

THE SCENTED GARDEN IN DECCANI MUSLIM LITERATURE

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## PRONUNCIATION & TRANSLITERATION

Pronunciation has been indicated by the following transliteration symbols :

### Vowels

	ا	ط	ش	ں
a		ٲ	sh	n
اِ	اِ	ث	ص	و
i		س	s	v
اُ	اُ	ج	ض	ه
ū		ج	z	h
آ	آ	چ	ط	ع
ā		ch	t	،
اِے	اِے	ح	ظ	ی
e		h	z	i
اِے	اِے	خ	ع	
ai		kh	،	
اِی	اِی	د	غ	(یعنی ہائے)
ī		d	gh	مخلوط التلفظ)
اِو	اِو	ڈ	ف	
o		ḍ	f	
اِو	اِو	ذ	ق	
oo		z	q	
اِو	اِو	ر	ک	
au		r	k	
	اِو	ر	گ	
Consonants :		ṛ	g	
ب	ب	ر	ل	
b		r	l	
پ	پ	ز	م	
p		z	m	
ت	ت	ژ	ن	
t		zh	n	
	ت	س		
		s		

### Accent :

The minute sign (') is placed immediately after every stressed syllable to denote accent.

**NOTE :** The various letters have been given their Urdu (as distinct from Arabic) sound values.

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## ABSTRACT OF THESIS (Regulation 3.5.10)

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This thesis study is concerned with the perception of the medieval Muslim garden within its wider view as an image of Paradise. The study examines the built evidence of gardens in the 17th century setting of Muslim Deccan, sharpening a perception of the Deccani Muslim garden through study of contemporary poetry supplemented with more general survey of traditional medicine and horticulture. By identifying concepts which bridge these various disciplines and through particular attention to a cherished Muslim value - fragrance - the study examines the Deccani garden enclosure for patterns of scent, evaluating the degree to which its (Persian-based) scent composition is tempered with Indian fragrances.

The thesis is made up of two sections. On the one hand, the physical and cultural setting of Deccani Muslim gardens is explored through study of Hyderābād, a 17th century built capital of the Qutb Shahi sultans modelled after the contemporary Iranian capital, Isfahān. Secondly, an image of the garden is conceived by examining garden ornament in terms of the Muslim gardener and by considering the significance of fragrance - as an aspect of garden ornament - in terms of the Muslim physician. On the one hand, therefore, gardening texts are examined; on the other hand, medico-botanical literature, particularly texts concerned with the cardiac (psychosomatic) virtues of plant and animal-based fragrances. The image of the garden is fully fashioned through reference to accounts of gardens in the Persian-inspired narrative romance (romantic *masnawī*), where the garden as the usual setting of love is described in utmost detail.

It is seen that garden favourites (in poetic record) are scented plants usually, which in traditional medicinal parlance are termed *mufarreh* (exhilarating) and *mu'tadil* (temperate), and to which the heart is thought to be 'naturally' receptive. As such a Deccani garden is potentially understood at one level, describable in terms of *mizāj* (temperament), a word in wide cultural usage in the Muslim world. Or, to elaborate, Deccani garden planting mix could be seen as a *majmu'a* (bouquet) made up of exhilarating, if essentially temperate, constituents each in complete accord with the spirit - a *majmū'ā*, moreover, whose *mizāj* is Indian even if its form is Persian.

The thesis concludes also that just as the garden of the human heart is conditioned by fragrance to perceive Grace (in terms of a Spiritual Medicine), its visible counterpart, too, was once furnished and filled with pleasure-giving plants - an appropriate setting for Love and its resultant order and harmony.

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## CHAPTER 1

### THE DECCAN PLATEAU

The Deccan, in its widest sense, has been understood as the elevated land mass lying 'south of the Vindhya.'<sup>1</sup>(Fig 1) This definition has its basis in the strong east-west lineaments of the peninsular tableland and of its oldest rocks : the faulted-down troughs of the two east-to-west flowing rivers (Narbada and Tapti) and the unbroken scarps of plateaus flanking these river valleys. The Vindhya and Kaimur scarp forms the northern flank of the Narbada; while, between the Narbada and Tapti, forming a second wall, are the scarped blocks of the Satpura and Mahadeo Hills - an ancient tectonic range and once a tangle of dense jungle.<sup>2</sup> (Fig.2)

An entity distinct from the *Dravida desa* (Dravidian land) of Tamils, *Dakshinapātha* of the two Indian epics is 'the land of the south' between the Vindhyan ramparts and the Nilgiri bastion - and between the two seas. But the nucleus of this southern land - 'the true Deccan' - is the area contained between the Western Ghat escarpment and the Eastern Hills; while in the South it is limited by the Krishna river and by its tributary, the Tungabhadra.<sup>3</sup> An ancient and persistent boundary, the Krishna-Tungabhadra *doāb* <sup>4</sup>was guarded by a proliferation of ancient forts and is dyed with the blood of claimants to the 'black country'<sup>5</sup> of the Raichur *Doāb*<sup>6</sup> and Dharwar and its famed mines of precious stones. The *Doāb* area was the Hindu kingdom Vijayanagar's basis of economic power from the 14th to the 16th centuries and later that of the Muslim sultanate of Bijapur.

Although the Deccan lies wholly within the tropics, an average surface elevation 2000 feet above sea level keeps inland temperatures from exceeding an average maximum of 95 degree F. The south west monsoon brings rain from June

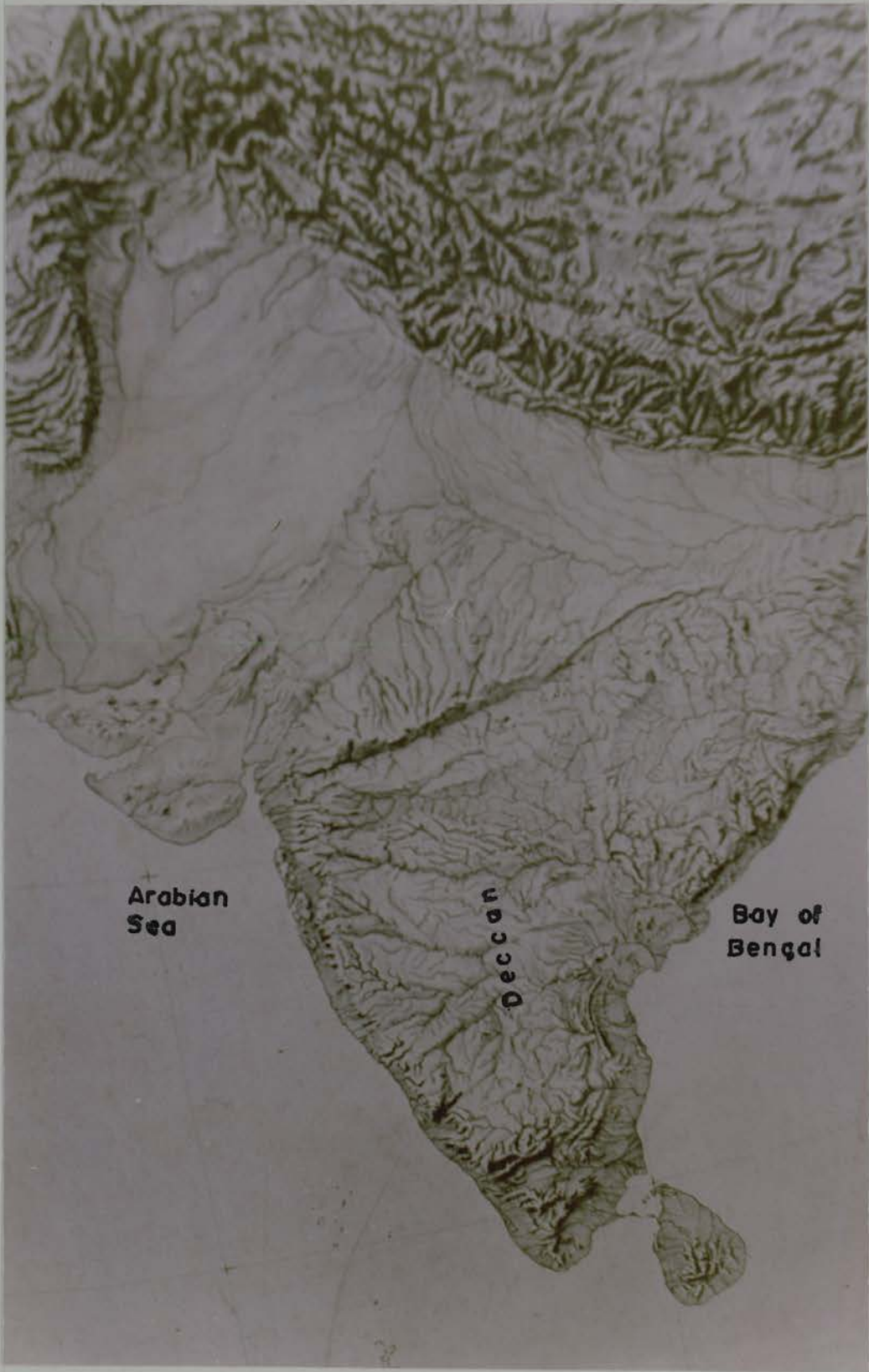
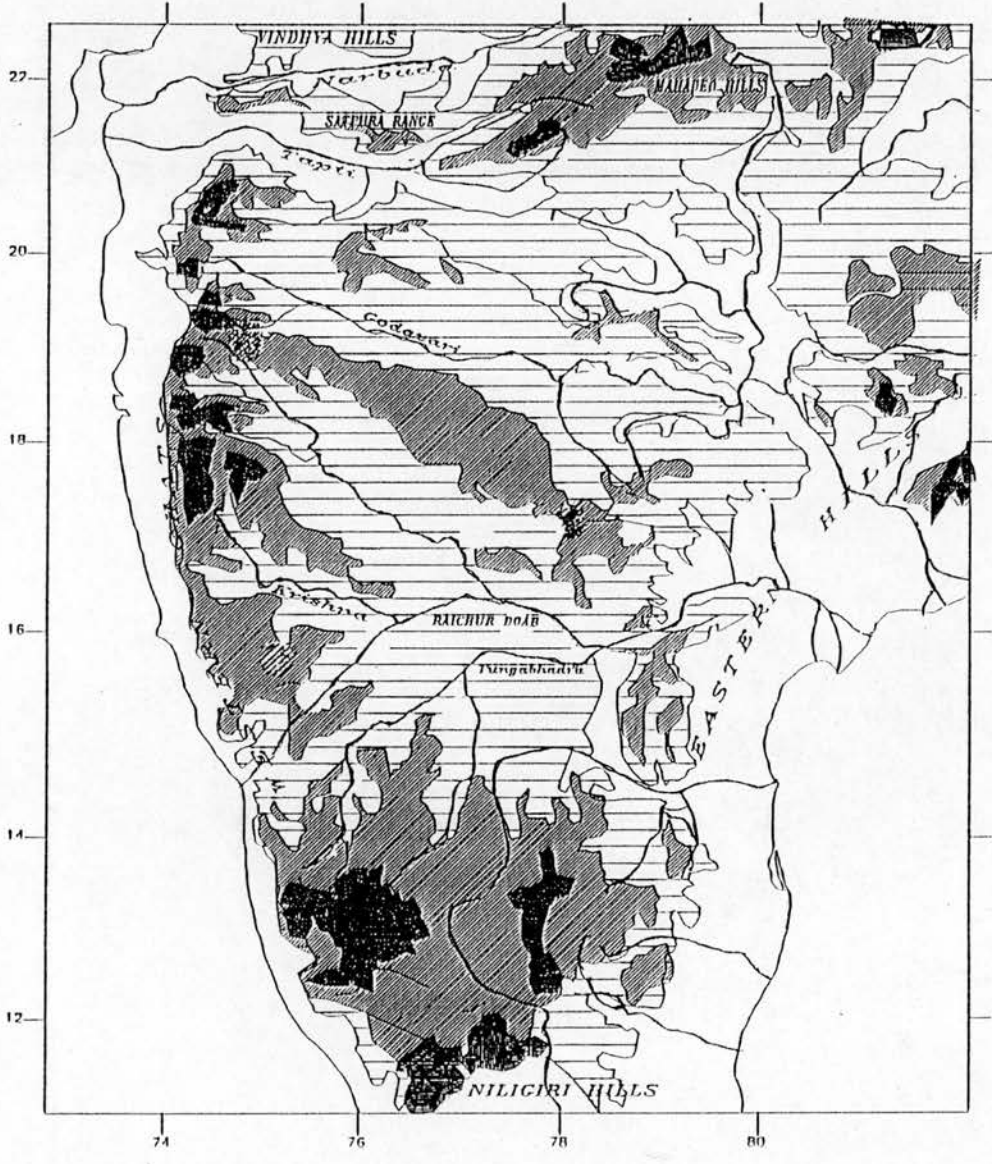


Fig 1 The Deccan: Geographical context  
Source: A Historical Atlas of South Asia



Land Over 3000 ft
  2000 - 3000 ft
  1000 - 2000 ft
  Under 1000 ft

**Fig 2 The Deccan Plateau: Relief Features**  
 Source: O. H. K Spate

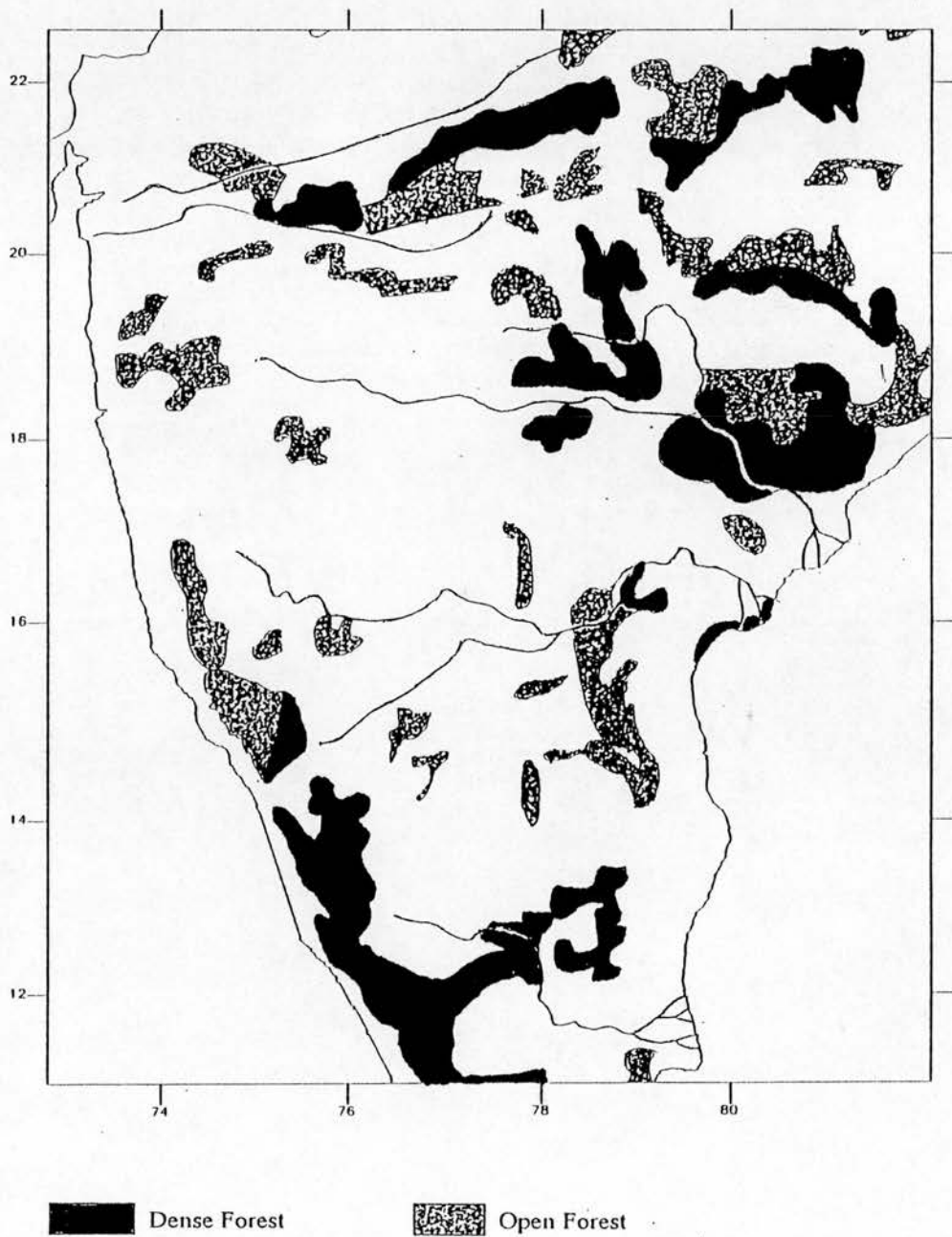
to October and occasionally a spell of wet weather follows in the period of 'the retreating monsoon' - (October - December) particularly in the coastal east. The remaining months tend to be rainless and dry. Rainfall ranges from 20" (in the rainshadow of the *Ghāts* as in Bijapur) to 40" (in north east Deccan as in Warangal); but the length of the dry season - varying from six to eight months - makes for semi arid conditions, on the whole. This necessitates water storage which has<sup>always</sup> been important in the agricultural economy of Deccani regions. While areas along perennial river valleys and in river deltas can be irrigated directly by channels dug from rivers, cultivation, for the most part, depends on storage tanks and large reservoirs, particularly in Eastern Deccan (Telingānā) where the slightly undulating topography of the weathered land mass encourages the damming of rivers.<sup>7</sup> Moreover, by throwing an earthen bank or *bund* across a valley or hollow ground, surface runoff can be conserved beyond the period of rains particularly where a bed of granite and crystalline rock provides an impermeable stratum. A string of *bunded* tanks and *sāgars* (lit: seas) enables wet crops to be raised on a large scale on the red sandy *chalka* soils which constitute 70% of the Deccan's area.<sup>8</sup> Such large sheets of water may be seen at Sholapur and Ahmednagar on the Deccan trap and at Warangal and Hyderabad on the Archæan gneisses.<sup>9</sup>

The Godavari and the Krishna, flowing within ancient structural troughs, are the two main lines of drainage in the Deccan. Between their sources in the crest of *Ghāts* (where the rivers are roaring torrents) and their deltaic region to the south-east are extensive stretches of 'broad and shallow valleys' in which the rivers are 'mere trickles of water' for most months of the year.<sup>10</sup> Beyond the deep narrow river gorges of the Eastern Hills is their combined delta where the two rivers create the largest freshwater swamp of the Deccan (Lake Colair) punctuated with low alluvial islands - the *lankās*. This is a fertile region which an extensive

irrigation network now has turned into vast rice field - the 'granary of *Āndhrā desa*, although rice, sugarcane, tobacco, sesame, indigo and cottons were cultivated extensively, in the times of Golconda's Qutb Shah's too, forming a fertile hinterland to their 17th century port of Masulipatam (the rival of Surat, the chief port of Mughal Empire).<sup>11</sup> In the words of a Dominican friar Masulipatam resembled Babel in the variety of tongues and costumes, for merchants from all the world had made it their operating base for trading along the coast and in the hinterland.<sup>12</sup>

The Godavari trough and adjacent land belts carry patches of the Deccan monsoon forests : three tiered, drought-deciduous and once a closed canopy of tall trees dominated by teak, *māhwā* (the 'araq' tree), *lobān* (the Indian frankincense tree) and *harar* (the myrobolan tree).<sup>13</sup> But of these Nirmal, Ādilabad, Karīmnaḡar and Warangal jungles, much now is open forest and scrub woodland, pitifully degraded through heavy browsing in places to thorny thickets. The same could be said of the forests in the Krishna gorges where the river cuts through the Nallamalais and the riverain forests on the higher Mysore plateau where sandalwood is gregarious.<sup>14</sup>(Fig.3) Between the remnants of its teak and sandalwood Paradise, the 'teeming life of *Ghāt* rainforest', and the scrub thickets of the east coastal plains much of the Deccan is a created Paradise of tank-fed basins - the waving green of rice and millet, of castor, cotton and groundnut. And much, too, on the skeletal soils is stony wasteland.

