

The Encounter of Medical Traditions in Nūr al-Dīn Šīrāzī's '*Ilājāt-i Dārā Šikōhī*'*

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Abstract

This paper discusses the '*Ilājāt-i Dārā Šikōhī*' by Nūr al-Dīn Šīrāzī¹ which is one of the largest Persian medical manuals composed in Mughal India (1526-1857). Šīrāzī was a physician attached to the Mughal court and dedicated his work to the Mughal prince Dārā Šikōh (d. 1659). A major characteristic of the '*Ilājāt-i Dārā Šikōhī*' is its incorporation of Indian knowledge and it can be considered as one of the most important attempts of describing in the same volume both the features of Muslim and Indian medical arts. Another important intellectual feature of the '*Ilājāt-i Dārā Šikōhī*' is its synthesis of secular and religious medical traditions of Islam and it is certainly not fortuitous that a book like this was dedicated to a personage such as Dārā Šikōh, both a Sufi scholar and an eminent student of Indian traditions.

The '*Ilājāt-i Dārā Šikōhī*' is a Persian medical treatise of an encyclopaedic character composed by Nūr al-Dīn Šīrāzī, who dedicated the work to the Mughal prince Dārā Šikōh (d. 1659). The work is known also as *Ṭibb-i Dārā Šikōhī*, or sometimes as *Daḥīra-yi Dārā Šikōhī*,¹ and offers a vast overview of the medical knowledge circulating among Muslim physicians in Mughal India. Nūr al-Dīn Muḥammad 'Abd Allāh Šīrāzī² was one of the leading medical writers in Persian active in India during the 17th century. He was born in India and he was

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¹ See Abdul Muqtadir (1927: 25, n. 992); Storey (1971: 257).

² Ḥasanī refers instead his name as Nūr al-Dīn Muḥammad ibn 'Abd Allāh ibn 'Alī al-Šīrāzī al-Ḥakīm 'Ayn al-Mulk, Ḥasanī (1990: 407).

the descendant, most likely the son, of a physician of Iranian origin, Ḥakīm ‘Ayn al-Mulk Šīrāzī (d. 1595), a descendant on his mother’s side from the well-known Iranian philosopher and theologian Jalāl al-Dīn Dawānī (d. 1502).³ ‘Ayn al-Mulk became a physician and ophthalmologist in the court of the Mughal Akbar (r. 1556-1601), where the medical elite was dominated by the presence of Iranian physicians.⁴ Nūr al-Dīn Šīrāzī’s mother, ‘Ayn al-Mulk’s wife, was the sister of two prominent scholars of Akbar’s court, the historian Abū al-Faḍl ‘Allāmī (d. 1602) and the court poet Fayzī (d. 1595).⁵

Nūr al-Dīn Šīrāzī also became a court physician and the Mughal Šāh Jahān (r. 1628-1657) conferred to him his father’s title of ‘Ayn al-Mulk. Later on, during Awrangzeb’s reign (r. 1657-1707), he served as the chief officer of the royal houses (*diwān-i buyūtāt*) in Agra.⁶ Nūr al-Dīn Šīrāzī left some non medical works, he collected the letters of Abū al-Faḍl (*Ruqa‘āt-i Šayḥ Abū al-Faḍl*) and of Fayzī (*Laṭīfa-yi Fayyazī*) and he also authored a treatise on the mystical doctrine of the *tawḥīd* (oneness of God) entitled *Marātib al-wujūd*.⁷

Apart from the *‘Ilājāt-i Dārā Šikōhī*, Nūr al-Dīn Šīrāzī wrote other Persian medical books. His most famous work was the *Alfāz al-adwiya*, a dictionary of drugs that he dedicated to Šāh Jahān in 1038/1628-29. The *ḥātima* contains paragraphs on the new substances circulating in Early-Modern India such as tea, coffee and the China root (*čūb-čīnī*).⁸ The *Alfāz al-adwiya* was known well among later physicians and several editions were printed in India during the 19th century.⁹ Šīrāzī’s other medical works include the *Anīs al-mu‘ālijīn*, a compendium on pathology and treatment,¹⁰ and the *Qusṭās al-aṭibbā* a dictionary of Arabic and Persian medical terms dedicated to Amān Allāh Ḥān (m. 1637),

³ Badā‘ūnī (1986: Vol. 3: 229).

⁴ ‘Ayn al-Mulk made also a career in the Mughal administration and composed for Akbar a medical treatise in verses entitled *Fawā‘id al-insān*, see Nawāz Ḥān (1999, Vol. 1: 172-173); Badā‘ūnī (1986, Vol. 3: 229-230).

⁵ Ḥasanī (1990: 407).

⁶ Kāzīm (1868: 344).

⁷ Ḥasanī (1990: 407); Marshall (1967: 35, 144, 381-382).

