When I began studying the Miftāḥ al-Fużalāʾ (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 Miftāḥ is the only known illustrated Persian dictionary (farhang) in the Islamicate manuscript tradition. For its fifteenth-century makers, the Miftāḥ was a wholly new text, written in 1468–69 by Muhammad ibn Muhammad Da’ud Shadiyabadi. The Miftāḥ required its artists to search for and codify visual representations of particular words from canonized manuscript genres such as the Islamicate cosmography (ʿajāʾib 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 Miftāḥ 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 Miftāḥ 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 sixteenth-century manuscripts. Turki, or Chaghatai, is a Turkic literary language of Central Asia from the fourteenth to sixteenth centuries that was vernacularized in India. 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. Both Hindavi and Turki words are widespread in fifteenth-century Persian dictionaries from India.

In its interplay between the verbal and visual, the Miftāḥ 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 Miftāḥ sometimes conflate the multiple meanings of a single word as a playful visual pun. A single illustration can also depict multiple adjacent entries simultaneously. 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.

While previous scholarship has emphasized the significance of the Persian farhang for understanding poetry and its authorship, I show how the Miftāḥ leads its readers to manuscript genres beyond the realm of poetry. In searching for manuscript genres related to the Miftāḥ, I have found that cosmographies exhibit several formal similarities. Like late fifteenth-century Persian
cosmographies, the Miṣṭāḥ’s illustrations are inserted adjacent to the entries to which they correspond. 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). 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 Miṣṭāḥ. In the final section of this article, I explain ways in which the Miṣṭāḥ’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 Miṣṭāḥ 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 Miṣṭāḥ 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 Miṣṭāḥ, this article reconstructs the

![Fig. 1. Pleasure place (kallah) with canopy (kulbah) shown above. Miṣṭāḥ al-Fużalāʾ 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)](image)
HISTORY OF THE MANUSCRIPT

Although it is cited in most surveys of sultanate arts of the book, the Miftāḥ has never been the subject of an extended critical study heretofore. 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. 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 established 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 Niʿmatnāmah (Book of Delights, ca. 1495–1500), Titley was keen to work on the Miftāḥ as her next project, yet the only products of that endeavor are her short article and a few handwritten notes. Dilorom Karomat, whose concerns were textual, examined the presence of the Turki and Hindavi vernaculars in Persian lexicons such as the Miftāḥ. 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 Miftāḥ al-Fużalāʾ. The manuscript of the work in the
Gupta

British Library (BL Or 3299) has been dated to 1490 based on its close similarity to dated Persian manuscripts of this decade. 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.

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 ‘Ajāʾib al-Ṣanāʿī (Wonders of Crafts, British Library Or 13718) was made for Ghiyas al-Din’s successor, Nasir al-Din Khalji (r. 1500–1510).

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. Polychrome ceramic cut-tile revetment (kāshī kārī) on early fifteenth-century Mandu architecture provides further evidence of the international Timurid style in central India.

Analogous to sultanate architecture, sultanate arts of the book embodied the confluence of an expanding lo-
cal idiom with cosmopolitan trends. 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. Because both the Ni’matnāmah 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.

One can also imagine a dynamic school in which Mandu’s books were taught. In ʿAli bin Mahmud al-Kirmani Shihab Hakim’s Maʿāsīr-i Mahmūdshāhī (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.” 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. In light of this impressive description, the madrasa 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 Yaqut [al-Mustaʿsimi, d. 1296] were not imprisoned in the tomb, he would say that [his own] script was its pupil. And if ʿAbd Allah Sirafi were not imprisoned in the dust’s house of oblivion, he would have cut his own hand into a pen of envy. Ibn Muqlah [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.

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. The madrasa formed a central part of an early fifteenth-century complex of buildings in Mandu that
integrated a congregational mosque and the monumental tomb of Sultan Hushang Shah (r. 1406–35). As the Miftāḥ 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 Hinduolā Maḥal 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.

Madrasas in neighboring cities include those of Chand-eri (Malwa) and Bidar (Deccan).

**Lexicography**

In contrast with detailed references to architectural commissions, the historical record is comparatively silent about the manuscripts of Mandu. Shadiyabadi’s preface to the Miftāḥ is only three folios long and conveys few facts about the dictionary. He classifies the text as a farhangnāmah (lexicon) and states that he utilized Pahlavi, Dari, Turki, Hebrew, Greek, and Chaghatai dictionaries. He also cites the work of Persian poets such as Khaqani, Mu’izzī, Anvari, Nizami, Zahir, Safaihanī, and Sa’di as inspirations. 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.

Unlike other farhangs of its time, the Miftāḥ 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). In addition to portraying poetic dramatica personae, the Miftāḥ 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). While Shadiyabadi’s textual definition describes the moth’s attraction to flames, it does not fully explain the allusion to the

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Fig. 7. Khusraw’s musician, Barbud. Miftāḥ al-Fużalāʾ 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). Miftāḥ al-Fużalāʾ of Shadiyabadi, Mandu, ca. 1490. Painted surface: 5.8 × 4.2 cm, British Library Or 3299, f. 71b. (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 Shāhnāmah (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 Islamicate contexts, but in the Miftāḥ, playfulness appears to correspond to a poetics.

