

## Ibn Sīnā (980–1037): LEGACY TO CIVILISATIONS

Elmira Akhmetova

Ibn Sīnā was one of many great minds of the Muslim world during medieval ages, whose multifaceted studies encompassed diverse scholarly fields such as exegesis, law, logic, metaphysics, mathematics, astronomy, and medicine. He played a considerable role in the development of both Eastern and Western philosophy and science. George Sarton, author of *The History of Science*, described Ibn Sīnā as “one of the greatest thinkers and medical scholars in history” and called him “the most famous scientist of Islam and one of the most famous of all races, places, and times.” For the British philosopher Antony Flew, Ibn Sīnā was “one of the greatest thinkers ever to write in Arabic,” while the Canadian 1913 as “the author of the most famous medical textbook ever written.” Osler added that as a medical practitioner, Ibn Sīnā was “the prototype of the successful physician who was at the same time statesman, teacher, philosopher and literary man” — perfectly expressing how contemporary scholars have perceived him.

Abū °Alī al-Ḥusayn ibn °Abd Allāh **Ibn Sīnā**, commonly known by his Latinized name **Avicenna**, was born in 980 CE in Afshana, a village near Bukhara in today’s Uzbekistan (historical Khurasan). His father ‘Abdullah was a local Samanid official from Balkh, and his mother Setareh was from Bukhara. At an early age his family moved to Bukhara, which at that time was the capital and intellectual centre of the Samanid ruling dynasty. Thanks to his father's position as a governor as well as his thirst for knowledge, Ibn Sīnā had access to an excellent education in Bukhara, and was taught by some of the most famous scholars of the time in the sciences and in Islamic theology.

According to his own autobiography Ibn Sīnā learned Indian arithmetic from an Indian greengrocer, and he began to study under a wandering scholar who gained a livelihood by curing the sick and teaching the young. He studied jurisprudence (*fiqh*) under the famous Ḥanafī scholar Ismā‘īl ibn al-Ḥusayn al-Bukhari al-Zahid (d. 1012), and medicine with a number of teachers. Such training and the excellent library at the Samanid court assisted Ibn Sīnā in his intellectual

search and philosophical self-education. By the age of eighteen, he had already mastered most sciences of his day<sup>1</sup> and entered into the service of the Samanid court as a physician to the Emir Nūḥ ibn Manṣūr (rg. 976–997). Now he had access to the royal library and to renowned scholars of the court. At this court, Ibn Sīnā began to write his earliest works.

After the death of his father, it appears Ibn Sīnā was given an administrative post. However, the Samanid dynasty came to an end at the turn of the millennium at the hands of the invading Ghaznavids and Qarakhanids. Mahmud of Ghazni, the prominent ruler of the Ghaznavid state (rg. 997–1030), was responsible for burning the famed Samanid library in Bukhara. Ibn Sīnā proceeded west to Urgench (modern Uzbekistan), where the vizier was regarded as a friend of scholars, and who gave him a small monthly stipend. Ibn Sīnā wandered from place to place through the districts of Nishapur and Marv to the borders of Khurasan, seeking an opening for his talents. Then he settled at Rayy in the vicinity of modern Tehran, where he entered the service of the Buwayhid sultans as a physician. Later Ibn Sīnā became the vizier for Majd al-Dawla, son of the last Buwayhid Emir who was a nominal ruler under the regency of his mother, Seyyedeh Khatun. About thirty of Ibn Sīnā's shorter works were composed in Rayy while he worked as the civil and financial administrator (vizier) for the Emir.

