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### The Indo-Islamic residential garden

Aulani Margaret Mulford

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THE INDO-ISLAMIC RESIDENTIAL  
GARDEN: EVIDENCE FROM  
SIXTEENTH TO NINETEENTH  
CENTURY INDIAN PAINTINGS

BY  
AULANI MARGARET MULFORD

1991





926

THIS THESIS FOR THE MASTER OF ARTS DEGREE  
BY  
AULANI MARGARET MULFORD  
HAS BEEN APPROVED  
JUNE 1991

The Indo-Islamic Residential Garden:  
Evidence from Sixteenth to Nineteenth Century Indian Paintings

by  
Aulani Margaret Mulford

*David O. Hill*  
CHAIRMAN, THESIS COMMITTEE

LA<sup>o</sup>

*George F. Coulton*  
READING THESIS COMMITTEE

Thesis  
1991/926

A thesis presented in partial fulfillment  
of the requirements for the  
Master of Arts degree  
in the Center for Arabic Studies  
of the American University in Cairo

May 30, 1991

*David O. Hill*  
CHAIRMAN, DEPARTMENT OF ARABIC STUDIES



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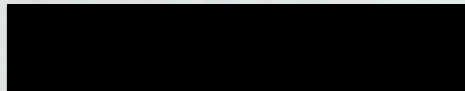
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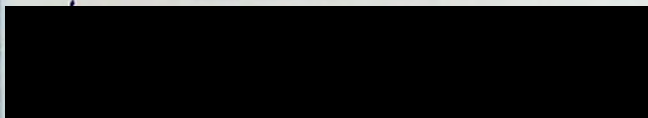
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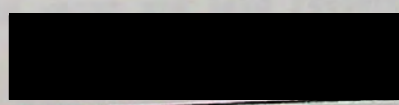
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071 01-602 6997

Report on the thesis, *The Indo-Islamic Residential Garden:  
Evidence from Sixteenth to Nineteenth Century Indian*

*Paintings*

submitted by Aulani Margaret Mulford for the MA Degree

The thesis comprises an Introduction, seven chapters, a bibliography listing the manuscripts and album paintings relating to the thesis, and forty eight reproductions of paintings.

In the Introduction she argues that pictorial representations of the garden in the period under review provide the most satisfactory evidence of the garden; and rightly emphasises the limitations of the archaeological evidence and the imprecision of contemporary literary references. Chapter 1 is a summary history of the Mughal empire; and chapter 2 a satisfactory account of the development of Mughal and Deccani painting and the later regional schools of Rajasthan, Oudh and Bangal, with particular reference to the representation of the garden.

The remaining chapters contain the core of the thesis. She has a clear definition of what she means by the residential garden (chapter 3) and presents a typology of the imperial garden and the transformation it underwent in the gardens of the nobility and in the provinces. She rightly underlines the distinctive features and purpose of the garden - the conception of space in which garden and architecture are inseparably bound. She has, in my opinion correctly, evaluated the symbolic element in garden design, preferring the more practical considerations such as climate and water and land resources.

The candidate has presented her material in a clear and systematic manner. She has utilised and understood all the significant secondary sources; and her choice and interpretation of the paintings is very satisfactory. I find myself generally in agreement with her findings.



071 01.602 6997

I think that she might with profit have introduced in her survey some allusion to the garden as it developed in Iran and Transoxiana and which was a formative influence on the Mughal garden. Nor has she dealt with what was planted in the garden. I think that the paintings might well yield useful information on this subject. This important aspect has not yet been dealt with by the candidate. The garden is the Indian Sub-Continent and I can, therefore, hardly complain of this omission on the part of the candidate.

I recommend the candidate for the award of the degree of Master of Arts.

[REDACTED]

R.H.Pinder-Wilson

28th May, 1991



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May 1991  
Aulani Margaret Mulford



### Acknowledgements

This project was initially conceived as a survey of Indo-Islamic residential garden architecture. As my research progressed, and as I became enchanted with Mughal paintings in Bernard's Islamic painting seminar, I realized that work could and must! be done combining the two traditions.

For the assistance given by the library staff at the Creswell Library I wish to thank Madame Kharnouk, Nahed Saleh, Jean Brown and Nadia Ali for their kind help throughout the years. I am grateful for the generous and almost overwhelming assistance of the librarians and staff of the manuscript collections of the British Library and Museum and the India Office Library.

For her inspiration, enthusiasm and support in the study of the art of the garden throughout my Mount Holyoke days, I wish to thank Bettina Bergmann.

Special thanks go to my advisor on the project, Bernard O'Kane, as well as George Scanlon and Ralph Pinder-Wilson for their careful reading and helpful suggestions on the manuscript.

For the support and superior advise of Chris Lude--indeed, a *rara avis*--throughout the whole process of research and writing, I am truly thankful.

I would also like to express my gratitude to the Kamehameha Schools Na Poki'i Committee for kindly financing my graduate studies, as well as the Mount Holyoke College Art Department-Fitz-Randolph Award, Ida Pope Trust Foundation, and the Kaiulani Scholarship Committee for their financial support.

And, finally, I would like to thank my parents for their abounding support throughout the years. This work is dedicated to them both.

May 1991

Aulani Margaret Mulford



## Introduction

Since the thirteenth century, Islamic rulers in India had imposed rather constant central authority which reached its zenith during the sixteenth and seventeenth centuries. The breakdown of centralized control in the last half of the seventeenth century directly affected the patronage of the arts. The paring down of the imperial court ateliers led to a broad diaspora of artisans throughout the sub-continent, and inevitably to the spread of Mughal aesthetic tastes.

A major turning point in the history of Indian arts came as patronage shifted from the great emperors and sultans in cities to lesser notables in provincial urban centres. This phenomenon spread at an accelerated rate during the late seventeenth century and continued throughout the early nineteenth centuries in northern India and the Deccan.

Regional traditions and conventions of residential garden design were directly affected by these shifts. Paintings of gardens from the mid-seventeenth century onwards illustrate that many elements of style and design became homogeneous under Mughal hegemony. Royal Turkman, Timurid and Safavid gardens and garden paintings of Iran had initially set the *modus-operandi* for Islamic garden traditions in India up to the sixteenth century.

As a direct result of the mixing of Indian craftsmen and artisans with those of Persia, Afghanistan and Central Asia in court ateliers of the Indo-Islamic regions, the various traditions merged to create a new hybrid style. Thus, despite



the foreign overtones, an underlying Indian style can be detected in many garden paintings.

A surprisingly large number of sixteenth to nineteenth century Indian paintings illustrate the mastery in design achieved in the art of the garden in India. Miniature paintings of both realistic and mythic gardens were a favorite subject for both manuscript and album illustrations. A large proportion of these garden paintings were produced in north Indian imperial and sub-imperial workshops since the early years of the Mughal dynasty, primarily based in the areas of Delhi, Agra, Lahore and Kashmir; for the ruling sultans in the independent Deccani kingdoms of Ahmadnagar, Bijapur and Golconda--the vast plateau south of the Vindhya mountains; and in the northeastern provinces of Oudh, Bihar and Bengal for the provincial courts which began to flourish, albeit on a lower level, as Mughal hegemony deteriorated.

A vast quantity of the paintings depict garden sites which are not topospecific. In other instances the gardens can be identified through an inscription on the work itself, if it is a copy of a site already identified in another painting, or if an actual site can be matched to the painted garden. A garden may also be attributed to the provinces, admittedly with a degree of uncertainty, based only upon the painting's provenance. In most cases, pictorial documentation is possibly the only extant material upon which we can rely for the study of Indian garden architecture of this period. The gardens depicted which do



correspond to identified sites will serve as a control group and help us interpret the paintings of gardens which cannot be so linked.

The focus of recent scholarship on sixteenth to nineteenth century Indian gardens has been placed on aesthetic and iconographical interpretations, such as Paradise symbolism, kingship and imperial social functions. This study is intended to depart from these trends in two ways. Firstly, attention will be given to paintings of gardens made for patrons other than the first six Mughal emperors.<sup>1</sup> One typically thinks of Mughal painting in the context of the imperial court, as works of these ateliers set standards of excellence in workmanship for virtually the entire country. This is not to say, however, that all painting from the Mughal period is imperial. Painting was patronized by elites other than royalty. There were serious patrons outside the imperial circles and many painters did satisfy these different kinds of tastes.

Secondly, it has been incorrectly suggested that the history of formal, high-quality garden architecture in India ended abruptly in the early eighteenth century with the last great Mughal emperor, Aurangzeb.<sup>2</sup> What has become increasingly clear in the course of this study of painted evidence is that the production of high-quality Indo-Islamic gardens probably did not decline. Ample evidence can be found in paintings post-dating 1700 to propose that residential gardens maintained an integral role in domestic architecture, and that in many cases the designs are exquisite, highly innovative and are definitely worthy of study. This thesis will show that non-imperial Mughal



residential gardens were not of diminished artistic identity, nor did the construction of quality gardens suddenly cease. To this end, pictorial evidence will be examined which illustrates how gardens, as architectural institutions, spread and diversified at various social and geographical levels.

Thirdly, the study of gardens of the sub-continent has yet to be placed within regional contexts. Although paintings have been used in discussions of the Mughal garden, a fuller analysis of paintings depicting gardens from other contemporaneous kingdoms of sixteenth to nineteenth century India will form the core of our present study. Differences between the gardens of Kashmir and Agra, or Hyderabad and Faizabad, are as great as those between them, respectively, and Isfahan. The painted gardens from the regions to be covered in this study will help clarify many distinctive regional concerns.

The types of sources which contain paintings of gardens include poetry anthologies, epic tales, histories, biographies and memoirs, albums compiled for patrons containing sundry illustrations, and Hindu texts illustrated in Muslim court styles such as the *Baramasa*<sup>3</sup> and *Ragamala*<sup>4</sup> series.<sup>5</sup> Evidently, a great number of paintings (which undoubtedly included those on garden themes) produced during the sixteenth to nineteenth centuries are now lost. With this in mind, our judgements can only be based on partial evidence. Yet we clearly get the impression that painting, in general, was a major concern not only at the court level, but also at other social levels throughout the sub-continent.

A number of problems are inherent in any attempt to study



specific features or themes such as 'the Indo-Islamic garden' in Indian painting. There is great difficulty in reproducing high-quality images of the exquisitely minute details and wonderful subtleties in color of many Indian miniature paintings. Therefore, the reproductions of the original paintings, and those taken from secondary sources, are often disappointing, making study based on them difficult.

Perhaps the greatest obstacles faced are the overwhelmingly diverse international locations of Indian paintings, and the inaccessibility of many manuscripts and folios in the various private collections. I have been limited to conducting primary research on manuscript and album paintings located in London at the British Library, British Museum and India Office Library. Although these collections possess ample materials, many masterpieces which illustrate residential garden settings remain in libraries throughout India and private collections around the world. Therefore I have had to also rely upon secondary source publications such as permanent collection and exhibition catalogues.

Our belief is that the history of gardens in India during the Mughal period, (1526-1848), can be supplemented by the use of pictorial evidence, especially where archaeological and literary sources fail to be conclusive. As this is the first attempt to bring together as many known and available examples of Indian garden paintings of Mughal and Deccani schools as possible, much of it will eventually have to be revised, and a substantial amount of new evidence will hopefully be appended. It is the hope of this study, aside from giving a glimpse of the



artistic heights achieved in non-imperial Indo-Islamic garden painting), to provide a new research angle in the study of the Islamic garden which operates from a more scholarly perspective than a purely aesthetic viewpoint.



## Notes

1. Recent studies of the gardens of Mughal India have primarily limited their surveys to the gardens erected by the first six Mughal emperors. The materials used tend to be repetitive especially with regards to the stock of garden paintings they have chosen to illustrate. See S. Crowe, et. al., *The Gardens of Mughal India*, London, 1972; J. Dickie, 'The Mughal Garden; Gateway to Paradise', *Mugharnas* III, 1985; S. Jellicoe, 'The Development of the Mughal Garden', *The Islamic Garden*, ed. E. Macdougall and R. Ettinghausen, Washington: Dumbarton Oaks, 1976, pp. 107-30; J. Lehrman, *Earthly Paradise*, New York, 1980; E. Moynihan, *Paradise as a Garden in Persia and Mughal India*, New York, 1979; R. Nath, 'The Treatment of Environment by the Mughals', *Marg* XXVI/1, 1972; N.M. Titley, *Plants and Gardens in Persian, Mughal and Turkish Art*, London, 1979; D.N. Wilber, *Persian Gardens and Garden Pavilions*, Tokyo, 1962.
2. S. Jellicoe, op.cit., p. 109.
3. The *Baramasa* is a poetic description of the twelve months of the year. Each month is characterized in terms of the feelings of lovers and illustrated accordingly: Toby Falk and Mildred Archer, *Indian Miniatures in the India Office Library*, London, 1981, p. 303.
4. The *Ragamala*, or 'garland of musical modes' is a cycle of poems or pictures characterizing the princes (*ragas*) and ladies (*raginis*) who personify the moods and characters of melodies on which Indian music is improvised. Ibid., p. 304.
5. See 'Primary Sources' in the bibliography listing of this study for a complete list of manuscripts and albums illustrating gardens used in this study. For a listing of garden paintings in Indian manuscripts in the British Library see N.M. Titley, *Miniatures from Persian Manuscripts, Catalogue and Subject Index of Paintings from Persia, India and Turkey in the British Library*, London, 1977. Titley's list is not exhaustive, and this study covers some garden paintings which are not included in her index. As well, there are also paintings in her listing which were not useful for this study and have been excluded.



### Historical Background

"Religion, high politics, and statecraft may seem far enough away from gardens, but sound art makes for sound politics, and their affinity in India is curiously close."

--Constance M. Villiers-Stuart<sup>1</sup>

During the twelfth and thirteenth centuries, Islamic rulers from Iran, Afganistan and Central Asia conquered most of northern India. Their aim was the unification of India under a single political authority, an ambition which was not realized until the fourteenth century under Sultan Muhammad Tughluq (1325-51), and then only briefly. By the time of his death, the Deccan had regained its independence, and other splinter states had broken away.<sup>2</sup> A new movement to regain political domination of the whole subcontinent began again in the sixteenth century with the invasion of a new group of Turks headed by Babur (1526-30), chieftain of the principalities of Kabul, Kandhar, and Badakshan, just north of the Hindu Kush mountains. With Babur's arrival, a powerful dynasty, misnamed the Mughals,<sup>3</sup> was established and held claim to Indian rule until the middle of the nineteenth century.

Aside from giving shape to an all-Indian administrative system, they laid the foundations of a distinctive culture which molded the social life, customs, manners and etiquette of the urban elite. During the reign of Babur's grandson, Akbar (1556-1605), the Mughal dynasty had truly transcended barriers of



religion, region and race, and came to represent the political and cultural aspirations of all Indian people. This period of social and political domination reached fruition by the mid-seventeenth century during the reigns of Jahangir (1605-1627) and Shah Jahan (1628-1657). Although the empire appeared the richest and most magnificent during the reign of Shah Jahan, it was in fact by this time rotting at its very core. The demands of the selfish elite outreached the resources of the country and the farmers who were the backbone of the economy could not continue such exploitative conditions much longer.<sup>4</sup>

These tensions were stressed by the succeeding emperor Aurangzeb's (1658-1707) campaigns in the Deccan. By the end of the seventeenth century he succeeded in annexing the Deccani kingdoms, but the cost ultimately left the country weak and impoverished.<sup>5</sup> As a Muslim zealot, Aurangzeb had also breached the 'unity of diversity' which was rather carefully maintained since the reign of Akbar. Besides carrying out the Deccani campaigns, Aurangzeb attempted to annex the Rajput territories of Mewar--the largest of the Rajput states--in the last quarter of the seventeenth century. The Rajputs rebelled but Aurangzeb was able to contain them. Fortunately, their alliance with the Mughals was preserved and maintained well into the eighteenth century. Another destructive blow to the unity of the empire was Aurangzeb's move to reinstate the tax on the non-Muslim populace.

With its central organization weakened, the age of tolerance and integration finally cracked.<sup>6</sup> Within just thirty years of Aurangzeb's death, the great empire lost all unity and a succession of effete incompetents followed who maintained only



an illusory show of power while the Mughal empire fell apart at its seams. A perfect example of such a character was the sybaritic emperor Muhammad Shah (1719-1748) who would often escape the reality of some military defeat by contemplating one of his gardens.<sup>7</sup>

The factionalism which these issues engendered encouraged internal fighting amongst the regional Mughal officers who sought to secure independent kingdoms for themselves while only paying lip service to the fiction of centralized authority--the emperor apparent at Delhi.<sup>8</sup> In fact, from Aurangzeb's reign to Muhammed Shah's, the powers of the Mughal viceroys had grown considerably. A case in point was that of Sa'dat Khan, a Mughal officer who was appointed to the governorship of Oudh in 1724 and soon after was able to claim independence from the Delhi court.

A similar phenomenon also occurred in the Deccan. As Topsfield points out,<sup>9</sup> the Deccani sultans had never taken territorial domination nor politicking as seriously as their Mughal counterparts. Instead, they placed greater emphasis on courtly pleasures and the patronage of the arts. Such a setting was therefore an easy target for Mughal domination. The viceroy stationed in the Deccan by Muhammad Shah in 1722 was Asaf Jah.

In Asaf Jah's case, however, independence was not formally declared. Rather, he simply became more and more powerful as the Mughal emperor weakened. As Nayeem has pointed out, Asaf Jah never declared independence and remained loyal to the Emperor. Under the dire circumstances of the court, however, he found it unnecessary to refer total power to the centre due to the fact that intrigue plagued the royal court.<sup>10</sup>



Thus, it is more accurate to say that Asaf Jah established personal supremacy as the Nizam of Hyderabad. The Asafiya dynasty, which he initiated, remained in power until the middle of the twentieth century as the most important Muslim house in India, and preserved like a living fossil Mughal forms and traditions<sup>11</sup> while Mughal rule and the Empire gradually disappeared in north India.<sup>12</sup>

Bengal was the third great province to become 'independent' from Mughal hegemony. Throughout the Mughal period Bengal had never really been in the mainstream of the political and cultural life of India. But in the eighteenth century Bengal gained importance as a center of trade primarily with European and Arab merchants. The French and the British became engaged in a bitter struggle to dominate trade and commerce in the regions of Bengal by the middle of the eighteenth century. The British East India Trading Company prevailed and soon its economic power brought it into conflict with the Nawab of Bengal, who was now aware of the threat that the foreign company posed to the integrity of his government.

Inevitably, power struggles developed between them all--the British, French, Marathas and Nizams--for control of the weakened imperial Mughal court staged in Delhi. The ensuing political and economic instabilities drained, in particular, the treasuries of the Nizams of Oudh and the state of Hyderabad. In 1765, the Company had ignominiously managed to force the Mughal emperor in Delhi to recognize its right to collect the revenue of Bengal. Within just two decades the Company became the definitive ruler of Bengal and by 1800, Hyderabad was finally forced into



becoming a British dependency.<sup>13</sup>

The eighteenth century was socially, economically and politically unstable throughout the sub-continent. Twenty years of warring in the Deccan, fighting in the north against the Maratha conquests and rapid expansion, foreign invasions including the Afghans in 1739, and the war between the British and French for paramouncy between 1744-48, ultimately combined to accelerate the pace of the empire's decay.

The relaxation of centralized rule, the growing independence of provincial administrations, and the widespread territorial instability throughout India directly affected the arts. Mughal trained artists were free and often forced out of desperation to transfer to more promising centers of patronage other than Delhi, especially to Rajasthan, the Deccan and the provinces of Oudh and Bengal. On one hand this was enriching to the various schools of painting as styles became more integrated and eclectic. Yet, on the other, the process ultimately led to the development of a rather generic strain of painting or commercialized art industry which catered to the tastes of expatriate patrons, particularly the British, in the late eighteenth and early nineteenth centuries.<sup>14</sup>

Political stability, power and riches which lead to ease, security and wealth, are thus naturally reflected in the arts of a country. Luxurious palaces and their formidable gardens seem to be the natural expression of a prosperous period<sup>15</sup> as are paintings which illustrate such affluent times; in less fortunate times the arts can suffer. However, we also come to realize that in times of political and economic crisis, the high



arts can reflect the decadence, luxury and prosperity of the fortunate few.

As Nizami points out, during the chaos of the eighteenth century, the government simply "reduced its welfare function and became an agency for exploitation and a cumbersome system of taxation."<sup>16</sup> This breakdown of political and economic stability, however, really only served to destroy the prosperity of the peasants, workers and artisans.<sup>17</sup> What remained was the exploitative patron, who was fortunate enough to be able to feign refuge in his gardens and palaces--secluded and as far away as possible from the chaos of his declining empire. In fact, Shah Wali Allah of Delhi (1704-63) poignantly criticized his contemporary Mughal rulers and the governing classes for their self-indulgent and luxurious style of living by equating them to the decadent Sassanian and Roman governing elites of yore.<sup>18</sup>

Historically, an ironic parallel may be drawn between the residential gardens of the later Mughal, Rajasthani and Deccani elites and those of the early Mughals with regards to their approach to the role of the residential garden and its functions. Babur used to build 'garden-encampments'--which were in effect temporary residences, or formal camp sites--during his campaigns or while en route to build or secure his empire. Similarly, the homes and gardens which the last Mughals and their assorted Indian allies built--although of a more permanent type--came to serve as realms of retreat, protective and sustaining encampments. But, more importantly, they came to serve these later rulers and nobles as more or less permanent sanctuaries amidst the volatile and unsettled conditions of their regions.



In eighteenth century painting, we see not only imaginary and fanciful paintings of gardens, but also numerous images of these elites in the extravagant garden palaces they built to escape from the instability of the times.

4. E. Moynihan, *Paradise as a Garden in Persia and Mughal India*, New York, 1979, p. 146.

5. M. Zabrowski, *Painting*, p. 244.

6. K.A. Nizami, "The Delhi Sultanate and the Mughal Empire: Genesis and Salient Features", p. 143.

7. A. Topfield, *Indian Court Painting* (in the Victoria and Albert Museum), p. 19.

8. M. Zabrowski, *loc. cit.*

9. A. Topfield, *Indian Court Painting in the Victoria and Albert Museum*, p. 22.

10. K.A. Nizami, "Political Status of Muslim Ruler in the Delhi Sultanate (1206-1519)", p. 13. Nizami has shed new light on the role of the ruler in the late Delhi Sultanate and has proved that the ruler was not a mere figurehead but a powerful monarch.

11. Sarkar, J.W., *The Cambridge History of India*, p. 379.

12. K.A. Nizami, *op. cit.*, p. 16.

13. Zabrowski, *op. cit.*, p. 244.

14. T. Talbot, *Archaeology of the Delhi Sultanate*, p. 36.

15. E. Moynihan pointed out this correlation: see *Paradise as a Garden in Persia and Mughal India*, p. 100.

16. K.A. Nizami, *op. cit.*, p. 171.

17. *loc. cit.*

18. Nizami, *loc. cit.* Quoting the *Alamgir Nama*, vol. 1, pp. 176-77.



## Notes

1. C. M. Villiers-Stuart, *Gardens of the Great Mughals*, p. 276.
2. P. Spear, *India: A Modern History*, p. 108.
3. Babur and his successors were misnamed the Mughals, which is a derivation of the word Mongol. They were actually Chagatai Turks.
4. E. Moynihan, *Paradise as a Garden in Persia and Mughal India*, New York, 1979, p. 146.
5. M. Zebrowski, *Deccani Painting*, p.244.
6. K.A. Nizami, 'The Delhi Sultanate and the Mughal Empire: Genesis and Salient Features', p. 169.
7. A. Topsfield, *Indian Court Painting* (in the Victoria and Albert Museum), p. 19.
8. M. Zebrowski, *loc. cit.*
9. A. Topsfield, *Indian Court Painting in the Victoria and Albert Museum*, p.22.
10. M.A. Nayeem, 'Political Status of Nizamu'l Mulk Asaf Jah I in the Deccan (1713-1748)', p.13. Nayeem has shed new light on the role of Asaf Jah in the late Mughal period and has proven that he did not claim independence from Muhammed Shah.
11. Sarkar, J.N., *The Cambridge History of India*, p. 378.
12. M.A. Nayeem, *op. cit.*, p.16.
13. Zebrowski. *op. cit.*, p. 244.
14. T. Falk and M. Archer, *Indian Miniatures in the India Office Library*, p. 36.
15. As E. Moynihan has pointed out this correlation: see *Paradise as a Garden in Persia and Mughal India*, p. 100.
16. K.A. Nizami, *op. cit.*, p. 173.
17. *Loc. cit.*
18. Nizami, *loc. cit.* Quoting the *Hujjat Allal Balighah*, vol. 1, pp. 196-99.



Garden Paintings: Stylistic Developments in the Regional Schools

In 1913, Constance M. Villiers-Stuart published her pioneering work *Gardens of the Great Mughals*. In a very limited number, manuscript paintings were first used in this monumental study of imperial gardens and garden-palaces of Mughal India.<sup>1</sup> Subsequent scholars have also neglected to examine comprehensively painted evidence in their studies on Indo-Islamic gardens. It is the intent of this study to show that sixteenth to nineteenth century paintings offer the richest body of evidence for reassessing the relationship and development of residential buildings and their garden spaces in India.

Many paintings reveal how the watering systems of residential gardens operated, how they were used, and how their layout related to the overall structure of the garden. Others serve to illustrate the functions and decorative features of these systems such as pavilions, basins and tanks, pathways and waterfalls. But beyond serving as encyclopedic renderings of contemporary garden features<sup>2</sup>, these paintings demonstrate the integral role of gardens in domestic architecture.

Throughout the period, gardens with fountains, terraces, pavilions, plants and geometric plots were a favorite subject in paintings. If monumental scale gardens ceased to be built, or, more aptly, since later archaeological evidence of such has disappeared, surviving paintings attest to the growing prevalence of smaller garden-palaces erected for regional nobles, their courtesans, and other non-imperial urban elites, both in northern India and the Deccan.<sup>3</sup>



Many of the garden settings in paintings are, if not completely, then partially idealized, even if the figural portraits and site details are known to be rendered from life.<sup>4</sup> However, leading scholars agree that Mughal art aimed at realism. The popularity of portraiture and the depiction of historical events throughout the period support this observation.<sup>5</sup> Therefore, it follows that a good number of garden paintings probably do depict real settings, whether they have been matched to existing archaeological sites or not.<sup>6</sup>

There are no other schools or regions of painting in the Islamic world which offer as many painted images of gardens as does India during the Mughal period (1526-1858). Not even the Persian schools which provided much of the inspiration as well as a number of painters to the Indian schools produced comparable material on this theme. Donald Wilber made the interesting comment that unlike Mughal painters, Persian painters depicted few garden overviews, concentrating instead on details.<sup>7</sup> The dominant features in Timurid and Safavid garden paintings are tiling, paling, decorative patterning on architectural elements, and the ubiquitous chahar-bagh water courses and basins. The point to be stressed here is that interpenetration of the garden and building site, and the intricacies of garden features is considerably less developed in Persian paintings when compared to those depicted in Mughal paintings.<sup>8</sup>

Brilliant though they are, Persian paintings of gardens are far less terrestrial and human than their later Indian counterparts. Majestically austere, Persian paintings of buildings and appended gardens are difficult to enter. They seem



to exist only for enameled royals.

The seventeenth and eighteenth centuries were the most prolific periods for miniature painting in the Indian subcontinent. Four regions exhibit this great flowering of painting: northern India, for the emperor and nobility of the Mughal empire; Rajasthan, under the patronage of the Hindu princes and their courts throughout the Mughal period; the Deccan, for the mysterious sultans during periods of both independence and Mughal subjugation<sup>9</sup>; and the northern provinces for the nawabs and governing families of Bihar, Bengal and Oudh.

By the mid-seventeenth century, the dissemination of the Mughal court painters had begun with the campaigns of Aurangzeb in the Deccan and the general breakdown of the Mughal court of Delhi. While the verve for painting was waning within the Mughal court circles in Delhi, Mughal trained artists were used prolifically in Rajasthan, the Deccan, in the northern provinces of the Gangetic plains and elsewhere. Many works from the mid-seventeenth to the early-eighteenth century are in a fused Mughal and Rajasthani, Deccani or provincial style.

With the death of Aurangzeb in 1707, a period of military confusion and political instability ensued. Muhammad Shah (1719-1748) succeeded to the throne of Dehli after a period of rapid successions during which little advancement in Mughal painting can be detected. Courtly patronage lingered on during the period of Muhammad Shah, and surprisingly even through the sack of Delhi by the Afghans in 1739. Paintings of this period were probably made for patrons outside the imperial court.<sup>10</sup>

By the mid-seventeenth century a number of Mughal artists



had found employment in the town of Bikaner in northwestern Rajasthan. Throughout the second half of the seventeenth century the Bikaner style of painting betrays strong influences of the more polished Mughal style, the traditional Rajasthani tastes for powerful, often folk-like imagery and a colorful and bold palette. The term 'Popular Mughal' is commonly applied to this fusion of local and Mughal styles.

Most Rajasthani styles were heavily affected by the liberal flow of paintings from court schools to the common market. This stimulated the production of cheaper commercial works which were usually repetitive and highly stylized.<sup>11</sup> The existing garden paintings from the Rajasthani schools of Bikaner, Bundi, Kotah, Udaipur and Jaipur illustrate the wide range in seventeenth to nineteenth century styles, from the elegance of Mughal inspired works to folkish compositions on popular and religious themes.

By the second quarter of the eighteenth century, the Deccan regained its independence and a new capital was established at Hyderabad. Many of the paintings of this period could be works produced for either the court in Hyderabad or other elites in the capital region.<sup>12</sup> Styles were basically a continuation of sixteenth and seventeenth century Deccani styles developed in the capital schools of Golconda. Towards the end of the century, however, the Hyderabad style had become more repetitive and commercial.<sup>13</sup>

The provinces of Oudh and Bihar in the later eighteenth century were the most prolific centers for later Mughal painting.<sup>14</sup> With the death of Muhammad Shah in 1748, many court painters of Delhi moved to Lucknow and other towns in the



northeastern provinces.<sup>15</sup> Farrukhabad, Faizabad, and Murshidabad were major centers of painting which produced fine works, many of which contain rather innovative and creative compositions of residential sites and their gardens.<sup>16</sup> A number of the Oudh garden site paintings are of imperial monuments in the lingering Mughal capital of Delhi. They offer surprisingly detailed views of these settings, although highly stylized and often romanticized. More importantly, however, they illustrate the freshness of approach to landscape and garden painting which the Indian artists developed in response to European paintings.

Painting proceeded throughout the first half of the nineteenth century on a widely commercial level, catering primarily to British and European expatriate tastes. This production centered in the northeastern provinces, especially in the Company districts of Bengal, and extended to Delhi as well. In fact, painting throughout the sub-continent from the early nineteenth century onwards became increasingly of a commercial type. These works tend to be reminiscent of images from the old days of Mughal and Deccani splendor. Copies of courtly scenes and imperial monuments, often set within gardens, were particularly popular. As well, Hindu texts such as the *Ragamala* series became extremely popular and provide excellent views of courtly residences and their pleasure gardens. As these images depict a plethora of garden-palace settings, they offer invaluable insight and evidence for better understanding the directions into which post-Mughal and later Indo-Islamic residential garden design proceeded.



### The Mughal School

This study does not intend to survey imperial garden sites as illustrated in painting. However, such works do depict the residential garden types and layouts which set many of the standards of design and function for the nobles and other elites of the Mughal empire, and as such they will be discussed in the proceeding chapters.

Mughal paintings of gardens date to as early as the 1590's. These early works were exclusively produced in imperial ateliers. Histories of the Emperors Babur, Humayun and Akbar, Persian epic tales, such as the *Shahnama*, and Persian poetic works, such as the *Divan* of Hafiz<sup>17</sup> and the *Khamsa* of Nizami<sup>18</sup>, were a few of the popular texts copied and illustrated for the early Mughal courts.

The emperor Babur (1526-1530) and many of his nobles are known to have constructed a number of their gardens in the capital area of Agra, especially along the banks of the Jumna river. The earliest paintings which illustrate Babur's gardens are dated to the ateliers of his grandson Akbar (1556-1605). As succeeding emperors never hesitated to alter existing gardens or palaces to their own tastes, these early garden paintings cannot be entirely relied upon.<sup>19</sup> They do, however, illustrate the fully mature, eclectic Mughal style achieved by the 1590's in which Iranian, Indian and European elements of design and perspective are thoroughly integrated.

Similar to Safavid paintings of gardens, the treatment of landscape in these earlier Mughal works is rather undeveloped.



The differences which emerged between the two lie in the way Mughal painted garden sites became monumentalized themes in themselves, and in the more realistic manner in which the painted scenery was executed.

Topospecificity of paintings of imperial Iranian gardens is virtually unknown. Heroic and poetic tales are the exclusive themes set within Persian garden illustrations. Overviews of garden settings never form the backdrop of a Timurid or Safavid portrait. Instead, the figure may pose within a monochrome plane on a stereotyped throne or platform, or stand in a sparsely flowered field. Although the Persian portrait tradition carries on into the Mughal schools<sup>20</sup>, there are many more instances of Mughal royalty, nobles and courtesans set within a variety of elaborate, and often, identifiable Mughal garden settings.

