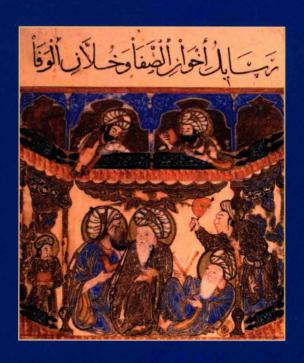
EPISTLES OF THE BRETHREN OF PURITY

On the Natural Sciences

An Arabic Critical Edition and English Translation of EPISTLES 15–21



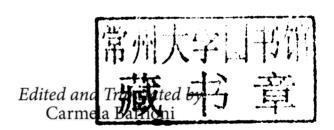
Edited and Translated by Carmela Baffioni

Foreword by Nader El-Bizri

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in association with
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EPISTLES OF THE BRETHREN OF PURITY



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The Institute of Ismaili Studies was established in 1977 with the object of promoting scholarship and learning on Islam, in historical as well as contemporary contexts, and a better understanding of its relationship with other societies and faiths.

The Institute's programmes encourage a perspective which is not confined to the theological and religious heritage of Islam, but seeks to explore the relationship of religious ideas to broader dimensions of society and culture. The programmes thus encourage an interdisciplinary approach to the materials of Islamic history and thought. Particular attention is also given to issues of modernity that arise as Muslims seek to relate their heritage to the contemporary situation.

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Epistles of the Brethren of Purity

The *Epistles of the Brethren of Purity* is published by Oxford University Press in association with the Institute of Ismaili Studies, London. This bilingual series consists of a multi-authored Arabic critical edition and annotated English translation of the *Rasā'il Ikhwān al-Ṣafā'* (ca. tenth-century Iraq).

Previously published

- Nader El-Bizri, ed. *The Ikhwān al-Ṣafā' and their 'Rasā'il': An Introduction* (2008).
- Ikhwān al-Ṣafā'. The Case of the Animals versus Man Before the King of the Jinn: An Arabic Critical Edition and English Translation of Epistle 22, ed. and tr. Lenn E. Goodman and Richard McGregor (2009).
- Ikhwān al-Ṣafā'. On Logic: An Arabic Critical Edition and English Translation of Epistles 10–14, ed. and tr. Carmela Baffioni (2010).
- Ikhwān al-Ṣafā'. On Music: An Arabic Critical Edition and English Translation of Epistle 5, ed. and tr. Owen Wright (2010).
- Ikhwān al-Ṣafā'. *On Magic I: An Arabic Critical Edition and English Translation of Epistle 52a*, ed. and tr. Godefroid de Callataÿ and Bruno Halflants (2011).
- Ikhwān al-Ṣafā'. On Arithmetic and Geometry: An Arabic Critical Edition and English Translation of Epistles 1 & 2, ed. and tr. Nader El-Bizri (2012).

Carmela Baffioni is a Senior Research Associate at the Institute of Ismaili Studies. Educated at the University of Rome "La Sapienza", and a student of Francesco Gabrieli and Alessandro Bausani, she became full Professor of History of Islamic Philosophy at the Università degli Studi di Napoli "L'Orientale" in 1987, where she served until 2012. She is a member of the Accademia dei Lincei, of the Academia Europaea, and of the Académie Internationale d'Histoire des Sciences, and a founder member of the Section of Arabic Studies in the branch of Near Eastern Studies of the Accademia Ambrosiana. Her publications include several monographs on the transmission of Greek thought into Islam; translations of works by the Ikhwān al-Şafā', al-Farābī, and Ibn Rushd (Averroes), as well as al-Shahrastānī; in addition, she has written a monograph on Aristotle's Meteorologica IV (1981), and books on the history of Muslim philosophy. Besides the Ikhwān al-Şafā', her articles focus on al-Kindī, al-Farābī, Yaḥyā ibn 'Adī, Ibn Sīnā (Avicenna), Ibn Rushd (Averroes), and some Latin elaborations of Arabic heritage. Her scientific interests concern logic, atomism, and embryology. She has translated books from German and Russian, and edited six collective works. Her recent publications include articles on the political views of the Ikhwan al-Şafa', the philosophy of nature of Hamid al-Din al-Kirmānī, some items in the Encyclopedia of Medieval Philosophy (Dordrecht: Springer, 2011), and the revision and edition of the catalogue of manuscripts of the Ahel Habott Foundation (Chinguetti), in Arabic and French (Milan: Nottetempo, 2006).