Fig. 9. Wild ass or tomb (gūr). Miftāḥ al-Fuẓalāʾ of Shadiyabadi, Mandu, ca. 1490. Painted surface: 10 × 12 cm, British Library Or 3299, f. 248b. (Photo: Courtesy of the British Library)
of anticipation, similar to how the lover-beloved trope is anticipated from the image of fluttering butterflies.\textsuperscript{39} We can thus envision an elder or tutor (atalīq) 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.\textsuperscript{40} One indicator of manuscript circulation and production in Mandu are the several sources named by Shadiyabadi in his preface that inscribe the Mīfṭāḥ within an intellectual genealogy. Shadiyabadi lists the Farhang-i Qavvās (The Lexicon of Qavvas), Risālat al-Nāṣir (The Treatises of Nasir),\textsuperscript{41} Asadi,\textsuperscript{42} Mafātīḥ al-Fażāʿil (The Keys of the Learned), Sulālat al-Fażāʿil (The Genealogies of the Learned),\textsuperscript{43} Dastūr al-Fażāʿil (The Code of the Learned), and the Lisān al-Shuʿʿarāʾ (The Tongue of Poets) as his sources.\textsuperscript{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.\textsuperscript{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.\textsuperscript{46} The fifth section, on manmade creations (dar nām-i chūzā 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.\textsuperscript{47} Apropos of the name of this journal, the Mīfṭāḥ follows the Farhang-i Qavvās in defining the honeycomb vault or muqarnas.\textsuperscript{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-Fażāʿil, which was written in Delhi by Hajīb-i Khayrat Raﬁʿ Dihlavi in 1342.\textsuperscript{49} In fact, the Farhang-i Qavvās served as the basis for the Dastūr al-Fażāʿil, showing how Shadiyabadi creates a chain of transmission (silsilah). Shadiyabadi's final source, the Lisān al-Shuʿʿarāʾ, 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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{52} Although the Farhang-i Zafāngūyā was an authoritative example of lexicography (according to Solomon Baevski), it either did not impress Shadiyabadi enough to cite it in his preface, or he may have never consulted it.\textsuperscript{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.\textsuperscript{54} The Farhang-i Zafāngūyā surely served as a practical dictionary for poets, whereas the Farhang-i Qavvās and the Mīfṭāḥ 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 (head-piece) 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’matnāmāh. 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 nastaʿlīq 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 (ʿunvān). Miftāḥ al-Fużalāʾ 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 maʿ al-Alīf, illustration: footboard or treadle for a loom (lawḥ-i pāy). Miftāḥ al-Fużalāʾ of Shadiyabadi, Mandu, ca. 1490. Painted surface: 8 × 12 cm, British Library Or 3299, f. 262a. (Photo: Courtesy of the British Library)
vernacular, everyday life of children. With regard to the hobbyhorse or kūrasht, the scribe adapts the retroflex ẓ by applying three dots below the dāl in the Hindi word ḍanḍā-mūhi (stick-face) (fig. 13). 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). 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. 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 nastā’īq 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 nastā’īq. 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
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. In this case, the scribe deemed it worthwhile to apply diacritics and short vowels to all words in the text regardless of language. The Niʿmatnāmah is written in black naskh (red headings) with large swooping nūn ligatures and dramatically elongated kāf letters (fig. 16). These kinds of nūns and kāfs are typical of the sultanate Bihārī script and its miniaturized form of naskhī-divānī, but this script overall is clearly closer to naskh. The presence of these features in the Niʿmatnāmah suggests the scribe’s possible mastery of these other scripts. In contrast to the Niʿmatnāmah, the sultanate manuscripts of the Hindavi Chāndāyan, which are sometimes written in a naskhī-divānī script, use ḥarakāt or diacritics sparingly. The notable absence 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-divānī 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 Miftāḥ 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 Miftāḥ, the final two chapter headings for the letters hāʾ and yāʾ 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 Harfal-Hā 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 ittīfāq uftād ba’d-i malḥūz u manẓūr 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 Qoyulu 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 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 ʿAttar’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 Niʿmatnāmah (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. Eloïse 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 sīmurgh, *Mantiq al-Ṭayr* (Conference of the Birds) of ʿAttar (1145–1220), Shiraz, 1493. Folio: 10.4 × 7.3 cm, Bodleian Library MS Elliot 246, f. 25b.

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

Fig. 17. Plant, mushroom (*jullah*). *Miftāḥ al-Fuẓalāʿ* 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. Isfandiyar 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.\(^8^0\) 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 *Miftāḥ*, it is best to think of Shirazi and sultanate manuscript cultures as part of the shared cosmopolitan Persian ecumene.\(^8^1\)

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

A close look at the *Miftāḥ* 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 *Miftāḥ* 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 lexicability were, by their very nature, consultative books used to teach the meanings 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.\(^8^2\) Although we lack a social history of early development or upbringing in the Indo-Islamicate world, I hope that the preliminary analysis below will serve as a gateway for further work on this important and neglected topic.\(^8^3\)

Illustrations germane to a younger age group include images of figures playing with toys. The *Miftāḥ* contains two illustrated definitions of dolls, two yo-yos, one spinning top, a hobbyhorse, and a swing (figs. 13, 14).\(^8^4\) 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).\(^8^5\) 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

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Fig. 19. Dolls (*bādajan*). *Miftāḥ al-Fużalāʾ* 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 (*luhfatān*). *Miftāḥ al-Fużalāʾ* 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 vāv; a youth (küdakī) whose education begins at school; and a leopard or hunting bird that is fed with bāvūlī to learn hunting” (naw āmūz: bi-vāv-i duvum-i bārsī; küdakī kih ānrā āghāz dar dabistān andākhtah bāshand; va yūz va shikarah kih ānrā āghtā bāvūlī dihand). Illustrations appear above and below this text (fig. 21). Above, a herd of six young goats follows their leader. The painting, the students’ text is none other than 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. 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. 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). 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 emphasize 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-Ṣanāʿī, a Persian adaptation of al-Jazari’s twelfth-century book of wondrous automata. Shadiyabadi thus may have had a penchant for wonders-oriented literature. 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. 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). Miftāḥ al-Fużalā 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)
Cosmographies, such as Ahmad-i Tusi’s twelfth-century Persian text and Zakariyyaʾ al-Qazwini’s (d. 1283) thirteenth-century work, begin with sections on cosmic creations and end with worldly phenomena. The Miftāḥ’s most Qazwini-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. Shadiyabadi defines takūk as “a vessel in the form of an animal” (ṣurāḥī bar šūrat-i jānvar). 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. 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). 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). Modern dictionaries also corroborate that the word takūk denotes zoomorphic vessel.

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). 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. Next to the two vessels...
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). Also unlike other, more realistic paintings of birds in the Miftāḥ (fig. 24), 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. In fact, a blue and white glazed ceramic, bearing a possible attribution to Nishapur, is dated 897 (1491–92) (fig. 25). 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 hamsa (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).