Indian elements emerge in many of the paintings of Mughal gardens. Indigenous architectural materials and decorative features are often depicted in these paintings. Most importantly, Indian painters introduced a greater concern for naturalism. The dynamic compositions and figures in typically expressive situations and moods so characteristic of Hindu and Jain arts, became a solid concern of the Mughal atelier. Indian influence may also be seen in the secularism of many Mughal works. Genre themes and colorful essays on the sensualities of court life, particularly that of the harem, became immensely popular especially in the later years of the empire.

The hybridization of Indian aesthetics and compositional interests with those of Persia, Turkey and Central Asia is clearly evident in garden paintings; for it is within these



private spaces that contemporary rituals, fashions, moods, intimate pastimes and traditional festivals come alive.

Perhaps the most revolutionary changes brought to the Mughal ateliers came through contact with European works and painters as early as the mid-sixteenth century.<sup>21</sup> Through them it is fair to say that Mughal painting absorbed a greater appreciation for landscape, per se, as an art.<sup>22</sup> European paintings introduced the new techniques of perspective. The more developed sense of space and growing interest in depicting contemporary life which we come to see in Mughal gardens, landscapes and architectural settings was surely a direct result of this contact.

The history of Mughal garden and landscape painting begins with the emperor Akbar (1556-1605). During Akbar's reign artists began to turn away from the Persian concern for decorative pattern making and conventional themes and imagery. Apart from a few Persianized early works which were actually drawn by Persian masters, painters under Akbar, as well as his son Jahangir (1605-1627) aimed at achieving naturalism by painting space in perspective and realistic portraiture. While the illustrations for the *Akbarnama*<sup>23</sup> richly detail contemporary court life (figs. 6 and 7), the more remote epics, poetics and histories were often drawn from the artists' imagination or Mughal interpretations of Persian illustrated manuscripts (figs. 1 and 21).

Akbar had the memoirs of his grandfather Babur illustrated as well. Earlier *Baburnama*<sup>24</sup> manuscripts, if they were indeed made, have not survived. The images in Akbar period *Baburnama*'s of the gardens which Babur designed and constructed were probably



based on reconstructions of the original sites.<sup>25</sup> This seems most probable as the paintings were commissioned years after Babur's death and successors could easily have rebuilt or restored the sites to their own designs.<sup>26</sup>

The technical methods of modelling, shading, and landscape recession, or diminished perspective, as introduced in the late sixteenth century by European paintings and prints,<sup>27</sup> were not yet thoroughly worked out even by the reign of Jahangir as evidenced in the *Gulistan* of Sa'di (fig. 23).<sup>28</sup> Yet the influence of European models is evident in many manuscripts of this kind including the British Library's *Khamseh*. Spatial recession is well developed in the courtyard garden settings in Figures 9, 10, and 13, and in an illustration from the *Akhlaq-i Nasiri*, dated to 1590-95,<sup>29</sup> of court artists working in an atelier's garden.<sup>30</sup> Another painting of a residential garden setting which enjoys partial success in terms of recession is *Bathing Women*, an album page in the Rietberg Museum Collection, dated to c.1590 (fig. 2).<sup>31</sup> Distant landscapes complete with hill-top towns (an element which was particularly popular in contemporary European paintings) were also successfully developed in the *Grenville Divan* of Hafiz, folio 86r.

Under Akbar and Jahangir, Mughal painting reached its zenith. The perfect balance of naturalistic and formal concerns, the feel for both dramatic and tender domestic realism, combined with superb technical finesse, characterize the achievements of their ateliers. These qualities are perhaps best illustrated in the British Library's *Nafahat al-Uns* (fig. 19),<sup>32</sup> and *Khamasa* of Nizami (figs. 14, 16 and 18).



A further development regarding subject matter may be seen in works produced under Shah Jahan (1628-1657). Towards the end of Jahangir's reign the interest in illustrating historical texts had been transferred to that of album paintings. The *muraqqa'*, or collected volume of single leaf masterpieces, gained immense popularity. Earlier, Jahangir, as both a critic and painter himself, patronized *muraqqa* paintings which he felt illustrated the virtuosity and creative faculties of individual artists.<sup>33</sup> Under Shah Jahan, album paintings came simply to serve court vanities. Decked-out portraits of the emperor<sup>34</sup> and his immediate court in formal occasions illustrate the heights of court pomp and display.<sup>35</sup>

Shah Jahan was mostly interested in architecture, specifically the building of new palaces in Delhi, and ultimately the Taj Mahal. Surprisingly, no contemporary paintings exist of these buildings. According to Losty, miniature paintings of these buildings were only produced around 1800 for a number of histories on Shah Jahan and other great nobles.<sup>36</sup>

Although painting during Shah Jahan's reign was magnificent, it lacked the warmth and animation of painting under Jahangir. Portraits were immaculately drawn and finished, but their final impression is cold and rigid. Together, these factors led to the general ebb of artistic identity in painting by the end of Shah Jahan's reign. Artistic verve was focused elsewhere at the time; the Taj Mahal best illustrates Shah Jahan's real obsession--jewels and architecture.

This trend continued throughout the reign of Aurangzeb (1658-1707). In addition to a general lack of flair in subject



matter and artistic identity, painting was drastically curtailed under Aurangzeb. Deeply affected by the wars and campaigns carried on in the Deccan, the production of illustrated manuscripts nearly ceased. The social response to such instability may be gleaned from contemporary paintings. An escapist mood permeates many works. Paradoxically, religious themes and texts, military exploits, and hunting scenes were widely popular at the same time as *zenana* scenes of pleasure and decadence (fig. 48).<sup>37</sup> As pointed out by Goetz, and also evident in the two figures in this pleasure scene, paintings of this period are melancholic in mood and oddly dull, all possible indications of a time of insecurity, misery and sacrifice.<sup>38</sup>

The great imperial palace gardens, which commonly served as settings for paintings of Jahangir's and Shah Jahan's court, were not used as such thereafter. Instead, gardens became private abodes of the waning royals--domestic realms of escape. Overall, very few paintings of gardens exist from the reign of Shah Jahan and Aurangzeb. The restriction of subject matter within imperial ateliers surely had a resounding effect on non-imperial workshops. The decrease in the illustration of historic and poetic works, which often contained garden themes or garden based settings, partially accounts for the rarity of garden paintings.

After the death of Aurangzeb, a reaction against his austerity set in. Jahandar Shah (1712-1713), Aurangzeb's grandson, and his mistress the infamous Lal Kaur, set the fashion for paintings, to a large degree, in which decadence and romance predominated, such as love scenes, *zanana* pastimes, dance and



music parties. This fashion continued to be in vogue basically throughout the eighteenth century.<sup>39</sup>

As military and political confusion continued to handicap the Mughal court, these tendencies in painting continued through the early years of Muhammad Shah's reign (1719-1748).<sup>40</sup> Muhammad Shah and his court retreated into a dream world beckoning back the glorious days of Delhi. The arts began to flourish again, including painting and the building of palaces and gardens. The paintings of this period are at once elegant and tranquil, yet mannered, unreal and idealized.<sup>41</sup> Eberhardt Fischer points out that in the eighteenth century a clear favorite was the theme of love in romantic settings. These themes had enjoyed great popularity in the Hindu arts, particularly in Rajasthan, but were just gaining impetus in the Mughal ateliers.<sup>42</sup> *Zenana* scenes are understandably a favored subject matter of this time as are drawings of the Emperor enjoying one of his garden palaces, such as the painting of *Muhammad Shah Viewing a Garden*, c. 1730-40 in the Museum of Fine Arts, Boston.<sup>43</sup>

These garden and landscape paintings illustrate the transformations which took place in the mid-eighteenth century and in later Mughal painting. Goetz points out that while works of this period are mannered, often simplified and other-worldly, (as *Muhammad Shah in his Garden*), they portray the discovery and further development of the interest in portraying landscape as an autonomous aesthetic experience.<sup>44</sup> From this period onwards landscapes and garden-settings became a central concern in compositions and no longer served just as background filler for



court pomp and display. Residential gardens, courtyards, and broad landscapes became integral and often dominating themes in paintings of court ceremony, portraiture, episodes from romances, epic tales, as well as *Raga* and *Ragini* illustrations. When illustrated in such Hindu works, architectural and garden settings preserved Mughal elements and ambience of design. (figs. 28 and 29) A contemporary Hindu architectural element which was incorporated in a number of late garden paintings is the *bangla* roof.<sup>45</sup>

With the death of Muhammad Shah in 1748, the court employment of artists practically ceased in Delhi. The court style naturally moved with the displaced artists to other centers of the empire, primarily in Rajasthan, the Deccan and the northern provinces. By the end of the century, Mughal paintings of gardens were reduced to mere shadows of the great works of the sixteenth and seventeenth century. Late eighteenth century works lack the vitality and finesse of the great Mughal paintings of gardens and court scenes. Yet they do illustrate a deep nostalgia for the days of yore by depicting court ceremonies and feasts complete with musicians, richly dressed royals and courtesans (figs. 29, 30-48).

In the late eighteenth and nineteenth century, as the Hindu and Muslim power structure collapsed, specific incidents of Hindu mythology were frequently confused and amalgamated with Muslim themes. Imprecise iconography appears in a number of works as paintings were mainly intended to be decorative. Intricate operetta-like scenes of luxurious palace and garden settings became popular, especially in painting centers at Delhi and then



in Oudh and Lucknow where many Delhi artists relocated.<sup>46</sup>

By the turn of the nineteenth century these transformations were followed by the ultimate demise of Mughal painting which began to patronize the dictates of the British tourist industry. The British Library's *Amal-i Salih*, an unofficial history of Shah Jahan, dated 1830, exemplifies this development (fig. 27). Here a Mughal style garden palace becomes the playground for European tourists who irreverently take a swim in the central fountain.

### The Rajasthani Schools

A survey of the numerous Rajput schools of painting necessarily extends beyond the scope of this study. Such a discussion is far more complex than that of the imperial Mughal schools. In short, the stylistic developments in Rajasthani schools of painting were based on pre-Mughal and Popular Mughal trends. The most important periods of painting in Rajasthan, particularly in Mewar and Bundi, occurred during the seventeenth century.<sup>47</sup> The Bikaner schools of painting began to produce notable works in the late seventeenth and early eighteenth centuries.<sup>48</sup> This was a result of the waves of immigrant artists who left Delhi as the Mughal ateliers disintegrated under Aurangzeb and the later Afghan invasions.<sup>49</sup> Rajasthani painting became increasingly Mughalized during the early eighteenth century. These influences are readily found in garden and landscape paintings from various schools throughout the region.

During the eighteenth century, many Rajput schools produced



single paintings depicting the pleasures of the elite, including both Hindu and Muslim festivals.<sup>50</sup> Rana Jagat Singh II of Mewar (1734-1752) built a series of magnificent island garden palaces on Lake Pachola.<sup>51</sup> As an architect himself, it can be assumed that he designed the pleasure gardens in his palace precincts as well. In many senses he may be compared to the Mughal emperor Muhammad Shah (1719-1748). Rana's pleasure loving disposition kept him from politicking and resisting the forces of the Marathas just as Muhammad Shah was doing while Nadir Shah invaded his empire.

Paintings such as *A Few Rajput Pleasures*<sup>52</sup> show that Mughal prototypes for painting as well as architectural design were influencing the Rajasthani schools in a number of ways. Firstly, secular painting as developed in the Mughal schools was not the norm in the Hindu schools which traditionally concentrated on religious themes. Secondly, Mughal concerns in naturalism and realism were developed in Rajasthani painting. More sophisticated figural, architectural and landscape compositions as seen in the paintings of Rana's island garden palaces, clearly illustrate these artistic exchanges between the two courts.

Most importantly, these paintings provide marvelous insight into the contemporary types of gardens and courtyards that existed in Rajasthan by the middle of the eighteenth century. They illustrate in great detail the many features and functions of the residential pleasure gardens. These landscape tour de forces display various layouts of parterres, walkways, pavilions, terraces, lawns, arbors and the many fountain courts which stage song, dance, gardeners, romantic walks, courtly promenades and



concerts.

Like many other hybrids throughout the continent, Rajasthani painting bloomed primarily in the seventeenth and eighteenth centuries, and died suddenly in the nineteenth century. By the nineteenth century, many Rajasthani schools were producing works in a highly commercial and debased style.<sup>53</sup>

#### The Deccani Schools

By the end of the sixteenth century the Deccani sultanates of Ahmadnagar, Bijapur and Golconda had succeeded in establishing distinctive schools of painting. As the population of the courts was multiracial--a mixture of Muslim Indians, Persians, Turks and Abyssinians--Deccani painting had evolved into an amalgamation of the various styles.

Zebrowski has pointed out that by 1600 the Bijapuri schools were experiencing similar developments to those of the contemporary Mughal schools. On one hand, Turco-Iranian styles were popular, as seen in the use of the rich arabesque patterning and paradise-garden settings;<sup>54</sup> on the other hand, the earthier Indian interests in the human body were developed.<sup>55</sup>

In the seventeenth century the Deccan was the only major center for Persian manuscript production apart from Delhi.<sup>56</sup>

Under the rule of Ibrahim Adil Shah II Bijapuri (1579-1627), alliances were formed through the marriage of Ibrahim's daughter



and Akbar's son, Daniyal. In 1601, as part of the marriage arrangements, two thousand manuscripts from the royal Bijapuri library were given to the Mughal court. These combined factors made the cross-fertilization of Deccani and Mughal painting inevitable. With the fall of Ahmadnagar to the Mughals in 1616, the courts of Bijapur and Golconda were forced to follow a more compliant policy towards Akbar.

Under Sultan Muhammad 'Adil Shah Bijapuri (1627-56), Mughal influence on Deccani painting grew. Many Mughal officers from the north, including Rajputs, who served under Shah Jahan and Aurangzeb were stationed in the Deccan. Surely they brought their prized painters with them.<sup>57</sup> By the middle of the seventeenth century many works are in a fused Bijapuri and Mughal style. As Rajput officers serving the Mughal court were also stationed in Deccani outposts, their court traditions are apparent as well.

Perhaps the greatest change brought to the Deccani schools of both Bijapur and Golconda, via the Mughal artists, was the growth of interest in realistic portraiture and the recording of historical events. Under Sultan Muhammad 'Adil Shah Bijapuri and Sultan 'Abd Allah Qutb Shah of Golconda (1626-1672) these themes became increasingly popular. The vibrant color ranges characteristic of the Bijapuri and Golconda schools persist and serve to invigorate the often restrained and somber tones of Mughal painting.<sup>58</sup>

By the middle of the seventeenth century, painting in Golconda was sensitively imitating the Mughal realist style, particularly in paintings of architectural settings. In the



*Procession of Sultan Abdullah Qutb Shah riding an elephant with courtiers and musicians,*<sup>59</sup> vivid Deccani color ranges and European vanishing point perspective may be seen. Here we are allowed a glimpse of what was probably a typical Golconda palace. Beyond a hedge of alternating palms and sundry trees, an elegant twelve sided pavilion towers over the palace courtyard. Like a jewel between two palace buildings, the garden pavilion is framed by the emerald plantings.

With the fall of Bijapur and Golconda in 1686 and 1687 to Mughal forces, Deccani painting did not lose its own identity. Although many scholars assume that Deccani painting was dismantled and degenerated under the conquests of Aurangzeb, in fact the invasion had less of a negative impact than is assumed.<sup>60</sup> As former rulers of the sultanates were readily enlisted by Aurangzeb into Mughal service, many Deccani painting traditions persisted until the late seventeenth century. Deccani artists continued to work in their vernacular styles and were also beginning to produce works in a provincial Mughal idiom. The strain of the Deccani wars on the imperial studios did however force many Deccani artists to seek employment elsewhere. Some found patronage under the officers who served Aurangzeb in the Deccan, while others accompanied their Rajasthani patrons back to Rajasthan.<sup>61</sup>

For twenty years after the capture of Bijapur and Golconda Aurangzeb was in hot pursuit of the Marathas in the western Deccan. This allowed the Mughal appointees as well as the old Qutb Shahi rulers of the eastern regions to gain semi-independence. The Mughal governors stationed in Hyderabad and



all their nobles and emirs provided a rich center for artistic patronage. Zebrowski points out that the shift in patronage from the great princes in cities to lesser notables in smaller urban centers during the late seventeenth and early eighteenth centuries, occurred in the north as well as in the Deccan. This shift mirrored the breakdown of central authority under Aurangzeb and the passing of the Great Mughal and legendary Deccani sultanate empire.<sup>62</sup>

In light of these political events, it is not surprising that escapist themes became popular in the Deccani schools just as they did in contemporary Mughal ateliers. And what better setting is there than the shade, peace and quiet of a garden? Garden paintings of this period admit us to the fantasy world into which the Deccani elites escaped. In pavilions, upon terraces or swings near fountains, elegant courtesans and noblemen pose in splendor, enjoying dance, music, poetry or simply the scent of a flower.<sup>63</sup> Even business was transacted within their garden palaces as we see in the painting of *Allah-wirdi Khan receiving a petition*.<sup>64</sup> The more luxuriant garden paintings such as these are very similar to the garden paintings of the Muhammad Shah period.<sup>65</sup>

In the eighteenth century, the realism which Mughal painting brought to Deccani schools gave way to the rediscovery of idealized and erotic earthly Indian concerns. Zebrowski refers to this as the rebirth of the feminine principle, whether called *devi*, *shakhti*, *yogini* or *ragini*.<sup>66</sup> Ladies carousing in garden pavilions and *Ragamala* scenes of this period are almost without exception set within rather stylized Mughal style courtyard



gardens complete with regular parterres, fountains and basins.<sup>67</sup>

As the century progresses, the figures and settings become increasingly more stylized. Like Mughal and Rajasthani painting, Deccani painting peaked in the seventeenth century and settled into a generally repetitive mode in the nineteenth century. However, a few Deccani paintings of the late eighteenth century are highly innovative and possess extreme finesse. They may lack the humanism and energy of earlier works but their vibrancy in color and the rich detail of contemporary settings which they record make them extremely valuable in this study.

The India Office Library possesses a most sumptuous Hyderabad *Ragamala* series dated to the third quarter of the eighteenth century. Here the private paradisiacal worlds of the fabulously wealthy Deccani patrons are best documented. The formal qualities of Mughal painting, the precise concepts of perspective introduced by European works and the revival of Indian themes combine in this work. For the first time in the history of Indian garden painting, we are allowed a comprehensive and realistic view of how a garden-palace complex was composed and the many functions and features of the various courtyards. We are lead through numerous courts and terraces complete with carefully rendered plantings and fully functioning water systems. The degree of detail and exactitude is unprecedented and serves as an encyclopedia of popular garden features which probably even date back to the great seventeenth century Mughal and Rajasthani gardens (figs. 30-47).

This interest in garden painting continued throughout the late eighteenth century in the Hyderabad school.<sup>68</sup> Garden



settings similar to these from the Hyderabad school, are found in portraiture paintings and illustrations of Hindu texts produced in provincial Deccani centers as well. Inevitably, Deccani painting followed the same course as the Mughal and Rajasthani schools. As Deccani schools began to cater to a more commercial market in the late eighteenth and early nineteenth centuries, the Hyderabad style moved towards greater simplification.<sup>69</sup>

#### The Provincial Schools of Oudh and Bengal

The great Mughal, Rajasthani and Deccani centres of authority and patronage slowly crumbled following the weak reign of Muhammad Shah (1719-1748), the sack of Delhi by Nadir Shah in 1739, the general collapse of central Mughal authority and the rise of the marauding Maratha chieftains in the later eighteenth century. It is not surprising that smaller provincial courts began to flourish as they gained greater political and economic independence.

Paying only nominal allegiance to Delhi, the northeastern courts began to flourish as well. The arts were naturally directly affected in these provinces, especially in the states of Oudh and Bengal. In both regions general styles and subject matter were for the most part derivatives of later Mughal works.

Yet as in the Rajasthani and Deccani schools, bolder and vibrant colors, and more often Hindu themes were commissioned in the provincial schools of Oudh and Bengal. This was primarily



due to the movement of artists from Mughal, Rajasthani and Deccani court ateliers to those of the provinces.

In the last half of the eighteenth century, contemporary elite life was enacted vicariously through illustrations of such texts as the *Ragamala* and through paintings of traditional Hindu festivities, such as *Holi* <sup>70</sup>. Many of these works were produced in the Oudh schools of Lucknow, Faizabad and Farrukhabad, as well as in the Bengali town of Murshidabad. The later Mughal court styles transferred to these areas as Mughal artists found employment in the flourishing courts of Shuja'al-Daula (1754-75) and Asaf al-Daula (1775-1797). These provincial styles are best characterized as finely executed and richly colored, yet are flat and rigid when compared with the more fluid and expressive seventeenth century Mughal portraits and scapes.

Just as the later Mughal, Rajasthani and Deccani courts, those of the northeastern provinces maintained a facade of wealth and revelry towards the end of the eighteenth century and even later. They built extravagant palaces and gardens, and greatly patronized the art of painting. Yet all was simply an escape from the realities of the declining Mughal empire. The worlds into which they found escape were ultimately as transitory as the palatial gardens themselves. Like so many paintings from the twilight days of the empire, Oudh and Bengali works reveal a deep nostalgia for the old days of royal splendor and stability--indeed, for an impossible dream.

Goetz points out that in the late eighteenth and early nineteenth century provincial ateliers made use of stock sketchbooks and stencils. The earliest evidence dates to the



later years of Aurangzeb's reign. Another fact which affected the quality of painting was the change in the patron's perception of the artist. In the later periods, artists were essentially treated as decorators and were therefore poorly paid. Thus, mass production of generic types of paintings became a necessity. Under these circumstances, the general repetitiveness of late eighteenth and nineteenth century paintings is hardly surprising.<sup>71</sup> Combined, these factors formed the basis for what became a commercial and tourist industry.

The group of early Oudh paintings published by Goetz<sup>72</sup> illustrate the remarkable innovations achieved in these provincial schools.<sup>73</sup> Although generally mannered and decorative in effect, comparable landscapes and palatial garden settings were not even produced in the imperial ateliers of the seventeenth century. The complexity of site and the extraordinary detailing of structural features is indeed unprecedented. Along with the contemporary Oudh painting *In a harem garden*, Faizabad, c. 1765, now in the David Collection in Copenhagen,<sup>74</sup> these works are some of the most elaborate depictions or interpretations, of late Mughal style garden palaces.<sup>75</sup>

The paintings illustrate the Qudsiyya Bagh<sup>76</sup> Palace at Delhi and court life under its owner Udham Bai Qudsiyya Begam<sup>77</sup>, the Moti Bagh and other gardens of the court at Faizabad.<sup>78</sup> Another painting in the group attributed to Faizabad from the third quarter of the eighteenth century *View of the Kashmir Valley*, c. 1761-75, Faizabad,<sup>79</sup> is a fanciful depiction of the Kashmir Valley. The artist has clearly drawn a very schematic and



generally distorted view of the valley. However, as Goetz points out, certain aspects are in keeping with extant topography and real sites. There are indeed many bends in the Jhelam river, (obviously regularized here), and Tahkt-i Sulaiman, the Pampur hills, Lake Dal, towns probably meant to be Bijbehara and Islamabad are depicted, and all roughly coorespond to their real locations. Further, a relatively accurate miniature view of the Nishat Bagh is set within a floating medallion at the top of the painting.<sup>80</sup>

Even as a fanciful and incomplete view, this painting probably stands as a general indicator of the number of gardens and palaces in the Kashmir valley during the second half of the eighteenth century. At the very least, this painting illustrates the stock types of garden and palace plans which were probably in vogue at the time.

Oudh painting of the late eighteenth century is perhaps best characterized as melancholic and dreamlike. Figures are elegant, yet dull and lifeless. Settings are neat, bright and beautiful, yet simplified and often architecturally bizarre.<sup>81</sup> It can be said that these provincial artists did achieve a freshness in approach to paintings of gardens by pulling together broadly Mughal compositional elements and applying them to non-Muslim themes. These works are best characterized as mannerist. They are retrospective yet easily break away from classic imperial Mughal conventions. At once they are highly detailed, polished views of court-life cycles, yet slightly vulgarized by garish acidic colors, radical complexities of building and landscapes, and the oddly eerie and eccentric looking figures within them.



Paintings in the Ragamala series from Murshidabad, c. 1760,<sup>82</sup> illustrate almost all of these late eighteenth century transformations, save for the differences in detailing and finish. Further, they point out that paintings of palace garden settings by this time, however varied in layout and plan, became substantially simplified in comparison to earlier Mughal style paintings. Lucknow schools were also producing similar Ragamala sets in the late eighteenth century which illustrate palace gardens in severely simplistic terms.<sup>83</sup>



## Notes

1. The double-page illustration of the emperor Babur laying out the Garden of Fidelity in Agra, from the *Baburnama* in the Victoria and Albert Museum, (I.M.1913.276a, 276), is illustrated on pages 16-17, Plates 2 & 3, in C.M. Villiers-Stuart, *Gardens of the Great Mughals*, London, 1913.
2. Architectural details were most likely not invented by the painter who was simply rendering with veracity his own observations or copying previous works based on sites.
3. E. Moynihan asserts that *charbagh* gardens ceased to be built in the early eighteenth century, *Paradise as a Garden in Persia and Mughal India*, p. 148.
4. *Ibid.*, p. 148. With regards to painting in later periods, (eighteenth to nineteenth century), it becomes evident that residential gardens may indeed be more likely topo-specific in comparison to earlier works which tended to be catagoric copies of imperial or historic 'site-types.' This can be substantiated by inscriptions on later portrait settings such as the one found on the Hyderabad painting of c. 1795, *Nawab Saif al Mulk Inspecting Jewels*, Mark Zebrowski, *Deccani Painting*, p.265, which follows: "This beautiful and original specimen...was done from the site..." and also substantiated by the spreading of house and garden architectural traditions.
5. Mark Zebrowski, *Deccani Painting*, p. 122.
6. The loss of Mughal building sites is an obstacle in proving the 'real' versus 'imaginary' in garden paintings. M.A. Chughtai in 'The so-called gardens and Tombs of Zeb-un-Nisa at Lahore', p. 620, suggests that many of the buildings of the nobles after their deaths were not properly maintained. As the posting of a noble did not necessarily pass to his son, their homes, in comparison to imperial palaces, were more transitory.
7. D. Wilber, *Persian Gardens and Garden Pavilions*, p. 52.
8. *Ibid.*, plates 11, 12, 13.
9. An excellent survey of these regions of painting is covered in T. Falk and M. Archer, *Indian Miniatures in the India Office Library*, London, 1981, pp.43-238.
10. T. Falk and M. Archer, *op. cit.*, p. 105.



11. T. Falk and M. Archer, *op. cit.*, p. 255.

12. T. Falk and M. Archer, *op. cit.*, p. 220.

13. *Loc. cit.*

14. *Ibid.*, p.105.

15. *Ibid.*, p. 121.

16. Herman Goetz discusses in great detail the rise of the schools of Oudh in his article 'The Early Oudh School of Mughal Painting: Two Albums in the Baroda Museum', *BBMPG IX*, 1955, pp. 9-28.

17. *Divan* or 'anthology', of the poems by the Persian lyricist and mystical poet Hafiz of Shiraz (d. 1389). This work was one of the most favored poetic works of the Mughal emperors, and was even used by Jahangir for taking auguries. Two large imperial copies survive, one in the Khuda Baksh Library in Bankipore and the other in the Rampur state library. Two pocket size Mughal copies, including the Grenville XLI, are in the British Library.

18. The *Khamsa*, or quintet, are the five narrative poems by the Persian poet Nizami (1141-1202) who lived most of his life in Ganjah (modern Elisavetpol, in Soviet Azerbaijan). The five works are: the *Makhzan al-Asrar*, or Storehouse of Maxims, a collection of ethical and religious maxims; the love stories of Khusrau and Shirin; the love story of Laila and Majnun; a collection of short stories entitled *Haft Paikar*, or the Seven Portraits, based on the life of the Sasanian king Bahram Gur; and finally an epic poem on the life of Alexander the Great, called the *Iskandarnama*.

19. See *Baburnama* garden illustrations in: British Library, Or. 3714, 173v, 253r, 295v, 491v, 492r; Victoria and Albert Museum, I.M.1913.276a, 276; Walters Art Gallery in Baltimore, (unknown folios); Moscow State Museum of Eastern Cultures (unknown folios); and National Museum in Delhi (unknown folios).

20. This tradition is best seen in the Dara Shikoh Album portraits, c. 1633-42, in the India Office Library, Add.Or. 3129. For illustrations of these see, T. Falk and M. Archer, *Indian Miniatures in the India Office Library*, pp.378-400.

21. An excerpt of a letter from Father Henrique, a Jesuit missionary to Akbars court, is cited in M. Brand and G. Lowry, *Akbar's India: Art from the Mughal City of Victory*, p. 98, as follows: "The first thing he (Akbar) did was to go into the church, which was well appointed with its perfumes and fragrance. On entering he was surprised and astonished and made a deep obeisance to the picture of Our Lady that was there, from the painting of St. Luke, done by Brother Emanuel Godinho, as well as to another beautifully executed representation of Our Lady brought by Fr. Martin da Silva from Rome, which pleased him no end. After stepping outside briefly to discuss these pictures with his attendants, he came back with his 'chief painter' and



other painters, 'and they were all wonderstruck and said that there could be no better paintings nor better artists than those who had painted the said pictures."

22. S. Crowe, *The Gardens of Mughal India*, p. 135.

23. The Akbarnama is the official chronicle of the reign of Akbar (1556-1605), written by the emperor's friend and counsellor Abu'l-Fazl ibn Mubarak (1551-1602). Abu'l-Fazl wrote it up until he was murdered by Jahangir, Akbar's son, in 1602. Surviving parts of the original copy are in the Victoria and Albert Museum. Another imperial copy to have survived is now divided between the British Library (vol. 1), and the Chester Beatty Library, (vols. 2 and 3).

24. The memoirs of the emperor Babur (1526-30), founder of the Mughal dynasty, composed originally in Chagatay Turkish during Babur's life, from the year 1494 at age twelve until his death in 1530. Akbar, Babur's grandson, had the memoirs translated into Persian by 'Abd al-Rahim Khankhanan, who ran the most celebrated scholastic library in India at that time. See note 17 above for official copies.

25. *Babur Lays out a Garden at Istalif*, c. 1589, See: Goswamy and Fischer, *Wonders of a Golden Age*, p. 83.

26. E. Moynihan, *op. cit.*, p. 107.

27. E. Moynihan points out that Jahangir was given a number of European paintings as well as garden literature, herbals and prints of European gardens, in *Paradise as a Garden...*, p. 123.

28. *Gulistan*, or 'The Rose-garden', was composed by the Persian poet Muslih ad-Din Sa'di (c.1189-1291). As one of the most famous works of Persian literature, illustrated manuscripts of the *Gulistan* are extremely common.

29. The *Aklat-i Nasiri*, or Nasirean Ethics, was written by Nasir-ud Din in the thirteenth century. It is a three part discourse on ethics, economics and politics. Each section addresses philosophical and moral questions and includes a code of conduct, especially geared for rulers. It does not contain a story line or characters and therefore demands artistic originality and imagination.

30. See: Goswamy and Fischer, *op. cit.*, p. 121.

31. *Ibid.*, p. 56.

32. *Nafahat al-Uns*, or Breaths of Fellowship, is a two part anthology of biographies of famous saints and Sufis, written by the Persian poet Nur ad-Din 'Abd ar-Rahman Jami (1414-93). He wrote this work between 1476 and 1479 in order to update two earlier works in Arabic. The first part is composed of 576 biographies of saints from the second to the eighth centuries Hijra. The second part includes shorter notices on mystic poets



and female Sufis.

33. T. Falk and M. Archer, *op. cit.*, p. 57.

34. For Shah Jahan his own importance became the central and paramount goal in his artistic patronage. For an excellent discussion of Shah Jahan in this regard see Waine Begley, 'The Myth of the Taj Mahal...', *The Art Bulletin*, 1979, pp. 7-37.

35. The imperial *Padshahnama* now in the Royal Library at Windsor Castle, contains 44 miniatures which date to the last years of Shah Jahan's reign, 1657-8. These works depict formal occasions such as darbars, processions and battles, to name a few. Losty points out that this Ms. was the last great Mughal commission and represents the culmination of trends apparent in Mughal painting since 1600. J. Losty, *The Art of the Book in India*, p. 99.

36. *Ibid.*, *ibid.*

37. The *zenana* is the female section of the house or palace. These areas often included the private apartments of the consorts, their gardens and baths.

38. H. Goetz, *op. cit.*, p. 10.

39. Jahandar Shah took the throne after Bahadur Shah died in 1712, but he was totally unfit to rule. Within a year his nephew Farrukh Siyar deposed him.

