

The Ikhwān al-Ṣafā' on Animals*

A focus on the non-narrative part of *Epistle 22*

GODEFROID DE CALLATAÏ (UCLouvain, Belgium)

Abstract

The epistle on animals by the Ikhwān al-Ṣafā' has never ceased to exert a kind of fascination, but the attention of its readers, ancient and modern alike, has hitherto been focused almost exclusively on the fable which it contains and which occupies the greater part of the treatise. In this study, we shall primarily consider the other, non-narrative part of the epistle, sometimes referred to nowadays as a mere 'prologue' to the fable although it is in reality a genuine essay on animal biology in the wake of the Greek, especially Aristotelian, tradition. I shall argue that, even if the authors are profoundly indebted to Aristotle for the theoretical framework and a good part of the content, this part of the epistle cannot be properly understood without acknowledging at the same time the influence of the Pythagorean and Neoplatonic philosophical traditions.

Key words: Ikhwān al-Ṣafā' – animals – Aristotle – Neoplatonism – Pythagoreanism – hierarchy of beings

The place of the animal epistle within the encyclopaedia

To help us better understand the purpose of the present investigation, we need to start by first considering the classification of the sciences purposefully designed by the Ikhwān al-Ṣafā' (or Brethren of Purity) in Epistle 7 of their encyclopaedic corpus.¹ Leaving aside the other two groups of sciences that make up this general classification of human knowledge, namely the 'propaedeutical sciences' (*al-'ulūm al-riyāḍiyya*) and the 'conventional religious sciences' (*al-'ulūm al-shar'iyya al-waḍ'iyya*), we focus here on the third group of 'genuine

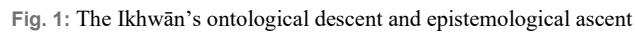
* This is a revised and expanded version of a paper first presented in Leiden in 2018 and then in Munich on 20 May 2022 on the occasion of a workshop organised by Peter Adamson as part of his ERC project on 'Animals in Philosophy in the Islamic World'. My thanks to Peter Adamson and the other participants for their valuable observations. Research for this article benefited from the ERC project "The origin and early development of philosophy in tenth-century al-Andalus: the impact of ill-defined materials and channels of transmission" (ERC-2016-ADG, 2017-2023, n. 740618) currently being conducted at UCLouvain and the Warburg Institute.

¹ Epistle 7, ed. de Callataï, pp. 71-96.

philosophical sciences' (*al-'ulūm al-falsafīyya al-ḥaqīqīyya*), which is the one elaborated in the greater detail by our authors. Its overall structure is patently Aristotelian. Like that of many other scholars of the Islamic Middle Ages, the Brethren's classification faithfully follows the master's division of theoretical philosophy into mathematics, physics and metaphysics, with the incorporation of logic, another Aristotelian field par excellence.²

This said, it must also be emphasised that the structural comparison between this programmatic scheme as displayed in Epistle 7 and the form in which the Ikhwānīan corpus of epistles has actually come down to us in manuscripts reveals important divergences from the Aristotelian scheme. Indeed, if the fifty or so epistles that make up the actual encyclopaedia of the Brethren also range under four sections, the correspondence of these sections with the four types of philosophical sciences in Epistle 7 is only partial.³ Most notably, a whole new section on 'the sciences of the Soul and the Intellect' (*al-'ulūm al-naḥsānīyya al-'aqliyya*) has now appeared. It consists of ten epistles on various non-specifically Aristotelian matters, as for instance two treatises on the intellectual principles respectively attributed to 'the view of Pythagoras' and 'the view of the Ikhwān al-Ṣafā'. To understand this discrepancy, we need to remind ourselves that the backbone of the Brethren's whole system of thought is the emanation theory which our authors owe, not to Aristotle, but to the Neoplatonist philosophers of Late Antiquity.⁴ A chart will help us illustrate this better.

- 2 For the contribution of the Platonic schools of Late Antiquity in the arrangement of Aristotle's books, see however Ch. Hein, *Definition und Einteilung der Philosophie: von der spätantiken Einleitungsliteratur zur arabischen Enzyklopädie*, Frankfurt: Peter Lang, 1985. For a description of medieval Islamic classifications, see in particular: W. Heinrichs, 'The Classification of the Sciences and the Consolidation of Philology in Classical Islam', in J. W. Drijvers and A. A. MacDonald (eds.), *Centres of Learning: Learning and Location in Pre-modern Europe and the Near East*, Leiden: Brill, 1995, pp. 119-139; H.-H. Biesterfeldt, 'Medieval Arabic Encyclopaedias of Science and Philosophy', in S. Harvey (ed.), *The Medieval Hebrew Encyclopaedias of Science and Philosophy: Proceedings of the Bar-Ilan University Conference*, Dordrecht [etc.]: Kluwer, 2000, pp. 77-98; H.-H. Biesterfeldt, 'Arabisch-islamische Enzyklopädien: Formen und Funktionen', in C. Meier (ed.), *Die Enzyklopädie im Wandel vom Hochmittelalter bis zur Frühen Neuzeit*. Akten des Kolloquiums des Projekts D im Sonderforschungsbereich 231 (1996), Munich: Wilhelm Fink Vlg., 2002, pp. 43-83; Ž. Vesel, 'Les encyclopédies persanes: culture scientifique et langue vernaculaire', in G. de Callatāy and B. Van den Abeele (eds.), *Une lumière venue d'ailleurs: héritages et ouvertures dans les encyclopédies d'Orient et d'Occident au Moyen Âge*. Actes du colloque de Louvain-la-Neuve, 19-21 mai 2005, Turnhout: Brepols, 2008, pp. 49-89.
- 3 For a comprehensive study of this comparison, see G. de Callatāy, 'The Classification of Knowledge in the *Rasā'il*', in N. El-Bizri (ed.), *The Ikhwān al-Ṣafā' and their Rasā'il. An Introduction* (Epistles of the Brethren of Purity), Oxford and New York, Oxford University Press in association with the Institute of Ismaili Studies, 2008, pp. 58-82. On the Ikhwān's classification of the sciences, see also: C. Baffioni, 'Oggetti e caratteristiche del curriculum delle scienze nell'Enciclopedia dei Fratelli della Purità', in G. di Stefano (ed.), *Studi arabo-islamici in memoria di Umberto Rizzitano*, Trapani: Istituto di Studi Arabo Islamici 'Michele Amari' di Mazara del Vallo, 1991, pp. 25-31; G. de Callatāy, 'Encyclopaedism on the Fringe of Islamic Orthodoxy: the *Rasā'il Ikhwān al-Ṣafā'*, the *Rutbat al-ḥakīm* and the *Ghāyat al-ḥakīm* on the Division of Science', *Asiatische Studien*, 71.3 (2017), pp. 857-877.
- 4 On the emanationist scheme of the Brethren, see: C. Baffioni, *Appunti per un'epistemologia profetica. L'Epistola degli Iḥwān al-Ṣafā' "Sulle cause e gli effetti"*, Napoli: Università degli Studi di Napoli «L'Orientale», 2005, pp. 63-73; G. de Callatāy, *Ikhwan al-Safa'. A Brotherhood of Idealists on the Fringe of Orthodox Islam* (Makers of the Muslim World), Oxford: Oneworld, 2005, pp. 17-33.