Although countless examples survive in stone sculpture, the representation of the hamsa in metalwork from the Deccan sultanates establishes connections.
between the Miftāḥ’s painting and a concurrent material phenomenon (fig. 27).108 From monumental leogryph-shaped cannons to small steel doorknokers, Deccan metal objects similar to this exemplary silvered-brass hamsa 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 Miftāḥ’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
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.\textsuperscript{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 Nishapur 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.\textsuperscript{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 chapdār (fig. 28). This is one example of an illustration that is illuminated by other images in the Miftāḥ. For the chapdār Shadiyabadi provides a rather terse definition: “feet-coverings that are also called jurmūq.” Both chapdār and jurmūq are absent from the Farhang-i Qavvās, despite the fact that they would have naturally fit the sub-chapter on clothing. 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 chapdār 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 chapdār 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 Miftāḥ defines other kinds of shoes informs our understanding of the chapdār 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. 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 chapdār, these foot-coverings are simply rendered in gold with darkened points. In contrast to the chapdār, 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 Miftāḥ at all. The khārkafsh, or boot covering, is defined as “a foot-covering that the Arabs call a jurmūq.” The lack of illustration for this word may in turn highlight the outstanding visual qualities of the chapdār.

The path to interpreting these stockings as wonder-inducing is not straightforward. It is not merely one, but several other images in the Miftāḥ that guide the reader towards construing the illustrated chapdār as represent-
sheen. This wonder-inducing quality of visual instability is perceivable in the illustration of *chapdār*.

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. Qavvas includes this word in his dictionary and states that “it is a Rumi (Anatolian) cloak of [seven] colors” (*jāmah īst rūmī, [haft] rang*). The first Mughal Emperor Babur (r. 1526–30) describes his encounter with a colorful bird known as *būqalamūn*. Muhammad al-Mufti al-Balkhi’s *Majma‘ al-gharā’iḥ* (Collection of Oddities), commissioned in 1555 and presented to Pir Muhammad Khan of Bakh, which was copied and illustrated multiple times in seventeenth-century India, opens with a quatrain that describes the world as *būqalamūn*, or ever-changing. 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.” 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.” 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). 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 *būbūrāqsh*” (*parandah īst, surkh, va gūyand murgī ast kih har zamān rāng bīgardānad va’arab ānā būbūrāqsh gūyand*). Modern dictionaries state that *būbūrāqsh* is synonymous with *būqalamūn*. 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.

With regard to the textile-related definition of *būqalamūn*, a number of illustrations in the *Miftāḥ* prepare a student to be enchanted by the surface of the *chapdār*. 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. Specific plants used for textiles are illustrated as well. 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.

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 *chākhā* as a robe worn by yogis (fig. 30). 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 *chapdār*. 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 *chapdār* 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...
obvious wonders-of-creation illustrations and the other evidence outlined above, suggest that Shadiyabadi and the makers of the *Miftāḥ* had cosmographies and wonder in mind when conceiving the *Miftāḥ*.

**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 bāshad*).134 Steingass defines *dīv-kulūch* as “an epileptic boy.”135 In the *Miftāḥ*’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 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.
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. Since monsters such as *dīv* were stock characters in Firdawsi’s *Shāhnāmah*, 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 *Shāhnāmah*. 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. 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*.

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.

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**Fig. 32.** Top: demon (*kakh-jhandah*); bottom: bookstand (*kīrakh*). *Miftāḥ al-Fużalā* 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)
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 Miftāḥ 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 Miftāḥ innovated a manual for their times. As Skelton reminded me, the Miftāḥ contains traces of the many more now-lost sultanate manuscripts. Although fifteenth-century Mandu may seem to be a faraway imagined place, reactivating the Miftāḥ affords us the immediate pleasure of becoming new students ourselves.

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1. Aditya Behl, Love’s Subtle Magic: An Indian Islamic Literary Tradition, 1529–1545, 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, “ʿAlī Shīr Navāʾī,” EJ3, Consulted online March 18, 2021: <http://dx.doi.org/10.163/1573-3912_ej3_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, ff. 321b–322a.

5. See, e.g., the illustration of the kallah, “pleasure place,” with a kūlah, “canopy,” shown above the painting. BL Or 3299, ff. 241b–242a.

6. BL Or 3299, turtles: ff. 56b, 156a; porcupines: ff. 86a, 163b; 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 Qarvās (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 Pello, “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. 194b, 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 Amir Khusrau’s Khamsah (London: RoutledgeCurzon, 2003), 86–87; and Éloïse 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 Siyavi, 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
This is exemplified in the cosmography of Aḥmad-i Ṭūsī dated December 7, 1505, by its colophon, and ascribed to Kashmir. This date is only a few years after 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. 109b; Brand, “Khalji Complex,” 255.

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 Chishti Khān ki Mahal in Mandu, and the Malkūm Khān ki kothi in Nālca. 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 Delvoye (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 Miftāḥ defines and illustrates several architectural terms, such as when it left India.