⁸ *Smilax China* Linn.

⁹ Šīrāzī (1849). Each entry of this dictionary provides the correct pronunciation of the concerned drug, specifying the names of foreign origins; the work was also called *Jāmi‘ al-aṭibbā*, that has been sometimes considered as a different work, see Storey (1971: 258); Monzawī (1382/2003: 3390).

¹⁰ The *Anīs al-mu‘ālijīn* circulated mainly by means of some printed editions published in India since late 19th century; the work discusses diseases and their remedies following the order from head to toe, Šīrāzī (1895).

a medical writer and a member of the Mughal's aristocracy.¹¹

Šīrāzī's writings were the object of some English studies which testifies the early interest of European scholars in Indian medicine and its *materia medica*.¹² Francis Gladwin wrote an English adaptation of the *Alfāz al-adwiya* that was published in 1793 in Calcutta, a long time before the appearance of the first printed edition of the Persian text. Gladwin writes that he undertook this work at the recommendation of the Hospital board of Fort William and «for the use of the Honourable Company».¹³ Major David Price published in 1831 the translation of the paragraphs of the 'Ilājāt-i Dārā Šikōhī dealing with the human senses (based on Nāṣir-i Ḥusraw's work) and with the Indian system of measurement of time and space. The introductory note to Price's translation defines it as «a work of no common magnitude or importance [...] and contains treatises, or discourses, not only on all the diseases [...] but also on almost every subject within the compass of the human understanding.» The note also makes a reference to a copy of the 'Ilājāt-i Dārā Šikōhī said to have been made by M. Bruys (sic.), a French resident at Surat, for the library of the King of France.¹⁴ This copy can be identified with the illuminated manuscript that belonged to the library of Pierre de Brueys in Surat, which was acquired by the Bibliothèque Nationale of Paris in 1802.¹⁵

Among Šīrāzī's main medical works the 'Ilājāt-i Dārā Šikōhī was the last he composed. This treatise stands among the largest Persian medical manu-

¹¹ The work was completed in 1040/1630-31 and is one of the main dictionaries of medical terms composed in Mughal India, Šīrāzī, *Qusṭās al-aṭibbā'*, Ms. Mashhad. Other two medical works attributed to Nūr al-Dīn Šīrāzī have been mentioned: the *Sabab-i sitta-yi rašidī*, on hygiene and the six essentials of health, which is a subject covered also in the 'Ilājāt-i Dārā Šikōhī, see Storey (1971: 258); Monzawī (1382/2003: 3500); Azmi (2004: 204); the other is the *Tāšrīḥ al-adwiya*, on the drug lexicon of the Greek, Arabic, Turkish and Indian books; the content of the *Tāšrīḥ al-adwiya* seems to be similar to that of the *Alfāz al-adwiya*, but the *incipit* of the two works is different, see Monzawī (1983: 532); Monzawī (1382/2003: 3376).

¹² See Harrison (2001); Arnold (2000: 65-71).

¹³ See Šīrāzī (1849).

¹⁴ Price (1831: 32); the part on the measurement of time includes the explanation of *pahar*, an Indian unit of time, equivalent to three hours, employed in the pharmacological instructions of Indo-Persian works, Price (1831: 54).

¹⁵ According to Blochet's description this copy (in 3 volumes, Ms. supplément persan 342, 342B, 342A), transcribed in 1192-93/1778-79 and lacking of the first page or two in the beginning, was realized for the Indian physician Bīžan Jīv, Blochet (1912: 104). Bīžan Jīv was a Zoroastrian and his father belonged to Surat.

als composed in India during the Muslim age. In his medical history of Persia Elgood describes it as «a gigantic work which rivals in quantity, if not in quality, the *Canon* of Avicenna or the *Thesaurus* of al-Jurjānī.»¹⁶ The work was composed in a relatively short time compared to its size, Šīrāzī started to write the *‘Ilājāt-i Dārā Šikōhī* in 1052/1642-43 (according to the *abjad* numerical value of *‘Ilājāt-i Dārā Šikōhī*) and it was completed about four years later in 1056/1646-47. Šīrāzī included in the text materials he used for his previous books, descriptions of his own medical experiences¹⁷ as well as some excerpts from previous scientific works of other authors. For this article I have used the copy of *‘Ilājāt-i Dārā Šikōhī* preserved at the Majlis Library of Tehran, which is one of the few known complete ones.¹⁸ It was transcribed about three decades after the work was composed and it is the oldest known copy of the *‘Ilājāt-i Dārā Šikōhī*.¹⁹

Some copies of the work were illustrated with miniatures and diagrams. Most of them are representations of the human body indicating the spots for cupping, phlebotomy and cauterisation. The previously mentioned manuscript of the Bibliothèque Nationale of Paris includes also a miniature showing a physician applying an enema to a reclined patient, while the section on drugs is illustrated with many coloured figures of animals on the borders.²⁰ The manu-

¹⁶Elgood (1951: 373); see also Leclerc (1876, Vol. 2: 332-334); Fonahn (1910: 64-65).

