A Preliminary Study of the Pseudo-Aristotelian Hermetica: Texts, Context, and Doctrines*

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Abstract

The pseudo-Aristotelian Hermetica are an understudied yet influential group of texts surviving in Arabic that claim to record conversations between Aristotle and Alexander the Great. I propose a ninth-century dating for these texts on the basis of textual and contextual evidence. In them, Aristotle instructs Alexander on two major subjects to aid his royal pupil's military career and personal life: the cosmos, the genesis of everything in it, and astral magic. This study provides a preliminary analysis of the texts' manuscripts and content, discussing what makes them Aristotelian and Hermetic and highlighting the resonances of Zoroastrian astro-cosmogenic doctrines.

The pseudo-Aristotelian Hermetica (hereafter PsAH) are a group of texts surviving in Arabic that claim to record conversations between Aristotle and Alexander the Great. In these conversations, Aristotle instructs Alexander about the cosmos, the coming-to-be of everything in it, and astral magic—more precisely, talismanry, rituals for attracting the spiritual and planetary forces of the cosmos, the creation of amulets, and extensive astrological rules. The purpose of the instruction is to support Alexander's military career and personal life. Aristotle claims to have received this knowledge from Hermes Trismegistus. There are very few studies dedicated to these fascinating and influential texts; therefore, this article offers a preliminary study of the PsAH that introduces the texts and their contexts systematically.

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We can identify the following constituent treatises within the PsAH cluster: *al-Isṭimākhīs*,[1] *al-Isṭimāṭīs*,[2] *al-Hādhīṭūs*, and *al-Ustuwaṭṭās*.[3] Together, they seemed to have formed a single work entitled *Kitāb ʿIlal al-rūḥāniyyāt*. To these we can add *al-Madīṭīs* (which is an abridgment of *Kitāb ʿIlal al-rūḥāniyyāt*), *Kitāb al-Shuʿrā al-yamāniyya*, and *Dhakhīrat Iskandar*. Modern scholarship has been bedeviled by a great deal of confusion about the spellings of these titles in manuscripts and secondary sources, which has prevented scholars from seeing the various connections between the texts that show them to have been part of a larger corpus. Nevertheless, the designation "pseudo-Aristotelian Hermetica" and the abbreviation used here, PsAH, must not lead us to overemphasize the homogeneity of the texts, for three reasons. First, a more thorough inspection of the surviving manuscripts is required to confirm the works' textual stability. Second, the constituent texts have been grouped in divergent ways, as evinced by some manuscripts and their careers, and sometimes compiled with non-PsAH texts into clusters that had separate trajectories, as in the case of what I refer to below as the *PsAH Cycle* and *Kitāb ʿIlal al-rūḥāniyyāt*. Third, two of the texts identified here as pseudo-Aristotelian and Hermetic—namely, *Kitāb al-Shuʿrā al-yamāniyya* and *Dhakhīrat Iskandar*—are later compositions that drew on what had become a dynamic Islamic philosophical and scientific tradition espousing the doctrines of Aristotle and Hermes.

The importance of the PsAH as a major source of elements that became ubiquitous in and fundamental to the medieval occult sciences cannot be overstated. Their influence is visible in the *rūḥāniyyāt*, talismanic practices, and astral causality in Maslama al-Qurṭubī's *Ghāyat al-ḥakīm*, in the magic and astrology of *Rasāʾil Ikhwān al-Ṣafāʾ*, and the science of letters (*ʿilm al-ḥurūf*) of Aḥmad al-Būnī in the thirteenth century and ʿAbd al-Raḥmān al-Bisṭāmī in the fifteenth, among others.[4] As a pivotal current in Islamic intellectual culture, the occult sciences coproduced and enriched knowledge about nature, the cosmos, and their forces. Therefore, it is not hard to see the significance of the PsAH beyond the occult sciences in Islamic intellectual history as a whole. What Paul Magdalino and Maria Mavroudi have said about Byzantine culture extends to Islamic culture: "Intellectual engagement with the occult was rooted in, or sought to cohere with, the philosophical systems of Greco-Roman antiquity. . . . The learned practitioners of the occult had a basic general education, including philosophy, and tended to combine their special expertise with a variety of intellectual interests, which made it appropriate to describe them as *philosophoi*."[5] Similarly, *ḥakīm* (sage or philosopher) designated occult scientists in medieval Islamic intellectual culture.

1. Based on MS London, British Library, Delhi Arabic 1946, fol. 1v. In MS Oxford, Bodleian, Marsh 556, fol. 111r, it is vowelized as *al-Isṭamākhus,* الإصطَماخُس .

2. Based on Marsh 556, fol. 4r. In Delhi Arabic 1946, fol. 32v it is found as *al-Isṭimāṭīs*, الاصطماطيس.

3. Following the vowelisation in Arabe 2577, fol. 1r; in Delhi Arabic 1946, fol. 32r it is found as *al-Isnūṭās*, الاسنوطاس.

4. L. Saif, "From *Ġāyat al-Ḥakīm* to *Šams al-Maʿārif*: Ways of Knowing and Paths of Power in Medieval Islam," *Arabica* 64 (2017): 297–345, at 306–9, 330–31.

5. P. Magdalino and M. Mavroudi, "Introduction," in *The Occult Sciences in Byzantium*, ed. P. Magdalino and M. Mavroudi, 11–38 (Geneva: La pomme d'or, 2006), 13.

Magic and alchemy, in particular, were considered the epitome of wisdom (*ḥikma*). The Islamic reception of Aristotle was, in reality, that of a master philosopher, sage, and mage, as demonstrated by the so-called *Theology of Aristotle*. The work is, in fact, an Arabic paraphrase of Plotinus's *Enneads* IV–VI along with Porphyry's commentary, which turns Aristotle into a sage of high Neoplatonism. Moreover, the pseudo-Aristotelian *Sirr al-asrār* (The secret of secrets, lat. *Secretum secretorum*) cemented Aristotle's image as a mage with consummate knowledge of occult properties, astral influences, and talisman construction. Along with the PsAH, these texts helped establish a Hermetized and Neoplatonized Aristotelianism that became definitive of Islamic scientific, philosophical, and religious knowledge pertaining to the universe, generation and corruption, and the place of human beings in the cosmos.

In this article, I first identify the constituent treatises of the PsAH and their relationships to one another. I then argue for a ninth-century date for their production on the basis of citations in texts influenced by them as well as contextual considerations, especially the coinciding of their composition with the codification of Zoroastrianism in texts such as the *Bundahishn* and *Dēnkard*. These texts could have familiarized the author or authors of the PsAH or their intellectual atmosphere with astro-prophetical cycles and the cosmic networks revolving around the "spiritual beings" known as *rūḥāniyyāt*. Moving to the content, I show how the philosophical and magical background of the PsAH demonstrates a consequential melding of Aristotelian hylomorphism and causality with what was perceived as "Hermetic" theurgic and astro-magical aspects.

I. The Texts and Manuscripts

The first step toward understanding the pseudo-Aristotelian Hermetic corpus is to draw a circle around its known and surviving constituent treatises—a real challenge considering the scattered manuscripts, widespread confusion about the titles, and the lack of dedicated studies. The PsAH were widely known in the Islamic world, especially during the medieval and early modern periods, but the titles were often confused. Ibn Abī Uṣaybiʿa (d. 668/1270), in *ʿUyūn al-anbāʾ fī ṭabaqāt al-aṭibbāʾ* (The choicest reports on the classes of physicians), mentions several PsAH texts in a chapter dedicated to the works of Aristotle. One of these is "*al-Isṭimākhīs*, composed when he [Alexander] wished to leave the Land of Rūm," exactly as described in the prologue of *al-Isṭimākhīs*. He also mentions *Kitāb al-Malāṭīs*, a certain "*Kitāb al-Ismāṭālīs*," and "a book for Alexander on the *rūḥāniyyāt* and their actions in the climes," which is possibly a reference to *al-Isṭimāṭīs* and its discussion of the seven climes.[6] Under a section on Hermes's writings on "*nīranj*s,[7] occult properties, and talismans," Ibn al-Nadīm (d. 380/990) lists "*Kitāb al-Harīṭūs* on *nīranj*s, trees, fruits, oils, and grasses";

6. Ibn Abī Uṣaybiʿa, *ʿUyūn al-anbāʾ fī ṭabaqāt al-aṭibbāʾ*, ed. N. Riḍā (Beirut: Dār Maktabat al-Ḥayyāt, n.d.), 105; online ed., E. Savage-Smith, S. Swain, and G. J. van Gelder, eds., *A Literary History of Medicine* (Leiden: Brill, 2020), https://doi.org/10.1163/37704_0668IbnAbiUsaibia.Tabaqatalatibba.lhom-ed-ara1.

7. In occult literature "nīranjs" refer to magical concoctions made from organic material. It is claimed that they cultivate a sort of "spiritual force" that overpowers that of animals and people. They are often ingested or suffimigated. They are discussed in more detail in section IV.5.

this is *al-Hādhīṭūs*, which has chapters on these precise genres. Under Hermes's writings on alchemy, Ibn al-Nadīm lists "*al-Hārīṭūs*" again, as well as *al-Malāṭīs*, "*al-Isṭimākhis*," and a certain *Kitāb al-Salmāṭīs*.[8]

In a section of his *Tārīkh* discussing Alexander the Great, Ibn Khaldūn (732–808/1332–1406) mentions *al-Isṭimākhīs*, which contains "the ancient devotions" (*al-ʿibāda al-ūlā*). He notes that "the people of the seven climes used to worship the[ir] planet, for each clime has a planet to which they prostrate, suffumigate, make sacrifices, and slaughter. The *rūḥāniyya* of this planet manages their affairs, they claim." The "ancient devotions" is likely to be a reference to the laws of the first sage-prophets in *al-Isṭimāṭīs*. Discussion of the seven climes can also be found in *al-Ustuwaṭṭās* and *al-Isṭimāṭīs*. Ibn Khaldūn does make reference to "*Kitāb al-Isṭimāṭīs*, which contains [information on] conquering cities and fortresses by talismans and [astrological] judgment; among them are talismans to bring down rain and to draw water." This is an appropriate description of the contents of this text. He also mentions a "*Kitāb al-Ishṭurṭās* on elections according to the procession of the moon through the mansions and applications," which is likely to be a reference to *al-Ustuwwaṭṭās*. And he adds "other books on the benefits and occult properties of animal parts, stones, trees, and grasses," which recalls the content of *al-Hādhīṭūs*.[9]

Ibn Khaldūn's description is worded similarly to that of the Coptic historian Jirjis al-Makīn (602-672/1205-1273) in his *al-Majmūʿ al-mubārak* (The blessed compendium):

> Aristotle interpreted the books of Hermes, the first Egyptian sage, and he translated them from the Egyptian tongue to the Greek. He explained the knowledge, judgments, and talismans therein. One of these [books] is *Kitāb al-Isṭimākhīs*, and it contains the devotions of the first peoples. He mentions in it that the people of the seven climes used to worship the seven planets; and in every clime they worshipped one of these planets, prostrating, suffumigating, making sacrifices, and slaughtering to it. The *rūḥāniyya* of this planet appeared to its clime and addressed [its people], fulfilling their needs in all that they seek. One of these [books] is *Kitāb al-Isṭimāṭīs*, which contains [information] on conquering cities, fortresses, strongholds, and seizing kingdoms with the talismans and judgments they make. Among them are talismans that bring down rain and water to them in thirsty deserts and dry wildlands. There is also *Kitāb al-Ustuwaṭṭās*.[10]

Ḥājjī Khalīfa (1017–1608/1609–1657), in *Kashf al-ẓunūn*, lists some of the PsAH texts: *al-Hārīṭūs* (this is likely *al-Hādhīṭūs*) and *al-Malāṭīs*.[11] He also mentions "the book on attracting the *rūḥāniyya* of animals from the writings of Hermes, interpreted by Aristotle. It is the book named *al-Madāṭīs*." This is a description of the contents of the text known as *Istijlāb rūḥāniyyāt al-bahāʾim* (On attracting the *rūḥāniyyāt* of animals)—also referred

8. Ibn al-Nadīm, *al-Fihrist* (Beirut: Dār al-Maʿrifa, n.d.), 434, 496.

9. Ibn Khaldūn, *Tārīkh Ibn Khaldūn*, ed. Kh. Shiḥāda and S. Zakkār, 7 vols. (Beirut: Dār al-Fikr, 2000), 2:223–24.

10. MS Oxford, Bodleian Library, Huntington 188, fol. 131r.

11. Ḥājjī Khalīfa, *Kashf al-ẓunūn*, ed. M. Sh. Yāltaqāyā and R. B. al-Kalīsī, 2 vols. (Beirut: Dār Iḥyāʾ al-Turāth al-ʿArabī, n.d.), 1:657–58.

to in the text as *al-Madhāṭīs*[12] which constitutes a chapter in *al-Ustuwaṭṭās*.[13] Other texts mentioned include an "*al-Isṭālīs*," an "*al-Isfūṭās*," *al-Isṭimāṭīs*,[14] the *al-Malāṭīs al-akbar*, *al-Ustuwaṭṭās*, a certain *al-Hāwīṭūs*, a "book of the moon by Hermes the Sage, which [contains material] on occult properties and talismans that consider the advent of the moon and its progression in the mansions,"[15] and, finally, "epistles by Aristotle to his son and to Alexander on managing the kingdom and on magic, too." Ḥājjī Khalīfa also mentions "*Kitāb al-Rūḥāniyyāt* and their actions in the climes" by Aristotle.[16]

Modern scholars have identified some of the PsAH's constituent treatises, often confusing the titles, and supplementing their identification with reference to other sources, especially the lists of Ibn al-Nadīm and Ḥājjī Khalīfa. For example, in *Aristoteles Arabus*, F. E. Peters identifies five separate texts: *al-Isṭimākhīs*, *al-Isṭimāṭīs*, *al-Malāṭīs* (equating it with *al-Madīṭīs*), the *K. ʿIlal al-rūḥāniyyāt*, and *Dhakhīrat Iskandar*.[17] In *Geschichte des Arabischen Schrifttums*, Fuat Sezgin lists *al-Shuʿrā* and *K. ʿIlal al-rūḥāniyyāt* under the heading "Astronomy, Astrology, and Magic"[18] and includes under Aristotelian works *al-Isṭimākhīs*, *al-Ustuwwaṭṭās* (which he deems identical to *al-Isṭimāṭīs*), *al-Malāṭīs* or *al-Miyalāṭīs*, and *Dhakhīrat Iskandar*.[19] In *Die Natur- und Geheimwissenschaften im Islam*, Manfred Ullmann identifies as separate texts *al-Isṭimākhīs*, *al-Isṭimāṭīs*, *al-Ustuwaṭṭās*, *al-Madīṭīs*, *al-Hādhīṭūs*, and *Dhakhīrat Iskandar*.[20] As noted earlier, very little research has tackled the problem of the titles. The result is that certain treatises have been considered separate works even though they are in fact interconnected.

Nevertheless, ʿAbd al-Raḥmān Badawī edited the passages about the Perfect Nature (*al-ṭibāʿ al-tāmm*) from *al-Isṭimākhīs* on the basis of MS Cairo, *Dār al-kutub*, 4291, fols. 136r–137r.[21] Recently, Kevin van Bladel has drawn attention to the PsAH in his investigations into Hermes, Hermetic writings, and their circulation.[22] Charles Burnett has uncovered a case of twelfth-century reception of *K. ʿIlal al-Rūḥāniyyāt* in the Latin West in the form of a paraphrase entitled *Liber Antimaquis*,[23] mentioned in *De essentiis* by Hermann of Carinthia,

12. Not to be confused with *al-Madīṭīs* described below.

13. Ibid., 2:1389.

14. Ibid., 2:1390.

15. Ibid., 2:1463.

16. Ibid., 2:1421.

17. F. E. Peters, *Aristoteles Arabus: The Oriental Translations and Commentaries of the Aristotelian Corpus* (Leiden: Brill, 1968), 58–59.

18. Sezgin, *Geschichte des Arabischen Schrifttums*, 9 vols. (Leiden: Brill, 1967–2000), 4:41–42.

19. Ibid., 4:40–42; 7:102–3.

20. M. Ullmann, *Die Natur- und Geheimwissenschaften im Islam* (Leiden: Brill, 1972), 374–77, 394–95.

21. ʿA. Badawī, *al-Insāniyya wa-l-wujūdiyya fī al-fikr al-ʿarabī* (Cairo: Maktabat al-Nahḍa al-Miṣriyya, 1947), 177–84.

22. K. van Bladel, *The Arabic Hermes: From Pagan Sage to Prophet of Science* (Oxford: Oxford University Press, 2009), 101–2, 114, 178, 224.

23. MS London, British Library, Sloane 3854 (fifteenth century), fols. 105v–110v ("The Book of the Spiritual Works of Aristotle, or the book *Antimaquis*, which is the book of secrets of Hermes: wonderful things can be accomplished by means of this book and it is the ancient book of the seven planets"); L. Thorndike, *A History*

who worked in the twelfth century and also translated several Arabic astrological works, including ones by Abū Maʿshar al-Balkhī (c. 171–c.272/787–886).[24] On the basis of MS Oxford, Bodleian, Marsh 556 (*al-Madīṭīs*) and MS Paris, BnF, Arabe 2577, Burnett has provided an analysis of the interconnections among these texts and their influence on the magic blockbuster *Ghāyat al-ḥakīm* (The goal of the sage) and its Latin reception.[25]

In the rest of this section, I introduce the constituent texts of the PsAH, highlighting cross-references among the texts and historical evidence that attests to their relative cohesion. The list of manuscripts consulted is not exhaustive. For the next stage of research, which should include producing a critical edition of the PsAH, a more comprehensive survey of manuscripts is necessary. All the manuscripts consulted are listed in the Appendix.

1. The PsAH Cycle

The manuscripts consulted show that certain pseudo-Aristotelian Hermetic texts traveled together. This cluster includes treatises that are not pseudo-Aristotelian or Hermetic but reflect the same themes—namely, amulets, talismans, and the occult properties of stones. In this article, I refer to this combination of texts as the *PsAH Cycle*. I shall begin with the pseudo-Aristotelian Hermetic texts and then move to the others.

The pseudo-Aristotelian Hermetica are framed as lessons to Alexander the Great and commentaries on Hermetic knowledge by Aristotle, composed over a period of time at different stages of various military campaigns. The first composition is *al-Isṭimākhīs*, which begins as follows:

> This is *Kitāb al-Isṭimākhīs* [on knowledge] received from Hermes and composed by Aristotle the Sage to Alexander when he wished to exit the land of Rūm [for a military campaign] to the eastern lands (*arḍ al-mashriq*). This was during the fourth year of his rule.[26]

The text consists mainly of instructions for talismans and amulets for securing military success, but it also contains an introduction to the central concept of the Perfect Nature

of Magic and Experimental Science: During the First Thirteen Centuries of our Era, vol. 2 (London: Macmillan, 1923), 260.

24. C. Burnett, "Hermann of Carinthia and the *Kitāb al-Isṭamāṭīs*: Further Evidence for the Transmission of Hermetic Magic," *Journal of the Warburg and Courtauld Institutes* 44 (1981): 167–69; idem, "Aristoteles/Hermes: Liber Antimaquis," in *Hermetis Trismegisti Astrologica et Divinatoria*, ed. P. Lucentini et al., 179-221 (Turnhout: Brepols, 2001); idem, "The Establishment of Medieval Hermeticism," in *The Medieval World*, ed. P. Linehan and J. L. Nelson, 111–30 (London: Routledge, 2001). See also S. Page, *Magic in the Cloister: Pious Motives, Illicit Interests, and Occult Approaches to the Medieval Universe* (University Park, PA: Penn State University Press, 2013), 94–95, where Page draws attention to the commonalities in "visionary framework" and practices between the PsAH and the medieval *Liber de essentia spiritum* by a Sevillian author. See also B. Láng, *Unlocked Books: Manuscripts of Learned Magic in the Medieval Libraries of Central Europe* (University Park, PA: Penn State University Press, 2008), 105–6.

25. C. Burnett, "Ṯābit ibn Qurra the Ḥarrānian on Talismans and the Spirits of the Planets," *La corónica: A Journal of Medieval Hispanic Languages, Literatures, and Cultures* 36, no. 1 (2007): 13–40.

26. MS London, British Library, Delhi Arabic 1946, fol. 1v.

(*al-ṭibāʿ al-tāmm*), which is a *rūḥāniyya*—a "spiritual" being—that watches over the philosopher/sage and belongs to her/his ruling planet, acting as a guide to wisdom and self-cultivation. *Al-Isṭimākhīs* also includes the famous story of the discovery of the Hermetic Emerald Tablet in a dark crypt. These parts of the text are discussed in more detail below.