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This work would have not been possible without the assistance of Julia Kolb, PA to Dr Daftary at the IIS, and the kind help of the staff of the Library of the Institute of Ismaili Studies, as well as those of the Warburg Institute and the SOAS libraries in London.

Once again, I have to pay tribute to my husband Gianni, for his love, and for his patience in sharing me with the 'Brethren' over so many past years — and (I hope) for many years in the future. My warmest thanks go also to my daughter, Carlotta, who has been looking with me for the best solutions to some English translations, whilst avoiding comments on content that, I am afraid, do not satisfy budding economists!

I am solely responsible for any inaccuracies this book may contain.

Carmela Baffioni Rome, 15 April 2013

Foreword

The Brethren of Purity (Ikhwān al-Ṣafā') were the anonymous members of a fourth-/tenth-century¹ esoteric fraternity of lettered urbanites that was principally based in the southern Iraqi city of Basra, while also having a significant active branch in the capital of the 'Abbāsid caliphate, Baghdad. This secretive coterie occupied a prominent station in the history of scientific and philosophical ideas in Islam owing to the wide intellectual reception and dissemination of diverse manuscripts of their famed philosophically oriented compendium, the *Epistles of the Brethren of Purity (Rasāʾil Ikhwān al-Ṣafāʾ)*. The exact dating of this corpus, the identity of its authors, and their doctrinal affiliation remain unsettled questions that are hitherto shrouded with mystery. Some situate the historic activities of this brotherhood at the eve of the Fāṭimid conquest of Egypt (ca. 358/969), while others identify the organization with an earlier period that is set chronologically around the founding of the Fāṭimid dynasty in North Africa (ca. 297/909).

The most common account regarding the presumed identity of the Ikhwān is usually related on the authority of the famed litterateur Abū Ḥayyān al-Tawḥīdī (ca. 320–414/930–1023), who noted in his *Book of Pleasure and Conviviality* (*Kitāb al-Imtāʿ waʾl-muʾānasa*) that these adepts were obscure 'men of letters': Abū Sulaymān Muḥammad b. Maʿshar al-Bustī (nicknamed al-Maqdisī); the *qāḍī* Abū al-Ḥasan 'Alī b. Hārūn al-Zanjānī; Abū Aḥmad al-Mihrajānī (also known as Aḥmad al-Nahrajūrī); and Abū al-Ḥasan al-ʿAwfī. Abū Ḥayyān also claimed that they were the senior companions of a secretarial officer at the

¹ All dates are Common Era, unless otherwise indicated; where two dates appear (separated by a slash), the first date is hijri (AH), followed by CE.

Būyid regional chancellery of Basra, known as Zayd b. Rifā'a, who was reportedly an affiliate of the Brethren's fraternity and a servant of its ministry. Even though this story was reaffirmed by several classical historiographers in Islamic civilization, it is not fully accepted by scholars in terms of its authenticity. Furthermore, some Ismaili missionaries (*du'āt*) historically attributed the compiling of the *Epistles* to the early Ismaili Imams Aḥmad b. 'Abd Allāh (al-Taqī [al-Mastūr]) or his father, 'Abd Allāh (Wafī Aḥmad), while also suggesting that the *Rasā'il* compendium was secretly disseminated in mosques during the reign of the 'Abbāsid caliph al-Ma'mūn (r. 198–218/813–833).

Encountering 'veracity in every religion', and grasping knowledge as 'pure nourishment for the soul', the Ikhwān associated soteriological hope and the attainment of happiness with the scrupulous development of rational pursuits and intellectual quests. Besides the filial observance of the teachings of the Qur'an and hadith, the Brethren also reverently appealed to the Torah of Judaism and to the Gospels of Christianity. Moreover, they heeded the legacies of the Stoics and of Pythagoras, Hermes Trismegistus, Socrates, Plato, Aristotle, Plotinus, Nicomachus of Gerasa, Euclid, Ptolemy, Galen, Proclus, Porphyry, and Iamblichus.

The Brethren promoted a convivial and earnest 'companionship of virtue'. Their eschatological outlook was articulated by way of an intricate cyclical view of 'sacred' history that is replete with symbolisms and oriented by an uncanny hermeneutic interpretation of the microcosm and macrocosm analogy: believing that the human being is a microcosmos, and that the universe is a 'macroanthropos'. The multiplicity of the voices that were expressed in their *Epistles* reflects a genuine quest for wisdom driven by an impetus that is not reducible to mere eclecticism; indeed, their syncretism grounded their aspiration to establish a spiritual refuge that would transcend the sectarian divisions troubling their era.

