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Music among the sciences in medieval Arabic texts. (La musique parmi les sciences dans les textes arabes médiévaux.) (French) Zbl 07965569

Lelli, Giovanna (ed.), Mathematics and physics in classical Islam. Comparative perspectives in the history and the philosophy of science. Crossroads – History of Interactions across the Silk Routes 5. Leiden: Brill. 52-66 (2022).

During the wave of translations of Greek texts, certain Arab thinkers and authors – following in the footsteps of newly rediscovered earlier traditions – took an interest in sound and related concepts. It was in this context that the term 'music' (musiqa) and the concept of the 'Science of Music' began to appear in the first theoretical texts in Arabic. Drawing on the thought of a number of important theorists, notably through half a dozen long extracts presented in the original Arabic and accompanied by a French translation, the author of this article summarises the evolution of a philosophical science of Music, Harmonics, towards a mathematical science of Music and then towards an independent science, before the texts sought less and less to refer to a scientific attitude.

The first school of thought discussed, represented by the Hellenized Arab philosopher al-Kindi (c. 801– c. 873), is part of the neo-Platonic tradition, for whom Music (whose effects on the soul they becoma aware of) constitutes the link between the metaphysical universe and the physical world: in this context, it constitutes a science of the Harmonic based on mathematical (or, at the very least, arithmetical) principles. Secondly, the author highlights what he describes as the revival of mathematical pragmatism in music that is beginning to emerge through the Kitab al-Musiqa al-Kabir (translation: The Great Treatise on Music) by the Persian philosopher al-Fārābī (c. 872–c. 950). Seeking to link musical mathematics to the world of sound and feeling, the school that derived from it would find itself partially reviving the positions of Euclid and Claudius Ptolemy, while discarding the astronomical and metaphysical aspect present in the thought of the second of these two Alexandrians to better focus on the question of the adequacy between mathematics and the perceptible in music.

This position continues, the author tells us, with the Persian philosopher and physician Ibn Sina (c. 980–1037), who gives it a concise and precise form. Alongside the musico-mathematical rules governing the composition of melodies and the science of rhythm, Ibn Sina presents an epistemological orientation which, by sparking discussion and rereading various texts on music theory, draws attention in particular to natural principles (since the object of music, i.e., sound, belongs to Nature). This new epistemological reading of music as a science that seeks to clearly define its object will, the author points out, had an impact in Europe with the important Italian theorist Gioseffo Zarlino, but also with the German Johannes Kepler, and the French Marin Mersenne and René Descartes.

For the entire collection see [Zbl 07918152].

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MSC:

01A30 History of mathematics in the Golden Age of Islam00A65 Mathematics and music

Keywords:

science of music; harmonic

Full Text: DOI