Another text that appears in the *PsAH Cycle* is a part of (*min*) *Kitāb al-Isṭimāṭīs*. It is stated that *al-Isṭimāṭīs* was composed after *al-Isṭimākhīs*:

> From *Kitāb al-Isṭimāṭīs*, composed by Hermes in (*fī*) *ʿIlal al-rūḥāniyyāt*, divided according to the seven climes and their nature, operations, and substances. This is the book wherein Aristotle the Sage explains the causes of the *rūḥāniyyāt*, their activities, their substances, and their differences across the seven climes and according to the seven planets.[27]

The next major constituent treatise of the PsAH is *al-Ustuwaṭṭās*, a section of which appears in the *PsAH Cycle* under the title *Kitāb Istijlāb rūḥāniyyāt al-bahāʾim*. According to its prologue, it is also referred to as "*al-Madāṭīs*".[28] Nevertheless, at the end of the text, we read: "This is the end of what the Sage described in *Kitāb al-Ustuwaṭṭās*."[29] This seems to be, then, a chapter from *al- Ustuwaṭṭās*. The text begins as follows:

> The book of attracting the *rūḥāniyyāt* of all animals according to the words of Hermes, interpreted by Aristotle. It is the book titled *al-Madāṭīs*. When I read this book, I found in it these four amulets (*khirz*) mentioned and praised by Hermes.[30]

Another part of the *Kitāb al-Ustuwaṭṭās* is included in the *Cycle*. It is a chapter from "al-Ishnūṭās" (الاشـنوطاس) according to MS Delhi Arabic 1946, fol. 85v and MS Arabe 221, fol. 60r; however, the content seems like a continuation of the episode of Admānūs's learning from Hādūs about the conditions for magical practice which we encounter in *al-Ustuwaṭṭās* (الأُسـتوطّاس). It is only a matter of scribal variation in dotting; so it seems to be a chapter of *al-Ustuwaṭṭās*. In the prologue, we read:

> This is a chapter (*faṣl*) from the book of *al-Ustuwaṭṭās*. Aristotle the Sage said: in his education of Admānūs in the hidden secrets and the subtle spiritual actions, the first thing Hādūs taught him in the secrets of the stars was the clarification of the twenty-eight mansions. These are the stations which constitute the first division, knowledge, and roots of the entirety of the first edifice.[31]

Other manuscripts, discussed below, contain additional parts of *al-Ustuwaṭṭās*, indicating that it is one of the major constituent texts of the PsAH corpus as a whole.

27. Ibid., fol. 32v.

28. Ibid., fol. 21v.

29. Ibid., fol. 32r (in the text it is dotted as الاسنوطاس).

30. Ibid., fol. 21v.

31. Ibid., fol. 85v.

An interesting reiteration of *al-Ustuwaṭṭās* is associated with the scholar and grammarian Sirāj al-Dīn Abū Yaʿqūb al-Sakkākī (555–626/1160–1229), and it appears in MS Tehran, Majlis-i Shūrā-yi Millī, no. 4752 (fols. 1r–42v). In addition to *Dhakhīrat Iskandar* and another text on stones, which is described below, this manuscript includes the third *bāb*, entitled *al-Isqūṭās*, from al-Sakkākī's magic text *al-Kitāb al-Shāmil fī al-baḥr al-kāmil* (The Comprehensive Book on the Perfect Sea).[32] Like all the PsAH texts identified here, *al-Isqūṭās*—also called *Kitāb al-Manlāṭīs Istūṭāṭīs* in the *Kitāb al-Shāmil*—is set within a historical narrative. A *sanad* is given, which begins with al-Sakkākī and ends with a certain Shakārkun Madīlā al-Mūṣilī in *al-Kitāb al-Shāmil* in the SOAS manuscript, and with Yazīd al-Mūṣilī in the Majlis manuscript. In the narrative, this al-Mūṣilī has arrived in Egypt and has been admitted to the company of its ruler Aḥmad b. Ṭūlūn.[33] There he finds an old shaykh dressed as a priest talking about the wonders and uncanny elements of ancient knowledge to a group of listeners. When asked about his sources, the shaykh mentions a single book that he

> inherited from his forefathers, containing several parts, retrieved from the treasuries of Khosraw I by Kanaka the Indian,[34] a master of conjunctions, who counted it among the Hermetic books (*al-kutub al-hirmisiyya*) translated by Aristotle and known as *Kitāb Mīlāṭīs al-akbar*. It is a book that contains a description of the [lunar] mansions, twenty-eight of them, their natures and properties, and the names of the angels in charge, their suffumigations, and the *nīranj*s made under them.

Ibn Ṭūlūn expresses interest in obtaining a copy of the book for his treasury. The shaykh responds by handing him this very book. Ibn Ṭūlūn then orders a man called Sahl b.

32. For the entire Kitāb al-Shāmil, I have consulted MS London, SOAS, no. 46347, fol. 2r. See M. Noble, *Philosophising the Occult: Avicennan Psychology and the Hidden Secret of Fakhr al-Dîn al-Râzî* (Hamburg: de Gruyter, 2021); T. Zadeh, "Commanding Demons and Jinn: The Sorcerer in Early Islamic Thought," in *No Tapping around Philology: A Festschrift in Honor of Wheeler McIntosh Thackston Jr.'s 70th Birthday*, ed. A. Korangy and D. J. Sheffield (Wiesbaden: Harrassowitz, 2014), 131–60. Emily Selove at the University of Exeter is the Principal Investigator of the Leverhulme-funded research project "A Sorcerer's Handbook," which will produce an edition, a translation, and a literary study of al-Sakkākī's text.

33. Interestingly, there seems to be a proximity between the family of Ibn Ṭūlūn to magic. It is mentioned in *Ghāyat al-ḥakīm*, where we learn that in a commentary on an aphorism belonging to Ptolemy's *Centiloquium*/*The Fruit* by Aḥmad b. Yūsuf the secretary, there is a story set in the time of Khmārūwīh b. Aḥmad b. Ṭūlūn in Egypt about a Byzantine resident of Egypt who was able to save a boy from a scorpion sting with a magical seal, was used to stamp a piece of frankincense that was then given to the afflicted to drink. It received its powers from the planets in a specific configuration. Maslama b. Qāsim al-Qurṭubī, *Picatrix: Das Ziel des Weisen*, ed. H. Ritter (Leipzig: B. G. Teubner, 1933), 54–55.

34. Many astrological works are attributed to the semilegendary Kanaka, whose name, meaning gold in Sanskrit, is often invoked in works dedicated to the astral sciences (astrology, astronomy, and talismanry). He is described by Pingree as "a favorite symbol used by intellectuals of the Islamic tradition to indicate the partial dependence of some of their sciences upon Sanskrit sources." Pingree links him to Sassanian intellectual culture and suggests he learned astrology in the Abbasid context, holding a position in the caliphal court. Several treatises are attributed to Kanaka; see J.-C. Coulon, *La magie en terre d'islam au Moyen Âge* (Paris: CTHS, 2017), 108–10, 150, 159; Sezgin, *Geschichte des arabischen Schrifttums*, 7:94–97; Ullmann, *Natur- und Geheimenwissenschaften*, 289–301; D. Pingree, *From Astral Omens to Astrology, from Babylon to Bīkāner* (Rome: Istituto italiano per l'Africa e l'Oriente, 1997), 51–62.

Mahīdān to translate it.[35] What follows is the text of this PsAH work, which includes another interesting narrative that explicitly sets this text apart from *al-Ustuwaṭṭās* and asserts an Indian provenance for its content:

> Kanaka the Indian said: This is the book I translated from [another work by] my esteemed sire Aristotle when I was composing my book describing the planetary *rūḥāniyyāt* and their activity, influences, actions, and properties. I was so thorough I did not leave anything unmentioned. This has been obtained from the lights of the esteemed Hermes, tripled in abundant wisdom that emanates over me and those like me. It occurred to me to mention the lunar mansions and their *rūḥāniyyāt*, their properties, the *nīranj*s made under them, alchemical operations (*tadbīr al-ṣanʿa*), and descriptions of fatal poisons, so that this book would be comprehensive in knowledge and operations, unlike *al-Ustuwaṭṭās* and the rest of my books. I could not find anything like this with me, and I found it strange that I have overlooked this matter. Time passed in investigation and thought about this, until I found myself in the army of the philosopher-king (*al-malik al-faylasūf*) and pupil (*tilmīdh*)[36] Alexander, son of Philip the Greek, [heading] to the land of India. He requested at its threshold all the old books by the ancient sages. So I brought to him many books on all kinds of verified occult sciences (*al-ʿulūm al-ḥaqīqa al-khafiyya*). Among them was a book penned by *Idriyās*. He (Kanaka) said: Upon reading it I realized that it contained what had been weighing on my mind regarding the mansions, their properties, and what is done under each mansion. I mention their *rūḥāniyyāt* as I recall them from Hermes Trismegistus, combining all that I had come across. So I thanked the Cause of all causes, the Creator of all creatures, for inspiring in me wisdom and spiritual insight (*al-khāṭir al-rūḥānī*).[37]

This narrative elicits couple of important observations. First, the PsAH, and the *al-Ustuwaṭṭās* in particular, are depicted here as a standard to follow and adapt to the occult practices of the thirteenth century. Indeed, the text is similar to *al-Ustuwaṭṭās* in its description of the magical operations of the lunar mansions, but the practices prescribed by the two texts are different, and the *rūḥāniyyāt* in this text are more like angels with Hebraic names. Second, the PsAH were legitimized and sensationalized by their insertion into a "historical imaginary," which is understood here as a shared understanding of the past created by various discourses—political, religious, scientific, philosophical, literary, and so on—which shapes the way in which a community relates to its immediate and ancient past and to its entanglements with different groups. In the case of the PsAH, this historical imaginary is one that reconstructs and celebrates a dynamic Islamic culture that hybridizes Persian, Indian, and Greek heritage.

35. SOAS 46347, fols. 30v–31v.

36. It is likely that the definite article is missing. *Al-tilmīdh* means "the student," not "student of," indicating Alexander's tutelage under Aristotle.

37. SOAS 46347, fols. 31v–32r.

The last pseudo-Aristotelian Hermetic treatise found in the *Cycle* is *Kitāb al-Hādhīṭūs*. Aristotle is absent from this text, but a cross-reference in the aforementioned *al-Istijlāb*[38] confirms its belonging to the PsAH, "according to what was described by Hermes."[39] Furthermore, an anonymous translator is mentioned.

The text begins as follows:

> This *Kitāb al-Hādhīṭūs* is the book that God, powerful and exalted, taught Adam. When He forced him to descend from Paradise, he taught him every beneficial thing, and every craft with which he could make good his land.[40]

The narrative about Admānūs (Adam) in this text is consistent with the rest of the corpus and provides a complementary trajectory by describing the magical knowledge that Admānūs received from the demiurge Hādūs (see below). The creation of Admānūs is described in other texts of the PsAH.

Four other works, which do not belong to the pseudo-Aristotelian Hermetica, also found their way into the *Cycle*. The first is the *Giranis*, which is attributed to Hermes but does not feature Aristotle. It is concerned with the occult properties of natural things and is organized alphabetically.[41] The work is an Arabic translation of an early Greek version of the *Kyranides* that has not survived. It may have differed from the traditional Greek versions.[42] As Toral-Niehoff notes, this may be called the earliest Arabic translation of a Hellenistic text on magic. She also highlights the work as evidence of medieval Islamic intellectual knowledge of ancient magic and of Muslims' ability to contextualize such knowledge successfully.[43] The latter is attested by the work's inclusion among the pseudo-Aristotelian Hermetic texts, which demonstrates a medieval conceptualization of a wider magical "hermetic" tradition.[44]

We also find in the *Cycle* a treatise entitled *Kitāb al-Aḥjār* (The Book of Stones). Although the work begins abruptly, a title is given in the conclusion. In content, the text is almost identical to another collection of stone and ring magic, MS Istanbul, Süleymaniye, Ayasofya 3610, fols. 1v–143r.[45] The compiler of this manuscript claims to have relied on several books "that describe some of the writings of the Light of Knowledge, Aristotle the Sage, retrieved from the book by Hermes the Sage" (fol. 2r). This makes it a pseudo-Aristotelian Hermetic

38. The treatise on attracting animals that forms part of *al-Ustuwwaṭṭās*, see above and the appendix.

39. Delhi Arabic 1946, fol. 85r.

40. Ibid., fol. 53r.

41. This text was edited and studied by Isabel Toral-Niehoff on the basis of MS Oxford, Bodleian, Arab d. 221 in *Kitab Giranis: Die arabische Übersetzung der ersten Kyranis des Hermes Trismegistos und die griechischen Parallelen* (Munich: Herbert Utz, 2004).

42. Toral-Niehoff, *Kitab Giranis*, 37–38.

43. Toral-Niehoff, *Kitab Giranis*, 16.

44. A.-J. Festugière, ed., *La révélation d'Hermès Trismégiste*, vol. 1: *L'astrologie et les sciences occultes* (Paris: Les belles lettres, 1989), 201–16.

45. This is a royal manuscript copied for the treasury of Sultan Abū al-Naṣr Sayf al-Dīn al-Ashraf Qaytbay (r. 1468–96); see fol. 1r. The colophon dates the manuscript to the beginning of Shaʿbān 888/September 1483.

text. However, in the version of the text found in the *PsAH Cycle* the reference to Aristotle and Hermes is absent since the first half of the text is missing.

Kitāb al-Aḥjār is followed in the *Cycle* by *Kitāb ʿUṭārid b. Muḥammad al-Muḥāsib fī manāfiʿ al-aḥjār wa-l-khiraz wa-ṭillismātihā wa-khawātim al-kawākib al-sabʿa* (The Book of ʿUṭārid b. Muḥammad al-Muḥāsib on the Benefits of Stones, Amulets, and Their Talismans, and the Rings of the Seven Planets), according to the title given at the text's conclusion.[46] The *PsAH Cycle* includes only the last part of the actual text attributed to ʿUṭārid on the construction of planetary rings. The first part of the work is found in the stone magic collection MS Paris, BnF, Arabe 2775 (second text, fols. 102r–114r) and in the second part of Ayasofya 3610 (fols. 44v–168v). Moreover, a version of ʿUṭārid's work appears in MS Tehran, Majlis-i Shūrā-yi Millī, fols. 80r–88v, the same Persian manuscript that contains the third *bāb* (*al-Isqūṭās*) of al-Sakkākī's *Shāmil* (fols. 43r–79v), discussed above, as well as the pseudo-Aristotelian *Dhakhīrat Iskandar* (fols. 1r–42v).[47] The ubiquity of the PsAH in all kinds of compilations on the theme of the occult properties of stones, talismans, and *nīranj*s testifies to their deep impact on Arabic- and Persian-language audiences interested in the occult sciences.

ʿUṭārid b. Muḥammad is described by Ibn al-Nadīm as an astrologer and an astronomer.[48] In Arabe 2775 we read that ʿUṭārid was inspired to write his own work on stones by a certain book of the same genre by Hermes that constitutes one of "the treatises (*alṣuḥuf*) known [collectively] as Ūjāyaqī,[49] which bring together writings on stones, trees, and all animals whose benefits I (ʿUṭārid) found in the Book of the Seven Talismans of Wisdom (*Kitāb al-Ṭillismāt li-l-ḥikma al-sabʿa*)." ʿUṭārid claims to have gathered in his work all writings on stone magic "by the Arabs."[50] In Arabe 2775, we also find a text containing passages from *Kitāb al-Ūjāyaqī fī al-ṭillismāt* (The Book of *Ūjāyaqī* on Talismans, fols. 127r–131r). In Ayasofya 3610, the *Ūjāyaqī* is a corpus of writing (*musḥaf*) which contains "a book on temples and stones" (*kitāb* al-*barābī wa-l-aḥjār*), but we do not find any actual discussion of temples in either Ayasofya 3610 or Arabe 2775. However, there is a similar discussion in another stone magic collection in MS Cambridge, Dd. 4. 28,[51] in a treatise titled *Muṣḥaf Hirmis al-Harāmisa* (The Book of Hermes of the Hermae, fols. 100r–119v), described as "the second book that covers the kinds of stones and their minerals, and wherein there is [a discussion of] their benefits, explained clearly, and wherein he also mentions several temples" (fol. 100v). There is no reference here to the *Ūjāyaqī*. A text attributed to Hermes

46. On the astral scientist ʿUṭārid b. Muḥammad al-Ḥāsib (fl. ninth–tenth century) and for comparisons of his work with *Ghāyat al-ḥakīm* on the basis of MS Madrid, El Escorial, no. 939, fols. 16v–17v, see M. J. Parra Pérez, "El 'Sirr al-asrār' de ʿUṭārid b. Muḥammad al-Ḥāsib y sus aforismos," *Anaquel de estudios árabes* 20 (2009): 165–86.

47. See more on these two texts below.

48. Ibn al-Nadīm, *al-Fihrist*, 387; Sezgin, *Geschichte des arabischen Schrifttums*, 5:254; 6:161; 7:137.

49. MS Paris, BnF, Arabe 2775, fol. 102v. In MS Istanbul, Süleymaniye, Ayasofya 3610, fol. 144v, the book's title is given as: إِرْحَانِيقِي.

50. MS Paris, BnF, Arabe 2775, fols. 102v–103v.

51. This manuscript carries the title *Kitāb Azmār al-afkār fī jawāhir al-aḥjār* (the divulsion of ideas on the precious stones) It was sponsored for the treasury of al-Malik al-Nāṣir Nāṣir al-Dīn Muḥammad b. Qalāwūn (r. 1293–94, 1299–1309, 1310–41). The manuscript ends abruptly.

with that title perhaps once existed, containing the material in *Muṣḥaf Hirmis al-Harāmisa*, the material in ʿUṭārid's text (in Arabe 2775 and Ayasofya 3610), and *Kitāb al-Ūjāyaqī fī al-ṭillismāt* (Arabe 2775).[52]

The final text in the *PsAH Cycle* is *al-Kitāb al-majmūʿ fī khawāṣṣ al-aḥjār* (The Collection Concerning the Occult Properties of Stones), which contains *Kitāb Maʿrifat al-ḥijāra wa-khāṣṣiyatihā wa-nuqūshihā* (On the Knowledge of Stones, Their Occult Properties, and Their Inscriptions) taken from *al-Hādhīṭūs* by the first Hermes,[53] as well as other books (*maṣāḥif*). The text begins as follows:

> This is the book on the knowledge of stones, their occult properties and inscriptions, what is made from them, and these things with which its practice is accompanied, retrieved from *Kitāb al-Hādhīṭūs* by the first Hermes and the books of wisdom (*maṣāḥif al-ḥikma*).[54]

One of the five texts featured in this collection is referred to as *bāb maḥakkāt al-aḥjār min kalām Aristotle wa-ghayrihi* ("a chapter on the pulverulence of stones from the writings of Aristotle and others").[55] Its content is identical with that of a section called *dhikr maḥakkāt al-ḥijār al-sabʿa* ("reference to the pulverulence of the seven stones") in Cambridge, Dd. 4. 28, fols. 120r–122r. Both are based on the sayings of a sage named Funṭus.

2. Kitāb ʿIlal al-Rūḥāniyyāt and More of al-Ustuwaṭṭās

According to the manuscript evidence, *K. ʿIlal al-rūḥāniyyāt* is known as a two-part composition, comprising a text from *al-Ustuwaṭṭās* and a second part, which lacks a title. The text from *al-Ustuwaṭṭās*, which constitutes the first half of *K. ʿIlal al-rūḥāniyyāt*, is concerned with the ontological links between the macrocosm and the microcosm, Aristotelian hylomorphism and the generation of the terrestrial world, the celestial structure of the cosmos, and the role of the *rūḥāniyyāt* in the administration of the celestial,

52. Arabe 2775 also contains "The Scintillating Pearls on the Properties of Stones and Minerals" (*al-Laʾāliʾ al-muḍīʾa fī khawāṣṣ al-jawāhir wa-l-aḥjār*) by Aḥmad al-Tīfāshī (1184–1253) (fol. 1v), a book on the properties of stones by Ḥunayn b. Isḥāq (fol. 76v), a book by Hermes on the occult properties of stones (fol. 161v), and an epistle on ancient opinions concerning stones, heavily featuring Aristotelian writings on stones (fol. 131v).

53. Abū Maʿshar al-Balkhī describes three different figures named Hermes in a surviving portion of his lost *Kitāb al-Ulūf*. The first Hermes was identified as Idrīs and is presented as an antediluvian prophet who constructed Egyptian temples. His father is Gayōmard. He is a consummate astronomer/astrologer and the first physician. The second Hermes is Babylonian who excelled in medicine, philosophy, and mathematics. Pythagoras is his pupil. The third Hermes of Abū Maʿshar lived in Egypt after the Flood. He is skilled in drugs and poisons and composed books on alchemy and precious stones. K. van Bladel, "Hermes and Hermetica", in *Encyclopaedia of Islam THREE*, ed. Kate Fleet, Gudrun Krämer, Denis Matringe, John Nawas, Everett Rowson (Leiden: Brill, online on 11 October 2021 http://dx.doi.org/10.1163/1573-3912_ei3_COM_23130; van Bladel, *Arabic Hermes*, 27 esp. n. 21, 28, 31–32; D. Pingree, *The Thousands of Abū Maʿshar* (London: Warburg Institute, 1968); C. Burnett, "The Legend of the Three Hermes and Abū Maʿshar's *Kitāb al-Ulūf* in the Latin Middle Ages," *Journal of the Warburg and Courtauld Institutes* 39 (1981): 231–34; D. Pingree, *From Astral Omens to Astrology, from Babylon to Bīkāner* (Rome: Istituto italiano per l'Africa e l'Oriente, 1997), 53-54.

