

EKMELEDDİN İHSANOĞLU, *The Ottoman Scientific Heritage*. Vol. 1: *The Formation, development and Issues*, Al-Furqan Islamic Heritage Foundation, London, 2023, xxviii + 376 pp. Vol. 2, parts 1 and 2: *The Compendium of Notable Scholars*, Al-Furqan Islamic Heritage Foundation, London, 2023, xxxiv + 1586 pp.

Despite its length (nearly two thousand pages) *The Ottoman Scientific Heritage* is an introduction. The work it introduces is a series of books written within the framework of the project *The History of Ottoman Scientific Literature*, inspired and directed by the well-known historian of science Ekmeleddin İhsanoğlu, with the aid of several collaborators. The series consists of ten books (eighteen volumes in total), published under the auspices of *İslam Tarih, Sanat ve Kültür Araştırma Merkezi* (Research Centre for Islamic History, Art and Culture, IRCICA), which appeared between 1997 and 2011. The subjects dealt with are: 1. astronomy; 2. mathematics; 3. geography; 4. music; 5. military art and science; 6. natural and applied sciences; 7. medical sciences; 8. astrology (and a supplement to the book on astronomy); 9. supplements (to books 1 to 8 and a history of the Ottoman classification of scientific literature); 10. indexes. The titles of each book, the authors, number of volumes, content, and year of publication, may be consulted at [www.ircica.org/publications/history-of-science](http://www.ircica.org/publications/history-of-science). The series constitutes a genuine *tour de force* by İhsanoğlu and his collaborators, who have created an essential tool for research in the history of science in the Ottoman world. The extensive information provided on manuscripts is unparalleled in any other work of its kind. In 2017, İhsanoğlu systematized the most significant aspects of the scientific tradition of the Ottoman world in two volumes published in Turkish, entitled *Osmanlı Bilim Mirası*. The work was welcomed by specialists in the history of science in Islamic societies (see, for example, Julio Samsó's review in *Suhayl*, no. 16-17). *The Ottoman Scientific Heritage* is the title of the translation into English of this work, published under the aegis of the Al-Furqan Islamic Heritage Foundation. Maryam Patton, who combines her mastery of Turkish with an extensive knowledge of Ottoman history of science, is the author of this careful translation.

*The Ottoman Scientific Heritage* comprises two volumes. The first contains a historical synthesis, and the second (divided into two parts, i.e., two physically independent volumes but paginated consecutively) deals with the biography and bibliography of 370 authors who are deemed particularly significant. The Otto-

man dynasty emerged in world history between the 14th and 15th centuries, creating not only a state but also a complex civilization that dominated a large part of Islamic societies until the early 20th century. An essential element of this civilization, though possibly not the best-known, is its scientific culture. The first volume of *The Ottoman Scientific Heritage* offers a wide audience the opportunity to access this culture. İhsanoğlu explains it in a synthetic style that does not exclude precision and detail. In the introduction, the author defines «Ottoman science» as an intellectual phenomenon centred in the Anatolian peninsula whose boundaries are as wide as those of the Ottoman Empire itself. The first chapter is devoted to the antecedents in the Seljuk dynasty and the Anatolian Beyliks; the second addresses the development of a scientific tradition under the Ottomans, and the third focuses on educational and scientific institutions. Many key topics are explored in these three chapters, including the importance of the sciences to the leaders of Islamic societies. This interest is reflected in the support given by Seljuk and Ottoman elites to an intense process of institutionalization of the sciences in the form of the establishment of madrasas, hospitals and astronomical observatories, and the presence of the sciences in the curricula taught in the madrasas. Another topic worthy of note is the adoption of the major currents of science in Islamic societies by Ottoman scientists, regardless of geographical distance: examples are the diffusion of Maragha astronomy, or the reception of Andalusí pharmacology. The fourth chapter, «An Overview of Ottoman Scientific Literature», showcases the complexity of the Ottoman legacy and the extraordinary process of constructing a science expressed in Turkish, stemming from two major processes of reception: on the one hand, Arab-Islamic science expressed in Arabic and Persian, and on the other European science written in languages such as French, German, English, Italian, and even Spanish and Latin. The fifth chapter presents an interesting series of statistics offering a precise overview of the internal dynamics of the creation, transmission, and evolution of the Ottoman scientific legacy. The ambitious analysis is conducted on a total of 4 897 authors and 20 154 works, figures that reflect the enormous scale of the phenomenon. By way of conclusion, in the final chapter İhsanoğlu analyses the process of the reception of modern science in the Ottoman world comparing it with the case of other societies that were peripheral to Western Europe, such as Russia, China, and Japan. The chapter, written under the inspiration of Needham, contains interesting reflections on the specific characteristics of the Ottoman process. If the first volume describes the structure of the Ottoman scientific legacy, the second analyses in detail its most important components, namely the authors. İhsanoğlu provides comprehensive bi-

ographical and bibliographical entries (including manuscripts that remain unpublished) for 370 authors. Although this figure represents only less than 7.5% of the total number of all the scholars known, they provide an eloquent representation of the whole. The first on the list is Hekim Bereket, a physician who flourished between the 13th and 14th centuries. Although little is known about his life, two treatises written in Arabic have survived, both translated by the author himself into Turkish, with one also translated into Persian. The last author is the well-known Syrian-Iraqi intellectual Sāṭi' al-Ḥuṣrī (1880 – 1968), an Ottoman official born in Sanaa, who eventually became a prominent ideologue of Arab nationalism. In between, we find such fascinating figures as the Sephardic physician and astronomer Moses Galeano (fl. early 16th century), the admiral, navigator and geographer Piri Reis (d. 1553), and the Hungarian physician Macarli 'Abdullah (d. 1874), the representative of the Ottoman Imperial Society of Physicians in the 3<sup>rd</sup> Medical Congress held in Vienna in 1873. These biographies express better than any monograph the status of the Ottoman world as a cosmopolitan crucible in which the languages, ethnicities, religions, social conditions and, in general, all the circumstances that divide humankind disappear in favour of a major purpose. İhsanoğlu's *The Ottoman Scientific Heritage* is an indispensable work that should be read not only by the specialists in history of science but also by any reader interested in the history of world civilization.

MIQUEL FORCADA  
*mforcada@ub.edu*  
*Universitat de Barcelona*

