Nizārī understanding of those truths. This doesn't sound like a man who thinks his philosophical gifts allow him to stand above the differences of religious opinion that divided his contemporaries.

Al-Ṭūsī's place in the history of Shiism seems bound to remain a matter of controversy, but his place in the history of philosophy is secure. He was the foremost defender of Avicennism in the thirteenth century. He wrote the most influential and eagerly read work of ethics in the later eastern tradition. And he led an extraordinary scientific center at Marāgha, which all by itself gives the lie

to any suspicion that the arrival of the Mongols ended serious intellectual inquiry in the Islamic world. To the contrary, in this case the Mongols actually sponsored such activity. This is one sign of the scientific and philosophical continuity that was possible across either side of the Mongol invasion. Before the invasion, philosophy in the East centered on arguments over the legacy of Avicenna, with one issue looming perhaps larger than any other: his distinction between existence and essence. After the Mongols came, Avicenna continued to dominate philosophical and theological debate, and the distinction remained as controversial as ever. No surprise there: if you've ever seen philosophers arguing about metaphysics, you'll know that it would take more than the collapse of a great civilization to shut them up.

47

TO BE OR NOT TO BE DEBATING AVICENNA'S METAPHYSICS

My sister, the former trapeze artist, has been pestering me to devote another chapter to her. I was reluctant, but after all, she's family, or at least she would be if she existed. So let's welcome her back. She's asked me to focus in particular on the plight of people like her, as she feels that our society has a real bias against non-existent people, and does far too little to take their needs into account. Actually, there's a (somewhat) serious point here. In some areas of ethics, there arises a genuine difficulty about whether we could possibly have obligations to people who don't exist. For instance, environmental ethicists wonder how it could be that we are perpetrating a moral wrong upon as-yet non-existent future generations, if we act in a way that will make the world a worse place for them to live in. But in this chapter I will be returning to the more metaphysical question of what, if any, metaphysical status non-existent things could possibly have. It's a question that remains important, even if we show callous disregard to the huge population of non-existent people not living around us. For it will help us to understand what it means for people like you and me, and all other things, to exist.

As we saw in Chapter 17, Avicenna proposed a fundamental contrast that addresses this issue. He distinguished between the essence of a thing and that thing's existence. Its essence is what makes it the sort of thing that it is—Hiawatha has the essence of a giraffe, whereas I have a human essence. What about my sister? Well, the temptation in her case is to say that she has a human essence just like mine, but in her case this essence has not been realized, which is just to say that she doesn't exist. But Avicenna took a slightly different tack here, saying that my sister *does* exist; it's just that the sort of existence she has is mental, rather than concrete or "external."[1] In other words, she exists by virtue of being something we think about, even if she doesn't have reality outside our

minds. Avicenna further points out that, for each item other than God, the essence leaves it open whether the thing in question exists. Giraffes and humans don't need to exist—that they do is the result of some cause that has made them exist. (This is true even in the case of mental existence, since mentally existent things are made to exist by someone's thinking about them.) So it is that giraffes and humans are merely possible, or contingent beings. By contrast, God is a necessary existent, which means that God's essence guarantees His existence. In fact Avicenna suggests that God's essence just *is* existence.

In developing these ideas, Avicenna seems to have been responding to an ongoing debate among Muslim theologians. As so often, there was a dispute here between the members of the Muʿtazilite and Ashʿarite schools of *kalām*. It concerned the rather abstruse-sounding question of whether the non-existent is a "thing."[2] The Muʿtazilites said yes, while the Ashʿarites said no. Their disagreement concerned the very issue we've been discussing, though they often raised it in the context of interpreting certain verses of the Koran. In particular, the revelation states several times (16:40, 36:82) that when God "wants a thing, he says to it 'be!' and it is." This verse applies the word "thing" to the item God has not yet created, and His command is addressed to this non-existing thing. Partially on this Scriptural basis, the Muʿtazilites argued that non-existents like my sister are indeed things. But the Ashʿarites rejected their talk of non-existing things as non-sensical.

The *kalām* debate helps to explain several things. First, my non-existent sister's strong preference for the Muʿtazilites. Second, Avicenna's new range of distinctions in metaphysics. The link between his discussion and that of the theologians is especially shown by the fact that he sometimes uses the neologism *shayʾiyya*, or "thing-ness," to express the idea of an essence.[3] This bit of terminology may seem to indicate that he is signaling agreement with the Muʿtazilites. Just as they would have non-existing things that can receive existence from God, so Avicenna would postulate essences that need to receive existence from a cause. On the other hand, Avicenna agrees with the Ashʿarites that there are no non-existing things, because every contingent essence gets existence somehow, even if it is only mental existence. The theological background helps to explain something else too, which is the fact that philosophically minded theologians *after* Avicenna were little short of obsessed with this issue of essence and existence. The cast of characters in this further story includes several figures who are now familiar to us: Suhrawardī, Fakhr al-Dīn al-Rāzī, and Naṣīr al-Dīn al-Ṭūsī. We will start with the dispute between the first two, as Suhrawardī rejects Avicenna's distinction and al-Rāzī defends it.

Then we'll move on to several thirteenth-century thinkers, including al-Ṭūsī, who further developed Avicenna's ideas.

Before we get into the historical details, let's think a little about the distinction for ourselves. At first glance it seems eminently reasonable. Avicenna seems right in saying that it is one thing to understand what a giraffe is, to grasp its essence, and another thing to say that there are in fact giraffes, or to ascribe existence to a given giraffe like Hiawatha. It also looks right that an existent that is necessary in itself would be one whose essence guarantees its existence— whether or not we agree with Avicenna that there actually is such a thing, and that it is God. But upon further reflection, there's something rather odd about these "essences" or "thing-nesses" Avicenna speaks about. What status could they possibly have, independently of existence? Think again of my sister. Does she really hover in logical or metaphysical space, waiting in hope to see whether she will get to exist in concrete reality, rather than remaining only in our minds? Can we make sense of the idea that there are not only giraffes and people, but *essences* of giraffes and *essences* of people, which do not in themselves possess existence?

Things aren't much clearer when it comes to existence. It seems straightforwardly true that asking what a thing is, is different from asking whether it exists. Aristotle already made that point in one of his logical works (*Posterior Analytics* 2.1 and 2.7). But Aristotle doesn't ever seem to use the idea of what we might call just-plain-existence, existence that remains the same no matter what essence it gets added to. Rather, he would think of the kind of being I have as fundamentally different from the kind of being we find in a giraffe. For the giraffe, being is not just "to exist" but "to be a giraffe." If we have the idea of being a human, being a giraffe, being God, and so on, why do we also need the more general and neutral notion of just-plain-existence?

These were the issues at stake in the dispute between Suhrawardī and Fakhr al-Dīn al-Rāzī. We know that Suhrawardī was a trenchant critic of Avicenna, so it's no surprise to see him subjecting the distinction to a critique—though in this case he may be directing his fire more at contemporary thinkers like al-Rāzī than at Avicenna himself.[4] Suhrawardī admits that we can draw a conceptual contrast between the essence of a thing and its existence. But that's all it is, a conceptual distinction. Suppose I am confronted with a giraffe at the zoo. I can think about what sort of thing she is, considering her in terms of what Avicenna calls her "essence." Or I could just think that there is indeed something here in the giraffe enclosure, thus affirming that she exists. But the giraffe itself is not composed from two real things, her essence and her existence. She's just a giraffe, the real

thing there in the enclosure. There are no essences out in reality that receive existence, like light-switches waiting to be turned on. Nor is there any external reality that we could call "existence." Rather, existence is merely a judgment made in the mind. Suhrawardī applies the same point to several other Avicennan notions, such as contingency. Again, contingency is not something real, but just our judging that a certain thing might not have existed. The same goes for relations, like the relation between brother and sister. These are all, as he puts it, "things applied [only] by the mind (*maḥmūlāt ʿaqliyya*)."[5]

All this sounds pretty plausible. But if you aren't yet convinced, Suhrawardī has a nifty argument to persuade you that existence is nothing more than a mental judgment. Suppose that existence really were out there, really "real." In that case, existence must itself exist! But this way lies madness: if existence exists, then presumably its existence also exists, and so on. To say that a giraffe exists with an existence that is real and not only a judgment of the mind is to commit oneself to an infinite regress of existences. Suhrawardī makes an equally persuasive argument against the idea of real essences, more or less along the lines I've already suggested. If we posit that the essences that receive existence are real, then aren't we saying that these essences *already* exist? Just as a light-switch must already exist if it is to be turned on, and a brother must exist before he can be pestered by his sister, so a real essence would need to exist in order to receive existence. But this seems to show that essences exist before they receive existence, which is clearly absurd.

These are powerful objections to Avicenna's distinction, at least if the distinction is understood as one that concerns the nature of things and not just the way we conceive of them. So it would take a powerful thinker, a master of argument, to respond to them adequately. Looks like a job for Fakhr al-Dīn al-Rāzī! Confronting Suhrawardī's nifty regress argument, which stated that existence would itself have to exist, al-Rāzī reminds us of the original reason for distinguishing between essence and existence in things other than God.[6] One cannot tell from considering the essence of contingent things whether they will exist or not. Nothing about giraffes requires that they exist. Thus Hiawatha's existence must be, as al-Rāzī puts it following Avicenna, "additional" to her essence. But this line of argument won't work for existence itself. We are not in doubt about whether existence exists. Indeed, the question makes no sense: existence isn't the sort of thing that exists or doesn't exist. Rather, it is things with essences that exist or not. So there is no reason to suppose that Hiawatha's existence will require a further existence.

Al-Rāzī not only fends off Suhrawardī's attack, he also argues positively for

the real version of the distinction.[7] All things that exist have something in common, namely, the very fact that they exist. So existence is, al-Rāzī says, shared equally by absolutely everything that there is, even God. Yet we don't only see single, undifferentiated existence. Rather, we see lots of different kinds of things that exist. The essences of these things make them distinct from one another. A giraffe and I are on equal footing in that we exist, but we have very different essences, which is why I don't lope across the savannah and Hiawatha didn't write this book. Notice that, according to what al-Rāzī is saying here, we need essence and existence to be *really* distinct, not just mentally distinct. We are trying to explain how it can be that things are different from one another, and that difference is not the product of our mental judgments. So Suhrawardī must be wrong to say that essences are only figments of the mind.

This line of argument has a further implication, which al-Rāzī is not shy in embracing. According to him, everything that there is has existence, even God. God is no better than His creatures just insofar as He exists. What makes Him better than His creatures—indeed, infinitely better—is His essence, which guarantees that He has existence, whereas His creatures must be caused to exist. That's just what we mean when we say that God is a necessary existent whereas His creatures are contingent. But existence in itself is always the same: it is the realization of an essence, whether necessarily or contingently. Al-Rāzī's great opponent in Avicenna exegesis, al-Ṭūsī, disagrees. He refuses to equate the way that God exists with the way that you or I exist. Whereas our essences leave it open whether we exist, God's essence actually *is* His existence. The most we can say is that there is a certain analogy to be drawn between the existence of created, contingent things and the existence of God.

Al-Ṭūsī does agree with al-Rāzī that Avicenna's distinction between existence and essence pertains to reality. He would have no truck with Suhrawardī's view that they are mere judgments of the mind. So for him too, existence is really something out there in the world. But we just said that, for al-Ṭūsī, God's essence is His existence. So if all existence were on a par, as al-Rāzī claims, then God's essence would have to be the same as any existence you care to choose—my existence, for example. For, if God's essence is the same as His existence, and His existence is the same as my existence, then God's essence is the same as my existence! But this is obviously ridiculous. So there must be a difference between divine existence and created existence. Divine existence is the necessary being of God, whereas created existence is something that comes to an essence from an outside cause. Of course, al-Rāzī would try to avoid this consequence by denying that God or God's essence is to be identified with

existence itself. In fact, he goes so far as to say that God's essence *causes* Him to exist.[8] But there's a price to pay here, because we are now admitting that God is subject to a sort of self-causation, whereas the whole point of Avicenna's theology was that God's existence has no cause. Al-Ṭūsī's position has the advantage of making God completely uncaused, even by His own essence. He can also ascribe a higher degree of simplicity to God, since for al-Ṭūsī we cannot drive a wedge between God's essence and His existence. They are one and the same.

The dispute between al-Rāzī and al-Ṭūsī is one we can also find in Latin medieval philosophy, waged between Thomas Aquinas and Duns Scotus. In that case, the opening move was an analogy theory like that of al-Ṭūsī. This was the position of Aquinas, which was then heavily criticized by Scotus, who thought that existence just means existence, even in God's case. In other words, Scotus, like al-Rāzī, held that existence is "univocal" rather than analogical. The parallel is no coincidence. Not that Aquinas and Scotus were reading al-Rāzī and al-Ṭūsī, or vice versa. But both disputes were triggered by an engagement with Avicenna, whose metaphysics leaves open both the analogical and univocal interpretations. It is no surprise that clever philosophers would take Avicenna's ideas in both directions.

In the wake of al-Rāzī came more philosophers devoted to the project of interpreting and adapting Avicenna. Given al-Rāzī's stature and influence, one might expect later thinkers to follow his lead on this central debate concerning essence and existence. But that's not what happened. Consider Athīr al-Dīn al-Abharī, an Avicennizing philosopher of the thirteenth century. He is sympathetic to what he takes to be the traditional Ashʿarite position I mentioned at the start of the chapter, according to which the non-existent is not a "thing." For al-Abharī, al-Rāzī's enthusiastic embrace of the real distinction between essence and existence looks more like a Muʿtazilite position.[9] After all, what are these contingent essences that need to receive existence, if not "things" that come to exist when God commands them to do so? Following this line of thought, al-Abharī went on to accept al-Ṭūsī's move of equating God's existence with His essence, and to reject al-Rāzī's idea that existence is always the same, whether it belongs to God or creatures.

Al-Abharī adds a clever new argument on this point, by noting that everything real must be either necessary or contingent. This seems uncontroversial. Now let's assume that al-Rāzī is right to say that existence is real, and is always the same, whether it belongs to God or to created things. Which is it then? Is the common existence supposedly shared by God and His

creatures necessary, or is it contingent? Neither option looks good. If existence is in itself contingent, then clearly it can't belong to God, the Necessary Existent. But if it is necessary, then it can't belong to contingent things like us. Thus we must distinguish between two varieties of existence, the necessary kind and the contingent kind, rather than thinking it comes in only one flavor as al-Rāzī had supposed. These positions would be carried on by al-Abharī's student, a man named Najm al-Dīn al-Kātibī al-Qazwīnī, who will play a significant role in .

Speaking of necessity and possibility, it may seem to you that by now every possible position on this issue has been defended by someone or other, and that it is therefore necessary for us to move on to something else. But there is actually one further idea to be proposed, and it will come from the philosophical mystics. Think back for a moment to al-Rāzī's argument for the real distinction between essence and existence. He said that all things share existence in common, and are differentiated by essence. But as we know from looking at Ibn ʿArabī, philosophically minded Sufis liked to use the technical language of Avicenna to express the fundamental unity of all things. Thinkers who were that way inclined realized that they could now articulate Ibn ʿArabī's position in a new way. They could say that all things share existence, and that they are *not* differentiated by essence, though it may seem otherwise to those who use only the plodding resources of everyday, worldly reasoning. The differences between things are unmasked as an illusion, one that fools everyone apart from the mystic, who grasps the "oneness of being."

48

EYES WIDE SHUT RŪMĪ AND PHILOSOPHICAL SUFISM

As you may have noticed, I like a good etymology; about the only thing I enjoy more is an almond croissant. The word "croissant," of course, comes from the French for "crescent," which in turn derives from the Latin "crescere," meaning "to grow," because the growing or waxing moon is crescent shaped. Hungry for more? How about the word "mysticism"? It derives ultimately from the Greek verb *muein*, meaning "to shut" one's eyes or lips, a reference to the secrecy of Greek mystery rites. Appropriately enough, mysticism makes many historians of philosophy want to shut their eyes, and block their ears for good measure. Philosophy is, after all, devoted to rational discourse, whereas mysticism tries to reach beyond the limits of reason to what cannot be said or even thought. Yet mysticism has both drawn on and contributed to the history of philosophy. Neoplatonism is often considered a kind of mysticism. That is less true than often supposed (Plotinus, for instance, is far less mystical than his reputation would suggest), but it certainly applies to a figure like the Pseudo-Dionysius. And in this book we've seen mysticism blooming in the soil of Spain and southern France, with Kabbalah and the Sufism of Ibn ʿArabī.

We'll now be turning our gaze to other thinkers whose eyes were wide shut: Sufi authors of the eastern tradition. As with Kabbalah, the full history of Sufism would burst the seams of this volume, just as surely as too many croissants will burst the seams of your trousers. The Sufis contributed to the literary traditions of Persia, the Ottoman empire, India, and even China. In this chapter I'm going to focus on just two men, who lived in Konya in central Anatolia during the thirteenth century. They knew each other well and died only one year apart. Probably you will have heard of one of them, but not the other. The less familiar name is Ṣadr al-Dīn al-Qūnawī, the more celebrated one Jalāl al-Dīn Rūmī. They took very different approaches to writing about Sufi ideas. Al-Qūnawī was

a systematizer, who expounded the ideas of his master Ibn ʿArabī in (relatively) clear language, replete with a new technical terminology. As for Rūmī, the great Persian poet of mysticism, translations of his works can be found on the shelves of pretty much any bookstore. Though you probably won't find them in the "philosophy" section, Rūmī's poems are packed with philosophical ideas and make for interesting reading alongside the more technical works of al-Qūnawī.

The term "philosophical mysticism" is now regularly applied to al-Qūnawī and his heirs—authors like the fifteenth-century thinkers Shams al-Dīn Lāhijī and ʿAbd al-Raḥmān Jāmī.[1] They merit this designation in part because they integrated philosophical language into their mystical writings. Of course, at this point in Islamic history "philosophical language" meant above all the language of Avicenna. Yet this tradition is philosophical in more than its terminology. Al-Qūnawī dealt with issues that had been central to Avicenna's metaphysics, while adopting the mystical approach of Ibn ʿArabī. A particularly notable case is the topic of existence. The doctrine of the "oneness of existence" (*waḥdat al-wujūd*) became a distinctive feature of the so-called "Akbarian" tradition—meaning the followers of Ibn ʿArabī, because of his honorific title *al-Akbar*, "the greatest." This was thanks not so much to Ibn ʿArabī himself, who does not make systematic use of the phrase "oneness of existence," but rather to al-Qūnawī and other philosophical Sufis.

What does it mean to speak of the "oneness of existence"? An eminent critic of the idea was the famous theologian and jurist Ibn Taymiyya, and he thought he knew what the Sufis were up to. Referring to Ibn ʿArabī, al-Qūnawī, and another Sufi philosopher of the thirteenth century, the Andalusian thinker Ibn Sabʿīn, Ibn Taymiyya said that for them, "there is only one existence."[2] This would mean, on Ibn Taymiyya's understanding, that there is no difference whatsoever between the existence of God and the existence of what God creates. In other words, the philosophical Sufis were monists. Ibn Taymiyya did not hesitate to point out the grim consequences of such a doctrine: the universe, being identical with God, must be eternal. And ironically, given the Sufis' claims of elevated insight, they must think that understanding the universe is just as good as understanding God, since there is no difference between the two. Obviously, this isn't a particularly sympathetic portrayal of the mystics' position, nor do I think it captures what al-Qūnawī really wanted to say.

We can better understand his point by considering one of the technical terms introduced by al-Qūnawī: "specification" (*taʿayyun*).[3] If I may trouble you with another etymology, this comes from the Arabic word ʿ*ayn*, which means "an individual or particular thing." So for something to be "specified" is for it to be

selected as a particular thing. Every existing thing other than God is "specified" in this way, whereas God is absolute or "unrestricted" existence. One might therefore think of created beings as limited fragments, or better, as images or representations of God's infinite being. Taking forward ideas from Ibn ʿArabī, al-Qūnawī explains that God's perfect, and perfectly unified, existence exceeds the grasp of our minds. Yet He shows Himself to us—as al-Qūnawī would put it, He "makes Himself manifest" to us—by creating the universe. As in Ibn ʿArabī, God's names or attributes are seen as a primary case of divine manifestation, which provides a basis for linking the whole theory to the language of the Koran. So we can now see that Ibn Taymiyya was wrong, or at least oversimplifying. Al-Qūnawī would say that there is indeed a difference between God and the created universe. It is the same as the difference between a real thing and its name, or a real thing and a mere image of that thing.

Characteristically, al-Qūnawī expresses this idea in both the metaphorical language of Ibn ʿArabī and in the philosophical language of Avicenna. One of his favorite metaphors is one that goes all the way back to ancient Platonism: created objects are mere reflections of divine reality, as in a mirror. Other Sufis will add other images, saying, for instance, that things in our universe are mere waves and ripples in the single infinite sea of divine reality. A more Avicennan note is struck when al-Qūnawī says that God's existence is necessary. Created things, by contrast, have a merely contingent existence, since it is up to God to decide how to make Himself manifest. Again, though, there is more going on here than the use of Avicennan terminology. Al-Qūnawī has an interesting answer to a question we just saw being raised in the debates over Avicenna's metaphysics: what is the status of things that do *not* exist? What are we to make of an essence that has not, or not yet, been granted existence by God? Al-Qūnawī proposes that non-existent things are things that reside in God's knowledge, rather than being made manifest in the created world. Before God creates something, it remains hidden in the recesses of the divine mind, just as God Himself is hidden. This is the meaning of the Prophetic saying that God is a "hidden treasure."

We might understand al-Qūnawī to be making a fairly basic point here, namely, that God knows what He can make before He makes it. If God knows about these items then they must have some kind of metaphysical status. They are, if you will, non-existent *things*. If that is what al-Qūnawī wants to say, then his position sounds a lot like that of the Muʿtazilites. I'd like to congratulate myself for drawing this rather unexpected connection. Unfortunately, someone else got there first and deserves the credit: a contemporary of al-Qūnawī, and a

man we've spoken about quite a lot in recent chapters, Naṣīr al-Dīn al-Ṭūsī. We have an exchange of letters between the two men, in which al-Ṭūsī remarks that al-Qūnawī's views on the status of essences sound rather Muʿtazilite.[4] But al-Qūnawī hastens to correct this impression, and he has a good reason for doing so. His position differs from that of the Muʿtazilites, in that the so-called "non-existent" things that are still hidden in the divine mind are in fact more "real" than the things God actually creates. Al-Qūnawī speaks of these non-existent essences as "paradigms" or "patterns."

Think again of the metaphor of the mirror, according to which the things we naively take to be most real are in fact mere images of the truly real things, the paradigms in the divine realm. Whereas the Platonists were usually confident that the human mind can come to understand these higher paradigms, al-Qūnawī accepts significant limitations on human knowledge. His exchange with al-Ṭūsī is polite and shows a considerable degree of mutual admiration between the two scholars. But in it, al-Qūnawī says that the intellectual exertions of philosophers like al-Ṭūsī can take us only so far. The Sufi climbs higher, achieving a mystical insight of God that trumps any intellectual knowledge. Only the prophets are afforded a more intimate knowledge of what really is real. As al-Qūnawī often says, the mystic's insights lie beyond the reach of discursive argument, and can be communicated only in hints and allusions.

Or in poems. Which brings us to al-Qūnawī's famous friend, Jalāl al-Dīn al-Rūmī; al-Qūnawī said the prayer at Rūmī's burial in the year 1273, before dying himself a year later and being laid to rest not far from the great poet. Rūmī came to Anatolia from modern-day Afghanistan—to be precise, from the city of Balkh. His father was also a Sufi master, one link in a chain of teachers and students stretching back to al-Ghazālī's brother Aḥmad, who was respected as a great authority in Sufism. Rūmī's father moved the family east when the poet-to-be was still a child, presumably in flight from the Mongol invasion. Despite the upheaval, young Rūmī was trained in a range of disciplines including law, theology, and philosophy, and studied in the city of Aleppo before settling in Konya and gathering a group of students around him. We have prose works based on his oral teachings, but his fame is due to the enormous collections of verses in which he devised powerful and vivid images to convey mystical insights.

Are these poems works of philosophy? He himself would probably have said no, given that he agreed with al-Qūnawī in seeing the "philosophers" as a well-defined group with well-defined limitations. Rūmī described Avicenna as "a donkey on ice," and remarked that "the leg of the reasoners is wooden; a wooden

leg is awfully unsteady."[5] But of course, having a wooden leg doesn't mean having no leg to stand on at all. Like al-Qūnawī, Rūmī believed that Sufism is not so much a stark alternative to philosophy as a higher discipline that contains the insights of philosophy within it. This helps to explain why the term "intellect" has such a positive connotation in his writings. He often contrasts the intellect to the lower self or soul, and encourages us to turn away from the latter and towards the former. We are hybrid creatures, an animal soul tied to a spiritual mind, like angels with the tails of asses (87). Because the Arabic terms for intellect and soul—ʿaql and nafs—are grammatically masculine and feminine, Rūmī allegorically represents the relation between intellect and soul with the relation between man and woman, or Adam and Eve (164).

Many of Rūmī's most celebrated images appear in verses where he exhorts us to abandon the self. He makes much use of the sensual metaphors of drunkenness and sex. The self is like the cork, and when removed we find the wine within (173). Our inability to know God is like the child's inability to imagine the pleasure of intercourse (44). These metaphors are well chosen to represent the ecstatic abandonment of self that is the ultimate goal of the Sufi path, often called "annihilation" (fanāʾ). For Rūmī, this is the meaning of the shocking statement made by the Sufi martyr al-Ḥallāj, when he announced that he was the Truth. This meant, as Rūmī puts it, that al-Ḥallāj had "become his own enemy" and destroyed himself so completely that it was God, and not the man, who spoke these words (191–2). In loving God and desiring union with him, the mystic is in love with his own non-existence, like a shadow in love with the sun, even though the sun's light will banish it (216). With such images, Rūmī poetically evokes the same idea we found in al-Qūnawī. To ascend to the level of true reality is to leave existence and join non-existence, like a drop of vinegar dissolving in an ocean of honey (180).

Of course, this is no simple process. You're not going to just wake up one morning, have an almond croissant for breakfast, and then abandon your self and unite to God's essence. The Sufi path is an arduous one of self-transformation and self-realization. Along the way there are many stages, which is what Rūmī understands by a Prophetic reference to hundreds or even thousands of veils between us and God (72). All the things we value in the created realm—loved ones, friends, knowledge, the cosmos itself, even almond croissants—are but veils that must be torn asunder if we are to know the single reality of God face to face (201). This abolition of the self has both a metaphysical and an ethical aspect. The metaphysical point is that, like al-Qūnawī, he thinks anything other than God is a delimitation or specification of God's absolute oneness and

existence. Our creaturely limitations make each of us what we are, and in mystical union such limitations are removed. From an ethical perspective, even our most deeply held individual values and concerns separate us from God. Again, Rūmī offers wonderful metaphors for the painful and laborious transformation that the mystic must undergo in giving up these things. My favorite is the allegory of the chickpeas (80–2). As they boil in the pot, the chickpeas cry out that they are being tormented by the heat. They cannot comprehend that they are being transformed into something far better. Just so, God sends us troubles in order to purify us, even if it means our ultimate destruction: "oh chickpeas," Rūmī writes, "boil in tribulation, so that neither your existence nor your selfhood may remain."

It's worth reiterating that knowledge itself is one of the veils that Rūmī tells us to remove. How, then, can he constantly be instructing us to identify with the intellect? The answer is given in passages that distinguish between two kinds of intellect, partial (or "acquired") and universal (35–6). These are, of course, philosophical terms but, as often in Sufism, they here take on a rather new meaning. For Rūmī, acquired intellect is knowledge that is learned from books and teachers. This includes the philosophical sciences. Such knowledge flows into us from the outside, like a stream of water into a house, and is thus dependent on its outer source. Universal intellect is rather to be found within. As Rūmī puts it, using terms already familiar to us from other Sufis, the heart is a mirror and reflects the ineffable divinity that thus dwells inside us (38–9). Does this mean that Rūmī would have no use for teachers, even teachers of mystical insight and practice? That would be a rather shocking break from tradition, even by his standards. As is clear from the case of Rūmī's own father, Sufis did study with masters, as did jurists, theologians, and philosophers. In all these fields, a thinker's intellectual credentials were established by naming their teacher, their teacher's teacher, and so on.

Here Rūmī is no exception. Like many other figures we have looked at, he criticizes *taqlīd*, and of course he offers a lovely image to illustrate the point (130–1): a man of *taqlīd* is like a blind person who has been told there is water rushing through a stream, whereas the man who has his own insight is like the blind person once he has filled a wineskin with the water, and can feel its weight. Yet the most pivotal relationship in Rūmī's life was with a spiritual teacher named Shams al-Dīn al-Tabrīzī. Rūmī became so attached to him that Rūmī's own students chased Shams away out of jealousy. Shams returned but then left again for good, leaving Rūmī to pine for his master. Many of his poems are addressed to Shams. Rūmī is therefore preaching what he practiced when he

warns that even if your goal is direct apprehension of the divine, you must begin more humbly by accepting guidance. Guidance from a human teacher, who will first explain the theory of Sufism, and only then the practice, and of course guidance from God Himself. As Rūmī says, "since you are not a sultan, be a subject … since you have not become God's tongue, become an ear" (122–3). The accomplished mystic also displays a deep humility, in that he achieves union only by annihilating himself. God manifests unbidden to the mystic who has removed the veils that used to separate him from reality, just as the whole creation is a voluntary self-manifestation of divine reality. Again, we see that Rūmī's mystical practice is grounded in something like the metaphysical picture offered by al-Qūnawī. But with all due respect to al-Qūnawī, I'd have to say that Rūmī puts the point more memorably (197):

> The caravan of the unseen enters the visible world, but it remains hidden
> from all these ugly people.
> How should lovely women come to ugly men?
> The nightingale always comes to the rosebush.
> The jasmine grows next to the narcissus,
> the rose comes to the sweet-mouthed bud.
>
> All of these are symbols—I mean that the other world keeps coming into
> this world. Like cream hidden
> in the soul of milk, no-place keeps coming into place.
> Like intellect concealed in blood and skin,
> the traceless keeps entering into traces.
> From beyond intellect, beautiful love comes
> dragging her skirts, a cup of wine in its hand.
> And from beyond love, that indescribable One
> Who can only be called "that" keeps coming.

49

PROOF POSITIVE THE LOGICAL TRADITION

In the Islamic world, many humorous stories are told featuring the Sufi folk hero Mullā Naṣr al-Dīn. He turns up at a border crossing, and the customs officer searches him, his donkey, and his empty basket for contraband. The officer finds nothing and waves Naṣr al-Dīn through. The next week the same thing happens. And again the following week, and so on—the customs officer remains suspicious, but can find nothing hidden on the donkey or in the basket. This goes on for years; the customs officer eventually retires. He runs into Naṣr al-Dīn at the market and says, "I'm retired, now you can tell me. I know you must have been smuggling something all those years. What was it?" "Donkeys and baskets," replies Naṣr al-Dīn. Or how about this one? Naṣr al-Dīn is sitting by a river and sees a traveler arrive at the far shore. The traveler looks around, and then calls out, "How do I get across?" "What do you mean?" asks Naṣr al-Dīn. "You're already across!" And here's a third one, more germane to the topic of this chapter. A king declares that he will tolerate no deviations from the truth, and that anyone who tells a lie in his city will be executed. Naṣr al-Dīn goes to the city, presents himself at the gates, and is asked what his business is. "I'm here to be executed," he explains. What should the guard do? If he executes Naṣr al-Dīn, then he makes him a truth-teller, so he is innocent and should not have been killed. But if he lets him go, then Naṣr al-Dīn is guilty of lying and should have been put to death.[1]

This is a picturesque version of one of the most famous logical puzzles, the Liar Paradox. It can be formulated in various ways, but the basic idea is that somebody makes a statement that will be true if it is false, and false if it is true. For instance: "This sentence is a lie." If that sentence is true, then it is a lie, so it is false. But if the sentence is false, it isn't a lie, so it is true. In antiquity the great Stoic logician Chrysippus wrote about the Liar, but his treatments of the

problem are lost. It also received considerable attention in Latin medieval philosophy,[2] and philosophers are still interested in the paradox today. Less well known is the fact that many thinkers of the Islamic world were fascinated by the Liar Paradox.[3] The first discussions were not produced by philosophers engaged with the Greek tradition. No surprise there, since Aristotle never really discusses it, and Chrysippus' works did not make it into the Arabic-speaking world. Rather, it was the theologians of the *kalām* tradition who first dealt with it, in about the ninth and tenth centuries. Interest in it became truly obsessive only in the twelfth century onwards.

Over the course of generations, considerable progress was made with the formulation of the paradox. The first attempts focused on something that is actually a distraction, namely, the status of the person who is making the paradoxical utterance: is he lying, or not? We thus find theologians imagining a scenario where someone has never spoken a lie in his life, and then suddenly says "I have told a lie." This will only be true if this very sentence is a lie, but if it is a lie, of course, it must be false. Alternatively, they imagine someone saying, "Everything I say is a lie." These early discussions tend to accept the simplest, but least satisfying solution. You would think that every meaningful assertion must be either true or false. Philosophers often call this the "principle of bivalence." One way to deal with the Liar is to bite the bullet and make it an exception to this principle, that is, to admit that it is neither true nor false. Like I say: simple, but not very satisfying.

Naṣīr al-Dīn al-Ṭūsī made advances concerning both the formulation and the solution to the Liar Paradox. He saw that it is really a problem about self-reference. In other words, the paradox arises because we are making a statement that is about itself. Al-Ṭūsī explained this very clearly by pointing out that a statement can be about anything at all, not just about things like giraffes and silent-film stars, but also about other statements, as when I say "The statement 'Giraffes are tall' is true." Once we've allowed this, then we can hardly ban statements that are about themselves, like the one in the Liar Paradox. Thus his formulation of the paradoxical utterance is simply "This statement is false." That zeroes in on the real problem, which is not whether the person making the statement is lying or not, but whether the statement itself is true or not. And of course, if it is true, then it is false; but if it is false, then it is true.

It's one thing to state the paradox clearly, and quite another to solve it. Al-Ṭūsī tried to pull off that second trick by considering what it means for a statement to be true in the first place. A true statement, he argued, is one that describes something else as being the way it really is. But this can't happen with

a self-referential statement, because it is not about *something else* at all, but rather about itself. Thus issues of truth and falsehood don't even arise for it. Basically this is just an advanced version of the bullet-biting solution of his predecessors, with the improvement that he now gives a reason why the problematic statement is neither true nor false. Unless the statement is about something else, it just can't be true, or false for that matter. Unfortunately, al-Ṭūsī's solution is not a particularly good one. It seems an ad hoc stipulation to ban truth and falsehood for self-referential statements. And in other cases, statements that are about themselves certainly do seem to be true or false. Surely I would be speaking the truth if I were to say, "This sentence I'm now uttering is in English," and saying something false if I said, "This sentence I'm now uttering is in German." So banning truth and falsehood in the case of self-referential statements looks not just arbitrary, but downright wrong. Further attempts at a solution will be made in centuries to come, as we'll see in Chapter 52.

Another puzzle is why these theologian-philosophers would be spending so much effort on something like the Liar Paradox. Or perhaps it isn't so puzzling. Starting in the eleventh century, and for centuries thereafter, the Islamic world saw a golden age of logic. This was not the logic of the formative period, when al-Fārābī and the Baghdad school were still writing commentaries on Aristotle's *Organon*. Instead, just as we've been seeing in the areas of metaphysics and philosophical theology, Avicenna was now the indispensable man. Post-Avicennan logicians worked within Avicenna's new system, even when they disagreed with him and made further adjustments to that system. What was new about Avicenna? I can't answer that question fully here, but I'll give you an example. Like Aristotle's logic, Avicenna's logic is still concerned with syllogisms made up of two premises and a conclusion, where both premises and the conclusion involve something being predicated of a subject. To take an example which, like a beloved stuffed animal, is by now well-worn but still does its job admirably, "All giraffes are animals, Hiawatha is a giraffe; therefore Hiawatha is an animal." What's going on here is that *animal* is being predicated of all giraffes, while *giraffe* is being predicated of Hiawatha. The argument form is "A is said of all B, B is said of C, therefore A is said of C."

Avicenna is happy with all this, but observes that all such predications can be taken in two ways, either "in themselves" (*dhātī*) or "under a certain description" (*waṣfī*). For instance, it is true of humans "in themselves" that they can laugh. But if we stipulate that a certain human is asleep, then the human cannot laugh. In other words, laughing is impossible for humans "under the description" that

they are asleep. Avicenna also explains more clearly than Aristotle what it means for something to be said of subjects "in themselves." "Laughing is said of human" is going to be true as long as at some time, some human or other laughs. It only has to happen once. "Laughing is said of *all* humans" will be true as long as every human laughs at least once. And this sounds about right. It would be unreasonable to insist that laughing is said of all humans only if everyone is laughing all the time. After all, you can only tell so many jokes about Mullā Naṣr al-Dīn.

After Avivenna, logicians routinely operated with this same distinction between *dhātī* and *wasfī* predications. But as in other areas of philosophy, that didn't mean they agreed with everything he said. A nice example here is Najm al-Dīn al-Kātibī al-Qazwīnī, a member of the group of pioneering scientists and philosophers gathered around al-Ṭūsī at the Marāgha observatory. Writing in the middle of the thirteenth century, al-Kātibī applied another Avicennan distinction to these predications that are studied in logic, one we're seeing more and more often as we move into this later period: the distinction between mental and concrete existence.[4] We might wonder whether Avicenna is right to say that "animal is said of giraffe" only if there is at some point a giraffe that is an animal. What if we lived in a world where there are no giraffes out there in concrete reality? In this horrible, yet perfectly possible world, Avicenna could not accept the truth of the statement "animal is said of giraffe," because there would be no giraffes to do the job of being animals. Al-Kātibī agrees that it would be false as concerns concrete reality. But it would remain true as concerns *mental* existence. Even if giraffe existed only in my mind, I could still understand giraffes to be animals.

A related point had been made in the previous century by Fakhr al-Dīn al-Rāzī.[5] He too pondered whether truth is tied to the frequency with which things happen. More specifically, his question was whether things that are eternal are thereby necessary. Aristotle thought the answer to this question was "yes." For instance, the heavenly spheres, being in his opinion eternal, exist necessarily (in fact he argued for the inference from eternity to necessity in *On the Heavens* 1.12). But Fakhr al-Dīn now moves decisively away from this Aristotelian position. For him, whether something is always the case has nothing to do with its being necessary. The heavenly spheres may indeed exist eternally, as Aristotle and Avicenna claimed, but they are certainly not necessary, since it is up to God whether they exist. In a way this is good Avicennism. Avicenna would agree that the spheres are in themselves only contingently existent. They must indeed exist, but only because God is causing them to exist. So their

eternity is borrowed from God's, not the result of any intrinsic necessity. Yet Fakhr al-Dīn's firm insistence that eternity doesn't imply necessity is probably more motivated by theological considerations. As an Ashʿarite theologian, he wants to ensure that all things are subject to God's will. And God's will might have been different, had He seen fit. By finally making a clean break between eternity and necessity, Fakhr al-Dīn is able to say that eternal things are just as contingent on God's free choices as things that start and stop existing.

Even though logic in this later period was always done within the framework laid down by Avicenna, his works were not necessarily on the standard reading list. As often as not, students of logic would be reading a book by someone like al-Kātibī, rather than by Avicenna himself. Al-Kātibī's logical textbook *Epistle for Shams al-Dīn* (*al-Risāla al-Shamsiyya*) was studied in logic classes at the *madrasas* for many centuries. He was only one of several authors working around the time of al-Ṭūsī, in other words, during and after the Mongol invasions, to produce such summaries of logic for the beginning reader. Another was al-Kātibī's teacher al-Abharī, and in the same period we might also mention Sirāj al-Dīn al-Urmawī.[6] All of these men wrote sophisticated philosophical works, not only textbooks for beginners. But those textbooks had a legacy that few theological treatises could hope to match. Ambitious theoretical treatises might impress your colleagues, but if you want to be read, it helps to write for a more general audience. (As evidence, I cite the fact that you are reading this book now.) Such was the influence of these medieval textbooks that they were still studied in Egypt, Persia, and India as late as the twentieth century. And the textbooks of al-Kātibī and his contemporaries were not only used by students, but also made the subject of commentaries, just like Avicenna's own works. It confirms a parallel I've drawn before, between the role of Aristotle in late antiquity and the role of Avicenna in later Islamic intellectual history. By writing a useful introduction to Aristotle's logic, a late ancient Platonist like Porphyry could be read by many generations of students and be made the object of commentary. With their handy introductions to Avicenna's logic, the thirteenth-century authors accomplished the same thing.

More than the late ancient commentators on Aristotle, the logicians in the Islamic world were ready to challenge and openly criticize their indispensable author, Avicenna. It has often been taken for granted that the later centuries were a time of unoriginality and stagnation. Scholars have been led to this assumption by the fact that, in the wake of the thirteenth-century textbooks, most writing on logic took the form of either commentaries or glosses, in other words, marginal notations on earlier works. But who says that commentaries and glosses can't

contain original ideas? Again, there's a parallel here to late antiquity. Nowadays everyone admits that the late ancient commentators on Aristotle showed great originality in the interpretive texts they wrote in places like Alexandria.[7] But only recently has it started to emerge that the same is true of logical works written in places like Marāgha, from the thirteenth century onwards. As logicians reacted to Avicenna and the textbooks he inspired, they took up new issues like the Liar Paradox, they questioned Avicenna's opinions, and they patched holes in the Avicennan logical system. Research into all this is in its infancy, but here are a couple of examples that have come to light.

First, let's consider the question of what logic is even about—what is its subject-matter? Avicenna, true to form, had an excellent answer to this question. So excellent was his answer, in fact, that it came to be the standard view in the Latin Christian tradition too. He said that logic is about "second intentions." A first intention is a concept in our minds, like the concept of *giraffe*. This is a concept that is about something, namely giraffes out in concrete reality. A second intention is about one of these first-order concepts. For instance, I might see that *giraffe* is a species, and that it belongs to the genus *animal*. Species and genus are, then, concepts about concepts, rather than being directly about things in the outside world. And logic deals with this meta-level of concepts. Clever though Avicenna's answer is, it was rejected by yet another logician of the thirteenth century, whose name was Afḍal al-Dīn al-Khūnajī.[8] On this question of the subject-matter of logic, al-Khūnajī insisted that logic is a proper philosophical science. And philosophical sciences do not study second-order concepts, they study the essential properties of things. For instance, giraffeology, if it is a science—and who would dare to deny this?—deals with the essential properties of giraffes. Likewise, logic should deal with the essential properties that belong to our first-order concepts. This is the right way to think about such things as species and genera. They are essential features of notions like giraffe, not a second order of concepts laid on top of our basic concepts.

The later tradition also had the admirable goal of ensuring that logic was without gaps. And here they noticed a serious problem. The systems of Aristotle and Avicenna are fine and good if you want to focus on arguments that consist of nothing but predications, like "Animal is said of giraffe." But there are plenty of valid arguments that are not of this form. One example had already been pointed out by the Stoics: conditional inferences, like "If it is day, then there is light." That sort of case was already noted by al-Fārābī and Avicenna, and continued to be discussed in the later period. Another exception was the so-called "relational syllogism." The standard example here concerned the relation

of equality. If I say that A is equal to B, and B is equal to C, you'll have no trouble in seeing that A is equal to C. Or we might consider the relation of being "in" something. If the mouse is in the box and the box is in the house, obviously the mouse is in the house; even Dr Seuss could tell you that. Like conditional "if–then" arguments, the relational syllogisms do not quite fit into the Aristotelian and Avicennan syllogistic. This problem, pointed out forcefully by Fakhr al-Dīn al-Rāzī, provoked solutions in commentaries and glosses at the time of the Mongols and thereafter, into the Ottoman, Safavid, and Mughal periods.[9]

As I've already hinted, the reason why logic was such a fixture of intellectual activity in these centuries is that it had been integrated into the educational system. The *madrasas* that were set up under the Seljūqs survived the Mongol invasions. The beginner jurists and theologians at these institutions cut their teeth on logic, and if they became particularly interested in the topic they could then use their teeth to bite the bullet of denying the principle of bivalence to solve the Liar Paradox. But of course, most students were content to do their exercises and move on to theology or the law. There is perhaps no simple answer to the question of why logic became so widespread an aspect of the education of religious scholars. Al-Ghazālī can take some of the credit, or blame, since alongside his criticisms of Avicenna and the other philosophers he poured scorn on anyone who dismissed the validity and utility of logic (Chapter 20). Other theologians agreed, and went so far as to begin general works on the religious sciences with a treatment of logic. A good example is yet another significant author of this period, Sayf al-Dīn al-Āmidī. He died in 1233, as the Mongols were on the horizon, so to speak. He contributed to the discussion of various logical issues, including the Liar Paradox, and was among the first to integrate logic into writing on what was called *uṣūl al-dīn*, or "principles of religion."

Thanks to thinkers like al-Āmidī, logic became so pervasive that even vigorous critics of Avicenna would usually try to show their mastery of this science, sometimes making the odd innovation of their own in the process. Particularly noteworthy in this regard was Suhrawardī, who criticized Avicenna in the first "logical" section of his *Philosophy of Illumination*. We already saw him arguing that the philosophical goal of providing definitions is misguided, and in fact impossible (Chapter 44). He also made technical proposals in the direction of simplifying Avicenna's system, consistently with his rhetoric that the so-called "Peripatetics" are always overcomplicating things. He reduced the number of categories from ten to five, and suggested that we don't need to consider both affirmative and negative propositions. Rather, any negative

proposition can be rephrased as an affirmation with a negative predicate: instead of negating the proposition "all men fly," we could just affirmatively say, "all men are non-flying." Not earth-shattering, perhaps, but it shows he is playing the Avicennan logical game. Yet it would be an exaggeration to say that everyone was keen to take part in that game. Some thinkers firmly rejected the utility of logic as practiced by Avicenna and his heirs. One of them wrote that the philosophers' theories of the syllogism "resemble the flesh of a camel found on the summit of a mountain; the mountain is not easy to climb, nor the flesh plump enough to make it worth hauling."[10] These are the words of the most famous, or perhaps I should say notorious, intellectual of the Mongol period. His name is associated with anti-intellectualism and fundamentalism, but this underestimates the subtlety and argumentative skill shown by one of the greatest ever Muslim religious scholars: Ibn Taymiyya.

BY THE BOOK IBN TAYMIYYA

It's a thankless job being a critic of philosophy. The anti-philosopher typically winds up getting sucked into the whole business they want to attack. After all, anyone who mounts a serious case against philosophy is bound to offer arguments, and these are liable to be arguments that are in some sense themselves philosophical—a rather self-defeating exercise. In a further bitter irony, the really sophisticated and interesting opponents of philosophy are simply absorbed into the annals of the subject they so detest. This has been the fate of al-Ghazālī, philosophy's most famous critic in Islam. His attitude towards philosophy was rather mixed, though, compatible with the acceptance of some philosophical views and a great appreciation for logic. Not so with Ibn Taymiyya. We've cast a broad net in this book, considering not just logic and Aristotelianism, but also rational theology or *kalām*, the theory of justification underlying Islamic law, and philosophical Sufism. Ibn Taymiyya railed against all of these. He advocated a return to the original teachings of the Koran and of the earliest Muslims, who lived close to the time of the Prophet Muḥammad and had privileged access to his teachings and their meaning. His appeal for Islam to go back to its roots is directly relevant to political issues in the contemporary Islamic world. A villain to some and hero to others, Ibn Taymiyya has been blamed, or praised, for launching an anti-rationalist traditionalism which inspires radical Islamists today.