54. Delhi Arabic 1946, fol. 126r.

55. Ibid., fol. 154r.

terrestrial, and human worlds. It also discusses the creation of Admānūs and Ḥaywānus, and the lunar mansions and associated *nīranj*s. It thus perfectly matches the content of *al-Ustuwaṭṭās* in the *PsAH Cycle* (see above). In addition, it complements the content of *al-Hādhīṭūs*, which describes itself as "the book that God, powerful and exalted, taught Adam."[56] The same divine lessons to Admānūs are covered in the part of *al-Ustuwaṭṭās* found in *Kitāb ʿIlal al-rūḥāniyyāt*. In the second part, we read that *K. ʿIlal al-rūḥāniyyāt* is in fact a translation, and we are given a summary of the second part's contents:

> Ḥunayn b. Isḥāq said: Among the books of Aristotle that we have found and I have translated from the Greek tongue to the Arabic is *Kitāb ʿIlal al-rūḥāniyyāt* by Hermes. It is divided according to the seven climes, their nature, and their operations. This is the book wherein Aristotle explains the causes of the *rūḥāniyyāt*, the *nīranj*s, their substances, and their differences, distributed among the seven climes. For Alexander asked Aristotle the Sage [for this information] when he had just completed *Kitāb al-Isṭimākhīs*, which he had explained to him during his march to Persia.[57]

The reported contents of this part of *K. ʿIlal al-rūḥāniyya* and the stated chronology of its composition indicate that it is *al-Isṭimāṭīs*, which, according to the prologue found in the *PsAH Cycle*, is likewise organized "according to the seven climes and their nature, operations, and substances" and treats "the causes of the *rūḥāniyyāt*, their activities, their substances, and their differences across the seven climes and according to the seven planets."[58]

The texts' own narratives and the cross-references established by this study demonstrate the unity between the texts of the *PsAH Cycle* and the *Kitāb ʿIlal al-rūḥāniyyāt*. We can conclude that the first text written was *al-Isṭimākhīs*, followed by *al-Isṭimāṭīs*. *Al-Ustuwaṭṭās* was part of a larger Hermetic work called *K. ʿIlal al-rūḥāniyyāt*. It is not a farfetched possibility that *al-Isṭimākhīs*, *al-Isṭimāṭīs*, *al-Ustuwaṭṭās*, and *al-Hādhīṭūs* are all parts of the larger *K. ʿIlal al-rūḥāniyyāt*. It remains unclear whether they were written all at once or over a period of time, but together they constitute the core texts of a pseudo-Aristotelian Hermetic corpus, containing a comprehensive and consistent cosmology according to which the world is ruled by God and a demiurge, unique genesis myths, planetary reverence, and magical and theurgic practices set within this world.

3. Al-Madīṭīs

The work known as *al-Madīṭīs* is an abridged reformulation of the content of the PsaH core texts. The text begins as follows:

> This is the book of Hermes on the operations pertaining to moving animals (*fī ṣanāʾiʿ al-ḥayawān al-mutaḥarrika*). It is the one he called *Kitāb al-Madīṭīs*, interpreted by

56. Ibid., fol. 53r.

57. MS Paris, BnF, Arabe 2577, fol. 38r.

58. Delhi Arabic 1946, fol. 32v.

Aristotle the Sage, and mentioned by Aristotle to Alexander the King in *al-Isṭimāṭīs*.[59]

According to the text, *al-Madīṭīs* is the title given to the work by Aristotle, who interpreted the knowledge revealed to Hermes about the secrets of creation obtained in a dark crypt.[60] This is the same story as that which we find in *al-Isṭimākhīs*, where Hermes meets his personal *rūḥāniyya*, known as the Perfect Nature.[61] The text proceeds to summarize some content from *al-Isṭimākhīs*. Elsewhere, more textual history is given, clearly delineating the relationship between *al-Madīṭīs* and other texts of the PsAH:

> Aristotle said: You are satisfied only with the most extensive research and analysis (*al-baḥth wa-l-istiqṣā'*). Yes, through it I have found the description of these things, the *nīranj*s, and the employment of wet and dry organs (*a'ḍā'*) that the maker of *nīranj*s needs. These are their hidden secrets that, along with [all] its aspects, were not possible to recount [here] because of their length. I dedicated a book to these [things] and named it *Kitāb al-Asrār* [The Book of Secrets], and I specified in it the times and hours that the practitioner of these *nīranj*s needs to keep. [. . .] The Sage omitted mention of these in their [suitable] place to avoid prolongation [. . .], so he placed them all in a single book and named it *Kitāb al-Ustuwaṭṭās*,[62] which is translated as "the secrets" (*al-asrār*). He also added into this book all the secrets needed from of *Kitāb al-Isṭimākhīs* and *Kitāb al-Isṭimāṭīs*,[63] the book that compiles the secrets the practitioner of *nīranj*s needs. This the Sage described in "the Book of the Qualities of Moving Animals." This book is completed by the aid of God and His kindness. This is the book named *al-Madīṭīs*, Aristotle's interpretations for Alexander the Great.[64]

The book continues with content from *al-Isṭimākhīs*.

4. Dhakhīrat Iskandar (The Treasury of Alexander)

Dhakhīrat Iskandar deals with astrology and the principles of astral influences, talismanry, occult properties, and alchemy. Ana Maria Alfonso-Goldfarb studied the work and, with Safa Abou Chahla Jubran, produced a translation into Portuguese on the basis of MS Madrid, El Escorial no. 947 (which also contains *Ghāyat al-ḥakīm*), and MS Berlin, Staatsbibliothek zu Berlin, Wetzstein II 1209, fols. 1v–42v (see Appendix).[65]

Dhakhīrat Iskandar is one of the most popular of all the pseudo-Aristotelian Hermetica, circulating widely in Persian translations.[66] It begins thus:

59. MS Oxford, Bodleian, Marsh 556, fol. 5r.

60. Ibid., fol. 5v.

61. Delhi Arabic 1946, fols. 4v–5r.

62. الاسطوطاس.

63. الاسطماطيس, الاسطماخيس.

64. Marsh 556, fol. 110v.

65. A. M. Alfonso-Goldfarb, *Livro do Tesouro de Alexandre: Um estudo de hermética árabe na oficina da história de ciência*, trans. Alfonso-Goldfarb and S. Abou Chahla Jubran (Petrópolis: Editora Vozes, 1999), 23–25.

66. C. A. Storey, *Persian Literature: A Bio-Bibliographical Survey*, vol. 2, part 3 (Leiden: Brill, 1977), 457–58.

> Al-Amīr al-Muʿtaṣim had heard that there was an ancient monastery associated with Antiochus, pupil of Alexander Dhū al-Qarnayn, son of Philip the Greek. Antiochus had built and fortified it, appointing a group to service it and to safeguard a house in it that they claim to contain some of the relics (*āyāt*)[67] of the prophets and their remains. For the sake of the group responsible for maintaining the monastery, Antiochus sponsored (*waqqafa ʿalā*) several estates, and he wrote down for them records that he notarized in Byzantium (*thabattahā fī Rūmiyya al-Kubrā*) to preserve its contents, establish covenants with the Byzantines and Greeks so that they would not allow anyone to target them or to obstruct that which he had sponsored for them, and prevent the opening of the gate to the house of the remains to honor [anyone]. So al-Muʿtaṣim sent a message to the people of this monastery, ordering them to allow him [to enter] the house of the remains. He said: "If this house contains nothing but the remains of prophets, as you claim, we will not usurp it or damage what is in there. If it contains money or books of wisdom, there would be no benefit in leaving them sealed there after the death of their owners. We are more entitled to them."[68]

Eventually, according to the narrative, al-Muʿtaṣim also guaranteed the safety of the monastery attendants' lives and property, and they trusted him. Then he dispatched the intelligence courier al-Malik b. Yaḥyā, the astrologer ʿAlī b. Aḥmad, and the engineer Muḥammad b. Khālid to search this monastery, but to no avail; they found nothing. Muḥammad b. Khālid suspected that the attendants had transferred the objects somewhere else. The latter protested and nearly convinced him and al-Muʿtaṣim that nothing had been hidden. After this event, al-Muʿtaṣim saw in a dream the caliph al-Maʾmūn telling him that in this house he should find "the treasury of Alexander Dhū al-Qarnayn and the knowledge of Aristotle and Hermes the Great." As soon as he woke up, he called for Muḥammad b. Khālid and ordered him to destroy the walls and their foundations. Eventually, the searchers found a copper box covered with Hematite (*al-ḥadīd al-ṣīnī*), and inside it was a box made of red gold, locked with a golden key hanging from a golden chain. On the box was writing in Greek script, and inside it was a 360-page golden book whose pages were also made of red gold. Every page had twelve lines, written sometimes in Greek and sometimes in Latin script. This was the treasury of Alexander. To honor Muḥammad b. Khālid, the treasury's finder, al-Muʿtaṣim tasked him with writing the prologue to this highly sought-after and treasured work. The prologue claims that the text was discovered after the sack of Amorium in 223/838.[69] The theologian Ibn Taymiyya (661–728/1263–1328) knew the *Dhakhīra* and considered it a book on the astral religion of the Sabians, among whose adherents he counted Aristotle.[70] There is no reference in the work to any of the other titles of the PsAH, but its contents match their magical concerns and practices.

67. Damage in IO Islamic 673, fol. 1v, obscures the word آيـات (*āyāt*). On close inspection, however, it seems to be آلات (*ālāt*), "possessions", which is found in MS Tehran, Majlis-i Shūrā-yi Millī, no. 4752, fol.1r.

68. MS London, British Library, IO Islamic 673, fols. 1v–2r.

69. IO Islamic 673, fols. 1v–5r.

70. Ibn Taymiyya, *Darʾtaʿāruḍ al-ʿaql wa-l-naql*, ed. M. R. Sālim, 10 vols. (Riyadh: Imam Mohammad Ibn Saud Islamic University, 1991), 1:312.

In the tenth-century magic handbook *Ghāyat al-ḥakīm*, the work's author, Maslama al-Qurṭubī (d. 353/964), mentions a work by Aristotle called *al-Malāṭīs* containing *nīranj*s made by Kīnas al-Hindī, about whom Alexander the Great had inquired. According to al-Qurṭubī, Kīnās had been known as al-Rūḥānī ("the theurgist") and had reached the age of 540 under the emperor Hadrian. Al-Qurṭubī goes on to provide numerous recipes from *al-Malāṭīs* over two chapters.[71] This Kīnas and his *nīranj*s are also mentioned in *al-Madīṭīs*.[72] Nevertheless, beyond such superficial similarities, nothing substantiates a real connection between *al-Malāṭīs* and *al-Madīṭīs*.[73] The title *al-Malāṭīs* is likewise mentioned in the alchemical work *Tadbīr Hirmis al-Harāmisa* and seems to be foundational to it.[74]

The abovementioned third *bāb* of *al-Kitāb al-Shāmil* claims to contain a certain *al-Mīyālāṭīs al-akbar* and says to contain "a description of the [twenty-eight lunar] mansions . . . , their natures and properties, and the names of the angels in charge, their suffumigations, and the *nīranj*s made under them".[75] The work continues with the exposition of the mansions according to this *al-Mīyālāṭīs*.[76] The content is different from that of the *Dhakhīra* and the *Ghāya*. *Al-Malāṭīs al-akbar/Dhakhīrat Iskandar* is thus likely to be a later work that elaborates Aristotelian-Hermetic magical and alchemical practice.

5. Al-Shuʿrā al-Yamāniyya or Aḥkām Ṭulūʿ al-Shuʿrā al-Yamāniyya

The text known as *al-Shuʿrā al-yamāniyya* is a popular, predominantly astrological text on prognostication by the star Sirius. The prologue claims that it is based on a text by Hermes, *The Treasured Book* (*al-Kitāb al-Makhzūn*), on which Aristotle drew and which he interpreted. It was translated into "the ancient tongue"[77] by Nafṭūya the Sage, and in MS Paris, BnF, Arabe 2578, we are told that it was known to Wahb b. al-Munabbih (34–109/654–728), the author of a sacred history entitled *Qiṣaṣ al-anbiyāʾ* (Stories of the Prophets).[78] Edgar Blochet saw no reason to contradict this claim and proposed a Greek or Syriac origin for the work. He went as far as stating that *al-Shuʿrā* was the basis for the part of Arabe 2577 that contains *al-Ustuwaṭṭās* and *K. ʿIlal al-rūḥāniyyāt*, an opinion accepted by Sezgin.[79] However, a comparison of the works does not support this assertion. The cosmology and

71. Al-Qurṭubī, *Picatrix*, ed. Ritter, 248–85; Sezgin, *Geschichte des arabischen Schrifttums*, 7:66.

72. Marsh 556, fol. 47r. On Kīnās and *nīranj*s, see Sezgin, *Geschichte des arabischen Schrifttums*, 7:66; Ullmann, *Natur- und Geheimwissenschaften*, 367–68.

73. Ullmann, *Natur- und Geheimwissenschaften*, 366–67.

74. P. Carusi, "Alchimia ermetica e arte del vetro: Il *Tadbīr Harmis al-Harāmisa*," *Quaderni di studi arabi* 10 (1992): 175–200, at 176–78; Ullmann, *Natur- und Geheimwissenschaften*, 168, 366–68; Sezgin, *Geschichte des arabischen Schrifttums*, 4:39 (no. 3).

75. MS, London, British Library, Delhi Arabic 1915, fols. 91r–91v; SOAS 46347, fols. 30v–31v.

76. SOAS 46347, fols. 31r–59v.

77. In MS Paris, BnF, Arabe 2578, fol. 1v: "the ancient book," *kitāb*.

78. Arabe 2580, fol. 1v.

79. E. Blochet, "Études sur le Gnosticisme musulman," *Rivista degli studi orientali* 4, no. 1 (1911): 47–79, at 57–58; see also Sezgin, *Geschichte des arabischen Schrifttums*, 4:35.

content of *K. ʿIlal al-rūḥāniyyāt* (which, as we have seen, included *al-Ustuwaṭṭās*) differ considerably from those of *al-Shuʿrā* despite their common astrological concerns, so the latter seems more like a sister text to the former rather than its basis.

II. Dating the Pseudo-Aristotelian Hermetica

For dating purposes, we are fortunate that the PsAH were influential on some major early texts on magic, in which they are cited by name. In some recensions of the tenth-century esoteric encyclopedia of Ikhwān al-Ṣafāʾ known as *Rasāʾil Ikhwān al-Ṣafāʾ* (The Epistles of the Brethren of Purity), reference is made to *al-Ustuwaṭṭās* as the source of the epistle's discussion of the lunar mansions.[80] The *Rasāʾil* were written in Iraq in the first half of the tenth century, thus giving a *terminus ante quem* for *al-Ustuwaṭṭās*.[81] To this we can add references made in one of the best-known texts on astral magic in Arabic, *Ghāyat al-ḥakīm*, which was written in 348/959 according to its Andalusian author, Maslama al-Qurṭubī, who traveled to the eastern domains, including Iraq.[82] Another possible clue to the date of the PsAH comes from one of the treatises themselves, namely, the version of *al-Isṭimāṭīs* found as the second part of *K. ʿIlal al-rūḥāniyyāt* in Arabe 2577 and MS Manisa, National Library of Manisa, no. 1461. That text claims that the prominent translator Ḥunayn b. Isḥāq (d. 260/873) had come across the text among works written by Aristotle and translated it from Greek into Arabic.[83] If this is true, we have a *terminus post quem* for the text. However, the putative role of Ḥunayn b. Isḥāq is one of the apocryphal elements of the PsAH texts alongside the attribution of the texts to Aristotle and the attribution of Aristotle's knowledge to Hermes. No such translation by Ḥunayn is recorded in historical accounts, and I have found no evidence of the work's Greek origins or references to it in ancient texts. The mention of Ḥunayn is reminiscent of the attribution to him of the aforementioned book on stones in Arabe 2775 and of the translation of *Kitāb Nawāmīs Aflāṭun* (The Secrets of Plato, known in Latin as *Liber Vaccae*), a ninth-century work mentioned in the early

80. Ikhwān al-Ṣafāʾ, *Rasāʾil Ikhwān al-Ṣafāʾ*, 4 vols. (Beirut: Dār Ṣādir, 2008), 4:443–45; MS Istanbul, Süleymaniye, Atıf Efendi 1681, fols. 572a–576a; MS Manisa, National Library of Manisa (Genel Kitaplik), no. 1461, fols. 18v–25v.

81. According to Maribel Fierro, "it is safe to conclude that they were written before 325/936"; M. Fierro, "Bāṭinism in al-Andalus: Maslama b. Qāsim al-Qurṭubī (d. 353/964), Author of the *Rutbat al-Ḥakīm* and the *Ghāyat al-Ḥakīm* (*Picatrix*)," *Studia Islamica* 84 (1996): 87–112. If the text's reference to ʿĪd Ghadīr points to the public commemoration of Ghadīr Khumm started by the Buyids, the *terminus post quem* should be 945, the year the Buyids took over Baghdad. This is supported by Abū Ḥayyān al-Tawḥīdī's account of the Ikhwān al-Ṣafāʾ's being active under the Buyids; see A. Hamdani, "Abū Ḥayyān al-Tawḥīdī and the Brethren of Purity," *International Journal of Middle East Studies* 9, no. 3 (1978): 345–5. See also G. de Callataÿ, "Magia en al-Andalus: *Rasāʾil Ikhwān al-Ṣafāʾ*, *Rutbat al-ḥakīm* y *Ghāyat al-ḥakīm* (*Picatrix*)," *al-Qanṭara* 34, no. 2 (2013): 297–344.

82. Al-Qurṭubī, *Picatrix*, ed. Ritter, 1.

83. Arabe 2577, fol. 38r.

tenth-century *Kitāb al-Tajmīʿ* (The Book of Assemblage) attributed to Jābir b. Ḥayyān.[84] All of this lends greater support to a ninth-century dating.

In one manuscript of *al-Shuʿrā al-yamāniyya* (Arabe 2578, fol. 1v), the reader is told that Wahb b. al-Munabbih knew the text as he was an expert on the subject of astral influences. The suggestion that *al-Shuʿrā* was composed in the eighth century is tempting, especially if it was indeed translated from Middle Persian. However, this reference to Wahb is absent from the rest of the manuscripts consulted. Further, there is nothing to suggest that the claim is true, although the association with Wahb is interesting; existing fragments of his *Kitāb al-Mabādiʾ* (The Book of Principles) indicate his interest in astral knowledge, and this is confirmed by some accounts.[85]

Blochet argues that "the political horizon" of the *Shuʿrā*'s author is that of the first Mamluk sultans, thus suggesting a twelfth- to fourteenth-century Egyptian origin. He supports his argument with the geographic names that appear in the text—namely, Rūm, Syria, Constantinople the Great, Maghreb, Algeria and Kairouan, Nūba, Abyssinia, India and Sind, China, and the countries of the Turks and Kiptchak.[86] The claim remains highly speculative and unconvincing. The perceived Egyptian connection rests on the fact that the text provides predictions for the flooding of the Nile, but interest in this topic was hardly limited to Mamluk-era Egyptians; it was also a concern for the Abbasids, whose centralized taxation systems and extensive administrative reach encompassed Egypt. The flooding of the Nile would have been a significant event also for other dynasties in other periods. Nevertheless, like the *Dhakhīra*, the *Shuʿrā* is not cited in early texts as the rest of the PsAH are, and neither work contains cross-references to other PsAH texts. This means that they cannot be set firmly in the ninth century, unless we take at face value the references to the ninth-century sack of Amorium in the *Dhakhīra* and to Wahb b. Munabbih, who was active in the eighth century, in the *Shuʿrā*. Without further evidence, the dating of these two texts remains open to challenge.

84. L. Saif, "The Cows and the Bees: Arabic Sources and Parallels for Pseudo-Plato's *Liber Vaccae* (*Kitāb al-Nawāmīs*)," *Journal of the Warburg and Courtauld Institutes* 79 (2016): 1–47. David Pingree considers the *Liber Vaccae* a Sabian text on the basis of a passage that describes the convictions of the masters of secrets (*nawāmīs*), *opfices aneguemis*; however, nowhere in the passage are Sabians mentioned. D. Pingree, "The Ṣābians of Ḥarrān and the Classical Tradition," *International Journal of the Classical Tradition* 9, no. 1 (Summer 2002): 8–35, at 34–35; M. Van der Lugt, "'Abominable Mixtures': The *Liber Vaccae* in the Medieval West, or the Dangers and Attractions of Natural Magic," *Traditio* 64 (2009): 229–77, at 229, 232–33; D. N. Hasse, "Plato Arabico-Latinus: Philosophy—Wisdom Literature—Occult Sciences," in *The Platonic Tradition in the Middle Ages: A Doxographic Approach*, ed. S. Gershwin and M. J. F. M. Hoenen, 31–66 (Berlin: de Gruyter, 2002), 53–54; D. Pingree, "Plato's Hermetic Book of the Cow," in *Il Neoplatonismo nel Rinascimento*, ed. P. Prini, 133–45 (Rome: Istituto della Enciclopedia Italiana, 1993), 133–34.

85. Sezgin, *Geschichte des arabischen Schrifttums*, 7:99; R. G. Khoury, "Un fragment astrologique inédit attribué à Wahb b. Munabbih," *Arabica* 19, no. 2 (1972): 139–44; N. Abbott, "Wahb b. Munabbih: A Review Article," *Journal of Near Eastern Studies* 36, no. 2 (1977): 103–12; A.-L. De Prémare, "Wahb b. Munabbih, une figure singulière du premier islam," *Annales: Histoire, Sciences Sociales* 3 (2005): 531–49.

Blochet, "Études sur le Gnosticisme musulman," 57–58; see also Sezgin, *Geschichte des arabischen Schrifttums*, 4:35–35.

86. Blochet, "Études sur le Gnosticisme musulman," 61–62.

The dating of certain PsAH texts has been connected to the dating of the better-known *Sirr al-khalīqa* (The Secret of Creation) by pseudo-Apollonius, a "hermetic" cosmological text concerned mostly with the etiology of all created and generated things, from angels to minerals, with pronounced astrological undertones. The real Apollonius (Bālīnās) was known as "the master of talismans," according to various Arabic sources.[87] In this work, a Christian priest called Sājiyūs from Nablus is mentioned as the translator of "*Kitāb al-ʿIlal*" which was the title of the book which was given to Apollonius by the Perfect Nature (*al-ṭibāʿ al-tāmm*) in the dark crypt from which he also retrieved the Emerald Tablet.[88]

The first part, or introduction, of *Sirr al-Khalīqa* is a commentary by the priest establishing the truth of monotheism (a theme that is continued in the following part), and it contains an interpretation of twenty-two divine names.[89] The priest identifies himself as a Rūmī (Byzantine) and positions his beliefs about the nature of God in contrast to those of the Brahmins, who caused the Indians to deviate from the words of the Buddha, believing that God is a body of light. He also denounces the Sabians for believing that God mixes with his creation.[90] Minor interventions by a Muslim editor, such as prayers upon the Prophet Muḥammad as section starters and conclusions, are found through the text.[91]

Ursula Weisser, Martin Plessner, and Hellmut Ritter have identified several parallels between *al-Ustuwaṭṭās*, *al-Isṭimāṭīs*, and *Sirr al-khalīqa*, especially the division of causes into four types[92] and the story of the dark crypt in which the existence of the Perfect Nature is revealed and the Emerald Tablet.[93] Thus, the dating of one can shed light on the dating and context of the other and locates its place in a particular intellectual tradition or religious current.

