



IMAGES FOR INSTRUCTION: A MULTILINGUAL ILLUSTRATED DICTIONARY IN FIFTEENTH-CENTURY SULTANATE INDIA

When I began studying the *Miftāh al-Fuṣalā'* (Key of the Learned), Robert Skelton, the doyen of the art of the book in India, challenged me to imagine the many other manuscripts that would have been available to the artists who made this book. Attributed to the central Indian sultanate of Malwa, the *Miftāh* is the only known illustrated Persian dictionary (*farhang*) in the Islamicate manuscript tradition. For its fifteenth-century makers, the *Miftāh* was a wholly new text, written in 1468–69 by Muhammad ibn Muhammad Da'ud Shadiyabadi. The *Miftāh* required its artists to search for and codify visual representations of particular words from canonized manuscript genres such as the Islamicate cosmography (*'ajā'ib al-makhlūqāt*) or works of belles-lettres (*adab*). This process of selectively adapting from an array of genres in order to create a new one, namely the illustrated *farhang*, would have allowed artists to experiment with the Islamicate manuscript tradition in India. By illustrating definitions, the *Miftāh* also became a manual on literary and visual languages for students in the fifteenth century. This article demonstrates that the book was conceived as a didactic work intended to educate members of sultanate society.

The text of the *Miftāh* is intensely multilingual. It provides definitions of Persian entries (lemmas) in Persian, frequently offering Arabic and Hindavi equivalents and occasional Turki or Chaghatai synonyms. Since medieval Persian literary sciences drew heavily from systems developed in Arabic, the presence of Arabic words is expected. Less obvious is the use of Hindavi and Turki. Hindavi is a premodern vernacular that eventually evolved into Urdu and Modern Hindi. It is the language used for Mawlana Da'ud's *Chāndāyan* (ca. 1379), the Sufi romance that is illustrated in several fifteenth- and six-

teenth-century manuscripts.¹ Turki, or Chaghatai, is a Turkic literary language of Central Asia from the fourteenth to sixteenth centuries that was vernacularized in India.² This period witnessed a rise in the importance of Chaghatai across regions. For example, in Khurasan's Timurid capital Herat, 'Ali Shir Nava'i (d. 1501) and Sultan Husayn Bayqara Mirza (d. 1506) promoted Chaghatai.³ Both Hindavi and Turki words are widespread in fifteenth-century Persian dictionaries from India.

In its interplay between the verbal and visual, the *Miftāh* serves as a model of sophisticated bookmaking. With a total of 306 folios, it contains 179 illustrations. Not every definition is illustrated, but the non-illustrated definitions relate to entries with paintings. Dictionary entries often include multiple definitions and meanings, and the illustrations of the *Miftāh* sometimes conflate the multiple meanings of a single word as a playful visual pun.⁴ A single illustration can also depict multiple adjacent entries simultaneously.⁵ Illustrations frequently transcend textual definitions, inspiring reinterpretations of the text. Some entries establish synonyms that are both textual and visual and demonstrate that artists were involved in a range of philological processes, such as making equivalences. For instance, there are two different lemmas and corresponding illustrations for the definitions of turtle, porcupine, monkey, animal den, and yawn.⁶

While previous scholarship has emphasized the significance of the Persian *farhang* for understanding poetry and its authorship, I show how the *Miftāh* leads its readers to manuscript genres beyond the realm of poetry.⁷ In searching for manuscript genres related to the *Miftāh*, I have found that cosmographies exhibit several formal similarities. Like late fifteenth-century Persian

cosmographies, the *Miftāḥ*'s illustrations are inserted adjacent to the entries to which they correspond.⁸ Executed on the same paper as the text, the paintings are placed within rectangular boxes of minimal ruling in black ink, and their sizes vary considerably. Certain court scenes stretch across a page, whereas animals tend to occupy less space (figs. 1, 2).⁹ Occasionally illustrations flow into the margins. Although the same layout is also used for books besides the wonders-of-creation cosmography (fig. 3), such as the bestiary or pharmacopeia, the sheer diversity of illustration types within cosmographies provides the closest analogy to the scope and themes of illustrations found in the *Miftāḥ*. In the final section of this article, I explain ways in which the

Miftāḥ's text and images point to a clear relationship to the cosmography and wonder (*ʿajab*).

Containing visual puns, illustrations of toys and games, musical instruments, and teaching and learning, the *Miftāḥ* appears to have been made with the intention of delivering a pleasurable education. The combination of its illustrated themes and the large, well-spaced text would have aided readers in mastering these words. This leads me to hypothesize that the *Miftāḥ* was an entry-level text that would have primed its readers to understand a range of literary and visual languages. An older member of society, such as a teacher, may have used the work as an object of instruction for pupils. As an initial study of the *Miftāḥ*, this article reconstructs the



Fig. 1. Pleasure place (*kallah*) with canopy (*kulbah*) shown above. *Miftāḥ al-Fuṣṣalāʾ* of Shadiyabadi, Mandu, ca. 1490, 16.2 × 12 cm (painted box); 4.7 × 3.6 cm (upper canopy), British Library Or 3299, f. 242a. (Photo: Courtesy of the British Library)

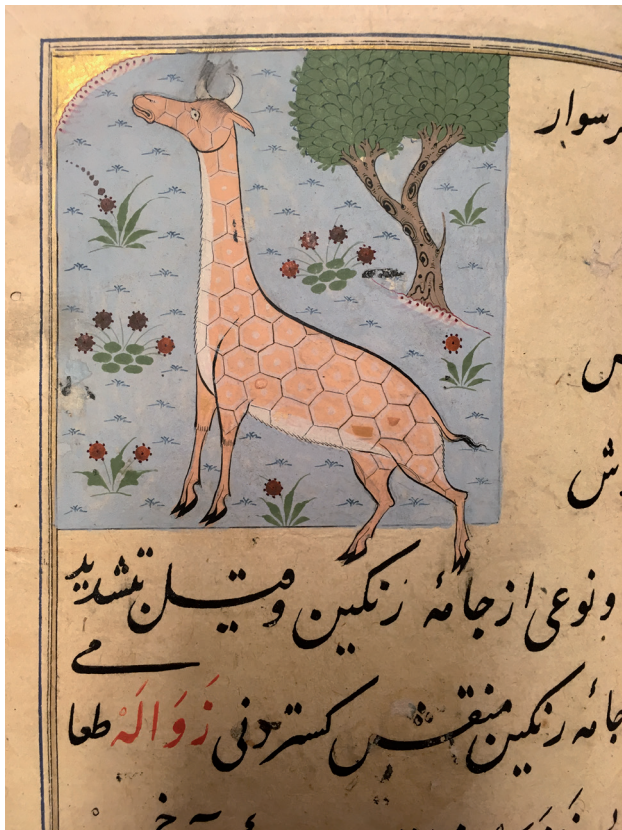


Fig. 2. Giraffe (*zarrāfah*). *Miftāh al-Fuḏalā'* of Shadiyabadi, Mandu, ca. 1490, 7.7 × 7.2 cm, British Library Or 3299, f. 152a. (Photo: Courtesy of the British Library)



Fig. 3. Giraffe (*zarrāfah*). *Persian Wonders of Creation*, Shiraz? ca. 1475, Royal Asiatic Society MS 178, f. 363b. (Photo: Courtesy of the Royal Asiatic Society of Great Britain and Ireland)

history of the manuscript and its context, and appraises its written text and illustrations, laying the foundation for future studies. At the end, I pursue an interpretation of a few illustrations, particularly of crafts, that reveals the significance of wonder for understanding the *Miftāh*.

HISTORY OF THE MANUSCRIPT

Although it is cited in most surveys of sultanate arts of the book, the *Miftāh* has never been the subject of an extended critical study heretofore.¹⁰ It is addressed in two articles, the first by Norah Titley in 1964–65, and the second by A. Jan Qaisar and Som Prakash Verma in 2002.¹¹ In both cases, these scholars adopted a thematic approach to the definitions and focused primarily on the paintings. Titley's initial study of the manuscript estab-

lished the following categories of entries: animals; terms for hunting; musical instruments; occupations; trades and crafts; food; costumes; and children's toys. After her publication of Mandu's famed *Ni'matnāmah* (Book of Delights, ca. 1495–1500), Titley was keen to work on the *Miftāh* as her next project, yet the only products of that endeavor are her short article and a few handwritten notes.¹² Dilorom Karomat, whose concerns were textual, examined the presence of the Turki and Hindavi vernaculars in Persian lexicons such as the *Miftāh*.¹³ At the end of this article, I provide a table of all the illustrations contained in manuscript, having verified these definitions against several lexicons, which I cite where appropriate.

In a preface, Shadiyabadi states that he completed the text in 873 (1468–69), and names the dictionary the *Miftāh al-Fuḏalā'*.¹⁴ The manuscript of the work in the

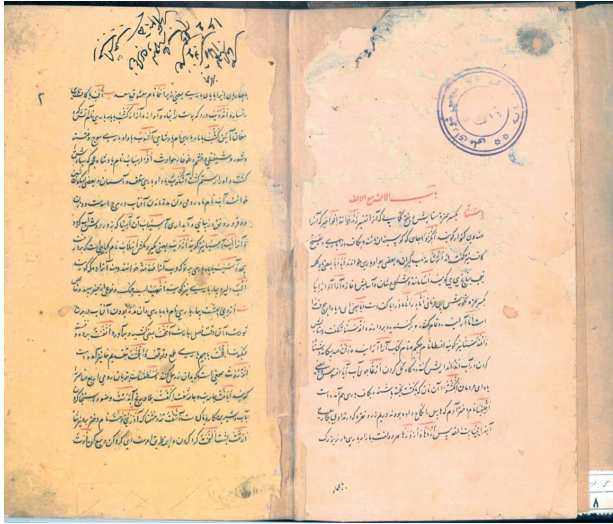


Fig. 4. Preface, *Miftāḥ al-Fuṣalā'* of Shadiyabadi, eighteenth or nineteenth century? Iran or India, Majlis Library, Tehran, IR-10-37320, ff. 2b–3a. (Photo: Courtesy of the Majlis Library)

British Library (BL Or 3299) has been dated to 1490 based on its close similarity to dated Persian manuscripts of this decade.¹⁵ What occurred in the centuries between the production of the *Miftāḥ* and the registration of this manuscript in the British Museum in 1887 is unclear. It appears that the British diplomat Sidney John Alexander Churchill (1862–1921) sold the manuscript to the British Museum in 1886, as the end flyleaf bears the note “Bt. of Sidney Churchill, 10 May 1886.” Churchill worked in the Telegraph Department (India Office) from 1880 to 1886, before embarking on a career in Iran that lasted until 1895.¹⁶

Apart from BL Or 3299, an unillustrated manuscript in the Majlis Library in Tehran (IR-10-37320) survives as the only other known extant copy of the *Miftāḥ* (fig. 4). Based on a preliminary analysis, this undated manuscript appears to postdate the British Library copy by a few centuries and was likely produced in the eighteenth or nineteenth century. The Tehran copy varies considerably from the British Library manuscript and appears to be a textual exercise of deciphering and editing an older text rather than a book with an explicit didactic aim for its time. The Tehran copy nevertheless allows us to salvage missing folios of BL Or 3299 and clarifies some definitions in cases where there is textual variance. From here onward, when referring to the fifteenth-century

Miftāḥ, I mean British Library Or 3299, and I refer to the later Majlis IR-10-37320 as the Tehran copy.

THE *MIFTĀḤ* IN ITS SULTANATE CONTEXT: ARCHITECTURE AND LEXICOGRAPHY

The *Miftāḥ* was created in the central Indian sultanate of Malwa, a polity that lasted roughly a century (1401–1531) and boasted many architectural and intellectual achievements. The Afghan governor of Delhi, Dilavar Khan (r. 1401–6), sowed the seeds of the sultanate in Malwa and pursued the Delhi sultanate's conquest of the Paramara kingdom based in Dhar. In a strategic move, Dilavar Khan's son, Hushang Shah (1406–32), shifted Malwa's center to Mandu, also known as Shadiyabad, “The City of Pleasure.” Muhammad Khalji (r. 1432–36) overthrew Hushang Shah, and it was during the reign of Muhammad's successor, ‘Ala’ al-Din Mahmud Shah (1436–69), that the first known manuscripts of Mandu were made. As noted above, the *Miftāḥ* was likely created circa 1490, during the reign of the subsequent shah, Ghiyas al-Din (1469–1500). The *‘Ajā'ib al-Ṣanā'ī* (Wonders of Crafts, British Library Or 13718) was made for Ghiyas al-Din's successor, Nasir al-Din Khalji (r. 1500–1510).¹⁷

Architecture

The manuscripts of Mandu were made in an architectural context that linked Delhi to the north and the Deccan to the south. For example, with its iwan-inspired hall and battered walls, an audience hall in Mandu known as the *Hindolā Maḥal* (Swinging Palace, fig. 5), possibly dating from the 1330s, appropriates forms from earlier paradigms established by Delhi's Tughluq sultanate (1320–1414). This architectural vocabulary circulated to capitals further south, as represented by monuments such as the *Khūsh Maḥal* (Happy Palace, ca. 1324–31) in the Tughluq-conquered Kakatiya capital of Warangal/Sultanpur.¹⁸ Polychrome ceramic cut-tile revetment (*kāshī kāri*) on early fifteenth-century Mandu architecture provides further evidence of the international Timurid style in central India.¹⁹

Analogous to sultanate architecture, sultanate arts of the book embodied the confluence of an expanding lo-



Fig. 5. *Hindolā Maḥal* (Swinging Palace), Mandu (ca. 1324–31). (Photo: Vivek Gupta, February 2019)



Fig. 6. *Madrasah-i Bām-i Bihisht* (School of the Heavenly Vault), Mandu, ca. 1450. (Photo: Vivek Gupta, February 2019)

cal idiom with cosmopolitan trends.²⁰ Mandu is one of the few early Indian sultanates with a relatively distinct corpus of illustrated manuscripts, but these have yet to be studied as a group. Two Jain *Kalpasūtra* manuscripts (ca. 1439 and 1470) are among the early works that attest to the production of local artists.²¹ Because both the *Niʿmatnāmah* and the *Miftāḥ* contain several Indic words, they also reveal a connection with the local vernacular culture. Yet the presence of the *Būstān* (1502–3) links Mandu’s book culture to the broader terrain of shared Persian cultural practices—the Persian cosmopolis—as do the illustrations of the *Miftāḥ*.²²

One can also imagine a dynamic school in which Mandu’s books were taught. In ‘Ali bin Mahmud al-Kirmanī Shihab Hakim’s *Maʿāṣir-i Maḥmūdshāhī* (Traditions of Mahmud Shah, 1468), he describes a madrasa in Mandu, *Bām-i Bihisht* (Heavenly Vault), and notes the presence of various kinds of decoration on the madrasa’s walls that are not extant today: “colored stones such as red carnelian, green, striped, and dark blue jasper, yellow Stone of Mary (*sang-i Maryam*), white alabaster, black marble, and so forth in the manner that inlaid woodworkers (*khātambandān*) produce ivory and ebony decoration.”²³ Shihab Hakim writes that artisans (*pīshvarān*) and possessors of skill (*hunarmandān*) from the kingdoms of Khurasan (comprising present-day eastern Iran, southern Turkmenistan, and western Afghanistan) and the cities of Hindustan (northern India) were involved in the construction of the madrasa.²⁴ In light of this impressive description, the madra-

sa was likely built to attract fine scholars from near and far.

Given Shihab Hakim’s fulsome praise, the calligraphy decorating the madrasa must have also been a marvel. His description invokes several masters of Islamic calligraphy, and in turn fashions Mandu as a cosmopolitan center:

Persian workers, who are knights in the arena of art, decorated the sides of the lofty dome with tilework (*kāshī kārī*) inscription in *thuluth* and *muḥaqqaq* scripts of such incredible fineness and straightness that if Yaquṭ [al-Mustaʿsimī, d. 1296] were not imprisoned in the tomb, he would say that [his own] script was its pupil. And if ‘Abd Allah Sirafī were not imprisoned in the dust’s house of oblivion, he would have cut his own hand into a pen of envy. Ibn Muqlāh [866–939] would have taken each letter from that [inscription] as the kohl of the pen-case of vision. Ibn Bawwab [d. 1022] would have known every word as the mirror of interior meaning.²⁵

Shihab Hakim’s praise has implications for understanding the calligraphy shared by manuscripts and monuments. On its face, this is a conventional literary description of calligraphic practice. But it demonstrates an awareness of the prevailing benchmarks in calligraphic excellence that must have also played a role in the art of the book. Although the madrasa only survives in fragments today (fig. 6), this description reflects achievements in Mandu’s manuscript culture.²⁶ The madrasa formed a central part of an early fifteenth-century complex of buildings in Mandu that



Fig. 7. Khusraw's musician, Barbud. *Miftāh al-Fuzalā'* of Shadiyabadi, Mandu, ca. 1490. Painted surface: 8.2 × 9.3 cm, British Library Or 3299, f. 60a. (Photo: Courtesy of the British Library)



Fig. 8. Moth (*parvānah*). *Miftāh al-Fuzalā'* of Shadiyabadi, Mandu, ca. 1490. Painted surface: 5.8 × 4.2 cm, British Library Or 3299, f. 71b. (Photo: Courtesy of the British Library)

integrated a congregational mosque and the monumental tomb of Sultan Hushang Shah (r. 1406–35).²⁷ As the *Miftāh* was a wholly original text written in Mandu, the Bam-i Bihisht madrasa would have been an ideal space for Shadiyabadi to study and compile his work. Just as Mandu's *Hindolā Mahal* displays architectural connections to both north and south, the Bam-i Bihisht madrasa would have participated in intellectual dialogue with other centers from Delhi to the Deccan, and beyond.²⁸ Madrasas in neighboring cities include those of Chand-eri²⁹ (Malwa) and Bidar (Deccan).

