



The Formation of the Classical Islamic World

MAGIC AND DIVINATION IN EARLY ISLAM

Edited by
Emilie Savage-Smith



THE FORMATION OF THE CLASSICAL ISLAMIC WORLD

General Editor: Lawrence I. Conrad

Volume 42

Magic and Divination
in Early Islam

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Volume 42

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Emilie Savage-Smith

 **Routledge**
Taylor & Francis Group
LONDON AND NEW YORK

First published 2004 in the series The Formation of the Classical Islamic World
by Ashgate Publishing

Published 2017 by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN
711 Third Avenue, New York, NY 10017, USA

Routledge is an imprint of the Taylor & Francis Group, an informa business

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British Library CIP Data

Magic and Divination in Early Islam – (The Formation of the Classical
Islamic World)

1. Magic, Islamic 2. Magic – Islamic countries – History – To 1500

3. Divination – Islamic countries – History – To 1500

I. Savage-Smith, Emilie

133.4'3'0917671

US Library of Congress CIP Data

Magic and Divination in Early Islam / edited by Emilie Savage-Smith

p. cm.

Includes bibliographical references.

1. Magic – Religious aspects – Islam. 2. Occultism – Religious
aspects – Islam. 3. Divination – Islamic Empire – History.

I. Savage-Smith, Emilie.

BP190.5.M25M34 2003

297.3'9–dc22

2003060079

ISBN 13 : 978-0-86078-715-0 (hbk)

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ACKNOWLEDGEMENTS

The chapters in this volume are taken from the sources listed below. The editor and publishers wish to thank the authors, original publishers or other copyright holders for permission to use their material as follows:

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CHAPTER 2: Francis E. Peters, "Hermes and Harran: The Roots of Arabic-Islamic Occultism", in Michel Mazzaoui and Vera B. Moreen, eds., *Intellectual Studies on Islam: Essays Written in Honor of Martin B. Dickson, Professor of Persian Studies, Princeton University* (Salt Lake City, 1990), pp. 185–215.

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CHAPTER 4: A. Fodor, "The Rod of Moses in Arabic Magic", *Acta Orientalia Academiae Scientiarum Hungaricae* 32 (Budapest, 1978), pp. 1–21.

CHAPTER 5: Tewfik Canaan, "The Decipherment of Arabic Talismans", *Berytus* 4 (Beirut, 1937), pp. 69–110; 5 (Beirut, 1938), pp. 141–51.

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CHAPTER 9: Yahya J. Michot, "Ibn Taymiyya on Astrology: Annotated Translation of Three Fatwas", *Journal of Islamic Studies* 11 (Oxford, 2000), pp. 147–208.

CHAPTER 10: George Saliba, "The Role of the Astrologer in Medieval Islamic Society", *Bulletin d'études orientales* 44 (Damascus, 1992), pp. 45–67. Figs. 1, 2,

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PUBLISHER'S NOTE

The pagination of articles originally published in English has been maintained for this volume. In articles translated into English, the original pagination has been indicated in the text in bold-face type.



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<http://taylorandfrancis.com>

GENERAL EDITOR'S PREFACE

Since the days of Ignaz Goldziher (1850–1921), generally regarded as the founder of Islamic studies as a field of modern scholarship, the formative period in Islamic history has remained a prominent theme for research. In Goldziher's time it was possible for scholars to work with the whole of the field and practically all of its available sources, but more recently the increasing sophistication of scholarly methodologies, a broad diversification in research interests, and a phenomenal burgeoning of the catalogued and published source material available for study have combined to generate an increasing "compartmentalisation" of research into very specific areas, each with its own interests, priorities, agendas, methodologies, and controversies. While this has undoubtedly led to a deepening and broadening of our understanding in all of these areas, and hence is to be welcomed, it has also tended to isolate scholarship in one subject from research in other areas, and even more so from colleagues outside of Arab-Islamic studies, not to mention students and others seeking to familiarise themselves with a particular topic for the first time.

The Formation of the Classical Islamic World is a reference series that seeks to address this problem by making available a critical selection of the published research that has served to stimulate and define the way modern scholarship has come to understand the formative period of Islamic history, for these purposes taken to mean approximately AD 600–950. Each of the volumes in the series is edited by an expert on its subject, who has chosen a number of studies that taken together serve as a cogent introduction to the state of current knowledge on the topic, the issues and problems particular to it, and the range of scholarly opinion informing it. Articles originally published in languages other than English have been translated, and editors have provided critical introductions and select bibliographies for further reading.

A variety of criteria, varying by topic and in accordance with the judgements of the editors, have determined the contents of these volumes. In some cases an article has been included because it represents the best of current scholarship, the "cutting edge" work from which future research seems most likely to profit. Other articles—certainly no less valuable contributions—have been taken up for the skillful way in which they synthesise the state of scholarly knowledge. Yet others are older studies that—if in some ways now superseded—nevertheless merit attention for their illustration of thinking or conclusions that have long been important, or for the decisive stimulus

they have provided to scholarly discussion. Some volumes cover themes that have emerged fairly recently, and here it has been necessary to include articles from outside the period covered by the series, as illustrations of paradigms and methodologies that may prove useful as research develops. Chapters from single author monographs have been considered only in very exceptional cases, and a certain emphasis has been encouraged on important studies that are less readily available than others.

In the present state of the field of early Arab-Islamic studies, in which it is routine for heated controversy to rage over what scholars a generation ago would have regarded as matters of simple fact, it is clearly essential for a series such as this to convey some sense of the richness and variety of the approaches and perspectives represented in the available literature. An effort has thus been made to gain broad international participation in editorial capacities, and to secure the collaboration of colleagues representing differing points of view. Throughout the series, however, the range of possible options for inclusion has been very large, and it is of course impossible to accommodate all of the outstanding research that has served to advance a particular subject. A representative selection of such work does, however, appear in the bibliography compiled by the editor of each volume at the end of the introduction.

The interests and priorities of the editors, and indeed, of the General Editor, will doubtless be evident throughout. Hopefully, however, the various volumes will be found to achieve well-rounded and representative syntheses useful not as the definitive word on their subjects—if, in fact, one can speak of such a thing in the present state of research—but as introductions comprising well-considered points of departure for more detailed inquiry.

A series pursued on this scale is only feasible with the good will and cooperation of colleagues in many areas of expertise. The General Editor would like to express his gratitude to the volume editors for the investment of their time and talents in an age when work of this kind is grossly undervalued, to the translators who have taken such care with the articles entrusted to them, and to Dr John Smedley and his staff at Ashgate for their support, assistance and guidance throughout.

Lawrence I. Conrad

INTRODUCTION

Magic and Divination in Early Islam

Emilie Savage-Smith

THERE ARE NEARLY as many definitions of magic and divination as there are people writing on the subject. Attempts at an all-inclusive definition tend to reflect the concerns of the person writing, whether philological, theological, historical, or anthropological. Moreover, most modern attempts to define magic and divination in Islam have been made in terms of European practice, which nearly always invokes forces other than God. Many European concepts, such as ghosts, necromancy, and witchcraft, have little or no counterpart in Islam, while the employment of dichotomies often used to characterize European practices (high v. low, white v. black, learned v. popular, prayers v. spells) is to a large extent inappropriate in the Islamic context.

When characterizing magic and divination, a contrast of the irrational with the rational is often evoked. However, what today may be deemed irrational was not always thought to be so, while both magic and divination can be viewed as a form of rationality with its own set of assumptions, based upon a process of analogy rather than proven causes and effects.

Medieval Islamic writers, as well as modern scholars, have categorized and enumerated various beliefs and practices under the general headings of *siḥr* (magic) or *kihāna* (divination).¹ Yet the boundaries between the categories are indistinct and shifting. *Siḥr*, for example, could apply to anything wondrous, including elegant and subtle poetry, to sleight-of-hand tricks, to the healing properties of plants, to invocations to God for assistance, to invocations to *jinn* or demons or the spirits of planets, and on occasion even to the divinatory art of astrology. Every medieval author had their own definitions and subcategories. For the purposes of this essay, I will make the distinction that magic seeks to alter the course of events, usually by calling upon a superhuman force (most often God or one of his intercessors), while divination attempts to predict future events (or gain information about things unseen) but not necessarily to alter them. The first part of this bibliographic essay will be concerned with magic in early Islam, and the second

¹See Toufic Fahd, "Siḥr", in *The Encyclopaedia of Islam*, 2nd ed., 11 vols. [hereafter *EI*²] (Leiden, 1960–2002), IX, 567–71; *idem*, "Kihāna", in *EI*², V, 99–101.

with divination. The articles selected for inclusion in this volume have been arranged in roughly the same manner, and they all include extensive references to earlier studies. The bibliography provided at the end of this essay is intended as an introductory guide to both topics, sharing many of the modern scholarly resources and methodologies.

Resources and Methodologies

For many, if not most, of the practices, our sources come from a later period (post-twelfth century) when the procedures and techniques had become well defined and often quite intricate. Teasing out the nature of practices and beliefs in the first centuries of Islam is both difficult and highly speculative.

For early Islam, when pre-Islamic practices were being incorporated into Muslim society, we have to rely on sources such as *ḥadīth*, early dictionaries, chronicles, and writings not solely devoted to magic or divination. Most historians of the subject, however, have focused upon later formal treatises on magic or divination, and for the early period (the eighth to early eleventh centuries) we are fortunate in having editions and translations of pertinent astrological treatises by al-Kindī (d. ca. AD 870) and Abū Ma'shar (d. ca. AD 893) and the magical compilation commonly known as the *Picatrix*. There are, however, relatively few synthetic studies whose primary focus is magic or divination in early Islam, aside from the valuable work of John Lamoreaux.² Often, however, there are insights relevant to the earlier period to be found in studies based on material originating after the eleventh century.

The field has not been well served by bibliographers, except for divination (excluding astrology) in the work of Toufic Fahd.³ The topics of magic and divination are only occasionally included in Carl Brockelmann's multi-volume *Geschichte der arabischen Litteratur* (1889–1949) and (with the exception of early astrology and astrometeorology) completely overlooked by Fuat Sezgin in his continuation and supplement to Brockelmann.⁴ For magic in general and for astrology (but not other forms of divination), the basic

²John C. Lamoreaux, *The Early Muslim Tradition of Dream Interpretation* (Albany, 2002).

³Toufic Fahd, *La divination arabe: études religieuses, sociologiques et folkloriques sur le milieu natif de l'Islam* (Strasbourg and Leiden, 1966). Astrology is not included in this otherwise fundamental study.

⁴Fuat Sezgin, *Geschichte des arabischen Schrifttums*, VII: *Astrologie–Meteorologie und Verwandtes bis ca. 430 H.* (Leiden, 1979), 1–199, for astrology in the period before ca. 1038, and 302–35 for astrometeorology during the same period.

bibliographic starting point should be Manfred Ullmann's *Die Natur- und Geheimwissenschaften im Islam*.⁵

While there are no full bibliographies of medieval sources concerned with both magic and divination, the field has been explored in a large number of pertinent articles in the *Encyclopaedia of Islam* (some of which will be cited here) and by two special issues of journals: *Bulletin d'études orientales*, 44 (1992), entitled "Sciences occultes et Islam", and *Quaderni di studi arabi*, 13 (1995), edited by Anne Regourd and devoted to "Divination magie pouvoirs au Yémen". Only a few of the studies in these two volumes will be singled out for mention in what follows, but both should be consulted in their entirety.