40. H. Goetz, 'The Early Oudh School of Mughal Painting: Two Albums in the Baroda Museum', p.10.

41. H. Goetz, *op. cit.*, p.11.

42. B.N. Goswamy and E. Fischer, *Wonders of a Golden Age: Painting at the Court of the Great Mughals*, (1987), p. 207.

43. See: Quraeshi, *Lahore: The City Within*, pp. 228-229.

44. H. Goetz, *op. cit.*, p. 9.

45. Curved roof with bent eaves probably derived from early bamboo roof constructions of Bengal.

46. L.Y. Leach, *Indian Miniature Paintings and Drawings: The Cleveland Museum of Art Catalog of Oriental Art*, Cleveland, 1986, p. 146.

47. *Maharaja Bhao Singh in a garden with ladies*, Bundi, c. 1670. See: T. Falk, *Indian Painting: Mughal and Rajput and a Sultanate Manuscript*, p. 99. *Rao Ram Singh of Kotah*, Kotah, c. 1670. See: S.C. Welch, *India: Art and Culture 1300-1900*, p. 358.

48. *A Sage visiting a prince in a garden*, Bikaner, c. 1680. See: *Ibid.*, p.97.



49. J. Losty, *op. cit.*, p. 107.

50. *Jyeshtha* (the May-June period from the Baramasa cycle), Jaipur, late 18th century, See: J. Bautze, *Indian Miniature Painting 1590-1850*, p. 98.

51. *The Rana's Lakeside Palace*, Udaipur, mid-18th century, See: S.C. Welch, *op. cit.*, p. 377.

52. Publ.: *Primitivo to Picasso- St. Paul's Alumni Collection*, New York, 1968, no. 118; S.C. Welch, *A Flower from Every Meadow*, New York, 1973, pl.8.

53. *Maharao Ram Singh of Kotah visiting Bahadur Shah II*, Kotah, c. 1842-43. See: S.C. Welch, *India: Art and Culture 1300-1900*, pp. 285-86.

54. (A lady dozing in a garden (from the *Kulliyat*), Golconda, c. 1590-1600, See: Zebrowski, *Deccani Painting*, p. 162. The *Kulliyat* is a collection of poems written by the Deccani emperor Muhamed Quli Qutb Shah of Golconda (1580-1626). His poetry, composed in Urdu, established him as India's first great Urdu poet and one of finest to use the early Deccani idiom of that language. M. Zebrowski, *op. cit.*, p. 158.

55. M. Zebrowski, *op. cit.*, p. 68.

56. J. Losty, *op. cit.*, p. 108.

57. M. Zebrowski, *op. cit.*, p. 122.

58. M. Zebrowski, *op. cit.*, p. 68. *Sultan 'Ali 'Adil Shah II with a courtesan in a garden*, Bijapur, c. 1660. See: Zebrowski, *op. cit.*, p.120.

59. Golconda, c. 1650, See: Zebrowski, *op. cit.*, p. 186.

60. M. Zebrowski, *op. cit.*, p. 209.

61. *Loc. cit.*

62. *Ibid.*, p. 211.

63. *Mujahid Jang and Murassa Bai sitting in a garden*, Hyderabad, early 18th century. See: Zebrowski, *op. cit.*, p. 235.

64. Hyderabad, early 18th century. See: Zebrowski, *op. cit.*, p. 230.

65. T. Falk and M. Archer, *op. cit.*, p. 220.

66. M. Zebrowski, *op. cit.*, p. 245.

67. See: Zebrowski, *op. cit.*, figures 199, 203, 211, 225 and 226.



68. *Nawab Saif al Mulk inspecting jewels*, Hyderabad, c. 1795. See: Zebrowski, *op. cit.*, figure 242.

69. *Marriage of Vishnu and Lakshmi*, Shorapur, late 18th century. See: Zebrowski, *op. cit.*, fig. 256.; *An unidentified raja*, Hyderabad, early 19th century. See: *Ibid.*, fig. 261; *Raja Marchand*, Hyderabad, early 19th century. See: *Ibid.*, fig. 259; *Raja Satji Prithvi Das*, early 19th century. See: *Ibid.*, fig. 258.

70. *Holi* was at one time an exclusively Hindu celebration of spring. Originally it was a chaotic fertility festival which later became ritualized and simply enjoyed as a spirited occasion with singing, dancing and music. With the spread of Hindu culture into the Mughal courts, primarily through the marriages of Rajput princesses and Mughal princes, the Mughal courts began to celebrate it as well. Red powders and liquids made from the tesu blossom are wheeled and squirted about by members of the court within their garden palaces.

71. H. Goetz, *op. cit.*, p. 20.

72. H. Goetz, *op. cit.*, pp. 10-28.

73. *Ibid.*, p. 24.

74. See: S.C. Welch, *op. cit.*, p. 278.

75. See: Goetz, 'The Early Oudh School of Mughal Painting: Two Albums in the Baroda Museum', *BBMPG IX* (1952-53), plates 4,5,6,7,8 and 9.

76. *Bagh* is the Persian word for garden.

77. *Ibid.*, figures 4 and 5; and *In a Harem Garden*, see note 74.

78. See: Goetz, *op. cit.*, plates 7, 8 and 9.

79. See Goetz, *op. cit.*, plate 4.

80. H. Goetz, *op. cit.*, p. 15.

81. *A Princess with her attendants and A prince smoking attended by ladies*. See Falk and Archer, *Indian Miniatures in the India Office Library*, p. 469.

82. *Ibid.*, Johnson Album 36-10, 29, 30 and 31, pp. 476 and 480.

83. *Ibid.*, Johnson Album 44-5, p. 462.



Indo-Islamic Residential Gardens: Social Distribution and Regional Developments

Within this scented garden close  
 Whoso desires may win repose;  
 An earthly Paradise it seems--  
 Of cypresses, green lawns, and streams--  
 And if your host you wish to please  
 Converse of nothing else but these.  
 --Amir Khusrau (1253-1324)<sup>1</sup>

To begin, it is important to be clear on what will constitute a residential garden. For the purposes of this study, Mughal period residential gardens will connote enclosed outdoor spaces or landscaped areas adjoining a home, including various structures such as pavilions, courtyards and terraces. Residential gardens are essentially garden courts connecting various parts of the housing complex. As such they are often designed to incorporate hammams, or baths, a number of public and private courtyards, plantings and water-courses, terraces and, in a number of cases, simple tented platforms with awnings. Emphasis will be placed on non-royal residential gardens in order to clarify the building traditions which developed in this social strata over the period in question. This emphasis has been chosen over that of royal gardens because previous scholarly research has advanced much further and deeper in the study of royal residential gardens. However, as royal and non-royal residential gardens are a related phenomena, royal gardens will be examined for the influence they had in setting standards and types of designs adapted in vernacular architecture.

For centuries, the Indo-Islamic palace and garden, were able



to develop under the ebb and flow of Persian, Turkish, Central Asian and indigenous Indian architectural traditions.<sup>2</sup> These impulses created a hybrid of sorts which was primarily based on the Persian tradition, but ultimately the Indian garden palace came to express a style of its own. Lacking the possibility to produce the dense type of orchard gardens of Herat and Samarkand, Indian gardens developed towards vast open spaces, wide expanses of water<sup>3</sup> and acquired a greater architectural character. Over a period of about three hundred years, before the middle of the eighteenth century, the changes in the character of the Indo-Islamic garden were minor. It was only increasingly refined in its details throughout the reigns of the great Mughals, Rajput rulers and Deccani Sultans. When developments ceased almost entirely on the imperial garden-palace level around the middle of the seventeenth century, forms and standards were passed down to the lower social strata.

That early Indian garden design had no resounding effect upon later garden constructions seems unlikely, especially in light of our literary evidence. For lack of any existing archaeological remains or paintings of pre-Sultanate gardens we must turn to literary evidence. Interestingly, in the *Kamasutra*, which records Indian life two-thousand years ago, we find a description of four gardens: one garden was reserved for the use of the kings and queens; in the second, the kings played games such as chess and were entertained by jesters; in the third, ministers and courtiers made merry with their courtesans; and the fourth garden was dedicated to Lord Indra. In addition, the *Kamasutra* describes the gardens as having ponds upon which swans



and other water fowl delighted. This may imply that water-courses and artificial ponds were constructed in these early times. Further, gilded cages were hung from the trees holding colorful birds, and no garden was complete without a swing.<sup>4</sup> This evidence implies that residential gardens existed and served as the setting of a variety of domestic and court functions in pre-Muslim India.

The first Muslim monarch of India to show great interest in the establishment of orchards and gardens was Sultan Ala' al-Din (1296-1316). As the most energetic member of the Khalji dynasty, Ala' al-Din greatly expanded the Delhi Sultanate and constructed a number of gardens in and around the capital city. Archaeological evidence no longer exists for these sites but later histories do document his gardens and orchards. The next to follow suit was Firuz Shah (1351-88) of the succeeding Tughluq dynasty, who is recorded as having restored thirty gardens constructed by Ala-ud-Din, and as having created one thousand two hundred of his own in the vicinity of Delhi.<sup>5</sup> Within a century and a half, Sultan Ibrahim (1517-1526), the last of the Lodi dynasty, made his capital in Agra. Thus the radical distinction drawn between Babur's gardens and those of pre-Mughal India loses some of its strength upon comparison with Sultanate architecture at Delhi, Agra and Gwalior.<sup>6</sup> One can assume that the traditions of architecture which Ibrahim Lodi had previously established in Agra, including that of residential garden design, had an impact on the succeeding Mughals.<sup>7</sup>

Existing remains, literary sources and our paintings bear ample testimony that garden design<sup>8</sup> indeed became an integral



part of Mughal period residential buildings in most regions of the sub-continent. Gardens designed to form part of a palace or haveli<sup>9</sup> are perhaps the most commonly found type in our paintings. For example, figures 12 and 13 show water wheels, lifting water from a well or cistern, then emptying it into an aquaduct then distributes the water to tanks and various water courses. Parterres, or rectangular flower beds, are watered by the overflow of the water channels; tanks complete with fountain jets; and in other paintings (fig. 18) a *chaddar*, or water-chute, carved with a decorative surface,<sup>10</sup> sends off a patterned cascade into a basin or terrace channel. Such waterworks which serve both residential and agricultural purposes were and are a necessity in practically all regions of India.<sup>11</sup>

Sixteenth to nineteenth century Indo-Islamic residences and their garden spaces are generally described as introverted and inward-oriented, as presenting lifeless facades to the outside world and serene, blissful cloisters to those who dwell within.<sup>12</sup> Yet the sharp separation between inner and outer landscape is not the only characterization for the residential gardens to be made. The preceeding chapter surveyed a number of works that depict courtyard houses and palaces which were outwardly or 'vista' oriented as well as garden-palaces which illustrate the central court or walled-in *charbagh* layout.<sup>13</sup>

Not all residential gardens walled out the surrounding landscape. In many cases garden scapes were both visually and spatially expansive--where the parterres, walkways, pavilions and courtyards were adjacent to the banks of a river to afford the view. Historically, water-front residences and gardens built on



islands, or set upon a river-bank, were highly favored in north India. Extant archaeological sites and paintings of garden-palaces built in Kashmir around Lake Dal, along Agra's Jumna River, and in Udaipur upon Lake Pichola are common enough to support this observation.<sup>14</sup> This tradition is one of the most definitive features of the residential garden (as opposed to typical settings for tomb gardens) and can be found in all regions in India. The common occurrence of water front residential gardens weakens the prevalent notion that the inward orientation and paradise symbolism of Indo-Islamic gardens (particularly those of the Mughal period) necessarily weakened the relationship between the palace-garden scape and the surrounding landscape. For in fact, as we can see in many of our garden paintings, views of the outside landscape came to be highly valued elements and were accordingly incorporated into the overall design of many residential gardens.

The evolution of gardens during the Mughal period may be divided into four general phases which more or less coincide with the reigns of the great Mughal emperors. From the more primitive open-air royal garden-camps (which took the place of buildings) of the sixteenth century, palace garden design passed into a vital and creative phase which was more building oriented during the first half of the seventeenth century. During the second half of the seventeenth century residential garden design climaxed in the tranquil perfection best illustrated in the palaces and gardens of the Red Fort at Delhi. This phase of garden design was followed by a period of decline, albeit within the imperial strata. For in the non-imperial Mughal world of



patronage the residential garden became more accessible.<sup>15</sup> As the art of the garden palace disseminated into the non-royal, more plebian social spheres it reached new heights of creativity. We can call this later phase of garden design 'Popular Mughal', a phrase which is traditionally applied only to contemporary Indian painting.<sup>16</sup>

Overall, from the early years of the Mughal period until at least the late seventeenth century, the evolution of the Indian residential garden (especially with regards to royal gardens) was towards increasing grandeur and intricacy. By the eighteenth century economic decline forced the material quality of the arts down, especially that of palace and garden architecture. Yet Indo-Islamic garden palaces, based on painted as well as archaeological evidence, continue to manifest creativity in terms of design throughout the eighteenth century. The Qudsiyya Bagh at Delhi, although built with cheaper materials than the marbles and sand stone of the preceeding emperors, the direction garden-palace design took. A number of rather fanciful paintings depict the Qudsiyya Bagh as excessively ornate in terms of both its garden and palace decorative elements. Here a classical Mughal garden design is creatively 'mannered' by a plethora of lotus columns, the extensive use of arcading, white marble (probably carved or molded stucco) palings, and the many fountain jets lining the central *charbagh* court tank and water course. Never before had the art of the garden reached such decorative heights.<sup>17</sup>

Based on a pool of evidence from a wide range of sources, it is clear that the designing--and in many cases the actual



maintenance--of gardens was a hobby with the Mughal emperors and their nobles.<sup>18</sup> As for the rulers and nobles of Rajasthan, evidence of their interest in garden design is best gleaned from late Rajput paintings of the garden palaces at Udaipur. Likewise, in the Deccan, it is in late paintings (primarily those from the capital of Hyderabad) that we find cases upon which to base our study of garden palace developments.<sup>19</sup> But by far, the imperial Mughal patrons have left the most extensive and insightful sources of evidence illustrating the developments in the Mughal objective and approach to the art of the residential garden. As their great works set the *modus operandi* for garden design throughout the territories, a brief survey of their key monuments is necessary.

The finest age of imperial Mughal palace-gardens lies between the reign of Babur and the deposition of Shah Jahan in 1658.<sup>20</sup> While the most prolific garden builders of the five were Babur and Jahangir, most of the surviving imperial gardens are remnants of Shah Jahan or were built by his nobles. As this study specifically hopes to highlight palace and residential gardens, it is worth pointing out that Jahangir was in effect the major exponent of the country garden-palace, and Shah Jahan's main contribution was to the development of the city palace and its attendant gardens and courtyards.

No garden-palaces have survived from the time of Babur, however, we are assured through Babur's memoirs that he and his nobles did indeed build residences and attendant formal gardens along the the Jumna River in Agra and developed Agra as a river-front city.<sup>21</sup> What we do have archaeological evidence for are



the formal garden sites in which he camped--in other words, gardens which basically took the place of buildings. One such site is the Lotus Garden which Babur built in Dholpur just outside of Agra.<sup>22</sup> This garden is the earliest example we have which illustrates the assimilation of Mughal design with Indian skill and creativity.<sup>23</sup> Here, Babur introduced and developed a thematically and decoratively sophisticated system of irrigation which surpassed by far the plans used at Samarkand<sup>24</sup> and applied it to bath architecture. By the end of the fifteenth century only simple foliated pools were popular in Timurid gardens and were pale in comparison with Babur's delicate lotus pools of Dholpur. It is also interesting to note that the water channels in the tanks and baths at the Lotus garden are strikingly similar to a hammam (bath) in the Gwalior fort which would suggest that Babur's water courses were most probably influenced by, if not based on, pre-Mughal stonework.<sup>25</sup>

Akbar, Babur's grandson, also contributed to the development of the palace-garden in the building of the city of Fatehpur Sikri, his fort at Ajmer near the lake (where he also ordered his nobles to build houses and gardens surrounding it),<sup>26</sup> and his Fort at Agra<sup>27</sup>. Perhaps the finest palaces and gardens which Akbar built were in Kashmir<sup>28</sup>, one in particular being his lake-side garden-palace the Nasim Bagh (Garden of the Breezes) located on the banks of Lake Dal. The only parts which still exist are some terrace walls and the ruins of small buildings near the lake.<sup>29</sup> We know that the Nasim Bagh was a place for living in, an enchanting summer home and retreat. Here Akbar initiated the tradition of building lake-front garden palaces, a tradition



which was to become very popular with and emulated by succeeding generations in the Kashmir.<sup>30</sup> In fact, in the first half of the seventeenth century, the vale of Kashmir is said to have had seven-hundred and seventy-seven gardens with pavilions along the lakesides and mountain slopes. All of them were built by Jahangir, his son Shah Jahan (1627-1656), and their nobles.<sup>31</sup>

From this stage forward river-front planning figures prominently in the development of the Indian residential garden, not only in Kashmir, but in most areas of India be it plain, lake-side, hilly region or desert. Unlike the urban residential gardens at Fatehpur Sikri<sup>32</sup> which are inward oriented mazes of living quarters and garden courts, we find that the whole emphasis of the garden in water-front properties is moved towards the river or lake front. It is perhaps this development which led C.S. Villiers-Stuart to state that the outstanding feature of the Kashmir gardens was the builders' "feeling for the genius of place."<sup>33</sup>

Akbar's son, Jahangir, made the greatest contribution to residential garden design in Kashmir and enthused about the place in his memoirs<sup>34</sup>. Here he was able to transplant traditional design features of Mughal gardens and make them respond to new site conditions. He did not continue to exclusively build closely walled single level gardens with the same patterns as Persian gardens. The topography of the Kashmir added new dimensions to the art of the garden. Now designers could exploit the possibilities of mountainsides and hillsides and create multiple level gardens through terracing, and create all sorts of water course devices--water could churn into pools, flow under



and through buildings, tumble down *chaddars*,<sup>35</sup> and cascade into imaginative waterfalls. In gardens of the plains, small amounts of water and generally level terrain had to be used with great effect in gardens.

The finest descriptions we have of the gardens of Kashmir built under Jahangir and Shah Jahan are those of Francois Bernier, a French physician employed by one of Aurangzeb's nobles named Danishmand Khan.<sup>36</sup> He was asked to join the emperor's retinue in his only visit to the area, his impressions are as follows:

"The lake is full of islands, which are so pleasure-grounds. They look beautiful and green in the midst of the water, being covered with fruit trees, and laid out with regular trellised walks...

...The declivities of the mountains beyond the lake [Lake Dal] are crowded with homes and flower-gardens. The air is healthful, and the situation considered most desirable: they abound with springs and streams of water, and they command a delightful view of the lake, the islands and the town."<sup>37</sup>

In retrospect it becomes clear that the transformations in royal residential garden design began with Akbar's placing great importance on the building of hammams and water-courses, and his interest in developing water-front properties. Jahangir's main departure from these traditions was his move to emphasize, even more dramatically, the choice and elegance of a site. Finally, Shah Jahan introduced new decorative heights to garden architecture through his predilection for indoor water-devices and fine materials and detailed construction. Unlike Akbar who also developed indoor water-devices in separate constructions like baths and royal camping gardens,<sup>38</sup> Shah Jahan emphasized those in residential or palace gardens. In essence, water became



an integral part of the palace lifestyle during Shah Jahan's reign. This development is perhaps best seen in the residential gardens of the Red Fort which formed part of Shahjahanabad, the finest city Shah Jahan built. The principle palace sections of the Fort are situated on the riverside and special emphasis is given to the riverside towers and terraces which overlook a lower lawn-terrace in which elephant fights and military processions were held.<sup>39</sup>

Fortunately, Bernier has also left us a detailed description of the mosaic of private apartments, houses and gardens in the Red Fort at Dehli built by Shah Jahan:

"Nearly every chamber has its reservoir of running waters at the door; on every side are gardens, delightful alleys, shady retreats, streams, fountains, grottoes, deep excavations that afford shelter from the sun by day, lofty divans and terraces, on which to sleep coolly at night. Within the walls of this enchanting place, in fine, no oppressive or inconvenient heat is felt."<sup>40</sup>

In fact, a shallow water channel, or conduit in the marble paving, ran through the whole length of the private apartments and served to assist in cooling the apartments while it soothingly sparkled and murmured.

The great period of imperial garden-palace building then subsided under Shah Jahan's son, Aurangzeb, and the later Mughal emperors. Henceforth, a new line of residential garden design began to develop, particularly under provincial rulers and nobles whose power and wealth grew during Aurangzeb's weakening reign and solidified after his death in 1707.

An interesting side-light here is that the finest period for European palace or residential gardens coincided with that of the great Mughal period. Italian Renaissance villas and gardens such



as Vignola's Villa Lante in Bagnaia built in 1564, the Baroque mansions in France such as the Vaux-le-Vicomte (begun 1657) with its formal gardens designed by Andre Le Notre (1613-1700), and the renowned palace gardens of Versailles (begun 1669), also designed by Le Notre, are the most noteworthy examples of contemporary European residential gardens. But in contrast to paintings of the period, especially painting under Jahangir and Shah Jahan, European garden design did not influence their gardens.

The history of non-imperial gardens--built by Mughal, Rajasthani and Deccani nobles--ran concurrently with those of the royals. However, less literary and archaeological evidence remains on these gardens in comparison to the information and knowledge we have on royal sites. Nevertheless, to suppose that non-royal residences and gardens were radically inferior to those of the emperors is not a necessary assumption, despite earlier claims, for homes and gardens of the non-royal elite rivalled and in some cases surpassed even those of royalty. However, three socio-political factors which were directed towards the elite and ruling families did in fact affect the non-imperial patron--especially in the building of their estates and gardens. Firstly, nobility per se was not hereditary in India, although the descendants of the deceased often obtained government posting. Secondly, the law of escheat, which was against the Mongol tradition, was enforced by the Mughal rulers; therefore palaces and gardens were not built to be permanent family residences.<sup>41</sup> Thirdly, as Moynihan has pointed out, the security and success of a noble in the political system depended upon the



emperor's pleasure.<sup>42</sup> Combined, these factors had a pernicious effect on the activities and character of the nobility who were thus encouraged to squander away their wealth in extravagant and luxurious pursuits, such as building splendid palaces and gardens to catch the emperor's eye. Then, however, their residences reverted to the government by law and were probably abandoned and laid to waste without proper upkeep.<sup>43</sup>

As early as Babur's reign, we know that his nobles preferred to build their residences and gardens on riverbanks since the water mitigated the heat, allowed for the operation of extensive watercourses, and incorporated beautiful views overlooking the river or lake. In fact, throughout the six great Mughal reigns, all the nobles of rank were also driven to build their houses on the waterfront in places such as Agra and localities in the Kashmir.<sup>44</sup> After all, the planning and planting of gardens in direct harmonious relation to the house were chosen not only from the viewpoint of physical convenience, but also of aesthetic pleasure.<sup>45</sup>

Non-imperial residential gardens developed differently in the less urban locations in the Kashmir and Agra along the Jumna river than they did in the great walled cities such as Fatehpur Sikri. In walled cities there was a limited amount and often shortage of space within the fortified area of the city. Nobles could not build individual gardens or enclosure walls. Therefore they built small cellular gardens which were grouped around fountains inside their courtyards. These garden courts in effect became the lungs of the households within these thickly populated areas. But as these small cellular gardens did not fully satisfy



the nobility, especially in terms of space, larger public gardens, usually outside the city walls, became part of such a city plan.<sup>46</sup>

The first extant non-royal residential garden design is the Nishat Bagh on Lake Dal in the Kashmir.<sup>47</sup> It is the largest and most spectacular residential garden in the area and was built by Asaf Khan, the elder brother of Nur Jahan, Jahangir's wife. Since it was not a royal garden, there are only two divisions: the pleasure garden and the zenana terrace.<sup>48</sup> The main feature is a great central watercourse spanning and cascading over twelve terraces which progress down from the base of the mountainside. The courses are full of fountain jets, and stone benches are placed over the *chaddars* with the water rushing underneath them.<sup>49</sup>

Jahangir's nobles laid out numerous beautiful gardens around their mansions in Agra. Kanwar lists the Agra mansions and gardens of the nobles as follows: Zahara Bagh between the Ram Bagh and the Chini-Ka-Rauza<sup>50</sup>; The Moti Bagh (opposite the Itimad al-Daula), the garden of Buland Khan, a eunuch of Jahangir's time;<sup>51</sup> the gardens of Asaf Khan, Islam Khan Rumi, Sayid Jalal Bukhari, Khan Alam Mirza, Barkhudar, and Khan Dauram Khan (all five gardens being on the southern bank of the Jumna); Mahtab Bagh, on the opposite bank of the Jumna facing the Taj Mahal.<sup>52</sup>

The mansions of these Mughal governors and nobles which still exist have hardly been studied, have fallen to ruin or have been massively disfigured.<sup>53</sup> It would seem probable that they were heavily influenced by royal garden-palace design current in Delhi, Lahore, Kashmir and Agra and not made of such costly



materials nor finished as finely as say the Taj Mahal. In all likelihood, they were similar in construction and decorative detailing to the palaces and gardens in the Agra Fort such as the Machchi Bahwan, or Fish Square garden court, the Khass Mahal, or Private Palace garden court, and the Anguri Bagh, or Grape Garden in the zenana section of the palace.

Under Shah Jahan a great number of urban residential gardens were also built around the city of Lahore by his nobles.<sup>54</sup> Within the city walls many palaces probably had small internal garden courts similar to those at Fatehpur Sikri. Niccolao Manucci, an Venetian physician, traveller and writer in the region during the reign of Aurangzeb, observed that:

'All these palaces [Delhi, Agra, Lahore] are full of gardens with running water, which flows in channels into reservoirs of stone, jasper and marble. In all the rooms and halls of these palaces there are ordinarily fountains or reservoirs of the same stone of proportionate size. In the gardens of these palaces there are always flowers according to the season. There are no large fruit trees of any sort, in order not to hinder the delight of the open view. In these palaces are seats and private rooms, some of which are in the midst of the running water. In the water are many fish for delight.'<sup>55</sup>

Another contributor to the design of the residential garden was Ali Mardan Khan, the governor of Kashmir under Shah Jahan, who later became the Comptroller of Works. In this post he was responsible for a number of civil projects such as the construction of canals to bring water to the Red Fort at Delhi and the Shalimar Bagh at Lahore. Most notably, however, he constructed the Chasma Shahi<sup>56</sup>, a summer residence garden on Lake Dal in the Kashmir.

The Chasma Shahi garden is important as it is one of the few



extant gardens of the period which illustrates how non-royal residence gardens incorporated imperial garden features. As in Shah Jahan's Hall of Private Audience at the Shalimar Bagh in Srinigar, Kashmir, here too water courses flow through the pavilion chamber and down a *chaddar* into a lower terrace pool or fountain basin and water course. Similar types of water systems are illustrated in Jahangiri period miniatures such as Miryam the Christian maiden versed in the art of alchemy consulted by other alchemists (fig. 18) and also became very popular design features in the palace gardens built by Shah Jahan. Late paintings, such as The David Collection's *In a Harem Garden*,<sup>57</sup> also illustrate similar systems where water cascades down from a tower terrace into a central courtyard with a charbagh fountain.

Few residential gardens built by Mughal nobles or other elites during Aurangzeb's reign have survived. The finest extant garden estate was that of Fadai Khan, the foster brother of Aurangzeb and his chief architect, in the hilly region of Pinjaur, near Simla.<sup>58</sup> The Pinjaur estate follows in the tradition of the summer palaces of Kashmir and Lahore, specifically that of the Shalimar gardens. Over three hundred natural springs on the hillside located behind the palace fed the water courses and fountains which cascaded over the gardens steep terracing.<sup>59</sup> As C.S. Villiers Stuart remarked, it is in the garden of Pinjaur that one can see the beauties and realize the charm of late seventeenth to eighteenth century Mughal residential gardens.

By the early eighteenth century, Mughal society had degenerated as the empire disintegrated into a loose



conglomeration of semi-independent aristocratic families. As the hope in Islam faded with the passing of Mughal institutions, Mughal society became increasingly Indianized. From the eighteenth to the middle of the nineteenth century, it is primarily in the Rajput states, the Deccan and the northeastern provinces--under the patronage of the independent nobles and regional governors who had broken away from the grip of centralized Mughal rule--that the traditions of the Mughal residential garden craft were preserved in what may best be called the post-Mughal garden.<sup>60</sup>

Perhaps the great link between the Mughal and post-Mughal garden-palace is found in the Qudsiyya Bagh built by Qudsiyya Begum at Dehli.<sup>61</sup> To recall, it was by the reign of Muhammed Shah (1719-1748) that the underlying anxieties of the court surfaced in the form of decadent, pleasure seeking lifestyles amongst the elites.<sup>62</sup> In its conception and design the Qudsiyya Bagh epitomized this trend and marks a turning point in late Mughal garden-palaces.

The palace itself was situated on the Jumna riverside just north of the Kashmir gate of Delhi. It was more than a thousand feet long, several hundred feet wide and three stories high. The gardens were situated in the eastern half of the compound and had renowned water-works. The residential pavilions were probably located in this as this area was more intimate and the contained the most costly decoration. This palace-garden section was located on the riverside where two octagonal pavilions overlooked the water. Based on what little archaeological evidence remains of the garden-palace,<sup>63</sup> Goetz has pointed out that its



constructive spirit is Mughal but the decorative detailing is in the Hindu sculptural approach.<sup>64</sup>

Goetz has suggested two factors which contributed to the transformations which we see in the Qudsiyya Bagh. Firstly, steps towards the Hinduization of Mughal art had already set in under Aurangzeb with the annexation of the Deccani states. For, since the reign of Ibrahim 'Adil Shahi, Deccani art had been strongly Hinduized. Deccani styles infiltrated Mughal art in the eighteenth century, particularly in terms of architectural detailing--such as arch forms and the extensive use of vegetal decoration, especially the lotus flower. Secondly, as Qudsiyya Begum was a dancing girl of Hindu origin, her aesthetic tastes may have preserved the Hindu spirit of design and thus Hindu fashion understandably pervaded her garden-palace art. In light of this, the Qudsiyya Bagh stands as the starting point from which Rajasthani and Maratha design developed in the eighteenth and nineteenth century.<sup>65</sup>

As was discussed in the previous chapter, artists were under pressure to leave the courts and traditional centers of patronage during Aurangzeb's reign. The Rajputs were fortunate enough to absorb a number of these artists (as evidence from paintings has revealed), and undoubtedly, architects and landscape designers were also absorbed as well. As Rajasthan is largely a barren desert land, the Rajputs could appreciate the art of the garden, especially formal water irrigation such as wide water channels, fountains, falls and pools which helped to alleviate the heat of their region. Mughal revival gardens (a phenomenon which as we have seen occurred in painting as well) soon appeared. In fact,



the first major garden-palace to rival Pinjaur was constructed in 1725 by the Raja of Bharatpur, Rajasthan in a town called Deeg. This garden was not only a Mughal revival in terms of design but was actually built with looted garden fixtures<sup>66</sup> and all sorts of building materials from the Agra fort. Marble fountains and channels as well as the tanks used for the Machchi Bahwan (Fish Tank) were installed in Suraj Mal's own garden-palace at Deeg.

In Udaipur the Rana Jagat Singh II of Mewar built a series of island palaces on Lake Pichola in the second quarter of the eighteenth century. Bright white marble pavilions set around the periphery of the island overlook the waters which are very similar in style and materials used to those in Shah Jahan's great fort cities. Almost all features of the island are also in exquisitely carved marble.

As for the development of Deccani residential gardens, very little archaeological evidence remains. According to Schweitzer, Deccani nobles built a number of pavilions along the lake front in Kumatgi, a town near Bijapur. Extensive waterworks have been found within and around these buildings which would suggest that the palace had complex water-garden courts.<sup>67</sup> These gardens are probably of a late seventeenth to eighteenth century date as water courses which flow through buildings really only gained popularity during and after the period of Shah Jahan. Another factor which may support this dating is that the artists who were pressed to leave Aurangzeb's atelier could have brought the skill and knowledge of such design to receptive Deccani patrons.

If we turn to our paintings for guidance in understanding the



developments of the Deccani garden palace, it becomes evident that the course taken in other areas of the sub-continent--Delhi and Rajasthan in particular--was also followed in the Deccan: a movement from classical Mughal design in the seventeenth century, toward increasing Indianization in the eighteenth century onwards.

The *Procession of Sultan Abdullah Qutb Shah riding an elephant with courtiers and musicians* exemplifies the pure Mughal style, structure, and decorative detailing of garden and palace architecture.<sup>68</sup> In the twelve-sided tower pavilion, and the austere, architectonic rather than sculptural treatment of the palace buildings we find the crisp elegance so characteristic of classical Mughal settings such as we have seen in the Nishat Bagh and garden pavilion in Kashmir.

By the first quarter of the eighteenth century, paintings reveal a dramatic transformation in garden-palace design in the Deccan. As the themes are of Hindu texts were growing in popularity, such as the *Ragamala* series, it follows that setting details would also be Hindu in flavor. As expected, many Hindu architectural and decorative elements were blended with classical Mughal garden architecture. We see in the *Paraj Ragini*,<sup>69</sup> that the chatris, or small roof top *baradaris*,<sup>70</sup> acquire lotus-type cupolas, and as well, lotus shaped bulbs top carved terrace paling (*jali*) posts.