Of course, I never mention the popular conception of a historical thinker without going on to say that it is misleading, and Ibn Taymiyya is no exception.[1] For one thing, recent research has suggested that, though Ibn Taymiyya had a close-knit circle of admirers and followers, he did not exert widespread influence within the Islamic world in subsequent centuries. His cultural resonance is a more recent phenomenon. Also, despite his opposition to philosophy and *kalām*, he would never have accepted the label of "anti-rationalist." He insisted that the deliverances of reason are necessarily in harmony with the Koran and Prophetic traditions.[2] His basis for this claim was the same as the one given by that arch-rationalist Averroes: revelation is true; whatever is proven by reason is true; and there can be no contradiction between two truths. Of course, Ibn Taymiyya did not agree with Averroes that we should therefore use Aristotle to understand the

teachings of the Koran. Instead, he urged us to dispense with the pretentious subtleties of the philosophers and theologians. We should rather accept the deliverances of natural reasoning and the straightforward Islam of the earliest generations, who in Arabic are called the *salaf*, meaning "predecessors" or "forebears." This is why Ibn Taymiyya is credited with laying down the template for the "salafist" movement in Islam.

But we need to be careful here. If you have heard the term "salafism" before, it may conjure up for you modern-day Islamic extremism and violent *jihād*. You may also connect it to the Wahhabi movement. These groups, and in fact the founder of Wahhabism, the eighteenth-century figure Muḥammad Ibn ʿAbd Wahhāb, have certainly been influenced by Ibn Taymiyya. But he lived in a different era, and the forces he saw as threatening Islam no longer existed in the eighteenth or twenty-first century. The chief historical factor in his thought was the Mongol invasion, which had penetrated far into the Islamic world before Ibn Taymiyya came along. He was born in Syria in 1263, shortly after the Mongols laid waste to Baghdad and deposed the last of the ʿAbbāsid caliphs. He left Syria at a young age, as the Mongols advanced still further, and spent the rest of his life in the domain of the Mamluks.

Based in Egypt, the Mamluks were the last redoubt of Islam as Ibn Taymiyya knew it. So by the time of his death, in 1328, Ibn Taymiyya had been witness to what he would have seen as an existential battle to preserve Islam. With his fiery rhetoric, calling on fellow Muslims to go back to basics, Ibn Taymiyya sought to be a standard-bearer in that battle. He waged his war mostly within the context of jurisprudence. In fact, we should see him not primarily as an ideologue, or for that matter as an anti-philosopher, but as a jurist with idiosyncratic ideas about how to reach correct verdicts within Islamic law. His verdicts have often been used, and abused, in modern invocations of Ibn Taymiyya. To take just one example, Ibn Taymiyya judged that it was licit for Muslims to kill the soldiers of the Mongol army, even though the Mongol forces had by this time converted to Islam. This has been taken by some as a rationale for *jihād* against foreign religions or peoples. But in fact Ibn Taymiyya defended his judgment by classifying the Mongols as a rebel group *within* Islam, who were trying to topple the legitimate authority of the Mamluks.[3]

Not that Ibn Taymiyya specialized in the legal niceties of warfare. Many of his rulings concern property and contract issues, and aspects of Islamic ritual observance. An often-discussed case is his ban on making trips specifically to visit the tombs of Muslim saints. In this respect, he resembles the other jurists we discussed in Chapter 23. But in one fundamental way he was very different.

Much like American legal theorists nowadays who think they can interpret the Constitution strictly in accordance with the intention of the founding fathers, Ibn Taymiyya restricted the basis of correct legal judgment to the Koran, prophetic ḥadīth, and reports about the early generations, or *salaf*. He thus dispensed with much of the apparatus of legal opinion that had been built up in the previous centuries. He associated himself closely with one of the main Sunni schools, the Ḥanbalīs, who were the best fit for his originalist brand of jurisprudence. Yet he rejected or reinvented even such basic legal concepts as "consensus." For him, the only consensus that mattered was that of the first generations, and subsequent legal opinions carried no weight. The same goes for the idea, widespread in Islamic jurisprudence, that all else being equal, legal rulings should seek the optimal practical result. For Ibn Taymiyya, any truly advantageous consideration is always to be found in the Koran and other literature from the prophetic time. Jurists who expand on this, no matter how well-intentioned they may be, are just making it up as they go along.

Which, as it happens, is exactly what some other jurists accused Ibn Taymiyya of doing. Just as today's American constitutional originalists are charged with foisting their own political views on the founding fathers, so Ibn Taymiyya had trouble convincing everyone that he was merely following the judgments of the *salaf*. As one contemporary critic put it, "for several years now he has been giving legal opinions not according to any particular legal school, but according to what evidence he finds convincing."[4] Even some of his fellow Ḥanbalī scholars often found his judgments and methods arbitrary. But Ibn Taymiyya was at least willing to engage in the juridical enterprise, even if he refused to play by the normal rules. By contrast, he had nothing but scorn for the traditions of philosophical Sufism and *kalām*. Although he was himself an adherent of moderate Sufism, his most ferocious invective was directed towards those who fused philosophy with mysticism.[5] He interpreted the doctrine of the "unity of existence" as implying that God and His creation would become one and the same thing. This made them a threat even more pernicious than the Mongols. The Sufis' supporters got their revenge, prevailing upon the Mamluk sultan to imprison Ibn Taymiyya for several years in that ancient city of philosophy, Alexandria. As for *kalām*, Ibn Taymiyya saw the various theological schools in much the same light as the jurists. They went beyond the Prophetic teachings, and in doing so, went astray. Yet, as in law, he had no hesitation in invoking the authority of the *salaf* to adopt what look suspiciously like distinctive and innovative positions within standard *kalām* debates.

Take his remarks on the classic problem of God's attribute of will.[6] There

were basically two previous schools of thought on this. First, that of the Ashʿarite theologians, who made God's will unrestricted and made it an eternal but non-necessary cause for the existence of the universe and for events within the universe. Then there was the philosophers' opinion, by which I, of course, mean Avicenna's opinion. He agreed that God has a will, but thought that, like everything else about God, this will is eternal and necessary. Characteristically, Ibn Taymiyya disagrees with both views, holding instead that God's will is constantly changing. God is no motionless intellect, as Aristotle had claimed, but an ever-active, ever-transforming and willing agent. His perfection consists not in remaining always the same, but in always willing something new, and willing the best thing for that moment. As Ibn Taymiyya says, it is no deficiency to will the right thing at the right time. Avicenna and the other philosophers were simply wrong to think that God's divinity would be compromised if He were to change. Along with what jurists from rival schools saw as his anthropomorphic understanding of God, this notion that God is subject to change gave critics the opportunity to condemn his teachings. Even the sixteenth-century theologian Mehmed Bergevī, who helped to inspire the conservative Kāḍīzādelī movement, believed that Ibn Taymiyya had strayed into outright unbelief on these issues.[7]

Yet this same line of argument shows that Ibn Taymiyya's reputation as an anti-rationalist is largely misleading. He was willing and able to meet the theologians and philosophers on their turf, to engage in argument against them, and to develop distinctive theological ideas of his own, even if he would have insisted that those ideas were already to be found in the earliest teachings of Islam. Ibn Taymiyya also understood that, in attacking the theologians and the philosophers, he was not really taking on two separate groups. What the historian Ibn Khaldūn will point out later in the fourteenth century was already true in Ibn Taymiyya's lifetime, around the turn of that century: Avicennan philosophy had wormed its way into *kalām* to the point where the two were hardly distinguishable anymore. For both Ibn Taymiyya and Ibn Khaldūn, expertise in logic in particular was the marker distinguishing the "later" *kalām* of their time from the theology of the early Muʿtazilite and Ashʿarite schools.

Logic's role in the education of religious scholars alarmed Ibn Taymiyya. He spoke out against numerous aspects of philosophy, rejecting, for instance, the Avicennan theory that celestial intellects serve as an intermediary between God and our earthly realm. But it was the philosophers' logic and its attendant theory of knowledge that provoked his most interesting and detailed critique. Where al-Ghazālī welcomed the study of logic by religious scholars, Ibn Taymiyya thought it was at best a waste of time, and at worst incoherent. He was not alone

in this. Already in the first half of the thirteenth century the ḥadīth scholar Ibn al-Ṣalāḥ issued a legal ruling prohibiting the study of logic.[8] He condemned it as the first step towards the study of philosophy, and described its greatest exponent, Avicenna, as "the devil of the human devils." Echoing al-Ghazālī's opinion that Avicenna's theories made him an apostate, Ibn al-Ṣalāḥ urged that the death sentence would be appropriate for anyone who refuses to give up on the study of logic and philosophy.

As for Ibn Taymiyya, in addition to comparing logical expertise to camel meat at the top of a mountain, he compared the logician to someone who is told to point at his left ear and reaches around his head with his right hand to do it, instead of just using his left hand. Both comparisons appear in his enormous treatise, the *Refutation of the Logicians*, which was provoked by his meeting with a philosophy enthusiast in Alexandria.[9] Ibn Taymiyya's extensive knowledge of authors like Abū l-Barakāt al-Baghdādī, Suhrawardī, and Fakhr al-Dīn al-Rāzī meant that he was well acquainted not only with logical theory, but also with doubts that had been raised concerning this theory. Taking a leaf out of Suhrawardī's book, he begins by questioning the philosophers' claim that knowing something presupposes being able to define it. This idea had a long pedigree. It played a central role in Socrates' relentless questioning of his fellow Athenians, and again in the epistemology of Aristotle and all his followers. But in Ibn Taymiyya's opinion, definitions do nothing at all to bring us to knowledge. Rather the reverse: it is knowledge of things that allows us to recognize the definitions of those things as correct (§22). If anything gives us knowledge, it is a demonstrative proof, not a definition.

Here too, though, the philosophers stand on shaky ground. They have rather restrictive rules for what counts as a demonstration: it must be a syllogism with exactly two premises, which are universal in scope. You won't be surprised to hear that Ibn Taymiyya disagrees. The number of premises you need, he argues, will depend on how much background knowledge you have (§§137–9, 146). If someone learns that the Prophet forbids the drinking of intoxicating beverages, he might immediately infer that he shouldn't drink wine. Someone else might first need to learn that wine is an intoxicating beverage. A third person might understand both the prohibition and the intoxicating nature of wine, but remain unmoved, because he isn't a Muslim and so doesn't accept the authority of the Prophet. Ibn Taymiyya uses the same example to argue that legal judgments needn't involve syllogistic arguments at all (§§52–3). If you should learn that the Prophet prohibited intoxicating beverages, then so long as you are Muslim and know what an intoxicating beverage is, you have knowledge with no need for

any argument. It's telling that Ibn Taymiyya uses legal examples here, a sign of his alarm at the integration of logic into juridical education.

With these criticisms, Ibn Taymiyya is not so much proposing a different way of doing logic as trying to show that logic is pointless. Definitions and syllogisms presuppose, or come along in the wake of, our direct knowledge of things. He likewise dismisses the premium that Aristotelians place on universal knowledge. In the first instance, argues Ibn Taymiyya, we always know *particular* things. Our universal knowledge is just a generalization from our experience of particulars (§§55–9, 171, 258), and is always liable to be trumped by a novel encounter that will overturn the generalization. How, then, can universal understanding be better than particular experience? He goes so far as to say, on this basis, that sensation is better than intellect (§293). That would be a heresy from the philosophers' point of view. But it's an obvious fact for Ibn Taymiyya, given that sense-perception of particular things is the sole basis for the universal generalities of the mind.

All this shows that the philosophers' logic is no better than the kind of reasoning used in Islamic jurisprudence. Legal judgments were frequently reached on the basis of analogy, with a judgment being transferred from one particular case to other, similar cases. With its emphasis on particulars, Ibn Taymiyya's epistemology is (not coincidentally) custom-made to make sense of this kind of reasoning. And he makes a further clever point against the philosophers, observing that, as even they would agree, the best thing of all to know is God (or as they would put it, "the necessary existent"). But God is a particular thing, not a universal thing (§§76, 84). So on their own theory, the best possible knowledge is not universal after all! Worse still, the philosophers must admit that there can be no proof of God, since they think we can only demonstrate universal truths, and God is not a universal.

As Ibn Taymiyya enumerates the weak points of logic, it becomes clear that, however pointless this science is, he has mastered it fairly well. In this he is unlike previous critics, notably the grammarian al-Sīrāfī, whose polemic against Abū Bishr Mattā failed to delve much into the details of logical theory (Chapter 8).[10] Ibn Taymiyya is a more dangerous kind of opponent: the kind that knows his enemy. He mentions such technical points as the reduction of all syllogistic forms to the first figure (§283) and the merely mental existence of universals (§79). He also has a good eye for the embarrassing anecdote. He tells us that the logician al-Khūnajī admitted on his deathbed that he knew only that a contingent thing needs an external cause to exist; and the contingent thing's lack of a cause is non-existent, so in fact he wound up knowing nothing at all (§§57, 233).

This is not to say that Ibn Taymiyya's critique of logic is always convincing. His complaint that the efficacy of an argument depends on the listener's background knowledge was actually well understood by Aristotle and his heirs. This is why they routinely distinguished between what is absolutely primary in an explanation, and what is primary for a given person who is seeking that explanation. The philosophers could use this same point to answer Ibn Taymiyya's criticism about particulars and universals. Sure, sensible particular things are primary to us, but they are not primary in scientific explanation. Ibn Taymiyya did offer a significant challenge to the logicians. But they seem to have felt that they could answer his criticisms, or get away with ignoring them. They were right. Among the Muslim thinkers we've covered so far, only al-Ghazālī and Rūmī equal Ibn Taymiyya's prominence in the contemporary world. But in his own time, and for some centuries thereafter, Ibn Taymiyya's legal radicalism made him a relatively marginal figure. His criticisms did little or nothing to slow the spread of philosophical Sufism or the integration of logic and other philosophical disciplines into religious education. But to be fair to him, stopping the development of Avicennan philosophy and *kalām*, or for that matter philosophical Sufism, was proving to be a difficult task indeed. As we'll see now, even the Mongol invasions couldn't manage it.

AFTERMATH PHILOSOPHY AND SCIENCE IN THE MONGOL AGE

What comes from central Asia, arrives on horseback, kills everyone in sight, eventually toppling one of the world's great civilizations, and has a leader whose name will be borrowed by a German pop band from the 1970s? If your answer is the Huns, you're almost right. They did help cause the fall of the Roman empire by unleashing chaos among barbarian tribes. But as far as I know, there has never been a German pop band named Attila, whereas the German entry in the 1979 Eurovision Song Contest was in fact a group called Dschinghis Khan. They came fourth with their eponymous hit, "Dschinghis Khan," which has a beat almost as irresistible as the Mongol hordes, and better lyrics. The warlord "erzeugte sieben Kinder in einer Nacht, und über seine Feinde hat er nur gelacht" ("fathered seven children in a single night, and just laughed when his enemies came into sight"). And then there's the admirably candid line, "lasst noch Wodka holen, denn wir sind Mongolen" ("get some more vodka, because we are Mongols!").

Almost as surprising as the Mongols' role in German pop music was their role in the history of philosophy.[1] Surprising, because it was not entirely negative. The Mongols did wreak devastation and death wherever they went.[2] But once their army had swept through, they were left with territory to rule, and they rose to the challenge. By the middle of the thirteenth century, a quarter-century after the death of the mighty Genghis, the Mongols figured out that they could get more out of the territory they had conquered through taxation than by wholesale slaughter. They had burst out of their homeland in central Asia at the beginning of the century, taking control of northern China and then laying waste to wide swathes of the Islamic world, including Khurāsān—home of many of the philosophers we've met, including Avicenna. By the time of Genghis Khan's

death in 1227 their realm reached as far as the Caspian Sea. Within another fifteen years they had defeated the Seljūqs, to take power in Anatolia. It was only a matter of time until they toppled the ʿAbbāsid dynasty. This occurred when the Mongol ruler Hülegü, accompanied by the opportunistic al-Ṭūsī, invaded Baghdad and killed the last of the caliphs in 1258. The Mongols' westward expansion was finally stopped only when the Mamluks managed a successful defense of Syria and Egypt.

With their borders stabilizing around the year 1260, Mongols now needed to consolidate their hold over the eastern Islamic realms. As Ibn Khaldūn's theory of history would predict, they had to become sedentary rulers rather than a rampaging horde fueled by tribal solidarity. Part of the process was the conversion of their leaders to Islam. Prior to that, the Mongols had been varied in their religious beliefs, embracing Christianity, Buddhism, and paganism. The rulers who succeeded al-Ṭūsī's patron Hülegü were known as the Īl-Khāns. One of them converted from Buddhism to Islam, and those Mongols who were not already Muslims followed his lead. So it was that the Mongols went from being an existential threat to Islamic civilization to being the rulers of that civilization. For all the havoc they wreaked, they proved capable of rebuilding, and even of supporting scholarly activity. They understood the value of skilled laborers among their new subjects, and would sometimes move them around their empire to where they could do the most good. Add to this the fact that intellectuals were often among the populations fleeing in terror from Mongol advances, as we saw in the cases of Fakhr al-Dīn al-Rāzī and Ibn Taymiyya. So it was that the Mongols directly and indirectly helped ideas to spread around the Islamic world.

The experts that could still flourish within the new Mongol order included philosophers. Especially likely to win favor were those with competence in astronomy and medicine, sciences that were valued by the Mongols no less than by the earlier Muslim dynasties they had now replaced. They even imported Muslim astronomers into China. In the Islamic world itself, the best example of the phenomenon is a man we already know well, Naṣīr al-Dīn al-Ṭūsī. We've discussed how he spent his last years leading scientific research at an astronomical observatory in the city of Marāgha. In addition to the works I described in Chapter 46, it's worth mentioning here his edition of the Arabic version of Euclid's *Elements*, which drew on the two main translations of the work and noted the differences between them. This philological achievement made al-Ṭūsī's version of the *Elements* the standard edition for successive generations.

It wasn't only al-Ṭūsī who was doing math in the aftermath of the Mongol

invasions. He gathered around him a formidable group of scholars working on astronomical, medical, and philosophical topics. We already met Quṭb al-Dīn al-Shīrāzī (Chapter 45), the Illuminationist philosopher who had a flair for performing magic. One trick he tried to pull off in astronomy was to solve an age-old problem that had already bedevilled the ancients: the planets are supposedly seated upon spheres, which are revolving in simple, circular motions around the earth. Yet we do not see them moving along a steady course. Rather, when their movements night to night are tracked, they seem to stop and even move backwards. Ptolemy had offered two possible solutions to this problem of retrograde motion. One was to suppose that the planets are indeed on single spheres, but say that they revolve around a different point than the center of the earth. These spheres would be "eccentric" (literally "off center"). The other was to postulate smaller spheres embedded within the large single sphere, with their own rotating motions. These smaller spheres, or "epicycles," would be the seats of the visible planets. The irregular motion of the planets could then be described as a combination of the revolution of the larger sphere around the earth, plus the smaller revolution of the planet around the epicycle.

Considering all this, Quṭb al-Dīn concluded that although a mathematical model could be made to fit the phenomena either way, the first solution, with eccentric spheres, was preferable, for its simplicity. He defended this Ockham's Razor style preference for simple scientific explanations on theological grounds: God would not make his cosmos more complicated than necessary.[3] As this example shows, the scholars gathered around al-Ṭūsī saw no conflict between the science of astronomy and the verities of Islam. This was in part because they pursued astronomy as a relatively autonomous science, which did not involve the more controversial claims of Avicenna's philosophy.[4] One might compare the cultural position of astronomy at this time to that of logic. Both disciplines had come into Islamic culture as part and parcel of the Hellenic legacy. Now they were being studied independently and were seen as perfectly appropriate for religious scholars. This was fully in accord with the advice of al-Ghazālī, who had criticized not only those who questioned the validity of logic, but also those who rejected the mathematical sciences. Even if these sciences might occasionally lead to error, he said, "a rational foe is better than an ignorant friend."[5]

Quṭb al-Dīn also contributed to another science with long-standing ties to philosophy: medicine. He wrote a commentary on the *Canon*, Avicenna's encyclopedic work of medicine, a reminder that Avicenna was as dominant in the later medical tradition as in later philosophy. The greatest medical writer of

this age was not Quṭb al-Dīn but the somewhat earlier Ibn al-Nafīs. It's a bit of a digression to bring him up here, because he didn't live in the territories conquered by the Mongols. Born in Damascus, he moved to Cairo and thus lived within the rather less dangerous realm of the Mamluks. But I can't pass over him, for two reasons. First, he made one of the most remarkable medical advances of the Islamic world, by being the first person to realize that blood is passed from one ventricle of the heart to the other through the lungs, contravening the teaching of Galen and Avicenna and making a big stride in the direction of an accurate understanding of the circulatory system. The text in which he announced this discovery? His own commentary on the *Canon* of Avicenna.[6]

The other reason it's worth bringing up Ibn al-Nafīs is that he wrote another, very different work, a critical response to Ibn Ṭufayl's island fantasy *Ḥayy ibn Yaqẓān*. Ibn al-Nafīs understood all too well the implication of Ibn Ṭufayl's book. It dramatized Avicenna's belief that a human can reach wisdom on his or her own, using nothing but the innate capacity for reason. To counter this, Ibn al-Nafīs wrote his own island story, in which the hero is named Fāḍil ibn Nāṭiq ("Virtuous, Son of the Rational," or "Virtuous, Son of the One who Speaks").[7] Like Ibn Ṭufayl's protagonist, Ibn al-Nafīs' main character, Fāḍil, is able on his own to realize that God must exist. But then his castaway home is visited by a ship, whose passengers expose him to the revelation. Ibn al-Nafīs' message is clear: there are truths whose attainment requires access to Prophetic teachings. This constitutes an inversion of the lesson taught by Ibn Ṭufayl, whose story ends with Ḥayy turning his back on society because the religious faith of its citizens falls short of his own, independently discovered philosophical and mystical insights.

From a historical point of view, Ibn al-Nafīs' riposte to Ibn Ṭufayl is noteworthy as an example of the impact of Andalusian thought outside of Andalusia. Nor is this the only example. Averroes' works were known to Ibn Taymiyya, and of course the Andalusian mystic Ibn ʿArabī exercised immense influence in the later eastern traditions. But if we turn away from Ibn al-Nafīs' Mamluk setting and back to Mongol-controlled territory, we find that the philosophical action during and after the Mongol invasions resembles what had been going on before they arrived. Earlier, Fakhr al-Dīn al-Rāzī had used the ideas and methods of Ashʿarite *kalām* to approach Avicennan philosophy. This sort of philosophically informed theology now continues, with a sequence of influential theologians named al-Bayḍawī, al-Ījī, and al-Taftazānī. Collectively they span the whole fourteenth century, with al-Bayḍawī dying in 1316, al-Ījī in

1355, and al-Taftazānī in 1390.

Their influential works were composed, not in spite of Mongol political hegemony, but actually within the elite circles of Mongol political life. Al-Ījī was a highly placed judge under the Īl-Khāns, and al-Taftazānī is said to have been among his students—this is doubted by scholars, as al-Taftazānī speaks of him with great respect, but not as his teacher.[8] After an itinerant career, al-Taftazānī wound up at Samarqand with the court of the great Tīmūr, better known in Europe as Tamerlane, who really deserves a German pop group of his own. He inflicted a new round of destructive conquest upon Persia and central Asia, and launched a new Mongol dynasty, the Timurids, whose rule extended from the late fourteenth down to the early sixteenth century. Al-Taftazānī died holding office under Tīmūr himself. His works, and those of his predecessor theologians al-Bayḍawī and al-Ījī, would remain required reading at Samarqand when another research center and observatory was established there by Tīmūr's grandson, Ulegh Beg.

The sequence of names and events may be slightly bewildering, but the take-home messages should be clear enough. Mongol rulers and their armies remained hazardous to the health of anyone standing in their way, yet they continued the traditions of patronage familiar to us from the high point of the ʿAbbāsid caliphate and the Seljūqs. The scholars they patronized likewise defy our expectations. They were Sunni theologians but also astronomers, experts in logic but also deeply learned religious scholars. Most unexpectedly of all, they were sometimes Christians! One of the scholars who worked at Marāgha was Gregory Abū l-Farāj, known as Bar Hebraeus. He hailed originally from Anatolia, but found himself in Aleppo when it fell to the Mongols in the year 1260. In some respects Bar Hebraeus is typical for the era. In philosophy he was influenced by Avicenna, he wrote on astronomy, and he was a doctor, serving at one point as physician to a Mongol ruler. As a participant in the scientific endeavor at Marāgha, he was yet another associate of al-Ṭūsī. We even have a manuscript that once belonged to him, containing mathematical works that had been revised by al-Ṭūsī. Of course, his religious affiliation is less typical, as is the fact that he wrote some of his works in Syriac, a language that has not appeared in our story since we looked at the first translations of Greek works into the Semitic languages (Chapter 3).[9] In a reversal of that original translation movement, and one entirely appropriate to the Mongol age, Bar Hebraeus produced Syriac versions of works by the foremost philosophical authority of his time: Avicenna.

Were all these scholars of the Mongol age really philosophers? Or just pious,

traditionally minded Muslims (and Christians) who were broad-minded enough to take an interest in less controversial disciplines like logic and astronomy? On this question I'd like to quote the great scholar of Islamic theology, Wilferd Madelung. I'll translate his remarks from German, which, between Madelung and Dschinghis Khan, is clearly the language to know if you want to find out more about Mongol history.

> When the Mongol rulers converted to Sunni Islam in the fourteenth century, the study and teaching of philosophy was most certainly allowed and was practiced openly. This intellectual freedom in the East stood in sharp contrast to the situation in the central Islamic lands ruled by the Mamluks, where in the wake of the fall of the ʿAbbāsid caliphate, there was a restrictive atmosphere with little patience for departures from Sunni orthodoxy. A phenomenon like Ibn Taymiyya would hardly have been possible in the East.[10]

In other words, and again probably contrary to our expectations, the situation for philosophical development under the newly Muslim Mongols was arguably better than the situation under the stricter Mamluks.

Men like Ibn Taymiyya, of course, saw that strictness as a big advantage of Mamluk rule. Meanwhile, thinkers who took advantage of the more open intellectual atmosphere of the Mongol dynasties included the aforementioned al-Bayḍawī, al-Ījī, and al-Taftazānī, each of whom deeply influenced the next.[11] For all their interest in topics like logic and astronomy, they considered themselves to be theologians and understood this to mean that they were *not* doing philosophy. Yet they knew their Avicenna and were well acquainted with the Avicennan *kalām* of Fakhr al-Dīn al-Rāzī. So their theology was shot through with Avicennan themes, something we can observe in the very way that they define their discipline of theology. It was standard practice for these authors to explain the scope of theology when they began writing their summaries of Islamic doctrine, texts that would be read for centuries to come. Following al-Rāzī, they naturally enough identified God as the central object of study in theology, along with topics like prophecy and the afterlife. But they conceived of the study of God in rather Avicennan terms, speaking of the "necessary existent" and characterizing creation as the bestowal of existence upon contingent beings.

On the other hand, they were also committed to the conception of God as an absolutely free and unfettered agent, a conception defended generations ago by their fellow theologian al-Ghazālī. We can see this even from their work on astronomy. This tends in a rather skeptical direction, thanks to their conviction that God could have chosen any one of a large number of ways to construct the cosmos (compare Maimonides' views on this, discussed in Chapter 34). Also, according to the Ashʿarite teaching, God's intervention from moment to moment

is needed to perpetuate the existence of that cosmos and all it contains. So al-Ījī wonders whether we really need to suppose that the planets are seated upon transparent spheres, as Aristotle and Ptolemy had assumed. Wouldn't it work just as well if they were on hoop-or belt-shaped rings surrounding the earth? Excitingly, he also questions the long-standing philosophical assumption that the earth is standing still, while the heavens turn above us. Perhaps it is the earth that is spinning, and we just can't tell because we are spinning right along with it? Al-Ījī supposes that philosophers will object to this by pointing out that earth falls, and thus has a tendency to move down towards the midpoint of the cosmos, rather than rotating. His reply is that earth might have two tendencies or inclinations at the same time, one making it tend to fall, the other making the earth as a whole revolve once each day.[12] Here we may detect the continued influence of Abū l-Barakāt al-Baghdādī, the Jewish-Muslim convert who first proposed this "dual inclination" theory (Chapter 42).

Whether the Mongols supported such research out of genuine curiosity and admiration for science, as a way of shoring up political legitimacy, or both, is of no concern to us. What matters is that they made it possible for philosophy, philosophically tinged theology, and science to survive and even thrive in this period. Marāgha was the first great example, a home for several significant scholars and supposedly a library containing hundreds of thousands of volumes. Then Samarqand became an important intellectual center. But other places fared less well. The Mongols redrew both the political and cultural maps, and cities that had been hotbeds of intellectual activity now became stagnant backwaters. Above all, the former ʿAbbāsid capital Baghdad could not recover from the Mongol devastation. Iraq more generally lost its status as the cultural center of the Islamic world. There was also massive destruction elsewhere, as in Khurāsān. In compensation, the territory corresponding to modern-day Iran became ever more defined as a political entity, and as a region at the forefront of cultural developments in the Islamic world.

Persian culture has been important right from the beginning of philosophy in the Islamic world, with some Greek works being translated into Persian early on, and with numerous scholars of Persian background flourishing in the Būyid period. Now though, Iran is going to occupy the limelight as never before. Soon we'll be taking the story forward to the Safavid empire, seeing a renaissance of interest in the Hellenic philosophical legacy and the rise of great synthetic theologian-philosopher-mystics, foremost among them Mullā Ṣadrā. First though, we'll focus on the next great philosophical city: not Athens, Rome, Baghdad, or even Samarqand. Instead we'll be close to the shores of the Persian

Gulf in southern Iran. If you, like Avicenna, are fond of a drop of wine, you might want to enjoy a glass of Shiraz as you read the next chapter.

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FAMILY FEUD PHILOSOPHY AT SHĪRĀZ

One stereotypical image of the philosopher is that of a hermit, living in isolation in a cave or on top of a mountain, meditating and dispensing inscrutable wisdom to those who have the wherewithal to make a pilgrimage to see him. We owe the image in part to the ascetics who have often appeared in the history of philosophy, in classical India or among the Christians of late antiquity. But in reality, philosophy has usually been a creature of the cities. Socrates hardly ever ventured outside the walls of Athens. Along with Plato and Aristotle, he gave his hometown an indelible association with his favorite topic of conversation, so that aspirational Roman philosophers like Cicero still visited Athens even though the intellectual action had moved on to other cities, like Alexandria and Rome itself. Paris and Constantinople would probably claim bragging rights as the greatest centers of philosophy in medieval Christendom. As for the Islamic world, it's hard to deny that Baghdad was the unofficial capital of philosophy.

But when Baghdad fell from its pedestal thanks to the Mongol invasion there were other cities ready to take its place. These included Constantinople, once it was in the hands of the Ottomans, and Lucknow in India under the rulership of the Mughals. Then there was the city that is still known today as the "Athens of Iran": Shīrāz. (Which presumably makes Athens the Shīrāz of Greece.) No less an authority than Wikipedia announces that this south Iranian city is also known as the "city of poets, literature, wine, and flowers," adding that the wine-grape variety called "Shiraz" has nothing to do with the place. On the other hand, Wikipedia thinks "Peter Adamson" was an actor who appeared on the British soap opera *Coronation Street*, so I'm taking all that information with a grain of salt. After consulting some other sources, I can, however, confirm that Shīrāz is an old city, continuously inhabited since the time of the pre-Islamic Sasanians, and the capital of the part of Iran known as *Fārs*.[1] It survived the Mongols largely unscathed, since its rulers prudently offered to submit to Mongol rule

rather than resisting. In the fifteenth century it was visited by a traveler from Venice, who recorded that it was a prosperous place with 200,000 inhabitants.

The city had a long-standing reputation for scholarly activity and piety, and indeed, Shīrāz produced philosophers of outstanding vintage, if not the grapes for Shiraz wine. Among them was the greatest thinker of Safavid Persia, Ṣadr al-Dīn Shīrāzī, better known as Mullā Ṣadrā. By his time the *madrasas* of Shīrāz had been a hotbed of philosophical activity for several centuries. Philosophically speaking, we can trace the city's importance back at least as far as the middle of the fourteenth century, when it was the home of al-Ījī, whom we just saw discussing the question of whether the earth might be revolving. In a sign that philosophy itself was beginning to revolve around Shīrāz, another major theologian of the later fourteenth century, al-Jurjānī, also visited the city. Al-Jurjānī wrote a commentary on one of al-Ījī's theological works which, to put it mildly, received a warm reception in later generations. In fact, al-Ījī has still been studied along with the commentary of al-Jurjānī in modern times, by religious scholars at al-Azhar University in Cairo.[2]

Though both of these men thought hard about astronomy, their main activity consisted in developing and defending Ashʿarite Sunni *kalām*. And they did need to defend the Ashʿarite doctrines. I haven't yet mentioned that, in central Asia, there was another theological school that rivaled the Ashʿarites: the Māturīdīs, who were likewise named after a founding figure of the tenth century, Abū Manṣūr al-Māturīdī.[3] It would take us too far afield to go into the details of the disputes between the Ashʿarites and Māturīdīs. Suffice to say that, in the period of the Mongol invasion, members of these rival schools engaged in particularly intense debate with one another. This is probably because Māturīdī scholars from central Asia were fleeing from the Mongols and coming into more direct contact with Ashʿarites further west.[4] This gave an Ashʿarite like al-Ījī, all the way down near the Persian Gulf in Shīrāz, a new and pressing reason to reformulate his school's theology, so as to make it as coherent and convincing as possible. Philosophical theology is like any other business: it thrives under the pressure of competition. Avicennan ideas gave al-Ījī and those influenced by him, like al-Jurjānī, the edge they needed to prevail in these disputes.

So, by the fifteenth century Avicennizing theology already had deep roots in Shīrāz. In this city of flowers, it will now blossom in the years just prior to the coming of the Safavids. But to be honest, this floral metaphor is a bit too tranquil for what happened in Shīrāz in the late 1400s. The atmosphere was more vicious than verdant, as hostility bloomed between two scholars named Ṣadr al-Dīn Dashtakī and Jalāl al-Dīn Dawānī. They engaged in a long-running dispute that

was personal in every sense, featuring face-to-face debates as well as treatises written against one another. If philosophical theology really does benefit from competition, then these two were each other's greatest benefactors. They died within just a few years of one another, right around 1500, but the hostility didn't end there. Dashtakī's son Ghiyāth al-Dīn carried on the family feud, writing work after work in which he took the side of his father Dashtakī against the hated Dawānī. Some scholars have referred to these philosophers as forming a "school of Shīrāz." But in light of the deep hostility between Dawānī and the two Dashtakīs, a more appropriate expression might be the "duel of Shīrāz," fought not with swords but with sharply honed syllogisms.[5]

It isn't entirely clear what motivated all this animosity. Dawānī seems to have been more comfortable with the integration of Sunni theology with Avicenna pioneered in Shīrāz by earlier figures like al-Ījī. By contrast, the Dashtakīs were highly critical of the Sunni theologians, directing their invective at Ashʿarites as far back as al-Ghazālī. The dispute may have been confessional in nature, with the Sunni Dawānī clashing with the Dashtakīs, who may have been Shiite.[6] But we can't be entirely sure which of these men may have been Shiite or Sunni. Once the Shiite Safavids took over Iran in Ghiyāth al-Dīn Dashtakī's lifetime, he would certainly have had to at least pay lip service to the Twelver Shiism of the new rulers.[7] And among Ghiyāth al-Dīn's students we find both Sunni and Shiite scholars, which doesn't exactly help to decide the issue.

Whatever the underlying reasons for the feud, it's abundantly clear that Dawānī and the Dashtakīs had profound disagreements in philosophy. The younger Dashtakī, Ghiyāth al-Dīn, devoted most of his writings to attacking Dawānī and his allies. Since he disagreed with Dawānī about practically everything, in doing so he managed to touch on most of the key philosophical issues of the time. Even apparently dry and technical topics in logic could provide an opportunity to pursue the vendetta. As we saw in Chapter 49, logicians over the previous few centuries had been particularly fascinated by the status of statements like "this sentence is false." Dawānī and the Dashtakīs produced treatises devoted specifically to this Liar Paradox, passing judgment on earlier solutions offered by everyone from al-Kātibī, author of the standard textbook on Avicennan logic, to the Illuminationist Ibn Kammūna, to recent theologians like al-Taftazānī.[8]

And of course, they offered their own rival solutions. Dawānī tried to dissolve the paradox by saying that the paradoxical statement is in fact no statement at all. It can't be, because it can be neither true nor false, and every meaningful statement is either true or false. Above, I called this sort of proposal

"the simplest, but least satisfying solution"—Dawānī seems simply to stipulate that statements that would give rise to the paradox don't count as real statements. But his solution is a bit more principled than that. For Dawānī, the ability to be consistently true or false is a kind of litmus test to qualify as a meaningful statement. This isn't an unreasonable demand, and it's easy to see that it is a demand the liar statement fails to satisfy. More interesting to my mind, though, is the solution proposed by Dawānī's rival, Ṣadr al-Dīn Dashtakī. It has something in common with al-Ṭūsī's discussion, since he already observed that the liar statement is about another statement. If I say, "What Zayd is saying now is false," then whether or not this is true depends on whether what Zayd says is true or false. In just the same way, the paradoxical utterance, "What I am saying now is false," is a statement about what I am now saying. Ṣadr al-Dīn now adds that this gives us a good reason to say that the statement is neither true nor false: there is no consistent way to say that the statement it refers to (namely itself) is true or that it is false. He thus shows how the paradox is generated by the clash between first-order and second-order truth. That's a nice point; so I say Round One goes to the Dashtakīs.

This logical problem, though, was not really at the heart of the conflict at Shīrāz. For that we must turn to metaphysics. At issue were the nature of God, and something else that mattered a great deal to these figures, namely who could lay claim to being the better interpreters of Avicenna. We've seen how intellectuals in the later period boasted of their educational lineage, as when Fakhr al-Dīn al-Rāzī claimed to be the latest in a line of teachers and students stretching back to al-Ashʿarī, the founder of his theological school. In the same way, both Dawānī and the elder Dashtakī claimed to be eleventh-generation students of Avicenna.[9] The two putative chains of teachers overlapped, splitting only after the familiar figures al-Ṭūsī and his student, the Illuminationist Quṭb al-Dīn al-Shīrāzī (whose name incidentally reminds us that he was yet another major intellectual associated with our new favorite city). Thus the arguments at Shīrāz were fought not only over philosophical issues, but also over the interpretation of Avicenna. In this respect, we might compare the Dawānī–Dashtakī rivalry to arguments in late antique and medieval philosophy. Proclus, Philoponus, and Simplicius mingled disagreement over the meaning of Plato's dialogues with disagreement over the eternity of the universe.[10] Or take Thomas Aquinas, who refuted Averroes' theory of the intellect not just by showing its falsehood, but also by criticizing it as a reading of Aristotle. Similarly, for all their other disagreements, Dawānī and the Dashtakīs agreed that the winner in their debates would be the one who could show that their position was closest to

that of Avicenna.

No wonder, then, that the most contentious questions at Shīrāz were the ones where Avicenna's own view was hardest to pin down. One such question was a rather basic one: does God have an essence or not? Sometimes Avicenna said that God has no essence at all, while at other times he qualified this, stating that God has no essence *apart from* His existence. The point may seem trifling. But on this issue turns the fundamental question of how we should conceive of God and His relation to the contingent things He creates. For Dawānī, it is crucial that God does have an essence, and that this essence is nothing other than existence.[11] He invokes this point in responding to a line of argument that was known as "Ibn Kammūna's sophistry." It goes like this. Ibn Kammūna sought to prove the uniqueness of God, on the basis that there can be only one thing whose essence is necessary existence. If there were two such things, then obviously both of them would be necessary. So they would need to have some other essential feature in order to be distinguished from one another. But the original idea was to imagine two things whose essences consist in *nothing* but necessary existence. So this additional distinguishing feature cannot also be part of the essence, meaning that these supposedly distinct entities are in fact one and the same.

The fact that this was known as "Ibn Kammūna's sophistry" shows that the argument was not universally admired.[12] From Dawānī's point of view, Ibn Kammūna was making much ado about nothing, or rather, much ado about the only thing that there is. There is no need to argue for God's uniqueness, because He is pure existence, and it is patently obvious that there cannot be two distinct versions of pure existence. This idea has a further, more radical implication. If God is nothing other than existence itself, then it would seem that, insofar as other things also exist, it is because they somehow partake of God. Whereas God is nothing but existence (*wujūd*), other things are merely existent (*mawjūd*). For Dawānī, this means that other things are in a sense unreal. Whatever dependent reality they have is due solely to God's presence in them. In themselves they do not exist at all, because unlike God, their essences are neutral with respect to existence. To draw an imperfect analogy (not used by Dawānī himself), one might suppose that it is water's essence to be wet, and that other things become wet only thanks to the presence of water in them.

For Ṣadr al-Dīn Dashtakī, it's Dawānī who is all wet. He rightly identifies a Sufi flavor to Dawānī's argument, according to which God is somehow unified with all things insofar as His presence to them makes them exist. Dashtakī is right again when he says that Dawānī's position looks a lot like the one that was

put forward several generations earlier by al-Ṭūsī (Chapter 47). This is, in a sense, bad news for Dashtakī, in that he is facing a united front of rather formidable opponents. Nonetheless, he confidently rejects Dawānī's contrast between God as "existence" and other things as merely "existent." Instead, Dashtakī insists that we are using the word "existence" in the same sense when we say that God or a created thing is "existent." So he is closer to the view earlier taken by Fakhr al-Dīn al-Rāzī, according to which existence is "univocal." Of course, if both God and other things can be said to exist in one and the same sense, then Dashtakī owes us an explanation of what it is that makes God so different from the other things. Simple, he says: God has no essence at all. By contrast, other things, the things that are contingent and must be brought into existence by God, have particular essences that distinguish them from God, and from each other.

Whether it was metaphysical questions like this one, or logical issues like the Liar Paradox, the thinkers of Shīrāz tended to present their work in the form of commentaries or glosses on the works of earlier philosophers and theologians. This was a widespread phenomenon. Writers in the later Islamic ages loved to present their ideas in the form of texts about other texts. Already before the Mongol period, we saw the works of Avicenna provoking more comment than an impetuous public kiss at an office Christmas party. As the centuries went by, the production of commentaries, summaries, and glosses on earlier works became even more common. This wasn't true only in philosophy: it also happened in works of Islamic jurisprudence, for instance, and even in the Sufi tradition. As in antiquity, the writing of commentaries was closely tied to practices of teaching and learning. To teach someone, whether in philosophy, theology, jurisprudence, or the Prophetic sayings, meant training them in the classic works of the relevant field. Students would obtain a "license to teach" from their masters, listing which works they themselves had mastered and were now able to explain to a new generation.[13]

The commentary or gloss is a natural genre for a teaching context, but it may seem a curious format for debating with one's rivals. In fact, Ghiyāth al-Dīn Dashtakī felt the need to explain why his father wrote almost nothing apart from glosses, or marginal notations, on the works of other theologians. It was basically a matter of efficiency, he explained. Rather than going over all the points that had already been made in previous generations, the elder Dashtakī could focus on making truly original points of his own.[14] This explanation overturns our expectations, suggesting as it does that, in restricting himself to commentary on another text, Ṣadr al-Dīn was actually able to be *more* original

in his writing, rather than going over old ground. Academics of today might want to take note. And certainly, we should avoid assuming that the dominance of commentary and glosses in these centuries is a sign of philosophical or intellectual stagnation.

Dawānī and the Dashtakīs were clearly highly original and opinionated thinkers, even if a cursory glance at lists of their works shows that all three of them spent most of their time expounding the writings of others. Thus, Dawānī wrote commentaries on works by the earlier Avicennizing Sunni theologians al-Bayḍāwī, al-Ījī, and al-Taftāzānī, and on a treatise by al-Ṭūsī.[15] But the intellectual sin of *taqlīd* was to be avoided in commentary, as elsewhere. As Dawānī said in his commentary on the creed of al-Ījī, "I have not abandoned myself to the alley of gathering quotes, as is often done by the disputatious who are unable to take the highroad of proof. Rather, I have followed the plain truth even if it goes against what is commonly accepted."[16] In another sign of the compatibility between originality and commentary, Dawānī even wrote a "self-commentary" on one of his own works!

At this time we also see the emergence of commentaries and glosses devoted to texts that were themselves commentaries or glosses. This may sound like the very definition of a pointless text. But again, such works could provide an occasion for serious philosophical controversy. One of the texts in which Dawānī attacked his rival Dashtakī was a set of super-glosses on glosses that Dashtakī had written for a commentary on a work by al-Kātibī. This kind of "layering" of texts will continue to be a feature of philosophical and theological writing in the later Islamic empires, which will be occupying our attention for the rest of this book.

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FOLLOW THE LEADER PHILOSOPHY UNDER THE SAFAVIDS

Like a policeman following two silverware thieves with holes in their pockets, we have reached another fork in the road. This time, instead of choosing between the realms of Islam, Latin Christendom, and Greek Christendom, the branching paths lead to three regions within the Islamic world. Furthest west is the Ottoman empire, which emerged just after the coming of the Mongols and fall of the Seljūqs in the thirteenth century. To the east, beginning in the early sixteenth century, India fell under the Islamic rule of the Mughals. And in the middle there is Persia, which at the same time fell under the domination of the Safavids. We'll begin with the Persian Safavid empire, which of the three is the one most celebrated for its contribution to the history of philosophy. Indeed, it produced the only Muslim philosopher from these later centuries who has received much attention in modern-day European scholarship, namely, Mullā Ṣadrā. But first I want to look at a few other thinkers of the Safavid period, because Ṣadrā wasn't the only game in town.

Which town? You might expect it to be Shīrāz, given the exciting developments in that city at the dawn of the Safavid period. And in fact Ṣadrā himself was born there. But some specialists in Safavid philosophy have instead spoken of a "school of Iṣfahān," which would refer to Ṣadrā and other philosophers of this period. Towards the center of modern-day Iran, several hundred miles due south of Tehran, Iṣfahān was indeed a significant center for scholarship. Mullā Ṣadrā studied there, as did other philosophers I'm going to mention below. Yet Shīrāz remained important, and the city of Qom played host to Safavid thinkers too.

More to the point, it isn't so clear that the Safavid thinkers necessarily formed a "school."[1] The so-called "school of Shīrāz" was in fact united by

nothing so much as mutual loathing, and though the "school of Iṣfahān" was not marked by the sort of hostility we saw between Dawānī and the Dashtakīs, these Safavid thinkers did disagree profoundly on key philosophical issues. One of Mullā Ṣadrā's most distinctive positions in metaphysics was developed in direct opposition to his teacher Mīr Dāmād, the greatest thinker of the period apart from Ṣadrā himself.

So if we think of a "school" as a tradition of thought united around a set of doctrines, then the Safavid thinkers were not a school. Yet they did share much in common with one another, above all in terms of the sources that influenced them. Mullā Ṣadrā's thought is a remarkable confluence of several currents flowing from earlier Islamic intellectual history. He draws on the Avicennizing *kalām* that had been so vibrantly and contentiously pursued at Shīrāz just at the dawn of the Safavid period, on Sufism, and on the Illuminationist tradition inaugurated by Suhrawardī. Finally, he exemplifies one of the most striking features of Safavid philosophy, a resurgence of interest in the Greek philosophical works that had been translated into Arabic so long ago. No thinker of the period fused these traditions as powerfully and influentially as Ṣadrā did. But in his choice of inspirations, he was very much a man of his time and place.

