Islamicate Occult Sciences in Theory and Practice

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CHAPTER 1

Introduction

Liana Saif and Francesca Leoni

A confluence of interests and an alignment of purposes led to the present volume, which gathers some of the papers presented at a three-day international conference, "Islamic Occultism in Theory and Practice," held at the Ashmolean Museum of Art and Archaeology, University of Oxford on January 6–8, 2017.* Following parallel yet separate trajectories until then were Liana Saif, a historian investigating magical practices in medieval Islam (secondeight/sixth-twelfth century), and Francesca Leoni, a curator working on the material forms taken by Islamicate divination.** When their paths crossed, they realized the advantage of accessing and combining their diverse expertise and associated fields of study. This was prompted by the recognition that the tendency to separate theory from practice is a short-sighted approach for the study of the occult sciences. The above-mentioned conference was conceived as an opportunity to engage the two perspectives in active dialog and identify new and fruitful methodological directions for a fast-growing field of studies. The team was quickly joined by two other scholars, Matthew Melvin-Koushki and Farouk Yahya, whose specialisms contributed to widen the thematic, chronological, and geographical parameters of the effort.

The greatest success of the conference lied in bringing international scholars together to develop ideas, questions, and arguments about the entanglement of the occult sciences with theological, philosophical, and esoteric currents, in terms of both theory and practice. The conference "spirit" now animates the present volume, with the same multidisciplinary approach maintained at its core. The thirteen chapters gathered here deliver the latest research on a wide range of issues and perspectives relating to Islamicate occult sciences. The breadth of the material discussed is similarly wide in geographical and chro-

^{*} We acknowledge the invaluable financial support of The Barakat Trust and Rosalie Basten toward the organizational costs of the conference. We would also like to thank all of the presenters for their valuable contributions, Azfar Moin, Venetia Porter, and Emilie Savage-Smith for sharing their insights during the roundtable discussion, and museum staff, volunteers, and attendees.

^{**} The authors are grateful to the British Academy and Leverhulme Trust for supporting their research through a postdoctoral fellowship and a research-project grant, respectively.

nological scope, with subjects of inquiry spanning from Spain in the west to Southeast Asia in the east, and from the fourth/tenth century to the present day.

1 The Occult Sciences

The complexity and often ambiguous nature of the subject addressed by this book means that it is important from the outset to establish our main conceptual framework. We have chosen to replace the term "occultism," used for the conference title, with "occult sciences," both to consolidate the subjectmatter within a burgeoning field and to avoid historical ambiguity. Occultism refers, in fact, to nineteenth- and twentieth-century developments in the history of Western esotericism and to "the specifically French currents in the wake of Eliphas Levi, flourishing in the 'neo-martinist' context of Papus and related manifestation of fin-de-siècle esotericism."¹ The term "occult sciences," on the other hand, reflects the Arabic, Persian, and Turkish, terminology used in historical sources up to the modern era: namely al-'ulūm al-khafiyya, literally meaning hidden or occult sciences, also known as al-ulūm al-gharība (the unusual, rare, or difficult sciences), al-'ulūm al-ghāmida (the recondite sciences), al-'ulūm al-daqīqa (the intricate sciences), and al-'ulūm al-latīfa (the subtle sciences).² We do, however, acknowledge the resulting problematic use of "occultist" as a noun describing actors and an adjective instead of the awkward "occult-scientific" or "occult scientist." We therefore opted for it anyway for the sake of style and clarity.³

¹ Wouter J. Hanegraaff, "Occultism," in *Dictionary of Gnosis and Western Esotericism*, ed. Wouter J. Hanegraaff, Antoinre Faivre, R. van den Broek, and Jean-Pierre Brach (Leiden: Brill, 2005), 887–888.

² While *al-'ulūm al-khafiyya* seems to be the dominant term in Arabic during the "classical" period, *al-'ulūm al-gharība* emerged as the preferred designation in Persian and Turkish classifications of the sciences, particularly from the sixth/twelfth century onward. On these terms and for a survey of the changing formal categorisation of the various occult sciences between the natural, mathematical, and religious sciences in Arabic and Persian encyclopedias from the fourth/tenth century to the eleventh/seventeenth, see Matthew Melvin-Koushki, "Powers of One: The Mathematicalization of the Occult Sciences in the High Persianate Tradition," *Intellectual History of the Islamicate World* 5, no. 1 (2017): 127–199.

³ The authors see the confusion that arises from the use of "occultism," which refers to a specific historical movement, as being graver than the use of "occultist." Translation at its most basic aims to convey meaning succinctly rather than obfuscate, but *traduttori traditori* ("translators [are] traitors"), as the nineteenth-century Tuscan proverb goes, and something will inevitably be lost.

A brief look at some uses is appropriate at this point in order to clarify the meaning of "occult sciences" in the Islamicate context. Al-'ulūm al-khafiyya makes an early appearance in the ps.-Aristotelian Hermetica (hereafter referred to as psAH), a group of texts—sometimes appearing together in manuscripts or separately-purporting to be epistles or lessons by Aristotle addressed to his pupil Alexander the Great and concerned with astrology, magic, occult properties, alchemy, and medicine. Aristotle claims to have received his knowledge from Hermes's al-Kitāb al-maknūn fī asrār al-'ulūm al-khafiyya, ("The well guarded book on the secrets of the occult sciences").⁴ We know that the psAH were known as early as the fourth/tenth century, based on citations in texts composed in that century, such as the Rasā'il Ikhwān al-Ṣafā' ("Epistles of the Brethren of Purity"), discussed in more detail in Chapter 4. In their epistle on magic, the Brethren list astrology, magic (which subsumes occult properties), alchemy, medicine, and a fifth science they call *al-tajrīd* (emancipation of the soul) as occult sciences.⁵ Al-'ulūm al-khafiyya recurs in another psAH epistle, in which we are told that the demiurge Hādūs has taught Adamnūs (that is, Adam) "the secrets of the four sciences" and "the secrets of medicine."

The *al-'ulūm al-khafiyya* are far from being rogue sciences. Attesting to their integration into the philosophical and scientific enterprise of the Islamicate world is their place in official classifications of the sciences. In his *Aqsām al-'ulūm al-'aqliyya* ("The classification of intellectual sciences"), Ibn Sīnā (Avicenna, d. 428/1037) presents his scheme as an organization of the constituents of *ḥikma*, that is, wisdom or philosophy, dividing it into three branches: lower sciences, encompassing the natural sciences; middle sciences, encompassing the mathematical sciences; and higher sciences, or metaphysics (*al-ilāhiyyāt*).⁶ The natural sciences, or lower sciences, are divided into either primary or secondary. In the first group are knowledge of natural universals such as matter, forms, motions, nature, and human nature; knowledge of the nature of heavens and the elements and nature; the processes of generation and corruption; knowledge of celestial influences on the elements (meteorology, earthquakes,

⁴ London, British Library, Delhi Arabic мs, fol. 21^v.

⁵ Godefroid de Callataÿ and Bruno Halflants, ed. and trans., *The Brethren of Purity: On Magic 1: An Arabic Critical Edition and English Translation of Epistle 52a* (London: University of Oxford Press, in association with the Institute of Ismaili Studies, 2011), 16–17. This is not surprising, considering that they transfer much of the content of the aforementioned psAH's treatise on attracting animals into another, longer, version of their epistle on magic, citing the same Hermetic text on the secrets of the occult sciences. *Rasā'il Ikhwān al-Ṣafā'*, 4 vols. (Beirut: Dār Ṣādir, 2008), 4:450.

⁶ Ibn Sīnā, "al-Risāla fī aqsām al-'ulūm al-'aqliyya," in *Tis' rasā'il fī l-ḥikma wa-l-ṭabī'iyyāt* (Cairo: Dār al-'Arab, n.d.), 104–116, esp. 104–105.

natural phenomena); mineralogy; science of plants; knowledge of animals; and knowledge of the soul and the powers of perception. The secondary natural sciences include medicine, astrology, physiognomy, oneiromancy (dream interpretation), talismans, *nīranjs* (organic amulets), and alchemy.⁷ Unlike Ibn Sīnā's neutral description, al-Ghazālī (d. 505/111) adopts a more condemnatory tone in the classification of sciences in his *Tahāfut al-falāsifa* ("The incoherence of the philosophers") while following his predecessor closely. He is, however, unconcerned with the lawfulness of these sciences; as a matter of fact, al-Ghazālī attacks the natural sciences' exclusion of divine volition from their discussion of causality, which ultimately undermines the extraordinariness of miracles making them akin to magic.⁸

From Ibn Sīnā onward, then, most occult sciences were consistently classed among the natural sciences in all the major Arabic and Persian classifications of the sciences, and increasingly among the mathematical and religious sciences as well. The science of letters ('ilm al-hurūf), sometimes referred to as lettrism, is a particularly instructive example here, as this and its subsets (such as *jafr*, or letter divination) were variously classed as natural, mathematical, or religious sciences, and, increasingly, as all three at once. The letters, especially those of the Arabic alphabet, are the building blocks of reality, so *'ilm al-hurūf* can be defined as knowledge of the esoteric significance and occult potency of letters, their numerical values, and names that reveal truths about nature, the cosmos, and the divine. For some of its practitioners, indeed, it came to serve as a universal or master occult science, comprising both magical and divinatory applications and running the epistemological gamut from physics to metaphysics.⁹ Most notably, the status of the science of letters by the early modern period as a primary vehicle of applied Neopythagoreanism, especially in the Persianate world, served as a means to sacralize the

⁷ Ibn Sīnā, "al-Risāla fī aqsām al-'ulūm al-'aqliyya," 108–111. This system became influential, as it has been adopted by other classifications such as those in *Miftāḥ al-saʿāda wa-miṣbāḥ alsiyāda* ("The key to happiness and the cresset of mastery") by the Ottoman scholar Ahmed b. Mustafā Ṭashköprüzāde (1495–1561) and *Kashf al-zunūn* ("The elucidation of doubts") by Kâtip Çelebi (d. 1067/1657). Ṭashköprüzāde, *Miftāḥ al-saʿāda wa-mişbāḥ al-siyāda*, 3 vols. (Beirut: Dār al-Kutub al-'Ilmiyya, 1985), 1:301–302, 340–346; Ḥājjī Khalīfa, *Kashf al-zunūn*, ed. Muḥammad Yaltaqāyā and Rif'at al-Kalisā, 2 vols. (Beirut: Dār Iḥyā' al-Turāth al-'Arabī, n.d.), 1:11–18.

⁸ Abū Ḥāmid al-Ghazālī, *Tahāfut al-falāsifa*, ed. Sulaymān Dunyā (Cairo: Dār al-Maʿārif, 1966), 235–238.