Plessner was hesitant to ascribe a pre-Islamic origin to *Sirr al-khalīqa,* although he considered it older than the PsAH treatises. Weisser argued that the author of *Sirr al-khalīqa* used "a pre-Islamic version" of *al-Isṭimāṭīs*.[94] She concluded, on the basis of brief and speculative linguistic comparisons, that both texts had a non-Arabic origin. Zimmermann, in his review of Weisser's monograph, asserted that Weisser was right in arguing that *Sirr al-khalīqa* depends on *al-Isṭimāṭīs*, but wrong in suggesting that the borrowing took place

87. M. K. Zanjani Asl, "*Sirr al-khalīqa* and Its Influence in the Arabic and Persianate World: ʿAwn b. al-Mundhir's Commentary and Its Unknown Persian Translation," *al-Qanṭara* 37, no. 2 (2016): 435–73, at 437–40.

88. Ps. Apollonius of Tyana, *Buch über das Geheimnis der Schöpfung und die Darstellung der Natur (Buch der Ursachen)*, ed. U. Weisser (Aleppo: Institute of the History of Arab Science, University of Aleppo, 1979), 100.

89. Ps. Apollonius, *Geheimnis der Schöpfung*, 1-50, 53-65.

90. Ps. Apollonius, *Geheimnis der Schöpfung*, 63–65; U. Weisser, *Das Buch über das Geheimnis der Schöpfung von Pseudo-Apollonius von Tyana* (Berlin: de Gruyter, 1980), 82–83.

91. Ps. Apollonius, *Geheimnis der Schöpfung*, 99–100.

92. Ps. Apollonius, *Geheimnis der Schöpfung*, 13–14; cf. *al-Ustuwaṭṭās*, Arabe 2577, fols. 2r–3r.

93. Ps. Apollonius, *Geheimnis der Schöpfung*, 5–7; cf. *al-Isṭimākhīs*, Delhi Arabic 1946, fols. 4r–5v. For the parallels, see Weisser, *Das Buch über das Geheimnis der Schöpfung*, 55, 68–69; M. Plessner, "Neue Materialien zur Geschichte der Tabula Smaragdina," *Der Islam* 16 (2009): 77–113, at 93–95; Maslama al-Qurṭubī, *Picatrix: Das Ziel des Weisen; Translated to German from the Arabic*, trans. and ed. H. Ritter and M. Plessner (London: Warburg Institute, 1962), 198–202. See also van Bladel, *Arabic Hermes*, 124–25, 158–61, 170–71, 178–79.

94. Weisser, *Das Buch über das Geheimnis der Schöpfung*, 69.

at a "pre-Arabic" stage. In his view, it was more probable that it was the "Arabic version" of *al-Istimāṭīs* that had been used in the compilation of the Arabic version of *Sirr al-khalīqa*.[95]

There is no reliable information that suggests a pre-Islamic origin for either *Sirr al-khalīqa* or the PsAH. Their pseudo-epigraphic nature places them within a widespread tradition of (mis)attributions common in the ninth and tenth centuries. Applying the principle of Occam's razor, *Sirr al-khalīqa* is more likely a text composed or heavily paraphrased by the priest Sājiyūs and a Muslim redactor, whose touches are present throughout the text. As Weisser herself has pointed out, it is difficult to differentiate the "original" text from these intrusions.[96] The author knew *al-Isṭimāṭīs* and *al-Isṭimākhīs*, and *Sirr al-khalīqa* was where he transferred, negotiated, rejected, and Christianized some of their doctrines. This becomes even more evident when we look at his discourse on monotheism and his take on the *rūḥāniyyāt*, which he calls *rūḥāniyyūn*.

The author of *Sirr al-khāliqa* criticizes the Sabians, "the people (*aṣḥāb*) of trees," "the people of the Sun," "the people of the stars," idolaters, "the people of the natures (*aṣḥāb al-ṭabāʾiʿ*)," and others who claim that God has a partner in creation.[97] He challenges a particular group of people on their belief that "the First Creator authorized some of his creatures to create"[98]—a belief reminiscent of the power given to Hādūs by the

95. F. W. Zimmermann, review of *Das Buch über das Geheimnis der Schöpfung* by Weisser, *Medical History* 25 (1981): 439–40; J. Ruska, *Tabula Smaragdina: Ein Beitrag zur Geschichte der Hermetischen Literatur* (Heidelberg: Carl Winter's Universitätsbuchhandlung, 1926), 67. Antoine Isaac Silvestre de Sacy believed *Sirr al-khāliqa* to be an originally Greek work penned by the Christian priest Sājiyūs and subsequently translated into Syriac and expanded anonymously. This Syriac version was then translated into Arabic by a Muslim who added Islamic linguistic elements (Weisser, *Das Buch über das Geheimnis der Schöpfung*, 8). François Nau, on the other hand, contended that the text's "essence" was indeed attributable to Apollonius of Tyana, although it had undergone many redactions. He identified the translator into Syriac as Sergios (d. 536) from Ras al-Ayn in Syria and argued that Ḥunayn b. Isḥāq was the translator into Arabic; see, Ibid., 9. Julius Ruska was of the opinion that the work had been produced between the sixth and eighth centuries in northeast Persia; he remained uncertain about a Greek original and was inclined to consider Sājiyūs the invention of a Muslim redactor; see, J. Ruska, *Tabula Smaragdina: Ein Beitrag zur Geschichte der Hermetischen Literatur* (Heidelberg: Carl Winter's Universitätsbuchhandlung, 1926), 122–27, 129. Martin Plessner saw a pre-Islamic origin unlikely; see, Martin Plessner, "Neue Materialien zur Geschichte der Tabula Smaragdina," *Der Islam* 16 (2009): 77–113. Paul Kraus suspected that the author, who belonged to Hellenized circles in Syria, adapted an early translation into Arabic, with a final redaction under the caliph al-Maʾmūn; see, P. Kraus, *Jābir ibn Ḥayyān: Contribution à l'histoire des idées scientifiques dans l'islam*, vol. 1: *Le corpus des écrits Jābiriens* (Cairo: French Institute of Oriental Archaeology, 1943), 290-303. Louis Massignon deemed it the work of a "heterodox Muslim" under al-Maʾmūn, based on a "hermetic prototype"; see, L. Massignon, "Inventaire de la littérature hermétique arabe," in Festugière, *La révélation d'Hermès Trismégiste*, 1:384–400, at 395. Ruska, meanwhile, concluded that "the Arabic Hermetic writings"—by which he meant the PsAH—are not based on Coptic or Greek models but rather were created in the tenth or eleventh century on the basis of borrowings from *Ghāyat al-ḥakīm*, which at that time was erroneously attributed to the mathematician Maslama al-Majrītī (950–1007); see, J. Ruska, *Tabula Smaragdina: Ein Beitrag zur Geschichte der Hermetischen Literatur* (Heidelberg: Carl Winter's Universitätsbuchhandlung, 1926), 67.

96. Weisser, *Das Buch über das Geheimnis der Schöpfung*, 69.

97. Ps. Apollonius, *Geheimnis der Schöpfung*, 35–37.

98. Ibid., 46.

"First Creator" in *al-Isṭimāṭīs*. Furthermore, he refers to Adam as Admānūs, the name used across the PsAH, and describes him, along with Lucifer (*Iblīs*), as the first sinner.[99]

In a subsequent section, "On the Creation of Angels," the author describes angels as "the luminescent intelligences" (*al-arwāḥ al-mutafakkira al-nāʾira*). The higher ones, he says, are created from simple fire, water, or air, but not from earth, as that is too terrestrial for their sublime nature. Such beings also include *jinn*, devils (*shayāṭīn*), "dwellers of the air, fire, sea and land," and the *rūḥāniyyūn* of the two luminaries (the sun and the moon), planets, stars, and spheres who govern celestial and terrestrial affairs.[100] Unlike the PsAH, *Sirr al-khalīqa* seeks to "demystify" the nature of these beings, repeatedly stressing that though they are immortal, but like animals and plants, they emerge from the elements, not from ether or through some other cosmogenic forces.[101] The author goes on to describe the traits and responsibilities of the planetary *rūḥāniyyūn*, which include fighting off rebellious devils (*maradat al-shayāṭīn*). Interestingly, the role of guardian angels (*al-ḥāfiẓūn*) over children is given to mercurial *rūḥāniyyūn*.[102] Lunar *rūḥāniyyūn* are assigned to guard the stars from the evil Shīṭāʾīl (Lucifer) and his progeny, who eavesdrop on the Higher Assembly, that is, the solar *rūḥāniyyūn*.[103] This recalls Quran 37:6–8: "We have adorned the low heavens with embellishing planets (6) as protection from every rebellious devil (*shayṭān mārid*) (7) so they may not eavesdrop on the Higher Assembly, pelted from every side (8)." Moreover, the author provides a peculiar angelic hierarchy. The two highest classes of supra-solar angels are what he refers to as *Samūrā* and the Carriers (*al-ḥamala*), and below them are the subsolar *Karūbā* and the Treasurers (*khazana*). Their description contains similarities, albeit unsystematic ones, with Christian angelology. The *Karūbā* are likely to be the cherubim; both groups are described as having four wings. The *Samūrā* occupy a position similar to that of the seraphim, but they have zoomorphic appearances (the faces of oxen, lions, and eagles, in addition to human faces), a feature traditionally associated with the cherubim. The Carriers are reminiscent of the Quranic *ḥamalat al-ʿarsh* (the Carriers of the Throne), who, like the Christian Thrones, occupy a high station. The Treasurers—the lowest category of angels according to *Sirr al-khalīqa*—recall the Dominations.[104] This angelic hierarchy is different to the *Celestial Hierarchy* of pseudo-Dionysius the Areopagite (fifth–early sixth century), which was translated as part of the *Corpus Dionysiacum* in 1009 by ʿAlī ʿĪsā b. Isḥāq of Emesa.[105] However, Christian medieval angelology coalesced and was formalized in the thirteenth century, when reflections on the angels' metaphysical nature came to rely more heavily on Aristotelian problems and categories. *Sirr al-khalīqa*'s reworking of Christian

99. Ibid., 47–48.

100. Ibid., 161–56.

101. Ibid., 155–58.

102. Ibid., 169.

103. Ibid., 166, 178–79.

104. Ibid., 179–84.

105. A. Treiger, "The Arabic Version of Pseudo-Dionysius the Areopagite's 'Mystical Theology,' Chapter 1: Introduction, Critical Edition, and Translation," *Le Muséon* 120, nos. 3–4 (2007): 365–93.

angelology can be seen to reflect an important moment before its standardization, when scholastics were developing "their ideas about angels and the creation in response to Arab and Greek ideas about intelligences and the origins of the world."[106] The *Sirr al-khalīqa*'s major objectives were spurred by ideas about the *rūḥāniyyāt* found in *al-Isṭimāṭīs* and *al-Isṭimākhīs*, which supports the conclusion that the latter two texts preceded *Sirr al-khalīqa*.[107]

Before the tenth century, although references to Apollonius as a master of talismans and philosopher abound, direct citations of *Sirr al-khalīqa* are very rare, and even where its influence has been detected, the evidence has fallen short.[108] A notable exception is the Jābirian corpus, specifically *Kitāb al-Aḥjār ʿalā raʾī Bālīnās* (The Book of Stones According to Apollonius) and *Kitāb Mīdān al-ʿaql* (Garden of the Intellect). In addition, the Ismāʿīlī *dāʿī* Abū Ḥātim al-Rāzī (d. 322/935) claims in his *Kitāb al-Nubuwwa* (The Book of Prophecy) that *Sirr al-Khalīqa* was apocryphal and had been written in the time of al-Maʾmūn (r. 196–201/813–833). However, this statement is too obscure to be accorded much weight, especially given the literary genre of the work that contains it—namely, a debate between Abū Ḥātim al-Rāzī and Abū Bakr b. Zakariyā al-Rāzī (251–313/865–925).[109]

Accepting the Jābirian corpus as the late ninth- or early tenth-century product of a collective united by a conception of a Jābirian program of knowledge centered on the occult sciences, especially alchemy and magic,[110] and further accepting 959 as the time of composition of the *Ghāya*,[111] which cites the PsAH and the Jābirian *Kitāb al-Nukhab* (The Compendium)—the latest treatise in the corpus – we may place the PsAH, *Kitāb al-Nukhab*, and *Kitāb al-Aḥjār* chronologically before the *Ghāya*. There is no evidence of the influence of *Sirr al-khalīqa* on the *Ghāya*, which is not surprising given their different contents and especially their disparate positions on the *rūḥāniyyāt*; in addition, perhaps they were

106. D. Keck, *Angels and Angelology in the Middle Ages* (Oxford: Oxford University Press, 1998), 71.

107. *Risālat Bālīnās al-Ḥakīm fī taʾthīr al-rūḥāniyyāt*, MS Madrid, El Escorial, no. 921; *Kitāb Ṭalāsim Bālīnās al-akbar*, MS Paris, BnF, Arabe 2250, fols. 84r–134v. The latter title is also given for MS Berlin, Petermann I 66, fols. 41v–74r, which has the same prologue as the aforementioned Madrid manuscript. The rest of its contents are an amalgam of material from the PsAH. On *Kitāb Ṭalāsim Bālīnās al-akbar*, its Greek background, and the two manuscripts, see L. Raggetti, "Apollonius of Tyana's Great Book of Talismans," *Nuncius* 34 (2019): 155–82. The *rūḥāniyyāt* in *Risālat Bālīnās al-Ḥakīm fī taʾthīr al-rūḥāniyyāt* (The Epistle of Apollonius the Sage on the Influences of the *Rūḥāniyyāt*) are construed in a way that is more aligned with their depiction in the PsAH, whereas in *Kitāb Ṭalāsim Bālīnās al-akbar* (The Great Book of Talismans by Apollonius), the spiritual agents are angelic (*malak*) with Hebrew names such as Ishmiyāl and Hirbīl.

108. For direct references from the early tenth century, especially by Ismāʿīlī *dāʿī*s, see Zanjani Asl, "*Sirr al-khalīqa* and Its Influence."

109. Jābir b. Ḥayyān, *Mukhtār rasāʾil Jābir b. Ḥayyān*, ed. P. Kraus (Cairo: Maktabat al-Khānjī, 1936), 126, 223; S. N. Haq, *Names, Natures, and Things: The Alchemist Jābir ibn Ḥayyān and His "Kitāb al-Aḥjār"* (Dordrecht: Kluwer, 1994), 29–30; Sezgin, *Geschichte des arabischen Schrifttums*, 4:77–88.

110. P. Kraus, *Jābir ibn Ḥayyān: Contribution à l'histoire des idées scientifiques dans l'islam*, vol. 1: *Le corpus des écrits Jābiriens* (Cairo: French Institute of Oriental Archaeology, 1943), xxiii–xxvi, xxxiv–xxv.

111. As indicated by the manuscripts; see also Fierro, "Bāṭinism in al-Andalus," 97.

composed too closely together in time for one to have influenced the other. We are thus left with two possible scenarios:

Scenario 1:

PsAH (early ninth century) → *Sirr al-khalīqa* (mid- to late ninth century) → *al-Nukhab* and *al-Aḥjār* (early tenth century) → *Ghāya* (mid-tenth century)

This scenario places *Sirr al-khalīqa* in or near the time of al-Maʾmūn's reign. If one accepts Sezgin's and Haq's objections to Kraus's dating of the Jābirian corpus and their alternative dating of it to the eighth century, a different,[112] less likely, scenario emerges in which the PsAH is a seventh- or eighth-century composition and *Sirr al-khalīqa* is written shortly after it:

Scenario 2:

PsAH (seventh–eighth century) → *Sirr al-khalīqa* (seventh–eighth century) → *al-Nukhab* and *al-Aḥjār* (eighth century) → *Ghāya* (mid-tenth century)

There is no evidence of the influence of the PsAH on the magic or worldview of the Jābirian corpus. Al-Kindī (d. between 252–260/866–873) and Thābit b. Qurra (d. 288/901), both of whom wrote on magic, also show no knowledge of the PsAH in their writings,[113] and neither does Abū Maʿshar al-Balkhī, who took a deep interest in the legend of Hermes. Their neglect of the PsAH could mean that these texts were not produced as early as the seventh or eighth centuries; however, it is just as likely to be indicative of the diversity of magic traditions in these foundational periods in the history of the Islamic occult sciences.

In dating the PsAH, some contextual considerations are necessary, especially given the absence of a smoking gun. The first of these is the trend of Hermetic enthusiasm witnessed in and around the ninth century. Among the Hermetic works translated from Greek to Middle Persian were a treatise known by its Latin title *De stellis beibeniis* and translated into Arabic as *Kitāb Asrār al-nujūm* (The Book of Astral Secrets), which David Pingree dates to 505, and *Kitāb Hirmis fī taḥāwīl sinī al-mawālīd* (The Book of Hermes on the Revolutions of the Years of the Nativities), which was translated from Persian into Arabic.[114] The eighth-century astrologer-translator Abū Sahl b. Nawbakht (eighth century) in his now lost *Kitāb al-Nhmṭʾn*[115] and the great astrologer Abū Maʿshar in his *Kitāb al-Ulūf* (The Book

112. Sezgin, *Geschichte des arabischen Schrifttums*, 4:191–213; Haq, *Names, Natures, and Things*, 19–29.

113. M.-Th. d'Alverny and F. Hudry, "Al-Kindi: *De radiis*," *Archives d'historie doctrinale et littéraire du Moyen Âge* 41 (1974): 139–260; G. Bohak and C. Burnett, *Thābit ibn Qurra on Talismans and Pseudo-Ptolemy on Images 1–9: A Reconstruction Based on the Judaeo-Arabic and Latin Texts, Together with the "Liber Prestigiorum Thebidis"* (forthcoming); C. Burnett and G. Bohak, "A Judaeo-Arabic Version of Ṯābit ibn Qurra's *De Imaginibus* and Pseudo-Ptolemy's *Opus Imaginum*," in *Islamic Philosophy, Science, Culture, and Religion: Studies in Honor of Dimitri Gutas*, ed. F. Opwis and D. Reisman, 179–200 (Leiden: Brill, 2012).

114. Van Bladel, *Arabic Hermes*, 28; D. Pingree, "Classical and Byzantine Astrology in Sasanian Persia," *Dumbarton Oaks Papers* 43 (1989): 227–39.

115. I follow Van Bladel and use the name *Nhmṭʾn* (with short vowels unknown) since "it has never been satisfactorily explained, though presumably it masks a distorted Middle Persian or other Iranian word; see, Van Bladel, *Arabic Hermes*, 30-31, and n. 37.

of Thousands) further articulated and popularized a "historical" narrative for Hermes the Sage.[116] As van Bladel writes: "References to Hermes and Zoroaster in such works illustrate for us one aspect of the intellectual milieu of the third century, when Hermetic texts were said by our Arabic sources to have been transmitted to the Persian Empire."[117] In a recent article, van Bladel demonstrates the frustration expressed by the astrologer al-Birūnī (d. after 442/1050) in *Ifrād al-maqāl fī amr al-ẓilāl* (The Special Treatise on the Subject of Shadows) about books on alchemy and talismans parading as authentic texts by Hermes. Al-Bīrūnī was familiar with the works of eighth- and ninth-century Arabic astrologers who used and cited astrological books attributed to Hermes.[118]

The upswell of interest in Hermes not only supports a ninth-century date for the PsAH but also demonstrates the entanglement of Zoroastrian ideas, especially concerning astrology, with intellectual and religious thought in the ninth century in the eastern domains of the Islamic Mediterranean, including the eastern and southern frontiers of Byzantium. Such entanglement is also an evident feature of the PsAH. Furthermore, between the eighth and tenth centuries, the rate of conversion from Zoroastrianism to Islam or to other Zoroastrian subaltern currents was high.[119] Moreover, the early Abbasids sought to create a new Islamic polity that borrowed some elements from Persian Zoroastrian traditions, and this aim manifested in the administrative power of the Barmakid family and the employment of Zoroastrian leaders for projects of translation from Middle Persian to Arabic.[120] In the case of astrology, Pingree argues that early Abbasid knowledge "was largely Sasanian and Greek in origin with Indian material entering in through its being intermingled with the Greek and Iranian elements in Sasanian astrology, while most of the practicing astrologers of the late eighth and early ninth centuries were Iranian."[121] Finally, it was during the ninth

116. Van Bladel, *Arabic Hermes*, 27 esp. n. 21, 28, 31–32; D. Pingree, *The Thousands of Abū Maʿshar* (London: Warburg Institute, 1968); C. Burnett, "The Legend of the Three Hermes and Abū Maʿshar's *Kitāb al-Ulūf* in the Latin Middle Ages," *Journal of the Warburg and Courtauld Institutes* 39 (1981): 231–34.

