

An Indo-Persian musical treatise: The *Tebb-e Dārā Shokuhi*, 1646

Jean During*

INTRODUCTION¹

This article aims to provide a clue at locating Middle Eastern music and musicology in India by the middle of the 17th century. For this purpose one could refer to the *Tebb-e Dārā Shokuhi*², an important Indo-Persian medical treatise written in 1646 by Hakim Nureddin Mohammad Shirāzi and dedicated to the Mughal prince Dārā Shokuhi³.

Between the 16th and the 17th centuries many musicians from Persia and the Great Khorasan had emigrated to India. Their names are mentioned in the chronicles alongside those of the emigrant literates and scholars.⁴ Musical treatises have spread with them.⁵ Some of their traces were found in the chapter of the *Tebb* dedicated to music. But while drawing abundantly from Persian treatises, it also incorporates Indian elements such as the comparison between *maqām* and *rāga* or the ascribed visit of Pythagoras to India. This Indian touch as well as the importance given to the healing virtues of music somewhat enhance the originality of what, otherwise, would be just another compilation on music.

NUREDDIN MUHAMMAD SHIRĀZI'S TREATISE

Nureddin Mohammad Shirāzi was born in India from a Persian family. An eminent physician like his father, he wrote two important medical books: The *Alfāz ol-adwiya* dedicated to Shāh Jahān in 1628 and the *Tebb-e Dārā Shokuhi* dedicated to the Mughal prince Dārā Shokuhi. This work contains a long chapter on music of 25 large pages written in a difficult scholarly style without breaks between paragraphs.⁶ The whole *Tebb* is part of the codex n. 6226 which includes 787 folios. The chapter on music is divided in 12 sections (*sorud*) listed in the introduction: (1) description of the ear; (2) musical science and its branches (*taqsim*); (3) the production of music and the melodic instruments; (4-6) the 12 *maqāms* and 6 *āvāz*, the 24 *sho'be*, the 48 *gushe*; (7) the *maqāms* and the 12 constellations, the 4 seasons, the 7 planets; (8) the affinities between music and the 7 climates, regions and peoples; (9) the comparison between certain *maqāms* and Indian *rāga*; (10) the science of rhythm (*iqā'* and *osul*); (11) singing and the kinds of beautiful voices; (12) the ethos (*tab'*) and characteristics of the melodies *naghamāt*.

In his introduction the author gave the purpose of music in a medical encyclopaedia:

“he who knows both medicine and music can cure all diseases”.⁷

The ties between these two sciences were explained earlier by Abdolqāder Marāghi (c. 1400) on the basis that the doctors' diagnostics rely upon the pulse of the patient.⁸

Without the knowledge of rhythm, it is impossible to distinguish the various types of pulses and their spec-

* Jean During is emeritus Senior researcher at the Centre National de Recherche Scientifique (LESC/CREM, Université de Paris Nanterre).

¹ This article was originally a paper read in Srinagar, June 21st in the context of a conference devoted to Kashmiri Sufyāna Kalām who claims its strong links with ancient Persian music. Some elements were mentioned in [During, 2015].

² [Shirāzi, 17th Century], referenced from this point on as “*Tebb*”. The folios of this manuscript are further referenced in the article as “(*Tebb*, f. X)”.

³ In India this name is pronounced Dārā Shikoh. About the transliteration used in this article: for Persian authors, the translit-

eration follows the standard rules of pronunciation, including Arabian names of authors and objects or concepts (for example “Abdolqāder” instead of “Abd-al-Qādir”, *Tebb-e Dārā* instead of *Tibb-i Dārā*. Finally, punctuated *h t z d* are phonetically transliterated as *h t z d*.

⁴ cf. [Meysami, 2002].

⁵ [Djumaev, 1996, p. 178–179].

⁶ I am grateful to Dr. Fabrizio Speziale for providing me with a scan of the pages on music from a copy that is kept in the Majles Library of Tehran.

⁷ (*Tebb*, f. 310).

⁸ [Marāghi, 1987, p. 12].

ificities (speed changes, contrasts, frequencies, pressures, etc.). Reciprocally, according to Shirāzi⁹, the science of rhythm stems from the cardiac pulse (*nabz*).

Another argument is that in most diseases, the efficacy of the treatment depends on the patient's psychological dispositions. Consequently, doctors must know music for both diagnosis and treatment:

“Most of the ancient doctors used melodies and melisma (*alḥān o tarannom*) to give strength to the vital soul (*naḥs*)”.¹⁰

Though his intention is clear, this chapter goes far beyond the field of musical therapy and deals with different topics such as:

- The physical analysis of sound of the great scientists of the Golden Age such as Fārābī or Avicenna;
- the symbolic aspects of music, with its myths and legends, typical of the 16th and 17th centuries Persian “musicological” trend which can be considered as “popular science”;
- the issue of the efficiency of music on the soul and the health according to the famous theory of ethos and humours;
- the description of the different classical composition forms and their structure.

Regarding these four levels, the section on music is not highly original, though one finds some interesting technical details which could have been drawn from oral traditions and not borrowed from alien writings.

For example, musical instruments mentioned in the treatise could have been in use in India during the author's time.¹¹ They would be the *qārun* (“invented by Fārābī”) the *chang*, the *tanbur*, the *nāy-e dah o nim*, the *buq*, the *sornā*, the *shāhnay*, the *balabān*, the *qechak*, the *kamānche*, the *shederghu*, the *chanbar*, the *rabāb*, *qanbar* and *janrān*, are said to be derived from the ‘*ud*.

