

THE MOON A Voyage
Through Time



THE **MOON** A Voyage
Through Time

Edited by Christiane Gruber

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CONTENTS

1 FOREWORD

HENRY S. KIM

2 ACKNOWLEDGEMENTS

CHRISTIANE GRUBER AND ULRIKE AL-KHAMIS

3 NOTE TO THE READER

4 INTRODUCTION

CHRISTIANE GRUBER

ESSAYS

8 Visualizing the Moon in the Ancient Near East

ÖMÜR HARMANŞAH

15 From Timekeeper to Dimmed Sun

The Moon's Long Shadow in the Qur'an and Islamic Literature

WALID A. SALEH

22 The Moon in the Sciences

HAMID BOHLOUL AND SONJA BRENTJES

29 The Moon in Islamic Portable Arts

FRANCESCA LEONI

35 "The Real Intention Was My Beloved"

The Moon in Persian Sufi Poetry

OMID SAFI

45 From Auspicious Ornament to State Symbol

The Crescent Moon in Ottoman Art and Architecture

ÜNVER RÜSTEM

56 Moonlight Empire

Lunar Imagery in Mughal India

YAEL RICE

63 Travelling Crafts

*The Moon and Science Fiction in Modern and Contemporary
Middle Eastern Art*

ELIZABETH RAUH

CATALOGUE

- 75 The Moon in Pre-Islamic Middle Eastern Civilizations
- 89 The Moon in Islamic Faith and Spirituality
- 125 The Moon in Islamic Science
- 161 The Moon in Islamic Arts
- 207 The Moon in Modern and Contemporary Islamic Art

226 BIBLIOGRAPHY

233 CONTRIBUTORS' BIOGRAPHIES

CATALOGUE

- 75 The Moon in Pre-Islamic Middle Eastern Civilizations
- 89 The Moon in Islamic Faith and Spirituality
- 125 The Moon in Islamic Science
- 161 The Moon in Islamic Arts
- 207 The Moon in Modern and Contemporary Islamic Art

226 BIBLIOGRAPHY

233 CONTRIBUTORS' BIOGRAPHIES

Foreword

July 20, 2019, marks the fiftieth anniversary of the first landing of humans on the moon. The moment Neil Armstrong stepped out of the lunar module of *Apollo 11* onto the moon's surface marked not only the beginning of future space exploration — “a giant leap for mankind” — it also symbolized the culmination point of humanity's longing, curiosity, and fascination attached to the moon over thousands of years. Around the world the silent mystery and wondrous beauty of the closest heavenly body to earth have inspired belief systems, science, and the arts, and continue to do so to this day.

The Moon: A Voyage Through Time celebrates the fiftieth anniversary of the moon landing and is the first exhibition of its kind. It focuses on the central role the moon has played in the faith, science, and arts of the Muslim world. The exhibition brings together manuscripts, miniature paintings, scientific instruments, artifacts, and spectacular contemporary art, including Luke Jerram's mesmerizing *Moon* installation, to tell a multitude of stories about the moon's importance in inspiring spiritual growth, scientific discovery, and artistic creativity.

This publication is intended to complement the exhibition with new, interdisciplinary research. It covers a wide range of topics, examining the moon's role in the Ancient Near East; the Qur'an and Islamic literature; science; Sufi poetry; and the art of Ottoman, Mughal, and other Islamic cultures, as well as contemporary art.

The Aga Khan Museum would like to sincerely thank the authors and Christiane Gruber, co-curator of the exhibition and editor of this publication. We would also like to acknowledge and thank our lenders and the contemporary artists who participated in the exhibition: the Cleveland Museum of Art; Columbia University Libraries, New York City; Farjam Foundation, London; Harvard Art Museums, Cambridge; Morgan Library and Museum, New York City; History of Science Museum, Oxford; National Museum of World Cultures, Amsterdam; Royal Ontario Museum, Toronto; Tropenmuseum (Museum of the Tropics), Amsterdam; University of Michigan Library, Ann Arbor; Victoria and Albert Museum, London; Wereldmuseum (World Museum), Rotterdam; and Ala Ebtakar, Ayham Jabr, Canan Şenol, Luke Jerram, Shahpour Pouyan, and Mohamed Zakariya.

Henry S. Kim

Director and CEO

Aga Khan Museum

Acknowledgements

This catalogue showcases objects displayed in the exhibition *The Moon: A Voyage Through Time*, on view at the Aga Khan Museum in Toronto from March 9 to August 18, 2019. We wish to thank our many colleagues, in particular Silke Ackermann, Cheryl Copson, Evyn Kropf, Mary McWilliams, Clemens Reichel, and Mirjam Shatanawi, for their assistance in securing loans. A special thanks also goes to Ala Ebtekar, Ayham Jabr, Canan Şenol, Luke Jerram, Venetia Porter, Shahpour Pouyan, and Mohamed Zakariya for their contributions to the exhibition as well as to Justin Kasper, who provided NASA lunar imagery of the moon's craters for inclusion in the show.

The dynamic team at the Aga Khan Museum made the exhibition and publication possible. We wish to thank Sarah Beam-Borg and her team — Simon Barron, Curtis Amisich, Sarah Chate, and Ghazaleh Rabiei — for overseeing all aspects of the exhibition; registrar Megan White for securing all loans; Alessandra Cirelli and Aly Manji for handling all image-related issues; Bitu Pourvash for her research assistance; Michael Carroll and Jovanna Scorsone for their editorial and logistical supervision of the publication; and Reich + Petch for the exhibition design.

Last but not least, we extend our thanks to Michelle Al-Ferzly for serving as a curatorial assistant and contributing more than twenty entries to the catalogue. We are also most grateful to the international scholars who wrote this volume's eight landmark essays exploring the moon in Ancient Near Eastern civilizations, the Islamic faith, scientific inquiry, the portable arts, Persian Sufi poetry, Ottoman and Mughal visual and material cultures, and modern and contemporary art. This journey would not have been possible without their expert knowledge, good humour, and willingness to sail to publication in almost record time.

Christiane Gruber

Guest Curator
Professor of Islamic Art
University of Michigan, Ann Arbor

Ulrike Al-Khamis

Curator
Director of Collections and Public Programs
Aga Khan Museum, Toronto

Note to the Reader

The transliteration of Arabic words follows the Library of Congress system as described in the *International Journal of Middle East Studies*, with diacritical marks removed to ease legibility. Persian and Ottoman Turkish words follow the Arabic transliteration system, but their slight variations in pronunciation are taken into consideration. Transliteration is not used for words commonly used in English such as Muhammad, Qur'an, and Hadith.

Names of individuals are followed by the years of their death (d.), regnal years (r.), or in the case of authors, the years during which their literary activities flourished (fl.) if their dates of death are unknown. When dates of death or activity are not fully established, several dates or a range of dates (ca.) are given. Moreover, the Islamic AH (*anno Hegirae*) and the Common Era (CE) dates are provided in that order, in particular when an object or painting includes a precise year of manufacture (741/1141, for example). If a date does not have dual years, then it is noted in CE. The AH calendar is lunar, while the CE calendar is solar, so at times an AH date spans two CE years. In such a case, the span of two CE years is provided.

Frequently used honorific expressions after the names of prophets, respected individuals, and God are omitted for the sake of simplicity. When the Qur'an is cited, Qur'anic chapter number and verse number(s) are given.

The authors of the texts in the Catalogue part of this book are signified by initials. What follows is a key to those initials:

BP: Bitā Pourvash

CG: Christiane Gruber

ER: Elizabeth Rauh

HB: Hamid Bohloul

MF: Michelle Al-Ferzly

SB: Sonja Brentjes

UAK: Ulrike Al-Khamis

9 Qur'an Folio

Isfahan, Iran, late 10th century
Ink and gold on paper
24.1 cm x 34.2 cm
Aga Khan Museum, Toronto, AKM222

The text includes an excerpt from Sura 54 of the Qur'an, entitled *Surat al-Qamar* (The Chapter of the Moon). This folio belongs to the last volume of a four-part Qur'an copied in Isfahan in central Iran during the late tenth century. The recto and verso of this folio each feature four verses written in black ink and punctuated by red dots that function as markers to assist in reading the text.¹

While the horizontal format of the page hearkens back to earlier Qur'ans, the writing is in a new calligraphic style referred to as Eastern Kufic or "broken cursive," which first appears in Iran during the tenth century.² In contrast to earlier styles, letters in Eastern Kufic are more elongated and narrow in form.³ The introduction of this new style of writing was also accompanied by a shift from parchment (animal skin) to paper as a primary medium for transcribing text.⁴

The first verse in *Surat al-Qamar* describes the splitting of the moon in two as both a harbinger of the apocalypse and a confirmation of Muhammad's prophethood.⁵ This cataclysmic lunar event serves as a warning to non-believers to adhere to the Qur'an before the Day of Judgment.⁶ The verses (40–49) included in this folio describe the punishments that will befall those who disregard this celestial forewarning. MF

NOTES

1. François Déroche, *The 'Abbasid Tradition: Qur'ans from the Eighth to the Tenth Centuries, the Nasser D. Khalili Collection of Islamic Art* (London and Oxford, 1992), vol. 1, 154–155; Yasin Dutton, "Red Dots, Green Dots, Yellow Dots and Blue: Some Reflection on the Vocalisation of Early Qur'an Manuscripts — Part I," *Journal of Qur'anic Studies* 1, no. 1 (1999): 115–140.
2. Priscilla Soucek, "Folios from a Qur'an Manuscript." In Maryam Ekhtiar, ed., *Masterpieces from the Department of Islamic Art in the Metropolitan Museum of Art* (New York and New Haven, 2011), 90–91.
3. Estelle Whelan, "Writing the Word of God: Some Early Qur'an Manuscripts and Their Milieux, Part I," *Ars Orientalis* 20 (1990): 113–147.
4. Annemarie Schimmel, "Islamic Calligraphy," *The Metropolitan Museum of Art Bulletin* 50, no. 1 (1992): 9.
5. Maxime Rodinson, "La lune chez les arabes et dans l'Islam." In Philippe Derchain, ed., *La lune: mythes et rites* (Paris, 1962), 165–166.
6. Christiane Gruber, "Signs of the Hour: Eschatological Imagery in Islamic Book Arts," *Ars Orientalis* 44 (2014): 40–60.