Across the crests of the western scarp are the rugged coastlands of the Konkans dotted with ancient ports, market towns and factories which stretch down to the - almost equatorial - Malabar or Kerala. More isolated from the plateau regions than the Konkans, Malabar has been a world in its own with its mudbanks, lagoons and coral reefs; its rice fields and the spice gardens of a jungle



**Fig 3 The Deccan Plateau: Forests**  
 Source: O. H. K. Spate

agriculture; its Jain *rajas* and Nestorian churches and the settlements of Arab middlemen and early Portuguese towns. Until Portuguese control of Goa in the early 16th century restricted the flow of Bahmani trade, jewels, silk and aromatics travelled from Goa across the Arabian sea; while the returning wave brought African slaves and Arab horses, *sufis*, adventurers and dancing girls - into the Bahmani cauldron. In the north, the coastal lowlands of the Konkans are accessible from the interior plateau along wild canyons that dissect the wall-like faces of the *Ghāts* and drain its western slopes into the Arabian sea. Guarded by forts crowning the flat topped lava crests, these ancient trading and military routes - once 'the key to the Deccan' - give onto Buddhist *chaityā* halls and *vihāras* hewn out from scarped rock faces. Near the Khandala pass - the Bombay-Poona road - are the caves of Karle, Bhaja, Bedsa, Kondane dating from the early periods of Āndhran rule, a century or two before the Christian era, where, amidst a profusion of forest, foaming waterfalls and walls of rock, Buddhist monks sought *Nirvana* - and the patronage of merchants.<sup>15</sup>

With its famed gold and diamond mines, its alluvial tracts and its cotton soil - its mineral and agricultural wealth augmented by a thriving commerce with the Mediterranean and with China, the Deccan was the seat of wealthy regional kingdoms and equally the seat of single royal sovereigns secure for a time in their girdle of rock between the seas.

Homogenising influences in the Deccan had been at work since the earliest settlements of Buddhists and Jains. The Nanda and Mauryan kings of the Gangetic *Doāb* contributed to the spread of the Aryan *dharma* in the Deccan. But more significant perhaps in this context was the patronage extended to Buddhist and Jain missionaries by the Andhra *satavahana* kings - 'more native than the native born'<sup>16</sup>. Initiating in 180 BC a line of '*Brāhman* kings' the sovereigns of

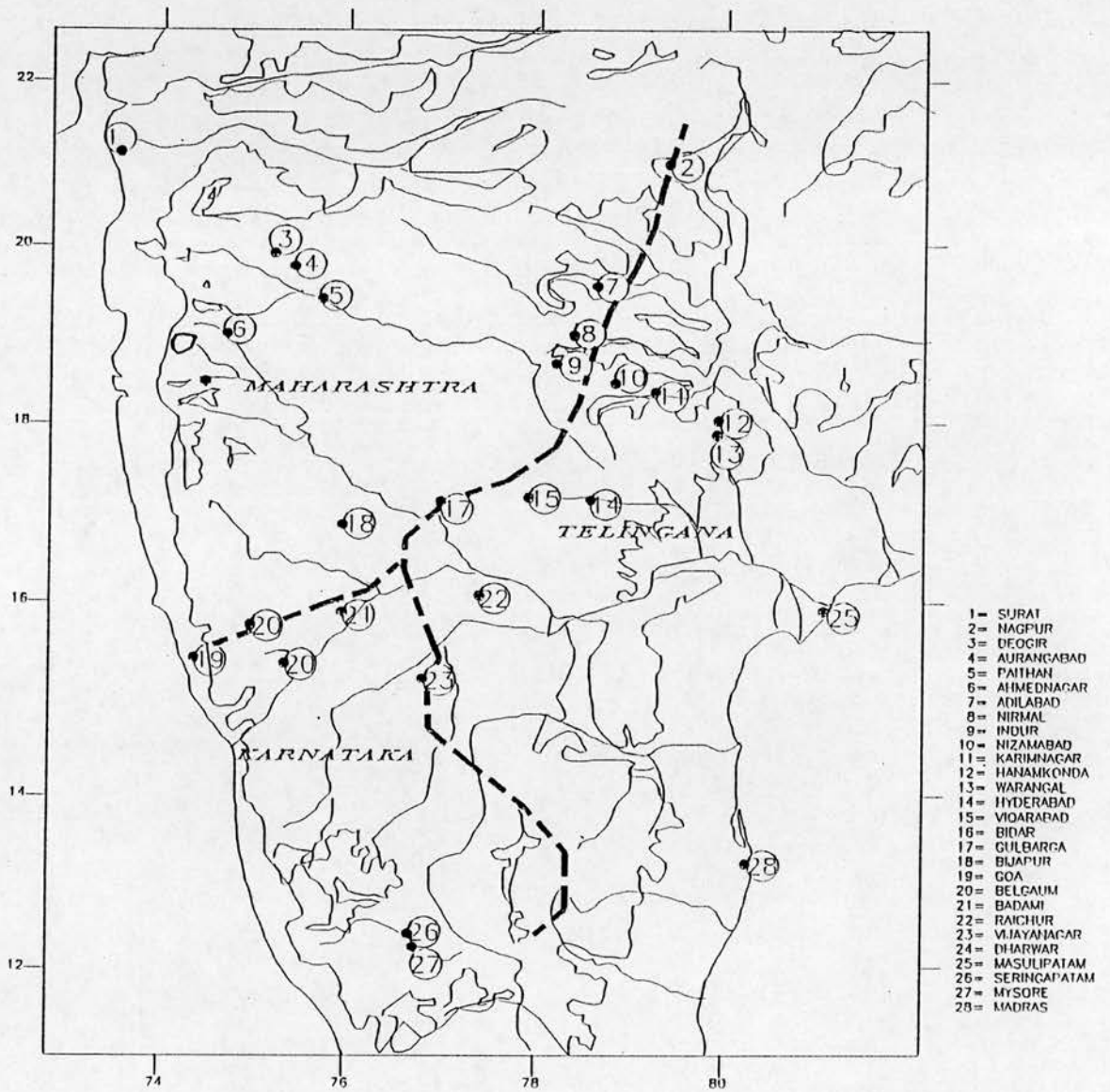
*Āndhra desa* (Andhra country of the east coast) created a far flung empire, spread westward to a new seat of government at Paithan (on upper Godavari) - famous for its muslins and gold brocades. During their rule ('from sea to sea'), 'the yellow robes (of Buddhist monks) shone over the length and breadth of the land' - from the frescoes of Ajanta to the golden caskets of Amaravati - and Nagarjunakonda, the seat of the Mahayana Buddhist philosopher of 2nd century AD. who infused new life into Indian Buddhism before its syncretic accretion. The mounds ('*dibbas*') of the east coast littoral upto Kalinga (Orissa) suggest that, like Northern Deccan, *Andhra desa* was a stronghold of Buddhism. Jaina *bastīs* and *vihārās* on the other hand predominated in the lands encircling the 'true Deccan' - particularly in the coastlands of southeast and southwest; in Malwa; and in the Cheti kingdom of Kalinga near the original home of Jains.<sup>17</sup>

With the rise of Badami Chalukiyas at the end of the 5th century AD at Badami, (65 miles south of Bijapur in SW Deccan) Buddhism in particular began to lose ground. Across the northern scarplands, in Malwa, Brahmanism, eclipsed over the centuries, had reasserted itself in the rule of the Guptas and the eventual expulsion of the Buddhist supporting *sāka* overlords of Kathiawar. Northern Deccan too had remained under the sustained control of Hindu rulers - the Vakataka *mahārājās* - since Andhran power collapsed in the third century AD. The Chalukyans displaced the northern Vakataka empire, adding its territories to their southern possessions and their eastern lands. By the 7th century (617 AD) they had established a semi-independent kingdom at Vengi in Eastern Deccan. By then, Buddhism had had its day and was driven out to the Eastern seas.<sup>18</sup>

The Chalukyan Empire was a loose federation of feudal states. Split between a Western - Kannada-speaking - Empire and an Eastern - Telegu-speaking - division, the two empires emphasised the broad linguistic division of

the Deccan.<sup>19</sup> By the 12th century AD when the second period of Western Chalukyan rule based at Kaliani was brought to an end by feudatory rulers, regional boundaries had become more distinct. When the Maratha-speaking Yadavas, Kannada speaking Hoysalas and Telugu speaking Kakatiyas came into power, they did so over regions marked out linguistically and geologically - to be reinforced by political power and by cultural tradition. The Yadavas ruled from the massive citadel of Deogir (later Daulatabad) on the lava mesas of Maharashtra. To their east lay the Kakatiyan capitals, Hanamkonda and Warangal, crowning the hummocky relict hills of weathered Telingana. The Hoysalas, the new ruling house in Karnatak, succeeding to the Kadambas, occupied the high Mysore plateau contesting with the Yadavas for the 'blood-stained' Raichur *Doab* and Dharwar (Fig.4). During the succession of Muslim military thrusts (beginning with the Khilji sultan Alau<sup>d</sup>in's expedition in 1294 AD and followed more actively by those of his general, Malik Kafur's), the Hindu kingdoms lost their *rājdhānis* (capital cities) one by one. But regional identities were so well marked by then in the Deccan that the Bahmani dynasty (1341-1526) that arose from these conquests found the most fertile soil for a political settlement in the transitional ('shatter') zones between the nuclei of non-Muslim cultures (Fig 5). The towns of Gulbarga and Bidar (and later Bijapur) were located in a 'cultural fault zone'<sup>20</sup> and the language which was promoted here was neither Kannada nor Telegu nor Marathi but the hybrid Urdu. Notwithstanding however, the three main divisions (Ahmednagar, Bijapur and Golconda - Fig 6) arising from the decay of Bahmani power coincided with the Kannada, Telugu and Marathi dominated regions.

With the foundation of the 'war-state' of Vijayanagar ruled by Telugu warriors from 'the deposed house of Warangal', the old boundary of the Tungabhadra Krishna acquired a fresh significance. For two centuries, the Deccan was divided along this boundary between Muslims and Hindus, the Muslims



--- Regional Boundaries

Fig 4 The Deccan Plateau: Towns; sites; regions  
 Source: Spate; Shastri; others



Fig 5  
Muslim and Hindu States  
(1390 - 1485)

Source: A Historical Atlas of South Asia



Fig 6  
Bahmani Successor States  
(1485 - 1605)

Source: A Historical Atlas of South Asia

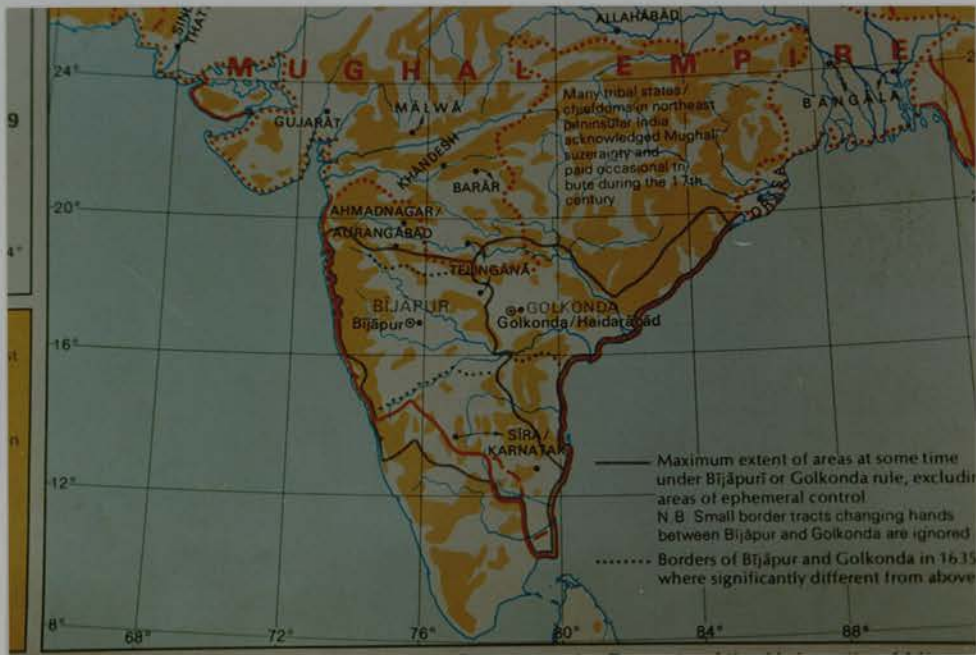
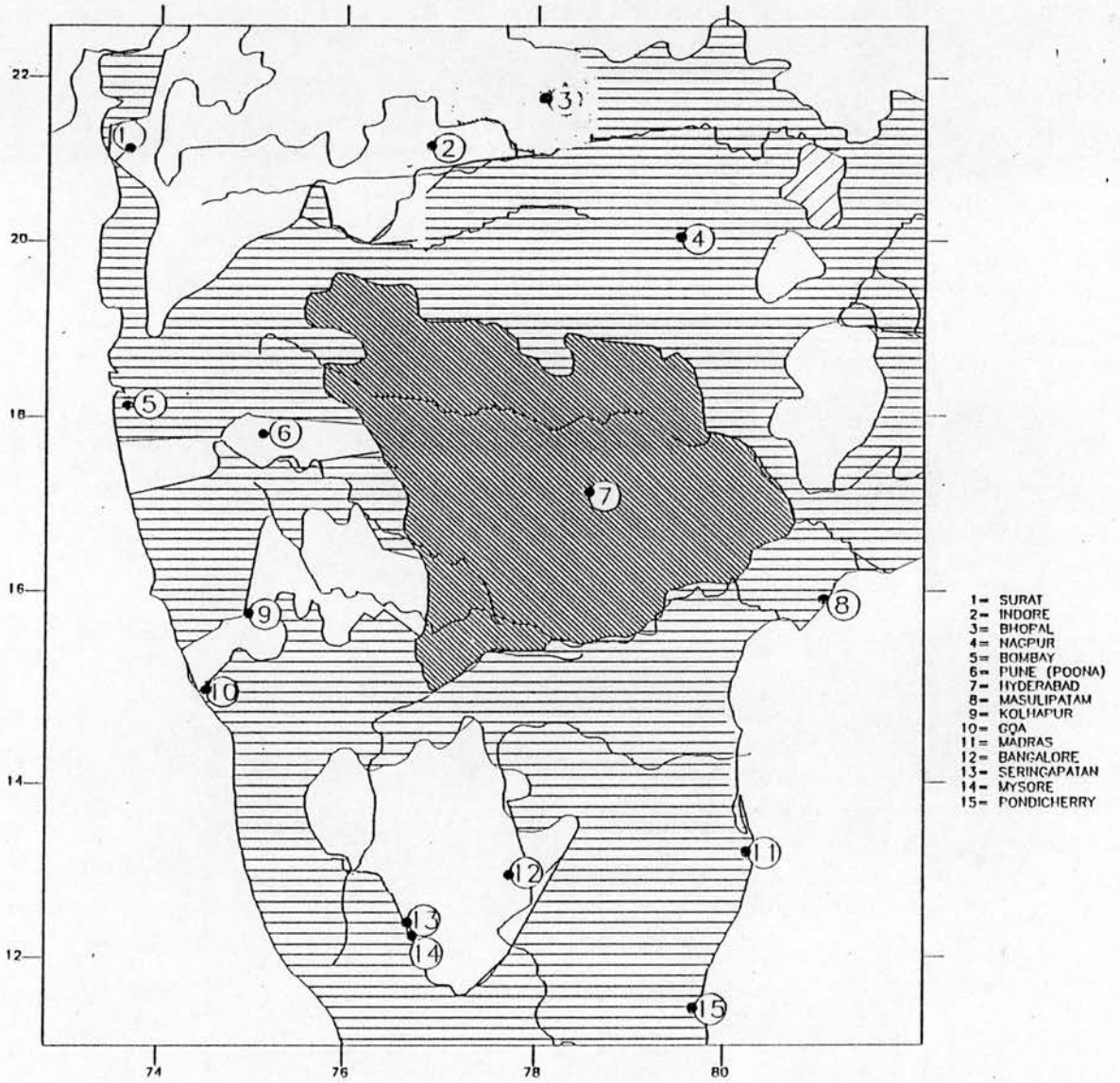



Fig 7 Bijapur and Golconda (17th century)

Source: A Historical Atlas of South Asia

restricted to the north while Vijayanagar expanded into the Pandyan dominions beyond the gneissic horsts. Ultimately the areas controlled by Vijayanagar passed onto the Sultanates of Bijapur and Golconda (Fig 7) and later to the Mughals - to be torn up between the Asif Jahi viceroys of Deccan and the Marathas and rent once more in the Anglo-French-Maratha scramble for supremacy.<sup>21</sup> Amidst these war cries, Haider 'Ali's and Tipu's princely state of Mysore in the shadow of the Nilgiri knot was doomed to perish. The state of Hyderabad under its nizams ('our Faithful Ally') survived for another century and a half. But severed from Muslim centres in North western India and in Bengal and cut off from the sea, the Muslim state's importance was administrative and cultural, mainly (Fig.8). The capital of a multilingual Muslim state until 1948, the city of Hyderabad, by 1956, had been turned into the *rājadhāni* of an enlarged Andhra Pradesh: a homogeneous Telugu-speaking region.<sup>22</sup> (Fig.9) Henceforth, Hyderabad would seek expression in the cultural history of Andhra Pradesh and no longer in its Muslim past.