There are masses of pertinent manuscripts in libraries, but very few have been published or studied, or even catalogued. Additional sources, such as material from the Geniza, are becoming available, though they have not yet been employed extensively by historians of the subject.⁶ Artefacts and material remains are another potential source, and major collections of Islamic amulets have been compiled in the last two centuries, but while there have been some descriptive publications, there has been relatively little historical analysis.⁷

In any case, there are problems of interpretation regarding artefacts and material remains. For example, do we know their intended use? If so, how is it to be interpreted? There are artefacts that are not reflected in any written sources (magic bowls being an example), and there are occasional disparities between preserved text and artefact. For example, stone-books providing instructions for elaborate magical figures and formulae to be engraved on

⁵Manfred Ullmann, *Die Natur- und Geheimwissenschaften im Islam* (Leiden, 1972; *Handbuch der Orientalistik*, I.vi.2), 271–358, 359–426.

⁶Peter Schäfer and Shaul Shaked, eds., *Magische Texte aus der Kairoer Geniza*, 3 vols. (Tübingen, 1994–99). This study includes an excellent bibliography. See also Bernard R. Goldstein and David Pingree, "Horoscopes from the Cairo Geniza", *Journal of Near Eastern Studies* 36 (1977), 113–44.

⁷Possibly the largest single collection is the Wellcome Collection of Amulets, now at the Pitt Rivers Museum in Oxford, comprising two major collections of Middle Eastern amuletic materials—those of Tewfik Canaan and Winifred Black—as well as that of Henry Hildburgh, of which a substantial portion is Islamic. With the exception of an unpublished thesis, none of this collection has been catalogued or studied; see Marie-Claire Bakker, *Amuletic Jewellery in the Middle East: the Hildburgh Collection of North African Amulets in the Pitt Rivers Museum*, unpublished M.Phil. thesis, University of Oxford, 1996. Alexander Fodor has published small reproductions and descriptions of his extensive personal collections of magical amulets and equipment; see Alexander Fodor, "Amulets from the Islamic World: Catalogue of the Exhibition held in Budapest, 1988", *The Arabist* [Budapest Studies in Arabic, II] (Budapest, 1990).

precious or semi-precious ring stones have raised doubts in the present writer about their applicability. Their designs seem far too elaborate to have been executed on a gemstone, and are in no way corroborated by the designs on the thousands of gemstones and seal stones preserved today. Perhaps stone-books are an example of a genre that is interesting to read but of little use to an amulet maker. Such problems need to be addressed.

Magical and divinatory material has been approached from various perspectives. Written treatises have generally been approached bibliographically or through textual analysis. The bio-bibliographic approach is best illustrated by Manfred Ullmann, while Toufic Fahd combined philological interests with manuscript citations.⁸ The recent editions and translations of astrological treatises by al-Kindī and Abū Ma'shar are good examples of textual analysis, but magical texts have not received comparable attention. Most artefacts have been approached from either an epigraphical or an anthropological perspective. The catalogues of seals and talismans prepared by Ludvik Kalus are detailed epigraphic studies with relatively little historical context.⁹ The extensive study by Kriss and Kriss-Heinrich of modern amulets and magical equipment is an example that is primarily anthropological.¹⁰ To date, historians of Islamic magic and divination have not been inclined to use a cultural/social or rhetorical approach (favoured by recent historians of European magic), in which the effectiveness of magic and religion are viewed as more or less similar and the focus is upon semiotics and functionalism. A strictly anthropological approach can also blur the margins of religion and magic, in addition to which it tends to reason backwards, assuming that practices current today remain essentially unchanged from those in antiquity or the medieval period. That risk is illustrated, for example, by the fact that therapeutic inscriptions occurring on the earliest magic bowls essentially contradict their use as "fear cups", the function that anthropologists have assigned to the cups on the basis of their modern use. Similarly, there are difficulties with total reliance on a structuralist approach to the subject, combining linguistic with anthropological perspectives.¹¹ Yet

⁸See also Richard Lemay, "L'islam historique et les sciences occultes", *Bulletin d'études orientales* 44 (1992), 19–32.

⁹Ludvik Kalus, *Bibliothèque Nationale, Département des Monnaies, Médailles et Antiques: Catalogue des cachets, bulles et talismans islamiques* (Paris, 1981); *idem*, *Catalogue of Islamic Seals and Talismans: Ashmolean Museum, Oxford* (Oxford, 1987).

¹⁰Rudolf Kriss and Hubert Kriss-Heinrich, *Volks Glaube im Bereich des Islam*, II: *Amulette, Zaubersprüche und Beschwörungen* (Wiesbaden, 1962).

¹¹For a critique of the historical and logical problems arising from a structural anthropological approach to Islamic geomancy, see the essay by Marion B. Smith, "The Nature

Joseph Henninger successfully combines an anthropological approach with textual analysis in his important study of the belief in *jinn* (Chapter 1), and recent studies of conjurers in India reveal some insights of possible use in analysing earlier practices.¹² A study by the present author has employed both artefacts and written texts in analysing the design and use of magical equipment and certain classes of amulets and related talismanic objects.¹³

While attention has been given to the origins of certain beliefs and practices, and the nature of formal discourses on some of them, the historian is still faced with a major unanswered question: How do we determine just what and how prevalent magical and divinatory procedures were, and why did so many practitioners employ them (if indeed they did)?

Magic

Most magic in the early Islamic world was protective in nature, asking for God's general beneficence. Occasionally, His intervention against other powers—the evil eye, assorted devils (*shayātīn*) and demons (*jinn*, “shape-shifting” supernatural creatures the existence of which was already recognized in the *Qur'ān*)—was specifically sought. This underlying assumption of the existence of evil beings, including a pantheon of demons, was inherited from pre-Islamic societies, as were many of the methods of counteracting them.

The study by Edmond Doutté, prepared nearly a century ago, is still useful as a general guide to magical practices in Islam.¹⁴ The recent study by Dorothee Pielow, though based on a thirteenth-century text, is highly useful.¹⁵ Also of use is the chapter on magic from the *Muqaddima* of Ibn

of Islamic Geomancy with a Critique of a Structuralist's Approach”, *Studia Islamica*, 49 (1979), 5–38.

¹²See, for example, Lee Siegel, *Net of Magic: Wonders and Deceptions in India* (Chicago, 1991); Ariel Glucklich, *The End of Magic* (Oxford, 1997). The latter proposes (p. 12) a useful definition of the magical experience as “the awareness of the interrelatedness of all things in the world by means of a simple but refined sense perception”.

¹³Emilie Savage-Smith, “Magic and Islam”, in Francis Maddison and Emilie Savage-Smith, *Science, Tools & Magic* (London and Oxford, 1997; *Khalili Collections of Islamic Art*, 12), I, 9–148. The study centres upon items now in the Khalili Collections of Islamic Art, but the comparative material employed in the analyses incorporates a much wider range of sources.

¹⁴Edmond Doutté, *Magie et religion dans l'Afrique du Nord* (Algiers, 1908; repr. Paris, 1984).

¹⁵Dorothee Anna Marie Pielow, *Die Quellen der Weisheit. Die arabische Magic im Spiegel des Uṣūl al-Hikma von Aḥmad 'Alī al-Būnī* (Hildesheim, 1995).

Khaldūn (d. 1382), who supplies a “history” of the subject,¹⁶ and the articles on *sihr* and *sīmiyāʾ* in the *Encyclopaedia of Islam*.¹⁷ Michael Dols, in his chapter concerned with magic in a medical context (Chapter 3), also presents the historical account given at the end of the tenth century by Ibn al-Nadīm as well as summarizing Ibn Khaldūn’s assessment of therapeutic magic.

Pre-Islamic Influences and Antecedents

The fundamental study of pre-Islamic and early Islamic belief in spirits or *jinn* is that by Joseph Henninger (Chapter 1). Also useful is the more recent study by Toufic Fahd, “Anges, démons et djinnes en Islam”,¹⁸ and the relevant articles in the *Encyclopaedia of Islam*.¹⁹ No thorough study has been undertaken of the indigenous Middle Eastern belief in the “evil eye” and its role in Islamic society, though the literature is full of references to prophylactic measures to be taken against the (usually unconscious) evil action of a glance. The most comprehensive study to date of the evil eye, encompassing many cultures, is that of Siegfried Seligmann.²⁰

The Hermetic tradition of late antiquity, with its emphasis on the close relationship or “sympathy” between the physical world and the divine, had a great influence on formal magical, divinatory, and alchemical writings in Arabic.²¹ Such influence is evident, for example, in the popular collection

¹⁶Ibn Khaldūn, *The Muqaddimah: an Introduction to History*, trans. Franz Rosenthal, 3 vols. (Princeton, 1958), III, 156–227.

¹⁷See n. 1 above; also Duncan Black MacDonald and Toufic Fahd, “Sīmiyāʾ”, in *EI*², IX, 612–13.

¹⁸Toufic Fahd, “Anges, démons et djinnes en Islam” in *Génies, anges et démons: Égypte, Babylone, Israël, Islam, Peuples altaïques, India, Birmanie, Asie du sud-est, Tibet, Chine*, ed. Dimitri Meeks et al. (Paris, 1971; *Sources orientales*, 8), 153–214.

¹⁹Pertev N. Boratav et al., “Djinn”, in *EI*², II, 546–50; Toufic Fahd and Daniel Gimaret, “Shayṭān”, in *EI*², IX, 406–409. For the much later development, first recorded in 1860, of a cult of spirits (neither demons or *jinn*) in northeastern Africa, see the article “Zār” (Alain Rouaud and Riziana Battain) in *EI*², XI, 455–57; Janice Boddy, *Wombs and Alien Spirits: Women, Men, and the Zār Cult in Northern Sudan* (Madison, 1989).

²⁰Siegfried Seligmann, *Die Zauberkraft des Auges und des Berufen. Ein Kapitel aus der Geschichte des Aberglaubens* (Hamburg, 1922); see also Doutté, *Magie et religion dans l’Afrique du Nord*, 317–27; Philippe Marçais, “‘Ayn”, in *EI*², I, 786.

²¹See Garth Fowden, *The Egyptian Hermes: a Historical Approach to the Late Pagan Mind* (Princeton, 1993); and for Graeco-Roman magic in general, see Christopher A. Faraone and Dirk Obbink, *Magika Hiera: Ancient Greek Magic and Religion* (Oxford, 1991); John G. Gager, *Curse Tablets and Binding Spells from the Ancient World* (New York and Oxford, 1992); Fritz Graf, *Magic in the Ancient World* (Cambridge MA, 1997); Bengt Ankarloo and Stuart Clark, eds., *Witchcraft and Magic in Europe: Ancient Greece and Rome* (London, 1999). For Byzantine and Coptic magic, see Henry Maguire, ed.,

of treatises by the Brethren of Purity (Ikhwān al-Ṣafā').²² Francis Peters (Chapter 2) discusses the rise of this esotericism in late antiquity and the role played by the Sabians of the city of Ḥarrān in its transmission into early Islam.²³ Jewish influences on Arabic magic are explored by Alexandor Fodor in the context of a thirteenth-century treatise (Chapter 4). For a general background to pre-Islamic magical beliefs, the chapter on "Pagans and Gnostics" by Michael Morony in his book *Iraq after the Muslim Conquest* is highly useful.²⁴ For Aramaic magical practices the work of Joseph Naveh and Shaul Shaked is indispensable.²⁵ On the difficulty of disentangling the various influences, see the article by Peter Joosse.²⁶

Many of these pre-Islamic beliefs and practices were assimilated into the emerging Islamic culture. Pre-Islamic magical imagery featuring lions, serpents, and scorpions can be seen on several types of magical artefacts, such as amulets and magic-medicinal bowls. There was concern for sudden death (associated with the evil eye)—explaining a nexus of symbols (scorpion/serpent/mad dog) that occur on the earliest amulets, all of which could be interpreted as omens of sudden death. Astrological iconography derived from classical antiquity, involving emblematic representations of the twelve zodiacal signs and the seven planets, also played a role in talismanic design.