Yet the constant feuds raging between the Queen regent and her second son Shams al-Dawla, compelled the young scholar to quit the place. After a brief sojourn at Qazvin (N.W. Iran), Ibn Sīnā headed south to Hamadan where the Buwayhid Emir Shams al-Dawla was established. In 1015 Ibn Sīnā became the vizier for Shams al-Dawla in Hamadan. After the death of Shams al-Dawla in 1021, Ibn Sīnā moved on to Isfahan where he served as the vizier for the Kakuyid Emir 'Alā' al-Dawla (d.1041), for whom he wrote an important Persian *summa* of philosophy, his *Danishnama-yi 'Ala'i* (*Book of Knowledge for 'Ala' al-Dawla*). Based in Isfahan (South central Iran), Ibn Sīnā became widely recognized as a philosopher and physician, and often accompanied his patron on campaigns. When civil unrest forced him to flee, Ibn Sīnā reached Hamadan in Ramadan 1037 where he died of colic aged fifty-eight years. His tomb in Hamadan is famous today.

---

<sup>1</sup> I. Zakaria, *The Political Aspects of Avicenna's General Theory of Cosmology and the Human Soul* (Malaysia: Penerbit Universiti Kebangsaan Malaysia, 2002), 15.

Ibn Sīnā lived a very stirring life, travelling from one place to another while finding time to teach, think and write. He was a very gifted person who busied himself as a physician and administrator, but who was above all an outstanding philosopher advancing many innovative ideas.<sup>2</sup> His works numbered almost 450 volumes on a range of subjects, of which only around 240 have survived. One hundred fifty volumes of his surviving works concentrate on philosophy and forty of them concentrate on medicine.

**The ‘Prince of Physicians.’** Ibn Sīnā is world-renown and widely respected in the Western history of medicine as a major historical figure who made important contributions to medicine and the European Renaissance. Along with al-‘Ibādī (Johannitus in Latin, 809–873), al-Rāzī (Rhazes in Latin, 865–925), al-Zahrāwī (Abulcasis, 936–1013) and Ibn al-Nafīs (1213–1288), Ibn Sīnā is considered an important compiler of Muslim medicine. Forty volumes of his surviving works concentrate on medicine, anatomy and pharmacology. His gigantic medical encyclopaedia entitled *al-Qanūn fī al-Ṭibb (The Canon of Medicine)* comprising upwards of a million words, was translated into Latin around 1150 and was used as the standard medical textbook in Europe up until the seventeenth century and is still widely considered a valuable resource for the study of medicine. It was printed thirty-six times in the fifteenth and sixteenth centuries alone, and is regarded as one of the most influential books in Europe during the Middle Ages and Renaissance.<sup>3</sup> It was a main source for many medical manuals and monographs and it was sometimes also taken as a model of form; for example, the collection of medical counsels by Ferrari of Grado (Venice, 1514 and several times reedited) is arranged according to the method of Ibn Sīnā. Due to the influence following translation of the Canon, from the early fourteenth to the mid-sixteenth centuries he was ranked with Hippocrates and Galen as one of the acknowledged authorities in medicine: *princeps medicorum* or Prince of Physicians.

In outline, the *Canon* consists of five books with each book subdivided into various subjects, subsidiary subjects, summaries, and sections. The first book, also

---

<sup>2</sup> Jules Janssens, *Ibn Sīnā and his Influence on the Arabic and Latin World* (Great Britain: Ashgate Publishing Limited, 2006), 1.

<sup>3</sup> Ihsan Ali & Ahmet Guclu, “Ibn Sina: An Exemplary Scientist,” Onislam.Net, <http://www.onislam.net/english/health-and-science/science/463382-ibn-sina-an-exemplary-scientist.html>.

called *al-Kulliyāt (The Universals)*, discusses the scientific background of medicine and anatomy such as physiology, symptomatology, and the principles of therapy. The second book gives an account of the therapeutic properties of substances used in medicine. The third book is devoted to pathology and specific or localized ailments. The fourth book elaborates general diseases that affect the whole body, such as fever. The final volume is a treasure on pharmacology which discusses the mixing of drugs.