⁹ Melvin-Koushki, "Powers of One." In the present volume, chapters 6, 7, and 9 are particularly concerned with this science.

mathematical sciences, occult or otherwise, by linking them with the Shi'i Imams, for Sunnis and Shi'is alike.¹⁰

More broadly, the occult sciences are a subset of knowledge that moves between the personal and the transpersonal, the subjective and the transitive, reflecting the epistemological fluidity of the Neoplatonic, Neopythagorean, and Aristotelian foundations of their theoretical frameworks. Ultimately the lines between divine and natural, subjective and objective investments are blurry. The recognition of this irreducible ambiguity is valuable to the methods of intellectual historians, art historians, and curators alike, as it allows them to give nuance to their arguments beyond preconceived notions based on anachronistic binaries.

The ambiguous character of the occult sciences also caused their modern social and institutional marginalization, especially when subjected to post-Enlightenment ideals that bifurcate knowledge into rational and irrational, as discussed later on. More significantly, the influence of the Enlightenment dichotomy of reason versus superstition, which delegitimized the study of the occult sciences, spread beyond "the West" to the Islamic ecumene, with similar effects expressed through different yet entangled cultural and political projects, most notably Islamic reform movements between the eighteenth and twentieth centuries. The creedal purity of Islamist revivalists of the early twentieth century, including those who adopted Wahhabi and Salafi theology, was bolstered by expunging "heterodoxy" and "superstition" from a rationalist program of reform.¹¹ This rationality overtly shuns the occult sciences and largely dismisses Islamic esoteric currents, deemed as embarrassing and backward superstitions. For Muhammad b. 'Abd al-Wahhāb (d. 1206/1792), the question warranted two chapters in his *Kitāb al-Tawhīd* in which he censored the making of amulets and seeking blessings from things other than God and criticized magic and divination by citing hadith against these practices and beliefs.¹² Ibn 'Abd al-Wahhāb revamped earlier criticisms aligning in particular with Ibn Taymiyya; however, in the context of the twentieth century his view takes on an explicit anti-colonial and anti-imperialist dimension. As the Lebanese reformer Rashīd Ridā claimed, these illicit practices and beliefs prevented the world from witnessing the true progressive and rational nature of Islam.¹³

¹⁰ Melvin-Koushki, "Powers of One."

¹¹ Henri Lauzière, *The Making of Salafism: Islamic Reform in the Twentieth Century* (New York: Columbia University Press, 2016), 47.

¹² Muḥammad b. 'Abd al-Wahhāb, *Kitāb al-Tawḥīd*, ed. Abū Mālik al-Qufaylī (Egypt: Maktabat al-Ulūm wa-l-Ḥikam, 2008), 31, 34, 80–86.

¹³ Lauzière, The Making of Salafism, 48, 118.

In Iran too, the reform movements issuing from the 1905–1911 Constitutional Revolution intensified the legal and institutional assault on the occult sciences:

Three developments conspired to criminalise the occult professions. First, postrevolutionary modernists redoubled attentions to the issue of public order, civility, and hygiene as part of efforts to remake urban space along modern European lines. Second, these reforms were coupled with calls for enlightened education and assaults on superstition and irrationality under the ancien regime Third, legal reform became the locus of heightened activity, particularly as modernists understood the establishment of a particular kind of public order to depend on the codification of and enforcement of a set of laws.¹⁴

These reformist processes of rationalization centre on the aforementioned post-Enlightenment dichotomy but contrast with medieval Islamicate notions of "intelligibility" and "rationality," historically contingent analytical categories formulated in an episteme that hailed a massive and deeply influential (on a global level) sense of the knowability of the universe and the forces within it. This discourse led directly to the emergence of systematic studies of occult forces and explorations on how they manifest in the practice of magic and astrology (action at a distance), divination (intuition), and alchemy (chemical reactions).

Anti-occultist rhetoric was also cultivated by other forces, including secularist and liberal-style currents in the Islamicate world and Christian evangelism, which resulted in strong tendencies of disenchantment. In its modern configuration propelled by political activism, from Algeria through Iran and India,¹⁵ therefore, the suppression and marginalization of the occult sciences, whether in practice or as academic study, was more successful than at any previous time.¹⁶

One of the by-products of such marginalizing processes is the creation of private and public spaces where new expressions of the occult emerge. For example, in many places of the MENA region at least, the privilege of middle and upper classes secures a level of legal immunity and social status. Thus, capital access to Western forms of occult and esoteric currents led to the surge

¹⁴ Alireza Doostdar, *The Iranian Metaphysicals: Explorations in Science, Islam, and the Uncanny* (Princeton: Princeton University Press, 2018), 50.

Francis Robinson, "Islamic Reform and Modernities in South Asia," *Modern Asian Studies* 42, nos. 2–3 (March–May 2008): 259–281.

¹⁶ Roman Loimeier, "Patterns and Peculiarities of Islamic Reform in Africa," *Journal of Religion in Africa* 33, no. 3 (2003): 237–262.

of Spiritism, Occultism, even Wicca, New Age practices, and Quantum Mysticism.¹⁷ The latter, in particular, created a modern process of rationalization that viewed traditional occult sciences with derision and their practitioners as charlatans, while elevating spiritual, esoteric, and occult practices that can be expressed in what are perceived as scientific terms (e.g., energy, wavelengths, consciousness). To some extent, this "Westernizing" turn contributed even further to the suppression of the traditional occult sciences, correlating them with the "superstition," "irrationality," and the desperation of the lower classes. This is a rich subject for future research that pays attention to contemporary practices, entanglements with other global communities, and the political, economic, and social power-structures that are, and have always been, shaping Islamicate occult sciences and spiritualities according to ever-changing discursive constructs of "rationality." Present-day university programs often deepen this split by excluding the occult sciences from the history of science and philosophy and by assigning them, if at all, to the realms of anthropology, sociology, and religion. This volume's ultimate ambition is thus to cement the value of studying and researching the occult sciences as an integral part of the vibrant Islamicate intellectual and scientific enterprise over many centuries and over vast territories.

2 Looking Backward, Looking Forward

The last decade or so has witnessed a notable rise in scholarship dealing with magic, alchemy, the science of letters, astrology, divination, and various esoteric trends in the Islamicate world. In particular, the recent work of a new generation of Islamicists on the theoretical contributions of pivotal exponents of the occult sciences is gradually making available hitherto unknown or unedited texts that expand considerably current knowledge of the subject and better equip future scholarly quests.¹⁸ Ongoing research, often brewed in increasingly

¹⁷ For the case of Turkey, see Özgür Türesay, "Between Science and Religion: Spiritism in the Ottoman Empire (1850s-1910s)," *Studia Islamica* 113 (2018): 166–200. See also the ANR-DFG Neoreligitur Research project, "New Religiosities in Turkey: Reenchantment in a Secularized Muslim Country?" https://anr.fr/Project-ANR-13-FRAL-0006. About Iran, see Doostdar, *The Iranian Metaphysicals, passim.*

¹⁸ See, above all, de Callataÿ and Halflants, *The Brethren of Purity: On Magic 1*; Jean-Charles Coulon, "La magie islamique et le corpus bunianum au Moyen Âge" (PhD diss., Université de Paris IV–Sorbonne, 2013); Cecile Bonmariage and Sébastien Moureau, ed. and trans., *Le cercle des lettres de l'alphabet Daïrat al-ahruf al-abjadiyya: Un traité pratique de magie des lettres attribué à Hermes* (Leiden: Brill, 2016); Liana Saif, "The Cows and the

diverse academic centers across Europe and North America,¹⁹ is shedding light on subjects such as the development of occult thought in the early medieval period;²⁰ the assimilation of Greek, Persian, and Indian knowledge to Islamic thought;²¹ the European reception of Islamicate occult ideas;²² the relationship between the occult sciences and imperial ideologies;²³ and the production, circulation and careers of occult manuscripts and learning.²⁴ Also on

- The Warburg Institute (London) continues to lead the way. At the Université Catholique de Louvain (Belgium), the "Speculum Arabicum Project" (ERC 2012) is engaged in research on alchemy and magic. Courses on the Islamicate occult sciences are regularly taught in the history and religion departments of the University of South Carolina, where an MA in magic is currently under development. In Paris, the workshop series "La magie dans l'Orient juif, chrétien et musulman: recherches en cours et études de cas" continues at the Institut des Sciences Humaines et Sociales du CNRS. Other initiatives are being developed at the University of Exeter and the University of London, as well as at Yale University, where Travis Zadeh recently organized an international symposium, "Magic and the Occult in Islam and Beyond" (March 2017), which was attended by several of the participants in the present volume. See his Postscript in this volume.
- 20 Jean-Charles Coulon, La magie en terre d'Islam au Moyen Age (Paris: CTHS-Histoire, 2017); Liana Saif, "From Gāyat al-ḥakīm to Šams al-maʿārif: Ways of Knowing and Paths of Power in Medieval Islam," in "Islamicate Occultism: New Perspectives," ed. Matthew Melvin-Koushki and Noah Gardiner, special double issue of Arabica 64, nos. 3–4 (2017): 297–345.
- 21 Bink Hallum, "Zosimus Arabus: The Reception of Zosimos of Panopolis in the Arabic/ Islamic World" (PhD diss., Warburg Institute, 2008); Kevin van Bladel, *The Arabic Hermes: From Pagan Sage to Prophet of Science* (Oxford: Oxford University Press, 2009).
- 22 Liana Saif, *The Arabic Influences on Early Modern Occult Philosophy* (Basingstoke: Palgrave Macmillan, 2015).
- 23 Ahmet Tunç Sen, "Astrology in the Service of the Empire: Knowledge, Prognostication, and Politics at the Ottoman Court, 1450s–1550s" (PhD diss., The University of Chicago, 2016); Emin Lelić, "Ottoman Physiognomy (*'ilm-i firâset*): A Window into the Soul of an Empire" (PhD diss., The University of Chicago, 2017); Matthew Melvin-Koushki, "Early Modern Islamicate Empire: New Forms of Religiopolitical Legitimacy," in *The Wiley-Blackwell History of Islam*, ed. Armando Salvatore, Roberto Tottoli, and Babak Rahimi (Hoboken: Wiley-Blackwell, 2018), 353–375; Matthew Melvin-Koushki, *The Occult Science of Empire in Aqquyunlu-Safavid Iran: Two Shirazi Lettrists and Their Manuals of Magic* (Leiden: Brill, forthcoming).
- Farouk Yahya, Magic and Divination in Malay Illustrated Manuscripts (Leiden: Brill, 2016);
 Noah Gardiner, "Esotericism in a Manuscript Culture: Ahmad al-Būnī and His Readers

Bees: Arabic Sources and Parallels for Pseudo-Plato's *Liber vaccae* (*Kitāb al-nawāmīs*)," *The Journal of the Warburg and Courtauld Institutes*, 79 (2016): 1–47; Matthew Melvin-Koushki, *The Lettrist Treatises of Ibn Turka: Reading and Writing the Cosmos in the Timurid Renaissance* (Leiden: Brill, forthcoming); Liana Saif, *The Goal of the Wise: An English Translation from the Arabic Original* (Pennsylvania: Penn State University, forthcoming); Godefroid de Callataÿ, Sébastien Moureau, and Bruno Halflants, ed. and trans., *The Brethren of Purity: On Magic 11: An Arabic Critical Edition and English Translation of Epistle 52b* (London: University of Oxford Press in association with the Institute of Ismaili Studies, forthcoming).