In general, fifty-two epistles are enumerated as belonging to the Rasā'il Ikhwān al-Ṣafā', and these are divided into the following four parts: Mathematics, Natural Philosophy, Sciences of the Soul and Intellect, and Theology. The first part consists of fourteen epistles, and it deals with 'the mathematical sciences', treating a variety of topics in arithmetic, geometry, astronomy, geography, and music.

It also includes five epistles on elementary logic, which consist of the following: the Isagoge, the Categories, the On Interpretation, the Prior Analytics, and the Posterior Analytics. The second part of the corpus groups together seventeen epistles on 'the physical or natural sciences'. It thus treats themes on matter and form, generation and corruption, metallurgy, meteorology, a study of the essence of nature, the classes of plants and animals (the latter being also set as a fable), the composition of the human body and its embryological constitution, a cosmic grasp of the human being as microcosm, and also the investigation of the phonetic and structural properties of languages and their differences. The third part of the compendium comprises ten tracts on 'the psychical and intellective sciences', setting forth the 'opinions of the Pythagoreans and of the Brethren of Purity', and accounting also for the world as a 'macroanthropos'. In this part, the Brethren also examined the distinction between the intellect and the intelligible, and they offered explications of the symbolic significance of temporal dimensions, epochal cycles, and the mystical expression of the essence of love, together with an investigation of resurrection, causes and effects, definitions and descriptions, and the various types of motion. The fourth and last part of the Rasā'il deals with 'the nomic or legal and theological sciences' in eleven epistles. These address the differences between the varieties of religious opinions and sects, as well as delineating the 'pathway to God', the virtues of the Ikhwān's fellowship, the characteristics of genuine believers, the nature of the divine nomos, the call to God, the actions of spiritualists, of jinn, angels, and recalcitrant demons, the species of politics, the cosmic hierarchy, and, finally, the essence of magic and talismanic incantations. Besides the fifty-two tracts that constitute the Rasā'il Ikhwān al-Ṣafā', this compendium was accompanied by a treatise entitled al-Risāla al-jāmi'a (The Comprehensive Epistle), which acted as the summa summarum for the whole corpus and was itself supplemented by a further abridged appendage known as the Risālat jāmi'at al-jāmi'a (The Condensed Comprehensive Epistle).

In spite of their erudition and resourcefulness, it is doubtful whether the Brethren of Purity can be impartially ranked amongst the authorities of their age in the realms of science and philosophy. Their inquiries into mathematics, logic, and the natural sciences were recorded in the *Epistles* in a synoptic and diluted fashion, sporadically infused with gnostic, symbolic, and occult directives. Nonetheless, their accounts of religiosity, as well as their syncretic approach, together with their praiseworthy efforts to collate the sciences, and to compose a pioneering 'encyclopaedia', all bear signs of commendable originality.

In terms of the epistemic significance of the *Epistles* and the intellectual calibre of their authors, it must be stated that, despite being supplemented by oral teachings in seminars (*majālis al-ʻilm*), the heuristics embodied in the *Rasāʾil* were not representative of the most decisive achievements of their epoch in the domains of mathematics, natural sciences, or philosophical reasoning. Moreover, the sciences were not treated with the same level of expertise across the *Rasāʾil*. Consequently, this opus ought to be judged by differential criteria as regards the relative merits of each of its epistles. In fairness, there are signs of conceptual inventiveness, primarily regarding doctrinal positions in theology and reflections on their ethical-political import, along with signs of an intellectual sophistication in the meditations on spirituality and revelation.

The Rasā'il corpus is brimming with a wealth of ideas and constitutes a masterpiece of mediaeval literature that presents a populist yet comprehensive adaptation of scientific knowledge. It is perhaps most informative in terms of investigating the transmission of knowledge in Islam, the 'adaptive assimilation' of antique sciences, and the historical evolution of the elements of the sociology of learning through the mediaeval forms of the popularization of the sciences and the systemic attempts to canonize them. By influencing a variety of Islamic schools and doctrines, the Brethren's heritage acted as a significant intellectual prompt and catalyst in the development of the history of ideas in Islam. As such, their work rightfully holds the station assigned to it amongst the distinguished Arabic classics and the high literature of Islamic civilization.