 British Dominated

**Fig 8** Hyderabad State Boundaries  
Source: Tillotson

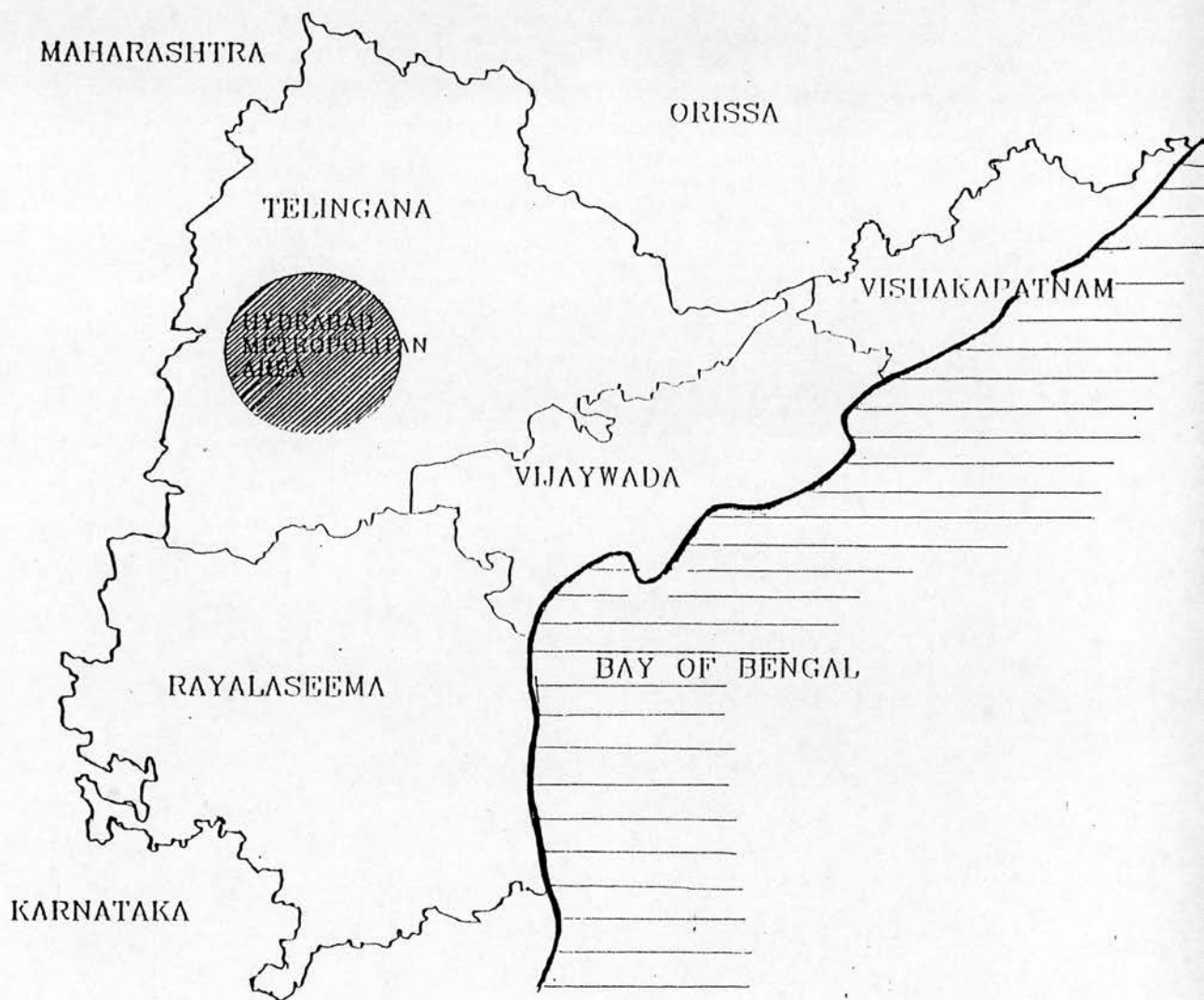


Fig 9 Andhra Pradesh Boundaries  
Source: Alam

## NOTES

1. Raychaudhari, H. "The geography of the Deccan" in G. Yazdani ed The Early History of the Deccan, 2 Vols, Vol 1, London: OUP, 1960; p 3
2. Spate, O H K and Learmonth, A T A. India and Pakistan : A General and Regional Geography, London: Methuen and Co, 1954, 9th edn 1972; p 23.  
See also Sāstri, N.K.A., A History of South India from Prehistoric Times to the fall of Vijayānagar, London: OUP, 1953; 1966; p 34
3. *ibid.*, p 25. See also Raychaudhari in The Early History op cit. p 4
4. that is, the land between two rivers, the two rivers here being the Krishna and (its tributary) the Tungabhadrā.
5. According to Ray <sup>chaudhari,</sup> op cit., it is the fertile black mud from the disintegration of the Deccan Trap which gives the 'black country' its name Krishna - <sup>literally,</sup> 'of black hue'; p 10.
6. Raichur *Doāb* is the name for the Krishna-Tungabhadra *Doab*.
7. Planning Atlas of Andhra Pradesh. ed S M Ālam, Govt of India and Andhra Pradesh 1974; p(i) - Section on Relief  
p(ii) - Section on Geology
8. *ibid.*, Ālam observes about this dominant soil of the Deccan that "it consists of a red, granular material which has been subject to considerable leaching and is therefore poor in plant nutrients.....although it gives good yield if properly manured".
9. Venkataramanayya, <sup>N. "The Kakatiyas of Warangal" in The Early History Vol 2, pp 677-80</sup> Warangal's water storage tanks are said to be the works of the 11th century Kakatiyan rajas of E. Deccan. Hyderabad's Husain *sagar* dates from the 16th century, the work of a Golconda sultan; while the two large sheets of water in western Hyderabad, created by damming up the Musa stream, were built during the days of Hyderabad's last nizam.
10. Spate, O.H.K op cit. pp 25, 26, 43
11. Ālam, S M Masulipatam - a Metropolitan Port in the 17th century. Islamic Culture Vol. XXXI July 1959. pp. 169 - 182.
12. *ibid.* Ālam writes that Masulipatam was linked directly with Golconda (capital of Qutb Shahi sultans) - "an insatiable market for the variety of goods imported (in the kingdom)". The port, Alam adds, was also an outlet for the vast variety of raw and manufactured products of the kingdom.
13. Pūri, G S; Meher-Homji, V M; Gupta, R K; Puri, S Indian Forest Ecology Phytogeography and Forest Conservation 2 Vols Vol. 1 2nd Edn Delhi 1983, pp 414-438. See also Partridge, E A. Forest Flora of the Nizam's Dominions Hyderabad 1911.
14. Spate, O H K op cit. <sup>pp 80, 87,</sup> writes that Indian teak production is centered in Mysore, sandalwood too being a valuable resource in Mysore. Shastri, op cit refers to forests of odoriferous sandalwood, in Mysore, p 39. See also Hyderabad

Forest Magazine : a quarterly journal for forestry, agriculture, industries  
Vol 1 1941-42 for references to forests in Telingana and Maharashtra; pp 20-23

15. Fergusson, J. A History of Indian Architecture, Rev. ed. J. Burgess and R. P. Spiers  
<sup>& Eastern</sup>  
London: John Murray, 1910; pp 133-148
16. <sup>p. 88</sup> ibid., The term *satavahana* signifies 'lord of the three oceans' and appears on the inscriptions of Andhran kings.
17. ibid., pp 21-22, 80-82, 119. See also Sastri op cit., p 94
18. Shastri, N op cit., pp 88, 94
19. ibid., pp 202-12. See also Sastri, "Chalukyas of Badami" in The Early History Vol 1 op cit., p 203; and Sastri, "Eastern Chalukyas" in The Early History Vol 2, p 471
20. Eaton, A M Sufis of Bijapur 1350-1700 Princeton 1978, pp 4-6, 12-13
21. Rao, P S M. 18th century Deccan Bombay 1963. Madurai in the south was in the control of Vijayanagar *nayyaks* until 1756 after which Marathas seized control not only of Madurai but all of Chola dominions.
22. Alam, S M Metropolitan Hyderabad and its region. Hyderabad 1972.

## CHAPTER 2

### HYDERABAD: CAPITAL OF THE QUTB SHAHIS

In 1991, Hyderabadis celebrated the 400th anniversary of the Qutb Shahi foundation of the city. It was a small celebration : a few *mushā'irās* (poetry recitals), an odd lecture or two, some stray leaflets announcing these events, a note in a local daily. A large part of the population played no part. The 'dynamic' community of coastal *Āndhrans* and of wealthy *Mārwarīs* had no part to play, in any case, in a celebration of Hyderabad's Muslim past.<sup>1</sup> As for the semi-feudal class which had administered the Nizam's State, the majority had fled to Pakistan after the State was annexed to the Indian Union in 1948; the remaining families having dispersed too for the most part - some to America to become 'green card holders', other for jobs in the Gulf. The bulk of Muslim Hyderabad (in the 'static' walled city or in 'derelict' Golconda and *Kārwan*<sup>2</sup>) (Fig.10) was too weary with the burden of living to reflect upon the passage of four hundred years of its once glorious capital. Too weary from day long sales of bananas carted about in *bandīs* (hand drawn- carts) and the day long carriage of shoppers in bicycle or auto rickshaws. Crouched in *pān-* and *bīdī* (cigarette and betel leaf) shacks or crammed inside buses on choked-up roads, the majority of Muslims had little reason to celebrate. And indeed little to remember. For if the Mughals had battered down its Qutb Shahi heritage, Hyderabad's treasury of Asif Jahi garden palaces had fast dwindled too - ravaged first in 1908 by floods in the Musa stream (a tributary of the Krishna) and demolished from time to time since 1948 by once-powerful *jāgīrdār* (feudal) households, now sadly lacking both money and conscience. Even as a handful of Hyderabad's Muslim literati assembled on its 400th birthday to lament the loss of the *Koh-e Tūr*<sup>3</sup> and the *Koh-e Nūr*,<sup>4</sup> the walled city was experiencing one more cultural loss. Behind its 'half a league' or so of *chārdewarī* (enclosing walls) the 18th century ensemble of garden palaces (called the *Chow Mahallā*)<sup>5</sup> was being

levelled down by its trustees, sixty acres of 'protected' urban site soon to become building plots for sale.

Until the mid-twentieth century, the city of Hyderabad could claim to be the centre of a distinct Deccani culture in India's largest feudal state. Of the Deccan's two surviving 17th century sultanates, Bijapur, the city-state of the Adil Shahis, which lay fatally close to the Maratha strongholds, had fallen first to the Mughals in 1686 and, inevitably later, to the Marathas. And it was Hyderabad which survived as the final link of a cultural chain stretching back to the 14th century when Alā u<sup>d</sup>īn Bahmani Shah wrested the Deccan province from the Delhi Sultanate. Eclipsed by Aurangabad after the Mughal conquest of the Sultanate in 1687, the city of Hyderabad reestablished its significance as a natural focus of the Krishna Godavari river basins - to become in 1761 the new headquarters of the Mughal viceroyalty. The Asif Jahis, who had come as conquerors to Hyderabad in the 17th century,<sup>6</sup> settled down as its *nizāms* (administrators) and *jāgīrdārs* (feudal lords) and the city's Qutb Shahi core revived as the debris of the 17th century was cleared away for new Mughal-inspired garden-palaces. (Much of this 'debris' now lies buried in the museums and libraries founded in the present century by Hyderabad's last Nizām).

Hyderabad's independence was short-lived and at the close of the 18th century the Nizām was obliged to seek the 'protection' of the British Resident, Major William Kirkpatrick. The military cantonment of Secunderabad<sup>7</sup> - Hyderabad's twin city - loomed up soon on a granite ridge four miles to the north and fifty feet higher than the older city. Like other cities of the subcontinent 'brought into the 20th century', Hyderabad's British phase was morphologically distinct. Its civil population clustered around the British Resident's *kothī* (mansion) and other nodal points emerged as road and rail network developed. The great

divide between the old and the new was the Musa stream, to the south of which lay Hyderabad's craft bazars, palaces of nobles and garden retreats - left to decay peacefully as the tide of urban development surged towards the vast watersheet of Husain *sāgar* (Husain sea), to the (once wild and waterless) Banjārā monadnock flanking it to the west and the relic ridges of Secunderabad to the north (Fig.11). As elsewhere in other traditional Indian cities, the schism created between the 'dynamic' and 'traditional' sectors was bound to widen.<sup>8</sup>

In 1956, the boundaries of the old state of Hyderabad were redrawn and the city became the metropolitan focus of the linguistic state of Andhra Pradesh gaining direct access to the sea, the fertile deltaic region and the forested and 'iron-rich' lands to the north east bordering on the state of Orissa. Soon the Telegu-speaking Āndhrans swarmed in from the coast and the city's new-found wealth signalled the beginning of a new era of development. As land values spiralled, boulders were swept away, tanks and hollows filled up and traffic brought to a virtual standstill. As the Sikh writer, Khushwant Singh, wryly observed quoting an Urdu poet :

" To disfigure the Rose garden  
One owl alone would suffice  
What Fate awaits this Rose garden  
With all its branches decked with owls? "<sup>9</sup>

Planning-sense arrived eventually but by then the bridge to the city's 'traditional sector' had become impassable and the 'unique moonscape' of Hyderabad had all but disappeared beneath the developer's dream.

The city of Hyderabad lies four miles east of the fortress town of Golconda, the older seat of the Qutb Shahis. Both the city (in the undulating 'vale of the Mūsi')<sup>10</sup> and the citadel lie on the historic east-west highway of commerce which connected the frontier fortresses and trading centres of the Maharashtrian uplands (of the NW) with the port of Masulipatam "the most famous mart of the

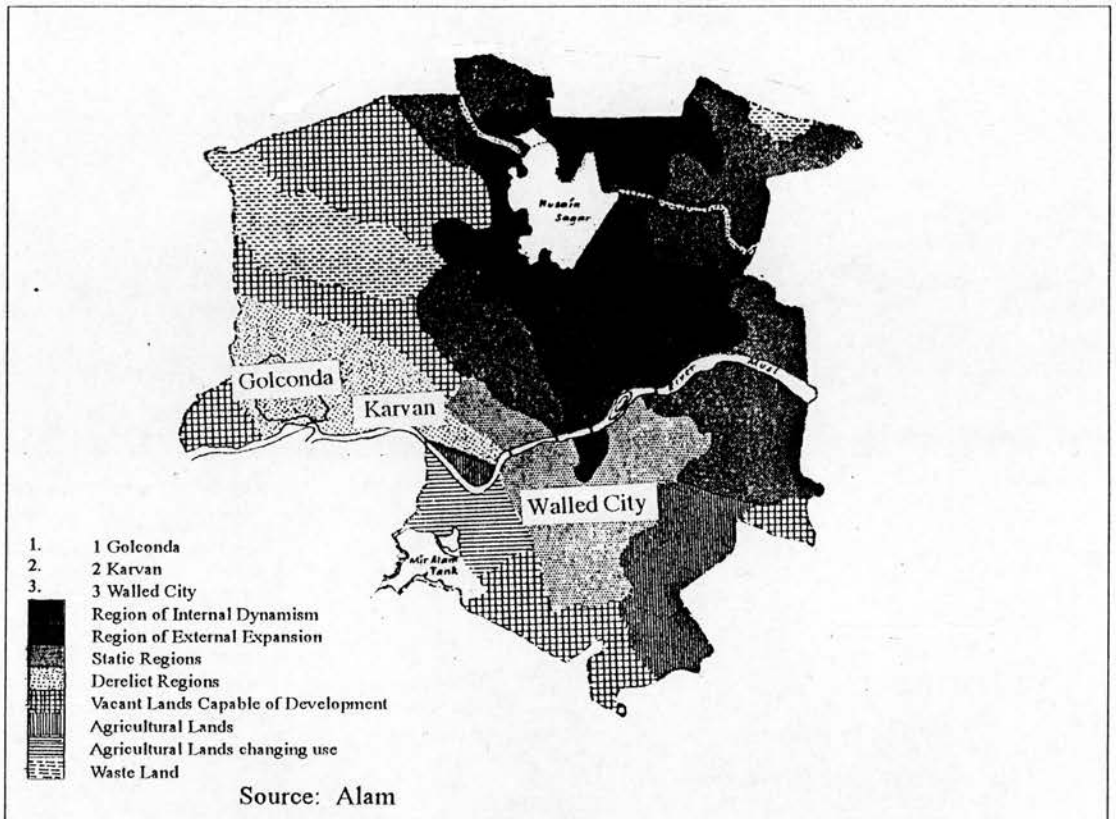


Fig 10 Hyderabad-Secunderabad: Morphological Regions

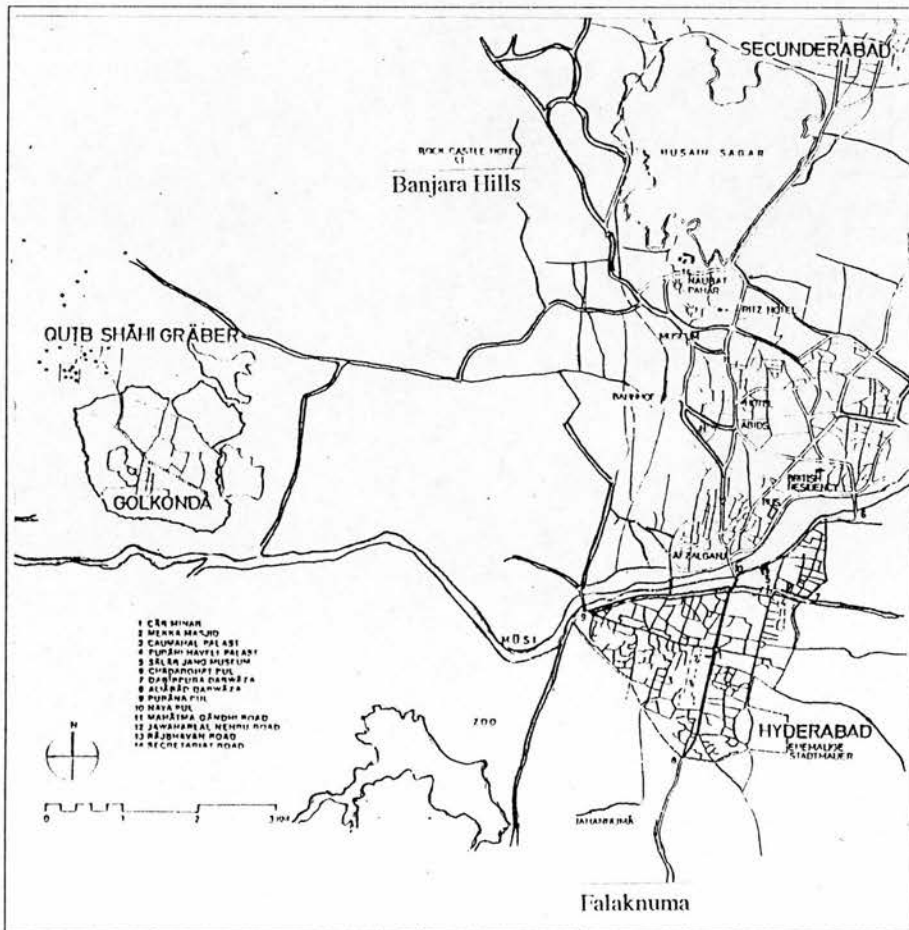
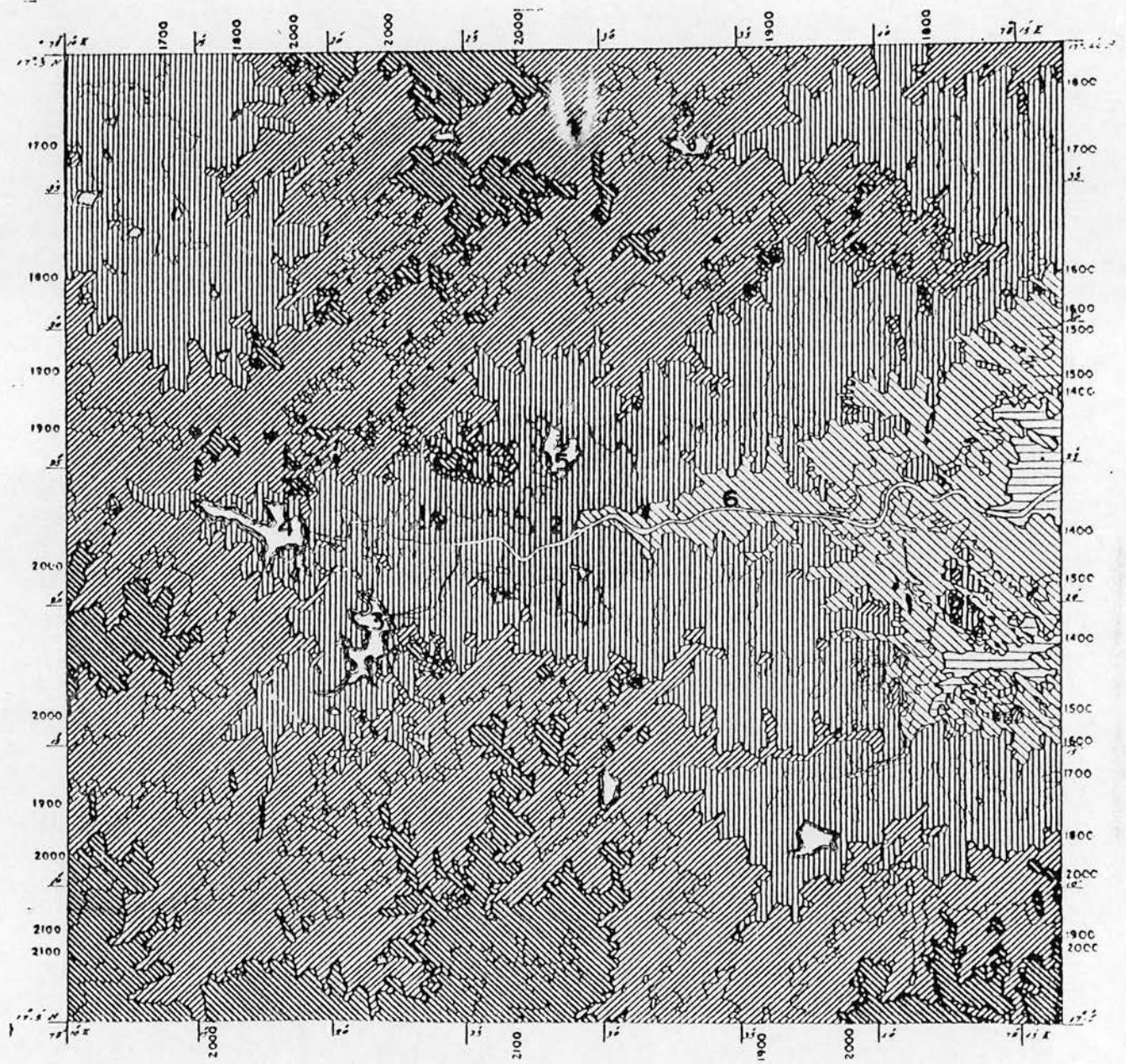


Fig 11 Hyderabad-Secunderabad: Landmarks 19th century  
 Source: Jan Pieper

Coromandel coast" in the mid 17th century.<sup>11</sup> A flourishing community of artisans, brokers and merchants straddled this east - west axis between Golconda and Hyderabad in the 17th century. *Kārwan*, as this business district was called, mushroomed from a colony of merchant caravans,<sup>12</sup> but it had become something of a leftover area after the city was 'walled' by the Asif Jahis and was eclipsed eventually by the new business node of Hyderabad around the British Resident's *kothī* (The Residency). Golconda, too, lost its administrative importance after it fell to Mughal forces, to become merely a treasury of the State jewels.<sup>13</sup>

Golconda is a natural citadel - one of the many 'relict tors' of Telingānā<sup>14</sup> marking the kingdoms of once-warring rajas. The *Bāla Hissār* reinforced by four encircling lines of defence rises 350 feet above the Musi vale commanding the prospect of the surrounding country. To the north and north west is *Banjārā* (nomad) country (whence the Banjara gate of the fort) : rough boulder-strewn pastures punctuated with stony tors, dykes and seasonal tanks rolling onto the irregular line of hills some ten miles or so in the distance. To the west and south west are the vast water reservoirs of *Osmān sāgar* and *Himayat sāgar* which supply water to the city and were created after the great Musi flood of 1908 by damming up the river and its seasonal confluent, the Isa (Fig.12). The prospect across the Musa stream is softened by these water expanses, the surrounding scrub remnants of forest and by agricultural farms and vineyards dotting the country southwards. The *dargāh* (Sufi shrine) at Shamsabad on the Bangalore highway is now the nucleus of an extensive flower garden supplying Hyderabad's flower market of *Jām Bāgh* (Guava Garden). Here tuberose, aster, marigold, chrysanthemum, crossandra and *dona* (a species of artemesia) are raised annually over a prolonged period and jasmine is in bloom for most months of the year. To the east of the Golconda *Bālā Hissār* and across the Musa stream is Hyderabad's landmark - the *Chār Minār* (Four Minarets).