In the *Ramkali Ragini*,<sup>71</sup> we find Hinduizing elements such as the tapered canellated (or bundled) lotus-columns which support the terrace *baradari*. In *Hindola Raga* the palace columns are in an even more exaggerated Hindu mode.<sup>72</sup> Here the columns



are wide-bellied canellated columns with large lotus flower capitals and blooming-lotus bases. Multiple-scalloped arches become the norm as well as plinths and friezes decorated with lotus-petal motifs. Overall, a new naturalism was introduced and transformed most architectural forms into vegetal, especially flower designs of fundamentally Hindu character. The bent, or bangla, roof type became widely used in garden pavilions and palace chatris, especially as evidenced in eighteenth century Hyderabad paintings.<sup>73</sup>

Late eighteenth century *Ragamala* and *Baramasa* illustrations show how radically Mughal garden-palace forms were Hinduized. In *Lady in a garden pavilion listening to music*, (fig. 37), a riverfront charbagh garden, complete with a fish tank and bangola pavilion with tapered lotus columns, clearly illustrates the elegant transformations which probably occurred in real residential garden design. Another example of the fusion which occurred in late eighteenth century Deccani palaces and gardens is *Nawab Saif al Mulk inspecting jewels in his estate gardens*.<sup>74</sup>

Here we see a small baradari with a bangola roof and jharoka windows with bangla type eaves.<sup>75</sup>

Perhaps the ultimate fusion of Hindu and Mughal garden art is best illustrated in *The Marriage of Vishnu and Lakshmi* dated to the late eighteenth century.<sup>76</sup> In this composition we can see that the layout and overall formality--the grid like parterres, the enclosure wall, the charbagh design--is Mughal, but the decorative spirit and architectural details, such as the combined bangla-lotus-domed pavilion is purely Indian.



## Notes

1. Amir Khusrau was a renowned court poet at the court of Sultan Qutb ud-Din at Delhi. Originally a Turk from Balkh, he fled to India with his father to escape the Mongol invasions. He became one of the early masters of the Persian *ghazal*, or ode, the verse form which Hafiz (d.1389) later extended and brought to perfection. Khusrau gained great fame as a musician, and by mingling Persian and Hindi words, did much to establish what became the Urdu language. Sultan Qutb ud-Din, to whom Khusrau dedicated a book of poems, is said to have rewarded Khusrau an amount of gold equal to the weight of an elephant. J.C.E. Bowen, *Poems from the Persian*, pp. 74-75.
2. The Persian and Central Asian roots of early Mughal period garden design are not yet sufficiently understood to sort out what is truly 'original' or 'traditional'. This issue is crucial for the study of later Indian gardens, including residential gardens, as it would further define the foundations of Mughal environmental design and the roles of various contributors who prepared these foundations.
3. D. Wilber, *Persian Gardens and Garden Pavilions*, p. 76.
4. M.S. Randhawa, apud E. Moynihan, *Paradise as a Garden in Persia and Mughal India*, pp. 90-91.
5. Elliot, vol. III, p. 345. These gardens may have been more along the lines of vineyards and orchards, but there is no reason to totally eliminate the possibility that formal gardens and garden-palaces were constructed as well. According to other sources, Firoz Shah Tughluq is known to have built 200 gardens in and around Delhi. See "The Treatment of Environment by the Mughals", *Marg* 26/I (1972), p.4. Patronage of various types of hydraulic architecture, including those for public gardens, parks, civil fountains and water-courses, made sound economic and even military sense to the Tughluqs. Water works also served to demonstrate their piety and concern for their populace. See also A. Welch and H. Crane, 'The Tughluqs: Master Builders of the Delhi Sultanate', *Mugharnas* 1 (1983), and T. Yamamoto, et al, *Delhi: Architectural Remains of the Sultanate Period*, Tokyo, 1970.
6. See R. Nath, *History of Mughal Architecture*, vol. 1, ch. 1; Anthony Welch, 'Hydraulic architecture in Medieval India: the Tughluqs', *Environmental Design* 2 (1985), pp. 74-81; and I.H. Siddiqui, 'Waterworks and Irrigation in India during Pre-Mughal Times', *Islamic Culture*, 1984, pp. 1-21.
7. Surely Babur and his contemporaries introduced new technologies and design forms into the Agra areas, but to believe that their Agra projects had no important precedents in northern India would be naive.



8. I have chosen not to go into all the various types and evolutions of Indo-Islamic gardens. Four major categories of gardens are well outlined by Dr. Dar as: (1) gardens attached to palaces or *haveli's*; (2) gardens which serve as substitute royal residences, for the emperor to put up at when on a journey; (3) funerary gardens surrounding purpose-built mausolea; and (4) pleasure gardens which function more or less as a park. See Dar, *Some Ancient Gardens of Lahore*, Lahore (1976), p.6.

9. A *haveli* is an open-courtyard house.

10. Or. 12208 fol. 281r illustrates a natural water fall fed bathing tank where water is flushed out the end of the tank over a stepped type of *chaddar* or chute.

11. In north India, the major monsoon occurs between late June and early September, and save for a minor monsoon in the winter months, this rainfall is the main source of water other than the rivers in north India. Rajasthan is an impoverished desert region with very little rainfall but fortunate in having a number of small lakes in its north-eastern territories. The Deccan is a plateau region with a number of lakes. The north eastern provinces of Oudh and Bengal are fertile plains watered by the Ganges. Water works, therefore, were a necessity and principle concern of every region long before the Tughluqs rose to power and certainly throughout Mughal hegemony and still are.

12. E. Moynihan has pointed out that "Mughal gardens can be a disorienting experience as they bear no relation to the life or the land outside their crenellated walls--they never did. They are remainders of a foreign presence, like a Crusader castle in the Levant..." See *op. cit.*, p. 146.

13. Although outward or vista orientated residential gardens were built in the Kashmir around Lake Dal and along the Agra River since the seventeenth century, paintings depicting such settings really only appeared from the first quarter of the eighteenth century and later. See: *The month of Aghan*, Mughal, c. 1740, Johnson Album 11-17; *A Mughal Lady letting off fireworks on a terrace on the night of Shab-barat*, Mughal, c. 1760, Johnson Album 20-2; *A princess with her attendants*, Farrukhabad, c. 1760-70, Johnson Album 66-6.

14. See: note 13 and *A Few Rajput Pleasures*, Rajasthan, Mewar, mid-eighteenth century, S.C. Welch, *A Flower from Every Meadow*, New York, 1973, p. 29.

15. Artists left the disintegrating royal courts for patronage amongst non-royal nobles and other urban elites. This shift led directly to the development of new levels of expectation and subsequently a new calibre of artistic productions. Attitudes towards the artist were not as they were in the royal ateliers and lesser elites simply did not pay as much as the imperial class. In addition, cheaper core materials had to be used. An example is the Qudsiyya Bagh, where the elegance and richness of the great Mughal gardens could only be achieved through painted,



pierced and carved stucco instead of the fine marbles and semi-precious stone inlays of earlier periods. It follows that the quality of the arts, including that of garden design, was only able to be superficially maintained through decorative extravagances.

16. See chapter 2 in this study for the parallel developement in paintings of the period.

17. See: *In a Harem Garden*, 46/1980, Faizabad, c. 1765, The David Collection, Copenhagen, in S.C. Welch, *India: Art and Culture 1300-1900*, New York, 1985; *Musical Party before Qudsia Begam (?)* (sic), c. 1748-54, Delhi, in H. Goetz, *The Early Oudh School of Mughal Painting: Two Albums in the Baroda Museum*, *Bulletin of the Baroda Museum and Picture Gallery* IX (1952-53), fig. 5.

18. Moynihan has noted that Akbar's finance advisor, Ja'far Beg, was reputed to be a skilled gardener. Apparently, he not only pruned his own garden, but planted it as well. He was so dedicated to and passionate of his garden that he even transacted business while working in his garden. E. Moynihan, *op. cit.*, p. 116.

19. There are also historical records which prove that early rulers of the Deccan built civic gardens. Muhammed Quli Qutb Shah (1580-1617) founded Hyderabad in 1591 and reportedly built a network of irrigated gardens. We may assume that at least some of them were pleasure gardens, but the majority were surely subsistence oriented. His interest in town planning undoubtedly laid the foundations of what made Hyderabad one of the finest cities in India. Many late Hyderabad paintings illustrate a number of magnificent and sophisticated garden-palaces. These indicate that an interest in garden design must have been developing for some time within the region. M. Zebrowski, *Deccani Painting*, p. 158.

20. The line of succession is as follows: Babur(1526-30); Humayun(1530-56); Akbar(1556-1605); Jahangir(1605-27); Shah Jahan(1627-48). For a comprehensive survey of the major gardens of these Mughal emperors, see: S. Crowe, et al, *The gardens of Mughal India*, London, 1972.

21. *Tuzuk-i-Baburi* (Memoirs of Babur), trans. by A.S. Beveridge (1921), vol. II, pp. 531-32 describes his endeavors along the Jumna River in Agra: 'The beginning was made with a large well from which water comes for the hot-bath...After that came the large tank with its enclosure; after that the tank and 'talar' [a grand pillared hall] in front of the outer residence; after that the private houses with their gardens and various dwellings; after that the hot-bath. Then...plots of garden were laid out with order and symmetry with suitable borders and parterres in every corner and in every border rose and narcissus in perfect arrangement.



22. See the most current and comprehensive study of Babur's garden at Dholpur by E. Moynihan, 'The Lotus Garden of Zahir al-Din Muhammed Babur', *Muqarnas* V (1987), pp. 135-152.
23. E. Moynihan, *Paradise as a Garden in Persia and Mughal India*, p.106.
24. Babur learned gardening at Samarkand. He praised the gardens laid out by Timur and Ulugh Beg at Samarkand. See *Baburnama*, trans. by A. Beveridge, London, 1922, pp. 30-31 as pointed out by K.K. Muhammad in 'The Houses of the Nobility in Mughal India', *Islamic Culture* vol. LX/3, 1986, p. 82.
25. E. Moynihan, 'The Lotus Garden Palace...', *op. cit.*, p. 141. Wescoat points out that in Babur's memoirs there is an obvious neglect of Hindu, and for that matter Sultanate, garden sites along rivers and lakes. Babur only briefly mentions ghats at Buksara, but otherwise was not interested in noting the qualities of earlier structures located along natural bodies of water. Babur insists on the absense of 'running waters' (generally as canals and civic oriented water facilities) yet this is certainly an oversight as a number of massive water systems were built in the Sultanate period. Firuz Shah built the Jumna canal which extended over two hundred miles. However, it is true that canal systems were probably not in the Agra area as the terrain in the region is deeply dissected. See: J. Wescoat, 'Early Water Systems in Mughal India', *Environmental Design* II (1985), pp. 51-52.
26. Abul Fazl, *The Akbar Nama*, vol. I, trans. by H. Beveridge, Calcutta, 1907, p. 648.
27. Many of the buildings which Akbar erected in the fort were demolished by Shah Jahan and replaced by his series of marble palaces and gardens structures.
28. Akbar annexed Kashmir in 1586.
29. S. Crowe, et al., *The Gardens of Mughal India*, London, 1972, p.83.
30. *Ibid.*, p.84.
31. Moynihan points this out but does not clarify whether these garden sites were residential or just independent pleasure gardens. It would seem most likely that the majority were summer residences or homes of regional nobles. See *Paradise as a Garden in Persia and Mughal India*, p. 123.
32. Such as the Turkish Sultana's house in Fatehpur Sikri with its centralized charbagh water-court pavilion.
33. C.S. Villiers-Stuart, *Gardens of the Great Mughals*, p. 830.
34. Jahangir wrote: "Kashmir is a garden of eternal spring... a delightful flower-bed, and a heart-expanding heritage for dervishes. Its pleasant meads and enchanting cascades are beyond



all description. There are running streams and fountains beyond count..." from *The Tuzuk-i Jahangiri*, trans. by A. Rogers, H. Beveridge ed., vol. II, Delhi, 1968, p. 143.

35. *Chaddar* literally means 'fish scales' but is the term applied to a stone water-chute which is carved with decorative surface patterns, such as fish-scales, which create a ripple effect or texture to the water as it flows over the chute.

36. Aurangzeb went there for the sake of his health and did not add nor alter the extant gardens erected by his forefathers.

37. Francois Bernier, *Travels in the Mughal Empire: 1656-68*, tr. A. Constable, p. 399.

38. S. Crowe has pointed out that the Mughals had a passion for living in the open. This interest influenced the design of all their gardens to some degree. (The Shalimar Garden in Lahore is a late example of such a garden-palace camp tradition.) This created gardens which in effect served as open-air rooms---where buildings and gardens met and merged imperceptibly into each other. See *op. cit.*, p. 43.

39. The use of the tower or *burj* in residential architecture typically served a fortificatory role but was transformed into an accessory of princely garden-palaces. Here at the Red Fort and at the Zahara Bagh the *burj* has been reinterpreted into Mughal garden architecture--an octagonal pavilion topped with a *chatri*.

40. Bernier, *op. cit.*, p. 267.

41. Nizami, 'The Delhi Sultanate and the Mughal Empire: Genesis and Salient Features', *Islamic Culture* LV/3 (1981), p. 180. M.A. Chughtai also points out the case of Asaf Khan, the brother-in-law of Jahangir, who built a number of garden palaces including the Nishat Bagh. As he died childless there was no one to look after his buildings after him. See: Chughtai, 'The So-Called Gardens and Tombs of Zeb-un-Nisa at Lahore', *Islamic Culture* IX (1935), p. 620.

42. Chughtai has discussed such a case, that concerning the house of Asaf Khan in Lahore, built during the reign of Shah Jahan. Chandar Bhan, an employee of Nawab Asaf Khan, wrote about the progress of Asaf's estate in a letter which is now in the Punjab University Library, it follows: 'The paradise-like buildings, for their suitable situation, spacious atmosphere, varieties of decoration and embellishments, recall the mind to the supposed picture of heaven.' After its completion, Asaf Khan was very anxious to invite the emperor to the palace and in the sixth year of Shah Jahan's reign Asaf begged him to honor him by visiting his house. The estate was majestically decorated for the occasion from the place of mounting to the house itself. See 'The So-Called Gardens and Tombs of Zeb-un-Nisa at Lahore', *Islamic Culture* IX (1935), p. 615.



43. Moynihan also elaborates on this point by stating that: 'Royal favor was sought by catering to the emperor's whims and appealing to his vanity. When Jahangir laid out royal gardens, dozens of nobles followed his example and built lavish charbaghs--as he was fond of roses, they [rose gardens] were in vogue.' *op. cit.*, p. 118.
44. Bernier, *op. cit.*, p.247, he also states that all the houses had a garden and a tank and were surrounded by an enclosure wall.
45. After C.S. Villiers-Stuart, *op. cit.*, p. 27.
46. K.K. Muhammed, 'The Houses of Nobility in Mughal India', *Islamic Culture*, LX/3, 1986, p. 101.
47. S.F. Dar provides a list of the lost gardens which encompassed the town of Lahore by nobles and other elites from the reign of Babur through the post-Aurangzeb period is as follows: (a) Babur and Humayun period: Naulakha Bagh; Bagh-i-Kamran. (b) Akbar period: Bagh Dilafroze; Bagh-i-Khan-i-Azam; Bagh-i-Andjan; Raju Bagh; Bagh Malik Ali Kotnal; Bagh Mirza Nizam al-Din Ahmad; Bagh Zain Khan Kolkatash. (c) Jahangir period: Bagh Mirza Mu'min Ishaq Baz; Bagh Shams al-Din; Bagh-i-Anarkali. (d) Shah Jahan period: Fa'id Bagh; Bagh Hoshiar Khan; Bag-i-Badr al-Din Shah 'Alam Bukhari; Bagh-i-Hadrat Sayyid Mahmud; Chauburji Bagh; Bahg-i-Asaf Jah; Bagh-i-Nur Jehan; Parviz Bagh; Bagh Abu'l-Hasan; Bagh Kwaja Ayyaz; Bagh Nusrat Jang Bahadur; Bagh-i-Ishan; Bagh 'Ali Mardan Khan. (e) Aurangzeb period: Gulabi Bagh; Bagh-i-Mahabat Khan; Bagh Shah Chiragh; Bagh Mullah Shah Badakshi. (f) Late Mughal period: Bagh Begum Jan: Badami (or almond) Bagh; Bagh Pir Muhammed Adalti; Bagh Mir Manno (or Bagh Nawab Jani); Bagh Sayyid 'Abd Allah Khan; Gol (or circular) Bagh (g) Other Mughal Gardens: Bagh-i-Dilkusha; Bagh-i-Dilaram; Bagh-i-Dilamaz; Anguri (or grape) Bagh; Anar (or pomegranite) Bagh. *Some Ancient Gardens of Lahore*, Lahore, 1976, p. 6
48. Gardens for the hall of public and private audience were necessary only in royal gardens.
49. Asaf Khan strove to outdo the Mughal emperor in the sphere of garden-planning by building the Nishat Bagh. Shah Jahan supposedly coveted it but Asaf Khan would not give it to him, so Shah Jahan cut off the water supply to get revenge. See S. Crowe, *op. cit.*, p.120 and Kanwar, *op. cit.*, p. 115.
50. For an excellent and comprehensive study of the site see Ebba Koch's article 'The Zahara Bagh: Bagh-i-Jahanara at Agra', in *Environmental Design I*, 1986, pp. 30-37.
51. The title Mughal title 'eunuch' is often misunderstood. The mughals used the word respectfully for the keepers of the harem whether they were castrated or not. Originally, eunuchs were castrated or emasculated men. But later the title was given to the administrative officer of the harem who maintained its accounts, supplied the stores, fixed duties of the servants but who did not go inside. Therefore, a Mughal kawajasarai (eunuch)



was usually a full-fledged man as other military officers of the Empire, he simply bore the title in connection with the harem.

52. H.I.S. Kanwar, 'Origin and Evolution of the Design of the Charbagh Garden', *Islamic Culture* 48, 1974, p.113.

53. The most important painted document of this residential garden area of Agra is the Jaipur map, dated to the early eighteenth century, in the Maharaja Singh II Museum. See Ebba Koch, *op. cit.*, pp. 30-37.

54. See note number 38 for Dr. Dar's list of the gardens built in Lahore during Shah Jahan's reign.

55. Manucci, *Storia do Mogor*, vol. 2, p. 435.

56. *Chasma Shahi* means 'Royal Spring'.

57. Painting by Faiz Allah, Faizabad, c. 1765. See S.C. Welch, *India: Art and Culture 1300-1900*, New York, 1985, p. 278.

58. S. Crowe, et al., *op. cit.*, p. 184.

59. E. Moynihan, *op. cit.*, p. 96.

60. R. Nath, 'The Mughal garden', *Marg* 26i, p. 24.

61. Qudsia Begum was a lower-class dancing girl who had been introduced to the emperor Muhammed Shah by the daughter of a courtier. She became the favorite of Muhammed Shah for a short time and bore him a son. She then became the mistress of Kwajasarai (eunuch) Jawed Khan, the head of the imperial zenana. When Muhammed Shah died in 1748, Jawed Khan helped Qudsia's son succeed the throne as Ahmed Shah. The nobles in power were pleased to have another weak emperor at Delhi and Qudsia became empress-mother. She assumed great power and wealth, but squandered away money, She built her own palace, the Qudsia Bagh at Delhi. See H. Goetz, 'The Qudsia Bagh at Delhi', *Islamic Culture*, 26 (1952), pp. 135-36.

62. *Ibid*, p.133.

63. It was destroyed during the Maratha seige of Delhi in 1857.

64. To quote Goetz: 'from the light flowers of Persia and Kashmir to the succulent turgidity of the lotus.' *Ibid*, p. 143.

65. *Ibid.*, p. 143.

66. The fixtures were primarily taken from palaces and gardens constructed by Shah Jahan.

67. C. Schweitzer, 'Muslim Waterworks', *Islamic Culture*, January 1939, p. 82.

68. Golconda, c. 1650. See: Zebrowski, *Deccani Painting*, p. 188.



69. Bidar, c.1700-25. See: *Ibid.*, p. 226.
70. *Baradaris* are open-sided pavilions.
71. Bidar, c.1700-25. See: Zebrowski, *op. cit.*, p. 228.
72. Bidar, c. 1700-25. See: *Ibid.*, p. 232.
73. *Mujahid Jang and Murassa Bai sitting in a garden*, Hyderabad, early 18th century. See: Zebrowski, *Deccani Painting*, p. 235.
74. Hyderabad, c. 1795. See: Zebrowski, *op. cit.*, p. 265.
75. *Jharokas* are projecting windows.
76. Shorapur, late eighteenth century. See: *Ibid.*, p. 276.



### The Houses of the Nobility: Typologies and Transformations

Mansions of Mughal period elites, governors and nobles from the regions under consideration, have hardly been studied, as many have been disfigured by later additions and alterations or have fallen to ruin. A comparison of the painted evidence and the sites which have been preserved and studied, however, does clarify that for the first time in the history of residential planning in India, there was a close coordination of plantings, water and structure.<sup>1</sup> Pools, fountains and cascades not only introduced a sense of repose and openness, but they heightened the aesthetic appeal of buildings by linking various spaces in directional sequences. Thus, the houses of the nobility and elite did not stand in stern isolation, but were integrated compounds--house and garden.<sup>2</sup>

The aim of the house or palace of the Mughal elite, in its most basic definition was to accomodate, integrate and control natural space and conditions to the greatest extent possible; its aim was climatological. It is best characterized by its freely spreading ground plan, in which inner and outer spaces were interwoven by terraces, water courses and courtyards, the opening of one room into another. There were open rooftop living quarters and pleasure pavilions and the private sanctum of the zanana<sup>3</sup> with its baths, tanks and pools. Overall, the design of the dwelling house was considered as landscape design, where the house was in some cases only a shelter from which the scenery could be viewed. Architecturally, indoor space and garden space



were interdependent in Mughal period houses. The garden was a living space as well as a decorative adjunct. The dwelling house was in essence a component of an overall horticultural scheme.

Two categories of residential design will be examined from the period in question. In the first category, the design of a home is approached from the outside, placing the emphasis of design on site conditions; the second is that of concentration on interior design, paying little or no attention to the exterior setting. Naturally, the first category generally applies to non-urban or sub-urban (mountainside and waterfront) properties where multi-level grounds, expansive vistas and wide open spaces are feasible. The second category of design applies to urban settings, where space constraints made an exterior orientation impractical. In both cases, however, the house and garden was not designed separately, nor were gardens later adapted to a completed house. In fact, the interior decoration of the house was often influenced by some special feature of the garden such as water channels, chaddars and fountains.

The designing of homes with plain and simple exteriors, conceived from the inside outwards, with emphasis on the interior decorative elements, was intentional. As K.K. Muhammad observed, the orientation of the house in the Mughal period was not based on Islamic laws, but rather was planned to respond to local climatic factors. In lake or river front compounds at Delhi, Agra and Lahore, courtyards were oriented in such a way as to receive the cool evening breezes from the river caused by the high and low pressure cycles. Further, the design and orientation of quarters were guided by the seasonal solar track--



summer houses were orientated to the north or in the west where the sun would have least effect.<sup>4</sup>

Rooms used during the summer would be more spacious, open walled and facing north, while winter rooms faced south and west and would be small. This is because during the summer shadow and airiness are favored, and during the winter the sun, and because it is easier to heat smaller rooms in the winter.

The idea of seasonal quarters raises the question of how fixed or set individual housing plans were. Klingelhofer has made some interesting points in his study of the Jahangiri Mahal at the Agra Fort. He suggested that architectural space seems "to have been a flexible commodity in early Mughal building adaptable to many and diverse purposes. This generic quality may itself reflect a significant aspect of the palace, suggesting it as a setting never intended to serve a strictly defined function." Indeed, if we look at early paintings, architectural space is treated rather generically and the functions of palace and garden spaces are not clearly defined. Klingelhofer concludes that the ambiguity of spacial functions in a residential setting was perhaps intentionally non-specific.<sup>5</sup>

K.K. Muhammad takes this idea further by suggesting that the polyvalent or non-specific function of space in Mughal houses was possibly due to the absense of furniture like cupboards, tables and chairs. Therefore, rooms could be used interchangeably for dining areas, sleeping quarters, recreation rooms or other domestic purposes.<sup>6</sup> Most likely, however, the use of domestic space was dictated by the seasons. Further, this flexibility in the use of space may go back to the early Mughals' Central Asian



nomadic customs--a related phenomena to the early formal garden-camp residence. For there too, garden structures, such as water systems, baths, courtyards and platforms, served as formal but non-specific foundations for residential settings.

Courtyards formed the framework of residential garden design and they provided the buildings' essential organizational composition. In addition they functioned as airways and lightshafts and this controlled the environment in setting a domestic micro-climate.<sup>7</sup> Most importantly, however, the Mughal period residential courtyard marked the departure in India away from the usual Islamic house plan which was an arrangement of apartments which shared a central courtyard but otherwise rarely communicated with each other. All the rooms of the houses which K.K. Muhammad surveyed in Delhi and Agra, did communicate with each other and also shared a courtyard.<sup>8</sup> Therefore the organization of rooms was unusually not based on seclusion, even in the harem quarters.<sup>9</sup>

As discussed in the previous chapter, riverbanks and lakesides had a powerful attraction to the emperors and sultans as well as to their nobles. The close proximity to the banks ensured the necessary supply of water and also mitigated the hot climate. It was in the early imperial formal garden-camp sites, like the Lotus Garden at Dholpur, that Babur set the basic organization of a Mughal palace. He conceived of a residence as a sequence of separate buildings, often tiered or terraced, with intervening spaces such as courtyards, platforms or pavilions, places 'where water dominated as it unified; threading the enclosed and open palace and garden spaces into one



composition.<sup>10</sup> This tradition led to the development of a powerful relationship between the garden and residence and the outside landscape. Through the study of residences which are outwardly oriented,<sup>11</sup> the inward orientation and paradise symbolism which is traditionally thought to characterize the Islamic garden-palace loses some of its significance.

The Mughal elite followed Babur's basic concepts in palace design. Modifications did develop, nevertheless, especially in terms of the permanence of building structure, the materials used, and in the complexity and virtuosity achieved in later residential irrigation and decorative water systems. But overall the Baburian organization of separate buildings with intervening spaces was largely followed.

In non-urban areas where waterfront property was not available the nobles built their estates wherever possible.<sup>12</sup> As these homes were not protected within the city proper or by a fort, high walls had to be built around them.<sup>13</sup> These homes also tended to be larger than houses and palaces within forts for two reasons: first, there were no spacial constraints; and second, they had to be as self sufficient as possible, like miniature cities themselves. These types of estates, which were not close to bodies of water, like those in forts and cities, frequently include hammams.<sup>14</sup>

As the dynasty declined, and economic and political chaos grew, such houses were seen by many nobles as a necessity, especially in unwalled cities such as Agra,<sup>15</sup> as self sustaining and defensively walled estates could resist looting armies in troubled times. It was not uncommon for wealthy nobles' estates



to be targeted for looting whenever an emperor was overthrown and the successor was in need of funds.<sup>16</sup> Therefore, self-sufficient mansions with thick walls started to become the norm. Thus the nature of the houses of the nobility from Shah Jahan's reign forward changed from a single house with an attendant garden to fortress complexes with gardens and courts.<sup>17</sup>

Unfortunately, there is hardly any archaeological evidence for aristocratic dwellings of the seventeenth century.<sup>18</sup> Francisco Pelsaert, a traveller and writer in Jahangir's India, has listed the names of more than a dozen nobles and members of the royal family who did, however, build their houses along the Jumna River at that time.<sup>19</sup> He also goes on to list the names of nobles who built their houses a distance away from the river, probably because waterfront property was not available.<sup>20</sup>

We do know, however that the selection of a site and setting for houses during Jahangir's time was very important as the following adage of Jahangir indicates: 'We have heard that prosperity and bad luck depend on four things: first upon your wife, second upon your slave, third upon your house, and fourth upon your horse.' The passage goes on to explain the test for determining whether or not a site is suitable for building a house. One began by clearing a small piece of earth from the proposed site and then throwing it back upon the same ground: if the soil did not cover the hole, bad luck was certain; if it covered more than the hole, prosperity was assured; if it covered only the cleared area neither good nor bad luck was implied, the site was basically satisfactory.<sup>21</sup>

A typical example of the types of houses and gardens which



were built along the Jumna in the first half of the seventeenth century may be the Bagh-i-Jahanara, a site recently reexamined by Ebba Koch.<sup>22</sup> Both the Jaipur map painting and Carlleyle's archaeological survey in 1871 corroborate the plan of the site.<sup>23</sup> The principle buildings were set upon a riverside terrace, or platform, and substantial towers (burjs) were set at the riverfront corners of the property, effectively framing the view over the water, or the reverse, framing the waterside view of the estate. It was a courtyard house with a square sunken tank in the central court. Each side of the house was open and the substructure had a number of vaulted rooms which were open on the river side. Koch points out that 'there was a water connection'<sup>24</sup> between the tank of the these lower rooms.'<sup>25</sup> On the riverside, the substructure was fronted by a platform with two flights of stairs which lead down to the river. An octagonal tank was set at the north-east corner of the garden.<sup>26</sup>

As for evidence on houses of the second half of the seventeenth century, Bernier, the French physician who travelled in the court circles between 1656-68, has left perhaps the finest observations on the contemporary dwelling house. According to Bernier, the houses of the nobles were scattered in every direction, though mostly situated on the river and in more suburban areas. He states:

'In these hot countries, a house is considered beautiful if it be capacious, and if the situation be airy and exposed on all sides to the wind, especially to the North breezes. A good house has its courtyards, gardens, trees, basins of water, small jets d'eau in the hall or at the entrance, and handsome subterranean apartments....They consider that a house to be greatly admired ought to be situated in the middle of a large flower garden and should have four large diwan apartments raised



to the height of a man from the ground and exposed to the four winds, so that the coolness may be felt from any quarter. Indeed no handsome dwelling is ever seen without terraces on which the family may sleep during the night.'<sup>27</sup>

This was a 'pretty fair description for a fine house...and there are many in Delhi possessing all the properties above mentioned...', according to Bernier.<sup>28</sup> He also made observations on the vicinity of Agra as follows:

'[Agra] has more the appearance of a country town, especially when viewed from an eminence. The prospect it presents is rural, varied and agreeable; for the grandees having always made it a point to plant trees in their [palace] gardens and courts for the sake of shade, the mansions of Omrahs, Rajas and others are all interspersed with luxuriant and green foliage, in the midst of which the lofty stone houses of Banjares or Gentile merchants have the appearance of old castles buried in forests.'<sup>29</sup>

That later residential architecture of the sub-continent was based on styles evolved and disseminated by the Mughal royals and their nobles can hardly be disputed. It is in later paintings from the Delhi area, the Deccan, Rajputana and the north east provinces that we gain a better idea of the layout and design of eighteenth century homes. However, whether the settings were real or not is difficult to determine, as vistas from terraces and various domestic scenes set in residential garden courtyards had become cliches of eighteenth century painting.



### Notes

1. As discussed in the previous chapter, the great developments in residential landscape and formal gardens which occurred in sixteenth to nineteenth century India were paralleled in contemporary Europe. One of the first European cases in which building and landscape were conceived as a single structure was that of the Palazzo Farnese begun by Sangallo the Younger in 1534 but also worked on by Michaelangelo, who suggested that the palace should be connected in design with the Farnese gardens on the other side of the Tiber river. Other examples of such integrated design are the Villa Capra in Venice by Palladio, constructed in 1550-54; Vignola's Villa Lante in Bagnaia began in 1564; and seventeenth century parallels would be Le Vau and Le Notre's Vaux-le-Vicomte estate and the palace and gardens of Versailles.
2. K.K. Muhammad, 'The Houses of the Nobility in Mughal India', *Islamic Culture* LX/3 (1986), p. 83.
3. The *zanana* is the women's quarters of the household.
4. K.K. Muhammad, *op. cit.*, p. 86.
5. W.G. Klingelhofer, 'The Jahangiri Mahal of the Agra Fort: Expression and Experience in Early Mughal Architecture', *Mugharnas* V (1989), p. 165.
6. K.K. Muhammed, *op. cit.*, p. 99.
7. *Ibid.*, p. 90.
8. *Ibid.*, p. 93.
9. According to Moynihan, with the exception of pavilions for some queens, Babur's luxurious use of space--as in the Lotus Garden at Dholpur--was denied women. This was probably due to the vast number of courtesans and harem women who lived at the court. The usual early Mughal *zanana* was multistoried with small rooms which were more or less secluded chambers. See her 'The Lotus Garden Palace of Zahir al-Din Muhammad Babur', *Mugharnas* V (1987), p. 144.
10. *Ibid.*, p. 142.
11. Examples would be residences around the lakes and mountains in Kashmir, those lining the Jumna River in Agra and Delhi, and the island-palaces in Udaipur.