The composition of this text displays impressive lexical versatility, which encompasses the technical idioms of mathematics and logic, the heuristics of natural philosophy, and the diction of religious pronouncements and occult invocations, in addition to poetic verses,

didactic parables, and satirical and inspirational fables. Despite the sometimes disproportionate treatment of topics, the occasional hiatus in proofs, irrelevant digressions, or instances of verbosity, the apparent stylistic weaknesses disappear, becoming inconsequential, when a complete impression is formed of the architectonic unity of the text as a whole and of the convergence of its constituent elements as a remarkable *oeuvre des belles lettres*.

Modern academic literature on the Rasā'il Ikhwān al-Ṣafā' is reasonably extensive within the field of Islamic studies, and it continues to grow, covering works dating from the nineteenth century up to the present, with numerous scholars attempting to solve the riddles surrounding this compendium. The academic rediscovery of the Rasā'il in modern times emerged through the monumental editorial and translation efforts of the German scholar Friedrich Dieterici between the years 1861 and 1872. Several printed editions aiming to reconstruct the original Arabic have also been established, starting with the editio princeps in Calcutta in 1812, which was reprinted in 1846, then a complete edition in Bombay between 1887 and 1889, followed by the Cairo edition of 1928, and the Beirut editions of 1957, 1983, 1995, and their reprints.² Although the scholarly contribution of these Arabic editions of the Rasā'il is laudable, as they valuably sustained research on the topic, they are uncritical in character, and they do not reveal their manuscript sources. Consequently, the current printed editions do not provide definitive primary-source documentation for this classical text. Given this state of affairs, the Institute of Ismaili Studies (IIS) in London has undertaken the publication (in association with Oxford University Press) of a multi-authored, multi-volume Arabic critical edition and annotated English translation of the fifty-two epistles.

² The principal complete editions of this compendium that are available in print consist of the following: *Kitāb Ikhwān al-Şafā' wa-Khullān al-Wafā'*, ed. Wilāyat Ḥusayn, 4 vols. (Bombay: Maṭba'at Nukhbat al-Akhbār, 1305–1306/ca. 1888); *Rasā'il Ikhwān al-Şafā'*, ed. Khayr al-Dīn al-Ziriklī, with two separate introductions by Ṭaha Ḥusayn and Aḥmad Zakī Pasha, 4 vols. (Cairo: al-Maṭba'a al-ʿArabiyya bi-Miṣr, 1928); *Rasā'il Ikhwān al-Ṣafā'*, ed. with introduction by Buṭrus Bustānī, 4 vols. (Beirut: Dār Ṣādir, 1957); and an additional version, *Rasā'il Ikhwān al-Ṣafā'*, ed. ʿĀrif Tāmir, 5 vols. (Beirut: Manshūrāt ʿUwaydāt, 1995).

Epistles of the Brethren of Purity

In preparation for the critical edition, reproductions of nineteen manuscripts were acquired by the IIS, and their particulars can be summarized as follows, with the corresponding Arabic sigla:

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Bibliothèque nationale de France, Paris:
  MS 2303 (1611 CE): [ ,]
  MS 2304 (1654 CE): [;]
  MS 6.647-6.648 (AH 695; Yazd): [د]
Bodleian Library, Oxford:
  MS Hunt 296 (n.d.): [7]
  MS Laud Or. 255 (n.d.): [7]
  MS Laud Or. 260 (1560 CE): [†]
  MS Marsh 189 (n.d.): [خ]
El Escorial, Madrid:
  MS Casiri 895/Derenbourg 900 (1535–1536 CE): [س]
  MS Casiri 923/Derenbourg 928 (1458 CE): [ش]
Istanbul collections (mainly the Süleymaniye and associated libraries):
  MS Atif Efendi 1681 (1182 CE): [γ]
  MS Esad Efendi 3637 (ca. thirteenth century CE): [;]
  MS Esad Efendi 3638 (ca. 1287 CE): [1]
  MS Feyzullah 2130 (AH 704): [ف]
  MS Feyzullah 2131 (AH 704): [ق]
  MS Köprülü 870 (ca. fifteenth century CE): [ച]
  MS Köprülü 981 (n.d.): [ ,
Königliche Bibliothek zu Berlin:
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MS 5038 (AH 600/1203 CE): [پ]