Lexicography

In contrast with detailed references to architectural commissions, the historical record is comparatively silent about the manuscripts of Mandu.³⁰ Shadiyabadi's preface to the *Miftāh* is only three folios long and conveys few facts about the dictionary.³¹ He classifies the text as a *farhangnāmah* (lexicon) and states that he uti-

lized Pahlavi, Dari, Turki, Hebrew, Greek, and Chaghatai dictionaries.³² He also cites the work of Persian poets such as Khaqani, Mu'izzi, Anvari, Nizami, Zahir, Safahani, and Sa'di as inspirations.³³ Extant copies of Shadiyabadi's commentaries on the oeuvre of Khaqani (d. Tabriz, 1186–99) attest to his close engagement with this poet's work.³⁴

Unlike other *farhangs* of its time, the *Miftāh* does not quote from poetry. It does, however, illustrate several poetic tropes and figures from the *Shāhnāmah* (Book of Kings) of Firdawsi and from the Khusraw and Shirin romance (fig. 7).³⁵ In addition to portraying poetic *dramatis personae*, the *Miftāh* gives form to words in Persian poetry that are often used in figurative contexts. For example, the moth (*parvānah*) that self-immolates in the flame of a candle, symbolizing the lover burning with desire for the beloved, is depicted simply as six fluttering multi-colored moths (fig. 8).³⁶ While Shadiyabadi's textual definition describes the moth's attraction to flames, it does not fully explain the allusion to the



Fig. 9. Wild ass or tomb (*gūr*). *Miftāḥ al-Fuṣalā'* of Shadiyabadi, Mandu, ca. 1490. Painted surface: 10 × 12 cm, British Library Or 3299, f. 248b. (Photo: Courtesy of the British Library)

ubiquitous trope of the lover-beloved. Rather, it allows readers to apply their own literary acumen to deciphering the meaning attached to the moth. The teacher may have pointed to the *parvānah* and *gūr* and extemporaneously recited a poem containing those tropes.

Shadiyabadi's definition of *gūr* is another poetic example. He defines *gūr* as a wild ass, a sepulcher, and part of the name of Bahram-i Gur, the Sasanian king who features prominently in the *Shāhnāmāh* (fig. 9).³⁷ The accompanying illustration shows a man sitting with arms upturned in front of a textile-covered cenotaph, and an onager in mid-gallop below. This is a literal depiction of two out of the three definitions in the text, if we do not take the seated figure to be Bahram-i Gur himself. The definition, ten words in total, does not explain

that *gūr* is one of the most common words utilized in Classical Persian puns, particularly when it comes to the figure of Bahram-i Gur;³⁸ rather, this is left for the new learner to apprehend from other sources.

The illustrated definitions of the *gūr* and *parvānah* would have struck immediate resonance with any fifteenth-century Persian poet, but Shadiyabadi's redaction of poetic quotations implies that this *farhang* served purposes other than helping poets choose words with appropriate end-vowels. The definitions of *parvānah* and *gūr* capture the *Miftāḥ*'s playfulness, as both rely on the reader to fill in the gaps based on its combination of word and image. The concept of playfulness remains undertheorized within Islamic contexts, but in the *Miftāḥ*, playfulness appears to correspond to a poetics

of anticipation, similar to how the lover-beloved trope is anticipated from the image of fluttering butterflies.³⁹ We can thus envision an elder or tutor (*ataliq*) using the manuscript as a teaching device, where the images would render lessons easier to comprehend.

The active scholarly environment of Mandu suggests that its intelligentsia and the teachers and students of its madrasa had access to many books.⁴⁰ One indicator of manuscript circulation and production in Mandu are the several sources named by Shadiyabadi in his preface that inscribe the *Miftāh* within an intellectual genealogy. Shadiyabadi lists the *Farhang-i Qavvās* (The Lexicon of Qavvas), *Risālat al-Naṣīr* (The Treatises of Nasir),⁴¹ *Asadī*,⁴² *Mafātīh al-Fazā'il* (The Keys of the Learned), *Sulālat al-Fazā'il* (The Genealogies of the Learned),⁴³ *Dastūr al-Fazā'il* (The Code of the Learned), and the *Lisān al-Shu'arā'* (The Tongue of Poets) as his sources.⁴⁴ Three out of these seven works are known medieval Persian dictionaries written in India, two are unidentified, one is no longer extant, and one is of Khurasani provenance.

The first work Shadiyabadi cites, the *Farhang-i Qavvās* (or *Fakhr-i Qavvās*), was compiled by the poet Fakhr al-Din Mubarak Shah Qavvas Ghaznavi around 1300.⁴⁵ Containing 1,341 entries, it is the first known Persian dictionary completed in India. This citation attests to Shadiyabadi's awareness of the *farhang* tradition in India that preceded his work by at least a century. In its organization, *Farhang-i Qavvās* follows the cosmographical tradition, with sections devoted to: (1) celestial creations; (2) earthly creations; (3) plants; (4) animals; and (5) manmade creations.⁴⁶ The fifth section, on manmade creations (*dar nām-i chīzhā kih az kār-i ādamī*), is full of terminology related to architecture, decorative objects, food, clothing, textiles, and arms and armor. This section remains an unmined treasure trove for historians of medieval and early-modern Islamicate and Indian material culture.⁴⁷ Apropos of the name of this journal, the *Miftāh* follows the *Farhang-i Qavvās* in defining the honeycomb vault or *muqarnas*.⁴⁸ The date of the *Farhang-i Qavvās* (around 1300) is roughly a century after the emergence of the Persian and Arabic wonders-of-creation illustrated manuscript genre. We can understand this in one of two ways. It either implies a parallel impulse towards codifying these genres (cosmography and *farhang*). Or,

it suggests that Qavvas may have been inspired directly by circulating cosmographies or ideas about the cosmic order.

The second Persian dictionary known to have been composed in India is also included in Shadiyabadi's list. This is the *Dastūr al-Fazā'il*, which was written in Delhi by Hajib-i Khayrat Rafi' Dihlavi in 1342.⁴⁹ In fact, the *Farhang-i Qavvās* served as the basis for the *Dastūr al-Fazā'il*, showing how Shadiyabadi creates a chain of transmission (*silsilah*). Shadiyabadi's final source, the *Lisān al-Shu'arā'*, is a Persian dictionary that was also composed in India by the author 'Ashiq between 1352 and 1388 during the time of Firuz Shah Tughluq.⁵⁰

Absent from Shadiyabadi's list is the *Farhang-i Zafāngūyā u Jahānpūyā* (Dictionary of the Polyglot and World Traveler) completed in 1433 by Badr al-Din Ibrahim in Mandu itself.⁵¹ Another agent of inter-court relations, Badr al-Din left Jaunpur (located in modern-day Uttar Pradesh, northern India) in 1409 or 1419 for the patronage of Dilavar Khan in Malwa.⁵² Although the *Farhang-i Zafāngūyā* was an authoritative example of lexicography (according to Solomon Baevskii), it either did not impress Shadiyabadi enough to cite it in his preface, or he may have never consulted it.⁵³ One possible reason for Shadiyabadi's omission of the *Farhang-i Zafāngūyā* is its philosophical difference from the *Farhang-i Qavvās*. While the *Farhang-i Qavvās* is organized according to God's creations, the seven parts of the *Farhang-i Zafāngūyā* are ordered etymologically; the first four parts are devoted to Arabic, Aramaic, Greek, and Turkish, and the last three parts are divided according to Persian simple words, complex words, and infinitives.⁵⁴ The *Farhang-i Zafāngūyā* surely served as a practical dictionary for poets, whereas the *Farhang-i Qavvās* and the *Miftāh* concentrate on broader, cosmographic knowledge. This is not to say that poets did not think cosmographically when seeking words to fit their end-rhymes. It is entirely possible that poets searched for words based on their celestial or worldly meanings and could easily find the desired rhyming syllable within these themes. Nevertheless, the number of definitions Shadiyabadi lifts verbatim from the *Farhang-i Qavvās* shows his appreciation of the work. While the *Farhang-i Zafāngūyā* may have been avail-

able to Shadiyabadi, he clearly preferred the *farhang* that spotlighted the wonders of God's creation, the *Farhang-i Qavvās*. And yet, for the makers of the *Miftāḥ* manuscript, their sources were not only textual. They were poetic images, several of which carried multiple allusive meanings.

Whether or not Shadiyabadi read Persian encyclopedias in Mandu itself is unknown. He could have traveled to the libraries in Jaunpur, Delhi, Bidar, or Gwalior to access these books. Shadiyabadi's name suggests that he was from Shadiyabad/Mandu or at least was descended from a lineage attached to the city. Considering that two extraordinary lexica, the *Farhang-i Zafāngūyā u Jahānpūyā* and the *Miftāḥ*, were produced in Malwa, it is safe to assume that Mandu's libraries were stocked with abundant intellectual resources.

In addition to the *Farhang-i Zafāngūyā u Jahānpūyā*, another noteworthy absence from Shadiyabadi's sources is any Hindavi source text. It is likely that Hindavi sources would have been filtered through other Persian dictionaries produced in India, supporting what Stefano Pellò has designated as the "provincialization of Persian" in fifteenth-century Persian lexicography.⁵⁵ Indeed, Persian *farhangs* written in India negotiated the cosmopolitanism and vernacularization of Persian in India.

The *Miftāḥ* itself attests to the existence and knowledge of many other books in fifteenth-century Mandu. One book serves as an index of many more. In other words, the production of *farhangs* in Mandu suggests the presence of particular books that would have been read and written with the aid of these *farhangs*. Given the *Miftāḥ*'s linguistic diversity, one can imagine that many scientific texts and works of *belles-lettres* in Arabic, Persian, Turkish, and Indic languages were composed in Mandu. The *Miftāḥ* would have allowed readers to enjoy a range of texts written in these languages, and to create new works using a rich vocabulary. The *Miftāḥ* is thus critical to reconstructing the contours of the manuscripts that may have circulated in fifteenth-century India. What is now just a few dispersed fragments can transform into a full-fledged library of the sultanate arts of the book by investigating the associations of each entry in this dictionary. Skelton's searing insight about the significance of the *Miftāḥ*'s allusions thus acquires further power.

THE FORM OF THE *MIFTĀḤ*: WRITTEN TEXT AND STYLE OF ILLUSTRATIONS

The Written Text

The calligraphers who inscribed the *Miftāḥ* must have been allowed some degree of agency in determining a suitable design for an illustrated *farhang*. As far as we know, this was a textual genre that had never before been copied with such resources. The 'unvān (headpiece) of the *Miftāḥ* is executed in black and blue inks, with gold and silver, and its pattern is dominated by split palmettes (fig. 10). Its ruling (inner to outer) consists of five lines of black, thick gold, black, black, and lapis. Organized alphabetically, the manuscript's chapter (*bāb*) headings are mostly inscribed in a thick gold *naskh* script, sometimes with black outlines. These are occasionally placed within a gold and black-ruled text box (fig. 11). The end-letter (*ḥarf*) of the lemma further subdivides the *bāb*.⁵⁶ The *ḥarf* headings are written in thick blue *naskh* script similar to the *bābs* (fig. 12). Like a modern-day tab for a filing folder or binder, the corresponding letter of chapter headings helpfully appear in matching ink and script in the manuscript's outer margin.⁵⁷ This is a practice that also occurs in Mandu's *Ni'matnāmah*. For the *ḥarf* headings, the corresponding letter is placed in its adjacent marginal area like the *bābs*. Of the 394 total *ḥarf* headings,⁵⁸ 24 either lack complete text boxes or do not have them at all. The tabs in the margins are still legible in most cases.

The logic and clarity of the *Miftāḥ*'s paleography further emphasize its didactic purpose. The fact that its Hindavi words are sensitively rendered in *nasta'liq* with adjusted lettering allows readers to pronounce these words correctly. To my knowledge, such adjustments were not made for sounds unique to Chaghatai. Unlike the relatively close affiliation between the syllabaries of Arabic and Persian, Hindi and Sanskrit contain a number of sounds that are absent from Arabic and Persian. In the *Miftāḥ*, short vowels and diacritics (*ḥarakāt*) are only utilized for the lemmas in red and for the corresponding Hindavi word in black if it is given. In two definitions of toys, the scribe found solutions for several non-Perso-Arabic sounds. The presence of Hindavi equivalents in the definitions for hobbyhorse and spinning top is likely because such toys were part of the



Fig. 10. Headpiece (*unvān*). *Miftāḥ al-Fuzalā'* of Shadiyabadi, Mandu, ca. 1490. Folio: 33 × 25.4 cm, British Library Or 3299, ff. 2b–3a. (Photo: Courtesy of the British Library)



Fig. 11. *Bāb al-Mīm ma' al-Alif*, illustration: footboard or treadle for a loom (*lawḥ-i pāy*). *Miftāḥ al-Fuzalā'* of Shadiyabadi, Mandu, ca. 1490. Painted surface: 8 × 12 cm, British Library Or 3299, f. 262a. (Photo: Courtesy of the British Library)



Fig. 12. Right folio 89b: *Ḥarf al-Fā*, *Ḥarf al-Qāf*, illustration of *jaq*, “to churn.” Left folio 90a: illustration, group of an army, *jūq*; *Ḥarf al-Kāf*, tabulating letters shown in outer margins. *Miftāḥ al-Fuḏalā*’ of Shadiyabadi, Mandu, ca. 1490. Folio: 33 × 25.4 cm, British Library Or 3299, ff. 89b–90a. (Photo: Courtesy of the British Library)

vernacular, everyday life of children. With regard to the hobbyhorse or *kūrasht*, the scribe adapts the retroflex *ḍ* by applying three dots below the *dāl* in the Hindi word *ḍandā-mūhī* (stick-face) (fig. 13).⁵⁹ Three dots are not utilized for these particular letters in Persian or Arabic scripts; rather, this is an adjustment used to signal a letter foreign to the script.

Another example of how the scribe made an adjustment in Persian for an Indic syllable—and likely heard its doubling—is the doubled retroflex syllable in the Hindavi word *laṭṭū*, which denotes a spinning top. This word appears in the Persian illustrated entry for *farmūk*, “top” (fig. 14).⁶⁰ The scribe identified the doubled *ṭa* retroflex syllable by means of three dots below the Perso-Arabic *tā*. The scribe found a creative analogue for the doubled syllable with the application of a *shaddah* over the letter. For the synonymous non-illustrated Persian word *pahnah*, which is also included in the lexicon, the three dots that had previously indicated a retroflex syllable in the word *laṭṭū* inexplicably do not appear.⁶¹ The

inconsistency lies primarily in the number of dots. For the illustrated *farmūk*, Shadiyabadi specifies that *laṭṭū* (inscribed with three dots) is how the word is said (*gūyand*) in Hindavi, whereas for the non-illustrated *pahnah*, he states that *laṭṭū* (without dots) is how the people of Hind (*ahl-i Hind*) read or recite it (*khvānand*). This inconsistency suggests that the representation of Indic retroflex syllables in *nasta’liq* was not a standard scribal practice. That the Hindavi words are given any special attention at all further supports Karomat’s argument that the *Miftāḥ* functioned as a Hindavi manual for Persian readers. In the absence of any text that clarifies Hindavi sounds for the Persian reader, a teacher may have had to explain to the new learner why the word *laṭṭū* was inscribed with three dots.