the rise are interdisciplinary studies that are dedicated entirely to individual practices, foremost among them alchemy, astrology, geomancy, bibliomancy, physiognomy, oneiromancy, and amulet making,²⁵ which have had the effect of sustaining more systematic work on divinatory and magical objects as well.²⁶

On the curatorial side, in the last decade major museums worldwide have organized exhibitions focusing on various aspects of the occult sciences, notably *Falnama: The Book of Omens* at the Arthur M. Sackler Gallery, Washington, DC (October 24, 2009–January 24, 2010), *Un art secret: Les écritures talismaniques en Afrique de l'Ouest* at the Institut du Monde Arabe, Paris (February 14–July 28, 2013), *Power and Piety: Islamic Talismans on the Battlefield* at the Metropolitan Museum of Art, New York (August 29, 2016–February 13, 2017), and *Power and Protection: Islamic Art and the Supernatural* at the Ash-

- Simon Swain, ed., Seeing the Face, Seeing the Soul: Polemon's Physiognomy from Classical 25 Antiquity to Medieval Islam (Oxford: Oxford University Press, 2007); Massumeh Farhad, with Serpil Bağcı, Falnama: Book of Omens (Washington, DC: Freer and Sackler Gallery, 2009); Venetia Porter, with Robert Hoyland and Alexander Morton, Arabic and Persian Seals and Amulets in the British Museum (London: British Museum, 2011); Özgen Felek and Alexander Knysh, eds., Dreams and Visions in Islamic Societies (Albany: State University of New York Press, 2012); Tuna Artun, "Hearts of Gold and Silver: Production of Alchemical Knowledge in the Early Modern Ottoman World" (PhD diss., Princeton University, 2013); Özgen Felek, Kitābü'l-Menāmāt: Sultan 111. Murad'ın Rüya Mektupları (İstanbul: Tarih Vakfı Yurt Yayınları, 2014); Elizabeth Sirriyeh, Dreams and Visions in the World of Islam: A History of Muslim Dreaming and Foreknowing (London and New York: I.B. Tauris, 2015); Elizabeth Sartell and Shandra Lamaute, eds., "Characterizing Astrology in the Pre-Modern Islamic World," special issue of Magic, Ritual, and Witchcraft 12, no. 1 (2017): 1-97; Alessandro Palazzo and Irene Zavattero, eds., Geomancy and other Forms of Divination (Florence: SISMEL, 2017); Matthew Melvin-Koushki, "Persianate Geomancy from Tusi to the Millennium: A Preliminary Survey," in Occult Sciences in Pre-modern Islamic Cultures, ed. Nader El-Bizri and Eva Orthmann (Beirut: Orient-Institut Beirut, 2018), 151-199; Nicholas Harris, "Better Religion through Chemistry: Aydemir al-Jildakī and Alchemy under the Mamluks" (PhD diss., University of Pennsylvania, 2020).
- 26 Interdisciplinary approaches to the occult have proved fruitful in other fields. See, for instance, Marvin Meyer and Paul A. Mirecki, Ancient Magic and Ritual Power (Leiden: Brill, 1995); Charles Burnett, Magic and Divination in the Middle Ages: Texts and Techniques in the Islamic and Christian Worlds (Aldershot: Variorum, 1996); Paul Magdalino and Maria Mavroudi, eds., The Occult Sciences in Byzantium (Geneva: La Pomme d'or, 2007); Alan Lenzi and Jonathan Støkl, eds., Divination, Politics, and Ancient Near Eastern Empires (Atlanta: Society of Biblical Literature, 2014).

through the Mamlūk Period" (PhD diss., University of Michigan, 2014); Noah Gardiner, "Esotericist Reading Communities and the Early Circulation of the Sufi Occultist Ahmad al-Buni's Works," in "Islamicate Occultism: New Perspectives," ed. Melvin-Koushki and Gardiner, special double issue of *Arabica* 64, nos. 3–4 (2017): 405–441.

molean Museum, University of Oxford (October 20, 2016–January 15, 2017). These large-scale projects and their accompanying catalogs have been essential to introducing the topic to a wider, non-specialist audience.²⁷ They have also challenged the way in which this material has been traditionally framed and exhibited in a museum context, creating further opportunities to reclaim its place within the wider material and artistic output of the Islamic societies under consideration.²⁸ Exhibitions with components relating to the occult sciences are being staged also in Muslim-majority countries. The exhibition *Ya Hafeth Ya Ameen*, featuring talismanic adornments from Jordan, Palestine, Iraq, Syria, and Oman, was held at the Widad Kawar Home for Arab Dress in Amman, Jordan (November 18, 2015–March 28, 2016). More recently, *Al-Tibb: Healing Traditions in Islamic Medical Manuscripts* at the Islamic Arts Museum Malaysia, Kuala Lumpur (March 19–December 31, 2018) dedicated a section to the uses of magic and divination in medicine, with a corresponding chapter in its catalog.²⁹

The outputs of this vibrant field are not only the modern response to the pioneering studies, translations, and group efforts of earlier generations of scholars focusing on the subject.³⁰ Many of them are, in fact, also transformative in methodological terms, in so far as they challenge and debunk the post-Enlightenment mindset and positivist stance that dismissed the occult

²⁷ Farhad with Bağcı, Falnama; Alain Epelboin et al., Un art secret: Les écritures talismaniques de l'Afrique de l'Ouest (Paris: Institut du Monde Arabe, 2013); Francesca Leoni, ed., Power and Protection: Islamic Art and the Supernatural (Oxford: Ashmolean Museum, 2016).

²⁸ On some of the challenges posed by public displays of this subject, see Francesca Leoni, "Islamic Occultism and the Museum," in "Installing Islamic Art: Interior Space and Temporal Imagination," ed. Yuka Kadoi, special issue of the *International Journal of Islamic Architecture* 7, no. 2 (2018): 327–351.

²⁹ Farouk Yahya, "Divination and 'Magic' in Islamic Medicine," in Al-Tibb: Healing Traditions in Islamic Medical Manuscripts, ed. Siti Marina Maidin (Kuala Lumpur: Islamic Arts Museum Malaysia, 2018), 190–193.

See, above all, Maslama al-Qurțubī, Picatrix: das Ziel des Weisen, ed. Hellmut Ritter (London: Warburg Institute, 1933); Hellmut Ritter and Martin Plessner, trans., "Picatrix"; das Ziel des Weisen von Pseudo-Majriti (London: Warburg Institute, 1962); Toufiq Fahd, La divination arabe: études religieuses, sociologiques et folkloriques sure le milieu natif de l'Islam (Leiden: Brill, 1966); Manfred Ullmann, Die Natur- und Geheimenwissenschafen im Islam (Leiden: Brill, 1972); Marie-Thérèse D' Alverny and Françoise Hudry, "Al-Kindi: De radiis," Archives d'historie doctrinale et littéraire du Moyen Age 41 (1974): 139–260; Richard Lemay, ed. and trans., Abū Ma'šar al-Balhī (Albumasar), Kitāb al-Madkhal al-kabīr ilā 'ilm ahkām al-nujūm. Liber introductorii maioris ad scientiam judicorum astrorum, 9 vols. (Naples: Istituto Universitario Orientale, 1995–1996); and Emilie Savage-Smith, ed., Magic and Divination in Early Islam (Aldershot: Ashgate, 2004).

sciences as irrational, leading to the marginalization of their academic study in the past both in Muslim-majority and Western countries.³¹ The occult sciences were long treated as anomalies clashing with the more rational disciplines of the "classical" period of Islam, the so-called "Golden Age," and their more "authentic" scientific and philosophical achievements of Greek origin. This view was bolstered with the colonialist and orientalist attitude toward the occult sciences in the Islamicate world, perceiving them as exotic phenonema of a superstitious Other. This was directed at "the Orient" as a whole and at rural societies more specifically, whose cultural output was deemed unsophisticated and uncultured because of a lack of textual output that can be approached on the basis of philological positivism.³² Such frameworks are at play in the nineteenth- and early twentieth-century accounts of Edward Lane, Edmond Doutté, Bess Allen Donaldson, and Tewfik Canaan, which are among early scholarly sources for the study of occult sciences and material culture in the Muslim world.³³

Published decades later, several works retaining this positivist scaffolding established themselves as standard resources on the subject. Most notable of these is Manfred Ullmann's *Die Natur- und Geheimwissenschaften im Islam* (1972), a book on Islamicate sciences encompassing zoology, alchemy, astrology, magic, and agriculture.³⁴ With few general insights, Ullmann systematically lists and summarizes the writings and manuscripts available under each heading, becoming a useful place for scholars to begin surveying literature and manuscripts related to their subjects and to expand further. A similar resource is Fuat Sezgin's *Geschichte des arabischen Schrifttums* (1967–2000),

³¹ For a recent overview and relevant bibliographic references, see David J. Collins, "Introduction," in *The Cambridge History of Magic and Witchcraft in the West*, ed. David J. Collins (Cambridge: Cambridge University Press, 2015), 1–14.

³² Omnia El Shakry, *The Great Social Laboratory: Subjects of Knowledge in Colonial and Postcolonial Egypt* (Stanford: Stanford University Press, 2007), 40–41.

Edward W. Lane, Manners and Customs of the Modern Egyptians (London: John Murray, 1860); Edmond Doutté, Magie et religion dans l'Afrique du nord (Algiers: A. Jourdan, 1909); Tewfik Canaan, Dämonenglaube im Lande der Bibel (Leipzig: Hinrichs, 1929); Tewfik Canaan, "Arabic Magic Bowls," Journal of the Palestine Oriental Society 16 (1936): 79–127; Tewfik Canaan, "The Decipherment of Arabic Talismans," Berythus 4 (1937): 69–110 and Berythus 5 (1938): 141–151 (reproduced in Savage-Smith, ed., Magic and Divination, 125–177); Bess Allen Donaldson, The Wild Rue: A Study of Muhammadan Magic and Folklore in Iran (London: Luzac, 1938).

³⁴ To this list we may add, Rudolph Kriss and Hubert Kriss-Heinrich, *Volksglaube im Bereich des Islam. Bd. 11. Amulette, Zauberformeln und Beschwörungen* (Wiesbaden: Otto Harrassowitz, 1962).

a thirteen-volume publication with sections on alchemy (vol. IV), astrology (vol. VII), and magical texts described under various headings.³⁵

The critical editions and studies of the orientalist Paul Kraus on alchemy-The Selected Treatises by Jabir ibn Hayyan (1935), Essai sur l'histoire des idées scientifique dans l'Islam (1935), and Jābir ibn Hayyān: Contribution à l'histoire des idées scientifique dans l'Islam (1942-1943)-are also foundational works, as they helped rehabilitate alchemy by turning it from an anti-scientific pursuit into an important intellectual and scientific enterprise.³⁶ Similarly, the works of David Pingree have been crucial to the study of Islamic medieval astrological magic. His publications on these subjects and their focus on Greek, Indian, and Persian sources remain essential reading for the historian of medieval Islamicate occult sciences.³⁷ Charles Burnett's extensive studies on the transmission of texts, techniques, and artifacts from the Islamicate world to Europe in the Middle Ages are equally crucial. While his focus has traditionally been on Arabic texts concerned with philosophy, arithmetic, geometry, divination, astrology, astronomy, medicine, and magic and their Latin translations, his extraordinary output exposes the deep influence of Islamicate philosophy and sciences, especially the occult sciences, on the scholarly communities in Europe and their world views.³⁸

³⁵ Fuat Sezgin, Geschichte des arabischen Schrifttums, 17 vols. (Leiden: Brill; Fankfurt am Main: Institut für Geschichte der Arabisch-Islamischen Wissenschaften, 1967–2000).