In his *Canon*, Ibn Sīnā derived his system of medicine from the prominent Graeco-Roman physician, surgeon and philosopher, Aelius Galenus, better known as ‘Galen of Pergamon’ (129–200 CE), who himself based his approach on the ancient Greek physician, Hippocrates (460–370 BCE). Ibn Sīnā also benefited from the methodologies of early Muslim physicians such as al-Rāzī and al-Majūsī (Haly Abbas in Latin, died ca. 990) to present a systematized and comprehensive view of the medical sciences of the time. Yet, as was noticed by the Greco-Arabist Jon McGinnis, when it comes to the philosophical underpinnings of medicine Ibn Sīnā was more apt to defer to Aristotle than to the physicians themselves when there is disagreement.<sup>4</sup>

The *Canon* met the needs of the new scholastic medicine in Europe in three respects. Firstly, with an immense wealth of information, it provided Western physicians with a synopsis of virtually all the knowledge amassed in the preceding 1500 years and stimulated them to work further on their own. Secondly, with its systematic incorporation of every subject, down to the smallest detail, in a well-ordered theoretical framework, it greatly facilitated the adoption of its contents for teaching and at the same time satisfied the scholastic liking for a logical classification of subject matter. Lastly, Ibn Sīnā linked the medicine of Galen to the natural philosophy and theory of science of Aristotle, who from the thirteenth century onward dominated intellectual life in Europe.

Medicine for Ibn Sīnā was one of the mixed sciences, which has both practical and theoretical components. At the opening of his *Canon* he identified medicine as “the science from which one comes to recognise the states of the body on the part of health and the loss thereof in order to preserve the health as something realised as well as recovering it when lost.”<sup>5</sup> For him, living in a

---

<sup>4</sup> Jon McGinnis, *Avicenna* (New York: Oxford University Press, 2010), 227.

<sup>5</sup> *Ibid.*, 230.

healthy climate, getting proper amounts of sleep, accompanied by a regimen of exercise and a well-balanced diet, as well as positive thinking were considered as the most important causes in preserving someone's health.

**Ibn Sīnā's Philosophy.** Ibn Sīnā wrote extensively on logic, metaphysics and ethics. His philosophical thought was influenced by ancient Greek philosophers, Aristotle and Plato, the Hellenic scientist Ptolemy (90–168 CE), as well as the earlier Muslim scientist–philosophers al-Kindī (801–873), al-Fārābī (870–950) and al-Bīrūnī (Alberonius, 973-1048). Thus, Ibn Sīnā's philosophical investigations combined Aristotelian and Platonic perspectives with Muslim theology (*kalām*) as he developed a sophisticated paradigm that divided all knowledge into the theoretical (mathematics, physics, chemistry, astronomy and metaphysics) and practical (philosophy, ethics, economics and politics). His philosophy dealt with many of the most fundamental questions for every philosopher with a certain faith in God, such as the origins of the cosmos, the nature of the soul, the role of God for human existence and in the universe, and divine interaction with humans and other created beings.

The greatest contribution of Ibn Sīnā to the development of both later Muslim and Western thoughts was his attempt to reconcile Hellenic philosophy and Islamic doctrine of the existence of God as Creator of all beings. Over time Ibn Sīnā came to be regarded as the leading authority on Islamic philosophy, while his synthesis of ancient Greek philosophy and revealed theology was later adopted by medieval Christian philosophers, notably Thomas Aquinas (1225–1274), producing a significant influence on the development of Western thought. Due to the translation of his works into Latin, Ibn Sīnā's metaphysics and philosophy of knowledge had a lasting impact on thinkers in the Latin West who were engaged with the writings on natural philosophy and metaphysics by Hellenic, Islamic and Jewish thinkers. They include William of Auvergne (1180–1249) who served as Bishop of Paris for twenty-one years, and the German Dominican friar and Catholic bishop Albertus Magnus (1193–1280).