Safavid rule began in the early sixteenth century, right where we just left off with the thinkers of Shīrāz. Actually, the younger of the two Dashtakīs, Ghiyāth al-Dīn, lived well into the Safavid period, dying in 1541. Safavid power expanded as far as Shīrāz already in 1504, and thereafter Ghiyāth al-Dīn was on good terms with the rising power. He was even invited by the Shah of the Safavids to rebuild the old observatory at Marāgha, where al-Ṭūsī and his students had done so much to advance the study of astronomy and philosophy more than two centuries ago.[2] Ghiyāth al-Dīn turned down the offer, claiming that the stars were not auspicious for such an undertaking (a reminder that, just as in Europe, the story of astrology continued to be intertwined with the story of astronomy in the Islamic realms). Along with anyone else who wanted to pursue a scholarly career under the Safavids, Ghiyāth al-Dīn espoused the beliefs of the Twelver branch of Shiite Islam. This form of Shiism is still dominant in modern-day Iran, and in geographical terms too there is a rough equivalence between Iran today and the domain controlled by the Safavids in the sixteenth century. For this reason, from here on out I'm going to refer to this region as "Iran" rather than "Persia."

So who were the Safavids? They took their name from a figure of the Mongol period named Ṣafī al-Dīn (d. 1334). He was no conqueror, but the head of a Sufi order which came to be named after him. Only decades after Ṣafī al-Dīn's death

did this group, the Safavids, begin to assert Twelver Shiism. Through the fifteenth century, the Safavids increasingly became a military and not just spiritual force.[3] Finally a leader named Ismāʿīl—the first Safavid Shah—established a base and a new state in Azerbaijian. The power of the Safavids spread from there, gaining hold over Iran within about a decade. They had laid claim to an ancient land, but their legitimacy was not recognized by all other Muslims. To the contrary, Safavid history would be marked by constant struggle against the Ottomans, who were staunch proponents of Sunni Islam. These struggles are, of course, not forgotten today, and modern-day Sunnis (in Iraq, for instance) still express their annoyance with Shiites by calling them "Safavids."

The upshot of the new Savafid hegemony was, among other things, a new context for the development of philosophy. Of course, it was no novelty that Shiite Islam should be intertwined with philosophy. We have seen how the previous major Shiite state, the Fāṭimids of Egypt, sent out missionaries to spread acceptance of the Ismāʿīlī form of Shiism in the tenth and eleventh centuries, and how a great Shiite thinker of the thirteenth century, al-Ṭūsī, alternated between Ismāʿīlī and Twelver Shiism, and colored his philosophical writings with Shiite ideas. Yet al-Ṭūsī did have Sunni students, and his philosophical works were enthusiastically commented upon by Sunni theologians. Naturally, Shiite scholars were drawn to his more specifically Shiite writings, such as a creed of Shiite belief which became the subject of commentary and glosses by numerous later authors, including the thinkers of Shīrāz. Al-Ṭūsī's immediate circle of students included a Shiite thinker named ʿAllamā al-Ḥillī.[4] He studied with al-Ṭūsī and another of al-Ṭūsī's students, the logician al-Kātibī, presumably at Marāgha. In a further exploit, al-Ḥillī is credited with helping persuade one of the Mongol rulers to convert to Twelver Shiism in the early fourteenth century, well before the more historically momentous shift towards Shiism under the Safavids.

Al-Ḥillī represents a different side of Shiite intellectual history than what we found with the earlier Ismāʿīlīs. Whereas they were inspired by Greek philosophy, especially the works of Neoplatonism that had been translated back in the time of al-Kindī, al-Ḥillī was more impressed by the work of Islamic theologians. He drew especially on the ideas of the Muʿtazilites, a nice example of the fact that *kalām* doctrines had appeal across the Sunni–Shiite divide. Among the issues where al-Ḥillī takes on Muʿtazilite doctrine is the grounding of morality. Is an action good because God commands us to perform it? Or is it that certain actions are intrinsically good, and God commands us to do them because He recognizes their goodness? The second option was the one taken by

the Muʿtazilites and by al-Ḥillī. He offered a nifty argument against the Ashʿarite theory that things become good because God commands them.[5] Anyone who does anything must have some reason or motive for what they are doing. If you have such a reason for doing something and the power to do it, then the action will follow. If I love Buster Keaton movies, that gives me reason enough to watch one tonight. It is because I think watching his movies is a good thing to do that I watch them. But what would be God's reason for commanding something, if he doesn't already see it as a good thing to command? The Ashʿarite position makes God like a Hollywood star getting too little help from the director: he'll have no motivation, and will thus be unable to act at all.

So what about Safavid-dominated Iran? What sort of Shiite philosophy are we going to find here? Something more like the Islamicized Neoplatonism of the earlier Ismāʿīlīs, which saw philosophy as the exoteric complement of the inspired message of the prophets and Imams? Or perhaps the kind of Shiite Muʿtazilism espoused by al-Ḥillī? Even though the Safavid thinkers are Twelver Shiites, the answer turns out to be that they are much closer in spirit to the Ismāʿīlīs. Neoplatonism sees an unexpected resurgence under the Safavids, with a renewed interest in the doubly ancient texts of authors like Plotinus. Once translated into Arabic, such Greek thinkers at first received careful attention but then suffered centuries of neglect in the wake of Avicenna, like silent-movie stars after the invention of the talkies. That changed under the Safavids. Mullā Ṣadrā and others were deeply influenced by Neoplatonism. They were especially fascinated by the so-called *Theology of Aristotle*. Many of the surviving manuscripts for this Arabic version of Plotinus come from Iran, and that's no coincidence. The *Theology* was even made the subject of a major commentary in the seventeenth century. Its author, a student of Mullā Ṣadrā's son-in-law, was named Saʿīd Qummī (his name means that he came from the Iranian city of Qom, a major scholarly center then and now).[6]

The renewed appetite for Greek sources did not mean that Avicenna was no longer on the menu. Safavid thinkers continued to write glosses and commentaries on his writings as well. So what we're seeing here is a mix of the old and the new, or rather a mix of the extremely old with the fairly old, given that Avicenna himself died in 1037, half a millennium before the heyday of the Safavids. To this already heady brew the Safavid thinkers added two more ingredients: Sufism and Illuminationism. Ibn ʿArabī and Suhrawardī too were long dead by the time of Safavid Iran, but their ideas remained alive and well. We find this combination of influences already in a man who provides us with continuity between the achievements of Mullā Ṣadrā and the earlier disputations

in Ṣadrā's home city of Shīrāz. The younger Dashtakī, Ghiyāth al-Dīn, had a student named Najm al-Dīn al-Nayrīzī, whose thought has all the hallmarks of Safavid philosophy.[7] Whereas it's not entirely certain whether the Dashtakīs were sincere Shiites, there can be no doubt that al-Nayrīzī was totally committed to the Safavid religious agenda. In his writings he even curses the first three caliphs of Islam, whom Shiites see as having held power when it should have passed to ʿAlī. This was the sort of thing that really annoyed Sunni Muslims like the Ottomans.

When he turns to doing philosophy, al-Nayrīzī seems to be carrying on where the Dashtakīs left off. He is a staunch advocate of Avicenna, as they were, and continues the practice of writing commentaries on earlier thinkers such as al-Ṭūsī. We also find him writing glosses on earlier commentaries, like on al-Jurjānī's commentary on a major theological treatise by al-Ījī, and in an illustration of the aforementioned phenomenon of third-and fourth-order commentary, a set of super-glosses on al-Jurjānī's glosses to a commentary devoted to the standard logical textbook of al-Kātibī. Notice, by the way, that al-Nayrīzī's Shiism doesn't stop him from commenting on Sunni scholars. That broad-mindedness extends to his other interests, which show him moving towards the wider philosophical tastes of later Safavid thinkers. He knows and uses the *Theology of Aristotle*, is influenced by Sufism, and, most tellingly, engages with the Illuminationist works of Suhrawardī and his followers. Of course, he writes commentaries on them. But, bearing out my constant refrain that commentaries are not necessarily slavish recapitulations of the texts being commented upon, al-Nayrīzī is actually very critical of Suhrawardī.

One area where he takes issue with Suhrawardī is political philosophy.[8] Naturally, Shiite thinkers tend to have a different approach to political legitimacy than Sunnis would. They believe that our allegiance is due to the Imams chosen by God and identified through their family connection to ʿAlī. Suhrawardī held that political rulership is rightly wielded by a kind of perfect philosopher, a virtuous man who masters both the argumentative and mystical sides of wisdom (Chapter 44). In his commentary, al-Nayrīzī speculates that with this line of argument Suhrawardī was probably trying to lay claim to political power for himself. No wonder Saladin had him killed! Furthermore, al-Nayrīzī adds, there seems to be no general connection between political success and wisdom. Though there are occasionally wise rulers, we can easily can think of rulers without wisdom and of wise men who had no power. Here al-Nayrīzī names Noah, of Ark fame: he was wise, but possessed no political authority. (The political ruler may be the shepherd of his flock, but if your followers are

literally a flock, that doesn't count.) Underlying this dispute with Suhrawardī is al-Nayrīzī's conviction that political dominion is bestowed by God. For him, politics is a game of follow-the-leader, and the rightful leader is the Imam, appointed by divine fiat. Even the Safavid Shahs rule as a mere substitute in the absence of the true ruler, the Imam.[9]

Fortunately for al-Nayrīzī and his fellow scholars, those Shahs had a fairly friendly attitude towards philosophy. Like so many other potentates of the Islamic world before them, they sought out intellectuals and scholars to grace their court. Two of them were Mullā Ṣadrā's teachers, Mīr Dāmād and Shaykh Bahāʾī, both of whom held the position of *shaykh al-islām* given to the foremost legal scholar under the Safavids.[10] There are some nice stories which put them together in royal company.[11] We are told of the time that Mīr Dāmād and Shaykh Bahāʾī were riding along with the great Safavid ruler Shah ʿAbbās. Mīr Dāmād was, it would seem, full-figured, and his horse was lagging behind the others. When the Shah teased him that Shaykh Bahāʾī was outpacing him, Mīr Dāmād replied that the Shaykh's horse was just running fast with joy to have such an eminent rider. The Shah then rode ahead and mentioned that Mīr Dāmād's corpulence was slowing down his horse. Shaykh Bahāʾī tactfully replied that the steed was simply having trouble carrying the weight of so much knowledge.

But let's consider one of Mīr Dāmād's weightier ideas, in fact, the one for which he is best known, the idea of "perpetual creation" (ḥudūth dahrī).[12] The theory was put forth in Mīr Dāmād's treatise *al-Qabasāt*, meaning *Blazing Embers*. It returns us to a problem that arose frequently in the first part of this book, namely, the question of whether the universe has always existed. We saw thinkers, ranging from the early philosophers al-Kindī and Saadia Gaon to the great Sunni theologian al-Ghazālī, refusing to accept that the universe is eternal. They believed that there was no way to reconcile its eternity with a freely chosen act of divine creation. Since Mīr Dāmād was influenced by both Avicenna and the Neoplatonic texts that were coming back into vogue in the Safavid times, he was unsurprisingly more inclined to think that the universe is eternally emanated from God, like rays of light from a source of illumination.

What Mīr Dāmād brings to this debate is a new way of thinking about the relationship between God and the universe. Avicenna reasoned that, if the universe necessarily proceeds from God, and God is eternal, then the universe too must be eternal. Taking advantage of some terminology found in Avicenna himself, Mīr Dāmād offers a different view. We should actually distinguish three levels of reality. The humblest things are subject to time—these will be things

that come and go, like you, me, giraffes, and the hope that Arsenal will win the league next year. The most exalted thing is, of course, God, who is eternal in the sense of being utterly beyond time. Mīr Dāmād follows Avicenna by using the Arabic word *sarmad* ("eternity") to mark this special status. But this is rather mysterious, isn't it? How can a timeless God relate to things in our world, which are happening at certain times? How could He perform an action to create the universe, or for that matter anything else, at a specific time if He is timeless? And how can He timelessly know about things that are happening in time?

Mīr Dāmād solves this age-old problem by positing a kind of transitional status between temporality and timeless eternity. For this he uses another Arabic word, *dahr*, which we might translate as "perpetuity" (to keep it distinct from *sarmad*). This term *dahr* refers specifically to the *relationship* between timeless God and temporal events in the world. God in Himself is timeless, but His action is "perpetual," lasting forever while still relating to things that happen at certain times in the created universe. Nothing in the universe lasts forever and unchangingly, but the universe as a whole has always been here, since it is the result of God's perpetual creative act. Hence the phrase "perpetual creation" (*ḥudūth dahrī*). You might wonder whether this is mere wordplay. Does it really help to assign different words—"eternity," "perpetuity," and "time"—to these three levels? Yes, because the different words mark out different kinds of before and after. The perpetual is "after" the eternal only in the sense of causal dependence: God's creative act had to be caused by Him, since it was up to Him whether to create. It was, to put it in Avicennan terms, contingent whether or not God would create anything at all. But the perpetual does not involve the "before and after" of time, which we see in things like giraffes and Arsenal's chance at winning the league title, things that begin to be and pass away. Though this point was implicit to some extent in Avicenna, Mīr Dāmād has made a real advance in clarifying the distinction between causal and temporal priority.

So what came after Mīr Dāmād himself? As we'll see in Chapter 56, he was influential beyond the Safavid realm, his works being read enthusiastically in India. And his name is still one to conjure with among scholars in modern-day Iran. But his most immediate legacy came in the shape of his student Mullā Ṣadrā. Ṣadrā shares much with Mīr Dāmād, not only in terms of their influences but also in their own distinctive philosophical ideas. He radicalizes Mīr Dāmād's idea that the created universe is in constant change, developing the even bolder theory that all of creation is changing or "moving" in its very substance. But on one topic Ṣadrā turns decisively away from his teacher, deciding that Mīr Dāmād backed the wrong horse in the long-running debate over Avicenna's

distinction between essence and existence.

54

TO BE, CONTINUED MULLĀ ṢADRĀ ON EXISTENCE

It is natural to think that the greatest philosophers are the ones who break completely with the ideas of their predecessors. We might call this assumption "the Descartes syndrome," in honor of Descartes' claim to be starting from scratch, throwing aside the accumulated arguments of scholastic philosophy. But I think that the great philosophers are, often as not, those who bring together and rethink the ideas they find in the previous tradition. Their originality consists in creative engagement, not creative destruction. They realize that synthesis is no sin, that taking the historical long view is no shortcoming. It takes a great mind to weave together the loose strands of numerous intellectual traditions. We can observe this with Plato, who drew on all the currents of Greek science, literature, and philosophy up to his day; with Plotinus, whose so-called "Neo"-Platonism was in large part new because of its novel combination of themes from Middle Platonism, Stoicism, and Aristotelianism; in Latin Christendom with that great synthesist Thomas Aquinas; and by the way, with Descartes, who owes far more to the scholastic tradition than he would like you to believe.

In the later Islamic world the undisputed master of philosophical synthesis was Mullā Ṣadrā, whose lifespan actually overlapped with that of Descartes. Like the other thinkers I've just mentioned, Ṣadrā was able to reshape earlier philosophical currents even as he drew upon them. Before him, Illuminationism, Sufism, and later Avicennan philosophy did frequently cross paths, but remained distinct streams. Once these streams flowed together in the oceanic mind of Mullā Ṣadrā, they suddenly could seem to be mere tributaries, finding at last the single destination that had been intended all along. This isn't to say that his contemporaries and immediate successors recognized him as a kind of new Avicenna, an indispensible thinker to whom they would all be forced to respond. But he was certainly influential in subsequent generations. And no philosopher

of the Islamic world lives on in the modern day more vividly than Ṣadrā, especially in Iran, where his works continue to be the subject of intense study. Scholars beyond Iran, too, have made him the most well-researched philosopher of the later eastern traditions (which admittedly isn't saying much, given how little attention this whole period of philosophy has received.)

His actual name was Muḥammad ibn Ibrāhīm al-Shīrāzī. The phrase Ṣadr al-Dīn, which gives us his usual sobriquet Mullā Ṣadrā, is an honorific title meaning "master of religion."[1] It's said that he was born after his father prayed to God to send him a pious child, in return for which the father would donate a large amount to charity. (He definitely got his money's worth.) It seems that the study of philosophy at Shīrāz, Ṣadrā's hometown, had died down to some extent since the activities of Dawānī and the Dashtakīs. He certainly knew the works of these earlier Shīrāzī thinkers, whom he mentions often in his writings. But after a period of self-teaching, he decided he would have to leave the city in search of a master. He wound up in the city of Qazwīn, which hosted the court of Shah ʿAbbās I. This gave him access to the two leading intellectuals of the day, the aforementioned Shaykh Bahāʾī and Mīr Dāmād. With Shaykh Bahāʾī, the young Ṣadrā studied the traditional Islamic sciences, that is, law, Koran commentary, and Prophetic reports or ḥadīth. Mīr Dāmād instructed him in philosophy, and may also have been one of his teachers in Sufism.

Soon enough, Ṣadrā the student became Ṣadrā the teacher. He went back to his home city, but found Shīrāz to be unfriendly. He complained bitterly about the criticisms he faced here. This episode has often been exaggerated by historians, in keeping with what we might call "the Socrates syndrome," our deep-seated and rather perverse desire to believe great philosophers must face persecution and repression. As usual, at least in the Islamic world, there isn't much reason to give in to the Socrates syndrome in Ṣadrā's case. Still, he was stung by the hostility he faced there, and left before long. Thereafter he moved around quite a bit, not least in the direction of Mecca. He made the ḥajj no fewer than seven times, dying in the midst of his final pilgrimage in the mid-1630s or possibly in 1640. By that time he had become head of a *madrasa* back in Shīrāz, where he taught the same range of subjects he had learned from his own teachers. It was also here that he finished writing his philosophical masterpiece, whose complexity and brilliance is only enhanced by the fact that its title could easily have been the name of another Motown singing group: *The Four Journeys*.[2]

Ṣadrā's choice of title connects the work to the Sufi tradition. Ibn ʿArabī too had spoken of "four journeys," naming God as the guide for those who travel

"from Him, to Him, in Him, and through Him." More recently, the language of four journeys had been used by the elder Dashtakī. The metaphor is appropriate to Ṣadrā's philosophy, which centers on the dynamism and motion of all things. The first of the Four Journeys is the one that was already undertaken by Aristotle: it begins from what is familiar to us, and progresses towards divine first principles. But Ṣadrā's journeys unfold along a two-way street. Created things come forth from God like rays from a shining light, so that the path back to the divine is not just a scientific enterprise, but a return home. The talk of shining lights may put us in mind of the Illuminationist tradition inaugurated by Suhrawardī, and this is not misleading. Mullā Ṣadrā takes over many ideas from Suhrawardī, though he has a fundamental disagreement with him on the issue of existence, as we'll see shortly.

Of course, philosophers had long used the metaphor of illumination, as far back as the metaphor of the sun in Plato's Republic and its use by later ancient Platonists. They were another main source of inspiration for Ṣadrā, who, like other intellectuals of the Safavid period, was fascinated by texts like the *Theology of Aristotle*, which he cites frequently and accepts as evidence for the views of Aristotle. Ṣadrā's conviction that all things proceed from and return to a divine first principle is one example of his deep debt to Neoplatonism. Yet his fascination with antique sources didn't prevent him from responding to more recent thinkers. In the *Four Journeys*, he supplies the context for his own ideas by recounting and refuting the positions of other philosophers in the Avicennan tradition. Avicenna himself is a nearly constant presence, and Ṣadrā takes time to explain and critique the ideas of authors like Fakhr al-Dīn al-Rāzī, al-Ṭūsī, and al-Dawānī. Thus the *Four Journeys* offers, among other things, a summary of and commentary upon the philosophical movements we've been considering in the last part of this book.

But if Ṣadrā has plenty of guides for his philosophical journey, he is also exploring new territory. His originality centers above all on an issue that has been a leitmotif in the later eastern traditions: existence. Ṣadrā distills the debate into an opposition between two basic positions. On the one hand, there are those thinkers who accept what he calls the "primacy of essence." They think that existence is a judgment of the mind. We may find a giraffe out in the world, but do not find the existence of the giraffe as a further item that itself exists. Of course, this was the position of Suhrawardī, among others. It's a bit misleading for Ṣadrā to label this view with the phrase "primacy of essence," since in fact Suhrawardī thought that essences too are mental constructs. But what Ṣadrā means is clear enough. Suhrawardī and like-minded philosophers hold that there

are real things outside the mind, but no real existence that would belong to those things. This was also the view adopted by Ṣadrā's own teacher, Mīr Dāmād, and accepted by Ṣadrā himself early in his career.

In due course, Ṣadrā came instead to embrace the "primacy of existence,"[3] a position he associated especially with mystical authors like Ibn ʿArabī and al-Qūnawī. On this second view, existence or "being" does have reality outside the mind. In fact, following the lead of the philosophical Sufis, Ṣadrā is happy to say that there is nothing real apart from existence. Despite adopting a diametrically opposed view to Suhrawardī on the primacy of essence or existence, Ṣadrā uses Illuminationist language to express this idea. Existence just is light, and we can envision all of reality as rays spreading forth from a divine source. God is pure existence or pure light, whereas other things are always limited in their existence or illumination. Like Suhrawardī, then, Ṣadrā describes created things as suffering from darkness. Like the Sufis, he says that such things are compromised by non-being and privation, lacking the perfect existence that belongs to God alone. And like Avicenna, he says that this is because created things are contingent, whereas God is necessary.

The primacy of existence is developed at great length in the *Four Journeys*, but also in other works by Ṣadrā, for instance, a more introductory work called the *Wisdom of the Throne*.[4] The first section of this treatise provides an overview of his metaphysics, beginning with the difference between God and other things. God is existence itself, whereas other things have various kinds of lack or limitation mingled with their existence (§1.1). As al-Qūnawī had put it, using more terminology that will be borrowed by Ṣadrā, things other than God are in some way "specified," whereas God is the existence that is simple, infinite, and unrestricted. This idea in hand, Ṣadrā is able to provide what must be one of the quickest ever proofs of God's existence. It is simply obvious, he says, that there is existence. As Avicenna too had observed, existence is immediately obvious to the mind. And God is nothing but pure existence. So there is a God. If that went a bit too quickly for your taste, Ṣadrā has a further point to add, which is that anything with limited or restricted existence needs some further thing that restricts it (§1.3). Therefore, if we imagined that all things are marked by some form of non-being or "darkness," then we would wind up with an infinite regress. Only simple existence can stop the chain of limited things and limiting factors.

All this may sound rather sketchy, but it will make a bit more sense once we see how Ṣadrā wants to fill it out. Like the ancient Neoplatonists, he understands the first principle to be the completely simple and infinite source of all being. He

envisions a chain of beings at increasing distance from God, the source of their illumination and existence. The lowest entities are mere physical bodies, followed by more perfect bodies like those of animals and humans, then souls, and between the souls and God an intelligible world. A note of agreement with Suhrawardī is struck when Ṣadrā explains the nature of this intelligible realm. Like his illustrious predecessor, Ṣadrā thinks that Avicenna and other followers of Aristotle were wrong to reject the existence of Platonic Forms. The familiar bodily things we see around us are nothing but images of higher paradigms (§1.11). With his distinctive flair for fusing ideas from different sources, Ṣadrā goes on to say that these Forms are residing in God's very essence, and thus have the same status as the divine names mentioned in the Koran and so celebrated by Ibn ʿArabī. Ṣadrā agrees with Ibn ʿArabī that God's essence remains completely simple and without qualification, while the divine names are relations, the mechanism by which God is manifest to the created world. In an effort to capture the way that the paradigms begin the process of God's unfolding His divinity out into a universe, Ṣadrā uses the phrase *nafas al-Raḥmān*, or "breath of the merciful" (§1.9), yet another borrowing from Ibn ʿArabī.[5]

With all this borrowing going on, devotees of the Descartes syndrome may be downright disappointed. Is all this just a patchwork of old ideas? Neoplatonic procession and reversion, Suhrawardī's Platonic Forms, and some added motifs from Avicenna and philosophical Sufism? We might think it's like a polyester suit: impressively synthetic, but not exactly trend-setting. But reserve judgment for the time being, because we're finally in a position to appreciate Ṣadrā's most characteristic and significant philosophical move in the existence debate. He uses an old word to express his new idea: *tashkīk*. The term is already found in Avicenna and was deployed more emphatically by al-Ṭūsī. Scholars writing about Mullā Ṣadrā have translated *tashkīk* in various ways: "systematic ambiguity," "modulation," "gradation," and "intensification."[6] The basic idea is that existence comes in various degrees.

Here Ṣadrā is once again responding, this time critically, to Suhrawardī. Suhrawardī had imagined degrees of intensity within a certain essence, giving the example of black. All black things are black, but some are blacker than others. At the one end you have your beloved but badly faded Iron Maiden T-shirt bought in the 1970s; at the other end the sense of humor expressed in a particularly morbid joke about ravens, told by a goth whose favorite song is the Rolling Stones' "Paint it Black." Ṣadrā proposes that we can likewise think of the descent of all things from God as occurring along a decreasing scale of

intensity. But this time, the variation in intensity will concern existence rather than blackness, or any other essence. This makes Suhrawardī's imagery of light and darkness particularly apt for expressing Ṣadrā's metaphysics. Things fade in their degree of illumination as they go forth, and away, from God. Or if you prefer a moister analogy, think of the river imagery I used earlier in this chapter. Existence pours forth from God, and in a metaphysical version of the trickle-down effect, what is at first a single gushing torrent divides into many smaller rivulets. Both metaphors capture Ṣadrā's conviction that all of creation is continuous, an unbroken flow that goes forth from its divine source.

In holding that all of existence remains connected to God—that "to be" is continued, if you will—Ṣadrā again signals his agreement with the tradition of philosophical Sufism inaugurated by Ibn ʿArabī and pursued by authors like al-Qūnawī. But by emphasizing that existence varies in intensity, he avoids a problem that had always faced philosophical Sufis. When you read the treatises of Ibn ʿArabī and al-Qūnawī, or for that matter the poetry of Rūmī, you might easily get the impression that the difference between created things and God is a mere illusion. The mystic rises above this illusion to grasp what these thinkers called the "unity of existence," in Arabic, *waḥdat al-wujūd*. Critics of the philosophical Sufis, like Ibn Taymiyya, rather unfairly accused them of equating created things such as themselves with the mighty God who should be recognized as being exalted above all things. Mullā Ṣadrā embraces the mystical insight that God is intimately present to all He creates, that, as the Koran puts it, He is "closer to man than his jugular vein" (50:16). But he is also sensitive to the sort of objection pressed by Ibn Taymiyya, and wants to avoid monism even as he asserts the unity of all things with God.

The problem is especially acute for Ṣadrā because of another point he takes over from Suhrawardī. We've seen that he decisively rejects Suhrawardī's claim that existence is merely a mental judgment, and nothing out in the world. For him, there is nothing more real than existence, in fact nothing real other than existence. But Suhrawardī had made a similar proposal concerning essences. And in this case Ṣadrā thinks Suhrawardī is like a man with ten dollars hidden in his shoe: right on the money. Essences are indeed nothing but concepts we use to differentiate one thing from another. There are good reasons to insist on this, such as those already given by Suhrawardī. If I say that essences are really out there in the world—like metaphysical light-switches waiting to be turned on, as I put it in Chapter 47—then these essences must in some sense "exist" before they receive existence. The conceptualist understanding of essences Ṣadrā finds in the Illuminationist tradition helps him avoid that absurdity.

But now we risk falling into the problem pointed out by Fakhr al-Dīn al-Rāzī. Without real essences, there will be no way to differentiate one existent thing from another, and all of existence will lapse into a single unity. It's here that the idea of "gradation" or "modulation" really comes into its own. It shows us how existence could in a sense be one, but without eliminating all differentiation. For even if there is nothing but existence, things do differ in terms of the intensity of their existence. All beings other than God have some admixture of non-being or privation, which is why they are lesser in existence than He is (§1.2). But the variation in intensity is always gradual. If you'll pardon the expression, this is a metaphysics "without any gaps." In fact it goes beyond mere gaplessness, by eliminating even the boundaries that separate one sort of existent from another. The world may seem to us to be divided up neatly, with some things qualifying as humans and others as giraffes. But the rigid dividing-lines are figments of our minds, not features of things out in the world.[7] Out in the world there is real difference, because of variation in intensity. That difference is indeed what gives rise to our different concepts. But where the conceptual essences have firmly drawn boundaries, the intensity of existence out in the world is continuous, like the color spectrum rather than a palette of individual color samples.[8]

Thus does Ṣadrā have his cake and eat it too, able to enjoy the sublime taste offered by the Sufis' unity of existence, without giving up Avicenna's fundamental contrast between divine necessary existence and created contingent existence. The whole thing turns on the continuity of modulated or gradational existence, so a skeptical response would probably focus on attacking him here. The Skeptic could start by complaining that Ṣadrā's acceptance of Platonic Forms commits him to clear divisions between types of things. After all, Plato introduced his Forms (in part) to explain just this fact that different things in the world around us fall into different types. But Ṣadrā has another move he can make here. I choose the word "move" quite deliberately. He thinks not only that all existence is marked by continuous variation in intensity, but also that all existence is in constant motion, even in respect of substance.

55

RETURN TO SENDER MULLĀ ṢADRĀ ON MOTION AND KNOWLEDGE

I think it must be pretty stressful being a shark. For one thing, all those teeth, and no dental insurance! And then there's this business about having to keep moving at all times just to keep breathing. If sharks do find this constant motion vexing, then they have something in common with philosophers. One of the more troubling proposals made in early Greek philosophy was Heraclitus' idea that all things are in never-ending flux. In a previous volume of this series, I claimed that this isn't really what he was trying to say.[1] But it's how Plato and Aristotle understood him. They worried that if the flux doctrine is true then nothing could ever be known. For knowledge to be possible, there must be fixed objects with fixed natures. Plato thought this could be guaranteed by postulating his Forms, while Aristotle said that there is not just change but something that undergoes change while remaining the same, as when one and the same shark survives even as it swims from one place to another, or loses one of its many teeth.

These responses to the flux doctrine were reasserted in subsequent centuries. Most agreed with Plato and Aristotle that reality is like a homeless horse: it needs something stable. But as Heraclitus observed, things change. Mullā Ṣadrā revived the notion of constant change, motion, or flux as part of his innovative theory of existence. Let's get our teeth into Ṣadrā's proposal by thinking again about that shark. For Aristotle, the shark is a *substance*, which among other things means that it is the sort of thing that can go from having one property to having another contrary property (see *Categories* 4a). In fact, our word "substance" comes from the Latin *substantia*, chosen as a translation of the Greek *ousia* in order to highlight the fact that substances "stand under" accidental properties. The Aristotelian tradition unanimously held that things are changing pretty much constantly with respect to their accidents, like a shark that is gliding through the water off the coast of Florida and so changing its location.

Underlying such accidental changes are substances, which provide stability. Admittedly, they too are generated and eventually destroyed, but as long as a substance exists it remains one and the same thing.

Ṣadrā, though, argued that everything we see is also changing constantly in respect of its substance. Like sharks, we are always on the move. He can point to persuasive examples to show that there is substantial motion, and not just accidental motion.[2] Think of boiling water. What we have here is an item that is gradually being transformed from water into steam. There is no sudden shift from one kind of substance to another. Even more compelling, consider the most central example of an Aristotelian substance, a living organism like a human being. If we think of a fetus developing in the womb, we have a case where the seed is transformed into an embryo and slowly takes on the form of a baby. An Aristotelian might admit that the generation of a substance, like a baby, or the transformation of water into steam, isn't instantaneous. There is no clear first moment where seed becomes infant. But the Aristotelian will still insist that, once the baby has been produced, it is a stable substance and in this respect unchanging. Ṣadrā could reply by pointing to the constant change undergone by humans as they mature from infant to adult. It's only because such examples of substantial change are gradual that we overlook them.

Ṣadrā will not be satisfied with just a couple of examples, though. He wants to insist that *everything* is changing in its substance *all the time*. It is really this that makes him an heir of Heraclitus, and such a striking exception to the metaphysical obsession with stability handed down since classical times.[3] Things may seem to endure without alteration, but in fact nothing stands still. It's a message Ṣadrā finds in the Koran, which states: "when you see the mountains you think they are stable, but they are fleeting just like the clouds" (27:88).[4] Yet it is philosophical concerns, more than exegetical ones, that drive him to insist on the universality of change. As we saw in the last chapter, Ṣadrā believes that existence cascades forth from God like gradually diminishing light, with no firm boundaries between things but only differences in the intensity of existence. It is we who impose well-defined boundaries on this gradual and continuous reality, when we grasp things as having certain essences: this thing a hammer, that one a hammerhead shark.

The modulation (*tashkīk*) of being goes hand-in-hand with universal substantial motion. After all, someone might object to Ṣadrā that, even if existence has a continuous range of intensity, each existent thing might still have a fixed and discrete nature, in other words, a real essence. Think of Ṣadrā's own example of colors. If you point at a given spot on a gradually shaded color

wheel, perhaps a nice sharkskin gray, you'll be pointing at a determinate color. The fact that there are very similar colors just to either side of it—slightly more blue in one direction, slightly less blue in the other—doesn't stop this gray color from being the color it is. (If you're waiting for me to make a *Fifty Shades of Gray* joke, forget it; this is a book for the whole family.) In the case of existence, the objection would be similar. This thing here has the essence of a mature hammerhead shark, and even if there are other, very similar existents, like immature hammerhead sharks, that doesn't prevent the shark from having a fixed nature.

With his doctrine of substantial motion in hand, Ṣadrā can respond that the shark is not just infinitely close to very similar things in the intensity of its existence. It is also *becoming* one of those very similar things, for instance, a very slightly more mature shark. Again, we are not usually able to discern the changes, because like the differences in the intensity of existence at any one time, the transformation is typically very gradual. That is why it is so easy, indeed unavoidable, for us to do in our minds what the artist Damien Hirst did with a real shark: impose a clean cut upon something that it in itself continuous, and suspend it in conceptual formaldehyde by considering it as having a sharply defined essence. In reality, though, being is continuous in every way, blurry at all possible edges—at any given time because of the gradation of existence, and across time because of constant change.

What inspired Mullā Ṣadrā to devise this radical new metaphysical picture? The answer lies at least partially with his debt to Neoplatonism. Plotinus and his heirs had envisioned the universe in terms of "procession and reversion," a pouring forth of all things from a divine source, and then a return to sender, as these things strive to reunite with their principle. In fact, the idea of change within substance was already pioneered by some later Neoplatonists to understand the fundamental transformation undergone by soul as it inclines towards the body.[5] Ṣadrā reinvents the idea and puts it to a more optimistic use, to describe the way all existing things strive to return to God. But among these existing things, it is of course humans that interest Ṣadrā most. How exactly do we change in order to, as the Koran puts it, "return to our Lord" (89:27)?[6]

The answer is knowledge. Perhaps no other kind of change interests Ṣadrā so much as the transformation involved in coming to know something. This may surprise you, given that, for Ṣadrā, we think about things by imposing falsely determinate essences on an indeterminate reality. As Plato and Aristotle worried, without such essences how can there be knowledge? Ṣadrā's signature doctrines, the gradation of being and substantial change, converge again in his answer to

this question. Real knowledge is not a mere relation to something outside, as might happen in sense-perception. Rather, my coming to know a thing means that I myself must change in order actually to become that thing. Here Ṣadrā is reviving a proposal made by the Greek Neoplatonist Porphyry. In a work that is lost to us but was known in Arabic, Porphyry had suggested that when we have knowledge, our minds literally become identical to the things known. This proposal was mocked by Avicenna, who pointed out the absurdity of saying that two distinct things could ever become identical.[7] With his penchant for retrieving the ideas of late antiquity, Ṣadrā comes to Porphyry's defense. Not only are things changing all the time, but sometimes they change to become other things.

How can this happen? Not, obviously, because we receive a representation or impression from the thing we know, as when the eye or memory registers an image of a shark swimming in its tank. Nor by abstracting a universal essence from that image, which should apply to all sharks.[8] These ideas had been suggested by various of Ṣadrā's predecessors. But he prefers an idea pioneered by Suhrawardī, according to which I know something when it is intimately *present* to me. Knowing a shark doesn't mean that the shark is physically present to me. Rather, knowledge involves a twofold transformation, in which both the thing known and the thing that knows change to become one and the same. This means that the knowing soul has to take the shark presented to it in sense-experience, preferably from a safe distance, and conceive an intelligible version of the shark within itself. Thus knowledge is not a passive process like receiving an image, or a negative process like abstraction. Rather, it's an active process of achieving unity with something else at a higher, more intense level of existence, namely, the one appropriate to intelligible things. The reason it is more intense is that the so-called "dark," material aspects of the things we know have been left behind. When I know the shark, the shark's body is not in my mind, only the idea of the shark.[9]

Even though this is not a theory about abstraction, it may still sound rather abstract. Perhaps it will help if we recall the close connection that Suhrawardī already drew between, on the one hand, my knowing something else by its presence to me, and on the other hand, my knowledge of my own self. For Ṣadrā, there is really no distinction between these two things at all. For me to know the shark is for me to make myself into the idea of the shark. This solves a troubling anomaly in Avicenna's theory of knowledge. For all his creativity and independence of mind, Avicenna thought more or less along Aristotelian lines when he tried to understand human knowledge. He talked of abstracting forms

from the images we encounter through sense-experience. But he also drew attention to the special case of *self*-knowledge, available even to the flying man in the famous thought experiment. Avicenna seems to have cherished the notion that self-knowledge is very different from other kinds of knowledge. But that's actually rather perplexing. How is the mind capable of two such different kinds of knowing, and what do the two have to do with one another? For Ṣadrā these problems vanish, as all knowledge is revealed to be self-knowledge.

He can solve another vexed issue in Avicenna by applying this analysis of knowledge to God Himself. Against Avicenna's notorious claim that God knows things only universally, Ṣadrā can now reply that God does know things in themselves. For all existence is immediately present to Him, and knowledge is nothing other than presence. But why is all existence immediately present to Him? Well, God just is unrestricted existence. So everything, insofar as it exists, is a manifestation of God, and God is to that extent identical to each thing. Whereas we must give things intelligible existence within our souls, God already has all things within Himself at an even higher level of existence—indeed at the highest, most pure level of existence possible. Sounding again like a Neoplatonist, Ṣadrā remarks that "a simple reality is all things," and that the higher a principle is, the more things it will contain within itself.[10] In more Illuminationist terms, God is the light within all things, and a light that is fully present to itself.[11]

Though there is indeed plenty of Neoplatonism and Illuminationism here, we shouldn't overlook the relevance of another "-ism" for Ṣadrā's theory: Sufism. Since on his theory each thing is just a manifestation of God, we are, usually unwittingly, knowing God every time we know anything. We are getting a glimmer of the blinding light that is His existence. Thus Ṣadrā describes the things around us as "veils" for the divine, since they distract us from God, and uses the traditional Sufi word "unveiling" (*kashf*) to describe knowledge. In knowing those things we are, after all, bringing them to a higher level of existence that is closer to God, by making them intelligible for and in ourselves.[12] Ultimately this process could culminate in the knowledge of pure existence itself, which is to say, knowledge of God Himself. That is the sort of experience afforded to the mystic, for whom nothing remains veiled. Like some of the other philosophical Sufis and Sufi-influenced philosophers we've met, such as al-Qūnawī and Ibn Ṭufayl, Ṣadrā sees no opposition between philosophical demonstration and mystical union. The mystic enjoys the purest, most exalted form of knowledge, but this isn't the only kind of knowledge there is. The philosophical understanding of things, too, involves unveiling, even if the

philosopher is still to some extent in the dark.

I'll finish off this look at Ṣadrā where he would, perhaps, have wanted me to begin: the Koranic revelation. Though I have mentioned his use of the Koran a few times, I haven't perhaps conveyed the density of Islamic imagery and language in his works. To add just one more example, he compares the way we face God's existence to the way that Muslims face the Kaaba in Mecca as they pray.[13] Ṣadrā wrote extensive commentaries on the Holy Book, an enterprise intimately connected with his philosophy. As many earlier Muslim theologians had emphasized, the Koran is God's word, and hence an attribute of the divine. For Ṣadrā, this means that it makes manifest the ultimate reality that is God Himself. The actual verses that are recited and written down are only one manifestation of the divine word.[14] So, while Ṣadrā admits the usefulness of the many commentators who have focused on the vocabulary and grammar of the Koran, he sees their project as rather superficial. The more insightful interpreter of the revelation goes beyond the "husk" of its linguistic garb to the true meaning within.

As he makes good on this promise, Ṣadrā shows us how his metaphysics of intensity and unity can be applied to the task of scriptural exegesis. We've seen how God's existence contains within it all the things that come after Him. In the same way, the first or "opening" chapter of the Koran (*sūrat al-fātiḥa*) contains within its brief compass the entirety of the Koran. Its praise of God introduces us to the divine attributes that give us our best access to the unknowable unity of God Himself. An even higher degree of unity is found in the name *Allāh* itself, which the Sufi tradition had honored as an "all-gathering name." For Ṣadrā, it is God's proper name. It contains all the other divine attributes, just as the opening chapter contains the whole of the Koran, and the Koran the whole of creation.[15]

If we turn to specific topics that may seem more "theological," we again find that Ṣadrā's philosophy operates in tandem with his exposition of the Koran and ḥ*adīth*. A good illustration is his treatment of the afterlife. For him there can be no doubting that we do live on after death, and that our afterlife will be bodily, not the purely intellectual existence envisioned by philosophers from al-Kindī to Avicenna and Averroes. But as usual, Ṣadrā puts a distinctive twist on this teaching, by invoking a third realm between the sensible and intellectual planes of existence, which humans can access through their imaginations.[16] This is familiar to us from the Illuminationists (Chapter 45), but he's also drawing on Ibn ʿArabī, who likewise gave the imagination a central place in his theory of human understanding and existence.

Ṣadrā thinks that we retain our imaginative power after death, and that we

use it to project new bodies for ourselves. Contrary to what we might suppose, the imaginary nature of these bodies makes them more rather than less real. They will be appropriate to the way we lived in this life, with the more beastly among us coming to see themselves in animal bodies. This is a new version of the reincarnation theory which we saw earlier Illuminationists variously flirting with, accepting, and rejecting. But now it becomes a distinctively Ṣadrian idea, related to the varied intensity of existence. The "subtle" or imaginary bodies of the afterlife, being one step closer to the intelligible, have a higher degree of existence than the bodies we have in this life. His doctrine of universal motion is relevant here too, since our transformation from physically embodied beings to "imaginally" embodied beings is simply another case of change in substance.

Ṣadrā is at pains to emphasize the agreement between such theories and the teachings of Islam, and more specifically the Shiite Islam ascendant under the Safavids. His proposal about the imaginary body safeguards traditional belief about resurrection (even if in a highly unorthodox way). And when he follows earlier Illuminationists by affirming that the soul already existed before coming into the body, he confirms the point with quotations from the Shiite Imams.[17] Between his Shiite faith, his allegiance to the Illuminationist and Sufi traditions, and his critical engagement with Avicennan philosophy and *kalām*, Ṣadrā draws together many of the themes that characterize later philosophy in the Islamic world. But it is the innovative doctrines that are most characteristic of Ṣadrā himself, the modulation of being and substantial change, that give him a place among the rarest of figures in the history of philosophy: those whose ideas command more allegiance today than when they were alive.

SUBCONTINENTAL DRIFT PHILOSOPHY IN ISLAMIC INDIA

India may not be the first nation to leap to mind when you think about the Islamic world. But in fact Islam is the second most common religion in today's India, embraced by 13 percent of the population.[1] And India has played a major role in the history of Islam. At a very early stage, scientific ideas filtered into the Arabic-speaking world, something we can trace especially in texts about astronomy and astrology. There was literary influence too; I've already made mention of the *Kalīla wa-Dimna*, an animal fable from India that was translated into Persian and Arabic (Chapter 14). But up until the eleventh century, the time of Avicenna, the subcontinent was still more or less foreign terrain from the Muslim viewpoint. The great scientist al-Bīrūnī, a contemporary of Avicenna, wrote a massive treatise intended to change that. Titled *A Truthful Account of India* (*Taḥqīq mā li-l-Hind*), it was a wide-ranging discussion of the cultural practices and religious and philosophical beliefs of the inhabitants of this exotic land.[2] Al-Bīrūnī was in a unique position to gather and present this information, since he found himself in the entourage of the Muslim warlord Maḥmūd of Ghazna, who was making incursions into northern India from his base in modern-day Afghanistan. Al-Bīrūnī learned Sanskrit and interviewed members of the brahman class who were brought from India by Maḥmūd, receiving a crash course in classical Indian teachings. He was struck, as many have been since, by the parallels between these teachings and the ideas he knew from the Greek works available to him in Arabic translation.

The Ghaznavid dynasty founded by al-Bīrūnī's master Maḥmūd was the first Islamic power to dominate territory in India. But it was certainly not the last. A series of less enduring sultanates based at Delhi in the north maintained Islamic political presence there for several centuries. The Delhi sultanate managed to

repel the advances of the Mongols around the year 1300, which is more than we can say for many other Muslim leaders of that era. But in the late fourteenth century India was invaded, and Delhi sacked, by a new Mongol wave led by Tamerlane. In , I mentioned that Tamerlane's grandson Ulegh Beg established a scientific center and observatory in Samarqand, following the precedent set by Hülegü's patronage of the Marāgha observatory. It was in turn a descendant of the same line as Ulegh Beg, the warlord Babur, who founded the powerful and long-lasting Mughal dynasty in the early sixteenth century. At first the Mughals, like the Delhi sultans, held only the territory in northern India. But Akbar, the grandson of Babur, pushed both north and south, now making use of gunpowder-based weaponry. (The only thing more dangerous than Mongols? Mongols with gunpowder.) By the beginning of the seventeenth century most of India was held by the Mughals, whose power extended into the southern plateau called the Deccan.

The Mughals rose to power at about the same time as the Safavids in Iran, and these powerful empires set the stage for two vibrant philosophical traditions. Actually, it might instead be better to think of a single tradition with two branches. Ideas traveled from Persia into India even as the empires were establishing themselves. Dawānī, one of the philosophers of Shīrāz, was invited to come to India; he turned down the offer, but did dedicate a work to a vizier of the subcontinent. Maybe he should have come in person, though, since as things turned out his rivals, the Dashtakīs, would be much read in Mughal India. Credit for this is often given to a scholar and politician named Fatḥallāh Shīrāzī. As his name implies, he hailed from the city of Shīrāz, where he studied with the younger of the two Dashtakīs, Ghiyāth al-Dīn. Fatḥallāh came to India and joined the court of Akbar. Here he proved himself an all-round intellectual, doing astronomical research and even designing military equipment.

It's not entirely clear how large a role Fatḥallāh really played in disseminating the philosophical tradition of Shīrāz. At least a share of the credit for building up a new tradition of philosophy in Muslim India should also go to ʿAbd al-Ḥakīm Siyālkot'ī.[3] A scholar of the Punjab region, Siyālkot'ī was in favor at the court of the Mughal Shāh Jahān. He was invited by the Shāh to pass judgment on the disputes between al-Ghazālī and Avicenna, on the usual contentious issues of the eternity of the universe, God's knowledge of particulars, and bodily resurrection. But arguably, the first really major Muslim thinker in India was the slightly later Maḥmūd Jawnpūrī. He lived in the first half of the seventeenth century, and was active in northern India. Like Fatḥallāh and Siyālkot'ī, Jawnpūrī was a well-connected individual, serving as tutor to one

of Shāh Jahān's sons in Bengal. He wrote a philosophical commentary on one of his own works, called *The Rising Sun* (*al-Shams al-Bāzigha*). This commentary became a standard text on philosophy for subsequent generations of students in India.