117. Van Bladel, *Arabic Hermes*, 47.

118. K. van Bladel, "Al-Bīrūnī on Hermetic Forgery," *Gnosis: Journal of Gnostic Studies* 3 (2018): 54–66, at 58, 63. The following is al-Bīrūnī's statement as translated by van Bladel: "I do not say this to defame Hermes, for it is he who occupied such a position with respect to wisdom that the Greeks counted him among the prophets. He transmitted the sciences of the Chaldaeans to Egypt, and the Chaldaeans—the people of Babylon—were so evidently advanced in the sciences that they were called sorcerers on that account, even if nothing is extant of their sciences today apart from their conception of the motion of the celestial sphere—which bespeaks a continuous care in observing it for millennia—and the traditions related from them by practicing astronomers, Ptolemy and others. Nevertheless, the books of Hermes, and the books of alchemy and talismans, suffer from an affliction: that fakers are devoted to composing and forging them, imputing them to the Sages."

119. T. Daryaee, "Zoroastrianism under Islamic Rule," in *The Wiley Blackwell Companion to Zoroastrianism*, ed. M. Stausberg, Y. S.-D. Vevaina, and A. Tessmann, 103–18 (Chichester: Wiley Blackwell, 2015), 104 and 108; J. K. Choksy, "Zoroastrians in Muslim Iran: Selected Problems of Coexistence and Interaction during the Early Medieval Period," *Iranian Studies* 20, no. 1 (1987): 17–30, at 21.

120. Daryaee, "Zoroastrianism under Islamic Rule," 107; D. Gutas, *Greek Thought, Arabic Culture: The Graeco-Arabic Translation Movement in Baghdad and Early ʿAbbāsid Society (2nd–4th/8th–10th Centuries)* (London: Routledge, 1998), 29, 45–51, 136.

121. Pingree, *From Astral Omens to Astrology*, 41.

century that a significant number of Zoroastrian Middle Persian texts were taking shape as canon.[122] The *Dēnkard* and the *Bundahishn* were part of "a new didactic, apologetic and polemic literature" produced in this period.[123]

Recently, Emily Cottrell and Micah Ross challenged the "Middle Persian hypothesis" of Pingree, who, in a series of publications instrumentalized the discovery of an Arabic version of Dorotheus's *Pentabiblos* to overemphasize, according to Cottrell and Ross, the role of a Persian intermediary between Greek astrology and its Arabic reception.[124] Pingree based his claim on a report by Ibn Nawabakht found in Ibn al-Nadīm's *Fihrist*. Cottrell and Ross questioned the strength of Pingree's evidence and concluded that there is no strong support for the claim that a third-century project of translating scientific texts into Persian paved the way for the Arabic reception of Greek ideas, as Pingree argued.[125] It is not the aim of the present article to insert the PsAH within some fixed line of transmission, whether directly from Greece or through an intermediate. However, what the narratives and reports of Ibn Nawabakht, Ibn al-Nadīm, and others do provide is an insight into how Islamic culture in the ninth and tenth centuries envisioned its scientific and intellectual heritage. It is this heritage and historicization that is internalized in the PsAH, whether by a trajectory of textual and material transmission or by naturalization. It remains true that the PsAH are the product of a dynamic atmosphere of translation activity, hermetic fervor, and codification of Middle Persian Zoroastrian religious texts, whether they contain Greek influences or not.[126]

III. Aristotelian, Hermetic, or Sabian?

Around one hundred pseudo-Aristotelian works were in circulation in the Middle Ages. These works were overwhelmingly concerned with the occult sciences, including alchemy,

122. Daryaee, "Zoroastrianism under Islamic Rule," 109–10; Choksy, "Zoroastrians in Muslim Iran," 18, 20.

123. J. C. Bürgel, "Zoroastrianism as Viewed in Medieval Islamic Sources," in *Muslim Perceptions of Other Religions: A Historical Survey*, ed. J. Waardenburg (New York: Oxford University Press, 1999), 202–12, at 203.

124. D. Pingree, "Classical and Byzantine Astrology in Sasanian Persia," *Dumbarton Oaks Papers* 43 (1989): 227–39; Pingree, *From Astral Omens to Astrology*, 39–50.

125. E. J. Cottrell and M. T. Ross, "Persian Astrology: Dorotheus and Zoroaster, According to the Medieval Arabic Sources (8th–11th Century)," in *Proceedings of the Eighth European Conference of Iranian Studies*, vol. 1: *Studies in Pre-Islamic Iran and on Historical Linguistics*, ed. P. B. Lurje, 87–105 (Saint Petersburg: State Hermitage Publishers, 2019).

126. Cottrell and Ross show that the "Middle Persian hypothesis" focused on a reference to the *Almagest* of Ptolemy in book 4 of the *Dēnkard* but neglected the fact that "the *megistīk ī hrōmāy*" (the *Megistik*, or "Romans," among the Greeks), referred to Ptolemy's work by its Arabic title, not its Greek one (*Syntaxis*). They also point out that book 4 of the *Dēnkard*, like Ibn Nawbakht, indicated that the growing interest in science came from Khosraw Anūshirwān, so the hypothesis of a third-century Persian intervention was unnecessary. Ptolemy was known at the sixth-century Sasanian court from testimonies describing the comparison of the Indian and Ptolemaic coordinates that led to the creation of the *Zīj al-Shahriyar*. Cottrell and Ross, "Persian Astrology," 90. This information lends an element of credence to the historical narrative in al-Sakkākī's *Shāmil* about Aḥmad b. Ṭūlūn's guest, who displays a single book retrieved from the treasuries of Khosraw I by "Kanaka the Indian" (see above).

chiromancy, and physiognomy.[127] Some of these works were renowned and influential, such as *Kitāb al-Siyāsa fī tadbīr al-riʾāsa* (The Book of Governance and Administration), which purports to be an epistle from Aristotle to Alexander the Great, offering political, moral, and dietary advice. Known in the tenth century, the work (mentioned earlier in this article) is often referred to by its subtitle *Sirr al-asrār*, which is also the title of the last chapter concerned with astral magic.[128] It was known in Latin Europe as *Secretum secretorum.* Other pseudo-Aristotelian texts include the *Chiromantia* and the *Physiognomia*.[129] The PsAH are related to this genre in their shared subject matter and historical proximity in the form in which we know them—that is, as Arabic productions. Many of the pseudo-Aristotelian (not necessarily Hermetic) texts also take the form of epistles or instructions to Alexander the Great and, more generally, belong to the "mirrors for princes" genre.

More significantly, the PsAH contain theories and concepts that are Aristotelian, in particular the discussion of causality in *K. ʿIlal al-rūḥāniyyāt* and the link (*ittiṣāl*) between the macrocosm and the microcosm:

> The first cause is the cause for the sake of which the thing comes to be, and the second cause is the thing for the purpose of which the thing comes to be. An example of this is the jeweller who works a [metal] sheet into a ring. If someone asks about its element (*ʿunṣuruh*), the metal sheet would be the answer. If someone asks about its cause, it is

127. C. B. Schmitt and D. Knox, *Pseudo-Aristoteles Latinus: A Guide to Latin Works Falsely Attributed to Aristotle before 1500* (London: Warburg Institute, 1985), 4; L. Thorndike, "The Latin Pseudo-Aristotle and Medieval Occult Science," *Journal of English and Germanic Philology* 21, no. 2 (1922): 229–58, at 231; idem, *History of Magic*, 2:246–78; S. J. Williams, "Defining the Corpus Aristotelicum: Scholastic Awareness of Aristotelian Spuria in the High Middle Ages," *Journal of the Warburg and Courtauld Institutes* 58 (1995): 29–51.

128. M. Manzalaoui, "The Pseudo-Aristotelian 'Kitāb Sirr al-asrār': Facts and Problems," *Oriens* 23/24 (1974): 147–257, at 158–59; Thorndike, *History of Magic*, 2:249, 257–58, 268–78; pseudo-Aristotle, *al-Uṣūl al-yūnāniyya li-l-naẓariyyāt al-siyāsiyya fī al-islām*, ed. ʿA. Badawī (Cairo: Maktabat al-Nahḍa al-Miṣriyya, 1954), 69. On the influence, circulation, and structure of this text, see M. Grignaschi, "L'origine et les métamorphoses du *Sirr al-asrâr*," *Archives d'histoire doctrinale et littéraire du Moyen Âge* 43 (1976): 7–112; idem, "La diffusion du *Secretum Secretorum* dans l'Europe occidentale," *Archives d'histoire doctrinale et littéraire du Moyen Âge* 48 (1980): 7–70; idem, "Remarques sur la formation et l'interprétation du *Sirr al-asrâr*," in *Pseudo-Aristotle's "The Secret of Secrets": Sources and Influences*, ed. W. F. Ryan and C. B. Schmitt, 3–33 (London: Warburg Institute, 1982); S. J. Williams, "The Early Circulation of the Pseudo-Aristotelian 'Secret of Secrets' in the West," in *Le scienze alla corte di Federico II*, ed. M. R. McVaugh and V. Pasche, 127–44 (Turnhout: Brepols and Florence: SISMEL, 1994); K. van Bladel, "The Iranian Characteristics and Forged Greek Attributions in the Arabic *Sirr al-Asrar* (Secret of Secrets)," *Mélanges de l'Université Saint-Joseph* 57 (2004): 151–72; M. Maróth, "The Correspondence between Aristotle and Alexander the Great: An Anonymous Greek Novel in Letters in Arabic Translation," *Acta Antiqua* 45 (2001): 231–315; D. Gutas, "Review Article: On Greco-Arabic Epistolary 'Novels,'" *Middle Eastern Literature* 12 (2009): 59–70; W. F. Ryan and M. Taube, *The Secret of Secrets: The East Slavic Version* (London: Warburg Institute, 2020).

129. Schmitt and Knox, *Pseudo-Aristoteles Latinus*, v–vi. A translation of a pseudo-Aristotelian physiognomy is attributed to Ḥunayn b. Isḥāq. The Greek original is dated to about 300 BCE, and it was translated into Latin in the thirteenth century by Bartholomaeus de Messana; see S. Vogt, *Aristoteles: Opuscula VI: Physiognomonica* (Berlin: Akademie Verlag, 1999), 197; R. Forester, *Scriptores Physiognomonici, Graeci et Latini*, vol. 1 (Leipzig: B. G. Teubner, 1893), vii–cxcii, 4–91.

> the smithing of the jeweller. If it is asked "for what purpose is it created?", for wearing it is said. Altogether, the principles in this are four-fold: the cause (*ʿilla*), the instrument (*sabab*), the action, and the agent. [. . .] He said: the action indicates the agent; the action is connected to the agent in a manifest manner, unhidden, since there is no action without the agent, and every agent indicates the action. To the agent is the action of motion; motion produces heat.[130]

According to the *ʿIlal*, the genesis of the cosmos was a result of the primordial principles of action, motion, heat, and cold. Action resulted from motion producing heat, from which emerged the masculine principle, whereas stillness generated coldness, the feminine principle; "the four elements came together in couples (*muqtarina*), and these were the mother elements."[131]

Astral causality and its Aristotelian elements are not unique to the PsAH. Although *K. ʿIlal al-rūḥāniyyāt* does not divulge its sources, by the ninth century these ideas had permeated cosmological discussions via influential works that formulated an astrologized ontology and cosmogony based on the theories of generation and corruption and the nature of the heavens found in Aristotelian works.

I have argued elsewhere that applying Aristotelian causality to explain astral influences, in the explicit context of astrology in theory and practice, and the relationship between the world above and the world below is a deeply influential development in medieval Islam, primarily systematized by the most prominent astrologer Abū Maʿshar al-Balkhī and his teacher al-Kindī. Adopting the Aristotelian epistemological stance, Abū Maʿshar perceived the heavenly bodies as causes of generation and corruption, and it was precisely because of their causal role that resemblances occurred in nature. In *Physics*, Aristotle explains that the study of nature is an inquiry into causes from their effects. By adopting this basis for astrological investigation, Abū Maʿshar famously established astrology as a part of natural philosophy in the Aristotelian sense and as a science that reveals causes through the observation of effects. In his *Kitāb al-Madkhal al-kabīr ilā ʿilm aḥkām al-nujūm* (Great Introduction to Astrology), the planets themselves are given a generative role as agents and efficient causes, responsible for the perpetual link between the celestial world and the sublunary world below. Abū Maʿshar writes that "the terrestrial world is connected to the celestial world and its motions by necessity. Therefore, due to the power of the celestial world and the celestial motions, terrestrial things, generated and corruptible, are affected." They are affected specifically by the heat produced by the motions of the celestial bodies, which causes transformation—including corruption—of generated things. In *On Generation and Corruption*, Aristotle attributes the coming to be and passing away of things to the circular motions of the heavens. In *Meteorology*, he also explains that elementary transformations take place because the celestial bodies emit heat that affects the sublunary world. According to Abū Maʿshar, the celestial bodies cause transformations

130. Arabe 2577, fols. 2r–3r.

131. Ibid., fol. 3r.

in the sublunary world (*tataghayyar*, *ḥadath istiḥālāt*), which consequently experiences generation and corruption (*sarā fīhā al-kawn wa-l-fasād*).[132]

Before Abū Maʿshar, al-Kindī also assigned the heavenly bodies a generative and causal role in two treatises, *al-Ibāna ʿan al-ʿilla al-fāʿila al-qarība li-l-kawn wa-l-fasād* (On the Explanation of the Proximate Cause of Generation and Corruption) and *al-Ibāna ʿan sujūd al-jurm al-aqṣā* (On the Explanation of the Bowing of the Outermost Body). The notion of astral causation can be found in the latter work, which is addressed to the son of the caliph al-Muʿtaṣim as a response to the question regarding the meaning of the Quranic verse that states that the stars and the trees bow down. The philosopher explains that the act of prostration described in the verse is not literal but rather indicates the stars' casting of influence to the earth and being causes of the generation of all terrestrial things. Therefore, the sacred order of the stars and the planets is not an arbitrary arrangement of signs but an order of causes. In *al-Ibāna ʿan al-ʿilla*, al-Kindī explains that the planets and their motions are the origin of everything that exists in the sublunary world.[133]

Before both al-Kindī and Abū Maʿshar, however, a prolific commentator on Aristotle, Alexander of Aphrodisias, who was active in the late second and early third century, also attributed to the motions of the celestial spheres a role in causing and maintaining the terrestrial-celestial link. Alexander begins his *Fī mabādiʾ al-kull bi-ḥasab raʾī Aristūtālīs* (The Principles of the Whole According to the Opinion of Aristotle) by establishing his Aristotelian epistemological stance: there are instruments (*sabab*) and causes (*ʿilla*), and the earliest cosmogonical simple principles are the causes that account for the behavior of generated things and their motions by internal and external principles.[134] In *K. ʿIlal al-rūḥāniyyāt*, a similar distinction is made: the link (*ittiṣāl*) between the macrocosm and the macrocosm "stems from an instrument and a cause. The cause is twofold and the instrument is singular. The instrument of the thing is that from which it originates. The cause is twofold: the cause of the thing before it comes to be and the cause of the thing after it comes to be."[135] Alexander emphasizes that the motions of the higher spheres are linked (*muttaṣila*) to the divine bodies (including the celestial bodies) and the sublunary world.[136] This necessitates the existence of a hypostatic chain, at the top of which is the Prime Mover to whom the Intellect aspires, mobilized by a perfect, circular, pneumatic motion toward Perfection for the sake of the Good.[137] The Intellect imparts motion to the sphere of the fixed stars, which in turn imparts motion to the planets, which, with their

132. L. Saif, *The Arabic Influences on Early Modern Occult Philosophy* (Basingstoke: Palgrave Macmillan, 2015), passim.

133. Saif, *Arabic Influences*, 17.

134. Alexander of Aphrodisias, *On the Cosmos: Arabic Text with English Translation, Introduction, and Commentary*, ed. and trans. C. Genequand (Leiden: Brill, 2001), 42.

135. Arabe 2577, fols. 2r–3r.

136. Alexander of Aphrodisias, *On the Cosmos*, 66, 112–14.

137. Ibid., 68, 96–98.

varying movements, cause the potential for and actualization of transformation, including generation and corruption.[138]

A statement in *K. ʿIlal al-rūḥāniyyāt* recalls a particularly Alexandrian doctrine:

> All things are both active (*fāʿil*) and passive (*munfaʿil*), for all things begin as a result of an agent (*fāʿil*); the agent signifies the action, and the action signifies the thing that is acted upon (*mafʿūl*). The thing acted upon indicates its agent; therefore, the thing that is acted upon indicates how it is 'enacted upon' in explaining the action and the agent.[139]

In *Fī al-mabādiʾ*, Alexander notes that "among the things in it [the world] there are those that are agents only (*fāʿil*); some are passive (*munfaʾil*) only; and some are both agent and passive. This is how some are ready to connect and remain with one another (*yatahayyaʾ an yattaṣil baʿḍuhā bi-baʿd wa-yalzam baʿḍuhā baʿḍ*)."[140] This is a departure from Aristotle, for whom everything that moves is moved by something else and, as Charles Genequand explains, the inner nature of the elements cannot be the efficient cause of their motion.[141]

It is important to recognize, however, that this astrologization of generation and corruption that emerges from late Aristotelian traditions is characterized by the assimilation of (neo-)Platonic doctrines, from the discussion of hypostatic structures to the application of the psychological theory of *De anima* to the ensouled stars and planets.[142] This crucial aspect is discussed below in the context of the animated and animating principles of the cosmos, especially the PsAH's *rūḥāniyyāt*. For now, it is sufficient to stress the philosophical framework of PsAH, which is reliant on Aristotelian notions of causality.

The model of a conversation between Aristotle and Alexander, the subject matter, and the philosophical rationale for the connection between the macrocosm and the microcosm place the PsAH firmly within the pseudo-Aristotelian genre. The magical and theurgic elements are supported by the astrologization of Aristotelian causality via the reconciliation of Aristotle and Hermes, whose works are presented as the source of the former's knowledge. The content is thus in this sense "Hermetic," but this does not imply that the PsAH embody a transhistorical body of fixed dogma or a set of doctrines uniting texts and thinkers in various languages across time and space under the anachronistic rubric of hermeticism/hermetism, as Bladel insists in *The Arabic Hermes*.[143] Nonetheless, the PsAH do constitute a substantial body of texts with a thematic and mythic consistency that lends itself to the construction of a medieval Arabic "hermeticism" constructed by medieval agents as filling the pages of "hermetic books" (*al-kutub al-hirmisiyya*). This level of coherence invited

138. Ibid., 86, 112, 120.

139. Arabe 2577, fol. 2v.

140. Alexander of Aphrodisias, *On the Cosmos*, 114 (my translation, for the sake of accuracy).

141. Ibid., 7, 62–64.

142. Ibid., 6.

143. A.D. Nock, "A New Edition of the Hermetic Writings," *Journal of Egyptian Archaeology* 11, no. 3/4 (1925): 126–37, at 177; van Bladel, *Arabic Hermes*, 17–22.

many medieval and early modern thinkers to associate the PsAH with a single religious group—namely, the Sabians, as discussed below.

Most scholarship touching on the texts of the PsAH identifies them as "technical hermetica," since they contain magical, astrological, and alchemical instructions, to distinguish them from "philosophical Hermetism" as encapsulated in the *Corpus Hermeticum*, which is a product of Roman Egyptian society that synthesized Greek and Egyptian views.[144] Some go as far as to describe the "technical hermetica" as "religious" in contrast to the *Corpus Hermeticum*, which is seen as the "philosophical" counterpart largely on the basis of the assessment by the Dominican friar Andre-Jean Festugière, who dissociated the latter from any "religious" doctrine.[145] This dyadic approach echoes the misleading yet tenacious binary imposed on "Hermetic" magic, which is divided into natural and ceremonial magic.[146] It lies behind Pingree's search for the sources of the "Neoplatonic justifications" found in the *Ghāyat al-ḥakīm*'s description of the pagan practice of statue vivification. He admits to not understanding how "neutral" non-corporeal celestial forces (*rūḥāniyyāt*) were conceived in opposition to the "divine and demonic beings" that are represented in ancient amulets. As a result, he proposes that the practice originated in Sabian-Ḥarrānian anxieties about their reputation as "practitioners of the black arts" who—according to Pingree—produced a large body of pseudo-Hermetic and pseudo-Aristotelian texts, although the evidence for this link is lacking. He suggests that "unpublished Hermetic texts such as the *Kitāb al-Isṭimākhīs*" could shed light on the relationship between the Sabians-Harranians and the PsAH.[147] For Pingree, the PsAH are thus "scientific texts more characteristic of Sabians,"[148] which neutralized "the nauseous details of psychic magic" in ways that would leave someone like Plato "horrified to learn what ends his philosophy has been made to serve."[149]

It is important to recognize that the PsAH are different from the Greek Hermetica. The PsAH belong to a large group of texts attributed to Hermes that "are later works originally composed in Arabic. Yet even where the texts themselves are not of ancient origin, the idea of Hermes is."[150] The *Corpus Hermeticum* usually refers to the philosophical corpus that was celebrated in the fifteenth century and translated by Marsilio Ficino (1433–99) into Latin. Many "technical" Greek Hermetica, such as *Iatromathematica* and *To Asclepius on the Plants of the Seven Planets*, remain unstudied. As Christian H. Bull has pointed out, the distinction between a technical and a philosophical corpus is false even from the point

144. Van Bladel, *Arabic Hermes*, 7; G. Fowden, *The Egyptian Hermes: A Historical Approach to the Late Pagan Mind* (Princeton, NJ: Princeton University Press, 1993 [first ed. 1986]), 69–74.

145. P. Lucentini and V. P. Compagni, "Hermetic Literature I: Antiquity," in *Dictionary of Gnosis and Western Esotericism*, ed. W. Hanegraaff, 517–29 (Leiden: Brill, 2005), 487–88, 499; Festugière, *La révélation d'Hermès Trismégiste*, 1:81–87; 2:50.