5 On this, see also my introduction to Epistle 7 in N. El-Bizri and G. de Callatāy, *On Composition and the Arts. An Arabic Critical Edition and English Translation of Epistles 6-8* (Epistles of the Brethren of Purity), Oxford and New York, Oxford University Press in association with the Institute of Ismaili Studies, 2018, in particular pp. 87-89.

Let us now turn more specifically to the second of these levels or sections, that of the ‘corporeal and natural sciences’. As the titles of many epistles already suggest, the Brethren’s indebtedness to Aristotle in this part of the work is paramount. But here again, we are a far cry from a blind and uncritical replica. In Epistle 28 (‘On the Limits of Human Knowledge’), for instance, echoing the classical debate of creation vs pre-eternity of the world, the Ikhwān do not hesitate to refer to those professing the latter belief as ‘the pseudo-philosophers of a deficient rank’ (*al-mutaʿfalsifa al-nāqishat al-rutba*),⁶ although they prudently refrain from mentioning any such scholar by name.

The same epistle is also valuable in that it helps us to better figure out how the Ikhwān conceive the hierarchy of generated beings, a crucial issue of the epistle on animals, as we shall see. Their point in Epistle 28 is to stress that in many respects the ‘average man’ occupies but an intermediate position with respect to the rest of creation. He is neither the strongest amongst the generated beings, nor the biggest, nor the swiftest nor the one that has the best vision or the best hearing. His capacity to sense, to perceive, to grasp is also quite limited. Even in terms of science does this average man occupy but a rather insignificant position in comparison with other beings in creation, as the following analogy makes clear:

Know that the relationship of man’s science [*ilm al-bashar*] with respect to the science of the angels, and the knowledge which men have about angels’ conditions, is like the relationship of the science of sea animals [*ḥayawān al-baḥr*] with respect to mainland animals [*ḥayawān al-barr*], and the knowledge which the former have of the latter’s affairs, and [this relationship] is [also] like that of mainland animals with respect to man’s science, and the knowledge the former have of the latter’s affairs.⁷

The two parts of Epistle 22

With these elements of contextualisation, we may now turn to Epistle 22, the one specifically devoted to animals. As is well-known, this is a quite untypical treatise within the corpus. Extending over about 250 pages, it is the longest *risāla* of the entire encyclopaedia. It is also the only one written mostly, yet not exclusively, in the form of a fable.⁸ This narrative, which features a trial between animal and human representatives in terms that could be described as mythical, is arguably the most famous part of the Ikhwānian corpus as a whole and it seems that it has enjoyed great fame ever since the time it was written.⁹ In the first half of the

⁶ Epistle 28 (ed. de Callatāy), forthcoming. In the uncritical edition of Beirut (Dār Ṣādir and Dār Bayrūt, 1377/1957) by al-Bustānī, this corresponds to III, 25.

⁷ Epistle 28 (ed. de Callatāy), forthcoming. The passage corresponds to Beirut, III, 23. All translations from the *Rasāʾil* in this article are mine.

⁸ On fables in the *Rasāʾil Ikhwān al-Ṣafāʾ*, see now: Sh. Almutawa, *The Philosophical Daʿwa of Ikhwān al-Ṣafāʾ: Narrative and Cultural Exchange in the ʿAbbasid Period of Islam*, chapter 4 (forthcoming at Edinburgh University Press).

⁹ The Ikhwānian fable has also generated a considerable number of studies in modern scholarship. Among recent contributions, let us mention here: L. Goodman, ‘Reading *The Case of the Animals versus Man: Fable and Philosophy* in the Essays of the Ikhwān al-Ṣafāʾ’, in El-Bizri (ed.), *The Ikhwān al-Ṣafāʾ and their Rasāʾil*, pp. 248-274; S. Tlili, ‘All Animals are Equal or Are They? The Ikhwān al-Ṣafāʾs Animal

fourteenth century, the animal fable was translated into Hebrew by Kalonymus ben Kalonymus¹⁰ and, one century later, it became inspirational to the Christian convert Anselm Turmeda for his *Disputa del Ase*, lost in the original Catalan but preserved in an old French version.¹¹ In addition to being a most diverting piece of literature in its own right, the 'Case of the Animals versus Man' is an erudite and carefully thought-of work in which various levels of reading can be traced up, including one 'For Those with Eyes to See' (*li-ūlī al-abṣār*), as I have tried to show in a recent article where I discuss some of the secret motifs which pepper the animal fable and which reveal curious and important facets of the Brethren's bāṭinism.¹²

For the present paper, however, I have chosen to deal primarily with the first, non-narrative part of Epistle 22, a section often disregarded in modern scholarship precisely because its significance tends to be obliterated by the celebrity of the fable. Symptomatic of this tendency is the edition of the epistle by Lenn Goodman and Richard McGregor in the Epistles of the Brethren of Purity series, published as 'The Case of the Animals versus Man Before the King of Jinn' and where the non-narrative part is regarded merely as a 'prologue' to the fable. In fact, no such appellation appears in the manuscript tradition, whether it be to name the epistle or the fable therein. In the manuscript tradition, the epistle is usually given the title 'On the Species of Animals, their Marvellous Corporeal Structures and their Wondrous Peculiarities' (*ft aṣnāf al-ḥayawān wa-'ajā'ib hayākili-hā wa-gharā'ib aḥwālī-hā*). No such thing as a part specifically referred to as *muqaddima* appears in manuscripts, either.