Ibn Sīnā introduced important modifications to the Neo-Platonic emanative scheme, which had been earlier systematised by al-Fārābī. He initiated a full-fledged inquiry into Ontology (the question of Being) where he distinguished between Essence (*māhiyah*) and Existence (*wujūd*). Avicenna posited that existence must be due to an agent or cause which necessitates, imparts, gives, and

adds existence to an essence. To do so, this cause must be an existing thing and coexist with its effect. Actually, Ibn Sīnā's conception of reality and reasoning revolved mainly around the existence of God. As the principle of all existence, God in his reasoning is pure intellect, from whom everything else emanates. Yet because of "necessities", humans are called upon to use real concepts that form what is known as human knowledge. Humans are thus called upon to develop and use the rules of syllogistic logic to serve his rational needs.

Ibn Sīnā also wrote a number of treatises dealing with Islamic theology or *kalām*. These included treatises on various scientific and philosophical interpretations of the Qur'an, showing how Qur'anic cosmology corresponds to his own philosophical system, and on Prophecy since he viewed the prophets as 'inspired philosophers.' In his *Metaphysics* (a major part of his comprehensive work *al-Shifa' /The Healing*) Ibn Sīnā recognized that philosophers could reach the Universal Single Truth by means of their rational efforts. Yet only prophecy can provide the law for the good society in the ideal state. Prophecy and Sharī'ah are together indispensable for the life and preservation of mankind. The divinely revealed law also contains truth about God, His universe, angels, the Hereafter, reward and punishment, and Providence.<sup>6</sup> Thus Ibn Sīnā clearly established the political significance of the Prophet as law-giver and first ruler of an ideal state.

Erwin Rosenthal suggested that Ibn Sīnā's philosophy has a definite political orientation, and important pronouncements on politics are found in every of his philosophical writings.<sup>7</sup> In his *Aqsām al-'Ulūm (Divisions of Science)* he distinguished between three practical sciences: Ethics, as taught by Aristotle in his *Nicomachean Ethics*; Economics, as set out in Bryson of Heraclea (late-5<sup>th</sup> century BCE), and the science or craft dealing with Household management – namely the discipline of politics first developed by Plato and Aristotle.<sup>8</sup>

During the 1020s Ibn Sīnā completed his major work on philosophy of science, entitled *Kitāb al-Shifā' The Book of Healing*. This work is divided into four parts: logic; natural sciences; mathematic sciences (the famous classical quadrivium of arithmetic, geometry, astronomy and music); and metaphysics (what is beyond or underlies natural physical phenomena). In the section on *al-*

---

<sup>6</sup> Erwin Rosenthal, *Political Thought in Medieval Islam: An Introductory Outline* (Greenwood Press Publishers, 1985), 147.

<sup>7</sup> Ibid., 143.

<sup>8</sup> Ibid.

*Burhān (Logical Demonstration)*, Ibn Sīnā also discussed the philosophy of science and assessed early scientific methods of inquiry and proof. He reviewed Aristotle's *Posterior Analytics* while significantly diverging on several points. Through his reviewing proper methodology for scientific inquiry, Ibn Sīnā developed a method of experimentation as a means for scientific inquiry which was informed and reacted to Muslim rational thought as developed by major rational theologians – particularly the Ash‘arite and Mu‘tazilite thinkers.

### Legacy to Civilisations

Ibn Sīnā's works were among the first translations from Arabic into Latin, and with their handy compendium format became immensely popular in Europe. As early as the 14<sup>th</sup> century when Dante Alighieri (1265–1321) in his *Divine Comedy* portrayed Avicenna in Limbo alongside virtuous non-Christian thinkers such as Virgil, Averroes, Homer, Horace, Ovid, Lucan, Socrates, Plato, and Saladin, Ibn Sīnā has been recognized by both East and West as one of the major forces in intellectual history.