The inclusion of Hindavi words in the *Miftāḥ* represents a rare case of early Hindavi in *nasta’liq*. In particular, it differs from how the words are written in Mandu’s *Ni’matnāmah* and the genre of the Hindavi *Chāndāyan*. Since the *Ni’matnāmah* is a book of recipes with



Fig. 13. Hobbyhorse (*kūrasht*, *ḥandā-mūhī*). *Miṣṭāḥ al-Fuṣalā'* of Shadiyabadi, Mandu, ca. 1490, Painted surface: 5.7 × 12 cm, BL Or 3299, f. 22ob. (Photo: Courtesy of the British Library)



Fig. 14. Yo-yo (*farmūk*, *laṭṭū*). *Miṣṭāḥ al-Fuṣalā'* of Shadiyabadi, Mandu, ca. 1490. Painted surface: 7.6 × 7.6 cm, BL Or 3299, f. 212a. (Photo: Courtesy of the British Library)

instructions on how to prepare the sultan Nasir al-Din Shah's favorite dishes and other pleasures, its Persian is peppered with many colloquial Hindavi words such as those for local ingredients.⁶² In this case, the scribe deemed it worthwhile to apply diacritics and short vowels to all words in the text regardless of language. The *Ni'matnāmah* is written in black *naskh* (red headings) with large swooping *nūn* ligatures and dramatically elongated *kāf* letters (fig. 16).⁶³ These kinds of *nūns* and *kāfs* are typical of the sultanate *Bihārī* script and its miniaturized form of *naskhī-dīvānī*, but this script overall is clearly closer to *naskh*. The presence of these features in the *Ni'matnāmah* suggests the scribe's possible mastery of these other scripts.⁶⁴ In contrast to the *Ni'matnāmah*, the sultanate manuscripts of the Hindavi *Chāndāyan*, which are sometimes written in a *naskhī-dīvānī* script, use *ḥarakāt* or diacritics sparingly.⁶⁵ The notable ab-

sence of *ḥarakāt*, even for the Hindavi words within the Persian headings of the *Chāndāyan* manuscripts, implies that readers would have inferred these vowels with little guidance. As the poetry of the *Chāndāyan* is in metered rhymed verse, short vowels in the *naskhī-dīvānī* would have been quite useful: their absence presumes a knowing reader, or a reading context of oral recitation. This variety of strategies for inscribing Hindavi words in Perso-Arabic scripts in the sultanate context suggests a diversity of audiences for this vernacular language—from the new learners of the *Miṣṭāḥ* to the poetry connoisseurs (*rasikas*) enjoying the *Chāndāyan*.

An appraisal of the text's contents also reveals that it does not survive in its original form. Of the 22 total chapters in the *Miṣṭāḥ*, the final two chapter headings for the letters *hā'* and *yā'* are missing. The first missing *bāb* heading is between folios 295b and 296a, and the second

is between folios 301b and 302a. Between folios 295b and 296a, it is possible that the original text jumped from the final section of *Ḥarf al-Ḥā'* to *Jīm-i Pārsī* (The Persian *jīm*, or cha sound). If this is true, then there would be no losses between these two folios. However, in the second case, a lack of correspondence between the catchword on folio 301b (*bi-vāv*) and the first word of folio 302a (*ku-nad*) implies a loss of folios.

Textual evidence also suggests that the manuscript suffered losses. In his preface, Shadiyabadi states that “twenty-two chapters were arranged after [this lexicon] was composed and accepted” (*va bīst u du bāb ittifāq uftād ba‘d-i malhūz u manzūr shudan*).⁶⁶ It is unclear whether this phrase refers to his text in general, or to Or 3299 as a manuscript. Although the later Tehran manuscript differs from the much earlier *Miftāḥ* in its ordering and language, it preserves several entries that would have been located on the missing folios of *Bāb-i Jīm-i Pārsī*.⁶⁷ In other words, there are clearly some missing folios in the British Library’s *Miftāḥ*, but whether or not Shadiyabadi was present to witness these problems in two chapters of the manuscript remains an open question. The folios could have gone missing if the manuscript’s quires of quaternions were ever unbound from its current leather binding. Because of the high ratio of illustrations to folios (179:306), the fact that some pages have been lost allows us to hypothesize that certain unknown illustrations are also missing from the manuscript.

Style of Illustrations

The *Miftāḥ*’s illustrations closely relate to the Turkmen painting practice.⁶⁸ In the latter half of the fifteenth century, the main center of this style was the southwestern Iranian city of Shiraz. The spread of the Aq Qoyunlu Dynasty (White Sheep Turkmens) to areas in western Iran, eastern Anatolia, and Iraq led to the establishment of new sites for the mass production of Turkmen manuscripts.⁶⁹ B. W. Robinson describes this style as follows: “the figures are stocky and child-like, and the background is either pale with small tufts or lush green with large masses of vegetation.”⁷⁰ The paintings of the *Miftāḥ* make clear that this style was practiced in India as well. Yet we will likely never know if the painters responsible for the *Miftāḥ* were trained in this style in In-

dia, Iran, or elsewhere before the *Miftāḥ* was made in Mandu.⁷¹

A comparison with Shirazi paintings in dated manuscripts brings the *Miftāḥ*’s paintings into sharper focus. A close Shirazi counterpart to the *Miftāḥ* is a manuscript of ‘Attar’s *Manṭiq al-Ṭayr* (Conference of the Birds) made in 1493.⁷² An opening illustration shows the mythical bird, the *simurgh*, supervising all of the other vibrantly feathered birds in a dense green thicket (fig. 15). The artist rendered the shrubbery by painting thin strokes of a dense verdigris base and adding lighter, more dilute green and yellow highlights above. Circular gold flowers in clusters are placed above the greenery. This pattern of thicket is widely used in at least two of the known Mandu manuscripts, the *Miftāḥ* and the *Ni‘matnāmah* (fig. 16).⁷³ The second element of the *Miftāḥ* that closely resembles a Shirazi painting practice is an arrangement of green plants against a pale blue ground.⁷⁴ The manuscript isolates these plants in its illustration of *jullah*, “plants / mushrooms” (fig. 17).⁷⁵ This unique example suggests that artists may have had a specific plant in mind when painting the common decorative feature. A *Shāhnāmah* made in Shiraz one year after the *Manṭiq al-Ṭayr* in 1494 shows a similar plant: in the scene of Isfandiyar being interviewed before his father, the hill is painted in a pale blue ground with interspersed flowering plants (fig. 18).⁷⁶ This image uses the two main background elements of Turkmen paintings. The skies in these paintings are also often executed in gold with a semi-circular horizon line.⁷⁷

The connections between Shirazi and sultanate manuscript cultures transcend the features of this painting style. It is well established that over the course of the fifteenth century, that the arts of the book in sultanate India witnessed several archaisms. Éloïse Brac de la Perrière has demonstrated how one of the clearest inspirations was from fourteenth-century Injuid manuscripts from southern Iran.⁷⁸ The intertwined careers of Iranian intellectuals indicate the longstanding networks in which artists participated and in which books played a major role. For example, Jalal al-Din Davani, a fifteenth-century Shirazi intellectual, never migrated to India, but in 1468 he dedicated one of his works to the Bahmani governor Mahmud Gavan (d. 1481) of Bidar and gifted another text to the sultan Mahmud Begarh of Gujarat (r. 1458–1511).⁷⁹ Considering the migration trends



Fig. 15. The conference of the birds presided over by the *simurgh*, *Manṭiq al-Ṭayr* (Conference of the Birds) of Attar (1145–1220), Shiraz, 1493. Folio: 10.4 × 7.3 cm, Bodleian Library MS Elliot 246, f. 25b.



Fig. 16. Ghiyas al-Din eats betel, *Ni'matnāmah* (Book of Delights); artist: Haji Mahmud; scribe: Shahsavār al-Katib, Mandu, ca. 1490–1500. Folio: 20.5 × 14 cm, BL IO Islamic 149, f. 100b.



Fig. 17. Plant, mushroom (*jullah*). *Miftāḥ al-Fuṣalā'* of Shadiyabadi, Mandu, ca. 1490. Painted surface: 5.7 × 5.3 cm, British Library Or 3299, f. 92b. (Photo: Courtesy of the British Library)



Fig. 18. Isfandiyyar interviewed before his father Gushtasp, *Shāhnāmah* of Firdawsi, Shiraz, 1494. Folio: 13.9 × 12.7 cm, Bodleian Library MS Elliot 325, f. 328a.

of artists and intellectuals in tandem strengthens our knowledge of cultural flows during the fifteenth century.⁸⁰ It is probable that many artists from this period were like Jalal al-Din Davani: they may have maintained relations with patrons based in South Asia but never left their homes in Iran. In cases such as the *Miftāh*, it is best to think of Shirazi and sultanate manuscript cultures as part of the shared cosmopolitan Persian ecumene.⁸¹

THE FUNCTION OF THE *MIFTĀH*: AN ENTRY-LEVEL TEXT FOR NEW STUDENTS

A close look at the *Miftāh* reveals the possible function of the manuscript as an entry-level text for teaching new or young students. If we had only the Tehran manuscript and not the British Library copy, it would be impossible to suggest this. However, the preponderance of illustrations in the *Miftāh* that depict learning or allude to play and upbringing allows us to think of it as a book for instructing new learners. The clear and well-spaced calligraphy coupled with the fact that lexica were, by their very nature, consultative books used to teach the mean-

ings of new words inform my view that the manuscript was specifically intended for a young member of society or someone responsible for cultivating youth, such as a tutor.⁸² Although we lack a social history of early development or upbringing in the Indo-Islamic world, I hope that the preliminary analysis below will serve as a gateway for further work on this important and neglected topic.⁸³

Illustrations germane to a younger age group include images of figures playing with toys. The *Miftāh* contains two illustrated definitions of dolls, two yo-yos, one spinning top, a hobbyhorse, and a swing (figs. 13, 14).⁸⁴ While such pleasures are not necessarily exclusive to youth, the dolls are rather explicit examples. In the illustrated definition of *bādajan* (“dolls”), we see a young girl putting her three dolls to bed on a carpet (fig. 19). The definition of *lahfatān*, a synonym for dolls, multiplies the illustration of the *bādajan*, showing two veiled girls putting their male and female dolls to bed on a carpet and pillow (fig. 20).⁸⁵ We can imagine these illustrations being used to teach young learners the names of playthings. Adults can appreciate these illustrated definitions of toys as well, but their peculiar recurrences in the



Fig. 19. Dolls (*bādajan*). *Miftāh al-Fuzalā'* of Shadiyabadi, Mandu, ca. 1490. Painted surface: 5.9 × 6.8 cm, BL Or 3299, f. 51b. (Photo: Courtesy of the British Library)

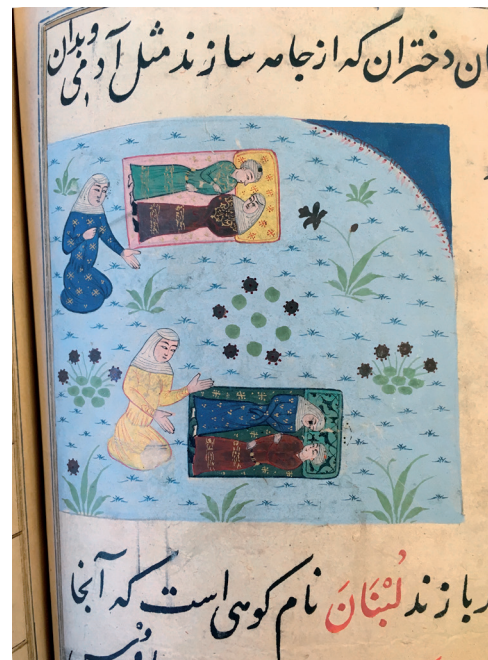


Fig. 20. Dolls (*lahfatān*). *Miftāh al-Fuzalā'* of Shadiyabadi, Mandu, ca. 1490. Painted surface: 7.5 × 8 cm, BL Or 3299, f. 259b. (Photo: Courtesy of the British Library)

Miftāḥ raises the important question of the manuscript's intended audience.

In addition to the toys featured in the *Miftāḥ*, it is fruitful to pursue a close reading of one example of early didacticism depicted in the work and its resonances throughout the *Miftāḥ*. The primary entry of concern is that of the new student, or *naw āmūz*. Shadiyabadi provides the following definition: "The New Student: with two Persian letter *vāvs*; a youth (*kūdakī*) whose education begins at school; and a leopard or hunting bird that is fed with *bāvūlī* to learn hunting" (*naw āmūz: bi-vāv-i duvvum-i bārsī; kūdakī kih ānrā āghāz dar dabistān andākhtah bāshand; va yūz va shikarah kih ānrā ibtidā bāvūlī dihand*).⁸⁶ Illustrations appear above and below this text (fig. 21). Above, a herd of six young goats follows a leader through a thicket; and below, a class is underway. A teacher instructs from a gold pulpit and gazes towards his six students seated on the ground.⁸⁷ The new students read from their tablets and books. Within the painting, the students' text is none other than the definition in the manuscript itself, which makes the illustration a *mise en abyme* and characterizes the classroom as a suitable space for reading the *Miftāḥ*. The two students, one female and the other male, in front of the teacher may depict royal youth, as the male wears a small crown on his head.

Apart from this definition of the new student, one finds many other entries in the *Miftāḥ* that establish the parallelism between animal and human upbringing and development. From the animal kingdom, the reader encounters a range of dictionary entries defining infant animals that resonate with the young goats following their leader. The *Miftāḥ* provides two illustrated definitions of baby chicks, a tame ram used for children, and a foal.⁸⁸ From the human world, the *Miftāḥ* illustrates several images pertaining specifically to children. It shows the gift given to a child after finishing the Qur'an.⁸⁹ We might think of this as the reward children receive after they graduate from primary school. The *Miftāḥ* also devotes illustrated definitions to *zād*, "son," and the mixed language of a child, or *kazhmazh* (fig. 22).⁹⁰ In the illustration of *kazhmazh*, an onomatopoetic word, a woman, probably the mother, speaks to her son, who is comparatively much smaller.

In concert with the full-page definition of the new student, the preponderance of definitions that empha-

size upbringing and are deemed worthy of an accompanying illustration provides some evidence as to how the *Miftāḥ* was intended to teach. On its own, the illustrated definition of the new student offers a visual analogy that clarifies the meaning of the word *naw āmūz*. But when taken together with all the other images of animal and human education and development, the illustration of the *naw āmūz* appears to be no accident. Rather, it directly informs us that the *Miftāḥ* was intended as a tool for teachers to lead and instruct students in a sultanate society.

DIDACTIC IMAGES OF WONDERS AND CRAFTS

Scattered clues allow us to speculate that Shadiyabadi and the makers of the *Miftāḥ* had Islamicate cosmographies and wonder in mind when compiling this work. The clearest evidence for Shadiyabadi's interest in cosmography is his heavy reliance on the cosmographically ordered *Farhang-i Qavvās*. Moreover, the only other surviving manuscript linked with Shadiyabadi's authorship is the *'Ajā'ib al-Ṣanā'ī*, a Persian adaptation of al-Jazari's twelfth-century book of wondrous automata. Shadiyabadi thus may have had a penchant for wonders-oriented literature.⁹¹ The layout and organization of the *Miftāḥ*'s manuscript also show significant overlaps with the cosmographical genre writ large. Both genres, the cosmography and *farhang*, are catalogue-like books used for consultation. Like the Islamicate cosmography, the *Miftāḥ* appears to be concerned with widespread tropes about the universe rather than discursive science.

While we can never truly know the intentions of Shadiyabadi or the *Miftāḥ*'s artists, it is generative to analyze the manuscript through the lens of cosmographies and wonder. Here, I argue that the *Miftāḥ* conveys the aesthetics of *'ajab*. Instead of serving as a cosmography, it teaches its readers how to grapple with the unstable reality of wonder through the enjoyment of acquiring new knowledge.⁹² I pursue this analysis by focusing primarily on the *Miftāḥ*'s illustrations of crafts. I also take into account the transcultural context of sultanate India in my interpretation of their *'ajab*. Before moving on to crafts, however, a few words on the cosmography are in order.