يَسْرُنَا الْفَوْزَ الَّذِي كَرِهْنَا مِنْ مَدَجْرٍ وَلَقَدْ جَاءَ
بِوَعْدِ الْبَدْرِ كَذِبًا وَإِنَّمَا أَكَلُوا مَا فِي بُطُونِهِمْ
أَنَّهُمْ كَرِبُوا مِنْهُ فَكَفَرُوا بِهِمْ مِنْ أَوْلِيائِهِمْ
أُولَئِكَ كَفَرُوا فِي الْبَدْرِ وَأَمْرُهُمْ لَوْ شَاءَ رَبِّي

مَنْصُورٌ سَيَمُوتُ لِيَجْمَعَ وَيُؤْتُوا لَوْ أَنَّ اللَّهَ تَشَاءَ
فَوَيْلٌ لِلَّذِينَ كَفَرُوا مِنْ عَذَابِ اللَّهِ الَّذِي هُوَ
بِغَيْرِ ضَلَالٍ وَمُصْحَفٍ يُؤْتِيهِمْ فِي الْيَوْمِ الْحَاقِقِ
وَيَوْمَ يَجْمَعُهُمْ وَيُؤْتِيهِمْ فِي الْيَوْمِ الْحَاقِقِ

12 *Kashkul*

Iran, late 16th century
Brass
Length 61 cm
Aga Khan Museum, Toronto, AKM612

Kashkuls, or begging bowls, were carried by Sufi Muslim mystics in order to collect alms.¹ Made of a variety of media, including metal, wood, and cocode-mer shells, *kashkuls* also served as food or drinking containers. Their crescent-moon shape, which stems from Iranian wine vessels fashioned like boats, symbolizes the emptying of the Sufi owner's ego and the renunciation of worldly possessions.²

Two dragon heads are situated at opposite ends of this vessel. Engraved on its rounded brass body are two bands of floral medallions. A Persian poetic inscription runs along the rim of the object's opening:

The prince of the two worlds, the seal of messengers
Came last: he became the pride of the very first
To the throne and the seat, not to the sky, he made his ascent
The prophets and the friends of God were in need of him
His existence was spent in guarding the two worlds
The whole surface of the earth became his mosque
The lord of the two worlds, the leader of mankind
The moon was split by the tip of his finger.³

NOTES

1. Ladan Akbarnia and Francesca Leoni, *Light of the Sufis: The Mystical Arts of Islam* (New Haven and London, 2010), 26.
2. Jürgen Frembgen, "The Symbolism of the Boat in Sufi and Shi'a Imagery of Pakistan and Iran," *Journal of the History of Sufism* 6 (2014): 91; Pedram Khosronejad and Thierry Zarcone, "Visual Representations of the Persian Dervish in Sufi Art and Material Culture: Preliminary Report from the Bunyad Institute, Tehran, Iran (Part 1)," *Anthropology of the Contemporary Middle East and Central Eurasia* 2, no. 2 (2014–2015), 137.
3. Assadullah Souren Melikian-Chirvani, "From the Royal Boat to the Beggar's Bowl," *Islamic Art* 4 (1990–1991): 35–36.
4. Assadullah Souren Melikian-Chirvani, "La kashkul safavide, vaisseau a vin de l'initiation mystique." In Jean Calmard, ed., *Etudes safavides* (Paris and Tehran, 1993), 171.
5. Maxime Rodinson, "La lune chez les arabes et dans l'Islam." In Philippe Derchain, ed., *La lune: mythes et rites* (Paris, 1962), 165–166.

In the thirteenth century, the image of the *kashkul* as a crescent moon becomes more prominent, since wine is often described in Persian Sufi poetry as the liquid light of the late-evening sun.⁴ In addition, the verses engraved on this *kashkul* refer to the crescent moon. The poem celebrates the Prophet Muhammad, "the Prince of Two Worlds," and his ascent to the heavens, or *mi'raj*, a major motif in Sufi spiritual thought. The final line describes the splitting of the moon when the Prophet miraculously cleaves the crescent moon in two.⁵ MF



14 *Mi'raj* Scene with Moon

From a *Khamseh* (Quintet) by
Nizami (d. 1209), folio 5v
Scribe: Pir Husayn ibn Pir
Hasan al-Katib al-Shirazi
Illuminator (Painter): Ghiyath Mudhahhib¹
Shiraz, Iran, late 16th century (Safavid)
Opaque watercolour, ink, and gold on paper
34 x 21 cm
Aga Khan Museum, Toronto, AKM523

This folio depicts the celestial ascension, or *mi'raj*, of the Prophet Muhammad. The account is based on *ayat al-isra*, or the “verse of the night journey,” as found in the Qur’an 17:1.² The Prophet is depicted with a veil covering his face and mounted on his human-headed steed Buraq.³ Both Buraq and Muhammad are encircled by flames to denote their elevated status, and are set against the deep blue background of the sky, swirling clouds, and golden stars. Surrounding the mounted figure of the Prophet are seven angels with coloured wings, each holding a golden vessel in offering.

The text framing the image is an excerpt from the *Makhzan al-Asrar* (Treasury of Secrets), the first book in the *Khamseh*, a collection of five poems written by the thirteenth-century Persian poet Nizami (d. 1209) of Ganja. The story of Muhammad’s ascension to the heavens was often included at the start of Persian mystical poems, perhaps as a parallel to the journey undergone by protagonists of epic or courtly poems.⁴ Moreover, the inclusion of the story of Muhammad’s ascension at the beginning of a narrative may also be a commentary on the episode’s importance in Sufi thought, since it symbolized unity with God and thus the path toward divine inspiration.⁵

A full-moon figure watches over the ascension scene of the Prophet, Buraq, and the angels. The veiled face of Muhammad looks upward in the moon’s direction. In the accompanying text by Nizami, the Prophet’s journey to the heavens is punctuated with encounters with various celestial beings such as the astrological signs for Cancer, Leo, and Virgo, as well as constellations such as Orion.⁶ The presence of the moon in this scene serves to indicate that Muhammad’s celestial journey takes place at night, and the moon’s representation as a woman may be a lunar reference to paradigmatic beauty as found in Persian poetry. MF

NOTES

1. On the artist, see Anthony Welch and Stuart Cary Welch, *Arts of the Islamic Book: The Collection of Prince Sadruddin Aga Khan* (Ithaca, 1982), 76.
2. Christiane Gruber and Frederick Colby, *The Prophet’s Ascension: Cross-Cultural Encounters with the Islamic Mi’raj Tales* (Bloomington, 2010); Mohammad Ali Amir-Moezzi, ed., *Voyage initiatique en terre d’islam: ascensions célestes et itinéraires spirituels* (Paris, 1996).
3. Christiane Gruber, “When *Nubuvvat* Encounters *Valayat*: Safavid Paintings of the Prophet Muhammad’s *Mi’raj*, ca. 1500–1550.” In Pedram Khosronejad, ed., *The Art and Material Culture of Iranian Shi’ism: Iconography and Religious Devotion in Shi’i Islam* (London, 2011), 55–61; Christiane Gruber, “al-Buraq.” In Kate Fleet et al., *Encyclopaedia of Islam*, 3rd ed. (Leiden, 2012), accessed January 20, 2019, at http://dx.doi.org.proxy.lib.umich.edu/10.1163/1573-3912_ei3_COM_24366; Thomas Arnold, *Painting in Islam: A Study of the Place of Pictorial Art in Muslim Culture* (New York, 1965), 117–122.
4. William Hanaway, “Some Accounts of the *Mi’raj* of the Prophet in Persian Literature.” In Jayne Warner, ed., *Cultural Horizons: A Festschrift in Honor of Talat S. Halman* (Syracuse, 2010), 555–560.
5. Gerhard Böwering, “From the Word of God to the Vision of God: Muhammad’s Heavenly Journey in Classical Sufi Qur’an Commentary.” In Amir-Moezzi, ed., *Voyage initiatique en terre d’islam*, 205–222.
6. Gholam Hosein Darab, *Nezami of Ganjeh Makhzanol Asrar: The Treasury of Mysteries* (London, 1945), 99–100.



<p>و قصص طیب ازین در اسکا مرغ آهسته نفس زنده چون دو جهان بیرون رود شش شش</p>	<p>سرغ دلش زفت به آرام کام قابلهش از قدس سبک شد سرزنی سجد و سرود شش شش</p>	<p>سرغ براندازنده زین ملک کام بکام او چون حرکت نمود این از آن همه که سر زین شش شش</p>	<p>عزیزه در اندامش بی شک سبیلش چو چترک نمود مرقد بر مرقد سجد شد شش شش</p>
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<p>زین لیل ازین کند و بست کوه شیب است کوهین چو شکر از سبیل تر است شش شش</p>	<p>غما شیب کند در چه بست کاوه فلک برده که کاوهین سبیل را بر اسما بد است شش شش</p>	<p>چرخ زمین کان شده او کو بست او شده ازین کس آن سوز تابش او با چو قدر است شش شش</p>	<p>برده سپهر ازین تن بست از سر طمان باج و جزو است زمره شیب است تر از بست شش شش</p>
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بسم الله الرحمن الرحیم

18 *The Beginning of Ramadan*

Qajar Iran, first half of 19th century
Oil on canvas
152.5 x 134 cm
Aga Khan Museum, Toronto, AKM505

This painting depicts a scene set in a garden pavilion. Fruits and vegetables, accompanied by a rabbit and a pheasant, are set against the backdrop of a garden and palace pavilion. This type of composition belongs to a tradition of still-life painting begun in Iran during the Qajar dynasty (1785–1925) under the auspices of the painter Mirza Baba (fl. 1789–1830).