1. Golconda    2. Hyderabad Metropolitan Area    3. Himayat Sagar  
 4. Osman Sagar    5. Husain Sagar    6. Musa River

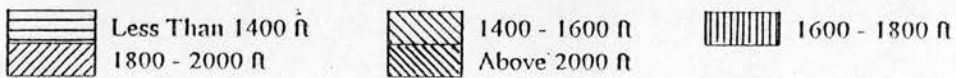


Fig 12 Hyderabad - Secunderabad Environs: Topography

Source: Alam

A network of wells, *bāolis* (stepped wells) and water storage tanks surrounds the citadel and its north eastern extension (the *Naya Qila* or New Fort) - a reminder of vanished gardens within and outside the citadel<sup>15</sup> (Fig.13). Until 1952, a canal from the *Durug* tank (twelve miles away) fed a succession of baolis in the Qutb Shahi necropolis irrigating fifty acres of the royal tomb gardens. The canal extended to the *Bālā Hissār* where it supplied water to another succession of wells, water being pumped up these by oxen-power to irrigate the gardens of the acropolis<sup>16</sup>. The canal now in ruins, can still be traced.<sup>17</sup> The Qutb Shahi necropolis was walled and rejuvenated in the days of the Nizams and, since 1965 when the Āndhra Pradesh Department of Archaeology took over its management, it has been embellished with modern fountain jets (Figs 18,19) and is now treeless too thanks to the Department's untiring zeal.<sup>18</sup> To the west of the fort is the Ibrahim tank<sup>19</sup> dating from the mid 16th century. It has a circumference of two miles and irrigated a village, Ibrahim patan, as well as the 16th century *Bāgh e Ibrahim Shāhī* flanking it to the south which survives now as a rice field (Fig.14). The garden of Ibrahim seems to have extended up the two hillocks nearby to viewpoints at their summits as the terraces of one hillock suggest.<sup>20</sup> The two structures (a mosque and a *bārādārī* pavilion) crowning these 150 feet high eminences were built later in memory of two special mistresses of the sultans, Tārāmatī and Pemāmatī (Figs 15,16). The latter, according to a Persian inscription on the tomb believed to be hers in the Qutb Shahi necropolis, was "from eternity, a rose of Paradise".<sup>21</sup> Within the citadel the remnants of the *Moī Mahal* (Pearl Palace) were blasted away in 1991 and the *Nau Mahal*, a charming composition of palaces, plots, 'for orange and other fruit trees' railed *chabūtrās* (terraces) and stone-lined water cisterns and parterres<sup>22</sup> (all within a wall) now serves the needs of a manufacturer of handloom carpets (Figs 21-23). The *Nau Mahal*. (believed to date from Qutb Shahi times) was restored (or rebuilt) in 1756 according to an



1. Ibrahim Tank 2. Baradari Taramati 3. Mosque Pemamati  
 4. Naya Qila 5. Musa River




 Seasonal Tank  
  Perennial Tank  
  Excavated Reservoir

Fig 13 Golconda Fortress and Environs  
 Source: Hyderabad Guide Map 1974



Fig 14  
Bagh e Ibrahim and  
Ibrahim Tank, Golconda



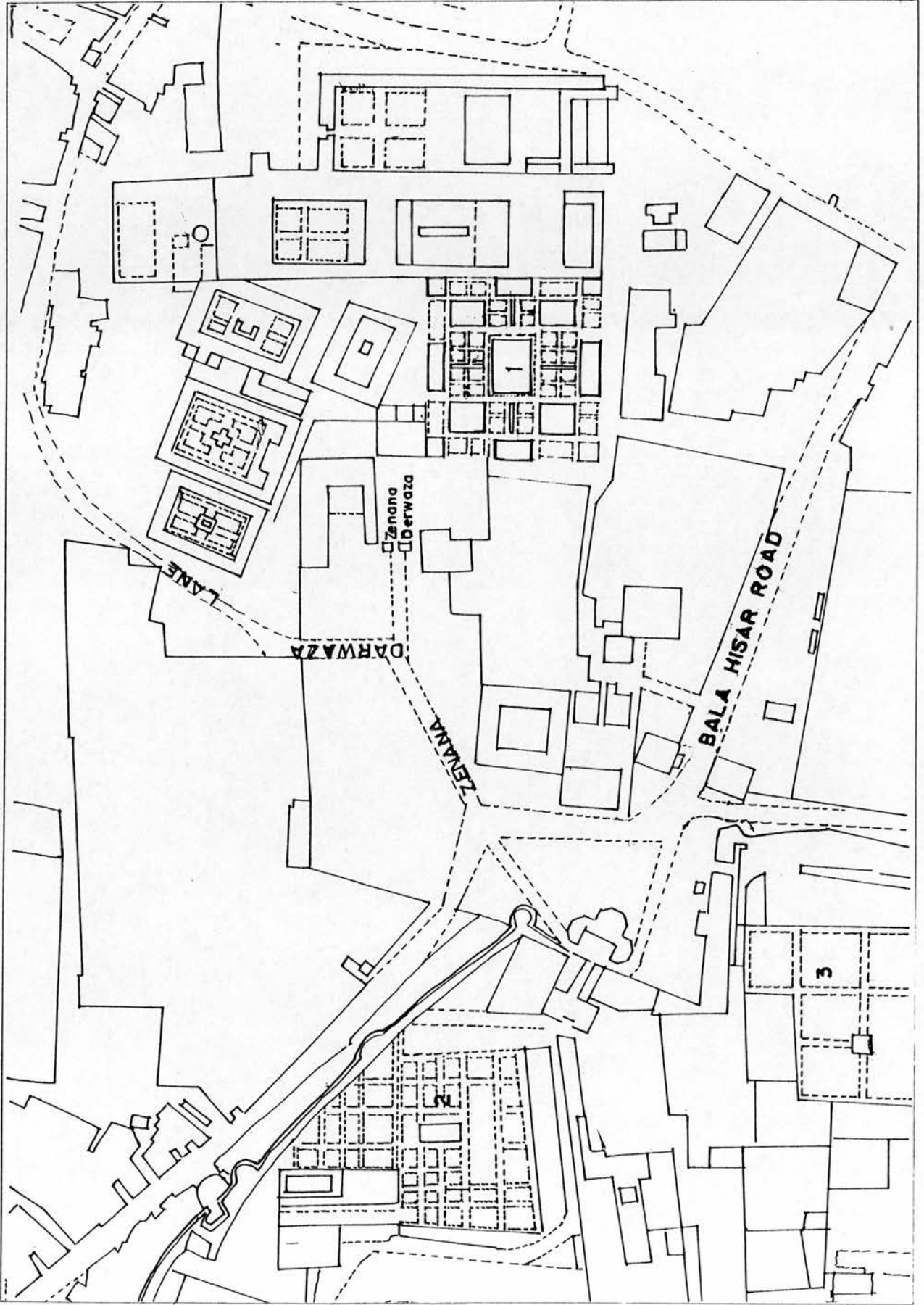
Fig 15  
Baradari Taramati  
Golconda  
(View from Mosque)



Fig 16  
Mosque Pemamati  
Golconda  
(View from Baradari)

inscription<sup>23</sup> and formed part of the royal *shabistān* (harem),<sup>24</sup> its nine palaces presumably for the *Nauratan* (nine jewels) adorning the court (Fig 17). The *Bālā Hissār's* only surviving garden is the *Nagīnā Bāgh* (Jewel Garden) now stripped of its carpets of jewel-like flowers although the checkerboard framework of terraces, planting plots, and walks is reasonably well preserved<sup>25</sup> (Figs 17,24) There are also the remains of a mosque, a bath (which was customary in gardens) wholly in ruins and a cusped stone cistern or *hauz* scooped out from the rock (Figs 25,26).

On the undulating ground north east of the *Bālā Hissār* is the *Nayā Qilā'* (New Fort) - the site of an old Qutb Shahi pleasure garden and the only one of its kind to have survived in Golconda <sup>26</sup> The garden lay outside the citadel until the first Mughal siege of Golconda (in 1656) after which the fort was extended to include the *Nayā Qilā* site where an elevation with views of surrounding country could be utilised as a bastion.<sup>27</sup> About forty acres of, now mostly, rice field - the garden is contained by the rising, boulder strewn land east of it, a stone embankment along its northern side and the walls of the old and the new forts along the west and south respectively (Fig 27). The impression of a vast sunken area is heightened by the rising ground to the east (retained by a wall) and particularly by the thirty foot high stone embankment north of which is the water storage tank - the source of the garden's water supply. The tank is perennial, receiving its supply from two others outside the walls and irrigation water piped into the garden (Figs 28-30) courses down to yet another tank, the *Langarcheruvu*, south of the *Nayā Qilā* after filling the two *bāolis* and stone cisterns of the garden. In effect the *Naya Qila* forms part of a tank network (Figs.31-38). During the rains when the water level in the garden's tank rises, water outlets at the tank's upper level come into operation filling a chain of stone cisterns (*hauz*) lining the embankment and the garden's eastern edge.<sup>28</sup> In Qutb Shahi times, the water from the cisterns was let out onto inclined granite slabs at the level of the garden sending ripples of light flying as it



1. Nau Mahal 2. Bagh Bala Hissar (Nagina Bagh) 3. Mahal Taramati  
Fig 17 Part Plan Golconda Source: Golconda Survey Map Scale: 1" = 200 ft



Fig 18  
Fountain in  
Tomb Garden  
Hayat Bakhsh Begam  
Golconda



Fig 19  
Detail of Fountain



Fig 20  
Zenana Darwaza  
Golconda



Fig 21  
Nau Mahal Golconda  
Western Chabutra  
(1 of 4)

Fig 22  
Nau Mahal Golconda  
Plan of Chabutra



Fig 23  
Nau Mahal Golconda  
Hauz (1 of 4)



Fig 24  
Nagina Bagh Golconda  
(View from Citadel)