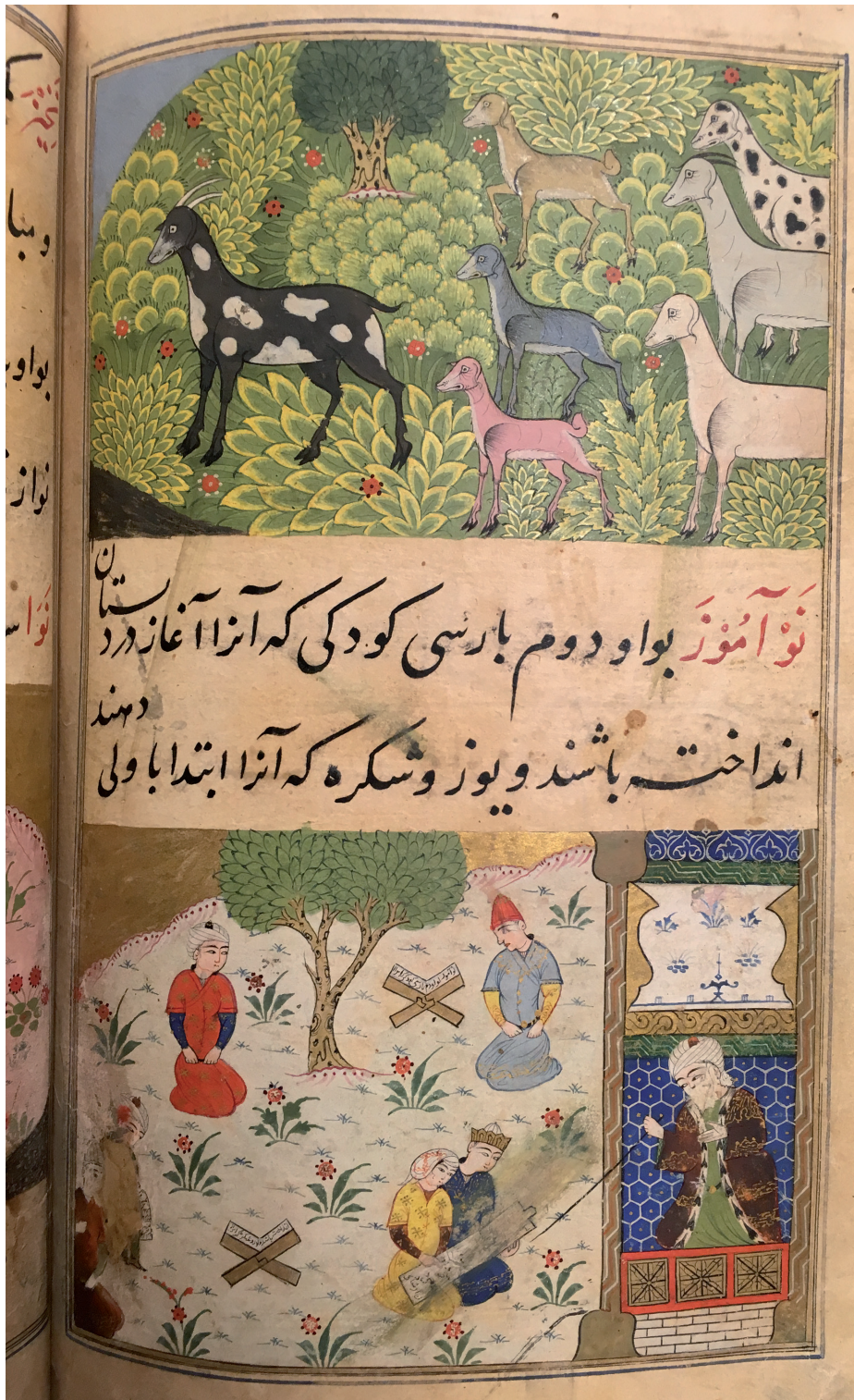


Fig. 21. New learner (*naw āmūz*). *Miṣṭāḥ al-Fuṣalā* of Shadiyabadi, Mandu, ca. 1490. Above: 7.6 × 12; below: 8.2 × 12 cm, British Library Or 3299, f. 278b. (Photo: Courtesy of the British Library)



Fig. 22. *Kazhmazh, Miftāḥ al-Fuṣalā'* of Shadiyabadi, Mandu, ca. 1490. Painted surface: 5.9 × 7.9 cm, BL Or 3299, f. 228b. (Photo: Courtesy of the British Library)

Cosmographies, such as Ahmad-i Tusi's twelfth-century Persian text and Zakariyya' al-Qazwini's (d. 1283) thirteenth-century work, begin with sections on cosmic creations and end with worldly phenomena.⁹³ The *Miftāḥ* does not follow a thematic order in this way, although it draws heavily on an earlier dictionary that does. In her study of medieval wonders-of-creation compendia, Persis Berlekamp has demonstrated how the images in these manuscripts codified tropes and fulfilled iconic, narrative, penumbral, and talismanic purposes.⁹⁴ These categories are fairly self-evident. Iconic images call for the viewer's focused contemplation on wonders that may have been familiar tropes (figs. 2, 17). Narrative images tell stories (fig. 7). Penumbral visions refer to matters that cannot be fully envisioned or apprehended. Talismanic pictures are protective. The majority of the *Miftāḥ*'s images are iconic or narrative. I have yet to dis-

cover penumbral or talismanic images within the manuscript. Yet one feature that unifies all of these categories is their didacticism. The *Miftāḥ*'s most Qazvini-esque images are of natural phenomena such as standalone animals and trees (figs. 2, 17). The manuscript, however, peculiarly elides images of the celestial cosmos. Instead, these wonders are relegated to textual definitions alone.

Some of the *Miftāḥ*'s illustrations of crafts also demonstrate that wonder was central to its function. The illustrated definition of a vessel in the form an animal, the *takūk*, is a primary example.⁹⁵ Shadiyabadi defines *takūk* as "a vessel in the form of an animal" (*ṣurāḥī bar ṣūrat-i jānvar*).⁹⁶ A word with etymological roots in old Persian (Pahlavi), the *takūk* first appeared as an entry in a fourteenth-century Persian lexicon from India as well in as a few earlier dictionaries.⁹⁷ It is useful to return to the first known Persian dictionary composed in India around 1300, the *Farhang-i Qavvās*, where one also finds the word *takūk* in a section dedicated to pots, pans, and other vessels (*āvandhā*).⁹⁸ In fact, Shadiyabadi quotes his definition of *takūk* from the *Farhang-i Qavvās* verbatim. Unlike the *Miftāḥ*, the *Farhang-i Qavvās* cites a verse from the Persian poet Rudaki (d. 941) to illustrate the usage of the word *takūk*. It reads, "the wine-drinker sips from the royal *takūk*; drink happily in the new spring" (*may kashān andar takūk-i shāhvār | khūr bishādī rūzgār-i navbahār*). Rudaki's verse implies the *takūk*'s function as a drinking vessel. The later Tehran manuscript of the *Miftāḥ* clarifies: "A vessel of pottery or gold or an animal in porcelain, also made in the form of an ox or fish" (*ṣurāḥī-yi sufālīn va yā zarrīn va yā bahīmīn bar chīnī va bi-ṣūrat-i gāv va māhī sāzand*).⁹⁹ Modern dictionaries also corroborate that the word *takūk* denotes zoomorphic vessel.¹⁰⁰

The painting of the *takūks* in the *Miftāḥ* emphasizes that they are objects to behold and contemplate. It shows two goose-shaped objects seated in a green pasture (fig. 23).¹⁰¹ The geese are painted dark brown, but their stylized wings and beaks are gold. Although the swelling bellies imply their hollowness as vessels, the river in the bottom left corner of the painting conjures an outdoor rather than indoor setting. The *takūks*' feet, also gold, are not the typical webbed feet of geese, but rather form a cylindrical base, which are common supports for freestanding objects.¹⁰² Next to the two vessels



Fig. 23. Zoomorphic vessel (*takūk*). *Miftāḥ al-Fuḍalā'* of Shadiyabadi, Mandu, ca. 1490. Painted surface: 7.8 × 7.9 cm, British Library Or 3299, f. 8ob. (Photo: Courtesy of the British Library)

is a human figure with one arm on his chest and the other hand pointing to the geese in a gesture that conveys engagement or fascination with the objects. Adjacent to *takūk* in the *Miftāḥ* are definitions of birds, although none of these textual entries matches the depiction of birds in the *takūk* painting. The adjacent bird-related lemmas include the pheasant (*turtak*), wagtail (Pers. *tarandak*, Hind. *mammolā*), and baby pheasant (*tūrang*).¹⁰³ Also unlike other, more realistic paintings of birds in the *Miftāḥ* (fig. 24),¹⁰⁴ these illustrated geese command the gaze of a human who beholds the *takūks'* wonder.

The interpretation of these goose-shaped vessels as wondrous is the product of a transcultural materiality. On one hand, the work of A. S. Melikian-Chirvani and

Melanie Gibson has accounted for the survival of several Persian *takūks*.¹⁰⁵ In fact, a blue and white glazed ceramic, bearing a possible attribution to Nishapur, is dated 897 (1491–92) (fig. 25).¹⁰⁶ This date is within a decade of when the *Miftāḥ* was likely produced. Similar to the painting of *takūks* in the *Miftāḥ*, this object has a footed base and a stylized wing. On the other hand, in the context of Mandu, the *Miftāḥ's* painted *takūk* also evokes the *haṃsa* (goose, gander), the Hindu lord Brahma's vehicle (*vāhana*), which served as a common emblem for the Hoysala (1026–1343) and Vijayanagara empires (1343–1565) of the Deccan (fig. 26).¹⁰⁷

Although countless examples survive in stone sculpture, the representation of the *haṃsa* in metalwork from the Deccan sultanates establishes connections



Fig. 24. Bustard, a bird that changes color (*shavālak*). *Miftāh al-Fuzalā* of Shadiyabadi, Mandu, ca. 1490. Painted surface: 4.7 × 6.8 cm, British Library Or 3299, f. 189a. (Photo: Courtesy of the British Library)



Fig. 25. Zoomorphic vessel (*takūk*), Nishapur?, dated 1491–92, glazed ceramic. Height: 33.6 cm, Musée de Céramique, Sèvres, MNC 22687.



Fig. 26. *Hamṣa* depicted on *mandapa* column, Acyuta Deva Raya Temple, Vijayanagara (ca. 1529–42), granite. (Photo: Vivek Gupta, January 2015)

between the *Miftāh*'s painting and a concurrent material phenomenon (fig. 27).¹⁰⁸ From monumental leoglyph-shaped cannons to small steel doorknockers, Deccan metal objects similar to this exemplary silvered-brass *hamṣa* aquamanile (ca. fifteenth–sixteenth century) now in the collection of the Museum of Fine Arts, Boston, blend Indic and Islamicate forms in a distinctively Islamicate method of metalworking.¹⁰⁹ Although Shadiyabadi's chosen word, *takūk*, stems from old Persian and lacks an Indic etymology, it is nevertheless possible that *takūk* forms adopted local animal typologies depending on context. Like the *Miftāh*'s painting of *takūk*, the Boston ewer has an elongated neck with a stylized wing (fig. 27). The painting also appears to depict a metal object, like the Boston ewer and quite unlike the Nishapur



Fig. 27. Ewer in the form of a *hamṣa*, Deccan, sixteenth century, bronze with layer brass repairs, copper arsenic paste. Inscribed: “Sulṭān Bakcham(?) Salmān, glorious in his splendor.” Height: 38.5 cm, Museum of Fine Arts, Boston, 37.470.



Fig. 28. Boot-stocking (*chapdār*). *Miftāḥ al-Fuṣalā* of Shadiyabadi, Mandu, ca. 1490. Painted surface: 8.2 × 6.1 cm, British Library Or 3299, f. 95b. (Photo: Courtesy of the British Library)

vessel. However, the Boston ewer features additional details: a crocodile-headed spout at the front and a flared handle. Three bands divide the ewer’s neck, accentuating its length. These decorative features may have been added at a later point, given that there are layers of brass repairs on the object. Its two separate holes, one for pouring in, and the other for decanting water, show that it was meant to hold liquid.¹¹⁰

In spite of their visual differences from the illustrated *takūk*, the existence of objects such as the Nishapur and Boston ewers supports the idea that the *Miftāḥ* and the earlier *Farhang-i Qavvās* were depicting a real, observed world, and not one that was purely fictional. The illustrated definition of the *takūk* merges the animal qualities of a manmade craft with its status as a marvelous object. The existence of both the Nishapuri and Boston

takūks suggests that this illustrated definition may have addressed audiences from multiple cultural orientations. The reader of the *Miftāḥ* beholds the *takūks*’ wonder just as the figure in the illustration does (fig. 23). In this illustration, the *takūks* are liminal objects. Although they are set within a natural environment, they have one clear trait, their cylindrical base, that uncovers their status as a manmade craft. The liminality of the *takūk*—its ability to evoke the natural and be manmade—would have added to its wonder.¹¹¹ Whether channeling water as an ewer, exhaling smoke as an incense burner, or firing a cannon ball as artillery, animal vessels like the *takūk* could come to life, purify water, and ward off evil.

A web of interrelated texts, images, and definitions within the *Miftāḥ* also led readers to comprehend

particular qualities of crafts as wondrous. Let us begin with the main illustrated definition in question, the boot stocking or *chapidār* (fig. 28).¹¹² This is one example of an illustration that is illuminated by other images in the *Miftāh*. For the *chapidār* Shadiyabadi provides a rather terse definition: “feet-coverings that are also called *jurmūq*.”¹¹³ Both *chapidār* and *jurmūq* are absent from the *Farhang-i Qavvās*, despite the fact that they would have naturally fit the sub-chapter on clothing.¹¹⁴ The illustration shows a bearded male in a luxurious blue robe with gold-thread embroidery whose his right hand is pointing directly at the stockings. Under a golden sky, he sits on the ground between a tree and a river as if encountering the stockings in a natural environment. This depiction of encountering a craft in nature aligns with the illustration of the *takūk*. The two stockings that illustrate *chapidār* are exquisite. With a point at their tip and a tooth at their rear, the curved outlines of these shoes are calligraphic. Within the stocking, there are swirls of gold illumination with highlights of green, yellow, and dark pink, recalling bookbinding decorations. None of the fanciness of these *chapidār* is specified in the definition. Here, the artist took the liberty of depicting the fabulously designed surface of clothing that inspires wonder. The way in which the *Miftāh* defines other kinds of shoes informs our understanding of the *chapidār* as well (fig. 29). The golden shoes, or *zarīnah kafsh*, are defined as a kind of royal shoe made of gold and brocade, and with the exception of the *pādshāh* (king), no one else wears them.¹¹⁵ The painting illustrates a ruler seated on a golden throne extending his foot as a servant hands him a pair of pointed golden shoes. The dense gold of the ruler’s throne lends the whole scene a sumptuous tone. Unlike the *chapidār*, these foot-coverings are simply rendered in gold with darkened points.¹¹⁶ In contrast to the *chapidār*, which are observed within nature, the golden shoes are featured within the pageantry of a court. Other shoe-related words are not depicted in the *Miftāh* at all. The *khārkafsh*, or boot covering, is defined as “a foot-covering that the Arabs call a *jurmūq*.”¹¹⁷ The lack of illustration for this word may in turn highlight the outstanding visual qualities of the *chapidār*.

The path to interpreting these stockings as wonder-inducing is not straightforward. It is not merely one, but several other images in the *Miftāh* that guide the reader towards construing the illustrated *chapidār* as represent-

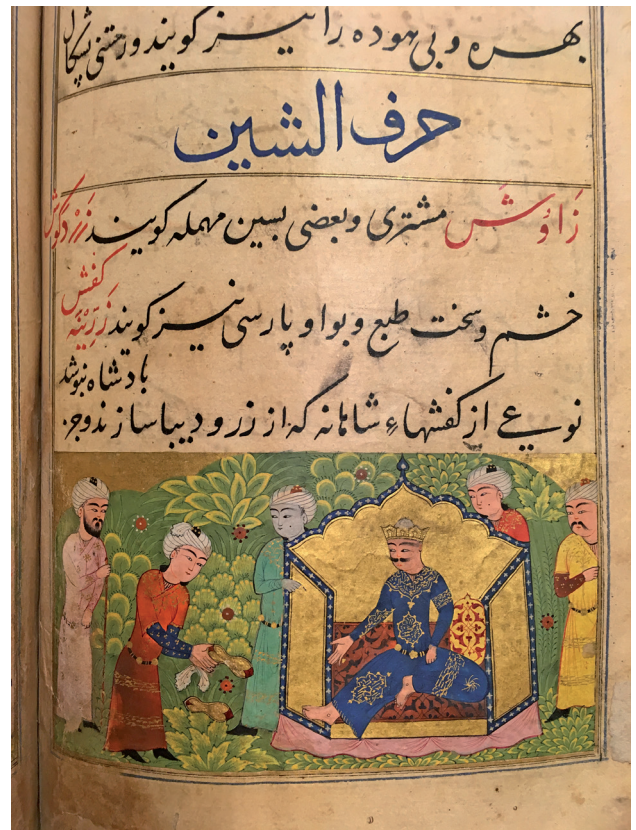


Fig. 29. Golden shoes (*zarīnah kafsh*). *Miftāh al-Fuzalā* of Shadiyabadi, Mandu, ca. 1490. Painted surface: 6.2 × 12 cm, British Library Or 3299, f. 146b. (Photo: Courtesy of the British Library)

ing more than high-quality design. A close reading of these other definitions gives us greater insight into this single entry. In what follows, I propose that one way of interpreting the *chapidār* is through their *Abū qalamūn* quality—that is, their multicolor, unstable surface and ability to change color. By reading several medieval sources, including Nasir-i Khusraw’s eleventh-century *Safarnāmah* (Book of Travels) and Ibn Manzur’s thirteenth-century *Lisān al-‘Arab* (The Tongue of Arabs), Matthew Saba arrives at a definition of *būqalamūn* or *Abū qalamūn* that encompasses two distinct meanings. The first is that of a multi-colored textile or silk cloth, the colors of which transform as they move; and the second is a bird that can change color.¹¹⁸ He also demonstrates the importance of Nasir-i Khusraw’s definition of *būqalamūn* as a type of pottery with an iridescent

sheen.¹¹⁹ This wonder-inducing quality of visual instability is perceivable in the illustration of *chapidār*.