³⁶ Paul Kraus, Mukhtār rasā'il Jābir ibn Hayyān (Cairo: al-Khānjī, 1354/1935); Paul Kraus, Essai sur l'histoire des idées scientifique dans l'Islam, vol. 1: Textes choisis (Paris: G.P. Maisonneuve, 1935); Paul Kraus, Jābir ibn Hayyān: Contribution à l'histoire des idées scientifique dans l'Islam, 2 vols. (Cairo: Imprimerie de l'Institut FRANÇAIS d'Archéologie Orientale, 1942–1943; reproduced Paris: Les Belles Lettres, 1986). See also Lawrence M. Principe, "Alchemy Restored," Isis 102, no. 2 (June 2011): 305–312, esp. 307.

³⁷ Though astrology and magic are no longer explicitly treated as pseudo-sciences, the focus on identifying sources and influences tends nevertheless to undermine the originality of the texts themselves.

See, among others, "Hermann of Carinthia and the *Kitāb al-Istamāţīs*: Further Evidence for the Transmission of Hermetic Magic," *Journal of the Warburg and Courtauld Institutes* 44 (1981): 167–169; "Arabic, Greek and Latin Works on Astrological Magic Attributed to Aristotle," in *Pseudo-Aristotle in the Middle Ages: The Theology and Other Texts*, ed. Jill Kraye, W.F. Ryan, and C.B. Schmitt (London: Warburg Institute, 1986), 84–96; "El *kitab al-Istamatis*: un manuscrit Barceloní d'obres astrològiques i astronòmiques," *Lengua i literatura* 2 (1987): 431–451; "The Eadwine Psalter and the Western Tradition of the Onomancy in Pseudo-Aristotle's Secret of Secrets," *Archives d'histoire doctrinale et littéraire du moyen âge* 55 (1988): 143–167; "Divination from Sheep's Shoulder Blades: A Reflection on Andalusian Society," in *Cultures in Contact in Medieval Spain: Historical and Literary Essays Presented to L.P. Harvey*, ed. D. Hook and B. Taylor (London: King's College, 1990), 29–45; Abū Ma'shār, *The Abbreviation of the Introduction to Astrology*, ed. and trans. Charles

A special issue of *Bulletin d'études orientales*, titled "Sciences Occultes et Islam," published in 1993, begins a change in scholarship.³⁹ Edited by Pierre Lory and Annick Regourd, this volume covers several facets of the occultist epistemologies of medieval Islam. Some contributions consider social and ethnological dimensions and others shed light on new texts and highlight more connections. In this volume we also see a crucial shift from positivist-philological approaches, which treat the occult sciences as textual and intellectual curiosities, to a more contextual one. We find Richard Lemay arguing for the integrality of the occult sciences in the medieval scientific and philosophical enterprise, Toufic Fahd highlighting the fluidity of occult sciences within philosophical and theological discourses, and Ridha Atlagh noting the multiplicity of magical practices and occult epistemologies in the medieval period.⁴⁰ The editors consciously loosen the dominant perspective that examines the occult sciences for their seeming infringement on some "orthodoxy." Instead, they note that

Burnett, Keiji Yamamoto, and Michio Yano (Leiden: Brill, 1994); Abū Ma'šar on Historical Astrology, The Book of Religions and Dynasties (On the Great Conjunctions), ed. and trans. Keiji Yamamoto and Charles Burnett, 2 vols. (Leiden: Brill, 2000); "Revision in the Arabic-Latin Translations from Toledo: The Case of Abu Ma'shar's On the Great Conjunctions," in Les traducteurs au travail: leurs manuscrits et leurs méthodes, ed. J. Hamesse (Louvain-la-Neuve: FIDEM, 2001), 51–113, 529–540; "Talismans: Magic as Science? Necromancy among the Seven Liberal Arts," in Burnett, Magic and Divination in the Middle Ages, 1-15; "Tābit ibn Qurra the Harrānian on Talismans and the Spirits of the Planets," La Corónica 36 (2007) 13-40; "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. Claudio Leornardi and Francesco Santi (Florence: Sismel, Edizioni del Galluzzo, 2008), 37-66; "The Theory and Practice of Powerful Words in Medieval Magical Texts," in The Word in Medieval Logic, Theology and Psychology, ed. Tetsuro Shimizu and Charles Burnett (Turnhout: Brepols, 2009), 215-231; "Aristotle as an Authority on Judicial Astrology," in Florilegium mediaevale, Études offertes à Jacqueline Hamesse à l'occasion de son éméritat, ed. J. Meirinhos and O. Weijers (Louvain-la-Neuve: Fédération Internationale des Instituts d'Études Médiévales, 2009), 41–62; The Great Introduction to Astrology by Abū Ma'šar, ed. Keiji Yamamoto and Charles Burnett, with an edition of the Greek version by David Pingree, 2 vols. (Leiden: Brill, 2019).

³⁹ Pierre Lory and Annick Regourd, eds., "Sciences occultes et Islam," special issue of *Bulletin d'études orientales* 44 (1992 [1993]).

⁴⁰ Richard Lemay, "L'Islam historique et les sciences occultes," in *Sciences occultes et Islam*, ed. Lory and Regourd, *Bulletin d'études orientales* 44 (1992 [1993]): 19–32; Toufic Fahd, "La connaissance de l'inconnaissable et l'obtention de l'impossible dans la pensée mantique et magique de l'Islam," in *Sciences occultes et Islam*, ed. Lory and Regourd, *Bulletin d'études orientales* 44 (1992 [1993]): 33–44; Ridha Atlagh, "Le point et la ligne, explication de la 'basmala' par la science des lettres chez 'Abd al-Karīm al-Ğīlī (m. 826 h.)," in *Sciences occultes et Islam*, ed. Lory and Regourd, *Bulletin d'études orientales* 44 (1992 [1993]): 161–190.

the reality of the occult sciences in law and dogma is ambiguous, despite censure by thinkers such as Ibn Khaldūn and al-Ghazālī. The early modern context remains outside of the volume's remit, perhaps reflecting the authors' adherence to the much-challenged declinist narratives that perceived little philosophical and scientific achievements produced at this later time with which the occult sciences may intersect.⁴¹ Although the volume does not pose a direct and explicit challenge to the orientalist legacies of earlier research, it marks the start of a self-reflecting field.

Published a decade later, the edited volume *Magic and Divination in Early Islam* provided another systematic effort to establish a state of the field. Compiled by Emilie Savage-Smith, whose contributions to the history of Islamic science, inclusive of occultist practices, have been field-defining,⁴² this volume spans an impressive range of topics from spirits and hermetic practices to weather forecasting and divinatory methods up to the seventh/thirteenth century. Savage-Smith's compelling introductory bibliographic essay highlights not simply the resources available, both textual and material,⁴³ for the study of this subject, but also the terminological challenges facing Western scholars studying Islamic practices, the limitations posed by the use of categorizations and dichotomies based on the European occultist tradition, and the complex nature of the disciplines included in Islamic classifications of occult sciences. Hence, although collating seminal articles that highlight past methodologies

⁴¹ On this declinist narrative and its rebuttal see, above all, George Saliba, *Islamic Science* and the Making of the European Renaissance (Cambridge, MA: MIT Press, 2007).

In addition to innumerable articles, other significant publications include Ranee Katzenstein and Emilie Savage-Smith, *The Leiden Aratea: Ancient Constellations in a Medieval Manuscript* (Malibu, CA: J. Paul Getty Museum, 1988); John A.C. Greppin, Emilie Savage-Smith, and John L. Gueriguian, eds., *The Diffusion of Greco-Roman Medicine into the Middle East and the Caucasus* (Delmar, NY: Caravan Books, 1999); Emilie Savage-Smith, *A Descriptive Catalogue of Oriental Manuscripts at St John's College Oxford* (Oxford: Oxford University Press, 2005); Peter E. Pormann and Emilie-Savage-Smith, *Medieval Islamic Medicine* (Edinburgh: Edinburgh University Press, 2007); Yossef Rapoport and Emilie Savage-Smith, *Lost Maps of the Caliphs* (Chicago: University of Chicago Press, 2018); and the titles cited below.

Of all senior scholars working on occult sciences, Savage-Smith has perhaps the strongest interest in their material dimensions. See, in particular, Emilie Savage-Smith and Marion S. Smith, *Islamic Geomancy and a Thirteenth Century Device* (Malibu, CA: Undena Publications, 1980); Emilie Savage-Smith, *Islamicate Celestial Globes: Their History, Construction, and Use* (Washington, DC: Smithsonian Institution Press, 1985); Emilie Savage-Smith and Francis Maddison, *Science, Tools and Magic*, 2 vols. (London: Nour Foundation in association with Azimuth Editions and Oxford University Press, 1997); and Emilie Savage-Smith and Yossef Rapoport, *An Eleventh-Century Egyptian Guide to the Universe: The Book of Curiosities* (Leiden: Brill, 2014).

and achievements in the study of occult sciences, *Magic and Divination* marked a further shift in the field.

The volume by Constant Hamès dedicated to talismanic practices, *Coran et talismans: textes et pratiques magiques en milieu musulman* (2007), was among the first collective projects to react to the challenges voiced by Savage-Smith.⁴⁴ Its focus on living practices, in particular, and interest in the longevity and reception of protective and prophylactic methods based on the Qur'an exposes not only some of the dynamics surrounding the life of talismans—from conception to consumption and disposal—but also these objects' profoundly Islamic nature, thereby reacting to the views that judge them as belonging to Islam contaminated by traditional animistic practices. Social aspects associated with talismanic arts and knowledge, including issues of authority, mediation, and class, are particularly significant throughout the volume and reflect the sociological and anthropological perspective framing the research of the editors and contributors dealing with North and West Africa, Yemen, and Tunisia.

The 2017 special double issue of *Arabica*, edited by Matthew Melvin-Koushki and Noah Gardiner, titled "Islamicate Occultism: New Perspectives," is a substantial critical contribution to this changing landscape.⁴⁵ By showcasing the original work of junior scholars and by proposing a more balanced medievalearly modern chronology and broader geographical focus than previously done, this recent collection has tackled more directly than before the epistemological shifts that led to the employment of the occult sciences as sources of natural and divine knowledge, as valued tools of statecraft, war, and imperial ideology, and as mainstream elements of Islamicate culture. The final two articles of this issue are also explicitly dedicated to material culture.⁴⁶ Most of all, the *Arabica* volume represents a crucial methodological intervention, challenging the intellectual marginalization of occult sciences in Islamic studies specifically and the history of science generally, which has been sustained until recently by persistent anxieties about their value for the study of Islam and the

⁴⁴ Constant Hamès, *Coran et talismans: textes et pratiques magiques en milieu musulman* (Paris: Editions Karthala, 2007).

