

MUSICAL INSTRUMENTS IN TIMURID PAINTINGS

An Organological Approach

Mahnaz Shayestehfar

Hooman Asadi

Tarbiat Modares University

Abstract

This paper is devoted to a study of Persian musical instruments in the Timurid era as depicted in a number of the 15th century miniature paintings. It begins with a discussion of the usual system of classification of musical instruments as well as a brief description of the common musical instruments in that period according to some extant musical treatises. Then an effort is made to locate illustrations of musical instruments in some Timurid miniature paintings. Finally, attempt is made to compare the data derived from both organological and iconographical sources in order to get a better understanding of the morphology and the function of the musical instruments, which were supposed to be prevalent in the Timurid epoch.

Any picture of the present that is not informed by an appreciation of the historical dimension is sadly incomplete.
(Widdess 1992: 219)

Introduction

Timurid epoch is often regarded as a highly prosperous era in the history of Persian music¹. In this period several important treatises on the science of music were composed in Persian², among which one may refer to the influential treatises of 'Abd al-Qâdir Marâghî, (Marâghî, 1966, 1987, 1991) one of the most prominent figures in the history of Persian music.

Other major Timurid music theoreticians with significant extant treatises were *Nûr al-Dîn 'Abd al-Rahmân ibn Ahmad ibn Mohammad Dashîrî Jâmî* (Mallah, 1965-66), *'Alî ibn Mohammad al-Me'mâr* known as *Banâ'î* (Banâî, 1989) and *Nizâm al-Dîn Alîshâh ibn Hâjî Bûkah Awbahî* (Awbahî). In the musical treatises of these artists and scholars, in which various aspects of music are technically discussed, a chapter is usually devoted to a discussion of musical instruments. The most complete discussions on musical instruments in this period can be found in the works of *Marâghî*. Hereafter the usual classification of musical

instruments, as well as a list of major instruments, as referred to in *Jâme' al-Alhân* and *Maqâsid al-Alhân*, his two major opuses, is presented. Then the musical instruments depicted in some miniature paintings of the 15th century (Figures 1-16 in the appendix) are studied from an organological viewpoint. It is tried to identify these illustrated musical instruments on the basis of the information presented in the Timurid musical treatises. Moreover, other issues such as aspects of the symbolism of musical instruments, and their probable associations with particular genders and/or contexts, are also discussed.

Classification and Description of Musical Instruments³

Musical instruments in Timurid treatises are usually categorized into four groups, including the human voice (*tasvîât-e ensânî/holûq-e ensânî*), which is always regarded as "the most complete" instrument. The other three categories, called external instruments (*âlat-e khârejah*), are wind instruments (*alat-e dhawat al nafkh*), string instruments (*âlat-e dhawâr al-awtâr*) and percussions (*kâsât, tâsât, alwâh*). Chordophones, especially the *'ûd*, are referred to as the most complete amongst the external instruments.

Both string and wind instruments are subdivided into two main groups of stopped (*moqayyadât*) and non-stopped or free (*motlaqât*). The former refers to those instruments that are stopped by fingers (*'asâbe* or *'anâmel*), hence having a fretted or unfretted fingerboard or a set of holes, while the latter comprises the ones that are not stopped by fingers. In stopped instruments each chord or tube can yield several tones, while in the free instruments each chord or tube can just produce a single tone. String instruments can also be further divided, according to their performance techniques, into plucked (*mezzârât*) and bowed (*majrûrât*) chordophones.

Hereafter a brief description of the musical instruments prevalent in the Timurid era, as

mentioned by Marâghî, is presented in order to provide the ground for a possible comparative study with iconographical sources.

Chordophones

1. **'ûd-e qadîm**: A short-necked lute with four double courses of strings.

2. **'ûd-e kâmel**: A short-necked lute with five double courses of strings.

3. **Tarab al-fath**: A short-necked lute with six strings, somehow similar to the *'ûd*.

4. **Shashtây**: There are three types of this instrument. (A) A pear shaped usually fretted short-necked lute, the body of which resembles that of the *'ûd*, with six strings tuned in pairs. However non-fretted instruments are more complete than the fretted ones. (B) A rather long-necked fretted lute, the body and soundboard of which resemble those of the *'ûd*. (C) A similar instrument on the soundboard of which there is a set of sympathetic strings in pairs. It is played with a plectrum and also by fingernails, on both melodic and sympathetic strings, and is very popular in *Rûm*.

5. **Tarab rûd**: This instrument is similar to the third type of the *shashtây*, but with two sets of sympathetic strings on both sides of the soundboard. Each set has 30 chords.

6. **Kamâncheh**: A bowed chordophone, sometimes its body is made of nutmeg and its chords from horsehair, while in some other types they are respectively made of wood and silk. In the latter case the skin of cow, which sounds better, covers the body.

7. **Ghezhak**: A bowed chordophone, the body of which is covered by skin. It has a larger belly than *kamâncheh*. This instrument has ten strings, two of which are melodic chords, i.e. the two outer ones, which are longer than the others. The other eight strings are not bowed, but just plucked by fingers; hence they can be regarded as sympathetic strings.

8. **Tanbûr-e shervânîân**: A long-necked pear shaped fretted lute with just two chords. It is very popular in *Tabriz*.

9. **Tanbûre-ye torkiyeh/torkî:** A long-necked lute, the belly and soundboard of which are smaller than those of the previous one, while its fingerboard is longer than that. It usually has two, and sometimes three, strings.

10. **Rûh afzây:** A chordophone with a round belly and six string in pairs, four made from silk and two from brass.

11. **Qupûz/Qupûz-e rûmî:** A piece of wood is emptied and curved like a small 'ûd, half of the surface of the soundboard is covered by skin. It has five strings.

12. **Ûzân:** A chordophone with three strings, which has the largest body among all the other instruments. Its soundboard is covered by skin. It is played by a wooden plectrum.

13. **Nây tanbûr:** A bowed chordophone with two or sometimes more strings, similar to *tanbûr-e shervânîân*.

14. **Rabâb/Robâb:** A chordophone with three to five strings in double courses tuned like the 'ûd. It is more popular in *Fârs* and *Isfahân*.

15. **Rûdkhânî:** A short-necked fretted lute with four strings, similar to 'ûd-e *qadîm*, half of its soundboard is covered by skin. It may have six strings, four of which are made of silk and the other two from brass. This instrument looks like *tanbûr-e shervânîân*, but has a flat surface. It has been a new instrument invented by *Marâghî*.

16. **Yaktây-e 'Arab:** A variety of monochords with a short fingerboard, belly and soundboard of which are in square shape among the Arabs. Its both sides are covered by skin, a set of horsehair making one single chords is around a peg.

17. **Tarantây/Tarantây-e rûmî:** A long-necked monochord lute, the soundboard of which is hexagon. It has a long neck, approximately one meter.

18. **Tohfat al-'ûd:** A small 'ûd, its length and width are half of those of the usual 'ûd, mainly with twelve strings.

19. **Shadarghû:** A long-necked lute with a large body and soundboard. It has four strings and half of

its soundboard is covered by skin. It is very common in the Chinese Turkestan (*khatây*) and tuned in 360 different ways.

20. **Shahrûd:** It has ten strings in pairs, its belly and soundboard resemble the 'ûd. But its length is twice larger than that of the 'ûd. This instrument has rarely been played in the Timurid era, but *Marâghî* revived it.

21. **Pîpâ:** A chordophone with four string and long frets. It is made up of a piece of curved wood, which is also covered by wood. Its belly is not deep. i.e. less than four fingers in depth. This instrument is popular in Chinese Turkestan (*khatây*).

22. **Moghni:** It resembles a wooden board with many, usually 24, strings. Although it is mainly a non-stopped instrument with no fingerboard, it may sometimes be stopped as well.

23. **Chang:** It has a very famous instrument. It usually has 24 strings played with nails of both hands. Its chords are fastened with ropes instead of pegs (*malâvi*) and its soundbox is covered by skin.