The non-narrative part of Epistle 22 occupies approximately one eighth of the size of the narrative part, which means that it extends over about the same number of pages as any other *risāla* of a more usual proportion. In it, the Brethren endeavour to put together their vision of the animal kingdom from a properly scientific and rationalistic perspective, thus adopting the same descriptive methods and pursuing the same objectives as those found, for instance, in the epistles on minerals and plants that precede Epistle 22 in this second section of the encyclopaedia.

The Aristotelian influence in this part of the epistle is perceptible throughout. Taking up the division into genres and species, the Ikhwān introduce their discussion by defining the animal as 'a body which moves and senses, which takes nourishment, grows, perceives and

Epistle and Its Unhappy End', *Journal of Qur'anic Studies* 16.2 (2014), pp. 42-88; H. Raymond, 'Le tribunal des animaux en Islam (IVe-Xe siècle)', *Arabica* 61.1-2 (2014), pp. 116-152; P. Adamson, 'The Ethical Treatment of Animals', in R. C. Taylor and L. X. López-Farjeat (eds.), *The Routledge Companion to Islamic Philosophy*, New York: Routledge, 2016, pp. 371-382; J. Mattila, 'The Animal Fable of the Ikhwān al-Ṣafā' in Context: The Ontological and Moral Status of Animals in Early Islamic Thought', in R. Mattila, S. Ito and S. Fink (eds.), *Animal End their Relation to Gods, Humans and Things in the Ancient World*, Wiesbaden: Springer, 2019, pp. 345-366.

10 F. Gorgoni, 'La *Iggeret Ba'ale Hayyim*. La ricezione dell'*Epistola degli Animalī* degli Iḥwān aṣ-Ṣafā' nel mondo ebraico medievale e moderno tra psicologia e etica', *Materia giudaica. Rivista dell'associazione italiana per lo studio del giudaismo* 25 (2020), pp. 105-116.

11 L. M. Alvarez, 'Beastly Colloquies: Of Plagiarism and Pluralism in Two Medieval Disputations between Animals and Men', *Comparative Literature Studies* 39.3 (2002), pp. 179-200.

12 G. de Callatāy, 'For Those with Eyes to See: On the Hidden Meaning of the Animal Fable in the *Rasā'il Ikhwān al-Ṣafā'*', *Journal of Islamic Studies* 29.3 (September 2018), pp. 357-391.

moves locally' (*jism mutaharrik hassās yaghtadhī wa-yanmī wa-yuḥiss wa-yataḥarrak ḥarakatan makāniyyatan*), adding that those of the noblest rank share with man 'the five senses, the power of fine discrimination and of being trained (*al-ḥawāss al-khams wa-l-tamyīz al-daḡīq wa-qabūl al-ta'lim*).¹³ Not only are most of these assertions traceable in Aristotle's works but the functionalist formulation used here by the Ikhwān 'is itself Aristotelian,' as Goodman and McGregor rightly observe.¹⁴ In their endeavour to account for the astonishing variety of the living beings, the Ikhwān provide descriptions in the form of systems that are also closely reminiscent of Aristotle. For instance, they distinguish the species of animals according to the number of senses each one possesses, ranging from those that have only the sense of touch (as, for example, worms) to those more perfect animals endowed with all of the five senses. They use a similar approach to classify animals according to the types of environment, the means of locomotion, the bodily structures, the duration of gestation in the womb, the modalities of birth, the peculiarities of the voice, the manners taken by the individuals of a given species to reproduce themselves and to feed their offspring. When they assume that 'divine wisdom did not equip animals with a single organ or sense that they do not need and take profit from' (*al-ḥikma al-ilāhiyya lam tu'fi l-ḥayawān 'uḍwan wa-lā ḥassatan lā yaḥtāj ilay-hā wa-lā yantafi' bi-hā*),¹⁵ the Brethren faithfully echo Aristotle's most famous statement that 'nature does nothing in vain'.¹⁶ These and other parallels with Aristotle are pointed out by Goodman and McGregor in the footnotes of their edition. There is no point in dwelling on this further.

And yet, there are a number of instances in which the Ikhwān are seriously at odds with Aristotle. One such obvious instance concerns the human brain. In agreement with Plato, Hippocrates and Galen, but sharply contrasting with Aristotle's views, the Ikhwān conceive the brain (*al-dimāgh*) as 'the king of the body (*malik al-jasad*), the origin of senses, the source of thinking, the house of reflection, the chest of memory, the abode of the soul and the seat of the intellect', while at the same time defining the heart (*al-qalb*) as 'the servant to the brain, in charge of its actions while being the prince of the body (*amīr al-jasad*) and its ruler, and the origin of the arteries and the source of the innate heat'.¹⁷

¹³ Epistle 22 (ed. Goodman and McGregor, see next note), p. 10.

¹⁴ L. E. Goodman and R. McGregor, *The Case of the Animals versus Man Before the King of the Jinn. An Arabic Critical Edition and English Translation of Epistle 22* (Epistles of the Brethren of Purity), Oxford and New York, Oxford University Press in association with the Institute of Ismaili Studies, 2009, p. 74.

¹⁵ Epistle 22 (ed. Goodman and McGregor), p. 12.

¹⁶ See for instance Aristotle, *Generation of Animals*, V, 8, 788b. More references in W. J. Wildman, 'Evaluating the Teleological Argument for Divine Action', in F. LeRon Shults (ed.), *Philosophy, Science and Divine Action* (Philosophical Studies in Science and Religion, 1), pp. 141-189, here pp. 151-152.