Ibn Sīnā's synthesis of Graeco-Arabic philosophy, with its concerns central to all three Abrahamic religions, helped facilitate and prepare Latin Europe for the reintroduction of the Aristotelian scientific tradition. Thus Ibn Sīnā's thought played an important role in the reinvigoration of philosophy in Europe, as well as the formation of Christian scholastic theology by notaries as Thomas Aquinas.<sup>9</sup> Major ideas of Ibn Sīnā, along with the efforts of other brilliant Islamic scientists and philosophers including al-Khwārizmī (Algoritmi, 780–850), al-Fārābī, al-Kindī, the mathematician and astronomer ‘Umar Khayyām (1048–1131), Ibn Rushd (Averroes) and a host of others, established the foundations of modern science, art and philosophy, enabling Europe to emerge from the Dark Ages into the Renaissance. Perhaps it is his creative teaching on Ontology and the primacy of Being which have shaped human thought most profoundly.

For the medieval world in the East and in Europe, to understand Ibn Sīnā was to understand philosophy. While dealing with philosophy, the leading Ash‘arite theologian and mystic Abū Ḥāmid Al-Ghazālī (1058–1111) admitted that Ibn Sīnā was a major source of inspiration for metaphysical ideas, even while he critiqued his natural philosophy and cosmology. Similarly, Ibn Sīnā's philosophical system

---

<sup>9</sup> McGinnis, 244.

exerted considerable influence on the thought of the al-Suhrawardī (1154–1191), who founded the Illuminationist philosophy (*hikmat al-ishrāq*).<sup>10</sup>

Ibn Sīnā's legacy was not confined to the classical period alone. His logic, natural philosophy and metaphysics are still taught in the Muslim world as a living philosophy in Iran, Turkey, and even Indonesia. Many contemporary Catholic Christian philosophers continue to encounter his ideas through the works of Aquinas. Ibn Sīnā not only was able to address a host of issues which troubled earlier philosophers in both the ancient Hellenic and Islamic civilisations, but also fundamentally changed the direction of philosophy in the Islamic East, as well as for the Jewish and Christian milieus of western Europe.

In Iran Ibn Sīnā is considered a national icon and is often regarded as one of the greatest Iranian thinkers of all time. His portrait is ubiquitous in Iran today. An impressive monument to the life and work of the 'doctor of doctors' still stands outside the Bukhara museum. There is also a crater on the Moon named 'Avicenna' and a plant genus 'Avicennia.' Among the many institutions named in his honor are Bu-Alī Sīnā University in Hamadan (Iran), the Ibn Sīnā Tajik State Medical University in Dushanbe (capital of Republic of Tajikistan), Ibn Sīnā Academy of Medieval Medicine and Sciences (Aligarh, India), Avicenna Medical College (Lahore, Pakistan), the Ibn Sīnā Balkh Medical School (in his native province of Balkh, Afghanistan), and the Ibn Sīnā Faculty of Medicine at Ankara University (Turkey).



#### Further Readings:

- Thirteen part article on AVICENNA – multiple authors, in *Encyclopaedia Iranica* vol. III, Fasc. 1, pp. 66–10 / or <http://www.iranicaonline.org/articles/avicenna-index>. Best up to date studies.
- Jules Janssens. *Ibn Sīnā and His Influence on the Arabic and Latin World*. Vermont: Ashgate Publishing, 2006.
- Jon McGinnis. *Avicenna*. New York: Oxford University Press, 2010.
- Fazlur Rahman. *Prophecy in Islam: Philosophy and Orthodoxy*. London: George Allen & Unwin Ltd, 1958. – a fundamental study.
- Erwin I. J. Rosenthal. *Political Thought in Medieval Islam: An Introductory Outline*. Greenwood Press Publishers, 1985.
- Nancy Siraisi. *Medicine and the Italian Universities, 1250–1600*. Leiden: Brill, 2001.
- Manfred Ullman. *Islamic Medicine*. Edinburg: Edinburgh University Press, 1978.
- I. Zakaria. *The Political Aspects of Avicenna's General Theory of Cosmology and the Human Soul*. Kuala Lumpur: Penerbit Universiti Kebangsaan Malaysia, 2002.

---

<sup>10</sup> Ibid., 245–250; and Jules Janssens, *Ibn Sīnā and His Influence on the Arabic and Latin World* (Vermont: Ashgate, 2006), 36–49.