Fig 25  
Nagina Bagh Golconda  
Plots and Platforms



Fig 26  
Nagina Bagh Golconda  
Detail water cistern

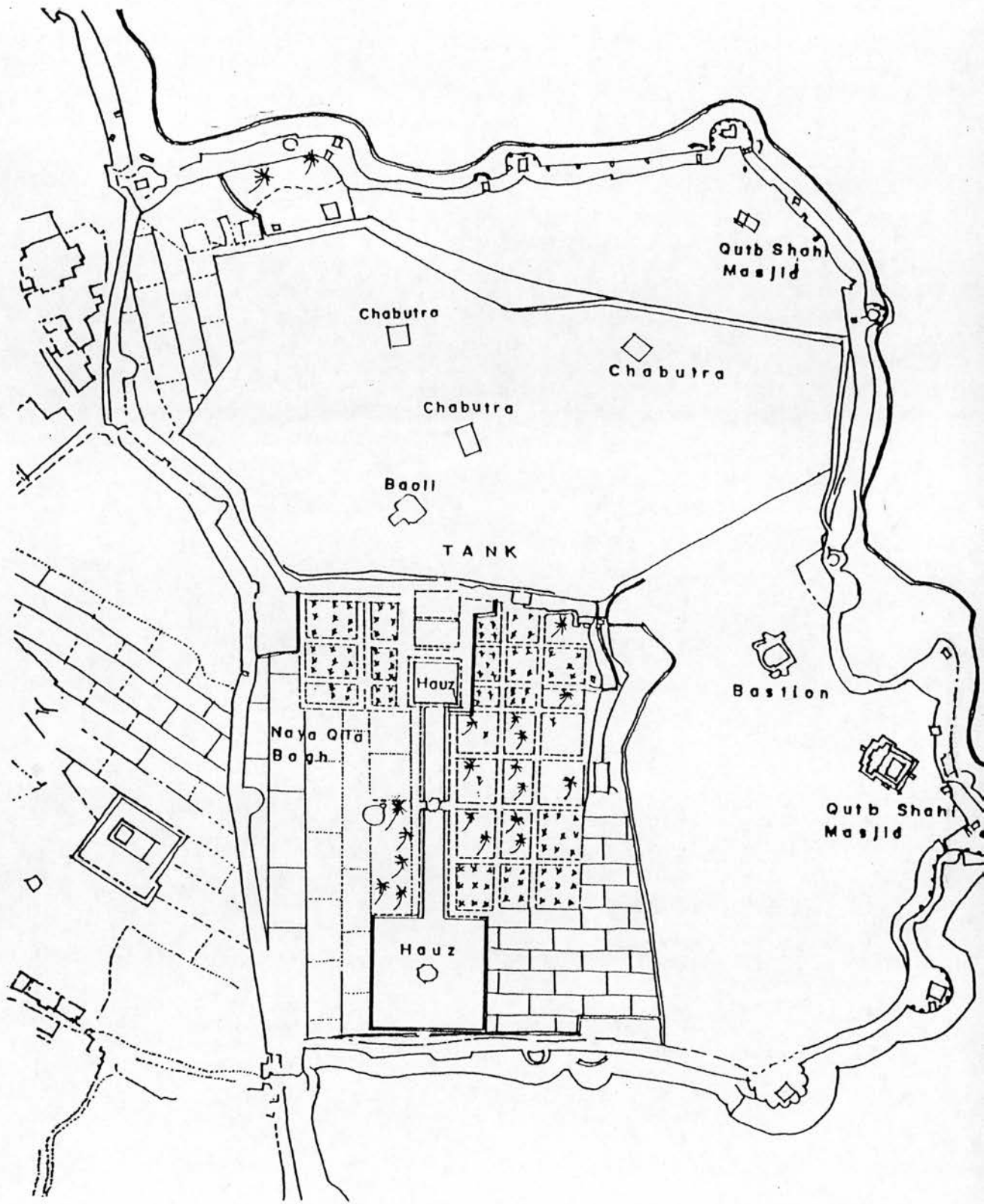


Fig 27 Naya Qila Golconda: Plan  
 Source: Golconda Survey Map

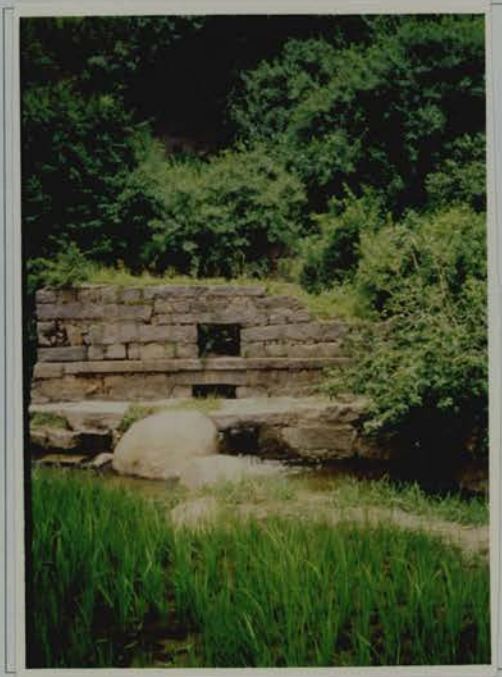


Fig 29  
Naya Qila water inlet point

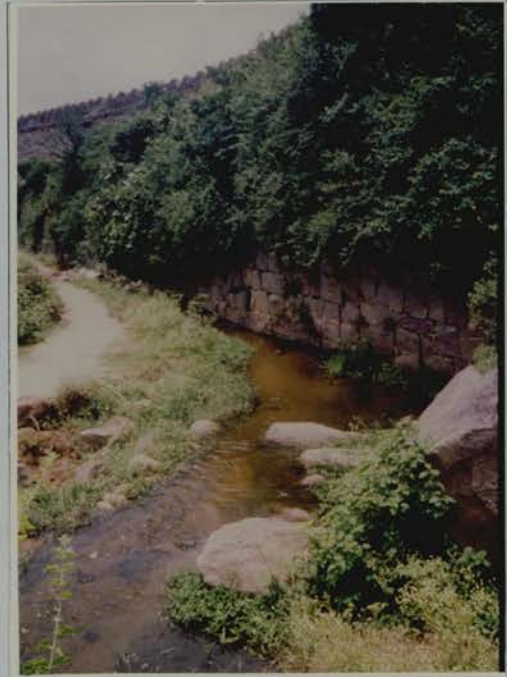


Fig 30  
Naya Qila watercourse along wall

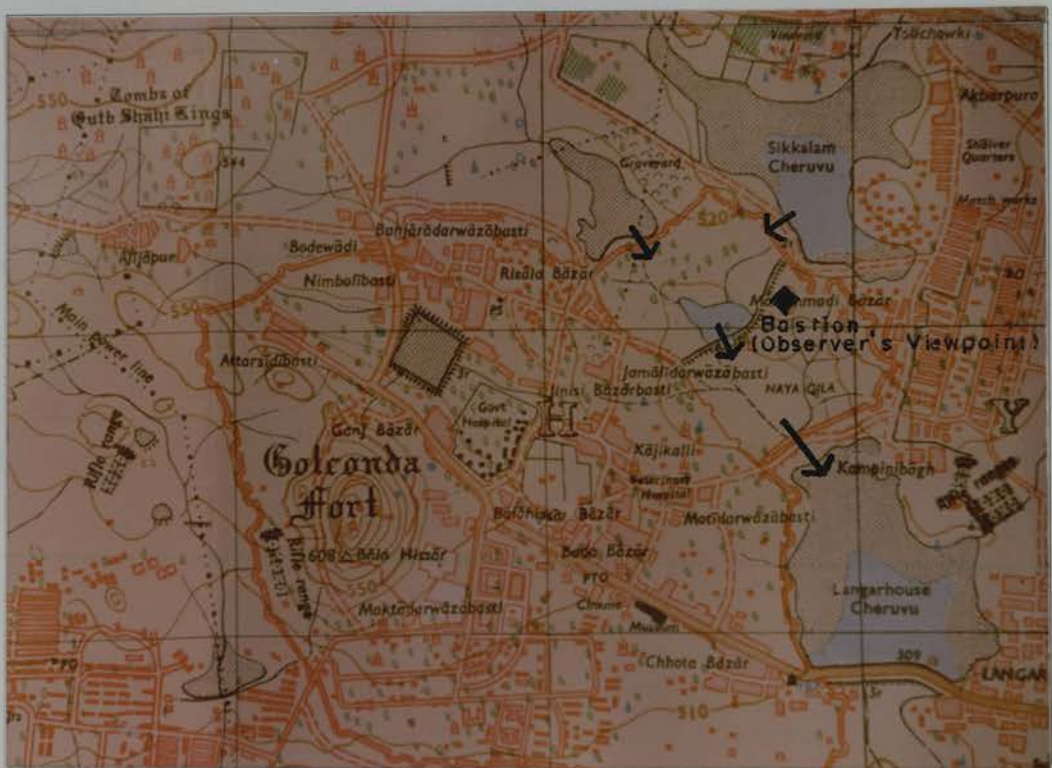


Fig 28 Naya Qila Environs  
Source: Hyderabad Guide Map 1974



Fig 32



Fig 31



Fig 34



Fig 33



Fig 36



Fig 35

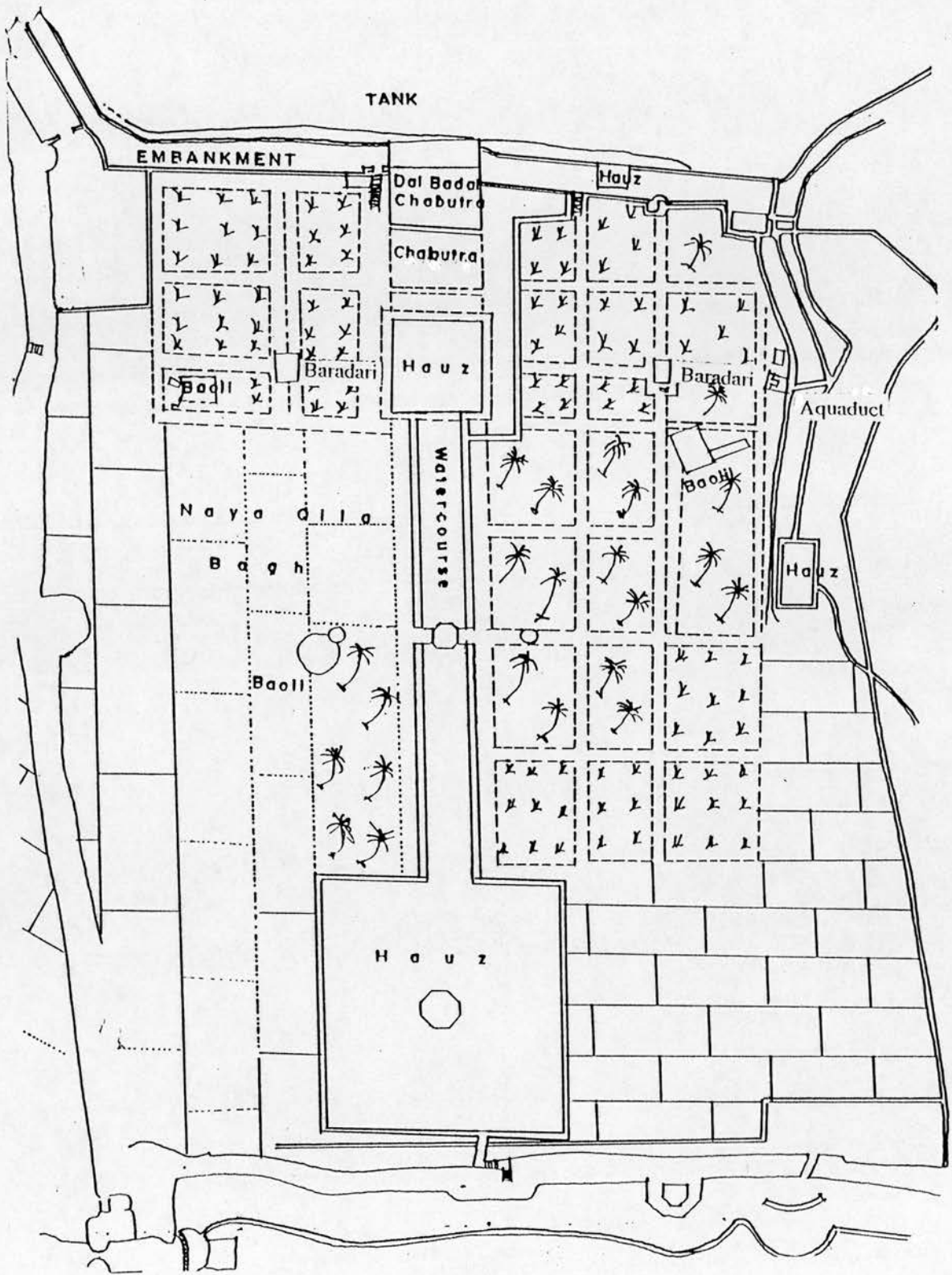


Fig 38  
Naya Qila: View from bastion



Fig 37

hit the slabs<sup>29</sup> (Fig.40). The 600 ft long water axis of the garden oriented along the (roughly) north-south direction of drainage connects two (stone) water cisterns or *hauz*, of which the southern one at the far end of the garden measures 300 ft x 350 ft and is the larger of the two. At its centre are traces of a pavilion (reached by a causeway presumably) and recalling the water pavilions -pleasure retreats- referred to in ancient Hindu texts such as the *Kāma sutra*.<sup>30</sup> The water axis, composed of three longitudinal divisions, is 75 ft across (while the total width, including the flanking walks is 125 ft) (Fig 39). Halfway along the length are traces of another pavilion connected with the flanking walks (Figs 42-44), with water parterres for fountains at the pavilion's edge, whose cusped outlines are reminiscent of the water parterres in the *Nau Mahal* or in the *Bālā Hiṣṣār* <sup>31</sup> (Figs 45-47). The transitions from cistern to water axis to cistern (which are progressing changes in level southwards) were once articulated by inclined stone slabs (of which traces remain) serving to break up the flow of water into sprays. There are suggestions of a secondary axis in the *bārādarīs* (12 door pavilions) to the east (and once to the west too) of the smaller *hauz* (which is 125 ft x 125 ft). The impression of a secondary axis is reinforced by the line of an aqueduct (Figs 48-50). Passing over the eastern wall and extending into the garden, the aqueduct would have discharged its flow (the run off from higher ground) in the form of a cascade, over a wall pierced with niches and holding candles at night, presumably (Figs 51-53). The tank embankment, one end of which is the *Nayā Qilā'* Gateway, gives access to the garden below and projecting halfway along its length is - what is known as - the *Dal Bādal chabūtrā*<sup>32</sup> where presumably a tent of state with satellite awnings, suggesting a mass of clouds, was pitched. This is the point of entry and steps and ramps on either side of the *chabūtrā* descend to the garden - to a lower terrace overlooking the smaller *hauz* ; while below the *Dal Bādal Chabūtrā* (at garden level) are rooms for guards (Fig.41).



Scale: 1" = 200 ft

Fig 39 Bagh e Naya Qila: Plan

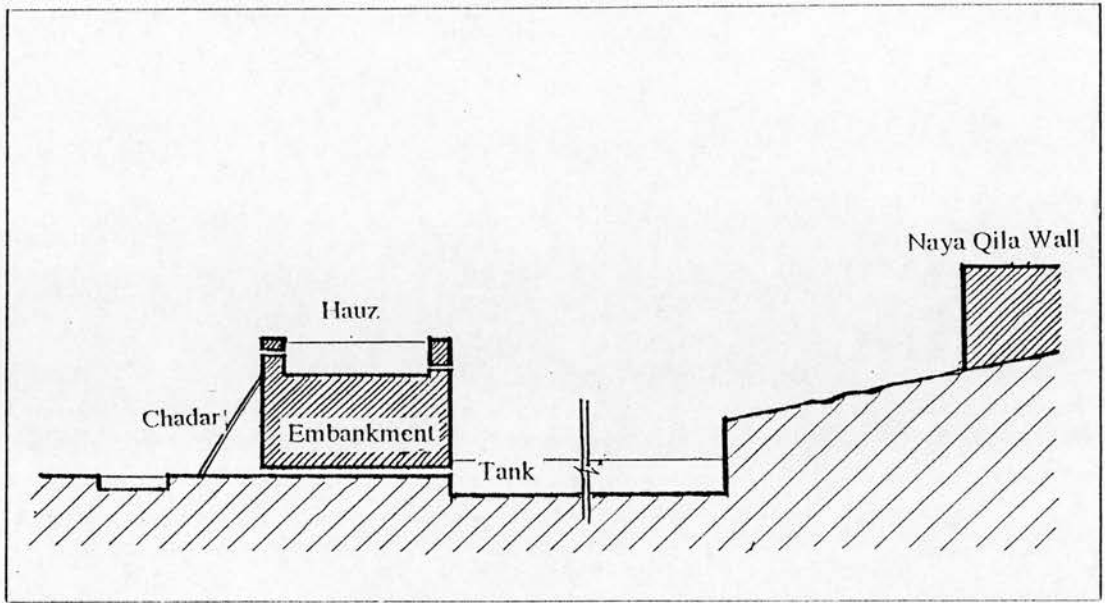


Fig 40 Naya Qila: Part section through tank embankment 1"=30'

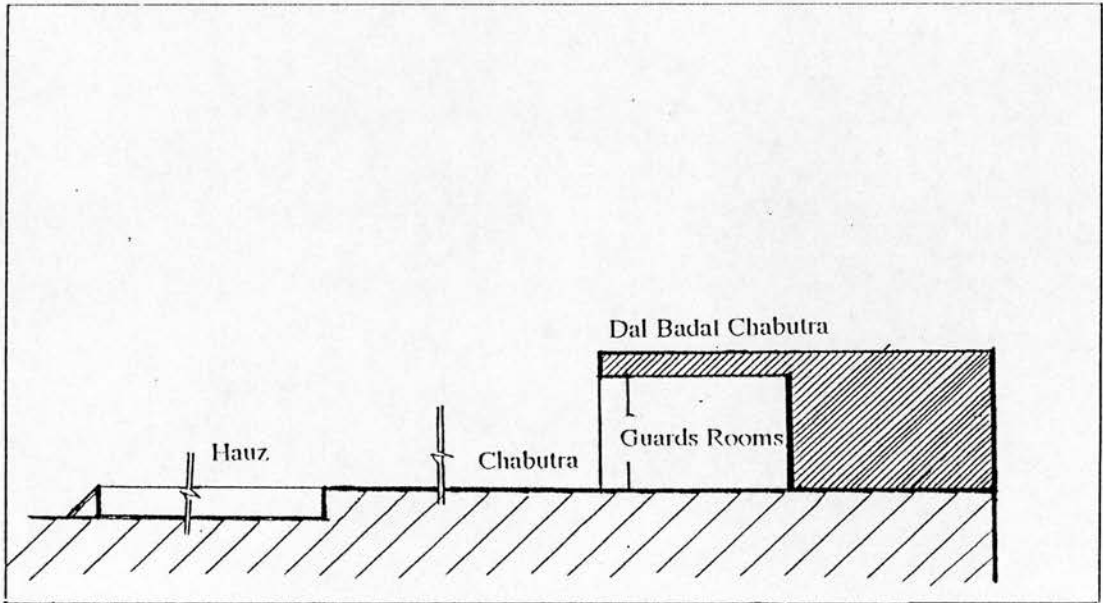


Fig 41 Naya Qila: Part section through tank embankment 1"=30'

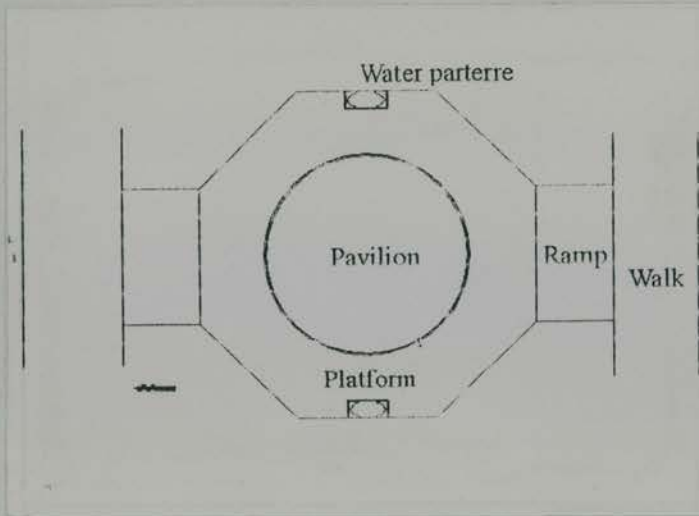


Fig 42  
 Bagh e Naya Qila:  
 Plan: Pavilion platform



Fig 43  
 Bagh e Naya Qila:  
 Platform remains



Fig 44  
 Bagh e Naya Qila:  
 Platform/Walk connection



Fig 45  
Naya Qila  
Water parterre



Fig 46  
Water parterre  
Nau Mahal



Fig 47  
Water parterre  
Bala Hissar



Fig 48  
View of aqueduct  
from bastion



Fig 49  
Watercourse  
to aqueduct



Fig 50  
Junction of watercourse  
and aqueduct



Fig 51  
Bagh e Naya Qila  
Detail of aqueduct



Fig 52  
Bagh e Naya Qila  
Remains of Chini Khana



Fig 53  
Bagh e Naya Qila  
Chini Khana and Hauzche

Professor Zor, writing in 1940,<sup>33</sup> says that the site of the *Nayā Qiḷā* functions as a *mela* or festival ground during *Basant*, the first harvest of the year when temples, tanks and water cisterns are adorned with flowers and the entire world is at sport. Zor adds that the *Bāgh e Nayā Qiḷā* must have been a favourite setting of the pleasure-loving sultans for the merriment of *Holi* during *Basant*. Mohammad Quli's various *qasidās* in celebration of *Basant*<sup>34</sup> might be used to supply details of such merrymaking which is not difficult to envision in the garden, given the lavish use of water here. It has been suggested that a fuller understanding of the use of the site could be promoted by examining the evidence of *chabūtrās* girdling the *Nayā Qiḷā* tank to its north (See Fig 27) which represent, seemingly, an exclusively Hindu use and possibly one predating the Qutb Shahi occupation of Golconda.<sup>35</sup>

The *Bāgh e Nayā Qiḷā* was measured during the days of British archaeology but seems to have been forgotten since. When the Mughal Asif Jahis walled the city of Hyderabad, Golconda's administrative and economic functions were transferred there and the town depopulated. The garden seems to have suffered the same neglect that characterises the town and is plainly evident in a walk through it.

Golconda was a mud fort occupied by a Warangal (*Kākatīyan*) raja before it was incorporated in the Bahmani Sultanate - in 1363. In 1478, the Turkoman Sultan Quli ('Servant of God') who had risen to become the governor of the Sultanate's eastern province of Telingana, seized control of the delta and the port of Masulipatam from the Hindu *naikwārīs* (chieftains) of the Kingdom of Vijayanagar. Soon Golconda (renamed Mohammad nagar in the 14th century) was an important node on the east-west trade route eclipsing Warangal to become the nucleus of an independent kingdom. The five provinces of Bahmani Deccan, by then, had split into successor states opposed across the Krishna river by Hindu Vijayanagar until



its destruction by a Muslim coalition in 1565.

With the remnants of Vijayanagar at Chandragiri (its eastern maritime province) and the rajas of Southern Orissa (in the north east) suppressed, Ibrahim (the fourth Qutb Shahi sultan) extended his control over the resource rich regions south and north of the Krishna Godavari *doāb*. By the end of the 16th century, the fame of Golconda's diamonds (mined in the Krishna district), its 'Damascus' swords (from iron mined in the Nirmal and Indur uplands) and its cotton *shatranjī* (chessboard) carpets and gold brocades (from Warangal) had brought in Arab and Persian traders and was beginning to attract merchants from China and Europe.<sup>36</sup> The town had spilled over its walls, its military population alone exceeding 40,000 in 1591.<sup>37</sup> The direction for future growth was evident when the Musa stream had been bridged in 1578 to the east of Golconda and, soon after, Ibrahim's successor, Mohammad Quli, was persuaded by his nobles that congested Golconda was no longer worthy of him and a new city be built on the (east-west) commercial axis of the kingdom. The plain on the stream's southern bank was extensive and well-drained, sanctified by the *dargāh* of Shah Chiragh, the mystic from Najaf,<sup>38</sup> and a perennial irrigation tank, Jalapalli, lay to the south on higher ground from where water could be conveyed through earthen pipes for domestic use.<sup>39</sup> A new city was conceived therefore to house the sultan and the civil and military bureaucracy and "in 1000 AD (1591) when the moon was in the constellation Leo and Jupiter was in his own mansion", its foundation was laid by the sultan who named it Hyderabad, the city of Hyder (after the title of Ali, the fourth Muslim caliph and the first Shi'ite imam).<sup>40</sup>

Hyderabad was founded about the time that the Iranian Shah Abbas Safavid's capital city, Isfahan, was conceived<sup>41</sup> and the man credited with the royal plan of the Qutb Shahi capital is the Iranian Mir Momin Asfārābādī, *Peshwā* (Prime

Minister) to Mohammad Quli. Mir Momin had left the Safavid court when political intrigue threatened to involve him, migrating to Golconda a decade or so before the foundation of Hyderabad.<sup>42</sup> It was not unusual for Muslims from the Iranian plateau regions to migrate at this time to Deccan. The Bahmani court at Gulbarga (and especially at Bidar) had attracted Iranian and Turanian *hukamā* and *‘ulamā*, mystics, poets and calligraphists. Both Sultan Mohammad II (1378-1397) and Sultan Firuz (1397-1422) had Persianised their respective courts, the latter even sending vessels from Goa and Chaul to bring in eminent Iranians (including the renowned mystic, Shah Tahir); while his successor, Ahmed, had 3000 archers shipped to the Deccan from the Persian Gulf. Needless to add, perhaps, the *āfaqīs* (foreigners) - the first or second generation immigrants from overseas - tended to dominate the military and civil establishment by the fifteenth century. They were never wholly integrated in the Deccan, of course, linguistic and sectarian differences tending to isolate them from the Deccanis, the established residents of the Deccan. Among these were Abyssinian migrants; the Hindus and Hindu converts to Islam; the original (Turkic and Pathan) colonists from North India who had administered the Bahmani kingdom at first; and the community of Arab traders who had settled along the west coast intermarrying freely with its local population. The *afaqīs* - mostly Iranians - tended to be Shi'ites, their language was Persian; and the Deccanis were Sunni Muslims for the most part who spoke the vernacular tongues and increasingly, Urdu (or *Deccanī*, *Hindawī*, *Gujjarī* or *Dehlawī* as it was also called).<sup>43</sup> The Qutb Shahis, themselves, came from an old Turkoman family, the Qara Qoyunlu, which had dominated Timurid Iran briefly in the 15th century; and the key figures in the Qutb Shahi administrative infrastructure tended to be *āfaqī* Iranians. Nevertheless, Deccanis who formed the bulk of the population were well represented and the Qutb Shahi Sultanate survived the tensions that had rocked the Bahmani kingdom and which continuously threatened political stability at Bijapur and (especially) at Ahmednagar. Eventually in its last days problems did arise in

Golconda when State affairs came to be dominated by Madanna and Akanna, the two Hindu ministers of Abul Hassan (Tana Shah).<sup>44</sup> But in the time of Mohammad Quli such threats were probably foreseen, and state administration, controlled by the shrewd Mir Momin, presented few real difficulties.

Hakim, *‘alim* and poet, Mir Momin had come to dominate the Qutb Shahi court soon after he reached Golconda. Both the hedonistic Mohammad Quli and his pious and more enlightened nephew and son-in-law, Mohammad, who succeeded him, turned to the Peshwa for guidance. In 1612, Mohammad was crowned and in a *qasidā* (ode) in praise of the enlightened sultan, Mir Momin declared that the dust scattered by the sultan's 'auspicious' feet was (an eye-brightening) collyrium with which life had been renewed, adding that

While the Emperor of the World, Shah Abbas, made a new Isfahan

Hyderabad is made *Safahan e nawī* (a new Isfahan), O King, because of you!<sup>45</sup>

By 1612, the Qutb Shahi *Safahān e Nawī* stood bright and gleaming. Like the new Safavid capital it included *maidāns* (squares), *chārbazārs* (lit: four bazars), *hammāms* (baths) and *caravānserāī* (inns); a *Jāmī* (Friday) mosque; a royal palace complex; the garden-palaces of the *Peshwā* and nobles; and the royal pleasantries outside the city (which in Qutb Shahi Hyderabad were developed around tanks exploiting natural viewpoints).<sup>46</sup>

Mir Momin's *haveli* complex was a nodal point at the heart of the city, surrounded by palaces of nobles. The area where these stood was built over in Asif Jahi times but is still known as *Peshwā's Havelī* (or as *Purānī* - the old *-Havelī*). The *Peshwā* is remembered, more enduringly, in the free burial ground for Muslims around the *dargāh* of Shah Chiragh. This was - and is - the *Dāirā Mir Momin* (lit: Circle of Mir Momin), the urban land purchased by Mir Momin used both for purposes of burial and the education of related ritual. The urban burial ground, surrounded by a community of corpse washers (by 1603) and sanctified by

the dust of Kerbala and Najaf, gradually assumed a new importance in the Shi'ite commemoration of *Muharram*, functioning as a replica *Maidān e Kerbala* where *īā'ziyās* (replica mausoleums) were brought and ceremoniously buried.<sup>47</sup>

The influence of the *Peshwā* is clearly manifest in the siting of the *Dār ul Shifā* - Hyderabad's 'house of healing'. The *Dār ul Shifā* was a teaching and a (free) 400 bed hospital as well as a centre for research in traditional *Yunānī* and *Ayurvedic* medicine (*Tibb*). It occupied six thousand square yards and had been built by 1595 flanking a wall of the extensive *Bāgh e Mohammad Shāhī* (Mohammad Quli's garden) along the river bank<sup>48</sup>(Fig 54). This location with its refreshing air, filled ('purified') with garden fragrances was ideal for a hospital where the concept of a 'natural healing' held essential significance<sup>49</sup>(a living illustration of a *Yunānī*-based institution of 'healing' is the sanitorium built during the days of Hyderabad's last Nizam on the summit of a densely forested hillock at Viqarabad some thirty miles west of Hyderabad). It was at the *Dār ul Shifā* that Mir Momin was instructed to write the *Ikhtiyārāt e Qutb Shahī* (Qutb Shahi Instructions). The 'instructions' pertained to the (revised) use of simple and compound drugs discussed in a 14th century medicinal work in Persian.<sup>50</sup> Several works on preventive medicine (based on Persian and Arab sources) were compiled at the research centre. Of these, the *Zubdat ul Hukamā* of Shamsu<sup>4</sup>ḍīn bin Nuru<sup>4</sup>ḍīn (discussed in a later chapter) and the *Tibb e Farīd* of 'Abdullah Tālib (both of which were written during the period of Mohammad Quli) may be mentioned.<sup>51</sup> Hakim Safiu<sup>4</sup>ḍīn Gilani's *Tazkirāt ul Shaḥwat*(List of Aphrodisiacs) is also believed to have been compiled at this time.<sup>52</sup>The *Dār ul Shifā* will be<sup>a</sup> mass of debris soon and is of interest to Muslims in Hyderabad only because a sacred relic of Kerbala originally housed in the building vestibule (and now in a modern structure built in the building courtyard)<sup>53</sup> has made it a pilgrimage point during 'Āshūrā - that is, the commemoration of the first ten days of *Muharram* (the first month of the

Muslim calendar).