The employment of special occult properties of plant, animal, and mineral substances continued an established late antique practice. An entire Arabic genre soon developed on the topic, usually called *khawāṣṣ* literature from the plural of the word *khāṣṣa* meaning "special property".²⁷ The ba-

Byzantine Magic (Washington DC, and Cambridge MA, 1995); Marvin Meyer and Richard Smith, eds., *Ancient Christian Magic: Coptic Texts of Ritual Power* (San Francisco, 1994).

²²See for example Seyyed Hossein Nasr, *An Introduction to Islamic Cosmological Doctrines: Conceptions of Nature and Methods Used for its Study by the Ikhwān al-Ṣafā', al-Bīrūnī, and Ibn Sīnā* (Cambridge MA, 1964).

²³See also "The Ṣābi'at Ḥarrān", in the article "Ṣābi'a" (Toufic Fahd), in *EI*², VIII, 675–78.

²⁴Michael G. Morony, *Iraq after the Muslim Conquest* (Princeton, 1984), 384–430. See also Wolfhart P. Heinrichs, "Sadj'", in *EI*², VIII, 732–38, concerning magical utterances in pre-Islamic Arabian usage.

²⁵Joseph Naveh and Shaul Shaked, *Amulets and Magic Bowls* (Jerusalem, 1985; 2nd rev. ed. 1987), *idem*, *Magic Spells and Formulae: Aramaic Incantations of Late Antiquity* (Jerusalem, 1993).

²⁶N. Peter Joosse, "An Example of Medieval Arabic Pseudo-Hermetism: the Tale of Salāmān and Absāl", *Journal of Semitic Studies* 38 (1993), 279–93.

²⁷See Manfred Ullmann, "Khāṣṣa", in *EI*², IV, 1097–98. Qur'ānic verses and phrases were also said to have occult properties (*khawāṣṣ*), for which see Toufic Fahd, "Khawāṣṣ al-ḳur'ān", in *EI*², IV, 1133–34.

sis premise was that everything in nature had hidden or occult properties that could be activated, and some properties were compatible with others while some were antipathetic. By recognizing and utilizing these properties, disease might be cured or good fortune attained. The occult properties of medicinal substances (*khawāṣṣ al-adwiya*) were favourite topics, though possibly the most popular and distinct form of *khawāṣṣ* literature were the "stone-books", devoted to the magical virtues and uses of stones and minerals. An early example is a magical-medical pharmacopoeia written in the tenth century by Muḥammad ibn Aḥmad al-Tamīmī, who lived in Jerusalem; the chapter concerned with the *khawāṣṣ* of stones has been edited and translated by Jutta Schönfeld.²⁸ Later treatises were often illustrated with designs to be engraved on gemstones and set into a ring—to help with capturing wild animals, releasing someone from a spell, gaining love, or a host of other uses.²⁹ This type of magic did not usually involve prayers or invocations, for the material itself from which it was made, or the symbols inscribed thereon, was regarded as sufficient.

Islamic Magic in General

There are, however, contrasts with many of the magical practices of late antiquity, the most obvious being the lack of animal, and occasionally human, sacrifice that was a well-attested activity in late antiquity. There is little evidence for the continued use in Islam of dolls and similar objects to bring about the destruction of one's enemy. In the case of magic bowls, it is evident that by the time they are attested in Islamic culture very fundamental changes have taken place, so much so that their derivation from pre-Islamic artefacts is very tenuous.

The role of the evil eye is much more evident in early Islamic practice than it appears to have been in earlier cultures. So imbedded in Islamic culture is this notion of the evil eye that Ignaz Goldziher has suggested that the traditional iconic gesture of astonishment in Islamic art, placing the index finger of the right hand to one's mouth, is a magical defence

²⁸Jutta Schönfeld, *Über die Steine: Das 14. Kapitel aus dem "Kitāb al-Muršid" des Muḥammad ibn Aḥmad al-Tamīmī, nach dem pariser Manuskript herausgegeben, übersetzt und kommentiert* (Freiburg, 1976).

²⁹For an example of this genre, see A.F.L. Beeston, "An Arabic Hermetic Manuscript", *The Bodleian Library Record* 7 (1962), 11–23.

against the evil eye or evil in general.³⁰ Quite certainly the representation of the human hand played an important role in protection against the evil eye throughout the pre-Islamic Middle East, and continues to do so in the Islamic lands.

Curse tablets (usually written on lead, rolled up, and hidden) are relatively common artefacts from Graeco-Roman culture, but few traces remain amongst Islamic artefacts. Binding spells continued to play a role, as they did in late antiquity, but perhaps can be seen to be of somewhat less importance.

Islamic writers often provided a magical/divinatory tradition with its own pseudo-history. Such prophets as Daniel or Enoch/Idris or Solomon, amongst others, were commonly named as originators of various arts, sometimes accompanied by tales of material being discovered in graves or caves.³¹ An association with North Africa or India was sometimes suggested, for both areas became associated with the *topos* of esoteric knowledge. Ibn Khaldūn, writing in the fourteenth century, provided a particularly full "history" of magical knowledge.³² For him, the definitive summary of everything known about magic and sorcery was the Arabic magical-astrological treatise compiled around 1004, the *Ghāyat al-ḥakīm*, commonly known as the *Picatrix*, that was falsely attributed to the Spanish astronomer al-Majrīṭī (d. ca. 1008). The Arabic text has been edited and translated into German, but a new edition and full study comparing it with the Latin tradition would be welcome.³³ For most later writers, the acknowledged authority in the field of magic was the Egyptian Aḥmad ibn 'Alī al-Būnī, who is said to have died in 1225. Many treatises are ascribed to him, the most influential being the *Shams al-ma'ārif al-kubrā*, which, though printed many times, has never been critically edited or translated.³⁴ Dorothee Pielow has published a study

³⁰ Ignaz Goldziher, "Zauberelemente im islamischen Gebet", in *Orientalische Studien Theodor Nöldeke zum siebzigsten Geburtstag gewidmet*, ed. Carl Bezold (Giessen, 1906), I, 320–21.

³¹ On the role of the introductory "authenticating apparatus", see Alexander Fodor, "The Origins of the Arabic Legends of the Pyramids", *Acta Orientalia Academiae Scientiarum Hungaricae* 23 (1970), 335–63.

³² Ibn Khaldūn, *Muqaddima*, III, 156–70.

³³ *Kitāb ghāyat al-ḥakīm*, ed. Helmut Ritter (Leipzig and Berlin, 1933); trans. Helmut Ritter and Martin Plessner, *Picatrix. Das Ziel des Weisen von Pseudo-Mağrīṭī* (London, 1962). See also David Pingree, ed., *Picatrix: the Latin Version of the Ghāyat al-Ḥakīm* (London, 1986).

³⁴ Aḥmad ibn 'Alī al-Būnī, *Kitāb shams al-ma'ārif al-kubrā wa-laṭā'if al-'awārif* (Cairo, [ca. 1945]).

of its principle features and their historical roots, while Lory has examined its letter magic.³⁵

One of the primary uses of magic was to ward off disease and preserve well-being. Michael Dols' discussion of the theory of therapeutic magic (Chapter 3) includes a discussion of sorcerers (*sāḥir*, pl. *saḥara*) who addressed their invocations to demons. His chapter concern with exorcists (*mu'azzimūn*), who sought God's assistance as well as that of the *jinn* to heal illnesses such as epilepsy or insanity (not reprinted here, though it occurs in the same book), is marred by a confusion or equating of early modern and modern practices with medieval ones.³⁶

Recognition of active supernatural forces other than God's to a certain extent contradicted the strict monotheism of Islam, though not the omnipotence of God, to Whom were directed most of the pleas for intervention. Religious scholars tended to recognize as legitimate those forms of magic that appealed only to God, but not the illicit forms addressed to *jinn* and demons.³⁷ It was also considered acceptable to address such invocations to angels, to Muḥammad, to 'Alī or other members of the Prophet's family, and to saints: all these were believed to intercede with God on behalf of the supplicant.³⁸ Virtually all scholars allowed for the mystical and magical interpretation of letters and numbers.

Amulets, Talismans, and Letter Magic

Although they portray magical symbols whose imagery might be traceable to pre-Islamic traditions, the amulets and talismanic objects used by Muslims chiefly took the form of pious invocations to God, through Qur'ānic quotations and prayers. In this respect they differ substantially from Byzantine, Roman, early Iranian and other pre-Islamic magic.

Talismans and amulets (there being virtually no distinction between the two English terms) were used not only to ward off the evil eye and misfortune, but could also be used to gain good fortune, or increase fertility

³⁵Pielow, *Die Quellen der Weisheit*; Pierre Lory, "La magie des lettres dans le *Shams al-ma'ārif* d'al-Būnī", *Bulletin d'études orientales* 39–40 (1987–88), 97–111.

³⁶Michael W. Dols, *Majnūn: the Madman in Medieval Islamic Society*, ed. Diana E. Immisch, (Oxford, 1992), Chapter 9 "The Practice of Magic in Healing"; see also 243–60 for "medicine of the Prophet" (*al-ṭibb al-nabawī*), which has many folkloric and magical elements but will be discussed in the volume on medicine forming part of the present series.

³⁷Toufic Fahd, "La connaissance de l'inconnaissable et l'obtention de l'impossible dans la pensée mantique et magique de l'Islam", *Bulletin d'études orientales* 44 (1992), 33–44.

³⁸For healing shrines in Islam, see Dols, *Majnūn*, 243–60; Josef W. Meri, *The cult of Saints among Muslims and Jews in Medieval Syria* (Oxford, 2002).

or potency or attractiveness. They encompassed not only magical symbols, but also evocations and prayers nearly always addressed to God or one of His intercessors. The most common Arabic terms employed for amulets were *tilsām* (Greek *telesma*, derived from a root meaning to endow a thing with potency) and *ḥirz*, suggesting protection.³⁹ The use of the English term “charm” for such material is generally best avoided, for it implies an evocation of a lesser god or demon through recitations and incantations. The difference between magical invocations in the Islamic world and those of Europe (both pre-Christian and Christian) is that in Islam the invocations are most often (though not exclusively) addressed to God rather than to demons. Thus, while the artefact may have some magical writing and magical symbols, they are predominantly supplications to God to aid and protect the bearer. Islamic magic has been defined by Michael Dols as “a supercharged prayer”,⁴⁰ and the artefacts bear this out. In this, Islamic magic differs from that of antiquity and from much of European medieval and later magical practices.