“The first instrument which has been built (*be ham reside*) is the *dotār*, with two strings: *bam* and *zīl* [...] Two strings have been added between them, to make the ‘*ud*. The *setār* was invented by ‘Ali Mashhur. The ‘*ud* is the most perfect instrument”.¹²

The names *qanbar*, *janrān*, as well as the distinction between *sornā* and *shāhnay*, or *qechak* and *kamānche*, seem relevant to Indian cultural contexts.

At the end of his chapter, he gives equivalences between *maqāms* and Indian *rāga*, but some names are difficult to decipher:

“They say that *Hoseyni maqām* is equivalent of *rāg Dehnāsari* [*Dhunāsri*]. *Rāst* = *Gowr* [*Gurī*], ‘*Oshshāq* = *Nat Narayan*, *Navā* = *Jaisri*, *Esfahān* = *Sārang*, *Rahāvi* = *Kalyān*, ‘*Erāq* = *Kānhrā*, *Zangule* = *Purbi*, *Bozorg* = *Mātīgura* (*Mānikura*), *Segāh* = *Bilaval*, *Chahārgāh* = *Pahardan* (?), ‘*Ozzāl* = *Sāvāri* (*Asavari*?), *Nowruz* ‘*Ajam* = *Mārūd*, *Dogāh* = *Jaisri*, *Segāh* = *Pehās* (*Behāg*?), *Panjgāh* = *Sārang*, ‘*Erāq* = *Todī*, *Rāst* = *Nat Narayan*, *Neysḥāburak* = *Kānrā*”, etc.¹³

This table is different from the ones given in other Indo-Persian sources such as the *Ghunyat al-Munya* written in 1374¹⁴, or the *Zamzama-i vahdat* of Bāqīe-ye Nā’ini (1628),¹⁵ but it shows similarities with other sources written in India after the 17th century¹⁶.

The *Tebb-e Dārā Shokuhi* is interesting for several reasons: it contains much information; it was written by a Persian who lived in India, thus it may reflect syncretic musical practices prevalent in Northern India; it deals with ideas about the aesthetic and therapeutic effects of music spread throughout a large cultural area from Maghreb to Mashreq.

The therapeutic use of music and especially modal melodies (*maqām*) is (to my knowledge) the achievement of the Arabs and the Persians, and to a lesser extent, of the Jews and of the Ottoman Turks. It did not exist in China, perhaps because there is no *maqām* system in this culture. In Indian Ayurvedic medicine, the morning, day and night *rāga* were prescribed to enhance the effect of a treatment according to the patient's temperament which itself belonged to one of the three categories *vatta*, *pitha*, or *kapha*. The main difference with Muslim medicine is that the latter relies on four categories while the relationship system is much more detailed.

⁹ (*Tebb* f. 324).

¹⁰ (*Tebb* f. 316a).

¹¹ (*Tebb* f. 316a).

¹² (*Tebb* f. 316b).

¹³ (*Tebb* f. 322b, 324a).

¹⁴ The *Ghunyat al-munya* is an anonymous treatise on Indian music. ([Sarmadee, 2003].)

¹⁵ [Rajabov, 1988, p. 125–136].

¹⁶ [Karomat, 2006, p. 86–87].

Within the perspective of Kashmiri music, it is noticeable that the cosmologic, ecologic and anthropological *maqām* system described in many Persian 16th and 17th centuries sources fades out in the course of the 18th century but remains a reference for the custodians of the Kashmiri classic genre Sufyāna Kalām. According to Sheykh ‘Abd ul-‘Aziz (20th century), *maqāms* are connected to the stars, the zodiac, humours, animal sounds, etc. and possess healing properties.¹⁷ This knowledge relies on 17th and 18th centuries writings but was transmitted up to the present day, and is still significant with traditional Kashmiri musicians. Yet the reference to this kind of doctrine is quite an anachronism, although the esoteric and metaphysic ideas on music were revived in post-soviet Central Asia, the ancient system has totally lost its relevance in the whole Inner Asian area.

As for the main ancient sources of the Sufyāna Kalām, Josef Pacholczyk concludes:

“Only a minimal part of this theory was [...] related to 18th-Century Kashmiri musical practice”.¹⁸

The same question arises for *Tebb*’s section on music. Shirāzi has obviously compiled several 16th-Century and earlier sources, probably without checking their relevance in contemporary North Indian music. On the other hand, as an erudite and perhaps a connoisseur, he had access to musical circles supported by the Mughal patronage. But as he was not a musician, one may wonder if his abundant data about the *maqām* system, the rhythmic cycles, structures, composition, ethos and healing properties of the *maqām* refers to actual practices and principles prevailing in North India in the first half of the 17th century. If we find no evidence that the *maqāms* quoted were still in use in their original form, then the whole system loses credibility. Anyway, this text deserves to be studied because it provides a large overview of the main ideas about music which circulated from the Near-East and Transoxiana, to India.

Keeping this in mind, I shall give an outlook of this chapter. For better appreciation I shall compare some of his data with other sources, mainly: Mohammad Neyshāburi’s *Resāle-ye musiqi*¹⁹ (13th century), Hasan Kāshānī’s *Kanz al-tuhaf dar musiqi* (mid-14th century),²⁰ Marāghī’s *Jāme‘ al-alhān* (around 1400), *Ma‘refat-e ‘elm-e musiqi*,²¹ Najmoddin Kawkabi’s *Resāle*²² (c.1520), Nasimi’s *Nasim-e tarab*, (16th century),²³ the famous *Behjat ul-ruh*²⁴ (early 17th century), the *Resāle-ye-e Amirkhān Gorji* (1699),²⁵ and two Kashmiri essays, the *Karāmat-e majrā* (around 1700) and the *Tarāna-e sorur* (around 1780)²⁶.