Behind the spread of pomegranates, pears, watermelon, and cucumbers on the garden veranda is a running fountain framed by a three-aisled garden dotted with tall green trees and lush vegetation. The geometric layout leads to a pavilion consisting of a colonnaded two-storey structure decorated with red drapes hanging from the ceiling and a matching red carpet at ground level.¹

Streaks of dark blue, orange, and pink in the sky indicate that the still-life depicts dusk.² In addition, the image is enclosed in an arched frame, hinting that it originally might have been mounted in a palace or pavilion wall, perhaps surrounded by fresco decoration and mirrors.³

The crescent moon at the apex of the composition, along with the setting of the food at dusk, suggests the feast was laid out for the celebration of the breaking of the fast (*'id al-fitr*). The sighting of the lunar crescent (*ru'yat al-hilal*), which is signified by the presence of the figure located in the upper chamber of the central tower, marked both the beginning and end of Ramadan.⁴ This painting thus might have been arranged in an interior space during the month of Ramadan, thereby visually celebrating the annual period of the fast, itself one of the five pillars of the Islamic faith.⁵ MF

NOTES

1. The garden is possibly a representation of Bagh-i Fin, a late-sixteenth-century garden in Kashan, Iran. See Yves Porter and Arthur Thévenart, *Palaces and Gardens of Persia* (Paris, 2003), 112–119; Klaus Herdeg, *Formal Structure in Islamic Architecture of Iran and Turkistan* (New York, 1990), 49–52.
2. Layla Diba and Maryam Ekhtiar, *Royal Persian Paintings: The Qajar Epoch, 1785–1925* (Brooklyn and London, 1999), 214–216. It is possible that this image was accompanied by a second painting showing a scene during daytime and also featuring a similar table spread before an open pavilion.
3. Sussan Babaie, “Palaces.” In Margaret S. Graves and Benoît Junod, eds., *Architecture in Islamic Art: Treasures of the Aga Khan Museum* (Geneva, 2011), 204–205; Julian Raby, *Qajar Portraits* (London and New York, 1999), 40–43.
4. Abu Dawud, *Sunan*, Book 14, Hadith 14. Accessed January 19, 2019, at <https://sunnah.com/abudawud/14/14>.
5. Peter Chelkowski, “Narrative Paintings and Painting Recitation in Qajar Iran,” *Muqarnas* 6 (1989): 98–111.



19 *The Night of Power (Shab-i Qadr)*

Folio from the *Khamseh* of Amir Khusraw Dihlavi (1253-1325), created for 'Ali al-Din Khalji (r. 1296-1316) ca. 1450, Delhi, India
Opaque watercolour and ink on paper
34.8 x 25.2 cm
Aga Khan Museum, Toronto, AKM13

This painting illustrates an episode in a five-part poem known as the *Khamseh* (Quintet), written by the Persian poet Amir Khusraw Dihlavi between 1298–1305.¹ This copy was produced near Delhi, India, during the fifteenth century for the ruler 'Ali al-Din Khalji (r. 1296–1316).²

The Persian text accompanying the image is an excerpt from the *Matla' al-Anwar* (The Ascent of Lights), which recounts the story of a mystic who remained awake for forty years watching the nocturnal sky for the Night of Power (*Shab-i Qadr*) when the first verses of the Qur'an were revealed to the Prophet Muhammad. Known in Arabic as *Laylat al-Qadr*, this religious holiday is celebrated on the twenty-seventh day of the month-long fast of Ramadan. As such, it forms part of Islamic sacred time and cosmology.³

In his text, the author Amir Khusraw Dihlavi tells his readers that one night the mystic drifts off to sleep, causing him to miss the event. When he awakes, a heavenly voice informs him that he has lost his chance and that the long years spent waiting have been in vain.⁴

The illustration depicts the mystic in two stages. At the right, a figure clad in a pink robe and white turban kneels behind a tall plant, his head lifted expectantly toward the sky. At the left, a figure in a white turban and robe peacefully sleeps in the shade of a blossoming tree. A crescent of grey descends upon the vivid red background, possibly illustrating the fall of nighttime and the appearance of the moon. MF

NOTES

1. *Los Mundos del Islam en la Colección del Museo Aga Khan/The Worlds of Islam in the Collection of the Aga Khan Museum* (Barcelona, 2009), 74.
2. *Los Mundos del Islam/The Worlds of Islam*, 74.
3. Arnold Yasin Mol, "Laylat al-Qadr as Sacred Time: Sacred Cosmology in Sunni Kalam and Tafsir." In Majid Daneshgar and Walid Saleh, eds., *Islamic Studies Today: Essays in Honor of Andrew Rippin* (Leiden, 2016), 74–97; G.E. von Grunebaum, *Muhammadan Festivals* (New York, 1951), 52.
4. Eloïse Brac de la Perrière, "Les manuscrits à peinture dans l'Inde des sultanats: l'exemple de la Khamisa dispersée d'Amir Khosrow Dehlavi, c. 1450," *Arts Asiatiques* 56 (2001): 28.

کس شود اندام ز لشکر کوه خوابش بر بای نخیز ز کار وز خوی پیشانی او را بسوی کی رود آن لحظت بخواب زیر نشین هم زین خواب	کی بود آنس چو شسته بر آن سنگ بسره کام توان زد درخ کوان خواب کندل بر انگب جود غوطه با آب کوچه الف اول اصحابت	بارد که چون گشته آخرش لنگری از خواب کوان ترکست از پی میداری خوابت نهاد خواب روان دست بشوید ز روی خفت الف کو حرکت هم شد	کلب بود خواب کوان لشکرش بود بن ماکه بخود بر کم است شرح که رو پیش از زبانت نهاد مرد چو از درخ شود خرق خوی بیم کھی چشم فراسم شد
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حکایتی است که در کمال سال خواب نکرده تا شب قدر را یاد قصه را بگفت خوابت و شکر در همان بعد از خواب

آردوی نورش در خواب تر کس پیش سوی بالی از آمده بود شده و خوی	کوچه که هم غره و هم برداشت یکشب از آنجا شش کوهی بود تا رخ از آن خوابت کاره	با چپکلی پال بشه خفت دیدم بدان فلک دوست دیدم بختن قدری کرم کرد	عازنی از زنده دلان در نعت سره ه سوزنی اندوخته بسیکوی نکلین بر زمین نرم کرد
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چشم تو را بشد زده ای پخته ببلبل زده از لوی نام قلم نینه خطی	آن همه میداری چلی سلاش خسته و کور زنده بی زبانت خوانده و را تیر سپهر از سوا	کجا چه شد اکنون نتوان باز داد خواب دمی همه عمر چه در مان نامه فارسی شده ارفار او	صبحش ماتی او از داد خواب دمی بهره چو زنیسان فار چکان شده زمتقار او
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آن سیاه می نشاید از عادت و بیان	صفت مجده کو که پسیدار دول	مجده سوخته را بکام	بزرگم این خامه بسودای خام
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21 Prelude to the *Shahnameh*

Mahmud ibn Mahmud ibn Mahmud
al-Jamali (scribe), folio 9r
Shiraz, Iran, 1457
Opaque watercolour, ink, and gold on paper
33.8 x 24.6 cm
Aga Khan Museum, Toronto, AKM268

This manuscript is a well-known copy of Firdausi's *Shahnameh* (Book of Kings) produced in Shiraz, Iran. Although it is possible that it was made circa 1457 for Pir Budaq, then governor of Shiraz, the copy subsequently found its way to India. It eventually came under the possession of the British Baron Teignmouth (1751–1834), who may have used it to learn Persian.¹

While the manuscript features several full-page illustrations, this folio is exclusively composed of verses included in the prelude to the *Shahnameh* text.² The text is divided into two gold-ruled columns written in cursive black *nasta'liq* script and set beneath a cartouche containing the text's title written in white Kufic script. The surrounding borders are illuminated with floral scrolls in gold, blue, green, red, and black paint, as well as separated by gold-edged frames with intricate geometric interlace.

Although the *Shahnameh* recounts the epic tales of the kings of Iran, Firdausi's introduction launches with invocations to God, praising in particular God's role in lighting the moon and the planets:

In the name of the Lord of both wisdom and mind
To nothing sublimer can thought be applied
The Lord of whatever is named or assigned
A place, the Sustainer of all and the Guide,
The Lord of Saturn and the turning Sky
Who causes Venus, the sun, and moon to shine³

The reference to God as the Lord of the moon and celestial bodies is found in the Qur'an as well as in Islamic religious and devotional literature.⁴ In Persian poetry, the moon is often invoked as the object of the author's love and admiration as well as a conduit to the realm of the divine.⁵ MF

NOTES

1. Anthony Welch and Stuart Cary Welch, *Arts of the Islamic Book: The Collection of Prince Sadruddin Aga Khan* (Ithaca, 1982), 57.
2. For a recent English translation of the epic, see Abu'l-Qasim Firdausi, *Shahnameh: The Persian Book of Kings*, Dick Davis, trans. (New York, 2016).
3. Edmond Warner and Arthur George Warner, *Shahnama of Firdausi* (London, 1905), 100 (with slight changes to the English translation).
4. Maxime Rodinson, "La lune chez les arabes et dans l'Islam." In Philippe Derchain, ed., *La lune: mythes et rites* (Paris, 1962), 165.
5. Rodinson, 182–183.



بسم الله الرحمن الرحيم

بسم خداوند جان و خرد
خداوند سوس و خداوند رای
خداوند کسان و کرده ان سپهر
ز نام در نشان و کان برت
از پندگان آفت برین راه
نیاید بجز از اندیش راه
سخن هر چه بر زمین گوهر آن کرد
خردگر سخن بر که نیند سی
ستودن ندانند کس او را چوت
خرد را جان را می سخاوت
بدین الت و رای و جان توان

کبرین تر از اندیش بر کند ز
خداوند روزی در رهنمای
فرو زمین ماه و آسمان
نکارن برش کورست
نیمنی مر جان در پند را
که او برتر از نام و از جایگاه
نیاید بجز در راه جان خرد
همان را که نیند که پند می
سیان نندکی را بایست
در اندیش سخن کی گنج او
ستود آفریننده را چون توان

بسم الله الرحمن الرحيم

24 Astrolabe

Possibly Toledo, Spain
14th century
Bronze inlaid with silver
Diameter 13.5 cm
Aga Khan Museum, Toronto, AKM611

Astrolabes are computational and navigational devices that serve various purposes, including reading one's horoscope, determining time, and measuring altitude. While these portable instruments were first used in antiquity, their technology significantly developed after the advent of Islam.¹ The astrolabe's rounded surface is designed to be a two-dimensional representation of a three-dimensional celestial sphere, incorporating a series of plates and numerical indicators to read the sky.²

This unique example bears inscriptions in Latin, Hebrew, and Arabic; it is one of the only early Western European examples to include Arabic inscriptions.³ Arabic and Hebrew names for the constellations are incised on the back of the instrument. Additionally, this astrolabe includes a plate with the celestial projections of Mecca that was used to determine the direction of prayer (qibla).⁴ The presence of this plate, which also incorporates the times for Muslim prayer, is a feature of Spanish and North African astrolabes.⁵ This particular example was presumably made in Toledo, Spain, a city that was home to significant Christian, Jewish, and Muslim communities and was also a centre of scientific activity in the Western Mediterranean during and after Islamic rule.⁶

Astrolabes were also used to track the moon's cycle, and thus were instrumental in determining important dates in the Islamic lunar calendar. These devices' ability to project the heavens onto a hand-held, flat surface allowed astronomers, navigators, and scholars to better understand heavenly bodies, including the moon. MF

NOTES

1. Willy Hartner, "Asturlab." In Peri Bearman et al., eds., *Encyclopaedia of Islam*, 2nd ed., accessed January 20, 2019, at https://referenceworks.brillonline.com/entries/encyclopaedia-of-islam-2/asturlab-COM_0071?s.num=0&s.f.s2_parent=s.f.book.encyclopaedia-of-islam-2&s.q=asturlab. See also Howard Turner, *Science in Medieval Islam: An Illustrated Introduction* (Austin, 1997), 88–96.
2. David A. King, *World-Maps for Finding the Direction and Distance to Mecca: Innovation and Tradition in Islamic Science* (Leiden, 1990), 18–19; Emilie Savage-Smith, "Maps and Mapmaking: Celestial Islamic Maps." In Helaine Selin, ed., *Encyclopaedia of the History of Science, Technology, and Medicine in Non-Western Cultures*, 2nd ed. (Berlin and New York, 2008), 1282–1284.
3. David A. King, *In Synchrony with the Heavens: Studies in Astronomical Timekeeping and Instrumentation in Medieval Islamic Civilization* (Leiden and Boston, 2005), vol. 2, 837.
4. Ruba Kana'an, ed., *Pattern and Light: Aga Khan Museum* (New York and Toronto, 2014), 94–95.
5. Hartner, "Asturlab"; King, *In Synchrony with the Heavens*, vol. 2, 887–888.
6. King, *In Synchrony with the Heavens*, vol. 2, 837.