146. A. Sannino, "From Hermetic Magic to the Magic of Marvels," in *The Routledge History of Medieval Magic*, ed. S. Page and C. Rider, 153–68 (London: Routledge, 2019), 154.

147. Pingree, "Ṣābians of Ḥarrān," 15.

148. Ibid., 30.

149. Ibid., 33.

150. Van Bladel, *Arabic Hermes*, 10.

of view of the traditional Egyptian traditions from which the Greek Hermetica emerged.[151] The PsAH's emphasis on technical instructions should not distract from its philosophical and cosmological elements, laid out in *K. ʿIlal al-rūḥāniyyāt.* Especially given the PsAH's consistent mythology and cosmological framework, which render them even more unique; the PsAH are the most reliable sources for the construction of the Arabic Hermes.

It is tempting to surmise that the PsAH were codified texts belonging to a certain group. Historically, as noted above, they have been associated with the Sabians. For example, Moses Maimonides (1138–1204) writes in *Dalālat al-ḥāʾirīn* that *Kitāb al-Isṭimākhīs* is commonly "attributed to Aristotle, [but] he is free of this (*ḥāshāh*) [. . .] and another one is attributed to Aristotle [. . .] Those that I mention to you are all scriptures (*asfār*) of the idol worshippers that were made available in the Arabic tongue."[152] For him, *al-Isṭimākhīs* belongs to the Sabians, who believe that there is no God and that only the planets deserve reverence.[153] As mentioned earlier, Ibn Taymiyya knew the *Dhakhīra* and considered it a book of the Sabians, among whom he counted Aristotle.[154] Many scholars have tackled the question of the identity of the Sabians, and this is not the place to recount their arguments; suffice it to say that the term emerged from a heresiographical and polemical discourse and has been used to refer to various groups that revered and practiced complex devotions to the planets and the stars.[155]

Nevertheless, historical sources contain many references alluding to practices similar to those described in the PsAH, particularly within discussions of the Sabians, and it is worth mentioning some of these. Al-Shahrastānī (d. 548/1153), in his *Kitāb al-Milal wa-l-niḥal* (The Book of Sects and Creeds), notes that according to the Sabian *madhhab* (set of

151. C. H. Bull, *The Tradition of Hermes Trismegistus: The Egyptian Priestly Figure as a Teacher of Hellenized Wisdom* (Leiden: Brill, 2018), 280, 370–71; Cottrell is critical of van Bladel's exclusion of the Alexandrian Hermetica represented by the *Corpus Hermeticum*, which, she argues, is cited in medical works and in particular by Hippocrates and Galen, whose Syriac and Arabic translations circulated already in the ninth century; E. Cottrell, "L'Hermès Arabe de Kevin van Bladel et la question du rôle de la literature Sassanide dans la presence d'écrits hermètiques et astrologiques en langue arabe," *Bibliotheca Orientalis* 72 (2015): 336–401.

152. Moses Maimonides, *Dalāʾil al-ḥāʾirīn*, ed. Ḥ. Atāy (Cairo: Maktabat al-Thaqāfa al-Dīniyya, n.d.), 588.

153. Ibid., 588.

154. Ibn Taymiyya, *Darʾ taʿāruḍ*, 1:312.

155. The Sabians are mentioned three times in the Quran, at 2:26, 5:69, and 22:17. The first mention (Q 2:26) reads: "Indeed, those who believed and those who were Jews or Christians or Sabians—those who believed in God and the Last Day and did righteousness—will have their reward with their Lord, and no fear will there be concerning them, nor will they grieve." This reference has puzzled historians, and there are no sources contemporary to the Quran that mention the Sabians, so it is not possible to be certain of their identity. For a good summary of research on the Sabians from historical and etymological perspectives, see T. Green, *City of the Moon God: Religious Traditions of Harran* (Leiden: Brill, 1992), 3–6, 101–8; F. de Blois, "Sabians," in *Encyclopaedia of the Qurʾān*, ed. J. Dammen McAuliffe (Leiden: Brill, online), http://dx.doi.org/10.1163/1875-3922_q3_EQSIM_00362. For a detailed critique of "uncontrolled historical speculation" about the Harranians' being Sabians, see van Bladel, *Arabic Hermes*, 65–82. For an example of such outdated speculation, see A. E. Affifi, "The Influence of Hermetic Literature on Moslem Thought," *Bulletin of the School of Oriental and African Studies* 13, no. 4 (1951): 840–55, at 842–43; M. Noble, "Sabian Astral Magic as Soteriology in Fakhr al-Dīn al-Rāzī's *al-Sirr al-Maktum*," in *Islamicate Occult Sciences in Theory and Practice*, ed. L. Saif, F. Leoni, M. Melvin-Koushki, and F. Yahya, 207–29 (Leiden: Brill, 2020).

convictions) the *rūḥāniyyāt*, who receive their power from God, are the governors of all affairs in the world below.[156] Indeed, he calls the Sabians "the people of the *rūḥāniyyāt*" (*aṣḥāb al-rūḥāniyyāt*).[157] According to al-Shahrastānī, the Sabians were experts in the construction of planetary temples, divination, astrology, and incantations; they wrote books on rings (*khawātīm*), occult properties (*khawāṣṣ*), and images (*ṣuwar*).[158] So far, the description does not warrant jumping to the attractive conclusion that al-Shahrastānī is referring to the group that produced the PsAH. However, he makes a striking statement that does recall *K. ʿIlal al-rūḥāniyyāt* in the first part called *al-Ustuwaṭṭās* : "They say the celestials are the fathers and the elements are the mothers."[159] In this part of *K. ʿIlal al-rūḥāniyyāt*, as described earlier, the genesis of the cosmos is said to have resulted from the primordial principles of action, motion, heat, and cold, with motion and heat giving rise to the masculine principle and stillness and coldness giving rise to the feminine one. Here, too, there is an explicit reference to procreation: "The four elements came together in couples (*muqtarina*), and these were the mother elements."[160]

Al-Masʿūdī (d. 345/956), in his *Murūj al-Dhahab* (Meadows of Gold), gives a similar description of the practices of the Sabians and their belief in the *rūḥāniyyāt*. However, a fascinating passage describes a belief concerning the periods of zodiacal sovereignty (discussed in detail below) that, as far as I am aware, is found only in *al-Ustuwaṭṭās*. According to al-Masʿūdī, a group of people conceived of the time leading up to the end of the world in the following way:

> The sovereignty of that time will be for Virgo, which is 7,000 years [long], and this is the age of the human world, with Jupiter aiding Virgo in governance [. . .] They claimed that the sovereignty of the sign of Aries is 12,000 years; the sovereignty of Taurus is 11,000 years; the sovereignty of Gemini is 10,000 years; the sovereignty of Cancer is 9,000 years; the sovereignty of Leo is 8,000 years; the sovereignty of Virgo is 7,000 years; the sovereignty of Libra is 6,000 years; the sovereignty of Scorpio is 5,000 years; the sovereignty of Sagittarius is 4,000 years; the sovereignty of Capricorn is 3,000 years; the sovereignty of Aquarius is 2,000 years; and the sovereignty of Pisces is 1,000 years. The total is 78,000 years.[161]

This view is identical to the description of the periods of zodiacal sovereignty in *al-Ustuwaṭṭās*, discussed below.[162] The overlap is probably an indication of al-Shahrastānī's and al-Masʿūdī's knowledge of the PsAH, adopting the common narratives about their connection to the beliefs and identity of the Sabians.

156. Al-Shahrastānī, *al-Milal wa-l-niḥal*, ed. M. b. F. Badrān, 2 vols. (Cairo: Maktabat al-Anjilū al-Miṣriyya, n.d.), 2:8.

157. Ibid., 2:7.

158. Ibid., 2:8, 30–31, 52–53, 61.

159. Ibid., 2:8.

160. Arabe 2577, fol. 3r.

161. Al-Masʿūdī, *Murūj al-dhahab*, ed. K. Ḥ. Marʿī, 4 vols. (Beirut: al-Maktaba al-ʿAṣriyya, 2005), 2:170.

162. Arabe 2577, fol. 7r–v.

None of the PsAH texts refer to themselves as Sabian or Ḥarrānian. However, that they were viewed related is exhibited in MS Leiden, Leiden University, Or. 1235. It includes a collection of treatises that share the themes of the PsAH, such as a treatise on suffumigation and planetary rings attributed to Ṭamṭam al-Hindī which cites Aristotle in multiple places. It also contains parts of both *al-Ustuwaṭṭās* and *al-Isṭimāṭīs*. In addition, one finds a treatise entitled "The Secrets of the Sabians on Knowing the Hours of Transformations (*al-qalb*)" which describes magical operations such as for making planetary rings and talismanic engravings. The title of the text is not a reliable indication of a "Sabian" identification or origin, as it could have been given by the work's compiler or scribe on the basis of a perceived association. There is no reference to Sabians in the text itself. Calling the PsAH Sabian would thus be misleading. The most defining feature of the PsAH remains the texts' apocryphal attribution to Aristotle and Hermes, which is used to justify the amalgamation of Aristotelian causality and hylomorphism with Perso-Arabo-Hermetic astrological and magical materials.

The nature of the Sabian religion is understandably very intriguing, but we must rein in our enthusiasm, which might lead us to see Ḥarrān and the Sabians where they are not present. For example, in some manuscripts of *al-Shuʿrā al-yamāniyya*, the astral sciences are said to be the special knowledge of the people of Ḥarrān (*ahl al-Ḥarrān*);[163] in other manuscripts, they are associated with the people of India (*ahl al-Hind*).[164] The rush to identify Sabian Harranian rituals led Hellmut Ritter to misread the month of Ḥuzayrān as Ḥarrān in the *Ghāyat al-ḥakīm*'s description of a Sabian rite of passage (*imtīḥān al-ghilmān*) even though the manuscripts show the name of the month consistently, with the result that he and others who viewed the Sabian rituals described in the *Ghāya* as Ḥarrānian.[165]

IV. The Astrological Cosmogony of the PsAH and Its Zoroastrian Resonances

The practical astrology of the PsAH, which includes rules of practice (exaltations, houses, lunar mansions, aspects, etc.), is, for the most part, Greek. Other sources have been noted; for example, Burnett and Pingree highlight Indo-Persian influences on the PsAH's conception of the lunar mansions and show that it reflects the *Nakṣatrāṇi* of classical Indian astrology.[166] However, astral/astrological theories in the PsAH underlie the structuring

163. Arabe 2580, fol. 1v.

164. Arabe 2578, fol 1v.

165. Al-Qurṭubī, *Picatrix*, ed. Ritter, 226. In preparing an English translation of the *Ghāya*, I consulted twenty-four manuscripts, all of which mention Ḥuzayrān, not Ḥarrān, in this section. See, for example, MS Istanbul, Süleymaniye, Hamidiye 852, fol. 99v; MS Dublin, Chester Beatty, Ar. 3313, fol. 151v. The mistake is reproduced in G. Bing's foreword to the German translation (p. i), in the introduction by Ritter and Plessner (pp. 22, 31–32), and in the translation itself (p. 238): al-Qurṭubī, *Picatrix*, ed. Ritter and Plessner; also reproduced in Green, *City of the Moon God*, 187, 213.

166. C. Burnett, "Arabic, Greek, and Latin Works on Astrological Magic Attributed to Aristotle," in *Pseudo-Aristotle in the Middle Ages: The Theology and Other Texts*, ed. J. Kraye, W. Ryan, and C. Schmitt, 84–96 (London: Warburg Institute, 1986), 84–96, 87; A. Panaino, "Between Astral Cosmology and Astrology: The Mazdean Cycle of 12,000 Years and the Final Renovation of the World," in *The Zoroastrian Flame: Exploring Religion, History and Tradition*, ed. A. Williams, S. Stuart, and A. Hintze, 113–33 (London: Bloomsbury, 2016), 121–22.

of the cosmos, its primordial creation activity, and the volitional causality that governs its affairs. It is in this type of astrological cosmogeny that we find Zoroastrian influences. This is not surprising when we consider the time that I have proposed for the production of these texts: the ninth century. Many scholars have clarified the Zoroastrian/Middle Persian link with "pseudo-Hermetic" works, especially in the minds of Muslim intellectuals.[167]

My comparison between the doctrines of the PsAH and Zoroastrianism is not meant to imply that the former represent a variety of Zoroastrianism. Rather, as stressed earlier, I am interested in the historical imaginary that encompasses and assimilates variegated doctrines and ideas (dualism, creation myths, demiurges, spirits, etc.) into narratives that feed societal, intellectual, and political aspirations by linking the past to the present.[168] It is not unusual to encounter local traditions and belief systems in the ninth century that are reminiscent of Zoroastrianism but do not correspond to it. Influential ideas from Zoroastrianism were absorbed into a wider historical imaginary that also encompassed ideas originating with other local traditions, thus creating entangled identities.[169]

It is the astrological cosmogony of the PsAH that carries the most fascinating elements of these texts:

1. The crucial role of cosmogenic and cosmological cycles
2. The story of the creation of humans by the demiurge Hādūs
3. The seven sage-prophets
4. The system of volitional causality whose agents are the *rūḥāniyyāt*, "spiritual entities"
5. Magical practice

All five elements are found in the *PsAH,* as well as in the summary text, *al-Madīṭīs.*

1. Cosmological Cycles

In the first part of *K. ʿIlal al-rūḥāniyyāt* entitled *al-Ustuwaṭṭās* Aristotle introduces an unusual zodiacal cycle: "He [God] assigned to each sign a period of sovereignty, and this is so because for every beginning there is a conclusion, and the beginning of a thing denotes its conclusion and its end."[170] He then proceeds to list these periods of sovereignty, which he uncovered through his efforts to comprehend the "hidden, protected secrets" (*istakhrajtuhu min al-asrār al-mughayyaba al-maknūna*): Aries: 12,000 years; Taurus: 11,000 years; Gemini: 10,000 years; Cancer: 9,000 years; Leo: 8,000 years; Virgo: 7,000 years; Libra 6,000 years; Scorpio: 5,000 years; Sagittarius: 4,000 years; Capricorn: 3,000 years;

167. Sezgin, *Geschichte des arabischen Schrifttums*, 4:35–36; van Bladel, *Arabic Hermes*, passim.

168. On the question of what makes a doctrine or a religion Zoroastrian, see P. Crone, *The Nativist Prophets of Early Islamic Iran: Rural Revolt and Local Zoroastrianism* (Cambridge: Cambridge University Press, 2012), 318–20.

169. Ibid., 23–27.

170. Arabe 2577, fol. 7r.

Aquarius: 2,000 years; Pisces: 1,000 years. These periods add up to a cycle of 78,000 years, whose end marks "the conclusion of the macrocosm and the dissolution of its parts."[171]

Furthermore, these periods of zodiacal sovereignty mark stages in the generation of earth's creatures. Citing Hermes's *al-Kitāb al-Makhzūn*, Aristotle explains that during the reigns of Aries, Taurus, and Gemini—that is, during the first 33,000 years—moving animals did not exist, nor was there a *rūḥāniyya* population on earth (*ʿimāra rūḥāniyya*). Instead, the stars were working their influences in the belly of the earth, preparing for the emergence of plants. When the sovereignty of Cancer began,

> the *rūḥāniyyāt* of the stars gained strength in their courses and sustenance drew itself up, as did the sphere, rounded in its course. [When] the signs became strong in their qualities, the *rūḥāniyya* of life poured down and caused to emerge the manifest action (*al-ẓāhir*) from the invisible and hidden (*al-khafiyy al-bāṭin*) action. God, powerful and exalted (*ʿazza wa-jall*), created (*kawwana*) aquatic beings and the insects of the earth during the entirety of Cancer's cycle.[172]

During Leo's sovereignty, four-legged animals multiplied. Under Virgo, God created from Virgo's *rūḥāniyya* the first man and the first woman, Admānūs and Ḥaywānus.[173] During the sovereignty of Libra, birds were created. *Al-Madīṭīs* recounts the same story, adding that at the end of this cosmic cycle, the universe will return to "its first state of being" (*ilā kawnihi al-awwal*).[174]

This description of a 78,000-year cosmic cycle (in other words, the age of the universe) is unique to the PsAH. The Persian system of the *fardār*, which was known in Hebrew, Arabic, and Latin, refers to a sequence of seventy-five-year periods. In the ninth century, Abū Maʿshar expanded the range and added the "big *fardār*," a period of seventy-eight years ruled successively by the twelve signs with the same order and pattern of decreasing reigns as we find in *al- Ustuwaṭṭās*. He also outlined a "middle *fardār*," a cycle of 675 years containing nine individual *fardār*s of seventy-five years each, and a "small *fardār*," a period of seventy-five years divided among the seven planets and the lunar nodes known as the Head and Tail of the Dragon in the order of their exaltation.[175] The astrologer al-Bīrūnī, in his *Qānūn al-masʿūdī* (the canon of al-masʿūdī), also recognized these periods. As Pingree has shown in his reconstruction of Abū Maʿshar's lost *Kitāb al-Ulūf*, the *fardār* periods are elements of "a complex system of cycles which determine the dominant planetary or zodiacal influences at any particular point in time"—a system that Islamic astrology inherited from Sasanian Persia.[176]

171. Ibid., fol. 7r–v.

172. Ibid., fols. 7v–8r.

173. Ibid., fol. 8r.

174. Marsh 556, fol. 10v.

175. Abraham Ibn Ezra, *The Book of the World*, ed. and trans. S. Sela (Leiden: Brill, 2010), 21–22 and n. 115.

176. Pingree, *Thousands of Abū Maʿshar*, 15–32. Godefroid de Callataÿ and I discuss the cycles in the PsAH and their medieval reception in greater detail in "Astrological and Prophetical Cycles in the Pseudo-Aristotelian Hermetica and Other Islamic Esoterica," in *Bilan et perspectives des études sur les encyclopédies médiévales*,

Moreover, the PsAH's 78,000-year cycle is reminiscent of the Zoroastrian cosmic cycle of 12,000 years, divided into twelve equal periods of zodiacal sovereignty as discussed in the *Bundahishn.* The cosmic duel between Ohrmazd and Ahreman took place during this cycle.[177] The earliest phase of creation covered the first 3,000 years of the *mēnōg* state, denoting the realm of mental existence, which is the realm of "spirit."[178] This was followed by another 3,000 years, in which Ahreman was sent into a dormant state by Ohrmazd by means of a prayer known as *Ahunwar*. Rising from his sleep, Ahreman attacked creation. This event marked the beginning of the 6,000-year period of the *gētīg* realm, which is the "living" and "physical" dimension of existence. It was in this phase that the astral bodies were set in motion.[179] The first 3,000 years of the *gētīg* concluded with the revelation of the Mazdean faith to Zoroaster, whereas the final period of 3,000 years will witness, at the end of each millennium, the birth of one of the three sons of Zoroaster. They will announce the liberation from the darkness, and with the birth of the third son—the Revitalizer par excellence, the Sōshāns—the destruction of Ahreman will take place. The stars were set in motion after Ahreman's invasion.[180] Panaino notes of the 12,000 year-cycle that "the elaboration of this doctrine represents one of the most original and radical innovations developed by the Iranian speculative mind in the course of history."[181]

Thus, in the *Bundahishn* we have a period of primordial cosmic activity divided into 12,000 years of zodiacal sovereignty, but these periods of sovereignty differ from the PsAH's periods of zodiacal sovereignty in their fixed lengths of 1,000 years per sign. Since the PsAH were composed in a place of intense ideological exchange with recently codified Zoroastrian texts, we can discern the fusion of two originally Persian ideas in them—Abū Maʿshar's modification of the *fardār* into a period of seventy-eight years ruled by twelve signs in the now familiar descending order, and the cycle of 12,000 years with each millennium under the protection of a particular zodiacal sign. The adoption of these ideas did not necessarily happen consciously; it may have been the result of these influential astrological ideas coalescing and reforming in accordance with the cultural and intellectual context. By their nature, these ideas lend themselves to reinvention since, as Panaino remarks, "these patterns are not strictly astrological, being purely symbolical and based on a simple proportional comparison, in which a single month corresponds to 1,000 years."[182]

ed. G. de Callataÿ, M. Cavagna, B. van den Abeele, and F. van Haeperen (Louvain la Neuve: Université catholique de Louvain, Publications de l'Institut d'études médiévales, forthcoming). See also E. Kennedy, "Ramifications of the World-Year Concept in Islamic Astrology," in *Proceedings of the Tenth International Congress of the History of Science*, 23–43 (Paris: Hermann, 1962), 26–30; G. de Callataÿ, *Annus Platonicus: A Study of World Cycles in Greek, Latin and Arabic Sources* (Louvain: Peeters, 1996).

177. A. Panaino, "Cosmologies and Astrology," in Stausberg, Vevaina, and Tessmann, *Wiley Blackwell Companion to Zoroastrianism*, 235–58, at 238.

178. Ibid., 236; *The Bundahišn: The Zoroastrian Book of Creation; A New Translation*, trans. D. Agostini and S. Thrope (New York: Oxford University Press, 2020), 3–5, 40–42, 18–26 (the celestial world of the *Bundahishn*).

179. Panaino, "Cosmologies and Astrology," 236, 239.

180. Ibid., 237–38, 240; Panaino, "Between Astral Cosmology and Astrology," 114–15; *Bundahišn*, 40–50.

181. Panaino, "Between Astral Cosmology and Astrology," 116.

182. Ibid., 117.

Classical astrology was not yet practiced in the second millennium BCE; it entered Iran in Parthian times and became current, with some adaptations, in the Sasanian period.[183] Edward Kennedy and Pingree conclude that astrologers of the Islamic era such as Māshāʾallāh "superposed the conjunction astrology upon a Zoroastrian millennial cosmology in which the duration of the universe is to be 12,000 years."[184] Abū Maʿshar's application of the *fardār* system and its cosmic amplification in the PsAH are cases of the astrologization trend seen in the *Bundahishn's* 12,000 cycles.