Mythical-history of the musical art and science

In the first pages of the *Tebb* Shirāzi deals with some current themes about the nature of music quoting Fārābī on the physics of sound, and reporting anecdotes with Pythagoras, Plato, David and Idris²⁷. Pythagoras cured physical and mental illness (*demāghī*), lovesickness, headache (*sarsam*), epilepsy, heart stroke, amnesia, and everything affecting the brain and nerves. This science was perfected by David²⁸ whose chanted psalms healed diseases.²⁹ Plato who invented the ‘ūd was able to play a tune that maintained the audience awake, and another one which had such a deep soporific effect on the listeners that they could not be waken up.

Shirāzi credits the invention of the stringed instruments to Pythagoras during his visit to India. According to a legend quoted in many sources and attributed to other individuals, Pythagoras saw the guts of a dead monkey stretched in a tree and giving the sound of strings.³⁰ By fixing the gut strings on a neck fitted in a coconut shell, he invented the *kanāncha*. This anecdote and two others³¹ are copied from the second paragraph of Kawkabi’s *Resāle-ye musiqi*³² written more than one century before the *Tebb*. In Central Asia (among Kirghiz

¹⁷ [Pacholczyk, 1996].

¹⁸ [Pacholczyk, 1996, f. 114].

¹⁹ [Neyshāburi, 1965, p. 99–103], [Rajabov, 1988, p. 76–78].

²⁰ [Binesh, 1992, p. 124].

²¹ [Anonymous, 1971, p. 190–198].

²² [Sābetzāde, 2002].

²³ [Nasimi, 2007].

²⁴ *Behjat al-ruh*, supposedly dating from beginning of the 17th century.

²⁵ Manuscript from the Bibliothèque nationale de France, “supplément persan 1087” [Gorji], and two Kashmiri essays: the

Karāmat-e majrā, around 1700 (ed. Pushp) and the *Tarāna-e sorur* around 1780.

²⁶ [Pacholczyk, 1996].

²⁷ Enoch in the Bible.

²⁸ A clear anachronism in the *Tebb*...

²⁹ (*Tebb* f. 312, 332b).

³⁰ (*Tebb* f. 312b).

³¹ (*Tebb* f. 314 b).

³² [Sābetzāde, 2002, p. 45].

and Kazakhs) it is generally attributed to Qanbar³³ and describes the invention of the lute.



Fig. 1 Folio 318b of the *Tebb-e Dārā Shokuh*.³⁴

Definitions and descriptions

In several pages of his introduction, Shirāzi establishes the basis of music in a very scientific and accurate way. He seems to rely on Fārābī whom he often quotes. He defines sounds, vibrations, rhythm, beats, in physical and acoustical terms. Then he gives accurate definitions of some musical concepts such as *musiqār* (the art of music), *alhān*, *osul*, *iqāʿ*, *āwāz* (any voice or sound), *lahn*

(simple melody), *ghinā* (melodies put together by a composer, with instrument).³⁵ Sound quality is sometimes described both with Arabic and Persian words: for example, *sorud* is the Persian rendition for *musiqi*. This is followed by a description of the different ways of sound production (natural and non-natural) and a classification of the musical sounds given by wind, string vibration, and percussions.

At the end of the chapter he gives interesting descriptions on the classical Middle-Eastern forms, genres, with a list of the rhythmic cycles. The forms are the following: *pishrow*, *kār*, *ʿamal*, *qawl*, *ghazal*, *tarāne*, *nowbat-e morattab* [...], *rikhte*, *sowt o naqsh*, and are distinct from each other by their organization in *sarkhāne*, *miānkhāne*, *bāzgu*, *tarkib*.³⁶ These pages are not compiled from Marāghi and deserve a comparison with other sources and also with the present day *Shashmaqom*.

Rhythmic cycles

The main rhythmic cycles (*osul*) were created by five masters who used them in their songs (*tasnif*). These are: *hazaj*, *ufar*, *torki*, *mokhammas*.³⁷ After these, five other cycles had been added by Khāje Seyfoddin Abdolmoʿmen, Ostād ʿAli T (...), Ostād ʿAli Sinābi, Ostād Ruhparvar, Mowlāna Hasan-ʿAli ʿUdi, and Khāje Abdolqāder (probably Marāghi). The same names are given in the *Maʿrefat-e ʿelm-e musiqi*.

Shirāzi mentions other *osul* names which are also found in other sources³⁸: *Qalandar*, *Farʿ*, *Khorazmi*, *Fākhte*, *Khafif*, *Mokhammas*, *Chanbar*, *Shāhi*, etc. All together add up to 17 *osul*. Let us note that this number, like the 12, has a symbolic meaning in Islamic esotericism. Several names are still common in Transoxiana, but on the whole, the list is quite different from the one given in the *Behjat al-ruh* (which quotes 24 *osul*) and the *Maʿrefat*.

An interesting detail is his definition of the cycle *Zarb al-fath* (50 beats, created by Marāghi), which blends different *osul* and melodic sections: 2 *sarkhāne*, *miyān khāne*, *bāzgu* or 3 *sarkhāne*, *tarji*, *pishro*. These concepts are still used in the Transoxiana *Shashmaqom*.

³³ Qanbar was the esquire of Hazrat Imām ʿAli (the 4th calife), but few people in Central Asia are aware of it.

³⁴ Image straightened and cropped.

³⁵ (*Tebb* f. 310).

³⁶ (*Tebb* f. 326b).

³⁷ (*Tebb* f. 324).