12. Areas around a lake or riverside for construction of a house were difficult as such areas were occupied primarily by the royal palaces and public buildings. K.K. Muhammad, *op. cit.*, p. 101.
13. H.I.S. Kanwar suggests that residential garden walls were constructed to enclose the harem with the object of keeping away the eyes of the covetous and the curious as well as serving as a means of protection against possible surprise attacks from hostile quarters. See: 'Origin and Evolution of the Charbagh Garden', *Islamic Culture XXXVIII* (1974), p. 113.
14. Hammams are more accurately air conditioned rooms for both summer and winter use which had a number of cold and hot tanks of water for bathing or setting climatic comfort. K.K. Muhammad surveyed Fatehpur Sikri and found that every nobles house had a hammam. *Loc. cit.*
15. K.K. Muhammad points out a number of references to travellers descriptions of Agra as an unwallled city: Pelsaert, p. 1; Bernier, vol. i, p. 284; and Manucci, vol. i, pp. 132-33. *Op. Cit.*, p. 99.
16. As a young prince, the rebellious Shah Jahan [Prince Salim], ordered attacks on the houses of Nur al-Din Quli Lashkar Khan and other wealthy Agra nobles. Similar events, according to K.K. Muhammad, occurred at Delhi. After Dara Shikoh's defeat in the battle for succession with Aurangzeb, he ordered his troops to attack and loot money from the houses of nobility in Delhi. Muhammed, *op. cit.*, p. 99.
17. *Ibid.*, p. 100.
18. Qaisar notes Pelsaert's explanation for the loss of many seventeenth century homes: 'Once the builder is dead, no one will care for the buildings; the son will neglect his father's work, the mother her son's, brothers and friends will take no care for each others buildings...Consequently, it may be said that if all these buildings and erections were attended to and repaired for a century the lands of every city, and every village, would be adorned with monuments...': Pelsaert (reprint), 1972, p.56. See Qaisar, *Building Construction in Mughal India: The Evidence from Painting*, Delhi, 1988, p.3.
19. F. Pelsaert, *Jahangir's India*, ed. and trans. W.H. Moreland and P. Geyl (reprint), Delhi, 1972, p. 2. He notes: 'I will record the chief of these palaces (noblemen's houses on both sides of the Yamuna river) in order. Beginning from the north there is the palace of Bahadur Khan, formerly king of the fortress of Asir (5 kos from Buranpur). Next is the palace of Rai Bhoj [?] father of the present Raja Ratan [?], governor of Burhanpur. Then came Ibrahim Khan...; Itiqad Khan, the youngest brother of Asaf Khan...; Khwaja Muhammad Thakkar...; Khwaja Bansi (formerly steward of Sultan Khurram)...the palace of Ehtibar Khan, the eunuch who was the governor of Agra city...Baqar Khan...; Mirza Aboussagiet [?]...; the exceedingly handsome and costly palace of Asaf Khan...; Itimad-ud-Daula...; Khwaja Abdul Hasan...; Mirza Khurram, son of Khan-e-Azam...; Mahabat Khan...; Khan-e-Alam...;



Raja Madho Singh.' The names indicate that both Hindu and Muslim nobles lived in the area.

20. *Ibid.*, p. 4.

21. Cit. in K.K. Muhammad, *op. cit.*, p. 85: *Tuzuk-i-Jahangiri*, History of Jahangir, tr. and ed. A. Rogers and H. Beveridge, London, 1909, vol. i, p. 235.

22. Koch dates the Bagh-i-Jahanara to the second decade of the seventeenth century and built by Shah Jahan's wife Mumtaz Mahal. See her: 'The Zahara Bagh <Bagh-i-Jahanara> at Agra', p. 30.

23. A.C.L. Carlleyle, *Agra, Report of the year 1871-72*, Archaeological Survey of India, 4 rpts., Varanasi: Indological Book House, 1966, pp. 105, 107.

24. This 'water connection' may indicate that there was a water course which flowed throughout various chambers, a design which gained immense popularity under Shah Jahan in his palace buildings in the Red Fort at Delhi.

25. E. Koch, 'The Zahara Bagh (Bagh-i-Jahanara) at Agra', *Environmental Design I*, 1986, p. 32.

26. *Loc. cit.*

27. F. Bernier, *Travels in the Mughal Empire: 1656-68*, ed. A. Constable, New Delhi, 1968, p. 247.

28. *Ibid*, p. 248.

29. *Loc. cit.*



### Salient Features of the Indo-Islamic Residential Garden

'To make a garden three things are required--  
roses to perfume it, bulbuls to sing you songs,  
and the sight and sound of running water.'  
--an old Turki motto<sup>1</sup>

The Mughal period garden-palace or residence was indeed the sum of these living elements, for a skillfully chosen site and practical architectural components were a sine qua non. As discussed in the previous chapter, the layout and design of the residence and constituent garden spaces actually defined realms of social access, exclusion, community, and privacy.<sup>2</sup> The factors which determined the interaction of these realms were the physical design features such as courts, terraces, screens, bridges, walks, towers, pavilions, parterres, plantings and trees--all features which actively molded space. The features which effectively climatized space were the water systems and courses incorporating pools, tanks, fountains and baths.

This chapter will highlight residential garden design features in three ways. Firstly, it will bring together the aesthetic and practical aspects of Mughal period residential garden water features.<sup>3</sup> Secondly, painted evidence of decorative (non-water oriented) features will be surveyed with emphasis placed on those features which have not been covered in previous garden studies.<sup>4</sup> Thirdly, the building and maintenance methods and materials of these features and overall residential structures will be discussed.

Since the early years of the Mughal period, residential



gardens were planned by a designer architect in collaboration with a gardener and a water system engineer. As discussed earlier, climatic factors prompted the early Mughals, primarily Babur and Akbar, to develop water systems which not only served to mitigate the heat and create the desired aesthetic environments, but which also irrigated the gardens and orchards. Later designers, particularly Shah Jahan and his followers, also retained these fundamentals in design, but they too adapted them to the environment. They selected appropriate sites where climate, availability of water, natural features and overall setting met their intended purpose.<sup>5</sup>

The necessity of water was the governing factor in the designing of residential gardens. In fact, in Mughal gardens water is even more important than the soil. In the form of water jets or sprays, simple waterfalls, long water courses or wide pools, water was used to cool and air buildings, courtyards, pavilions and *chabutras*.<sup>6</sup> Large tanks or deep pools made splendid swimming pools or cooling outdoor baths.<sup>7</sup> Then water channels were widened, as at the Shalimar Bagh in Srinigar, where the water served both aesthetic and practical aims: the wide expanses of water and the hundreds of splashing water jets created a dazzling spectacle and also served to cool the air.<sup>8</sup>

At the Nishat Bagh, where water cascaded from level to level or foamed over water-chutes and carved *chaddars*, benches were sometimes placed to span the water course which provided a cool and scintillating view of the garden. In other cases of broad bodies of water, stepping stones were placed across them. An example of this is seen in a painting of Shah Jahan seated on



a terrace with Dara Shikoh and Zafar Khan. The site may be the garden of Zafar Khan, but is most probably that of the Shalimar Bagh in Kashmir.<sup>9</sup> These stepping stones pose the question: were they actually used by the patrons as channel crossings, or were they more practical maintenance features from which the waterfalls, *chini-khanas* and *chaddars* could be tended?<sup>10</sup> Pavilions were also built in the middle of wide canals where water cooled them.

Another purpose which water tanks, water courses and wide pools served was to water the sunken flowerbeds and other plantings. They were allowed to overflow into sunken parterres. This procedure was a maintenance rather than design feature. Fountains and water-jets also served a similar purpose as their spray could be carried by the breezes and thus water the garden as well as cool the air itself. In addition, these water devices, especially the water courses running through the living quarters--interior pools, channels and chamber basins--also contributed to sanitation of a residence as they freshened and cooled the air and provided clean water for baths and any other domestic need.

Perhaps the most stunning decorative feature of Mughal period residential water-systems were the *chini-khanas*, or wall niches set above water basins, pools or under water cascades both inside buildings and outside in the gardens and courts.<sup>11</sup> Previous studies have discussed *chini-khanas* as merely decorative lighting. Yet it must also be pointed out that they were not only aesthetic but also practical devices in the residential garden. They were designed to hold vases of flowers, perfume



decanter or lights. The vases of flowers provided a colorful spectacle and a fresh scent as the rushing waters stirred the air and carried the perfumed mist. By night, the candles or lamps cast shimmering and sometimes colored light.

Most importantly, however, the cascading water would refract the light casted by the many lamps while the pool below reflected the dazzling wall of lit niches. Thus, both water features--the waterfall and the pool below--served to intensify and maximize the effect of the chini-khanas and, thereby, brighten the garden in the evening. In sum, water works and broad tanks were not just aesthetic and decorative elements of charm as previous studies maintain, but were also important practical features of the residential garden.

The question then arises: did the network of interior channels, ornamental tanks and sunken basins, waterfalls and water-chutes serve more than just aesthetic and sensory purposes in palace life? Certainly they did; for, aside from climatizing the apartments, they mildly contributed to the general sanitation and healthful atmosphere of the house. Air was circulated and refreshed as the flow of waters stimulated gentle air currents. Further, in the private apartments, particularly the harem, the murmuring waters could disguise confidential conversation and generally set a soothing and constant aquatic tone.

In later periods there even occurred a mannerist or bizarre development in garden water features. At the Sahelion-ki-Dari or the Garden of the Maids of Honour, probably datable to the late eighteenth or nineteenth century,<sup>12</sup> a circular *baradari* is set in the middle of a large pool and water showers down from the



eaves simulating rainfall around the pavilion. Apparently, the flow of water could be varied to mimic light or heavy rains.<sup>13</sup> In earlier residential gardens the use of water relied primarily on the quality and the form of the decorative water systems themselves.<sup>14</sup> The conduits and containers of water were generally simple and designed to give shape to the water and not to be the main spectacle. In the later gardens, water is contained and molded by more complex and highly wrought basins and structures which themselves are the main focus, as evident at the Sahelion-ki-Dari.

Let us now turn to painted evidence of residential garden features which have received less notice in previous studies. Aside from the ubiquitous *charbagh* garden courtyard design with its central tank and quadratic water course system (figs. 11, 13, 15, 18, 19, 22 and 23),<sup>15</sup> many later paintings show the popularity of long, rectangular terrace-top water channels.<sup>16</sup> Usually lining the sides of the terrace, this type of water course is often studded with water jets (figs. 43 and 45).<sup>17</sup>

Perhaps the most prominent feature in later residential garden paintings is the square or slightly elongated fish tank, which is usually situated alongside a terrace or in the center of an open courtyard. These tanks usually have a single central water jet. Although this feature was known in ancient India,<sup>18</sup> pre-Mughal and early Mughal times,<sup>19</sup> it appears most frequently in late eighteenth century Deccani garden paintings such as *Allah Wirdi Khan receiving a petition* and figures 34, 37, 38, 40, and 44).<sup>20</sup>

Another feature found in paintings of residential gardens



is the courtyard bathing tank. The tanks or pools seem to be both the decorative type of garden pools with fountains as well as small tanks within a compound which do not appear to be decorative in intent. In *Bathing Women* (fig. 2), three ladies stand in a small and simply designed tank which is fed directly by the *arghatt* and water chute system. Another painting showing the direct use of water flowing down from the *arghatt* into a small basin is *Girls Spraying Each Other at Holi* dated c. 1640-50, Bikaner.<sup>21</sup> A variation of this feature is found *The owner of the garden discovering bathing in the pool* (fig. 15) where we see the women of the harem bathing, or playfully swimming about in the central tank of a residential courtyard *charbagh* water course.

Another variant is in the British Library's *Amal-i Salih*. In the painting of the *Divan-i khass* (fig. 27) we see European tourists splashing about in the central tank of a palace courtyard. Whether the tank was originally used for such activity remains dubious. A most curious but enchanting scene of a stone bathing tank in Mughal painting is figure 17 of *Khizr washing the grey horse, given to him by Iskandar, in the water of life*. Here the Fountain of Life is a large tri-level tank fed by a natural water-fall which cascades down the mountainside above.

Minor decorative features illustrated in residential garden paintings include carved or pierced paling, grass screens,<sup>22</sup> swings, forms of lighting other than *chini-khanas*, and various types of fountain heads and water spouts. Of these features, carved or pierced paling is perhaps the most ubiquitous feature in residential garden paintings. Made of red sandstone, marble,



stucco and wood, the patterning of the boarder screens ranges from strict diamond and geometric grilling, to highly organic and floral arabesque designs. Pierced cinnabar or white marble palings are found in countless paintings from all regions under consideration.<sup>23</sup> As well, short railings made of dowels are also commonly illustrated in residential garden settings.<sup>24</sup> Aside from painted evidence, the only original cinnabar (red sandstone) palings which have survived from the Mughal period are in the Anguri Bagh at the Agra Fort.<sup>25</sup>

Painted evidence of grass screening is rare but we know from Bernier that grass screened pavilions of sorts were placed in gardens. Bernier explains:

'...many persons prefer *khas kanays* [khanas] that is small and neat houses made of straw or odiferous roots placed commonly in the middle of a parterre, so near to a reservoir of water that the servants may easily moisten the outside by means of water brought in skins.'<sup>26</sup>

The painting *Jyeshtha* indicates that awnings (in this case a large white one) were suspended above the *khas khana*<sup>27</sup> to protect it from the direct rays of the sun.<sup>28</sup> Whether or not these were common in residential gardens is left open to question. The David Collection's *Jyeshtha* painting does, however, provide proof that it was a feature of elite dwellings. Whether or not this work indicates that *khas khanas* were common features in late eighteenth century Rajasthani dwellings is also left open to question.

Sawan, or the month of July, was the month of the swings. As July is a warm rainy month in India, it was pleasant and profitable to swing in the rains. C.M. Villiers-Stuart observed:



'...a swing under the trees wafts a cool, reviving air...in the palace gardens, the swings were beautiful, elaborate constructions, their pointed arches forming one of the most charming garden ornaments. These arches were built of stone or white marble...the ropes were scented fibre and covered with wreaths of flowers ...[a swing] is placed on a platform under the trees at the end of one of the canals, where the swinger... could sway through the nearest fountain spray.'<sup>29</sup>

Garden swings begin to appear in late eighteenth century Deccani, Oudh and Lucknow paintings illustrating Hindu texts, specifically the painting depicting *Hindola Raga* of the *Ragamala* series (fig. 38).<sup>30</sup>

A feature which is rarely depicted in paintings is the use of small lamps or candles set along the edges of a rooftop or the eaves of terrace pavilions especially for the night ceremonies of *Shab Barat*, a Muslim festival held on the eve of the fourteenth day of the month *Shaban*. In *A Mughal lady letting off fireworks on a terrace on the night of Shab-barat* (fig 29) we see three tiers of such candles set in delicate lotus bud shaped cups. The finials of the pavilion are also crowned with these lotus cup lights. The effect of such lighting must have been truly spectacular, especially in gardens where *chini khanas* lit the water courses and chutes.

Most studies have been concerned with residential garden architectural features alone, or have occasionally discussed the origin and symbolism of such features. Equally important aspects to be studied are the building methods and materials. Whereas literary sources provide most of the information we have on garden-palace building staff (i.e. architects and labour),<sup>31</sup> paintings offer most invaluable information on tools and techniques used in Mughal period residential garden construction



and maintenance. Further, literary sources do not offer details on gardening or garden designing techniques, yet there are a number of these indications in paintings.

The building of residential gardens was naturally a collective effort of various artisans: architects, engineers (especially hydraulic), labourers, and gardeners or landscapers.<sup>32</sup> By the seventeenth century, it is clear that a separate identity or specialization developed between the architect (who prepared the plan of the proposed building) and the engineer (a technical supervisor).<sup>33</sup> The title *mir-imarat*, or chief builder--effectively a chief engineer responsible for accounting, estimation of materials required, and estimating costs of materials and labor--was not used in any sixteenth century Akbar sources. Instead, the title of *mir-bahr*--a director concerned with the development of agriculture, gardening and the digging of canals and streams--was used in all literary sources to designate the master builder.<sup>34</sup> This fact may indicate the primary functionary, or master builder, in early Mughal period construction was in fact a garden and water feature engineer.

Qaisar has pointed out that the knowledge of the architectural trade was transmitted from one generation to the next orally and through hands-on experience, not through books. No manuals on design and building techniques were written.<sup>35</sup> Evidence does exist which proves that ground plans (*tarah*) were used by the Mughals since the late sixteenth century. In the Victoria and Albert Museum's *Baburnameh*, a painting of *The Bagh-i-Vafa* illustrates a man, probably Babur's chief architect,



holding a graph sheet which is mounted on a board while he and Babur supervise work on the site.<sup>36</sup>

Turning now to the building staff such as the workers and artisans, it has been made evident that workers were from the local area as well as other regions and countries.<sup>37</sup> Even female labourers are shown working at sites in Akbarnama illustrations.<sup>38</sup> Interestingly, Babur indicates in his memoirs that gardeners with special skills, such as transplanting and grafting trees, were brought from Persia and the north to tend Babur's gardens and train local workers. In the British Library's *Baburnameh* (figs. 3, 4, and 5) and in the painting of Babur laying out a garden at Istalif, a number of gardeners and water course masons are at work.<sup>39</sup> Their headdresses and costumes indicate their diverse backgrounds. In the late Jaipur painting of *Jyeshtha*,<sup>40</sup> we see a gardener (*bhishti*) standing on the white marble garden wall to which the house or pavilion is attached. The house is actually a *khas khana*, or a pavilion made of straw. As we see here, the gardener watered the pavilion in order to moistened the walls for cooling purposes. Abu'l-Fazl has listed other types of workers connected with residential construction which include the well diggers and divers who cleaned wells and cisterns.<sup>41</sup>

A painting from the *Darabnameh*, *Gifts being brought to Darab and Fastalikin* (fig. 1) dated c. 1590, shows the preparation of an elephant for a journey of sorts. One of the men is seemingly handing over a potted plant which has been brought in from afar to be given as a present. Whether this was a common occurrence is left open to question. In the British Library's *Shahnameh*



dated c. 1616, Delhi (fig 22), harem attendants apparently tend trees and parterres in the small *charbagh* garden in the foreground. An attendant inspects a dwarfed tree in the top right quadrant, while another leans on a thin sort of staff which may be some type of gardening utensil, perhaps for cleaning the water courses, weeding or aerating the soil.

Paintings also offer invaluable information on the tools and techniques of gardening. It is clear that a limited variety of tools were used in building and planting gardens. Hoes, flat faced shovels and sickles were used in gardening, and iron chisels and hammers were used to form stone water courses and channels (figs. 3, 4 and 5). In *Babur lays out a garden at Istalif* we see a gardener cleaning a water course with a shovel or long handled spade.<sup>42</sup> In the lower right foreground we also see a worker seeming to prepare to anchor or plant a tree with rope he holds in his hand.

According to Qaisar, as pulley water-lifts operated by workers assisted by livestock were less expensive, they were primarily used by the poor. However, based on painted evidence in the *Divan of Hafiz* of *A scene outside a tavern(?)* (fig. 20), and the painting of *Shapur kneeling before Shirin* in the *Khamseh* (fig. 10), we can see pulley water-lifts were also set within residential garden courtyards of elite citizens.

Another method of watering and irrigating the estate was with an *arghatt*--a geared wheel with a rope-chain fitted with water-pots operated by bullocks. These were widely employed for drawing water from rivers and lakes for use in palaces and large houses. This device is often and incorrectly called the 'Persian



Wheel' (*rehant*) for it was a sysytem used in India prior to the influx of Persian culture, as the first half of the seventh century.<sup>43</sup>

In *Bathing Women* (fig. 2) and the harem gardens in the miniature of *Khusrau and Shirin entertained by Mahin Banu in Armenia* (fig. 12), it is can be seen that the water-wheel jugs pour water into an aquaduct on top of the *arghatt* wall from which it was then conducted to the garden where it fed tanks, water courses, pools and where the overflow was used to irrigate the plantings. This overflow watering system is best seen in the figure 12 where dense rows of flowers are planted along the edges of the water-courses and tanks. As the overflow watering system was a maintenance feature we can only suppose that it occured in the site depicted here. The *arghatt* system (water flowing from a higher point downwards) also produced the head of water necessary to work the fountains.

It can be assumed that another reason for building residences and gardens along the banks of the rivers or lakes, aside from aesthetic and climactic reasons, was that the location was practical in situating an *arghatt*. The wheel could be placed on the bank and water could be raised to the level of the enclosure wall and then distributed through the water system.

Our focus will now turn to the building materials used in the building of residential gardens. As Qaisar observes, most houses and monuments were constructed with the materials easily available in the vicinity. However, the elite were able to import materials and articles from all over the country and even abroad in addition to the local materials.<sup>44</sup> The basic building



materials were clay (*gil*), bricks (*khist*, *ajur*), stones (*sang*), and wood. The types of stone used in aristocratic housing and gardens was primarily marble and red sandstone. The use of marble in gardens was introduced under Jahangir and became extensively used during Shah Jahan's reign. Marble was largely quarried in Alwar and Makran.<sup>45</sup> Red sandstone was quarried around Delhi.<sup>46</sup> It was in fact typical in the early decades of the seventeenth century to build brick core constructions with carved red sandstone revetment.<sup>47</sup>

Clay was used for making tiles and also used to make water-pipes and water-spouts (*qulba*) for various decorative and technical water features. Abu'l-Fazl mentions such uses of clay and adds that both plain and glazed tiles were used for roofs of houses as protection against the heat and the cold.<sup>48</sup> In Shah Jahan's Shalimar Bagh at Lahore, clay pipes leading to an aquaduct carried water along the top of the walls into the main water channel.<sup>49</sup> Clay or terra-cotta was also used for outlining parterres at the Anguri Bagh, although this is the only known instance of its use.

The use of bricks was a boon to urban middle class building which were located far from stone quarries.<sup>50</sup> As good building stone could not be found in all areas, particularly Lahore, brick masonry with stucco facing became the common building material even up through Shah Jahan's reign.<sup>51</sup> Early paintings indicate the use of brick and stucco in residential garden structures. Waterproof mortar or plaster was used for making cisterns and bath walls. According to Pelsaert, all buildings were plastered with lime mixed with gum, milk and sugar into a thin paste. The



paste was then polished with agate until it shone like glass. Lime mixed with milk helped prevent cracking in the plaster.<sup>52</sup>

In the later Mughal period, brick construction became the norm even in royal circles as economic conditions deteriorated and building funds were strained. In addition, as the authority of the imperial court was for the most part limited to the immediate district of Delhi, it was practically impossible to get marble from Alwar and Makran and red sand stone was available only in limited quantities. There was, however, no limit to the production and feasibility of brick and plaster. Many well trained artisans could also be had at cheap rates as the emigration of artists from Delhi to the provinces of Lucknow and Oudh and areas of the Deccan had already set in. Stucco was cheaper and could be decorated with paintings, carvings or just polished.

For these reasons, brick and stucco were the main building materials used for the Qudsiyya Bagh,<sup>53</sup> sand stone being used only for finials. Instead of marble walls inlaid with precious colored stones, the Qudsiyya Bagh walls were draped with silken and golden embroideries. As brick and stucco constructions and painted, carved and molded decoration are more expediently built than marble and stone structures, such materials were chosen for the building of the Qudsiyya Bagh.<sup>54</sup> In a late *Shahnama* from Rajaur in the Kashmir, brick and stucco work was used for the buildings and the water-courses (figs 24 and 25). Late paintings from the Deccan also indicate the common use of brick and stucco such as *Nawab Saif al Mulk inspecting jewels* dated c. 1795, Hyderabad, and the stucco revetted structures which we see in



figures 30-47.<sup>55</sup>

As for the use of wood, paintings rarely indicate its use--save for the construction of water wheels. An early eighteenth century Deccani work of Allah-wirdi Khan receiving a petition does, however, show the use of wood for door framing and also for the carved palings which boarder the garden walks in a palace garden.<sup>56</sup> According to K.K. Muhammad, wood was an important building material in the homes of nobility in Kashmir as brick construction with wooden framing was common.<sup>57</sup>



## Notes

1. C.M. Villiers-Stuart, 'Indian Garden Palaces,' *Country Life* XXXVII/962 (1915), p. 828.

2. Examples are the harem quarters, and the public or private audience halls (which are part of royal residences only).

3. Sources on pre-Mughal water systems provide little information on garden water-features primarily because most were civic or military large-scale water works. (Mughal period water features were not large-scale civil-works but were the more private baths, pools, fountains, wells, channels and chaddars of the residential garden.) Exceptions to this are: R. Nath's, 'Gardening and Water-sites of the Ancient Hindus,' *Marg* 26i (1972), pp. 9-11; and I.H. Siddiqui, 'Waterwork and Irrigation Sysytems in India During Pre-Mughal Times,' *Islamic Culture*, 1984, pp. 1-21.

It should also be pointed out that few studies have brought together the aesthetic and practical aspects of residential water features such as fountains, baths, pools and water-courses. A notable exception is G.T. Scanlon's, 'Housing and Sanitation: Some Aspects of Medieval Islamic Public Service', *The Islamic City: A Coloquium*, ed. Oxford, 1970.

4. The importance of residential garden water features have been extolled in most studies but detailed research on their development and structure has not been conducted. This area also goes beyond the scope of this study.

5. R. Nath, 'The Treatment of Environment by the Mughals', *Marg* XXVII (1972), pp. 10-11.

6. A *chabutra* is a raised platform.

7. C.M. Villiers-Stuart observed that swimming baths were an invariable feature of an Indian garden. The ladies as well as the men had swimming tanks. They were generally shallow as a rule and were filled by one or more fountain lets so that the water was always running and clear. See *Gardens of the Great Mughals*, London, 1913, p. 263

8. Similar water courses, fountains, basins, pools and tanks to these in Mughal residences were also appearing in contemporary Persia, particularly at Shah Abbas's Farahabad garden-palace, on the coast of the Caspian Sea, built in 1611: Nath, *op. cit.*, p. 23.

9. Shah Jahan seated on a terrace is from the *Mathnawi of Zafar Khan* now in the British Library, folio 15v. Zafar Khan was a prominent noble, and poet as well, who became the governor of Kashmir under Shah Jahan. The *Mathnawi* was made in Lahore and dated 1663. The setting is a bit distorted in terms of spatial concerns yet the scene closely resembles the garden areas around the Hall of Private Audience at the Shalimar Bagh. Pinder-Wilson also believes it is Shalimar Bagh, Kashmir while Losty believes



it is the Nishat Bagh. Stone steps along the top of the water fall and similar pavilions indeed still stand in the background of the Hall of Private Audience at the Shalimar. See R.H. Pinder-Wilson, 'Three Illustrated Manuscripts of the Mughal Period,' *Ars Orientalis* vol. II, 1957, pp.418-19; Moynihan, *Paradise as a Garden in Persia and Mughal India*, p. 124; J. Losty, *The Art of the Book in India*, London, 1982, p. 101.

10. Chini khanas were originally wall niches for the display of Chinese wares.

11. Chini-khanas were used as early as Babur's Rambagh. During Akbar's reign they were used in the Fatehpur-Sikri palaces, such as Miriam's Garden. Jahangir also used them but the greatest proponent of the device is Shah Jahan and his contemporaries who used them elaborately at their houses at Agra, Delhi and in the Kashmir. They were even used in Aurangzeb's period, particularly at Fadai Khan's estate in Pinjore.

12. These 'maids' refer to the courtesans who were traditionally sent to the Maharana of Udaipur by the Mughal emperors.

13. S. Crowe, et al., *The Gardens of Mughal India*, London, 1972, p.185.

14. i.e., basic chaddars, simple fountains and water jets, channels, rills, tanks and pools.

15. A late example is *Jyeshtha*, c. 1790's. See: Bautze, *Indian Miniature Painting 1590-1850*, p.97.

16. Variations on these two features include the composite scheme we see in the MFA Boston's *Muhammad Shah in a Garden* (c. 1730-40, See: S.C. Welch, *Imperial Mughal Painting*, New York, 1978, p. 116.) and The David Collection's *In a Harem Garden* (Faizabad, c. 1765, 46/1980, See: S.C. Welch, *India: Art and Culture 1300-1900*, New York, 1985.) Here, long rectangular water tanks, studded with water jets, are set on a charbagh pattern but each channel is separate and the central tank also stands alone in the center with a single water jet.

17. *Gauri Ragini* and *Madhyamandi Ragini*, Murshidabad, c. 1760. See: Falk and Archer, *Indian Miniatures in the India Office Library*, pp. 479-80.

18. Megasthenes describes a royal garden in the Mauryan Court of India in c. 300 B.C.: 'there are...artificial ponds of great beauty in which they keep fish of enormous size but quite tame.' Moynihan, *op. cit.*, p. 91.

19. An example is the Machchi Bahwan at the Agra Fort where there were pools of sacred fish with fountains surrounded by flower beds.

20. Hyderabad, c. early 18th c. See: Zebrowski, *op. cit.*, p. 230.



21. See: Leach, *Indian Miniature Paintings and Drawings: The Cleveland Museum of Art Catalog of Oriental Art*, p. 122.
22. An intriguing feature which we do not have pictorial evidence for but is mentioned in Babur's memoirs was the planting of vegetation on residential roof tops. Aside from the decorative effect, these plantings served to cool buildings and pavilions. See: *Baburnama*, trans. A.S. Beveridge, London, 1922, p. 313 and 358.
23. See: *In a Harem Garden*, Faizabad, c. 1765, David Collection, Copenhagen, S.C. Welch, *India*, p. 278; Krishna, Kishangarh, late 18thc, National Museum New Delhi, Brijbhushan, fig. 59; *Princess enjoying fierworks*, Kishangarh, early 19th, *ibid.*, fig. 64; *Allah Wirdi Khan receiving a petition*, Hyderabad, Zebrowski, p. 230; *The night of Shab-barat*, Delhi Mughal, JA 20-2; *A princess with her attendants*, Farrukhabad, Oudh, JA 66-6; *Malasri Ragini*, Murshidabad, Oudh, JA 36-10.
24. See: JA 37-9 and 17; JA 36-26; JA 66-6; *Nawab Saif al-Mulk inspecting jewels*, Zebrowski, p. 265; *Prince Ghulam Hazrat Akbar Khan Bahadur and courtiers*, Zebrowski, p. 238; *Procession of Sultan Abdullah Qutb Shah riding an elephant with courtiers and musicians*, Zebrowski, p. 186.
25. J. Dickie, 'The Mughal Garden: Gateway to Paradise', *Muqarnas* III (1985). p. 134.
26. F. Bernier, *Travels in the Mughal Empire: 1656-68*, ed. A. Constable, New Delhi, 1968, p. 247.
27. "Khas khas, the root of a plant,... used for the well known screens which are placed in the doorways of houses in India during the hot winds, and kept constantly wetted, so that the external air enters the house cool and fragrant. Rooms are sometimes made of these khas-khas mats." Bernier, *loc. cit.*
28. *Jyeshtha* is equivalent to the month of May/June in the Baramasa series. As it is the hottest period of the year in India, its illustration typically contrasts the barren aridity of the surrounding lanscape with the lush and watered environment within a garden. J. Bautze, *Indian Miniature Painting 1590-1850*, Amsterdam, 1987, pp. 97-98.
29. C.M. Villiers-Stuart, *Gardens of the Great Mughals*, London, 1913, p. 262.
30. Another example: *Hindola Raga*, Bidar, c. 1700-25. See: Zebrowski, *op. cit.*, p. 232.
31. For a detailed study of personnel in Mughal building see: Qaisar, *op. cit.*, chapter 2.
32. Qaisar divides the general building staff of the Mughal period into two groups: 1) officers and master builders, and 2) workers and artisans. *Ibid.*, p. 6.



33. *Ibid.*, p. 37.

34. *Ibid.*, p. 7.

35. In the family of architects of ustad Ahmad (the chief architect of the Taj Mahal and the Red Fort at Delhi) just such a tradition occurred. See: Sayyad Sulaiman Nadvi, 'The Family of Engineers who built the Taj Mahal and the Delhi Fort', *Journal of Bihar and Orissa Research Society* XXXIV (1948), p. 87, 106; For a comprehensive study of Ustad Ahmad see: H.I.S. Kanwar, 'Ustad Ahmad Lahori', *Islamic Culture* 48 (1974), pp. 11-32..

36. For a detailed account of the painting in the Baburnama, Victoria and Albert Museum, I.M.1913-276 and 276a, see: E.S. Smart, 'Graphic Evidence for Mughal Architectural Plans', *Art and Architectural Research Papers* VI (1974), pp. 22-23.

37. Lists of the various workers are found in: Abul Fazl, *A'in-i-Akbari*, vol. i, ed. Blochmann, Calcutta, 1867, p. 170; Shams Siraj 'Afif, *Tarikh-i Feroze Shahi*, ed. Wilayat Husain, Bib. Indica, Calcutta, 1891, p. 331. The employment of immigrant architects is discussed by M.A. Chaghatai. See: 'A Fugitive Architect', *Afghanistan* XXIII (1974), pp. 24-28.

38. Qaisar, *op. cit.*, plates 3, 4, 5, and 7.

39. Babur mentions an excellent gardener he brought from Balkh who successfully transplanted melons in his garden in Agra. See: E. Moynihan, *Paradise as a Garden in Persia and Mughal India*, New York, 1979, p. 103. The painting Babur Lays out a Garden at Istalif from a dispersed Baburnama, (c. 1598, Akbar period, Private Collection), shows gardeners transplanting young trees which were brought to the site in pots, see: B.N Goswamy and E. Fischer, *Wonders of a Golden Age*, Zurich, 1987, p. 83.