Diagram of the Cosmos in the *Maʿrifetname* (Book of Gnosis)

By Erzurumlu İbrahim Hakkı, folios. 46v–47r
Ottoman lands, 1237/1822

Ink and pigment on paper
27.5 x 15.5 cm

Special Collections, Hatcher Graduate Library,
University of Michigan, Ann Arbor, Isl. Ms. 397

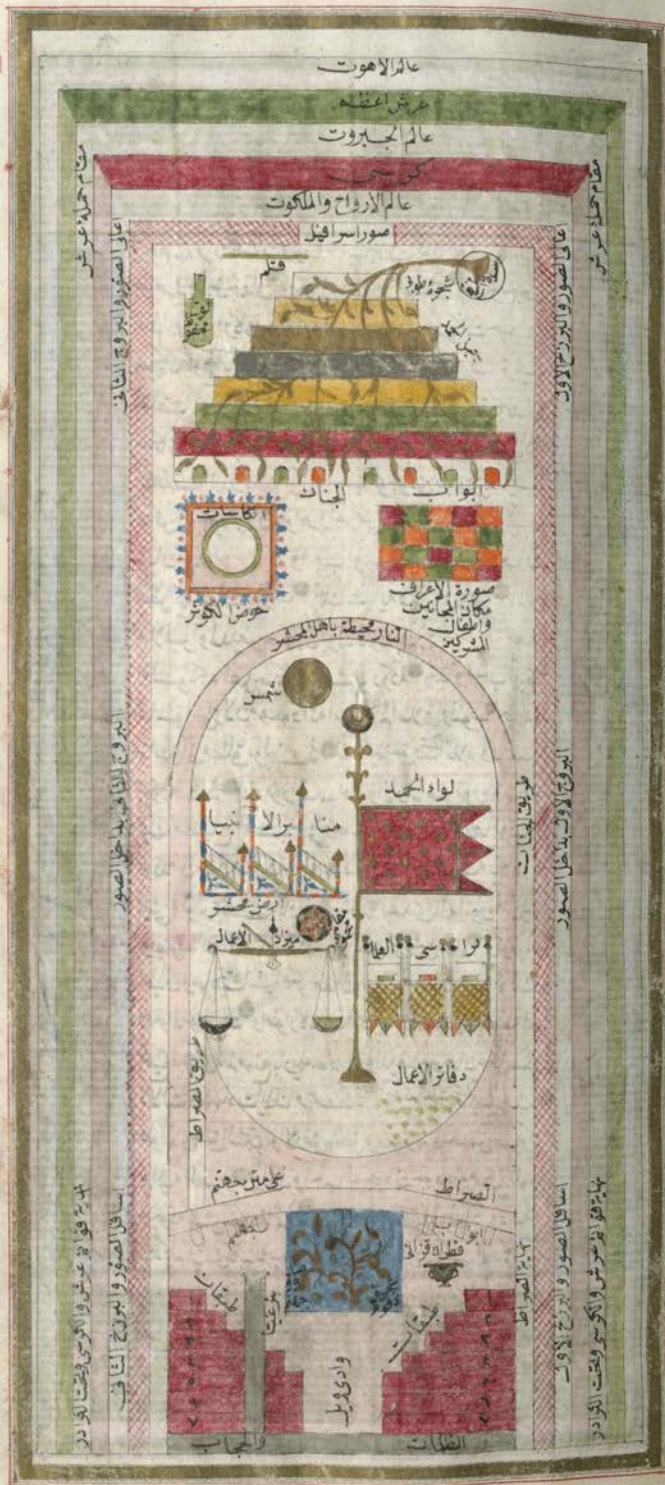
NOTES

1. On this manuscript, see Evyn Kropf, “Marifetname,” accessed January 31, 2019, at http://mirlyn-classic.lib.umich.edu/F/FBEGAILQFIALCVD9X91UNS6EKYAXXBFLHXC558EHQTDU3BGS2A-00372?func=full-set-set&set_number=000610&set_entry=000010&format=999.
2. Christiane Gruber and Ashley Dimmig, *Pearls of Wisdom: The Arts of Islam at the University of Michigan* (Ann Arbor, 2014), 95–96. See also Carol Garrett Fisher and Alan Fisher, *Islamic Art from Michigan Collections* (East Lansing, 1982), 102; Rachel Milstein, “The Evolution of a Visual Motif: The Temple and the Ka’ba,” *Israel Oriental Studies* 19 (1999): 23–48; Norah Titley, *Miniatures from Turkish Manuscripts: A Catalogue and Subject Index of Paintings in the British Library and the British Museum* (London, 1981), 48; Nerina Rustomji, *The Garden and the Fire: Heaven and Hell in Islamic Culture* (New York, 2009), 138–140; Ali Akbar Ziaee, *Islamic Cosmology and Astronomy: Ibrahim Hakkı’s Marifetname* (Saarbrücken, 2010).
3. Christiane Gruber, “Signs of the Hour: Eschatological Imagery in Islamic Book Arts,” *Ars Orientalis* 44 (2014): 54–55.
4. Ahmet Karamustafa, “Cosmographical Diagrams.” In J.B. Harley and David Woodward, eds., *The History of Cartography, Volume 2, Book 1: Cartography in Traditional Islamic and South Asian Societies* (Chicago, 1992), 88–89.
5. Walter Denny, “Silk Banner (*Sanjak*).” In Maryam Ekhtiar et al., eds., *Masterpieces from the Department of Islamic Art in The Metropolitan Museum of Art* (New York, 2011), 326–327.

This copy of the *Maʿrifetname*, or Book of Gnosis, is an illustrated nineteenth-century copy of an eighteenth-century text.¹ The treatise covers a wide range of subjects, including astronomy, mathematics, geography, and theology.²

At the end of the text’s introduction, the double-page painting shows a synoptic diagram of the cosmos, with a representation of Mecca (on the right) and the Last Judgment (on the left). Framing each central scene are representations of an eight-layered hell at the bottom, and an eight-layered paradise at the top. On each upper register, the paradisiac scheme includes a depiction of a celestial tree, God’s pen (*qalam*), and the well-preserved tablet (*al-lawh al-mahfuz*). Below, the domains of hell incorporate the infernal tree (*Zaqqum*) and a glass of molten liquid.³ On the right folio, the topography of Mecca and the Ka’ba is surrounded by the seven celestial spheres, painted in blue. On the left folio, the land of gathering, which includes pulpits, chairs, and the scales of justice, surmounts to hell via a narrow bridge (*sirat*).⁴

A crescent moon, labelled *qamar*, can be seen above the depiction of the Ka’ba on the right. It is accompanied by a representation of the sun, located in the lower layer of the seven celestial spheres that envelop Mecca. The sun and moon are shown as if on the approach, visually suggesting the apocalyptic conjunction of the two luminaries. On the left, a finial shaped like the crescent moon ornaments a red standard. Resembling contemporary Ottoman ceremonial weaponry, this standard represents the Prophet Muhammad’s banner of praise (*liwa’ al-hamd*) pitched onto the ground on the Day of Judgment.⁵ Like its counterpart on the opposite page, the moon here is depicted in close proximity to the sun. MF



هذه الايام

31 Phases of the Moon

Folio from the *Metali'ü's-sa'ade ve menabi'ü's-siyade* (Ascension of Propitious Stars and the Sources of Sovereignty)

Edited and translated into Ottoman Turkish by Muhammad ibn Amir Hasan al-Su'udi
Istanbul, Ottoman lands, 1582

Opaque watercolour, ink, and gold on paper
31 x 20.5 cm

Bibliothèque nationale de France,
Paris, Suppl. Turc 242

The *Metali'ü's-sa'ade ve menabi'ü's-siyade* (Ascension of Propitious Stars and the Sources of Sovereignty) encompasses treatises on astrology, divination, demonology, and wonders.¹ This richly illustrated compendium was made in Istanbul for Fatima Sultan, daughter of the Ottoman sultan Murad III (r. 1574–1595).²

This painting, titled “The Different Phases of the Moon” in gold lettering, includes a brief descriptive paragraph in black cursive script. Below, illustrations of thirty phases of the moon radiate from a central blue floral motif. Each phase of the moon is labelled and numbered. The progression of the lunar cycle from new to full moon is depicted by blue disks, representing the night sky, and waxing and waning golden crescents. In the outer frame, the figure of the sun, shown here as a gold circle, is located on the same axis as the full and new moons. Golden leaves, branches, and other vegetation encircle the lunar diagram, marking the four corners of the rectangular frame.