¹⁷Rahbar Fārūqī, author of the first known history of medicine in Muslim India written in Urdu, published in 1938, quotes a description of the author's own experience referring to an oil (*rūḡan*) for the eye of which the formula was given by the same Šāh Jahān to Šīrāzī who says to have used it for fourteen years, Fārūqī (1999: 113).

¹⁸For other manuscripts copies of this work see Blochet (1912: 103-104); Ivanow (1985: 724); Abdul Muqtadir (1927: 25-26); Ishrat (n.d.: 164); Pasha (1966: 43); Keshavarz (1986: 113); Šiddīqī (1996: 414); Rahman *et al.* (1982: 164-165); Nizami (1993: 226-227); five copies existing in Pakistan libraries are mentioned by Monzawī (1983: 625-626).

¹⁹The copy is dated Tuesday, the 25th of *muharram* 1089/19th March 1678; the codex (n. 6226) consists of 1574 numbered pages (787 folios) and it was transcribed in India at Akbarābād (Agra) by Muḥammad Wazīr ḥalaf-i Ḥakīm Muḥammad ‘Alam Kašmīrī; the place and date of transcription of the manuscript is given by the copyist on page 1573; for a physical description of the codex see Ḥā’irī (1350/1972: 202). Of this codex, I’ve been able only to view the microfilm (n. 6293).

²⁰Some illustrations of the codex of the Bibliothèque Nationale, including the one showing the enema, are reproduced in Speziale (2001: 925, 927). See also F. Speziale, «L’art médical à la cour moghole : l’encyclopédie de médecine de Šīrāzī, dédiée au prince Dārā Šikōh», paper presented at the XI^{ème} *Journée Monde Iranien*, National Museum of Natu-

script of the Majlis Library includes two diagrams describing the processes of vision.²¹

An important characteristic of the 'Ilājāt-i Dārā Šikōhī is its incorporation of Indian medical knowledge, a feature that mirrors both the courtly milieu in which the work was composed and the wider trend of Indo-Persian medical studies. The Mughal prince Dārā Šikōh, to whom the work is dedicated, had a well-known mystical leaning and as other Indian Sufis showed a considerable interest for learning of Indian origin. Dārā Šikōh patronised the Persian translation (entitled *Sirr-i akbar*) of the *Upaniṣads*²² and authored the *Majma' al-baḥrayn* (1065/1655), an important Persian comparative study of philosophic and mystic doctrines of the Muslim and the Hindu traditions.

Šīrāzī's family background includes important figures active in the courtly movement of Persian studies of Indian sources. Fayẓī translated in 995/1587 for Akbar Bhāskara's *Līlāvātī*, a Sanskrit text on arithmetic and geometry, and authored a treatise on Vedānta philosophical topics titled *Šāriq al-ma'rifāt*, where he also used categories derived from the *Išrāqī* (Illuminationist) philosophy.²³ Fayẓī was also among the scholars which Akbar ordered to translate the *Atharvaveda* but it seems that this project was not completed.²⁴ Abū al-Faẓl wrote the introduction to the translation of the *Mahābhārata* made at Akbar's instance and offered his readers in the *Ā'in-i Akbarī* an important description of Indian traditions.²⁵

The medical culture of Mughal India was characterised by the production of a relevant number of Persian texts on Indian medicine.²⁶ These studies began to be written from the epoch of the Indian sultanates and lasted until the Colonial period that also saw works on Indian medicine written in Urdu. The writing of Persian and Urdu texts on Indian medicine and sciences should be

ral History, Paris, March, 19th, 2009, accessible online at: http://semioweb.msh-paris.fr/corpus/aar/FR/_video.asp?id=1665&ress=6058&video=128738&format=68.

²¹ On pp. 160 and 163; the Majlis codex comprises also drawings of the human body (see the spots for cupping on p. 522), however most of these are unfinished and some pages are left empty, most likely in foresight of the addition of other figures.

²² On the *Sirr-i akbar* and its authorship see D'Onofrio (2010).

²³ On the *Šāriq al-ma'rifāt* see Ernst (2003: 184).

²⁴ Badā'ūnī (1986, Vol. 2: 216).

²⁵ The *Ā'in-i Akbarī*, constituting the third part of the *Akbar-nāma*, is also among the sources of the 'Ilājāt-i Dārā Šikōhī; for the chapter on the Indian units of measure, where is referred the description given in the *Ā'in-i Akbarī* of the *karoh*, a measure of distance, see Price (1831: 55); Abū al-Faẓl (2001: Vol. II: 417-418).

