

des behandelten Zeitraums mit Schwerpunkt auf Spanien und den von Spanien ausgehenden Entdeckungswegen. Taléns stellt unter der Überschrift "Las floras actuales" den Anschluß an die Botanik der Gegenwart her. Felipe Jerez Moliner vermittelt in seinem Beitrag einen interessanten Einblick in die Entwicklung der botanischen Illustrationstechnik. Jesús Ignacio Capalá Gorgues und Christina Sendra Mocholí beschäftigen sich mit der Geschichte der botanischen Klassifikation und der Pflanzenbenennung und María José López Terrada mit der 'Welt der Pflanzen' in der spanischen Malerei von der Renaissance bis zum 19. Jahrhundert. Bereits der Textteil enthält zahlreiche sehenswerte Abbildungen.

Von den in der Ausstellung gezeigten 342 Abbildungen ('Catálogo Técnico', 179-217), bringt der Katalog etwas mehr als einhundert Reproduktionen ('Catálogo de obras', 97-178). Diese hervorragenden Reproduktionen bilden das Kernstück des Bandes. Zum Teil in Originalgröße, zum Teil leicht verkleinert, auf gutem Papier ausgeführt, bilden diese Reproduktionen eine bemerkenswerte Sammlung, die weit über die ursprüngliche Gebrauchsbestimmung eines Katalogs hinausweist. Die wiedergegebenen Illustrationen überspannen den Zeitraum von der Mitte des 16. bis zum Beginn des 19. Jahrhunderts. Sie sind überwiegend medizinischen und botanischen (Lehr-)Büchern entnommen, die sich im Besitz der Universität Valencia befinden und zu einem nicht geringen Teil Seltenheitswert besitzen dürften. Zu den hinzugezogenen Werken zählt u.a. eine spanische Ausgabe des Kräuterbuchs von Leonhard Fuchs und bemerkenswerte Botaniken spanischer Autoren (u.a. Gonzalo Fernández de Oviedo und Nicolás Monardes), die den Konquistadoren dicht auf den Fersen, die pflanzliche Vielfalt der 'Neuen Welt' der staunenden europäischen Gelehrtenwelt bekannt machten. In vorwiegend chronologischer Folge angeordnet, ermöglichen die Abbildungen dem Leser und Betrachter eine aufschlußreiche Wanderung durch die Geschichte der botanischen Illustration, die nicht zuletzt auch ein ästhetisches Vergnügen ist. Die Spanne der Techniken reicht vom 'einfachen' Holzschnitt bis zur aufwendigen, handkolorierten Radierung. Im 'Catálogo Técnico' sind nach einem einheitlichen Schema in sorgfältiger Weise Angaben zu den Abbildungen zusammengestellt.

Estratto da

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ROSHDI RASHED (ed.): *Encyclopedia of the History of Arabic Science*. 3 vols. London, New York: Routledge, 1996. 1105 pp.

To whom do the great scholars of the world belong? To their homeland, their nation, or to all mankind? Debates on the attribution of eminent scientists of the past are not new, and they are usually sullied by fanaticism and narrow-mindedness. Maybe a reasonable answer is that their true heirs are those researchers – whatever their nationality or land – who investigate, translate, interpret, and publish their scientific legacy. 'Arabic' science as a major contribution to the overall activity in the realm of science was multinational, not only from the above-mentioned viewpoint, but also because it was deeply influenced by Greek, Iranian and Indian sources and, the scholars who produced it belonged to a vast area – from Andalusia to China. The epithet 'Arabic' for this glorious scientific and cultural activity between the 9th century C.E. (when al-Khwārizmī wrote his mathematical works) to the 17th century (when modern European science was introduced into Islamic territories) refers to the fact that Arabic, the language of the founders of Islamic sovereignty, became the lingua franca of science in the conquered lands. In fact, most of the works related to 'Arabic science' were composed by non-Arabs. Hence, this term cannot be used in a sense similar to 'Greek science' which was both produced by Greeks and written in Greek (contrary to note 1 in the Preface, vol. 1, p. xiv). To avoid nationalistic implications, sometimes the adjective 'Islamic' is preferred (cf., e.g., Prof. E. S. Kennedy's *A Survey of Islamic*

Astronomical Tables). Another controversy relates to the assessment of the degree of originality of Arabic or Islamic scientific contribution to the global domain of science. The editor of the *Encyclopedia* refers to this question and duly rejects the viewpoint that Arabic science is regarded "as an excavation site, in which the historian is the archeologist on the track of Hellenism" (vol. 1, x).

In spite of the bulk of studies and publications on the subject during the last half century, much still remains to be done. Moreover, studying the history of science, including 'Arabic' science, has not yet gained the position it deserves in the syllabus of universities and other institutions of higher education.

The *Encyclopedia of the History of Arabic Science* was conceived and produced for "not only ... students and the scholars of Arabic science, the history of science, and Islamic studies, but ... [also for] mathematicians, engineers and life scientists" (back cover); its dual objective is "to open the way to a genuine understanding of the history of classical science from the ninth to the seventeenth century, and to contribute to the knowledge of Islamic culture itself by according it a dimension which has never ceased to be its own: that of scientific culture" (vol. 1, xiii). Although, for reasons partly mentioned by the editor in the Preface, the *Encyclopedia* should not be regarded as a comprehensive work, it is a collection of valuable and informative articles on different branches of the Islamic period science.

The *Encyclopedia* is in 3 volumes containing 30 articles on Arabic science in the period from the 9th to the 17th centuries C.E. The first volume contains 9 articles on "astronomy - theoretical and applied"; the second, 12 articles on "mathematics and physical sciences"; and the third, 9 articles on "technology, alchemy and life sciences". The articles, written by experts in the relevant fields, while meeting academic standards, are generally comprehensible to non-specialists. Each volume includes an article on the influence in the West of the relevant branch of Arabic science. A postface written by Prof. Muhsin Mahdi, entitled "Approaches to the History of Arabic Science", deals with general subjects such as Greek sources, positivism and historicism, and historical understandings.

There is an extensive bibliography at the end of each volume. Moreover, two articles are immediately followed by useful lists of further reading: article 4, on "Astronomy and Islamic Society: Qibla, Gnomonics and Timekeeping", by David A. King, and article 27, on "Medicine", by Emilie Savage-Smith. At the end of the third volume, separate indices of proper names, subjects, and titles of treatises are provided. In some articles, drawings and other illustrations are quite helpful for a better understanding of the subject.

A table of transliteration system for Arabic words and a glossary of scientific terms could increase the usefulness of this work as a reference tool. There are quite a few printing errors, e.g., Ḥamadhān (vol. 1, xii) for Hamadān; Aṣfahānī (vol. 2, 367, 375) for Iṣfahānī; Marāqī (vol. 2, 612) for Marāghī, and Āyḍīn Sayīlī (vol. 3, 993) for Aydın Sayılı. Avicenna's treatise on mechanics, *Mi'yār al-ʿuqūl*, is written as *Mi'yār al-ʿaql* (vol. 2, 738). Such cases are negligible in view of the size of the work.

In conclusion, this is a useful work of reference on several scientific branches in the Islamic period, conceived "for the knowledgeable layperson and not merely [for] an inner circle of colleagues, without however over-popularizing the subjects" (vol. 1, xiii).

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