29. Another lexicon, the Dānishnāmah-i Qadar Khān (1435) of Ashraf bin Sharaf al-Muẓakkār 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 sāqi (bartender). The sāqi is a common trope from Persian poetry and led to the genre of the Sāqinmānah. Folio 186a depicts Shabdiz, 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. 21b.
37. Ibid, f. 248h. 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 ʿUmar Ḥājib-i Khayrāt Rafīʿ Dihlavī’s patron was Shams al-Dīn Muḥammad Jajnīrī of Delhi. Baevskiĭ, Early Persian Lexicography, 77; Asiatic Society of Bengal MS 57; Karomat, "Turki and Hindavi in the World of Persian," 133.
39. ‘Āshiq, Farhang-i Lisān al-Shuʿārā’, ed. Nazir Ahmad (New Delhi: Rāyzanī-yi Farhangī-yi Jumhūrī-yi Islāmī-yi Īrān, 1995).
40. Karomat, “Turki and Hindavi in the World of Persian,” 133–34; Pellò, “Local Lexis?” 177.
41. Shihab Hakim, the author of the Traditions of Mahµud Shah (1468), is another intellectual who migrated from Jaunpur to Mandu in 1465. Shihab Hakim’s nisbih 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.
42. Baevskiĭ, Early Persian Lexicography, 99.
43. Ibid., f. 179.
44. See especially Pellò, “Local Lexis?” 182. Standalone Hindavi entries in the Miftāḥ problematize this, however. See BL Or 3299, f. 160b; Karomat, “Turki and Hindavi in the World of Persian,” 161. Rajeev Knira also makes a similar argument in “Cultures of Comparative Philology in the Early Modern Indo-Persian World,” Philological Encounters 1 (2016): 225–87.
45. This method of organization was utilized in the Adāt al-Fużālā (‘Delhi, 1419), BL Or 1262. See Karomat, “Turki and Hindavi in the World of Persian,” 136. According to Baevskiĭ, 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 Baevskiĭ, Early Persian Lexicography, 153. In the absence of any contrary evidence, I follow Baevskiĭ’s argument.
46. The Nīʿmatnāmah (BL IO Islamic 149) also uses a system of marginal tabulation. Norah Titley, The Nīʿmatnāma Manuscript of the Sultans of Manda: The Sultan’s Book of Delights (Oxford: RoutledgeCurzon, 2005). In the preface Shadiyabadi states, “most of Persian letters and letters with short vowels and diacritics have not gone unexamined” (bishtari ʿurūf-i pārsi va iʿarāb-i muhmal nāmar-i guzāštah nasuhūd ast). BL Or 3299, f. 4b.
47. Éloïse Brac de la Perrière, “The Art of the Book in India under the Sultanates,” in Orsini and Sheikh, After Timur Left, pl. 51. My reading accounts for muhān from the Hindi muhān, which differs from muvāhā as implied by Brac de la Perrière.
48. BL Or 3299, f. 212b.
49. Ibid., f. 73a.
50. Titley, The Nīʿmatnāma Manuscript. It would be revealing to compare this copy of the text to a manuscript with a similar
It demonstrates several other artistic connections between the courts of Mandu and Bijapur. See Mark Zebrowski, *Deccani Painting* (New Delhi: Roli Books, 1983), 76–78.

63. BL IO Islamic 149, f. 100v. The naskh calligraphy of the *Niʿmatnāmah* and the Cleveland *Ṭūṭīnāmah* are strikingly similar. The completion of the Cleveland *Ṭūṭīnāmah* has been dated to 1573 by John Seyller based on its overpainting. The black body text is nearly identical to the *Niʿmatnāmah* 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 *Caourapañcāśikā* style of painting. See John Seyller, “Overpainting in the Cleveland *Ṭūṭīnāmah,*” *Artibus Asiae* 52, no. 3 (1992): 283–308, at 305, for the problem of dating this manuscript.

64. Brac de la Perrière, “*Bihārī* et naskh-i-diwānī: remarques sur deux calligraphies de l’Inde des sultanats,” in *Ecriture, 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* (36/24/2019) <https://blogs.bl.uk/asian-and-african-studies/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 *naskhi-diwani.* See, for example, f. 134b. There are cases in which the script of the sultanate *Chāndāyan* comes closer to a *Bihārī,* but it is still a *naskhi-diwānī* script. Take, for instance, the thicker and more widely spaced text of the Varanasi *Chāndāyan.* See Anand Krishna, “An Illustrated Manuscript of the *Laor-Chanda* in the Staatsbibliothek, Berlin,” *Chhavi 2: Rai Krishnadasa Felicitation Volume* (1981): 275–89. This is also reproduced in Adjamee, “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-Yāʾ maʿ al-Alif, which is precisely the text one would expect on folio 296a of BL Or 3299.

68. Robert Skelton, “The *Niʿmatnāma:* 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 Retting 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 Retting, “La production manuscrite à Chiraz sous les Aq Qoyyunlu entre 1467 et 1503” (PhD diss., Université Aix-Marseille I, Université de Provence, 2011). See also Priscilla Soucek, “The New York Public Library ‘Makhsan al-arṣār’ 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 Aqqyunulu 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 1573,” 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 *Niʿmatnāmah* (fig. 16) and *Būstān* (The Orchard) (1502–3). See Richard Ettinghausen, “The *Bustan* Manuscript of Sultan Nasir Shah Jalālī,“ *Marg* 12, no. 3 (1959): 40–45; 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 *Niʿmatnāmah,* 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 *Miftāḥ.* It thus seems that Mandu attracted a range of artists trained in various styles of Persian painting. While the *Miftāḥ* 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. BL Or 3299, f. 278b (top illustration); IO Islamic 149, f. 100b. The bottom illustration of BL Or 3299, f. 16b features this type of background.

73. Ibid., f. 92b.

74. Bodleian MS 325, f. 328a. Robert Skelton also cites this *Shāhnāmah* in highlighting features of the commercial Turkmen style. See Skelton, “*Niʿmatnāma*.”

75. 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 (1973): 15–23. In addition, a “Timurid” *Wonders of Creation,* Museum of Islamic Art, Doha, 2014, also shares several stylistic features with BL Or 3299. See Gupta, “Wonder Reoriented,” for further discussion.

76. Brac de la Perrière, “Art of the Book in India,” 310. The Injuid 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 Injuid 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 Keelton 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 Mahmud Gawan,” in *Turkish History and Culture in India: Identity, Art and Transregional Connections*, ed. A. C. S. Peacock and Richard Piran McClary (Leiden: Brill, 2023), 134–28; Simon Retting, *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 Burézi (Paris: PUPS, 2016), 203, and Gülru 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. Gülru 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 Keelton Overton, ed., *Iran and the Deccan: Persianate Art, Culture, and Talent in Circulation, c. 1400-1700* (Bloomington, IN: Indiana University Press, 2023) have advanced scholarship on these networks.