Jawnpūrī exemplifies the response of Indian scholars to the intellectual tradition in Iran. As I've already said, the works of the Dashtakīs were widely read, probably to a greater degree than philosophers whose names are more famous today, like Mullā Ṣadrā and even Avicenna himself. We do, however, find Jawnpūrī engaging with Ṣadrā's teacher Mīr Dāmād, and in particular with the latter's characteristic doctrine of "perpetual creation," according to which all things are first created at the level of the perpetual, then made manifest in our temporal realm (Chapter 53). Jawnpūrī sympathizes with what Mīr Dāmād was trying to do here, but believes the theory has one small flaw: it's incoherent.[4] We are asked to believe that the same thing is created twice, once "perpetually" and then again within time. Hiawatha the giraffe would exist perpetually as part of God's everlasting creative act, but she would also turn up round about the early twenty-first century on the African savannah. Thus Hiawatha would, absurdly, be prior to herself. Mīr Dāmād also spoke of things at the level of perpetuity as being "non-existent," and "existent" only when created in time. This Sufi-inspired notion makes no sense to Jawnpūrī. If anything, the perpetual things at the level of the divine should be *more* existent than the things in the temporal realm. Thus Jawnpūrī respectfully suggests that it would be better to return to the idea of eternal emanation, already found in al-Fārābī and Avicenna. It's an indication that, even with all the Mongol-era, Shirāzī, and Safavid authors being read in this later period, philosophers of the formative period too continue to exert their influence.

Nonetheless, Avicenna's influence in India was most often mediated through later authors. He was read at least occasionally, hardly surprising, given his importance to thinkers like the Dashtakīs, who represented the cutting edge of philosophical thought in this period.[5] For the most part, though, India saw the emergence of a less Avicenna-centered approach to the rational sciences, known as the *dars-i niẓāmī*. This curriculum seems to have evolved over generations, but it is called *dars-i niẓāmī* in honor of Niẓām al-Dīn Sihālavī, a scholar who took a significant hand in devising its standard version.[6] He was a member of the leading scholarly family of Mughal India in the eighteenth century, the Farangī Maḥall. This clan, based in the city of Lucknow, received favor from the Mughal princes and could count a number of influential scholars among their ranks. The earlier thinkers I've been mentioning, like Fatḥallāh Shīrāzī, ʿAbd al-

Ḥakīm Siyālkot'ī, and Maḥmūd Jawnpūrī, paved the way for the Farangī Maḥall family. In fact, Niẓām al-Dīn was a fifth-generation student of Fatḥallāh, and a work by Jawnpūrī was one of the texts in the *dars-i niẓāmī* curriculum. The *dars-i niẓāmī* was not necessarily intended to produce philosophers. Rather, students would read a selection of canonical texts, sometimes only in summarized versions, and receive training in logic and other fields, so as to prepare them for work as government officials and jurists. Still, this pedagogical activity in the *madrasa*s naturally gave rise to a large number of commentaries and glosses on the texts included in the curriculum. And hopefully, you're by now convinced that the commentary form is entirely compatible with philosophical innovation and originality.

Just in case, though, here's another example.[7] One work on logic produced in India was the *Ladder of the Sciences* (*Sullam al-ʿulūm*), by Muḥibballāh al-Bihārī, who died in the year 1707. Al-Bihārī's treatise was tailor-made to be the subject of commentary, offering a dense survey of issues in logic, philosophy of language, and epistemology. His successors duly composed more than ninety commentaries and glosses on the *Ladder of the Sciences* in the eighteenth and nineteenth centuries. Not only did the original text of al-Bihārī find its way into the *dars-i niẓāmī* curriculum, but glosses and commentaries on the work also became standard reading, and provoked still further reflection from still later authors. A fascinating issue that emerged in this layered textual tradition concerned the question of whether God can be defined. The obvious answer, in light of the usual Muslim belief in divine transcendence, was "no." But how to justify this answer philosophically? Avicenna suggested one possible strategy, which was developed in one of the standard commentaries on al-Bihārī: since God has no body, and since His essence is the same as His existence, God is simple. But definitions always have multiple parts. The definition of *human*, for example, is *rational mortal animal*, and one can think of these three items (rationality, mortality, animality) as the "parts" of the definition. So to define God would be to compromise His simplicity by breaking Him up into conceptual parts.

But what Avicenna gave, he could also take away. We've seen numerous times that later thinkers were fascinated by his distinction between mental and concrete existence. If we apply that distinction to God, we can see that there is a problem with the argument just sketched. All will admit that God is simple in concrete reality. But need He be simple when He exists in my mind? If my *idea* of Him has parts, that should allow me to offer a definition of Him, without implying that God Himself has parts. In other words, God might have conceptual

parts while remaining simple in reality. To take a not-so-random example of how this proposal might be filled out, I might define God as the "necessary existent." God Himself lacks all multiplicity, as Avicenna argued, but the *idea* of a necessary existent is obviously not simple. It has two ingredients: necessity and existence.

There is a more troubling issue lurking here, and the commentators and super-commentators on al-Bihārī were not slow to notice it. If the rules that apply to God outside the mind may differ from those that apply to Him as He exists mentally, why not think this is true for other things besides God? If I am only getting mental *representations* of the things out there in reality, how can I be sure that the features of these representations match the features of the things in themselves? The commentators' skeptical worry mirrors a central problem of early modern European philosophy, found in philosophers like Descartes and Hume. The commentators of India were led to the same destination, along a path entirely characteristic of later philosophy in the Islamic world: the issue that provoked the debate was a theological one, and the debate centered on one of Avicenna's standard distinctions, in this case the contrast between mental and external existence.

This was not entirely new. The skeptical implications of mental existence were already noticed by Fakhr al-Dīn al-Rāzī (Chapter 43). But it's remarkable to see it being formulated here as a general problem of epistemology. In the end, the Mughal-era commentators on al-Bihārī did stop short of drawing the radically skeptical conclusion that there can be no correspondence between our ideas and things in the outside world. Rather, we have universal knowledge gleaned from our experience of external things, and are also able to grasp the peculiar characteristics of those things. As a result, we have mental representations that, as the commentators say, "reveal" the nature of the outside things. But this still leaves a skeptical worry. We have no independent confirmation that our representations do "reveal" the things they are meant to represent. This point led a nineteenth-century philosopher of India, Faḍl al-Ḥaqq al-Khayrabādī, to go even further and doubt that our ideas ever succeed in capturing the essences of things in themselves.[8]

So far, we've been looking at the transplanting of ideas from elsewhere in the Islamic world onto Indian soil. But of course, this soil was not barren. To the contrary, the Indian subcontinent had its own ancient philosophical and religious traditions. Did Muslim intellectuals attempt to come to grips with these indigenous belief systems? Indeed they did. Under the Mughal emperor Akbar, it was decreed that religious scholars should work through a range of intellectual

sciences, including medicine, logic, physics, mathematics, metaphysics, and history. They should also learn about the Hindu traditions, studying the Sanskrit language and acquainting themselves with the teachings of the Nyaya and Vedanta schools.[9] Akbar was remarkable among Muslim rulers in India for his friendliness towards Hinduism, a policy which happened to be politically expedient as well. He himself married Hindu women and allowed them to keep their religion rather than converting to Islam.

You might think it doesn't get much more friendly than that. But at least one member of the Islamic ruling class in India could give Akbar some serious competition when it comes to affection for classical Indian culture. He was a seventeenth-century prince by the name of Dārā Shikūh, the son and intended successor of the Shah Jahān. Upon his father's death conflict erupted between Dārā Shikūh and his brothers. This ended in Dārā's untimely death, on charges of irreligion. These accusations were obviously politically motivated, since Dārā Shikūh's death paved the way for the accession of one of his brothers. Still, the prosecuting attorneys would have had plenty to work with, since in fact Dārā was pretty daring in his ideas about religion. From a young age he was enthusiastic about the teaching of the Sufis, and trained with a beloved master to achieve ever greater degrees of spiritual enlightenment. He also engaged in Sufi practices like breath control, writing that he was able to pass through an entire night inhaling only twice.

What really left him breathless, though, was the wisdom contained in ancient Sanskrit works like the *Upanishads*.[10] Dārā produced translations of this body of sacred literature, and pronounced it the oldest of the revelations sent by God to humankind. He considered the *Upanishads* superior to other revealed books, like the Torah and the New Testament of the Christians. For him, this Sanskrit source could provide the key to unlock the deeper meaning of the revelation sent to Muḥammad. Surprising though this may sound, to some extent it reflects a well-established attitude towards Hinduism among Muslims. Islam standardly recognized Hindus and Buddhists, alongside Jews, Christians, and Zoroastrians, as "peoples of the book," favored with prophets who brought the word of God. But Dārā Shikūh went further by giving the *Upanishads* privileged place above all other revelations, apart, of course, from the Koran itself. He even daringly suggested that the Koran alludes to the *Upanishads* in a much-discussed verse (56:78) that makes mention of a "hidden book." What could this book be, reasoned Dārā, if not the oldest of the revelations?

To press home his point, Dārā Shikūh attempted to illustrate the agreement of the Islamic and Indian traditions in his *Confluence of the Oceans*. The title is

taken from another verse of the Koran (18:60), and symbolizes the meeting-place between the two great religions. When an English translation of Dārā's treatise was published in Calcutta in 1929, one reviewer dismissed it rather high-handedly, writing, "this little treatise is not … a work of deep insight or great spirituality … The subject-matter is entirely matter-of-fact and consists of nothing but wooden terminological comparisons. It lacks both eloquence and inspiration."[11] I find this amazing, because the *Confluence of the Oceans* is a truly remarkable document, and would be so even if it hadn't been written by a Mughal prince. It surveys the key ideas of the Hindu teaching as Dārā Shikūh understands it. He shows that the core ideas and vocabulary of this teaching correspond to Arabic concepts and terminology used by Muslim intellectuals, especially philosophical Sufis. Thus, the Sanskrit term *maya* is connected to the passionate love, or ʿ*ishq*, of the Sufis (§1), and the Koranic names of God are matched to Sanskrit equivalents (§11). Both the Islamic and Hindu traditions, explains Dārā Shikūh, have more or less the same cosmological theories and similar ideas about the soul. Even Avicenna's theory of the five internal senses can be found in the Sanskrit sources (§2).

He touches also on more controversial points. After sketching the Indian theory that world-cycles repeat over and over in an infinite loop of time, Dārā says that this notion too can be shown to agree with the Koran. In proof he cites verses on resurrection (Koran 14:48, 21:104, 39:68, cited at §§19, 21). To those Muslims who complain that, on this theory, Muḥammad will no longer be the last of the prophets, Dārā responds that it will be the very same Prophet Muḥammad that returns in the next cycle. He will end the line of prophets in each and every iteration of the endlessly repeated history of the world. Dārā also likes to defend contentious ideas within Islam by referring to other religious traditions. One frequent point of dispute among Muslim theologians had been whether God is ever actually visible. Can He manifest Himself so that we can actually see Him? Of course, most philosophers would dismiss the idea out of hand. But Dārā thinks it is possible, and claims as allies the many religious sages who have claimed to behold God. Dārā says he is happy to find himself in agreement with them, whether they believe in "the Koran, the Vedas, the Book of David or the Old and the New Testament" (§10).

For Dārā Shikūh, the extensive agreement between the different religious and philosophical traditions known to him showed that no one people has a monopoly on wisdom or truth. But I'll tell you who did have a monopoly: the East India Company. The first half of the eighteenth century saw the collapse of both the Safavid and the Mughal empires, in the latter case paving the way for

the era of British colonialism. Their fall was in part the result of British conquest and, famously, of exploitation at the hands of the East India Company. There is more to the story than that, though. To some extent the empire succumbed to internal problems before the colonial depredation began.[12] This isn't the place to chart the demise of these two mighty powers, but it *is* the place to consider the fate of philosophy in the eighteenth century and beyond. In the closing chapters of this book, we'll be seeing how the ideas of figures like Avicenna or Mullā Ṣadrā remained influential right down to the twentieth century, and discovering how ideas from Europe were received among Muslims. But before we do that, there is a third empire to deal with. As you read on you might want to put your feet up, perhaps on some sort of upholstered footstool, because we're about to turn to the Ottomans.

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TURKISH DELIGHTS PHILOSOPHY UNDER THE OTTOMANS

Here's old joke I can't help liking. "Q: What's the difference between mathematicians and philosophers? A: Mathematicians need only a pencil and an eraser. Philosophers likewise, except they don't need the eraser." And it's true, philosophy doesn't require much in the way of equipment. To write this book I only needed a computer, a well-stocked library, and above all, coffee. The latter requirement is something else philosophers share with mathematicians, who have been called "machines for turning coffee into theorems." And the same need was felt by the seventeenth-century Ottoman scholar Kātib Çelebī. He supposedly died while drinking coffee (not a bad way to go), and he put his arguments where his mouth was. Kātib Çelebī was an impressive scholar, who produced much-admired works including a bibliographal dictionary and a treatise on geography. But his last work, titled *The Balance of Truth*,[1] is among other things a plea for flexibility and tolerance with respect to social and religious practices that were controversial in Kātib Çelebī's day. Among those controversial practices was the drinking of coffee (60–2).

I can't entirely side with him, since Çelebī also speaks up in favor of allowing people to smoke tobacco (47–9), whereas I am one of those people who cough ostentatiously if anyone lights up nearby. Still, I have to admire his policy of pragmatism. With his moderate and open-minded approach to Islam, Çelebī was signaling his opposition to a popular movement of his day, the Ḳāḍīzādelīs. Named after the charismatic preacher Mehmed Ḳāḍīzāde (d. 1635), the Ḳāḍīzādelīs opposed not only the fragrant activities of coffee-drinking and tobacco-smoking, but anything that smelled of innovation in religion. They were even upset by such apparently innocuous novelties as shaking the hands of one's fellow worshippers in the mosque. The Ḳāḍīzādelīs' great opponents were the Sufi orders, which were influential and massively popular in the Ottoman

empire. They also became rivals to the scholars who formed both the intelligentsia and the legal class in the Ottoman state: the *ulema* (Arabic 'ulamā').[2]

The *ulema* had always been important as the main repository of religious learning and legal authority in Sunni Islam. Under the Ottomans, their influence and social status reached new heights. Their coziness with the Ottoman rulers and their entrenched status, with scholarly sinecures being passed down from father to son within certain fortunate families, enraged the Ḳāḍīzādelīs. So this popular movement was taking aim at not just religious innovations and the theological excesses of the Sufis, but also the corruption and complacency of the *ulema*. The Ḳāḍīzādelīs succeeded, for a time. The Sultan Murād was persuaded to put some of their policies into practice, for instance by declaring the death penalty for anyone caught smoking. This was at best a temporary, and mixed, success. There are even stories of Ottoman soldiers being executed after being caught with tobacco, and defiantly indulging in one last smoke while being led to their deaths.[3]

Kātib Çelebī was a hero of the moderate stance within these debates. He made a point that still has application in political and social debates today, namely, that there is no point forbidding something that people are going to do no matter what. He also acknowledged the problem of corruption among the scholarly class, and shares the Ḳāḍīzādelīs' alarm at the excesses of some Sufis. But he spoke up in defense of the controversial Ibn ʿArabī, pointing out that his theories are so hard to understand that it would be uncharitable not to give him the benefit of the doubt (80–3). Like al-Ghazālī before him, he inveighed against those who wanted to throw out the intellectual baby along with the bathwater of *ulema* corruption. His *Balance of Truth* actually begins by insisting upon the value of such traditional scholarly disciplines as logic, mathematics, and astronomy (21–8). Without training in these sciences, how is the Muslim jurist to adjudicate in a land-measurement dispute, or understand Koranic references to the stations of the moon? The Ottoman *madrasa* education defended by Çelebī was more or less along the lines of the curriculum taught in Persia and in Mughal India.[4] For centuries, this education helped form the religious and legal scholars of the *ulema* class. Given the close relations between the *ulema* and the state, the curriculum was at the heart of the Ottoman conception of Sunni Islam, and so at the heart of the Ottoman sultans' claim to legitimacy as the defenders of the faith.

The Ottomans took their name from Osman, who achieved a first famous victory for his dynasty, but certainly not the last, in a clash with the Byzantines

in the year 1305. Osman and his followers were Turkic tribesmen and *ghāzī*s, or religious warriors, who rallied around the cause of Islam. Not without reason, later Ottoman intellectuals would look to Ibn Khaldūn's theory of tribal solidarity to explain their own history.[5] But their ascent to power was not exactly uninterrupted. The Ottomans had early successes in eastern Europe from their base in Anatolia, penetrating into the Balkans and defeating a combined force of Serbs and Bosnians in a famous battle at Kosovo in 1389. If we've learned anything about the thirteenth and fourteenth centuries, though, it's this: watch out for Mongols. Legend has it that Osman's tribe first came to Anatolia as refugees from the initial Mongol invasion. And around the year 1400 the new round of Mongol conquests, led by Tamerlane, arrived at the Ottomans' doorstep. They were crushed at the Battle of Ankara, and the Ottoman leader, Bāyezīd, was taken captive and then executed.

You can't keep a good empire down, though. The Ottomans regrouped, took back their territory in Anatolia, and renewed their attacks against Christian forces in the Balkans. The big breakthrough came in 1453, when Mehmed II overran the city of Constantinople, also known as Istanbul. As a result, the Ottoman sultans acquired something of the charisma of Roman emperors, which was augmented further when the sultan Selīm defeated Mamluk forces to lay claim to the holy cities of Mecca and Medina, in 1517. Still the Ottomans weren't done. Selīm's successor, the famous Süleymān the Magnificent, pushed the frontiers of Ottoman territory yet further into Egypt and Iraq. The result was a mighty empire, beset by rivals on all sides yet still able to survive, and indeed flourish, for centuries to come. Ottoman forces clashed with a variety of European powers, including the Habsburgs, the Venetians, and the Portuguese, and they contended with the Mamluk dynasty before Selīm wrested Egypt from their grasp. At least as important was their rivalry with another Muslim empire, located to the east: the Safavids in Persia. Given that the Ottomans' legitimacy rested in large part on their claim to be the champions of Sunni Islam, they saw the Shiite Safavids as natural enemies, and there was frequent military conflict between the two empires.

That religious context had deep consequences for the development of philosophy in the Ottoman empire. For one thing, with the rise of the Safavids many Sunni scholars relocated from the newly Shiite Persia to the Ottoman realm. One such scholar was Muṣliḥ al-Dīn al-Lārī, who originally studied at Shīrāz and thus had a deep knowledge of the works of the feuding philosophers of that city, the two Dashtakīs and Dawānī.[6] The younger Dashtakī, in fact, was a teacher of Lārī (I unfortunately haven't been able to confirm my suspicion that

he had two fellow students named Moe and Curlī). In one of his works, Lārī says explicitly that a number of Sunnis like himself left Iran because of the Safavids' religious policies. Lārī is a particularly interesting case because he at first went to India and joined the court of a Mughal ruler, before coming to Aleppo and Istanbul in 1566. So here we have a single thinker who spent time in all three of the later Islamic empires, bringing with him the ideas of the so-called "school of Shīrāz." Nor was Lārī content simply to transmit the ideas of his teachers. He also wrote works of his own on history, logic, astronomy, and so on. In keeping with the scholarly customs of the day, many of these were in the form of commentaries and glosses on earlier works.

He wrote, for instance, two commentaries on astronomical works by an Ottoman scientist of the fifteenth century by the name of ʿAlā' al-Dīn al-Qūshjī.[7] Like his commentator Lārī, al-Qūshjī originally hailed from further east, in his case central Asia. He worked at the astronomical observatory founded by Ulegh Beg in Samarqand, and indeed was the son of Ulegh Beg's falconer. But he soon enough spread his wings and took flight to the Ottoman realm, passing through Iran on the way to Istanbul, where he became one of the greatest scientists in Ottoman history. Though he was primarily an astronomer and not a philosopher, al-Qūshjī had some interesting things to say about how these two fields relate to one another. I mentioned in Chapter 51 that astronomy, like logic, had become "safe" for Islamic religious scholars by being made autonomous from the more controversial aspects of philosophy. But there was always a worry that philosophy might sneak in through the back door. After all, Aristotelian natural philosophy tells us *why* the heavens are revolving, and why earth stays unmoving at the center of the universe. Earth has a natural tendency to move downwards until stopped by some obstacle, and then come to rest when it reaches its "natural place," whereas heavenly bodies are made of a special fifth element that naturally moves in circles.

But unlike al-Ṭūsī and his fellow philosopher-scientists at the Marāgha observatory, al-Qūshjī had no strong commitment to Aristotelian cosmology. For all we know the earth might be rotating; he realized that we can't exclude this through observation. The mathematical astronomer is not presupposing any particular causal account of the heavens. He is just devising models on the basis of what has been observed, and the only truths he needs to invoke are geometrical ones, which are not open to doubt. As far as the astronomer is concerned, it simply doesn't matter whether the philosophers are right with their physical theories. For that matter, astronomy would be left untouched even by the Ashʿarite theologians' insistence that God, being omnipotent and entirely

free, could radically change the heavens in the blink of an eye. Again, that wouldn't impugn the validity of our mathematical descriptions of heavenly motion as it has always appeared.

A scientist like al-Qūshjī could, then, afford to remain neutral in the face of the now age-old quarrel between Aristotelian philosophy and Islamic *kalām*. But he was lucky: the sultan never asked him for his opinion on the matter. It had been known to happen. Back in the late fifteenth century, Mehmed II asked two scholars to write responses to al-Ghazālī's *Incoherence of the Philosophers*, then as now paradigmatic for the clash between philosophy and Ashʿarite theology.[8] This was an unusual project for both scholars, who were more accustomed to write commentaries on the standard *kalām* works of the Ottoman educational curriculum. But, as Ayman Shihadeh drily remarks in a study of this event, "when commissioned by the sultan, scholars normally obliged." In fact this was no ordinary commission but a kind of contest. Both authors were given a large monetary reward, with the winner also receiving a fabulous robe. The victor was Khojazāda, the loser ʿAlāʾ al-Dīn al-Ṭūsī (not to be confused with the much more famous Naṣīr al-Dīn al-Ṭūsī). Both oversaw *madrasa*s in the Ottoman realm, and so qualified as leading intellectuals. The approach they took to writing their own versions of the *Incoherence of the Philosophers* is rather telling in what it says about the mindset of leading intellectuals of this period. They tackled the topics raised by al-Ghazālī, but without engaging with his text in great detail (making no reference to Averroes' *Incoherence of the Incoherence,* although it was available to the later Kātib Çelebī). Instead, Khojazāda and ʿAlāʾ al-Dīn drew freely on more recent works, such as the widely read commentary by al-Jurjānī on the great Ashʿarite theologian al-Ījī. So a lot of new material was brought to bear on the classic debate between al-Ghazālī and Avicenna.

Also characteristic is that both Khojazāda and ʿAlāʾ al-Dīn were broadly happy with al-Ghazālī's approach. They proposed additional criticisms of Avicenna's position and even agreed that some of Avicenna's positions amount to apostasy from Islam. On the other hand, they weren't necessarily impressed by the actual arguments used by al-Ghazālī.[9] A nice example is the debate over the eternity of the universe. Khojazāda agrees with al-Ghazālī in rejecting Avicenna's position: that is, he too holds that the universe is created rather than eternal. But he rebuts al-Ghazālī's arguments for this conclusion. In the original *Incoherence* al-Ghazālī had pointed out that if Aristotle and Avicenna were right to think the universe is eternal, then an infinite number of humans must already have existed. But humans' souls survive the death of their bodies. Thus there

should by now be an actually infinite number of human souls hanging around; but the philosophers reject the possibility that there could be any actual infinity.[10]

Nice try, says Khojazāda, but this argument won't work. The problem with an actual infinity is that you can't go through it in order and get to the end, like counting up through the integers and eventually reaching an infinite number. But here there is no need to go through the infinite souls in order. They have no relationship of priority and posteriority, the way that numbers do. Rather, they coexist as a disordered jumble, and there's nothing absurd in that. Of course, we might try counting backwards through infinite past time: one year ago, two years ago, three years ago, and so on. That might give us the absurd kind of infinity, since the years do have an order going into the past. It's an argument that was deployed against the eternity of the world already in antiquity by John Philoponus, and in the formative period by al-Kindī. But this won't work either, in Khojazāda's view. For the past years are no longer existent, as would be needed if the philosophers are to be stuck with an *actual* infinite quantity.

Khojazāda therefore proposes a different argument of his own. The infinite past times do not exist in reality, but they exist *mentally*. Not, of course, in our puny human minds, which cannot really grasp infinity. But in the mind of God all past times should still be present, since He is omniscient. The times would have order, too, since He would know which times were earlier and which later. Thus, if past time were infinite, then the absurd kind of infinity would turn up in God's mind. It would have only what Khojazāda calls a "shadowy" kind of existence, that is, mental instead of concrete existence, but it would be there nonetheless. On this topic of God's knowledge, Khojazāda has another interesting proposal concerning a different part of al-Ghazālī's *Incoherence*. Avicenna, infamously, held that God knows particular things only universally. For al-Ghazālī and other critics, this claim had the unacceptable consequence that God would not know particular things at all. Not so, says Khojazāda. For each individual thing is unique in the combination of universal properties it possesses. For instance, there are lots of bald people, lots of Arsenal fans, lots of philosophers, lots of coffee-drinkers. But I may be the only bald, coffee-drinking, Arsenal-supporting philosopher. (If there are any others out there, let me know.) The upshot is that God could know about me without knowing anything non-universal, by knowing that these universals are found together in my case, and only in my case.

This example might suggest that Ottoman scholars were only interested in philosophy when it got into theological territory. But that impression is

misleading. Ottomans contributed to all branches of what they called the "rational sciences." Just as Islamic India was enlivened by scholars migrating from Persia, so the Ottomans benefited from the learning of Persian, Kurdish, and north African intellectuals.[11] When Mullā Maḥmūd, a Kurd, came to Damascus in the first decade of the seventeenth century, he brought with him the ideas of Persian thinkers such as Dawānī. The impact made by such Kurdish scholars was acknowledged by Kātib Çelebī, who grumbled that their self-aggrandizing manner helped them to attract many to the study of philosophy. An influential thinker from the west was the Moroccan thinker Muḥammad ibn Yūsuf al-Sanūsī, active around the time that the Christian "reconquest" of Spain was being completed. His ideas spread to Cairo, helping to spark what has been called a "florescence" of the rational sciences in the seventeenth century.[12]

Jews too were moving into Ottoman territory, especially when they were exiled from the Iberian peninsula at the end of the fifteenth century.[13] As a result, texts of the Andalusian philosophical tradition, like Maimonides' *Guide* and the central Kabbalistic text, the *Zohar*, were read and debated by Jews living in the empire. One outstanding representative of this development was Moses Almosnino, who lived in Salonica in the sixteenth century. He wrote commentaries on Averroes, al-Ghazālī, and the *Ethics* of Aristotle. Almosnino also drew on Latin philosophers, including Thomas Aquinas. In his commentary he followed the sort of intellectualist position in ethics we've already seen in other Jewish thinkers, like Maimonides himself. To this he added the kabbalistic notion that the souls of Jews in particular have a spark of the divine in them, which is why the Bible says that mankind was created in God's image. If such a soul achieves intellectual perfection by subduing the body in this life, it can look forward to a reunion with God in the hereafter.

In the same century practical philosophy was also being pursued by the Muslim Ottoman philosopher ʿAlī Çelebī Kinalizāde. He produced a treatise called *The Exalted Ethics*,[14] a reworking of an ethical work by Dawānī, which was itself a reworking of the widely read *Ethics for Nāṣir* by Naṣīr al-Dīn al-Ṭūsī (that's the famous al-Ṭūsī again). It's been mentioned already that the title of al-Ṭūsī's treatise is misleading, in that he in fact tackled not just ethics but the other areas of practical philosophy, political philosophy, and household management. Kinalizāde followed his lead, along the way providing a justification for the arrangement of Ottoman society. He explained that a functioning society has four main groups: the soldiers or "men of the sword," the scholars or "men of the pen"—in other words, the *ulema*—the craftsmen, and the farmers. As in Plato's *Republic*, the just ordering of society requires that these

groups be in appropriate balance. As for the leaders, they belong to a class of their very own: Kinalizāde praises Süleymān as a real-life philosopher king.

He had good reason to do so. Süleymān was the most outstanding of the Ottoman rulers, having increased the territory held by the Ottomans to unprecedented size in Kinalizāde's own lifetime. These were the glory days of the Ottoman realm, when *madrasa*s were being built at a rapid pace, setting the stage for the scholarly activities I've been discussing in this chapter. But nothing good lasts forever. What became of philosophy as the Ottoman empire lost territory and finally ended, and as its inhabitants were increasingly exposed to European culture through travel, trade, and colonization? I hope that I have by now dispelled the myth of post-medieval decline. But as we now move ever closer to the present day, are we going finally to see the end of meaningful philosophical activity in the Islamic world?

58

BLIND ALLEY TAQLĪD, SUFISM, AND PHILOSOPHY

If the reports of the death of philosophy in the Islamic world have not in fact been greatly exaggerated, who were the culprits responsible for its demise? As in a good murder mystery, there are numerous suspects. There were the jurists who accepted the "closing of the gate of judgment (*ijtihād*)" after the formation of the main schools of *fiqh*,[1] ushering in centuries of slavish "imitation" (*taqlīd*) in the place of the intellectual creativity of the formative period. In the Ottoman empire, there were the supposedly anti-rationalist Ḳāḍīzādelīs. And there were their opponents the Sufis, often blamed for distracting intellectuals from the rigors of philosophy with the vaguer promises of mystical ecstasy. Of course, we already have plenty of reason to be suspicious of these charges. The phenomenon of philosophical Sufism has shown rigorous metaphysics to be compatible with mysticism, and we have seen *taqlīd* pilloried by thinkers of a wide range of persuasions. Nonetheless, in this chapter I want to look more closely at the question of whether anti-rationalist currents played a significant role in latter-day Islam.

Already in the seventeenth century Kātib Çelebī was lamenting that the study of more advanced philosophical topics had gone into retreat in the *madrasa*s of his day. His *Balance of Truth* states that he was forced to pursue it outside the standard educational curriculum, something Çelebī compares to the way that Plato learned in the marketplace at the feet of Socrates.[2] He provides a list of the scholars he most admires, some of which are familiar: Ashʿarite philosopher-theologians like al-Ghazālī and Fakhr al-Dīn al-Rāzī, Mongol-era thinkers such as al-Ījī, and the Shīrāzī philosopher Dawānī. Çelebī sees little, if any, sign of activity in his own day that could match their achievements. Of course, we should take into account the universal human tendency to think that things aren't

what they used to be. Just think of how parents always think their generation's pop music was better than the rubbish their kids listen to. Then again, sometimes things really do degenerate. The moms and dads of the 1950s were wrong to complain about Elvis, but their counterparts in the early 1990s were right to complain about Milli Vanilli.

And Kātib Çelebī's complaints have been ratified by some modern-day scholars. Francis Robinson, for instance, has written that "in the Ottoman world, from the seventeenth century there is an emphasis on the transmitted as against the rational sciences, and from the eighteenth century a reorientation amongst some Sufis towards activism."[3] Such a context could help to explain how Ibn Taymiyya's "salafist" adherence to the teachings of the earliest Muslims could suddenly seem more appealing than it had in previous centuries. It was taken up in the eighteenth century by Muḥammad Ibn ʿAbd al-Wahhāb, whose followers, the Wahhābīs, would go on to create an independent state on the Arabian peninsula. Back in Kātib Çelebī's day, it was the Ḳāḍīzādelīs who might most easily be cast in the role of anti-intellectuals. There is some evidence that the founder of the movement, Mehmed Ḳāḍīzāde, was hostile towards the rational sciences. Kātib Çelebī assigns to him the memorable quote, "Who sheds a tear if a logician dies?"[4]

But the narrative of inexorable decline in the rational sciences falls apart upon closer inspection. Even the Ḳāḍīzādelīs' posture with regard to the sciences was not unlike al-Ghazālī's: an attitude of selectivity rather than outright opposition.[5] We find them endorsing the study of mathematics, astronomy, and medicine, and even approving of the vast array of philosophical ideas that had been domesticated within Islamic theology. In any case, whatever inroads they may have achieved against the sciences seem to have been short-lived. The heyday of the Ḳāḍīzādelīs was the mid-seventeenth century; around the turn of the eighteenth century, far from a collapse of educational activity we find new *madrasas* opening in the cities of the Ottoman empire. These schools would continue to train religious scholars and jurists in the rational sciences. Major change would come only in the nineteenth century, with reforms inspired by European models of education.[6]

We find a similar picture among Muslims living in India. In Chapter 56 we saw the Farangī Maḥall family carrying forward the rational sciences in eighteenth-century India. In the nineteenth century this tradition was still going strong, with the torch passing to another group in the city of Khayrābād.[7] Scholars of the Khayrābādī school wrote on logic and philosophy throughout the nineteenth century. More than their predecessors, they tended to write

independent works focusing on specific problems in logic, rather than working their ideas into glosses and comments on earlier standard works. Still, they took inspiration from the many commentaries produced over the preceding centuries in India and Iran. They even cast their gaze as far back as Avicenna himself, engaging with him more than the Farangī Maḥallīs had done. It's worth dwelling on that for a moment. Remember that Avicenna died in the middle of the eleventh century, and here he is still being read carefully by the leading philosophers of India in the nineteenth century! Even Elvis may not prove to have such a long-lasting legacy; as for Milli Vanilli, they are already half-forgotten. (According to an informal poll I've conducted, most people guess that it's the name of an ice-cream flavor.) Of course, the Khayrābādīs were pursuing these activities under British colonial power in India, a fact of some relevance for the school. One of them, Faḍl al-Ḥaqq al-Khayrābādī, spent years serving the East India Company, but was then involved in the 1857 uprising against the British.[8] He was tried for treason because he supported a legal judgment approving of *jihād* against the British. Faḍl al-Ḥaqq's punishment was deportation to a penal colony, where he died in 1861. Yet even these traumatic events could not kill the Khayrābādī school. Faḍl al-Ḥaqq al-Khayrābādī's son, ʿAbd al-Ḥaqq, enjoyed royal patronage and held posts in Tonk, Calcutta, and Rampur. His students would ensure the continuation of the school's activities into the early twentieth century.

In short, it would seem that such anti-scientific polemic as there was, in both the Ottoman and Indian spheres, did not derail the train of philosophical *kalām*. But the Ḳāḍīzādelīs were training their sights on another target, too: the Sufis. Were their attacks more successful in this case, and more generally, has Sufism remained compatible with philosophical sophistication? Let's start to answer this question not with the Ottoman empire, but in India. We've already met the seventeenth-century royal prince Dārā Shikūh, and have seen him drawing on Sufism to find harmony between the Islamic and Hindu religious traditions. A somewhat similar figure of the eighteenth century was Shāh Walī Allāh, from the city of Delhi. Perhaps because he was living in a time of great political upheaval, Walī Allāh was one of many Muslim thinkers in the eighteenth and nineteenth centuries who sought to "revive" the religion of Islam itself. (This idea of renewal was, ironically, a very old one: we see it in the title of one of al-Ghazālī's works, *Revival of the Religious Sciences*.) Towards this end Walī Allāh composed *The Conclusive Proof of God*, a major work on ḥ*adīth*.[9] In this and other works he draws on the Sufi idea that the differences we see in things are representations of a higher unity.

In particular, he invokes the "world of images," which we've seen in Ibn ʿArabī and in the Illuminationists. According to this theory, things in our world have archetypes, much like Platonic Forms, to which gifted individuals can gain access through their imaginative powers. Walī Allāh applies this doctrine to the phenomenon of religion itself. In a move reminiscent of Dārā Shikūh's syncretic treatment of Islam and Hinduism, Walī Allāh claims that the various religions of the world are just specific versions of the single paradigm religion shared by all mankind. The religious commandments and laws laid upon this or that population are providentially tailored to their own specific needs. The purpose of religion, and for that matter of all human society and all political institutions, is to bring humankind ever closer to a single, shared perfection. Walī Allāh's universalist vision is appropriate for the pluralist society he lived in. But it is in some tension with his commitment to Islam as the most perfect religion. He claims that Islam is unusual among religions, in that its legal provisions are not so closely suited to just one group. This is why Muḥammad was the last to receive a prophetic revelation: his message was the most universal, and thus most final. So Walī Allāh seems to teach that all earthly religions are equal in being versions of the perfect exemplar religion; but one earthly religion in particular is more equal than the others.

As for the Ottoman empire, Sufism played a significant role there for many generations. Ibn ʿArabī himself was honored in the early sixteenth century, when a lavish monument was built on his grave in Damascus on the orders of the sultan. Already in the early fifteenth century we find the doctrines of Ibn ʿArabī being defended by Shams al-Dīn al-Fenārī, usually called by the honorific Mollā Fenārī. The first man to hold the prestigious religious post of *shaykh al-islām* under the Ottomans, he carried on the story of philosophical Sufism from al-Qūnawī, and in fact commented on a work by the latter. He also wrote commentaries on more "mainstream" philosophical literature, like al-Abharī's logical *Introduction* (a commentary which, Fenārī says, took him all of one day to write).[10] Like al-Qūnawī, Mollā Fenārī used the tools of Avicennan philosophy in order to defend the doctrine of *waḥdat al-wujūd*, or "unity of existence," which became the characteristic position of Ibn ʿArabī's followers, the "Akbarian" school.

But to defend this doctrine, one first needed to figure out what it claimed. In the fifteenth and sixteenth centuries some admirers of Ibn ʿArabī were stressing that the unity of God with all existence is merely "experiential" (*shuhūdī*), not "metaphysical" (*wujūdī*).[11] In other words, the mystic may achieve a state of union with God, an exalted form of knowledge. But we need not admit that all

things are unified with God's very being, and that for them to exist is nothing more than to partake of God as the sole reality. Sufis had good reason to offer such deflationary readings, because the more ambitious metaphysical version of Ibn ʿArabī's doctrine had been subject to vigorous condemnation and refutation. Among the most powerful critics was the Mongol-era theologian al-Taftāzānī (see Chapter 51). He had traced the idea of the "unity of being" to a basic confusion. Existence as such is nothing real in the world, the way that the philosophical Sufis think. It is not to be identified with God, or any other existent thing.[12] Rather, existence as such is a mental concept that we predicate universally. It applies in common to all things, whether God, human, or Elvis Presley (who I think we can all agree was more than merely human).

In his commentary on al-Qūnawī, Mollā Fenārī insisted in response that existence as such is indeed real, and is in fact the subject-matter of "divine science."[13] The difference between God and other things is that He is "pure" or "absolute" existence. In a Sufi reworking of Avicenna's emanative scheme, Fenārī adds that God radiates being from Himself.[14] It is this that we should call "common existence" (*al-wujūd al-ʿāmm*). It is a kind of unspecified being that serves as an intermediary between God and His creation, and then receives delimitation or "particularization" (*takhṣīṣ*) in created things, as existence is restricted by the essence of each created thing. Elvis fans may have a hard time telling him apart from God, but there is in fact a big difference between them: Elvis had a particularizing essence that distinguished him from the pure, unrestricted being that is God.

Centuries later, Ottoman Sufis were still trying to answer al-Taftāzānī's critique. About a generation earlier than the Indian Sufi thinker Shāh Walī Allāh, we have a comparable Ottoman figure by the name of ʿAbd al-Ghanī al-Nābulusī (he died in 1731, Walī Allāh in 1762; and Elvis died in 1977, or at least that's what they want us to believe). Like Walī Allāh, ʿAbd al-Ghanī was a well-rounded scholar, who did draw on Sufism but also wrote on ḥ*adīth* and composed poetry.[15] He shared Walī Allāh's open-minded attitude towards other religions. He was happy to debate theology with Christians, whom he considered "brothers in thought," though, like Walī Allāh, he considered Islam the one true and universal creed. He also practiced asceticism, undergoing a period of seclusion in middle age when he refused to socialize with anyone, purposefully deprived himself of sleep, and so on. But ʿAbd al-Ghanī abandoned his hermetic lifestyle after a time, traveling widely through the Ottoman lands and defending moderate views on religious questions like the acceptability of tobacco-smoking.

ʿAbd al-Ghanī was less moderate when it came to Ibn ʿArabī's doctrine of the

unity of existence (*waḥdat al-wujūd*). Following in the footsteps of al-Qūnawī and Mollā Fenārī, ʿAbd al-Ghanī asserted the ultimate oneness of being: God is the only true reality, one that can never be known in itself and only appears to us in various guises.[16] In a work written in 1693, he explained that this thesis does not involve identifying God with the general concept of being, as al-Taftāzānī had charged. Rather, we must make a distinction between pure existence (*wujūd*) as such and the existing thing (*mawjūd*) (notice the parallel to the teaching of Dawānī, discussed in Chapter 52). Pure existence is not to be confused with a mere concept of existence, which can be applied to any old existent. To the contrary, the pure existence that is God is in fact beyond human understanding. The alternative metaphysics of al-Taftāzānī would make God merely one among many existents, failing to preserve His supreme and unique metaphysical status.

In keeping with his pessimistic outlook on the power of human reason to grasp God, ʿAbd al-Ghanī was that relatively rare figure in the Islamic world: a bona-fide anti-rationalist.[17] He took up the anti-logical polemic of earlier figures like al-Sīrāfī, Ibn al-Ṣalāḥ, and Ibn Taymiyya, advising that one should not even bother arguing with philosophers. Their heretical doctrines spring from reason, and there is no point meeting them on their own territory in an attempt to refute them. Instead, one should take refuge in simple faith and, if one seeks a higher form of enlightenment, strive to achieve the mystical union pursued by Sufis. This may seem to fit into a narrative of intellectual decline as we move into the eighteenth century, with non-philosophical Sufis like ʿAbd al-Ghanī bearing at least part of the blame. But his views were certainly not held uniformly by intellectuals of the Ottoman empire.

To the contrary, one of the most influential figures for this period (and still down into the twentieth century) was the fifteenth-century Moroccan theologian al-Sanūsī, briefly mentioned in the previous chapter. His views on reason were as uncompromising as those of ʿAbd al-Ghanī, yet diametrically opposed. In a breathtaking attack on *taqlīd,* he argued that every Muslim has the duty to engage in rational reflection (*naẓar*) in order to confer certainty on their religious beliefs. It was not reason that led people away from true Islam, but imitation: "lowly *taqlīd* is at the root of the unbelief of the idolaters."[18] We find these ideas being received even by thinkers associated with the supposedly anti-rationalist Ḳāḍīzādelī movement, for instance the early seventeenth-century Ottoman author Aḥmed Rūmī Āḵhisārī. He was enough of a religious puritan to take up the cause of banning tobacco,[19] but nonetheless quoted al-Sanūsī with approval on the subject of *taqlīd*.

While this was fundamentally a dispute over the status of religious belief, it

has broader philosophical implications. Much like the arguments over the principles of Judaism that raged in the wake of Maimonides, the protagonists of the *taqlīd* debate were exploring the question of when one may take oneself to have justified belief. Those with a more benign attitude towards the faith of the simple believer adopted what we would now call an "externalist" account. On this view, beliefs can be certain even if they are adopted by slavish imitation, so long as the teachers being imitated had unimpeachable access to the truth (as did Muḥammad, thanks to his prophetic revelation). In other words, the grounds of certainty may be external to the believers who are taking themselves to be certain. A parallel, non-religious case might be your conviction that Madagascar exists, without ever having been there. You had reliable sources in forming this belief—the testimony of friends, or geography books—so the belief counts as knowledge even if you cannot verify the existence of Madagascar from your own experience. The critics of *taqlīd* instead insisted on an "internalist" account of justification. For them, certainty requires that you reflect on your beliefs and establish for yourself that they must be true. Not every religious commitment would need to be individually proven, of course. Once one has rationally established the existence of God and Muḥammad's veracity as a prophet, many other beliefs will immediately follow—though al-Sanūsī would hasten to add even here that reason is still needed to understand the teachings of the ḥ*adīth* and the Koran. All of this is what he understands by *kalām*, which for him, therefore, becomes an indispensable part of life as a religious believer.

Of course, the extreme rationalism of al-Sanūsī did not represent the unanimous, or even mainstream, position among the intelligentsia of the Ottoman empire, any more than the extreme anti-rationalism of ʿAbd al-Ghanī did. Still, it would be fair to say that among the Ottomans and in the eastern realms of the Safavids and Mughals in the early modern period, there was no general trend towards anti-intellectualism and anti-rationalism. Instead, many would have agreed with a sentiment of Kātib Çelebī's: knowledge can never be harmful, and ignorance is never beneficial.[20] It was a credo that implied wary curiosity, if not enthusiastic embrace, of knowledge coming from outside the Islamic world.

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THE YOUNG ONES ENCOUNTERS WITH EUROPEAN THOUGHT

At the beginning of this book, we saw an intellectual revolution as Greek science was made available in Arabic in the ninth century. Three centuries later, Latin-speaking Christendom was transformed by the translation of works from Arabic. Now, as we reach the end of our journey through the Islamic world, history repeats itself yet again. From the Copernican revolution in astronomy to nineteenth-century positivism, scientific and philosophical ideas flowed from Europe into the Islamic world.[1] As with the original Greek–Arabic translation movement, some bemoaned the corrupting influence of the new foreign science. Others gladly embraced the European ideas, arguing that they offered a chance to revive Islam and strengthen Muslim political regimes against their enemies. Still others took a middle path, by proposing a more selective approach or by reinterpreting European philosophy so as to harmonize it with Islamic tradition.

The process of negotiation unfolded in a fraught atmosphere, even an atmosphere of crisis, as territories long held by powerful Muslim states fell under the sway of colonial power. For intellectuals in the eighteenth and nineteenth centuries the question of whether to adopt European ways of thinking was an urgent one. Could these ideas be used to reverse military setbacks, revive faltering empires, and renew the religion of Islam itself? As we consider this reception of ideas from beyond the Islamic world, we should be careful not to assume that openness to foreign ideas is synonymous with an enlightened and inquiring mindset. As Khaled El-Rouyaheb has observed, no one accuses seventeenth-century Europeans of blinkered dogmatism because they failed to be open to ideas from the Ottoman, Safavid, and Mughal empires![2] And as we saw in the last chapter, early modern Ottoman culture had its fair share of invective against *taqlīd*.