^{45 &}quot;Islamicate Occultism: New Perspectives," ed. Matthew Melvin-Koushki and Noah Gardiner, special double issue of *Arabica* 64, nos. 3–4 (2017): 287–693. The publication was based on Melvin-Koushki's 2014 Princeton conference of the same title.

⁴⁶ Özgen Felek, "Fears, Hopes and Dreams: The Talismanic Shirts of Murad III," in "Islamicate Occultism: New Perspectives," ed. Melvin-Koushki and Gardiner, special double issue of *Arabica* 64, nos. 3–4 (2017): 647–672; Rose E. Muravchick, "Objectifying the Occult: Studying an Islamic Talismanic Shirt as an Embodied Object," in "Islamicate Occultism: New Perspectives," ed. Melvin-Koushki and Gardiner, special double issue of *Arabica* 64, nos. 3–4 (2017): 673–693.

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(de)legitimization of the scientific achievements of its civilization.⁴⁷ The editors and contributors counter the resulting declinist narrative by showing some of the ways in which the occult sciences were integral to scientific activity in both "classical" and "post-classical" Islamicate cultures, thereby also exposing the fertile opportunities that the intellectual rehabilitation of this field offers to contemporary Islamic studies.⁴⁸

The same year saw the publication of Jean Charles-Coulon's La magie en terre d'Islam au Moyen Âge, an extensive survey of magic from the first/seventh to the eleventh/seventeenth century. This work, based on Coulon's doctoral thesis, is a who's who of medieval magic, among them al-Kindī, Jābir b. Hayyān, Ibn Wahshiyya, and Maslama al-Qurtubī, before turning to Ahmad al-Būnī, the corpus attributed to him, and his influence. Coulon's book is conscious of the orientalist fantasy in the early scholarship on magic, stemming from the scenes set in The Thousand and One Nights with the exoticization of jinn, and "the colonial propaganda" that one sees, for example, in La sorcellerie au Maroc by Émile Mauchamp and which ignited the magical imaginary pertaining to the Arab world.⁴⁹ He also acknowledges the central problem of orientalist studies on magic that "want science and religion to be in constant opposition." The result is a vision where "the Muslim is torn between the brilliance of science embodied, in the history of the Middle Ages, by Hellenistic, Persian, and Indian heritage, and the darkness of religion embodied ... by Muslim religion as such and magic."⁵⁰ This indeed distracts from the originality of Islamic works by focusing on their "inheritance" of non-Islamic models of science, namely Greek, and their passing into the Latin world.⁵¹ Coulon points out that the trend of studying Islamic magic through their Latin translations, as in the work of David Pingree and Richard Lemay, for example, contributed to this view. This is usually set within a distorted broader picture that depicts

⁴⁷ Cf. John W. Livingstone, "Science and the Occult in the thinking of Ibn Qayyim al-Jawziyya," *Journal of the American Oriental Society* 112, no. 4 (1992): 598; Stephen P. Blake, *Astronomy and Astrology in the Islamic World* (Edinburgh: Edinburgh University Press, 2016), viii and 2.

⁴⁸ Matthew Melvin-Koushki, "Introduction: De-orienting the Study of Islamicate Occultism," in "Islamicate Occultism: New Perspectives," ed. Melvin-Koushki and Gardiner, special double issue of *Arabica* 64, nos. 3–4 (2018): 287–295, esp. 288–290; on the same theme, see also Matthew Melvin-Koushki, "(De)colonizing Early Modern Occult Philosophy," review essay on Liana Saif, *The Arabic Influences on Early Modern Occult Philosophy* (London: Palgrave Macmillan, 2015), in *Magic, Ritual, and Witchcraft* 12, no. 1 (2017): 98–112.

⁴⁹ Coulon, *La magie en terre d'Islam*, 11–13.

⁵⁰ Coulon, *La magie en terre d'Islam.*, 17.

⁵¹ Coulon, *La magie en terre d'Islam*, 19–20.

medieval Islamic sciences in conflict with religion, as exemplified by the seeming determinism of astrology and the question of the legitimacy of addressative magic.⁵² *La magie en terre d'Islam* takes into account the *adab* genre in its investigation and includes new and interesting themes such as magic and the feminine.⁵³

Two further recent publications, appearing in 2018 and 2019 respectively, deserve mention. Both are collections of articles and are reflective not only of a rapidly widening field but also of the pressing importance of a conceptual shift in the way occult sciences and practices should be approached. The first collection of articles, The Occult Sciences in Pre-Modern Islamic Cultures, edited by Nader El-Bizri and Eva Orthmann, provides additional case studies intended to reclaim the intellectual value of the occult sciences in Islamic culture.⁵⁴ This volume's articles on physiognomy and occult alphabets, topics that are often overlooked, in addition to geomancy and the science of letters, are particularly important. At the same time, in seeking to demonstrate their place wedged between "natural philosophy" and "metaphysics" understood as clearly demarcated domains, the volume continues to appraise the relevance of occult sciences in relation to a positivistic notion of exact science, modeled on modern delineations, and juxtaposed with metaphysics. It is more accurate to see the occult sciences, especially medieval and early modern, not as a distinct, if precarious, category of science but rather as one whose epistemological foundations, like all sciences, change along with shifts in paradigms, discourses, occupations, and specializations. This is also because one of the immediate consequences of the above-mentioned approach is the exclusion of the material ramifications of occult practices, cutting out what is instead an essential dimension of these activities, as will be discussed shortly.

The second publication is *Die Geheimnisse der oberen und der unteren Welt: Magie im Islam zwischen Glaube und Wissenschaft*, edited by Sebastien Günther and Dorothee Pielow.⁵⁵ It is a large volume dealing with magic, theology, prophetic medicine, spirit summoning, amulet making, and astrological magic across an impressive chronological and geographical span, including Kurdish and West African practices. Because it is the latest contribution on this topic

⁵² Richard Lemay, "Religion vs Science in Islam: The Medieval Debate around Astrology," *Oriente moderno*, n.s., 80, no. 3 (2000): 557–575.

⁵³ Coulon, La Magie en terre d'Islam, 55–60.

⁵⁴ *The Occult Sciences in Pre-Modern Islamic Cultures*, ed. Nader El-Bizri and Eva Orthmann (Beirut: Orient-Institut Beirut, 2018).

⁵⁵ Die Geheimnisse der oberen und der unteren Welt: Magie im Islam zwischen Glaube und Wissenschaft, ed. Sebastian Günther and Dorothee Pielow (Leiden and Boston; Brill, 2019).

at the time of writing, a more elaborate review is warranted.⁵⁶ This book is an ambitious undertaking bringing together German scholars, most of whom are not historians of magic, with the exception of Eva Orthmann, Dorothee Pielow, and Bernd-Christian Otto, a historian of "Western" magic.⁵⁷ Yet the conceptual framework and method of this publication reiterates the approaches of the earlier generations with heavy emphasis on the place of magic in religious and legal discourse, that is, as a polemic.⁵⁸ This, in turn, feeds the unsubstantiated argument that Islamic magic refers to the modification of pre-Islamic and non-Islamic magical models and genres. Islam's own contributions are understood in strict relation to the Qur'an (e.g., the story of Hārūt and Mārūt, Moses and the Pharaoh's magicians, tying knots in Sūrat al-Falaq) and the agency of jinn, rather than in relation to a wider intellectual and scientific incentives of a culture invested in the occult sciences. However, the relationship between science and the religious canon cannot be so neatly separated, assigning the Islamic to one sphere and the non-Islamic to another. The authors of the introduction view the "intrusion" of non-Islamic elements in terms of a syncretism, a concept of questionable heuristic value, as it implies the independent existence of a pure system of belief that is sullied by extraneous elements.⁵⁹ Despite acknowledging that these developments are incomplete, organic, and dynamic, this double view, which reduces "inherent" magical elements to the Qur'an and hadith, portrays magical discourse mostly as a religious anxiety legitimized.60

⁵⁶ For a more detailed review see Matthew Melvin-Koushki, "Magic in Islam between Religion and Science," *Magic, Ritual, and Witchcraft* 14, no. 2 (2019): 255–287.

⁵⁷ Eva Orthmann, "Lettrism and Magic in an Early Mughal Text: Muhammad Ghawth's Kitāb al-Jawāhir al-Khams," in The Occult Sciences in Pre-Modern Islamic Cultures, ed. El-Bizri and Orthmann, 223–247; Eva Orthmann, "The Sources and the Composition of the Dustūr al-munajjimīn," in Science in the City of Fortune: The Dustūr al-munajjimīn and Its World, ed. E. Orthmann and P. Schmidl (Berlin: EBVerlag, 2017), 35–114; Dorothee Pielow, "Dämonenabwehr am Beispiel des Zärs und des islamischen Amulettwesens," Zeitschrift der Deutschen Morgenländischen Gesellschaft 147 (1997): 354–370.

⁵⁸ Johann Christoph Bürgel, "Zum Geleit," in *Die Geheimnisse der oberen und der unteren Welt*, ed. Günther and Pielow, xv–xxix, esp. xvi–xviii and xix–xx; Hans Daiber, "Magie und Kausalität im Islam," in *Die Geheimnisse der oberen und der unteren Welt*, ed. Günther and Pielow, 155–177, here 155.

⁵⁹ For a concise overview of the limits of syncretism as an analytical category, see Tony Stewart and Carl Ernst, "Syncretism," in *South Asian Folklore: An Encyclopedia*, ed. Peter Claus and Margareth Mills (New York: Routledge, 2003), 586–588.

⁶⁰ Bürgel, "Zum Geleit," in *Die Geheimnisse der oberen und der unteren Welt*, ed. Günther and Pielow, xx; Sebastian Günther and Dorothee Pielow, "Magie im Islam: Gegenstand, Geschichte und Diskurs," in *Die Geheimnisse der oberen und der unteren Welt*, ed. Günther and Pielow, 3–95, esp. 4–8.