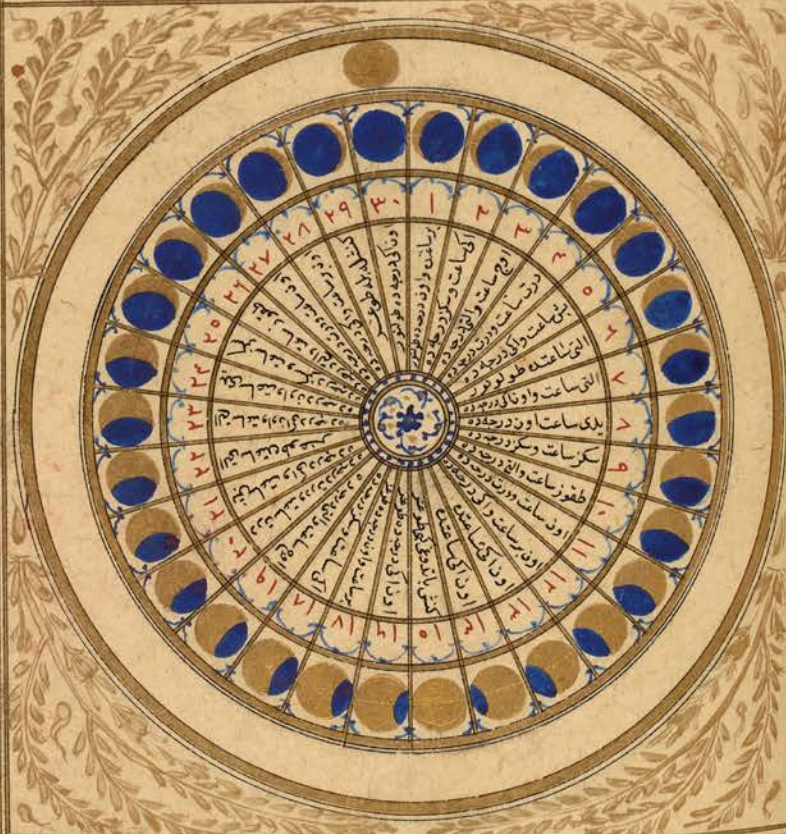
While Sultan Murad III commissioned several copies of the *Metali'ü's-sa'ade ve menabi'ü's-siyade*, this version is the only one to include a circular diagram of the phases of the moon.³ This circular composition displays how the light of the sun is distributed on the moon on its way around the earth and the two conjunctions between sun and moon at new moon and full moon. MF

NOTES

1. For the manuscript's online entry, see <https://archivesetmanuscrits.bnf.fr/ark:/12148/cc129058>.
2. Barbara Schmitz, *Islamic and Indian Manuscripts and Paintings in The Pierpont Morgan Library* (New York, 1997), 71–72.
3. Schmitz, 73; Stefano Carboni, “The ‘Book of Surprises’ (*Kitab al-bulhan*) of the Bodleian Library,” *The La Trobe Journal* 91 (2013): 22–34.

دَائِرَةُ اخْتِلَافِ اشْكَالِ الْقَمَرِ

اَلْيَوْمَ عَشْرَةَ دَنِّ اَخْيَرِيَّتِهِ وَارْبَعَةَ وَاثِنِيَةَ اَوَّلَانِ اِخْتِلَافِ اشْكَالِ الْقَمَرِ
 شَمْسِدَنْ قَرِيْبُ وَبُعْدِي حَكِيْمِي اَيْلَهَ دُرِّ شَكَلِ كُرْبِي دَرِيْدَا اِيْمَا
 كُنْشَدَنْ طَرَفِي مَضِي اَوْلُوْرَتَمَامُ مَقَابَلَهَ يَهَ كَلِيْبِيَهَ بِالْتَمَامِ
 مَضِي اَوْلَانِ طَرَفِي كُوْرَتَمَامُ اللهُ اَعْلَمُ



From a *Kitab al-Bulhan* (Book of Wonders), folio 50r
 Baghdad, Iraq, 1382–1410
 Opaque watercolour, ink, and gold pigment on paper
 24.5 x 16 cm
 Bodleian Library, Oxford University, Or. 133

The *Kitab al-Bulhan* (Book of Wonders) includes a series of treatises on subjects such as astrology, divination, and astronomy.¹ The book's author, Abu Ma'shar al-Balkhi, was a well-known astronomer from Balkh, Afghanistan, who was employed at the 'Abbasid court.² This copy of the *Kitab al-Bulhan* was compiled and illustrated by al-Hasan al-Isfahani, a calligrapher also active in Baghdad, and commissioned by a certain Husayn al-Irbili, a prominent citizen originally from the city of Irbil in northern Iraq.³

The varied topics discussed in the *Kitab al-Bulhan* are richly illustrated with full-page paintings that depict the twelve signs of the zodiac and personifications of the seasons as well as talismanic scenes featuring images of supernatural beings such as devils and *jinns*.⁴ This content is accompanied by astronomical charts, including the diagram of the phases of the moon over a thirty-day period. Here, each phase of the moon, including its waxing (*ziyada*), waning (*naqsana*), or full appearance, is illustrated by a golden sphere arranged in a framed circle. Depending on its position within the lunar cycle, the thirty golden spheres are partially or completely obscured by black swatches of paint, forming the corresponding shape of the moon as a waxing or waning crescent.

Descriptions of the moon's phases, in alternating black and red ink, are arranged in a radiating rosette at the centre of which appears a gold disk. Located just outside the frame, at the top centre, is a depiction of the sun. Known conjointly as the "two celestial luminaries" (*al-qamaran*), the sun is often paired with the moon. MF

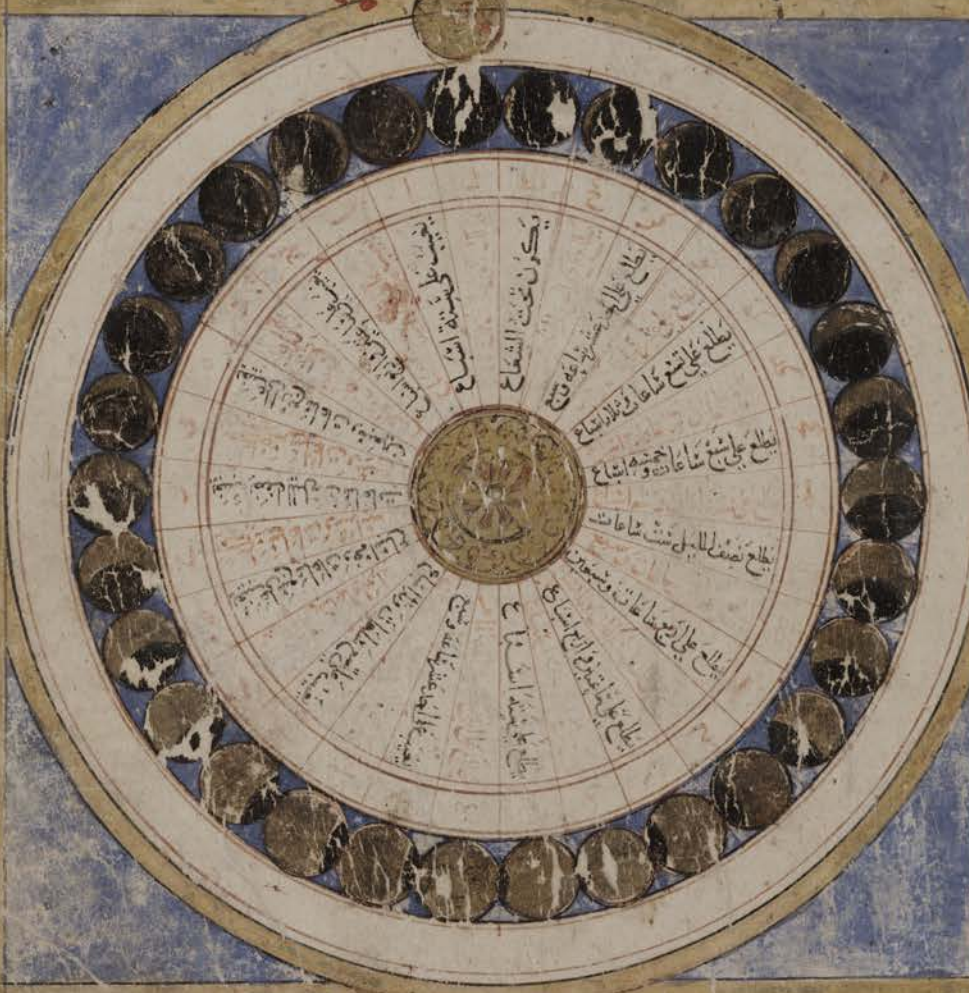
NOTES

1. For the manuscript's online entry, see: <https://digital.bodleian.ox.ac.uk/inquire/Discover/Search/#/?p=c+0,t+,rsrs+0,rsp+10,fa+,so+ox%3Asort%5Easc,scids+,pid+5c9da286-6a02-406c-b990-0896b8ddb0,vi+7709d3c6-374e-420e-820b-23967420420e>, accessed January 31, 2019.
2. Stefano Carboni, "The 'Book of Surprises' (*Kitab al-bulhan*) of the Bodleian Library," *The La Trobe Journal* 91 (2013): 24; Persis Berlekamp, *Wonder, Image, and Cosmos in Medieval Islam* (New Haven, 2011), 154–155.
3. D.S. Rice, "Seasons and Labors of the Months in Islamic Art," *Ars Orientalis* 1 (1954), 3; Carboni, 25.
4. Carboni, 26–27.

كمر الفلكية معاً
 اذن الكون بعد اول نصف مضمون بمقدار
 غايته واقع اوله ملائمة او لتوزن مقدار بعد
 اوله اوله اوله اوله اوله اوله اوله اوله

الفقار على زياره القمر نقصانها

اما يقول القمر الضوفا الشمس يكون الزيادة والنقصان في صورة بحسب عزه وقربه منها وذلك ان كل
 جسم مستدير اما يقع البصر على النصف الذي يواجه البصر منه فقط فنصف كره القمر التي تواجه الشمس
 مضي ابدًا والنصف الثاني يظلم ابدًا فاذا كان نصف كره القمر التي تواجه الارض هو النصف الذي يواجه



الشمس ايضا القمر على الضوء كذلك يكون في تضاد اشهر القمر واذا كان النصف الذي يواجه الارض
 الذي يواجه الشمس كان بحسب ما يقع في النصف الذي يواجه الارض من النصف الذي يواجه الشمس هو كذا
 عن الشمس وقت الحاق كثر الضوفا الى ان يقابلها ثمة آبال نقصان كما كان الى ان يتحول الى اخره

Folio from the *Metali'ūs-sa'ade ve menabi'ūs-siyade* (Ascension of Propitious Stars and the Sources of Sovereignty), folio 34r

Edited and translated into Ottoman Turkish by Muhammad ibn Amir Hasan al-Su'udi (d. 1591)
Istanbul, Ottoman lands, 16th century
Opaque watercolour, ink, and gold on paper
27.6 x 17 cm

The Morgan Library & Museum,
New York, purchased from Demotte
and Company, 1935, MS. M788

This painting is included in the *Metali'ūs-sa'ade ve menabi'ūs-siyade* (Ascension of Propitious Stars and the Sources of Sovereignty), a manuscript commissioned by the Ottoman sultan Murad III (r. 1574–1595) for his daughter.¹ The multi-text compendium includes descriptions and images of the twelve signs of the zodiac, astrological tables, and a treatise on fortune-telling.