81. Assadullah Souren Melikian-Chirvani was a pioneer of this subject. See *Keelton 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 Mahmud Gawan,” in *Turkish History and Culture in India: Identity, Art and Transregional Connections*, ed. A. C. S. Peacock and Richard Piran McClary (Leiden: Brill, 2023), 134–28; Simon Retting, *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 Burézi (Paris: PUPS, 2016), 203, and Gülru 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. Gülru 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.

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-Islamicate world by looking at how princes were raised and cultivated. See Munis D. Faruqui, *The Princes of the Mughal Empire, 1504–1719* (Cambridge: Cambridge University Press, 2012), 166–133.

84. BL Or 3299, ff. 5b and 259b, 5b and 212b, 217a, 220b, 29a.

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 *divān* by the poet Hafiz that shows Layla and Majnun at school. This painting is attributed to Shiraz, 1490, and is in the Sackler Gallery (S986.289).

87. The word for teacher, or *āmāmgār,* is also an entry in the dictionary (ibid., f. 13a). The herb here alludes to the illustrated definition of *ramah* on folio 130b. Two other closely related illustrations are the herd of cows and wild asses (*kavvārāh*, 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’īb Tradition,* *Middle Eastern Literatures* 13, no. 1 (2013): 29–39, 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 Berelwak, *Wonder, Image, and Cosmos in Medieval Islam* (New Haven, CT: Yale University Press, 2011).

95. BL Or 3299, f. 80b. For discussions of the *takāk,* see Graves, *Arts of Allusion, 66;* 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 centrale présislamique*, ed. Paul Bernard and Frantz Grenet (Paris: Éditions du centre national de la recherche scientifique, 1991), 102–4. Melanie Gibson’s *“Takāk 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 *takāk.*

96. Mark Zebrowski defines *saraḥi* 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 Asadi Ţusi, 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‘zi nuskhah] it is written as takrak.” This implies that there may have been other copies of the *Miżāh* or related lexicons available to the scribe.

100. Ali Akbar Dehkuda, *Lughatnāmah-i Dikhudā* <https://www.vajehyab.com/dehkhoda/> (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 (‘aın),” 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,” 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 found in nature and contain verses of Hafiz and Nizami.

106. Katherine Kasdorf, “Forming Dōrasamudra: Temples of the Hoysala Capital in Context” (PhD diss., Columbia University, 2013), fig. 5.31.

107. 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 Bijapur monumental canon known as the Malik-i Maydān also considered this issue. See Vivek Gupta, “Art and Artillery: The Iconography of the Malik-i Maydān,” Lecture, Jnanaprapa Series in Islamic Art, Mumbai, India, January 6, 2017.

108. Zebrowski, Gold, Silver and Bronze, 100, figs. 103–5.

109. To balance this interpretation of the takūk, it is worth emphasizing here that all crafts defined within the Miftāḥ al-‘ālam 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.

110. This is a case in which a recognizable depiction sheds light on the textual definition. See Gupta, “Interpreting the Eye (‘aın),” 195–97, for my thoughts on what constitutes a recognizable depiction.

111. Qavvās, Farhang-i Qavvās, 49.

112. Babur, Emperor of Hindustan, 1483–1530, Bābūrnamāh, trans. Wheeler M. Thackston (Washington, DC: Freer Gallery of Art, Smithsonian Institution, 1996), 340.

113. Chester Beatty Library In 09, f. 3b (Mughal, 1650); BL Add 15241, f. 1b (Aurangabad, 1698); Salar Jung Museum Library Geo MS 12 (Hyderab? ca. 1700).

114. Qavvās, Farhang-i Qavvās, 152.

115. Ibid. This bird also appears in Qazvini; see BL Or 4701, f. 23a.

116. Ali Akbar Dehkhuda, Lughatnāmāh-i Dīkhkūdah (London: Routledge & K. Paul, 1970). As a noun in Persian, the word can also mean a chameleon or turkey. A full discussion of Azad’s definition of biqālamūn is provided in Vivek Gupta, “The Voice of the Indian Cuckoo in Arabic: The Adaptive Capacity of Ghulām ‘Ali ‘Azād’ Bilgrāmi’s Poetics in the Eighteenth Century,” journal of South Asian Intellectual History (forthcoming).

117. Ibid. This bird also appears in Qazvini; see BL Or 4701, f. 23a.

118. Farhang-i Qavvās, 77). I thank 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.

119. BL Or 3299, f. 223b. Qavvās defines kakāh as a beast that frightens children: Farhang-i Qavvās, 14.

120. BL Or 3299, f. 111a. The definition of khujīvan is also an illustrated definition of a dīv; however, the image does not show such a child.
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.