¹⁷ Epistle 22 (ed. Goodman and McGregor), pp. 18-19. It will be noted, however, that in other parts of the corpus, as for instance in Epistle 26 ('On Man as a Microcosm', ed. Bustānī, II, 476-479), the Ikhwān establish a correspondence between the heart and the Sun (as being the central planet of the system), while the brain is associated to Mercury. For a discussion of this and an attempt at reconciling these apparently contradicting views, see I. Nokso-Koivisto, *Microcosm-Macrocosm Analogy in Rasā'il Ikhwān al-Ṣafā' and Certain Related Texts*, Ph.D Dissertation, University of Helsinki, 2014, pp. 105-106. Among recent literature on the Aristotle vs Galen debate about the heart and the brain see for instance: M. Oleksowicz, 'Aristotle on the heart and brain', *European Journal of Science and Theology* 14.3 (June

Continuum

Another, perhaps more significant divergence of our text from Aristotle's teaching is the idea that there exists throughout the hierarchy of beings (*tartīb al-mawjūdāt*) a certain kind of continuity. This belief, which is in fact a leitmotiv of the *Rasā'il*, is found in the very first words of the epistle, in the immediate continuation of the epistle on plants:

We have now finished to report on plants and have, in that epistle of ours, provided some explanation about the manners they come to being, develop, and grow, about their numerous genres, distinctive species and particular dispositions, and the benefits and harms they bring. We have also explained there that the first rank (*martaba*) of plants unites with the last rank of mineral substances, and that their ultimate rank unites with the first rank of animals. In this epistle, we should also like to give some explanation on the ways in which animals come to being, develop, and grow, on their numerous genres, distinctive species and particular dispositions, and on their different traits. We shall also explain that the last rank of animals unites with the first rank of humans, and that the last rank of humans unites with the first rank of angels.¹⁸

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This is indeed an important statement which, I believe, should also be understood in relation to the Brethren's Neoplatonist scheme of emanation and its epistemological counterpart. Man is the last being to have appeared on the scene, but in virtue of his soul being rational he is literally 'at the head' of what Yves Marquet used to call the 'remontée' towards the principle.¹⁹ In the subsequent chapter, the Ikhwān explain that minerals are composites of the four elements, that plants add to this the faculties of growth and nutrition, that animals add to these latter those of locomotion and sensitivity, and that man adds to all this the faculties of reasoning and discernment.²⁰ There is nothing really new with this conception. The originality of the Ikhwān rather lies in their emphasis on the role played by each category of beings in the hierarchy and especially by man in the eschatological process by which the souls of the generated beings may hope to re-ascend to their place of origin. In Epistle 21 ('On Plants'), the Ikhwān illustrate the continuum in creation with examples of species occupying respectively the lowest and the highest places of the three kingdoms. At the lower extreme of minerals, adjacent to earth, we find gypsum (*jīss*), vitriol (*zāj*) and the species of alums (*shubūb*), whereas hyacinth (*yāqūt*) and gold (*dhahab*) occupy the other extreme, being almost on a par with the lowest plants in nobility. Among plants, the green manure (*khaḍrā' al-diman*) is found the lowest whereas the palm tree (*shajarat al-nakhl*), which the Ikhwān refer to as an animal plant, occupies the highest rank.²¹ At the lower end of the animal rank

3018), pp. 77-94; G. Strohmaier, 'Avicenna between Galen and Aristotle', in P. Bouras-Vallianatos and B. Zipser (eds.), *Brill's Companion to the Reception of Galen*, Leiden: Brill, 2019, pp. 215-226.

¹⁸ Epistle 22 (ed. Goodman and McGregor), pp. 3-4.

¹⁹ Y. Marquet, 'La détermination astrale de l'évolution selon les Frères de la Pureté', *Bulletin d'études orientales*, 44 (1992), pp. 127-146, here p. 129.

²⁰ Epistle 22 (ed. Goodman and McGregor), p. 5.

²¹ Epistle 21, ed. Baffioni, pp. 452-453. For a similar conception of the palm-tree in the *Filāḥa nabaṭiyya*, see J. Hämeen-Anttila, *The Last Pagans of Iraq. Ibn Waḥshiyya and his Nabatean Agriculture*, Brill:

are found creeping creatures such as worms (*dūd*). At the higher extreme, the Ikhwān mention several species which all may somehow be regarded as ‘almost human’, each for a specific reason: the horse (*faras*) for its nobility, the elephant (*fil*) for its intelligence, the bee (*naḥl*) for what it is able to produce, the ape (*qird*) for its bodily resemblance with man.²² As for the rank occupied by man, it extends from those animal-like humans who prove unable to detach themselves from the vanities of this world to those who struggle hard to make their souls becoming angels in actuality.²³ In Epistle 41 (‘On Definitions and Descriptions’), the Ikhwān express the same idea by saying: ‘the paradise of the vegetative soul is the animal form, the paradise of the animal soul is the human form, and the paradise of the soul of the human form is the angelic form’.²⁴

In the 19th century, when both the *Rasā’il Ikhwān al-Ṣafā’* and Ibn Khaldūn’s *Muqaddima* were being re-discovered in Europe, there were scholars to affirm that the Ikhwān had elaborated some kind of ‘Pre-Darwin’ evolutionistic views. This includes Friedrich Dieterici, the first modern translator of the *Rasā’il*, who based himself on the animal fable to write a long essay on ‘Der Darwinismus im zehnten und neunzehnten Jahrhundert’.²⁵ This was done, needless to say, by grossly over-interpreting the texts. In the non-narrative part of Epistle 22, yet with greater clarity still in the narrative itself, the Ikhwān present a division of the animal kingdom into seven species.²⁶ These are respectively: the aquatic animals, the creeping animals, the birds of prey, the beasts of prey, the birds, the flying insects and the domestic animals, each species being also attributed a king and a spokesman in the fable for the sake of the plot. But the reality is that apart from clearly setting apart the domestic animals, our authors abstain from establishing any kind of rigid hierarchy between these species or their different representatives.

But let us return to the beginning of the epistle and to our eschatological ‘remontée’. The Ikhwān tell us that the human soul is—or, in any case, should be—the leader of, and chief responsible for, this universal ascent towards the divine cause. The faculty of reason is what distinguishes the human being from the rest of creatures and makes man the only being with the potential (*quwwa*) to become either a ‘noble angel, the best of creatures’ (*malik karīm khayr al-barriyya*) or a ‘cursed devil, the worst of creatures’ (*shayṭān rajīm sharr al-barriyya*) in actuality (*bi-l-fi’l*).²⁷ This potential to become an angel is what enables us to

Leiden and Boston, 2006, pp. 131-132. In his *Akhḷāq-i Nāṣirī* (*The Nasirean Ethics*, translated from the Persian by G. M. Wickens, London: George Allen & Unwin Ltd, 1964, pp. 44-45), the thirteenth-century polymath al-Ṭūsī describes the palm-tree and its place in the hierarchy of beings in words that are also closely reminiscent to the Brethren’s doctrine.

22 Epistle 21, ed. Baffioni, pp. 456-457. In Epistle 31, ed. Ormsby, p. 90, the Ikhwān attribute the power of reflection and discrimination to ants and bees.