³⁸ (*Tebb* f. 324b).

Origin of the *maqāms*

The seven basic *maqāms* are attributed to seven prophets: Adam → ‘Oshshāq, Ebrāhim → Hejāz, Esmā‘il → Rahāvi, Yusof → Arāq, Yunus → Kuchak, Dāvud → Hoseyni. In this list, Soleyman is missing.³⁹ In the *Behjat al-ruh*⁴⁰ and the anonymous booklet *Ma‘refat*⁴¹ we find the same connections with also a missing *maqām*. Obviously Shirāzi compiled these sources. He adds⁴² that the primitive 7 *pardes* (i.e. *maqāms*) were completed by Ostād Asadi and linked with the 12 constellations.

Unfazed by these contradictions, he mentions their attribution to Pythagoras according to a famous tradition: after hearing the sound of the blacksmith’s hammers in the bazaar, by the mean of mathematic and asceticism, he could contemplate the angelic world (*mala-kut*), and perceive the sound of the spheres (*falak*) from which he drew the 12 *maqāms*.⁴³ According to another tradition, he says that these 12 modes were transmitted from King David to Pythagoras. He elaborates also extensively about the current attribution of the 12 *maqāms* by Moses who hit a magic stone from which 12 fountains sprung out.

The 12 *maqāms* (“also called *shadd*”), are the following: *Hoseyni*, ‘Oshshāq, *Navā*, *Busalik*, ‘Erāq, *Esfahān*, *Hejāz*, *Rāst*, *Bozorg*, *Kuchak*, *Rahāvi*, *Zangule*.⁴⁴ The same list is given in the *Behjat al-ruh*; it is a variant of the one established by Qotboddin Shirāzi (c.1320).

In his table of content, he says he will describe the 6 *āvāz*, 12 *maqāms*, 24 *sho‘bes*, and 48 *gushes*, but he only mentions the 12 *maqāms*. This classification is presented in the *Behjat* with a very suggestive diagram, and is quoted in modern times by the Kashmiri master Sheikh

‘Abd ul-‘Aziz.⁴⁵ It is worth noting that the 48 *gushes* reflect an evolution going back to the early 16th century and is limited to Persia.

An interesting point is the author’s understanding of the variability of the musical terminology: he points out that in different countries some *maqām* names are different.⁴⁶ In Rum, *Navā* = *Māhur*, *Zangule* = *Mavarā on-nahr*, *Kuchak* = *Zirafkand*, *Rahāvi* = *Varhavi* (?*Rahāvi*), *Zangule* = *Nahāvand*, *Esfahān* = *Mokhālef*.⁴⁷ The *gushe Khazan* or *Kabāb* are close to *Nowruz-e ‘ajam*.⁴⁸

He writes:

“*Nahāvand* is also called *Bayāti* in the Fars⁴⁹, and there are many *tasnifs* in this *maqām*”.⁵⁰

He also writes:

“*Oshshāq* is the more important and widespread, but *Rāst* has a priority, and is called *omm ol-advār*, (the mother of all the scales⁵¹), because the conclusion of every *maqām* is in *Rāst* [...]”.⁵²

This very interesting remark is found in several treatises as early as the 13th century in the Neyshāburi booklet⁵³. The specific status of *Rāst* is due to its attribution to Adam, and its first place in the 12 constellations. Actually, the Kashmiri Sufyāna Kalām is the only repertoire which illustrates this statement.⁵⁴

After the mythical origins of the *maqām* system, Shirāzi mentions historical figures about whom we have little information. The following masters are said to have added 2 *sho‘bes* to each *maqām* (one in the upper, the other in the lower register): Shamsoddin Mohaqeq (also mentioned in *Ma‘refat* and *Risāla karāmiyya*⁵⁵, c. 1582), Kamāleddin Borhān, Hoseyn Māhru, Ebrāhim Dānā, Es’hāq Khoshhāl (could be Mawsilī and his son).⁵⁶

³⁹ (*Tebb* f. 316).

⁴⁰ [Safioddin ‘Abdolmo‘men, 1965, p. 77].

⁴¹ [Anonymous, 1971, p. 192].

⁴² (*Tebb* f. 316a).

⁴³ (*Tebb* f. 312b).

⁴⁴ (*Tebb* f. 316b).

⁴⁵ [Pacholczyk, 1996, p. 109].

⁴⁶ In the modern period, the variance between *maqāms* probably increased. For example, *Navā* or *Bozorg* are very different in Arabic, Persian, Turkish, Tajik and Uyghur repertoires.

⁴⁷ In Iran they are still very close and differ mainly by their conclusion. The similarity between *Esfahān* and *Mokhālef* is mentioned in other ancient sources.

⁴⁸ (*Tebb* f. 316b).

⁴⁹ Persia.

⁵⁰ (*Tebb* f. 318b).

⁵¹ *Advār* in Arabic is literally “cycles”.

⁵² (*Tebb* f. 318a).

⁵³ [Pourjavady, 1995, p. 63].

⁵⁴ All the *maqāms* are related to *Rāst*, most of them use only a *Rāst* scale and end in its first tetrachord and its tonic.

⁵⁵ Dawra Beg Kerāmi, “*Resāle-ye kerāmiyya*,” in [Fallahzadeh, 2009].

⁵⁶ (*Tebb* f. 317).

Affect, ethos and therapy

We will now summarize and critically examine the foundations of the aesthetic and therapeutic effects expressed in the *Tebb-e Dārā Shokuh*. In Muslim culture, the philosophy of the effect of music, or doctrine of ethos (*ta'thūr, tasir*), is in the continuity with the Greek tradition. The first systematic approaches date back to the 9th century, but only in the 13th century was the ethos system developed for therapeutic purposes, and not only for aesthetic efficiency.