Nonetheless, the narrative of decline would have it that it was impossible for science to flourish in the Islamic world as it did in Europe. Exhibit A for the indictment is the destruction of an astronomical observatory at Istanbul in 1580. We know from the case of Marāgha that such observatories could be centers for scientific research, and so it was at Istanbul, where the astronomer Taqī al-Dīn devised a plan for a steam engine and in 1577 made observations about Halley's comet parallel to those made in the same year in Europe by Tycho Brahe.[3] But for Taqī al-Dīn, this comet was the beginning of an unfortunate tale. He took it as an opportune sign for launching a military campaign against the Safavids—as I've mentioned before, as Shiite Muslims the Safavids were always seen as rivals by the Sunni Ottomans. This expedition ended in failure, and it may be that the observatory was destroyed because the advice given by Taqī al-Dīn turned out to be counter-productive. Alternatively, the demolition may have been an expression of a more general distrust of astrology. It seems, in any case, that it should not be blamed on anti-rationalist sentiment, such as that inspired by the Ḳāḍīzādelīs.[4]

In 1660 Ottoman astronomers were given something rather different to worry about: the Copernican account of the solar system. We've seen scientists of the Islamic world debating whether the earth might in fact be rotating, rather than standing still beneath revolving heavenly spheres. Now they were confronted with the possibility that the earth might in fact be orbiting around the sun, as well as rotating on its own axis. This was thanks to an Ottoman scholar named Ibrāhīm Efendi, who translated a book on Copernican philosophy from French into Arabic.[5] Ibrāhīm was convinced of the value of his translation, since it might help to rectify problems in the Ptolemaic, earth-centered astronomical system. But he did not go so far as to endorse the Copernican theory. In a familiar pattern, the theory was met with a mixture of dismissive rejection, cautious interest, and eager acceptance. My favorite response came from a scholar who pronounced the heliocentric view plausible, drawing an analogy to cooking: it makes more sense to turn meat over a fire than turning the fire around the meat![6]

And Copernican astronomy wasn't the only European idea to get the Ottomans' juices flowing. There was transmission in other scientific fields as well, for instance, medicine. In the seventeenth century, Arabic translations ushered the daring chemical theories and pharmacology of Paracelsus into the empire.[7] This exposed Ottoman doctors to ideas that challenged the Galenic approach which had defined medicine in the Islamic world since its inception. There was positive engagement and acceptance of some of this material, but it

did not lead to a complete overhaul of the tradition. Galen's ideas in medicine, like Ptolemy's system in astronomy, retained their centrality, for now anyway. Last but not least, there were translations of philosophical works. Notable here are the productions of Yanyalı Esad Efendi, a scholar who moved from his native Greece to Istanbul.[8] He worked during the cultural efflorescence called the "Tulip Age" (in the first half of the eighteenth century), when intellectuals were promoted and supported by the Grand Vizier Ibrahim Paşa. Supported by his patronage, Esad Efendi translated into Arabic parts of Aristotle's logic and a Greek commentary on the *Physics*; he occasionally intervenes in his translation, for instance, by proposing Turkish equivalents of Arabic technical terms. Interestingly, he also draws on Averroes' commentary on the *Physics*. While this is an exception to the general rule that Averroes' commentaries were not much known in the later Islamic world, it is an exception that proves the rule: Esad Efendi is obliged to make use of a Latin version, since he cannot get hold of the Arabic original.

As the Ottomans experienced military setbacks and lost territory, intellectuals and leaders also looked to Europe for new ideas and organizational techniques that might help restore the Ottomans to their former position of dominance. Already in the eighteenth century organizational techniques from Prussia were borrowed for the Ottoman military. A much further-reaching reform movement was launched in the mid-nineteenth century: the *tanzimat*. The *tanzimat* introduced free-market economic policies and a thorough shake-up of the state bureaucracy and educational system, all inspired by models in Europe. The result was a fundamental reshaping of Ottoman political ideology.[9] A group of intellectuals known as the Young Ottomans argued that the *tanzimat* had not gone far enough. They pushed for a constitutional form of government, and put their faith in the power of nationalism rather than religion. The sultans had always drawn legitimacy from their status as defenders of Islam—never forgetting that the empire had begun thanks to conquests made by Turkish *ghāzīs*, or holy warriors. Now, though, the ideal of unity between state and religion, or in Ottoman Turkish, *din ü devlet*, was being replaced by an ideal of separation of the two spheres.

Things were taken still further by another generation of political activists: the Young Turks. For all their reforming zeal, the Young Ottomans had embraced the value of Islamic tradition. They had not challenged the status of the *ulema* or religious scholars, and had frequently sought support for their political ideas in the core texts of Islam, for instance, by citing reports about the Prophet to argue for constitutionalism. But by the late nineteenth century the more radical Young

Turks were embracing European materialism and scientism. One particularly interesting example was Abdullah Cevdet, who remarked that "religion is the science of the masses whereas science is the religion of the elite."[10] Like al-Fārābī in the time of medieval Islam, Cevdet believed that society should be led by those with rational understanding, and that the role of religion was to bring along the common people to an outlook compatible with the teachings of science. Similarly, the leading Young Turk intellectual Ziya Gökalp saw religion as serving a fundamentally social function, part of what he called "culture," as opposed to the rational achievements that qualify as "civilization."[11]

Cevdet, Gökalp, and the other Young Turks looked not to Aristotle for their conception of science, but to European philosophers of the nineteenth century. Gökalp was particularly influenced by the sociologist Émile Durkheim, while Cevdet took inspiration from the materialist Ludwig Büchner and the positivist Auguste Comte. Darwinism, both biological and social, also played a role in the new ideology of the Young Turks. All these ideas were taken over by Cevdet and placed alongside thinkers from ancient Greece and the Islamic tradition in a massive treatise called *Fünun ve Felsefe*, meaning *Sciences and Philosophy*. For Cevdet, the findings of modern science could be found implicitly in the Islamic revelation; when we read in the Koran of God's ways (*sunnat Allāh*), this is nothing but a reference to the laws of physics.[12] The critics of the young Turks could be forgiven for thinking that even such rationalist uses of revelation were mere lip-service paid to Islam. The philosophy of some Young Turks was aggressively materialist, loudly rejecting the notion of a soul distinct from the body, and more quietly thinking that even the existence of God was nothing but a convenient superstition.

Of course all of this did not go unchallenged, and some critics came from the ranks of the Young Turks' fellow reformers. A less radical stance, but one still friendly to science and European philosophy, was taken by men like İzmirli İsmail Hakkı.[13] Hakkı was a classic product of the new educational system brought in under the *tanzimat*. He did not want to dispense with religious tradition or see it as serving a purely social function, as Gökalp had suggested. Rather, he thought that modernity could be fused with tradition. He drew a parallel with the emergence of a new, philosophical brand of *kalām* in the works of Fakhr al-Dīn al-Rāzī. Back in the twelfth century, al-Rāzī had woven Avicenna into Islamic theology to make it more relevant for his time. So must the intellectuals of Hakkı's own time renew Islamic theology by drawing on the positivism of Comte. Hakkı was thus occupying a middle position between conservatives and radicals. One conservative remarked that it had already been a

mistake for the ʿAbbāsids to have Greek science translated in the first place, and that Ottoman scholars with European leanings like Hakkı were repeating that error. Yet Hakkı himself attacked the most radical of the Young Turks, accusing Cevdet of ignorance of Islam, and helping to pave the way for his trial on charges of blasphemy.

Another figure who encouraged Muslims to take lessons from the Europeans, and one of the most influential Muslim theologians of the early twentieth century, was Said Nursi.[14] Frequently jailed during his lifetime by the nascent Turkish government, his legacy lives on today in the shape of the Nūr ("Light") movement, which takes inspiration from his writings and especially the collection of treatises called the *Light Epistles* (*Risale-i Nur*). These fuse Sunni theology with ideas borrowed from the Sufi tradition. In a manner reminiscent of figures like Shāh Walī Allāh and ʿAbd al-Ghanī al-Nābulusī, Said Nursi insisted on the truth of Islam but believed that this was compatible with an irenic and pluralist attitude towards other religions. For him, all religions should unite in the struggle against irreligion (his pluralism did not extend to atheists). His views are put forth a remarkable sermon delivered in Damascus in 1911, practically on the eve of the world war that would put an end to the Ottoman empire. In the Damascus Sermon, Nursi predicted the final triumph of Islam over other belief systems precisely because of the influence of the European Enlightenment. Islam is fundamentally a rational religion, whereas other faith traditions are inextricably bound up with the slavishness of *taqlīd*. But to bring forward the new, pan-Islamic future, Muslims need to embrace political freedom and modern science. Progress would come not through violence—the futility of which Nursi experienced himself, fighting and being wounded in the First World War—but through love, shown both towards one's co-religionists and the members of other religions.

The influence of European ideas was not always so benign, as we can see from the case of one final late Ottoman figure, Ahmed Hilmi.[15] Hilmi can be grouped with the Young Turks: he criticized the *ulema* for their backward notions, embraced Darwinism, and insisted on the harmony between science and Islam. But Hilmi was drawn to Sufism as well, and rejected the crude materialism of thinkers like Cevdet. Hilmi also exemplifies a darker side of European influence. He drew on the racist theories then current in France to support the Turkish nationalism that he held in common with other Young Turks. Anti-feminist French authors served him well as he angrily denounced the freedoms that were being granted to women in the new society that the Young Ottomans and Young Turks had helped to build. Hilmi was not merely

imagining things: already in the late nineteenth century attitudes towards women were changing, not least among women themselves. It was increasingly possible for women writers to take part in political and religious debates, and take part they did.

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THE STRONGER SEX WOMEN SCHOLARS IN THE ISLAMIC WORLD

Which of the following has *not* been mentioned so far in this book: a giraffe, a silent-film star, or a woman philosopher? It's a trick question, actually, as I've mentioned all three. The giraffe was Hiawatha, the silent-film star Buster Keaton, and the woman philosopher was of course my non-existent sister. (If you think a non-existent person can't be a philosopher, all I can say is, try telling that to my sister's face.) And what, you might think, could be more appropriate: the only female thinker I've seen fit to mention in this lengthy book doesn't exist? Surely the oppressive arrangements of Islamic societies from medieval times down to today have excluded women from pursuing intellectual pursuits? In which case this would be a very short chapter. But it turns out that women have always been allowed to play a part in Islamic intellectual history, even if that part has undeniably been more limited than the one allowed to men. Some of the men we have discussed were even taught by women: ʿAbd al-Laṭīf al-Baghdādī (mentioned in Chapter 41) studied with a female religious scholar named Bint al-Ibārī,[1] and the greatest of the philosophical Sufis, Ibn ʿArabī, studied under a woman named Fāṭima of Cordoba.

Speaking of which, it's actually not true that women have gone entirely unnoticed so far. I did discuss Rābiʿa, a major early Sufi, who helped introduce the theme of passionate love for God into Islamic mysticism (Chapter 27). That's not a bad place to start with our topic, since women feature prominently in the history of religious asceticism and mysticism from early on in the Islamic world. Here we can detect a parallel to late antiquity, when "desert mothers" joined in the Christian ascetic movement.[2] In medieval Latin Christendom there were numerous women who wrote about their mystical visions of God, including Hildegard of Bingen, Mechthild of Magdeburg, and Catherine of Siena. (They

will play a prominent role in the next volume of this series.) In the Islamic tradition, Rābiʿa was the most famous such figure, quoted by many male Sufis and imitated by many female ones.[3] Rābiʿa exemplified rigorous asceticism, living a life of destitution. Unlike the late antique desert mothers who gave up wealth to live lives of pious self-denial, Rābiʿa came by her poverty the old-fashioned way, by actually being poor. In fact she was a freed slave. But many other Muslim women who contributed to Sufism were well-to-do. Some indeed contributed in the most literal sense, by sponsoring religious orders and retreats, while others gave up their lives of luxury for the rigors of asceticism.

In another respect, Rābiʿa was downright unusual: she remained steadfastly celibate. This corresponds to the expectations we might have from the Christian ascetic tradition, but most women honored as Sufi saints were married.[4] Even so, they were often seen as having an ambivalent relation towards their husbands and towards femininity itself. Within a century of Rābiʿa, who died at the end of the eighth century, we have the interesting case of Umm ʿAlī from Balkh.[5] Unlike Rābiʿa, Umm ʿAlī was from a wealthy background and was well educated in the Islamic sciences of her day. She not only married, but according to some stories aggressively pursued her husband-to-be and teased him for being unmanly in eluding her advances. As his wife, she annoyed him by unveiling herself while studying with a male Sufi teacher, something she justified on the grounds that the teacher was another, spiritual partner alongside her husband. In these stories, Umm ʿAlī departs from expectations about women in medieval Islamic society. In fact her teacher paid her the "compliment" that she was, in effect, a man wearing women's clothes. Similarly, Rābiʿa was praised as being no longer a woman, because of her intimate knowledge of God.[6]

Perhaps, then, women mystics were exceptions who proved the rule. Their asceticism and intense spirituality freed them from the constraints normally imposed on women in Islamic society, to the point that they could transcend their gender in the eyes of that society. Literary achievement was also open to women in the field of poetry. There were already female poets writing in Arabic in pre-Islamic times, and this tradition continued into the Umayyad and ʿAbbāsid eras. Medieval anthologies of poetry frequently included items by women, and we even hear of an enormous (now sadly lost) collection called *Accounts of Women Poets*.[7] Sometimes Sufism and poetry came together, as with Rābiʿa and, much later, ʿĀʾisha al-Bāʿūniyya. Born in Damascus in the Mamluk period, she was author of a manual of Sufi practice and many poems, often in praise of the Prophet.[8] There were also many female transmitters of ḥadīth, the traditions about the life of the Prophet Muḥammad. The earliest transmitters included the

wives of the Prophet, who are admired in Islam as exemplars for other women to emulate. Among them, the most important for the reporting of ḥadīth was Muḥammad's favorite wife, the original ʿĀʾisha. As we saw in Chapter 23, reports about the Prophet are a fundamental basis for the law as well as a guide for day-to-day life. To ensure the reliability of these reports, ḥadīth scholars traced each of them back through a chain of transmitters who each needed to be trustworthy, indeed beyond reproach. Well over one thousand of these reports have chains of transmission beginning with ʿĀʾisha.

These ḥadīth, along with stories about ʿĀʾisha herself, provide key sources concerning attitudes towards women in Islam. Once it was claimed to her that the Prophet deemed prayer to be interrupted if a woman, donkey, or dog should come between the believer and the direction of Mecca. ʿĀʾisha rejected the report on the basis of personal experience: the Prophet prayed when she herself was lying in front of him. And I can't resist mentioning another anecdote not relevant to our subject of women, in which she scoffed at the notion that, according to the Prophet, a believer could be damned to hell for mistreating a cat![9] Other reports transmitted by ʿĀʾisha show her high degree of learning, and especially her mastery of detailed legal issues. Given the example set by ʿĀʾisha, and to a lesser extent the Prophet's other wives, it is no surprise that many early transmitters of ḥadīth were women. This trend ceased following the earliest generations, probably because of the increasing specialization of those who gathered and authenticated traditions, often by traveling long distances to interview witnesses. All this required freedom of movement and financial independence, something not available to women. But in the late tenth century or so, once the corpus of ḥadīth was better established, women came back into the game. When we hear of men being taught by women, it is often because the women are experts in the Prophetic traditions and are passing them on to the next generation.

All of this means that, even in the medieval period, and certainly later on, many women (usually wealthy ones) could boast of a high degree of education and expertise in the Islamic sciences. Still, women's education was kept within certain bounds. We've seen often that educational institutions were central to intellectual developments in the Islamic world—something that is, of course, true in other cultures as well. So a major shift in opportunities for female intellectuals would come only in the later period we've been looking at the last few chapters. We just saw how reform movements in the late Ottoman empire, partly inspired by European philosophy, resulted in an overhaul of education and the emergence of new political ideas. After the 1908 revolution that gave rise to

the modern nation of Turkey, Mustafa Kemal (Atatürk) would stress the liberation of women as part of a new, secularist society. The seeds for this change were already laid in the Ottoman era. We've seen how the Young Turk movement of the late nineteenth century pushed for secularism and scientism. Part of that political program was an insistence that women should be educated, if only because they represented an untapped economic resource. As one Young Turk intellectual, Namık Kemal (not to be confused with Mustafa Kemal), put it: "the present idleness of women, who constitute more than half the human population, and their entire economic dependence disturb the balance of the general laws of cooperation and the welfare of mankind."[10]

The Young Turks made the case for their ideology in newly launched magazines and journals, and a parallel development saw the emergence of periodicals written for, and often by, women. The authors of pieces in magazines like the *Ladies' Own Gazette* were frequently the daughters of the bureaucrats who were running Ottoman society after the *tanzimat* reforms. They contributed literature, advice columns, and political essays, which sometimes reflected explicitly on the question of whether to imitate the model of European female intellectuals. An article published in 1895 by the novelist Fatma Aliye mentions the so-called "Bluestockings," women who pursued salon culture in Britain. Aliye affirms that their intellectual activities should be adopted by Muslim women, but their immodest behavior should not.[11] Like the men who set the agenda of the Young Turks, authors like Aliye knew that increased access to education would make all the difference. Others argued against educating girls, on the grounds that this would make them inappropriately masculine. The debate echoes one that had taken place a century earlier in England. Mary Wollstonecraft's pioneering work *Vindication of the Rights of Woman* was a contribution to that debate, and consists largely of an argument in favor of better education for girls.

In the past century such reforms have produced the sort of figure who had previously been as non-existent as my sister: politicized Muslim women intellectuals. We might assume that these would all be passionate liberals, railing against the patriarchal nature of Islamic culture. But that hasn't necessarily been the case. Take the Egyptian thinker ʿĀʾisha ʿAbd al-Raḥmān, who published under the pen-name Bint al-Shāṭiʾ, meaning "Daughter of the Shore." She was born in 1913 and died in 1998. She grew up in rural Egypt, the daughter of an illiterate but supportive mother and a father who was a conservative religious scholar. From inauspicious beginnings she managed to attend Cairo University and to have an academic career beginning at the time of the Second World War.

She's apparently the first woman to have produced extensive exegesis of the Koran, but she did not cite revelation to promote women's liberation. Rather, to quote a study of her by Ruth Roded, when commenting on the Koran she chose "difficult, theological Quranic verses with no social implications whatsoever," which "seems to be the strategy of an ambitious woman carefully invading a traditional male domain."[12] Yet Bint al-Shāṭi' was certainly not an apolitical thinker. Befitting her background, she argued for improving conditions for peasants in the countryside, and wrote fiction depicting the plight of women in rural society.

She did also write a scholarly treatise devoted to the subject of women. As mentioned above, Muḥammad's wives have always played a central role in Islamic conceptions of femininity, and they provide both the theme and the title of her treatise *The Wives of the Prophet*. It is a work rooted in traditional scholarship, with information drawn from the many reports about the Prophet and his Companions. Yet Bint al-Shāṭi' also depicts the inner mental life of her protagonists, in a sense reimagining the story of Muḥammad's life from the point of view of his wives. Still, it's not exactly a statement of feminism. Bint al-Shāṭi' associates femininity with "weakness," and repeatedly describes the petty bickering and jealousy among Muḥammad's wives. Roded goes so far as to say that, in *The Wives of the Prophet*, Bint al-Shāṭi' is trading in "almost misogynist stereotypes."[13]

But there have been powerfully liberal voices too among women intellectuals. In the past several decades one such voice has been that of Fatema Mernissi. Born in Fez in 1940, Mernissi has held a professorship of sociology in Morocco and written several pioneering books considering the place of women in Islamic society. Her most famous work is *Beyond the Veil*, published in 1973.[14] In this book, Mernissi draws a contrast between the Western oppression of women and the oppression distinctive of Islamic society. Whereas Western thought has always insisted on the biological inferiority of females, Islamic society has instead feared women precisely because they are the *stronger* sex (19). Here Mernissi contrasts Freudian ideas about women to sentiments she finds in a medieval author of perennial, if not eternal, relevance: al-Ghazālī (28). Whereas Sigmund Freud saw women as essentially passive, al-Ghazālī depicted them as active and sexually demanding, needing to be kept satisfied by their husbands to contain their potential for causing familial strife (*fitna*). Women are also possessed of a far greater degree of self-control than men. Hence the practice of veiling women. This is not done to protect them or hide them away. To the contrary, women are veiled in order to protect the weaker sex, namely

men, who tend to lack control over their passions (31).

Mernissi is on to something here. As we've seen many times, the Islamic intellectual tradition echoed Platonist ethics by describing virtue as the rule of reason over desire. Mernissi sees al-Ghazālī, and by extension the wider Islamic tradition, as associating the feminine with a provocation to untamed desire. Men must restrain and discipline their desires for women, and hence exert control and command over the women themselves, rather than showing them love and respect (110). But it is not just intellectuals like al-Ghazālī who are to blame. For Mernissi, the history of Muslim society is in large measure the history of an attempt to defuse women's power. She contrasts the status of women after the advent of Islam to the situation in the so-called *jahiliyya*, or "time of ignorance" before Muḥammad received his prophetic message. In pre-Islamic society social structures were tribal, and women had a relatively high degree of self-determination (166). This was abolished early on in the history of Islam (65–6), through such means as rules concerning divorce, veiling, and restricting women to certain spaces. Only in recent times, as the forces of modernity have broken down traditional Islamic social structures, has it become possible for women to wield power again, by invading the previously male enclaves of the workplace, politics, and the public sphere (82–3, 94).

Yet Mernissi thinks that the long-standing oppression of women represents a distortion of the Islamic revelation. She sees the Prophet's message as a fundamentally democratic and egalitarian one. Mernissi argues for this in another book, called *Women and Islam*.[15] She makes her case using the techniques of the Islamic religious sciences, especially ḥ*adīth* scholarship. Supposedly, the Prophet once remarked that "those who entrust their affairs to a woman will never know prosperity" (3). This report has been used down the ages to justify the exclusion of women from political and economic leadership. As Mernissi recounts at the beginning of the book, it was even once quoted at her in her local grocery store. The report is deemed sound in the classical collections of ḥ*adīth*, but Mernissi decides to explore the provenance of the saying more thoroughly. She discovers that it was originally reported—many years after it was supposedly uttered—by a man named Abū Bakra. She argues that his reliability is rather questionable, and produces evidence that he was even convicted of bearing false testimony (53). For Mernissi, the conclusion is clear. This is obviously an unsound ḥ*adīth*, and only the sexist motives of the classical ḥ*adīth* scholars could have blinded them to this fact.

Mernissi takes the same text-critical approach when she considers the practice of veiling women (86–7). The institution of the veil can be traced back

to a verse of the Koran (33:53) which instructs Muslims to request things of the Prophet's wives from behind a curtain, in Arabic, ḥ*ijāb*. As Mernissi emphasizes, many verses of the Koran were revealed in response to specific events, and this is one of them. The occasion was the Prophet's marriage to his beautiful cousin Zaynab; the verses were revealed when some guests overstayed their welcome, preventing the couple from enjoying their wedding night. For Mernissi, this context indicates that the so called "verse of the ḥ*ijāb*" was revealed to teach believers a lesson in tactfulness (92). It has, however, been abused to divide space itself into two realms—the private, domestic sphere allowed to women, and the public sphere of political and economic action reserved for men. The word ḥ*ijāb* can also mean a veil, and as we've already seen, Mernissi sees the practice of veiling as an attempt by men to defend themselves from the attractions of women. But on her reading, there is no basis for this practice in the Koran.

Mernissi could draw on some support here from an unlikely source: the eleventh-century Andalusian jurist Ibn Ḥazm. As we saw in Chapter 23, he followed the ẓ*āhirī* school of Islamic law, which accepted a very restricted range of sources in reaching legal decisions. Just as he rejected the death penalty for homosexuality, having found no explicit support for it in the Koran or ḥ*adīth*, so he dismissed the religious requirement for veiling as having no basis in the authoritative texts of Islam.[16] It is sometimes claimed that Andalusian society was unusual in the medieval period for allowing a greater degree of liberty and self-expression to women than was possible elsewhere in the Islamic world. This is a matter of debate, and even more debatable is the possibility that Ibn Ḥazm had anything remotely approximating to feminist leanings. He does tell us himself that much of his early education, for instance in Koran recitation, was given to him by women, which confirms again that in medieval Islam women played an important teaching role.[17] Still, Ibn Ḥazm's woman-friendly rulings were not inspired by his experiences learning at their feet, but were a consequence of his restrictive legal method.

Ironically, though, Fatema Mernissi does have something in common with Ibn Ḥazm and (even more ironically) with the salafist jurist Ibn Taymiyya. Like them, she urges a return to the original teachings of Islam, and wants her fellow Muslims to divest themselves of distortions introduced in later Islamic history. For Mernissi, the distortions began almost immediately, in part thanks to the first caliph, ʿUmar (142). Though she admits that he had many admirable features, she also produces evidence that ʿUmar was very hostile towards women. He was only one of a long series of rulers and scholars whose misogyny led them to

twist the revelation towards oppressive ends. Islam's true teaching concerning women, for Mernissi, is represented not by unsound anti-feminist ḥadīth or the wearing of veils, but by a verse revealed to Muḥammad after his wife Umm Salama asked why the Koran only ever spoke about men (118). In response, Muḥammad received a revelation that seems to set women and men on a par: God shows forgiveness and gives reward to women and men who have surrendered to God, women and men who believe, women and men who show charity (Koran 33:35). Mernissi suggests that this verse was sent down in answer to a wider demand from the women of the community for protection within the laws of the new religion, with Umm Salama acting as their spokesperson. Their demand was providentially answered, not only by that verse but by the institution of laws protecting the women's right of inheritance.

Clearly, the status of women in Islam is inextricably bound up with interpretation of the core Islamic texts: the Koran itself and reports concerning the sayings and deeds of the Prophet and his Companions, including his wives. Mernissi puts her faith in what she calls "memory," a recalling of the original intention of the Islamic revelation. She is convinced that the correct interpretation will give women rightful place as equal partners, within the family and in religion.[18] It's not my place to say what is and is not the true interpretation of these texts. But in this book series I do plan to continue giving female thinkers their rightful place, by highlighting the role that they have played in the history of philosophy.

61

ALL FOR ONE AND ONE FOR ALL MUḤAMMAD ʿABDUH AND MUḤAMMAD IQBĀL

I read somewhere, and recently confirmed with forty-five seconds or so of intensive research on the internet, that the most common given name in the world is Muḥammad. Apparently the most common surname is Chang, which to my mind raises the question of why we don't run into more people named Muḥammad Chang. The reason for the popularity of the name Muḥammad, at least, is clear enough: many Muslim parents name their boys after the Prophet. Statistically speaking, then, it's no surprise that two of the greatest Muslim thinkers of the early twentieth century were both named Muḥammad: Muḥammad ʿAbduh and Muḥammad Iqbāl. They came from nearly opposite ends of the Islamic world, ʿAbduh growing up in Egypt and Iqbāl in India. But they had more in common than just a name. Both were influenced by the traditions of philosophy and Sufism in the Islamic world, but looked also to more recent European thinkers. Both advocated a reformist view of Islam, rejecting fatalist and determinist elements in the tradition to make room for individual and social improvement. And both were politically active, involved in debates about how Islamic society could be reformed in the face of colonial domination by external powers.

Colonialism was, of course, the bitter water in which Muslim intellectuals of this period were forced to swim. Foreign governments steered events in both India and the failing Ottoman empire, which was at the time called "the sick man of Europe." Many Muslim intellectuals thought colonialism was the disease, not the cure. Muḥammad ʿAbduh was one of them. He was born in rural Egypt in 1849, at which time the Ottomans had lost control over Egypt, forced to recognize the governorship of their rebel general whose name was (wait for it

…) Muḥammad ʿAlī. But as ʿAbduh was growing up the khedives (governors) of Egypt were under immense pressure from the colonial powers, especially the British. ʿAbduh would later express resentment at this state of affairs, remarking, "now we know that there are worse evils than despotism and worse enemies than the Turks."[1] Here he was agreeing with his early mentor and ally, another of the major Muslim thinkers of the time, Jamāl al-Dīn al-Afghānī.

Al-Afghānī arrived to teach at al-Azhar University in Cairo passing himself off as a Sunni Muslim from Afghanistan. He had actually been born in Shiite Persia, where he had the opportunity to study classic works of philosophy not so commonly read in the Ottoman realms. He was thus able to instruct the young Muḥammad ʿAbduh in texts like Avicenna's *Pointers and Reminders*. Before long ʿAbduh would be publishing a set of glosses on Dawānī's commentary on a theological treatise by the Mongol-era thinker al-Ījī.[2] It's a remarkable example of the continuity of Islamic intellectual history, as Avicennan *kalām* continues to be relevant for intellectuals in late nineteenth-century Egypt. Though al-Afghānī and ʿAbduh took an interest in the past, they were no conservatives, but reformists and modernizers who insisted that the Islamic tradition already contained the seeds of worthwhile ideas that had only later been discovered in Christendom. Darwinian evolution? It's anticipated in a verse of the Koran.[3] Democracy? Its virtues are enshrined in Islamic teaching, through the practice of *shūrā*, or consultation among the community.[4]

ʿAbduh left Egypt when the British invaded in 1882, joining al-Afghānī in Paris. From here the two published a political journal, the standard forum for political dissent in this final phase of the Ottoman empire. (I have to mention my favorite title among the Egyptian periodicals: *Mr Sunglasses*, after the nickname of the Jewish reforming intellectual who founded it.) But ʿAbduh would eventually break with al-Afghānī. This may be because he came to advocate a degree of cooperation with the British in Egypt, moving away from his teacher's implacable opposition to colonialist power. He returned to Egypt and to al-Azhar University, where he taught for a number of years before being appointed *mufti*, or chief judge, of all Egypt—which, to be honest, shows more faith in philosophy professors than I would have. ʿAbduh gives us yet another example of an intellectual who advocated a return to (what he saw as) the true, original teaching of Islam. He was convinced that weakness of Islamic societies in the face of colonial power was the consequence of a divergence from this teaching.[5] The traditional scholars among the *ulema*, trapped within their sclerotic ways of thinking by *taqlīd*, were perpetuating an erroneous approach to Islam. For ʿAbduh, nothing represented this error more than a belief in fatalism or

determinism, that is, the view that God has predestined all that will happen. Such a belief naturally lends itself to passivity and quietism, an attitude of waiting to see what God has ordained. But what is needed to improve society, and what is demanded by Islam, is individual action.[6] For ʿAbduh, political reform and religious commitment went hand in hand.

ʿAbduh was, of course, not the only one agitating for reform. We know already that the Young Ottomans and Young Turks, taking inspiration from European scientific and political ideas, challenged long-entrenched institutions and ideologies. There were parallel developments in India.[7] Leading the charge for the modernists was Sayyid Aḥmad Khān, who died just at the end of the century in 1898. He founded the Aligarh University as a means of bringing Westernizing education into India, to replace what he saw as the outmoded *dars-i niẓāmī* that had set the curriculum for religious scholars over the last few centuries. But, like his reform-minded Ottoman contemporaries, Khān was no indiscriminate devotee of all European ideas. He pointed out that scholars had long ago responded to the Greek–Arabic translation by taking the best of the Hellenic heritage and discarding what was erroneous. He urged the scholars of his day to do likewise, by responding to recent scientific discoveries. He was confident that they would find nothing but agreement with Islam, so long as the religious sources were interpreted properly. For Khān saw Islam as what he called a "natural religion," in perfect harmony with whatever science could discover.

On the political front, meanwhile, reformers in India were proclaiming that democratic ideals could be discovered in the Koran and ḥ*adīth*. Such ideals were needed to stage a "renewal" of Islam in the subcontinent, to reverse what these modernizers saw as the backwardness of their co-religionists. A telling example is Khān's view on polygamy. Although Islam in theory allows a man to marry more than one woman, it also requires the husband to treat all the wives equally. Clearly that is impossible in practice, said Khān, so Islam effectively prohibits polygamy. (His ingenious interpretation was taken over by ʿAbduh in Egypt.) Meanwhile, more traditionally minded scholars were insisting on the value of the Islamic sciences as they had been practiced for centuries. A member of the Faranghī Maḥāll school tradition, which was still alive in the early twentieth century, followed Khān's example by founding a new institution for the furtherance of those sciences in 1919.[8]

A key point in the political debates of the time was the relationship between Islam and the state. Could Muslims living under colonial rule still be said to live within the sphere of the Islamic faith (*dār al-islām*)? Or may its believers

recognize only political leaders who claim the mantle of religious authority? In 1922 a *fatwā* issued in Delhi affirmed the need for a caliph who wields both secular and religious authority.[9] Yet some insisted that religion and politics can be, and perhaps even should be, separate. A people need not be united by religious allegiance; they can gather together as an independent nation. In the Islamic world, this secularist version of nationalist ideology has had its most famous expression in the rise of Turkey following the demise of the Ottoman empire. But nationalism had supporters among Muslims in India as well, whose ideology would have a concrete focus after the partition of India and formation of Pakistan, in 1947. Which brings us to our second Muḥammad.

Muḥammad Iqbāl, born in the Punjab in the year 1877, has been seen as a forerunner of Pakistani nationalism, and it is true that early on he was attracted to the nation-state ideology. But in his later years he turned against the whole idea of a state defined independently of religion. In fact, he remarked that nationalism was the "greatest threat to Islam."[10] That might sound a bit alarmist, but bear in mind the Mongols were no longer around. Iqbāl believed that nationalism, like the Mongols, had the power to break empires. He saw the nation-state as a distinctively Western development, in which nationalism replaces religion as the bond between people, something he connected to the dissolution of the Ottoman empire. Yet Iqbāl was no knee-jerk opponent of Western ideas. He spent years studying at several European universities, before returning to India to settle in Lahore, where he became a leading poet in the Urdu language. Rejecting the idea of "art for art's sake," Iqbāl determined that his poetry would have political significance. He called his verses "a song of war."[11]

During his time in Europe Iqbāl absorbed the ideas of Western thinkers, and he drew on them for the rest of his career. A glance through a set of English-language lectures he gave in several Indian cities, published in 1934 under the title *The Reconstruction of Religious Thought in Islam*,[12] gives one a sense of his wide and varied reading. At one point he quotes, on a single page, the Pre-Socratic ancient philosopher Zeno of Elea, the Muslim thinkers al-Ashʿarī and Ibn Ḥazm, the Western philosophers Bergson and Russell, and the mathematician Cantor (34). Iqbāl was also influenced by Friedrich Nietzsche. In this book we've seen many cases where thinkers of the Islamic world drew on foreign ideas. But perhaps none is more surprising than the spectacle of an Indian intellectual using Nietzsche to vindicate the Islamic religion. Nietzsche is, after all, known for his critique of religious values. He argued that Christianity consists in a self-abnegating embrace of weakness over strength, of the

otherworldly over this world. Iqbāl agreed with this assessment, and then added that just the reverse is true of Islam. For him, the Koran is the revelatory text that celebrates this world. It concentrates on the particular and concrete, demanding its readers to marvel at the physical world as an expression of God's might (13). In this respect the Islamic revelation is fundamentally opposed to the abstract, theorizing tendencies of Greek philosophy. So, for Iqbāl, it was a crass error to use Hellenic ideas to expound the Koran, as did the early philosophers and theologians in the Islamic world (122–4).

Islam's affinity for this world also accounts for the great achievements in natural science made by Muslims. These achievements, Iqbāl hastens to add, lay behind the rise of modern science in Europe (13); he rightly points out that early pioneers of "experiment" like Roger Bacon drew on Muslim predecessors like Ibn al-Haytham (123). This aspect of Iqbāl's thought makes him seem like a hard-core rationalist, along the lines of his fellow Indian intellectual Aḥmad Khān, or Abdullah Cevdet and Ziya Gökalp of the Young Turks. But for Iqbāl, as for so many Muslim thinkers before him, there is no tension between extolling rational science and cherishing the prospect of super-rational intuition, as described in the Sufi tradition. There are, he notes, only three ways to reach knowledge: experience of nature, the lessons of history, and intuitive union with reality (91). Scientists like Ibn al-Haytham learned from nature, and Ibn Khaldūn learned from history. The Sufis alone have achieved intuitive knowledge. But, again alluding to Western ideas, Iqbāl rejects a strict opposition made by the American philosopher William James between mystical consciousness and normal, everyday consciousness (27). The two are, in fact, continuous. The difference is simply that mystical intuition sees reality all at once, whereas rational inquiry takes things bit by bit. Iqbāl thus gives his approval not to James, but to his fellow poet Rūmī, who spoke of grasping the whole unity of the divine with the "heart," rather than restricting oneself to the use of reason (15).

In accordance with these Sufi-inspired ideas, Iqbāl argues that the function of religion is not to lay down a rigid, unchanging law which all its adherents must forever obey. Rather, Islam has the flexibility to adapt itself to the needs of different peoples, places, and times. Here Iqbāl refers to the earlier Indian Sufi thinker Shāh Walī Allāh (92, 115, 163). Whatever the circumstances, Islam is meant to work through political institutions. The original Muḥammad was a lawgiver and leader, not just a prophet, a sign that Islam is politically engaged— unlike Christianity, which Iqbāl sees as focused solely on the salvation of individual believers. Islam guides its adherents towards a unified grasp of

reality, and towards harmony with one another. Here lies the fundamental error of the nationalist project. The nation-state is built around ethnic or geographical identity rather than religious devotion. By separating state from spirit, this political ideal creates what Iqbāl calls "a dualism which does not exist in Islam" (148). But remember, Iqbāl is a Nietzschean: when he speaks of achieving union through intuitive understanding, he does not mean an escape from this world. The ascetic traditions within Sufism are something he dismisses as corruptions, the result of influence from world-denying traditions such as Neoplatonism or Buddhism.[13]

In place of the "false Sufism" of unity with an otherworldly divinity, Iqbāl wants to achieve unity *within* this world. This is his understanding of *tawḥīd*, the central Islamic tenet of God's oneness. Islam "demands loyalty to God, not to thrones. And since God is the ultimate spiritual basis of all life, loyalty to God virtually amounts to man's loyalty to his own ideal nature" (140). Here we have a link between Iqbāl's political thought, his Sufi-inflected ideas about knowledge, and his admiration of science. If God is in the world, then we know Him by knowing the world in its wholeness and its unity, and by reflecting that wholeness and unity in our political affairs. The ultimate aim for Islam is to achieve global solidarity, in a kind of "league of nations." Geographical and racial divisions would be acknowledged merely "for facility of reference," rather than grounding the identity of the community as in the Western nation-state (151–2).

Easier said than done, of course. Iqbāl was painfully aware that unity was hard to come by among the Muslims of India, never mind across the globe. So when it came to concrete political proposals, he was practical enough to suggest taking intermediate steps towards the ultimate goal of Islamic unity. He urged individual Muslim countries to strive for internal coherence and strength, and within India, he thought it a good idea to assign different regions to different communities. Just as Iqbāl's epistemology makes a place for both rational science, which investigates the world one part at a time, and Sufi intuition, which sees the whole in one glance, so his political theory recognizes the need for strong parts within the whole. The unified parts could be nations, and within those nations, also individuals. The individual self must develop towards fulfillment, but can only do so within the context of a well-run society. With his "all for one and one for all" theories, Iqbāl adopted a nuanced, moderate position. He rejected the hard-core rationalism of Aḥmad Khān and the secular nation-state ideal of the Young Turks, yet was equally critical of the conservative attitudes of the Indian *ulema*. He would not have shared the ideals

of the later Indian scholar Abū l-Aʿlā Mawdūdī, who wanted to see the founding of explicitly Islamic states defined by their adherence to the religious law.[14] Iqbāl did influence Mawdūdī with his idea that Islam can provide a political ideology, but unlike him, insisted on the flexibility and adaptation of Islam to historical change and the character of each given community.

So there you have it: ʿAbduh and Iqbāl, two of the leading thinkers of the late nineteenth and early twentieth centuries, and both named Muḥammad. While we're at it, I may as well mention a more recent Muḥammad: the Algerian Mohammed Arkoun, who died in 2010. Arkoun was a historian of philosophy in the Islamic world, who devoted particular attention to the Neoplatonist, ethical writer, and historian Miskawayh. Arkoun took him to be a central figure in a "humanist" movement that took place in the Islamic world in the tenth and eleventh centuries—roughly the developments covered in Chapter 13.[15] Arkoun was also an original philosopher in his own right, with an approach shaped by French philosophical culture. Being of Berber background, and having a foot in both Algerian and French culture, Arkoun was intimately familiar with the experience of being an outsider.[16] This, along with his study of the very different world-view he found in medieval authors like Miskawayh, led him to reflect on the nature of religious and social identity. Arkoun thought the answer lay in what he called the *imaginaire*: the images and concepts through which a group perceives reality. The *imaginaire* defines the boundaries of what is "thinkable" for the adherents of a religion or members of a society. By remaining within these boundaries, Muslims adhere to the orthodoxy that defines them as a group. That orthodoxy is not determined by the Koran. Rather, the revelation is in itself open-ended, subject to an indefinite range of interpretations. The limits imposed by orthodoxy close down alternative readings of the Koran, establishing a concrete set of laws, practices, and even a specific form of reasoning. Thus Arkoun distinguishes between the Koranic revelation and the Islamic reality that is made out of it.

Living in multicultural, colonialist, and post-colonialist societies, all three Muḥammads, ʿAbduh, Iqbāl, and Arkoun, struggled with this issue of religious identity. In their different ways, they all drew a distinction between the revelatory message brought by the Prophet Muḥammad, and what had been made out of that revelation in subsequent centuries. This has been true of other recent thinkers too. From the conservatives who have adopted Ibn Taymiyya's Salafism, to feminists like Fatema Mernissi, many modern Muslim intellectuals have questioned tradition, paradoxically proposing to "renew" Islam by going back to its ultimate origins. Yet the thinkers of earlier Islamic history have

remained relevant. ʿAbduh was steeped in the traditions of Avicennizing *kalām*, Iqbāl endorsed the universalist vision of Shāh Wālī Allāh, and Arkoun took inspiration from Miskawayh's humanism. Other thinkers have turned to Averroes, seeing him as the arch-rationalist of Islamic history. (A good example would be yet another Muḥammad, the Moroccan thinker al-Jābirī, who like Arkoun died in 2010.) Already in 1902, Iqbāl engaged in a debate with one of his contemporaries, who lamented the indifference with which Muslims had greeted Averroes.[17] But among all the historical figures we've met, one in particular has given rise to a vibrant, still-living philosophical tradition. And you'll never guess what his given name was.

62

IRAN SO FAR THE HEIRS OF MULLĀ ṢADRĀ

Driving a car while under the influence is absolutely unacceptable, but doing philosophy while under the influence is all but unavoidable. Just as practically all art and literature responds to a previous works in the same fields, so practically all philosophers are in close dialogue with their predecessors. We've now surveyed almost the entire history of philosophy in the Islamic world. So we would now be in a position to ask, who has been the most influential figure of all from this tradition? Taking the long historical view, there is only one possible answer: Avicenna. His impact in ethics and political philosophy was limited, but in every other area his influence was immense and permanent. We could take a different tack, though, and ask which thinker has provided the most inspiration for Islamic philosophy and in the recent past. Here the answer is not so clear, but a strong case could be made for Muḥammad ibn Ibrāhīm al-Shīrāzī, better known to us as Mullā Ṣadrā.

In modern-day Iran religious scholars still study the works of Ṣadrā, not just as a historical figure but as a philosopher whose teachings remain relevant to their social and religious concerns. In this final chapter I'll be concentrating on two of the foremost exponents of his thought in the last two centuries: Sabzawārī and Ṭabāṭabā'ī. They will bring us up to the time of the 1979 Islamic revolution. Of course, when that revolution deposed the last of the Iranian shahs, it was not the Safavid dynasty that was being ended. They had already lost their hegemony in Iran in 1722, ushering in a period of fractured tribal rule for most of the eighteenth century. Finally one tribe, the Qajars, rose to dominance and held sway in Iran from 1796 to 1925. The Qajars' own rhetoric compared them to the great Persian empires of the past, the Achaemenids and Sasanians. But the reality was rather different. Throughout the nineteenth century they struggled to fend off pressure from the Russians and British. As in the Ottoman empire,

European-inspired reforms were brought in, but this didn't prevent Iran from being effectively colonialized. A new dynasty began in when Riza Khan, a Russian-trained officer, seized power in a 1921 coup. He would be installed as the first Pahlavi shah in 1926, and the succeeding line of monarchs would end only thanks to the 1979 revolution.[1]

If you read around in histories of Islamic philosophy you'll probably get the impression that Mullā Ṣadrā was the central thinker for Iranians throughout all these upheavals and changes of power. But in fact it was really only in the nineteenth century, under the Qajars, that he became the central figure. A good deal of the credit for this can go to Sabzawārī. Born on the cusp of the nineteenth century (in 1797 or 1798), his name refers to his home city of Sabzawār, which lies in the north-eastern corner of Iran. He was scathing in his assessment of the state of philosophy in his day, writing that "it was woven by spiders of forgetfulness."[2] Yet it was still possible for him to study the classic works of Sufism and logic, and above all the writings of Ṣadrā, with masters in Mashhad and in Iṣfahān, still a center of philosophical activity as it had been in the glory days of the Safavids. On the other hand, in Iṣfahān he also encountered Aḥmad Aḥsā'ī, known for his highly critical attitude towards Ṣadrā.

Eventually Sabzawārī found his way to the city of Mashhad, where he taught the religious sciences. Like so many of the Muslim (and for that matter Jewish) thinkers we've looked at, he was a jurist as well as a philosopher. He maintained the ascetic lifestyle we've come to expect from Sufi-inclined thinkers, though he did allow himself the luxury of a pair of eyeglasses. A biographical notice on him makes a point of mentioning these, adding that the spectacles make a nice metaphor for his advanced spiritual insight.[3] An apt symbol indeed, since he was a follower of the Illuminationist tradition, or at least the version of Illuminationism he found in Mullā Ṣadrā. He wrote a large number of works, in both Arabic and Persian, some dedicated to Qajar royalty. Following the tendency of later Muslim thinkers to present their ideas in the form of glosses and commentaries, Sabzawārī produced exegetical works on several of Ṣadrā's writings and on the poetry of Rūmī. He also wrote self-commentaries on his own poetry, composing verses on topics in philosophy and logic and then writing his own explanatory treatises as a guide to the poems. To be extra sure that his ideas would be understood, Sabzawārī later added a further layer of explanatory glosses on the commentary. It was through this textbook that "the thought of Mullā Ṣadrā was simplified, vernacularized, and disseminated."[4] Its popularity is shown by the fact that it has itself become the object of further commentaries, more than forty of them in the past century-and-a-half.

Sabzawārī's commentary on his philosophical poem has been translated into English.[5] It doesn't make for easy reading. This may be a carefully thought out textbook, but it's full of technical language and subtle metaphysical argument. It does help if you know something about Ṣadrā and the earlier tradition of debates over Avicenna's metaphysics. Which, fortunately, we do. Sabzawārī starts by sounding a familiar note, when he argues for the "primacy of existence" (2). This position, also the one adopted by the mature Ṣadrā, insists that existence is not a mere mental construct but a concrete reality out in the world. Again following Ṣadrā, Sabzawārī holds that there is in fact *nothing* other than existence. Its reality is in fact obvious, a point already made by Avicenna. The hard question, therefore, is not whether there is existence, but how exactly we should understand it.

Sabzawārī offers a number of arguments against those who, like Ṣadrā's teacher Mīr Dāmād, instead hold that essences are real and that existence is all in the mind. Here's one of the more convincing. Causes are obviously prior to their effects. But if all we have to work with is essences, then this priority remains inexplicable. Imagine, for instance, that one fire starts another fire. Clearly every fire, just insofar as it is a fire, is equal in essence to every other fire, with none having priority to any other. So the fire that plays the role of cause must have something else that is giving it priority over the one it ignites. This will be existence, since the cause is the source of the existence for the effect—that is what makes it prior. (You'd think that Mīr Dāmād would have seen this point, given that one of his most important works was titled *Blazing Embers*.) Of course, the cause that most interests Sabzawārī is God, and here his burning ambition is to keep the flame of Ṣadrā's philosophical theology alight. To this end he explains and defends the core Ṣadrian teaching of modulation or analogy (*tashkīk*) in being, which holds that all things have existence in varying degrees or intensities. Not only does Sabzawārī think this conclusion is true, he contends that it is unavoidable. Again, his argument is ingenious. Start with the fact that, as Avicenna already observed, God does not just have a particularly impressive essence that receives existence. God does not *receive* existence at all, for He is a necessary being, and has no cause. For this reason, we must say that God, or God's essence, just *is* His existence (5).