²⁶ See Speziale (2010b).

considered as one of the major corpus of scientific studies on a pre-Islamic tradition that took place in the Muslim world; and certainly as the most important one of the Early-Modern and Modern periods. These Muslim studies of Indian medicine and pharmacology were to a large extent motivated by practical considerations such as the search for local substitutes of foreign drugs. The study of Indian pharmacopoeia served therefore as a vehicle for adapting the practice of the Muslim Avicennian physicians to local conditions. Persian works on Indian medicine were composed by contemporaries of Šīrāzī such as the already mentioned Amān Allāh Ḥān, who translated the *Madanavinoda*.²⁷ Some of them were even named after Awrangzeb such as Darwīš Muḥammad's *Ṭibb-i Awrang-šāhī*, a general manual of Indian medicine. Moreover was Indian knowledge discussed in some Persian texts chiefly devoted to Avicennian medical learning such as the *ʿIlājāt-i Dārā Šikōhī*. The *ʿIlājāt-i Dārā Šikōhī* can be considered as one of the most important attempts of describing in the same volume both the features of Muslim and Indian medical arts.

Another important intellectual feature of the *ʿIlājāt-i Dārā Šikōhī* is its synthesis of religious and secular medical traditions of the Islam. Nūr al-Dīn Šīrāzī quotes in his work the *ḥadīth* (sayings) of Muḥammad and also mentions other pre-Islamic prophets and imams; in particular the *Risāla al-dahabiyya*, a medical treatise attributed to the eighth Shiʿite imam ʿAlī al-Riḍā (m. 818).²⁸ The *ʿIlājāt-i Dārā Šikōhī* was dedicated to a Sufi prince and the religious and esoteric traditions of Islam constitute an important framework of the book. Šīrāzī even included a description of the breathing exercises used by the yogis. It is not clear if Šīrāzī was affiliated to a Sufi order, but his *Marātib al-wujūd* seems to indicate that he was close to the Sufi doctrinal school patronized by Dārā Šikōh. Nūr al-Dīn Šīrāzī also refers to Sufi knowledge in the *ʿIlājāt-i Dārā Šikōhī*, especially to the *Fuṣūṣ al-ḥikam* of Ibn ʿArabī (d. 1240). The mystical and cosmological notions exposed in the *Marātib al-wujūd*, a treatise on the unity of God's Essence, reveals that Šīrāzī was a follower of the doctrine of the

²⁷ The *Madanavinoda* is a dictionary (*nighaṭu*) of drugs and foods composed in 1375 for Rāja Madanapāla, Amān Allāh's translation was titled *Dastūr al-hunūd*.

²⁸ The space Šīrāzī dedicated to this text can be certainly seen in connection with the contemporary vogue of the commentaries and translations of the *Risāla al-dahabiyya* taking place in Persia under the Safavids. The partial Persian translation included by Šīrāzī in the *ʿIlājāt-i Dārā Šikōhī* appears as one of the firsts among these contemporary translations, considering that the first known Persian version made in Safavid Persia is Muḥammad Naṣīr's *Tuḥfa-yi šāhiyya ʿAbbāsiyya* dedicated to Šāh ʿAbbās II (r. 1642-1666). On the *Risāla al-dahabiyya* and its Persian translations see Speziale (2004); Speziale - Giurini (2009).

waḥdat al-wujūd (unity of being).²⁹ In India, Ibn 'Arabī's metaphysical doctrine of the *waḥdat al-wujūd* circulated especially among Čištī and Qādirī circles, the later being the order that gained the princely patronage of Dārā Šikōh. It should also be noted that physicians like Šīrāzī who were versed in mystical doctrines was not an isolated phenomenon in India, on the contrary. Sufi circles in India had important connections with the medical culture and Indo-Muslim physicians with religious and Sufi backgrounds authored main Persian texts on Avicennian medicine as well as on Indian medicine.³⁰ An important example of Persian studies on Indian medicine is the *Ṭibb-i Awrang-šāhī* of the already mentioned Darwīš Muḥammad, who was a follower of the Čištīyya order.

Emblematic of the relation with the Indian Qādirīs are two texts dedicated to the saint eponymous of the order 'Abd al-Qādir al-Gīlānī (d. 1166, Baghdad); Abū Ḥalīm's *Ṭibb-i Qādirī*, a medical manual composed for Šāh Jahān,³¹ and Akbar Arzānī's *Qarābādīn-i Qādirī* (1718), which became one of the most diffused Persian pharmacopoeias of the Subcontinent. But in the *'Ilājāt-i Dārā Šikōhī* the relation with the mystical sphere goes beyond that of a work such as the *Qarābādīn-i Qādirī* where this relation remains merely symbolical as it is confined to the dedication of the text. Šīrāzī wants to present a true doctrinal combination of philosophical and mystical knowledge, which becomes especially obvious in the introduction. The *'Ilājāt-i Dārā Šikōhī* is an important case of a medical treatise that is inspired by elements of philosophical mysticism. It should be noted that Šīrāzī was a contemporary of the main scholars of the Iranian «school of Isfahan», who emphasized the role of *ḥikmat* (philosophical mysticism) and whose works soon circulated in India and had an important impact on local studies.