The ancient Arabian – and later Persian – sources developed a large network of affinities between the modes or melodic types (generally called *maqām*) and the anthropological and cosmological levels. It was based on 4 fundamental qualities: hot, cold, dry, humid and the 4 humours (blood, yellow bile, black bile, phlegm) identified by the Greek physicians, producing the 4 basic temperaments: sanguine, choleric, melancholic, phlegmatic.

In the early period (c. 9th to 15th centuries), the purpose was mainly to optimize the aesthetic efficiency of the musical performance by connections with the calendar and agenda parameters (seasons, zodiac, hours) and the nature, humour and temperament (*tab', tabiyat*) of the listener. A step further was to apply the system of humours and effect to the country, the ethnic origin and even to the professional and social class of the listeners.

In parallel to this aesthetic research and symbolism, Arabian and Iranian scientists elaborated a theory of the therapeutic effects of music. During the 17th century the speculation about the aesthetic and curative effect reaches its peak in Persian speaking spheres, then it decreases up to the point that in the Near East and Middle East nothing remains from it after the 18th century. Yet in modern and contemporary eras, the concern about therapeutic effect survives in the Maghreb,⁵⁷ while the global aesthetic views are echoed with Kashmiri masters.⁵⁸

⁵⁷ (*Tebb* f. 316a).

⁵⁸ From my personal observations and encounters These conceptions also appear in modern times in isolated writings like [Darwish, 1901].

⁵⁹ [Rajabov, 1988, p. 113].

⁶⁰ (*Tebb* f. 322b).

⁶¹ (*Tebb* f. 322).

Maqām and time

According to ancient sources, the classification of 12 *maqāms* in 4 categories (hot-dry, hot-wet, cold-wet, cold-dry) follows the zodiac. It starts in the *jins/genos Rāst* – a pentachord equivalent to the beginning of the western major scale – in the sign of Aries (also stated in *Resāle-ye karāmiye dar 'elm-e musiqi'*⁵⁹).

The association between the 12 *maqāms* and the 12 constellations is almost identical in all Persian sources from the same time: The *Tebb*, the *Ma'refat*, the *Behjat*, and Kawkabi's *Resāle*. However, this table differs from those given in Arabic and Turkish treatises. This may stem from variance of scale and structure between *maqāms* from one region to another, as Shirāzi pointed out,⁶⁰ but it is also possible that the Persian treatises referred to a common source.

The *Tebb* states:

“the influence of a *maqām* is at its peak when performed at the right moment.”⁶¹

Given the movement of the sky in the day, the zodiac rotates in 24 hours, thus it is recommended to perform:

“At dawn *Rahāvi* and *Hoseyni*; in the morning *Rāst*, at noon *Busalik*, *Nahāvand*, ‘*Oshshāq* and *Delkash*; at sunset, ‘*Erāq*, *Zirafkand*”, etc.⁶²

These connections are close to the ones allotted by Avicenna,⁶³ quoted later in the *Kanz al-Tohaf* (14th century)⁶⁴ and in N. Kawkabi's (d. 1531) *Resāle-ye musiqi'*.⁶⁵ They are different in Neyshāburi's booklet (13th century) and in Amirkhān-e Gorji's treatise⁶⁶.

According to Fonton, as late as in 1751, the Ottomans were taking in account the relation between the modes and the day and night phases.⁶⁷ In many cultural areas where these views were shared, remains the idea that some music, and particularly *maqāms* or *rāga*, are better suited to a particular moment of the day and night. It is well known that the attribution of each

⁶² (*Tebb* f. 322b).

⁶³ Farmer, 1926, p.109.

⁶⁴ [Binesh, 1992, p. 124].

⁶⁵ [Sābetzāde, 2002, p. 63].

⁶⁶ [Gorji, p. 35-36].

⁶⁷ [Fonton and Neubauer, 1999, v. 4, p. 69–70].

maqām to a specific moment is still followed in India, and even more in the *Sufyāna Kalām*.

Relations between maqāms and temperament

The duty of an artist is to delight the listeners who pay him. We find some recommendations on this topic long before in the *Qābus nāme* (1082),⁶⁸ but without therapeutic concern. This is the earliest Persian reference about the adequacy of the auditor's temperament with the choice of instruments and melodies. It says:

“the greatest art for an interpreter (*khonyagar*) is to adapt to the temperament of the listeners”.⁶⁹

According to the ethos doctrine, to please those having a hot and humid complexion, one should use modes, rhythms, timbres that are hot and humid.

On this basis, the *Tebb* prescribes: *Erāq*, *Ruh-Afzā*, *Busalik* for hot and humid temperament, *Rāst*, *Kuchak*, *Hoseyni Delkash* for warm and dry, *Isfahān* for cold and dry, etc.⁷⁰

The temperament (*tabʿ*) is reflected in the physical type and morphology which have affinities with some musical ethos.