Otto's postscript, in particular, emphasizes the bifurcation of the cultural sphere within which magic is thought of and practiced: the polemical and the internal. Magic becomes deviance contested, set within an exclusionary discourse, with persistent references to Ibn Khaldūn, whose treatment of the occult has demonstrably been given too much weight. This implies that this polemicization of magic is even across all periods and all Islamic religious experiences.⁶¹ This "pro-and-anti" duality is then developed into a call for a methodological binary, recommended by Otto as a systematic differentiation of inner and outer perspectives which he claims helps overcome Eurocentricisms. The contradiction of this approach, however, lies in the fact that Otto is adopting a perspective taken from the study of "Western" magic and esotericism, and one that, above all, approaches occult sciences and esotericism as forms of heterodox and "rejected knowledge."62 Notable in this volume is the lack of engagement with the works and findings of the new generation, most of whom are contributors to our volume, who have been shedding new light on all aspects of magic specifically, and the occult sciences generally.⁶³

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In addition to representing an array of new voices, *Islamicate Occult Sciences in Theory and Practice* offers a more explicit intervention in relation to visual and material culture. The paucity of visual and material evidence from traditional scholarship devoted to Islamic occult sciences is not, in itself, new. Save, in fact, for a few and mostly recent exceptions,⁶⁴ text-based studies have propelled

⁶¹ Bernd-Christian Otto, "Magie im Islam: Eine diskursgeschichtliche Perspektive," in *Die Geheimnisse der oberen und der unteren Welt*, ed. Günther and Pielow, 317–318.

⁶² Yet, as scholars of Western esotericism today recognize, the scholarship from this unbalanced framework has produced an overemphasis on the particular polemical discourses against the occult that have issued from the Protestant Reformation to the post-Enlightenment period, the like of which have no relevance for the Islamicate experience. Wouter J. Hanegraaff, *Esotericism and the Academy: Rejected Knowledge in Western Culture* (New York: Cambridge University Press, 2012), *passim*.

⁶³ The names of some of these scholars are mentioned in the introduction, but it becomes clear they were not read carefully. For example, although the PhD dissertations of Noah Gardiner and Jean-Charles Coulon are mentioned, Aḥmad al-Būnī is still regarded as the true author of *Shams al-Maʿārif al-kubrā*, despite both scholars proving that it is an eleventh/seventeenth-century al-Būnian-type compilation. Instead, the authors rely on outdated sources, such as Ullmann, on the topic of occult sciences.

⁶⁴ Except for the already cited work by Tewfik Canaan on Arabic talismans and Emilie Savage-Smith and Marion B. Smith's monographic study of the British Museum's geomantic tablet (*Islamic Geomancy and a Thirteenth Century Device*), most object- or image-

and dominated the study of disciplines with strong material dimensions, such as astrology, geomancy, bibliomancy, and the science of letters.⁶⁵ Yet artifacts have always provided a primary space for the articulation and implementation of occult technologies and knowledge.⁶⁶ A telling example is to be found in the collection of the Ashmolean Museum at the University of Oxford. Elias Ashmole's own antiquarian passion and collecting activities, in fact, were but an extension of his intellectual pursuits, centered mainly in natural philosophy, astrology, and alchemy. While often described in subsequent literature as exotic curios, his many natural specimens and artifacts were primarily a source of corroborative evidence and a testing ground for his ongoing exploration of nature's secrets, properties, and powers.⁶⁷ Ashmole's collection, above all, testifies to the legitimacy of the esoteric, the folkloric, and the magical, alongside and even as part of the natural and the religious within the harmonizing framework of the cabinet of curiosities. Far from being the result of haphazard and misinformed collecting habits, in fact, these holdings reflected the considerable overlap between religion, philosophy, the natural sciences, and the occult sciences observable at the time.⁶⁸ As such, these mineral, vegetal, and animal specimens

based contributions involving contextual analysis date from the last two decades. For a detailed list, including recent doctoral dissertations studying new bodies of material, see the bibliographies in Leoni, *Power and Protection*, 95–100, and Venetia Porter, Liana Saif, and Emilie Savage-Smith, "Amulets, Magic, and Talismans," in *A Companion to Islamic Art and Architecture*, Vol. 1: *From the Prophet to the Mongols*, ed. Finbarr Barry Flood and Gülru Necipoğlu (Hoboken, NJ: Wiley, 2017), 521–557.

⁶⁵ As demonstrated by the studies of, among others, Maddison and Savage-Smith (*Science, Tools and Magic*), Stefano Carboni (*Following the Stars: Images of the Zodiac in Islamic Art* [New York: The Metropolitan Museum of Art, 1997]), Anna Caiozzo (*Images du ciel d'orient au moyen âge: histoire du zodiaque et de ses représentations dans les manuscripts du Proche-Orient musulman* [Paris: Presses de l'Université de Paris Sorbonne, 2003]) and Farhad with Bağcı (*Falnama*).

⁶⁶ A two-year research project led by Francesca Leoni under the auspices of the Leverhulme Trust and completed in early 2018 was the first large-scale object-focused effort to explore divination in pre-modern Islam.

⁶⁷ Conrad Hermann Josten, *Elias Ashmole (1617–1692): His Authobiographical and Historical Notes, His Correspondence, and Other Contemporary Sources Relating to His Life and Work,* 5 vols. (Oxford: Clarendon Press, 1966). Many of these objects originated from John Tradescant the Elder's own extensive selection of natural and botanical specimens, known as the Ark, which constituted the largest collection of its kind in seventeenth-century Britain. Arthur MacGregor, *Ark to Ashmolean: The Story of Tradescants, Ashmole and the Ashmolean Museum* (Oxford: Ashmolean Museum, 1983).

^{68 &}quot;[The Ark] straddled a world where burgeoning scientific research had parity with magic and superstition, both forms of knowledge were interrelated and accepted ... the bizarre and incomprehensible had serious function ... critical to the understanding of the mac-

and artifacts provided essential keys to the prevailing system of knowledge underpinned by a Neoplatonic view of the cosmos and its correspondences between the heavenly and earthly spheres.⁶⁹

That the belief in occult forces and the drive to study them were shared by the Royal Society—one of the world's most prestigious institutions for the promotion of scientific knowledge—and its members (including Ashmole) should therefore come as no surprise. It was not long, though, before the rising experimentalism that eventually led to the Enlightenment began to sideline occult disciplines.⁷⁰ The far-reaching effects of this shift were felt across the Ashmolean throughout the nineteenth century, when new taxonomies and hierarchies led to a reorganization of its growing collection. The process culminated in the relocation of the natural specimens and ethnographic materials in two institutions of recent foundation, the Museum of Natural History (1850) and the Pitt Rivers Museum (1886), transforming the Ashmolean into the university's museum of art and archaeology, which it remains today.

Reflecting the emergence of anthropology as a discipline during the nineteenth century and of ideas on social evolution and the linear progress of the human civilization, the establishment of the Pitt Rivers Museum, in particular, bears witness to the way in which material culture associated with occult practices came to be seen and represented in the public arena. At this time, the study of the material evidence of remote societies was deemed instrumental for the understanding of the earlier stages of human civilization of which the European exemplified what was believed to be the highest point in development. This conversation intersected with processes of rationalization of religions to align them with the parameters of modernity.⁷¹ "Irrational" elements,

rocosm and its implications for the microcosm or mankind." Martin Welch, "The Foundation of the Ashmolean Museum," in *Tradescant's Rarities. Essays on the Foundation of the Ashmolean Museum, 1683, with a Catalogue of the Surviving Early Collections*, ed. Arthur MacGregor (Oxford: Clarendon Press, 1983), 40–58, 53.

⁶⁹ Ashmole's interest in botany developed because of its link with medicine and astrology. At the time, planets were key to establish both the medical applications of plants and the timing and rules of their collection and utilisation. Josten, *Elias Ashmole*, 1:57.

Thomas Sprat's *History of the Royal Society of London* published in 1667, just a few years after the society was established, lists only research on celestial phenomena of an astronomical nature. *History of the Royal Society of London, for the Improving of Natural Knowledge* (London: Printed by T.R. for J. Martyn and J. Allestry, 1667). This was also the time in which chemists embarked on a systematic epuration of alchemy in order to make it "honest, sober and intelligible" and clear it of "the Chrysopoietick, delusory designs and vain transmutations, the Rosie-crucian vapours, magical charms and superstitious suggestions of the old Philosophers of the Notional way." Josten, *Elias Ashmole*, 1135–136.

⁷¹ As in anthropology, a strand of liberal theology also argued for an evolutionary framework

including forms of popular devotion and superstition, were seen as unmodern, hence the need to strip them away in order to rediscover the (true) essence of religions.⁷² Rather than using material evidence to shed light on the past social and economic forms of associated cultures, non-European artifacts were used to substantiate and explain pre-historic European finds and patterns of evolution. Material related to spiritual and occult practices always constituted a significant part of the evidence collected,⁷³ useful in providing the evidence of non-European primitivism, and was mainly obtained by professionals involved in European colonial enterprises on the basis of criteria and guidelines dictated by their home institutions.⁷⁴ However, by responding to processes of seriation measured against Western standards of development in both the scientific and religious domains, these objects were turned into tools for the legitimation of specific ideological frameworks and, more crucially, of the resulting colonial and civilizational enterprises.⁷⁵

It is in the exoticization and vilification of occult objects witnessed in the museum space that we also find the conditions that led to their separation from the practices they once accompanied. Why their study came to prioritize their theoretical, rather than material, manifestations is thus ultimately also explainable by the process of segregation, abasement, and manipulation enacted in

in which religions could be positioned. Christianity came to be framed as the opposite of Islam. The former was dynamic and progressive, while the latter was "stagnant and declining ... defiantly unaffected by, or even reversing, the evolutionary momentum towards modernity." Dietrich Jung, *Orientalists, Islamists and the Global Public Sphere: A Genealogy of the Modern Essentialist Image of Islam* (London: Equinox, 2011), 95–156.

Peter Pels, "Introduction: Magic and Modernity," in *Magic and Modernity: Interfaces of Revelation and Concealment*, ed. Birgit Meyer and Peter Pels (Redwood, CA: Stanford University Press, 2003), 1–38; and Yusuf Muslim Eneborg, "The Quest for 'Disenchantment' and the Modernization of Magic," *Islam and Christian-Muslim Relations* 25, no. 4 (2014): 419–432. For the impact of this conversation on Muslim intellectuals and reformists, see in the earlier part of this chapter, as well as Sadiq Jalal al-Azm, "Orientalism and Orientalism in Reverse," in *Orientalism: A Reader*, ed. Alexander L. Macfie (Leiden: Brill, 2001), 217–238; Muhammad Khalid Masud, Armando Salvatore, and Martin van Bruinessen, eds., *Islam and Modernity: Key Issues and Debates* (Edinburgh: Edinburgh University Press, 2009).

⁷³ Building on Sir Hans Sloane's bequest, which comprised an important group of amulets with Qur'anic passages, the British Museum continued to enlarge its collection of Islamic amulets, thanks to the considerable holdings accumulated by Henry Christy and Arthur W. Franks. Porter et al., *Arabic and Persian Seals*, vii.

⁷⁴ This collecting strategy also made the gathering of contextual information unnecessary, orphaning many of these objects from significant background documentation.