But if this is right, then, as al-Ṭūsī already observed, what we mean by "existence" in God's case cannot be the same as what it means in the case of something like you, me, a giraffe or the Eiffel Tower. All such things have existence as additional to their essences. Well, actually Sabzawārī can't quite say that, since like Ṣadrā, he doesn't think that essences are real. Only existence is

real. What he *can* say is that created things have causes and are thus dependent in their existence. In this respect they are fundamentally unlike God. So if we deny that existence is modulated, in other words, accept that existence is always the same, we are faced with a stark choice (3). Either genuine existence belongs to God, or to created things. It can't belong to both, since the two cases are so different. But if genuine existence belongs to created things, then God is beyond the bounds of existence completely. That doesn't look like a good move, especially if we want to keep saying that God is the necessary existent. For Sabzawārī, it would in fact imply that God is completely unknowable to us, and he doesn't want to admit that. But neither does it look plausible to admit that created things don't exist. Instead, we should drop the assumption that existence always means existence. Rather, existence varies from case to case. Both God and the Eiffel Tower exist, but with vastly different intensities of existence (also, with vastly different views of Paris—God's is even better).

As I say, Sabzawārī follows Ṣadrā in believing that essences are only in the mind, not in reality. It may seem to us as though the world is divided up nicely into various kinds of things, but in fact there is only the scale of perfection in existence, decreasing gradually as it moves away from God (11). Sabzawārī draws an important conclusion from this. Avicenna and earlier Aristotelian philosophers had assumed that the world of the mind corresponds quite closely to the concrete world out there. But now that we are thinking along Ṣadrian lines, we see that this just isn't true. Our minds impose rigid distinctions where none really exist. In one of the most striking illustrations of the gulf between mental and concrete existence we've seen so far, Sabzawārī points out that impossible things, like a second God, can exist in the mind even though they don't exist in reality (15). In fact, even non-existence has mental existence, because we can think about it! This sort of point could easily lead into skepticism, as it threatened to do for contemporary Muslim philosophers working in India (see Chapter 56).

In the twentieth century, it was Ṣadrā himself who would be greeted with skepticism in some quarters. A group of Iranian theologians known as the *maktab-i tafkīk* have been bitterly opposed to his influence, and to the practice of philosophy more generally.[6] They urged their fellow Shiites to turn not to Ṣadrā and other philosophers but to revelation and the teachings of the Imams. Paired with the innate awareness of God implanted into every human soul, it is religious sources that offer the only way towards knowledge. With this hostile stance towards philosophy, the members of the *maktab-i tafkīk* were carrying on a tradition of opposition to Ṣadrā that extends back to the Safavid period (and as

mentioned earlier, Sabzawārī's contemporary Aḥmad Aḥsā'ī was similarly critical). This most recent manifestation of anti-philosophical sentiment even led to attempts to ban one of the foremost adherents of Ṣadrā's thought from teaching.

The adherent in question was, however, not to be budged: he insisted that his students had come to him "with a suitcase full of doubts and problems,"[7] so that he had a duty to share his learning with these troubled young men lest they fall into skepticism and materialism. His name was Sayyid Muḥammad Ḥusayn Ṭabāṭabā'ī, usually honored with the epithet ʿAllāma, meaning "the knowledgable" or "the erudite." ʿAllāma Ṭabāṭabā'ī was born in 1904, into a family with long-standing scholarly credentials.[8] He was orphaned at an early age and brought up by one of those scholarly relatives, an uncle who saw to it that Ṭabāṭabā'ī was properly trained. He studied law and philosophy in Najaf. The philosophical works he read here give us another indication of the remarkable staying power of authors from the formative period. Of course Ṭabāṭabā'ī was schooled in Avicenna, but he also studied Miskawayh for ethics. In the Ṣadrean tradition he read works by Ṣadrā himself and the explanatory guidance of Sabzawārī.

After a stay in the city of Tabriz was cut short by a Soviet invasion of northern Iran, Ṭabāṭabā'ī came to Qum in 1946. This is where he would spend the rest of his career, teaching the works of Ṣadrā and other philosophers, and producing a staggeringly huge commentary on the Koran. This took Ṭabāṭabā'ī about twenty years to write, and is distinguished by its insistence on using the Koran to interpret itself, by understanding each passage in light of other passages rather than extraneous material. At this stage, I probably don't still have to emphasize that there have been pious Muslims on both sides of the debate as to the value of philosophy. But I may as well emphasize it one last time. Ṭabāṭabā'ī, like Sabzawārī before him, led an ascetic life, venerated the Shiite Imams, and was one of the great modern-day commentators on the Koran. None of this gave him the slightest hesitation in pursuing philosophy. The tension between him and the *maktab-i tafkīk* was not, then, a conflict between reason and piety. It was a conflict between two different conceptions of what pious Shiism should consist in.

While Ṭabāṭabā'ī was obviously on the pro-philosophy side in this debate, and adopted Mullā Ṣadrā's views on the modulation of existence and knowledge by presence, he was no blind follower of Ṣadrā. He avoided teaching Ṣadrā's views on the afterlife, evidently finding these problematic.[9] More positively, he brought Ṣadrean philosophy to bear on contemporary issues, arguing forcefully

against the atheism and materialism of the Marxist philosophy that had just gained ascendancy in the Soviet Union. Against this ideology, Ṭabāṭabāʾī put forward a novel distinction between the *iʿtibārī* and the *ḥaqīqī*, which means something like "conventional" or "merely conceptual" as opposed to "real." For instance, social arrangements and the provisions of the law may be useful and good for humankind, but they are merely conventional. It would be a grave mistake to think that all our concepts are like this, though. Rather, we have concepts that are *ḥaqīqī*, meaning that they correspond to real things outside the human mind. Though Avicenna's distinction between mental and real existence had led some earlier thinkers to skeptical worries, in Ṭabāṭabāʾī's hands it becomes the basis for a realist refutation of skepticism.

Ṭabāṭabāʾī died in 1981, only two years after the revolution that deposed the last of the Pahlavi shahs. His relationship to this event remains a contentious issue. He was too old to take part in any meaningful way, but some of his students were involved in the revolution, and he earlier endorsed the notion that an outstanding individual may be recognized as "head of the jurists" in the absence of guidance from the line of Imams venerated by the Shiites. The same idea was also used by Khomeini, the spiritual leader of the revolution.[10] Whatever we make of his role in these events, it's indisputable that Ṭabāṭabāʾī played an indirect role in spreading awareness of Islamic philosophy in Europe and the United States. In 1958 he was visited by the French scholar Henri Corbin, and later he collaborated with the Iranian-born philosopher and historian Seyyed Hossein Nasr. Nasr had been educated in the United States before returning to Iran to work as a professor of philosophy. The revolution broke out while he was on a trip abroad, and Nasr did not return, instead taking up academic positions in the States.

Ṭabāṭabāʾī inspired Corbin and Nasr to advance a new assessment of the philosophical tradition of Islam. Like this book, they argued forcefully against the myth that this tradition ended with Averroes. They and their students have especially emphasized the role of Persian culture throughout the history of philosophy in Islam, and seen Mullā Ṣadrā as the key figure of the later centuries. Taking their cue from Ṣadrā himself, they have promoted an interpretation of Islamic intellectual history which highlights philosophical Sufism and Illuminationism. Nasr has not been content to be a mere historian of philosophy, though. Inspired not only by Ṣadrā but by traditions of thought from across the globe, he has advocated what he calls "perennial philosophy," a set of shared doctrines and spiritual goals that he finds in many religious and philosophical traditions, including Taoism, Buddhism, Hinduism, and

Christianity.

With this idea of perennial philosophy, Nasr is apt to remind us of Dārā Shikoh and Shāh Walī Allāh, Muslim thinkers who likewise pointed to the commonalities spanning religious and cultural boundaries. But when Nasr spells out the content of this perennial philosophy, the specifically Ṣadrean lineaments of his thought become obvious: "ultimate Reality is beyond all determination and limitation. It is the Absolute and the Infinite from which issues goodness, like the rays of the sun that of necessity emanate from it."[11] Nasr places great emphasis on the notion of the "Absolute," which for him represents a fundamental disagreement between the perennial philosophy and modern-day relativism and materialism. He does not discount the differences between religious traditions and ritual practices. To the contrary, each such tradition represents a new, independent descent of the Absolute into our reality. But the unity of God, as the Absolute, guarantees that there will be a single teaching unifying all the disparate religious teachings.

The perennial philosophy has some surprising advantages, according to Nasr. It can form the basis of a realistic and effective environmentalist philosophy, because members of all these religions accept the need to place cosmic harmony above the selfish gratification of our individual desires.[12] Nasr is rather dismissive of secular, atheistic approaches to environmental ethics, however well meant—if only for practical reasons, since most people on the planet are religious and need to be given reasons to safeguard the environment that speak to their religious worldview. Speaking as one of the mere historians (another group that Nasr tends to dismiss), I see another significant advantage in Nasr's approach. He and Corbin were among the earliest to call attention to the riches of later philosophy in the Islamic world. In this volume I certainly haven't adopted their interpretive approach wholesale. I've emphasized the role of philosophical theologians in the Sunni tradition much more than they would, and have fundamental disagreements with them when it comes to the interpretation of Avicenna himself. This is no minor detail, given the centrality of Avicenna to subsequent philosophical developments in the Islamic world. But Corbin and Nasr must be given credit for insisting on the importance and interest of post-Avicennan thought.

With Nasr and a few of the other still-living or recently deceased thinkers I've looked at, like Fatema Mernissi and Mohammed Arkoun, I've now brought this story of philosophy in the Islamic world up to the present day. Obviously there would be much more to say about the last century of Islamic intellectual history. One could easily imagine another dozen chapters or so on topics like the

use of Averroes as a poster child for rationalism,[13] the continued engagement with European philosophers by scholars of the Islamic world,[14] or intellectuals in regions of the Islamic world that have gone unexplored here, like Indonesia.[15] I would not pretend to have offered thorough coverage of philosophy in the contemporary Islamic world, but I do hope to have conveyed the continued importance of historical figures like Ibn Taymiyya and Ṣadrā. We've also learned much about the lasting influence of much earlier thinkers from the formative period. Their impact was felt not only in the Islamic world, though. Muslim and Jewish philosophers like Avicenna, Averroes, and Maimonides exercised great influence in Latin Christendom, as one can see from the writings of such thinkers as Albert the Great, Thomas Aquinas, and Duns Scotus. It's just one part of the story of medieval philosophy, as we'll see in the next installment of the History of Philosophy, without any gaps.

NOTES

Preface

1. P. Adamson, *A Very Short Introduction to Islamic Philosophy* (Oxford, 2015).
2. This material was also added in part to take account of an important new book which appeared only during my revision process: K. El-Rouyaheb, *Islamic Intellectual History in the Seventeenth Century: Scholarly Currents in the Ottoman Empire and the Maghreb* (Cambridge, 2015).
3. For instance, the *Cambridge Companion to Medieval Jewish Philosophy* has a chapter on the "Islamic context" by J. L. Kraemer, while conversely the two-volume *History of Islamic Philosophy* published by Routledge has a chapter by L. E. Goodman on Jewish philosophy in the Islamic world.
4. Available at <www.historyofphilosophy.net>.

Chapter 1

1. The phrase already appears in the opening chapter, or *sūra*, of the Koran (1:5).
2. Koran 12:2, 13:7, 20:113, 39:28, 42:7, 43:3; cf. 14:4, 44:58, 46:12.
3. The alert reader will notice that al-Ghazālī, a post-Avicennan thinker, is included in Part I on the formative period. He really belongs in Part III on the eastern traditions, but I discuss him in Part I because he provides necessary context for thinkers in the Andalusian tradition, especially Averroes.
4. The Kaaba is a building in the shape of a black cube, said to have been built by Abraham and his son. Even if you are not Muslim, you will probably be familiar with images of Muslim pilgrims circling the Kaaba during the pilgrimage to Mecca.
5. See for example, Koran 2:62, 3:64.
6. Practitioners of *kalām* were themselves unsure as to the derivation of the phrase; for instance, the fourteenth-century author al-Ījī presents a whole list of possible explanations. See J. van Ess, *Die Erkenntislehre des ʿAḍuaddīn al-Īcī* (Wiesbaden, 1966), 56.

Chapter 2

1. P. Crone and M. Hinds, *God's Caliph: Religious Authority in the First Centuries of Islam* (Cambridge, 2003).
2. W. Madelung, "The Origins of the Controversy Concerning the Creation of the Koran," *Orientalia Hispanica*, vol.1, ed. J. M. Barral (Leiden, 1974), 504–25; W. M. Patton, *Aḥmed ibn Ḥanbal and the Miḥna* (Leiden, 1987).
3. R. M. Frank, *Beings and their Attributes: The Teachings of the Basrian School of the Muʿtazila in the Classical Period* (Albany, NY, 1978); A. Dhanani, *The Physical Theory of the Kalām* (Leiden, 1994).
4. G. F. Hourani, *Islamic Rationalism: The Ethics of ʿAbd al-Jabbār* (Oxford, 1971); M. T. Heemskerk, *Suffering in the Muʿtazilite Theology: ʿAbd al-Jabbār's Teaching on Pain and Divine Justice* (Leiden, 2000); G. S. Reynolds, *A Muslim Theologian in a Sectarian Milieu: ʿAbd al-Jabbār and the Critique of Christian Origins* (Leiden, 2004).
5. For the views of specific early theologians, the best source is in German: J.van Ess, *Theologie und Gesellschaft im 2. und 3. Jahrhundert Hidschra: eine Geschichte des religiösen Denkens im frühen Islam* (Berlin, 1991–5).
6. For this earlier debate see *Philosophy in the Hellenistic and Roman Worlds*, ch. 49.
7. R. M. Frank, "The Autonomy of the Human Agent in the Teaching of 'Abd al-Jabbār," *Le Muséon*, 95 (1982), 323–55.
8. *Philosophy in the Hellenistic and Roman Worlds*, ch. 8.
9. R. M. Frank, "The Divine Attributes According to the Teaching of Abū 'l-Hudhayl al-Allāf," *Le Muséon*, 82 (1969), 451–506.
0. For a proof from contemporary philosophy of religion inspired by this sort of reasoning, see W. L. Craig, *The Kalām Cosmological Argument* (London, 1979), and "In Defense of the *Kalām* Cosmological Argument," *Faith and Philosophy*, 14 (1997), 236–47.

Chapter 3

1. D. Gutas, *Greek Thought, Arabic Culture: The Graeco-Arabic Translation Movement in Baghdad and Early Society (2nd–4th/8th–10th centuries)* (London, 1998), 95–100. He suggests the Euclidean inspiration of Baghdad's layout at p. 52.
2. Gutas, *Greek Thought, Arabic Culture*, 61–9.
3. C. Genequand, *Alexander of Aphrodisias on the Cosmos* (Leiden, 2001).
4. For these two paragraphs I draw on the work of J. W. Watt. See his *Rhetoric and Philosophy from Greek into Syriac* (Farnham, 2010) and "From Sergius to Matta: Commentary and Translation in Syriac Aristotelian and Monastic Tradition," in J. W. Watt and J. Lössl (eds.), *Interpreting the Bible and Aristotle in Late Antiquity* (Aldershot, 2011), 239–58. For another recent study of the Syriac tradition, see D. King, *The Earliest Translation of Aristotle's Categories in Syriac* (Leiden, 2010).
5. Plato was known mostly through Arabic summaries, themselves based on Greek paraphrases of the dialogues written by authors including Galen. (In fact a summary of the *Timaeus* paraphrase by Galen, which is lost in Greek, survives today in Arabic.) As far as we know, not a single dialogue was translated in full. Perhaps Plato's highly literary and dramatic texts seemed to resist translation. But the most likely explanation for his absence is that Plato simply did not play the central pedagogical role that Aristotle did. See on this topic F. Rosenthal, "On the Knowledge of Plato's Philosophy in the Islamic World," *Islamic Culture*, 14 (1940), 387–422; R. Arnzen, "Arabisches Mittelalter," in C. Horn, J. Müller, and J. Söder (eds.), *Platon-Handbuch* (Stuttgart, 2009), 439–45.
6. F. W. Zimmermann, "The Origins of the So-Called *Theology of Aristotle*," in J. Kraye *et al.* (eds.), *Warburg Institute Surveys and Texts XI: Pseudo-Aristotle in the Middle Ages*, (London, 1986), 110–240, at 131.
7. A translation of the *Theology* and other remains of the Arabic Plotinus by G. Lewis was printed facing the Greek edition of the *Enneads* in P. Henry and H.-R. Schwyzer (eds.), *Plotini Opera* (Paris, 1959), vol. 2.
8. P. Adamson, *The Arabic Plotinus: A Philosophical Study of the "Theology of Aristotle"* (London, 2002), ch. 3
9. Plotinus, *Enneads* 5.3.17.
0. R. C. Taylor, "Aquinas, the *Plotiniana Arabica* and the Metaphysics of Being and Actuality," *Journal of the History of Ideas*, 59 (1998), 241–64.

Chapter 4

1. P. Adamson, *Al-Kindī* (New York, 2007). Citations in the main text of this chapter are to P. Adamson and P. E. Pormann (trans.), *The Philosophical Works of al-Kindī* (Karachi, 2012).
2. Actually only the first "part" of *On First Philosophy* is extant, but fragments from the lost portions suggest that he continued talking about God and his relationship to the universe.
3. H. A. Davidson, "John Philoponus as a Source of Medieval Islamic and Jewish Proofs of Creation," *Journal of the American Oriental Society*, 89 (1969), 357–91.
4. See Adamson, *Al-Kindī*, ch. 8.
5. P. Adamson, "Al-Kindī and the Muʿtazila: Divine Attributes, Creation and Freedom," *Arabic Sciences and Philosophy*, 13 (2003), 45–77.
6. *Against the Trinity*, in Adamson and Pormann, *The Philosophical Works*.
7. *On the True Agent*, in Adamson and Pormann, *The Philosophical Works*.
8. *That there are Incorporeal Substances*, in Adamson and Pormann, *The Philosophical Works*.
9. *On the Quantity of Aristotle's Books*, in Adamson and Pormann, *The Philosophical Works*.
0. For the following, see *Discourse on the Soul*, in Adamson and Pormann, *The Philosophical Works*.
1. B. Dodge (trans.), *Ibn al-Nadīm: al-Fihrist*, 2 vols. (New York, 1970). See further the list of al-Kindī's works in Adamson and Pormann, *The Philosophical Works*.

Chapter 5

1. For a survey of antique Judaism, see R. Goldenberg, *The Origins of Judaism* (Cambridge, 2007).
2. S. T. Katz (ed.), *The Cambridge History of Judaism*, vol. 4: *The Late Roman-Rabbinic Period* (Cambridge, 2006), 917–18.
3. See *Philosophy in the Hellenistic and Roman Worlds*, chs. 42 and 46.
4. J. E. Taylor, *Jewish Women Philosophers of First-Century Alexandria: Philo's Therapeutae Reconsidered* (Oxford, 2003).
5. Thus J. Neusner, *Midrash in Context: Exegesis in Formative Judaism* (Atlanta, GA, 1988), 20, speaks of an "eternal present" as the context for the Mishnah.
6. For these examples, see Goldenberg, *The Origins of Judaism*, 145.
7. J. Neusner, *Judaism as Philosophy: The Method and Message of the Mishnah* (Columbia, 1991).
8. W. Z. Harvey, "Rabbinic Attitudes Towards Philosophy," in H. J. Blumberg *et al.* (eds.), *Open Thou Mine Eyes: Essays on Aggadah and Judaica Presented to Rabbi William G. Braude on His 80th Birthday and Dedicated to His Memory* (Hoboken, NJ, 1992), 83–101.
9. Katz, *Cambridge History of Judaism*, 4. 889.
0. Katz, *Cambridge History of Judaism*, 4. 900.
1. On whom see A. Altmann and S. M. Stern, *Isaac Israeli: A Neoplatonic Philosopher of the Early Tenth Century* (Oxford, 1958).
2. S. Pessin, "Jewish Neoplatonism: Being Above Being and Divine Emanation in Solomon Ibn Gabirol and Isaac Israeli," in D. Frank and O. Leaman (eds.), *The Cambridge Companion to Medieval Jewish Philosophy* (Cambridge: 2003), 91–110.
3. Altmann and Stern, *Isaac Israeli*, 85, 88.
4. With this interpretation, which has Isaac close to Plotinus, I am in agreement with S. Pessin, "Divine Presence, Divine Absence and the Plotinian Apophatic Dialectic: Reinterpreting 'Creation and Emanation' in Isaac Israeli," in K. Corrigan *et al.* (eds.), *Religion and Philosophy in the Platonic and Neoplatonic Traditions* (Sankt Augustin, 2012), 133–49.
5. Altmann and Stern, *Isaac Israeli*, 49. Isaac's view is close to that of a near-contemporary Muslim author, Quṣṭā ibn Lūqā; the two may be drawing on a common source.

Chapter 6

1. Cited by page number from Saadia Gaon, *The Book of Beliefs and Opinions*, trans. S. Rosenblatt (New Haven, CT, 1948). There is also an abridged translation, Saadya Gaon, *The Book of Doctrines and Beliefs*, trans. A. Altmann (Indianapolis, IN, 2002).
2. See I. Efros, "Saadia's Theory of Knowledge," *Jewish Quarterly Review*, 33 (1942/4), 133–70 , and I. Efros, *Studies in Medieval Jewish Philosophy* (New York, 1974), ch. 2.
3. H. A. Davidson, "John Philoponus as a Source of Medieval Islamic and Jewish Proofs of Creation," *Journal of the American Oriental Society*, 89 (1969), 357–91.
4. P. Adamson, *Al-Kindī* (New York, 2007), ch. 4.
5. On Saadia's theory of divine attributes, see D. Kaufmann, *Geschichte der Attributenlehre in der jüdischen Religionsphilosophie des Mittelalters von Saadja bis Maimuni* (Amsterdam, 1967); Efros, *Studies in Medieval Jewish Philosophy*, ch. 4.
6. H. A. Wolfson, "Saadia on the Trinity and Incarnation," in H. A. Wolfson, *Studies in the History of Philosophy and Religion*, 2 vols. (Cambridge, MA, 1977), 394–414.
7. See further P. Adamson, "Freedom and Determinism," in R. Pasnau (ed.), *The Cambridge History of Medieval Philosophy*, 2 vols. (Cambridge, MA, 2010), 1: 399–413.

Chapter 7

1. There is no full translation yet, but excerpts of this and other works by al-Rāzī can be found in J. McGinnis and D. R. Reisman (ed. and trans.), *Classical Arabic Philosophy: An Anthology of Sources* (Indianapolis, 2007). These excerpts give a good sense of the theory of five eternals discussed later in the chapter.

2. Spanish translation in M. Vázquez de Benito (ed. and trans.), *Al-Rāzī: Libro de la introducción dal arte de la medicina o "Isagoge"* (Salamanca, 1979). For the wider context see P. E. Pormann and E. Savage Smith, *Medieval Islamic Medicine* (Edinburgh, 2007), and on philosophical aspects of al-Rāzī's own works, P. E. Pormann, "Medical Methodology and Hospital Practice: The Case of Tenth-century Baghdad," in P. Adamson (ed.), *In the Age of al-Fārābī: Arabic Philosophy in the 4th/10th Century* (London, 2008), 95–118.

3. Hence the modern assessment of al-Rāzī as a countercultural "free thinker," for which see S. Stroumsa, *Freethinkers of Medieval Islam: Ibn al-Rāwandī, Abū Bakr al-Rāzī, and their Impact on Islamic Thought* (Leiden, 1999).

4. T. Khalidi (ed. and trans.), *Abū Ḥātim al-Rāzī: The Proofs of Prophecy* (Provo, UT, 2011).

5. E. McMullin, "Creation *ex nihilo*: Early History," in D. B. Burrell *et al.* (eds.), *Creation and the God of Abraham* (Cambridge, 2010), 11–12.

6. *Proofs of Prophecy*, §1.3.8.

7. I base this judgment on a passage from al-Rāzī's *Doubts About Galen*, where he describes Plato's atomism in a way highly reminiscent of his own.

8. *Proofs of Prophecy*, §1.3.24.

9. *Philosophy in the Roman and Hellenistic Worlds*, ch. 24. This parallel may be no coincidence, as we are told by other sources that al-Rāzī consulted works by Plutarch.

0. *Proofs of Prophecy*, §1.4.35.

1. *Proofs of Prophecy*, §1.4.20.

2. *Proofs of Prophecy*, §1.1.4.

3. As shown by M. Rashed, "Abū Bakr al-Rāzī et la prophétie," *Mélanges de l'Institut Dominicain d'Études Orientales du Caire*, 27 (2008), 169–82.

Chapter 8

1. In fact the phrase is supposedly a contraction of "old is cool," not an intentional misspelling of "old school." I found this out the way any self-respecting youngster would: by looking on the internet.
2. As discussed in D. C. Reisman, "The Life and Times of Avicenna: Patronage and Learning in Medieval Islam," in *Interpreting Avicenna: Critical Essays* (Cambridge, 2013), 7–27.
3. S. Pines, "A Tenth-Century Philosophical Correspondence," *Proceedings of the American Academy for Jewish Research*, 24 (1955), 103–36.
4. See *Philosophy in the Hellenistic and Roman Worlds*, ch. 37.
5. S. Pines and M. Schwarz, "Yaḥyā Ibn ʿAdī's Refutation of the Doctrine of Acquisition (*Iktisāb*)," in J. Blau *et al.* (eds.), *Studia Orientalia Memoriae D. H. Baneth Dedicata* (Jerusalem, 1979), 49–94.
6. See *Philosophy in the Hellenistic and Roman Worlds*, ch. 44. For Ibn ʿAdī's works on the topic, see E. Platti, *Yaḥyā Ibn ʿAdī, théologien chrétien et philosophe arabe: sa théologie de l'incarnation* (Leuven, 1983).
7. K. Gyekye (trans.), *Arabic Logic: Ibn al-Ṭayyib's Commentary on Porphyry's Eisagoge* (Albany, NY, 1979); C. Ferrari, *Der Kategorienkommentar von Abū l-Farağ ʿAbdallāh ibn aṭ-Ṭayyib: Text und Untersuchungen* (Leiden, 2006).
8. For a translation, see D. S. Margoliouth, "The Discussion Between Abu Bishr Matta and Abu Saʾid al-Sirafi on the Merits of Logic and Grammar," *Journal of the Royal Asiatic Society* (1905), 79–129. For discussion of the event, see A. Elamrani-Jamal, *Logique Aristotélicienne et grammaire arabe. Étude et documents* (Paris, 1983); G. Endress, "Grammatik und Logik. Arabische Philologie und griechische Philosophie im Widerstreit," in B. Mojsisch (ed.), *Sprachphilosophie in Antike und Mittelalter* (Amsterdam, 1986), 163–299; P. Adamson and A. Key, "Philosophy of Language in the Medieval Arabic Tradition," in M. Cameron and R. Stainton (eds.), *Linguistic Meaning: New Essays in the History of the Philosophy of Language* (Oxford, 2015), 74–99.
9. On this phenomenon, see H. Lazarus-Yafeh (ed.), *The Majlis: Interreligious Encounters in Medieval Islam* (Wiesbaden, 1999).
10. See *Philosophy in the Hellenistic and Roman Worlds*, ch. 25.
11. On this, see P. Adamson, "The Last Philosophers of Late Antiquity in the Arabic Tradition," in U. Rudolph and R. Goulet (eds.), *Entre Orient et Occident: la philosophie et la science gréco-romaines*, Entretiens sur l'Antiquité classique, vol. LVII (Vandoeuvres: Fondation Hardt, 2011), 1–43.
12. C. Ehrig-Eggert, "Yaḥyā Ibn ʿAdī: Über den Nachweis der Natur des Möglichen," *Zeitschrift für Geschichte der arabisch-islamischen Wissenschaften*, 5 (1989), 283–97. Excerpt translated in J. McGinnis and D. C. Reisman (ed. and trans.), *Classical Arabic Philosophy: An Anthology of Sources* (Indianapolis, IN, 2007).
13. See *Philosophy in the Hellenistic and Roman Worlds*, ch. 53.
14. P. Lettinck, *Aristotle's "Physics" and its Reception in the Arabic World* (Leiden, 1994).

Chapter 9

1. R. Wisnovsky, "New Philosophical Texts of Yaḥyā Ibn ʿAdī: A Supplement to Endress' *Analytical Inventory*," in F. Opwis and D. Reisman (eds.), *Islamic Philosophy, Science, Culture, and Religion: Studies in Honor of Dimitri Gutas* (Leiden, 2012), 307–26.
2. I try to make a case for this in P. Adamson, "Knowledge of Universals and Particulars in the Baghdad School," *Documenti e Studi sulla Tradizione Filosofica Medievale*, 18 (2007), 141–64.
3. F. W. Zimmermann, *Al-Farabi's Commentary and Short Treatise on Aristotle's De Interpretatione* (London, 1981). For the following, see also P. Adamson, "The Arabic Sea Battle: al-Fārābī on the Problem of Future Contingents," *Archiv für Geschichte der Philosophie*, 88 (2006), 163–88.
4. D. Black, "Knowledge (ʿ*Ilm*) and Certainty (*Yaqīn*) in al-Fārābī's Epistemology," *Arabic Sciences and Philosophy*, 16 (2006), 11–45. For a translation of his *Posterior Analytics* paraphrase by M. Fakhry, see S. H. Nasr and M. Aminrazavi (eds.), *An Anthology of Philosophy in Persia*, Vol. 1 (Oxford, 1999), 93–110.
5. Both translated in M. Mahdi (trans.), *Alfarabi's Philosophy of Plato and Aristotle* (New York, 1962).
6. M. Rashed, "On the Authorship of the Treatise *On the Harmonization of the Opinions of the Two Sages* Attributed to al-Fārābī," *Arabic Sciences and Philosophy*, 19 (2009), 43–82.
7. See the translation and discussion in D. Gutas, *Avicenna and the Aristotelian Tradition* (Leiden, 2014).
8. Translated in R. Walzer (ed. and trans.), *Al-Farabi on the Perfect State (*Oxford, 1985) and C. Butterworth (trans.), *Alfarabi: The Political Writings. "Political Regime" and "Summary of Plato's Laws"* (Ithaca, NY, 2014).
9. Translated in J. McGinnis and D. C. Reisman (ed. and trans.), *Classical Arabic Philosophy: An Anthology of Sources* (Indianapolis, IN 2007).

Chapter 10

1. Discussed in L. Richter-Bernburg, "Abū Bakr al-Rāzī and al-Fārābī on Medicine and Authority," in P. Adamson, *In the Age of al-Fārābī: Arabic Philosophy in the Fourth/Tenth Century* (London, 2008), 119–30.
2. See Gutas, "The Meaning of *Madanī* in al-Fārābī's 'Political' Philosophy," *Mélanges de l'Université Saint Joseph*, 57 (2004), 259–82.
3. See his *On the Principles of the Opinions of the Inhabitants of the Virtuous City*, trans. in R. Walzer (ed. and trans.), *Al-Farabi on the Perfect State* (Oxford, 1985), §15.7; and *Political Aphorisms*, trans. in D. M. Dunlop, *Al-Fārābī: Aphorisms of the Statesman* (Cambridge, 1961), §28.
4. *Principles of the Opinions*, §17.1.
5. *Principles of the Opinions*, §15.8.
6. Again following ancient precedent, he recognizes three subdivisions here: ethics, economics (i.e. household management), and political philosophy.
7. *Political Aphorisms*, §56.
8. Available in C. E. Butterworth (trans.), *Alfarabi: The Political Writings* (Ithaca, NY, 2001).
9. For the controversy on this point, see S. Harvey, "Did Alfarabi Read Plato's *Laws*?" *Medioevo*, 27 (2003), 51–68.
0. J. Lameer, "The Philosopher and the Prophet: Greek Parallels to al-Fārābī's Theory of Philosophy and Religion in the State," in A. Hasnawi *et al.* (eds.), *Perspectives arabes et médiévales sur la tradition scientifique et philosophique grecque* (Paris, 1997), 609–22.
1. *On the Quiddity of Sleep and Dreams*, §IX.4, in P. Adamson and P. E. Pormann (trans.), *The Philosophical Works of al-Kindī* (Karachi, 2012).
2. R. Hansberger, "How Aristotle Came to Believe in God-Given Dreams: The Arabic Version of *De divinatione per somnum*," in L. Marlow (ed.), *Dreaming Across Boundaries: The Interpretation of Dreams in Islamic Lands* (Boston, MA, 2008), 50–77.
3. *Book of Religion*, §§8–10; cf. *Political Aphorisms*, §56, *Principles of the Opinions*, §15.14.
4. Plato, *Statesman* 295b–300c.
5. See the contributions of E. Gannagé and N. Lahoud in *Mélanges de l'Université Saint Joseph*, 57 (2004), building on a suggestion of F. W. Zimmermann.
6. *Enumeration of the Sciences*, in Butterworth, *Alfarabi: The Political Writings*, §5.

Chapter 11

1. K. Ierodiakonou, "On Galen's Theory of Vision," in P. Adamson, R. Hansberger, and J. Wilberding (eds.), *Philosophical Themes in Galen* (London, 2014), 197–211.
2. I. Avotins, "Alexander of Aphrodisias on Vision in the Atomists," *Classical Quarterly*, 30 (1980), 429–54.
3. R. Sambursky, "Philoponus' Interpretation of Aristotle's Theory of Light," *Osiris*, 13 (1958), 114–26, and J. de Groot, "Philoponus on *De Anima* II.5, *Physics* III.3, and the Propagation of Light," *Phronesis*, 28 (1983), 177–96.
4. A. Jones, "Peripatetic and Euclidean Theories of the Visual Ray," *Physis*, 31 (1994), 47–76.
5. A. M. Smith, *Ptolemy's Theory of Visual Perception* (Philadelphia, 1996).
6. E. Kheirandish, "The Many Aspects of 'Appearances': Arabic Optics to 950 AD," in J. P. Hogendijk and A. I. Sabra (eds.), *The Enterprise of Science in Islam* (Cambridge, MA, 2003), 55–83; P. Adamson, "Vision, Light and Color in al-Kindī, Ptolemy and the Ancient Commentators," *Arabic Sciences and Philosophy*, 16 (2006), 207–36.
7. In P. Adamson and P. E. Pormann (trans.), *The Philosophical Works of al-Kindī* (Karachi, 2012). His works on mathematical optics are edited and translated into French in R. Rashed, *Oeuvres Philosophiques et Scientifiques d'al-Kindī*, vol. 1: *L'Optique et la Catoptrique* (Leiden, 1997). See also D. C. Lindberg, "Alkindi's Critique of Euclid's Theory of Vision," *Isis*, 62 (1971), 469–89.
8. J. McGinnis, "New Light on Avicenna: Optics and its Role in Avicennan Theories of Vision, Cognition and Emanation," in L. López-Farjeat and J. Tellkamp (eds.), *Philosophical Psychology in Arabic Thought and the Latin Aristotelianism of the 13th Century* (Paris, 2013), 41–57; S. B. Omar, *Ibn al-Haytham's Optics* (Minneapolis, MN, 1977); A. I. Sabra, *The Optics of Ibn Al-Haytham Books I–III: On Direct Vision*, vols. 1–2 (London, 1989); A. M. Smith, "The Alhacenian Account of Spatial Perception and its Epistemological Implications," *Arabic Sciences and Philosophy*, 15 (2005), 219–40.
9. D. C. Lindberg, "Alhazen's Theory of Vision and its Reception in the West," *Isis*, 58 (1967), 321–41, at 322.

Chapter 12

1. P. Adamson and P. E. Pormann (trans.), *The Philosophical Works of al-Kindī* (Karachi, 2012), §IV.2.
2. A. Shiloah, *Music in the World of Islam* (Detroit, 1995), 5.
3. This parallel is drawn by F. Shehadi, *Philosophies of Music in Medieval Islam* (Leiden, 1995), 38, albeit without the pun, for which I assume full blame. For the centrality of the oud, see also Wright, "Music and Musicology," 235.
4. For discussion and further references, see P. Adamson, *Al-Kindī* (New York, 2007), ch. 7.
5. O. Wright, *Epistles of the Brethren of Purity: On Music* (New York, 2010).
6. *Classical Philosophy*, ch. 43.
7. Poetry still has great standing in the Arabic-speaking world: the popular television show *Millionaire Poet* pits amateur poets against one another, with a large cash prize for the victor.
8. D. Gutas, "Classical Arabic Wisdom Literature: Nature and Scope," *Journal of the American Oriental Society*, 101 (1981), 49–86.
9. *Epistles of the Brethren of Purity: On Music*, 163–4.
0. Not yet available in translation, but for discussion see Y. Klein, "Imagination and Music: *Takhyīl* and the Production of Music in al-Fārābī's *Kitāb al-mūsīqī al-kabīr*," in G. J. van Gelder and M. Hammond (eds.), *Takhyīl: The Imaginary in Classical Arabic Poetics* (Warminster, 2008), 179–95. My thanks also to Alison Laywine for help with this topic.
1. Shiloah, *Music in the World of Islam*, 34.
2. *Epistles of the Brethren of Purity: On Music*, 84; I here follow the suggestion of Wright at note 30.
3. Klein, "Imagination and Music," 186.

Chapter 13

1. *Philosophy in the Hellenistic and Roman Worlds*, ch. 20.
2. Translated in P. N. Singer (ed.), *Galen: Psychological Works* (Cambridge, 2014). This also includes *On Character Traits*, mentioned below.
3. *Classical Philosophy*, ch. 21.
4. A. J. Arberry (trans.), *The Spiritual Physick of Rhazes* (London, 1950), cited by section number.
5. L. E. Goodman, "The Epicurean Ethic of Muḥammad Ibn Zakariyāʾ ar-Rāzī," *Studia Islamica*, 34 (1971), 5–26. I argue for the contrary view that follows here in P. Adamson, "Platonic Pleasures in Epicurus and al-Rāzī," in P. Adamson (ed.), *In the Age of al-Fārābī: Arabic Philosophy in the Fourth/Tenth Century* (London, 2008), 71–94. See also T.-A. Druart, "The Ethics of al-Rāzī," *Medieval Philosophy and Theology*, 5 (1997), 47–71.
6. In J. McGinnis and D. R. Reisman (ed. and trans.), *Classical Arabic Philosophy: An Anthology of Sources* (Indianapolis, IN, 2007).
7. I. Alon, *Socrates in Mediaeval Arabic Literature* (Leiden, 1991).
8. *Sayings of Socrates*, in P. Adamson and P. E. Pormann (trans.), *The Philosophical Works of al-Kindī* (Karachi, 2012), §6. See further P. Adamson, "The Arabic Socrates: The Place of al-Kindī's Report in the Tradition," in M. Trapp (ed.), *Socrates from Antiquity to the Enlightenment* (Aldershot, 2007), 161–78.
9. *On Dispelling Sorrows*, in Adamson and Pormann, *The Philosophical Works*, §IX.5 and 9.
0. *Philosophy in the Hellenistic and Roman Worlds*, ch. 13.
1. There is no English translation, but for a German version of the ethical part, see Z. Özkan, *Die Psychosomatik bei Abū Zaid al-Balḫī (gest. 934 AD)* (Frankfurt, 1990).
2. A. Akasoy and A. Fidora, *The Arabic Version of the Nicomachean Ethics* (Leiden, 2005).
3. Cited by section number from S. H. Griffith (trans.), *Yaḥyā b. ʿAdī: The Reformation of Morals* (Provo, UT, 2002).
4. *Philosophy in the Hellenistic and Roman Worlds*, ch. 45.
5. S. H. Griffith, "Yaḥyā b. ʿAdī's Colloquy On Sexual Abstinence and the Philosophical Life," in J. E. Montgomery (ed.), *Arabic Theology, Arabic Philosophy* (Leuven, 2006), 299–333.
6. He also believed that a moderate sex life was healthy: see P. E. Pormann, "Al-Rāzī (d. 925) on the Benefits of Sex: A Clinician Caught between Philosophy and Medicine," in A. Vrolijk and J. P. Hogendijk (eds.), *O Ye Gentlemen: Arabic Studies on Science and Literary Culture* (Leiden, 2007), 134–45.
7. C. Zurayk (trans.), *Miskawayh: The Refinement of Character* (Beirut, 1968).
8. For an example, see P. Adamson, "Miskawayh on Pleasure," *Arabic Sciences and Philosophy*, 25 (2015), 199–223.

Chapter 14

1. See D. Gutas, *Greek Thought, Arabic Culture: The Graeco-Arabic Translation Movement in Baghdad and Early Society (2nd–4th/8th–10th centuries)* (London, 1998), 25–7, 34–45.
2. The phrase is Vladimir Minorsky's, quoted at J. Kraemer, *Humanism in the Renaissance of Islam* (Leiden, 1992), 36.
3. See further P. Adamson, "Abū Maʿshar, al-Kindī and the Philosophical Defense of Astrology," *Recherches de théologie et philosophie médiévales*, 69 (2002), 245–70.
4. P. Adamson, "The Kindian Tradition: The Structure of Philosophy in Arabic Neoplatonism," in C. D'Ancona (ed.), *Libraries of the Neoplatonists* (Leiden, 2007), 351–70.
5. While in Baghdad, he also debated the grammarian al-Sīrāfī, who had earlier been the antagonist of Abū Bishr Mattā.
6. Arabic text, German translation, and commentary in E. Wakelnig, *Feder, Tafel, Mensch. Al-ʿĀmirīs Kitāb al-Fuṣūl fī l-Maʿālim al-ilāhīya und die arabische Proklos-Rezeption im 10. Jh.* (Leiden, 2006).
7. Translated in P. Adamson and P. E. Pormann, "More than Heat and Light: Miskawayh's Epistle on Soul and Intellect," *Muslim World*, 102 (2012), 478–524.
8. E. Rowson, "The Philosopher as Littérateur: al-Tawḥīdī and his Predecessors," *Zeitschrift für Geschichte der arabisch-islamischen Wissenschaften*, 6 (1990), 50–92.
9. J. Montgomery, *Al-Jāḥiẓ: In Praise of Books* (Edinburgh, 2013).
0. *Philosophy in the Hellenistic and Roman Worlds*, ch. 27.
1. N. El-Bizri (ed.), *The Ikhwān al-Ṣafāʾ and their Rasāʾil: An Introduction* (Oxford, 2008).
2. L. E. Goodman and R. McGregor (ed. and trans.), *Epistles of the Brethren of Purity: The Case of the Animals Versus Man Before the King of the Jinn* (Oxford, 2010). For a more detailed discussion, see P. Adamson, "The Ethical Treatment of Animals," in R. C. Taylor and L. X. López-Farjeat (eds.), *The Routledge Companion to Islamic Philosophy* (London, 2015), 371–82.
3. *Philosophy in the Hellenistic and Roman Worlds*, ch. 33.
4. P. E. Walker, *Early Philosophical Shiism: The Ismaili Neoplatonism of Abū Yaʿqūb al-Sijistānī* (Cambridge, 1993) and *Ḥamīd al-Dīn al-Kirmānī: Ismaili Thought in the Age of al-Ḥākim* (London, 1999).
5. Walker, *Early Philosophical Shiism*, 78.
6. Walker, *Ḥamīd al-Dīn al-Kirmānī*, 58; D. De Smet, "Al-Fārābī's Influence on Ḥamīd al-Dīn al-Kirmānī's Theory of Intellect and Soul," in P. Adamson (ed.), *In the Age of al-Fārābī: Arabic Philosophy in the Fourth/Tenth Century* (London, 2008), 131–50.
7. Walker, *Early Philosophical Shiism*, 127.
8. For an English translation of this text, see E. Ormsby (trans.), *Between Reason and Revelation: Twin Wisdoms Reconciled* (London: 2012). Nāṣir Khusraw is also noteworthy as a major source of information (and criticism) regarding Abū Bakr al-Rāzī.

Chapter 15

1. See *Classical Philosophy*, ch. 18.
2. As detailed by H. A. Wolfson, *The Philosophy of the Kalām* (Cambridge, MA, 1976), 663–74.
3. R. McCarthy (trans.), *The Theology of al-Ashʿarī* (Beirut, 1953), §§169–70.
4. P. E. Walker (trans.), *Imām al-Ḥaramayn al-Juwaynī: A Guide to Conclusive Proofs for the Principles of Belief* (Reading, 2000), 146. Rather than self-defense, he gives the rather less persuasive examples of killing as punishment or revenge.
5. R. M. Frank, "Bodies and Atoms: the Ashʿarite Analysis," in M. E. Marmura (ed.), *Medieval Islamic Thought* (Toronto, 1984), 39–53.
6. Walker, *al-Juwaynī*, 127.
7. No actual giraffes were harmed in the making of this chapter.
8. Walker, *al-Juwaynī*, 103.
9. McCarthy, *al-Ashʿarī*, §155.
0. Here I can't resist repeating the following story: a man named ʿAlī al-Nashiʾ was debating with al-Ashʿarī, and suddenly slapped him in the face. When al-Ashʿarī expressed his outrage, al-Nashiʾ pointed out that on the Ashʿarite theory the slap was God's doing, not his. He got a big laugh from the audience present at the dispute. See G. Makdisi, *The Rise of Colleges: Institutions of Learning in Islam and the West* (Edinburgh, 1981), 135.
1. McCarthy, *al-Ashʿarī*, §92 and Walker, *al-Juwaynī*, 118.
2. McCarthy, *al-Ashʿarī*, §123.
3. McCarthy, *al-Ashʿarī*, §126.
4. Walker, *al-Juwaynī*, 86.

Chapter 16

1. Avicenna's *Autobiography* is quoted from the translation in D. Gutas, *Avicenna and the Aristotelian Tradition* (Leiden, 1988, rev. edn. 2014), 11–19. See also W. Gohlman (trans.), *The Life of Ibn Sina* (Albany, NY, 1974). Avicenna's full name was Abū ʿAlī l-Ḥusayn Ibn Sīnā. In English he is typically called "Avicenna," which is the medieval Latin version of the name Ibn Sīnā. In this book, for the most part I'm going with Arabic names or English versions of those names, for instance Ibn Gabirol (and not the medieval Latin Avicebron) for the Andalusian Jewish thinker Ibn Jabīrūl. However, I make an exception for Avicenna and Averroes, because they are so well known under these names.

2. *Classical Philosophy*, ch. 31.

3. D. Gutas, "Intuition and Thinking: The Evolving Structure of Avicenna's Epistemology," in R. Wisnovsky (ed.), *Aspects of Avicenna* (Princeton, NJ, 2001), 1–38; P. Adamson, "Non-Discursive Thought in Avicenna's Commentary on the *Theology of Aristotle*," in J. McGinnis (ed.), *Interpreting Avicenna: Science and Philosophy in Medieval Islam* (Leiden, 2004), 87–111; Gutas, *Avicenna and the Aristotelian Tradition*, 179–200.

4. Gohlman, *The Life of Ibn Sina*, 70–2.

5. As shown by J. Lameer, "Avicenna's Concupiscence," *Arabic Sciences and Philosophy*, 23 (2013), 277–89.

6. D. C. Reisman, "The Life and Times of Avicenna: Patronage and Learning in Medieval Islam," in P. Adamson (ed.), *Interpreting Avicenna: Critical Essays* (Cambridge, 2013), 7–27.

7. A. Bertolacci, *The Reception of Aristotle's Metaphysics in Avicenna's Kitāb al-Shifā'* (Leiden, 2006).

8. For the history of misunderstandings concerning this label, see D. Gutas, "Ibn Ṭufayl on Ibn Sīnā's Eastern Philosophy," *Oriens*, 34 (1994), 224–41.

9. See the final three contributions in Adamson (ed.), *Interpreting Avicenna*, as well as J. Janssens and D. De Smet (eds.), *Avicenna and his Heritage* (Leuven, 2002) and D. C. Reisman (ed.), *Before and After Avicenna* (Leiden, 2003).