Following the example of other Indo-Muslim medical authors, Šīrāzī quotes at the beginning of the book the well-known *ḥadīth* of prophet Muḥammad which says that there are two kinds of sciences, the science of the body, i.e. medicine, and the science of religion. The author then goes on to offer a detailed list of the books and authors he consulted when compiling his work.³² This list includes main pre-Islamic medical authorities such as Galen (Jālīnūs), Hippocrates (Buqrāt), Aristotle (Arastāṭālīs), Oribasius (Arbyāsūs) and Paul

²⁹ See Šīrāzī, *Marātib al-wujūd*.

³⁰ On the relation between Sufi circles and medical studies in India see Speziale (2010a).

³¹ See Monzawī (1983: 630).

³² This list of sources has been edited by Blochet showing however some differences with the bibliography given in the Majlis copy (on p. 3) which lacks of some of the books quoted in the copy of the Bibliothèque Nationale, see Blochet (1912: 103-104). I've included in my description also some of the books mentioned only in the copy of Paris.

of Aegina (Būlus). Among the physicians of the Muslim age, Šīrāzī mentions Baḥtīšū', Yūḥannā ibn Sarābiyūn, Yūḥannā ibn Māsawayh, Ḥunayn ibn Ishāq, Muḥammad ibn Zakariyā' al-Rāzī, Ibn Sīnā, and, among the more recent writers, the Iranian physician 'Imād al-Dīn Maḥmūd Šīrāzī. Nūr al-Dīn Šīrāzī also gives the titles of several medical books such as the *Risāla al-dahabiyya* attributed to 'Alī al-Riḍā and here referred to as the *Ṭibb-i imām-i Riḍā*, the *Mūjaz al-Qānūn* by Ibn al-Nafīs, the *Taqwīm al-abdān* by Ibn Jazla, Ismā'īl al-Jurjānī's *Dahīra-yi ḥwārazm-šāhī* and *Āgrāz al-ṭibbiyya*, the *Agdiya al-marḍā* by Najīb al-Dīn al-Samarqandī, the *Iḥtiyārāt-i Badī'ī* by Zayn al-Dīn 'Alī al-Anṣārī, the *Kifāya-yi Manṣūrī* by Manṣūr ibn Ilyās and the *Tuḥfa-yi ḥānī* by Muḥmūd ibn Muḥammad 'Abd Allāh³³. Among other referred works are Ġiyāth al-Dīn Iṣfahānī's encyclopaedia of natural sciences, the *Dāniš-nāma-yi jahān*, and the famous al-Qazwīnī's *'Ajā'ib al-maḥlūqāt*.

This bibliography also includes the works of Indian Muslim authors, offering an interesting testimony to the circulation of these texts among later physicians. Among the Indo-Persian books mentioned are the *Šifā'-i ḥānī*, which can be identified with the work by the same name written in 794/1392 by Šihāb al-Dīn ibn 'Abd al-Karīm Nāgawrī.³⁴ The *Šihābī* is most likely the *Ṭibb-i Šihābī*, a medical *maṭnawī* composed by the same Šihāb al-Dīn Nāgawrī in 790/1388. The *Ṭibb-i Sikandarī* is almost certainly the *Ma'dan al-šifā'-i Sikandar-šāhī* by Miyān Bhuwa ibn Ḥawāṣṣ Ḥān, an important Persian compendium on Indian medicine dedicated to the Sultan of Delhi, Sikandar Lodī (r. 1489-1517). The *Mizān al-ṭabā'i* can be identified with the *Mizān al-ṭabā'i-i Qutb-šāhī*, a treatise on pharmacology written not long before the *'Ilājāt-i Dārā Šikōhī* by Taqī al-Dīn Muḥammad.³⁵ Among the other Indo-Persian works mentioned are the *Ṭibb-i Yūsufī* by Yūsuf ibn Muḥammad, court physician of the first two Mughals, the *Laddāt al-nisā'*, a Persian paraphrase of the *Kokaśāstra* (or *Ratirahasya*) by Pandit Kokkoka, an Indian treatise on sexology, the *Ṭibb-i badan binod-i hindī*, an unidentified Indian work, and the *Akbar-nāma* by Abū al-Faḥl. Among his other works Šīrāzī mentions his medical dictionary *Qusṭās al-aṭibbā'* and the *Alfāz al-adwiya*.³⁶ In the chapters of the *'Ilājāt-i Dārā Šikōhī*, Nur al-Dīn also mentions other books not included in this introductory bibliography, such as the *Kitāb-i fuṣūl* of Hippocrates and the *Kitāb al-šifā'* by Ibn Sīnā (d. 1037).