The readers of the *Miftāḥ* likely had knowledge of the two meanings of *Abū qalamūn*. For instance, the Persian poet Sa'di (d. 1291), whose works were widely read in India, used *būqalamūn* to mean iridescent.¹²⁰ Qavvas includes this word in his dictionary and states that "it is a Rumi (Anatolian) cloak of [seven] colors" (*jāmah īst rūmī, [haft] rang*).¹²¹ The first Mughal Emperor Babur (r. 1526–30) describes his encounter with a colorful bird known as *būqalamūn*.¹²² Muhammad al-Mufti al-Balkhi's *Majma' al-gharā'ib* (Collection of Oddities), commissioned in 1555 and presented to Pir Muhammad Khan of Balkh, which was copied and illustrated multiple times in seventeenth-century India, opens with a quatrain that describes the world as *būqalamūn*, or ever-changing.¹²³ By the eighteenth century, the South Asian philologist Azad Bilgrami even innovated a poetic device that he classified as *Abū qalamūn*. Writing in Arabic, he defines this device as follows, "It is language that is like a woolen cloak saturated with colors. Such vibrancy is called 'Abū qalamūn' and it is marked by a shared word between two or more languages."¹²⁴ Azad indicates that Amir Khusraw (d. 1325) specialized in a version of *Abū qalamūn* in which "the speaker uses Arabic, but the essence (*qalb*) of his speech is Persian, or the speaker uses Persian, but the essence of his speech is Arabic."¹²⁵ The fact that *Abū qalamūn* was utilized to denote a shape-shifting multilingual punning device indicates a strong association between *būqalamūn* and the qualities of polyvalence and instability.

With regard to the ornithological meaning of *būqalamūn*, the dictionary illustrates the *shavālak*, or bustard, as a multicolored bird (fig. 24).¹²⁶ Shadiyabadi defines the *shavālak* as "a bird, that is red, and it is said that it is a bird that always changes color. The Arabs call it *būburāqsh*" (*parandah īst, surkh, va gūyand murghī ast kih har zamān rang bigardānad va 'arab ānrā būburāqsh gūyand*).¹²⁷ Modern dictionaries state that *būburāqsh* is synonymous with *būqalamūn*.¹²⁸ The illustration shows the multicolored bird alone in a thicket; its wings are red and gold, its long plume is blue, and its head is pink. Shadiyabadi's definition of *shavālak* thus would make the reader aware of this bird's fabulous qualities.¹²⁹

With regard to the textile-related definition of *būqalamūn*, a number of illustrations in the *Miftāḥ* pre-

pare a student to be enchanted by the surface of the *chapidār*. The *Miftāḥ* features at least seven illustrations related to the process of producing cotton and silk textiles. These include the wooden instrument used for separating cotton from its pod, the bow used by a cotton dresser, a cage spool, the reed used by weavers (syphon), the foot treadle (fig. 11), and the dyer.¹³⁰ Specific plants used for textiles are illustrated as well.¹³¹ The audience of the *Miftāḥ* would thus be equipped with the tools needed to fathom the distinct stages of textile production, and to appreciate when textiles were made as *būqalamūn*. It is also worth bearing in mind that fifteenth-century Malwa was the site of much cotton harvesting and weaving, which suggests a practical application for such knowledge.¹³²

The world of fifteenth- and sixteenth-century Indian textiles was a markedly transcultural one, and none of the cotton farmers and weavers were high-class Muslims. The *Miftāḥ* nevertheless depicts articles of clothing commonly worn by figures beyond the court. For example, Shadiyabadi defines the Turkic word *chūkhā* as a robe worn by yogis (fig. 30).¹³³ The illustration shows a stumpy barefooted figure whose face and headgear have been smudged. The yogi wears a long pale blue robe with a red collar. His right sleeve is lengthened, a common sartorial signifier of a Sufi. Thus, the reader becomes aware of the valences of Indo-Islamicate cultures of dress. While obtaining expertise in textiles and dress, the reader would also become immersed in their transculturation. One can imagine that the readers of the *Miftāḥ* may have needed such language to communicate their sartorial needs or desires to artisans, or to incorporate these experiences into their poetry.

The visual knowledge of these ornithological and textile definitions read in tandem with the circulating literary allusions to *būqalamūn* would have facilitated a sophisticated and informed interpretation of the illustrated definition of *chapidār*. With all of these associations, a well-taught student would be more sensitive to the wonderfully designed surface of this apparel.

The illustrations of the *takūk* and *chapidār* as crafts set in a natural landscape beheld by a viewer emphasizes wonder as a key theme within the *Miftāḥ*'s illustrations. One function of the *Miftāḥ* was clearly to inspire a state of wonder (*ta'jjub*) and contemplation of new words. These illustrations of crafts, in addition to the more



Fig. 30. Robe worn by yogis (*chūkhā*). *Miftāh al-Fuṣṭalā* of Shadiyabadi, Mandu, ca. 1490. Painted surface: 6.1 × 6.1 cm, British Library Or 3299, f. 93b. (Photo: Courtesy of the British Library)

obvious wonders-of-creation illustrations and the other evidence outlined above, suggest that Shadiyabadi and the makers of the *Miftāh* had cosmographies and wonder in mind when conceiving the *Miftāh*.

A FINAL EXAMPLE: WONDER FOR A YOUTH

I close this article with one final illustrated definition that conflates a youth (*bachah*, *kūdak*) and wonder. Shadiyabadi defines the *dīv-kulūch* as “a human child who is changed (possessed) by the demon” (*bachah-i mardum kih dīv badal kardah bāshad*).¹³⁴ Steingass defines *dīv-kulūch* as “an epileptic boy.”¹³⁵ In the *Miftāh*’s illustration, a young boy extends his hand as if speaking and sits across a river from a larger figure, a bare-chested and horned demon. The painting occupies the entire

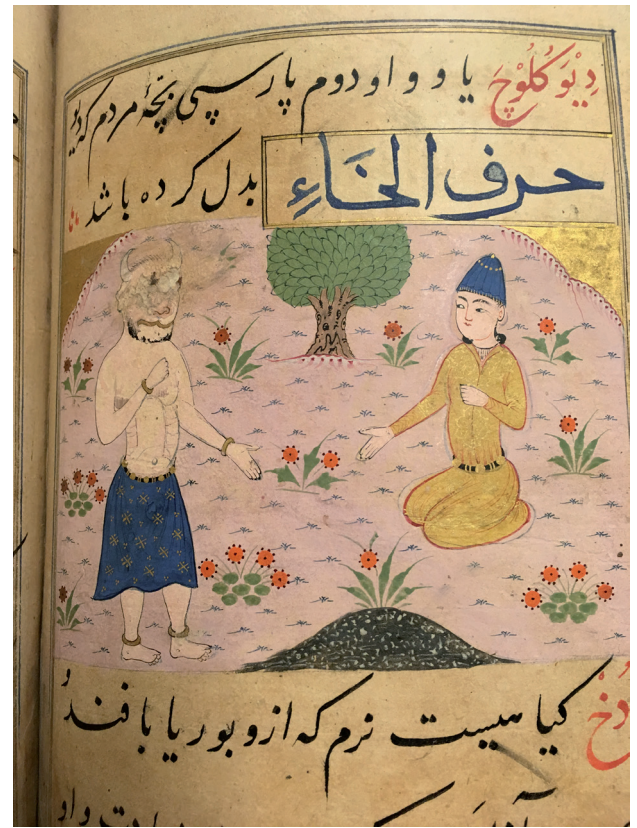


Fig. 31. Child possessed by a demon (*dīv-kulūch*). *Miftāh al-Fuṣṭalā* of Shadiyabadi, Mandu, ca. 1490. Painted surface: 8.2 × 12 cm, British Library Or 3299, f. 116b. (Photo: Courtesy of the British Library)

width of the page, indicating that the calligrapher or painter regarded the image as significant enough to be allocated this amount of space (fig. 31). A similar scene occurs in the definition for *kakh-jhandah* (fig. 32), a synonym of *dīv*.¹³⁶ Here, the young boy’s hand points away from the other figure—a large, dark, horned demon who appears to be speaking. Again, the painting fills the entire width of the page, and the meta-didactic image of the bookstand (*kīrakh*) appears in the illustration below. Here, the dark *dīv* extends his left arm as if teaching: the student receives knowledge from this otherworldly creature.

These two illustrations suggest that *dīvs*, in spite of their supposed fearfulness, may have served as companions for children. The similarity of the boy’s clothing in both illustrations—a mustard-colored robe and blue hat—may indicate that he is a stock figure of a student.



Fig. 32. Top: demon (*kakh-jhandah*); bottom: bookstand (*kirakh*). *Miftāḥ al-Fuṣalā* of Shadiyabadi, Mandu, ca. 1490. Top: 7.3 × 12; bottom: 6.1 × 7 cm, British Library Or 3299, f. 223b. (Photo: Courtesy of the British Library)

Whereas the definition of *dīv-kulūch* concerns children specifically and thus a child is naturally expected to appear in the illustration, in the case of *kakh-jhandah* the textual definition does not require the depiction of the child.¹³⁷ Since monsters such as *dīvs* were stock characters in Firdawsi's *Shāhnāmāh*, their inclusion here was likely intended to aid a new student's reading of this text. To my knowledge, however, the *dīv-kulūch* and the *kakh-jhandah* are not figures that appear in the *Shāhnāmāh*. As an otherworldly beast, the *dīv-kulūch* would most likely strike fear into the heart of a child. In fact, the *dīv-kulūch*'s text suggests that the youth is crazed, wonderstruck, and perhaps even driven into an epileptic seizure by the *dīv*. However, the illustration does not depict this. It shows a seemingly friendly interaction between the *dīv* and boy. The *dīv* in this case may even serve as a companion for the youth. These two

nearly identical images of *dīvs* and children would thus be points of entry for the viewer, perhaps a youth, or someone reading to a child, into the world of wonder.

CONCLUSION

Through a study of British Library Or 3299, we have seen that the *Miftāḥ* employs wonder to educate new students. Images, and not only texts, transmitted knowledge. The form and function of the *Miftāḥ* also lead us to reflect on what it meant to shape this entirely new genre of manuscript in sultanate India. We may describe a number of books as a *vade mecum* (Latin: "go with me"), but they adhere to the category of handbook or manual in different ways. Cosmographies can capture a tropology for a given book culture, not necessarily in terms of text, but frequently in painting. Albums (*muraqqa's*)—collections of various paintings, calligraphies, etc. that became popular in the fifteenth century—may represent a particular artistic worldview and can be taken as a guide to comprehending the concerns of a cultural habitus.¹³⁸ Anthologies, by their nature, also aggregate and canonize materials for a given milieu. They can thus be taken as a guide to gaining a clearer understanding of the main concerns of an artistic or intellectual context. It is for this reason that David Roxburgh once called the anthologies of Iskandar Sultan (d. 1415) prime examples of the *vade mecum*.¹³⁹

As its title suggests, the *Miftāḥ* is indeed a key for the learned. In terms of styles and provenance of its contents, it does not contain the same diversity as albums or anthologies, which can provide a clearer view of how distinct artistic practices may have been valued at a particular historical moment. But this article demonstrates how the *Miftāḥ* guides us through the little-understood dynamism of the sultanate visual world. Like the cosmography, the *Miftāḥ* codifies tropes. Like the album or anthology, there appears to have been a considerable amount of collecting and curating agency involved in the creation of the *Miftāḥ*. Whereas in the album this agency belonged to a book artisan selecting various paintings or calligraphies, or to an intellectual choosing verses from both the past and present to anthologize, in the *Miftāḥ* the agency may be assigned to the artists or intellectuals at the moment of conception and making.

This individual had to choose which entries required paintings and which did not, and how the idea of a particular word could best be captured and codified in a single image as a trope.

In light of its implications for medieval and early modern material culture, the *Miftāh* must now join the shelves of other select texts that historians of Islamic and South Asian art keep within close reach. The manuscript's illustrated and non-illustrated definitions shed light on dozens of material artifacts, particularly from the sixteenth-century Deccan sultanates. I believe that this is no accident. Because of its central location, Mandu's material culture was a fulcrum for other contemporary and later courts. While it may have only flourished for roughly a century, it likely established certain models of material culture that crystallized later.

In the final analysis, this article calls attention to the significance of combining art historical with philological study in establishing word-image relationships and assigning names and meanings to premodern images and objects. The illustrated definitions must be understood as a close synthesis of text and image: one did not follow from the other. Images are recognizable as definitions that fulfill a clear didactic purpose. The artists of this manuscript were likely rather sophisticated or had an intellectual guide to help them plan the illustrations. Shadiyabadi might have even supervised the making of the manuscript. Shadiyabadi and the artists of the *Miftāh* innovated a manual for their times. As Skelton reminded me, the *Miftāh* contains traces of the many more now-lost sultanate manuscripts. Although fifteenth-century Mandu may seem to be a faraway imagined place, reactivating the *Miftāh* affords us the immediate pleasure of becoming new students ourselves.

University of Cambridge,
Cambridge, UK

NOTES

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the author's PhD thesis, "Wonder Reoriented: Manuscripts and Experience in Islamicate Societies of South Asia, ca. 1450–1600" (SOAS, University of London, 2020). I dedicate this article to Professor Alka Patel and all Indo-Islamicists who have followed in her impossible path.

1. Aditya Behl, *Love's Subtle Magic: An Indian Islamic Literary Tradition, 1379–1545*, ed. Wendy Doniger (New York: Oxford University Press, 2012), 60–108; Qamar Adamjee, "Strategies for Visual Narration in the Illustrated *Chandayan* Manuscripts" (PhD diss., Institute of Fine Arts, New York University, 2011).
2. Dilorom Karomat, "Turki and Hindavi in the World of Persian," in *After Timur Left: Culture and Circulation in Fifteenth-Century North India*, ed. Francesca Orsini and Samira Sheikh (Delhi: Oxford University Press, 2014), 143, 164.
3. Maria Eva Subtelny, "Alī Shīr Navā'ī," *EL3*. Consulted online March 18, 2021: <http://dx.doi.org/10.1163/1573-3912_ei3_COM_23837>
4. See the illustration of the *yūz*, which means "to search," or can refer to a small dog or leopard. The illustration shows both animals, with the dog following the leopard. BL Or 3299, f. 302b.
5. See, e.g., the illustration of the *kallah*, "pleasure place," with a *kalbah*, "canopy," shown above the painting. BL Or 3299, ff. 241b–242a.
6. BL Or 3299, turtles: ff. 56b, 156a; porcupines: ff. 86a, 160b; monkeys: ff. 73a, 245b; animal dens: ff. 198b, 235b; and yawns: ff. 65a, 268b.
7. Karomat, "Turki and Hindavi," 132, following Baevskii, *Early Persian Lexicography*; Rajeev Kinra makes this point about the *Farhang-i Qavvās* (around 1300) because its author claims as a motive the desire to aid in comprehending "the poetry of past masters, especially the *Shāhnāma*." See Kinra, "This Noble Science," 364, and Stefano Pellò, "Local Lexis? Provincializing Persian in Fifteenth-Century North India," in Orsini and Sheikh, *After Timur Left*, 175.
8. A. T. Adamova and Manijeh Bayani, *Persian Painting: The Arts of the Book and Portraiture* (London: Thames & Hudson, 2015), 175–77.
9. BL Or 3299, ff. 104b, 242a. Compare the depiction of an atrium on f. 242a to Bodleian Elliot 325, f. 124b.
10. Norah Titley, *Persian Miniature Painting and Its Influence on the Art of Turkey and India* (London: British Library, 1983), 171–72; J. P. Losty, *The Art of the Book in India* (London: The British Library, 1982), 66–67; Barbara Brend, *Perspectives on Persian Painting: Illustrations to Amīr Khusrāu's Khamsah* (London: RoutledgeCurzon, 2003), 86–87; and Éloise Brac de la Perrière, *L'art du livre dans l'Inde des sultanats* (Paris: PUPS, 2008), 281. It is also catalogued in Charles Rieu, *Supplement to the Catalogue of the Arabic Manuscripts in the British Museum* (London: Trustees of the British Museum, 1894), 116; Charles Ambrose Storey, *Persian Literature: A Bio-bibliographical Survey* (London: Royal Asiatic Society, 1927), 13; and Muhammad Dabir Siyaqi, *Farhanghā-yi Fārsī va Farhang-gūnah-hā* (Tehran: Isparak, 1989), 66.
11. Norah Titley, "An Illustrated Persian Glossary of the Sixteenth Century," *The British Museum Quarterly* 29, no. 1/2