23 Epistle 21, ed. Baffioni, pp. 461-462.

24 Epistle 41, ed. Beirut, III, 397. The text in Beirut seems to be slightly corrupt here.

25 F. Dieterici, *Der Darwinismus im zehnten und neunzehnten Jahrhundert*, Leipzig: J. C. Hinrichs’sche Buchhandlung, 1878.

26 See for instance Epistle 22, ed. Goodman and McGregor, pp. 13-15 and p. 87.

27 Epistle 22, ed. Goodman and McGregor, p. 5. For Miskawayh’s comparable views on this as expressed in his *Tahdhīb al-akhḷāq*, see now: P. Adamson, ‘Miskawayh on Animals’, *Recherches de théologie et philosophie médiévales*, 89.1 (2022), pp. 1-24.

explain the ‘surprising dénouement’²⁸ of the fable, which sees man—yet evidently not ‘the average man’ in this case—saving the game in extremis by adducing the immortality of his soul, and this despite of the fact that man—here to be understood in the generic sense of the term—has been boxed in a corner by the representatives of all the animal species all along the narrative. In other words, the famous holy figure of the syncretic man that the Brethren introduce at the end and who combines the virtues of the different peoples and categories of men²⁹ is the exact incarnation of this noble angel in potentiality that they mention at the beginning of the treatise.³⁰ There is no hiatus on this between the two parts of the epistle whatsoever. The Ikhwān remain perfectly consistent from one end of the treatise to the other.

Numbers

We shall now turn to another of the Ikhwān’s leitmotivs, also present from the beginning of the epistle. The opening chapter of the treatise indeed continues with the following statement:

To those with pure heart, clean soul and superior intellect we shall explain and demonstrate that the proportion (*nisba*) in the arrangement of existents (*tarṭīb al-mawjūdāt*) and in the organisation of the generated beings (*niẓām al-kā’ināt*) originates in a unique cause and in a unique commencement, and that it is like numbers originating in the one, which is before the two (*wa-anna-hā ka-tarṭīb al-‘adad ‘an al-wāḥid alladhī qabla l-ithnayn*). We shall also explain that the proportion of man’s form with respect to the other animals is like the proportion of the head with respect to the body: his soul is like the leader and theirs are like the led (*wa-naḥsu-hū ka-l-sā’is wa-anḥusu-hā ka-l-masūsa*).³¹

Further down, the Ikhwān develop a Pythagorean approach of the same nature when dealing with what they refer to as ‘the animals with a perfect constitution’ (*al-ḥayawānāt al-tāmma al-binya*). It is worth quoting from this other passage at some length:

You must know, my brother, that when the wise Creator created the animals with a perfect constitution (*al-ḥayawānāt al-tāmma al-binya*), He divided their bodies into **two** halves, one left and one right, to agree with the first number (*awwal al-‘adad*) and with the things that go in pairs from the beginning (*al-umūr al-mathnawiyya al-‘unṣuriyya*), as we reported in our epistle ‘On the Principles’. He placed them on **three** levels—one median and two extremes, to agree with the first odd number (*awwal ‘adad fard*) and with the things having a mean and two extreme terms (*al-umūr dhāt*

²⁸ I take this expression from Goodman and McGregor, *The Case*, p. 51.

²⁹ Epistle 22, ed. Goodman and McGregor, p. 278.

³⁰ de Callatāy, ‘For Those with Eyes to See’, here pp. 365-366.

³¹ Epistle 22, ed. Goodman and McGregor, p. 4. For the specific designations of these numbers in the arithmetical tradition as inherited from Pythagoras and Nicomachus of Gerasa, see Nader El-Bizri’s introduction to the epistle on arithmetic in: N. El-Bizri, *On Arithmetic and Geometry. An Arabic Critical Edition and English Translation of Epistles 1 & 2* (Epistles of the Brethren of Purity), Oxford and New York, Oxford University Press in association with the Institute of Ismaili Studies, 2012, pp. 21-22.

al-awsāt wa-l-ṭarfayn). He made the temperament of their bodies consist of **four** humours, to agree with the first square number (*‘adad majdhūr*), and also to agree with the four natures of the elements. He placed in them **five** senses to apprehend the sensible forms, to agree with the first circular number (*‘adad dā’ir*) and with the number of the four natures plus the fifth, [that is,] the celestial. He placed in them the power to move in **six** directions, to agree with the first perfect number (*‘adad tāmm*) and with the faces of a cube. He placed in their bodies **seven** active faculties, to agree with the first complete number (*‘adad kāmīl*) and with the number of the planets. He placed in their bodies **eight** temperaments, four simple and four in pairs, to agree with the first cubic number (*‘adad muka‘ab*) and with the eight musical proportions (*munāsabāt al-mūsīqī*). He placed **nine** layers in the arrangement and composition of their bodies, to agree with the first odd square number (*‘adad fard majdhūr*) and with the encompassing spheres.³²

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As can be seen, the Ikhwān here imply that certain animals are perfectly constituted precisely because their natures combine each one of the nine arithmetical units. Proceeding along the same ways with other remarkable numbers found in the human body—such as the 12 orifices, the 28 vertebrae and the 360 veins—, they conclude their analogical reasoning by saying shortly after:

Following the same examples and analogies, we find that, when they are numbered and examined, every organ agrees in number with [some] category of existent beings. We have already explained, while reporting the meaning of what the Pythagorean sages said, that the existent beings follow the nature of numbers, for that is the decree of the Mighty, the Wise.³³

The Pythagorean doctrine that the hierarchy of beings in this world follows that of the numbers is a central tenet of the Brethren’s teaching. It can be found in many places of the corpus, starting with the epistle ‘On the Intellect Principles According to the View of Pythagoras,’ which the above quotation most probably refers to.³⁴ It is also at the core of the epistle of arithmetic, the first science of the mathematical quadrivium at the forefront of their encyclopaedia. The presence of Pythagoras and the Pythagorean numerology in the *Rasā’il* is paramount and has already been explored by various scholars.³⁵ It needs no further elaboration here.

³² Epistle 22, ed. Goodman and McGregor, pp. 28-29.

³³ Epistle 22, ed. Goodman and McGregor, pp. 29-30. The reference to the sayings of the Pythagoreans is probably to Epistle 32 (‘On the Intellect Principles According to the View of Pythagoras’), which is known in two versions.