2. Adam, Eve, and the Demiurge

More signs of the aforementioned ideological convergence can be seen in the story of the creation of Admānūs (Adam) and Ḥaywānus (Eve) under the rule of Virgo (7,000-year-long cycle) and of the demiurge who creates them. According to this story, when all the planets were in their exaltations, "they lifted their resolve (*himma*) to the highest sphere, which is their governor, asking for a corporeal creation (*khilqa jismāniyya*) into which their *rūḥāniyyāt* may pour, so they may direct it. As a result of this resolve, a pure, strong, angelic spirit was generated (*fa-tawallada min tilk al-himma rūḥan qawiyyan malakan naqiyyan*), called Hādūs."[185] Hādūs, the story goes, created the first man from hundreds of celestial *rūḥāniyyāt*, giving him the form of the macrocosm. At first, Admānūs was "like animals, not cognizant of anything (*lā yaʿqil shayʾ*)," but then Hādūs lifted Admānūs's resolve to the Creator, exalted and high (*al-Bāriʾ, jalla wa-ʿalā*) and connected it to the stars and planets because of their innate spirits (*arwāḥ*) of intellect (*ʿaql*), logic (*manṭiq*), and thought (*fikr*). In the moment in which the first man was created, the planets were occupying their exaltations and pouring into him their benefic influences, except for Saturn, which was in the exaltation of Mars and thus handed down the Major Misfortune (*al-naḥs al-kabīr*) that could be suffering in general or specifically death.[186]

The concept of the demiurge was available through Plato's *Timaeus*, which had been translated by Ibn al-Biṭrīq and possibly revised and translated again by Ḥunayn b. Isḥāq.[187] According to this work, the universe is created and maintained by a purposeful, and beneficent agency. It is the handiwork of a divine craftsman, the demiurge, who bestows

183. Panaino, "Cosmologies and Astrology," 241, 245.

184. E. Kennedy and D. Pingree, *The Astrological History of Māshāʾallāh* (Cambridge, MA: Harvard University Press, 1971), vii. See also E. G. Raffaelli, "Astrology and Religion in the Zoroastrian Pahlavi Texts," *Journal Asiatique* 305, no. 2 (2017): 171–90, at 180.

185. Arabe 2577, fol. 8v.

186. Ibid., fol. 8bis r.

187. On the reception of Plato in the Arabic-speaking world, see F. Rosenthal, "On the Knowledge of Plato's Philosophy in the Islamic World," *Islamic Culture* 14 (1940): 387–422; R. Walzer, "Platonismus in der islamischen Philosophie (arabische Übersetzung aus dem griechischen)," in *Antike und Orient im Mittelalter: Miscellanea Mediaevalia 1*, 179–95 (Berlin: de Gruyter, 1962); D. Gutas, "Platon: Tradition arabe," in *Dictionnaire des philosophes antiques*, vol. 5, ed. R. Goulet, 845–63 (Paris: CNRS, 2012); R. Arnzen, "Plato's *Timaeus* in the Arabic Tradition: Legend—Testimonies—Fragments," in *Il Timeo: Esegesi greche*, *arabe*, *latine*, ed. F. Celia and A. Ulacco, 181–267 (Pisa: Pisa University Press, 2012).

mathematical order on primordial chaos to generate the ordered cosmos. The universe and all its parts are arranged to produce good effects. In Plato's view, this arrangement is not fortuitous but rather the outcome of the deliberate intent of the Intellect (*nous*), represented by the craftsman who designs and constructs a world that is as excellent as its nature permits it to be.[188] The demiurge here is identical to Nous in Plato's *Philebus*, too.[189] However, there is nothing in the PsAH that evokes any recognizably Platonic interpretation of the demiurge's nature or its activity.

The *Asclepius*'s famed demiurge, by contrast, rings a bell:

> Pouring down Essence and taking Matter up, drawing both round himself and to himself all things, and from himself giving all things to all. For he it is whose goodly energies extend not only through the Heaven and the Air, but also onto Earth, right down unto the lowest Depth and the Abyss. And if there be an Essence which the mind alone can grasp, this is his substance [. . .] But whence this [Substance] doth arise, or flows forth, he, [and he] only, knows. [. . .] The reins are Life, and Soul, and Spirit, Deathlessness, and Genesis.[190]

However, the *Asclepius*—known in late antiquity as *The Perfect Discourse*—was translated into Latin and Coptic but does not seem to have been known in Arabic,[191] which reduces the likelihood of its being among the sources of influence on the PsAH.

Of course, the Zoroastrian demiurge of the *Bundahishn* is a possible inspiration, especially if the production of the *Bundahishn* coincided with the composition of the PsAH. But the demiurge of the PsAH appears after the creation of the stars and the earth; therefore, he is not responsible for all creation, only for the creation of human beings. He does not appear to be responsible for the emergence of birds in the following period of sovereignty, that of Libra. Moreover, Hādūs is neutral in comparison to the Zoroastrian demiurge,[192] although his intentionality is not clear, for Saturn, unlike all the other planets, was not in its exaltation at the moment Hādūs created Admānūs, and we do not know whether it was by Hādūs's choice that misfortune and death were astrologically introduced into the life of the first humans. Furthermore, Zoroastrianism's strict duality is absent from the PsAH.

Nevertheless, we still find a parallel with some Zoroastrian doctrines. In the 12,000-year cycle in the *Bundahishn*, it was in the period of *gētīg*, from the seventh millennium onward and after Ahreman's irruption, that the whole celestial sphere was put in motion. With the beginning of the *gumēzishn* (the mixed state of good and evil in the

188. D. Zeyl and B. Sattler, "Plato's *Timaeus*," in *The Stanford Encyclopedia of Philosophy*, summer 2019 ed., ed. E. N. Zalta, https://plato.stanford.edu/archives/sum2019/entries/plato-timaeus.

189. S. Menn, "Aristotle and Plato on God as Nous and as the Good," *Review of Metaphysics* 45, no. 3 (1992): 543–73, at 546.

190. G. R. S. Mead, ed. and trans., *Thrice-Greatest Hermes: Studies in Hellenistic Theosophy and Gnosis*, vol. 1 (London: Theosophical Publishing Society, 1906), 269–71.

191. Van Bladel, *Arabic Hermes*, 133.

192. Panaino, "Cosmologies and Astrology," 235.

material world),[193] the domination of the new millennium passed to Libra, the sign representing the most significant point of astrological depression, but also Saturn's place of exaltation.[194] Thus, Kēwān (Saturn), the most dangerous of the planetary demons, became the lord of that millennium and, after thirty years, decreed the death of the first man, Gayōmard.[195] In the PsAH, the sovereign of the millennium in which the first man appears is Virgo, whose ruler is traditionally Mercury. In the horoscope of Gayōmard given in the *Bundahishn*, all the seven planets were in their exaltation except for Mercury, which was in its fall in Pisces, rather than in Virgo, the ruling sign of that millennium according to the PsAH.[196] The same principle is at work in the *Bundahishn*: one planet is off and disordered, and this explains astrologically the presence of suffering, death, and evil. In the PsAH, the malefic nature of Saturn is responsible for confusion (*ḥīra*), mutability (*taghyīr*), and sadness (*ḥuzn*), whereas in the *Bundahishn* it is Saturn, the ruler of this period, that introduces death, and a malefic Mercury may signal a troubled existence.[197]

As for Ḥaywānūs, she was created to distract Admānūs from his fascination with Hādūs. According to the story, Admānūs was hopelessly fixated on the mighty Hādūs, finding solace in the latter's presence. The demiurge then decided to strike Admānūs with his hand between the shoulders, "grabbing from him" something spiritual and something corporeal. Giving some of his own power to strengthen the *rūḥāniyya* of resolve (*al-himma*), he created Ḥaywānūs as the embodiment of the feminine principle (*fa-khalaqa minhu Ḥaywānūs bi-l-unūtha*). This caused Admānūs to pay attention to her and find solace in her, and they thus "came together through masculinity and femininity, as a result of which she gave birth to the human race."[198] It is difficult, at this stage, to identify the origins of this fascinating narrative despite the shallow similarities with the story of Adam and Eve. From our description thus far, the similarity between Admānūs and Gayōmard lies in their monogenesis and the astrological background of their birth; in addition, as Yishai Kiel observes:

> The convergence of Adam and Gayōmard as a First Man figure is found, in fact, already in central Manichaean works written in Iranian languages from the third century onwards. Rather than identifying Adam and Eve with Mašī and Mašyānī (the first human couple and the descendants of Gayōmard), Mani identifies Gayōmard (Manichaean Middle Persian, Gēhmurd) with Adam and, leaving out Mašī, he identifies Mašyānī (Manichaean Middle Persian, Murdiyānag) with Eve. The use of Zoroastrian mythology in central Manichaean works reflects the attempt on the part of Mani and his followers

193. *Bundahišn*, 5, 7, 14.

194. Ibid., 41.

195. Panaino, "Cosmologies and Astrology," 240; *Bundahišn*, 49.

196. *Bundahišn*, 35–39.

197. Arabe 2577, fols. 6v, 8v, 9v, 13v; A. Panaino, "Saturn, the Lord of the Seventh Millennium," *East and West* 46, nos. 3–4 (1996): 235–50, at 238–40; Raffaelli, "Astrology and Religion," 180; Panaino, "Cosmologies and Astrology," 250–51; idem, "Between Astral Cosmology and Astrology," 121.

198. Arabe 2577, fols. 12v–13r.

> to package the Manichaean message in a manner that would be more agreeable and familiar to local adherents to Zoroastrianism.[199]

Kiel's objective in his article was to present the Talmudic story of Adam and Eve in light of Zoroastrian and Manichean doctrines. However, the similarities that he establishes concern elements that are absent from the creation myth of the PsAH—namely, sex with demons and atonement with abstinence. Nevertheless, it is possible that such accumulative processes of doctrinal merging resulted in the Admānūs-Gayōmard hybrid in the PsAH.

3. The Seven Sage-Prophets

The celestial being Hādūs not only created the first man and woman but also introduced Admānūs to the sciences: he taught him logic and "the occult sciences and subtle operations" (*al-ʿulūm al-khafiyya wa-l-aʿmāl al-laṭīfa*).[200] He also taught him about animals, their anatomy and the flow of certain *rūḥāniyyāt* within them, and what they are good for. Then Hādūs gave him knowledge of plants and minerals. Aristotle mentions "the secrets of the four sciences and their causes, the secrets of medicine and its causes, and the secrets of the elements and their composition."[201] It is not clear what is meant by the four sciences; however, given the mention of the occult sciences earlier we can assume them to be magic, astrology, alchemy, and divination. This first knowledge of nature was thus revealed to human beings by the demiurge before he "ascended away" (*murtafiʿ ʿanka*) from Admānūs and Ḥaywānus, requesting that they populate the earth with their progeny.[202] One of their offspring is Shītālūs, who is mentioned in *al-Hādhīṭūs* and whom Hādūs "clothes" with Admānūs's "spiritual garments" (*innī urīd an ulbisuhu libāsaka li-l-rūḥāniyya*).[203]

The knowledge imparted by Hādūs was not maintained by Admānūs's descendants. As a result, seven sage-prophets were possessed by the *rūḥāniyyāt* of their climes and planets. These *rūḥāniyyāt* brought religious laws and rituals (*tusharriʿ al-adyān wa-l-ʿibādāt*).[204] Reporting Hermes's teachings, Aristotle explains that the *rūḥāniyya* of each planet, possesses a "sage" (*ḥakīm*) who emerges at the beginning of every millennium and bestows wisdom on the people of his clime. At the end of each millennium, the *rūḥāniyya* assigned to the sage ascends, and a new millennium with a new sage begins. The reason for this process is that the highest sphere shifts by one degree every 1,000 years. When the prophetic *rūḥāniyya* is generated from that sphere, it descends to the realm of the planets and generates another *rūḥāniyya*, which then generates twelve more, corresponding to the signs of the zodiac.[205] Each sage-prophet teaches the people of his clime about their

199. Y. Kiel, "Creation by Emission: Reconstructing Adam and Eve in the Babylonian Talmud in Light of Zoroastrian and Manichaean Literature," *Journal of Jewish Studies* 66, no. 2 (2015): 300–301.

200. Arabe 2577, fol. 13r.

201. Ibid., fols. 14v–16r.

202. Ibid., fol. 16v.

203. Delhi Arabic 1946, fol. 55v.

204. Arabe 2577, fol. 54r.

205. Ibid., fol. 23v.

practical obligations to the *rūḥāniyyāt* of the planet (including sacrifices, *nīranj*s, poisons, talismans, rings, idols, and the names of the *rūḥāniyyāt*).[206]

Human history structured by a millennial scheme, the eschatological role of immortal kings and heroes, and the intervention of deities are major elements of Zoroastrian religious traditions.[207] According to the Mazdean tradition, the history of humankind covers six millennia from the First Man, Gayōmard, to the last of the three future saviors, Sōshāns. The Mazdean cosmic cycle has been variously said to consist of 12,000, 9,000, or even 7,000 years, but the latter number is found only in Islamic texts.[208]

Enrico Raffaelli notes that the Byzantine millenary chronocratoria system has Saturn first and then the other planets in the order of Hellenistic astronomy, each ruling over one millennium of history. Such a system is missing from the *Bundahishn*, which has the 12,000-year cycle discussed above. Nevertheless, Arabic sources mention some Mazdean chronologies, which most likely date from the Sasanian period, according to which the key part of world history lasts for 7,000 years. Furthermore, a planetary chronocratoria system is attributed to the Persians by al-Sijzī (ca. 334–411/945–1020) in his *Muntakhab kitāb al-Ulūf* (The Abridgment of the Book of Thousands).[209]

Astrological sacred history is present in the ninth-century Zoroastrian text *Dēnkard*, which mentions twelve astrologers named after the twelve zodiac signs. This story is referenced in Arabic sources; however, in the tenth-century historical bibliography, *al-Fihrist*, of Ibn al-Nadīm, the same story is modified to feature seven astrologers corresponding to the seven planets and Hermes as the representative of Mercury. This association proved very influential on the Arabic constructions of the legend of Hermes.[210] The content of the PsAH was the product of a setting in which these Hellenistic and Persian doctrines of astrological cycles were accessible and influential, leading to their incorporation into the cosmological framework of the PsAH.

4. Rūḥāniyyāt

The volitional causality of the PsAH's cosmos is based on the activity of the *rūḥāniyyāt*, the spiritual agents who determine the qualities of natural things, including human beings, and transmit astral influences. "Volitional causality" is a term I have employed elsewhere to describe the network created by these spiritual agents that penetrates the celestial and terrestrial worlds, carrying down and putting into action the will of God. These spiritual agents are "immanent principles—beings manifesting divine plenitude and profusion," the core of the universe's nonmechanistic efficiency.[211] As we saw earlier, the creation of the first man was the result of this volitional causality via the demiurge.

206. Ibid., fols. 54v–98v.

207. Panaino, "Cosmologies and Astrology," 260.

208. Ibid., 250–51; Pingree, *From Astral Omens*, 39–40.

209. Raffaelli, "Astrology and Religion," 180–81.

210. Van Bladel, "Al-Bīrūnī on Hermetic Forgery," 59; idem, *Arabic Hermes*, 31–32.

211. Saif, *The Arabic Influences*, 4, 172, 181.

Events in the world below are inclined by the influences of the *rūḥāniyyāt* and tuned by the planetary and astral configurations through which their agency flows. It is not an exaggeration to say that by and large, medieval and early modern magical traditions, from *Ghāyat al-ḥakīm* through the works of the arch-mage Aḥmad al-Būnī to contemporary practices and writings, have been permeated by the *rūḥāniyyāt*. However, as their sources were typically not identified, they were often confused with the more traditional "spirits," and this association solidified over time. Consequently, in later literature they became interchangeable with *jinn* or angels or were given a special status within a more expressly Islamic cosmology.[212]

The *rūḥāniyyāt* permeate all the treatises that make up the PsAH. We are told that when God first "established the secrets of the macrocosm in the microcosm," there was nothing physical—no bodies, substances, or accidents in the microcosm.[213] What the microcosm had was "spiritual (*rūḥāniyya*) parts connected with one another."[214] As noted earlier, the genesis of the observable cosmos is explained as the result of the primordial principles of action, motion, heat, and cold. These produce the masculine and feminine principles, which in turn give rise to primordial elements (*usṭuquṣṣāt*), which are "the fundamentals (*uṣūl*) from which spiritual and physical things are generated."[215] Thus, there are three principles of creation: corporeality, the spiritual dimension (*rūḥāniyya*), and their "partnership" (*shirka*). The corporeality of the macrocosm manifests in the variation of forms, the spiritual dimension is the decreed life (*al-ḥayāt al-muqaddara*), and their partnership comprises "actions influencing the bodies from the spiritual dimension" through the mediation of the seven planets.[216] About the *rūḥāniyyāt*, we read: "The highest sphere is the governor (*mudabbir*) by its essence (*bi-dhātihi*), and from it the *rūḥāniyyāt* of good and evil pour downward to the bodies by the authority of the *rūḥāniyya* of the highest—that is, the highest sphere." These *rūḥāniyyāt* flow through the planets and the microcosm, multiplying and branching as they descend.[217] Every event results from their actions. However, their very nature is determined by the primordial elements, the principles of heat/masculinity and cold/femininity. There are *rūḥāniyyāt* of planets, zodiac signs, physical attributes, cognitive faculties, animals, plants, minerals, climes, and so on. By means of the *rūḥāniyyāt*, the microcosm and the terrestrial world are connected to the celestial world and the macrocosm.[218]

A particular *rūḥāniyya* takes center stage in the life of the mage/sage/king. This is the personal *rūḥāniyya*, about which we learn in *al-Isṭimākhīs*. Aristotle advises Alexander the Great as follows:

212. Saif, "From *Ġāyat al-Ḥakīm*."

213. Arabe 2577, fol. 1v.

214. Ibid., fol. 2v.

215. Ibid., fol. 3r.

216. Ibid., fol. 3v.

217. Ibid., fol. 4r–v.

218. Ibid., fols. 7v–12v.

> The first thing you ought to begin with in your affairs is to look to your governing *rūḥāniyya*, whose parts are linked with your star and who is devoted to you and [looks] after you by directing the rulership of your star. This is the Perfect Nature (*al-ṭibāʿ al-tāmm*), mentioned by Hermes in his book. For he said that if the microcosm, the human being, is perfect in nature, his heart is like the stable disk of the Sun in the sky, which extends her rays over all horizons. Likewise, the Perfect Nature takes the role of an intermediary in the heart, and so its rays pass through and come into contact with the faculties of subtle wisdom; then the rays attract these powers of wisdom until they establish them in the heart where they belong, the way the rays of the Sun attract the powers of the world and raise them into the air. Socrates the Sage said: The Perfect Nature is the Sun of the sage and his origin. Hermes was asked: By what means does he [the sage] bring down wisdom? He said: By means of the Perfect Nature. He was asked: What is the key of wisdom? He said: The Perfect Nature. He was asked: What is the Perfect Nature? He said: The *rūḥāniyya* of the philosopher, which is connected to his star and its governor, unlocking for him the latches of wisdom and teaching him all that puzzles him, inspires him with its own awareness (*ṣawābuhā*) and hands him the key to its [wisdom] gates in sleep and in wakefulness.[219]

This advice is followed by a story similar to the narrative about the extraction of the Emerald Tablet in the *Sirr al-khalīqa*. Instead of the tablet, the name of the Perfect Nature that is revealed:[220]

> Hermes said: When I wanted to retrieve the science and methods of the causes of creation, I stumbled upon a dark crypt filled with shadows and winds. I could not see anything because of its darkness, and no lamp could be kindled because of the abundance of winds. In my sleep, a visitor came in the most beautiful form. He said: Take a fire and place it inside a clear glass container, and it will show you [the way]. Enter the crypt, dig in its center, and extract from it a statue with a built-in talisman. If you remove this statue, the wind will dissipate, and you shall see the crypt and it will be illuminated for you. Then dig in its four corners and you shall retrieve the science of all creation, the science of nature, and the genesis of all things and their ways. I asked him: And you; who are you? He answered: Your Perfect Nature. If you wish to see me, call me by my name: Bmāghīs, Fqdīsūghdās, Wghdās, Nūfāghādīs.[221]

These four, the text tells us, are the "letters of the names of this *rūḥāniyya*."[222] The Perfect Nature then teaches Hermes the ritual to summon it. There is no magic without the *rūḥāniyyāt*, and there is no wise and victorious philosopher or king without the Perfect Nature.[223]

219. Ibid., fols. 3v–4r.

220. Haq, *Names*, *Natures*, *and Things*, 29–30.

221. Delhi Arabic 1946, fols. 4v–5r.

222. Ibid., fol. 4v.

223. Ibid., fols. 5v–6r.

I have argued elsewhere that the *rūḥāniyyāt* are akin to or even a reformulation of the Greek *daemones*. The Neoplatonic chain of divine beings consists of God, daemons, heroes, and souls. Daemons are "the common bond that connects gods with souls, and that causes their linkage to be indissoluble. They bind together a single continuity from top to bottom." The bond between the daemons and the gods is generative, too, as the former "receive from the gods on high the causal principles of all these things" and, subjecting themselves to the goodness of the gods, cause "the formless to shine forth in forms."[224] Through the influence of the Arabic sources that they knew, such as *Ghāyat al-ḥakīm*, known in Europe in its Latin translation, *Picatrix*,[225] European natural philosophers, occultists, and esotericists depaganized the daemons, rendering them more palatable to Christian thinkers.[226] Some European medieval and early modern natural philosophers and occultists encountered "daemones" in Iamblichus's *De mysteriis aegyptiorum, chaldaeorum, assyriorum* (On the Mysteries of the Egyptians, Chaldeans, and Assyrians), a paraphrase of which was completed by the priest, mage, and philosopher Marsilio Ficino in 1497. Ficino also translated and published in 1497 Porphyry's *De abstinentia ab esu animalium* (On Abstinence from Killing Animals). Other sources include Plato's *Symposium on Love* and Ficino's commentary on it, *Cratylus*, as well as the *Timaeus*.[227] Furthermore, the Perfect Nature recalls the personal daemon from Apuleius's *On the God of Socrates* (*De deo Socratis*). When the creation of a human soul takes place, a daemon is assigned to guard and watch over it. This daemon is a genius who communicates through signs, inspiration, and dreams in order to guide human beings by inclining towards one action or event, or to forewarn them of harms.[228]

5. Magical Practice

The magical instructions and practices across the PsAH are consistent in terms of ritual types, construction formats, and conditions of practice. All treatises in the corpus save the *Dhakhīra* claim that these rituals and operations belong to the knowledge Hādūs endowed on Admānūs. The agents of efficaciousness are the *rūḥāniyyāt* and the occult properties of animals, plants, minerals, and stones.[229] The magic of the PsAH includes talismans, the organic concoctions referred to as *nīranj*s, invocations to the *rūḥāniyyāt*, suffumigations, sacrifices, magic rings, poison antidotes, and magic connected to the lunar mansions.