³³He had been in Shiraz a student of 'Imād al-Dīn Maḥmūd Šīrāzī.

³⁴A court physician active in the sultanate of Gujarat, the work was dedicated to sultan Muẓaffar Šāh (d. 1411).

³⁵The work was dedicated to the sultan Muḥammad Quṭb Šāh (r. 1612-1626) of Golconda.

³⁶The *Alfāz al-adwiya* is one of the books missing in the bibliography of the Majlis copy.

The 'Ilājāt-i Dārā Šikōhī is divided into an introduction (*miiftāḥ*), ten chapters or «discourses» (*guftār*), and a conclusion (*ḥātima*).³⁷ The first section of the book consists of the long *miiftāḥ* which is subdivided into forty-two chapters (*maqāla*).³⁸ Many of the arguments exposed in it are not typical of those of medical books. The author, for example, begins the first chapter on Adam's birth without mother and father by saying that however this is not a subject of the medicine of the bodies (*ṭibb al-abdān*) it is nevertheless necessary to give a description of it. Šīrāzī's aim is indeed to offer a synthesis of the philosophical, natural, cosmological and religious doctrines of Islam. Not even Ibn Sīnā's *Qānūn* uses so much philosophical material when introducing medical knowledge. The subjects included in the *miiftāḥ* range from the physical and psychic nature of man, the relation between microcosm and macrocosm, planetary spheres and their movements, the doctrine of the four elements (*ʿanāšir*) and of the four natural qualities (hot, cold, moist, dry). Šīrāzī also deals with subjects such as the formation of mountains, precious stones, metals, plants and animals.

The scientific and philosophical doctrines of the encyclopaedia of the Iḥwān al-ṣafā' (Brethren of Purity) are mentioned several times here. The version of the *Rasā'il Iḥwān al-ṣafā'* used by Šīrāzī is a Persian abridged translation titled *Mujmal al-ḥikma*. The thirteenth chapter (*maqāla*) of the introduction offers an excerpt from the *Ṭibb-i imām-i Riḍā*, which paraphrases in Persian the whole introductory discourse of the *Risāla al-dahabiyya*; this illustrates the symbolism of the body which is described as a kingdom (*mamlukat*) of which the king (*padšāh*) is the heart (*dil*).

Various *maqāla* treat in detail the psychic and the cognitive nature of man. The author exposes the doctrine of the soul (*nafs*), and places particular emphasis on the description of the *nafs-i nāṭiqa*, the rational soul. Šīrāzī describes the kinds of human knowledge, such as 'ilm, *ma'rifa*, *ḥikmat*, *idrāk*, and the psychic states (*aḥwāl*) of man, such as desire (*šahwat*), rage (*gazzb*), fear (*ḥauf*) and love ('*išq*).³⁹ *Maqāla* thirty-nine, in seven paragraphs, describes the process of vision and is illustrated with diagrams. The following chapter treats the doctrine of the external and the internal senses, and Šīrāzī's description abridges the exposition of the subject given in the *Zād al-musāfirīn* of the Ismaili scholar Nāṣir Ḥusraw (d. 1088).⁴⁰ Three chapters, beginning from the thirty-fifth, are devoted to the visions and the instructions on the occult world (*iṭṭila' bar ḡayb*) which appears

³⁷ The table of contents of the work is given on pp. 8-29 of the Majlis manuscript.

³⁸ On pp. 29-188 of the Majlis manuscript.

³⁹ The chapter on love is the last of the *miiftāḥ*.

⁴⁰ This excerpt comprises also the two beginning chapters of the *Zād al-musāfirīn* on speech and writing, see Price (1831: 32-53).

during dreams (*ḥwāb*) and during the state of wakefulness. The following chapter explains the manifestation of wonderful events (*ḡarā'ib*) such as miracles operated by prophets (*mu'jizāt*) and saints (*karāmāt*), magic and talismanic.

The first chapter of the book is divided into six paragraphs called *asrār* (secrets). The first paragraph deals with the classical definition and division of the medical domain into the theoretical (*'ilmī*) and the operative (*'amalī*). The author proceeds by describing the fundamental physiological concepts of Avicennian medical science. Šīrāzī's exposition begins with the doctrine of elements (*arkān*) and humours (*aḥlāt*), and then follows the description of the formation of powers (*quwwathā*), faculties (*aḡ'āl*) and spirits (*arwāḥ*). In the section dealing with humours and the natures (*ṭabā'i*) of the body, Šīrāzī again refers to the *Risāla al-dahabiyya* and its discourse on the humours and their relations with the four parts of the human body. In a further paragraph Šīrāzī again quotes the text of the *Risāla al-dahabiyya* and its discourse on the four ages of man and their relation with a predominant humour: the first age of man is dominated by blood (*ḥūn*); the second age is dominated by yellow bile (*ṣafrā'*); the third age which is the age of wisdom (*waqt-i 'ilm*) is ruled by black bile (*sawdā'*); and the fourth age of man is under the influence of phlegm (*balḡam*).