40. See J. Bautze, *Indian Miniature Painting 1590-1850*, (exhibition catalog), Amsterdam, 1987, p. 98.

41. Abul Fazl, *op. cit.*, vol. i, ed. Blochmann, Calcutta, 1867, p. 170. Qaisar, *op. cit.*, p. 32.

42. See note 32.

43. R. Nath, 'Gardening and Water Sites of the Ancient Hindus', *Marg* XXVII (1972), p. 10. See: *Bathing Women*, Rietberg Museum, Or. Akbar period, c. 1590; *Khamsa of Nizami*, British Library, Or. 12208, fols. 65r, 99v, and 294r; *Religious Mendicants in a Garden Pavilion*, see: Leach, *op. cit.*, p. 69; and *Girls Spraying Each Other at Holi*, Rajasthan, Bikaner, ca. 1640-50, see: *ibid.*, p. 123.

44. Qaisar, *op. cit.*, p. 1. An example of the importation of luxurious articles is the colored glass brought from Aleppo for bath windows during Shah Jahan's reign. *Ibid.*, p. 17.



45. Goetz, 'The Qudsia Bagh at Delhi: Key to Late Mughal Architecture', *Islamic Culture* XXVI (1952), p. 137.
46. Red sandstone was brought to Fatehpur Sikri from Delhi. *Ibid.*, p. 16.
47. E. Koch, 'The Zahara Bagh (Bagh-i-Jahanara) at Agra', *Environmental Design I* (1986), p. 34.
48. Abul Fazl, *op. cit.*, p. 169. See Qaisar, *op. cit.*, p. 17. See: Or. 12208, fol. 40v, 45v and 206r.
49. Moynihan, *op. cit.*, p. 146. Copper pipes and vessels were reported by Sir John Marshall in his excavations at the Taj Mahal. He noted: 'the ancient copper pipes of the fountains around the central tank and the copper vessels which formed the connection between the main supply pipe and the fountain pipes were discovered beneath the floor of the channel and have been preserved.' See *Archaeological Survey of India, Annual Report 1902-3*, p. 73.
50. Qaisar, *op. cit.*, p. 17.
51. Moynihan, *op. cit.*, p. 145.
52. Pelsaert, *Jahangir's India*, ed. and trans. by W.H. Moreland and P. Geyl (reprint) Delhi, 1972, p. 66.
53. See note 38.
54. *Idem.*, p. 135.
55. See: Zebrowski, *op. cit.*, p. 265.
56. See: Zebrowski, *op. cit.*, p. 230.
57. K.K. Muhammad, 'The Houses of Nobility in Mughal India', *Islamic Culture* LX/3 (1986), p. 102.



Social and Domestic Functions of Indo-Islamic Residential Gardens

This chapter will highlight and address a number of social and domestic functions of non-royal residential gardens. Garden paintings will be surveyed as they form a veritable illustrated encyclopedia of contemporary life within the residential garden. Although these painted garden settings cannot be treated as topospecific, they do show veritable features and probable functions of contemporary residential gardens. In addition to painted evidence, a number of literary sources provide insight into the role of the residential garden. Special emphasis will be placed on later paintings as they show the increasing diversity of functions and intercultural uses of the residential garden in eighteenth and nineteenth century India.

As was discussed in Chapter 4, palace and residential spaces in general were non-specific and thus could be used for a variety of social and domestic functions. This optimal flexibility of space is indicated in many paintings of residential courts, terraces and other garden structures. Although many paintings are of stock-type settings, they illustrate that specific spaces could accomodate any number of events as occassion demanded.

By the first decade of the eighteenth century, the great imperial Mughal tradition of building garden palaces had come to an end. What superseded them were the individual estates and gardens of the nobles and other provincial grandees in areas of the north, Rajasthan and the Deccan. Many of these later residential gardens served functions related to those of imperial



palace garden affairs--from feasting to political affairs, from business transactions to private pleasures. In addition to these traditional functions, many late paintings illustrate the resurfacing popularity of Hindu cultural traditions in late Mughal India. Although figures and settings are clad in Mughal garb, the predominant themes in late Indian painting are those connected with Hindu lifestyles, ceremonies and festivities. This change was primarily due to the shift of interests away from patronage of the production of Persian literature and poetry and growing interest in Hindu texts such as the *Ragamala* and *Baramasa*.

The functions of residential gardens as depicted in sixteenth through seventeenth century paintings were usually those prescribed by classical Persian tales, love stories or histories of the great Mughal emperor's themselves. In essence, themes, and thus functions, of residential gardens throughout the period were very conventional--formal court receptions, paying homage, religious discussions, the playing of board games, royal courtships, pleasures of the harem, animal combats or other aspects of the princely cycles such as feasting, dancing and musical festivities.

In other instances such as *Work in an Atelier* from the *Akhlaq-i Nasiri*,<sup>1</sup> where the subject matter is that of ethical guidance for a prince, we are allowed a view of the workings of an atelier with an adjacent charbagh garden. Here the garden, apparently within an urban residential type building, functions as a contemporary atelier or workshop.<sup>2</sup> We know from Babur's memoirs that he composed parts of his memoirs in his palace



gardens at Agra.<sup>3</sup>

It is also interesting to note that Babur's daughter stated in her memoirs that her father planned to fill a tank at Dholpur with wine, but took an oath against it and filled it with lemonade instead.<sup>4</sup> Whether or not the tank was used for bathing in and/or drinking or simply for show is not clear. But the idea is reminiscent of the renowned wine pool of the Umayyad Khirbat al-Mafjar palace. It is also known that Akbar's finance advisor, Ja'far Beg, who was a skilled gardener himself, transacted business while working in his garden.<sup>5</sup>

Another function of palace gardens which we do not have painted evidence for but know of through literary sources is that of installing a picture gallery in a palace garden. Jahangir writes in his memoirs about displaying paintings in his Kashmir garden palace:

'The picture gallery in the garden had been ordered to be repaired; it was now adorned with pictures by master hands. In the most honoured positions were the likenesses of Humayaun and of my father opposite to my own, and that of my brother Shah Abbas....'<sup>6</sup>

Whether or not the paintings were hung in a garden pavilion or in a specialized garden structure is unclear. But the setting for such an exhibition must have been truly magnificent.

Another use of residential garden terraces and courtyards, especially in the summer months, was sleeping. Paintings and literary sources prove this. In the *Garden Scene* dated to the seventeenth century, in the Indian Museum, Calcutta,<sup>7</sup> we see in the upper right of the scene figures sleeping on a terrace overlooking the palace gardens and a pavilion. This fact is confirmed through Bernier's observation



as follows: "For more than six successive months, everybody lies in the open air without covering--the common people in the streets, the merchants and persons of condition sometimes in their courts or gardens, and sometimes on terraces, which are first carefully watered."<sup>8</sup> Elsewhere he notes: 'Every noble's house had a terrace on which the family slept during the summer. The terrace also had a room to accommodate them in case of rain.'<sup>9</sup>

Unlike their Mughal contemporaries, the Deccani sultans lacked the passion for historical record. They commissioned fewer histories and the few paintings which have survived are largely portraits or illustrations to Hindu texts such as the *Ragamala* and *Baramasa* series. The majority of Deccani royal and noble portraits of the seventeenth century which are set within a residential garden, typically show the ruler with dignitaries, transacting business or conducting some other political affair.<sup>10</sup>

Almost as common are portraits of the ruler or noble with a courtesan or within the harem gardens where he is entertained with musicians and dancers.<sup>11</sup>

Perhaps the most popularly painted residential garden setting in virtually all regions under consideration was that of the harem quarters. We have countless paintings illustrating the various social and domestic activities which occurred in the harem gardens. As well, a substantial amount of information on harem activities is given in European travellers' accounts. As an observer of Jahangir's India Pelsaert explains:

'Their mahals are adorned internally with lascivious sensuality, wanton reckless festivity, superfluous pomp, inflated pride and ornamental daintiness...A noble came in [to the harem and would]...relax under a fan or in



the open courtyard where some of them [maidservants] would rub his body with sandalwood paste or other perfumed cooling oil. Some would massage his hands and feet while a third group would entertain him with music and dance ...This goes on and the husband would sit like a golden cock among the gilded hens until midnight.<sup>12</sup>

Manucci also depicts the panoply of the harem life during the reign of Shah Jahan as follows:

'they [the women of the harem] have permission to enjoy the pleasure of the comedy and the dance, to listen to tales and stories of love, to recline upon beds of flowers, to walk about in gardens, to listen to the murmur of running waters, to hear singing and other similar pastimes.'<sup>13</sup>

Our paintings bear ample testimony to the central role which the garden played in harem life. A variety of social and domestic functions took place within the harem gardens. Aside from the entertainment of the head of the household,<sup>14</sup> as discussed above, the harem gardens were essentially the women's province, and therefore difficult of access. Activities within their gardens included bathing and swimming in the tanks and pools,<sup>15</sup> entertaining children (including the flying of kites),<sup>16</sup> tending to pet birds,<sup>17</sup> setting off fireworks,<sup>18</sup> or simply harem attendants entertaining the lady of the house with music and song.<sup>19</sup>

Numerous harem paintings portray Hindu festivities in Mughal and provincial Mughal styles. Though a number of these works may have been made for Hindu patrons, costumes and architecture are still Mughal per se and thus show the amalgamation of Muslim and Hindu culture which developed in India by the eighteenth century. Aside from *Diwali* fireworks, the *Holi* festival became a popular theme in late Mughal painting.<sup>20</sup> Although it was also celebrated



in the high Mughal period, as we see in *Jahangir playing holi with the ladies of the palace* in the Chester Beatty Collection, it became a recurrent and commercialized theme in the late eighteenth century.<sup>21</sup>

The production of *Ragamala* and *Baramasa* illustrations also increased in the later half of the eighteenth century. These illustrations depict many activities which largely occurred within the numerous residential garden courts and pavilions.

In the India Office Library's *Ragamala* (figs. 30-47) a series of elegantly painted residential gardens form the background of a number of social and domestic functions. The array of residential activities illustrated in this as well as other Deccani *Ragamala* series include: lovers sleeping in pavilions (fig. 31), terrace entertainments including music and dancing parties (figs. 33-35, 37, and 45), the *Holi* festival (fig. 34) and even simple consultations (fig. 30), a woman taking a walk about the garden (fig. 42), or a lady writing a letter to her lover (fig. 40) and *Dhanasri Ragini*, dated to c. 1700-25, Bidar.<sup>22</sup> The illustration for the *Hindola Raga* (fig. 38) shows the lovers in a garden swing surrounded by attendants and musicians. Another scene shows a woman and her attendant enjoying lotus flowers (fig. 39) and *Hindola Raga*, c. 1700-25, Bidar,<sup>23</sup> which were probably just freshly cut from the garden. Another scene shows lovers walking toward a pavilion where an attendant is preparing a bed (fig. 44).

A *Baramasa* painting which shows another activity which may have typically occurred on residential garden terraces, especially in the winter months, is the illustration of *The Month*



of Aghan (November-December).<sup>24</sup> Here we see two ladies seated in an opensided terrace-top pavilion or room cooking or warming themselves before a charcoal brazier. A woman approaches the room from the adjoining terrace courtyard carrying what may be more charcoal for the court ladies inside.



1. See: Goswamy and Fischer, *Wonders of a Golden Age*, p. 121.
2. Work in an atelier, see Goswamy and Fischer, *Wonders of a Golden Age*, Zurich 1987, p. 120-121.
3. R. Jairazbhoy, 'Early Garden-Palaces of the Great Mughals', *Oriental Art* IV (1958), p. 71.
4. Moynihan, *Paradise as a Garden in Persia and Mughal India*, New York, 1979, p. 109.
5. *Ibid.*, p. 116.
6. *Tuzuk-i Jahangiri (Memoirs of Jahangir)*, tr. and ed. A. Rogers and H. Beveridge, vol. 1, third edition, New Delhi, 1978, pp. 161-162.
7. See M.R. Anand, 'Jahangir the Epicurean', *Marg* XI/4 (1958), pp. 26-27.
8. F. Bernier, *Travels in the Mughal Empire 1656-68*, ed. A. Constable, New Delhi, 1968, p. 24.
9. *Loc. cit.*
10. See: Allah Wirdi Khan receiving a petition, early eighteenth century, Zebrowski, 230; Prince Ghulam Hazrat Akbar Khan Bahadur and courtiers, first half 18th c., Zebrowski, p. 238; Mahmud Khan Dawudi and his son-in-law 'Abd al-Razzaq Khan with courtiers, first half 18th c., Zebrowski, p. 240; Nawab Saif al-Mulk inspecting jewels, c. 1795, Zebrowski, p. 265.
11. See: Sultan 'Ali 'Adil Shah II with a courtesan, c. 1660-70, Zebrowski, p. 120; Nawab Salabat Khan, c. 1698, Zebrowski, p. 217; Mujahid Jang and Murassa Bai sitting in a garden, early eighteenth century, Zebrowski, p. 235.
12. Francisco Pelsaert, *Jahangir's India*, tr. and ed. W.H. Moreland and P. Geyl, (reprint), Delhi, 1972, pp. 64-65.
13. N. Manucci, *Storia do Mogor*, vol 2, p. 329.
14. Images of men within the harem are: *Khamsa of Nizami*, Or. 12208, fols. 65r and 244v, British Library; and Sultan 'Ali 'Adil Shah II with a courtesan, c. 1660-70, Zebrowski, p. 120.
15. See *Khamsa of Nizami*, Or. 12208, fol. 220r, British Library and *Bathing Women*, c. 1590, Rietberg Museum, Zurich.



16. See *Bathing Women*, as noted above, and *Ladies flying kites*, c. 1740-50, in the collection of Babu Sitiram Sah, Banaras, in M. Ashraf, 'The Decline', *Marg* XI/4 (1958), p. 59.
17. See *Ladies with pet birds*, c. 1750-70, in the collection of Babu Sitiram Sah, Banaras, in M. Ashraf, 'The Decline', *Marg* XI/4 (1958), p. 59.
18. See: A Mughal lady letting off fireworks on a terrace on the night of *Shab-barat* (A Muslim festival held on the eve of the fourteenth day of the month of Shaban.), c. 1760, Johnson Album 20-2, India Office Library; *Princess enjoying fireworks with her maidens*, early 19th c., Kishangarh, in J. Brijbhushan, *op. cit.*, pl. 64; and *Ladies celebrating Divali* (The Hindu festival of light occurring in October or November during which lines of small lamps or torches and fireworks are used to illuminate the nights of the period.), c. 1760, Lucknow, 71.82, Cleveland Museum of Art, in Linda York, *Indian Miniature Paintings and Drawings: The Cleveland Museum of Art Catalog of Oriental Art*, Cleveland, 1986, p. 138.
19. See: *Ladies carousing in a garden*, Hyderabad, first half 18th c., Zebrowski, p. 252; *Lady and her maidens listening to music*, in J. Brijbhushan, *The World of Indian Miniatures from the National Museum Delhi*, New York, 1979, pl. 53; and *In a Harem Garden*, c. 1765, Faizabad, in the David Collection, Copenhagen, published by S.C. Welch, *India: Art and Culture 1300-1900*, New York, 1985, p. 278.
20. The spring festival when men and women douse each other with colored water. See Chapter 3 note 55.
21. Sir T.W. Arnold and J.V.S. Wilkinson, *The Library of A. Chester Beatty: a catalogue of the Indian Miniatures*, London, 1936, pl. 56. Also see *Girls Spraying Each Other at Holi*, 71.83, L. York, *op. cit.*, figure 37.
22. See: Zebrowski, *Deccani Painting*, p. 231.
23. See: Zebrowski, *op. cit.*, p. 232.
24. *The Month of Agha (Nov.-Dec.)*, By Govardhan, Mughal, c. 1740, India Office Library, Johnson Album 11-17.



Epilogue

"Gardening and its interwoven architecture go to the very root of national life. In the garden the whole history of the nations finds a true and clear reflection. In times of peace and prosperity the craft expands and flourishes, while wars and unsettled years sweep away the gardens and all their gentle arts."<sup>1</sup>

-----C.M. Villiers-Stuart

Certain questions have not been raised thus far, especially those pertaining to the legacy of the Indo-Islamic garden in terms of both Indian architecture and painting. Ultimately, it is difficult to say whether or not residential gardens continued to be built by the nobility after the last remnants of Mughal and, more broadly, Indian political self-determination and power were snatched away by the British. However, our paintings offer an indication of the directions into which residential garden design may have gone.

The aristocracy as well as expatriates continued to commission paintings in the north, primarily Delhi, Lucknow, Oudh, the Rajasthani centres and in the Deccan, particularly in the capital of Hyderabad. In fact, the subject matter of paintings hardly changed at all throughout these regions. Scenes of charming courtesans soaking up the pleasures of life on palace terraces, and versions of earlier paintings were commissioned. It is not surprising that the style with which the Mughals surrounded themselves became a standard against which to measure quality for the rest of India for almost three centuries. However, the commercialism which developed throughout this



period, combined with the introduction of photography in the middle of the nineteenth century, ultimately contributed to the demise of Indian painting.

Other factors which must be considered are the effects of copying and adopting of European fashions, specifically in the fields of painting and architecture. C.M. Villiers-Stuart observes:

"...one of the greatest drawbacks to Indian women must be the loss of their fine water gardens...none of us lose more than the gentle purdah ladies, whose lives are, in truth, rather cramped by contact with our ideas when this entails the loss of their beautiful terraced roofs and pavilions, and the introduction of the open, exposed garden which they cannot enjoy."<sup>2</sup>

The imposition of British traditions had resounding affects upon civic and residential buildings and gardens which, as all the arts, generally lost their Mughal spirit by the middle of the nineteenth century. Indeed, the decline of the great Indo-Islamic arts of painting and garden design reflects the broader decline in socio-political spheres.

As for Revival Indo-Islamic residential gardens, James Dickie has pointed out the gardens designed for the Viceroy's House in New Delhi by W.R. Mustoe of the Horticultural Department.<sup>3</sup> Here the expansive water courses and broad tanks with central pavilions beackon back to the great Mughal palace gardens. As it was built for the Viceroy of New Delhi, the building of residential gardens by the aristocracy indeed persisted. Surely there are more examples of such revival gardens throughout the sub-continent but a survey of them necessarily goes beyond the scope of this study.



A more pertinent topic regards the evidence we have for late Mughal residential gardens, that is, monuments of the last half of the eighteenth century to the mid-nineteenth century. As far as literary documentation of these sites in sources such as histories or official records, one cannot expect mention of them for two primary reasons. Firstly, such documents were not written from a topographical point of view. Secondly, the houses of the nobles did not deserve mention by the official diarist and historians unless they were connected with state affairs.<sup>4</sup> Although it is true that without the writings of Bernier, Manucci, and Pelsaert our knowledge of Mughal period residential gardens would be considerably slight, we must also remind ourselves that their impressions were subject to their own biases, were regionally limited, and certainly only covered a small fraction of contemporary Indo-Islamic homes.

What happened to the surely countless houses of the aristocracy? It wasn't until the turn of the twentieth century that the preservation and restoration of Indo-Islamic buildings and gardens began. Lord Curzon first initiated the programs and since then work has been supervised by the Archaeological Survey of India.<sup>5</sup> But by that time surely many of the residences and gardens had fallen to ruin.

As was mentioned in the previous chapter, many buildings of the nobles were not properly kept up after their death. Other reasons for the loss of these sites may be inferred from historic writings. As for the Mughal period gardens of the Kashmir region, climatic problems were causing the loss of gardens as far back as Shah Jahan's period. Inayat Khan notes in his *History*



of Shah Jahan:

"Towards the end of the spring [1650-51] on account of the heavy rain and tremendous floods, all the verdant islands in the middle of [Lake] Dal, as well as the gardens along its borders, and those in the suburbs of the city, were shorn of their grace and loveliness. The waters of the [Lake] Dal rose to such a height, that they even poured into the garden below the balcony of the public audience [at the fort of Hari Parbat], which became one sheet of water from the rush of the foaming tide, and most of its trees were swamped. Just about this time, too, a violent hurricane of wind arose, which tore up many trees, principally poplars and planes, by the roots, in all the gardens, and hurled down from on high all the blooming foliage of Kashmir."<sup>6</sup>

As well as the loss of gardens in storms and other natural disasters, residences surely experienced damage and ultimately fell to ruin. The scarcity of water during this century has ironically transformed local garden traditions and destroyed many historic gardens. Many of the great residential water gardens have been reduced to dry garden parks.<sup>7</sup>

This study suggests that the use of paintings as sources of evidence for the study of Indo-Islamic residential gardens can provide insight into the designs, features, methods and materials in building, and the many functions of these spaces. This study also reveals the limitations of painted evidence: are the settings real or imaginary, and were there regional differences in the houses of nobility even though paintings of them are generally homogeneous throughout the periods? It is hoped that a more complete picture of regional residential gardens will emerge through further archaeological surveys of the houses of nobility combined with even more comprehensive study of paintings of Indo-Islamic residential gardens.



1. C.M. Villiers Stuart, *Gardens of the Great Mughals*, London, 1913, p. 278.
2. Idem., pp. 264-65.
3. J. Dickie, 'The Mughal Garden: Gateway to Paradise', *Muqarnas* 3 (1985), p. 129.
4. M.A. Chaghtai, 'The So-Called Gardens and Tombs of Zeb-un-Nisa at Lahore', *Islamic Culture* IX (1935), p. 619.
5. Moynihan, *Paradise as a Garden in Persia and Mughal India*, New York, 1979, p. 100.
6. H.M. Elliot and J. Dowson, 'Inayat Khan's Shah Jahan-nama,' *The History of Mughal India*, vol. VII, , pp. 97-98.
7. Moynihan, *op. cit.*, p. 125.



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5. The same work, second half of the epic from the accession of  
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6. Mir Tahir al-Jurjani, Divan (The Collected poems), Mughal, c. 1600-25, British  
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Figure 1

Gifts being brought to Darab and Fastilixia  
Described by Abu Tahir Tarsusi, Naghal, c. 1530-35  
British Library Or. 4819, folio 84v

FIGURES



Figure 1  
Described by Abu Tahir Tarsusi, Naghal, c. 1530-35  
British Library Or. 4819, folio 84v







Figure 2

*Bathing Women*, Akbar period, c. 1590

Single leaf mounted as an album page  
Courtesy of the Rietberg Museum, Zurich





Figure 3

The Garden of Fidelity (Bagh-i vafa) being laid out at Kabul

Baburnameh by Mirza 'Abd al-Rahim, Mughal, c. 1590  
British Library, Or. 3714, folio 173v





Figure 4

A platform being constructed by the altered stream

The same work, folio 181v.

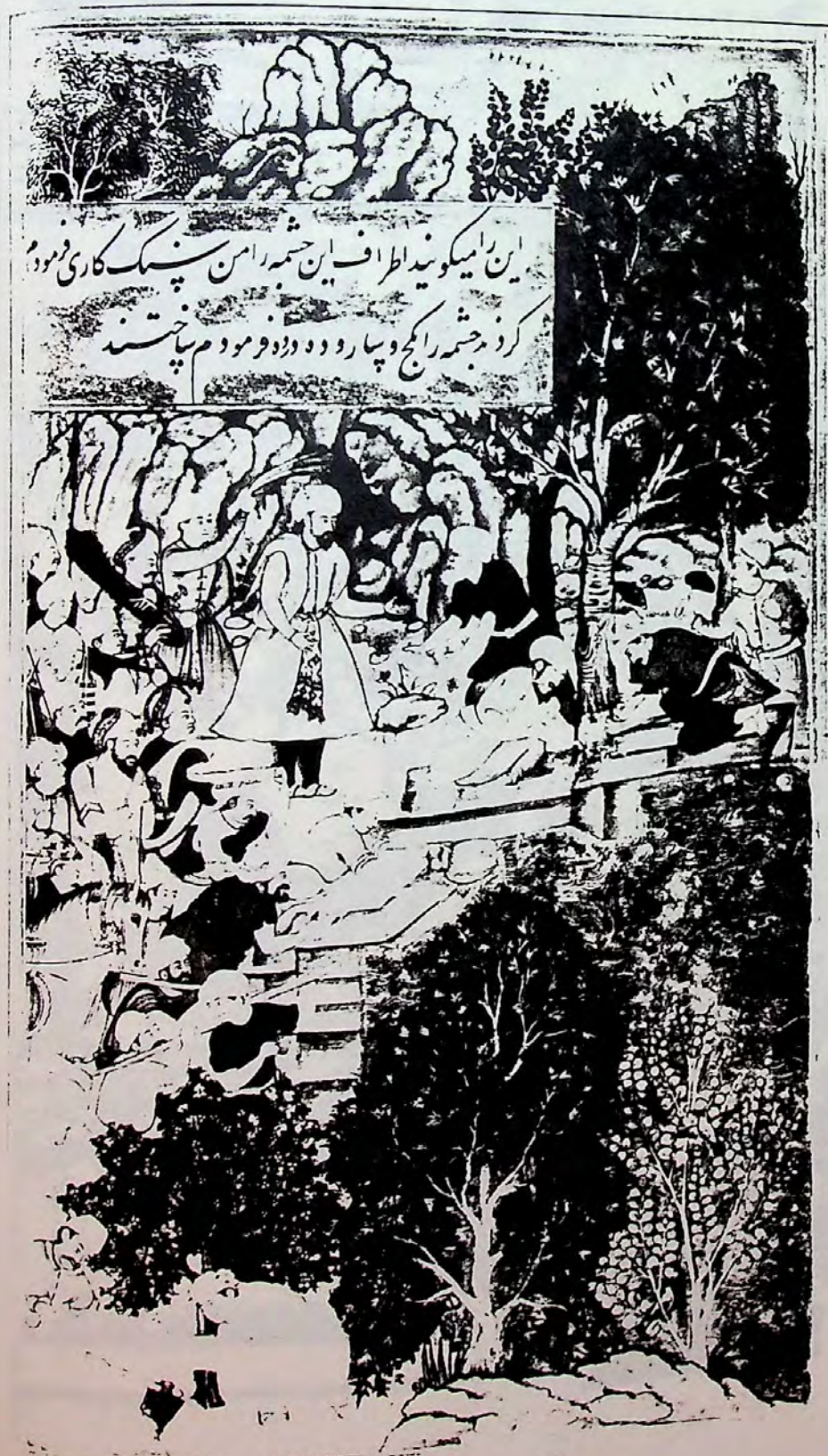




Figure 5

Babur watching men altering the course of the stream at Istalif  
The same work, folio 180v.





Figure 6

A feast attended by Uzbek, Hindu and Kizilbash envoys  
who brought Gifts and money to Babur

The same work, folio 491v.





Figure 7

Entertainment provided for the envoys  
in the form of fighting rams and blackbuck

The same work, folio 492r.





Figure 8

Krishna telling Bhima of Arjunas exploits  
to which the women also listen

Razmnameh, the Persian translation of the Mahabharata  
comprising Parvans XIV-XVIII, Mughal, AH 1598  
British Library, Or. 12076, folio 95r



امین المصنف المیرزا محمد تقی میرزا  
بنواری خرد



Figure 9

Khusrau enthroned when as a young man he became drunk  
and allowed his horse to wander off and damage crops and vines

Khamseh (Khusrau u Shirin), Mughal, 1595  
British Library, Or. 12208, folio 40v

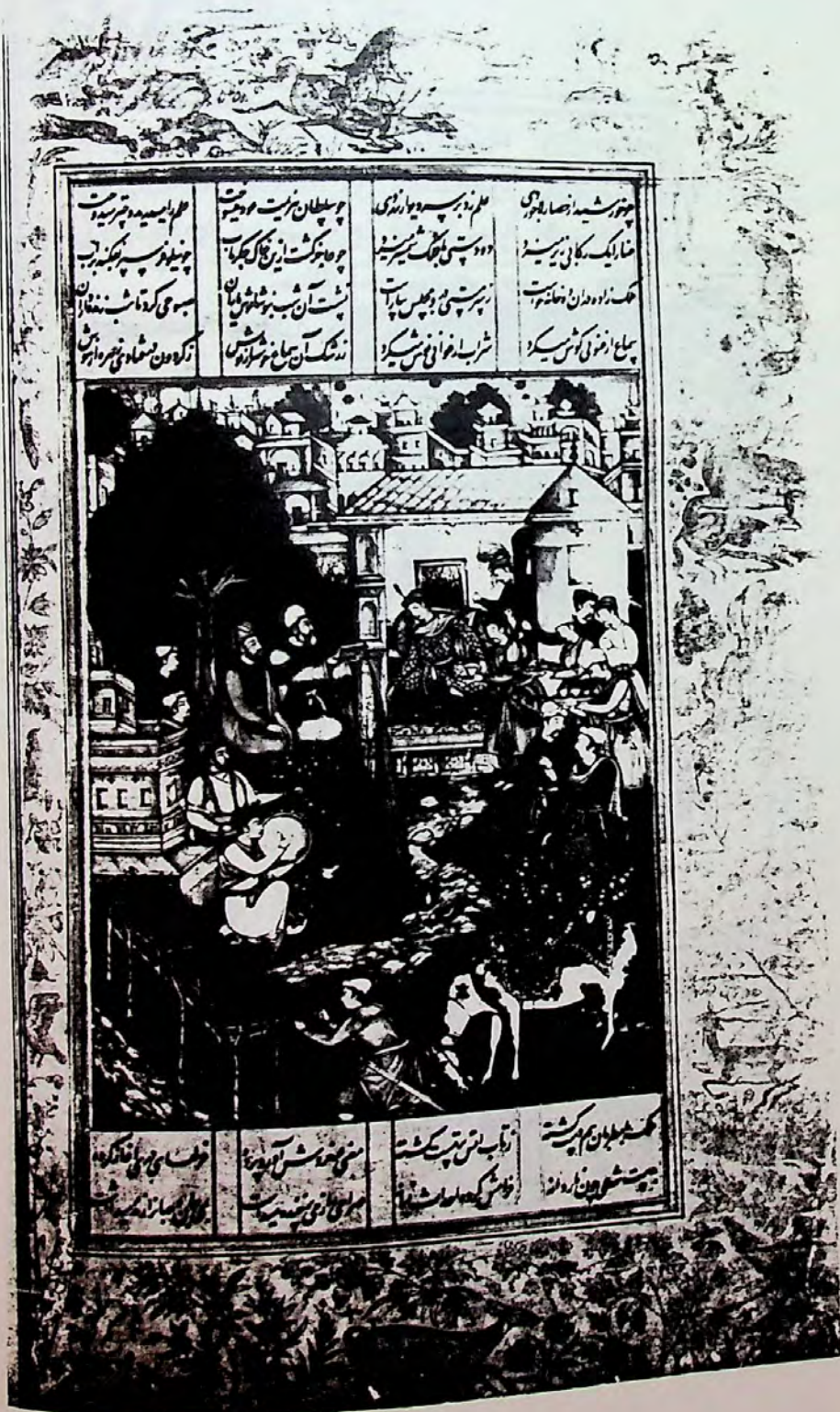




Figure 10

Shapur kneeling before Shirin

The same work, folio 45v.

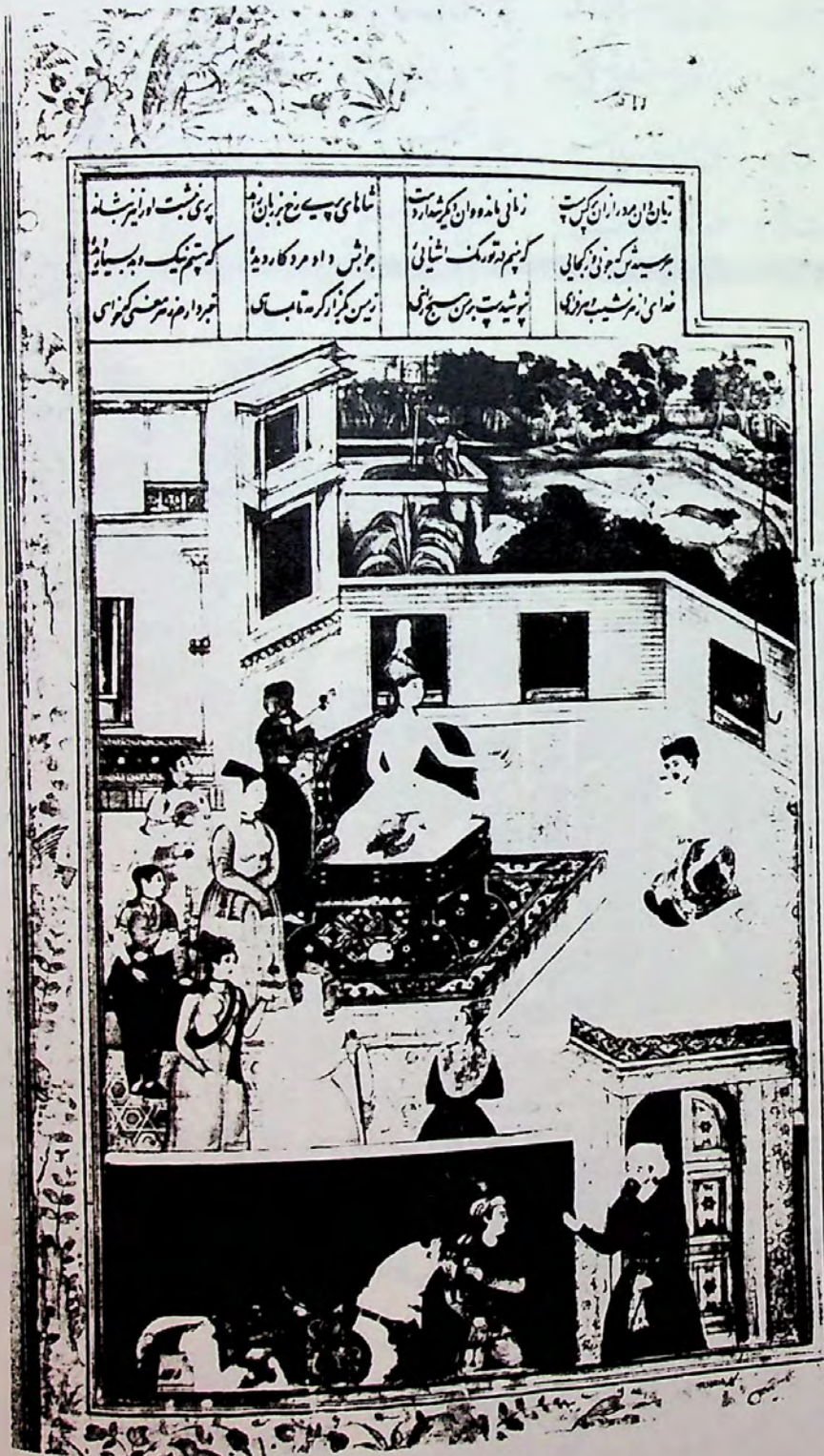




Figure 11

Barbad the minstrel paying homage to Khusrau  
as he bestows gifts on him

The same work, folio 54r.