⁷⁵ Jonathan C.H. King, "Franks and Ethnography," in A.W. Franks: Ninenteenth-Century Collecting at the British Museum, ed. Marjorie Caygill and John Cherry (London: British Museum, 1997), 136–159, esp. 139.

these spaces.⁷⁶ Yet, being often action- and goal-driven, be it for material or spiritual gain, occult practices would lose their raison d'être if separated from their tools, vehicles, and "end products," as clearly demonstrated by the object-based essays presented in this collection. Furthermore, objects enable us to consider the operative dimensions of specific techniques, and to reconstruct the ways in which users contribute to their efficacy. Be they utilitarian or symbolic, they are also vital to determining the sensorial interactions necessary for their actual functioning. As such, they allow us to reflect on broader issues, such as agency and activation, while bringing to light other and less visible classes of individuals who, in addition to the authors of texts and manuals, contributed to their existence and continued reproduction over time.

These points are clearly emphasized in Chapter 10 on talismanic weaponry, and Chapter 12 on a stamped talisman. In the former, Maryam Ekhtiar and Rachel Parikh argue that the presence of talismanic formulas is, in itself, not enough for protection, and that the ability to interact with them is crucial for these objects' construction as much as for their efficacy. Such evidence challenges our assumptions about the way apotropaic devices and their vocabulary operate and suggests that individual interventions and interaction constituted an essential, and yet overlooked, ingredient of a talisman's potency. The centrality of sensorial interaction for the successful transfer of the prophylactic or apotropaic properties of specific motifs is similarly highlighted in Francesca Leoni's contribution, where the diagrammatic nature of some of the seal marks reproduced on the talisman under examination elicits extended visual contemplation and tactile interaction, the latter, in fact, being documentable through the smudging of some of their surfaces.

When cultivating an interdisciplinary collaboration between material culture and intellectual history on the subject of the occult sciences, one is confronted by the lack of direct correspondence between specific texts and objects.⁷⁷ Nevertheless, the magical vocabulary visible on magical and divinatory artifacts appears in the medieval and early modern literature on magic.⁷⁸ Survival is certainly part of the issue, as Venetia Porter, Liana Saif, and Emilie Savage Smith have noted in their recent reassessment of magic and talismans:

⁷⁶ The fact that many of the objects associated with occult practices are of varying artistic merit caused them to be mostly overlooked also by art historians until recently. The 2016 exhibition *Power and Protection: Islamic Art and the Supernatural* mentioned earlier on offered an important corrective by considering both humble and sophisticated artifacts.

⁷⁷ Savage-Smith and Maddison, eds., *Science, Tools and Magic*, 1:62–63; Emilie-Savage-Smith, "Islamic Magical Texts vs. Magical Artefacts," *Societas Magica Newsletter* 11 (2003): 2–6.

⁷⁸ Porter, Saif, and Savage-Smith, "Amulets, Magic, and Talismans," 522.

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In terms of the survival of such objects, there are few that can be attributed with certainty to before the twelfth or thirteenth centuries. More magical artefacts have survived from later periods and we can only speculate about the reasons for the apparent lack of material evidence of the theories and practices discussed in the early medieval literature. It could be due to the perishable nature of earlier objects such as *niranjiyat* or perhaps they were subject to corrosion, since many were made of metals. Also, many of the objects that have survived in museums and other public resources originally belonged to personal collections gathered by travellers and researchers, from as early as the fifteenth century, as curios of the cultures they visited and thus it is more likely that these objects were created nearer the time of the collectors' sojourns in these regions.⁷⁹

Objects should nevertheless be seen as a supplementary form of "document," testifying to ideas and principles whose textual formulation may have been lost or never realized. They can also capture oral and practical know-how and show its relevance in everyday life, the intended and ultimate forum of occult technologies. Farouk Yahya shows this in his analysis of the "lion of 'Alī" calligram across Southeast Asia in Chapter 11, which reveals how the motif's synthesis of regional adaptations, in both form and content, and drawing on Islamic as much as non-Islamic ideas and beliefs, supported both local devotional and protective needs. Similar to the vocabulary in use on the talisman discussed in Chapter 12, or found on the laminate devotional goods surveyed in Chapter 13, the content of Yahya's calligrams is another proof of the endurance into modern times of specific principles and resources-from the Qur'an to prophetic and saintly intercession-in the production of apotropaic and prophylactic devices. These examples also reveal the degree of experimentation of their creators, who may have relied only to a limited extent on technical literature and written knowledge. Instances such as these suggest that material culture can be a gateway to a parallel and highly stratified world of occult wisdom, which is usually the synthesis of established principles and idiosyncratic, generally locally relevant, methods, whose systematic exploration and significance for the broader subject matter remains to be undertaken.

Artifacts, like texts, provide unique evidence for assessing the original and ad hoc contributions made by makers or determined by contingent circumstances. This, in turn, can help historians evaluate the bearing of occult theoret-

⁷⁹ Porter, Saif, and Savage-Smith, "Amulets, Magic, and Talismans," 533.

ical and philosophical knowledge on the realm of practice and which aspects of it filtered beyond scholarly circles and, therefore, succeeded in terms of reception. Related to this are the social dimensions of occult sciences, including the roles of users as diverse patrons of specific tools and methods, and the space occupied by the scholars, redactors, readers, and artisans responsible for the dissemination of such knowledge throughout society. Finally, objects can help to challenge clear-cut categories traditionally used to navigate Islamicate cultural contributions and expose the ambiguity of certain taxonomies. This appears consistently in all object-based contributions presented in this volume, where concepts such as "orthodox" and "heterodox," "magical" and "devotional," *harām* and *halāl* show levels of interpenetration that ultimately test these categories' assumed coherence, to say nothing of their usefulness in trying to situate phenomena like the Islamicate occult sciences within the related cultural production. An instance of this, demonstrated by both the object-based and text-based contributions in this volume, is the problematic assumption of a strict Shi'i-Sunni divide. From the perspective of material culture, Chapter 10 demonstrates the presence of 'Alid references in Sunni contexts, for example on weapons on which one finds talismanic motifs that exemplify a crossbred system of symbols and devotional practices. From the perspective of intellectual history, Chapter 7 demonstrates a case in which Imamophilia, Sufism, and esotericism transcended confessional boundaries. Related to the equally hampering elite-popular binary, historical and material evidence points to the use of information drawn from occult sciences and practices for the benefit of aristocratic individuals, such as the weaponization of the science of letters for imperial agendas or the dedication of precious manuscripts to sovereigns for education and entertainment. At the other end of the spectrum, we recognize the role of the commodification of magical texts and objects in popularizing their utility.

3 Rationale and Structure

One of the overarching ideas of the 2017 conference was an evaluation of the occult sciences in their own historical contexts and on their practitioners' own terms, where their standing and intellectual contributions can be best measured. Hence, we structured it as a conversation between papers dedicated to intellectual history and others to material culture. This seemed intuitive, because the content and objectives of intellectual historians overlap, or are continuous with, the disciplines of the history of science, social history, political history, and history of art and material culture. Despite the now long, and

even clichéd, contestation to "Whiggish" perspectives when it comes to magic, astrology, divination, alchemy, the science of letters, and the rest of the occult sciences, these issues are still contributing to the "stashing" of documentary evidence, whether texts, manuscripts, objects, or art, in archives and libraries all over the world. Nevertheless, the cache of untapped resources means that the effort of historians of Islamicate occult sciences is expended mostly on producing an expanding canon by making available the content of the documentary body: producing critical editions, translations, textual, paratextual, and material analysis, and examining the epistemological frameworks of the occult sciences in Islam.

Our volume is a snapshot of these philology-heavy responsibilities of the historians of the occult sciences at this stage. At the same time, the articles take the research in two new directions: a wider global approach, and an examination beyond intention and analysis of context. The aim is to expand the meaning of textuality and provide insights into the various discursive practices with which the documentary source—be it text or material object (including texts as material objects)—and occult knowledge production were in dialog, especially the intellectual, cultural, and political incentives behind the creation of classificatory systems of knowledge.⁸⁰ This also highlights the over-privileged status of "the archives,"⁸¹ new and historical, that historians themselves use, and its influence on the way our own classifications of the occult sciences are continuously (re)structured. Through the two directions followed in this volume, we heed the call for decolonizing our disciplines, because, to shake off the normative framework of "the West," we need to identify transregional communities of interactions. Moving beyond national and religious boundaries, more than ever we must be reflective of our own position and power within

⁸⁰ This was an important practice in the systematization of Islamicate sciences and arts especially in the medieval and early modern periods. This approach has been employed by some of the authors in this volume too; namely, Matthew Melvin-Koushki, Noah Gardiner, and Bink Hallum. For an example of these methodological directions beyond this volume, see Liana Saif, "What Is Islamic Esotericism?," in "Islamic Esotericism," ed. Liana Saif, special issue of *Correspondences: Journal for the Study of Esotericism* 7, no. 1 (2019): 1–59.

⁸¹ A collection of documents (manuscripts, records, objects, etc.) created or gathered by one person or institutions (universities, libraries, museums, etc.) for long-term preservation. Here it is understood that the selection of these documents is never neutral and is influenced by power structures that resulted from social, economic, and political conflict, colonialism, and orientalist heritage. See Holger Warnk, "Searching for Seeds to Rest in Libraries: European Collecting Habits towards Malay Books and Manuscripts in the Nineteenth Century," *Frankfurt Working Papers on East Asia* 1 (2009): 3–22; and James Lowry, ed., *Displaced Archives* (Abingdon and New York: Routledge, 2017).

intellectual and institutional structures to reassert the importance of the study of the occult sciences to the post-colonial study of Islam and the Islamicate world, past and present.

Reflecting this rationale, the essays in this volume have been grouped according to two complementary aspects of the occult sciences. The first section, "Occult Theories: Inception and Reception" showcases the latest research from the perspective of intellectual history. This part commences with Charles Burnett's discussion of the medieval tripartite division of magic into talismans, *nīranis*, and alchemy, and the epistemological rationale behind it (Chapter 2). Investigating medieval sources such as Ghāyat al-hakīm, Rasā'il Ikhwān al-Ṣafā', Thabit b. Qurra's De imaginibus, and some works of Ibn Sīnā, the author shows that the division reflects ideas on the body and soul. Magic, thus, becomes part of wisdom, to which the understanding of the dynamics between corporeal and psychical realities is central, and whose pursuit is therefore the appanage of the sage and the philosopher. This chapter expands on the relevance of magic to medieval physics and metaphysics, in addition to highlighting the transfer of this conceptualization to Europe by medieval authors and translators such as Hermann of Carinthia (fl. 1138-1143), Roger Bacon (d. 1292), and Adelard of Bath (d. 1160).

Moving from a broad discussion of magic to a specific genre, Chapter 3 by Bink Hallum is an in-depth study of *awfāq* or magic squares. The author situates *awfāq* literature in the intellectual atmosphere in which it was conceptualized and created, from the mid-third/ninth to the late sixth/twelfth century. This chapter complements the study of the mathematical quality of these squares and emphasizes their importance in long-standing magical traditions, from astral magic to letter magic. Progressing to a specific text is Liana Saif's essay, which explores the content of Ikhwān al-Ṣafā's epistle on magic, the fifty-second in their encyclopedia known as the Rasā'il, "The Epistles" (Chapter 4). In this epistle, magic (sihr) is uniquely construed as a magical power in the traditional sense, an allegory of self and state transformation, and a means to enlightenment through knowledge of nature, the cosmos, and the divine. The author's examination continues the discussion on the philosophical and mystical discourses in which the occult sciences, in general, and magic, in particular, are conceptualized. This theme is taken up further in Michael Noble's discussion of the Kitāb al-Milal wa-l-nihal ("The book of religions and sects") of Muhammad b. 'Abd al-Karīm al-Shahrastānī (d. 548/1153), and the al-Sirr al-maktūm ("The hidden secret") of Fakhr al-Dīn al-Rāzī (d. 606/1210), in which astral magic is treated as a form of spiritualized natural philosophy that offers the human soul "the promise of a soteriological angelomorphosis" (Chapter 5).

