

Edson, Evelyn and Savage-Smith, Emilie: *Medieval Views of the Cosmos: Picturing the Universe in the Christian and Islamic Middle Ages*. Oxford: Bodleian Library (University of Oxford), 2004, 128 pp.

This book is a survey of the perception and mapping of the heavens and the earth in the Islamic and European traditions from the middle ages up to the Renaissance. It is divided in two main sections, the first one devoted to cosmology, and the second, which is lengthier, to geography and terrestrial cartography. Each section offers comparative materials alternatively from each tradition, in order to show the contrast between Islamic and Christian products of the same period. Emphasis is put on the differing ways in which the earlier thought reached the medieval scholars and how they profited from it. The selected items, presented with a brief commentary and reproduction, are helpful to the historian of cartography. In addition, a multiplicity of concepts is explained concisely and accessibly for the non-specialized reader. Such is the case of the medieval flat earth misconception that was promoted in the 19th century (p. 67). The titles of Arabic works are given only in English translation.

The original contribution of the *Book of Curiosities* (Egypt, 1020-50) is described with more detail, as the manuscript has been subject of a research project by E. Savage-Smith (with J. Johns and Y. Rapoport). Its cartographical contents are contextualized with relevant examples of

Islamic mapmaking, like the circular world map that is identical with the one associated with al-Idrīsī (fl. 1154).

The first section opens with a general introduction to the structure of the heavens (The Medieval Cosmos, pp. 9–20) and covers chapters 1 (Greek and Roman Heritage, pp. 22–29), 2 (Science in the Islamic Regions, pp. 30–43), 3 (Twelfth-Century European Renaissance, pp. 44–45) and 4 (Microcosm/Macrocosm, pp. 46–48). These concentrate on the impact of Plato's cosmology on Christianity, and the transmission role of Roman popularisers and encyclopaedists, to contrast with the direct reception of Aristotle and Ptolemy's writings in the early Arabic sciences. The authors focus on 12th-century Spain for the transfer of Arabic versions of Greek texts and Arabic treatises to the Latin West. This legacy led to the renovation of the European sciences.

The geographical section starts with chapter 5 (The Geographical Inheritance from Antiquity, pp. 49–56). Islamic geography and mapmaking are discussed in chapters 7 (Medieval Islamic Geography, pp. 61–66), 9 (Medieval Islamic Mapping of the World, pp. 75–81) and 10 (Medieval Islamic Regional Mapping, pp. 85–95), beginning with Ptolemy's contribution to the development of Islamic mathematical geography. The cartography is categorized in five main approaches, that are those of the Balkhī school (10th cent.), al-Bīrūnī's sketch of seas and landmasses (early 11th-cent.), the *Book of Curiosities*, al-Idrīsī's Geography and the Islamic sacred geography. Elements of Islamic

influence that are pinpointed on European world maps, in particular the one by Pietro Vesconte (1321), partly illustrate the *interchange of intellectual commodities* that took place across the Mediterranean (p. 81).

European geography and mapmaking are examined in chapters 6 (Medieval Western Geography, pp. 58–60), 8 (Mapping the Earth in the European Middle Ages, pp. 67–74) and 11 (Regional Mapping in Medieval Europe, pp. 99–109). Most examples are representative of English cartography and include the T-O map from St. Johns' College, Oxford (1110), the Holy Land map of Mathew Paris (mid-13th cent.), the world map of Ranulf Hidgen (d. 1363) and the Gough Map (mid-14th cent.). The European nautical chartmaking, appearing in the late 13th century, is highlighted through Vesconte's works, and for the Ottoman context reference is made to Pīrī Re'īs' *Kitāb-i Baḥrīye* (1521, 1526). Unfortunately, the nautical production of the Maghribi chartmakers (14th cent. – 1600) is entirely omitted. The geographical section ends with chapter 12 (Travellers and Traders, pp. 112–16) that shortly outlines the updating of the world view by means of long distance journeys for reasons of pilgrimage, commerce, warfare and, eventually, exploration.

The book is beautifully illustrated with 59 colour figures of excellent printing quality, so that the visual aspects of the selected materials are fully displayed. The majority belongs to the collections of the Bodleian Library, Oxford. Some diagrams and

maps are accompanied with additional translation and identification of the basic data and toponymy. As a whole, this is a useful and handy overview of comparative cartography.

Mónica Herrera-Casais