The prayers, Qur’anic verses, pious phrases, and invocations, often employing the 99 “Beautiful Names of God” (*al-asmā’ al-ḥusnā*)⁴¹ or names of angels, applied to magical objects were supplemented by an array of symbols whose function was to strengthen the supplications. Many of these symbols were inherited from earlier cultures, and their origins and significance have become obscure with the passage of time.

The earliest surviving talismanic objects reflect pre-Islamic magical symbolism: for example, a long-horned stag or oryx occurring on very early Iranian amuletic objects of about the ninth century, and a remarkably stable but complex design also occurring on ninth- and tenth-century amulets composed of a scorpion, rampant lion or dog, a canopy of stars, and a frame of pseudo-writing.⁴² Both designs, for unknown reasons, drop out of the talismanic repertoire by the twelfth or thirteenth century, at which time other talismanic designs appear to dominate. Of the latter, the most common is a row of seven magical symbols, one of which is a five-pointed star (or pentagram) or sometimes hexagram traditionally called the “Seal of Solomon”. The seven magical symbols together represented the sigla of God’s Holy Name,

³⁹See Julius Ruska, Bernard Carra de Vaux, and C.E. Bosworth, “Tilsām”, in *EI*², X, 500–502, an excellent article except for over-use of the word “charm” and over-emphasis on the difference between talismans and amulets.

⁴⁰See Chapter 3, p. 216.

⁴¹Louis Gardet, “al-Asmā’ al-Ḥusnā”, in *EI*², I, 714–17.

⁴²Savage-Smith, “Magic and Islam”, 135–37.

though historians have sometimes incorrectly called them the “Seven Seals of Solomon”. Talismanic designs could also include astrological iconography derived from classical antiquity. These were usually anthropomorphized representations, adapted to Islamic iconographic conventions, of the zodiacal signs and the seven classical planets.

Magic writing, composed of numerals and letters as well as other marks, is another common feature.⁴³ As early as the ninth century, entire treatises were devoted to magical alphabets, secret writing, and curious alphabets of earlier cultures. For example, about AD 855 Ibn Waḥshīya composed the illustrated essay on magical scripts entitled *Kitāb shawq al-mustahām fī maʿrifat rumūz al-aqlām* (“The book of the frenzied devotee’s desire to learn about the riddles of ancient scripts”).⁴⁴ The tenth-century treatise by Jaʿfar ibn Manṣūr al-Yaman on deciphering ancient symbols has been edited twice and is a useful guide to early knowledge of esoteric symbols.⁴⁵ Early (and later) Islamic magical vocabulary also included symbols used in late antiquity consisting of combinations of short lines ending in tight curls or loops, often called “lunette sigla”.⁴⁶ By employing the magical properties of the letters themselves (an art called *ʿilm al-ḥurūf* or *ṣimiyā*), it was said that one could sometimes control the *jinn*.

The best guide to deciphering the myriad symbols on Islamic talismans remains the long out-of-print study by Tewfik Canaan (Chapter 5). More recently, Venetia Porter has published an examination of Islamic seals having amuletic designs engraved in reverse and therefore intended for stamping (Chapter 6). In this she explores the ambiguity between seal (*khātām*) and amulet and the “function” of each. The study by H.A. Winkler should still be consulted, while Georges Anawati provided an excellent bibliography as part of his analysis of some North African amuletic instructions.⁴⁷ The oc-

⁴³See Toufic Fahd, “Ḥurūf (ʿilm al-),” in *EI*², III, 395–96; MacDonald and Fahd, “Ṣimiyā”, 612–13.

⁴⁴Ed. and trans. Joseph Hammer, *Ancient Alphabets and Hieroglyphic Characters Explained; with an Account of the Egyptian Priests, their Classes, Initiation and Sacrifices* (London, 1806).

⁴⁵Jaʿfar ibn Manṣūr al-Yaman, *Kitāb al-kashf*, ed. Rudolf Strothmann (Oxford, 1952); ed. Muṣṭafā Ghālib (Beirut, 1984). Magical alphabets could also be used for encoding messages; see C.E. Bosworth, “Muʿammā”, in *EI*², VIII, 257–58.

⁴⁶For lunette sigla, see Chapter 5, pp. 141–43; Doutté, *Magie et religion dans l’Afrique du Nord*, 158–59, 244–48, 288.

⁴⁷H.A. Winkler, *Siegel und Charaktere in der muhammedanischen Zauberei* (Berlin, 1930); Georges C. Anawati, “Trois talismans musulmans en arabe provenant du Mali (Marché de Mopti)”, *Annales islamologiques* 11 (1972), 287–339. See also Savage-Smith, “Magic and Islam”, 61–62, where a table is given of the relative occurrences of Qurʾānic

currence on many surviving amulets of undecipherable pseudo-Arabic raises some interesting issues for the historian. Were the words nonsense to the person writing them? Was the person writing them illiterate and misunderstanding his model? If so, was that thought to lessen or invalidate its magical or invocatory power? Did it compromise the efficacy of the magic if the person reciting an invocation or wearing an amulet did not understand the formulae?

Talismanic protection was sought for virtually everything. Manuscripts, for example, were often "protected" by the simple inscription of the phrase *yā kabikaj* ("O Buttercup"). This talismanic inscription did not involve any magical symbols, but rather reflected the idea that the buttercup, a member of the family of highly poisonous plants called *ranunculaceae*, was useful in repelling insects and worms. The use of fish-glue and starch-paste in Arabic manuscript production attracted to a volume all kinds of worms and insects. It is apparent that, when the actual plant was unavailable, it was considered equally effective to simply write the name "buttercup" (*kabikaj*) in an invocation at the front and again at the back of a volume to protect it from insects and worms. In these instances the invocation is neither to God nor to an intercessor nor to a lesser god, but to the occult powers (*khawāṣṣ*) of the plant itself.

Magic Squares

Magic squares became an important part of the vocabulary of talisman-makers and compilers of magical manuals, particularly after the twelfth century. The earliest magic square (*wafq* in Arabic) was a 3 x 3 square having nine cells in which the letter/numerals from 1 through 9 were arranged so that every row and every column as well as the two diagonals had the same sum: 15. This ancient magic square (possibly of Chinese origin) was given its own special name of *budūḥ*, derived from the four letter/numerals that are placed in the corner squares (the letters *b* = 2, *d* = 4, *w/ū* = 6, and *ḥ* = 8). So potent were the magical properties of this square that the name itself, *budūḥ*, acquired its own occult potency. Thus, like the invocation to a buttercup (*yā kabikaj*), when one did not wish or know how to write the magic square, one could invoke it against stomach pains, temporary impotency, or even to become invisible, by writing or saying *yā budūḥ* ("O Budūḥ").⁴⁸ The

verses on amulets.

⁴⁸See Duncan Black Macdonald, "Budūḥ", in *EI* ², Suppl., 153-54.

names of the four archangels were frequently associated with the square, and it was often placed within a larger talismanic design.

The magical literature and artefacts that have been studied up till now do not seem to display any knowledge of higher-order magic squares (i.e. larger than 3×3) until the thirteenth century. It appears that knowledge of their construction developed before that time but did not pass into the magical vocabulary until the late twelfth or early thirteenth century. Mathematical texts from the late tenth century, such as that by Abū l-Wafā' al-Būzjānī (d. 997), contain methods for constructing standard magic squares up to 6×6 , yet they did not enter the magical vocabulary until about two-hundred years later.⁴⁹

In a magical context there were also squares that on first sight appear to be "magic squares", but in fact lack the required mathematical properties. These fall into two categories: the so-called Latin square (in Arabic, *wafq majāzī* "false magic square") and the "verse square". In the former each row and each column contain the same set of symbols (be they numerals, letters, words, or abstract marks), but with the order of the symbols differing in each row or column. In the "verse square" the cells of the square are filled with words or phrases, but not arranged as in a Latin square. Rather, in each consecutive row one word is dropped on the right side and a new one added on the left until the entire selected verse (usually from the Qur'ān) is worked into the square.

The literature on true magic squares is extensive, for it has attracted the attention of historians of mathematics and puzzles. Yet the focus of virtually all the scholarly literature has been upon the mathematical methods of creating magic squares of higher order, rather than upon their magical significance or their role in popular culture. For the mathematical historical approaches to the subject, see the publications of Jacques Sesiano.⁵⁰ See Chapter 6 by Venetia Porter for the magical associations of such squares,

⁴⁹Bordered magic squares of higher orders could also be constructed by mathematicians in the tenth century. See Jacques Sesiano, "Le traité d'Abū'l-Wafā' sur les carrés magiques", *Zeitschrift für Geschichte der arabisch-islamischen Wissenschaften* 12 (1998), 121–244.

⁵⁰Jacques Sesiano, "Wafq", in *EI*², XI, 28–31; *idem*, *Un traité médiéval sur les carrés magiques: De l'arrangement harmonieux des nombres* (Lausanne, 1996); *idem*, "Quadratus mirabilis", in Jan P. Hogendijk and Abdelhamid I. Sabra, eds., *The Enterprise of Science in Islam: New Perspectives*, ed. (Cambridge MA, 2003), 199–233; Schuyler Cammann, "Islamic and Indian Magic Squares", *History of Religions* 8 (1969), 181–209, 271–99.

and for their use in the context of magic shirts and charts, see the discussion by the present author.⁵¹

Talismanic Equipment

It is evident that the twelfth century, for whatever reason, saw a marked increase of interest in magic: Present evidence suggests it was about this time that magical-medicinal bowls were first produced (the earliest example known was made in 1167 for the Syrian ruler Nūr al-Dīn ibn Zangī), that the amuletic design known (inaccurately) as the Seven Seals of Solomon was devised, that the magical use of higher-order magic squares occurred, and the production of magical texts began to increase dramatically.

Magic healing bowls were produced in considerable quantity from at least the twelfth century, though they are not found in the written magical literature. In origin they were probably related in some fashion to pre-Islamic Aramaic bowls, though there are in fact great differences in design and function.⁵² The latter are of clay and have spiral inscriptions invoking demons, while the Islamic ones are of metal and noticeably lacking in any reliance upon *jinn* and demons. Islamic magic-medicinal bowls are distinct amongst magical artefacts for a number of reasons: a) they were not carried or worn by the sufferer (hence not an amulet); b) they do not function continuously, as a household amulet would; c) they were employed only when needed, yet they were of a lasting material; and d) the early examples are far more informative as to their intended use than any other magical artefact, for the early (twelfth–fourteenth century) examples are engraved with statements giving specific therapeutic uses. In addition to Qur’ānic verses and magical writing, the early bowls were decorated with schematically rendered human and animal forms. A sub-group always have representations of a scorpion, a snake (or serpent), an animal that is probably intended to be a dog (though some have called it a lion), and two intertwined dragons—imagery reminiscent of the design on ninth/tenth-century Iranian amulets. This sub-group has been designated by some scholars as “poison cups”, though in fact poisons and animal bites are only some of the many uses inscribed on the outside of the dish.⁵³

⁵¹See Savage-Smith, “Talismanic Charts and Shirts”, in *Science, Tools & Magic*, I, 106–23.