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The following contribution by Noah Gardiner takes up the subject of the occult sciences, especially the science of letters, in the service of writing universal history, particularly the case of 'Abd al-Raḥmān al-Bisṭāmī's *Naẓm al-sulūk fī musāmarat al-mulūk* ("Regulation of conduct: On the edification of kings"), a largely overlooked work completed in Bursa in $8_{33}/1429-14_{30}$ (Chapter 6). Such an application is facilitated by the fact that the science of letters is, at its core, a cosmological and cosmogenic discourse that interprets historical events as part of universal dynamics organized by divine decree through a lettrist cosmological infrastructure. As a result, the *Naẓm* is no mere exercise in writing history; al-Bisṭāmī, rather, signals the obligation of communal reform, in tandem with the cyclical movement of history, facilitated by the knowledge and utility attained by the science of letters. Like chapters 4 and 5, this article demonstrates the mobilization of the occult sciences for personal, communal, and civilizational transformation.

The final contribution of this first section by Maria Subtelny analyzes the occult thought of Kamāl al-Dīn Husayn Vāʿiẓ-i Kāshifī (d. 910/1504-1505), primarily through his Asrār-i qāsimī ("Qāsimian secrets") (Chapter 7). This is a Timurid manual primarily concerned with illusionism and prestidigitation, which was expanded in the Safavid period to encompass all five of the "classical" occult sciences: kīmiyā', līmiyā', hīmiyā', sīmiyā', and rīmiyā', the initial letters of which represent the Arabic phrase kulluhu sirrun ("It is all a secret"). Most strikingly, Kāshifī, a Naqshbandī Sufi by training and hence Sunni by confession, transcends conventional notions of confessionalism (and thus a strict Sunni-Shi'i divide) by putting forward the occult sciences as a primary discourse of 'Alidism or Imamophilia, which explains its eager reception in the Twelver Shi'i society of Safavid Iran. Subtelny's textual choice provides us with a telling example of the defining elements of the occult sciences as discussed earlier in this introduction, that is, sciences incorporated in both natural and religious systems of knowledge, in addition to confirming the confessional ambiguity of such disciplines.

The second part of the volume, "Occult Technologies: From Instruction to Action" brings together the methods and directives associated with sciences such as astral magic, science of letters, and amulet-making, on the one hand, and the direct applications and material incarnations of some of these procedures, on the other. In Chapter 8, Jean-Charles Coulon introduces a text virtually ignored in available scholarship but of considerable importance and authority in the medieval Islamicate magical tradition, as testified by its mentions in later occultist literature. The chapter surveys available versions in view of a forthcoming critical edition and translation, but also highlights the text's strengths and significance for both the transmission of Indian occult knowledge and

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for the theorization of occult sciences like *sīmiyā*', identified primarily as "the secret of the nature," "the secret of wisdom," and "the bewitchment of reason." Furthermore, by highlighting the role of talismans as "the means of action" of *sīmiyā*', the *Kitāb Sharāsīm* adds historical validity to the approach put forth by this volume and its desire to reclaim the material dimensions of occult sciences.

The next contribution (Chapter 9), by Matthew Melvin-Koushki, explores the application of the science of letters for imperial-ideological and military purposes, in this case for the Ottoman sultan Selīm the Grim (r. 918–926/1512– 1520). This occurs in a tract probably composed by the jurist Kemālpasazāde Ahmed, in which, using an exclusively lettrist argument, he urges his royal patron to invade Mamluk Egypt. To this end, Kemālpaşazāde's text analyses Q 21:105 to demonstrate that the Ottoman ruler's conquest of Egypt, which was indeed achieved immediately afterwards in 921-922/1516-1517, was "mathematically encoded in the very structure of the cosmos" and hence inevitable. Melvin-Koushki uses this case study, and the context of its production and reception, to reiterate the centrality of the science of letters as "the primary expression of Islamic Neopythagoreanism," comparable to the role played by the sister discipline, the Kabbalah, in the Latinate Renaissance. This essay complements Chapter 6 by showing al-Bistami's pioneering of a new, explicitly lettrist historiography and theory of history was in no way a one-off but a pursuit common to the ninth/fifteenth- and tenth/sixteenth-century Persianate world more broadly, and an important ideological prop to Mamluk, Timurid, Aqquyunlu, Ottoman, and Mughal imperial ambitions alike.⁸²

The link between the science of letters and warfare informs the following chapter as well, which concentrates on another material dimension of this and associated techniques (Chapter 10). A close analysis of select arms and armor from the collection of the Metropolitan Museum of Art, in New York, leads Maryam Ekhtiar and Rachel Parikh to recognize them as talismanic in nature. Both the choice of materials and the vocabulary used in their decoration support this interpretation, which testifies to the continued reliance on notions such as the occult properties (*khawāṣṣ*) of stones—theorized in al-Bīrūnī's *Kitāb al-jamāhir fī ma'rifat al-jawāhir* ("The book of the multitude of

⁸² Advocating this approach are also İlker Evrim Binbaş, Intellectual Networks in Timurid Iran: Sharaf al-Dīn 'Alī Yazdī and the Islamicate Republic of Letters (Cambridge: Cambridge University Press, 2016); Noah D. Gardiner, "Forbidden Knowledge? Notes on the Production, Transmission, and Reception of the Major Works of Aḥmad al-Būnī," Journal of Arabic and Islamic Studies 12 (2012): 81–143; Noah D. Gardiner, "Esotericist Reading Communities"; Melvin-Koushki, "Early Modern Islamicate Empire"; Matthew Melvin-Koushki and James Pickett, "Mobilizing Magic: Occultism in Central Asia and the Continuity of High Persianate Culture under Russian Rule," Studia Islamica 111, no. 2 (2016): 231–284.

knowledge of precious stones") and developed by al-Tīfāshī's popular $Azh\bar{a}r$ al-afkār fī jawāhir al-aḥjār ("The blooms of considerations concerning precious stones")—throughout the early modern period. Being later objects, these arms and armor are also useful to follow continuities and transformations of talismanic languages and motifs through time. The most interesting and resonant may be the imagery related to the Ahl al-Bayt—both through symbolic motifs such as Dhū l-Fiqār ('Alī's mythical bifurcated sword) and the *khamsa* ("hand of Fāṭima"), and through formulas or ejaculations evoking 'Alī and his progeny—and its proliferation in areas traditionally considered Sunni. The arms and armor produced in the Ottoman sphere provide additional evidence for the veneration of the Prophet and his family in this milieu, and they further support the argument that the public display of such piety aimed to appease Shi'i/Sufi factions within the empire and to prevent the Safavids from establishing a monopoly over them.⁸³

The blurring of Shi'i and Sunni also emerges in Farouk Yahya's contribution, dedicated to Southeast Asian adaptations of the Lion of 'Alī for both devotional and talismanic purposes (Chapter 11). The choice of the *shahāda* and Q 61:13 in place of the more common $n\bar{a}d$ -i 'Alī, along with the replacement of the lion with the tiger, an animal with stronger magical associations in the region, reveals the degree of manipulation undertaken at both textual and visual levels in order to align the motifs with local sensibilities. At the same time the author's examples, culled from various localities across Southeast Asia, document the survival of the broader associations with protection and well-wishing observed in other parts of the Islamicate world.

The last two essays in the volume expand on the devotional contours of talismanic formulas and motifs. Chapter 12, by Francesca Leoni, deconstructs a large stamped talisman in order to highlight the harmonization of "magical" and "devotional" resources for a range of apotropaic and prophylactic aims. The object's protective capital against adversities such as demons, jinn, and the evil eye consists of invocations to saints, repetitions of God's names, supererogatory prayers, images of holy sites, and burials of Sufi leaders. In the author's view, however, this apparatus is not simply talismanic vocabulary in an Islamic garb but a likely indication of the direct involvement of individuals endowed with spiritual stature and charisma in these motifs' and devices' actual fabrication. By considering the use and arrangement of this mighty syntax on the talisman,

⁸³ Zeynep Yürekli-Gorkay, "Dhū'l-faqār and the Ottomans," in People of the Prophet's House, ed. Fahmida Suleman (London: Azimuth, Institute of Ismaili Studies, British Museum, 2015), 163–172.

the author follows its transformation from a devotional tool to an empowering prophylactic resource for the desirable immediate benefit of diverse users.

Chapter 13, by Christiane Gruber, brings the occult traditions to the modern day by reflecting on the contemporary incarnations and adaptations of centuries-old motifs stemming from the veneration of the prophet Muḥammad and his intercessory powers. Following the spread of protective commodities such as "blessing cards" (*bereket kartelası*) and "evil-eye beads" (*nazar boncuğu*) across Turkey, the author considers the shifts observable in their makeup, using the Arabic language as their main tool in the legalization of otherwise dubious activities and in the overall Islamization of the public sphere promoted by the Justice and Development Party (AKP). This compelling, additional act of erasure and reconfiguration of practices drawing on occultist traditions and knowledge by acting on their material incarnations acts as a final reminder of why the recognition of a scholarly and cultural status for the occult sciences is necessary.

A postscript by Travis Zadeh brings the volume to full circle, meditating on its governing question: what is the relationship between theory and practice? To this end, he catalogs some of the many ways in which the *gharīb* sciences defy and trouble traditional conceptual divisions, both those of our historical actors and our own. With respect to the latter, Zadeh calls for a more sweeping deconstruction of the intellectual frameworks and master categories through which the Western academic study of Islam has been pursued to date, presenting as antidote to persistent colonialist tropes the radically fluid ways in which Muslim thinkers and doers have classified and experienced the occult and the marvelous over the centuries. "Magic" as a historiographical category thus becomes impossible to pin down, functioning in this sense as a mandala. But this is its great virtue, as its very elusiveness reminds us of the constructed nature of all our analytical categories. To study the occult sciences of the Islamic past and present is therefore to track the myriad ways in which knowledge is generated, and power is exercised, in human societies.

We hope that the studies contained in *Islamicate Occult Sciences in Theory and Practice* will help construct a more nuanced and broader understanding of the complexities surrounding this obscure, fascinating, and yet grossly understudied topic. The authors would like to express their gratitude to Emilie Savage-Smith, Hans Daiber, and Anna Akasoy for first recognizing the value of their collaboration, and for encouraging them to develop it into the present volume. They would also like to acknowledge the support of the publisher, Brill, and its

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