24. **Ikrî:** Resembling *chang*, but covered by wood instead of skin. It has pegs instead of ropes.

25. **Qânûn:** Its body and soundboard are triangular, without any fingerboard. Its strings are made of metal, and sets of three chords are tuned the same.

26. **Sâz-e morassa'e ghâyebi ghâyebi-e morassa:** It is a stopped string instrument, resembling a lantern put on a mill, with two ropes fastened to a wooden cycle. The performer holds one end of the rope from distance, then a hard object is moved and plectrum moves to play the chords. It has not been prevalent in the Timurid era, although cited in ancient treatises. *Marâghî* revived this instrument.

27. **Yâtughân:** Its shape resembles a long board, approximately 1.5 meter, with 15 or 17 chords fixed on it. This instrument does not have any fingerboard or tuning peg (*malâvi/gûshak*). The strings are placed on the backside of their carriers (*hâmel*) and tuned by moving the carriers or bridges. Chords are moved and played by right-hand fingers, while left-hand fingers vibrate or stop the

plucked chords. It is very popular in Chinese Turkestan (*khatây*).

28. Sâz dûlâb: It is one of the ancient instruments, like a reversed *dohol* with external strings. Its plectrum is fixed in an appropriate place, while the instrument proper is moved by a piece of wood like a weaving cycle.

29. Kongereh: A fretted monochord played by right-hand fingers, while stopped by left-hand fingers. It is like a piece of wood fixed between the heads of two gourds. This instrument is mainly popular in India (Hindustan).

Aerophones

1. Nây-e sefid: A tubular instrument (pipe) with seven holes in front and one hole in the backside; the latter is stopped by the thumb. Its length is usually about seven and half handfuls (*mosht*).

2. Zamr-e shahnây: It is smaller than the previous one, about half in size. It is even regarded to be complete than *nây-e sefid*.

3. Nây-e balbân/ Nâyche-ye balbân: It is a small instrument related to the *sornâ*.

4. Nây-e châwur/jâwur: It is a kind of *nây* with an small range, with is played by some Turkish people.

5. Sornâ: It is not as perfect as *nây-e sefid* or *zamr-e shahnây*, but can be heard in longer distances.

6. Burghu: This instrument, which is made of brass, is three times longer than the *sornâ*, and only yields three tones. It may also be described as a longer type of *nafir*, the length of which exceeds two meters.

7. Nafir: This instrument is approximately two meters long. It is called *karrenây* when its neck and mouth are shaped in a curve-like form.

8. Bâq: A small instrument, about one handful, with holes on the tube and a reed (*zabânî*) in its mouth, which produces sound.

9. Khik nây: An instrument with a churn-like body. It is blown into one end, and on the otherside there are two small *nâus* similar in size, bound together, the holes of which are stopped by fingers

to produce various sounds.

10. Mûsîqâr: A set of *nâys*, which are different in size and bound together. Each pipe only produces a single tone.

11. Chapchîq/Japchîq: Also called *mûsîqâr-e khatâi*. It also has a churn-like body and a set of brass curve-like pipes (*nâys*) placed at one end-so that all *nâys*, with holes beneath them, are blown together simultaneously.

12. Orghânûn: It is comprised of two sets of popes (*nâys*) made of tin. Some *nâys* are small, while some others are long. A bellow, made blown by moving the left-hand, is placed at the left side of the instrument, while the right-hand fingers are used to stop the holes. It is very popular in Europe [cf. Organ].

Percussions

There is not much information devoted to percussions, however it seems that both membranophones and idiophones were rather common in this period. Only the generic terms of *kâsât*, *tâsât* and *alwâh* are mentioned to refer to this category of musical instruments. According to *Marâghî* percussions are all among the free or non-stopped instruments.

1. Kâsât: A set of bowls, each of which produces a certain pitch. The larger and/ or fuller bowls yield lower tones, while the smaller and/ or emptier ones produce higher pitches. *Marâghî* invented this instrument, on which various tunes could be performed.

2. Tâsât: *Marâghî* does not provide us with enough information with regard to this type of instrument. He just says that it is similar to *kâsât*.

3. Alwâh: A set of plates or tables (*lawhs*) suspended on a wooden frame. Each plate is tuned to a certain pitch, so that this instrument can be regarded as a tuned idiophone. The plates fastened with ropes to the frame are suspended in the air to vibrate freely when struck by an object. This instrument has been called *sâz-e alwâh-e fûlâd* (Fig. 17)⁴.

Musical Instruments in Paintings

1. "A Peri with Lute". In this figure a lady is depicted while playing a long-necked lute. The instrument has a pear shaped body and a long narrow fingerboard. It is difficult to distinguish any frets and also the number of strings due to the narrowness of the fingerboard, although it probably has just one or two strings. This instrument seems to be a kind of *tanbûr*. There are at least two possibilities: it might be either *tanbûre-e shervânîân* or *tanbûre-ye torkî*. Although it is very difficult to identify its type with any certainty, it seems more probable to resemble the latter, due to its long fingerboard and small belly (Fig. 1).

2. "Sufi Dance around a Cypress Tree": This scene illustrates a mystical ritual (*samâ*) in which music accompanied by dance always plays a prominent role. All participants, including the musicians, are male. A long stopped aerophone accompanied by two membranophones [and several idiophones (hand-clapping)] are depicted in this painting. The wind instrument is a kind of *nây*. It probably is *nây-e sefid*, due to its size, which seems to be about seven and half handfuls, and also with regard to its performance technique and the position of the thumb. The two percussions may be regarded as hybrid instruments: they can primarily be considered as membranophones due to their having skins, however their five metal rings or palates may function as idiophones. Although no particular name is mentioned for such an instrument in extant Timurid musical manuscripts, it might generally be called the *daff*. A number of participants are clapping their hands, which may also in turn be considered as idiophones (Fig. 2).

3. "Shirin Receiving Khosrow in Her Palace": In this scene three male musicians are playing in outdoor quarters of the palace. Two long stopped aerophones are illustrated as accompanied by a percussion instrument. The instruments may be identified as two *nâys* (probably *nây-e sefid*) and on *daff* (Fig. 3).

4. "The Celebration of the Birth of Majnun": This painting illustrates a ceremonial musical scene. There are four male musicians performing in the outdoor quarter. There are three instrumentalists and one vocalist in this ensemble. The instruments include two *nâys* (probably *nây-e sefid*) and one *daff*. It is quite noteworthy that the singer holds a song-text collection⁵ in his hands (Fig. 4).

5. "The Dance of the Sufi Dervishes". In this painting another mystical ritual (*samâ*) resulting in trance and ecstasy is vividly depicted. The ensemble, which consists of three musicians, includes two *nâys* (probably *nây-e sefid*) and one *daff*. Such scenes are rather more prevalent in the 16th and 17th century paintings (cf. Fig. 2). It seems that one of the participants is also singing, probably saying divine words [*dhikr*] (Fig. 5).

6. "A Celebration at the Court of Sultan Husayn Mirza": This painting illustrates a scene of court music. There are two male instrumentalists depicted in this miniature playing two chordophones, i.e. a big lute and a long fiddle, as well as a male vocalist. The lute has 10 [or 12] strings. The number of strings as well as its large size suggests that it may be either '*ûd-e kâmel* or *shahrûd*. It seems more reasonable to resemble the latter than the former, due to its very large size; but since according to *Marâghî* the *shahrûd* was "rarely played" at that time, it might also be interpreted as '*ûd-e kâmel*. The body of the bowed chordophone seems to be covered by skin, but it is difficult to distinguish the number of strings. It seems to be *kamancheh*, due to its overall shape and also being rather more prevalent among the bowed instruments. The singer, who sits on the opposite side, holds a song-text collection in his hands (Fig. 6).