The building of *‘Āshūr Khānās* reflected the impetus to Shi‘ism provided by incoming Iranians. It was designed to gain Safavid Iranian sympathy too perhaps, Safavid support being important for the Sultanate, threatened continuously by Mughals. In addition to the two *Bādshāhī* (Royal) *‘Āshūr Khānās* within and outside the palace precincts, numerous others were set up informally in *bazars* and within the houses of *amīrs*. The *‘Āshūr Khānās* were centres for Shi‘ite *majālis* (lit: assemblies) and mourning processions originated here.<sup>54</sup> The *majālis* mourned for Prophet Muhammad's (pbuh) grandson, Husain, and for his companions, who according to <sup>Shi‘ite</sup> Muslim belief had been martyred at the *Maidān e Kerbala* (in Iraq in the 7th century) when they refused to submit to the <sup>(alleged)</sup> unlawful succession of Yazīd as Muslim caliph. The pain and anguish of the besieged camp of Husain, <sup>which according to Shi‘ites was</sup> denied access to the waterpoint for ten days by the army of Yazīd; <sup>(alleged)</sup> the disrespect shown by the victorious army to the corpses of the martyrs; and the grieving women of the camp who survived to relate all this forms the subject of *zīkr* (remembrance), *madaḥ* (praise) and *marsiya* (dirge) during *‘Āshūrā*.

The *‘Āshūr Khānās* of Hyderabad house a variety of visual artefacts to fuel the grief of the mourning assemblies. These visual aids include *tabuts* (replica coffins or biers of the martyred Husain) and *zari‘hs* ('permanent' mausoleums) - for the sake of those, it is stressed, who cannot visit the blessed *Rauza* personally. And, most importantly, *‘Āshūr Khānās* carry *alams* - recalling Husain's standard at the Kerbala battle.<sup>55</sup> Each of the fourteen *alams* of the *Bādshāhī ‘Āshūr Khānā* was 'clothed' with fourteen yards of gold brocade on which Quranic verses were woven and the Sultan, who inaugurated the *‘Āshūrā* ceremonial, would garland each *alam* with a 'rosary' of flowers. The number fourteen represented the fourteen *Masumīn* (Pure or Impeccable ones), including the Prophet Mohammad (pbuh), his

daughter (Bibi) Fatima and the twelve *imāms* beginning with 'Ali - the chain of transmission of the light emanating from God in terms of *isna ashari Shi'ism*.<sup>56</sup> Although *alams* may be mere staffs carrying banners, the more elaborate ones have an ornamental (often gold) crest simulating a human hand (the *Panjā*) with five metallic, radiating leaves or fingers. The *Panjā* in itself is believed to signify the might of 'Ali (the Lion of God) while the 'five fingers' stand for the *Panjtan e Pak* (lit: the Five Pure Bodies - of the family of the Prophet Muhammad, pbuh, whose names are inscribed on the crests).<sup>57</sup>

Kerbala had been sanctified by its famous battle. Its dust was holy and artefacts from the battlefield as well as personal belongings of the martyred family became sacred relics bestowed with special power (*barakā*) needless to add. Some of these relics arrived in the Deccan during the days of Ibrahim and of his son, Mohammad Quli, and at Hyderabad each relic was exhibited on an ornate *alam* and housed in an '*Āshūr Khānā* specially built to 'receive' it. Such '*Āshūr Khānās* became pilgrimage points during '*Āshūrā* - as has been mentioned - and were maintained by royal grants.<sup>58</sup>

In the mid 17th century, the seventh Qutb Shahi sultan, Abdullah, instructed his court physician, Hakīm Nizamudīn Gilānī to maintain a court journal; and Hakim Gilani's *Hadiqat us Salātīn* (Garden of the Sultans) is a detailed account, in Persian, of the first seventeen years of Abdullah's period of rule - 1035 AH to 1052 AH (1626-1643). His description of the pomp and splendour of royal celebration is graphic as is his description of '*Āshūrā* ritual which had been formalised in the days of Abdullah's grandfather, Mohammad Quli. The nucleus of each *Bādshāhī 'Āshūr Khānā*, according to Gilānī, was a single storeyed hall preceded by a walled *sahn* (forecourt) and a *hauz* (water cistern). The forecourt walls were rows of arched recesses, ten in each wall and a thousand niches in each row. The lowermost rows

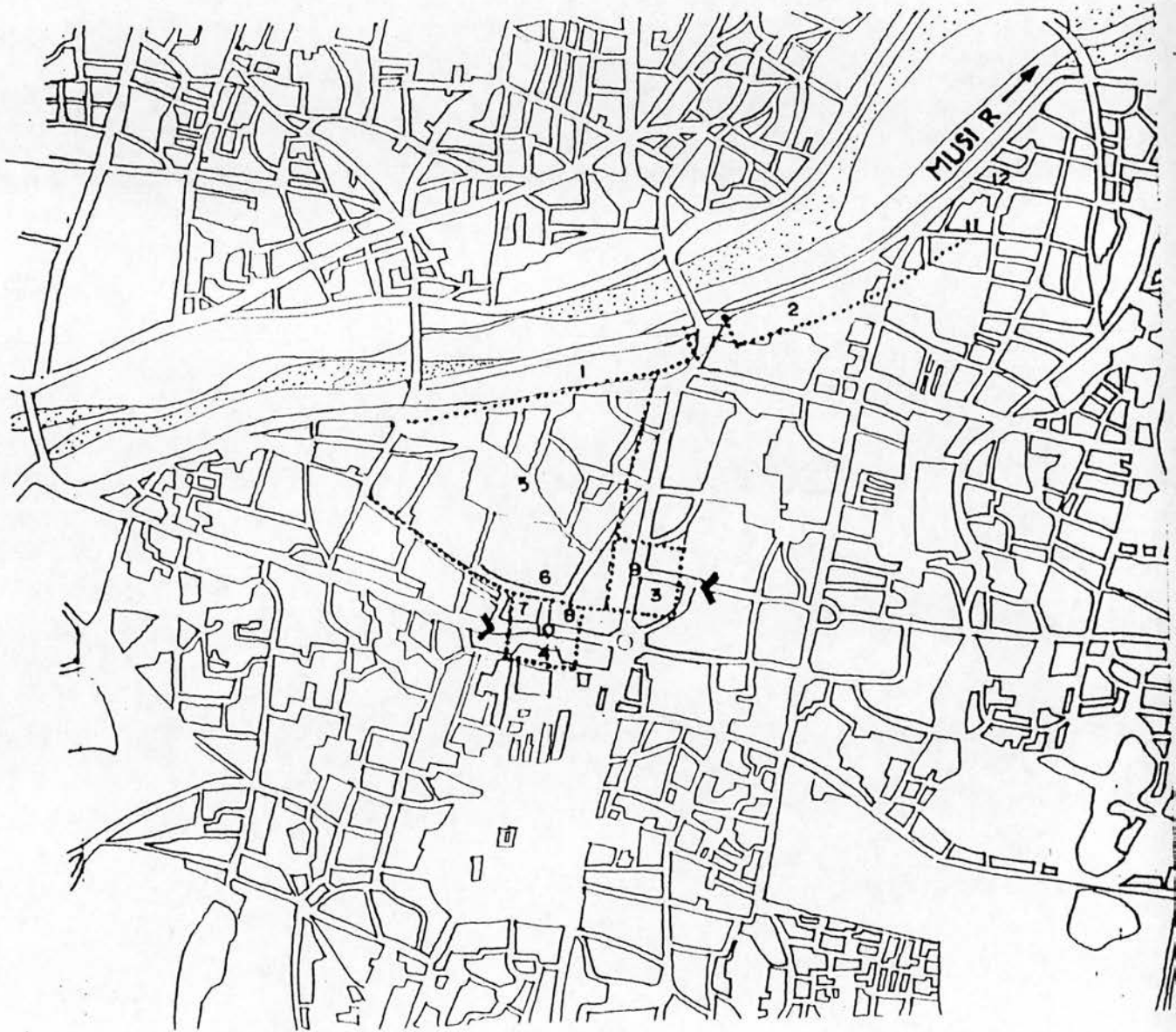
were lit up with earthen lamps the first evening of *Muharram* and the rows above each successive evening until on the evening of the tenth *Muharram*, each wall of the *sahn* was glowing with ten thousand earthen lamps. In addition to the lights from these illuminated walls, there were tall camphor candles ("taller than a man") placed around the *hauz* and *iwān* (hall) which were lit up by the Sultan himself, and brass lampstands simulating "tall trees with branches" - each tree-like lamp holding 120 candles - were placed beside the hall's entrance doorways. Each *‘Āshūr Khānā* (also known as the 'house of the *alava*'- or of the fire ) was transformed thus, during *‘Āshūrā*, into a flaming garden of the house of ‘Ali lit up by ten thousand burning, grieving hearts.<sup>59</sup> Hakīm Gilanī does not mention the circular pit (or *‘ūd-dān* - incense pot) at the centre of the forecourt ( customary too) where *‘ūd batīs* (*‘ūd* sticks) are burnt. This can be seen today in Hyderabad during *Muharram*. As the fragrance of *‘ūd* rises, the black-robed assembly, reciting *marsiyyās* and with *alams* held high, circumambulates the pit (or *‘ūd dān*) before a 'mourning' procession is formed headed by a blaze of torches, lanterns and lamps. (This is both funeral procession and battlefield; a moving army; and an evergreen garden of the martyrs - or *Rauzat al Shuhadā*.).

Hyderabad's construction commenced with the monumental *Chār Minār*, the 'Four Minarets' which marked the intersection of the two axes of the city. This date - 1000 AH - is commemorated in *Yā Hāfīz* ('O Protector') of its chronogram<sup>60</sup> - and what more protection was needed than this *munajāt* (or plea) to the Creator (although, it might be added, the building's foundation rested firmly enough on a bed of crystalline rock). The *Chār Minār*'s 50 feet high archway facing the 'four winds' carried a dome. Above this was a stone water cistern fed by the Jalapalli tank to the south of the city and high enough, apparently to supply drinking water to the uppermost levels in the royal palace complex nearby.<sup>61</sup> At the level of this *hauz* was also a mosque<sup>62</sup> (and, apparently, an *‘Āshūr Khānā* too<sup>63</sup>) accessible

through stairways in the four 190 feet high minarets and the *Bālā Khānās* (upper galleries) connecting these. The building is believed to have been inspired by the blessed *Rauza* of Imām Raza, the 8th Shi'ite Imam, at the intersecting axes of Meshet, Iran's 'city of shrines'.<sup>64</sup> But it is equally likely, of course, that the source of inspiration lay closer home than Meshet. As for instance, in the *chaubara* (four doors) at the intersecting axes of the Bahmani city, Bidar.<sup>65</sup> Or in the ruins of Warangal fort where a temple crowns the summit of a domical granite hill, its four gateways marking the principal directions.<sup>66</sup> The circular base of the dome was echoed in a stone water cistern at ground level where two stone elephants and two stone tigers splashed water across at each other. As might be imagined, this fountain was destroyed after the Mughal conquest as a clear sign of idolatry.<sup>67</sup>

The nucleus of the royal plan was formed by two immense square-shaped *maidāns* (plazas or squares) which lay on the city's two axes, a hundred yards or so north and west of the *Chār Minār*<sup>68</sup> (Fig.54) The *maidāns* provided the means for mass assembly and exhibition, for 'bread and circuses' which held together the splendour and squalor of the *Sultanate* until the Mughal conquest. Royal celebrations such as the *'Īd e Milād an Nabī* (the birthday of Prophet Muhammad pbuh) could last up to twelve days and the birthday of the Sultan Abdullah, which visitors from as far as China attended, was celebrated for a whole month. The *Maidān e Dilkushā* (The Heart-Rejoicing Square) towards the end of each day's merrymaking became an immense dining area where food was provided free to the multitudes assembled - with a burst of fireworks rounding off the evening.<sup>69</sup>

The *Maidān e Dilkushā* was located on the *caravanserāi*-lined road from Golconda, surrounded by *bazārs* of jewellers, goldsmiths and perfumers to its east, west and south with the four-storeyed *Dād Mahal* (Palace of Justice) forming a continuous wall along its northern side - effectively separating the *Maidān* from



--- Reconstruction based on Zor

- |                     |                          |                      |
|---------------------|--------------------------|----------------------|
| 1. Amin Bagh        | 2. Bagh e Mohammad Shahi | 3. Maidan Char Kaman |
| 4. Maidan Dilkhusha | 5. Royal Palace Complex  | 6. Dad Mahal         |
| 7. Chawri Thana     | 8. Kotwal Thana          | 9. Char su ka Hauz   |
| 10. Hauz            | 11. Dar us Shifa         | 12. Ashur Khana      |
| 13. Jami Masjid     | 14. Daira Mir Momin      |                      |

Fig 54 Hyderabad: Qutb Shahi Plan

the royal palace complex to its north, of which the *Dād Mahal* formed the southern end.<sup>70</sup> It is believed that the *Dād Mahal* was demolished soon after the conquest and in this context it is usually <sup>mentioned</sup> too that the victorious Aurangzeb likened it to the lofty palace of *Shaddād*, the Yemenite king whose worldly vanity had invited the Wrath of God.<sup>71</sup>

From his *shahnashīn* (royal seat) in the topmost storey of the *Dād Mahal* - "the eye of the assembly<sup>72</sup>" - the Sultan had the world at his feet, quite literally. Petitions were presented and read out to the Sultan and justice dispensed in the *maidān* below<sup>73</sup> - which (latter) functioned, apparently therefore, as an open Hall of Public Audience, or *Divan e 'Ām*. From his viewpoint, the Sultan could participate in the *chirāgh zār* (lit: 'lamp of grief') on the sixth evening of *'Āshūrā* when torches and lanterns were hung out around the *maidān* and lamps illuminated "colossal wooden trees and carved figures of elephants and tigers". As heart-rending *marsiyyās* were recited the procession from the *'Āshūr Khānā* assembled in the *maidān*, their incense censers bobbing up and down, their *alam* banners flying in the wind and their *tāziyas* glowing everywhere. Sufficiently moved by this spectacle of grief, the Sultan would give instructions for *nanzīra* (bread) to be distributed, and, led by the *Kotwāl* (Minister of Interior) the assembly lifted its hands in prayer and thanksgiving for the Sultan and his Sultanate - a frequently-repeated show of solidarity. No wonder then that *'Āshūrā* observance was said to be the Sultan's means of 'gaining the blessings of the twelve imams'.<sup>74</sup>

At the centre of the *Maidān e Dilkushā* was a rectangular water reservoir (180 ft x 120 ft) - a *daryācheh* ('little sea') carried on arches well above the ground.<sup>75</sup> To the east and west of this reservoir, and facing each other, stood two four-storeyed buildings - the *Kotwāl Khānā* and the *Chawri Thānā* (representing the Home Ministry - See Fig.54). Both buildings were fronted with halls (*maidāns*

or *aiwanat* ) which housed ranked assemblies of the military bureaucracy during a public celebration and each such *aiwān* or hall was a *Nigār Khānā e Chīn* (a picture gallery of China), its columns ornamented with gold and turquoise and paintings and murals decorating its walls and ceilings. During the days of a celebration, the public was allowed entry in these art galleries and had the pleasure then of a close-up view of not only the Qutb Shahi court but also the Mughal Indian and the Safavid Iranian courts. The walls also carried 'portraits of the kings of the world', scenes from popular Iranian and Arab romances - and for those who had never witnessed the pageantry of a royal procession, the splendid hierarchy of a ranked assembly or the nail-biting excitement of the royal hunt, here was a wonderful opportunity to do so.<sup>76</sup>

Although the public celebration of the birthday of Prophet Mohammad (pbuh) and other Muslim holidays had been discontinued during the days of Mohammad Quli's successor, Mohammad, Mohammad's pleasure-loving son, Abdullah, re-established the traditions of his maternal grandfather as soon as he was on the throne.<sup>77</sup> Long before the 17th day of *Rabī ul Awwal* (when the *Maidān e Dilkushā* resounded with the beat of drums) preparations for the public celebration of the Prophet Mohammad's (pbuh) birthday would begin. The packed earthen surface of the *maidāns* would be swept clean and *bihishī* sprinkled it with water everyday, while craftsmen would display stalls under colourful canopies and awnings. The festivity would be carried out in both *maidāns* near the *Chār Minār* as well as within the royal palace complex and 'cloud-like' tents would be pitched in front of the palace halls. Singers, dancers and drummers, assembled from the various parts of the Sultanate, would entertain assemblies of high ranking civil and military officials everywhere. Gilanī estimates that, within the royal palace complex, at least 100,000 gold and silver bowls filled with musk, sandalwood and saffron were distributed one evening (in one palace alone) in addition to wreaths

and bouquets of fragrant flowers as *molsary* (*Mimusops* sp.), *champā* (*Michelia champaca*.), *seoti* (*Chrysanthemum* sp.), *mogra* (*Jasminum sambac*) and *yasmin* (*Jasminum* sp.). The choicest dishes were prepared and laid out on floorspreads (*dastarkhwān*) and platters filled with betel leaf served afterwards.<sup>78</sup>

Describing the celebrations of the Prophet Muhammad's (pbuh) birthday in the year 1036 AH (1626) in *Maidān e Dilkushā*, Gilani writes that the huge tent pitched here was supported on forty columns and guyed with ropes to four hundred pegs. The tent was pitched right opposite the *Dād Mahal*, between the two buildings of the Home Ministry.<sup>79</sup> As Gilani has described the events relating to the period of Abdullah who was a contemporary of the Mughal Emperor, Shah Jahan, this great tent could be visualised as the sort pitched in front of the Halls of Public and Private Audience at Lahore, Delhi and Agra (in the 17th century). P.A. Andrews,<sup>80</sup> who has based his analysis of such tents on contemporary Mughal sources, writes that the assembly of some of these involved as many as 3000 skilled tentmen engaged in the task for a month. One such tent, Andrews adds, measured 56.9 m in length, 36.5 m in width and could accommodate 10,000 standing people; while its central supporting poles which were 17.5 m high made this tent higher than the palace hall where it was pitched. The tent at *Maidān e Dilkushā* may have resembled such a Mughal tent. Gilani continues that within it was a canvas canopy (*shamyānā*) covered with gold brocades velvet below while on a raised dais was the golden throne encrusted with jewels and surmounted by a pearl-fringed parasol. Presumably awnings surrounded the tent sharing the peripheral poles of the roof, so that the forty columns of support that Gilani speaks of may have consisted of four central poles and thirty six peripheral columns - or ten columns on each elevation of the tent. Around this great tent an exhibition of crafts had been set up and apart from the entertainment provided to the multitudes thronging the *maidan* by rope-walkers, puppeteers, jugglers and jesters, there was

the added attraction of a thousand dancing girls. Their cheeks aflame like candles and their eyes glistening like pearls, they danced away the evening like a thousand peacocks or like a thousand flowers while their audience watched wide-eyed, pupils flitting like black bees (from one flower to the other). In the afternoon the royal procession advanced slowly from the royal palace complex on a tour of the two *maidāns*' festivity, the Sultan on an elephant flanked by an army on foot and preceded by dancing girls arrayed in red. A special elephant five *gaz* long, which was to be the Sultan's mount, had been 'washed' with sandalwood and saffron for the occasion and was ornamented with gold and silver chains, a pearl-fringed seat and a jewelled crest. At the *Maidān e Dilkushā* where the procession paused, golden platters were waved around the Sultan to avert the evil eye and, at the throne, gifts were presented and received.<sup>81</sup>