- (Winter 1964–65): 15–19. A. Jan Qaisar and Som Prakash Verma, “The *Miftah-ul-Fuzala*: A Study of an Illustrated Persian Lexicon,” in *Art and Culture Painting and Perspective*, vol. 2, ed. Ahsan Jan Qaisar and Som Prakash Verma (Abhinav Publications: New Delhi, 2002), 17–32. Earlier notices of the book include Sidney Churchill, “A Modern Contributor to Persian Literature: Rizā Kulī Khān and His Works,” *The Journal of the Royal Asiatic Society of Great Britain and Ireland* 18, no. 2 (1886): 196–206, and Carl Salemann, “Beilage V. Chronologisches verzeichnis der Farhange,” *Mélanges Asiatiques* 9 (1883): 517.
12. Barbara Brend, discussion with author, November 2017.
 13. Karomat, “Turki and Hindavi in the World of Persian.” Solomon I. Baevskii, *Early Persian Lexicography*, trans. N. Killian (Global Oriental: Kent, 2007) includes a short entry on the *Miftāh*, 109–10.
 14. BL Or 3299, f. 4b.
 15. Titley, *Persian Miniature Painting*, 171–72; and Losty, *Art of the Book in India*, 66–67.
 16. Moya Carey, *Persian Art: Collecting the Arts of Iran in the 19th Century* (London: V&A, 2018), v–vi. The *Miftāh* also features in a footnote of Churchill’s 1886 article on the contents of Riza Quli Khan’s library, which is the first mention of the work in an English publication and demonstrates that Churchill himself examined the manuscript. Or 3299 must have thus entered the museum before Churchill was formally stationed in Iran, but this does not mean the manuscript was not purchased in Iran. A mostly illegible note on the manuscript’s final folio (306b) in Persian with the date 1269 (1852–53) scribbled five times may have been added during a significant moment in the manuscript’s itinerary, such as when it left Iran.
 17. Vivek Gupta, “Wonder Reoriented: Manuscripts and Experience in Islamicate Societies of South Asia (ca. 1450–1600)” (PhD thesis, SOAS University of London, 2020), offers a full study of this manuscript.
 18. Phillip Wagoner and John Henry Rice, “From Delhi to the Deccan: Newly Discovered Tughluq Monuments at Warangal-Sultānpūr and the Beginnings of Indo-Islamic Architecture in Southern India,” *Artibus Asiae* 31 (2001): 83. The *Hindolā Maḥal* also caught the attention of K.A.C. Creswell; see “The Vaulting System of the Hindola System at Mandū,” *Journal of the Royal Institute of British Architects* 25, no. 11 (1918): 237–45.
 19. Gülru Necipoğlu, “From International Timurid to Ottoman: A Change of Taste in Sixteenth-Century Ceramic Tiles,” *Muqarnas* 7 (1990): 136–70; Yves Porter, “Décors émaillés dans l’architecture de pierre de l’Inde centrale: les monuments islamiques de Mandu (15e-16e siècles),” *Archéologie islamique* 7 (1997): 125; and Vivek Gupta, “Interpreting the Eye (‘ain): Poetry and Painting in the Shrine of Aḥmad Shāh al-Walī al-Bahmanī (r. 1422–1436),” *Archives of Asian Art* 67, no. 2 (2017): 189–208.
 20. This is exemplified in the cosmography of Aḥmad-i Tūsī (BL Or 14949), made in early sixteenth-century India. See Gupta, “Wonder Reoriented,” for a full discussion of this manuscript.
 21. *Kalpasūtra*, 1439, Mandapadurga (National Museum of Delhi, MS 49.175); and *Kalpasūtra*, ca. 1470, Mandu (location unknown).
 22. *Būstān*, National Museum, New Delhi, MS 58.28-14. Comparing this manuscript to Fitzwilliam MS 261 might be a productive avenue forward. The Fitzwilliam manuscript is dated December 7, 1505, by its colophon, and ascribed to Kashmir. This date is only a few years after Mandu’s *Būstān* (1502–3). However, during the past several years Mandu’s *Būstān* has been inaccessible to scholars, as the National Museum has been unable to locate it. See Emma Flatt, *The Courts of the Deccan Sultanates: Living Well in the Persian Cosmopolis* (Cambridge: Cambridge University Press, 2019), 17–24, for an explanation of the term “Persian cosmopolis” in line with how I use it here.
 23. Bodleian MS Elliot 237, f. 109a; Michael Brand, “The Khalji Complex in Shadiabad Mandu (India)” (PhD diss., Harvard University, 1987), 255.
 24. Bodleian MS Elliot 237, f. 108b; Brand, “Khalji Complex,” 253.
 25. In consultation with the Persian manuscript, I quote an edited translation from Brand, “Khalji Complex,” 255.
 26. Yves Porter identifies similar kinds of decoration from late fifteenth-century Malwa, particularly on the Jahāz Maḥal and Chishtī Khān kī Maḥal in Mandu, and the Malkūm Khān kī koḥī in Nālcha. See Porter, “Décors émaillés dans l’architecture de pierre de l’Inde central.”
 27. Brand, “Khalji Complex”; Yves Porter, “Khalji architecture of Mālwa in Light of the *Ma’āṣer-e Mahmudshāhi*,” in *Confluence of Cultures: French Contributions to Indo-Persian Studies*, ed. Nalini Delvoe (New Delhi: Manohar, 1994), 23–36. It also featured a seven-story tower, the base of which can still be seen today.
 28. Identifying the specific relationship between architectural decoration and manuscripts is beyond the scope of this study, but I examine the architecture of Mandu for possible implications for its manuscripts. For instance, the *Miftāh* defines and illustrates several architectural terms, such as vaulted roof (*jaft*, with illustration), porched doorway (*khanub*, with illustration), four-post/tent (*chārtāq*), vaulted roof of the *ayvān* (*kham*), dome (*khanbah*), palace (*kākh*), church (*kanīсах*), honeycomb vault (*muqarnas*), etc. See BL Or 3299, ff. 94a; 102b; 97a; 109b; 113b; 224a; 240a; 266b.
 29. Another lexicon, the *Dānishnāmah-i Qadar Khān* (1405) of Ashraf bin Sharaf al-Muzakkar Fārūqī, was composed in Chanderi. See Rajeev Kinra, “This Noble Science: Indo-Persian Comparative Philology, ca 1000-1800,” in *South Asian Texts in History*, ed. Yigal Bronner, Whitney Cox, and Lawrence McCrea (Ann Arbor, MI: Association for Asian Studies, 2011), 368.
 30. The most thorough assessment of textual sources on Malwa remains Upendra Nath Day, *Medieval Malwa: A Political and Cultural History, 1401–1562* (New Delhi: Munshi Ram Manohar Lal, 1965). Vernacular and Sanskrit sources provide companions to the Persian and Arabic archives and the manuscripts themselves, but they extend beyond the scope of this study.
 31. This preface is entirely absent from the Tehran manuscript.

32. BL Or 3299, f. 4a.
33. Ibid.
34. Bodleian MS Fraser 63, dated 1633.
35. See BL Or 3299, f. 179b, for the illustration of the *sāqī* (bar-tender). The *sāqī* is a common trope from Persian poetry and led to the genre of the *Sāqīnāmah*. Folio 186a depicts Shabdīz, Khusraw's steed. The illustration of *sitān*, "to be hung upside down," on folio 170b visually alludes to the execution of Mazdak in the *Shāhnāmah*. There are also several non-illustrated lemmas from the *Shāhnāmah*.
36. BL Or 3299, f. 71b.
37. Ibid, f. 248b. Note that the inscription in the bottom left corner of the illustration, *kavāshīr*, is not a catchword. It is the lemma for the definition on the following page.
38. The pun famously appears in the quatrains of 'Umar Khayyam. See, for instance, Khayyam, "Rubā'ī number 7," *Ganjoor.net*, accessed January 30, 2021, <<https://ganjoor.net/khayyam/robaee/sh7/>>. See also Arthur John Arberry, *The Romance of the Rubaiyat* (London: Allen & Unwin, 1959), 203.
39. On the idea of anticipation and play, see Fatemeh Keshavarz, "Sewn Together with the Thread of the Sun: Religion and Literature as a Discipline," *Religion and Literature* 41, no. 2 (2009): 39. Keshavarz's readings of Rumi emphasize his playfulness and begin to theorize this concept in the Persian sphere. See Fatemeh Keshavarz, *Reading Mystical Lyric: The Case of Jalal al-Dīn Rumi* (Columbia, SC: University of South Carolina Press, 1998), 73. We can also detect an element of play in the question (*su'vāl*) and answer (*javāb*) that completes the distich in Persian poetry competitions. Margaret Graves has recently argued that playfulness is an important mode through which artisans negotiate the relationship between architectonic objects and architecture in her book *Arts of Allusion: Object, Ornament, and Architecture in Medieval Islam* (Oxford: Oxford University Press, 2018), 211.
40. Elizabeth Merklinger, *Sultanate Architecture of Pre-Mughal India* (New Delhi: Munshiram Manoharlal, 2005), 45, 135.
41. This lexicon is now lost. See Baevskii, *Early Persian Lexicography*, 88, and Pellò, "Local Lexis?" 171n13.
42. This is a Persian dictionary by 'Alī ibn Aḥmad Asadī Ṭūsī from Khurasan (999–1072). It contains several phrases from Darī poetry and is the first known Persian dictionary.
43. The titles *Mafātīḥ al-Fazā'il* (Keys of Virtues) and *Sulālat al-Fazā'il* (Genealogy of Virtues) are similar to the *Miftāḥ al-Fuzālā'*, suggesting Shadiyabadi's possible preferences. It is unclear if these works should be read as two separate titles or as a single title. They may represent an alternative title for the *Baḥr al-Fazā'il fī Manāfi' al-Afāzīl* (The Sea of Virtues for the Benefit of Learned) compiled by Muḥammad ibn Qavvām ibn Rustam ibn Aḥmad Balkhī in 1433, India. See Baevskii, *Early Persian Lexicography*, 105–8.
44. BL Or 3299, ff. 4a–b. Pellò, "Local Lexis?" suggests that Malwa in particular was a center for the codification of *farhangs*. In the sultanate context, there are a total of three *farhangs* made in Mandu, including the *Miftāḥ*.
45. Baevskii, *Early Persian Lexicography*, 71–77; Karomat, "Turki and Hindavi in the World of Persian," 139.
46. Baevskii, *Early Persian Lexicography*, 157.
47. Fakhr al-Dīn Mubārak Shāh 'Qavvās' Ghaznavī, *Farhang-i Qavvās*, ed. Nazir Ahmad (Tehran: BTNK, 1974), 115–78.
48. BL Or 3299, f. 266b.
49. Ḥājib-i Khayrāt Rafī' Dihlavī's patron was Shams al-Dīn Muḥammad Jainīrī of Delhi. Baevskii, *Early Persian Lexicography*, 77; Asiatic Society of Bengal MS 517; Karomat, "Turki and Hindavi in the World of Persian," 133.
50. 'Āshiq, *Farhang-i Lisān al-Shu'arā'*, ed. Nazir Ahmad (New Delhi: Rāyzanī-yi Farhangī-yi Jumhūrī-yi Islāmī-yi Īrān, 1995).
51. Karomat, "Turki and Hindavi in the World of Persian," 133–34; Pellò, "Local Lexis?" 177.
52. Shihab Hakim, the author of the *Traditions of Mahmud Shah* (1468), is another intellectual who migrated from Jaunpur to Mandu in 1465. Shihab Hakim's *nisbah* suggests that he had originally migrated from Kirman. There was also a massive influx of Sufis, nobility, and intellectuals from Kirman to the Bahmani court of Bidar, a court that factors heavily in Shihab Hakim's historical account of Mandu.
53. Baevskii, *Early Persian Lexicography*, 99.
54. Ibid., 179.
55. See especially Pellò, "Local Lexis?" 182. Standalone Hindavi entries in the *Miftāḥ* problematize this, however. See BL Or 3299, f. 126b; Karomat, "Turki and Hindavi in the World of Persian," 161. Rajeev Kinra also makes a similar argument in "Cultures of Comparative Philology in the Early Modern Indo-Persian World," *Philological Encounters* 1 (2016): 225–87.
56. This method of organization was utilized in the *Adāt al-Fuzālā'* (Delhi, 1419), BL Or 1262. See Karomat, "Turki and Hindavi in the World of Persian," 136. According to Baevskii, these *farhangs* elide a chapter devoted to the letter 'ayn, most likely because 'ayn is a guttural consonant associated with Arabic and not Persian. See Baevskii, *Early Persian Lexicography*, 153. In the absence of any contrary evidence, I follow Baevskii's argument.
57. The *Ni'matnāmah* (BL IO Islamic 149) also uses a system of marginal tabulation. Norah Tittle, *The Ni'matnama Manuscript of the Sultans of Mandu: The Sultan's Book of Delights* (Oxford: RoutledgeCurzon, 2005).
58. In the preface Shadiyabadi states, "most of Persian letters and letters with short vowels and diacritics have not gone unexamined" (*bishtar-i ḥurūf-i pārsī va i'arāb-i muḥmal nāmar'ī guzāshṭah nashudah ast*). BL Or 3299, f. 4b.
59. Éloïse Brac de la Perrière, "The Art of the Book in India under the Sultanates," in Orsini and Sheikh, *After Timur Left*, pl. 5.1. My reading accounts for *mūhī* from the Hindi *mūñh*, which differs from *muwahī* as implied by Brac de la Perrière.
60. BL Or 3299, f. 212b.
61. Ibid., f. 73a.
62. Tittle, *The Ni'matnama Manuscript*. It would be revealing to compare this copy of the text to a manuscript with a similar

- title commissioned by Ibrāhīm ‘Adil Shāh II of Bijapur. I demonstrate several other artistic connections between the courts of Mandu and Bijapur. See Mark Zebrowski, *Decani Painting* (New Delhi: Roli Books, 1983), 76–78.
63. BL IO Islamic 149, f. 100v. The *naskh* calligraphy of the *Ni‘matnāmah* and the Cleveland *Tūṭīnāmah* are strikingly similar. The completion of the Cleveland *Tūṭīnāmah* has been dated to 1570 by John Seyller based on its overpainting. The black body text is nearly identical to the *Ni‘matnāmah* and short vowels are frequently indicated in gold. The scholarship on this manuscript has tended to consider it as a product of the early Mughal atelier, 1560–70. While it was completed in a Mughal milieu, the manuscript was likely initiated in a sultanate book workshop familiar with the *Chāndāyan* and *Caurapañcāsīkā* style of painting. See John Seyller, “Overpainting in the Cleveland *Tūṭīnāma*,” *Artibus Asiae* 52, no. 3 (1992): 283–318, at 308, for the problems of dating this manuscript.
64. Brac de la Perrière, “Bihārī et naskhī-dīwānī: remarques sur deux calligraphies de l’Inde des sultanats,” in *Écriture, calligraphie et peinture, Studia Islamica*, ed. A. L. Udovitch and H. Touati (Paris: Maisonneuve et Larose, 2003), 86–92; and Vivek Gupta, “Naskhi-divani: A Little-Recognized Sultanate Script,” *British Library, Asian & African Studies Blog* (06/24/2019) <<https://blogs.bl.uk/asian-and-african/2019/06/naskhi-divani-a-little-recognized-sultanate-script.html>>
65. The manuscript JRL Hindustani MS 1 was likely produced in Mandu around 1520–30. Throughout the manuscript, the script is typically *naskhī-dīwānī*. See, for example, f. 134b. There are cases in which the script of the sultanate *Chāndāyans* comes closer to a Bihari, but it is still a *naskhī dīwānī* script. Take, for instance, the thicker and more widely spaced text of the Varanasi *Chāndāyan*. See Anand Krishna, “An Illustrated Manuscript of the *Laur-Chanda* in the Staatsbibliothek, Berlin,” *Chhavi 2: Rai Krishnadasa Felicitation Volume* (1981): 275–89. This is also reproduced in Adamjee, “Strategies for Visual Narration,” pl. 2.26.
66. BL Or 3299, f. 4b.
67. Majlis Library IR-10-37320, f. 121a, contains the chapter heading *al-Yā’ ma’ al-Alif*, which is precisely the text one would expect on folio 296a of BL Or 3299.
68. Robert Skelton, “The *Ni‘matnama*: A Landmark in Malwa Painting,” *Marg* 12, no. 3 (1959): 48; Brend, *Perspectives on Persian Painting*, 86. For an outline of this style, see B. W. Robinson, “The Turkman School to 1503,” in *The Arts of the Book of Central Asia 14th-16th centuries*, ed. Basil Gray (Paris: UNESCO, 1979), 244–45. Recently, David Roxburgh and Simon Rettig have offered reconsiderations of this category of illustrated books. See David J. Roxburgh, “‘Many a Wish Has Turned to Dust’: Pir Budaq and the Formation of Turkmen Arts of the Book,” in *Envisioning Islamic Art and Architecture: Essays in Honor of Renata Holod*, ed. David J. Roxburgh (Leiden: Brill, 2014), 175–222; and Simon Rettig, “La production manuscrite à Chiraz sous les Aq Qoyunlu entre 1467 et 1503” (PhD diss., Université Aix-Marseille I, Université de Provence, 2011). See also Priscilla Soucek, “The New York Public Library ‘*Makhzan al-asrār*’ and Its Importance,” *Ars Orientalis* 18 (1988): 1–37.
69. Robinson, *Fifteenth-Century Persian Painting*, 31. See also Norihito Hayashi, “The Turkman Commercial Style of Painting,” *Orient* 47 (2012): 169–90, for a recent assessment of this category. John Woods, *The Aqquyunlu: Clan, Confederation, Empire*, rev. ed. (Salt Lake City, UT: University of Utah Press, 1999) is an important history of the empire.
70. Robinson, “Turkman School to 1503,” 244.
71. There is scant evidence of a possible Mandu artist named Hajji Mahmud, who may have been responsible for several illustrations and the illumination in the *Ni‘matnāmah* (fig. 16) and *Būstān* (The Orchard) (1502–3). See Richard Ettinghausen, “The *Bustan* Manuscript of Sultan Nasir Shah Khalji,” *Marg* 12, no. 3 (1959): 40–43; Stuart Cary Welch, *India, Art and Culture* (New York: Metropolitan Museum of Art, 1985), 133–35. V&A IS.14-1958 is a single-page drawing signed by this artist. Considering the style of the *Būstān* paintings, it appears Hajji Mahmud may have trained in a Timurid or Turkmen atelier before migrating to India. The *Ni‘matnāmah*, however, has Turkmen elements, suggesting that the artist was able to work in a variety of painting practices. The few published illustrations of this *Būstān* are more Timurid than the decidedly Turkmen style we observe in the *Miftāh*. It thus seems that Mandu attracted a range of artists trained in various styles of Persian painting. While the *Miftāh* is more or less uniform in the style of its paintings, it does not stand for all of Mandu’s manuscripts.
72. Bodleian Library MS Elliot 246, f. 25b, following B. W. Robinson, *A Descriptive Catalogue of Persian Paintings in the Bodleian Library* (Oxford: Clarendon Press, 1958), pl. 501 for this thicket. Although attributed to Timurid Herat, the illustrations to the *Shāhnāmah* (Chester Beatty Library Per 157) also bear some striking resemblances to BL Or 3299.
73. BL Or 3299, f. 278b (top illustration); IO Islamic 149, f. 100b.
74. The bottom illustration of BL Or 3299, f. 161b features this type of background.
75. *Ibid.*, f. 92b.
76. Bodleian MS 325, f. 328a. Robert Skelton also cites this *Shāhnāmah* in highlighting features of the commercial Turkmen style. See Skelton, “*Ni‘matnama*.”
77. Royal Asiatic Society MS Pers 178 (Persian *Wonders of Creation*, Shiraz, 1475) shares a similar golden skyline, with a background of primarily green flowers against a pale blue ground. See B. W. Robinson, “R. A. S. MS 178: An Unrecorded Persian Painter,” *Journal of the Royal Asiatic Society* 2 (1970): 15–23. In addition, a “Timurid” *Wonders of Creation*, Museum of Islamic Art, Doha, 2014.455, also shares several stylistic features with BL Or 3299. See Gupta, “Wonder Reoriented,” for further discussion.
78. Brac de la Perrière, “Art of the Book in India,” 310. The Injuīd archaisms in sultanate manuscripts extended far beyond the fifteenth century as well. See Gupta, “Wonder Reoriented,” 134, for a discussion of the ‘Adil Shahi translation of Qazvini’s cosmography. The many copies of this manuscript from the mid-sixteenth century onwards appear to be copied from an Injuīd cycle of illustrations.