7. "Sultan Husayn Mirza in a Garden": This is an interrelated double-page illustration. The first page depicts four male musicians in an outdoor context, while in the indoor quarter ladies entertain the king, where one female instrumentalist is playing solo harp. The male musicians play a big lute, a harp, a pear shaped long-necked lute and a *nây*

(Fig. 7). The instruments might respectively be interpreted as *'ūd-e kâmel* (or less probably *shahrūd*), *chang*, *nây-e sefid* and *tanbûr* (probably *tanbûr-e shervânîân*). The second page depicts a lady playing a *chang* (Fig. 8).

8. "A Royal Feast": In this painting two female musicians are playing a non-stopped chordophone and a *daff* in indoor quarters [of the court]. Another lady seems to be singing. The string instrument seems to be either the *chang* or *ikrî*. Although it is very difficult to identify whether it has pegs or ropes, which distinguish *chang* from *ikrî*, the chords somehow seem to be fastened with pegs, in this case it might be the latter. However, it should also be taken into consideration that the *chang* has been more popular and quite famous in that period, hence it might equally be interpreted as a *chang* (Fig. 9).

9. "An Outdoor Court": This painting depicts four male musicians. A singer is accompanied by three instrumentalists playing a long-necked lute, an aerophone and a percussion instrument (*daff*). There seem to be two wind instruments in this depiction, one in the performers hands (probably *nây-e sefid*) and the other one in front of him on the ground. It is quite noteworthy that even today *ney*-players usually have several instruments ready to their hands, with different tunings. The *nây* which is placed on the ground seems to have several holes on the tube and also looks smaller than the other one, almost half in size, hence might be a *zamr-e siâhnây*. It is difficult to identify the lute; however, it seems to have four tuning pegs, hence four strings. Its soundboard seems to be covered with skin and its pegbox somehow resembles that of the *'ūd*. [It might be *shâdarghu*] (Fig. 10).

10. "Shirin and the Portrait of Khosrow": This miniature depicts four female musicians in an all-female context. There is one vocalist in the ensemble, who also seems to clap her hands while singing. The instruments include *'ikrî* or *chang*, *daff*, and a kind of *nây*, which is not completely visible to distinguish further (Fig. 11).

11. "Majnun on Laylas Tomb": This painting depicts a nomadic scene. There is only one male musician playing *nây* (*nây-e sefid*). It is an outdoor performance in a rather folk context, resembling a shepherd playing his typical instrument, the *nây* (Fig. 12).

12. "Bahram Slays the Dragon": In this scene a lady, *Âzâdeh*, is playing an *ikrî* or *chang* on a horse. However it rather seems to be a *chang*, since this instrument is attributed to *Âzâdeh* (Fig. 13).

13. "The Master Spying Bathing Maidens": In this miniature a lady is playing a *chang* or *ikrî* in indoor quarters. Another lady seems to clap her hands together while dancing (Fig. 14).

14. "Iskandar Beating the Drum to Repel the Sea Monster": This painting depicts a man playing a drum. It illustrates a membranophone (*tabl*), which is struck by a single stick. However there is no mention of such an instrument in musical treatises of this period (Fig. 15).

15. "The Couple Brought before the King": This painting depicts a courtly scene. There are three male musicians playing the *daff*, *nây* (*nây-e sefid*) and *chang* or *ikrî* (Fig. 16).

Conclusion

It seems that certain musical instruments have been more prevalent in Timurid paintings, a fact that might imply their possible popularity in the 15th century Persian musical life. Among wind instruments, various types of the *nây*, especially *nây-e sefid*, may be regarded as the most common musical instrument. Among percussions various sizes of the *daff* are presented in many illustrations suggesting that it has usually been used as an accompanying instrument. Although the absence of this instrument in musical manuscripts makes a paradoxical case, it can still be inferred that such instruments have been in practice. Their being ignored in the technical musical literature might be due to the fact that any discussion of the musical instruments, particularly in the treatises of the so-called Systematist School⁶, has been usually

considered as part of a more favored discussion of the tuning systems, which is naturally based on the melodic rather than the rhythmic instruments. The most favorite string instruments in this period, actually in all periods of the history of music in the world of Islam, have been various types of the *ūd* and *tanbūr*, which are both among plucked stopped chordophones. *Ūd*, the most complete external musical instrument, may also be regarded as the most popular string instrument in the Timurid era. The *kamâncheh* among bowed stopped chordophones, and *chang* among non-stopped string instruments seem to have been popular in this period as well. Nonetheless it should be claimed that it seems difficult in most depictions to distinguish the *chang* from *ikrî*.

Although in musical and literary sources there is hardly cited any information with regard to female musicians⁷, the iconographical sources point out to their active presence in the musical life of Timurid epoch. The absence of female musicians in literature may have been due to certain social considerations. Certain instruments seem to have been more common among female musicians, such as the *chang* or *ikrî*, the *daff* and sometimes long-necked lutes of the *tanbūr* family. Also female singers are depicted in some cases suggesting that they mainly used to perform at indoor quarters and in all-female contexts. In illustrations the only contexts in which men could listen to females singing are the royal scenes.

Various contexts of musical performance included Sufi ritual gatherings (*samâ*), which were even more favored in the Safavid era, royal courts in both indoor and outdoor quarters as well as everyday and folk scenes. The musical instruments more prevalent in such performance contexts were respectively the *nây* (*nây-e sefid*) accompanied by the *daff* (in Sufi and mystical contexts), various types of the *ūd*, *tanbūr*, *kamâncheh*, *chang*, *nây* and *daff* (at the royal courts), and *nây* (in folk scenes).

Some scenes suggest the use of this instrument, the

nây, by shepherds, a general tradition that continues up to the present time.

Ensembles were usually comprised of a small number of musicians. The most common types of ensembles included several performers on the *nây* and *daff* usually accompanying a vocalist. The solo performance of some instruments, especially the *chang*, seemed to have been favored as well. It is also noteworthy that the singers usually hold a so-called song-text collection in their hands, a fact that emphasize the importance of such extant collections and implies the possibility of getting access to parts of the Timurid musical repertory.⁸

¹ For a general discussion of Timurid music consult Mashhun 1994, 193-269; Binesh, 1995, 116-133 and Asadi, 1999, 70-73.

² For a descriptive catalogue of the hitherto known Timurid musical manuscripts consult Daneshpazhuh, 1976 and Massoudieh, 1996.

³ All information on musical instruments presented hereafter is based on Maraghi (1966, pp. 124-137 and 1987, pp. 198-210), unless otherwise cited.

⁴ The author has identified an illustration of this instrument in a hitherto unknown musical manuscript kept in the Library of the Leiden University. It is actually a fragment of one of the treatises of Maraghi. Figure 17 illustrates this instrument (Maraghi, MS).

⁵ Consult Wright, 1992

⁶ Consult Asadi, 1999 and Wright, 1978.

⁷ In musical treatises of this period there is no female musician cited, the same holds true for literary sources (ch. Vasefi, 1970-71).

⁸ A highly remarkable study on such collections in the Ottoman tradition, which include many Persian song-texts, has been conducted by Wright (1992). There are a considerable number of such collections in Persian awaiting further research in hope of getting access to their musical sounds as well.