| 1. Lemma in Persian and any given Indic equivalents | 2. Folio of illustration | 3. Depicted definition | 4. Dimensions (L × W cm) |
|-----------------------------------------------------|-------------------------|-----------------------|-------------------------|
| bādjan                                              | 51b                    | doll                  | 5.9 × 6.8               |
| bādefarah; Ind: lattū                               | 55b                    | whiptop               | 6.2 × 6.5               |
| badrīsah                                            | 56a                    | tent-pole             | 6.1 × 7.2               |
| bākhah                                              | 56b                    | turtle                | 4.1 × 6.8               |
| bārībad                                             | 60a                    | name of Khusraw's musician | 8.2 × 9.3            |
| pālād                                               | 60b                    | horse                 | 6.3 × 7.2               |
| parandā                                             | 61b                    | sword                 | 6.2/3.2 × 7.2/5.9       |
| paghāz                                              | 62a                    | wedge                 | 6.4 × 4.8               |
| pāsuks                                              | 65a                    | to yawn               | 5.6 × 6.4               |
| pushk                                               | 65b                    | goat                  | 4.5 × 2.4               |
| pānjpāyak                                           | 66a                    | crab                  | 4.6 × 3.9               |
| palang                                              | 66b                    | cheetah               | 5.6 × 5.6               |
| pālavān                                             | 67b                    | mace                  | 2 × 8                   |
| pāvāyah                                             | 70b                    | black and white bird, the swallow | 4.4 × 5.2            |
| pālvānah                                            | 70b                    | ladder                | 4 × 2.5                 |
| parvānah                                            | 71b                    | moth                  | 5.8 × 4.2               |
| parah                                               | 72a                    | gathering of the troops; dried branches* | 10.8 × 12.1         |
| pahānānah                                           | 73a                    | monkey, ape           | 5.8/4.4 × 5.1/4.2      |
| tarandā; Ind: mammolā                               | 80a                    | wagtail               | 4.2 × 3                 |
| takāk                                               | 80b                    | zoomorphic vessel     | 7.8 × 7.9               |
| tārānq                                              | 81b                    | partridge             | 4.1 × 3.8               |
| tanbān                                              | 82b                    | short linen drawers   | 5 × 6.6                 |
| tārdah                                              | 84b                    | device to ease a hand-mill | 5.8 × 5.9            |
| tārah                                               | 85b                    | jackal                | 7.2 × 5.6               |
| tashī                                               | 86a                    | porcupine             | 2.8 × 3.9 (no ruling)   |
| jūj                                                 | 87b                    | the red part of a rooster's plume | 4.1 × 4.1            |
| javāz; Ind: ukhī                                     | 89a                    | mortar                | 4.1 × 7.3               |
| jaq                                                 | 89b                    | alternative spelling for jak, meaning "to churn" milk | 6.4 × 6.3            |
| jūq                                                 | 90a                    | group or army         | 5.6 × 8.8               |
| jangalāk                                            | 90b                    | weak person in recovery | 5.9 × 6.2            |
| jīdān                                               | 91b                    | sesame (kunjūd) or the jujube tree (sinjūd)* | 4.1 × 7.8            |
| jullah                                              | 92b                    | plant, mushroom       | 5.7 × 5.3               |
| chūkhā                                              | 93b                    | robe worn by yogis    | 6.1 × 6.1               |

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

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-Fuṣalāʾ*, British Library or 3299 (Cont.)