The painting also appears in the *Kitab al-mawalid* (Book of Nativities) of Abu Ma'shar, a ninth-century astrologer-astronomer. It is divided into four red-framed vignettes with a descriptive title above in a cloud-shaped golden cartouche. The main title reads: "The Exaltation and Dejection of the Head and Tail [of the Dragon] and the Moon." In the upper left register, a closed crescent moon is shown locked into the claws of Scorpio, symbolized by a scorpion; on the right, a radiant full moon with facial features peeks out from behind Taurus, represented by a bull. Below, the tail of the Dragon, extending an archer's bow between its two extremities, is in dejection in Sagittarius, while the head is depicted in exaltation in Gemini, represented here by a string of stars.²

In pre-modern Islamic astrology, each of the seven planets, which include the moon, have a point of exaltation (*sharaf*) and dejection (*hubut*), each associated with a particular constellation.³ At its exaltation, the planet exerts its maximum influence, while it is least powerful at its dejection.⁴ As illustrated in the vignettes, the moon's exaltation occurs in Taurus, whereas its dejection takes place in Scorpio. Like its companion planets, the moon was believed to possess specific attributes: it was considered a cold and moist feminine planet endowing joy and good fortune. As with other planets, it could also influence an individual to take up a particular profession.⁵

The Dragon (*al-jawzhar* or *al-Tinnin*) was considered to be a fictitious eighth planet, representing the two lunar nodes, the points at which the moon's orbit crosses that of the sun.⁶ These intersections caused eclipses, which were widely believed to be fearful events instigated by supernatural beasts such as monsters or demons.⁷ As a result, the two meetings of the sun and moon were represented by the Dragon's head and tail. MF

NOTES

1. For a scholarly study and facsimile of this and other illustrated copies of the text, see Monica Miro, *The Book of Felicity* (Barcelona, 2007). See also Barbara Schmitz, *Islamic and Indian Manuscripts and Paintings in The Pierpont Morgan Library* (New York, 1997), 71–91, Cat. No. 22.
2. Schmitz, 90, folio 34, top.
3. Willy Hartner, "The Vaso Vescovali in the British Museum: A Study on the Islamic Astrological Iconography," *Kunst des Orients* 9 (1973): 105.
4. Hartner, 106.
5. Anne Caoizzo, *Images du ciel d'Orient au Moyen Âge: une histoire du zodiaque et de ses représentations dans les manuscrits du Proche-Orient musulman* (Paris, 2003), 459; D.S. Rice, "Seasons and Labors of the Months in Islamic Art," *Ars Orientalis* 1 (1954): 10–11.
6. Caoizzo, 223–225; Stefano Carboni, *Following the Stars: Images of the Zodiac in Islamic Art* (New York, 2013), 22–23, 44.
7. Hartner, 106; D.S. Rice, *The Wade Cup in the Cleveland Museum of Art* (Paris, 1955), 17.

بيان شرفه و راسه و ذنبه و غيره

عنق بدهب و طوق

نور كه شرفه



قوسه شرفه

جوزاده شرفه



Kitab al-Mawalid (Book of Nativities), folio 33v

Author: Abu Ma'shar

Artist: Qanbar 'Ali Naqqash al-Shirazi

1300

Cairo, Egypt

Opaque watercolour, ink, and gold on paper

26.5 x 27 cm

Bibliothèque nationale de

France, Paris, Arabe 2583

The *Kitab al-Mawalid* (Book of Nativities) was written by Abu Ma'shar, a ninth-century Persian astronomer.¹ This manuscript copy of the text, made around 1300 in Cairo, features depictions of the personifications of the planets as well as illustrations of zodiacal signs.²

The painting represents the domicile of the mentioned planet in the corresponding zodiacal sign and the aspect of a planet for the numbered decan. Here, Saturn is the ruler of Aquarius, while the moon rules the third decan of Aquarius.

The composition is dominated by the representation of the moon as a cross-legged figure seated on a green cushion and wearing a golden tunic. Its face represents the full moon (*badr*), which is framed by a blue disk or crescent (*hilal*). Nearby, the figure of Saturn can be seen clad in a gold embroidered loincloth and lifting water from a nearby well, which represents the sign of Aquarius.³ The five black roundels in the rectangular frame to the right might represent unfavourable days, while the red roundels could symbolize auspicious days.⁴

The lower section of the composition features the figure of Mars in a belted red robe and conical helmet. In keeping with his martial connotations, he holds a sword in his right hand and a severed head in the other. Jupiter is seen in the middle of the register seated between the moon (blue halo) and the sun (golden halo); he wears a white turban, hands tucked into the sleeves of his yellow robe.⁵ Farther to the right, Mercury, clothed in a pink robe and a white headdress, gestures toward the left.⁶ MF

NOTES

1. Thomas Hockey et al., eds., *Biographical Encyclopedia of Astronomers* (New York, 2011), 11.
2. For the online entry on the manuscript, see <https://archivesetmanuscrits.bnf.fr/ark:/12148/cc30497>, accessed January 31, 2019. For the digitized version, see www.ifao.egnet.net/anisi/37/02, accessed January 31, 2019.
3. Anne Caiozzo, "La représentation d'al-Mirrih et d'al-Zuhāl: planètes maléfiques et apotropaïa," *Annales Islamologiques* 37 (2003): fig. 8, 27, 51–52; Willy Hartner, "The Vaso Vescovali in the British Museum: A Study on the Islamic Astrological Iconography," *Kunst des Orients* 9 (1973): 111–112.
4. The red roundels also may refer to some of the planets found in the lower register. See Stefano Carboni, *Following the Stars: Images of the Zodiac in Islamic Art* (New York, 2013), 46–47.
5. Eva Baer, "Representations of 'Planet-Children' in Turkish Manuscripts," *Bulletin of the School of African and Oriental Studies* 31, no. 3 (1968): 527; Anne Caiozzo, *Images du ciel d'Orient au Moyen-Âge: une histoire du zodiaque et de ses représentations dans les manuscrits du Proche-Orient musulman* (Paris, 2003), 260–261.
6. Caiozzo, *Images du ciel d'Orient au Moyen-Âge*, 163.

أَعْلَجَ بِرَأْسِ الدَّالِ وَنَجَلَ مِثْلَ مِرْبُوطِ القَمَرِ



الحكيم المولود بهذا الطالع يكون دري اللوز مربوع القامة رفيع العنق عليه ميل من الشمس

From a *Kitab al-Diryaq* (The Book of Antidotes), folios 36v–37r

Probably Jazira (Upper Mesopotamia), 595/1198–1199

Opaque watercolour, ink, and gold on paper

36.5 x 27.5 cm

Bibliothèque nationale de France, Paris, Arabe 2964

The *Kitab al-Diryaq* (The Book of Antidotes) is a medicinal treatise comprised of remedies for snake bites and poisoning. The Arabic text is thought to be based on Greek physician Galen's pharmacological study on antidotes.¹

The double frontispiece shows two nearly identical images consisting of knotted dragons forming a circular frame. At the centre of each folio, seated cross-legged within the dragon's embrace, is a crowned figure holding a large, closed crescent. The human figures are assisted by two attendees on either side.² Four winged figures located at the corners of the rectangular frame gesture toward each of the dragon's knots. The inscription on the right-hand page states that the manuscript was intended for the library of Imam Abu'l-Fatah Mahmud, while the left-side inscription introduces the work as The Book of Antidotes.³

The knotted dragons are thought to carry talismanic power, and their symmetrical arrangement may have increased their apotropaic efficacy.⁴ In addition, the two crescent moons featured in this double-page frontispiece have been interpreted as depictions of the lunar eclipse, which was represented by a dragon in pre-modern Islamic astrology.⁵ The personification of the eclipse as a dragon can also be read as the triumph of good over evil, of light over darkness,⁶ while the depiction of the crowned and haloed figure at the centre of the *Kitab al-Diryaq* frontispiece may be a ruler portrait, since lunar metaphors frequently were used to describe and portray sovereigns in the literary and visual arts of Islam.⁷ MF

NOTES

1. Sheila R. Canby et al., *Court and Cosmos: The Great Age of the Seljuqs* (New York, 2016), 176–177.
2. For representations of the moon in Arabic manuscript frontispieces, see Persis Berlekamp, "Painting as Persuasion: A Visual Defense of Alchemy in an Islamic Manuscript of the Mongol Period," *Muqarnas* 20 (2003): 35–59.
3. Oya Pancaroğlu, "Socializing Medicine: Illustrations of the *Kitab al-diryaq*," *Muqarnas* 18 (2001): 155–156.
4. Sara Kuehn, *The Dragon in Medieval East Christian and Islamic Art* (Leiden and Boston, 2011), 171–176, pl. 185; Persis Berlekamp, "Symmetry, Sympathy, and Sensation: Talismanic Efficacy and Slippery Iconographies in Early Thirteenth-Century Iraq, Syria, and Anatolia," *Representations* 133, no. 1 (2016): 59–109. On the symmetrical composition of Arabic manuscript frontispieces, see Robert Hillenbrand, "The Schefer Hariri: A Study in Islamic Frontispiece Design." In Anna Contadini, ed., *Arab Painting: Text and Image in Illustrated Arabic Manuscripts* (Leiden and Boston, 2007), 121–125.
5. Guitty Azarpay and Anne D. Kilmer, "The Eclipse Dragon on an Arabic Frontispiece-Miniature," *Journal of the American Oriental Society* 98, no. 4 (October-December 1978): 363–374; Pancaroğlu, 155–156; Margaret S. Graves, *Arts of Allusion: Object, Ornament, and Architecture in Medieval Islam* (New York, 2018), 87; Anne Caoizzo, *Images du ciel d'Orient au Moyen Âge: une histoire du zodiaque et de ses représentations dans les manuscrits du Proche-Orient musulman* (Paris, 2003), 223–225; Stefano Carboni, *Following the Stars: Images of the Zodiac in Islamic Art* (New York, 2013), 22–23, 44; Jaclynne Kerner, "Art in the Name of Science: The *Kitab al-Diryaq* in Text and Image." In Anna Contadini, ed., *Arab Painting: Text and Image in Illustrated Arabic Manuscripts* (Leiden and Boston, 2007), 27.
6. Pancaroğlu, 164.
7. Maxime Rodinson, "La lune chez les arabes et dans l'Islam." In Philippe Derchain, ed., *La lune: mythes et rites* (Paris, 1962), 176–177, 202–203; Pancaroğlu, 168–169; Bishr Farès, *Le livre de la thériaque* (Cairo, 1953), 20–34.