Figure 1. "A Peri with Lute," Topkapi Palace Museum Library, Istanbul, H2162 f. 7v. (Bahari, 1997, p. 31)

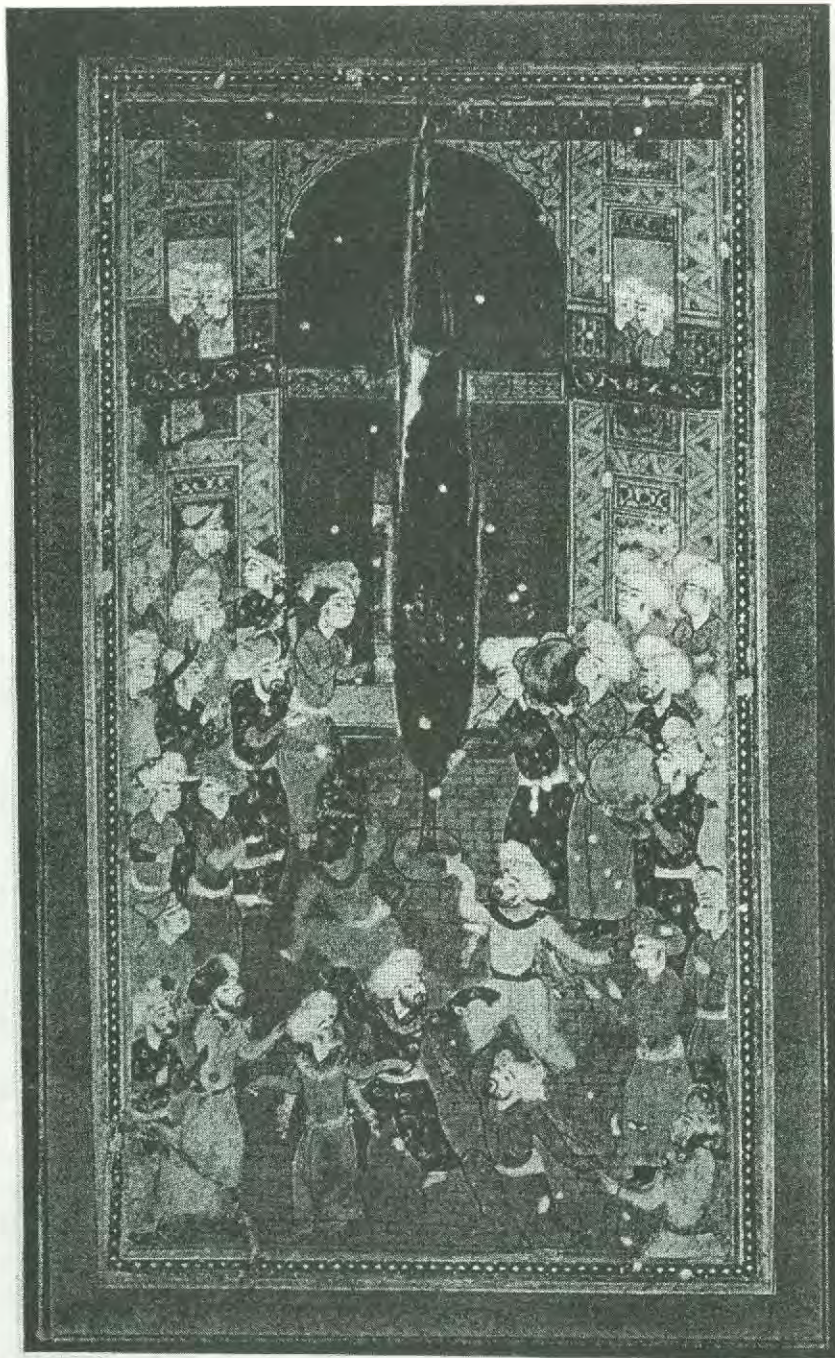


Figure 2. "Sufi Dance around a Cypress Tree" c. 16th century, c. 20x14cm, Private Collection. (Bahari, 1997, p. 46)

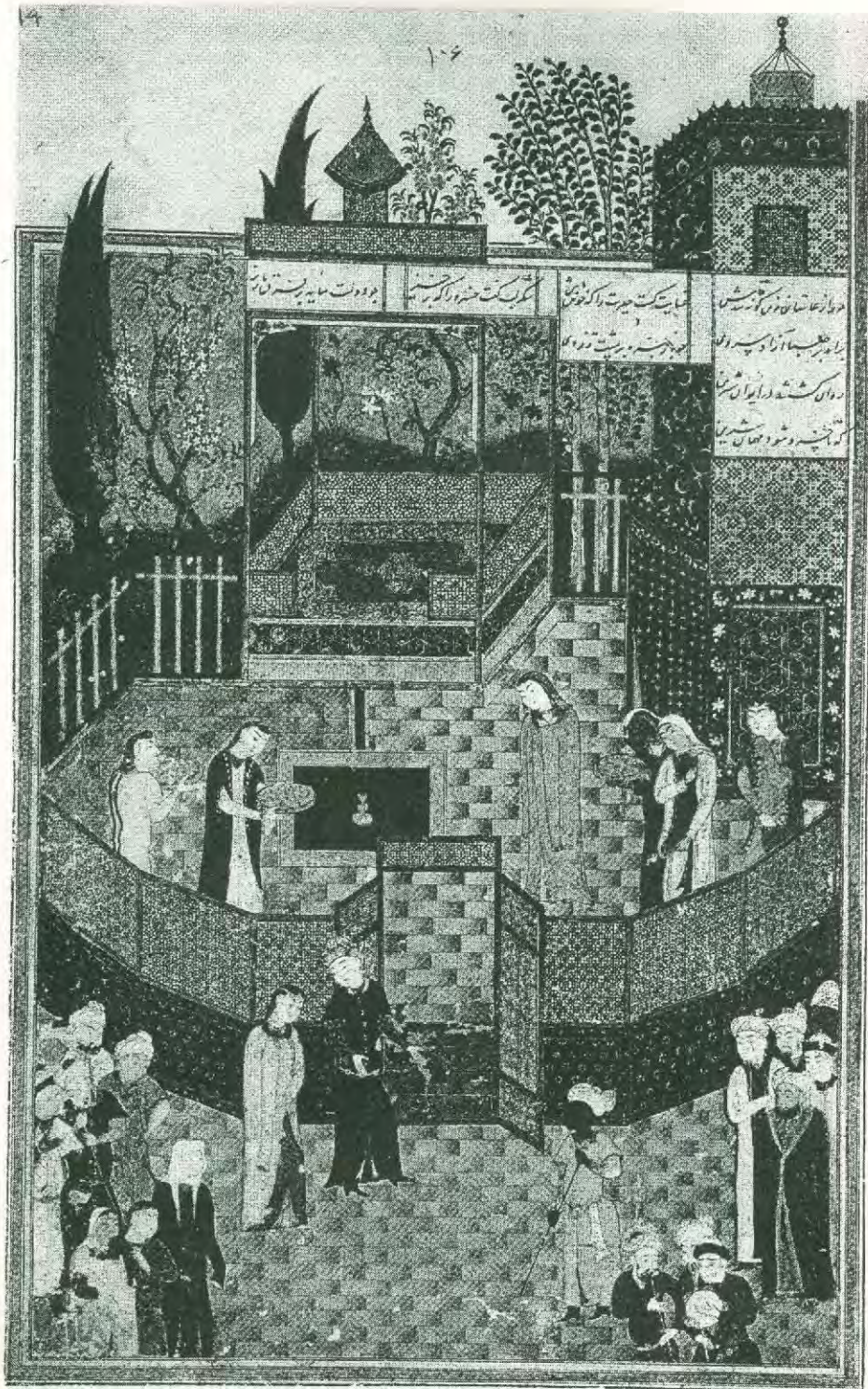


Figure 3. "Shirin Receiving Khosrow in Her Palace" Under Bihzad's supervision, from a *Khosrow u Shirin* of Amir Khosrow Dihlavi, 1485; c. 20×15cm. Chester Beatty Library, Dublin, MS 163, f. 54r. (Bahari, 1997, p. 65)



Figure 4. "The Celebration of the Birth of Majnun" Under Bihzad's supervision, from a *Leyli u Majnun* of Amir Khosrow Dihlavi, 1485; c. 20×15cm. Chester Beatty Library, Dublin, MS 163, f. 104v. (Bahari, 1997, p. 66)



Figure 5. "The Dance of the Sufi Dervishes" Attributed to Bihzad, c. 1490; 16×10.7 cm. Metropolitan Museum of Art, New York, Rogers Fund, 1918. (Bahari, 1997, p. 94)



Figure 6. "A Celebration at the Court of Sultan Husayn Mirza" Attributed to Bihzad, 1488; frontispiece to a Bustan of Sa'di, f. 1v. 30.5×21.5cm. General Egyptian Book Organization, Cairo, Adab Farsi 908. (Bahari, 1997, p. 102)