³⁴ For the edition of the two known versions of this epistle, see now: P. E. Walker, I. K. Poonawala, D. Simonowitz, and G. de Callataÿ, *Sciences of the Soul and Intellect. Part I. An Arabic Critical Edition and English Translation of Epistles 32-36* (Epistles of the Brethren of Purity), Oxford and New York, Oxford University Press in association with the Institute of Ismaili Studies, 2015.

³⁵ In addition to the above-mentioned introduction by El-Bizri, let us here mention in particular: A. Straface, ‘Testimonianze pitagoriche alla luce di una filosofia profetica: la numerologia pitagorica negli Ikhwān al-Ṣafā’, *Annali dell’Istituto Universitario Orientale* 47 (1987), pp. 225-241; I. R. Netton, *Muslim Neoplatonists. An Introduction to the Thought of the Brethren of Purity (Ikhwān al-Ṣafā)*, London and

Cycles

But how are we to understand that ‘animals with a perfect constitution’ were created at a special moment in time and under particular conditions, as one of the texts quoted above has it? The Ikhwān develop the idea in two places of the non-narrative part and, interestingly enough, also bring about Adam and Eve in one of them. This passage reads:

You must know, my Brother, that all the animals with a perfect constitution, whether male or female, were originally generated from clay. Next, they reproduced themselves, multiplied and spread over the earth, in plains, mountains, mainlands and seas, under the equatorial line which is where night and day are equivalent, where the climate is always balanced between heat and coldness, and where the matter prepared to receive the forms is always present. There also took place the generation of Adam, the father of mankind, and of his wife. Next, they reproduced themselves and their progeny multiplied, filling the earth with themselves in plains, mountains, mainlands and seas, down to this day.³⁶

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When dealing with the spontaneous generation of Adam, another essential point of doctrine in their eyes, the Ikhwān al-Ṣafā' indeed use to link it with their theory of numbers, the idea being always the same: whereas Adam symbolizes the primeval unity, not deriving from any further principle, his progeny up to the present time represents the rest of numbers, from duality to multiplicity.³⁷ As for the reference to the equator, also found in the animal fable itself, it is to be understood in relation to the theory of the seven climes and, in the case of the Ikhwān, to their particular elaboration of the Ismā'īlī doctrine of the cycles of prophet-hood.³⁸ What is particularly worth mentioning here is that a connection of the same kind between specific astral configurations and the generation of the ‘more perfect of animals’ also appears in our second passage. The text reads:

You must know, my brother, that the animals with massive bodies and a huge constitution, those that have large bones, rugged skins, thick nerves, broad veins, big limbs, such as the elephant, the camel, the buffalo, and the like, need to remain in the womb for a long time until they are born, and this for two reasons: first, to gather together in the womb all the materials that their natures require to complete their constitution and to perfect their form; secondly, to allow the Sun to revolve in the sphere and to cross the zodiacal triplicities that correspond to their natures and from

New York: RoutledgeCurzon, 2002, pp. 9-16; Baffioni, *Appunti per un'epistemologia profetica*, pp. 109-121.

³⁶ Epistle 22, ed. Goodman and McGregor, pp. 7-8.

³⁷ See for instance this passage from Epistle 40 (ed. Baffioni, p. 152) where the authors ask themselves: ‘For which reason are the languages, the colours, and the traits of characters of the human people different, when they all have the same form and the same father?’

³⁸ de Callatāy, ‘For those with Eyes to See’, here pp. 285-390; G. de Callatāy, ‘The Ikhwān al-Ṣafā' on the *Ṣūrat al-Arḍ*: a Geography in Motion’, forthcoming in D. Hasse and A. Giletti (eds.), *Mastering Nature: Heritage and Transfer of Medieval Arabic Science. Studies in Honour of Charles Burnett* (Contact and Transmission: Intercultural Encounters from Late Antiquity to Early Modern Times), Turnhout: Brepols.

there to send down the powers of the spiritualities of the stars onto the world of coming-to-be. For it is required, in order to complete the faculties of the growing and vegetative of the soul and the faculties of the animal and sensitive soul, that each kind of existent and generated beings receive its share of these powers, as we have explained in the *Epistle of the place where the sperm drops*.³⁹

In Epistle 36 ('On Cycles and Revolutions'), the astrological epistle par excellence, the Ikhwān have more to say about the coming-to-be and passing-away of generated beings, including animals, in relation to determined periods of the heavenly spheres, which the Ikhwān range in the increasing order of their lengths. Our authors associate, for instance, the rotation of the sphere around the earth in 24 hours with the generation of certain deficient plants, like green manure, and that of certain animals 'of deficient stature and of weak constitution' (*al-nāqīṣat al-khilqa al-da'īfat al-binya*), like worms, insects and lice, 'which are born from various kinds of putridity, and from manure, dung and droppings, along with the remains of carrion and the like'.⁴⁰ These animals, the Ikhwān say, will not survive a whole year, since they are unable to resist the heat of the summer or the coldness of the winter. In like manner, the Ikhwān make correspond the monthly revolution of the Moon with the generation of some particular minerals, plants, and animals such as birds, silk-worms and wasps.⁴¹ According to the same principles, they also make the revolution of Mercury on its epicycle responsible for the generation of 'various animals like certain predators, wild beasts, gazelles and some types of sheep'.⁴²

In the same epistle on cycles and revolutions, the Ikhwān bring forward a curious astrological theory supposed to account for the lifespan of any given species according to its gestation period and the ascendant that corresponds to that species. Their point is to show that there exists, as it were, a theoretical, ideal, limit to the lifespan of an individual in any given species—they mention the figures of 120 years for man, 120 months for birds and 9 days for deficient animals—but that in practice various other causes and objectives also need to be considered as part of this calculation.⁴³

We are meant to infer that this rigid astral determinism ought to apply for longer periods as well and, therefore, for generated beings having a longer period of existence. But in fact,

³⁹ Epistle 22, ed. Goodman and McGregor, p. 15. The reference is to Epistle 25. On embryology in the Ikhwān and other medieval sources, see: Ch. Burnett, 'The Planets and the Development of the Embryo', in G. R. Dunstan (ed.), *The Human Embryo: Aristotle and the Arabic and European Traditions*, Exeter: University of Exeter Press, 1990, pp. 95-112; C. Baffioni, 'L'embriologia araba fra astrologia e medicina: Abū Ma'shar al-Balḥī e Muḥammad ibn Zakarīa al-Rāzī', in R. B. Finazzi and A. Valvo (eds.), *La diffusione dell'eredità classica nell'età tardo-antica e medievale. Il "Romanzo di Alessandro" e altri scritti*, Alessandria: Edizioni dell'Orso, 1998, pp. 1-21; Nokso-Koivisto, *Microcosm-Macrocosm Analogy*, pp. 121-125; L. Saif, 'The Universe and the Womb: Generation, Conception, and the Stars in Islamic Medieval Astrological and Medical Texts', *Journal of Arabic and Islamic Studies*, 16 (2016), pp. 181-198.