⁵²For the pre-Islamic bowls, see the work of Naveh and Shaked (above, n. 25).

⁵³See Tewfik Canaan, “Arabic Magic Bowls”, *Journal of the Palestine Oriental Society* 16 (1936), 79–127; Savage-Smith, “Magic-Medicinal Bowls”, in *Science, Tools & Magic*, I, 72–105.

Another type of magical equipment with no counterpart in the literature are magic shirts, made of cloth and painted with magical symbols and verses from the Qur'ān. The only preserved examples are from the fifteenth century or later and were made in Ottoman Turkey, Safavid Iran, or Mughal India. There was, however, a tradition traceable to the ninth century of wearing a special shirt for curing fevers or aiding childbirth.⁵⁴ A remarkable Judeo-Persian talismanic textile, recently published in detail by Raya Shani, though of recent date nonetheless reflects an ancient magical tradition traceable to Mesopotamia and mediated through Jewish and Muslim communities.⁵⁵

Mirrors have a long history of association with magical properties.⁵⁶ A number of medieval mirrors are preserved, usually from the late twelfth or thirteenth century, on which talismanic designs have been engraved upon the shiny surface.⁵⁷

There was an old tradition of placing padlocks on sacred places or tombs of saints to mark a vow taken. Many of these locks have amuletic designs on them, and Paola Torre has published an excellent examination of this type of amuletic equipment.⁵⁸ Finally, in the various collections of amulets there are large numbers of amulet cases for holding rolled-up written amulets or even entire minuscule Qur'āns.

At times the artefacts enrich our understanding of a text, sometimes the literature helps us understand a surviving artefact, and sometimes there is a surprising or inexplicable discrepancy between them. A methodology, however, that examines both the material culture and the written text can perhaps aid us in better understanding the everyday practices and concerns of both the educated and the illiterate, the affluent and the poor.

Magic as Trickery and Conjuring

Magic also included the art of trickery or forgery. Several Arabic terms could be used for this activity: *nīranj* (from a Persian word for creating illusions), *sha'badha* (a magician was called a *musha'bidh*), *'ilm al-ḥiyal*, "the science of tricks", or *'ilm sāsāniya*, derived from the designation of the medieval Islamic

⁵⁴See Savage-Smith, "Talismanic Charts and Shirts", 106–23.

⁵⁵Raya Shani, "A Judeo-Persian Talismanic Textile", in *Irano-Judaica IV*, ed. Shaul Shaked and Amnon Netzer (Jerusalem, 1999), 251–73.

⁵⁶Manfred Ullmann, *Das Motiv des Spiegels in der arabischen Literatur des Mittelalters* (Göttingen, 1992), 55–61.

⁵⁷See Savage-Smith, "Talismanic Mirrors and Plaques", 124–31.

⁵⁸Paola Torre, *Lucchetti Orientali: Funzione, simbolo, magia. Roma, Palazzo Brancaccio, 5 luglio–30 novembre 1989* [exhibition catalogue] (Rome, 1989). See also Tim Stanley, "Locks, Padlocks, and Tools", in *Science, Tools & Magic*, II, 356–90.

underclass of swindlers and rogues as Banū Sāsān.⁵⁹ The activities included confidence tricks, sleight-of-hand tricks, creating illusions, and at times even included the taming of animals. They could employ lamps, candles, vapours, bottles, cups and glasses, eggs, and all sorts of other equipment.

Such practices continued traditions from late antiquity. There has not yet been a study, however, of early Islamic manifestations of such conjuring nor comparisons with pre-Islamic practices. A text that throws considerable light upon later activities is *al-Mukhtār fī kashf al-asrār* ("The Selection in Unveiling Secrets"), written in the first half of the thirteenth century by 'Abd al-Raḥīm al-Jawbarī, a dervish of Damascus and ex-magician. In it, al-Jawbarī exposes the practices of charlatans and magicians. The scholarly edition and study of this important work by Stefan Wild has not yet been published.⁶⁰ Meanwhile, there is an unsatisfactory printed version and French translation available (though copies are often hard to locate).⁶¹ Insights can also be gained by comparison with recent studies of magicians in countries such as India.⁶²

Magic as Wonder-working and Marvels

Magic also plays a prominent role in the genre of paradoxography or "marvel-writing", whose origins can be traced back to the third century BC.⁶³ Virtually all writers on geography included stories of incredible creatures and events that cause wonderment, and by the twelfth century a genre of literature developed usually designated as *'ajā'ib*, equivalent to "mirabilia".⁶⁴ These accounts of the sensational and wondrous included manmade structures such as the pyramids, as well as natural phenomena, travellers' tales of

⁵⁹Toufic Fahd, "Nīrandj", in *EI*², VIII, 51–52. See also Franz Rosenthal, "Sha'badha" in *EI*², IX, 152; C.E. Bosworth, *The Medieval Islamic Underworld, I: The Banū Sāsān in Arabic Life and Lore*; and II: *The Arabic Jargon Texts* (Leiden, 1976).

⁶⁰See Stefan Wild, "al-Djawbarī" in *EI*², which corrects some information given in the "Nīrandj" article cited in the previous note.

⁶¹'Abd al-Raḥīm al-Jawbarī, *Kitāb al-mukhtār fī kashf al-asrār* (Cairo, [ca. 1918]); *Le voile arraché*, trans. René R. Khawam (Paris, 1979–80).

⁶²See, for example, the study of Siegel, *Net of Magic*.

⁶³James S. Romm, *The Edges of the Earth in Ancient Thought* (Princeton, 1992), 92–109.

⁶⁴See C.E. Bosworth and Iraj Afshar, "'Ajā'eb al-Maklūqāt" in *Encyclopaedia Iranica*, ed. Ehsan Yarshater (London and Costa Mesa, CA, 1985–proceeding), I, 696–99; Lutz Richter-Bernburg, "'Ajā'ib" in *Encyclopedia of Arabic Literature*, ed. Julie Scott Meisami and Paul Starkey (London and New York, 1998), I, 65–66; Robert Irwin, *The Arabian Nights: a Companion* (London, 1994), 178–213.

the fabulous, strange events, grotesque and hybridised creatures, and occult properties of animals.

By the thirteenth century there were manuals of sorcery giving spells for flying, for becoming invisible, for walking on water, for giving someone a dog's head, and all sorts of other amazing things—forming a type of fantastical literature in its own right. See, for example, Rex Smith's study of stories of sorcery in Ibn al-Mujāwir's thirteenth-century guide to Arabia.⁶⁵

Divination

Divination is concerned with the prediction of future events or gaining information about things unseen.⁶⁶ In the early and classical Islamic world it encompassed a range of techniques inherited from late classical antiquity, from Sasanian Iran, and from traditional Mesopotamian practices. For these earlier practices, see the analysis by Ann Jeffers.⁶⁷ The relatively overlooked subject of Armenian divinatory practices has been addressed by Robert Thompson.⁶⁸ While all but one form of Islamic divination can be traced back to earlier practices, not all the divinatory techniques inherited from early cultures were continued with equal enthusiasm.

The divinatory practices can be grouped roughly into those whose techniques are largely intuitive and those that employ numerical or mechanical methods. Insights into the future do not always require a procedure or technique, the Ṣūfī association with divination being an example.⁶⁹ However, the discussion to follow will be restricted to those practices involving specific techniques, beginning with the intuitive forms.

Augury by observing the behaviour of animals (especially the flight of birds) was an early practice throughout Mesopotamia and continued in late antiquity, but in Islamic culture it seems to have played a less prominent

⁶⁵G. Rex Smith, "Magic, Jinn, and the Supernatural in Medieval Yemen: Examples from Ibn al-Muğāwir's 7th/13th Century Guide", *Quaderni di studi arabi* 13 (1995), 7–18.

⁶⁶For all types of divination in the Islamic world, with the exception of astrology, the fundamental guide is that by Toufic Fahd, *La divination arabe*. See also his article on *kihāna*, also on "Fa'l" in *EI*², II, 758–59.

⁶⁷Ann Jeffers, *Magic and Divination in Ancient Palestine and Syria* (Leiden, 1996). See also Morony, *Iraq after the Muslim Conquest*.

⁶⁸Robert W. Thomson, "'Let Now the Astrologers Stand Up': the Armenian Christian Reaction to Astrology and Divination", *Dumbarton Oaks Papers* 46 (1992), 305–12. This study includes an excellent discussion of terms used for various techniques.

⁶⁹See for example Meri, *Cult of Saints*, where Chapter 2 is particularly relevant. For the distinction between divination and prophecy, see Toufic Fahd, "Nubuwwa", in *EI*², VIII, 93–96.

role. A factor may have been that *tīra*, pre-Islamic divinatory interpretation of the flight of birds, was prohibited, and the term was later extended to include divination by any animal or human movement.⁷⁰ On the other hand, the behaviour of animals, particularly the hoopoe, was part of the water-diviner's art for discovering the presence of underground water (sometimes extended to include the presence of minerals).⁷¹

Techniques for reading the future and learning the will of God by examining the conformation of animal parts (most frequently the liver or shoulder blades) were also commonly employed in pre-Islamic Mesopotamia and the Near East,⁷² as was hydromancy—interpreting patterns appearing on the surface of water (or oil, ink, or any shiny surface).⁷³ With the exception of divination by shoulder blades (scapulimancy), few details remain of the specific methods used in these intuitive techniques, although divination from the shape of a sheep's scapula (*'ilm al-katif*) was the subject of several early Arabic treatises, one attributed to al-Kindī and others to the elusive "Hermes".⁷⁴

While foretelling the future by consulting oracles had been an important practice in classical antiquity, it played a greatly diminished role in late antiquity and almost no role in classical Islam. On the other hand, the common Graeco-Roman practice of dream interpretation (oneiromancy) passed from

⁷⁰Toufic Fahd, "Iyāfa", in *EI*², IV, 290–91; Fahd, *Divination arabe*, 498–519.

⁷¹The water-diviner's art was called *riyāfa*; see Toufic Fahd, "Riyāfa", in *EI*², VIII, 562.

⁷²For Babylonian liver omens preserved on Assyrian cuneiform tablets, see Ulla Koch-Westenholz, *Babylonian Liver Omens: the Chapters Manzāzu, Padānu and Pān tākalti of the Babylonian Extispicy Series, Mainly from Aššurbanipal's Library* (Copenhagen, 2000).

⁷³On the topic of hydromancy in Islam, little has been done. Alexander Fodor has translated a relevant chapter from a prolific modern Egyptian author of magical texts, 'Abd al-Faṭṭāḥ al-Sayyid al-Tūkhī, who claims to have used manuscript material in the Dār al-Kutub in Cairo. The technique described involves the conjuring of spirits to do the magician's bidding; Alexander Fodor, "Arabic Bowl Divination and the Greek Magical Papyri", in *Proceedings of the Colloquium on Popular Customs and the Monotheistic Religions in the Middle East and North Africa*, ed. Alexander Fodor and Avihai Shvitiel (Budapest, 1994; *The Arabist*, 9–10), 73–101.