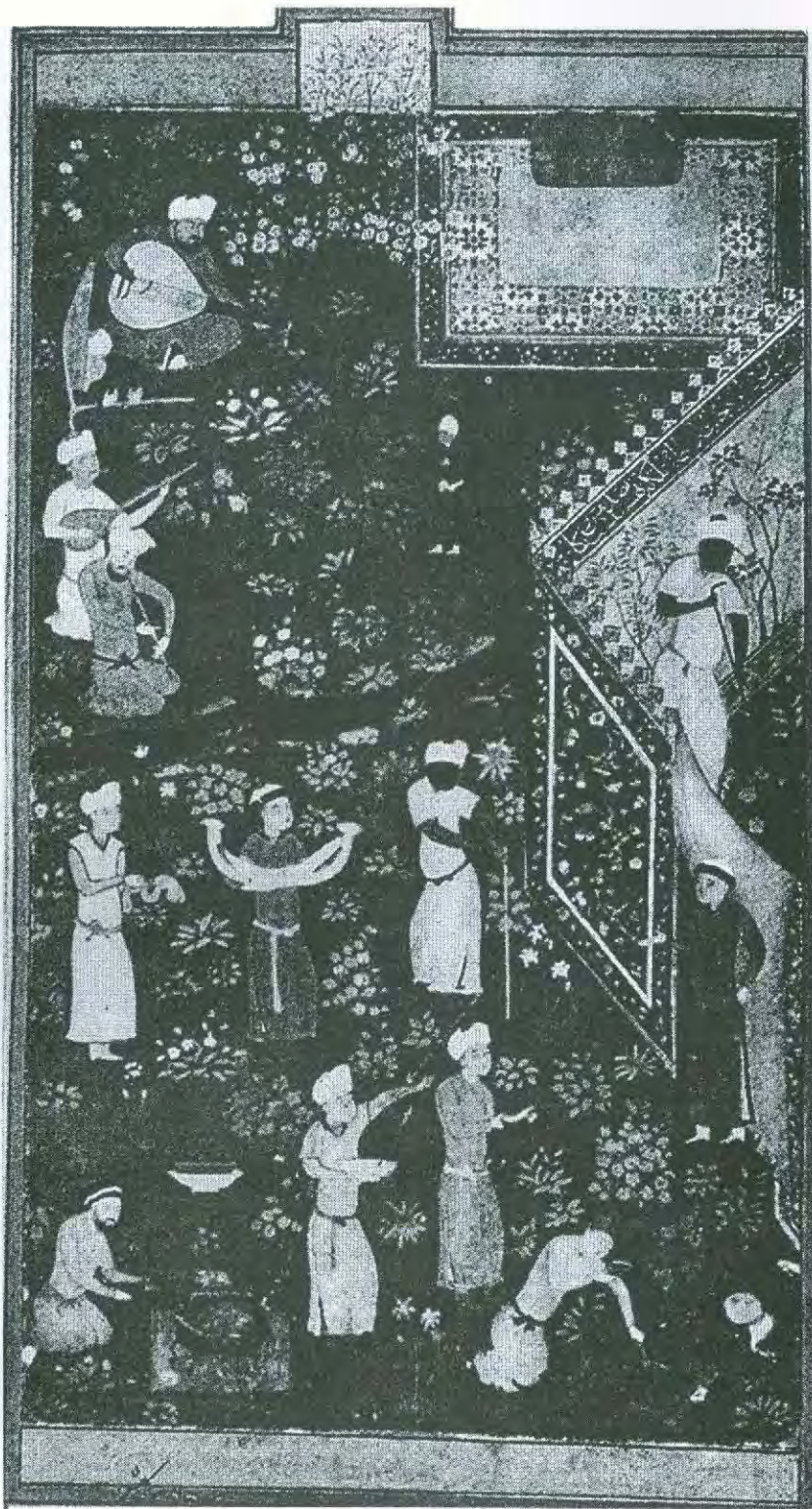


Figure 7. "Sultan Husayn Mirza in a Garden" By Bihzad, Muraqqa Gulshan, c. 1490; f. 55, 24×14 cm. Gulestan Palace Library, Tehran. (Bahari, 1997, p. 110)



Figure 8. "Sultan Husayn Mirza in a Garden" By Bihzad, Muraqqa Gulshan, c. 1490; f. 62, 24×14 cm. Gulestan Palace Library, Tehran. (Bahari, 1997, p. 111)



Figure 9. "A Royal Feast" By Bihzad and others, c. 1490; f. 4r, frontispiece to Khamseh of Nizami, c. 15×10 cm. The British Library, Add. 25900. (Bahari, 1997, p. 115)

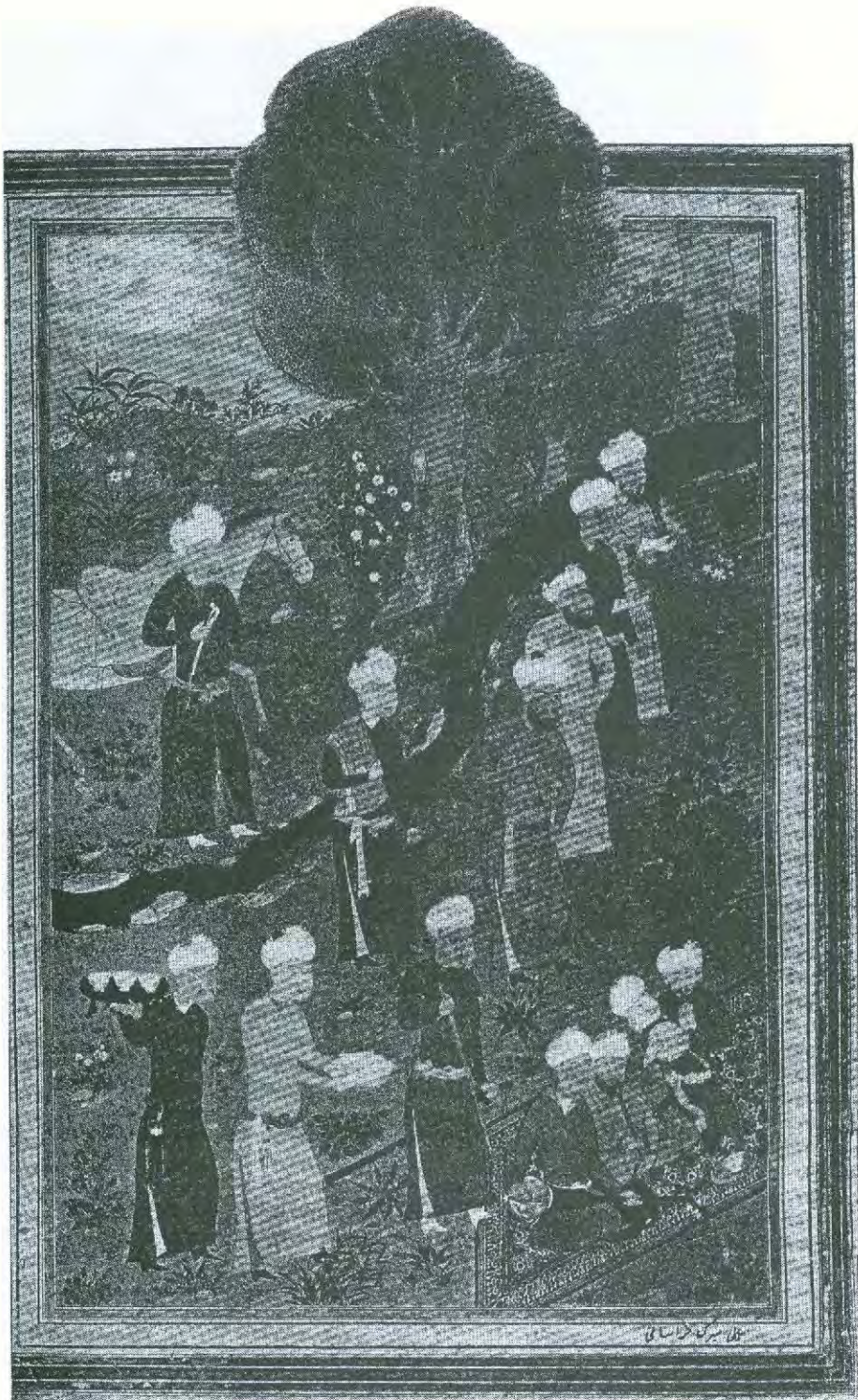


Figure 10. "An Outdoor Court" By Mirak Khurasani, from *Khamseh* of Nizami, 1494; f. 1v, frontispiece, 25×17 cm. The British Library, Or. 6810. (Bahari, 1997, p. 130)