⁴⁰ Epistle 36, ed. de Callatāy, pp. 149-150.

⁴¹ Epistle 36, ed. de Callatāy, pp. 154-155.

⁴² Epistle 36, ed. de Callatāy, pp. 164-165. The authors make explicit reference to their epistle 'On Animals' in that place.

⁴³ Epistle 36, ed. de Callatāy, pp. 157-163.

what we read about those longer cycles—which are determined either by the revolutions of the spheres or by the conjunctions of specific planetary spheres within the zodiac—turns out to be exclusively focused on man, his traits of character, or the political and religious changes which affect the history of mankind and which are brought about by the different types of conjunctions.⁴⁴ At a larger scale, we find the 36,000-year period of equinoctial precession, which is held responsible for the periodic geological interchanges of seas and mainlands on the surface of the earth.⁴⁵ And at a still larger scale we find the 360,000-year period, which is determined by the general conjunction of all the heavenly spheres and which corresponds to the 'Annus Platonius', the greatest cycle of the universe.⁴⁶

It is not the place here to enter again into the intricacies of the Ikhwānian theory of cycles and its eschatological implications. What is certain, however, is that we are in front of a system in which man, or more exactly man's soul, is put in relation to all the other souls in the universe. Perhaps no text illustrates this positioning in the Great Chain of Being better than the following passage, also found in the non-narrative part of Epistle 22. Therein, the Brethren contemplate the angelic condition promised to the people of their like:

Now consider, my Brother—May God stand by you, as well as by ourselves, from a spirit coming from Him!—, the way your soul will pass from this world to that place. For your soul is one of the faculties that are spread from the World Soul circulating in this world. It has already reached the centre, departed from it and escaped from being in minerals, plants, and animals. It has overstepped the reverted path (*al-ṣirāṭ al-mankūs*) and the curved path (*al-ṣirāṭ al-mutaqawwis*) alike, and is now on an Upright Path (*ṣirāṭ mustaqīm*), for this is the human form.⁴⁷

These lines are indeed a fitting illustration of the loop that has been referred to above. Thus, having reached the centre of the world—in other words, the four elements—at the end of the ontological descent, the soul starts now its re-ascent by passing through the three kingdoms of generated beings in succession to finally reach the human rank.

⁴⁴ Epistle 36, ed. de Callatāy, pp. 189-191.

⁴⁵ On this, see G. de Callatāy, 'World cycles and geological changes according to the Ikhwān al-Ṣafā'', in P. Adamson (ed.), *In the Age of al-Fārābī: Arabic Philosophy in the Fourth/Tenth Century. Proceedings of the Conference held at the Institute of Classical Studies and the Warburg Institute (London, 19-21 June 2006)* (Warburg Institute Colloquia, 12), London: The Warburg Institute, and Torino: Nino Aragno Editore, 2008, pp. 179-193.

⁴⁶ G. de Callatāy, *Annus Platonius. A Study of World Cycles in Greek, Latin and Arabic Sources* (Publications de l'Institut Orientaliste de Louvain, 47), Louvain and Paris: Peeters, 1996, pp. 129-161.

⁴⁷ Epistle 22, ed. Goodman and McGregor, p. 10.

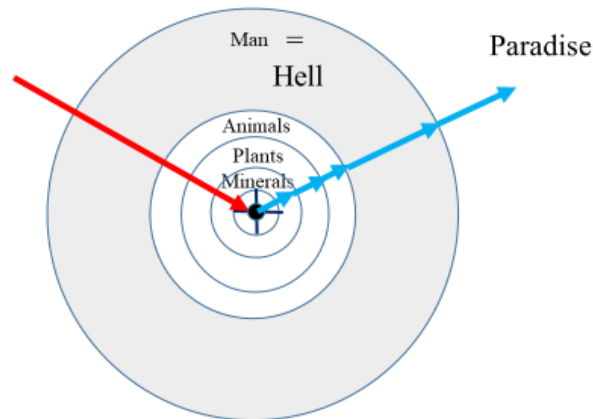


Fig. 1: The steps of the 'remontée' for the angelic soul

In the Beirut edition is found the additional information that the human rank is 'the last degree of Hell' (*ākhir darajāt jahannam*). Although it is likely to be a later interpolation in this place, it would certainly make sense in the system of the Brethren. In much the same way as Plato famously used to call the human body a tomb,⁴⁸ the Ikhwān indeed hold the view that man's condition is hellish as long as the soul is incapable to move to the angelic rank. In various places of the *Rasā'il*, they explicitly equate hell with the world of coming-to-be and passing away⁴⁹ and, in Epistle 46 ('On the Quiddity of Faith') they actually write that 'the human rank is the last level of hell and the first degree of the gates of Paradise' (*al-rutba al-insāniyya hiya ākhir ṭabaqa min jahannam wa-hiya awwal darajāt abwāb al-jinān*).⁵⁰ In passing, we observe the Brethren's art at playing with Islamic terminology within a philosophical context. By assuming that the human rank corresponds to the Qur'ānic 'Upright Path', they subtly instil the view that beings in lower ranks correspond to the 'reverted' and the 'curved' paths respectively. None of these expressions is found in the Qur'ān, in fact, but they both tally well with the image of the loop in the middle of the Great Chain of Beings.

In my study on the secret motifs of the animal fable, I have discussed some passages from the *Epistles* suggesting that the promotion of human souls is only a part of a broader mechanism which, depending on certain astrological conjunctions, also cares for the destiny of animals.⁵¹ From a passage in the animal fable, we understand, for instance, that at the end of each 7,000-year cycle of prophetic history the souls of the beasts (*bahā'im*) are given the

⁴⁸ See for instance: Plato, *Cratylus*, 400c; *Gorgias*, 493a.

⁴⁹ See for instance Epistle 38, ed. Beirut, III, 296-297. More on this in Sh. Almutawa, "'The Death of the Body is the Birth of the Soul': Contradictory Views on the Resurrection in *Rasā'il Ikhwān al-Ṣafā*", *Studia Islamica* 113 (2018), pp. 56-75, here pp. 61-62.