⁷⁴Al-Kindī, *Kitāb fi 'ilm al-katif*, ed. and trans. by Gerrit Bos and Charles Burnett in *Hermētis Trismegisti astrologica et divinatoria*, ed. Gerrit Bos, Charles Burnett, Thérèse Charmasson, Paul Kunitzsch, Fabrizio Lelli, and Paolo Lucentini (Turnhout, 2001), 285–347; see also 253–83, comprising an edition by Charles Burnett of the Hermetic treatises together with an introductory history of scapulimancy. See also the collection of studies by Charles Burnett, *Magic and Divination in the Middle Ages: Texts and Techniques in the Islamic and Christian Worlds* (Aldershot, 1997), nos. XII–XV, and Toufic Fahd, "Katif ('ilm al-)" in *EI*², IV, 763.

late antiquity into Islam through a number of treatises. John Lamoreaux has published an excellent study of dream interpretation in early Islam.⁷⁵ The value of this monograph extends far beyond the limits of the Muslim oneirocritic tradition, and should be read by everyone working on any aspect of divination in early Islam.

A number of Byzantine treatises were concerned with divination from winds (*brontologia*) or the phases of the moon (*selenodromia*). The prediction of seasonal changes and cultivation patterns on the basis of natural phenomena such as thunder, clouds, and rainbows formed part of the Byzantine treatises called *geoponica*, transmitted into Islam as the "Nabatean agriculture" (*Kitāb al-filāḥa al-nabaṭīya*) attributed to Ibn Waḥshīya.⁷⁶

It could be argued that the most common divinatory practice was that of predicting changing weather patterns. Charles Burnett (Chapter 7) discusses a tract on the topic composed by al-Kindī (d. ca. 870), which was largely dependent upon classical and late antique traditions of weather forecasting employing a method based on the visibility of important star-groups.⁷⁷ Such a form of divination has been termed astrometeorology.⁷⁸ Alexander Fodor has published a study of one example from a group of texts concerned with meteorological divination circulating under the title *malḥama* or *malāḥim* and attributed to the prophet Daniel.⁷⁹ The example of the genre that Fodor chose to translate and analyse is still in circulation today, at least in Iraq, suggesting that this approach to meteorological forecasting is part of the current folklore. Fodor presents rather ingenious arguments for the date and place of composition—i.e. the beginning of the eleventh century on the southern slope of Ṭūr 'Abdīn, by a Syriac Christian monk.

Knowledge of stars, and in particular lunar mansions (a series of 28 prominent star-groups near the ecliptic), formed the basis for much of this astrometeorology. A very important examination of the recognition of star groups in early Islam is that by Joseph Henninger, regrettably overlooked in much of the literature.⁸⁰

⁷⁵Lamoreaux, *The Early Muslim Tradition of Dream Interpretation*.

⁷⁶See Ullmann, *Die Natur- und Geheimwissenschaften*, 427–42.

⁷⁷For a fuller discussion see Gerrit Bos and Charles Burnett, *Scientific Weather Forecasting in the Middle Ages: the Writings of Al-Kindī—Studies, Editions and Translations of the Arabic, Hebrew and Latin Texts* (London and New York, 2000).

⁷⁸For basic sources for astrometeorology before the twelfth century, see Sezgin, *Astrologie-Meteorologie*, 302–35.

⁷⁹Alexander Fodor, "Malhamat Daniyal" in *The Muslim East: Studies in Honour of Julius Germanus*, ed. Gyula Káldy-Nagy (Budapest, 1974), 84–133 + 26 pp. Arabic.

⁸⁰Joseph Henninger, "Über Sternkunde und Sternkult in Nord und Zentralarabien",

Lunar mansions were also given astrological and divinatory significance outside the realm of weather prediction. They played a prominent role particularly in non-horoscopic forms of astrology. Their use is evident in the treatises of the Brethren of Purity (Ikhwān al-Ṣafā') and in the *Picatrix*, both compiled at the end of the tenth century, as well as in geomancy.⁸¹ Daniel Varisco has published a useful study of the astrological significance of lunar mansions as given in a thirteenth-century Yemeni treatise, with a survey of earlier writings on the subject.⁸²

The most intuitive of all forms of divination—physiognomy—will be discussed at the end of this essay. The forms of divination that were less intuitive fall into three groups: sortilege, letter-number interpretation, and astrology.⁸³

Sortilege

The Roman practice of lot-casting or sortilege (the interpretation of results produced by chance) was especially popular throughout late antiquity and continued to be so in the Islamic world. Lot-casting was not always divination in the sense of predicting the future, but rather a means of determining a course of action or deciding between courses of action.

In the Qur'ān two practices involving chance were prohibited: *istiḡsām*, a pre-Islamic use of rods to settle disputes or give simple omens; and *maysir*, literally, "the game of the left-handed", involving arrows and the slaughtering of animals and later extended to include all kinds of gambling (*qimār*).⁸⁴ Nonetheless, the casting of lots (*qur'a*) was considered legitimate.⁸⁵ Dice,

Zeitschrift für Ethnologie 79 (1954), 82–117; repr. with additions in Joseph Henninger, *Arabica Sacra* (Göttingen, 1981), 48–117.

⁸¹See above, nn. 22, 33, and, for geomantic use of lunar mansions, Chapter 8.

⁸²Daniel M. Varisco, "The Magical Significance of the Lunar Stations in the 13th-Century Yemeni *Kitāb al-Tabṣira fī 'ilm al-nujūm* of al-Malik al-Ashraf", *Quaderni di studi arabi* 13 (1995), 19–40; also Emilie Savage-Smith, *Islamicate Celestial Globes: Their History, Construction, and Use* (Washington DC, 1985), 114–32.

⁸³Toufic Fahd classifies under the term "cleromancy" (*les procédés cléromantiques*) both sortilege and letter-number interpretation, as well as the meteorological divination in the texts called *malāḥim* discussed above; see Fahd, *Divination arabe*, 177–245. Such a classification blurs fundamental distinctions.

⁸⁴See T. Fahd, "Istiḡsām" and "Maysir" in *EI*², IV, 263–64; VI, 923–24; Franz Rosenthal, *Gambling in Islam* (Leiden, 1975), 66–112; Fahd, *Divination arabe*, 204–12.

⁸⁵See Toufic Fahd, "Qur'a", in *EI*², V, 398–99; *idem*, *Divination arabe*, 214–19. Note that throughout Fahd's discussions there is a confusion of the term "rhapsodomancy" (an otherwise unattested word apparently meaning divination from verses) and "rhabdomancy", from a Greek root meaning divination using darts or rods. See also Rosenthal,

as well as arrows or rods or grains, could be used.⁸⁶ A variant form (bibliomancy) involved opening a book and selecting a passage at random, with the Qur'ān being the most commonly used volume. The Arabic term for bibliomancy was usually *ṭarīq al-istikhārāt* ("the method of choices"), the term *istikhāra* meaning entrusting to God the choice between several options.⁸⁷ Lot-books in the form of tables of questions and answers were also employed, with selection determined by letters or numbers or verses. A lot-book consisting of 144 topics, each topic provided with twelve answers, circulated under the name of al-Kindī (as well as other early figures) and claimed an association with the caliph al-Ma'mūn.⁸⁸

Geomancy (*'ilm al-raml*, "the science of the sand") also falls within the category of sortilege, although it does not appear to have been one of those techniques taken from pre-Islamic practices. In this respect it is unique amongst the Islamic divinatory practices. Numerous Arabic and Persian manuscripts on the topic are preserved, but they do not seem to occur together with works on interpretation of dreams nor with physiognomy—suggesting a very different origin and different milieu in which it was practiced. Its origin is a matter of speculation, but it appears to have been a well-established practice in North Africa, Egypt, and Syria by the twelfth century. Its purported history and association with the archangel Gabriel, Idrīs, and a legendary Indian sage Ṭumṭum al-Hindī is related in Chapter 8.⁸⁹ Ibn Khaldūn associated it particularly with urban practices, and said: "Many city dwellers who had no work, in order to make a living, tried sand divination".⁹⁰ It appears to be the only example we have of a divinatory technique for which a mechanical device was constructed.⁹¹ The fact that

Gambling in Islam, 32–34, 51–52; Thompson, "'Let now the Astrologers Stand Up'", 306; Savage-Smith, "Divination", in *Science, Tools & Magic*, I, 150–51, 158–59.

⁸⁶For examples, see Anna Contadini, "Islamic Ivory Chess Pieces, Draughtsmen and Dice", *Oxford Studies in Islamic Art*, 10 (1995), 111–54; for so-called "geomantic dice", see Savage-Smith, "Divination", 148–51, 156–59.

⁸⁷See Savage-Smith, "Divination", 154–57.

⁸⁸It is preserved in at least five Arabic copies and a popular Latin version was known as *Liber Alfadhol*; see Paul Kunitzsch, "Zum *Liber Alfadhol*. Eine Nachlese", *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 118 (1968), 297–314.

⁸⁹Chapter 8 is a revised version of a study published nearly 25 years ago: Emilie Savage-Smith and Marion B. Smith, *Islamic Geomancy and a Thirteenth-Century Divinatory Device* (Malibu, CA, 1980).

⁹⁰Ibn Khaldūn, *Muqaddima*, I, 228–29.

⁹¹If one does not count an astrolabe or the instrument for the calculation of *tasyīr*, both of which only provided part of the data necessary for a divinatory prognostication.

geomancy did not require astronomical observations and calculations as did astrology no doubt contributed to its great popularity.

Letter-Number Interpretation

The numerical values of letters forming a word could constitute the basis of a divinatory reading. The general terms for this technique were *‘ilm al-ḥurūf* (“the science of letters”) and *sīmiyā’*.⁹² The method could flourish only in a culture that used alphabetical numerals—that is, Greek, Syriac, Hebrew, and Arabic—and its legendary origins were traced back to Pythagoras. The numerical value of a name had particular significance, and if that is the focus of the technique, then the art is known as onomancy. An onomantic table often present in divinatory treatises was used to determine the victor and the vanquished by calculating the numerical value of the names of the contenders, dividing each by nine, and finding the remainders on the chart. The technique was usually called *ḥisāb al-nīm* (“calculation by nine”).⁹³ There were similar procedures for determining the outcome of an illness, the success of a journey, the truth or falsity of a matter, or whether or not an event would occur.

More complicated techniques of interpreting numerical values of words or phrases soon developed. The form of letter-number interpretation known as *jafr* included combining the letters of a divine name (one of the 99 names of God) with those of the name of the desired object.⁹⁴ Astrological elements of possible Indian origin were also introduced into the art of *jafr*. The “authority” most often associated with *jafr* was Imām Ja‘far al-Ṣādiq, who died in 765.

An even more complicated form of letter-number manipulation was called *zā’irja*.⁹⁵ It employed concentric circles, letters of the alphabet, elements of astrology, and poetry, while requiring the calculation of the degree of the ecliptic on the eastern horizon at the time of forming the intricate circular chart. After various manipulations, a phrase was formed whose meaning was then interpreted. So complicated was this method that according to the Ottoman historian Ḥājī Khalīfa: “It is said that no one is capable of understanding its true meaning except the Mahdī, expected at the end of

⁹²See Fahd, “Ḥurūf (‘ilm-)”, 395–36; MacDonald and Fahd, “Sīmiyā’”, 612–13.

⁹³Franz Rosenthal comments on the term *nīm* and the history of this technique in Ibn Khaldūn, *Muqaddima*, I, 235 n. 359.

⁹⁴Fahd, “Djafr”, 375–77.