41 *Portrait of Sultan Selim III*

Istanbul, ca. 1805

Opaque watercolour and gold on paper

54.1 x 40 cm

Aga Khan Museum, Toronto, AKM220

Royal Ottoman portraits bound into albums were instrumental for individual sultans to insert their image and legacy into a longer lineage of Ottoman imperial power.¹ This portrait of Sultan Selim III (r. 1789–1807) shows the seated ruler at the centre of an oval window wreathed in gold laurels and resting atop a panoramic view of the sea. Foregrounding this topographical representation is the arrangement of a Mevlevi Sufi turban, five books (perhaps Qur’ans), and an incense burner, all resting on a stone surface.

In this portrait, the sultan is dressed lavishly. He is wearing a golden cloak lined with black fur in which is tucked a gem-encrusted scabbard. He holds a diamond watch in his left hand, and a gem headpiece fastens a black-and-grey aigrette to his green turban.

The opulent interior in the background consists of blue and gold curtains, embroidered pillows in the same colour scheme, and a black carpet trimmed with gold fringe. In the lower register, a scene of ships at sea and building complexes set at the foot of a mountain range might refer to Selim’s architectural patronage as well as to his interest in international trade.²

At the top centre of the oval frame appears a small golden medallion enclosing a crescent moon with a star nestled in its inner arch. The emblem of the crescent moon and star became widespread in Ottoman lands during the mid-nineteenth century, as evidenced by standards and banners.³ Selim III was the first Ottoman ruler to adopt this symbol in official Ottoman insignia.⁴ Moreover, in 1799 he established the Order of the Crescent, which honoured foreigners who distinguished themselves while fighting for the Ottoman Empire.⁵ Eventually, the moon-and-star motif became the national emblem of modern-day Turkey where it ornaments the country’s national flag.⁶ MF

NOTES

1. *Splendori a corte: arti del mondo islamico nelle collezioni del Museo Aga Khan* (Milan, 2007), 99; Benoît Junod, ed. *The Path of Princes: Masterpieces from the Aga Khan Museum Collection* (Geneva, 2008), 144–145.
2. Sheila R. Canby, *Princes, Poets & Paladins: Islamic and Indian Paintings from the Collection of Prince and Princess Sadruddin Aga Khan* (London, 1999), 103.
3. Arménag Sakisian, “Le croissant comme emblème national et religieux en Turquie,” *Syria* 22, no. 1 (1941): 66–80. See also William Ridgeway, “The Origin of the Turkish Crescent,” *The Journal of the Royal Anthropological Institute of Great Britain and Ireland* 38 (July–December 1908): 241–258.
4. Sakisian, 79. The crescent moon’s official adoption on the Ottoman flag occurred approximately thirty years later in 1826.
5. Maxime Rodinson, “La lune chez les arabes et dans l’Islam.” In Philippe Derchain, ed., *La lune: mythes et rites* (Paris, 1962), 203.
6. Fevzi Kurtoğlu, *Türk Bayrağı ve Ay Yıldız* (Ankara, 1938).



48 Lustre-Painted Dish

Kashan, Iran
Late 12th to early 13th centuries
Lustre-painted fritware
Diameter 17 cm
Aga Khan Museum, Toronto, AKM559

This small lustre-painted dish was produced in Kashan, a city in central Iran known for its ceramic production from the eleventh to the thirteenth centuries. Kashan wares, made of frit, were painted with metal oxides. They often depict scenes of elite leisure such as hunting, feasting, and dancing.¹ The shape of the bowl echoes the design of a metal vessel, due to its flat base and wide rim, and the metallic lustre also suggests gold.

The interior of the bowl features a seated female figure accompanied by two attendants on either side. She is holding a cup in her left hand, and the scene is set against a background of scrolling vines and flying birds, perhaps invoking a garden space. On the exterior rim is an illegible inscription written in *naskh* script.

The central female figure has rounded facial features, almond-shaped eyes, and arched, narrow eyebrows set beneath long locks that extend to her shoulders. Her head is framed by a halo. Similarly, her two companions feature broad, disk-shaped faces encircled by smaller haloes. In medieval Persian poetry, such rounded features were referred to as “moon-face” (*mahrui*), which was considered the paradigm of beauty.² The use of the moon as a metaphor for the subject of one’s love and admiration appears in the verses of Rumi (1207–1273), who waxes poetic about his beloved in the following words: “You are not in the sky, O Moon, however / Wherever you appear, there is a heaven.”³

Linked to such poetic rhetoric, depictions of “moon-faced” figures abound in medieval Persian art, including illustrated manuscripts and ceramics.⁴ Moreover, this lustre bowl’s ability to catch and reflect light may also allude to the moon’s light-emitting properties. MF

NOTES

1. Oliver Watson, *Persian Lustre Ware* (London, 1985), 45.
2. Assadullah Souren Melikian-Chirvani, *Le monde iranien et l’Islam: sociétés et cultures II* (Geneva, 1974), 38.
3. Annemarie Schimmel, *As Through a Veil: Mystical Poetry in Islam* (Oxford, 2001), 100.
4. Ruba Kana’an, ed., *Pattern and Light: Aga Khan Museum* (New York and Toronto, 2014), 50.



49 Lustre-Painted Ewer

Kashan, Iran
Late 12th to early 13th centuries
Lustre-painted fritware
Height 45.7 cm, diameter 10.8 cm
Aga Khan Museum, Toronto, AKM763

This ewer was produced in Kashan, a city in Iran known for ceramic production from the eleventh to the thirteenth centuries. Kashan wares were made of frit and painted with metal oxides.¹ They often depict scenes of elite leisure such as hunting, feasting, and dancing.² This jug includes a slender handle, bulbous lower body, and rimmed opening, echoing the design of metal ewers. Moreover, the use of brown lustre imitates the sheen of a metal such as bronze or gold.

The ewer is painted with brown and touches of blue pigment against a white body. Five bands of inscriptions, written in cursive (*naskh*) script, punctuate the body of the vessel; two of these are scratched through the lustre surface, while the remaining three are painted directly onto the white body of the vessel. A Kufic inscription in large white lettering runs along the upper band of the ewer's neck. The handle is also painted in a similar colour scheme and bears an inscription along its edge.³

A row of figures seated against a backdrop of blue scrolling vine motifs populate the upper half of the body. These figures are dressed in white and brown robes dotted with geometric patterns as well as portrayed with long, dark tresses and rounded facial features.

Rounded facial traits belong to a category of portraiture referred to as “moon-face” (*mah-ruy*), considered the paradigm of beauty and love in medieval Persian literature.⁴ Among the many examples, references to the moon as a metaphor for the object of one's desire can be found in the mystical poetry of Rumi (d. 1273), who writes: “The soul-like is found on the road to the heart / You can't imagine how pleasant is the journey on the way to the heart.”⁵

Representations of “moon-faced” figures are frequently found in Persian illustrated manuscripts and ceramics such as this jug.⁶ Moreover, the object's blue and brown lustre catches and reflects light, acting as a potential metaphor for the moon's light-emitting qualities. MF

NOTES

1. Oliver Watson, *Ceramics from Islamic Lands* (London, 2006), 114.
2. Oliver Watson, *Persian Lustre Ware* (London, 1985), 45.
3. Anthony Welch, *Collection of Islamic Art, Prince Sadruddin Aga Khan* (Geneva, 1972), vol. 2, 127 (pl. 29).
4. Assadullah Souren Melikian-Chirvani, *Le monde iranien et l'Islam: sociétés et cultures II* (Geneva, 1974), 38.
5. Jalal al-Din Rumi, *Divan-i Shams*, Poem 2219, accessed February 2, 2019, at <https://ganjoo.net/moulavi/shams/ghazalsh/sh2219>.
6. Ruba Kana'an, ed., *Pattern and Light: Aga Khan Museum* (New York and Toronto, 2014), 50.



Iran, 15th century
 Carved wood
 Height 52 cm, length 138 cm
 Aga Khan Museum, Toronto, AKM635

This large wood panel inscribed with Persian poetry was most probably made during the Timurid period (ca. 1370–1507) in Iran.¹ It features six verses of a ghazal, or lyrical poem, written by the Persian poet of Hafiz (1325–1390).² The text, which occupies the full surface of the panel, is written in the cursive *thuluth* script, often used for monumental inscriptions. The panel is truncated on the left, indicating that the text would have continued on an adjoining fragment. The inclusion of poetic verses suggests the panels were originally affixed to walls in a secular setting such as a reception room dedicated to receiving guests, eating, drinking, and reciting poetry.³

The verses read:

First register:

I confided heart and soul in the eyes and eyebrows of my beloved
 Come, come and contemplate the arch and the window!
 Say to the guardian of paradise: the dust of this meeting place [...]

Second register:

[...] do not falter in your task, pour the wine into the glasses!
 Beyond your hedonism, your love for moon-faced beings,
 Amongst the tasks that you accomplish recite the poem of Hafiz!⁴

These verses by Hafiz allude to the moon several times. The reference to the eyes (*chashm*) and eyebrows (*abru*) of Hafiz's beloved in the first verse recall the full and crescent moon respectively. The second to last verse, included in the central panel in the lower register, makes mention of moon-faced beings, or *mahruyan*. This term was frequently used as a metaphor for utmost physical grace and allure in Persian poetry. Textual and visual allusions to moon-like beauty abounded in Persian ceramics, manuscript illuminations, poetry, and literature during the pre-modern period. MF

NOTES

1. Sophie Makariou and Monique Buresi, *Chefs-d'oeuvre islamiques de l'Aga Khan Museum* (Milan and Paris, 2007), 194–197
2. Thomas Lentz and Glenn D. Lowry, *Timur and the Princely Vision: Persian Art and Culture in the Fifteenth Century* (Los Angeles, 1989), 222.
3. Ellen Kenney and Mechthild Baumeister, "Damascus Room." In Maryam Ekhtiar et al., eds., *Masterpieces from the Department of Islamic Art in The Metropolitan Museum of Art* (New York, 2011), 333–336.
4. Benoît Junod, ed., *The Path of Princes: Masterpieces from the Aga Khan Museum Collection* (Geneva, 2008), 194–195.