Chapter 17

1. *Classical Philosophy*, chs. 30 and 31.
2. A. *Bäck,* "Avicenna's Conception of the Modalities," *Vivarium*, 30 (1992), 217–55; P. Thom, "Logic and metaphysics in Avicenna's modal syllogistic," in S. Rahman, T. Street, and H. Tahiri (eds.), *The Unity of Science in the Arabic Tradition: Science, Logic, Epistemology and their Interactions* (Dordrecht, 2008).
3. A fundamental study of the issue is J. Hintikka, *Time and Necessity: Studies in Aristotle's Theory of Modality* (Oxford, 1973).
4. T. Street, "Avicenna on the Syllogism," in P. Adamson (ed.), *Interpreting Avicenna: Critical Essays* (Cambridge, 2013), 48–70.
5. A. M. Goichon, *La Distinction de l'essence et de l'existence d'après ibn Sina (Avicenne)* (Paris, 1937); F. Rahman, "Essence and Existence in Avicenna," *Mediaeval and Renaissance Studies*, 4 (1958), 1–16; O. Lizzini, "*Wujūd-Mawjūd*/Existence-Existent in Avicenna: a Key Ontological Notion of Arabic Philosophy," *Quaestio*, 3 (2003), 11–38. A good primary text on this is M. E. Marmura (trans.), *Avicenna, The Metaphysics of the Healing* (Provo, UT, 2005), §1.5.
6. This doesn't apply only to existence: in general properties can belong to things necessarily, contingently, or impossibly. For instance, I am necessarily human, contingently bald, and impossibly in two places at the same time.
7. D. L. Black, "Avicenna on the Ontological and Epistemic Status of Fictional Beings," *Documenti e studi sulla tradizione filosofica medievale*, 8 (1997), 425–53; T.-A. Druart, "Avicennan Troubles: The Mysteries of the Heptagonal House and of the Phoenix," *Tópicos*, 42 (2012), 51–74.
8. D. L. Black, "Mental Existence in Thomas Aquinas and Avicenna," *Mediaeval Studies*, 61 (1999), 45–79.

Chapter 18

1. For analyses of the proof see M. E. Marmura, "Avicenna's Proof from Contingency for God's Existence in the *Metaphysics* of the *Shifā'*," *Medieval Studies*, 42 (1980), 337–52 and T. Mayer, "Avicenna's *Burhān al-Ṣiddiqīn*," *Journal of Islamic Studies*, 12 (2001), 18–39. The proof is presented by Avicenna in various places, but for the concise and influential version in the *Pointers*, see S. C. Inati (trans.), *Ibn Sina's Remarks and Admonitions: Physics and Metaphysics* (New York, 2014), part 3, fourth "class." See also M. E. Marmura (trans.), *Avicenna, The Metaphysics of the Healing* (Provo, UT, 2005), §1.6; and for the version in the *Salvation*, J. McGinnis and D. C. Reisman (ed. and trans.), *Classical Arabic Philosophy: An Anthology of Sources* (Indianapolis, 2007), 211–19.

2. From the proof in the *Salvation*, at McGinnis and Reisman, *Classical Arabic Philosophy*, 215.

3. For instance in the *Metaphysics of the Healing*, especially at §8.4–7, and *Ibn Sina's Remarks and Admonitions: Physics and Metaphysics*, fourth class, chs. 18–29, sixth class, chs. 1–8. On this project, see P. Adamson, "From the Necessary Existent to God," in P. Adamson (ed.), *Interpreting Avicenna* (Cambridge, 2013), 170–89.

4. *Metaphysics of the Healing*, §1.7.

5. *Ibn Sina's Remarks and Admonitions: Physics and Metaphysics*, fourth class, ch. 28. On this move, see also P. Adamson, "Avicenna and his Commentators on Self-Intellective Substances," in D. N. Hasse and A. Bertolacci (eds.), *The Arabic, Hebrew and Latin Reception of Avicenna's Metaphysics* (Berlin, 2011), 97–122.

6. A. Bertolacci, "Avicenna and Averroes on the Proof of God's Existence and the Subject-Matter of Metaphysics," *Medioevo*, 32 (2007), 61–98.

7. *Metaphysics of the Healing*, §8.6. See M. E. Marmura, "Some Aspects of Avicenna's Theory of God's Knowledge of Particulars," *Journal of the American Oriental Society*, 82 (1962), 299–312; P. Adamson, "On Knowledge of Particulars," *Proceedings of the Aristotelian Society*, 105 (2005), 273–94.

Chapter 19

1. For translations and discussion of the thought experiment, see M. E. Marmura, "Avicenna's 'Flying Man' in Context," *Monist*, 69 (1986), 383–95; D. L. Black, "Avicenna on Self-Awareness and Knowing that One Knows," in S. Rahman *et al.* (eds.), *The Unity of Science in the Arabic Tradition* (Dordrecht, 2008), 63–87; D. N. Hasse, *Avicenna's De Anima in the Latin West* (London, 2000), 80–92; J. Kaukua, *Self-Awareness in Islamic Philosophy: Avicenna and Beyond* (Cambridge, 2015).
2. The Arabic word used here, *dhāt*, could mean either "essence" or "self." For an argument that it here needs to means "essence," see Hasse, *Avicenna's De Anima*, 83–4; for a contrary view, see Kaukua, *Self-Awareness in Islamic Philosophy*, 39.
3. For Mullā Ṣadrā's rejection of this claim, see Kaukua, *Self-Awareness in Islamic Philosophy*, ch. 8.
4. For further discussion, see Dr Seuss' *The Cat in the Hat*.
5. Hasse, *Avicenna's De Anima*, 87.
6. I discuss this argument in P. Adamson, "Correcting Plotinus: Soul's Relationship to Body in Avicenna's Commentary on the *Theology of Aristotle*," in P. Adamson *et al.* (eds.), *Philosophy, Science and Exegesis in Greek, Arabic and Latin Commentaries* (London, 2004), 2: 59–75.
7. On this problem, see T.-A. Druart, "The Human Soul's Individuation and its Survival after the Body's Death: Avicenna on the Causal Relation Between Body and Soul," *Arabic Sciences and Philosophy*, 10 (2000), 259–73.
8. D. Gutas, "The Empiricism of Avicenna," *Oriens*, 2 (2012), 391–436.
9. *Philosophy in the Hellenistic and Roman Worlds*, ch. 45.
0. D. L. Black, "Estimation in Avicenna: The Logical and Psychological Dimensions," *Dialogue*, 32 (1993), 219–58.
1. P. E. Pormann, "Avicenna on Medical Practice, Epistemology, and the Physiology of the Inner Senses," in P. Adamson (ed.), *Interpreting Avicenna: Critical Essays* (Cambridge, 2013), 91–108.
2. P. Adamson, "Avicenna and his Commentators on Self-Intellective Substances," in D. N. Hasse and A. Bertolacci (eds.), *The Arabic, Hebrew and Latin Reception of Avicenna's Metaphysics* (Berlin, 2011), 97–122.
3. D. N. Hasse, "Avicenna on Abstraction," in R. Wisnovsky (ed.), *Aspects of Avicenna* (Princeton, NJ, 2001), 39–72; J. McGinnis, "Making Abstraction Less Abstract: The Logical, Psychological, and Metaphysical Dimensions of Avicenna's Theory of Abstraction," *Proceedings of the American Catholic Philosophical Association*, 80 (2007), 169–83; C. D'Ancona, "Degrees of Abstraction in Avicenna: How to Combine Aristotle's *De anima* and the *Enneads*," in S. Knuuttila and P. Kärkkäinen (eds.), *Theories of Perception in Medieval and Early Modern Philosophy* (Berlin, 2008), 47–71; D. N. Hasse, "Avicenna's Epistemological Optimism," in Adamson (ed.), *Interpreting Avicenna*, 109–19.

Chapter 20

1. W. M. Watt, *The Faith and Practice of al-Ghazālī* (London, 1951). References in the main text are to page numbers of this translation.
2. *Philosophy in the Hellenistic and Roman Worlds*, ch. 18.
3. *Classical Philosophy*, ch. 8.
4. The dream example recalls another ancient discussion of skepticism, in Plato's *Theaetetus*.
5. Averroes, *On the Harmony of Religion and Philosophy*, trans. G. F. Hourani (London, 1976), 61.
6. On al-Ghazālī's biography, see the opening chapters of F. Griffel, *Al-Ghazālī's Philosophical Theology* (New York, 2009).
7. S. Menn, "The *Discourse on the Method* and the Tradition of Intellectual Autobiography," in J. Miller and B. Inwood (eds.), *Hellenistic and Early Modern Philosophy* (Cambridge, 2003), 141–91.
8. R. M. Frank, "Al-Ghazālī on *Taqlīd*. Scholars, Theologians and Philosophers," *Zeitschrift für die Geschichte der arabisch-islamischen Wissenschaften* 7 (1991–2), 207–52; F. Griffel, "*Taqlīd* of the Philosophers: al-Ghazālī's Initial Accusation in the *Tahāfut*," in S. Günther (ed.), *Ideas, Images, and Methods of Portrayal* (Leiden, 2005).
9. For more on this topic, see F. Griffel, "Al-Ghazālī's Concept of Prophecy: The Introduction of Avicennan Psychology into Ashʿarite Theology," *Arabic Sciences and Philosophy*, 14 (2004), 101–44.

Chapter 21

1. See A. Treiger, *Inspired Knowledge in Islamic Thought: al-Ghazālī's Theory of Mystical Cognition and its Avicennan Foundation* (London, 2012), appendix B. Treiger thus suggests the translation *Precipitance of the Philosophers*.

2. The *Maqāṣid* was translated in the second half of the twelfth century, the *Tahāfut al-Tahāfut* only in 1328.

3. References are to pages in M. E. Marmura (trans.), *Al-Ghazālī: The Incoherence of the Philosophers* (Provo, UT, 1997).

4. The unprecedented nature of this accusation is explored in F. Griffel, *Toleranz und Apostasie im Islam* (Leiden, 2000).

5. I say "probably" because his views on soul are highly contentious; see T. J. Gianotti, *Al-Ghazālī's Unspeakable Doctrine of the Soul* (Leiden, 2001).

6. We saw this argument before in al-Rāzī (Chapter 7). His solution was to posit a foolish Soul that was responsible for selecting the fateful moment of creation.

7. L. E. Goodman, "Did al-Ghazālī Deny Causality?," *Studia Islamica*, 47 (1978), 83–120; I. Alon, "Al-Ghazālī on Causality," *Journal of the American Oriental Society*, 100 (1980), 397–405; B. S. Kogan, "The Philosophers al-Ghazālī and Averroes on Necessary Connection and the Problem of the Miraculous," in P. Morewedge (ed.), *Islamic Philosophy and Mysticism* (Delmar, NY, 1981), 113–32; B. Abrahamov, "Al-Ghazālī's Theory of Causality," *Studia Islamica*, 67 (1988), 75–98; S. Riker, "Al-Ghazālī on Necessary Causality," *Monist*, 79 (1996), 315–24; M. E. Marmura, "Ghazali and Ashʿarism Revisited," *Arabic Sciences and Philosophy*, 12 (2002), 91–110.

8. The main protagonists in this debate have been R. M. Frank, *Creation and the Cosmic System: al-Ghazālī and Avicenna* (Heidelberg, 1992), asserting an "Avicennan" reading, and M. E. Marmura, for example, in "Ghazali and Ashʿarism Revisited," defending an "Ashʿarite" interpretation.

9. For this reading, see F. Griffel, *Al-Ghazālī's Philosophical Theology* (New York, 2009).

Chapter 22

1. I mentioned this phenomenon in the last volume (*Philosophy in the Hellenistic and Roman Worlds*, 197), giving the example of the title of Ptolemy's *Almagest*.
2. Related by R. Fletcher, *Moorish Spain* (London, 1992), 15. For other overviews of Andalusian history, see H. Kennedy, *Muslim Spain and Portugal: A Political History of al-Andalus* (London, 1996) and A. J. Fromherz, *The Almohads: The Rise of an Islamic Empire* (London, 2010).
3. Fletcher, *Moorish Spain*, 35.
4. Fromherz, *The Almohads*, 159–60.
5. V. Mann, T. F. Glick, and J. D. Dodd (eds.), *Convivencia: Jews, Muslims and Christians in Medieval Spain* (New York: 1992); M. R. Cohen, *Under Crescent and Cross: The Jews in the Middle Ages* (Princeton, NJ, 1994).
6. G. Freudenthal and M. Zonta, "The Reception of Avicenna in Jewish Cultures East and West," in P. Adamson (ed.), *Interpreting Avicenna: Critical Essays* (Cambridge, 2013), 214–41.
7. This will be covered in the next volume in this series, *Medieval Philosophy*.

Chapter 23

1. There have also arisen distinctive legal traditions for the specific branches within Shiism. See, for instance, I. K. Poonawala, "Al-Qāḍī al-Nuʿmān and Ismaʿili Jurisprudence," in F. Daftary (ed.), *Medieval Ismaʿili History and Thought* (Cambridge, 1996), 117–43.
2. On this process, see W. B. Hallaq, *The Origins and Evolution of Islamic Law* (Cambridge, 2005); C. Melchert, *The Formation of the Sunni Schools of Law* (Leiden, 1997).
3. Hallaq, *Origins*, 22–3. My presentation of the development of Islamic law owes much to this book.
4. Hallaq, *Origins*, 104.
5. J. Lowry, *Early Islamic Legal Theory: The Risāla of Muḥammad Ibn Idris al-Shāfiʿī* (Leiden, 2007).
6. For a brief overview of the geographical spread, see J. Schacht, *An Introduction to Islamic Law* (Oxford, 1982), 65–6.
7. I. Goldziher, *The Ẓāhirīs: Their Doctrine and their History*, trans. W. Behn (Leiden, 1971).
8. For his views on law a good place to start is A. Sabra, "Ibn Ḥazm's Literalism: A Critique of Islamic Legal Theory," in C. Adang *et al.* (eds.), *Ibn Ḥazm of Cordoba: The Life and Works of a Controversial Thinker* (Leiden, 2013), 97–160.
9. C. Adang, "Ibn Ḥazm on Homosexuality: A Case Study of Ẓāhirī Legal Methodology," *al-Qanṭara*, 24 (2003), 5–31.
0. For an assessment of the evidence, see J. Lameer, "Ibn Ḥazm's Logical Pedigree," in Adang, *Ibn Ḥazm of Cordoba*, 417–28.
1. See Adang, *Ibn Ḥazm of Cordoba*, 19 and 75.

Chapter 24

1. Cited by page number from the edition of L. Gauthier (Beirut, 1936). For a complete English translation see L. E. Goodman (trans.), *Ibn Tufayl: Hayy ibn Yaqzan* (Chicago, IL, 2009); most of the text, without the final section where Ḥayy travels to the other island, is translated in M. A. Khalidi, *Medieval Islamic Philosophical Writings* (Cambridge, 2005).
2. D. Gutas, "Ibn Ṭufayl on Ibn Sīnā's Eastern Philosophy," *Oriens*, 34 (1994), 224–41.
3. D. Wirmer, *Vom Denken der Natur zur Natur des Denkens: Ibn Bājja's Theorie der Potenz als Grundlegung der Philosophie* (Berlin, 2014).
4. For an edition and French translation of both treatises, see Ibn Bājja, *La Conduite de l'isolé et deux autres épîtres*, trans. C. Genequand (Paris, 2010). See further A. Altmann, "Ibn Bajja on Man's Ultimate Felicity," in *Harry Austryn Wolfson Jubilee Volume*, vol.1 (Jerusalem, 1965), 47–87.
5. See R. Kruk, "A Frothy Bubble: Spontaneous Generation in the Medieval Islamic Tradition," *Journal of Semitic Studies*, 35 (1990), 265–82.
6. For instance T. Kukkonen, *Ibn Tufayl: Living the Life of Reason* (London, 2014), 91.
7. For further discussion, see P. Adamson, "The Ethical Treatment of Animals," in R. C. Taylor and L. X. López-Farjeat (eds.), *The Routledge Companion to Islamic Philosophy* (London, 2015), 371–82.
8. For the history of criticisms aimed at Avicenna for this doctrine, see D. N. Hasse, "Spontaneous Generation and the Ontology of Forms in Greek, Arabic, and Medieval Latin Sources," in P. Adamson (ed.), *Classical Arabic Philosophy: Sources and Reception* (London, 2007), 150–75.
9. The name is transmitted as Asāl or Absāl in different manuscripts.

Chapter 25

1. This joke was borrowed from Paul Theroux.
2. As pointed out by D. Gutas, "Aspects of Literary Form and Genre in Arabic Logical Works," in C. Burnett (ed.), *Glosses and Commentaries on Aristotelian Logical Texts* (London, 1993), 29–76.
3. B. G. Dod, "Aristoteles Latinus," in N. Kretzmann, A. Kenny, and J. Pinborg (eds.), *The Cambridge History of Later Medieval Philosophy* (Cambridge, 1982), 45–79.
4. As with all general rules in the history of philosophy, there are exceptions. Averroes did have some immediate followers, as shown in C. Burnett, "The 'Sons of Averroes with the Emperor Frederick' and the Transmission of the Philosophical Works by Ibn Rushd," in J. A. Aertsen and G. Endress (eds.), *Averroes and the Aristotelian Tradition* (Leiden, 1999), 259–99. His most significant first-generation student was Ibn Ṭumlūs (d. 1223). At about the same time, Averroes' ideas found a more critical reception in the Ashʿarite thinker al-Miklātī, whose main target was, however, Avicenna: Y. Adouhane, "Al-Miklātī, a Twelfth Century Ašʿarite Reader of Averroes," *Arabic Sciences and Philosophy*, 22 (2012), 155–97. Later still, we also find Ibn Taymiyya referring to Averroes, sometimes in a surprisingly complimentary fashion.
5. S. Van Den Burgh (trans.), *Averroes: Tahāfut al-Tahāfut* (Cambridge, 1954).
6. A. Bertolacci, "Avicenna and Averroes on the Proof of God's Existence and the Subject-Matter of Metaphysics," *Medioevo*, 32 (2007), 61–98. See also D. B. Twetten, "Averroes on the Prime Mover Proved in the *Physics*," *Viator*, 26 (1995), 107–34.
7. Arberry trans., quoted G. F. Hourani (trans.), *Averroes: On the Harmony of Religion and Philosophy* (London, 1976), 45. Citations of the *Decisive Treatise* in the main text are from this version.
8. R. C. Taylor, "Truth Does Not Contradict Truth: Averroes and the Unity of Truth," *Topoi*, 19 (2000), 3–16. See also T.-A. Druart, "Averroes on the Harmony of Philosophy and Religion," in M. Wahba and M. Abousenna (eds.), *Averroes and the Enlightenment* (Amherst, NY, 1996), 253–62.
9. For Averroes' conviction that Aristotle was a more-or-less perfect philosopher, see R. C. Taylor, "Improving on Nature's Exemplar: Averroes' Completion of Aristotle's Psychology of Intellect," in P. Adamson *et al.* (eds.), *Philosophy, Science and Exegesis in Greek, Arabic and Latin Commentaries* (London, 2004), 107–30.

Chapter 26

1. R. McInerny (trans.), *Aquinas: On the Unity of the Intellect* (West Lafayette, IN, 1993).
2. For readers who missed my job interviews, I recommend ch. 30 of *Philosophy in the Hellenistic and Roman Worlds*.
3. For the differing views of Alexander of Aphrodisias and Themistius, see *Philosophy in the Hellenistic and Roman Worlds*, ch. 27.
4. References to Averroes' commentary are to the section numbers in Averroes (Ibn Rushd) of Cordoba, *Long Commentary on the De Anima of Aristotle*, trans. R.C. Taylor (New Haven, CT, 2009). The introduction offers a comprehensive presentation of Averroes' developing views on the intellect. See on this also A. L. Ivry, "Averroes' Middle and Long Commentaries on the *De Anima*," *Arabic Sciences and Philosophy*, 5 (1995), 75–92, H. A. Davidson, *Alfarabi, Avicenna and Averroes on Intellect* (Oxford, 1992).
5. For this, see Taylor's introduction to the *Long Commentary*, 12–28 and 89–93.
6. See Taylor's introduction, 33–4, and *Classical Philosophy*, ch. 39.
7. See also Taylor's introduction, 60–1 (I'm glad to note that he too uses giraffes to illustrate Averroes' theory). Taylor has also pointed to the influence of the ancient commentator Themistius on this and other aspects of Averroes' theory: "Themistius and the Development of Averroes' Noetics," in R. L. Friedman and J.-M. Counet (eds.), *Medieval Perspectives on Aristotle's De Anima* (Louvain, 2013), 1–38.
8. Like Ibn Bājja, Averroes describes the individual's active thinking as a form of "union" with the universal intellect. See A. L. Ivry, "Averroes on Intellection and Conjunction," *Journal of the American Oriental Society*, 86 (1966), 76–85; D. L. Black, "Conjunction and the Identity of Knower and Known in Averroes," *American Catholic Philosophical Quarterly*, 73 (1999), 159–84.
9. See Chapter 19 for the role played by this idea in Avicenna's proof for the immateriality of the rational soul.

Chapter 27

1. Translations taken from W. C. Chittick, *The Sufi Path of Knowledge: Ibn al-ʿArabī's Metaphysics of Imagination* (Albany, NY, 1989), xiii. This book is the most useful overview of Ibn ʿArabī's thought and provides many quotations from his works.
2. In Arabic his name is normally given as Ibn al-ʿArabī, whereas writers in Persian tend to drop the definite article *al-*. You'll see him called by both versions, but I will stick with Ibn ʿArabī.
3. See further A. Knysh, *Ibn ʿArabī in the later Islamic Tradition: The Making of a Polemical Image* (Albany, NY, 1999).
4. Their relationship is memorialized in two other anecdotes, one in which Ibn ʿArabī manages to summon an image of the distant Averroes in order to converse with him, and another in which he witnesses Averroes' funeral, with the body being carried to burial along with Averroes' books. See G. Elmore, *Islamic Sainthood and the Fullness of Time* (Leiden, 2000), 50–3. Thanks to Mohammed Rustom for this reference.
5. These two stories are recounted by A. Schimmel, *Mystical Dimensions of Islam* (Chapel Hill, NC, 1975), 125 and 109.
6. For the Cynics and Christian ascetics, see *Philosophy in the Hellenistic and Roman Worlds*, chs. 2 and 45.
7. See R. E. Cornell, "The Muslim Diotima? Traces of Plato's *Symposium* in Sufi Narratives," in K. Corrigan *et al.* (eds.), *Religion and Philosophy in the Platonic and Neoplatonic Traditions: From Antiquity to the Early Medieval Period* (Sankt Augustin, 2012), 235–56, at 245.
8. L. Lewisohn, *The Heritage of Sufism*, vol. 1: *Classical Persian Sufism from its Origins to Rumi (700–1300)* (Oxford: 1999), xxi.
9. He incidentally had a brother named Aḥmad who was a significant contributor to Sufi literature. Aḥmad in turn had an important student named ʿAyn al-Quḍat al-Hamadhānī, who was put to death at a young age in the year 1131. This was the decision of yet another vizier who served under the Seljūqs (these viziers are a dangerous bunch), probably because ʿAyn al-Quḍat criticized the corruption of the Seljūq regime.
0. For a partial translation, see M. Chodkiewicz (trans.), *Ibn al-ʿArabī, The Meccan Revelations: Selected Texts of Al-Futūḥāt al-Makkiyya*, 2 vols. (New York, 2002–4).
1. C. K. Dagli (trans.), *Ibn al-ʿArabī, The Ringstones of Wisdom* (Chicago, IL, 2004).
2. Chittick, *The Sufi Path of Knowledge*, 70.
3. Chittick, *The Sufi Path of Knowledge*, 34.
4. Chittick, *The Sufi Path of Knowledge*, 19, 130.
5. Chittick, *The Sufi Path of Knowledge*, 113.

Chapter 28

1. A. J. Fromherz, *Ibn Khaldūn: Life and Times* (Edinburgh, 2010).
2. Fromherz, *Ibn Khaldūn*, 3.
3. Citations from section number of F. Rosenthal, *Ibn Khaldūn: The Muqaddimah: An Introduction to History*, 3 vols. (Princeton, 1958). The next couple of paragraphs are based on Ibn Khaldūn's preface to the introduction.
4. This gives us a sharp contrast between Ibn Khaldūn and Ibn Ṭufayl, especially since, as we'll see shortly, Ibn Khaldūn thinks that settled human communities are required for the practice of philosophy.
5. See J. W. Morris, "An Arab Machiavelli? Rhetoric, Philosophy and Politics in Ibn Khaldun's Critique of Sufism," *Harvard Middle Eastern and Islamic Review*, 8 (2009), 242–91, which has the text of the legal ruling at 249–50. It's worth noting, in support of the reading I offer here, that even this harsh ruling against the Sufis distinguishes between an acceptable and unacceptable path.
6. See also the "sixth preparatory discussion" in his *Introduction*.

Chapter 29

1. P. Cole, *Selected Poems of Solomon Ibn Gabirol* (Princeton, NJ, 2001).
2. J. A. Laumakis (trans.), *Solomon ibn Gabirol (Avicebron): The Font of Life (Fons Vitae)* (Milwaukee, WI, 2014). Cited by page number from the Latin edition by Baeumker, which is given in brackets in Laumakis' translation.
3. Discovered by S. Munk, *Mélanges de philosophie juive et arabe* (Paris, 1859).
4. This is the argument of D. De Smet, *Empedocles Arabus: une lecture néoplatonicienne tardive* (Brussels: 1998), 15–20; De Smet also provides references to previous discussions of the issue.
5. Cited by page number from S. S. Wise (trans.), *Ibn Gabriol: The Improvement of the Moral Qualities* (New York, 1966).
6. *Summa Theologiae* 1.50.2.
7. Figure taken from T. Rudavsky, "Avencebrol (Ibn Gabirol)," in J. J. E. Gracia and T. B. Noone (eds.), *A Companion To Philosophy in the Middle Ages* (London, 2003), 174–81.
8. Here I am much in sympathy with the interpretation of Sarah Pessin; see her *Ibn Gabirol's Theology of Desire: Matter and Method in Jewish Medieval Neoplatonism* (Cambridge, 2013). She incidentally assumes (30) that Ibn Gabirol would have been able to access the *Theology of Aristotle*. See also T. M. Rudavsky, "Conflicting Motifs: Ibn Gabirol on Matter and Evil," *New Scholasticism*, 52 (1978), 54–71; J. Dillon, "Solomon Ibn Gabirol's Doctrine of Intelligible Matter," in L. E. Goodman (ed.), *Neoplatonism and Jewish Thought* (Albany, NY, 1992), 43–59. For Plotinus' views, see *Philosophy in the Hellenistic and Roman Worlds*, ch. 30.
9. Section numbers from B. Lewis (trans.), *Ibn Gabirol: The Kingly Crown* (London, 1961).

Chapter 30

1. Unfortunately the only English translation is a rather outdated one by Hartwig Hirschfeld, which was first published in 1905. (Of course the outdated can have a certain charm; please pause to admire the name "Hartwig.") I cite by page number from this widely available printing: *The Kuzari: An Argument for the Faith of Israel* (New York, 1964).
2. See further D. J. Lasker, "Yehuda Hallevi and Karaism," in J. Neusner *et al.* (eds.), *From Ancient Israel to Modern Judaism*, vol. 3 (Atlanta, GA, 1989), 111–25. For the relation of Karaitism to philosophy, see also D. J. Lasker, *From Judah Hadassi to Elijah Bashyatchi: Studies in Late Medieval Karaite Philosophy* (Leiden, 2008).
3. A point well made by Y. T. Langermann, "Science and the *Kuzari*," *Science in Context*, 10 (1997), 495–522, at 496.
4. On the role played by this principle, see H. A. Davidson, "The Active Intellect in the *Kuzari* and Hallevi's Theory of Causality," *Revue des Études Juives*, 131 (1973), 351–96.
5. On this theme, see N. Roth, "The 'Theft of Philosophy' by the Greeks from the Jews," *Classical Folia*, 32 (1978), 53–67.
6. For more on this connection, see H. Kreisel, "Yehuda Hallevi's Influence on Maimonides: A Preliminary Appraisal," *Maimonidean Studies*, 2 (1991), 95–121.
7. *Philosophy in the Hellenistic and Roman Worlds*, ch. 16.
8. The relevant passage is translated at M. A. Friedman, *From a Sacred Source: Genizah Studies in Honor of Professor Stefan C. Reif* (Leiden, 2011), 162. My thanks to Daniel Davies for the reference.
9. D. H. Baneth, "Judah Hallevi and al-Ghazali," in A. Jospe (ed.), *Studies in Jewish Thought* (Detroit, 1981), 181–99.

Chapter 31

1. Cited by N. M. Sarna, "Abraham Ibn Ezra as an Exegete," in I. Twersky and J. M. Harris (eds.), *Rabbi Abraham Ibn Ezra: Studies in the Writings of a Twelfth-Century Polymath* (Cambridge, MA, 1993), 1–27, at 2. The poem is translated in T. Carmi, *The Penguin Book of Hebrew Verse* (New York, 1981), 353.
2. *Philosophy in the Hellenistic and Roman Worlds*, ch. 28.
3. P. Adamson, "Abū Maʿshar, al-Kindī and the Philosophical Defense of Astrology," *Recherches de théologie et philosophie médiévales*, 69 (2002), 245–70.
4. Sarna, "Abraham Ibn Ezra as an Exegete," 5.
5. S. Sela, *Abraham Ibn Ezra and the Rise of Medieval Hebrew Science* (Leiden, 2003), 105.
6. Sela, *Abraham Ibn Ezra*, 287.
7. Sela, *Abraham Ibn Ezra*, 149–50.
8. Y. T. Langermann, "Science and the *Kuzari,*" *Science in Context*, 10 (1997), 495–522, at 500.
9. For applications of astrology, see Sela, *Abraham Ibn Ezra*, 64–7, and see further B. R. Goldstein, "Astronomy and Astrology in the Works of Abraham ibn Ezra," *Arabic Sciences and Philosophy*, 6 (1996), 9–21. The buried-treasure example is one discussed in a work by al-Kindī.
0. Sela, *Abraham Ibn Ezra*, 179, 190.
1. A third Abraham is worth mentioning at least in a footnote: Abraham Bar Ḥiyya, who started transmitting learning from Arabic into Hebrew already before Ibn Ezra and who was, like him, a staunch advocate of astrology. Bar Ḥiyya is occasionally criticized by Ibn Ezra on technical issues. On him, see Sela, *Abraham Ibn Ezra*, 96–104.
2. References to manuscript page numbers given in N. M. Samuelson (trans.), *Abraham Ibn Daud: The Exalted Faith* (London, 1986). See also I. Levin, *Abraham Ibn Ezra Reader: Annotated Texts with Introductions and Commentaries* (New York, 1985); R. Fontaine, *In Defence of Judaism: Abraham Ibn Daud: Sources and Structure of ha-Emunah ha-Ramah* (Assen, 1990).
3. Sela, *Abraham Ibn Ezra*, 179.
4. "Letter on Astrology," in R. Lerner and M. Mahdi, *Medieval Political Philosophy* (Ithaca, NY, 1963), 227–36. See further Y. T. Langermann, "Maimonides' Repudation of Astrology," in A. Hyman (ed.), *Maimonidean Studies*, 2 (1991), 123–58; G. Freudenthal, "Maimonides' Stance on Astrology in Context: Cosmology, Physics, Medicine, and Providence," in F. Rosner and S. Kottek (eds.), *Moses Maimonides: Physician, Scientist, and Philosopher* (London, 1993), 77–90.
5. *Philosophy in the Hellenistic and Roman Worlds*, ch. 26.
6. Also mentioned by Abraham Ibn Daud at *Exalted Faith*, 204a.

Chapter 32

1. Cited by page number from M. Mansoor (trans.), *Ibn Pakuda: The Book of Direction to the Duties of the Heart* (Oxford, 2004).
2. *Philosophy in the Hellenistic and Roman Worlds*, ch. 12.
3. A work which was, incidentally, known in Andalusia: as mentioned in Chapter 23, it was made the subject of a refutation by Ibn Ḥazm. But as far as I know, no one has investigated the possibility that Ibn Paquda made use of it.
4. It serves as an introduction to a treatise that collects ethical maxims and sayings. For this and other texts see R. L. Weiss with C. E. Butterworth (trans.), *Ethical Writings of Maimonides* (New York, 1975). Citations by page number from this volume.
5. For these examples, see R. L. Weiss, *Maimonides' Ethics* (Chicago, IL, 1991), 36.

Chapter 33

1. The word can also mean "vulture." Given Maimonides' significance in the history of religion, it is tempting to make a joke here involving the phrase "bird of pray." But even I won't stoop that low, except insofar as I just have.
2. Two relatively recent assessments of the relevance of the historical context for Maimonides' life are H. A. Davidson, *Moses Maimonides: The Man and his Works* (Oxford, 2005) and S. Stroumsa, *Maimonides in his World: Portrait of a Mediterranean Thinker* (Princeton, NJ, 2009).
3. We have an epistle ascribed to Maimonides which deals with forced converts, translated as *The Epistle of Martyrdom* in A. S. Halkin, *The Epistles of Martyrdom: Crisis and Leadership* (Philadelphia, PA, 1985). Its authenticity is, however, doubted by Davidson, *Moses Maimonides*, 501–9.
4. S. Pines (trans.), *Guide of the Perplexed* (Chicago, IL, 1963), §3.27. See further D. Frank, "The End of the Guide: Maimonides on the Best Life for Man," *Judaism*, 34 (1985), 485–95.
5. Translations in I. Twersky (ed.), *A Maimonides Reader* (New York, 1972) and H. M. Russell and J. Weinberg (trans.), *The Book of Knowledge from the Mishneh Torah of Maimonides* (Edinburgh, 1981).
6. In the *Epistle to Yemen*, cited at Stroumsa, *Maimonides in his World*, 61.
7. J. A. Buijs, "Attributes of Action in Maimonides," *Vivarium*, 27 (1989), 85–102.
8. Concerning his views on prophecy, see for example, H. A. Wolfson, "Hallevi and Maimonides on Prophecy," *Jewish Quarterly Review*, 32 (1942), 345–70; A. Reines, *Maimonides and Abravanel on Prophecy* (Cincinnati, OH, 1970); L. Kaplan, "Maimonides on the Miraculous Element in Prophecy," *Harvard Theological Review*, 70 (1977), 233–56.
9. K. Seeskin, *Maimonides on the Origin of the World* (Cambridge, 2005), 161–3.
0. For his changing views on miracles, see Y. T. Langermann, "Maimonides and Miracles: The Growth of a (Dis)belief," *Jewish History*, 18 (2004), 147–72.

Chapter 34

1. For other discussions of the problem see, for instance, H. A. Davidson, "Maimonides' Secret Position on Creation," in I. Twersky (ed.), *Studies in Medieval Jewish History and Literature* (Cambridge, MA, 1979), 16–40; W. Z. Harvey, "A Third Approach to Maimonides' Cosmogony-Prophetology Puzzle," *Harvard Theological Review*, 74 (1981), 287–301; D. Davies, *Method and Metaphysics in Maimonides' Guide for the Perplexed* (New York, 2011).
2. This is the argument of K. Seeskin, *Maimonides on the Origin of the World* (Cambridge, 2005).
3. G. Freudenthal, "Maimonides' Philosophy of Science," in K. Seeskin (ed.), *The Cambridge Companion to Maimonides* (Cambridge, 2005), 134–66.
4. G. Freudenthal, "'Instrumentalism' and 'Realism' as Categories in the History of Astronomy: Duhem vs Popper, Maimonides vs Gersonides," *Centaurus*, 45 (2003), 96–117.

Chapter 35

1. G. Stern, "Philosophy in Southern France: Controversy over Philosophic Study and the Influence of Averroes upon Jewish Thought," in D. H. Frank and O. Leaman (eds.), *The Cambridge Companion to Medieval Jewish Philosophy* (Cambridge, 2003), 281–303.
2. Stern, "Philosophy in Southern France," 290, and D. J. Silver, *Maimonidean Criticism and the Maimonidean Controversy 1180–1240* (Leiden, 1965), 42–3. Maimonides himself seems to be echoing Aristotle's statement that the young are not a fit audience for philosophical discussion of ethics (*Nicomachean Ethics* 1095a).
3. On reasons for the geographical spread of philosophy among Jews in Christendom, see G. Freudenthal, "Arabic into Hebrew: The Emergence of the Translation Movement in Twelfth-Century Provence and Jewish-Christian Polemic," in D. Freidenreich and M. Goldstein (eds.), *Border Crossings: Interreligious Interaction and the Exchange of Ideas in the Islamic Middle Ages* (Philadelphia, PA, 2011), 124–43.
4. S. Stroumsa, *Maimonides in his World: Portrait of a Mediterranean Thinker* (Princeton, NJ, 2009), 165–83.
5. G. Freudenthal, "Samuel Ibn Tibbon's Avicennian Theory of an Eternal World," *Aleph: Historical Studies in Science and Judaism*, 8 (2008), 41–129.
6. Particularly in Silver, *Maimonidean Criticism*.
7. Quoted from N. Caputo, *Nahmanides in Medieval Catalonia* (Notre Dame, IN, 2007), 22; see p. 27 for the relevance of the campaign against the Cathars for the Maimonidean controversy.
8. Y. T. Langermann, "Acceptance and Devaluation: Naḥmanides' Attitude towards Science," *Journal of Jewish Thought and Philosophy*, 1 (1992), 223–45, and D. Berger, "Miracles and Natural Order in Nahmanides," in I. Twersky (ed.), *Rabbi Moses Nahmanides* (*Ramban*)*: Explorations in his Religious and Literary Virtuosity* (Cambridge, 1983), 107–28.
9. Cited at Caputo, *Nahmanides in Medieval Catalonia*, 34; see also 10 and 36–8 for the following points about localism.
0. The rabbi in question was Abraham ben David ("Rabad"); see E. Schweid, *The Classic Jewish Philosophers: From Saadia Through the Renaissance*, trans. L. Levin (Leiden, 2008), 305. For his objections to the "universalist" project of Maimonides in a legal context, see also Silver, *Maimonidean Criticism*, 93.
1. For a useful, though brief, overview of Albalag on this issue, see C. Sirat, *A History of Jewish Philosophy in the Middle Ages* (Cambridge, 1985), 238–43.
2. Caputo, *Nahmanides in Medieval Catalonia*, 20.

Chapter 36

1. The first of which is actually the *Isagoge* or *Introduction* of Porphyry. For Averroes' influence, see R. Glasner, "Levi ben Gershom and the Study of Ibn Rushd in the 14th Century," *Jewish Quarterly Review*, 86 (1995), 51–90.
2. S. Harvey, "Arabic into Hebrew: The Hebrew Translation Movement and the Influence of Averroes on Medieval Thought," in D. H. Frank and O. Leaman (eds.), *The Cambridge Companion to Medieval Jewish Philosophy* (Cambridge, 2003), 258–80, at 260.
3. Citations to page numbers of S. Harvey (trans.), *Falaquera's Epistle of the Debate: An Introduction to Jewish Philosophy* (Cambridge, MA, 1987).
4. Cited by section numbers from S. Feldman (trans.), *Levi ben Gershom (Gersonides): The Wars of the Lord*, 3 vols. (Philadelphia, PA, 1987). This remark appears in Gersonides' introduction, at vol.1, 98.
5. This was the Kabbalist, Shem Ṭov ibn Shem Ṭov, not to be confused with the aforementioned Shem Ṭov Falaquera. See Feldman's introduction to his translation, vol. 1, 42.
6. There has been some debate over Gersonides' possible acquaintance with Latin texts and Christian authors. On this see Feldman, *Wars of the Lord*, 6 and 47–50. Intriguingly, Gersonides was in Avignon at the same time as the great scholastic Christian thinker Ockham.
7. For what follows, see H. A. Davidson, "Gersonides on the Material and Active Intellects," in G. Freudenthal (ed.), *Studies on Gersonides: A Fourteenth-Century Jewish Philosopher Scientist* (Leiden, 1992), 195–265.
8. At §3.6 Gersonides, however, takes Maimonides to hold that merely universal divine knowledge would be at least consistent with the Torah.
9. See N. Samuelson, "Gersonides' Account of God's Knowledge of Particulars," *Journal of the History of Philosophy*, 10 (1972), 399–416; J. D. Bleich, *Providence in the Philosophy of Gersonides* (New York, 1973), which translates book 4 of the *Wars*; T. M. Rudavsky, "Divine Omniscience and Future Contingents in Gersonides," *Journal of the History of Philosophy*, 21 (1983), 513–36; T. M. Rudavsky, "Creation, Time and Infinity in Gersonides," *Journal of the History of Philosophy*, 26 (1988), 25–44.
0. Genesis 41, mentioned at *Wars of the Lord* 3.5 and discussed by T. M. Rudavsky, "Divine Omniscience," 531.
1. S. Feldman, "Gersonides' Proofs for Creation of the Universe," *Proceedings of the American Academy for Jewish Research*, 35 (1967), 113–37.
2. For what follows, see J. Staub, *The Creation of the World According to Gersonides* (Chico, CA, 1982).
3. For his critical approach to Aristotelian science, see R. Glasner, *Gersonides: A Portrait of a Fourteenth-Century Philosopher-Scientist* (Oxford, 2014).

Chapter 37

1. See, for his influence, M. Zonta, "The Influence of Hasdai Crescas's Philosophy on Some Aspects of Sixteenth-century Philosophy and Science," in J. Helm and A. Winkelmann (eds.), *Religious Confessions and the Sciences in the Sixteenth Century* (Leiden, 2001), 71–8.
2. For a useful overview of his life and works, see Shalom Sadik's article on Crescas on the online *Stanford Encyclopedia of Philosophy*, on which I have drawn in the next paragraph or so.
3. For the wider story of Jews in Spain after the reconquest, see Y. Baer, *A History of the Jews in Christian Spain* (Philadelphia, PA, 1992); B. Z. Netanyahu, *The Origins of the Inquisition in Fifteenth-century Spain* (New York, 1995).
4. On this and the subsequent tradition of reflection on the principles in response to Maimonides, see M. Kellner, *Dogma in Medieval Jewish Thought: From Maimonides to Abravanel* (Oxford, 1986).
5. See the passage from the *Light of the Lord* translated at Kellner, *Dogma in Medieval Jewish Thought*, 110–11.
6. For what follows I draw on the classic edition, translation, and commentary of this part of the *Light* in H. A. Wolfson, *Crescas' Critique of Aristotle* (Cambridge, MA, 1929). Cited by page number from Wolfson's English translation.
7. For this and the following points, see W. Z. Harvey, *Physics and Metaphysics in Ḥasdai Crescas* (Amsterdam, 1998), 51–6.
8. This is the reading of Harvey, *Physics and Metaphysics*, 19.
9. Harvey, *Physics and Metaphysics*, 73–88.
0. This version of the proof also appears in Thomas Aquinas' famous "five ways" of proving God in the *Summa Theologiae*.

Chapter 38

1. *Classical Philosophy*, ch. 26, *Philosophy in the Hellenistic and Roman Worlds*, chs. 32 and 41.
2. L. E. Goodman, *The Book of Theodicy: Translation and Commentary on the Book of Job by Saadiah ben Joseph al-Fayyūmī* (New Haven, CT, 1988). See further E. I. J. Rosenthal, "Saadya's Exegesis of the Book of Job," in E. I. J. Rosenthal (ed.), *Saadya Studies* (New York, 1980), 177–205.
3. This point is made by R. Eisen, *The Book of Job in Medieval Jewish Philosophy* (Oxford, 2004), 4–6. I draw on Eisen extensively in this chapter.
4. Eisen, *The Book of Job*, 19–20, 29.
5. Eisen, *The Book of Job*, 36.
6. For this connection, see Goodman, *The Book of Theodicy*, 31–5.
7. M. T. Heemskerk, *Suffering in the Muʿtazilite Theology: ʿAbd al-Jabbār's Teaching on Pain and Divine Justice* (Leiden, 2000), 178.
8. See also Eisen, *The Book of Job*, 5.
9. *Philosophy in the Hellenistic and Roman Worlds*, ch.26. See *Guide for the Perplexed*, §3.17.
0. See Eisen, *The Book of Job*, 58–9 for various approaches to Maimonides' interpretation of the verse, which is set out in *Guide for the Perplexed*, §3.22–3.
1. A. L. Lassen, *The Commentary of Levi ben Gersom (Gersonides) on the Book of Job* (New York, 1946).
2. Eisen, *The Book of Job*, 155. As an example of Maimonidean rationalism, Eisen also discusses the reading of the Book of Job offered by Zeraḥiah Ḥen.
3. As in Chapter 32, references are to M. Mansoor (trans.), *Ibn Pakuda: The Book of Direction to the Duties of the Heart* (Oxford, 2004).
4. Eisen, *The Book of Job*, 184.

Chapter 39

1. *Philosophy in the Hellenistic and Roman Worlds*, ch. 23.
2. Quoted from F. Greenspahn (ed.), *Jewish Mysticism and Kabbalah: New Insights and Scholarship* (New York, 2011), vii–viii.
3. G. Scholem, *Origins of the Kabbalah*, trans. A. Arkush (Princeton, NJ, 1987).
4. *Philosophy in the Hellenistic and Roman Worlds*, ch. 40 For the connection to Gnosticism and possible historical connections, see Scholem, *Origins of the Kabbalah*, ch. 2.
5. Cited in E. R. Wolfson, "Beneath the Wings of the Great Eagle: Maimonides and Thirteenth-Century Kabbalah," in F. K. Hasselhoff and O. Fraisse (eds.), *Moses Maimonides (1138–1204): His Religious, Scientific and Philosophical "Wirkungsgeschichte" in Different Cultural Contexts* (Würzburg, 2004), 209–37, at 212. For more on the relation between Maimonides and Kabbalah, see S. O. Heller Wilensky, "The *Guide* and the *Gate*: The Dialectical Influence of Maimonides on Isaac ibn Latif and Early Spanish Kabbalah," in J. Hackett *et al.* (eds.), *A Straight Path: Studies in Medieval Philosophy and Culture* (Washington, DC, 1988), 266–78; M. Idel, "Maimonides and Kabbalah," in I. Twersky (ed.), *Studies in Maimonides* (Cambridge, MA, 1990), 31–79; E. R. Wolfson, "*Via Negativa* in Maimonides and its Impact on Thirteenth-Century Kabbalah," *Maimonidean Studies*, 5 (2008), 393–442.
6. This distinction has especially been emphasized by Moshe Idel, as in his *The Mystical Experience in Abraham Abulafia* (Albany, NY, 1988), 8.
7. Scholem, *Origins*, 61.
8. The *Book of Brilliance* enumerates eight of them in an anthropomorphic account of God. See M. Idel, *Kabbalah: New Perspectives* (New Haven, CT, 1988), 137. But in another passage it refers to a list of "ten utterances," see A. Green, "The Zohar: Jewish Mysticism in Medieval Spain," in L. Fine (ed.), *Essential Papers on Kabbalah* (New York, 1995), 27–66, at 31.
9. For the derivation of the term, see Scholem, *Origins*, 81: in the tradition it is variously related to the verb "count" (*safar*), which indicates a meaning close to "numbers," and to "sapphire," suggesting the brilliant luminosity of God.
0. Scholem, *Origins*, 222.
1. For the possible influence of Sufism on Kabbalah, see E. R. Wolfson, "Abraham ben Samuel Abulafia and the Prophetic Kabbalah," in Greenspahn (ed.), *Jewish Mysticism and Kabbalah*, 68–90, at 69 with further references at note 3.
2. See D. C. Matt, "*Ayin*: The Doctrine of Nothingness in Jewish Mysticism," in Fine (ed.), *Kabbalah: Essential Papers*, 67–108, at 83.
3. Matt, "*Ayin*: The Doctrine of Nothingness," 77.
4. An even closer comparison would be to theory of Damascius (see *Philosophy in the Hellenistic and Roman Worlds*, ch. 37), who distinguished the One from a highest principle called simply the Ineffable—the latter being comparable to the Kabbalists' *ein sof*.
5. Scholem, *Origins*, 274. Jewish critics were known to say that this made the Kabbalists even worse than the Christians: they made God ten, instead of three!
6. Scholem, *Origins*, 222.
7. For a brief overview, see Idel, *The Mystical Experience*, 3. This book is the basis for most of what follows here.
8. Idel, *Kabbalah: New Perspectives*, xiii, 53–8, 166–70, 173–99.
9. Idel, *The Mystical Experience*, 76.
0. Idel, *The Mystical Experience*, 135 (Exodus), 128 (Metatron).
1. M. Idel, "Maimonides' *Guide of the Perplexed* and the Kabbalah," 201. For Maimonides on the Chariot, see D. Davies, *Method and Metaphysics in Maimonides' Guide for the Perplexed* (New York, 2011), ch. 7.