This general principle is developed beyond the bounds of credibility a few centuries later in the *Tebb* and the *Behjat*:

“If they are dark skinned, dry and slim, one must play fast tunes in the high pitched register, such as *Segāh*, *Neyriz*, *Zābol*, *Maghlub* and *Salmak* [...] then their soul will rejoice [...] and they will give everything they have to the musicians”.⁷¹

This correspondence is expressed in the same wording in the *Tebb*.⁷²

The temperaments are up to a point an ethnic characteristic. Therefore:

“*Oshshāq*, *Busalik* and *Navā* increase courage. This is why Turks, Ethiopians and Blacks (*zang*) like them, and in war time they sing or play nothing else than these *maqāms*. It is said that *Māhur* and *Nahāvand* have also this property”.⁷³

The first line about ‘*Oshshāq* is copied exactly from *Kanz al-tohaf*, written three centuries before the *Tebb*. The second line comes also from the same treatise.⁷⁴

Many treatises establish relationships between *maqāms* and animal calls, or just animals. The basis for it is not clear to us; they could reflect the temperament or the sound quality (low/high register, volume, etc.). Thus, according to the great Safavi court musician (1699) Amirkhān-e Gorji: *Hoseyni* ↔ horse, *Rāst* ↔ Esrāfil (the angel, or sometimes *fil*, the elephant), *Busalik* ↔ lion, *Navā* ↔ nightingale, etc.⁷⁵ This is still reported in the Sufyana Kalām tradition relying on *Karāmat-e Majrā* (c. 1700).⁷⁶

Maqām regions and ethnicity

Ethnicity is itself bound to a territory, to a region. So logically the *Tebb* also establishes parallels between the 12 *maqāms* and the regions of the world.⁷⁷ Thus, Khorasan ↔ *Hejāz*; Transoxiana ↔ *Hoseyni*, *Kuchak*; Irak ↔ *Erāq*, *Esfahān*; Arabestan ↔ *Rahāvi*, *Homāyun*, *Zangule*; Rum ↔ ‘*Oshshāq*, *Navā*; India ↔ *Bozorg*, *Busalik* and *Mokhalef*.

The *Kanz al-Tohaf* gives other advices:

“in a meeting of Turks one will perform *Navā* and *Busalik*; in a meeting of Blacks and Ethiopians, ‘*Oshshāq*; [...] in a meeting of Tajiks and natives of Iraq, *Buzruk*, *Zirafkand* and *Zangule*; for ordinary people, *Hejāz* and ‘*Erāq*; in a meeting in which lovers are taking part, *Esfahān*, which will produce a deep dilatation in their souls (*bast-e ‘azīm dar nofus zāher shavad*)”.⁷⁸

The *Resāle-ye-Amirkhān Gorji*, offers similar associations but quite different in details from the one above:⁷⁹ *Rāst*, *Hoseyni* and *Dogāh* for the Indians, *Chahārgāh* for the Khorāsanis, *Neyshāburak* for the people from Sabzevār, *Segāh* for pink skinned people, *Hejāz* for the aged, *Zangule* and *Neyriz* for the ignoramus.

⁶⁸ [Key Kāvus, 1956].

⁶⁹ [Key Kāvus, 1956, p. 196].

⁷⁰ (*Tebb* f. 330).

⁷¹ (*Tebb* f. 330a).

⁷² “One must play fast tunes in the high pitched register, such as *Segāh*, *Neyriz*, *Zābol*, *Maghlub* and *Salmak* [...] then their soul will rejoice”.

⁷³ (*Tebb* f. 330a).

⁷⁴ [Binesh, 1992, p. 124].

⁷⁵ [Gorji, p. 26].

⁷⁶ [Pacholczyk, 1996, p. 118].

⁷⁷ (*Tebb* f. 322b).

⁷⁸ [Binesh, 1992, p. 124].

⁷⁹ [Gorji, p. 35-36].

Maqām, professions and social classes.

The common sense says that the adequacy between the *maqāms* and temperaments can only be considered for one, two or three listeners at the same time, or for one patient to heal. In the context of a concert, it is unlikely that all the auditors share, for example, a hot and humid nature. This concern may explain that several sources connect the modes to social classes. Thus Shirāzi advises:

- “- *Hoseyni* for kings;
- *Isfahān*, *Kuchak* and *Rahāvi* for sheikhs, as well as farmers, Kurds and mountaineers;
- *Erāq*, *Kuchak*, *Bozorg* for ministers, aristocrats, scholars and lawyers;
- *Zangule* and *Oshshāq* for emirs, Turks and soldiers;
- *Navā* and *Hejāz* for khans;
- *Busalik* and *Rahāvi* for scientists and scholars;
- *Rāst* for ordinary people”, etc.⁸⁰

The mentioning of Kurds suggests that this table is lifted from a Persian source. If we perceive consistency between *maqāms*, zodiac, moods and others, we can hardly find arguments to allocate some *maqām* to professional groups. It is not a reflection of the Indian cast system, because the same views are shared by other Persian treatises.

For its part, the *Behjat* advises:

“If they are soldiers, bloodthirsty bellicose Turks, one must play something beginning in the low register and ending in the high, such as *Rāst*, *Panjgāh*, *Erāq*, *Dogāh* and *Neyriz*. For bazaar merchants: *Hoseyni*... For kings *Hoseyni*, *Erāq*, *Zangule*, *Rāst*, *Panjgāh* and *Segāh*. For scholars *Ozzāl*, *Gavesht*, *Shahnāz*, *Segāh* and *Bastenegār*. *Mokhālef* and *Erāq* for listeners with a large head and small teeth”.⁸¹

There is no evidence of a systematic division of social and professional classes, but these lines suggest a ternary categorization: militaries-rulers, merchants-craftsmen, scholars.

A search on this aspect in other sources does not enlighten us. The *Maʿrefat* which contains common elements with the *Tebb* provides further connections.

