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Ikhwān al-Ṣafā'

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Flourished (Iraq), circa 961-980

The Ikhwān were a philosophical-religious group, consisting of several authors who lived in Basra, Iraq, and collected their teaching in an encyclopedia known as the *Rasā'il Ikhwān al-Ṣafā'* (The Epistles of the Brethren of Purity). Composed circa 980, it contains 51 epistles (a fifty-second considered spurious) and is grouped into Four Sections: (I) mathematical sciences; (II) physical sciences; (III) psychological and intellectual sciences; and (IV) metaphysical and legal sciences. The book is propaedeutical, i.e., a program of teaching, in this case based mainly upon Ismā'īlī, neo-Pythagorean, and neo-Platonic doctrines, but drawing as well on other traditions existing in the tenth century.

Astronomy is the subject of the third, sixteenth, and thirty-sixth epistles. The third epistle of Section I is devoted to "Astronomy, viz. Astrology and the Arrangement of the Orbs (*tarkīb al-aflāk*)." It begins by providing a categorization of the "science of the stars" (*'ilm al-nujūm*): a) cosmography (*hay'a*); b) astronomical table-making (*zīj*es), compiling of ephemerides (*taqwīm*), and chronology (*istikhrāj al-tawārīkh*); c) astrology (*aḥkām al-nujūm*). This is followed by a brief exposition of the Ptolemaic system of spheres and planets, while the remaining part of this section concerns astrology. This basic astronomical knowledge is mainly intended to be in the service of historical astrology, the theory of cycles based upon conjunctions, which was meant to legitimize the political power of the Shī'a Imāmat.

The sixteenth epistle (the second of Section II), which treats "The Sky and the World" (*al-samā' wa-l-'ālam/de caelo et de mundo*), provides additional information. It is mainly based upon the Ptolemaic system and Aristotelian physics with eleven spheres/orbs including the Earth and the atmosphere. In addition, the diameters of the planets are given. Finally, the thirty-sixth epistle (the fifth of Section III) is devoted to "Revolutions and Cycles" (*Fī al-adwār wa-l-akwār*) and is again mainly astrological but with some passages of astronomical interest (cf. de Callatāy 1996). Marquet (1973, chap. 4) extensively discusses the celestial realm as presented in the *Rasā'il*.

This encyclopedia was translated into Persian, probably at the beginning of the thirteenth century, in an extremely abridged form entitled *The Compendium of Wisdom* (*Mujmal al-ḥikma*, the oldest copy dating from 1268-1269); it was later apparently also dedicated to Tīmūr (died: 1405). This version follows the original plan and contents (I. *ḥikmiyyāt*; II. *ṭabī'iyyāt*; III. *nafsāniyyāt*; IV. *ilāhiyyāt*) and maintains technical terms in Arabic.

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