| Lemma in Persian and any given Indic equivalents | Folio of illustration | Depicted definition | Dimensions (L x W cm) |
|--------------------------------------------------|------------------------|---------------------|-----------------------|
| chazkhushāt                                       | 93b                    | winepress           | 6.1 x 6.6             |
| jaft                                              | 94a                    | vaulted roof        | 8.6 x 5               |
| chapdār                                          | 95b                    | boot stocking       | 8.2 x 6.1             |
| jāz                                               | 96a                    | red bird            | 6 x 5                 |
| jakhsh                                            | 96b                    | goiter (a kind of illness) | 7.8 x 5.5 |
| chaghāk; Ind: matrah or jaftak                    | 97b                    | sparrow or lark     | 4.1 x 5.9             |
| chang                                             | 98b                    | stringed instrument | 8.1 x 11.9            |
| chubān                                            | 100a                   | tool for separating cotton from its pod | 6.6 x 6.6 |
| chārpānah                                         | 100b                   | castanets           | 6.5 x 6.1             |
| chaghānah                                         | 101a                   | stringed instrument similar to the rubāb | 7.9 x 6.6 |
| chuḥsh                                             | 101b                   | chicklets           | 6.2 x 6.3             |
| khanub                                            | 102b                   | porched doorway     | 8.3 x 7.5             |
| khīsh                                             | 103b                   | a tame ram used by children | 8 x 7.9 |
| khushkāmār                                        | 104b                   | oedema (illness)    | 6 x 11.9              |
| kharīvāz / kharbīvāz                               | 105b                   | large bat           | 7.9 x 7.3             |
| khabazdāk                                         | 107b                   | beetle              | 4 x 5                 |
| khumak                                            | 108a                   | hand-drum or tambourine | 4.3 x 5.6 |
| kharchang                                         | 108b                   | crab                | 2.2/5.8 x 4.8/4       |
| khuyrī                                            | 111a                   | a type of demon     | 2.1/6.3 x 2.8/1.2     |
| kharīh                                            | 112b                   | decoy, or trap for birds | 1.8/5.8 x 8/4 |
| dīv-kulāch                                        | 116b                   | child possessed by a demon | 8.2 x 12 |
| dukhtarnadar                                      | 118a                   | step-daughter       | 6.3 x 6.5             |
| dastās                                            | 119a                   | handmill for corn grinding | 5.9 x 7 |
| darfāsh                                           | 119a                   | flag                | 6.4 x 6.8             |
| daryūsh                                           | 119b                   | dragon              | 7.9 x 5.8             |
| durdūsh                                          | 120a                   | drunkard            | 8 x 6.6               |
| dangal                                            | 122a                   | idiot               | 6.5 x 6.3             |
| dām                                               | 122b                   | snare               | 8.3 x 12              |
| dīzah; Ind: sarvālīh                               | 125b                   | thorny plant used for making textiles | 8.4 x 5.4 |
| durāmān                                           | 126b                   | bow used by a cotton dresser | 6.3 x 8 |
| durrājāh                                          | 127b                   | a chest used for mining pearls | 7.7 x 5.6 |
| dam lábah                                         | 128a                   | tail-wagging        | 7.2 x 5               |
| dahlah                                            | 128a                   | large cat           | 5.8 x 6               |
| dadah                                             | 129a                   | wild animals        | 8.8 x 6.4             |
| rāmishgar                                         | 132b                   | musician            | 6 x 8.1               |
| rangrīz                                           | 133b                   | dyer                | 10 x 7.7              |
| razm                                              | 136a                   | battle              | 8.7 x 12              |
| rāsū; Ind: nūl, nakul                              | 138a                   | mongoose            | 3.9 x 4.4             |
| ramah                                             | 139b                   | flock               | 1.8/4.1 x 6.6/5.5     |
| zīmunj                                            | 142b                   | black predatory bird | 4.3 x 5  |
| zād                                               | 143b                   | son                 | 6.1 x 7.8             |
| zīyūd                                             | 144a                   | a move in backgammon | 2.2/6 x 7.9/4.1 |
| zavār                                             | 144b                   | slave               | 5.6 x 7.9             |
| zanjīr; Ind: brūthā (unattested)                  | 145a                   | chain               | 8 x 12                |
| zīgar                                             | 145b                   | striking the cheeks when they are full of air | 6.3 x 6.7 |
| zarūnah kafsh                                     | 146b                   | golden shoes        | 6.2 x 12              |
| zabān                                             | 149b                   | she-camel who kicks her milker, or a captive | 8.5 x 8.4 |
| 1. Lemma in Persian and any given Indic equivalents | 2. Folio of illustration | 3. Depicted definition | 4. Dimensions (L × W cm) |
|---------------------------------------------------|--------------------------|-----------------------|------------------------|
| zahdān                                            | 15a                      | the womb               | 8 × 6.9                |
| zaghnāh                                          | 15a                      | raw silk for a spindle | 6.2 × 7.1              |
| zarīfah                                          | 15a                      | giraffe                | 7.7 × 7.2              |
| sangpusht                                        | 15a                      | turtle                 | 4.5 × 12               |
| sanj                                             | 15a                      | cymbals                | 6.5 × 7                |
| sarghū; Ind: gūnchī                               | 15b                      | head-covering for a woman | a green film on the surface of stagnant water (n.) | diam: 8.4 |
| sābūd                                            | 15b                      |                        |                        |
| sughur                                           | 16b                      | porcupine              | 8 × 8.6                |
| suftāghar                                        | 16b                      | stone drill            | 6 × 7.3                |
| sanqar                                           | 16a                      | falcon, a kind of bird that hunts | 8.6 × 7.3 |
| subās                                            | 16b                      | one who boasts         | 7.8 × 7.8              |
| sitāragh                                         | 16b                      | a milk-giving animal   | 6.1 × 7.7              |
| sqagk                                            | 16b                      | a kind of plant used to make cloth | 5.9 × 6.3 |
| sītān                                            | 17b                      | to be hung upside down | 6.1 × 6.1              |
| sīrkīzīdan                                       | 17a                      | to gallop              | 3.5/4.2 × 7.3/9        |
| sarv                                             | 17b                      | cypress tree           | 8 × 3.8                |
| sabūsah                                          | 17a                      | lice or dandruff?      | 5.9 × 6.8              |
| sadpāyah; Ind: kānkhajūrah                        | 17b                      | centipede              | 5.9 × 6.8              |
| sanah                                            | 17b                      | neighing (of a horse)  | 7.6 × 8.7              |
| sāqi                                             | 17a                      | the bartender          | 8 × 12                 |
| shashdar                                         | 18a                      | a move in backgammon akin to checkmate in chess | 6 × 9.3 |
| shayāūr                                          | 18b                      | Turkish horn           | 6.5 × 12               |
| shādkhvār                                        | 18a                      | one who drinks and is fresh-faced | 6 × 6.6 |
| shadbiz                                         | 18a                      | Khusraw’s steed        | 7.8 × 12               |
| shagh                                            | 18a                      | horns of the cows or oxen | 7.5 × 12 |
| shaturmurgh                                      | 18a                      | ostrich                | 5.8 × 7.8              |
| shavīlak                                         | 18a                      | bustard, a bird that changes color | 4.7 × 6.8 |
| shahlang, shāhlang                               | 19a                      | rope twisting          | 7.6 × 12               |
| shafshāhang                                      | 19b                      | plate of steel through which gold and silver wire is drawn | 6.2 × 12 |
| sharzah                                         | 19a                      | predatory lion         | 6 × 7.5                |
| shkārī                                            | 19b                      | hunting                | 10.2 × 12; 1.7/8.5 × 8.3/3.7 |
| ghāb                                             | 19b                      | filling the mouth with air so air escapes | 7.4 × 5.2 |
| ghar                                             | 19a                      | deer, gazelles         | 5.4 × 12               |
| ghazal                                           | 20a                      | mountain sheep         | 7.2 × 12               |
| ghurn; Ind: iyād                                  | 20a                      | man with large testicles; ugly* | 6.5 × 6.8 |
| fanj                                             | 20b                      | whiptop                | 7.6 × 7.6              |
| farmūk; Ind: laṭṭū                               | 21b                      | chick                  | 6.4 × 6.2              |
| furūjah                                          | 21b                      | diablo, top            | 6.1 × 5.6              |
| farfara                                          | 21b                      | something to roast     | 4.8 × 5.7              |
| kurdatā                                          | 21a                      | barber                 | 5.4 × 12               |
| kaddū; Ind: kaṭṭa (cutting)                       | 21b                      | colocolynth, bitter melon, or watermelon | 6 × 7.9 |
| kabast                                           | 22a                      | hobbyhorse             | 5.7 × 12               |
| kārasht; Ind: gāndā-muḥī                          | 22b                      | demon                  | 7.3 × 12               |
| kakh jhandah                                      | 22b                      |                        |                        |
| 1. Lemma in Persian and any given Indic equivalents | 2. Folio of illustration | 3. Depicted definition | 4. Dimensions (L × W cm) |
|------------------------------------------------------|--------------------------|------------------------|-------------------------|
| kīrah                                               | 223b                     | bookstand              | 6.1 × 7                 |
| kuhbūd                                              | 224a                     | mountain-dweller, ascetic | 8.1 × 12               |
| kuftār; Ind: jarakāh?, charakāh? (unattested)        | 226b                     | hyena                  | 6.9 × 6.2               |
| kashmāz                                             | 228b                     | child who mixes languages, cannot fully speak | 5.9 × 7.9               |
| kamās                                               | 229a                     | portable vessel, pilgrim flask | 6.4 × 3.9               |
| kāvish                                              | 231a                     | debate and discussion  | 6 × 12                  |
| kashāf                                              | 232a                     | tortoise               | 5.6 × 5.3               |
| kunām                                               | 235b                     | wild animal’s den      | 7.6 × 12                |
| kāpān                                               | 237b                     | balance, steelyard     | 7.9 × 7                 |
| kargadān; Ind: ganimrā kūlālah; Ind: mihnīrī (?)    | 238a                     | rhinoceros             | 6.3 × 12                |
| (unattested)                                        |                          |                        |                         |
| kalābah; Ind: pareṭi                                 | 240a                     | reel for winding thread on, bobbin | 6.3 × 6.7               |
| kamānān                                              | 240a                     | bow for digging wells  | 4.1 × 7                 |
| kamān ġirauh and kamān muhrah / kawkalah            | 240b                     | a stone or something to lodge into a bow; hoopoe (illustration may recall the bird) | 8 × 7.1                 |
| kallah with kulbah                                   | 242a                     | pleasure-place with canopy (second definition on f.241b) (upper canopy) | 16.2 × 12 (box); 4.7 × 3.6 |
| kārbāsah                                            | 243b                     | a green lizard         | 3.9 × 5.2               |
| kārah                                               | 244a                     | foil                   | 7.5 × 5.6               |
| kāvībhārah                                           | 244a                     | flock of cows and wild asses | 6.2 × 6.5               |
| kāzhā kāshāh                                         | 244b                     | trap made of tree branches, likely for birds | 8.6 × 6                 |
| kandah; Ind: khorāh for secondary                   |                          | clog or wooden fetters for captives; not illustrated: dugout hole in the ground |                  |
| meaning                                             | 244b                     | for seeds              | 6.3 × 6.6               |
| kappī                                               | 245b                     | ape, monkey            | 5.5 × 7.8               |
| gurbhā bīd                                          | 247b                     | species of willow tree | 6.4 × 6.6               |
| ġūr                                                 | 248b                     | wild ass or tomb*      | 10 × 12                 |
| ġurāz                                               | 250a                     | hog or boar            | 7.3 × 6                 |
| gorg and gulbānk                                     | 251b                     | wolf; the sound of the nightingale* | 7 × 9.8                 |
| silāḥi                                              | 252b                     | Turkish horn           | 7.8 × 6.3               |
| gūshn                                               | 253b                     | sex, conception, animal sex | 9.9 × 12                |
| lārak                                               | 259b                     | cotton bow             | 7.6 × 12.1              |
| latīnak                                             | 259b                     | sharpening of the millstone | 7.4 × 4.7               |
| lahfatān                                            | 259b                     | dolls                  | 7.5 × 8                 |
| lahv pāy                                            | 262a                     | foot treadle           | 8 × 12                  |
| muḥār                                               | 265b                     | reins for a camel      | 5.7 × 9.5               |
| maḥījāng                                            | 268a                     | dildo                  | 4.1 × 7.3               |
| mang; Ind: amgrār                                   | 268b                     | yawn                   | 6.3 × 6.9               |
| md (pronounced mul for “drink”-related definition)  | 269a                     | hair                   | 6.4 × 6.5               |
| mūshkāī                                             | 270b                     | palace built for Shirin | 10.6 × 12; 6/4.6 × 3.6/8.4 |
| maykadaḥ                                            | 271a                     | tavern                 | 10.7 × 12; 1.8/8.9 × 7.1/4.9 |
| māhiyānah                                            | 271b                     | fish eaten with bread  | 8.2 × 7.3               |
| māshkārah                                           | 272a                     | reed used by weavers, syphon | 7.8 × 5.2              |
This article focuses on the *Miftāḥ al-Fużalāʾ* (Key of the Learned) of Muhammad ibn Muhammad Daʾud Shadiyabadi (ca. 1490). The *Miftāḥ* is an illustrated dictionary made in the central Indian sultanate of Malwa, based in Mandu. Although the *Miftāḥ*’s only illustrated copy (British Library Or 3299) contains quadruple the number of illustrations as Mandu’s famed *Niʿmatnāmah* (Book of Delights) and is a unicum within the arts of the Islamicate and South Asian book, it has received minimal scholarly attention. The definitions in this manuscript encompass nearly every facet of Indo-Islamicate art history. The *Miftāḥ* provides a vocabulary for subjects including textiles, metalwork, jewelry, arms and armor, architecture, and musical instruments. The information transmitted by the *Miftāḥ* is not limited to the Persian, Hindavi, Turki, and Arabic language of the text, but also includes the visual knowledge depicted in paintings.