A hundred yards north of the *Chār Miṅār* was the *Maidān Daulat Khānā e Āli* which was a *Jilū Khānā* (forecourt) of the royal palace complex to its west. The *maidān* was a walled square, each (300 yds) side of which was articulated by a monumental *kamān* or vaulted portal, with an octagonal stone *hauz* at its centre. Three of the *kamāns* survive (Figs 55-57) giving some idea of the vastness of the square and the *hauz*, filled now with *bidi* butts, *pān* spittle and plastic wrappers, is nevertheless a reminder still of the city's benchmark and known once as the '*chār sū ka hauz*' - the *hauz* of the crossroads.<sup>82</sup> The eastern *kamān* or portal was the *Machhlī* (Fish) *Kamān* facing *Machhlī Bandar*, the Qutb Shahi port on the east coast which originated as a fishing village. Another name for it seems to have been the *Kamān Davāzdeh Imām* ( the Arch of the 12 *imāms*). The portal across it, on the *Maidān's* west, was the *Kamān Sher-e Āli* (or *Kamān* of Āli the Lion<sup>83</sup>) recalling an alleged *hadīṣ* : 'I (Mohammad) am the City of Learning and Ali is its doorway' (this *hadīṣ* forms part of an inscription on the Mecca gateway of the Golconda citadel<sup>84</sup>). The *Sher-e Āli* portal opened into the royal palace complex and its door



Fig 55  
Qutb Shahi Kamans  
Source: Jan Pieper



Fig 56  
Char Minar and Kamans  
Source: Jan Pieper



Fig 57 Char Minar: View from Mecca Masjid

was framed by three black basalt slabs, the two vertical ones being 60 ft high and 6 ft thick, the horizontal slab being 36 ft long and of same thickness. The door itself was made of sandalwood ribbed into geometrical patterns which were filled with ivory and gold plates - or so one is told.<sup>85</sup> Traditionally, the *Maidān Daulat Khānā e 'Ālī* was the venue of a grand 'Āshūrā assembly on the 9th evening of *Muharram* when a fire was built at the centre of the *maidān*, the *kamāns* illuminated and 'golden cypresses' set up around the square.<sup>86</sup>

The northern boundary of the city was the Musa River and garden palaces extended along the river to the west and east of the city's northern axis (See Fig.54). Those on the west side include the *Amīn Bāgh* after Mohammad Quli's minister, Mirza Mohammad Amin Shaḥstrāni. The locality is still known as *Amīn Bāgh*, part of it now taken up by Hyderabad's Maternity Hospital.<sup>87</sup> An old fountain in black stone in the hospital compound with stone tigers and elephants spouting water is believed to have been a part of the Qutb Shahi garden.<sup>88</sup> The garden was used for the recreation and residence of royal visitors such as the envoy from Safavid Iran, Imam Quli Beg (who resided in Hyderabad for six years<sup>89</sup>). Gilani sums it up as a *qit'ā* (fragment) of *bihisht* (paradise).<sup>90</sup> Further west of the *Amīn Bāgh* was Mohammad Quli's *Nadī<sup>d</sup> Mahal* (Palace of the River) which was completed by Abdullah with gilded wooden ceilings and columns.<sup>91</sup> The plain along the river which it overlooked was used for playing *chaugān* (polo) and functioned also as another *maidān* for 'Āshūrā assembly - which (on the seventh evening) resembled Resurrection Day.<sup>92</sup>

Along the river bank to the east was the *Bāgh e Mohammad Shāhī*, an extensive pleasure garden,<sup>93</sup> which the sultan Mohammad Quli himself has described in an incomplete poem. Much of the description reads like the garden *qasidā* (ode) of the classical Iranian poets<sup>94</sup>: the trees of the garden like the

heavenly *Tūbā* tree; its flower-reviving breezes, the very breath of Jesus; the ten tongues of the *sausan* (lily) unfolding in praise of the garden.<sup>95</sup> The garden was walled and surrounded by walks and fruits from its trees hung out above the walls glowing like candles in chandeliers. This site of the garden had opened up the bud in the garden of the poet's heart and the fragrance had illuminated the entire world. The poet lists some of the fruit of his precious Paradise : coconuts like emerald jars, date clusters like branches of coral, red and white betelnut clusters "like night and day" and every *jāman* (*Eugenia* sp) a whole sapphire. Grape clusters, like the Pleiades, hung down from the *mandwā* (trellises) and each pomegranate was like (an *alam* inscribed on) a Qutb Shahi *sikkā* (coin), the seeds within like a hundred sparkling ruby eyes. Inevitably, there were reminders for the poet of his beloved: the mangoes shaped like her eyes and the *chamṡā kalī* (*chamṡā* bud) was her nose; while the black bee hovering over it was the mole on her nose. Inevitably, too, the garden was filled with the *hourīs* of Paradise and the music of the birds and the dancing *hourīs* had so intoxicated the trees that they waved about drunkenly shaking their bejewelled arms and clapping their hands (leaves).<sup>96</sup>

The royal pleasure gardens of the Qutb Shahis were located for the most part around the water storage tanks on the outskirts of the city (See Figs 63,64). One such cluster of pleasure gardens surrounded the 16th century Husain *sāgar* (commissioned by Ibrahim Qutb Shah and named after its builder, Shah Husain Wali - a respected Sufi from the *Chishtiyā khānqāh* of Gulbarga and the Sultan Ibrahim's son-in-law<sup>97</sup>). The Husain *sāgar* collected run off from the surrounding high ground (particularly from the Banjara monadnock in the west) and was fed by a 36 mile long canal originating in the upstream reaches of the Musa river (engineered in the 16th century by Neknam Khan<sup>98</sup>). Its mile long embankment, 100 *gaz* high and 50 *gaz* wide, was stone and lime construction<sup>99</sup>. On a hill nearby (the *Koh-e Nabāt Ghāt* ) three hundred feet above the water an airy three

storeyed palace had been built by Mohammad Quli overlooking the forest-backed water expanse and the irrigated orchards "which extended two *farsakhs* (6 miles) around the hill" (and where lofty tents were set up during a royal visit<sup>100</sup>). According to Gilani, the canals irrigating these gardens were dug out in anticipation of the Safavid Iranian ambassador's first visit to Golconda (during Mohammad Quli's life time<sup>101</sup>); and the Iranian ambassador perched on the hill palace of Mohammad Quli was presumably entertained by *chirāghān* (illuminations) of the Husain *sagar* similar to the one on the occasion of the Sultan Abdullah's visit (in the year 1050 AH or 1641<sup>102</sup>). Gilani writes that wooden screens, 20 yds high, had been put up along the (mile long) embankment<sup>and the embankment</sup> illuminated with earthen lamps was transformed into a wall of *Nur* (light) at night. The woodwork extended along the three sides of the tank and carried an extraordinary representation of trees, animals and huge *mihrāb* cutouts - all of which were illuminated. Temporary markets and bazars ornamented the water front, and every evening wooden rafts were lit up and set afloat in the water with thousands of earthen pitchers and jars each carrying a candle. During the day, swimmers (including women) demonstrated a variety of skills in water while elephants threw columns of water into the air with their trunks. The festivity lasted for several days and the population of Hyderabad attracted to Husain *sāgar* was entertained with a rare display of fireworks until two in the morning. On the fourth evening the Sultan was joined by the Iranian and Hindustani envoys and the fireworks and illuminations enjoyed from the *Nabat Ghāt* palace. For this occasion, bonfires had been built in the jungle clearings on high ground - to east and west of the tank - and the jungle lit up with the glow of scattered fires.<sup>103</sup>

Another garden cluster defined the 'tor - boulder - tank' area four farsakh (twelve miles) south of the city (See Fig 64) and crowning the highest point here was the three storeyed palace of Mohammad Quli - the *Koh-e Tūr*, on whose ruins

the *Falaknuma* (sky-like) Palace of Mahbub Pasha (the 6th Nizam) was built in the 19th century.<sup>104</sup> *Koh-e Tūr* (the Mount on which God's Light was revealed to Prophet Moses<sup>pbuh</sup>) was an appropriate name for Mohammad Quli's palace, for, as the sultan observed in a poem, it was forever radiant with God's Light, and its radiance brightened the eyes of its onlookers like collyrium from the ash of (the burnt) Mount of Moses.<sup>105</sup> Ironically, Mohammad Quli's *Koh-e Tūr* which seems to have been a *shabistan* (harem) was inhabited only during *Barsat*, the rainy season, when it was used as an *ishrat gāh* or pleasure retreat.<sup>106</sup> With the onset of rains, royal visits to the garden surrounding the city were planned<sup>107</sup> and an entire army travelled with the Sultan when he visited the *Bāgh e Gulshanī*, the *Bāgh e Lingampalli*, the *Bāgh e Dilkushā* or the *Koh-e Tūr*. Such visits could last the entire period of rains.<sup>108</sup> During the day the hunt could be enjoyed while the evenings were for wine, music, poetry and the company of women. Surrounding *Koh-e Tūr* were two miles of orchards and the garden villas of *amīrs* which became camping grounds for the travelling army while bazars were set up around this tent colony.<sup>109</sup> It was only during *Barsāt* that the (150 ft x 90 ft) reservoir<sup>110</sup> of the palace *sahn* could be transformed into "the mirror of Alexander". Likewise, the *hauz* in the four *shahnashīns* and four *ivāns* of the palace were brimful only during the rains when "the cloud-like spray from fountains in their midst fell back in a sparkle of stars".

In 1940, the *Kulliyāt* (Poetical Works) of Mohammad Quli was published in Hyderabad compiled and edited by (the late) Dr. Zor, Professor of Urdu at Osmania University. The publication was an important development for Urdu literateurs since not only is the entire collection of Mohammad Quli's poetry written in (Deccani) Urdu but also - more significantly - its *mizāj* (character or tone) is unmistakably Hindustani (Indian) even if the *pirāyā* (style) is Persian.<sup>111</sup> It is through his collection of *nazm* (poem), *ghazal* (lyric) and *qasidā* (ode) - that

Mohammad Quli's collection of palaces in his royal palace complex<sup>112</sup> could be understood. While the Indo-Iranian Qutb Shahi culture which he promoted is best reflected in his choice of Urdu as a medium for literary expression.

Parallel to its use as a literary language, Urdu was a language of trade and of social intercourse - a language arising from the interaction between incoming Persians, Turks, Afghans and Arabs with India's native population and the outcome, therefore, of a process of cultural fusion (an early name for it being *rikhtā* - or 'scattered')<sup>113</sup>. A distinction tends to be made between<sup>the</sup> Classical Urdu of 18th and 19th century Delhi and Old Urdu<sup>114</sup> and examples of the latter tend to be sought in the poetry of the North Indian Amir Khusrau<sup>too</sup> who, in addition to much else, sang joyously of Indian seasons and culture in the 13th and 14th centuries.<sup>115</sup> This was the period of southern expansion of the Delhi Sultanate and the new language and poetry was now promoted in the Deccan (and Gujrat).

Urdu in one of its forms was spoken in Delhi at the *khanqāh* of *Chishtiyā* sufis whose *silsilā* (lit: chain) had extended to the Deccan in the 14th century.<sup>116</sup> As their task was more a matter of *talif e qulūb* (the winning over of hearts) rather than *tablīgh e mazhab* (religious sermonising), the 'literary' sufis of this branch (or order) used the mixed tongue of the people increasingly in their oral and literary discourse and poetry.<sup>117</sup> And in this process of 'winning over hearts', they assimilated. Hindu culture was being refashioned at this time all over India - stimulated by *bhakti kāl* (Hindu devotionalism). This was a movement to create a new social equilibrium in the Hindu kingdoms in place of<sup>a</sup> *Brāhmin* - dominated order. The signs of God were everywhere, the *bhaktīs* said, reinterpreting ancient wisdom and the poets wrote *dohās* in vernacular tongues unfolding the lives of Rama and Krishna. A common message of *bhaktīs* and sufis was love and a common task was instruction in the Path of Love (*Prem Marg*) which, as both

knew, was a fundamental lesson to be learnt in the quest for God. Poetry was one common medium of expression. Inevitably, both *bhaktīs* and sufis influenced each other in as much as they stood apart.<sup>118</sup>

It was natural, therefore, that in a Deccani Urdu romantic *masnawi* (patterned on *Prem Mārgī* Sufi poetry) a description of the beloved should follow the example not only of a Persian *sarāpā* but also of a Hindu *nak shikh* ('top to toe' description); for the lover's longing for the beloved to be expressed occasionally in terms of the lament of the *birhan* (or Creation) separated from her lord (or Creator); or for the pleasure and intoxication (and liberation) of Union to be celebrated in wholly sensual terms - as it is in Krishna *bhaktī* poetry; or in Mohammad Quli's poetry.<sup>119</sup>

The resurgence of Hindu culture which both paralleled and followed *bhaktī's* social message was stimulated by the patronage of wealthy Hindu rulers too and it was a reaction, partly perhaps too, to the spread of Muslim culture. It was court patronage and the pursuit of pleasure which promoted the renewed interest in Hindu aesthetics - and particularly in *smngararasa* (the erotic *rasa* or 'flavour'), the chief of nine *rasas* (flavours) comprising the Hindu system of aesthetics<sup>120</sup> (and paintings illustrated through a repertoire of images how this *rasa* was attained). Another subject to have gained popularity was the creation of male and particularly of female stereotypes and their portrayal as actresses and actors in the drama of love. (This *nayika bhed* literature had its origin in the ancient *Natyāsastra* of *Bharata* <sup>121</sup>).

And this reappraisal of the ancient *sastrās* was to influence Muslim court culture. Works on erotics such as the *Bhog Bal* were patronised at the court of Bidar in the 15th century<sup>122</sup> and the *Tazkirāt al Shahw*<sup>at</sup><sub>λ</sub> (List of Aphrodisiacs) the

*Lazzat al Nisa* (lit: Flavours of Women) the *Sringara manjari* (lit: Blossoms of Erotica) are just a few of the surviving manuscripts on the subject from Qutb Shahi times, the first two in Persian the last in Telugu.<sup>123</sup> But Muslim understanding of *rasa* was not <sup>limited</sup> to mere appreciation of *sringarasa* and Mulla Wajhi's 17th century work titled *Sabras* (All Flavours) suggests in its name itself the familiarity with Sanskrit poetics at the Qutb Shahi court!<sup>124</sup> At Bijapur, Ibrahim Adil Shah (a contemporary of Mohammad Quli and *jagat guru* to his admirers, wrote the *Kitāb e Nauras*, a collection (in Urdu love songs) of the nine flavours of Hindu aesthetics, while also a wholly *nau* (new) flavour - the *Nauras*.<sup>125</sup> One source of cultural influence on the Deccani Muslim courts was Vijaynagar (just as the Mughal courts were influenced by the culture of the Rajput kingdoms). As Herman Goetz speculates, the greatness of Vijayanagar's art was felt at the Deccani Muslim courts through the migration of artists after its fall.<sup>126</sup> Needless to add, Hindus formed the bulk of its population in the Deccani Muslim sultanates and a synthetic culture was inevitable. At the court of Ibrahim, Mohammad Quli's father, both Telugu and Urdu were literary languages (in addition to Persian) and one source of Hindu cultural influence in Golconda may have been Ibrahim himself who had depended constantly on the political support of Hindu *naikwaris* (chieftains) and had spent several years in political asylum at the court of Ramaraja in Vijayanagar.

To return to Mohammad Quli's poetry, to its Hindustani *mizāj* (Indian character) and to the nature of the synthesis he helped to promote. The *rang-ras* (colour and taste) of the *nayikā* seems dominant<sup>127</sup> even as the poet concedes his debt to the wine and love lyrics of Hafiz, the Persian mystical poet. Poems in praise of courtesans (a poem for each one) share a light-hearted quality with poems in praise of palaces (one for each courtesan). And the joyous mood prevails - as it must - in description of Hindu festivals and Indian seasons (such as *Basant* and

*Barsāt*); or, equally, in description of Muslim and Iranian celebrations (such as *Shab e Bārāt* and *Nauroz*<sup>128</sup>). For it is the face of a new love that the poet finds wherever he turns - on the *hindolās* (swings) among the flowering trees (in spring or in the rains<sup>129</sup>); in the evenings fireworks on *Shab e Bārāt*,<sup>130</sup> or in the new moon of *Id ul Ramzān*.<sup>131</sup> But each new love is an Indian face and it is his Indian portrait that the poet glories in, too; as he labours over a *nakh shikh* description of *Nannī*, her *sari* the colour of *madan phul* (the flower of love<sup>132</sup>), or of *Piārī* with curls (like the sprouting tamarind<sup>133</sup>); of lively *koel*-like *Sānwali*,<sup>134</sup> or of charming *Chhabelī* with glowing *gulali* (pink lotus) cheeks,<sup>135</sup> of the flower-sprinkler, *Koñlī*, with *donā* (*Artemisia* sp.) and *bālā* (hibiscus) braided in her hair,<sup>136</sup> or of *Hyder Mahal* enveloped in Love's red *chādar* (veil) like a velvety red rain beetle<sup>137</sup>(the bride of the earth<sup>138</sup>).

*Hyder Mahal* was a harem palace and the residence of a special mistress bestowed with this title - and the various poems of the palace are portraits of *Hyder piārī* (beloved Haider<sup>139</sup>). Description of other palaces too (such as *Ālā Mahal*<sup>140</sup> or *Sajjan Mahal*<sup>141</sup> - each for a favourite) tend to lapse likewise into the imagery of ten thousand lightning flashes from (a silver tassled) veil, or the *tārā mandal* (star clusters) of hair ornament. At the poet's residence, *Qutb Mandir*, where mirrors were hung everywhere and the floor strewn with pearls there were spirited assemblies of women every evening when whole goblets of wine could be consumed in the exchange of <sup>a</sup> few words and the music and dance brought down *Zohrā* (Venus) herself from above.<sup>142</sup> While the seven palaces of the eight storeyed *Khuda Dād Mahal* were named after (a further) seven favourites of the Sultan<sup>143</sup> - recalling <sup>the</sup> *Haft Paikar* (Seven Portraits) of Nizami, a Persian poet <sup>(d. 1209)</sup> the Sultan admired.<sup>144</sup>

Mohammad Quli's poetry is the expression of prevailing culture and its

celebration. <sup>145</sup> It is the image of an ordered world guarded by the twelve *imāms* and radiant with the light of the *Qutb* star (Pole star) - a light perceived in the glitter of jewelled ornament, the glow of lamps and the sparkle of crystal goblets; and in the flash of fireworks and fireflies and in a hundred illuminating fragrances. The sense of joy and exhilaration in the creation of this image is the poet's only message, perhaps, to the world.<sup>146</sup>

But, as the Deccani sultans knew more prosaically, this radiant, pleasure-giving world they celebrated in their poetry was dependent on the regular flow of money to the State treasury. And business was judiciously separated from pleasure in the royal palace complex whose southern end consisted of State offices, the royal workshops and storehouses while the royal harem was located at the northern end.<sup>147</sup> Between these lay *aiwānāt* (halls) for assemblies of the learned and a 300 feet long dining hall where *'ulamā* and *wazīrs* and other notable residents of the palace complex (10,000 in all) sat daily at the Royal *dastarkhwan*.<sup>148</sup> Nearby, halls for military troops and guards around a *maidān* and palaces (such as the *Gaggan Mahal* and *Chandan Mahal*) for high ranking soldiers guarded the Sultan's precious wives and precious jewels. Dominating the complex was the eight storeyed *Khudā Dād Mahal* whose various levels housed workshops for paper making, for manuscript illumination and building as well as a painting gallery and a library.<sup>149</sup> This lofty, airy *hasht bihisht* (8 Paradises) where fountains sparkled at every level was destroyed by a fire in the early 17th century<sup>150</sup> and with it was destroyed a treasury of paintings and books which would have shed more light on the splendour of the Indian *Safahān e Nawī*.

Notes.