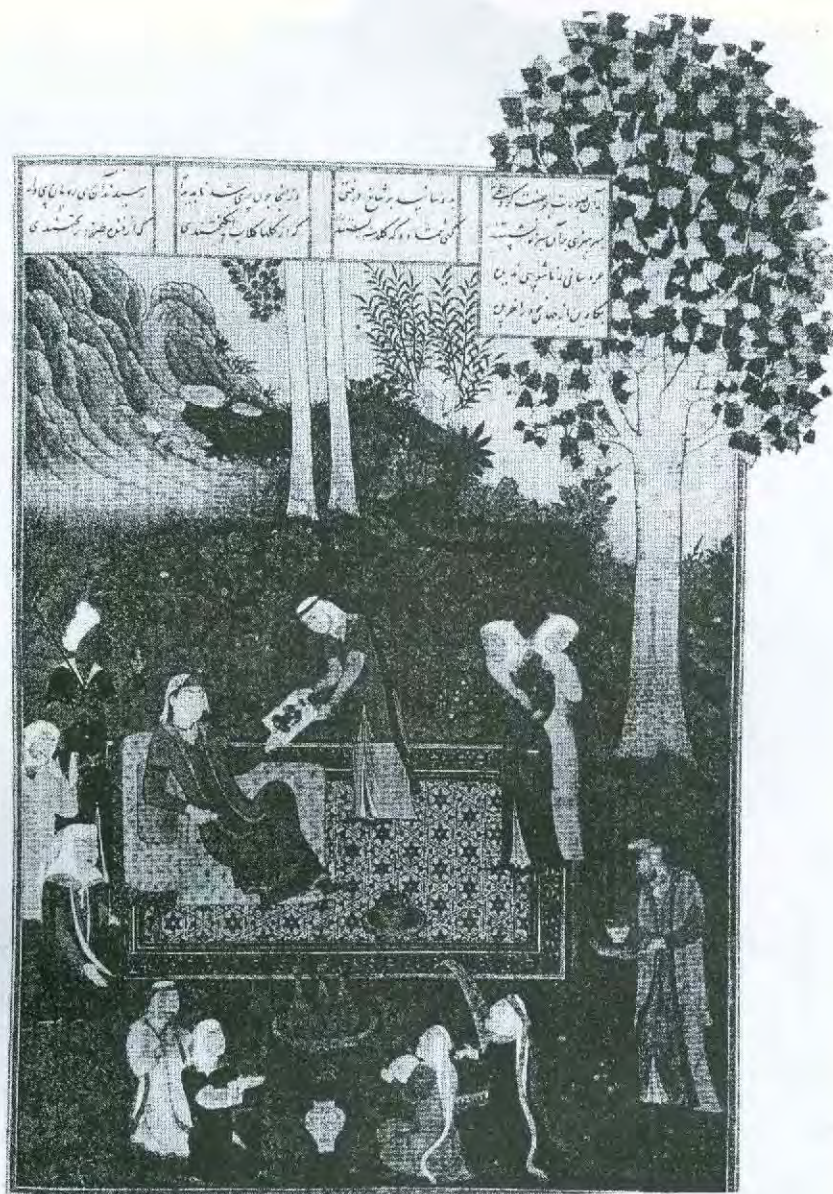


Figure 11. "Shirin and the Portrait of Khosrow" Attributed to Mirak, from Khamseh of Nizami, 1494; f. 39v. c. 20×14 cm.
The British Library, Or. 6810. (Bahari, 1997, p. 137)

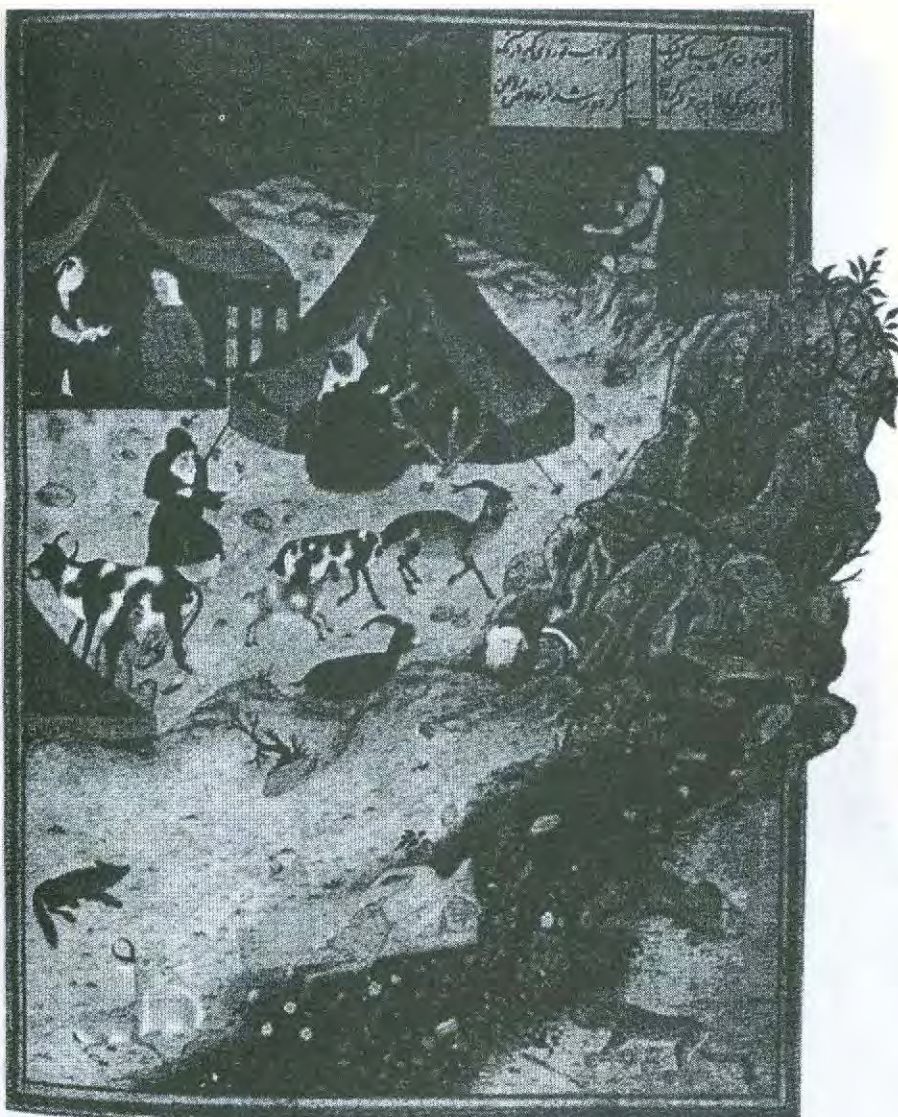


Figure 12. "Majnun on Layla's Tomb" By Qasim Ali, supervised by Bihzad, from Khamseh of Nizami, 1494; f. 144v. c. 20×14cm. The British Library, Or. 6810. (Bahari, 1997, p. 147)



Figure 13. "Bahram Slays the Dragon" Attributed to Bihzad, from *Khamseh of Nizami*, 1494; f. 157r, c. 20x14 cm. The British Library, Or. 6810. (Bahari, 1997, p. 149)