The second chapter is dedicated to the anatomy of the organs and bones (*tašrīḥ-i a'zā' wa ustulḥwānhā*) and is divided into eight paragraphs (*asrār*) dealing with the different parts of the body. The third chapter treats - in thirteen *asrār* - various canonical subjects of the medical literature, beginning with health and disease (*tan-durustī wa bīmārī wa anwā'-i ān*, 1° paragraph), and following with a description of the crises of illness (*rūzhā-yi buḥrān*, 2° paragraph) and the six essential elements of health and sex (*sitta-yi żarūriyya wa jimā'*, 3° paragraph). Then follows a section of the book dealing with various sciences other than medicine. The science of music is the object of the fourth paragraph, divided into 12 subparagraphs called *surūd* (song). Here Šīrāzī remembers the pre-Islamic prophet David, who is traditionally associated with this art, and deals with the therapeutic properties of music. He mentions the relations with the humours of the body and explains that music is indicated especially for the therapy of psychic and cerebral diseases, such as love sickness, madness, encephalitis, melancholia and apoplexy. The seventh *surūd* describes the relationship between the *maqāmāt* (modes) of music and the celestial bodies, the seasons of the year and the seven days of the week. The following (8° *surūd*) exposes the affinities (*nisbat*) of the *maqāmāt* with the seven climates (*iqḷīm*), as well as the regions (*diyār*) and nations (*aqwām*) of the earth. The ninth *surūd* is entirely dedicated to Indian music (*rāg-i hindūstān*). While the other paragraphs of the third chapter treat the principles of few other science which were considered useful to medical learning, in particular astronomy

(*nujūm*), arithmetic (*ḥisāb*) and geometry (*muqaddamāt-i handasa*).

The principles and methods of diagnosis are described in detail over the next few chapters. The fourth chapter is on the causes and signs of diseases (*asbāb-i bīmārī wa 'alāmāt-i ān*) and is divided into four paragraphs (*asrār*), of which the third is on the signs of physiognomy or *qiyāfa* (*'alāmāt-i qiyāfa*). The fifth chapter is on the diagnosis of the pulse (*dar bayān anfās wa bayān nabẓ wa aḥwāl-i ān*) and is divided into nine paragraphs (*asrār*) of which the last deals with the knowledge of Indian physicians. The following chapter exposes in fourteen paragraphs the rules for the diagnosis of urine (*aḥwal-i bawl*).

The seventh chapter of the 'Ilājāt-i Dārā Šikōhī deals with the preservation of health (*dar tadbīr-i ḥifẓ-i ṣiḥḥat*), and is divided into ten paragraphs (*asrār*). The first paragraph is on the regulation of human conduct (*tadbīr-i 'ādāt*); the second paragraph is on the regulation of movement, rest and times (*tadbīr-i ḥarakat wa sukūn wa ḥālḥā wa waqthā*) and is subdivided into four discourses, the third of which deals with medicine for travellers (*tadbīr-i musāfirān*) and includes a final subparagraph on sea voyages. The third paragraph deals with the regulation of food and drink (*tadbīr-i ma'kūl va ma'srūb*) and is subdivided into numerous subparagraphs on the properties of different kinds of food and drink. The first part, on the properties of food, is divided into twelve subparagraphs (*ma'kūl*), of which the last should deal with the foods used by Indian physicians (*ağdya-yi musta'mal-i aṭibbā'-i hind*, the title is given in the table of contents but this subparagraph is not present in the text of the Majlis manuscript). The fourth paragraph, divided into sixteen subparagraphs (*ma'srūb*), also deals with drinks (*šarābhā*) and the properties and methods of preparing products such as *fuqā'*, a kind of drink made of water and barley, distillates (*'araqhā*), juice preserves (*murabbayāt*), oxymels (*sakanjabīnāt*), *la'waqāt*, a kind of electuary to be licked, and infusions (*naqū'āt*). Among the other subjects of this chapter the seventh paragraph is on the rules of sleep and wakefulness (*iḥtiyār-i ḥwāb wa bidārī*) and the rules to be followed in the different seasons of the year (*tadbīr-i fuṣūl-i sāl*). The last paragraph is on purgation, purgative drugs (*adwiya-yi mushil*), emetic drugs (*mustafrīg*) and enema (*ḥuqnat*), and is divided into eleven paragraphs (*kār*).

