specifically religious aspects of his work; among them is Ignacio Saadé's *El pensamiento religioso de Ibn Jaldûn* (Madrid, 1973).

FRANZ ROSENTHAL

IBN RUSHD (AH 520-595/1126-1198 CE), more fully Abū al-Walīd Muḥammad ibn Aḥmad ibn Rushd, known in Latin as Averroës; Spanish-Arabic philosopher, jurist, and medical writer. His father and grandfather were distinguished lawyers in Cordova, the leading center of intellectual culture in western Islam, which came under the rule of two successive Moroccan dynasties, the Almoravids (to 1146) and the Almohads (1146-1269). He received an excellent education in the Islamic sciences and Arabīc literature, then in the physical sciences, medicine, and philosophy. At a young age he composed several summaries of Aristotle's works, which were all, except for the *Politics*, available in reliable Arabic translations.

These early books drew the attention of Ibn Tufayl, the senior physician to the Almohad emir in Marrakesh, who was interested in Greek philosophy but thought some explanation of Aristotle's texts was needed. After an interview at the palace (c. 1167) Ibn Rushd received a royal commission to continue his summaries and was nominated as a judge in Seville and subsequently as chief justice in Cordova. He held these posts for most of the rest of his life and devoted his free time to writing works of varying lengths on Aristotle's books, known as "summaries," "middle commentaries," and "long commentaries." It was through these works, translated into Latin and Hebrew, that he became known in the new universities of western Europe. He aroused much controversy in Christian circles over doctrines such as the everlasting time span of the physical substance of the universe, unavoidable to a strict Aristotelian, and the single Active Intellect into which all individual human intellects are absorbed after death. Thomas Aquinas (1225-1274) was especially opposed to the latter doctrine, with enormous consequences for the vigor of individualism in Western thought. Averroës was received more favorably by other Latin philosophers and scientists of the thirteenth century, such as Siger of Brabant, Roger Bacon, and a school of "Averroists" at the University of Padua, where his Aristotelian scholarship stimulated the growth of inductive, empirical sciences.

Ibn Rushd's impact on Islamic philosophy and theology was quite different. While interest in philosophy was growing in the European and British universities in his time, it was declining in the Arab countries and taking mystical forms in Iran. Only a few philosophers, such as Ibn Khaldūn, studied the Aristotelian commen-

taries of Ibn Rushd. But Ibn Rushd also wrote three important works of systematic philosophy that for a while injected new life into the study of Islamic theology.

The first of these was published about 1177 under the title Faṣl al-magāl (The Decisive Treatise). It is a short work on the legitimacy of philosophy from the standpoint of Islamic law (the sharī'ah). Citing the authority of the Qur'ān to encourage the study of nature in search for signs of divine providence and benevolence, Ibn Rushd pleads that such study must be built on all previous learning in logic and the sciences, especially that of the ancient Greeks, even though they had been pagans.

Some problems then are raised. What if the conclusions of science differ from those of revealed scripture? Since both are sources of truth, a reconciliation must be found, for "truth does not oppose truth, but accords with it and bears witness to it." This stance provides a straightforward denial of the theory of "double truth" wrongly attributed to Ibn Rushd by some European Averroists and long surviving in popular myth. Another persistent misconception has been that Ibn Rushd was concerned with conflicts between philosophy and theology. But theology (kalām) in Islam is merely the thought of fallible theologians, with no stamp of official approval by councils or popes. Hence Ibn Rushd felt free to attack it as the work of half-educated philosophers who merely confused people. His concern was to find harmony between philosophy and scripture itself.

These attitudes are fully confirmed by the detailed solutions he offers for three specific problems: (1) the "creation" of the universe means its continuous transformation; (2) God knows the particular facts of the world (denied by Ibn Sīnā) not as given objects but by his act of creating them; (3) our physical bodies are dissolved at death, but we may receive new celestial ones in a resurrection, and these would hold our reconstituted individual souls. Such conclusions were unlikely to satisfy the powerful conservative clergy. Ibn Rushd hedges his arguments by insisting that they should be taught only to those few who are qualified by their philosophic education to understand them; most people should be left alone with simpler ideas, for fear of undermining their belief in Islam altogether.

Following the *Decisive Treatise*, Ibn Rushd published a longer book with the abbreviated title *Kitāb al-kashf* (Programs of Proofs), in which he outlined a system of doctrines for reasonable Muslims who are not philosophers and refuted many erroneous teachings of the theologians. This is an important work that has not yet been sufficiently studied.