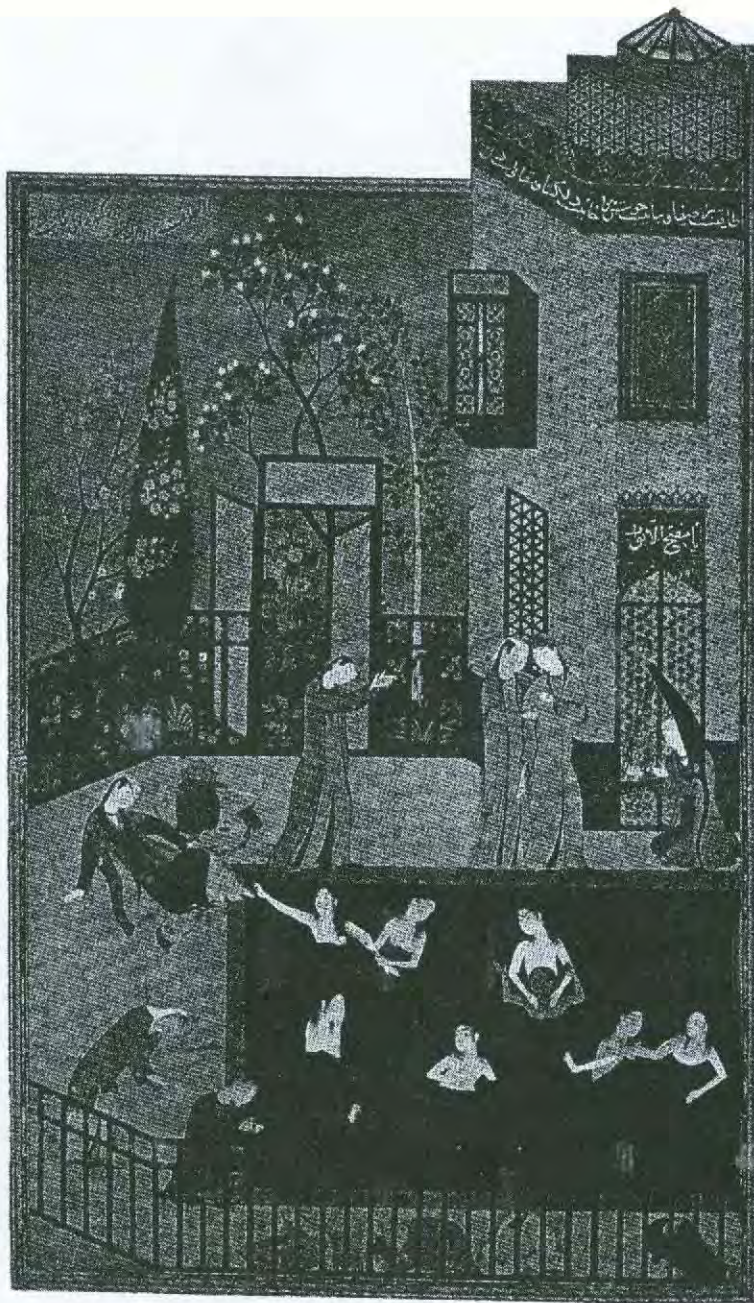


Figure 14. "The Master spying Bathing Maidens" Attributed to Bihzad, from Khamseh of Nizami, 1494; f. 190r, c. 20×14 cm.
The British Library, Or. 6810. (Bahari, 1997, p. 151)



Figure 15. "Iskandar Beating the drum to Repel the Sea Monster. A tributed to Bihzad, from Khamseh of Nizami, 1494; f. 225v, 20x14 cm. The British Library, Or. 6810. (Bahari, 1997, p. 154)

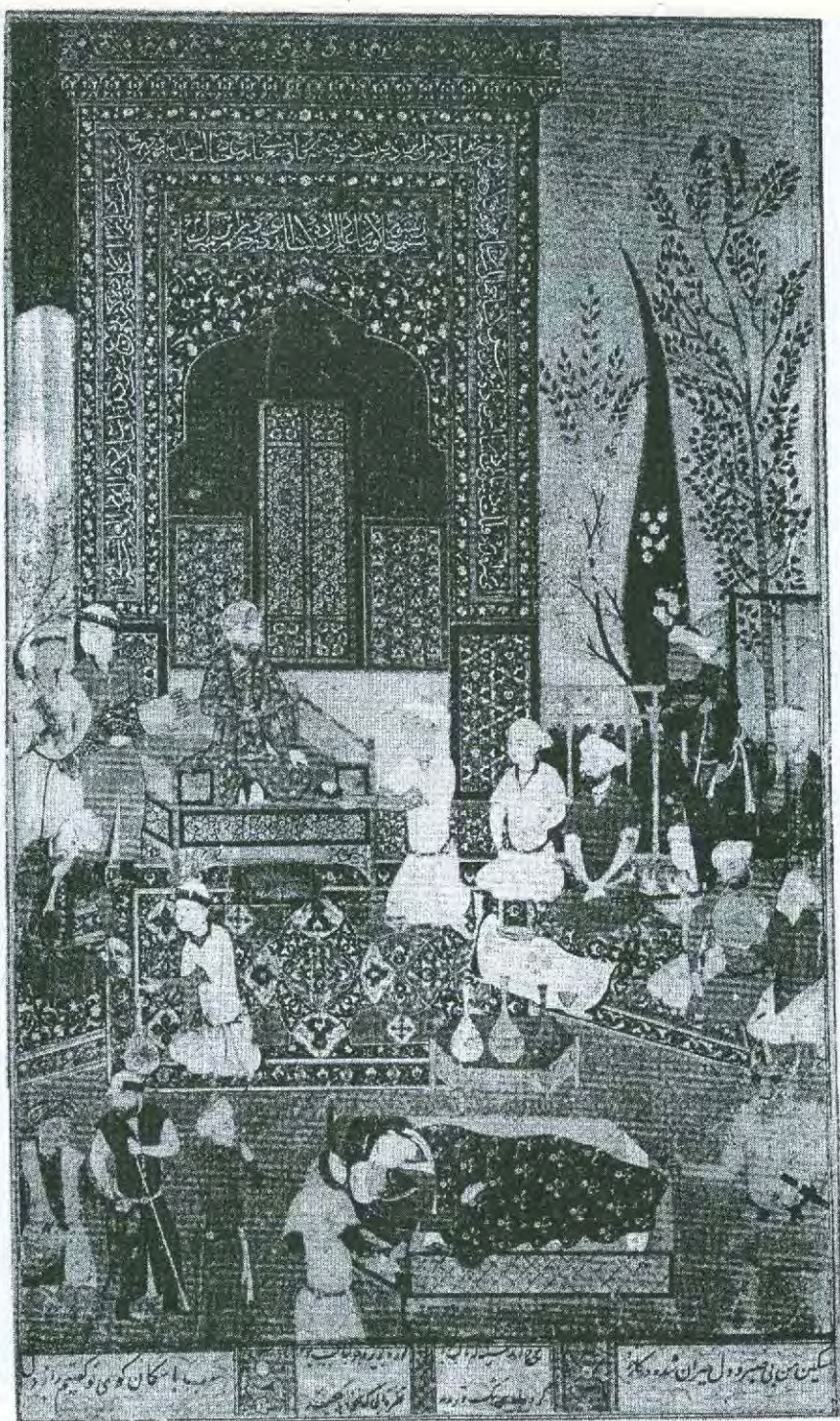


Figure 16. "The Couple Brought before the king". Attributed to Bihzad, dated 1496; 24×14cm Keir Collection, London.
(Bahari, 1997, p. 170)