79. Ali Anooshahr, "Shirazi Scholars and the Political Culture of the Sixteenth-Century Indo-Persian World," *Indian Economic Social History Review* 51 (2014): 336. See Keelan Overton, "Book Culture, Royal Libraries, and Persianate Painting in Bijapur, circa 1580–1630," *Muqarnas* 33 (2016): 91–154, for an overview of Mahmud Gavan's library; and Vivek Gupta, "Remapping the World in a Fifteenth-Century Cosmography: Genres and Networks Between Deccan India and Iran," *Iran: Journal of the British Institute of Persian Studies* 59, no. 2 (2021), for the discovery of a fifteenth-century cosmography that likely passed through Gavan's library. See Maya Petrovich, "Merchants, Young Heroes and Caliphs: Revisiting Maḥmūd Gāwān," in *Turkish History and Culture in India: Identity, Art and Transregional Connections*, ed. A. C. S. Peacock and Richard Piran McClary (Leiden: Brill, 2020), 104–28; Simon Rettig, "A 'Timurid-Like Response' to the Qur'an of Gwalior?: Manuscript W563 at the Walters Art Museum, Baltimore," in *Le coran de Gwalior. Polysémie d'un manuscrit à peintures*, ed. Éloïse Brac de la Perrière and Monique Burési (Paris: PUPS, 2016), 203, and Gülrü Necipoğlu, "The Spatial Organization of Knowledge in the Ottoman Palace Library: An Encyclopedic Collection and Its Inventory," in *Treasures of Knowledge: An Inventory of the Ottoman Palace Library (1502/3–1503/4)*, ed. Gülrü Necipoğlu, Cemal Kafadar, and Cornell H. Fleisher (Leiden: Brill, 2019), 43, for flows between the early Ottoman world and Gavan's library. Less is known about the libraries of Gujarat.
80. The chapters in Keelan Overton, ed., *Iran and the Deccan: Persianate Art, Culture, and Talent in Circulation, c. 1400–1700* (Bloomington, IN: Indiana University Press, 2020) have advanced scholarship on these networks.
81. Assadullah Souren Melikian-Chirvani was a pioneer of this subject. See "L'école de Shiraz et les origines de la miniature moghole," in *Paintings from Islamic Lands*, ed. Ralph Pinder-Wilson (Columbia, SC: University of South Carolina Press, 1969), 124–41.
82. It is important to note that early scholars of Persian painting identified a childlike quality in the style of such images, particularly from the fifteenth century. David J. Roxburgh analyzes the issues with these earlier comments in "Micrographia: Toward a Visual Logic of Persianate Painting," *RES: Anthropology and Aesthetics* 43 (2003): 13 and footnote 7.
83. We may begin to reconstruct a social history of upbringing in the Indo-Islamic world by looking at how princes were raised and cultivated. See Munis D. Faruqi, *The Princes of the Mughal Empire, 1504–1719* (Cambridge: Cambridge University Press, 2012), 66–133.
84. BL Or 3299, ff. 51b and 259b, 55b and 212b, 217a, 220b, 291a.
85. It would be instructive to consider these definitions of dolls within a longer history. Fatimid dolls may be one group of objects to investigate in relation to this question. See Alzahraa K. Ahmed, "Refiguring Figurines: Amulets/Dolls in the Eastern Mediterranean (Sixth–Twelfth Century)," *Met Fellows Colloquium—Arts of Memory and Image Making from Asia to the Mediterranean* (Metropolitan Museum of Art, New York, April 28, 2017).
86. BL Or 3299, f. 278b. The closest comparison I have identified for the bottom illustration is from a detached folio of a *dīvān* by the poet Hafiz that shows Layla and Majnun at school. This painting is attributed to Shiraz, 1490, and is in the Sackler Gallery (S1986.289).
87. The word for teacher, or *āmūzgār*, is also an entry in the dictionary (*ibid.*, f. 13a). The herd here alludes to the illustrated definition of *ramah* on folio 139b. Two other closely related illustrations are the herd of cows and wild asses (*kavbārah*, f. 244a), and the child of a horse, or foal (*karah*, f. 244a).
88. BL Or 3299, ff. 101b, 216b, f. 103b, f. 244a. It also provides the definition of a herd of cows and wild asses on f. 244a, which fits with the theme of animals following a leader.
89. BL Or 3299, f. 286a.
90. BL Or 3299, ff. 143b, 228b.
91. See Gupta, "Wonder Reoriented," 201–57 for an analysis of this manuscript.
92. I refer to the title of Matthew Saba's "Abbasid Lusterware and the Aesthetics of 'Ajab,'" *Muqarnas* 29 (2012): 187–212, as it has influenced my approach to this subject and factors into the following paragraphs. See Travis Zadeh, "The Wiles of Creation: Philosophy, Fiction, and the 'Ajā'ib Tradition," *Middle Eastern Literatures* 13, no. 1 (2010): 29–30, for the link between wonder and pleasure; and Gupta, "Wonder Reoriented," 27–32.
93. Oya Pancaroğlu, "Signs in the Horizons: Concepts of Image and Boundary in a Medieval Persian Cosmography," *RES: Anthropology and Aesthetics* 43 (2003): 34.
94. Persis Berlekamp, *Wonder, Image, and Cosmos in Medieval Islam* (New Haven, CT: Yale University Press, 2011).
95. BL Or 3299, f. 80b. For discussions of the *takūk*, see Graves, *Arts of Allusion*, 61; Assadullah Souren Melikian-Chirvani, "Le rhyton selon les sources Persanes," *Studia Iranica* 2 (1982): 276; and Assadullah Souren Melikian-Chirvani, "Les taureaux à vin et les cornes à boire de l'Iran islamique," in *Histoire et cultes de l'Asie central préislamique*, ed. Paul Bernard and Frantz Grenet (Paris: Éditions du centre nationale de la recherche scientifique, 1991), 102–4. Melanie Gibson's "Takūk and Timthāl: A Study of Glazed Ceramic Sculpture from Iran and Syria circa 1150–1250" (PhD diss., SOAS University of London, 2010) is a definitive study of the *takūk*.
96. Mark Zebrowski defines *surahi* as a "tall elegant flask for wine or water." See Mark Zebrowski, *Gold, Silver and Bronze from Mughal India* (London: Alexandria Press in association with Laurence King, 1997), 17.
97. The word also appears in the eleventh-century *Lughat-i Furs* of Asadī Tūsī, the first known Persian lexicon.
98. Qavvās, *Farhang-i Qavvās*, 134–43.
99. Majlis Library IR-10-37320, f. 26a. The definition continues on folio 26b where we find the statement, "In other copies [*ba'zī nuskhah*] it is written as *takrak*." This implies that there may have been other copies of the *Miftāḥ* or related lexicons available to the scribe.
100. Ali Akbar Dehkhuda, *Lughatnāmah-i Dihkhudā* <<https://www.vajehyab.com/dehkhoda/تکوک>> (accessed April 2, 2018).

101. This is a case in which a recognizable depiction sheds light on the textual definition. See Gupta, "Interpreting the Eye ('*ain*)," 195–97, for my thoughts on what constitutes a recognizable depiction.
102. Zebrowski, *Gold, Silver and Bronze*, 99, fig. 101.
103. BL Or 3299, ff. 80a–b; 80b; and, 81b.
104. *Ibid.*, f. 80a.
105. Assadullah Souren Melikian-Chirvani, "Le rhyton selon les sources Persanes," *Studia Iranica* 2 (1982): 263–92; Gibson, "Takūk and Timthāl."
106. Gibson, "Takūk and Timthāl," vol. 2, 135, cat. 392. I thank Melanie Gibson for sharing this with me. See also Assadullah Souren Melikian-Chirvani, "The Wine-Birds of Iran from Pre-Achaemenid to Islamic Times," *Bulletin of the Asia Institute* 9 (1995): 81–87. Deciphered by Melikian-Chirvani, its inscriptions are Sufi in nature and contain verses of Hafiz and Nizami.
107. Katherine Kasdorf, "Forming Dōrasamudra: Temples of the Hoysala Capital in Context" (PhD diss., Columbia University, 2013), fig. 5:31.
108. Zebrowski, *Gold, Silver and Bronze*, 99, figs. 98–101. See also *ibid.*, figure 3.16 for an example of a spiral fluted decanter similar in type to plates 189–90.
109. Phillip Wagoner and Laura Weinstein, "The Deccani Sultanates and Their Interregional Connections," in *A Companion to Islamic Art and Architecture*, ed. Finbarr Barry Flood and Gülru Necipoğlu (Hoboken: Wiley Blackwell, 2017), 798–99, makes this point. A project I initiated in 2014 on the Bijapuri monumental cannon known as the Malik-i Maydān also considered this issue. See Vivek Gupta, "Art and Artillery: The Iconography of the Malik-i Maydān," Lecture, Jnanapravaha Series in Islamic Art, Mumbai, India, January 6, 2017.
110. Zebrowski, *Gold, Silver and Bronze*, 100, figs. 103–5.
111. To balance this interpretation of the *takūk*, it is worth emphasizing here that all crafts defined within the *Miftāh* cannot be considered wonders. Shadiyabadi provides many definitions with pragmatic purposes. One example is the illustration of the *kamās*, which is a bottle meant to be worn, with a covering that is sometimes made of wood, sometimes of earthenware; it can also be carried in the armpit. BL Or 3299, f. 229a.
112. BL Or 3299, f. 95b.
113. *Ibid.*, ff. 95a–b.
114. Qavvās, *Farhang-i Qavvās*, 49.
115. BL Or 3299, f. 146b.
116. Extant shoes of this type survive, but they are made out of gilt steel with overlay (*kuftagari*). See Howard Ricketts, "122. Armored Shoes," in *Sultans of Deccan India, 1500–1700*, ed. Navina Najat Haidar and Marika Sardar (New Haven, CT: Yale University Press, 2015), 230–31.
117. BL Or 3299, f. 106a. Another non-illustrated shoe is the *sandal* on f. 167a.
118. Saba, "Abbasid Lusterware and the Aesthetics of 'Ajab,'" 193–95.
119. *Ibid.*, 192–93.
120. Sa'dī of Shiraz, *Gulistān*, trans. Wheeler M. Thackston (Bethesda, MD: Ibex Publishers, 2008), 7.
121. Qavvās, *Farhang-i Qavvās*, 152.
122. Babur, Emperor of Hindustan, 1483–1530, *Bāburnāmah*, trans. Wheeler M. Thackston (Washington, DC: Freer Gallery of Art, Smithsonian Institution, 1996), 340.
123. Chester Beatty Library In 09, f. 3b (Mughal, 1650); BL Add 15241, f. 1b (Aurangabad, 1698); Salar Jung Museum Library Geo MS 12 (Hyderabad? ca. 1700?).
124. Ghulām 'Alī "Āzād" Bilgrāmī, *Subhat al-marjān fī āthār Hindūstān* (Aligarh: Jāmi'at 'Aligarh al-Islāmiyya, 1976–80), 2:239. As a noun in Persian, the word can also mean a chameleon or turkey. A full discussion of Azad's definition of *būqalamūn* is provided in Vivek Gupta, "The Voice of the Indian Cuckoo in Arabic: The Adaptive Capacity of Ghulām 'Alī 'Āzād' Bilgrāmī's Poetics in the Eighteenth Century," *Journal of South Asian Intellectual History* (forthcoming).
125. Ghulām 'Alī "Āzād" Bilgrāmī, *Subhat al-marjān fī āthār Hindūstān* (Aligarh: Jāmi'at 'Aligarh al-Islāmiyya, 1976–80), 2:239.
126. BL Or 3299, f. 189a.
127. *Ibid.* This bird also appears in Qazvini; see BL Or 4701, f. 213a.
128. Ali Akbar Dehkhuda, *Lughatnāmah-i Dihkhudā* <<https://www.vajehyab.com/dehkhoda/شواالک>> (accessed April 2, 2018).
129. It is curious that Shadiyabadi chooses not to provide a definition of *būqalamūn*, given his penchant for wonder. The textile meaning of *būqalamūn* does appear in the *Farhang-i Qavvās*, 152.
130. BL Or 3299, ff. 100a, 126b and 259b, 240a, 272a, 262a, 133b.
131. See the *sagak* (*ibid.*, f. 166b) and *dūzan* (*ibid.*, f. 125b).
132. Stewart Gordon, "Burhanpur: Entrepôt and Hinterland, 1650–1750," *The Indian Economic and Social History Review* 25, no. 4 (1988): 425–42; Vivek Gupta, "Splendour of the City, *Nagarshobha*: Textile Culture of Mughal Burhanpur," in *Reflections on Mughal Art and Culture*, ed. Roda Ahluwalia (New Delhi: Niyogi Books, 2020), 229–53.
133. BL Or 3299, f. 93b. Similar images of yogis appear in the *Chāndāyan*. See the illustration of "The Second Day: The Arrival of the Snake Charmer and Laurak Falls at His Feet," John Rylands Library, Hindustani MS 1, f. 270a. For descriptions of yogic attire in contemporaneous vernacular sources, see James Mallinson, "Nath Yogis and Their 'Amazing Apparel' in Early Material and Textual Sources" (forthcoming).
134. BL Or 3299, f. 116b. The definition also appears in Majlis Library IR-10-37320, f. 40a, and in the *Farhang-i Qavvās* in a chapter devoted to the names of birds, reptiles, and anything that moves, which is lodged within a section that defines the names of men and human figures (Qavvās, *Farhang-i Qavvās*, 77).
135. Francis Joseph Steingass, *A Comprehensive Persian-English Dictionary, Including the Arabic Words and Phrases to Be Met with in Persian Literature* (London: Routledge & K. Paul, 1892), 566.
136. BL Or 3299, f. 223b. Qavvās defines *kakh* as a beast that frightens children: *Farhang-i Qavvās*, 114.
137. BL Or 3299, f. 111a. The definition of *khujīvan* is also an illustrated definition of a *dīv*; however, the image does not show a child.

138. David J. Roxburgh, *The Persian Album, 1400–1600: From Collection to Dispersal* (New Haven, CT: Yale University Press: 2005).
139. David J. Roxburgh, “The Aesthetics of Aggregation: Persian Anthologies of the Fifteenth Century,” *Princeton Papers: Interdisciplinary Journal of Middle Eastern Studies* (2001): 123. I thank Christiane Gruber for discussing the term *vade mecum* with me.

TABLE OF PAINTINGS IN THE *MIFTĀḤ AL-FUḌALĀʿ*, BRITISH LIBRARY OR 3299

1. Entry or lemma name in Persian transliteration. Indic words are provided if they appear within the definition. Note: there are no illustrated Hindi entries/lemmas.
2. Folio number of painting.
3. Identification of painting. If multiple meanings of a single word are illustrated, the identification is indicated with an asterisk.
4. Measurements of the illustrations given as length × width in centimeters.