Nīranj originally refers to a type of Zoroastrian prayer known in Middle Persian as *nērang*, commonly, and shakily, translated as "incantation." A *nīranj* identifies "the forces that shape and animate existence, whether spiritual (*mēnōg*) or physical (*gētīg*)."[230]

224. Ibid., 187.

225. Ibid., 179-81; D. Pingree, "From Hermes to Jābir and the Book of the Cow," in *Magic and the Classical Tradition*, ed. C. Burnett and W. F. Ryan, 19–28 (London: Warburg Institute, 2006), 21.

226. Saif, *Arabic Influences*, 189–94.

227. Saif, *Arabic Influences*, 186–89.

228. Ibid., 179 and n. 60.

229. Delhi Arabic 1946, fol. 12r.

230. R. E. Payne, *A State of Mixture: Christians, Zoroastrians, and Iranian Political Culture in Late Antiquity* (Oakland: University of California Press, 2015), 86–89; M. Boyce, "Pāydāb and Nērang: Two Pahlavi Terms

In addition, it denotes standard formulas to be uttered on specific occasions, such as after killing noxious creatures and sneezing. The word has proven difficult to translate precisely given its use in different contexts of Zoroastrian cultic practice and its Islamic appropriation. Other known *nērang*s have similar purposes as the *nīranj*s we encounter in the PsAH: they are recited to defeat sorcerers, give courage, restore a relationship between a husband and a wife, and promote healing.[231] Panaino discusses two *nērang*s, one in Middle Persian and the other in Pazend. They contain an invocation of the most important stars and planets of the Zoroastrian tradition.[232] The first of the two is aimed at tying the mouths of demons, tyrants, sinners, thieves, murderers, and oppressors: "In the name of God (Yazd) in the name of the brave Fredon, in the name of the star Tishtar (Sirius), in the name of the star Sadwes (Fomalhaut), in the name of the star Wanand (Vega), in the name of the stars Haftoring (Ursa Major)." The day of the operation is specified: "In the name of Ohrmazd, the creator, on the day of Spandarmad, in the month of Spandarmad, I have tied down [. . .]"[233] The second *nērang* cures fevers and other afflictions caused by demons and the evil eye "by the powers of the stars and the planets."[234]

In the PsAH, the *nīranj* is not identified with Zoroastrians; however, it is a staple medieval magical object, seen in the *Ghāya*, *Rasāʾil Ikhwān al-Ṣafāʾ*, and al-Sakkākī's *Shāmil* and appearing in Ibn Sīnā's *al-Ishārat wa-l-tanbīhāt* as well as in myriad unstudied manuscripts.[235] It is possible that its ubiquity is the result of a direct co-optation of Zoroastrian practices, but it is more realistic to view this "influence," discussed at length in this section and encapsulated by the PsAH, as an indication that a cosmography and a set of practices that were once deeply Iranian were naturalized by the ideological dynamism of the eastern Islamic domains, reaching al-Andalus and Latinate Europe.

Burnett has drawn attention to the nature of the *nīranj*s in the PsAH within the Arabic tradition and the way in which they passed into the Latin world through translations of some PsAH treatises such as *al-Istijlāb* (from *al-Ustuwaṭṭās*) and a portion of *al-Madīṭīs* known as *Antimaquis*, as well as through the translation of *Ghāyat al-ḥakīm*, Herman of

Further Considered," *Bulletin of the School of Oriental and African Studies* 54, no. 2 (1991): 281–29, at 284–85; M. Stausberg, "Monday-Nights at the Banaji, Fridays at the Aslaji: Ritual Efficacy and Transformation in Bombay City," in *Zoroastrian Rituals in Context*, ed. M. Stausberg, 653–718 (Leiden: Brill, 2004), 666.

231. C. Burnett, "Nīranj: A Category of Magic (Almost) Forgotten in the Latin West," in *Natura, scienze e società medievali: Studi in onore di Agostino Paravicini Bagliani*, ed. C. Leonardo and F. Santi, 37–66 (Florence: SISMEL, 2008), 37–38; F. M. Kotwal and P. G. Kreyenbroek, "Prayer," in Stausberg, Vevaina, and Tessmann, *Wiley Blackwell Companion to Zoroastrianism*, 333–43, at 341; J. J. Modi, "A Few Parsee Nîrangs (Incantations or Religious Formulae)," in *Anthropological Papers Read before the Anthropological Society of Bombay*, part 3, 52–71 (Bombay: Nabu Press, 1924), 55–56.

232. A. Panaino, "Two Zoroastrian Nērangs and the Invocations to the Stars and the Planets," in *The Spirit of Wisdom (Mēnōg ī Xrad): Essays in Memory of Ahmad Tafazzoli*, ed. T. Daryaee and M. Omidsalar, 196–218 (Costa Mesa, CA: Mazda Publishers, 2004), 196–97, 206–7.

233. Ibid., 198–99.

234. Ibid., 200–201.

235. Ibid., 207, 209–10; SOAS 46347, fols. 30v–31r; Noble, *Philosophising the Occult*, 22–23; L. Saif, "A Study of Ikhwān al-Ṣafāʾ's Epistle on Magic, the Longer Version (52b)," in Saif et al., *Islamicate Occult Sciences*, 162–206, at 187–88.

Carinthia's *De essentiis* (which contains a reference to "data neiringet initia" attributed to Aristotle), and the *Liber Lune secundum Aristotelem*.[236]

V. Conclusion

The aim of this article was to present the pseudo-Aristotelian Hermetica as a recognizable corpus unified by cross-references among its constituent texts, the historical narrative articulated across them, and their consistent cosmological and mythic foundations. Drawing on both internal and external evidence, I have argued for a ninth-century provenance. A clear and systematic introduction to this dense corpus required first disentangling the confusion about the titles and number of the constituent treatises through a careful reading of the texts. The major texts of the PsAH are *al-Isṭimākhīs*, *al-Isṭimāṭīs*, *al-Ustuwaṭṭās*, and *al-Hādhīṭūs*, all of which are likely to be parts of a larger work entitled *K. ʿIlal al-rūḥāniyyāt*. There also exists an abridgment of the latter work, entitled *al-Madīṭīs*. We are aware of two additional texts that can be considered pseudo-Aristotelian and Hermetic but that were composed much later, modeled on the aforementioned texts; these are *Dhakhīrat Iskandar* and *al-Shuʿrā al-yamāniyya*.

What makes the PsAH unique is their content. Magical recipes and planetary rituals are woven into a creation myth according to which a demiurge, Hādūs, teaches Admānūs the sciences and doctrines required to cultivate his soul, intellect, and progeny and to secure prosperity for human civilization. The first sciences revealed to Admānūs, given their necessity for survival, are the occult sciences, knowledge of natural properties, and medicine. However, the generations after Admānūs went astray, so seven sage-prophets, embodying planetary *rūḥaniyyāt*, appear in successive epochs to different peoples to reestablish law and wisdom. Creation and generation—and their counterparts, cosmic collapse and corruption—as well as prophecy and revelation are structured by astrological cycles. I have shown the considerable extent to which these ideas demonstrate the blending of Zoroastrian notions, especially astrological ones, with Greek ideas in the PsAH corpus.

The prologues of the PsAH texts, examined in detail here, reveal that the entire corpus is located within a historical imaginary, which consolidates Aristotle and Hermes Trismegistus philosophically and doctrinally. Alexander the Great becomes a model of a sagacity that links the understanding of the celestial world with that of the terrestrial, the divine with the mundane.

The philosophisation of the occult through the Hermes–Aristotle–Alexander triad proved profoundly influential and forms the basis for the cosmological and philosophical principles of major occult texts such as *Ghāyat al-ḥakīm*, *Rasāʾil Ikhwān al-Ṣafāʾ*, al-Sakkākī's *al-Kitāb al-Shāmil*, and the works of Aḥmad al-Būnī. This trend highlights a closely interrelated canon of early medieval Islamic occult sciences that include the Jābirian corpus, the pseudo-Apollonian *Sirr al-khalīqa*, and other important but understudied works.[237]

236. Burnett, "Nīranj," 44–66, where the *Liber Lune secundum Aristotelem* is edited and translated.

237. The influence of the PsAH is also evident in *Kitāb Sharāsīm al-hindiyya*, currently being studied by Jean-Charles Coulon, who is also preparing a critical edition. See J.-C. Coulon, "The *Kitāb Sharāsīm al-Hindiyya* and Medieval Islamic Occult Sciences," in Saif et al., *Islamicate Occult Sciences*, 317–79.

The influential esotericist and lettrist ʿAbd al-Raḥmān al-Bisṭāmī (d. 858/1454) presents at the beginning of his *Shams al-āfāq* (The Sun of the Horizon) an extensive reading list on occult sciences, which includes *Kitāb al-Ishnūṭās* (*al-Ustuwaṭṭās*), *al-Isṭimākhīs*, *al-Hādhīṭūsh* (*al-Hādhīṭūs*), and *al-Malāṭīs*, in addition to texts attributed to Kīnās, *Ghāyat al-ḥakīm*, and the works of al-Būnī, among others.[238] Therefore, by giving the PsAH its due attention, we become better equipped to understand the diversity of ideas, practices, and sources in a foundational period in the history of the Islamic occult sciences, namely, the eighth to tenth centuries, which continued to echo in later periods. The deep influence of these ideas is not restricted to the realm of the occult sciences but also infiltrated the wider discourse on wisdom and the production of knowledge about the universe, its forces, and the place of human beings in the cosmos.

The overall objective of this article has been to catalyze scholarly interest in the PsAH. A more exhaustive analysis of the available manuscripts is needed to support the essential undertaking of editing and translating the PsAH, which would make more widely available a hitherto unnoticed corpus arising from a community active under Islamic rule with unique myths, cosmology, and practices. The striking parallels between the contents of the PsAH and later descriptions of Sabian doctrines and rituals deserve further attention—not necessarily for the purpose of identifying who the Sabians actually were but as a genealogical approach to Sabian religion as a construct instrumentalized in the formation of an Islamic cultural identity by means of relating and othering, as we see in al-Shahrastānī's *al-Milal wa-l-niḥal*. The PsAH invites us to consider the relationship it has with ancient local sets of beliefs that relate to Zoroastrianism such as the "Ghulāt" and "the specific complex of Syro-Mesopotamian Gnostic traditions [that] likely contributed to the religious milieu out of which Ghulāt thought emerged;" [239] this becomes more pressing when we consider the role of the demiurge in the world of the PsAH. Another subject for future investigation is the reception and circulation of the PsAH within the Islamic world and beyond from the perspective of manuscript studies, intellectual history, history of science, and material culture, in order to get closer to understanding the communities from which these texts emerged and the traditions that were shaped by them.

238. ʿAbd al-Raḥmān al-Bisṭāmī, *Shams al-āfāq fī ʿilm al-ḥurūf wa-l-awfāq*, MS London, British Library, no. 7494, fols. 3r–6r; see also N. Gardiner, "Books on Occult Sciences," in *Treasures of Knowledge: An Inventory of the Ottoman Palace Library (1502/3–1503/4)*, vol. 1: *Essays*, ed. G. Necipoğlu, C. Kafadar, and C. H. Fleischer, 735–66 (Leiden: Brill, 2019); J.-C. Coulon, "Building al-Būnī's Legend: The Figure of al-Būnī through ʿAbd al-Raḥmān al-Bisṭāmī's *Shams al-Āfāq*," *Journal of Sufi Studies* 5, no 1 (2016): 1–26.

239. Crone, *The Nativist Prophets of Early Islamic Iran*, 22–27, 191– 215; M. Asatryan and D. Burns, "Is Ghulāt Religion Islamic Gnosticism? Religious Transmissions in Late Antiquity," in *Le Ésotérisme shiʿite: ses racines et ses prolongement*, ed. M.A. Amir-Moezzi, M. de Cillis, D. de Smet, and O. Mir-Kasimov (Turnhout: Brepols, 2016), 55–86.

Appendix: Manuscripts Consulted

The Pseudo-Aristotelian Hermetic Cycle

Complete manuscripts:

- MS Oxford, Bodleian, Arab d. 221, fols. 1r–82r. The sequence of folios is disordered. Dated 417/1026. A. F. L. Beeston has challenged the dating, arguing that the text is instead an early fourteenth-century composition.[240] Isabel Toral-Niehoff, however, has proposed 921/1515 as a *terminus ante quem* on the basis of repeated notes within the text that are dated between 921/1515 and 933/1527.[241]
- MS London, British Library, Delhi Arabic 1946, fols. 1v–200r. Undated. Estimate: late nineteenth century.
- MS Tonk, Rajasthan, Maulana Abul Kalam Azad Arabic Persian Research Institute, no. 2142. Described by Isabel Toral-Niehoff and Hans Daiber.[242] Despite several attempts, I, like Toral-Niehoff and Daiber, was unable to gain access to this manuscript.[243]

The constituent treatises of the *Cycle* are the following:

a. *Al-Isṭimākhīs* (PsAH), fols. 1v–21r in Delhi Arabic 1946.

b. *Kitāb Istijlāb rūḥāniyyāt al-bahāʾim* (On Attracting the *Rūḥāniyyāt* of Animals, PsAH), fols. 21v–32r in Delhi Arabic 1946. Also referred to as *al-Madāṭīs,* according to the prologue.[244] At the end of the text, we read: "This is the end of what the Sage described in *K. al-Ustuwaṭṭās*."[245] It thus seems to be a chapter of *al-Ustuwaṭṭās* (see also "e" below).

c. From (*min*) *Kitāb al-Isṭimāṭīs* (PsAH), fols. 32v–52v in Delhi Arabic 1946.

d. *Kitāb al-Hādhīṭūs* (PsAH), fols. 53r–85r in Delhi Arabic 1946. Aristotle is absent, but the text's identity is confirmed by a cross-reference in *al-Istijlāb*: "according to what was described by Hermes."[246] An anonymous translator is mentioned.

e. Another chapter from *al-Ustuwaṭṭās* (PsAH), fols. 85v–92v in Delhi Arabic 1946 (see also "b" above).

f. *Giranis* (not PsAH), fols. 93r–115v in Delhi Arabic 1946.

240. A. F. L. Beeston, "An Arabic Hermetic Manuscript," *Bodleian Library Record* 7, no. 1 (1962): 20–23.

241. Toral-Niehoff, *Kitab Giranis*, 28.

242. Toral-Niehoff, *Kitab Giranis*, 29; H. Daiber, "New Manuscript Findings from Indian Libraries," *Manuscripts of the Middle East* 1 (1986): 26–48, at 39, no. 156.

243. The catalog can be accessed here: http://www.maapritonk.nic.in/pdf/A-handlist-of-Arabic-Mss.pdf.

244. Delhi Arabic 1946, fol. 21v.

245. Ibid., fol. 32r.

246. Ibid., fol. 85r.

g. *Kitāb al-Aḥjār* (The Book of Stones, not PsAH), fols. 116r–119r in Delhi Arabic 1946. The title is given at the end; the text begins abruptly. Identical in content to the stone- and ring-magic collection in MS Istanbul, Süleymaniye, Ayasofya 3610, fols. 1v–143r.[247]

h. *Kitāb ʿUṭārid b. Muḥammad al-Muḥāsib fī manāfiʿ al-aḥjār wa al-khiraz wa ṭillismātihā wa khawatim al-kawākib al-sabʿa* (The Book of ʿUṭārid b. Muḥammad al-Muḥāsib on the Benefits of Stones, Amulets, and Their Talismans, and the Rings of the seven planets, not PsAH), fols. 119r–126r in Delhi Arabic 1946. The title is given at the text's conclusion. The *PsAH Cycle* includes only the last part of the actual text attributed to ʿUṭārid on the construction of planetary rings. The second text in the stone-magic collection MS Paris, BnF, Arabe 2775 (fols. 102r–114r) and the second part of Ayasofya 3610 (fols. 44v–168v) contain the first part of ʿUṭārid's work.

i. *Al-Kitāb al-majmūʿ fī khawāṣṣ al-aḥjār* (The Collection Concerning the Occult Properties of Stones, not PsAH), which contains *Kitāb Maʿrifat al-ḥijāra wa-khāṣṣiyatihā wa-nuqūshihā* (On the Knowledge of Stones, Their Occult Properties, and Their Inscriptions) taken from *al-Hādhīṭūs* (see "d" above) by the First Hermes and other books (*maṣāḥif*); fols. 126r–197r in Delhi Arabic 1946. One of the five texts featured in this collection is referred to as "*bāb maḥakkāt al-aḥjār min kalām Aristotle wa-ghayrihi*" ("a chapter on the pulverulence of stones from the writings of Aristotle and others," fol. 154r), which is identical to a section called "*dhikr maḥakkāt al-ḥijār al-sabʿa*" ("reference to the pulverulence of the seven stones") in MS Cambridge, Dd. 4. 28., fols. 120r–122r. Both are based on sayings by a sage named Funṭus.

Kitāb ʿIlal al-rūḥāniyyāt and *al-Ustuwaṭṭās*

Complete manuscripts:

- MS Paris, BnF, Arabe 2577, fols. 35v–104r. Undated. Estimate: fourteenth century. *Al-Ustuwaṭṭās* on fols. 1v–34r; *al-Isṭimāṭīs* on fols. 35v–104r. In this manuscript, fols. 104r–105r contain sections from *Kitāb Nawāmīs Aflāṭūn*, known in Latin as *Liber Vaccae* or *Liber Aneguemis*.

- MS Manisa, National Library of Manisa (Genel Kitaplik), no. 1461. Dated 771/1370. *Al-Ustuwaṭṭās*: fols. 1v–25v; Ps.2: fols. 26v–72r.

Incomplete manuscripts:

- MS Berlin, Staatsbibliothek zu Berlin, Petermann I 66. Eighteenth century, according to the catalog. Parts from *al-Isṭimāṭīs* are found in fols. 41v–73v.

247. This is a royal manuscript copied for the treasury of Sultan Abū al-Naṣr Sayf al-Dīn al-Ashraf Qaytbay (r. 1468–96); see fol. 1r. The colophon dates the manuscript to the beginning of Shaʿbān 888 AH (September 1483).

- MS Leiden, Leiden University, Or. 1235. Undated. This is a collection of treatises on the subject of planetary talismans and invocations from various works, including *al-Ustuwaṭṭās* on fols. 9r–17v, 35r–38v, and 52r, and an abridgment by Ibn Waṣīf of *Kitāb al-Mīlāṭīs* "described by Kīnās" on fols. 76v–101r (see below under *Kitāb al-Mīlāṭīs al-akbar*).

Al-Madīṭīs

- MS Oxford, Bodleian, Marsh 556, fols. 4r–152r. The date has been scratched off. This is an abridged reformulation of *K. ʿIlal al-rūḥāniyyāt*.

***Dhakhīrat al-Iskandar* (The Treasury of Alexander)**

Complete manuscripts:

- MS London, British Library, IO Islamic 673, fols. 1v–59r.
  The date has been scratched off.
- MS Berlin, Staatsbibliothek zu Berlin, Wetzstein II 1209, fols. 1v–42v.

Incomplete manuscripts:

- MS Tehran, Majlis-i Shūrā-yi Millī, no. 4752, fols. 1r–42v, under the title *Kitāb Milāṭīs al-akbar*. This manuscript includes the third *bāb*, entitled *al-Isqūṭās* (*al-Ustuwaṭṭās*?), from *al-Kitāb al-Shāmil fī al-baḥr al-kāmil* (The Comprehensive Book on the Perfect Sea), a magic text by Sirāj al-Dīn Abū Yaʿqūb al-Sakkākī (1160–1229).

Al-Shuʿrā al-yamāniyya* or *Aḥkām ṭulūʿ al-shuʿrā al-yamāniyya

Complete manuscripts:

- MS Paris, BnF, Arabe 2578, fols. 1v–38v.
- MS Paris, BnF, Arabe 2579, fols. 1v–13v.
- MS Paris, BnF, Arabe 2580, fols. 2v–16v.[248]

248. Many other manuscripts of this work exist, including MS Tehran, Majlis 6451/3, 4448/7; MS Leipzig, Vollers 831; and MS Princeton, Islamic Manuscripts, Garrett no. 547H.

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