“*Rāst* is for scholars, *Chahārgāh* for Indians, *Hoseyni* for women, *Segāh* for the soldiers, *Navā* for the people of Rum, *Panjgāh* and *Neyshāburak* for red and tanned skinned people, *Mokhālef* and

Erāq for Khorāsānis, *Ozzāl* and *Chahārgāh* for dark skinned people, *Oshshāq* and *Navā* for white skinned people, *Zangule* and *Neyriz* for the athletes, *Segāh* and *Hejāz*, for the aged”.⁸²

The same paragraph mixes ethnicity, professions and complexion, which casts doubt on the theoretical consistency of the system. No author considers the case of an assembly of listeners having different temperaments. Of course, given the usual conditions of performance, there is some chance that the participants belong to a common class: e.g. scholars, soldiers, or traders, which would justify this type of affinities.

Despite obvious borrowings, the correspondences often vary from one text to another, in a way that reduces their credibility. On the other hand, the association of the 12 *maqāms* and the hours of the day and night, or with social classes, differs from one text to another.

The medical use of the maqāms

After these preliminaries, the chapter deals progressively with the therapeutic dimension, relying primarily on the doctrine of ethos. This topic was developed as early as the 14th or 15th centuries in an anonymous Arabic treatise, the *Kashf al-Humūm wa-l-Kurab fi Sharh Ālāt a-ṭ-Ṭarab*.⁸³

Consequently:

“to those whose nature is cold and dry, one should not play a hot and humid tune”.⁸⁴

This principle applies for healthy people, but since the illness is caused by excess of a temperament, one can reduce it by sounds having the opposite properties. So conversely:

“For a patient, the remedy is to play melodies whose effect is opposed to his nature”.⁸⁵

“Music is a branch of magic, because if you play in the direction of the disease, it will get worse, and if you play in the opposite direction it will heal”.⁸⁶

⁸⁰ (*Tebb* f. 321).

⁸¹ (*Tebb* f. 322b).

⁸² [Safiuddin ‘Abdolmo’men, 1965, p. 58].

⁸³ Reproduced in [Farmer, 1965, pl. V].

⁸⁴ (*Tebb* f. 327).

⁸⁵ (*Tebb* f. 327).

⁸⁶ (*Tebb* f. 332b).

After a dozen pages of preliminaries, Shirāzi devotes three pages to accurate therapeutic prescriptions, such as the following:⁸⁷

“The doctors say:

Rāst cures paralysis, headaches and encephalitis (*sarsam o barsam*);

Esfahān develops intelligence, reason, spirit and brings away the coldness and dryness;

Zirafkand (also called *Shahnāz*) fights tremors and palpitations (*khafagān*) and blood diseases;

Kuchak for headache, palpitations and blood diseases;

Rahavi for paralysis, lumbago, and arthritis;

Bozorg is for stomach trouble, back pain, and develops understanding and memory;

Zangule is good for heart disease, it induces cheerfulness, quenches thirst, cures otitis, puts the body in motion;

Busalik removes *dark al-jama* (?), develops mindfulness [...];

Oshshāq removes diseases caused by hot and dry winds (*bād*);

Huseyni fights the fever.

Navā is a remedy against dark thoughts, sciatica and backache: it brings joy”.⁸⁸

We find almost the same prescriptions in the *Risāla dar bayān-e davāzdah maqām*, of Khāja Abdorahmān Ghaznavi.⁸⁹ They are also very close to the *Karāmat-e majrā* though *Oshshāq* and *Navā* are missing.⁹⁰ According to the Kashmiri master Sheykh ‘Abd ul-‘Aziz, *Kuchak/Kalyān* eases heartache, *Nowruz-e Sabā* is good for headache, *Dogāh* for fever and sore throat, etc.⁹¹

The influence of music is not only due to the adequacy of sounds to temperaments, but also to the harmonious movements of the stars, both being governed by the laws of numbers. Consequently, the power of music comes from the influence of the stars. The *Tebb* only alludes to the question:

“these data are available to the skilled physician: if he understands the temperament of the patient as well as the movements of the stars (*kavākeb*), he can achieve extraordinary effects (*atharhā-ye ‘azim*)”.⁹²

CONCLUSION

To close this survey, I will pick up a relevant hint about the choice of the poetry to be sung in the appropriate *maqām*:

“The singer must choose poems suitable to each *maqām* in order to increase their impact”.⁹³

Marāghi and Kawkabi recommend to choose the lyrics according to the listeners,⁹⁴ but Shirāzi advises to choose the poem which fits best the mood of the *maqām*.⁹⁵ For example, the *Navā maqām* must be sung with a poem inducing joy. In fact, the opening (*sarakhbār*) of the *Navā maqām* of the Bukharian *Shashmaqom* illustrates this recommendation with a jubilant poem.

In the Qājār Persian tradition there is a whole book of poems to be sung in specific *āvāz* and *gushe*.⁹⁶

The mention of poetry draws our attention to the fact that all along Shirāzi’s chapter, *the action of music itself is reduced to its modal element*, without considering other aspect such as the rhythm, the tempo, the timbre, the register, the volume, the movement induced and the meaning conveyed by the song. It suggests that the whole system was an abstract and ideal construction, an ambitious attempt to connect and organize the material and immaterial levels of the universe.

*
* *

⁸⁷ This is only one table among others on the curative effect of the *maqām*. In several sources of the same period, we find other tables. See [Neubauer, 1990, p. 256–257].

⁸⁸ (*Tebb* f. 330b).

⁸⁹ [Rajabov, 1988, p. 78].

⁹⁰ [Pacholczyk, 1996, p. 109].

⁹¹ [Zokā’, 1971].

⁹² (*Tebb* f. 332b).

⁹³ [Pacholczyk, 1996].

⁹⁴ [Sābetzāde, 2002, p. 63].

⁹⁵ (*Tebb* f. 330b).

⁹⁶ [Forsat-e Shirāzi, 1913].