The eighth chapter deals with Turkish baths (*istiḥmām*) and minor surgical interventions. It is divided into seven paragraphs (*asrār*), the first of which is on the rules of *istiḥmām*; the second on phlebotomy (*faṣd*); and the third on cupping (*ḥajāmat*). The fourth paragraph is on the uses of leeches (*zālū*) and the next paragraph deals with cauterisation (*dāg*). The ninth chapter is devoted to the treatment of diseases from head to toe (*dar bayān 'ilāj-i bīmārān az sar tā qadam*) and is divided into forty *asrār* which are further subdivided into many subparagraphs. In this chapter the author relays the treatments of several fa-

mous physicians and in various cases mentions the views of Indian physicians. A contact with the Western world can be seen in the chapter on syphilis (*nār-i farangī, atiṣak*) where the use of China root is also mentioned. The thirty-ninth paragraph is on the treatment of poisoning (*‘ilāj-i sammiyāt*) and describes several kinds of antidotes (*taryāq*). The tenth and last chapter of the book is dedicated to the pathology and the treatment of children and infants (*dar ‘ilāj-i šubyān wa kūdakān*).

The long conclusion (*ḥātima*) of the book is mostly devoted to pharmacology (*dar dīkr-i qarābādīn*) and is divided into forty-one paragraphs. Metallic and mineral substances and compounds, elixirs and mercurial electuaries, as well as chemical methods such as the calcination (*kušta*) of various substances, are widely described in this concluding section of the book. The first paragraph explains in detail the fundamentals of pharmaceutics and the methods for the preparation of medicines, beginning with collecting and storing drugs. A paragraph is devoted to the methods for determining the degrees of compound drugs (*dar yāftan-i darājāt-i adwiya-yi murakkab*). Nūr al-Dīn Šīrāzī describes in this section various technical and chemical operations for refining drugs such as cleaning (*tanqiya*), dissolving (*ḥall*), extracting (*istihṛāj*) and sublimating (*taṣ‘īd*). The fifteenth paragraph is dedicated to opium compounds (*murakkabāt-i afyūn*). Other paragraphs expose in detail the most important electuaries and preparations of the tradition such as *ma‘ājīn* (sing. *ma‘jūn*, a kind of electuary), *itrīfalāt* (corresponding to the *triphalā* of the Ayurvedic tradition), pills (*aqrās, ḥubūb*), drugs in powdered form (*saḫūfāt*), oils and unguents (*adhān*), fomentations (*kimādāt*), embrocations (*naṭūlāt*), perfumes and poisons. There is also a paragraph on the making of paper and ink.

Šīrāzī dedicates two paragraphs (23° and 24°) to the mercurial compounds (*murakkabāt-i ras*) and to Indian alchemical topics (*murakkabāt-i rasāyan*). The thirty-seventh paragraph, which is further divided into nine subparagraphs, deals with the physiology of breath and breathing exercises used by Indians, including some therapeutic uses associated with them (*dar ma‘rifat-i ijrā-yi naḥs wa manāfi‘ ān*). Nur al-Dīn describes the principles of the esoteric physiology of breath as contemplated by Indian yogis according to whom the flow of breath during the day alternates in predominantly one of the two nostrils, while only sometimes but at regular intervals the breath flows in both of them. He also exposes the correspondence between the side of nasal breathing and solar and lunar principles, according to which the right nostril is connected to the sun while the left is associated with the moon.

In conclusion it must be said that this paper is only a synthetic and preliminary description of the major themes and subjects described in this huge and still insufficiently studied medical treatise. This introductory analysis, however,

allow us to appreciate some of the salient features of this book. Nūr al-Dīn Šīrāzī's *'Ilājāt-i Dārā Šikōhī* is among the most comprehensive Persian medical manuals written in India and it stands as an emblematic product of the medical literature of the Mughal age. Nūr al-Dīn Šīrāzī's fundamental intent was to present together in a single book the different kinds of medical knowledge available to the Indo-Muslim physicians of 17th century. As such he relies on the classical heritage of Greek and Arabic authors adding to it the elements of the medical and pharmacological knowledge that Indo-Muslim scholars assimilated from Indian sources. Šīrāzī's synthesis of Muslim and Indian medical knowledge can be considered a primary example of its kind realised in India. Another fundamental feature of the book is the blending together of the various medical traditions of the Muslim world, the Avicennian doctrine on the one hand and the prophetic and esoteric traditions on the other. The *'Ilājāt-i Dārā Šikōhī* is a coherent product of the intellectual and courtly milieu in which the author was active. It is therefore no surprise to see this book dedicated to the Mughal prince Dārā Šikōh, a Sufi scholar, a patron of the Persian translation of Sanskrit sources and the author of the *Majma' al-baḥrayn* (The Mingling of the Two Seas) which was composed a few years after the *'Ilājāt-i Dārā Šikōhī* and represents a major comparative study of the Hindu and the Islamic traditions.

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