2. Idel, *Kabbalah: New Perspectives*, 2.

Chapter 40

1. For what follows, see S. Rauschenbach, *Joseph Albo: Jüdische Philosophy und christliche Kontroverstheologie in der frühen Neuzeit* (Leiden, 2002), ch. 2.
2. On this topic, see L. Jacobs, *Principles of the Jewish Faith* (London, 1964); S. Schechter, "The Dogmas of Judaism," in S. Schechter, *Studies of Judaism: A Selection* (Cleveland, OH, 1962), 73–104; M. Kellner, *Dogma in Medieval Jewish Thought: From Maimonides to Abravanel* (Oxford, 1986).
3. *Philosophy in the Hellenistic and Roman Worlds*, ch. 36
4. Rauschenbach, *Joseph Albo*, 48; Kellner, *Dogma in Medieval Jewish Thought*, 152.
5. Rauschenbach, *Joseph Albo*, 95.
6. Kellner, *Dogma in Medieval Jewish Thought*, 141.
7. Kellner, *Dogma in Medieval Jewish Thought*, 150. As Kellner points out, Duran (mentioned in Chapter 38) was also instrumental in developing this "geometrical" approach to the law.
8. On him, see S. Feldman, *Philosophy in a Time of Crisis: Don Isaac Abravanel, Defender of the Faith* (London, 2003).
9. Here I follow Feldman, *Philosophy in a Time of Crisis*, 160.
0. See Kellner, *Dogma in Medieval Jewish Thought*, 179–95; I follow his interpretation of Abravanel's view on the principles below.
1. Kellner, *Dogma in Medieval Jewish Thought*, 185.
2. Feldman, *Philosophy in a Time of Crisis*, 36–7. He also discusses the next point I mention about willing to believe, at p. 38.
3. G. Schwarb, "Muʿtazilism in the Age of Averroes," in P. Adamson (ed.), *In the Age of Averroes: Arabic Philosophy in the 6th/12th Century* (London, 2008), 251–82, at 276–9.
4. D. R. Blumenthal, *The Philosophic Questions and Answers of Ḥōṭer ben Shelōmō* (Leiden, 1981).
5. Blumenthal, *The Philosophic Questions*, 32.

Chapter 41

1. D. Gutas, "The Heritage of Avicenna: the Golden Age of Arabic Philosophy, 900–ca.1350," in J. Janssens and D. De Smet (eds.), *Avicenna and his Heritage* (Leuven, 2002).
2. G. Makdisi, *The Rise of Colleges: Institutions of Learning in Islam and the West* (Edinburgh, 1981).
3. R. Wisnovsky, "The Nature and Scope of Arabic Philosophical Commentary in Post-Classical (ca. 1100–1900 AD) Islamic Intellectual History: Some Preliminary Observations," in P. Adamson, H. Baltussen, and M. W. F. Stone (eds.), *Philosophy, Science and Exegesis in Greek, Arabic and Latin Commentaries*, 2 vols. (London, 2004), 2: 149–91.
4. A. K. Kazi and J. G. Flynn (trans.), *al-Shahrastānī: Muslim Sects and Divisions* (London, 1984).
5. W. Madelung and T. Mayer (trans.), *Struggling with the Philosopher: A Refutation of Avicenna's Metaphysics* (London, 2001). Cited by page number.
6. On whom, see C. Martini Bonadeo, ʿ*Abd al-Laṭīf al-Baghdādī's Philosophical Journey. From Aristotle's Metaphysics to the "Metaphysical Science"* (Leiden, 2013).
7. On which, see Makdisi, *The Rise of Colleges*, 84–8.
8. For this criticism and ʿAbd al-Laṭīf's view of philosophy in general, see D. Gutas, "Philosophy in the Twelfth Century: One View from Baghdad, or the Repudiation of al-Ghazālī," in P. Adamson (ed.), *In the Age of Averroes: Arabic Philosophy in the Sixth/Twelfth Century* (London, 2011), 9–26. On him see also N. P. Joosse's contribution to the same volume.
9. A. Neuwirth, ʿ*Abd al-Laṭīf al-Baġdādī's Bearbeitung von Buch Lambda der aristotelischen Metaphysik* (Wiesbaden, 1976).
0. See W. C. Chittick, *The Heart of Islamic Philosophy: The Quest for Self-Knowledge in the Teachings of Afḍal al-Dīn Kāshānī* (Oxford, 2001).

Chapter 42

1. S. Pines, *Studies in Abū l-Barakāt al-Baghdādī: Physics and Metaphysics* (Jerusalem, 1979). Citations in the main text of this chapter are to page numbers of this volume.
2. On this and other conversion stories, see S. Stroumsa, "On Jewish Intellectuals who Converted in the Early Middle Ages," in D. Frank (ed.), *The Jews of Medieval Islam: Community, Society and Identity* (Leiden, 1989), 179–97.
3. This Galenic tradition is discussed in S. Menn, "The Discourse on the Method and the Tradition of Intellectual Autobiography," in J. Miller and B. Inwood (eds.), *Hellenistic and Early Modern Philosophy* (Cambridge, 2003), 141–91.
4. On this see A. Hasnawi, "La Dynamique d'Ibn Sīnā (La notion d'inclination *mayl*)," in J. Jolivet and R. Rashed (eds.), *Études sur Avicenne* (Paris, 1984), 102–23; F. W. Zimmermann, "Philoponus' Impetus Theory in the Arabic Tradition," in R. Sorabji (ed.), *Philoponus and the Rejection of Aristotelian Science* (London, 1987), 121–9; J. McGinnis, *Avicenna* (New York, 2010), 79–84. From the latter I take the point below about the disanalogy with impetus theory.
5. Pines, *Studies*, 154–9 points out another unexplained parallel with Abraham bar Ḥiyya, who likewise said that time measures existence.

Chapter 43

1. Taken from F. Kholeif, *A Study on Fakhr al-Dīn al-Rāzī and his Controversies in Transoxiana* (Beirut, 1966), 63–5.
2. Kholeif, *A Study on Fakhr al-Dīn al-Rāzī*, 29.
3. On his life, see T. Street, "Concerning the Life and Works of Fakhr al-Dīn al-Rāzī," in P. Riddell *et al.* (eds.), *Islam: Essays on Scripture, Thought and Society* (Leiden, 1997), 135–46; F. Griffel, "On Fakhr al-Dīn al-Rāzī's Life and the Patronage He Received," *Journal of Islamic Studies*, 18 (2007), 313–44.
4. Kholeif, *A Study on Fakhr al-Dīn al-Rāzī*, 5.
5. P. Adamson, "Fakhr al-Dīn al-Rāzī on the Existence of Time," forthcoming.
6. Kholeif, *A Study on Fakhr al-Dīn al-Rāzī*, 11.
7. Indeed, in earlier treatises al-Rāzī adopted an agnostic position on the nature of time. But in the *Exalted Pursuits* he winds up endorsing something like the earlier al-Rāzī's position on the nature or "essence" of time, according to which it exists independently of motions. This is a view that both Rāzīs associate with Plato. See P. Adamson and A. Lammer, "Fakhr al-Dīn al-Rāzī's Platonist Account of the Essence of Time," forthcoming.
8. Kholeif, *A Study on Fakhr al-Dīn al-Rāzī*, 18.
9. M. E. Marmura, "Fakhr al-Dīn al-Rāzī's Critique of an Avicennan *Tanbīh*," in B. Mojsisch and O. Pluta (eds.), *Historia Philosophiae Medii Aevi: Studien zur Geschichte der Philosophie des Mittelalters*, vol. 2 (Amsterdam, 1991), 627–41.
0. For instance, he worries that the "Platonist" understanding of time as independently existent might make time a second necessary existent alongside God. See Adamson and Lammer, "Fakhr al-Dīn al-Rāzī's Platonist Account."
1. It remains a subject of dispute whether Avicenna's proof is "ontological," *i.e.* based on pure conceptual analysis, or "cosmological," *i.e.* requiring premises about what we find in the created world. See on this, for instance, M. E. Marmura, "Avicenna's Proof from Contingency for God's Existence in the *Metaphysics* of the *Shifāʾ*," *Medieval Studies*, 42 (1980), 337–52; P. Morewedge, "A Third Version of the Ontological Argument in the Ibn Sinian Metaphysics," in P. Morewedge (ed.), *Islamic Philosophical Theology* (Albany, NY, 1979), 182–222.
2. T. Mayer, "Fakhr ad-Dīn ar-Rāzī's Critique of Ibn Sīnā's Argument for the Unity of God in the *Ishārāt* and Naṣīr ad-Dīn aṭ-Ṭūsī's Defence," in D. C. Reisman (ed.), *Before and After Avicenna* (Leiden, 2003), 199–218.
3. P. Adamson, "Avicenna and his Commentators on Self-Intellective Substances," in D. N. Hasse and A. Bertolacci (eds.), *The Arabic, Hebrew and Latin Reception of Avicenna's Metaphysics* (Berlin, 2011), 97–122.
4. B. Abrahamov, "Fakhr al-Dīn al-Rāzī on God's Knowledge of Particulars," *Oriens*, 33 (1992), 133–55.
5. For what follows, see A. Shihadeh, *The Teleological Ethics of Fakhr al-Dīn al-Rāzī* (Leiden, 2006), especially ch. 2.
6. Shihadeh, *The Teleological Ethics*, 5.

Chapter 44

1. F. Griffel, *Toleranz und Apostasie im Islam* (Leiden, 2000).
2. Quoted from J. Walbridge, "Suhrawardī and Illuminationism," in P. Adamson and R. C. Taylor (eds.), *The Cambridge Companion to Arabic Philosophy* (Cambridge, 2005), 201–23, at 202.
3. It is worth noting that Suhrawardī is said to have studied with the same master as Fakhr al-Dīn, namely Majd al-Dīn al-Jīlī.
4. Citations are of section numbers from J. Walbridge and H. Ziai (ed. and trans.), *Suhrawardī: The Philosophy of Illumination* (Provo, UT, 1999).
5. Actually Suhrawardī's argument is somewhat more complicated than this: he argues that if I am to know the specifying feature (in our example, "green") then I learn about it either from knowing the case at hand (emeralds) or from somewhere else (dollar bills), but if from somewhere else, then the feature doesn't really specify the thing defined.
6. See M. Haʾiri Yazdi, *The Principles of Epistemology in Islamic Philosophy: Knowledge by Presence* (Binghamton, NY, 1992). For the more "Avicennizing" reading I'm about to present, see H. Eichner, "'Knowledge by Presence', Apperception in the Mind–Body Relationship: Fakhr al-Dīn al-Rāzī and al-Suhrawardī as Representatives and Precursors of a Thirteenth-Century Discussion," in P. Adamson (ed.), *The Age of Averroes: Arabic Philosophy in the Sixth/Twelfth Century* (London, 2011), 117–40. At p. 132 of this article Eichner translates the dream dialogue with Aristotle, which is recounted in another work, the *Talwīḥāt*.
7. See further J. Kaukua, *Self-Awareness in Islamic Philosophy: Avicenna and Beyond* (Cambridge, 2015), ch. 6.
8. Here I agree with J. Walbridge, *The Science of Mystic Lights: Quṭb al-Dīn al-Shīrāzī and the Illuminationist Tradition in Islamic Philosophy* (Cambridge, MA, 1992), 40.

Chapter 45

1. See in general on this topic, P. E. Walker, "The Doctrine of Metempsychosis in Islam," in W. B. Hallaq and D. P. Little (eds.), *Islamic Studies Presented to Charles J. Adams* (Leiden, 1991), 219–38, and for Illuminationism and reincarnation S. Schmidtke, "The Doctrine of the Transmigration of Soul According to Shihāb al-Dīn al-Suhrawardī (Killed 587/1991) and his Followers," *Studia Iranica*, 28 (1999), 237–54.

2. On him, see Y. T. Langermann, "Ibn Kammūna and the 'New Wisdom' of the Thirteenth Century," *Arabic Sciences and Philosophy*, 15 (2005), 277–327; R. Pourjavady and S. Schmidtke, *A Jewish Philosopher of Baghdad: ʿIzz al-Dawla ibn Kammūna (d. 683/1284)* (Leiden, 2006).

3. Pourjavady and Schmidtke, *A Jewish Philosopher of Baghdad*, 18–23.

4. Here I draw on L. Muehlethaler, "Ibn Kammūna (d.683/1284) on the Eternity of the Human Soul: The Three Treatises on the Soul and Related Texts," Ph.D dissertation, Yale University (2002). My thanks to the author for making a copy available to me.

5. This idea that immaterial things are each unique in species was also used in Latin medieval thought to explain how angels are different from one another, despite having no matter to individuate them.

6. H. Ziai, "The Illuminationist Tradition," in S. H. Nasr and O. Leaman (eds.), *History of Islamic Philosophy* (London, 1996), 465–96, at 488–9.

7. As argued by Y. T. Langermann, "Ibn Kammūna at Aleppo," *Journal of the Royal Asiatic Society*, 17 (2007), 1–19.

8. In what follows I draw on J. Walbridge, *The Science of Mystic Lights: Quṭb al-Dīn al-Shīrāzī and the Illuminationist Tradition in Islamic Philosophy* (Cambridge, MA, 1992).

9. Walbridge, *The Science of Mystic Lights*, 19.

0. Shahrazūrī additionally commented on the *Talwīḥāt* of Suhrawardī, and wrote independent works such as the massive, and later influential, *Rasāʾil al-Shajara al-Ilāhiyya*.

1. R. Pourjavady and S. Schmidtke, "Quṭb al-Dīn al-Shīrāzī's (634/1236–710/1311) *Durrat al-Tāj* and its Sources," *Journal Asiatique*, 292 (2004), 311–30.

2. Walbridge, *The Science of Mystic Lights*, 100 and 103.

3. Schmidtke, "The Doctrine of the Transmigration of Soul," 243–4.

4. R. Marcotte, "Suhrawardī's Realm of the Imaginal," in Y. Eshots (ed.), *Ishraq: Islamic Philosophy Yearbook* (Moscow, 2011), 68–79.

5. Walbridge, *The Science of Mystic Lights*, 84.

Chapter 46

1. For more, see F. Daftary, The Ismailis: Their History and Doctrines (Cambridge, 1990), and F. Daftary (ed.), *Mediaeval Ismaili History and Thought* (Cambridge, 1996).
2. S. J. Badakhchani (trans.), *Contemplation and Action: The Spiritual Autobiography of a Muslim Scholar* (London, 1998). Cited in what follows by section number of this volume.
3. S. J. Badakhchani (trans.), *Paradise of Submission: A Medieval Treatise on Ismaili Thought* (London, 2005). Again, cited by section number.
4. G. M. Wickens (trans.), *The Nasirean Ethics* (London, 1964).
5. W. Madelung, "Nasir al-Din Tusi's Ethics Between Philosophy, Shi'ism, and Sufism," in R. G. Hovannisian (ed.) *Ethics in Islam* (Malibu, 1985), 85–101.
6. Which is not to say that he was entirely without influence in this area. See M. Cüneyt Kaya, "In the Shadow of 'Prophetic Revelation': the Venture of Practical Philosophy after Avicenna," *Arabic Sciences and Philosophy*, 24 (2014), 269–96.
7. In what follows I am drawing on my own article "Avicenna and his Commentators on Self-Intellective Substances," in D. N. Hasse and A. Bertolacci (eds.), *The Arabic, Hebrew and Latin Reception of Avicenna's Metaphysics* (Berlin, 2011), 97–122, and on T. Mayer, "Fakhr ad-Dīn ar-Rāzī's Critique of Ibn Sīnā's Argument for the Unity of God in the *Ishārāt* and Naṣīr ad-Dīn aṭ-Ṭūsī's Defence," in D. C. Reisman (ed.), *Before and After Avicenna* (Leiden, 2003), 199–218.
8. G. Saliba, "The Role of Maraghah in the Development of Islamic Astronomy: A Scientific Revolution Before the Renaissance," *Revue de Synthèse*, 3–4 (1987), 361–73.
9. A forceful case to this effect is put by H. Dabashi, "The Philosopher/Vizier Khwājah Naṣīr al-Dīn al-Ṭūsī and the Ismāʿīlīs," in F. Daftary (ed.), *Medieval Ismaʿili History and Thought* (Cambridge, 1996), 231–45.

Chapter 47

1. Here I assume that we can posit mental existence for particulars, as opposed to essences as such, which would be shared by all members of a species.
2. F. Klein-Franke, "The Non-Existent is a Thing," *Le Muséon*, 107 (1994), 375–90.
3. R. Wisnovsky, "Notes on Avicenna's Concept of Thingness (*Shayʾiyya*)," *Arabic Sciences and Philosophy*, 10 (2000), 181–221; T.-A. Druart, "*Shayʾ* or *res* as Concomitant of 'Being' in Avicenna," *Documenti e studi sulla tradizione filosofica medievale*, 12 (2001), 125–42.
4. As pointed out by R. Wisnovsky, "Essence and Existence in the Eleventh-and Twelfth-Century Islamic East (*Mašriq*): a Sketch," in D. N. Hasse and A. Bertolacci (eds.), *The Arabic, Hebrew and Latin Reception of Avicenna's Metaphysics* (Berlin, 2012), 27–50. In what follows I draw heavily on this piece and another in the same volume (at 123–51): H. Eichner, "Essence and Existence: Thirteenth Century Perspectives in Arabic-Islamic Philosophy and Theology."
5. See J. Walbridge and H. Ziai (ed. and trans.), *Suhrawardī: The Philosophy of Illumination* (Provo, UT, 1999), §68.
6. Eichner, "Essence and Existence: Thirteenth Century Perspectives," 135.
7. Wisnovsky, "Essence and Existence in the Eleventh-and Twelfth-Century Islamic East," 42.
8. Wisnovsky, "Essence and Existence in the Eleventh-and Twelfth-Century Islamic East," 43. Wisnovsky notes that elsewhere al-Rāzī affirms a line more like the one we find in al-Ṭūsī.
9. Eichner, "Essence and Existence: Thirteenth Century Perspectives," 131–2.

Chapter 48

1. For a sample of works by these and other later mystics in English translation, see S. H. Nasr and M. Aminrazavi (eds.), *An Anthology of Philosophy in Persia*, Vol. 4: *From the School of Illumination to Philosophical Mysticism* (London, 2012).
2. A. Akasoy, "What is Philosophical Sufism?" in P. Adamson (ed.), *In the Age of Averroes: Arabic Philosophy in the Sixth/Twelfth Century* (London, 2011), 229–49.
3. For this and what follows, see W. C. Chittick, "Ṣadr al-Dīn al-Qūnawī on the Oneness of Being," *International Philosophical Quarterly*, 21 (1981), 171–84. He translates the term as "entification."
4. The exchange is summarized in W. C. Chittick, "Mysticism vs. Philosophy in Earlier Islamic History: The al-Ṭūsī, al-Qūnawī Correspondence," *Religious Studies*, 17 (1981), 87–104, with this point mentioned at p. 101. Mohammed Rustom points out to me that Ibn ʿArabī also admitted a connection between his idea of items "fixed" or "residing" in God's knowledge (the *aʿyān thābita*) and the Muʿtazilite school.
5. W. C. Chittick, "Rūmī and the Wooden Leg of Reason," in M. Rustom, A. Khalil, and K. Murata (eds.), *In Search of the Lost Heart: Explorations in Islamic Thought* (Albany, NY, 2011), 201–9, at 201–2. Further citations and translations of Rūmī in the main text are from W. C. Chittick, *The Sufi Path of Love: The Spiritual Teachings of Rumi* (Albany, NY, 1983), with the wooden-leg image at p. 127.

Chapter 49

1. For this last story see I. Shah, *The Sufis* (London, 1964), 60. My thanks to Stamatios Gerogiorgakis for telling me of the anecdote.
2. P. V. Spade, *Lies, Language and Logic in the Late Middle Ages* (London, 1988).
3. What follows is based on A. Alwishah and D. Sanson, "The Early Arabic Liar: the Liar Paradox in the Islamic World from the Mid-Ninth to the Mid-Thirteenth Centuries CE," *Vivarium*, 47 (2009), 97–127.
4. For this see T. Street, "Faḫraddīn ar-Rāzī's Critique of Avicennan Logic," in D. Perler and U. Rudolph (eds.), *Logik und Philosophie: Das Organon im arabischen und im lateinischen Mittelalter* (Leiden, 2005), 99–116, at 105–6.
5. Street, "Faḫraddīn ar-Rāzī's Critique," 108.
6. On these textbooks and their influence, see J. Walbridge, "Logic in the Islamic Intellectual Tradition: The Recent Centuries," *Islamic Studies*, 39 (2000), 55–75.
7. *Philosophy in the Hellenistic and Roman Worlds*, ch. 37.
8. Only one of the thinkers discussed in K. El-Rouayheb, "Post-Avicennan Logicians on the Subject Matter of Logic: Some Thirteenth-and Fourteenth-Century Discussions," *Arabic Sciences and Philosophy*, 22 (2012), 69–90.
9. As exhaustively studied by K. El-Rouayheb, *Relational Syllogisms and the History of Arabic Logic, 900–1900* (Leiden, 2010), which is as far as I'm aware the only study to examine a single logical topic from Avicenna all the way down to the nineteenth century.
0. W. Hallaq (trans.), *Ibn Taymiyya against the Greek Logicians* (Oxford: 1993), §253.

Chapter 50

1. For what follows, see the papers collected in Y. Rapoport and S. Ahmed (eds.), *Ibn Taymiyya and his Times* (Karachi, 2010).
2. B. Abrahamov, "Ibn Taymiyya on the Agreement of Reason with Tradition," *The Muslim World*, 82 (1992), 256–72.
3. Rapoport and Ahmed, *Ibn Taymiyya*, 18.
4. Rapoport and Ahmed, *Ibn Taymiyya*, 200. See pp. 205, 198 for consensus and seeking the optimal outcome.
5. A. Knysh, *Ibn ʿArabī in the Later Islamic Tradition: The Making of a Polemical Image in Medieval Islam* (Albany, NY, 1999), 87–111.
6. As studied in several articles by J. Hoover: "Perpetual Creativity in the Perfection of God: Ibn Taymiyya's Hadith Commentary on God's Creation of This World," *Journal of Islamic Studies*, 15 (2004), 287–329; "Ibn Taymiyya as an Avicennan Theologian: A Muslim Approach to God's Self-Sufficiency," *Theological Review*, 27 (2006), 34–46; "God Acts by His Will and Power: Ibn Taymiyya's Theology of a Personal God in his Treatise on the Voluntary Attributes," in Rapoport and Ahmed, *Ibn Taymiyya*, 55–77.
7. K. El-Rouayheb, *Islamic Intellectual History in the Seventeenth Century: Scholarly Currents in the Ottoman Empire and the Maghreb* (Cambridge, 2015), 16–17.
8. A. von Kügelgen, "The Poison of Philosophy: Ibn Taymiyya's Struggle for and against Reason," in B. Krawietz and G. Tamer (eds.), *Islamic Theology, Philosophy and Law: Debating Ibn Taymiyya and Ibn Qayyim al-Jawziyya* (Berlin, 2013), 253–328, at 263–4.
9. W. Hallaq (trans.), *Ibn Taymiyya against the Greek Logicians* (Oxford, 1993), cited by section number in what follows. For the encounter with the philosopher see p. 3, and for the ear analogy §125 and §234. Note that this translates a later summary by the jurist al-Suyūṭī, not the complete original work of Ibn Taymiyya.
0. Ibn Taymiyya mentions this event at §159.

Chapter 51

1. On the history of the Mongol conquests see, for instance, D. O. Morgan, *The Mongols* (Oxford, 1986). Some of the points in what follows are taken from M. Biran, "The Mongol Transformation: From the Steppe to Eurasian Empire," in J. P. Arnason and B. Wittrock (eds.), *Eurasian Transformations, Tenth to Thirteen Centuries* (Leiden, 2004), 339–61.

2. Indeed, we know of philosophers who perished in the Mongol invasions, for example, a student of Fakhr al-Dīn al-Rāzī who was killed in the sacking of Nishapur. Incidentally, it's worth mentioning the remark of one jurist, Ibn Qayyim al-Jawziyya (d. 1350): the Mongols were sent by God to punish the Muslims for studying philosophy!

3. R. Morrison, "*Falsafa* and Astronomy after Avicenna: An Evolving Relationship," in Y. T. Langermann (ed.), *Avicenna and His Legacy: A Golden Age of Science and Philosophy* (Turnhout, 2009), 307–26. For more on astronomy in this period, see E. S. Kennedy, "The Exact Sciences in Iran under the Saljuqs and the Mongols," in *The Cambridge History of Iran*, vol. 5 (Cambridge, 1968), 558 ff.; H. Hugonnard-Roche, "The Influence of Arabic Astronomy in the Medieval West," in R. Rashed (ed.), *Encyclopedia of the History of Arabic Science*, vol. 6 (New York, 1996), 303; A. Dallal, *Islam, Science and the Challenge of History* (New Haven, CT, 2010).

4. On this, see F. J. Ragep, "Freeing Astronomy from Philosophy: An Aspect of Islamic Influence on Science," *Osiris*, 16 (2001), 49–71.

5. Al-Ghazālī, *The Incoherence of the Philosophers*, trans. M. E. Marmura (Provo, UT, 1997), 7; quoted by Morrison, "*Falsafa* and Astronomy after Avicenna," 308.

6. P. E. Pormann and E. Savage-Smith, *Medieval Islamic Medicine* (Edinburgh, 2007).

7. For a translation, see J. Schacht and M. Meyerhof (ed. and trans.), *The Theologus Autodidactus of Ibn al-Nafīs* (Oxford, 1968). For discussion, see M. Mahdi, "Remarks on the *Theologus Autodidactus* of Ibn al-Nafīs," *Studia Islamica*, 31 (1970), 197–209; N. Fancy, "The Virtuous Son of the Rational: A Traditionalist's Response to the *Falāsifa*," in Langermann, *Avicenna and his Legacy*, 219–47. Fancy prefers to understand Nāṭiq as "rational" but I wonder whether it may refer to the "speaking" of revelation involved in prophecy.

8. *Encyclopedia of Islam*, second edition, under "Al-Taftazānī." See also W. Madelung, "At-Taftazani und die Philosophie," in D. Perler and U. Rudolph (eds.), *Logik und Philosophie: Das Organon im arabischen und im lateinischen Mittelalter* (Leiden, 2005), 227–38, at 228.

9. H. Takahashi, *Aristotelian Meteorology in Syriac*: *Barhebraeus, Butyrum Sapientiae, Books of Mineralogy and Meteorology* (Leiden, 2004).

0. Madelung, "At-Taftazani und die Philosophie," 227.

1. The best-studied of them is al-Ījī, thanks to J. van Ess, *Die Erkenntnislehre des ʿAḍuḍaddīn al-Īcī* (Wiesbaden, 1966).

2. Morrison, "*Falsafa* and Astronomy after Avicenna," 322.

Chapter 52

1. On the city see A. J. Arberry, *Shiraz: City of Poets and Saints* (Norman, OK, 1960).
2. A. I. Sabra, "Science and Philosophy in Medieval Islamic Theology: The Evidence of the Fourteenth Century," *Zeitschrift für die Geschichte der arabisch-islamischen Wissenschaften*, 9 (1994), 1–42, at 14.
3. On whom see U. Rudolph, *Al-Māturīdī und die Sunnitische Theologie in Samarkand* (Leiden, 1997).
4. I owe this point to Heidrun Eichner.
5. I take this point (but not the pun) from R. Pourjavady, *Philosophy in Early Safavid Iran: Najm al-Dīn Maḥmūd al-Nayrīzī and his Writings* (Leiden, 2011), 74. This book is my main source for much of what follows.
6. A. Bdaiwi, "Some Remarks on the Confessional Identity of the Philosophers of Shiraz: Ṣadr al-Dīn Dashtakī (d. 1498) and his Students Mullā Shams al-Dīn Khafrī (d. 1535) and Najm al-Dīn Maḥmūd Nayrīzī (d. 1541)," *Ishrāq: Islamic Philosophy Yearbook*, 1 (2014), 61–85.
7. Pourjavady, *Philosophy in Early Safavid Iran*, 27.
8. Pourjavady, *Philosophy in Early Safavid Iran*, 87. I follow his summary of their solutions in the next paragraph.
9. Pourjavady, *Philosophy in Early Safavid Iran*, 5 and 18.
0. *History of Philosophy in the Hellenistic and Roman Worlds*, chs. 37–8.
1. Pourjavady, *Philosophy in Early Safavid Iran*, 88–99. It should be recalled that Avicenna also tried to base God's uniqueness on the idea of necessary existence, in a slightly different fashion: see Chapter 18.
2. See R. Pourjavady and S. Schmidtke, *A Jewish Philosopher of Baghdad: ʿIzz al-Dawla ibn Kammūna (d. 683/1284)* (Leiden, 2006), 39–40.
3. For the information to be gleaned from such lists, see A. B. Khalidov and M. Subtelny, "The Curriculum of Islamic Higher Learning in Timurid Iran in the Light of the Sunni Revival under Shāh-Rukh," *Journal of the American Oriental Society*, 115 (1995), 210–36, and for the commentary tradition, see R. Wisnovsky, "The Nature and Scope of Arabic Philosophical Commentary in Post-classical (ca. 1100–1900 AD) Islamic Intellectual History: Some Preliminary Observations," in P. Adamson, H. Baltussen, and M. W. F. Stone (eds.), *Philosophy, Science and Exegesis in Greek, Arabic and Latin Commentaries*, 2 vols. (London, 2004), 2. 149–91.
4. Pourjavady, *Philosophy in Early Safavid Iran*, 23.
5. Pourjavady, *Philosophy in Early Safavid Iran*, 14–15.
6. Quote taken from K. El-Rouyaheb, *Islamic Intellectual History in the Seventeenth Century: Scholarly Currents in the Ottoman Empire and the Maghreb* (Cambridge, 2015), 33.

Chapter 53

1. A point that has been well raised in S. H. Rizvi, *Mullā Ṣadrā Shīrāzī: His Life and Works and the Sources for Safavid Philosophy* (Oxford, 2007), 139.
2. R. Pourjavady, *Philosophy in Early Safavid Iran: Najm al-Dīn Maḥmūd al-Nayrīzī and his Writings* (Leiden, 2011), 27.
3. For a historical overview, see A. J. Newman, *Safavid Iran: Rebirth of a Persian Empire* (London: 2006).
4. On him, see S. Schmidtke, *The Theology of al-ʿAllāma al-Ḥillī (d.726/1325)* (Berlin, 1991).
5. Schmidtke, *The Theology of al-ʿAllāma al-Ḥillī*, 105.
6. See S. H. Rizvi, "(Neo)Platonism Revived in the Light of the Imams: Qāḍī Saʿīd Qummī (d. AH 1107/AD 1696) and his Reception of the *Theologia Aristotelis*," in P. Adamson (ed.), *Classical Arabic Philosophy: Sources and Reception* (London, 2007), 176–207.
7. On him, see Pourjavady, *Philosophy in Early Safavid Iran*.
8. See Pourjavady, *Philosophy in Early Safavid Iran*, 142–5.
9. Pourjavady, *Philosophy in Early Safavid Iran*, 67–8.
0. For a recent study of another early Safavid thinker, see F. Saatchian, *Gottes Wesen—Gottes Wirken: Ontologie und Kosmologie im Denken von Šams-al-Dīn Muḥammad al-Ḫafrī (gest. 942/1535)* (Berlin, 2011).
1. Recounted in H. Dabashi, "Mīr Dāmād and the Founding of the 'School of Iṣfahān,'" in S. H. Nasr and O. Leaman (eds.), *History of Islamic Philosophy* (London, 1996), 597–34, at 606. A third thinker of this period often linked with Ṣadrā's teachers was Mīr Findiriskī.
2. For this, see F. Rahman, "Mīr Dāmād's Concept of Ḥ*udūth Dahrī*: A Contribution to the Study of God–World Relationship in Safavid Iran," *Journal of Near Eastern Studies*, 39 (1980), 139–51; S. H. Rizvi, "Between Time and Eternity: Mīr Damād on God's Creative Agency," *Journal of Islamic Studies*, 17 (2006), 158–76. Mīr Dāmād is, incidentally, an honorific title; his real name was Burhān al-Dīn Muḥammad Bāqir Astarābādī.

Chapter 54

1. The following is based on the biographical overview offered in S. Rizvi, *Mullā Ṣadrā Shīrāzī: His Life and Works and the Sources for Safavid Philosophy* (Oxford, 2007).
2. On the meaning of the title (whose full translation is *Wisdom Ascending along the Four Intellectual Journeys*) and structure of the work, see R. Arnzen, "The Structure of Mullā Ṣadrā's *al-Ḥikma al-mutaʿāliya fī l-asfār al-ʿaqliyya al-arbaʿa* and his Concepts of First Philosophy and Divine Science: An Essay," *Medioevo*, 32 (2007), 199–240. For overviews of all his writings, see Rizvi, *Life and Works*, and I. Kalin, "An Annotated Bibliography of the Works of Mullā Ṣadrā with a Brief Account of his Life," *Islamic Studies*, 42 (2003), 21–62.
3. F. Rahman, *The Philosophy of Mullā Ṣadrā* (Albany, NY, 1975), 37.
4. J. W. Morris (trans.), *Mullā Ṣadrā: The Wisdom of the Throne* (Princeton, NJ, 1981). Cited by section number.
5. For this see (while noting the apt name of the author) Rahman, *The Philosophy of Mullā Ṣadrā*, 86–7, 149, and M. Rustom, *The Triumph of Mercy: Philosophy and Scripture in Mullā Ṣadrā* (Albany, NY, 2012), 24.
6. See S. Rizvi, *Mullā Ṣadrā and Metaphysics: Modulation of Being* (London, 2009), especially ch. 2.
7. On the unreality of essences, see Rahman, *The Philosophy of Mullā Ṣadrā*, 83–5; S. Rizvi, *Mullā Ṣadrā and Metaphysics*, 119–20.
8. Ṣadrā too uses the analogy of colors to describe this, as noted by S. Rizvi, "Process Metaphysics in Islam? Avicenna and Mullā Ṣadrā on Intensification of Being," in D. C. Reisman (ed.), *Before and After Avicenna* (Leiden, 2003), 233–47, at 244.

Chapter 55

1. *Classical Philosophy*, ch. 5.
2. For these examples, see S. Rizvi, "Process Metaphysics in Islam? Avicenna and Mullā Ṣadrā on Intensification of Being," in D. C. Reisman (ed.), *Before and After Avicenna* (Leiden, 2003), 233–47, at 237–8.
3. Mohammed Rustom points out to me, however, that this idea of change is to some extent one of Ṣadrā's borrowings from Ibn ʿArabī, who had spoken of the unceasing "renewal of creation" (*tajdīd al-khalq*).
4. J. W. Morris (trans.), *Mullā Ṣadrā: The Wisdom of the Throne* (Princeton, NJ, 1981), §1.13. See also F. Rahman, *The Philosophy of Mullā Ṣadrā* (Albany, NY, 1975), 108.
5. On this see C. Steel, *The Changing Self: A Study on the Soul in Later Neoplatonism: Iamblichus, Damascius and Priscianus* (Brussels, 1978).
6. Quoted by Ṣadrā at *Wisdom of the Throne*, §2.A2.
7. I discuss this in "*Porphyrius Arabus* on Nature and Art: 463F Smith in Context," in G. Karamanolis and A. Sheppard (eds.), *Studies on Porphyry* (London, 2007), 141–63. For the topic in Ṣadrā, see *Wisdom of the Throne* §1.7 and §1.10, and I. Kalin, *Knowledge in Later Islamic Philosophy: Mullā Ṣadrā on Existence, Intellect and Intuition* (New York, 2010), 159.
8. Kalin, *Knowledge in Later Islamic Philosophy*, 119.
9. Kalin, *Knowledge in Later Islamic Philosophy*, 122.
0. Rahman, *The Philosophy of Mullā Ṣadrā*, 204, 235; Kalin, *Knowledge in Later Islamic Philosophy*, 113; Rizvi, "Process Metaphysics," 245.
1. S. Rizvi, *Mullā Ṣadrā and Metaphysics: Modulation of Being* (London, 2009), 84. His position here should be compared to that of Dawānī; see Chapter 52.
2. Kalin, *Knowledge in Later Islamic Philosophy*, 217; Rizvi, "Process Metaphysics," 235.
3. See the "conclusion" to *Wisdom of the Throne*.
4. M. Rustom, *The Triumph of Mercy: Philosophy and Scripture in Mullā Ṣadrā* (Albany, NY, 2012), 23.
5. Rustom, *The Triumph of Mercy*, 62.
6. For this see *Wisdom of the Throne* §2B (or not 2B).
7. *Wisdom of the Throne* §2A.8.

Chapter 56

1. According to the 2001 Census by the Indian government.
2. See E. Sachau (trans.), *Al-Beruni's India* (London, 1914).
3. I take this point from an as yet unpublished work by Jan-Peter Hartung; my thanks to him for sharing this with me.
4. See S. Rizvi, "Mīr Dāmād in India: Islamic Philosophical Traditions and the Problem of Creation," *Journal of the American Oriental Society*, 131 (2011), 9–23.
5. See A. Q. Ahmed, "The *Shifāʾ* in India I: Reflections on the Evidence of the Manuscripts," *Oriens*, 40 (2012), 1–24, at 14.
6. For a comparison of this curriculum to education in the Ottoman and Safavid realms, see F. Robinson, "Ottomans-Safavids-Mughals: Shared Knowledge and Connective Systems," *Journal of Islamic Studies*, 8 (1997), 151–84.
7. What follows is based on A. Q. Ahmed, "Post-Classical Philosophical Commentaries/Glosses: Innovation in the Margins," *Oriens*, 41 (2013), 317–48.
8. For more on al-Khayrabādī, see Chapter 58.
9. Again I take this point from Jan-Peter Hartung.
0. For what follows, see I. A. Omar, "Delhi's Debates on *Ahl-i Kitāb*: Dara Shikuh's Islamization of the *Upanishads*," in R. C. Taylor and I. A. Omar (eds.), *The Judeo-Christian-Islamic Heritage: Philosophical and Theological Perspectives* (Marquette, WI, 2012), 89–109. See also J. Ganeri, *The Lost Age of Reason: Philosophy in Early Modern India 1450–1700 CE* (Oxford, 2010), ch. 2; F. Speziale, *La congiunzione dei due oceani* (Milan, 2011).
1. R. P. Dewhurst, *Journal of the Royal Asiatic Society*, 63 (1931), 460–1, in a review of M. Mahfuz-ul-Haq (trans.), *Majmaʿ-ul-Baḥrain or The Mingling of the Two Oceans by Prince Muḥammad Dārā Shikūh* (Calcutta, 1929). I cite this English translation by section number in the main text.
2. S. F. Dale, *The Muslim Empires of the Ottomans, Safavids, and Mughals* (Cambridge, 2010), 248.

Chapter 57

1. G. L. Lewis (trans.), *Kātib Chelebi: The Balance of Truth* (London, 1957). Referred to by page number in what follows.
2. For this clash, see M. C. Zilfi, *The Politics of Piety: The Ottoman Ulema in the Postclassical Age (1600–1800)* (Minneapolis, MN, 1988).
3. Zilfi, *The Politics of Piety*, 138.
4. F. Robinson, "Ottomans-Safavids-Mughals: Shared Knowledge and Connective Systems," *Journal of Islamic Studies*, 8 (1997), 151–84; N. R. Keddie (ed.), *Scholars, Saints, and Sufis: Muslim Religious Institutions in the Middle East Since 1500* (Berkeley, CA, 1972); E. Ihsanoğlu, "Institutionalisation of Science in the Medreses of Pre-Ottoman and Ottoman Turkey," in G. Irzık and G. Güzeldere (eds.), *Turkish Studies in the History and Philosophy of Science* (Dordrecht, 2005), 265–84.
5. See C. H. Fleischer, "Royal Authority, Dynastic Cyclism, and 'Ibn Khaldunism' in Sixteenth-Century Ottoman Letters," *Journal of Asian and African Studies*, 3–4 (1983), 198–220. It's worth mentioning that the period featured several outstanding historians, for instance, Kamāl Pāshāzāde (d. 1533) and Muṣṭafā ʿAlī, on whom see C. H. Fleischer, *Bureaucrat and Intellectual in the Ottoman Empire: The Historian Mustafa Ali (1541–1600)* (Princeton, NJ, 1986).
6. I am indebted to Reza Pourjavady for allowing me to see a pre-publication version of his article "Muṣliḥ al-Dīn al-Lārī and his *Samples of the Sciences*."
7. On whom, see F. J. Ragep, "Freeing Astronomy from Philosophy: An Aspect of Islamic Influence on Science," *Osiris*, 16 (2001), 49–71.
8. On this, see A. Shihadeh, "Khojazāda on al-Ghazālī's Criticism of the Philosophers' Proof of the Existence of God," in T. Yücedoğru *et al.* (eds.), *International Symposium on Khojazada (22–24 October 2010 Bursa): Proceedings* (Bursa, 2011), 141–61; M. Sait Özervarlı, "Arbitrating Between the Philosophers: The *Tahāfut* Commentaries in the Ottoman Intellectual Context," in *Islam and Rationality: The Impact of al-Ghazālī* (Leiden, 2015), 375–97. I have also benefited from seeing unpublished work on the topic by Eric van Lit; I am grateful to him for making this available to me.
9. The later Ottoman thinker Kemālpāşāzāde wrote a commentary on Khojazāda's work, and expressed surprise at what he saw as its tendency to side with the philosophers against al-Ghazālī. See Sait Özervarlı, "Arbitrating Between the Philosophers," 390.
10. See M. E. Marmura (trans.), *Al-Ghazālī: The Incoherence of the Philosophers* (Provo, UT, 1997), 19, and M. E. Marmura, "Avicenna and the Problem of Infinite Souls," *Mediaeval Studies*, 22 (1960), 232–9.
11. As detailed in K. El-Rouyaheb, *Islamic Intellectual History in the Seventeenth Century: Scholarly Currents in the Ottoman Empire and the Maghreb* (Cambridge, 2015), part I.
12. K. El-Rouyaheb, "Opening the Gate of Verification: The Forgotten Arab-Islamic Florescence of the Seventeenth Century," *International Journal of Middle East Studies*, 38 (2006), 263–81.
13. For what follows, see H. Tirosh-Rothschild, "Jewish Philosophy on the Eve of Modernity," in D. H. Frank and O. Leaman (eds.), *History of Jewish Philosophy* (London, 1997), 499–573.
14. For a brief summary, see A. Black, *The History of Islamic Political Thought: From the Prophet to the Present* (Edinburgh, 2011), 218–19.

Chapter 58

1. For a demystification of this supposed phenomenon, see W. B. Hallaq, "Was the Gate of *Ijitihad* Closed?" *International Journal of Middle East Studies*, 16 (1984), 3–41.
2. G. L. Lewis (trans.), *Kātib Chelebi: The Balance of Truth* (London, 1957), 26.
3. F. Robinson, "Ottomans-Safavids-Mughals: Shared Knowledge and Connective Systems," *Journal of Islamic Studies*, 8 (1997), 151–84, at 172, with similar remarks on the Mughal and Safavid realms.
4. K. El-Rouayheb, "The Myth of the Triumph of Fanaticism in the Seventeenth-Century Ottoman Empire," *Die Welt des Islams*, 48 (2008), 196–221, at 200. The following observations are taken from this article.
5. It's also worth reiterating that one of the intellectual forefathers of the Ḳāḍīzādelī movement, Mehmed Birgevī, was highly critical of Ibn Taymiyya; see Chapter 50.
6. See M. C. Zilfi, *The Politics of Piety: The Ottoman Ulema in the Postclassical Age (1600–1800)* (Minneapolis, MN, 1988), 204–5.
7. A. Q. Ahmed, "Logic in the Khayrābādī School of India: A Preliminary Exploration," in M. Cook *et al.* (eds.), *Law and Tradition in Classical Islamic Thought* (New York, 2013), 227–43.
8. As in Chapter 56, I here draw on unpublished work by Jan Peter Hartung.
9. There is an English translation by M. K. Hermansen (Leiden, 1996). For what follows, see also her "Shāh Walī Allāh of Delhi's *Ḥujjat Allāh al-Bāligha*: Tension Between the Universal and the Particular in an Eighteenth-Century Islamic Theory of Religious Revelation," *Studia Islamica*, 63 (1986), 143–57.
10. H. Eichner, "Intertextuality and Intellectual Affiliations: The Case of Molla Fanārī's Ontology," in *International Symposium on Molla Fanārī: Proceedings* (Bursa, 2010), 459–66.
11. K. El-Rouayheb, *Islamic Intellectual History in the Seventeenth Century: Scholarly Currents in the Ottoman Empire and the Maghreb* (Cambridge, 2015), 244.
12. El-Rouayheb, *Islamic Intellectual History*, 318, and 334–5 for the response of ʿAbd al-Ghanī.
13. For this and what follows I am grateful to advice from Yuki Nakanishi, who also made available to me work-in-progress on Fenārī.
14. J. Janssens, "Elements of Avicennian Influence in al-Fanārī's Theory of Emanation," in *International Symposium on Molla Fanārī*, 315–27.
15. S. Akkach, *Abd al-Ghani al-Nabulusi: Islam and the Enlightenment* (Oxford, 2007); El-Rouayheb, "Opening the Gate," 273.
16. Akkach, *Abd al-Ghani al-Nabulusi*, 90.
17. El-Rouayheb, *Islamic Intellectual History*, 290–3.
18. El-Rouayheb, *Islamic Intellectual History*, 178, and 191 for Āḳḥisārī.
19. Y. Michot (ed. and trans.), *Aḥmad al-Aqhisārī: Against Smoking. An Ottoman Manifesto* (Leicestershire, 2010).
20. Akkach, *Abd al-Ghani al-Nabulusi*, 77.

Chapter 59

1. It may not be necessary to point out that it would be wrong to draw a simple contrast between the Islamic world and "Europe." After all, much of this book has been about developments on the Iberian peninsula under Islamic rule, and the Ottoman empire held a good deal of European territory. So take my use of the word "European" in this chapter with a healthy dose of salt.
2. K. El-Rouyaheb, *Islamic Intellectual History in the Seventeenth Century: Scholarly Currents in the Ottoman Empire and the Maghreb* (Cambridge, 2015), 357.
3. Akkach, *Abd al-Ghani al-Nabulusi*, 55.
4. El-Rouayheb, "The Myth," 202. On the general topic, see also A. Sayılı, *The Observatory in Islam* (Ankara, 1988).
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3. Namely 2:251. Mentioned by Sedgwick, *Muhammad Abduh*, 87, and M. H. Kerr, *Islamic Reform: The Political and Legal Theories of Muḥammad ʿAbduh and Rashīd Rıḍā* (Berkeley, CA, 1966), 130. Muḥammad Iqbāl, on whom see further in this chapter, claimed to find the theory in the works of Miskawayh.
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