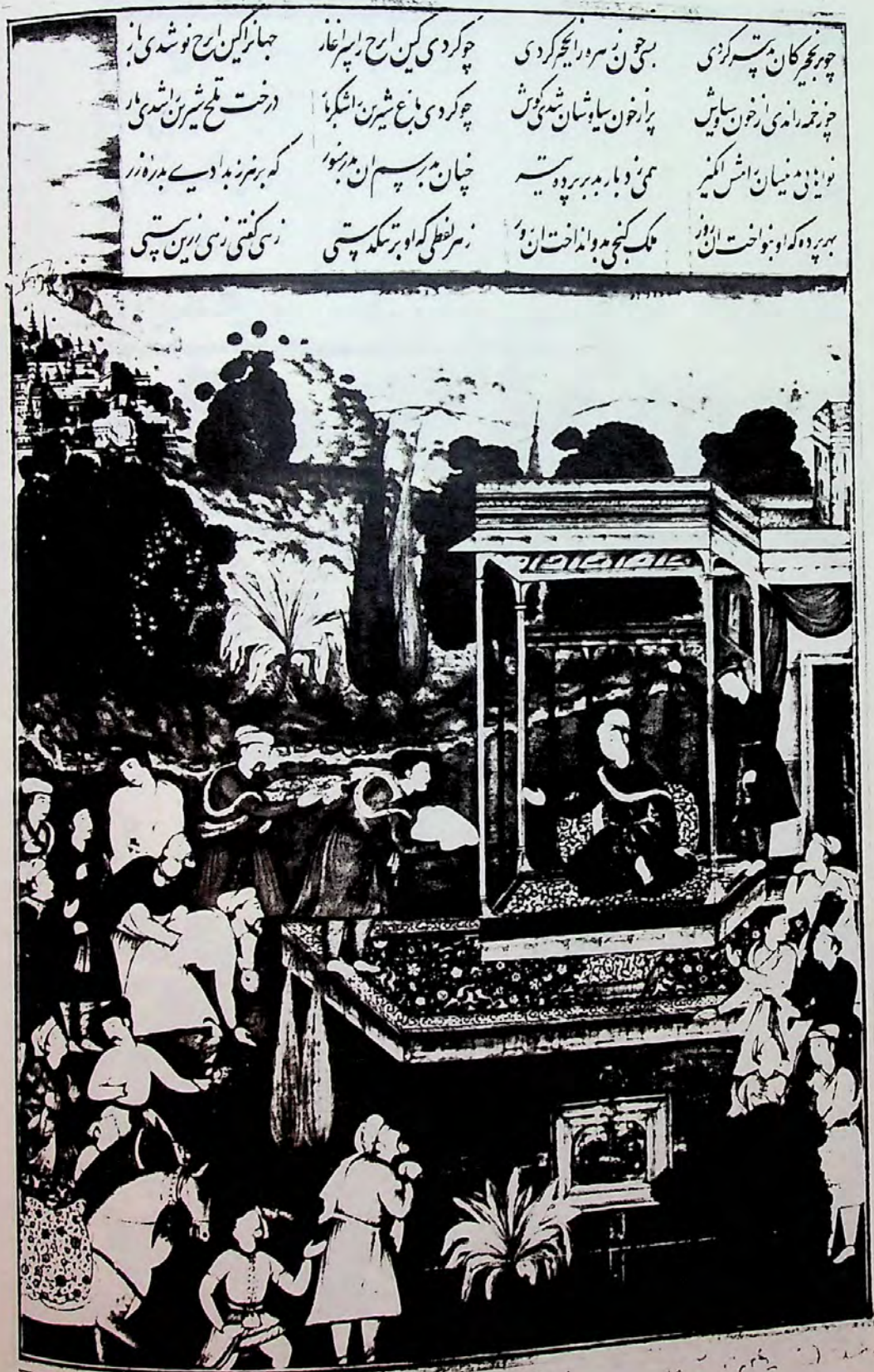




Figure 12

Khusrau and Shirin entertained by Mahin Banu in Armenia  
The same work, folio 65r.





Figure 13

Shiruy and Buzurjumid before Khusrau

The same work, folio 99v.





Figure 14

The princess who painted a self-portrait  
(Story told by the Russian Princess)

The same work, folio 206r.

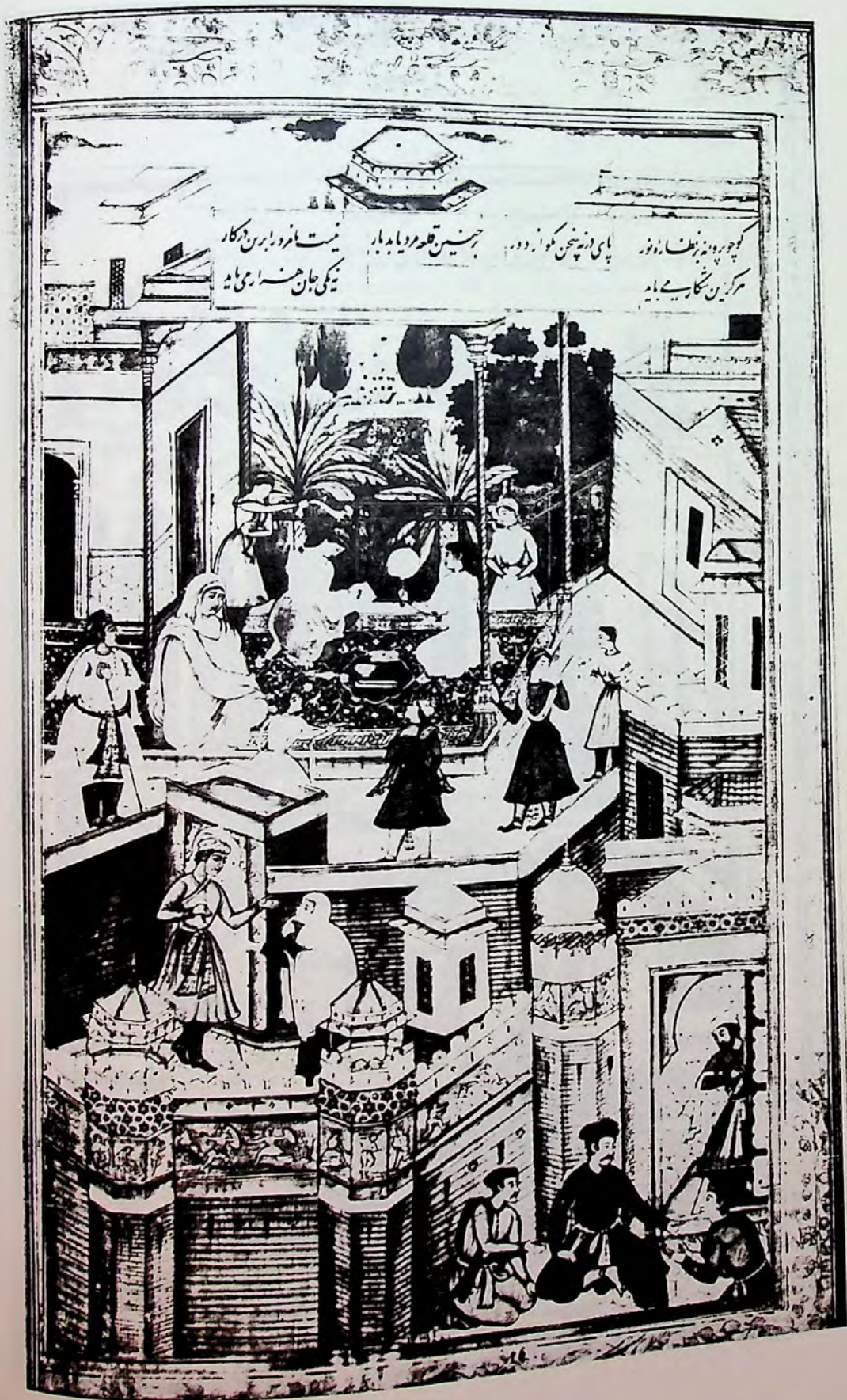




Figure 15

The owner of the garden discovering maidens bathing in the pool  
(Story told by the Greek princess)

The same work, folio 220r.





Figure 16

*Iskander with Nushabeh (Iskandarnameh)*

*The same work, folio 244v.*





Figure 17

Khizr washing the grey horse, given to him by Iskandar,  
in the water of life (Iskandarnameh)

The same work, folio 281r.





Figure 18

Miryam the Christian maiden versed in the art of alchemy  
consulted by other alchemists

The same work, folio 294r.

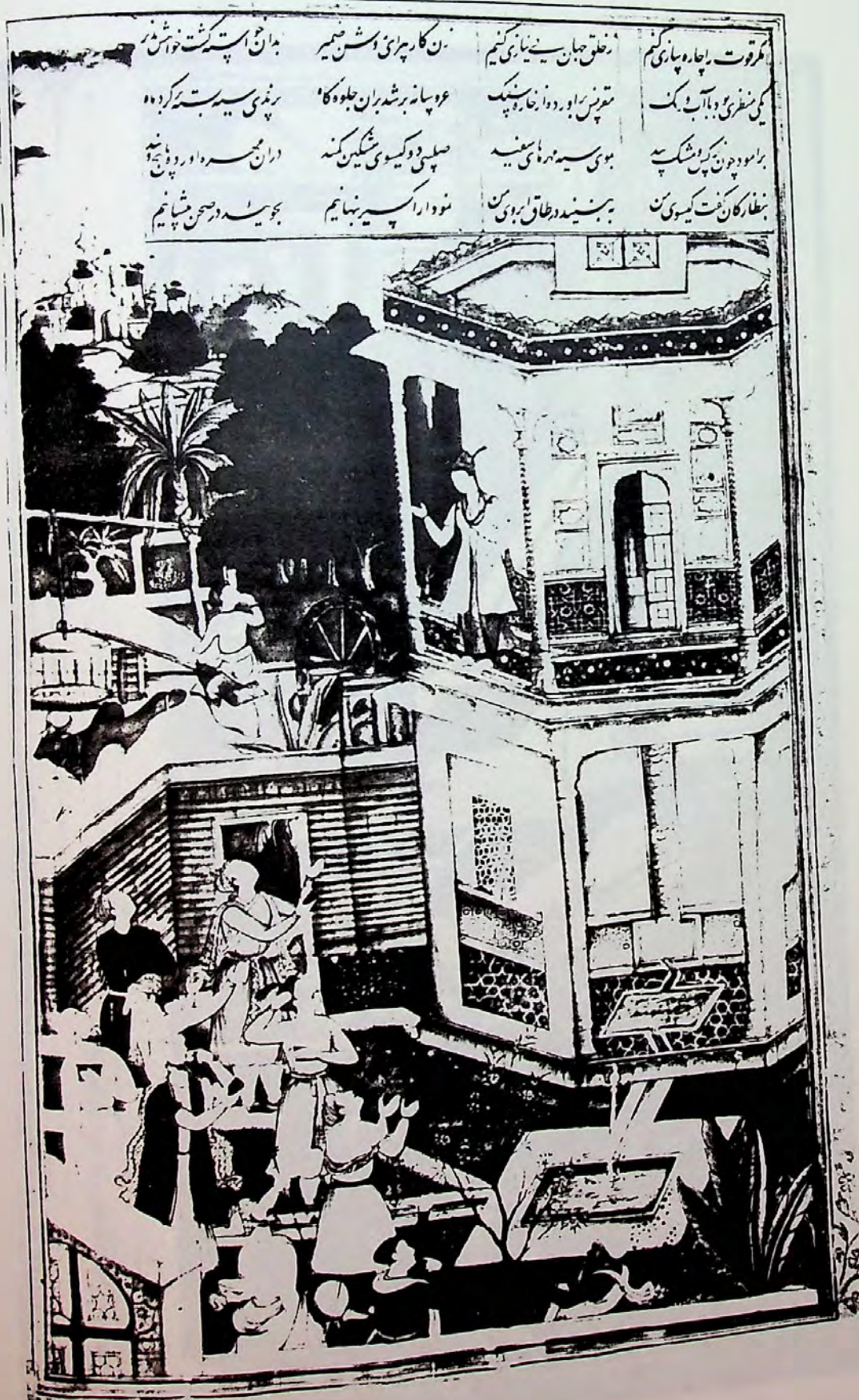




Figure 19

Jalal al-Din Rumi visiting 'Attar at Nishapur  
when 'Attar presented him with a copy of the Asrarnameh

Nafahat al-Uns, copied for Akbar at Agra, 1603  
British Library, Or. 1362, folio 287r.





Figure 20

A scene in a courtyard outside a tavern or house (?)

Divan of Hafiz, Mughal, c. 1600-05  
British Library, Grenville XLI, folio 167r.





Figure 21

The prince in a pavilion at night with the shoemakers  
who kidnapped him

Anvar-i Suhayli, a modernized version of Kalila wa Dimnah  
by Husain Va'iz Kashifi, Mughal, 1610-11.  
British Library, Add. 18579, folio 396r.

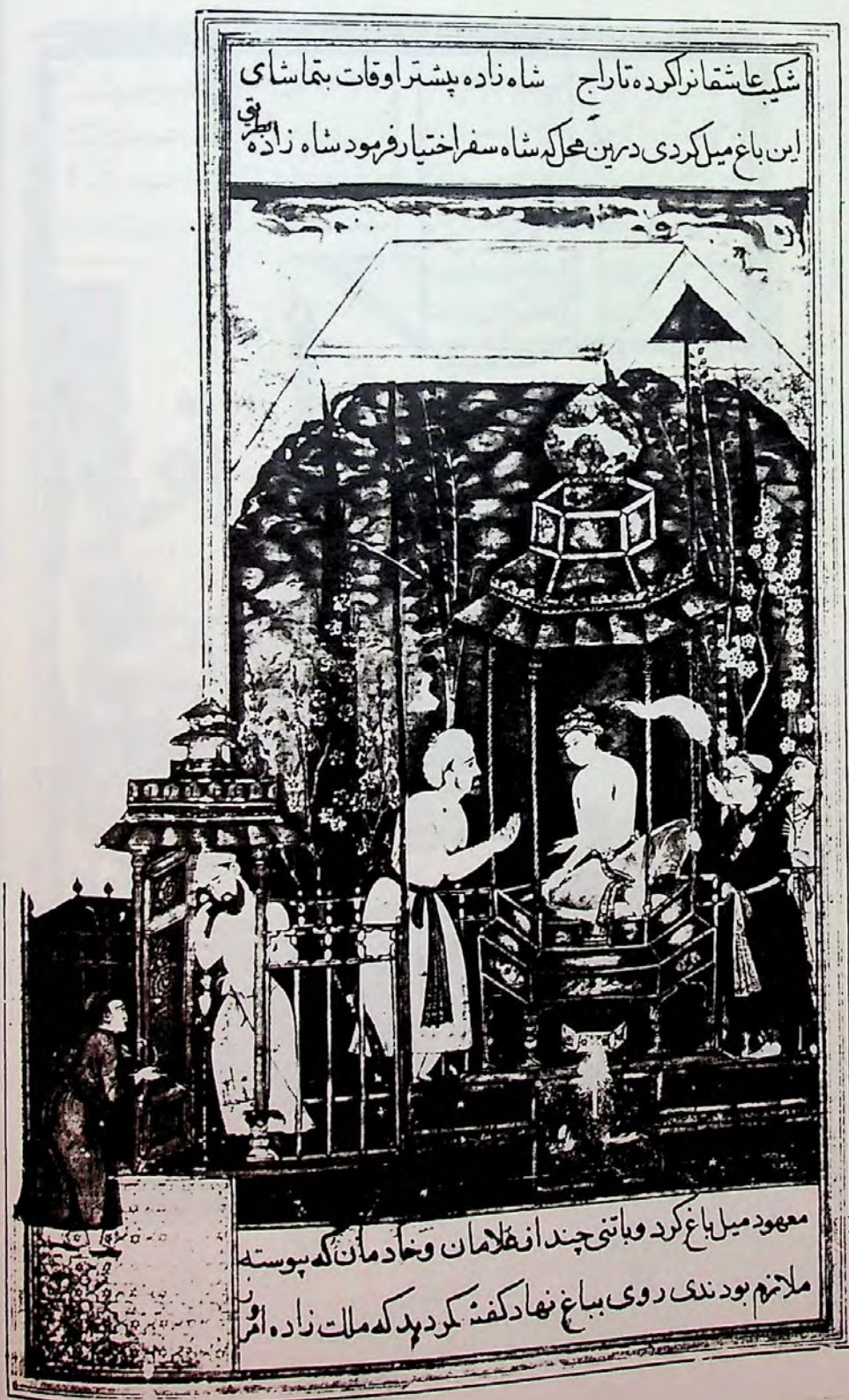




Figure 22

*Khusrau Parviz with Shirin*

*Shahnameh by Firdausi, Delhi, 1616  
British Library, Add. 5600, folio 555v.*





Figure 23

The king visiting the darvish friends of Khusrau who were  
walled up in prison for weeks, after which it was found that the  
strong man had died and the frail one survived

Gulistan of Sa'di, Jahangir period (?)  
British Library, Or. 5302, folio 50r.





Figure 24

Accession of Lahrasp

Shahnameh of Firdausi, Panjabi, 1719  
British Library, Add. 18804, folio 2r.





Figure 25

Gushtasp greeting Isfandiyar when he returned  
from the Brazen Fort

The same work, folio 48r.



و بزرگ



Figure 26

Buzurjmihr giving nard (backgammon) to the King of Hind  
as Anushirvan's gift

The same work, folio 262r.





Figure 27

Divan-i Khass at Delhi  
(private audience hall chamber and courtyard garden)

Amal-i Salih, Mughal, eighteenth century  
British Library, Or. 2157, folio 732r.

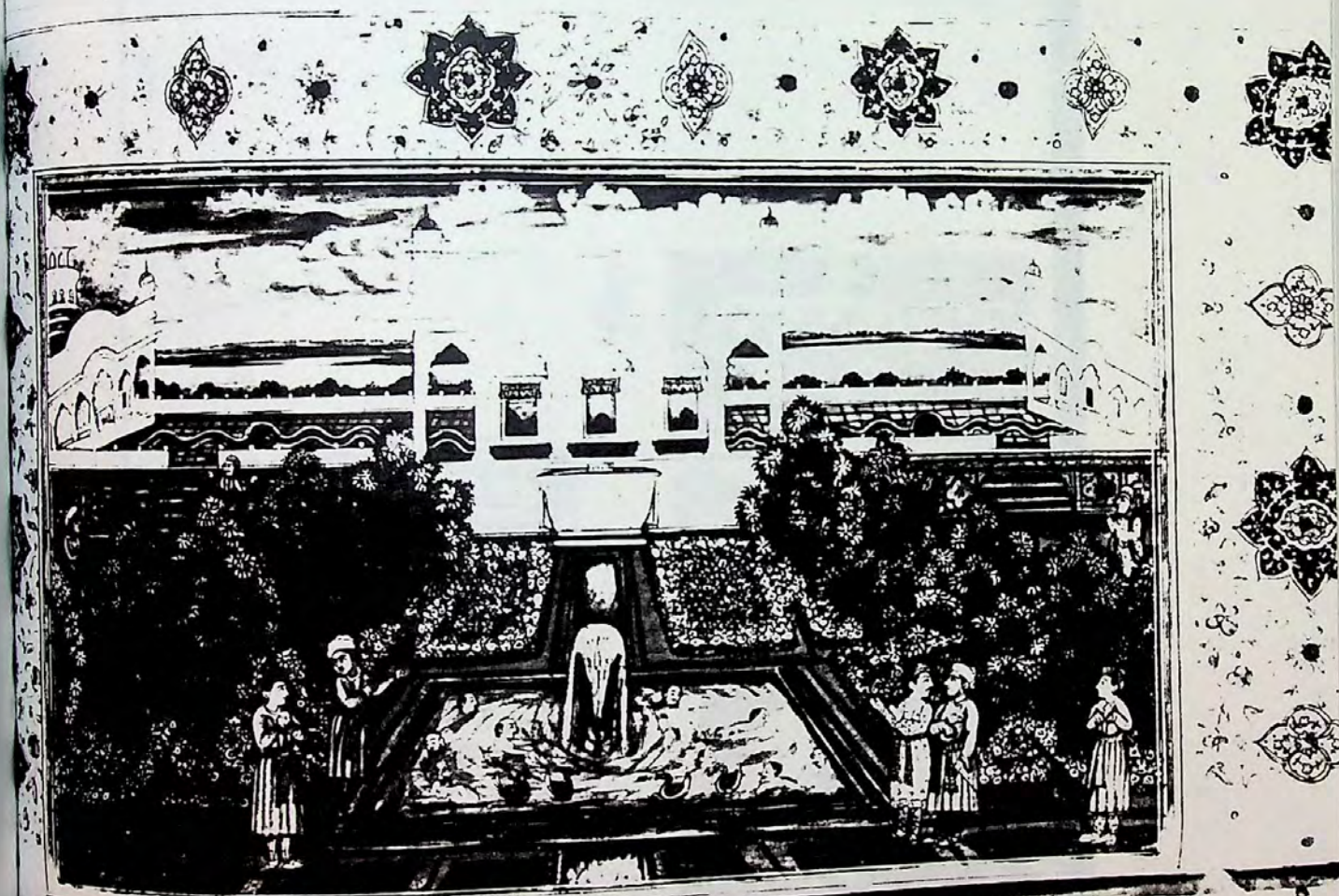




Figure 28

*The Month of Aghan (November-December)*

*Baramasa series, Mughal, c. 1740*  
India Office Library, Johnson Album 11, no. 17.

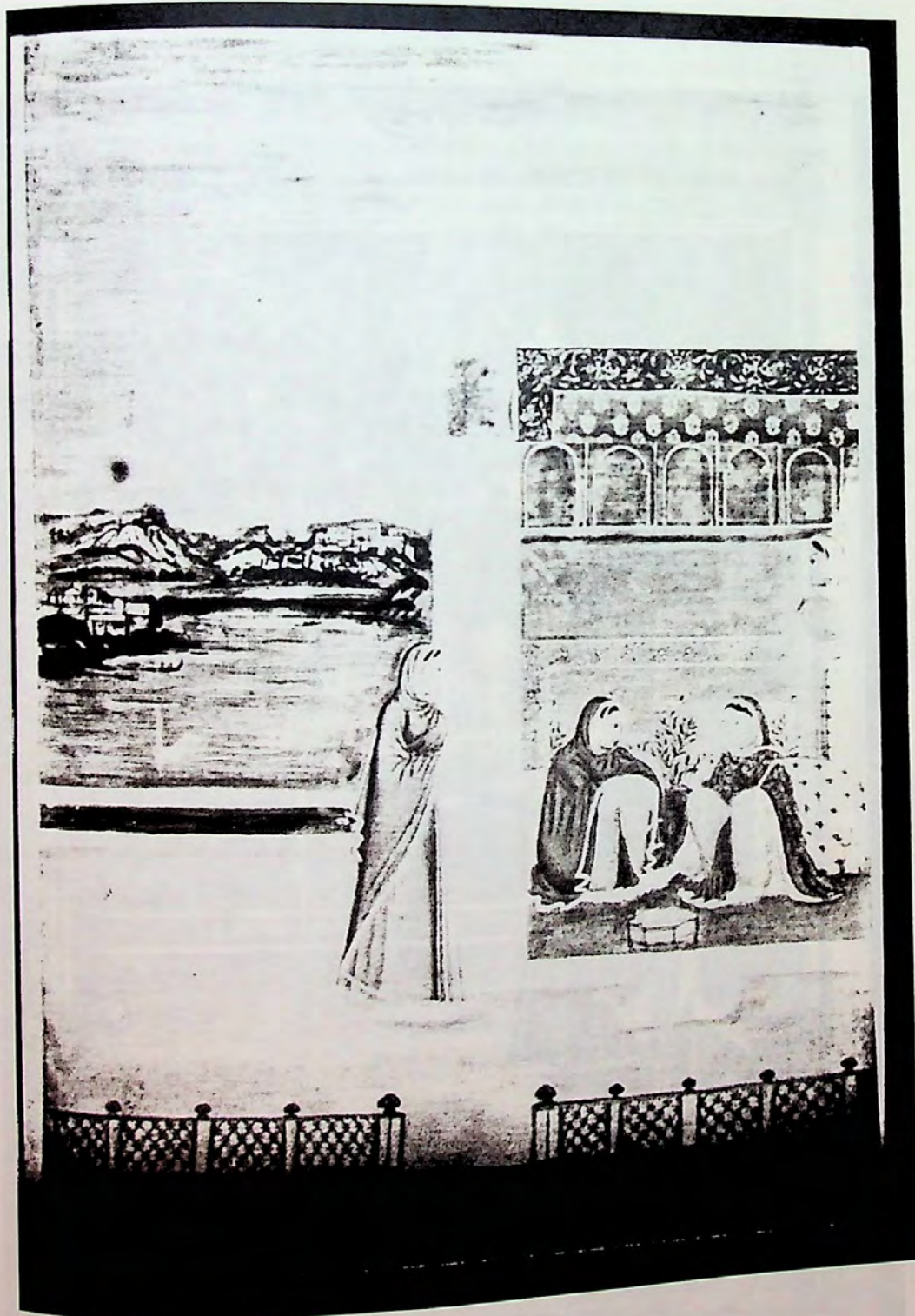




Figure 29

*A Mughal lady letting off fireworks on a terrace  
on the night of Shab-barat.*

Mughal, c. 1760  
India Office Library, Johnson Album 20, no. 2.

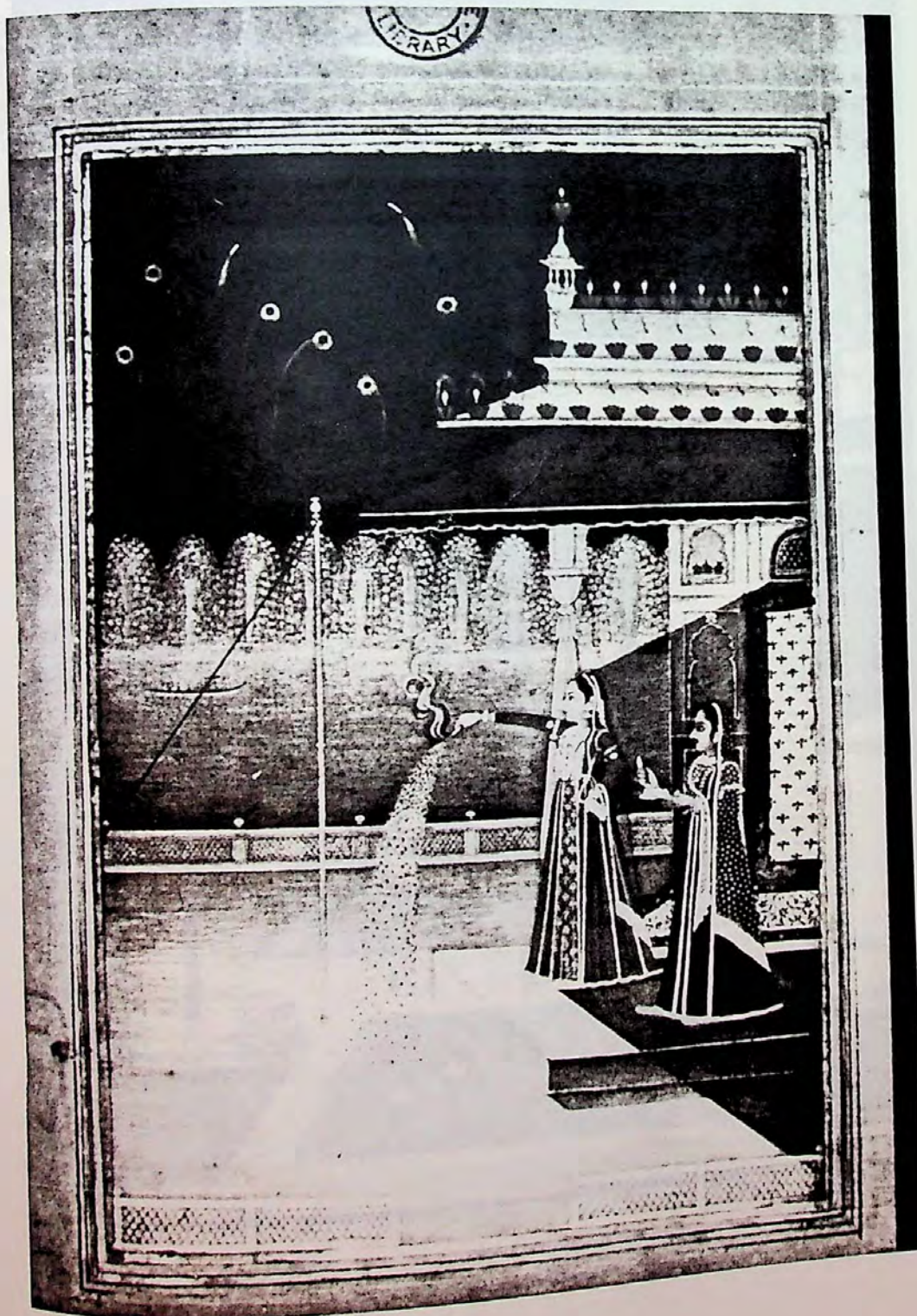




Figure 30

*Patamanjari Ragini*

Ragamala series, Hyderabad, c. 1760  
India Office Library, Johnson Album 37, no. 2.





Figure 31

*Vibhasa ragini*

The same work, no. 3.

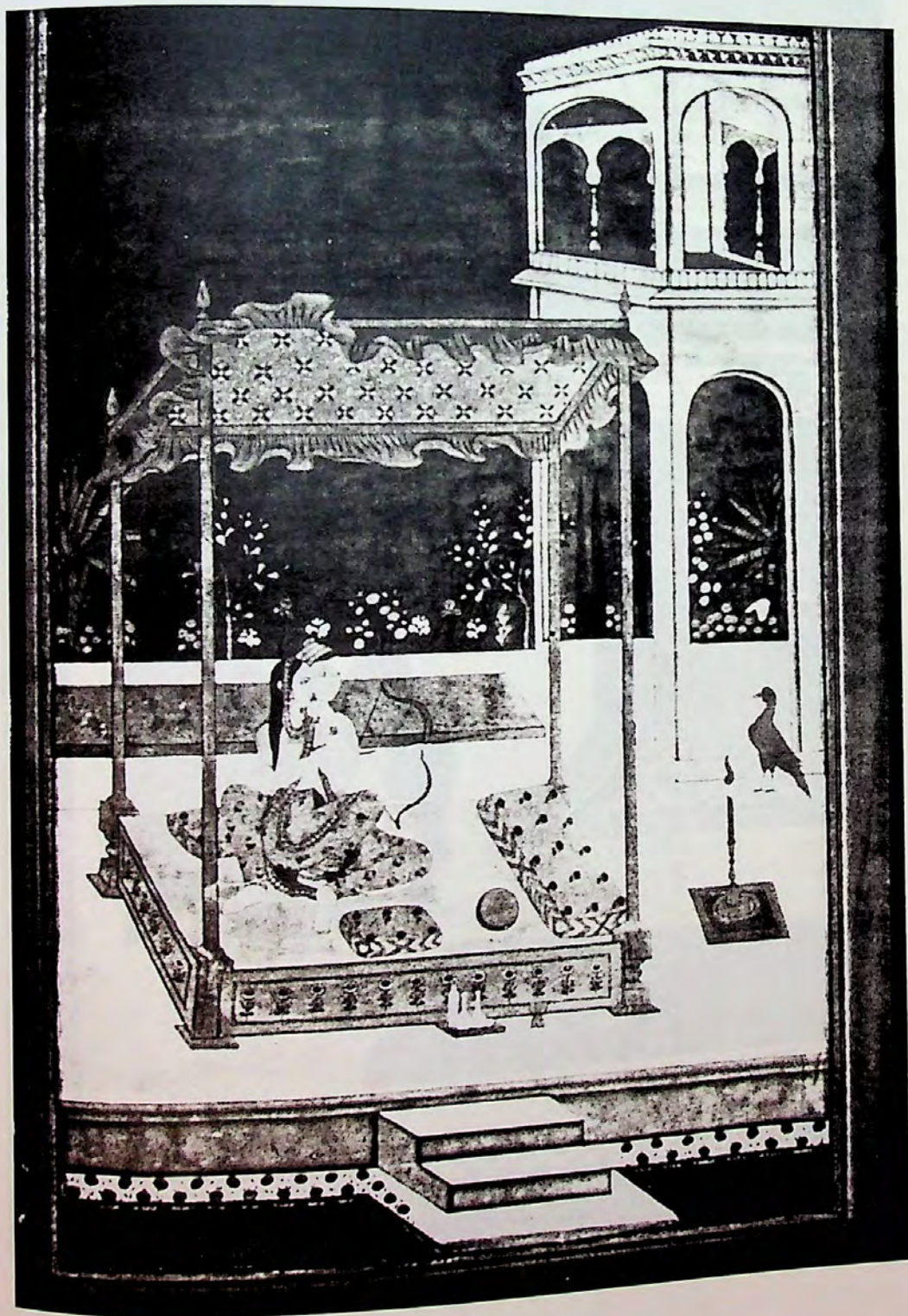




Figure 32

*Gujari ragini*

The same work, no. 4.