In cases where the illustration is of an irregular shape, I provide top/bottom (length) × left/right (width).

1. Lemma in Persian and any given Indic equivalents	2. Folio of illustration	3. Depicted definition	4. Dimensions (L × W cm)
<i>bādjan</i>	51b	doll	5.9 × 6.8
<i>bādafarah</i> ; Ind: <i>laṭṭū</i>	55b	whiptop	6.2 × 6.5
<i>badrīṣah</i>	56a	tent-pole	6.1 × 7.2
<i>bākhah</i>	56b	turtle	4.1 × 6.8
<i>bārbad</i>	60a	name of Khusraw's musician	8.2 × 9.3
<i>pālād</i>	60b	horse	6.3 × 7.2
<i>parandā</i>	61b	sword	6.2/3.2 × 7.2/5.9
<i>paḡhāz</i>	62a	wedge	6.4 × 4.8
<i>pāsuk</i>	65a	to yawn	5.6 × 6.4
<i>pushk</i>	65b	goat	4 × 5.2
<i>panjpāyak</i>	66a	crab	4.6 × 3.9
<i>palang</i>	66b	cheetah	5.6 × 5.6
<i>pālāvan</i>	67b	mace	2 × 8
<i>pālvāyah</i>	70b	black and white bird, the swallow	4.4 × 5.2
<i>pālvānah</i>	70b	ladder	4 × 2.5
<i>parvānah</i>	71b	moth	5.8 × 4.2
<i>parah</i>	72a	gathering of the troops; dried branches*	10.8 × 12.1
<i>pahanānah</i>	73a	monkey, ape	5.8/4.4 × 5.1/4.2
<i>tarandak</i> ; Ind: <i>mammolā</i>	80a	wagtail	4.2 × 3
<i>takūk</i>	80b	zoomorphic vessel	7.8 × 7.9
<i>tūrang</i>	81b	partridge	4.1 × 3.8
<i>tanbān</i>	82b	short linen drawers	5 × 6.6
<i>tardah</i>	84b	device to ease a hand-mill	5.8 × 5.9
<i>tūrah</i>	85b	jackal	7.2 × 5.6
<i>tashī</i>	86a	porcupine	2.8 × 3.9 (no ruling)
<i>jūj</i>	87b	the red part of a rooster's plume	4.1 × 4.1
<i>javāz</i> ; Ind: <i>ukhlī</i>	89a	mortar	4.1 × 7.3
<i>jaq</i>	89b	alternative spelling for <i>jak</i> , meaning “to churn” milk	6.4 × 6.3
<i>jūq</i>	90a	group or army	5.6 × 8.8
<i>janḡalūk</i>	90b	weak person in recovery	5.9 × 6.2
<i>jīdān</i>	91b	sesame (<i>kunjud</i>) or the jujube tree (<i>sinjid</i>)*	4.1 × 7.8
<i>jullah</i>	92b	plant, mushroom	5.7 × 5.3
<i>chūkhā</i>	93b	robe worn by yogis	6.1 × 6.1

TABLE OF PAINTINGS IN THE *MIFTĀḤ AL-FUḤALĀʿ*, BRITISH LIBRARY OR 3299 (*Cont.*)

1. Lemma in Persian and any given Indic equivalents	2. Folio of illustration	3. Depicted definition	4. Dimensions (L × W cm)
<i>chazkhusht</i>	93b	winepress	6.1 × 6.6
<i>jaft</i>	94a	vaulted roof	8.6 × 5
<i>chapdār</i>	95b	boot stocking	8.2 × 6.1
<i>jazr</i>	96a	red bird	6 × 5.3
<i>jakhash</i>	96b	goiter (a kind of illness)	7.8 × 5.5
<i>chaghūk</i> ; Ind: <i>matrah</i> or <i>jaftak</i>	97b	sparrow or lark	4.1 × 5.9
<i>chang</i>	98b	stringed instrument	8.1 × 11.9
<i>chūblīn</i>	100a	tool for separating cotton from its pod	6.6 × 6.6
<i>chārpārah</i>	100b	castanets	6.5 × 6.1
<i>chaghānah</i>	101a	stringed instrument similar to the <i>rubāb</i>	7.9 × 6.6
<i>chūzhah</i>	101b	chicklets	6.2 × 6.3
<i>khanub</i>	102b	porched doorway	8.3 × 7.5
<i>khūch</i>	103b	a tame ram used by children	8 × 7.9
<i>khushkāmār</i>	104b	oedema (illness)	6 × 11.9
<i>kharīvāz</i> <i>kharbīvāz</i>	105b	large bat	7.9 × 7.3
<i>khabazdūk</i>	107b	beetle	4 × 5
<i>khumak</i>	108a	hand-drum or tambourine	4.3 × 5.6
<i>kharchang</i>	108b	crab	2.2/5.8 × 4.8/4
<i>khujīvan</i>	111a	a type of demon	2.1/6.3 × 2.8/1.2
<i>kharūh</i>	112b	decoy, or trap for birds	1.8/5.8 × 8/4
<i>dīv-kulūch</i>	116b	child possessed by a demon	8.2 × 12
<i>dukhtarnadar</i>	118a	step-daughter	6.3 × 6.5
<i>dastās</i>	119a	handmill for corn grinding	5.9 × 7
<i>darfash</i>	119a	flag	6.4 × 6.8
<i>daryūsh</i>	119b	dragon	7.9 × 5.8
<i>durdaksh</i>	120a	drunkard	8 × 6.6
<i>dangal</i>	122a	idiot	6.5 × 6.3
<i>dām</i>	122b	snare	8.3 × 12
<i>dūzah</i> ; Ind: <i>sarvālth</i>	125b	thorny plant used for making textiles	8.4 × 5.4
<i>durūnah</i>	126b	bow used by a cotton dresser	6.3 × 8
<i>durrājah</i>	127b	a chest used for mining pearls	7.7 × 5.6
<i>dum lābah</i>	128a	tail-wagging	7.2 × 5
<i>dallah</i>	128a	large cat	5.8 × 6
<i>dadah</i>	129a	wild animals	8.8 × 6.4
<i>rāmishgar</i>	132b	musician	6 × 8.1
<i>rangriz</i>	133b	dyer	10 × 7.7
<i>razm</i>	136a	battle	8.7 × 12
<i>rāsū</i> ; Ind: <i>nūl</i> , <i>nakul</i>	138a	mongoose	3.9 × 4.4
<i>ramah</i>	139b	flock	1.8/4.1 × 6.6/5.5
<i>zimunj</i>	142b	black predatory bird	4.3 × 5
<i>zād</i>	143b	son	6.1 × 7.8
<i>ziyād</i>	144a	a move in backgammon	2.2/6 × 7.9/4.1
<i>zavār</i>	144b	slave	5.6 × 7.9
<i>zanjūr</i> ; Ind: <i>brūtha</i> (unattested)	145a	chain	8 × 12
<i>zīgar</i>	145b	striking the cheeks when they are full of air	6.3 × 6.7
<i>zarīnah kafsh</i>	146b	golden shoes	6.2 × 12
<i>zabūn</i>	149b	she-camel who kicks her milker, or a captive	8.5 × 8.4

TABLE OF PAINTINGS IN THE *MIFTĀḤ AL-FUḌALĀ'*, BRITISH LIBRARY OR 3299 (*Cont.*)

1. Lemma in Persian and any given Indic equivalents	2. Folio of illustration	3. Depicted definition	4. Dimensions (L × W cm)
<i>zahdān</i>	150a	the womb	8 × 6.9
<i>zaghūnah</i>	151a	raw silk for a spindle	6.2 × 7.1
<i>zarrāfah</i>	152a	giraffe	7.7 × 7.2
<i>sangpusht</i>	156a	turtle	4.5 × 12
<i>sanj</i>	157a	cymbals	6.5 × 7
<i>sarghūj</i> ; Ind: <i>gūnchī</i>	157b	head-covering for a woman a green film on the surface of stagnant water (n.)	6.1 × 7 diam: 8.4
<i>sābūd</i>	158b	porcupine	8 × 8.6
<i>sughur</i>	160b	stone drill	6 × 7.3
<i>suftahgar</i>	161b	falcon, a kind of bird that hunts	8.6 × 7.3
<i>sanqur</i>	162a	one who boasts	7.8 × 7.8
<i>subūs</i>	163b	a milk-giving animal	6.1 × 7.7
<i>sitāragh</i>	164b	a kind of plant used to make cloth	5.9 × 6.3
<i>sagak</i>	166b	to be hung upside down	6.1 × 6.1
<i>sitān</i>	170b	to gallop	3.5/4.2 × 7.3/.9
<i>sirkizīdan</i>	171a	cypress tree	8 × 3.8
<i>sarv</i>	172b	lice or dandruff?	5.9 × 6.8
<i>sabūsah</i>	175a	centipede	5.9 × 6.8
<i>sadpāyah</i> ; Ind: <i>kānkhajūrah</i>	175b	neighing (of a horse)	7.6 × 8.7
<i>sanah</i>	176b	the bartender	8 × 12
<i>sāqī</i>	179a	a move in backgammon akin to check- mate in chess	6 × 9.3
<i>shashdar</i>	184a	Turkish horn	6.5 × 12
<i>shaypūr</i>	184b	one who drinks and is fresh-faced	6 × 6.6
<i>shādkhvār</i>	185a	Khusraw's steed	7.8 × 12
<i>shabdīz</i>	186a	horns of the cows or oxen	7.5 × 12
<i>shagh</i>	187a	ostrich	5.8 × 7.8
<i>shuturmurgh</i>	187b	bustard, a bird that changes color	4.7 × 6.8
<i>shavālak</i>	189a	rope twisting	7.6 × 12
<i>shahlang, shāhlang</i>	190a	plate of steel through which gold and silver wire is drawn	6.2 × 12
<i>shafshāhang</i>	190b	predatory lion	6 × 7.5
<i>sharzah</i>	196a	hunting	10.2 × 12 ; 1.7/8.5 × 8.3/3.7
<i>shikārī</i>	197b	a den of wild animals (n. in illustration); useless (adj. not illustrated)	9.8 × 12
<i>ghāb</i>	198b	filling the mouth with air so air escapes	7.4 × 5.2
<i>ghar</i>	199a	deer, gazelles	5.4 × 12
<i>ghazāl</i>	201a	mountain sheep	7.2 × 12
<i>ghurm</i> ; Ind: <i>iyad</i>	201b	man with large testicles; ugly*	6.5 × 6.8
<i>fanj</i>	206b	whiptop	7.6 × 7.6
<i>farmūk</i> ; Ind: <i>laṭṭū</i>	212b	chick	6.4 × 6.2
<i>furūjah</i>	216b	diablo, top	6.1 × 5.6
<i>farfarah</i>	217a	something to roast	4.8 × 5.7
<i>kurdatā</i>	218a	barber	5.4 × 12
<i>kaddā</i> ; Ind: <i>kaṭṭa</i> (cutting)	218b	colocynth, bitter melon, or watermelon	6 × 7.9
<i>kabast</i>	220a	hobbyhorse	5.7 × 12
<i>kūrasht</i> ; Ind: <i>ḍandā-mūhī</i>	220b	demon	7.3 × 12
<i>kakh jhandah</i>	223b		

TABLE OF PAINTINGS IN THE *MIFTĀḤ AL-FUḌALĀ*³, BRITISH LIBRARY OR 3299 (*Cont.*)

1. Lemma in Persian and any given Indic equivalents	2. Folio of illustration	3. Depicted definition	4. Dimensions (L × W cm)
<i>kīrakh</i>	223b	bookstand	6.1 × 7
<i>kuhbud</i>	224a	mountain-dweller, ascetic	8.1 × 12
<i>kuftār</i> ; Ind: <i>jarakah?</i> , <i>charakah?</i> (unattested)	226b	hyena child who mixes languages, cannot fully speak	6.9 × 6.2 5.9 × 7.9
<i>kazhmazh</i>	228b	portable vessel, pilgrim flask	6.4 × 3.9
<i>kamās</i>	229a	debate and discussion	6 × 12
<i>kāvīsh</i>	231a	tortoise	5.6 × 5.3
<i>kashaf</i>	232a	wild animal's den	7.6 × 12
<i>kunām</i>	235b	balance, steelyard	7.9 × 7
<i>kapān</i>	237b	rhinoceros	6.3 × 12
<i>kargadān</i> ; Ind: <i>gaimṛā</i>	238a	ringlets, locks	8 × 7.8
<i>kulālah</i> ; Ind: <i>mīnhirī(?)</i> (unattested)	239b	reel for winding thread on, bobbin	6.3 × 6.7
<i>kalābah</i> ; Ind: <i>paretī</i>	240a	bow for digging wells	4.1 × 7
<i>kamānah</i>	240a	a stone or something to lodge into a bow; hoopoe (illustration may recall the bird)*	8 × 7.1
<i>kamān girauha</i> and <i>kamān muhrah</i> <i>kawkalah</i>	240b	pleasure-place with canopy (second definition on f.241b)	16.2 × 12 (box); 4.7 × 3.6 (upper canopy)
<i>kallah</i> with <i>kulbah</i>	242a	a green lizard	3.9 × 5.2
<i>karbāsah</i>	243b	foal	7.5 × 5.6
<i>karah</i>	244a	flock of cows and wild asses	6.2 × 6.5
<i>kavbārah</i>	244a	trap made of tree branches, likely for birds	8.6 × 6
<i>kāzah kāshah</i>	244b	clog or wooden fetters for captives; not illustrated: dugout hole in the ground for seeds	6.3 × 6.6
<i>kandah</i> ; Ind: <i>khōrah</i> for secondary meaning	244b	ape, monkey	5.5 × 7.8
<i>kappī</i>	245b	species of willow tree	6.4 × 6.6
<i>gurbah bid</i>	247b	wild ass or tomb*	10 × 12
<i>gūr</i>	248b	hog or boar	7.3 × 6
<i>gurāz</i>	250a	wolf; the sound of the nightingale*	7 × 9.8
<i>garg</i> and <i>gulbānk</i>	251b	Turkish horn	7.8 × 6.3
<i>silāḥī</i>	252b	sex, conception, animal sex	9.9 × 12
<i>gushn</i>	253b	cotton bow	7.6 × 12.1
<i>lūrak</i>	259b	sharpening of the millstone	7.4 × 4.7
<i>latīnak</i>	259b	dolls	7.5 × 8
<i>lahfatān</i>	259b	foot treadle	8 × 12
<i>lawḥ pāy</i>	262a	reins for a camel	5.7 × 9.5
<i>muhār</i>	265b	dildo	4.1 × 7.3
<i>majājāng</i>	268a	yawn	6.3 × 6.9
<i>mang</i> ; Ind: <i>amgrāī</i>	268b	hair	6.4 × 6.5
<i>mīl</i> (pronounced <i>mul</i> for "drink"- related definition)	269a	palace built for Shirin	10.6 × 12; 6/4.6 × 3.6/8.4
<i>mushkū</i>	270b	tavern	10.7 × 12; 1.8/8.9 × 7.1/4.9
<i>maykadah</i>	271a	fish eaten with bread	8.2 × 7.3
<i>māhiyānah</i>	271b	reed used by weavers, syphon	7.8 × 5.2
<i>māshūrah</i>	272a		

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1. Lemma in Persian and any given Indic equivalents	2. Folio of illustration	3. Depicted definition	4. Dimensions (L × W cm)
<i>mākhchī</i>	273a	half Turk and half Arab horse	6.5 × 7.1
<i>nākhudā</i>	274a	captain of a ship	8.3 × 8.8
<i>nāchakh</i> , Ind: <i>apaharsī</i> (unattested)	275b	axe or double-headed spear*	7.8 × 12
<i>nūmūr</i>	277b	a hunt?, also a deer?	8.6 × 12.2
<i>naw āmūz</i>	278b	new student	7.6 × 12 and 8.2 × 12
<i>navāsāz</i>	279a	musician who plays a stringed instrument	8 × 12
<i>nāqūs</i>	279b	long reed used for calling Christian worshipers	7.7 × 12
<i>nāznīn</i>	285a	delicate, lovely gift given to children after finishing the Qur'an	7.4 × 7.8
<i>nushrah</i>	286a	small reed	8.4 × 12
<i>nayshah</i> ; Ind: <i>bānsū</i>	288a	swing	8 × 12
<i>vāzanch</i> ; Ind: <i>penga</i> (unattested)	291a		9.5 × 12
<i>Waqwāq</i>	293a	Island or tree of Waqwāq	18 × 12; 7.3 × 12; space: 4.6 × 12; 6.1 × 12
<i>vanang</i> ; Ind: <i>lakanī</i> , (<i>laganī</i>) (unattested)	294a	line upon which grapes are hung	3.7 × 12
<i>varkāl</i>	294b	wild bird	8 × 7.4; 1.4/6.6 × 5.6/1.9
<i>yūz</i>	302b	small dog, leopard, to search*	6 × 12
<i>yang</i>	304a	law	8.4 × 9.1