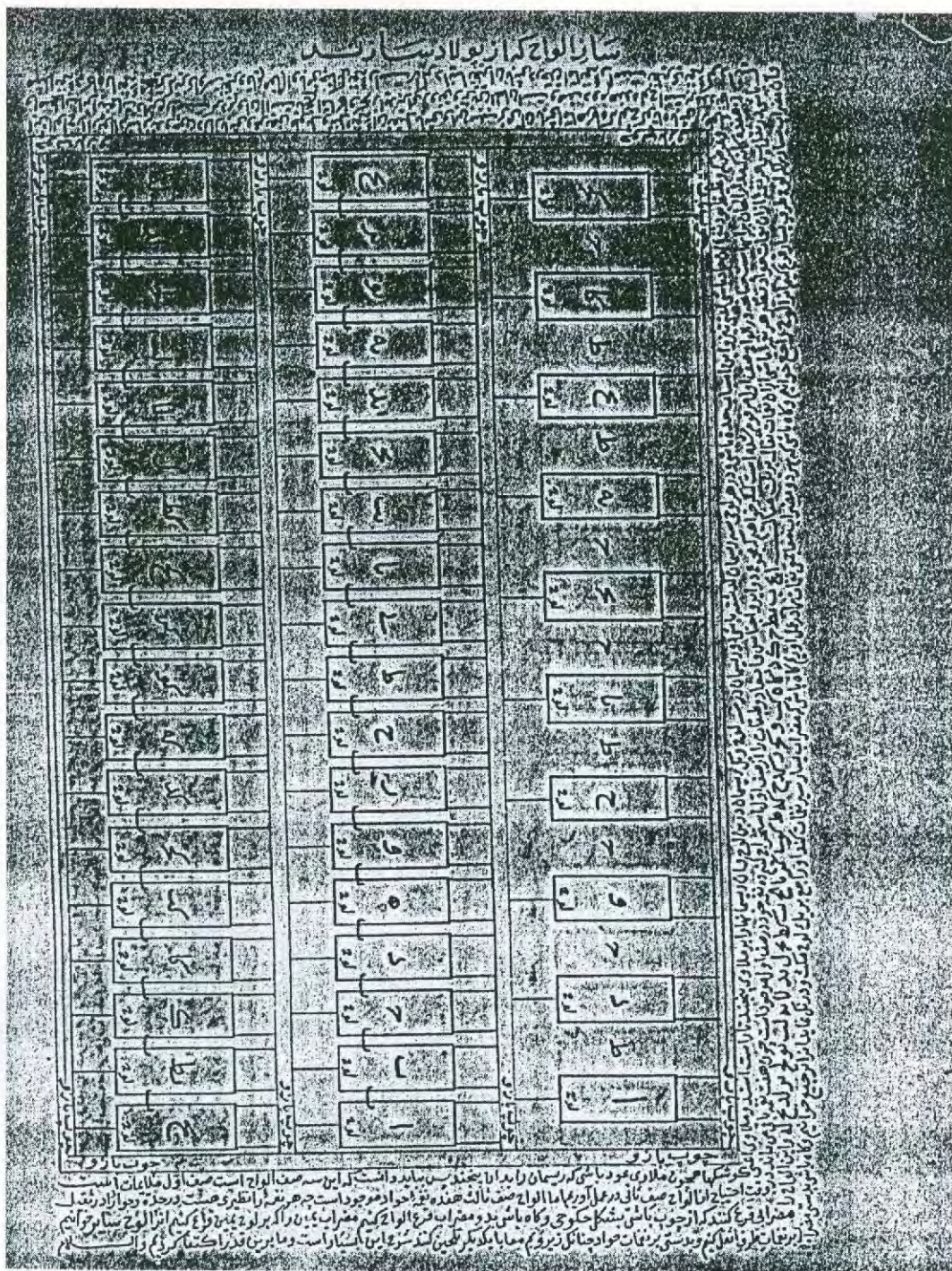


Figure 17. "Sāz-e Alwāh-e fūlād" An Idiophone with Metal Plates from Marāghī MS, Leiden University Library, Cod. 271
Warn. f. 66a.

References

- Asadi, Hooman. (1999). Historical Background of Music in Transoxania: An Overview. *Mahoor Music Quarterly*, Autumn, No.5, pp. 59-88.
- Awbahî, Nizâm al-Dîn 'Alîshâh ibn Hâjî Bûkah. (MS) Moqaddamat al 'Uşûl. MS Istanbul Universitesi Kutuphanesi, F 1079.
- Bahari, Ebadollah. (1997). Bihzad: Master of Persian Painting. Foreword by Annemarie Schimmel. London, New York: I.B. Tauris Publishers.
- Banâ'î ('Alî ibn Mohammad al-Me'mâr). (1989). Risale dar mûsîqî [Treatise on Music]. Facsimile edition, with an introduction by Darush Safvat and Taqi Binesh, Tehran: Markaz-e Daneshgahi.
- Binesh, Taqi. (1995) Târikh-e mokhtasar-e mûsîqî-e Iran. Tehran: Nashr-e Arvin.
- Daneshpazhuh, Mohammad-Taqi. (1976) Nemune'â az fehrest-e âthâr-r dânesmandan-e Irani va eslami dar ghenâ va musigi. Tehran: Entesharat-e edare- ye kolle negaresh-e vezarat-e farhang va honar.
- Mallah, Hossein-Ali. (1965-6) *Sharhi* bar risâle-ye mûsîqî-e Jami. [A Commentary on Jami's Musical Treatise]. *Majalle-ye mûsîqî*, Numbers 101-107, Tehran.
- Marâghâ, 'Abd al-Qâdir. Saz-e alwah-e fulad. MS Leiden University Library. Rijksuniversiteit, Universiteits Bibliotheek, Cod. 271 Wam.f.66a
- Marâghâ, 'Abd al-Qâdir. (1966). Maqâsid al-Alhân. Edited by Taqi Binesh. Tehran: Bongah-e tarjomeh va nashr-e ketab.
- Marâghâ, 'Abd al-Qâdir. (1987). Jâme'al-Alhân. Edited by Taqi Binesh. Tehran: Mo'assese-ye motale'at va tahqiqat-e farhagi.
- Marâghâ, 'Abd al-Qâdir. (1991). *Sharh-e Adwâr*. Taqi Binesh (Ed.). Tehran: Markaz-e daneshgahi.
- Mashhun, Hassan. (1994). *Tarikh-e musiqi-e Iran*. [History of Persian Music]. Simorgh Press with collaboration of Fakhteh Press. 2 Volumes.
- Massoudieh, Mohammad- Taghi. (1996). Manuscripts Persans Concernant la Musique. Catalogue par Mohammad Taghi Massoudieh. RISM, Band XII. Munchen: G. Henle Verlag.
- Vâsefi, Zayn I-Din Mahmûd. (1970-71). Baddâye'al-Vaqâye'. Edited by Alexader Boldirve. Tehran: Entesharat-e bonyad-e farhang-e Iran. 2 Volumes.
- Widdess, Richard. (1992). "Historical Ethnomusicology" in *Ethnomusicology: An Introduction*. Helen Myers (Ed.), *The New Grove Handbooks in Music*, Macmillan. Pp. 219-237.
- Wright, Owen. (1978). *The Modal System of Arab and Persian Music: A.D. 1250-1300*. London: Oxford University Press.
- Wright, Owen. (1992). *Words Without Songs: A Musicological Study of an Early Ottoman Anthology and its Precursors*. SOAS Musicology Series, Volume 3 London: SOAS, University of London.

ابزار خنیاگری در نقاشی‌های تیموریان

دکتر مهناز شایسته‌فر

هومن اسدی

دانشگاه تربیت‌مدرس

چکیده

این مقاله به مطالعه ابزار خنیاگری دوران تیموریان که در شماری از نگاره‌های قرن پانزدهم به تصویر کشیده شده است می‌پردازد. بحث با بررسی و طبقه‌بندی ابزار و ادوات موسیقی شروع می‌شود که در عین حال به معرفی و توصیف ابزار موسیقی متداول در آن دوره براساس منابع موجود نیز اشاره کوتاهی دارد. بحث اصلی مقاله به بررسی جایگاه ابزار خنیاگری در تعدادی از نقاشی‌های زمان تیموریان می‌پردازد و در انتها به مقایسه اطلاعات به‌دست آمده از ابزار موسیقی و منابع تصویری پرداخته تا از این طریق به فهم صحیح‌تری در ارتباط با فرم و عملکرد ابزار خنیاگری در دوران تیموران نایل شود.