Two Paintings of a Moon-Faced Princess

Mughal India, ca. 1710

Opaque watercolour with gold on paper
42.2 x 28.5 cm (left); 43 x 28.9 cm (right)

Cleveland Museum of Art, gift in honour of Madeline Neves Clapp, gift of Mrs. Henry White Cannon by exchange, bequest of Louise T. Cooper, Leonard C. Hanna Jr. Fund, from the Catherine and Ralph Benkaim Collection, 2013.336a and 2013.337a

These two paintings were included in an album dedicated to the Mughal emperor Shah Alam I (r. 1707–1712). The Shah Alam album features depictions of foreign or otherworldly figures and phenomena, frequently set in courtly or garden settings.

These images appear to illustrate a poetical romance composed in the early eighteenth century. In one painting, a hexagonal-walled city enclosing white and pink buildings, as well as lush vegetation, occupies the upper portion of the image's composition. Below, a channel of water flows between two portals, separating the lower scene in two frames. On the left, an avian figure with a human face, identified as Khawaja Mubarak, sits in a tree, surrounded by pines and other lush greenery. He is faced by a group of women to the right, who all appear to be looking toward the composite creature across the stream.

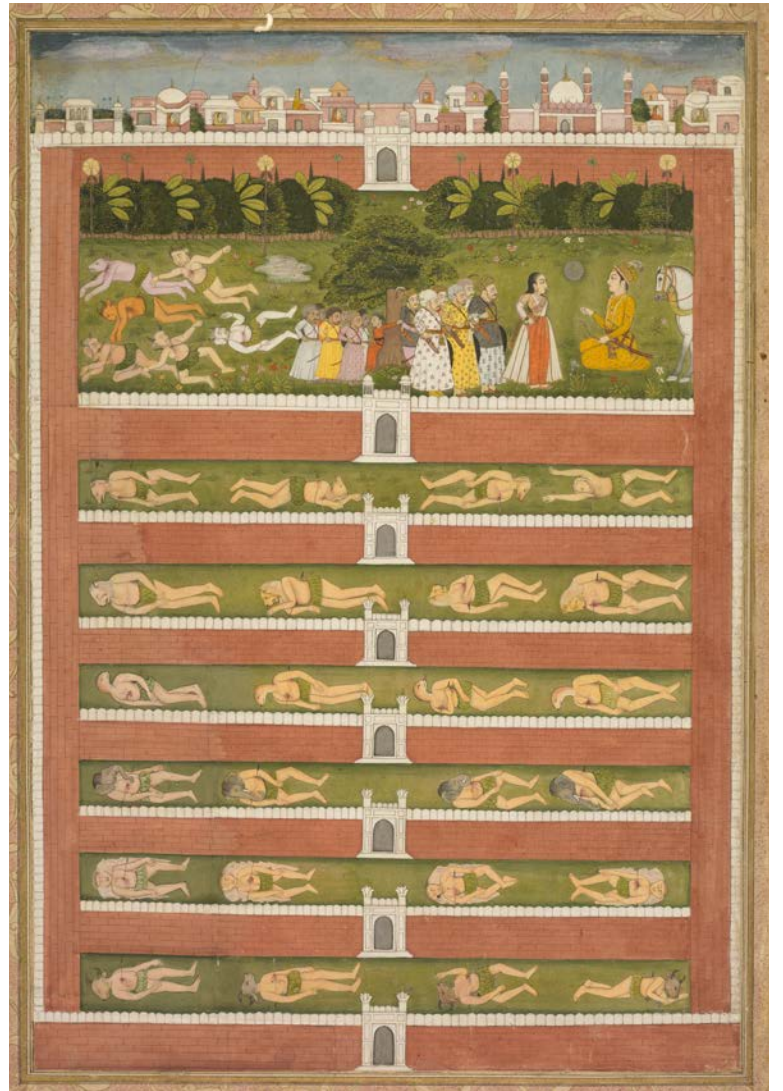
At the forefront, an elaborately dressed female figure, wearing a purple turban topped by two feathers and lined with pearls, points to the seated bird. Her neck is wreathed in several strings of pearls, and her skirt is embroidered with pink and green flowers. A Persian inscription identifies this female figure as Mahliqa, the daughter of the emperor of China.¹ The group of women behind her appear to be attendants: one carries a peacock feather fan, while two others hold a jewelled box and a fanning device.

The name Mahliqa means “moonlike” in Persian. The princess's lunar name is vividly illustrated in the adjacent painting where the Chinese royal stands in a walled garden. Her elevated status is once again highlighted by her elaborate clothing, as well as by a retinue of armed men standing behind her. Nearby a group of onlookers assemble around a tree, located in front of the entrance to a walled city.

A male figure, dressed in an embroidered yellow ensemble and wearing a turban, kneels before the princess and gestures toward a full moon, painted in silver and hovering between the two figures. In Persian literature, the moon-face, or *mah-ruy*, was considered the epitome of beauty.² Moon-faced figures were frequently described and illustrated in poetry, manuscripts, and ceramics.³ MF

NOTES

1. Sonya Rhie Quintanilla, *Mughal Paintings: The Cleveland Museum of Art* (London, 2016), 339.
2. Assadullah Souren Melikian-Chirvani, *Le monde iranien et l'Islam: sociétés et cultures II* (Geneva, 1974), 38.
3. Ruba Kana'an, ed., *Pattern and Light: Aga Khan Museum* (New York and Toronto), 50.



Murshidabad or Lucknow, India,
first half of 18th century

Opaque watercolour and gold on paper
45 x 28.5 cm

Victoria and Albert Museum, London, AL.4940

Photo © Victoria and Albert Museum, London

Gardens were important components of palace complexes in India, serving as shady and cool refuges for Mughal courtiers.¹ These spaces of sensory delight were divided into a series of courtyards with pools, fountains, and pavilions. They were central to courtly activities such as listening to music and reading as well as socializing, which included the enjoyment of the natural beauty of lush vegetation.² A subcategory of the Indian garden was the *mahtab bagh*, or moonlight garden, which was designed to be used during the nighttime.

A *mahtab bagh* pavilion is illustrated in this painting along with two male courtiers intimately engaged in conversation. They are seated beneath a white canopy, with attendants surrounding them on all sides, two of whom are holding instruments. The resulting music would have intermingled with the sound of the nearby fountain, creating a sonoric landscape within the pavilion setting. A bright full moon surrounded by stars illuminates the scene, its light reflected in the nearby pond and echoed in the shining white hues of the lotuses dotting the water.

Mahtab baghs combined white marble walkways, pavilions, pools, and fountains that reflected the moon and bathed the garden in a cool light.³ The preponderance of pale, cool light emanating from the moon reflected on these white surfaces would have created a transcendental effect, described by one seventeenth-century writer as rendering the “land a wonder place in the eyes of the sky.”⁴ MF

NOTES

1. Elizabeth B. Moynihan, *Paradise as a Garden: In Persia and Mughal India* (London, 1982), 115–147; James Westcoat, “Mughal Gardens: The Re-emergence of Comparative Possibilities and the Wavering of Practical Concern.” In Michel Conan, ed., *Perspectives on Garden Histories* (Washington, D.C., 1999), 107–135; Abdul Rehman, “Garden Types in Mughal Lahore According to Early-Seventeenth-Century Written and Visual Sources.” In Atillio Petruccioli, ed., *Gardens in the Time of the Great Muslim Empires: Theory and Design* (Leiden, 1997), 163.
2. James Dickie, “The Mughal Garden: Gateway to Paradise,” *Muqarnas* 3 (1985): 132; D. Fairchild Ruggles, *Islamic Gardens and Landscapes* (Philadelphia, 2011), 105–106.
3. Rehman, 164–165; Peter Andrews, “The Architecture and Gardens of Islamic India.” In Basil Gray, ed., *The Arts of India* (Ithaca, 1981), 124.
4. Rehman, 165.



Ruler and Companion Seated on the Edge of a Moonlit River

Murshidabad, Lucknow, 18th century
Opaque watercolour and gold on paper
45 x 28.5 cm

Victoria and Albert Museum, London, AL.4937

Photo © Victoria and Albert Museum, London

Gardens in Mughal India were frequently used at night, at which time they relied on the brightness of the moon as a source for light.¹ These moonlit gardens, referred to as *mahtab bagh*, were integral parts of Indian palace complexes and were designed to provide coolness and intimacy to their visitors.²

In this painting, two men enjoy the waterfront setting of a white garden pavilion. On the right, a bearded man dressed in a white embroidered robe and turban holds a red gemstone in his right hand, while his left rests on his lap. Facing him, his companion, garbed in a white-striped robe, holds a book in his left hand, his right fingers extended outward as if in conversation. A sword sheathed in a red scabbard rests nearby beside two white pillows on the ground. A body of water stretches behind the seated figures, tinged grey due to the moon's reflection.

Although only partially illustrated here, the *mahtab bagh* design combined white marble walkways, pavilions, pools, and fountains with night-blossoming jasmine, narcissus, and other pale flowers that would reflect the moon and bathe the garden in an otherworldly light.³ Courtiers would gather in such gardens after dusk to enjoy the perfumed breeze, socialize, listen to music, or simply contemplate the moonlight's reflection on the water. In addition, activities in such settings were thought appropriate for intellectual pursuits such as reading, since gazing at the moonlight reflected on the water was thought to bring mental clarity to the beholder.⁴ MF

NOTES

1. Abdul Rehman, "Garden Types in Mughal Lahore According to Early-Seventeenth-Century Written and Visual Sources." In Attilio Petruccioli, ed., *Gardens in the Time of the Great Muslim Empires: Theory and Design* (Leiden, 1997), 164–165. For an overview of Mughal imperial patronage of gardens, see Elizabeth B. Moynihan, *Paradise as a Garden: In Persia and Mughal India* (London, 1982), 115–147; James Westcoat, "Mughal Gardens: The Re-emergence of Comparative Possibilities and the Wavering of Practical Concern." In Michel Conan, ed., *Perspectives on Garden Histories* (Washington, D.C., 1999), 107–135.
2. James Dickie, "The Mughal Garden: Gateway to Paradise," *Muqarnas* 3 (1985): 129.
3. The Taj Mahal in India also incorporated a *mahtab bagh*. See Elizabeth B. Moynihan, *The Moonlight Garden: New Discoveries at the Taj Mahal* (Washington, D.C., 2000); D. Fairchild Ruggles, *Islamic Gardens and Landscapes* (Philadelphia, 2011), 127–128; Ebba Koch, "Mughal Palace Gardens from Babur to Shah Jahan (1526–1648)," *Muqarnas* 14 (1997): 143.
4. Rehman, 165.



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