⁹⁵See Toufic Fahd and Anne Regourd, “Zā’irdja”, 404–405.

time.”⁹⁶ The “history” of *zā’irja*, like geomancy (see Chapter 8), was associated with the legendary ʿUmṭum al-Hindī, and while it was mentioned by early writers, such as the astrologer Abū Ma’shar, it was not fully developed until the late thirteenth century. The diagram and technique used in *zā’irja* also greatly influenced Ṣūfism.

The extant treatises on *jafr* and *zā’irja* are voluminous, yet none have been translated and studied in their entirety. One of the most useful introductions is the chapter on *zā’irja* in Ibn Khaldūn’s *Muqaddimah*.⁹⁷ Number symbolism also infiltrated the general culture of the population, resulting in the quantities and measurements given by medieval authors being often determined by a number’s magical significance.⁹⁸

Astrology

Horoscopic astrology, as well as simpler forms of zodiacal associations, were practiced throughout late antiquity and continued in the Islamic period, while the Alexandrian astronomer Ptolemy’s defence of astrology in his *Tetrabiblos*, written in the second century AD and later translated into Arabic, was crucial in establishing astrology as the most important learned form of divination. There were, however, many other pre-Islamic influences on the development of the art in the early Islamic world.⁹⁹ The Sabian inhabitants of Ḥarrān in northern Iraq were particularly famous for the practice of astrology, and their influence extended well into the early Islamic period—a topic addressed in part by Francis Peters in Chapter 2. The influence of Hermetic literature from late antiquity is also evident.¹⁰⁰ In a divinatory text, *The Book of the Zodiac*, preserved in the Mandaic language of lower central Iraq, one sees the blending of Babylonian, Sasanian, and Hellenistic traditions in a popular form of astrological divination that also employed onomancy and omens drawn from natural phenomena. A similar blending of divinatory

⁹⁶ Ḥājīr Khalīfa (Kātib Çelebi), *Kashf al-ẓunūn*, ed. Gustav Flügel (Leipzig, 1835–58), II, 603.

⁹⁷ Ibn Khaldūn, *Muqaddima*, II, 182–214.

⁹⁸ Lawrence I. Conrad, “Seven and the *Tasbī*’: On the Implications of Numerical Symbolism for the Study of Medieval Islamic History”, *Journal of the Economic and Social History of the Orient* 31 (1988), 42–73.

⁹⁹ Ullmann’s guide is particularly useful on this point; *Die Natur- und Geheimwissenschaften*, 271–358.

¹⁰⁰ For Hermetic influences on astrological thought, see Chapter 2; Burnett, *Magic and Divination in the Middle Ages*, item V; Aristoteles/Hermes, *Liber Antimaquis*, ed. Charles Burnett in *Hermetis Trismegisti astrologica et divinatoria*, 177–221.

techniques can be seen in many of the Arabic astrological treatises preserved today.

Astrology (*‘ilm al-nujūm*, “the science of the stars”) was understood and practiced at several levels. Non-horoscopic astrology (what Toufic Fahd has termed “natural astrology”)¹⁰¹ did not require a knowledge of mathematics and was a much simpler technique that I have placed amongst the intuitive forms of divination. It involved the prediction of events based upon the rising or setting of certain star groups (usually lunar mansions) or geophysical events such as earthquakes or winds. Astrology that involved calculating the positions of planets and the mathematical production of horoscopes is often called judicial astrology (*‘ilm aḥkām al-nujūm*, “the science of the judgments of the stars”) or sometimes catarchic astrology. This form of astrology in turn breaks up into four categories:

1. The determination of the fate of an individual based on nativities (*mawālīd* in Arabic), that is, a horoscope representing the planets at time of birth. Historians have given this branch of astrology the awkward name of genethliology.
2. The production of horoscopes for determining the course of events for a country or dynasty or even longer periods of time.
3. The determination of auspicious and inauspicious days and whether action should or should not be taken, based upon a horoscope drawn up for the day in question. In Arabic this method was referred to as *ikhtiyārāt* (“choices”).¹⁰² There were also other means of determining auspicious and inauspicious days based on calendrical considerations, to which the term hemerology is often applied.
4. The construction of horoscopes with the intent of answering specific questions (*masā’il*). The questions could concern innermost thoughts (*damīr*), or the location of lost objects, or the diagnosis and prognosis of disease, or numerous others concerns. Sometimes entire treatises were composed just on finding lost objects by astrological methods or on astrological medicine. This form of astrology, usually termed Interrogations, is sometimes combined with the previous type when classifying astrological practices.¹⁰³

¹⁰¹ Toufic Fahd, “Nudjūm (‘ilm al-),” in *EI* ², VIII, 105–108.

¹⁰² See David Pingree, “Eḳṭiārāt,” 291–92.

¹⁰³ As, for example, George Saliba has done in Chapter 10 (pp. 58–60), where he enumerates yet more subdivisions of astrology.

In the past twenty years a number of important editions and translations of early texts have appeared. The Arabic version of a first-century AD Greek tract on judicial astrology by Dorotheus has been edited and translated by David Pingree.¹⁰⁴ A treatise of Greek origin on the astrological virtues of the fixed stars, attributed to Hermes, has been edited by Paul Kunitzsch,¹⁰⁵ while Charles Burnett recently published an essay on judicial astrology by al-Kindī (d. ca. 870).¹⁰⁶ Yūḥannā ibn al-Ṣalt's essay on astrological medicine written at the end of the ninth century has been edited and studied by Felix Klein-Franke.¹⁰⁷ The writings of the most famous of all Arabic astrologers, Abū Ma'shar (d. ca. 893), have received much scholarly attention in recent years. His most influential *Kitāb al-mudkhal al-kabīr* (known in Latin as *Introductorium maius*) was recently edited by Richard Lemay, while Abū Ma'shar's own abbreviation of this same work was edited and translated by Charles Burnett, Keiji Yamamoto and Michio Yano.¹⁰⁸ In 2000, Abū Ma'shar's treatise "On the Great Conjunctions" was published.¹⁰⁹ The latter treatise is not concerned with individual horoscopes, but with predictions for countries and dynasties.

In the eighth and ninth centuries there were several efforts to compose astrological histories of the caliphate, one of the most complete being that of Māshā'allāh written in the eighth century, which included a horoscope of the Prophet.¹¹⁰

¹⁰⁴ Dorotheus Sidonius, *Carmen Astrologicum*, ed. and trans. David Pingree (Leipzig, 1976).

¹⁰⁵ [Hermes] *Liber de stellis beibenüs* [*Asrār al-nujūm / Fī l-kawākib al-bābānīya*], ed. by Paul Kunitzsch in *Hermetis Trismegisti Astrologica et Divinatoria*, 9–99.

¹⁰⁶ Charles Burnett, "Al-Kindī on Judicial Astrology: the Fifty Chapters", *Arabic Sciences and Philosophy* 3 (1993), 77–117.

¹⁰⁷ Felix Klein-Franke, *Iatromathematics in Islam: a Study on Yūḥannā Ibn Ṣalt's Book on "Astrological Medicine"* (Hildesheim, 1984).

¹⁰⁸ Abū Ma'shar, *Kitāb al-mudkhal al-kabīr ilā 'ilm aḥkām al-nujūm, Liber introductorii maioris ad scientiam judiciorum astrorum*, ed. and trans. by Richard Lemay, 9 vols. (Naples, 1995) and *The Abbreviation of "The Introduction to Astrology": Together with the Medieval Latin Translation of Adlard of Bath*, ed. and trans. Charles Burnett, Keiji Yamamoto, and Michio Yano (Leiden, 1994).

¹⁰⁹ *Abu Ma'shar on Historical Astrology: the Book of Religions and Dynasties (On the Great Conjunctions)*, ed. and trans. Keiji Yamamoto and Charles Burnett, 2 vols. (Leiden, 2000).

¹¹⁰ E.S. Kennedy and David Pingree, *The Astrological History of Māshā'allāh* (Cambridge MA, 1971). See also the astrological history composed by al-Ḥasan ibn Mūsā al-Nawbakhtī (fl. 900–13) recently edited by Ana Labarta (*Mūsā ibn Nawbajt, al-Kitāb al-Kāmil. Horóscopos históricos* (Madrid, 1982); and A.R. Nykl, "'Alī ibn Ṭālib's Horoscope", *Ars Islamica* 10 (1943), 152–53.

From the turn of the tenth to eleventh century we have the important introductory treatise by Kūshyār ibn Labbān (d. 1029), recently edited and translated.¹¹¹ For an initial guide to basic astrological concepts in early Islam, however, the most useful starting point still remains the translation of the astrological manual (*Kitāb al-taflhūm*) written in 1029 by al-Bīrūnī and translated into English by R. Ramsey Wright in 1934.¹¹²

In addition to these varied uses, astrology also provided an explanation of the structure of the universe and man's role within it. For some, astrology offered dangerous competition to religion. Yahya Michot explores these complicated issues through an analysis of three legal decisions or *fatwās* (Chapter 9).¹¹³ Some astrologers also were concerned to provide proofs as to the validity of astrology and offer defence against critics. The articles by Charles Burnett and J.-C. Vadet provide excellent introductions to such arguments.¹¹⁴ The topic is also taken up in the study by George Saliba (Chapter 10).

Astrological associations also had a major impact upon artistic conventions. The important study by Willy Hartner demonstrates the influence of the "lunar nodes" on Islamic artisans.¹¹⁵ The two points where the course of the moon crosses the ecliptic (and hence associated with eclipses) were traditionally known as the "head of the dragon" (ascending node) and the "tail of the dragon" (descending node). This non-Ptolemaic concept played a prominent role in astrological associations, with the nodes even serving as extra "planets" in the formation of astrological horoscopes. The representation of the constellation Sagittarius with a dragon-headed tail is, according to Hartner, often to be interpreted as an iconographic reference to the descending

¹¹¹Kūshyār ibn Labbān, *Introduction to Astrology*, ed. and trans. Michio Yano (Tokyo, 1997).

¹¹²Abū l-Rayhān al-Bīrūnī, *The Book of Instruction in the Elements of the Art of Astrology*, trans. R. Ramsey Wright (London, 1934). Another astrological treatise by al-Bīrūnī has also been recently published: F.I. Haddad, David Pingree, and E.S. Kennedy, "Al-Bīrūnī's Treatise on Astrological Lots", *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften* 1 (1984), 9–54.

¹¹³See also John W. Livingston, "Science and the Occult in the Thinking of Ibn Qayyim al-Jawziyya", *Journal of the American Oriental Society* 112 (1992), 598–610.

¹¹⁴Charles Burnett, "The Certitude of Astrology: the Scientific Methodology of al-Qabīṣī and Abū Ma'shar", *Early Science and Medicine* 7 (2002), 198–213; Jean-Claude Vadet, "Une défense de l'astrologie dans le Madḥal d'Abū Ma'shar al-Balḥī" *Annales islamologiques* 5 (1963), 131–80.