Figure 33

*Bhairava raga*

The same work, no. 5.

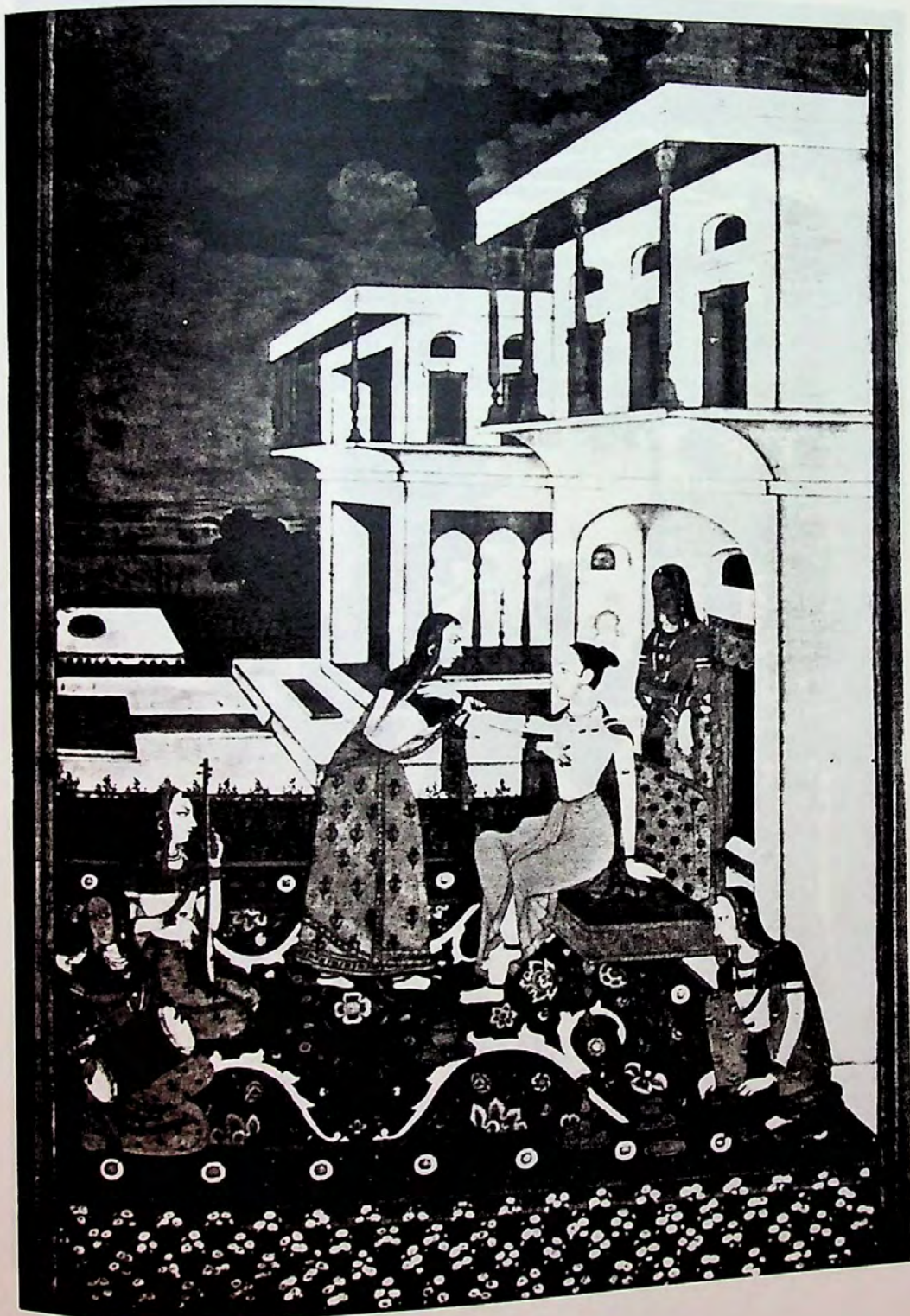




Figure 34

*Vasanta ragina*

The same work, no. 6.





Figure 35

*Ragini, unidentified.  
Lady with parrot awaiting her lover*

The same work, no. 7.

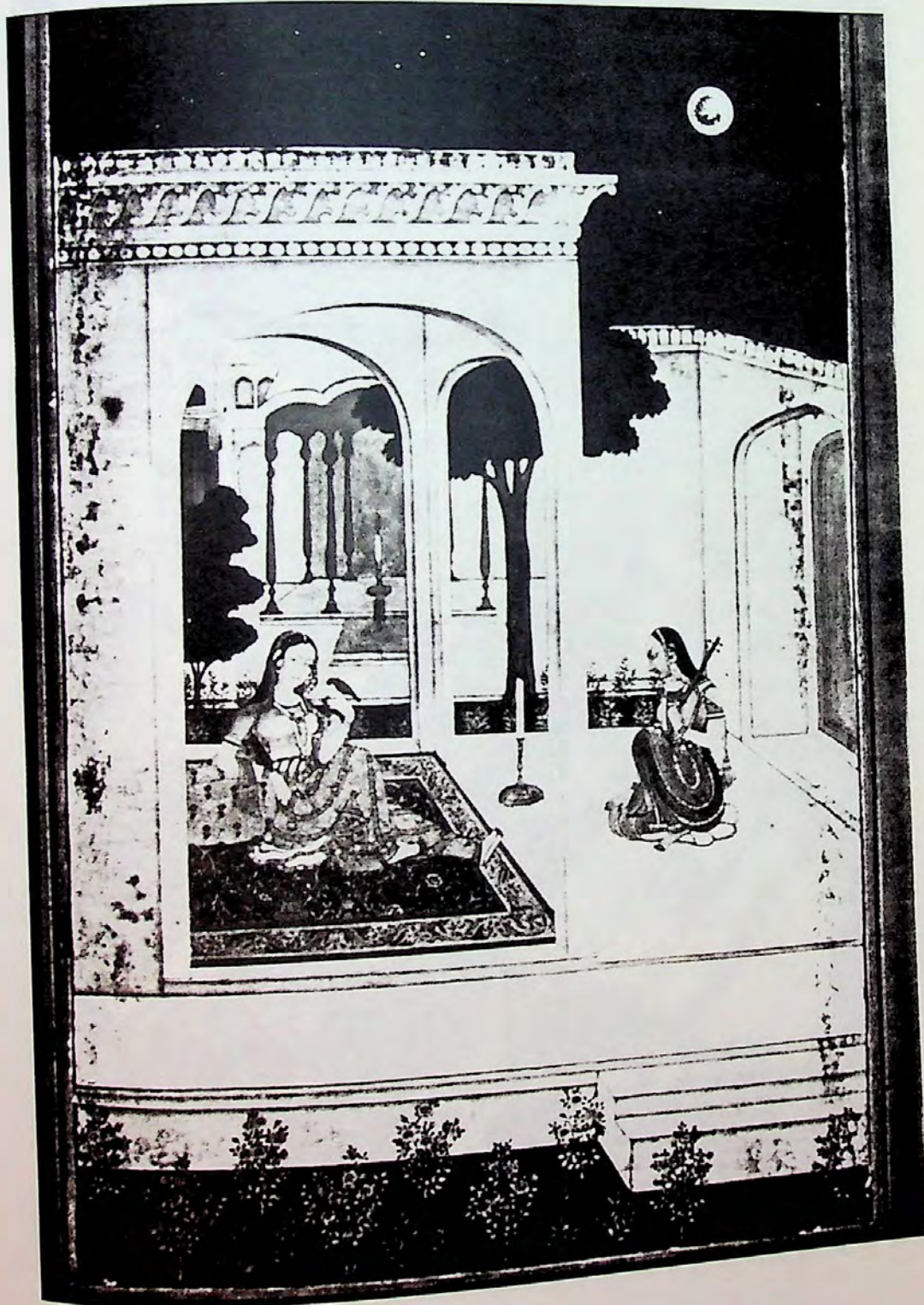




Figure 36

*Lalita ragini*

The same work, no. 8.

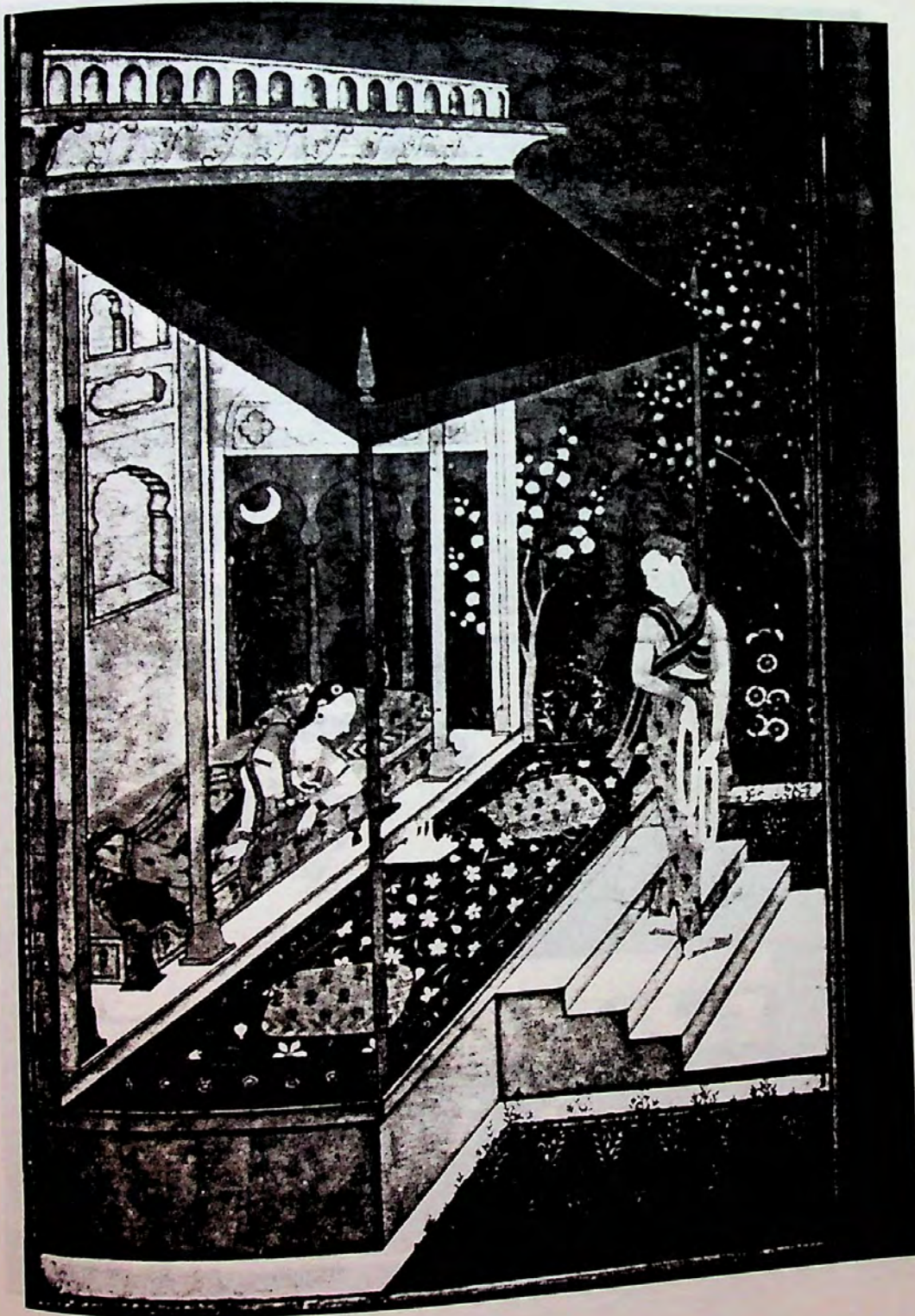




Figure 37

*Ragini, unidentified*  
*The nayika awaiting her lover*

The same work, no. 9.

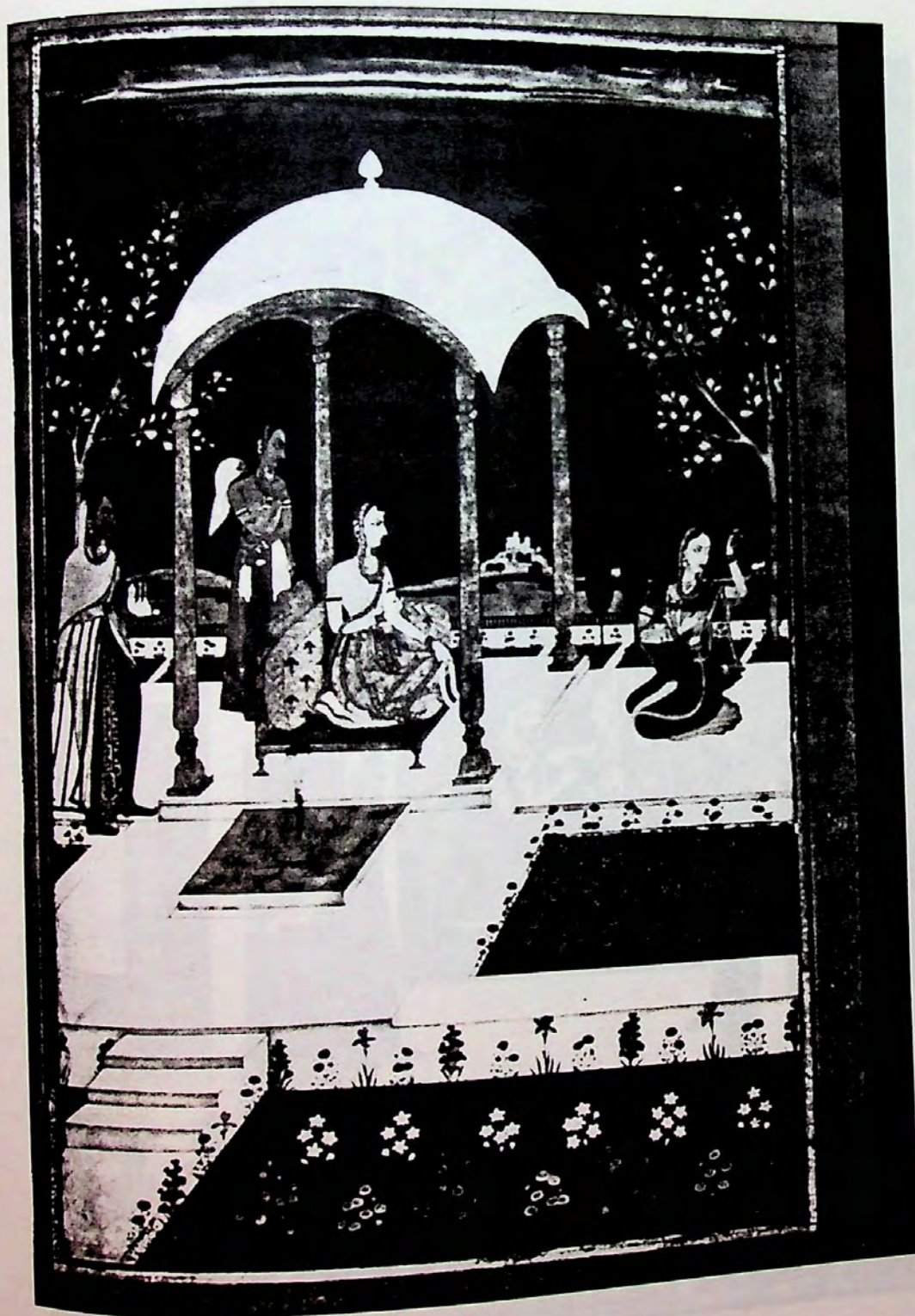




Figure 38

*Hindola Raga*

The same work, no. 11.





Figure 39

*Malasri ragini*

The same work, no. 12.





Figure 40

*Dhanasri ragini*

The same work, no. 20.

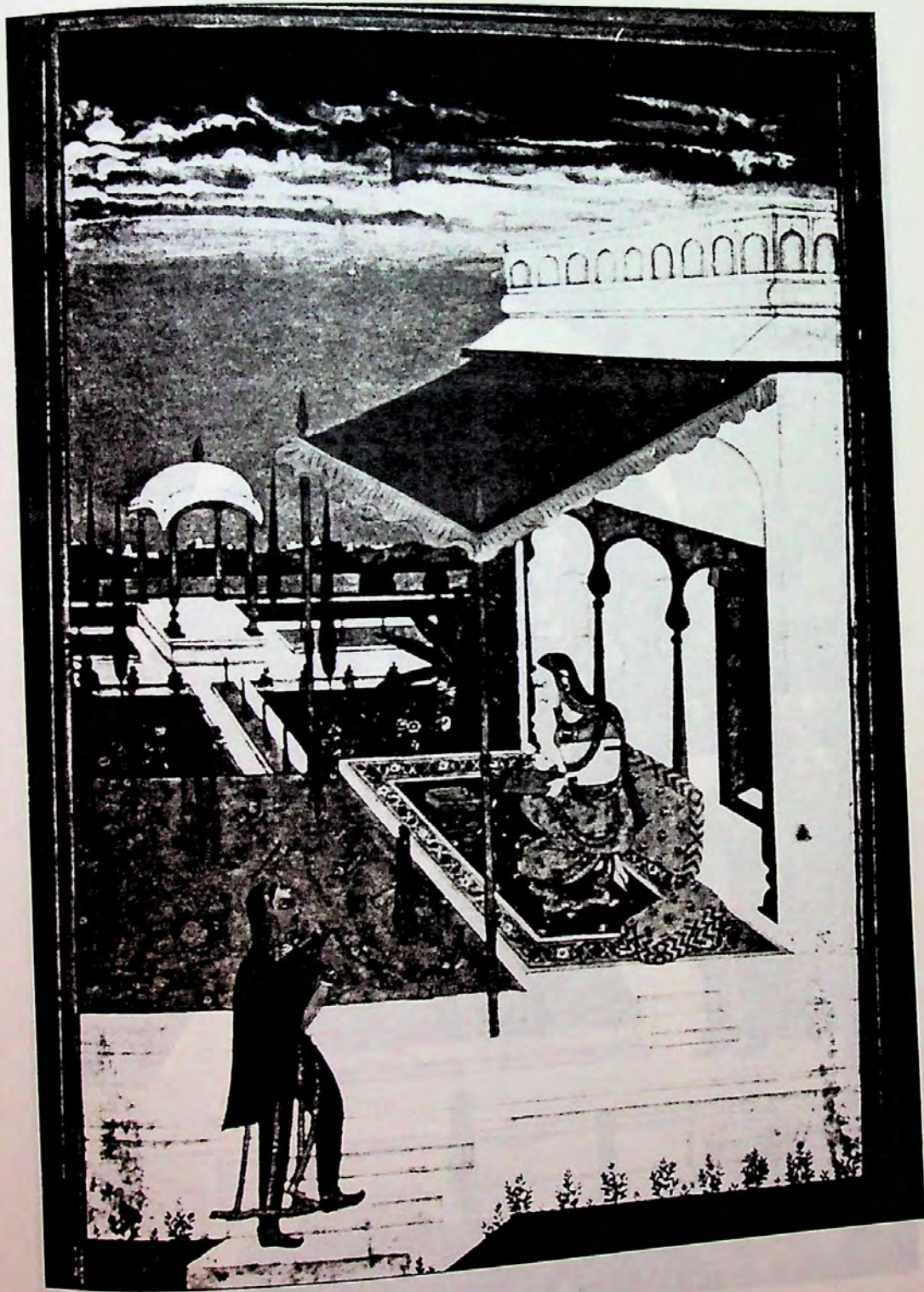




Figure 41

*Sriraga*

The same work, no. 23.





Figure 42

*Gauri ragini*

The same work, no. 25.

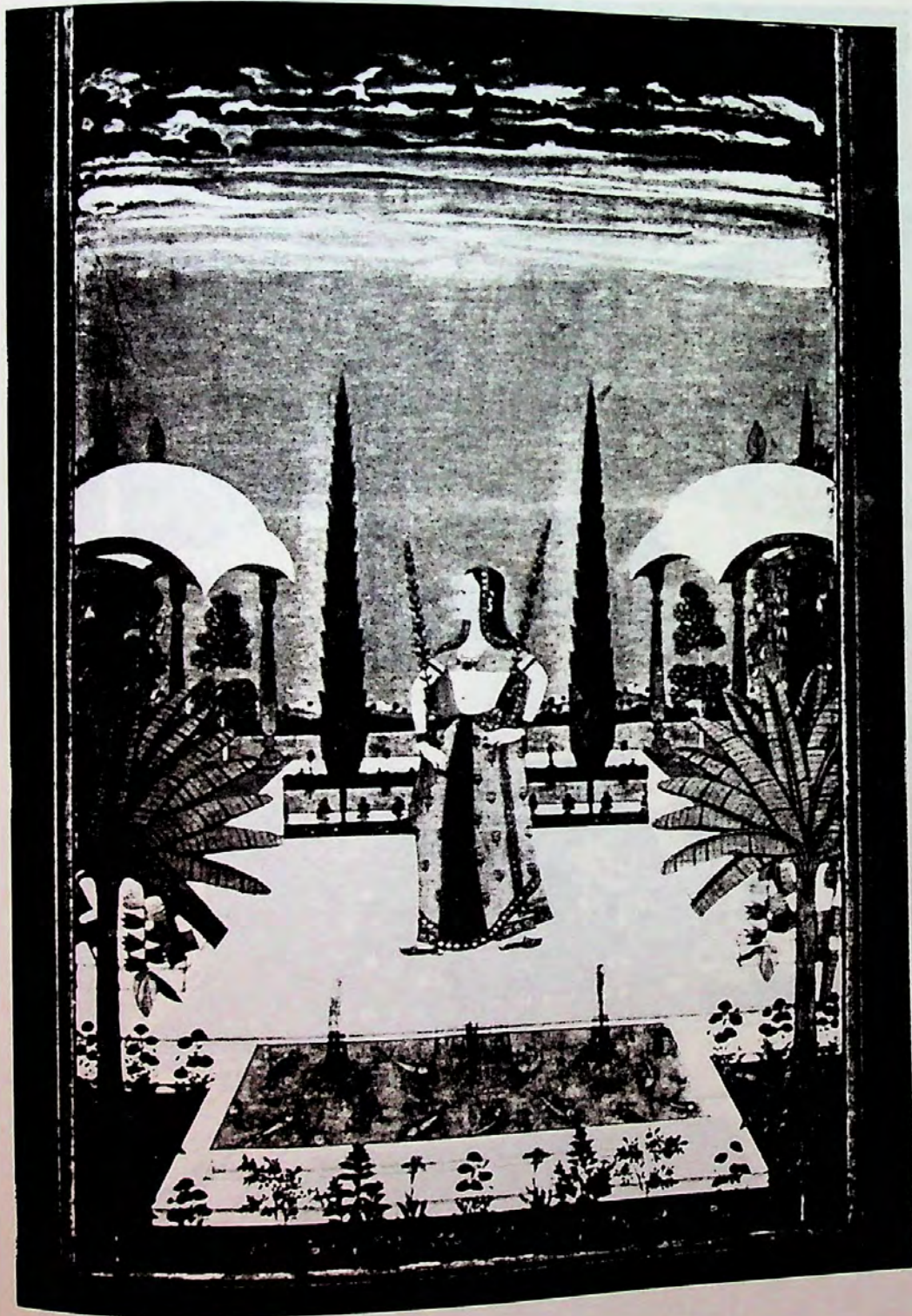




Figure 43

*Syam Kalyam ragini*

The same work, no. 26.

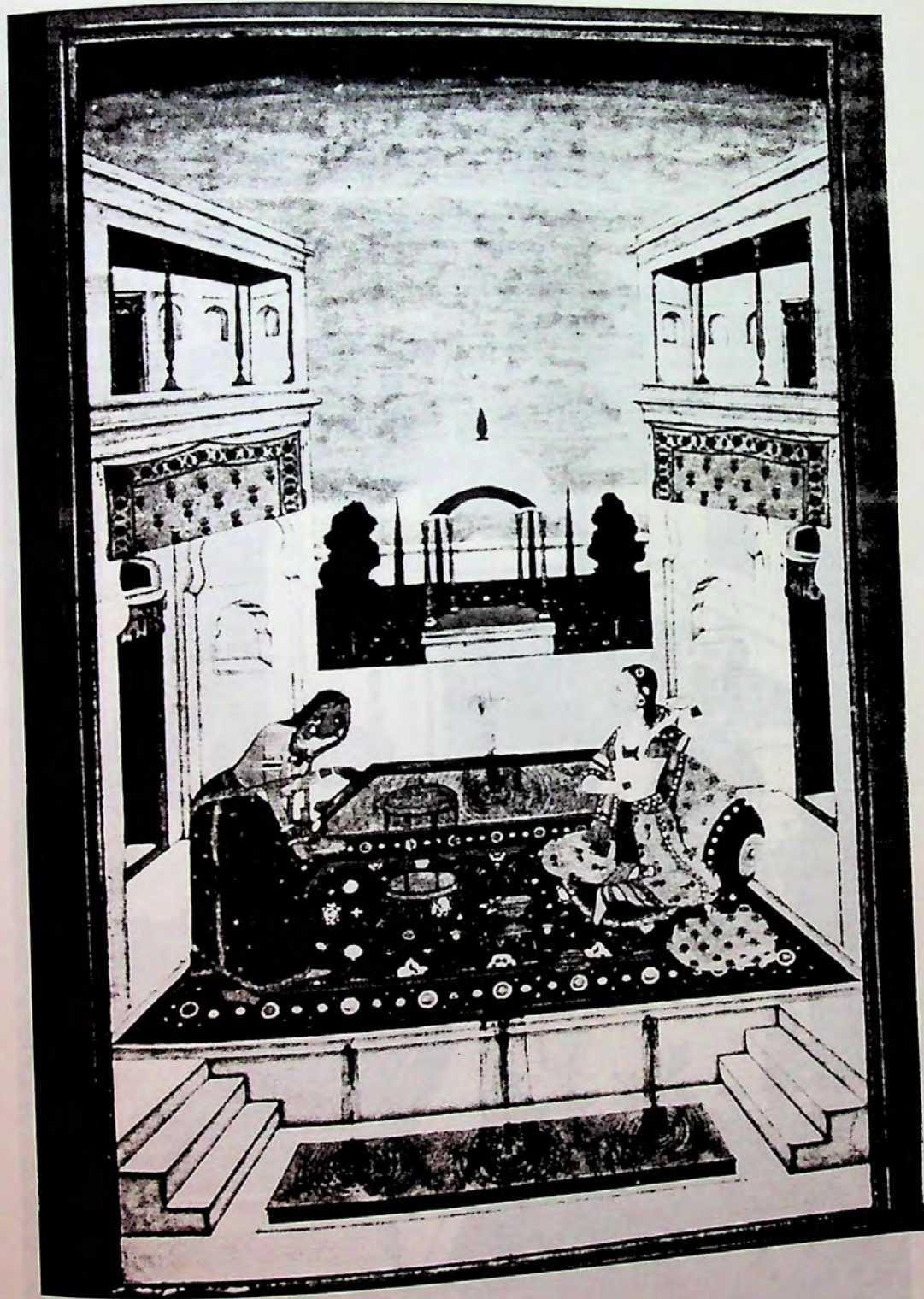




Figure 44

*Sugrai ragini*

The same work, no. 27.





Figure 45

*Dipak raga*

The same work, no. 29.

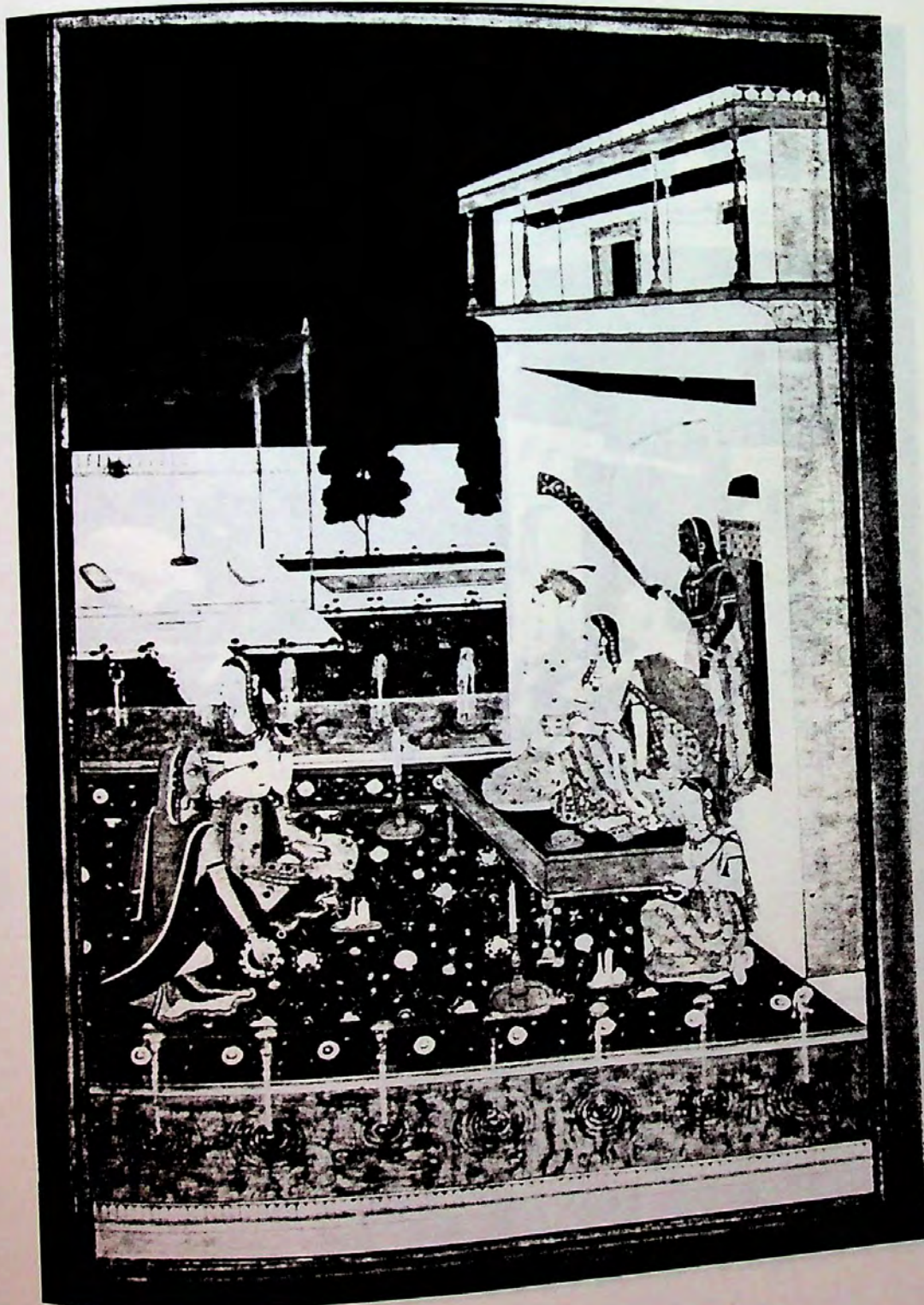




Figure 46

*Madhu-madhavi ragini*  
The same work, no. 32.





Figure 47

*Khambavati Ragini*

The same work, no. 34.





Figure 48

*Prince on a terrace*

Mughal, c. 1770  
India Office Library, Johnson Album 1, no. 29.