⁵⁰ Epistle 46, ed. Beirut, IV, 123.

⁵¹ de Callatāy, 'For Those with Eyes to See', here, pp. 378-385.

opportunity to get freed from their current condition.⁵² The text suggests that this is because beasts are, of all animals, those that are the most badly treated by the humankind and that the transformation of their animal souls into human souls would therefore be a compensation for their former miserable condition. In his study on the moral status of animals in the *Rasā'il*, Janne Mattila has recently pointed out another passage, from Epistle 5 ('On Music'), that can be interpreted in the same manner.⁵³ Thus, to justify the slaughtering of animals for religious purposes, the Ikhwān state:

Such is also the case for the souls of animals after being slaughtered. You should not assume, my brother, that the objective of the legislators (*wāḍi'ī l-nawāmīs*) in permitting the slaughter of beasts (*bahā'im*) in temples for sacrifices is only the consumption of their meat. Their objective is rather to release their souls from the lowest levels of the hell of the world of coming-to-be and passing-away (*darakāt jahannam 'ālam al-kawn wa-l-fasād*) and to transfer them from a state of deficiency to a state of completion and perfection in the human form, which is the most complete and perfect form below the sphere of the Moon. This form is the ultimate gate in the hell of the world of coming-to-be and passing-away.⁵⁴

The Brethren's justification is quite original.⁵⁵ Mattila rightly considers these lines 'a clear reference to the doctrine of reincarnation'. Whether collectively (with the completion of cycles of prophetic history) or individually (with the separation from the body at the moment of death), we may infer from the above quotations that the Ikhwān admitted the transformation of animal souls into human souls in just the same way as they conceived that of human souls into angelic souls. In the case of the animal souls turned to human souls, this transformation can indeed hardly be defined otherwise than as a reincarnation. In that respect too, the Ikhwān seem to have followed the teaching of Pythagoras, Plato and the Neoplatonists, and one may naturally wonder whether this point of doctrine, which was usually the object of vehement opposition in medieval Islam, did not contribute to making the Brethren even more heretical to the self-proclaimed champions of orthodoxy.⁵⁶ This said, it is also certain that, unlike Pythagoras, Plato and his Neoplatonist followers, the Ikhwān did

⁵² Epistle 22, ed. Goodman and McGregor, p. 80.

⁵³ Mattila, 'The Animal Fable of the Ikhwān al-Ṣafā'', here p. 364.

⁵⁴ Epistle 5, ed. Wright, pp. 94-95.

⁵⁵ For different types of ethical concerns with respect to animals, as for instance in al-Rāzī, al-Ma'arrī or Ibn Ṭufayl, see Mattila, 'The Animal Fable of the Ikhwān al-Ṣafā'', here p. 351. See also: P. Adamson, 'Abu Bakr al-Rāzī on Animals', *Archiv für Geschichte der Philosophie* 94.3 (2012), pp. 249-273; Adamson, 'The Ethical Treatment of Animals'.

⁵⁶ On all this, see especially P. E. Walker, 'The Doctrine of Metempsychosis in Islam', in W. B. Hallaq and D. P. Little (eds.), *Islamic Studies Presented to Charles J. Adams*, Leiden: Brill, 1991, pp. 219-238. There is unfortunately no discussion of the Ikhwān al-Ṣafā''s views in this article. On the related question of 'bodily resurrection' in the Ikhwān, see, in addition to the previously mentioned article by Almutawa: C. Baffioni, 'Bodily Resurrection in the Iḥwān al-Ṣafā'' in U. Vermeulen and D. De Smet (eds.), *Philosophy and Arts in the Islamic World. Proceedings of the Eighteenth Congress of the Union européenne des arabisants et islamisants held at the Katholieke Universiteit Leuven* (September 3 – September 9, 1996, Leuven: Peeters, 1998, pp. 201-208.

not believe in the idea that the soul of a man could eventually be reincarnated in the body of an animal. In the rare instances in which the *Epistles* mention ‘those who believe in metempsychosis’ (*ahl al-tanāsukh*), the authors simply portray these people as those for whom souls are punished for having committed sins in the previous cycles.⁵⁷ The metempsychosis as conceived by the Brethren is something clearly different, since their system only allows for the transmigration of souls in the opposite direction, that is, ‘from hell to paradise’. From this point of view, Geo Widengren was certainly right to say that, according to the Brethren of Purity, ‘the destiny of the human soul in spite of its eternal substance is transmigration’.⁵⁸

How far can we extrapolate the possibilities of promotion of souls in the system? If we except the case of these animal souls that reincarnate in the human form, the *Rasā’il* do not include examples of a great clarity. The eschatological views of the Ikhwān would deserve an exploration of its own to better understand, beyond the cryptic and allusive prose of the Brethren, the mechanisms at work at three different levels: the individual, the collective, but also the one that corresponds to the ‘Great Resurrection’ (*al-qiyyāma al-kubrā*) at the end of times.⁵⁹

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⁵⁷ See Epistle 40 (‘On Causes and Effects’), ed. Beirut, III, 365, 367, 370; Epistle 42 (‘On Views and Religions’), ed. Beirut, III, 430. On the interpretation of these passages, see also Baffioni, *Appunti per un’epistemologia profetica*, p. 188: ‘da cui è evidente che gli Iḥwān sembrano avversare tale dottrina’; Netton, *Muslim Neoplatonists*, p. 13: ‘The Ikhwān did not, however, endorse everything that was Pythagorean, or characterised as Pythagorean. They rejected, for example, the doctrine of the transmigration of the soul and emphasised the differences which existed between themselves and those who believed in it (*ahl al-tanāsukh* or *aṣḥāb al-tanāsukh*)’.

⁵⁸ G. Widengren, ‘The Gnostic Technical Language in the *Rasā’il Iḥwān al-Ṣafā*’, in *Actas do IV Congresso de Estudos Arabes e Islamicos. Coimbra – Lisboa 1968*, Leiden: Brill, 1971, pp. 181-203, here p. 183.

⁵⁹ A brief presentation of these three levels is given in: G. de Callatāy, *Ikhwan al-Safa’. A Brotherhood of Idealists on the Fringe of Orthodox Islam* (Makers of the Muslim World), Oxford: Oneworld, 2005, pp. 28-33 (‘Eschatological prospects’).

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