¹¹⁵Willy Hartner, "The Pseudo-Planetary Nodes of the Moon's Orbit in Hindu and Islamic Iconography: a Contribution to the History of Ancient and Medieval Astrology", *Ars Islamica* 5 (1938), 112–54; repr. in Willy Hartner, *Oriens-Occidens*, I, 349–404.

node of the moon's course. One of the most famous and richly decorated Arabic astrological treatises is the *Kitāb al-bulhān*, apparently produced at the end of the fourteenth century. Stefano Carboni published a preliminary examination of the imagery in this remarkable compilation.¹¹⁶ Much still needs to be done, however, in tracing the earlier influences on the imagery and the techniques incorporated into this non-horoscopic astrological and divinatory treatise that claims the authority of Abū Ma'shar.

Of the numerous practices attempting to foretell future events or discern hidden things, astrology was by far the most popular. George Saliba, in his essay on the role of the astrologer (Chapter 10), amply demonstrates the widespread popular acceptance of astrology. He also presents evidence regarding the symbols that came to represent astrologers (and fortune-tellers in general), the training of astrologers, their status in society, and the conditions in which they worked.

All the non-intuitive techniques—sortilege, letter-number interpretation, astrology—were employed to answer more or less the same questions: the nature and course of an illness, the outcome of a journey, the fate of an absent person, the prospect of improved resources, and so forth. One of the most common queries seems to have been the location of lost objects or finding buried treasure. Geomancy was used for this purpose (see Chapter 8), and it is a common procedure in astrological manuals. See, for example, the essay on finding buried treasure attributed to al-Kindī.¹¹⁷ Occasionally *jinn* were summoned to assist in this important matter (see Chapter 1).

Physiognomy

There were also various divinatory practices employing specific parts of the human body.¹¹⁸ *Ikhtilāj*, for example, was the art of divining the future from twitching eyelids or involuntary movement of a limb or other part of the body.¹¹⁹ There were divinatory practices using birthmarks and moles. Chiromancy (divination from the shape and appearance of the hands, joints, and nails—*'ilm al-kaff*) and chiromancy or palmistry (employing lines on the hands—*'ilm al-asārīr*) were, and still are, popular.¹²⁰ These tech-

¹¹⁶Stefano Carboni, *Il Kitāb al-bulhān di Oxford* (Torino, 1988).

¹¹⁷Charles Burnett, Keiji Yamamoto, and Michio Yano, "Al-Kindī on Finding Buried Treasure", *Arabic Sciences and Philosophy* 7 (1997), 57–90.

¹¹⁸Note that scapulimancy, discussed above, uses the shoulder blades of sheep and does not involve human anatomy.

¹¹⁹A Turkish elaboration of *ikhtilāj* drew omens from the form of battle wounds or accidental archery wounds. See Toufic Fahd, "Ikhtilāj", in *EI*², III, 1061.

¹²⁰Toufic Fahd, "Kaff ('ilm al-)", in *EI*², IV, 406–407.

niques, however, should not be classed with physiognomy, for they are quite different, both in their literary sources and traditions (which look to figures such as Jaʿfar al-Šādiq) as well as in their methodologies.¹²¹ Their intent is not to determine a hidden character by aligning physical characteristics with character traits, but rather to read the future from a bodily part. For example, the success or failure of an enterprise might be indicated by a twitching eyelid or a certain line on the palm.

On the other hand, the major impetus of physiognomy (*firāsa*) was to decode the inner character by developing a grammar of observable bodily features. It was not concerned with predicting future events, except in terms of the effect one's character has on future behaviour. In contrast to other forms of prognostication where a consultation with a specialist is necessary, it appears from the literature that anyone could use physical features as a guide to inner character after reading a treatise on physiognomy.

The term *firāsa* came from the vocabulary of Šūfism, where it designated a type of mystical intuition and form of wisdom. It was employed already in the ninth century as a translation of the Greek word *physiognomonika* when Ḥunayn ibn Ishāq translated a small treatise on the subject incorrectly ascribed to Aristotle.¹²² Since its inception in Greek and Roman literature, physiognomy was not just a taxonomy of human expressions or the codifying of bodily features, but it was a means of classifying people so as to gain knowledge of their internal ideas and motives. It played a major role in the rhetoric of the day, and its principles were applied also to the practical problems of medical diagnosis and prognosis, how one could choose a good physician, or who would be a reliable and honest servant. In physiognomy (through its use of external physical clues), one passed directly from knowledge of the known to the unknown, and for this reason it was incorporated into many general divinatory manuals.

A chapter on the topic of *firāsa* forms part of the "Secret of Secrets" (*Sirr al-asrār*).¹²³ The latter was an immensely influential treatise intended as a

¹²¹ Here I differ with Fahd, who considers these practices a part of physiognomy; see Toufic Fahd, "Firāsa", in *EI*², II, 916–17; *idem*, *Divination arabe*, 369–429.

¹²² Antonella Ghersetti, *Il Kitāb Aristṭāṭalīs al-faylasūf fī l-firāsa nella traduzione di Ḥunayn b. Ishāq* (Venice, 1999).

¹²³ Mahmoud Manzalaoui, "The Pseudo-Aristotelian *Kitāb Sirr al-asrār*: Facts and Problems", *Oriens*, 23–24 (1974), 147–257; M. Grignaschi, "L'origine et les métamorphoses du *Sirr al-asrār*", *Archives d'histoire doctrinale et littéraire du Moyen-Age* 43 (1976), 7–112. The earliest copy of the physiognomic chapter would have been London, British Library, OIOC, Ms. Or. 12,070, fols. 39b–43b, were its colophon stating that it was copied in 330/941 to be believed. Although the manuscript was described by G. Meredith-Owens

guide to kings and rulers purporting to be written by Aristotle for Alexander the Great. No Greek original of the *Sirr al-asrār* exists, though there are claims in the Arabic treatise that it was translated from the Greek into Syriac and from Syriac into Arabic by a well-known ninth-century translator, Yaḥyā ibn al-Biṭrīq. It is likely that the treatise gradually evolved over a long period through the accretion of material on a wide range of topics, including statecraft, ethics, physiognomy, astrology, alchemy, magic, and medicine.

In the early tenth century we find physiognomy forming a small chapter in a medical compendium by Muḥammad ibn Zakarīyā' al-Rāzī (d. 925).¹²⁴ This chapter is distinctive in terms of the physiognomic literature in having the order of the parts of the body given from top to bottom, starting with the hair and then proceeding to the colour of the face and eyes and ending with the feet—an order of presentation common in medical manuals. Indeed, several Hippocratic writings were influential in later physiognomic thought, since they employed physiognomic indicators. The Hippocratic tract on prognosis and signs of death used physical characteristics as guides (e.g. if the nose became sharp and the eyes sunken, and if the fingernails were a greenish colour, then death may be expected). In the Hippocratic treatise *Airs, Waters, Places*, the physical characteristics of people or races living at different locations were described, and it was said, for example, that people living near stagnant water in marshes and lakes have large and firm spleens with hard bellies and tend to have dropsy with a fever (characteristics that today we consider symptomatic of malaria). Thus the boundaries between medical and physiognomic literature are blurred.

Most astrological manuals had chapters aligning the twelve zodiacal signs and the seven planets with particular physical conformations and with certain character traits and professions. The geomantic manuals are also conspicuous in their use of physiognomic material and alignments. In the thirteenth century there were a number of Arabic monographs devoted solely to physiognomy. If the number of preserved copies is an accurate indication, the most popular treatise on physiognomy was that by Shams al-Dīn

shortly after it was acquired by the British Library (in the *British Museum Quarterly* 20 [1955], 33–34), it has only recently been shown to be a forgery produced about 1940 by a well-known studio in Iran.

¹²⁴This chapter, part of *Kitāb al-Manṣūrī*, has been published in *Kitāb al-firāsa li-Falīmūn al-ḥakīm wa-jumal aḥkām al-firāsah li-Abī Bakr Muḥammad ibn Zakarīyā' al-Rāzī*, ed. Muḥammad Rāghib al-Ṭabbākh (Aleppo, 1929). See also Youssef Mourad, *La physiognomie arabe et le Kitāb al-firāsa de Fakhr al-Dīn al-Rāzī* (Paris, 1934).

al-Dimashqī (d. 1327), an imam in Rabwa, Syria, best known for his cosmological writings.

There is an on-going project, headed by Simon Swain, to survey the early Greek and Islamic written treatises on physiognomy. Following the completion of this project, scholars might then formulate and address a number of questions regarding the interaction of this type of literature, in all its various forms, with other aspects of Islamic culture. For example, the relationship between the physiognomic literature and medical discourses, or the role of physiognomy in guides to purchasing slaves, and the role played by physiognomy in rhetorical literature. What role did *firāsa* play in portraiture and figural drawing? What role did it have in the reception and interpretation of figural painting by the observer? Did the ethical ideals, and the external manifestations associated with these ideals, remain unchanged in the Arabic (and Persian or Turkish) traditions? If the physical descriptions in such treatises remained constant over centuries and large geographical areas, then their direct influence on changing conventions of portraiture is problematic. On the other hand, if they were changing, were they doing so in a way consistent with the artistic conventions of a given location and time? Did *firāsa* reflect a society's notion of an ideal man, or did it help form the notion? Or did it do neither; was it only a literary and rhetorical tradition? Did *firāsa* play a role in the mimicry of stock characters employed in storytelling? For example, is there a demonstrable relationship between the physical characteristics of certain personality types in the "Secret of Secrets" (or in al-Dimashqī's physiognomy) and Abū Zayd and other figures in Ḥarīrī's *Maqāmāt* written in the eleventh to twelfth century, or characters in the *Thousand and One Nights*? Do we have the name of a single practitioner of physiognomy in the Islamic lands? Are we justified in asserting that the physiognomic writings had any influence outside the literary, fictional, medical, or divinatory environment in which it was created?

Though physiognomy is perhaps the most conspicuous example of a divinatory method forming part of a large spectrum of genres, the same broad approach should be applied to all the divinatory and magical material. There are broader questions to be asked once more texts and artefacts are carefully analysed and published—a task made the more difficult because the lines separating the different forms of divination, as well as magic, were very fluid, and techniques were often combined. The indebtedness to pre-Islamic concepts and practices is certainly an important aspect of the study. Equally important, however, are the subtle changes and adaptations to Islamic culture and beliefs, the differences in procedures advocated by various

authors, and the changing relationship of magical and divinatory material with other genres and practices. Systematic comparison of treatises needs to be undertaken. Were some of the magical and divinatory treatises merely literary and rhetorical traditions, not reflected in actual practice? Did some practices arise that were not incorporated into the written traditions? How are discrepancies between treatises and artefacts to be resolved? What was the relationship between the formal literature and the makers of artefacts and the practitioners of the art? What was the intended readership for the magical and divinatory treatises? To what extent did the ideas expressed in the magical/divinatory literature invade or reflect the realms of poetry, history, biography, and storytelling?

Fortunately, through the work of Sezgin, Ullmann, Fahd, and many others, the groundwork has been laid for further investigation. It is evident that magic and divination in the classical Islamic world is now attracting the serious consideration of historians. Yet much work remains to be done. No full survey of all the Arabic literature has been published, not even a listing of the preserved manuscript sources, and the Persian and Turkish sources are for the most part overlooked by historians. More written sources need to be studied and compared in detail, with more artefacts examined. Consideration needs to be given to the inter-relationship of magic and divination with other ideas and practices. The work of the scholars reprinted in this volume and listed in the bibliography can provide a basis for tackling the rather daunting task of understanding the role of magic and divination, in all its manifestations, in the early Islamic world.