Table of Paintings in the *Miftāḥ al-Fużalāʾ*, British Library Or 3299 (Cont.)

| 1. Lemma in Persian and any given Indic equivalents | 2. Folio of illustration | 3. Depicted definition | 4. Dimensions (L x W cm) |
|-----------------------------------------------------|--------------------------|------------------------|--------------------------|
| mākhchī                                             | 273a                     | half Turk and half Arab horse | 6.5 x 7.1 |
| nākhudā                                             | 274a                     | captain of a ship         | 8.3 x 8.8 |
| nāchakh, Ind: apakharsī (unattested)                | 275b                     | axe or double-headed spear* | 7.8 x 12 |
| nīmūr                                               | 277b                     | a hunt?, also a deer?     | 8.6 x 12.2 |
| naw ūmūz                                            | 278b                     | new student               | 7.6 x 12 and 8.2 x 12 |
| navāsāz                                             | 279a                     | musician who plays a stringed instrument | 8 x 12 |
| nāqūs                                               | 279b                     | worshipers                | 7.7 x 12 |
| nāznīn                                              | 285a                     | delicate, lovely          | 7.4 x 7.8 |
| nushrah                                             | 286a                     | gift given to children after finishing the Qur’an | 8.4 x 12 |
| nayshah; Ind: bānsī                                  | 288a                     | small reed                | 8 x 12 |
| vāzanch; Ind: penga (unattested)                    | 291a                     | swing                    | 9.5 x 12 |
|                                                                  |                          |                         | 18 x 12; 7.3 x 12; space: 4.6 |
| Waqwāq                                              | 293a                     | Island or tree of Waqwāq | x12; 6.1 x12 |
| vanang; Ind: lakanī, (laganī) (unattested)          | 294a                     | line upon which grapes are hung | 3.7 x 12 |
| varkāl                                              | 294b                     | wild bird                | 8 x 7.4; 1.4/6.6 x 5.6/1.9 |
| yūz                                                 | 302b                     | small dog, leopard, to search* | 6 x 12 |
| yang                                                | 304a                     | law                      | 8.4 x 9.1 |