References

1. ANONYMOUS: "Ma' refāt-e 'elm-e musiqi", *Nāme-ye Minovi*, Y. Zokā [Tehran, 1971-1350 H] p. 190-198.
2. BINESH, Taqi: *Se resāle-ye fārsi dar musiqi musiqi-e Dāneshnāme-ye alāyi, musiqi-e Resā'el-e ikhwān al-safā, Kanṣ al-tuhaf*, Markaz-e nashr-e dāneshgāhi [Tehran, 1992].
3. DARWISH, Muhammad: *Ṣafā' al-Awqāt fi 'ilm a-n-Naghamāt*, Maṭba'at at-Tawfiq [Cairo, 1901].
4. DJUMAEV, Alexander: "Migrations de musiciens des villes de Transoxiane et développement de la science musicale en Inde (XVI^e-XVII^e siècles)", translators Alié Akimova and Jean During, *Cahiers d'Asie centrale* 1/2, Institut Français d'Études sur l'Asie centrale [1996-6-1] [url: <https://journals.openedition.org/asiacentrale/434>] p. 173-182.
5. DURING, Jean: "De la délectation à la médication. L'évolution des conceptions de l'effet de la musique dans l'ancien monde musulman", *Cahiers d'ethnomusicologie. Anciennement Cahiers de musiques traditionnelles* 28, Infolio Editeur / Ateliers d'ethnomusicologie [2015-11-15] [url: <https://journals.openedition.org/ethnomusicologie/2513>] p. 171-183.
6. FALLAHZADEH, Mehrdad, ed.: *Two Treatises-Two Streams Treatises from the Post-Scholastic Era of Persian Writings on Music Theory*, Ibex Publishers [2009].
7. FARMER, Henry George: *The sources of Arabian music an annotated bibliography of Arabic manuscripts which deal with the theory, practice, and history of Arabian music from the eighth to the seventeenth century*, E. J. Brill [Leiden, 1965].
8. FONTON, Charles and Eckhard NEUBAUER: *Der Essai sur la musique orientale von Charles Fonton mit Zeichnungen von Adanson, The Science of Music in Islam (Volume 4) 4/*, Institute for the History of Arabic-Islamic Science at the Johann Wolfgang Goethe University [Frankfurt - Deutschland, 1999].
9. FORSAT-E SHIRĀZI, Mohammad Nasir al-Hoseyni Forsat al-Dowleh: *Bohur al-alhān dar elm-e musiqi va nesbat-e ān bā ariz ...*, Matba'eh-ye Mozaffari [Bombay, 1913-Tehran 1975].
10. GORJI, Amirkhān: *Resāle*, Bibliothèque nationale de France, supplément persan 1087.
11. KAROMAT, Dilorom: "The 12-maqam System and its Similarity with Indian Ragas (according to Indian Manuscripts)", *Journal of the Indian Musicological Society* 36 [2006] p. 62-88.
12. KEY KĀVUS: *Qābus Nāme*, Ebn-e Sinā [Tehran, 1956].
13. MARĀGHIL, 'Abdolqāder: *Jāme' al-alhān*, editor Taqi Binesh, Cultural Studies and Research Institute [Tehran, 1987].
14. MEYSAMI, Hoseyn (Seyyed): "Mohājrat-e musiqidānān-e dōwrān-e safiyeh be hend", *Mahoor* 16 [2002] p. 69-81.
15. NASIMI: *Nasim-e tarab (The Breeze of Euphoria) A Sixteenth-Century Persian Musical Treatise*, edited by Amir Hosein Pourjavady, ed. Chāp-i 1., Farhangestān-e honar [Tehran, 2007].
16. NEUBAUER, Eckhard: "Arabische Anleitungen zur Musiktherapie", *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften* 6 [1990] p. 227-272.
17. NEYSHĀBURI, ebn-e Mahmud: "Resāle-ye Musiqi", editor M. Dāneshpazhuh, *Yaghmā Haftād sālegi-e Farrokḥ* 15 [1965-1344H] p. 99-103.
18. PACHOLCZYK, Józef: *Sūfiyāna mūsīqī the Classical Music of Kashmir*, ed. für Wissenschaft und Bildung [Berlin, 1996].
19. POURJAVADY, Amir Hosein: "Resāle-ye musiqi-e Mohammad ebn-e Mahmud ebn-e Mohammad-e Neyshāburi", *Ma'āref* XII [1995] p. 32-70.
20. RAJABOV, Askarali: *Naghme-ye Niyāgān*, Adib [Dushanbe, 1988].
21. SĀBETZĀDE, Mansure: *Se resāle-ye musiqi-e qadim-e irān*, Anjomān-e āsār o mo'ākher-e farhangī [Tehran, 2002].
22. SAFIÖDDIN 'ABDOLMO'MEN: *Behjat or-ruh (mid. 17th century?)*, H. L. Rabino de Borgomale (Bonyād-e farhang-e Iran) [Tehran, 1965].
23. SARMADEE, Shahab, ed.: *Ghurnyatu'l munya the earliest Persian work on Indian classical music*, Indian Council of Historical Research in association with Northern Book Centre [New Delhi, 2003].
24. SHIRĀZI, Hakim Nureddin Muhammad: "Tebb-e Dārā Shokuhī", *Codex n. 6226 (787 folia)* [Tehran, 17th Century].
25. ZOKĀ', Yahyā: "Resāle-ye 'elm-e musiqi (A treatise by Dowre Beg Kerāmi, c. 1580)", *Nāme-ye Minovi*, Chapkhāne-ye Kāvīān [Tehran, 1971] p. 190-198.