In 1184 he brought out his major work of systematic philosophy, in answer to al-Ghazālī's attack on the phi-

losophers, Tahāfut al-falāsifah (The Incoherence of the Philosophers), written ninety years earlier but still influential among Muslims. Ibn Rushd's reply, which he entitled Tahāfut Al-tahāfut (The Incoherence of The Incoherence), takes the form of lengthy quotations from al-Ghazālī's book, followed by point-by-point refutations of his arguments. These wide-ranging dialogues discuss the creation of the world, the attributes of God, including his will and his knowledge, the nature of causation, and the fate of the soul, among many other topics. Al-Ghazālī's aim had been a negative one, to show that the philosophers al-Fārābī (873-950) and Ibn Sīnā (980-1037) had failed to prove twenty theses about God and the world that were irreligious or at least heretical from the viewpoint of Islam. These penetrating criticisms had remained unanswered. Ibn Rushd came to the defense of the original, pure philosophy of Aristotle and often repudiated in the process the arguments of the two Muslim philosophers.

As a result of his open teaching of Aristotelian philosophy and science and, no doubt, his attacks on the traditional theologians, he and a small group of fellow scientists in Cordova were indicted in 1195 on charges of irreligion. He was convicted and sentenced to exile for a few years, until he was taken by the reigning prince to Marrakesh, where he died.

In spite of his Aristotelian writings and the trial in Cordova, Ibn Rushd has generally been regarded as a sincere Muslim, as witnessed by his long career as an Islamic judge (qādī), a book he wrote on jurisprudence, and his own conviction about himself. Although he had few disciples or even readers in Muslim countries over the following centuries, he continued to be honored as a learned scholar on Aristotle who had made a heroic but vain effort to reconcile that philosopher with Islam. Only in the last century has interest in him revived in the Muslim world, owing largely to fresh studies by Western scholars and a revival of interest in rationalistic philosophers among an educated Muslim public.

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GEORGE F. HOURANI

IBN SĪNĀ (AH 370-428/980-1037 CE), more fully Abū 'Alī al-Ḥusayn ibn 'Abd Allāh ibn Sīnā, known in Latin as Avicenna; Muslim philosopher and physician. Ibn Sīnā was born in Afshana, a village near Bukhara. Today a city in the Uzbek Soviet Socialist Republic, Bukhara was at that time the capital of the Samanid rulers, for whom Ibn Sīnā's father worked.

**Education.** Ibn Sīnā grew up in a bilingual environment; his native language was Farsi (Persian), but the language of his education was Arabic. The heritage of these two cultures was to lead to the two very different lines of his influence on later thinkers.

The education provided for Ibn Sīnā by his father was very wide-ranging, encompassing both Muslim religious studies and secular subjects from the Arabic, Greek, and Indian traditions. He began by memorizing the Qur'an and much of the didactic literature known as adab, then went on to study Muslim jurisprudence (fiqh). His father and brother were followers of the Ismā'īlī branch of Shī'i Islam, which encouraged the study of hermetic philosophy, Neoplatonism, and mathematics. Ibn Sīnā did not become an Ismā'īlī but did study these subjects, as well as "Indian calculation," probably meaning the use of the Hindi (Arabic) numerical system. When he reached ten years of age, his father hired a tutor to teach him Greek philosophy and science. For the next several years he studied Aristotle's logic, Euclid's geometry, and Ptolemy's astronomy and quickly surpassed his tutor in his knowledge of these subjects.

From age fourteen or fifteen Ibn Sīnā continued his studies on his own, reading the texts and commentaries in the natural sciences, metaphysics, and medicine. He excelled in this last subject, to the point that he was practicing and teaching it by the time he was sixteen. He completed his education in the following year and a half, reviewing and mastering all the branches of philosophy: logic, mathematics, natural science (or physics), and metaphysics. He was helped in his understanding of metaphysics by the commentary of Abū Naṣr al-Fārābī (d. 950 ce), whose commentaries on Greek philosophy and original writings had a great influence on Ibn Sīnā. In his attack on both Ibn Sīnā and al-Fārābī, the great theologian al-Ghazālī (d. 1111) was to consider their views virtually identical.

Public Life. Ibn Sīnā's entry into public life began during this period of study, when he was summoned to treat the Samanid emir in Bukhara and then became part of his court. He was to spend the rest of his life—the next forty years—as a courtier, with all of the vicis-situdes of fortune which that position usually entails. He held both medical and political positions in a number of courts in areas that are today part of Iran and