1. 'Ālam, S M Hyderabad - Secunderabad Twin Cities : a study in urban geography. Bombay : Allied Publishers 1965, p 130. According to Professor 'Ālam the wealthy and enterprising Hindu immigrants from the east coast (*Andhrans*) remained alienated from the city's traditional sector. Likewise, the *Jaina* community of *Mār wāri* businessmen (from Marwar, Rajasthan), which formed an important constituent of the city's social fabric. (Professor Alam's book was the outcome of a PhD dissertation at the University of Edinburgh).
2. *ibid.* pp 131-32 (figs 50&51) in an appraisal of morphological regions of Hyderabad and Secunderabad.
3. *Koh-e Tūr* (lit: Mount Sinai, the Mount where God's Light was revealed to Moses) was the name of a Qutb Shahi palace south of Hyderabad city over whose ruins the 19th century *Falaknumā* (Sky-Like) palace was built.
4. *Koh-e Nūr* (lit: Mountain of Light) is the name of the well known diamond (now amongst the British Crown jewels) which is believed to have been found in 1658 at Kollur in the Krishna river (in Qutb Shahi dominions) and is said to have originally weighed 765 English carats uncut. For the complete story of the *Koh-e Tūr*, see Sha Roco A guide to Golconda Fort and Tombs. Hyderabad Deccan: Hyderabad Central Press, n d, p 25.
5. Four palaces. also referred to as *Chār Mahal*.
6. Roco, Sha op cit. pp 39 and 43. The first Nizām's father Ghazi u<sup>d</sup>in Firoz Jung was commander-in-chief of the Mughal army at the final siege of Golconda. His grandfather, Chin Qulich Khan is buried in Hyderabad, while he, himself, was viceroy of the Deccan under Aurangzeb.
7. Sikanderabad was named after Sikandar Jāh (Hyderabad's 3rd nizām) and 'Our Faithful Ally'.
8. 'Ālam, S A op cit., p 132
9. The original verses in Urdu (translated here into English) were quoted by Sardar Khushwant Singh, in his lecture 'State of the Nation' at Madina Education Centre, Hyderabad, 21st July 1991.
10. Hyderabadis refer lovingly to the Musa (Moses) river as the *Musi*, just as its confluent, Isa (Jesus) river is referred to as *Isi*.
11. Foster, W English Factory Records 1655-66, p 261. Quoted by Alam S M in "Masulipatam - a metropolitan port in the 17th century". Islamic Culture Vol XXXIII, July 1959, p 177. The Dutch were established at Masulipatam by 1615, the English by 1622. In 1632 the English received the 'Golden Farman' from Abdullah permitting them to open their factory. 'Ālam also quotes Methowld (Hakluyt Society : Golconda Relations) who noted that Masulipatam was an emporium for calicoes and painting, its fabrics commanding a wide market in Europe, W. Asia and SE Asia.
12. Sarkār, J "The last siege and capture of Golconda". Journal of Hyderabad

Archaeological Society 1918

13. Alam, S A op cit. p 131
14. Planning Atlas of Āndhra Pradesh ed S M Alam. Government of India and Andhra Pradesh, 1974, p(ii) of Section on Geology
15. Sarkār, J op cit.
16. Qayyūm, M A "Qutb Shahī gumbadain (Qutb Shahi tombs)". In Urdu Āndhra Pradesh Oriental Research, No 7, July 1990, pp 50-51. The author is Assistant Director of the Department of Archaeology, Hyderabad.
17. ibid, p 53 This was a subterranean canal, designed by Persian engineers presumably. The type is described in detail by G Yazdānī: Bīdar its history and monuments, Oxford University Press, 1947, pp 205-206
18. ibid; p 54
19. after Ibrahim Qutb Shah, the 4th Qutb Shahi sultan who commissioned its construction.
20. Sherwāni, H.K. "Cultural aspects of the reign of Abdullah Qutb Shah". Islamic Culture, Vol XXX No 1 1956 pp 45-75. Professor Sherwani writes that "the original garden extended from the twin hillocks later topped by a *baradari* and a mosque right upto the ruins of the palace lying towards the west of the mosque". The palace spoken of has disappeared altogether. For a description of buildings on top of hillocks, see G. Yazdani ed Report of Archaeological Dept of HEH the Nizam's Dominions 1924-25, pp 2-4
21. frequently quoted, see Epigraphia Indo Moslemica 1915-16 G Yazdani ed See also Annual Report 1924-25 op cit., p 2
22. Bilgrāmi, S H and Wilmot, C; Historical and Descriptive Sketch of His Highness the Nizam's Dominions 2 vols, Vol 1, 1883. The authors write that court held in *Nau Mahal* frequently in the time of Nizam Ali Khan II.... "but the present Nizam rarely visits Golconda".
23. Epigraphia Indo Moslemica, ed. G Yazdani 1913-14. The inscription is dated 1180 AH (corresponding to 1756 AD).
24. As is suggested by the 'Golconda Survey Map' of the Dept. of Archaeology, n d. The survey at a scale of 200 ft to 1 inch was carried out under the direction of M.Karamatullah Khan, Superintending Engineer General Branch PWD, Ghulam Yazdani, Superintendent Dept. of Archaeology and Anantha Krishna Rai, Asst. Superintendent, Hyderabad Municipal Supply. The survey was undertaken in the first quarter of the present century.
25. Golconda Survey Map, op cit. Another garden is indicated as Mahal Taramati on the map; but apart from its *baoli*, there are no traces left of it.
26. infact this is the only large pleasure garden to be seen in Bijapur, Hyderabad and Bidar, the three places visited.
27. Sherwāni, H K op cit.

28. Observation based on personal visit to site in July 1991.
29. as suggested by fragments of these slabs which can be seen in the garden below the cisterns on the embankment. These and other rough measurements of mine correspond to those of the Golconda Survey Map, op cit.
30. Chakladar, H C Social Life in Ancient India : Studies in Vatsyayana's Kāma Sutra. Calcutta, 1929. Chakladar draws attention to the *samudra-grhas* in *Kama Sutra* ("cool summer houses for lovers").
31. At the *Nau Mahal* , water parterres surround the railed *chabutras*. The water parterres in the royal palace complex at Golconda are better preserved.
32. As indicated on Golconda Survey Map, op cit. *Dal Bādāl* in Sanskrit refers to a mass of clouds; a large army, large tent. See Duncan Forbes Dictionary of the Hindustani Language, London 1848.
33. Zor, S.M.Q. ed Kulliyāt Sultan Mohammad Quli Qutb Shah. Hyderabad Deccan, Ibrahimia Press, 1940 (1359), p 208. Zor discusses *Bagh e Naya Qila* in the chapter titled "*Nauroz aur Basant* (Nauroz and Basant)" of his *muqaddimāh* (Preface). Zor was Professor of Urdu at Osmania University at the time of first publication of *Kulliyat* .
34. Shah, Mohammad Quli Qutb. Kulliyāt Mohammad Quli Qutb Shah. S Jaffar ed. Delhi: Tarraqi Urdu Bureau, 1985. pp. 370-74.
35. Byrom, J B Observation during the course of my postgraduate research seminar in Edinburgh, July 1992
36. Alam, S M. Hyderabad - Secunderabad Twin Cities op cit.
37. ibid. The author quotes contemporary historian Khafi Khan's *Muntakhab u'l Lubāb*. (In Persian; in State Library, Hyderabad).
38. Rizvī, S A A A socio intellectual history of the isna'ashari Shi'is in India. 2 vols, Vol 1 (7th to 16th century), Canberra : Ma'rifat Publishing House, 1986; p 305  
See also Zor, op cit. p 281
39. Zor, S M Q op cit., p.108. Zor's source of information is Girdharilal Ahqar's *Tarikh e Zafrāh* of 1185 AH (in Persian).
40. Alam, S M Hyderabad and Golconda op cit. quoting H K Sherwani, *The Foundation of Hyderabad*, Hyderabad 1953 pp 224-44 who in turn refers to *Tarikh e Ferishtā* of the contemporary historian, Ibrahim Ferishta.
41. Mc Chesney, R D "Four sources of Shah Abbas's building of Isfahan". Muqarnas Vol 5, 1988, p.104. Mc Chesney refers to the *Nuqawat al Athar* of Natanzi, 'a bureaucrat of some standing' who composed his account of the *Safavid* State in 1589-90 and according to whom the construction of Isfahan commenced in 1590, well before the usually accepted date of 1598.
42. Rizvī, S A A op cit., p 303. See also Zor, op cit. p 279

43. Eaton, R M Sufis of Bijapur 1350-1700 Princeton 1978. Eaton bases his account on 17th century historian Ferishta's *Tarikh e Ferishtā*.
44. It is believed that the pleasure loving-sultan, Abul Hassan, and his appointment of Madanna as the chief Minister incurred Aurangzeb's displeasure. Moreover, the Mughal threat to Golconda resulted in alliances with the *Maratha* chief Sivaji which proved disastrous for Golconda.
45. frequently quoted. See Rizvī, S A A op cit. <sup>p 316</sup> Rizvi's translation reads "Although the Emperor `of the World Shah`Abbas made Safahan a new town / O King: because of you Hyderabad has become *Safahan e Nawi*".
46. Zor, S M Q op cit. <sup>pp 305-12</sup> Alam, S A op cit.; others.
47. Epigraphia Indo Moslemica 1935-36 G. Yazdani ed. Yazdani refers to inscriptions in the *ghassal wari* which were "once the quarters of the professional washers of the bodies of the dead.....close to *Mir ka Daira*".  
*see also Rizvī, op cit., p. 309.*
48. Zor, S M Q op cit., p 132
49. that is according to the *Yunānī* or Greek based system of Muslim medicine.(In more detail in another chapter).
50. This original source was the *Ikhtiyārāte Bad`eyī* (in Persian) of Hāji Zein ul `Attār.
51. Husain, S A and Ali, M "Medical manuscripts of Qutb Shahi period in the Libraries of Hyderabad". Bulletin of Indian Institute of History of Medicine Vols XIX and XX, pp 51-63 and pp 129-36 respectively.
52. Jafar, S ed. Kulliyat Mohamamad Quli Qutb Shah.. In Urdu. New Delhi : Tarraqi Urdu Bureau, 1685, p77 of *muqaddi ma* (preface).
53. Rizvī, S A A op cit., pp 340-48. This sacred relic was believed to be associated with Imam Husai n's son, Imam Za'in ul `Abidin who was sick at the time of the Battle of Kerbala. The relic was believed to confer blessings on the sick.
54. ibid, p 334 According to Rizvī, this Iranian model of *Āshūrā* mourning and procession patterned on the *sabzwār* (lit: green) processions was introduced by the Niamatu llāhīs in their *khānqāhs* in Bidar and was established in the Deccan long before the rise of Golconda.
55. ibid, p 347 Rizvī says it reminds mourners of the *alam* given by Imam Husai n to his half brother, a brave warrior also martyred. So presumably, the *alam* is a symbol of power and strength.
56. Gilanī, H N A Hadiqāt as Salātin ed S A A. Bilgrami, Hyderabad: Idara Adabiat Urdu, 1961, p 43 (in Persian) quoted by Zor, S M Q. op cit. p 145. *Isna`āshārī Shi'is* who believe in this 'transmission through' 12 imams differ from the Ismaili Shi'is who believe in 7 imams.
57. Rizvī, S A A, op cit. p 348.
58. ibid, p 340. Aurangzeb issued a *farmān* dated 1110 (1699) in connection with

the maintenance of <sup>his</sup> relic.

59. This account in Zor, S M Q op cit. pp 145-46 based on Gilani Hadiqāt Bilgrami ed pp 43-44.
60. Zor, S M Q op cit. p 108.
61. ibid, p 107. Quoted from Girdharilal Ahqar Tarīkh e Zafrāh , p 21.
62. ibid, p 107. The mosque still exists but is not open to public.
63. Nizami, P S F "Qutb Shāhion ke āhad men tashkīl e shahrī aur fan e tāmir" (City planning and architecture in the Qutb Shahi period). In Urdu. The author adds that there was a madrasā besides for assemblies of the learned (the ulama and pandits ). See Zor op cit., p 280. See also Annual Report 1918-19 op cit., p 3
64. ibid, p 241 The author refers to Tuzk Qutb Shahi of Mir Roshan Ali Manuscript No 37, Idara Adbiat Urdu, Folio 216. See also G. Yazdani ed Archaeological Report of HEH the Nizams Dominions, 1918-19, wherein a similar view is expressed
65. Archaeological Map of Bidar town in G Yazdani Bidar : its history and monuments. London: Oxford University Press, 1947.
66. Yazdani, G ed Archaeological Report of HEH the Nizam's Dominions 1925-26.
67. Zor, S M Q, op cit, p 108. Refers to p 21 of Gulzar e Asifya (In Persian).
68. ibid. This reconstruction of the royal plan based on contemporary historical works and on journals of the European visitors, Tavernier and Thevenot in the 17th century. See also Tuzuk e Asifya Persian MS National Museum of India, Delhi, Folios 163, 164 / 82 for 18th century map of Hyderabad. Another map of 18th century Hyderabad in Idara Adbiat Urdu, Hyderabad in ruinous state. Discussed by S Gole in The Maps of India. One of the maidāns is what is now known as Chawk dominated by a "lofty clock tower". The other maidān whose centre is marked by a stone cistern is now one of the jewellery markets of Hyderabad. See also Jan Pieper Hyderabad : A Quranic Paradise in Architectural Metaphors, Environmental Design ed Attilio Petruccioli pp 46-51. Since it is not possible to know what the writer's sources are for his version of the original plan of Hyderabad, one would be more inclined to accept Prof Zor's version of the original layout based on two maidans (rather than one). Jan Pieper is clearly in error when he refers to the northern archway as the Machchli Kaman (Fish Kaman ), for the Fish Kaman was the eastern archway leading to the Machchli Bandar, or Masulipatam, the 'fish' port of the kingdom.
69. ibid, p 168.
70. based on Tavernier's description of Bhāgnagar (Hyderabad) as quoted by Sha Roco, op cit., pp 20-22 See Tavernier, J B. Travels in India. Transl from original French edition of 1674 by V Ball; London, 1889. Repr Lahore 1976; 2 vols, Vol 1, pp 152-155.
71. frequently quoted. See Zor, S M Q, op cit, pp 113-14. Original source is

Lachmi Narayan Shafiq (court historian of Nizam Ali Khan 11) *Ahwāl e Hydērābād*, 1214 AH (1789 AD). In Persian.

72. Cf. a verse from Lawrence Binyon's <sup>transl.</sup> *Khamsā e Nizāmī* :  
The balcony of my eye is thy abode / Gracefully alight therein for this  
house is thy own. See G. Yazdani *Bidar* op cit., p 45  
This is similar to an inscription from Bidar Fort translated by G Yazdani  
*Bidar its history and monuments*, op cit. p 46. The verse is translated as:  
Since in my eye (lit: "the royal chamber of my eye") always rests thy  
image / It is my prayer (O King) that my sight may remain only as long as  
that vision.
73. Tavernier's description of *Bhāgnagar* (Hyderabad) as quoted by Sha Roco, op  
cit, p 21.
74. Zor, S M Q, op cit, p 155. See also Rizvi S A A op cit p 340.
75. *ibid.*, quoting 17th century historian Fīẓuni Aṣṣrabādī's *Tārikh e Futoohāt e  
'Adil Shāhī* (Persian Ms. folio 217, British Museum)
76. Gilani, *Hadīqāt* , quoted by Zor, S M Q op cit pp 162-64.
77. Gilani, *Hadīqāt* . Urdu translation K.M.Sarwar; p 57.
78. *ibid.*, p 48. Cf Zor, op cit. p 166.
79. Zor, op cit p 165.
80. Andrews, P A "The court tents of Shah Jahan : the Generous Heart or the  
Mass of Clouds" *Muqarnās* Vol 4 pp 149-56.
81. Account based on Gilani, *Hadīqāt* S A A Bilgrami ed pp 49-56. See Zor, op  
cit, p 167-68.
82. Nizami, PS op cit., p 239.
83. Zor, S M Q op cit., p 110.
84. Rizvi, S A A op cit. <sup>p 299</sup> The said inscription is on the Mecca Gateway of the  
Golconda Fort. The Gateway was completed in 1559 by Mustafa Khan  
Ardistani, Prime Minister of Ibrahim Qutb Shah.
85. Zor, S M Q op cit. p 110.
86. *ibid.*, p 157.
87. *ibid.*, p 130. According to Zor, the garden extended from the river bank  
southwards to the royal palace complex.
88. Qarni, K O *Qarni's Sketches of Hyderabad*, Hyderabad : Nazir Ahmed Publ.  
1990. On p 25 is a sketch of the fountain.
89. Gilani, *Hadīqāt* . trans. K M Sarwar op cit. p 133. Also referred to as the  
*Hirā Mahal* after it was 'adorned' by a palace in Mohammad Quli's  
lifetime.

90. *ibid*, p 66.
91. *ibid*, p 90.
92. Zor, S M Q., *op.cit.*, p 156.
93. *ibid*, p. 156. Traces the boundaries of the garden. See Gilani, *Hadiqat*, transl. K.M.Sarwar, *op. cit.*, p. 72 for destruction to garden caused by flooding in Musa river.
94. Shah, M Q *Kulliyāt*, Zor, S M Q ed, p 415. Mohammad Quli acknowledges his debt to the poetry of Nizami and Khaqani. See also *Kulliyat*, Jafar, S ed *op cit.* p 191 on the influence of Hafiz on the poet.
95. Persian garden *qasidās* abound in such description. See Schimmel, A "The Celestial Garden" in *The Islamic Garden*. R Ettinghausen ed Dumbarton Oaks Colloquium pp 18, 30 for similar references to the lily, the *Tuba* tree and the spring breeze as the *Nafas ar Rahman* (Breath of the Merciful ). The author reminds (elsewhere: Gifford Lectures on Islam, Univ of Edinburgh, May 1992) that to the poets, the breeze was often likened to "the breath of Jesus which quickens the half dead lover"; and opens the "contracted bud of the human heart".
96. Shah, M Q Q *Kulliyat* S. Jafar ed. p. 729. The *qasidā* (*Bāgh e Mohammad Shahi*) transl. into spoken Urdu by Zor, S M Q. *op cit.* pp 133-36.
97. Gilani, *Hadiqāt*, transl. K M Sarwar *op cit* p 44.
98. Sarkar, J *Journal of Hyderabad Archaeological Society* 1917. The channel completed in 1856 and called Balkapur Canal.
99. *ibid.*, p 44 A Gaz was a little less than a yard. The circumference of Husain *Sāgar* is 11 miles.
100. *ibid*, p 44.
101. *ibid*, p 192.
102. *ibid*, p 192.
103. *ibid*, pp 192-93.
104. Zor, S M Q *op cit.* p 120.
105. Shah, M Q Q *Kulliyāt* S Jafar ed *op cit.*, p 411. The poem *Koh-e Tūr* translated into spoken Urdu by Zor, S M Q, *op cit.* p 123.
106. Zor, S M Q, *op cit.* p 125 Cf Gilani *Hadiqat* transl. K M Sarwar *op.cit.*, p 64.
107. Gilani, *Hadiqāt* transl K M Sarwar- *op cit.* p 73 Gilani says, writing the names of several gardens around the city, that royal visits to these began with the onset of rains.

108. *ibid* pp 44, 73, 74 The Sultan Abdullah stayed a week at the *Bāgh e Lingampalli* ; and he spent a whole month at *Bāgh e Gulshani* and (the following year) at the *Koh-e Tūr*.
109. *ibid.*, p 64 Refers to tent colony in the (surrounding) gardens at the foot of the hill and the setting up of bazars around the whole.
110. Zor, S M Q *op cit*, p 18 Refers both to *Tārīkh e Zafrāh* , *op cit.* and to *Tarikh e Qutb Shahi* (Persian Ms. Folio 269 Salar Jung Museum, Hyderabad). Both record dimensions of the *shah'nashīn* and the raised *hauz*.
111. Hasan, M *Urdu Adab kī tanqīdi tārīkh* (A critical history of Urdu literature). In Urdu. Lucknow 1986, p 162. The author at the time of this publication was Professor of Urdu in Jawaharlal Nehru University, New Delhi and President of the Centre for Indian Languages.
112. Gilani, *Hadiqāt*, transl. K M Sarwar p 104. Refers to the 40 palaces of the royal palace complex.
113. Hasan, M *op cit.*, pp 185-89
114. Sadiq, M *A History of Urdu Literature*, London: Oxford University Press, 1964.
115. Schimmel, A. *A History of Indian Literature: Classical Urdu Literature from the Beginning to Iqbal*, Wiesbaden: Harrassowitz, 1975; p 129. The writer notes that Amir Khusro "introduced the popular language of N. India into Persian verses" which resulted in a genre later called *rikhta* (mixed).
116. Hasan, A *op cit* p 55. See also Rizvi, S.A.A. *A history of Sufism in India 2 vols*, Vol 1 New Delhi, 1978, p 359. Speaks of popularity of Vaisnavite themes in Sufi *santā* ritual in Hindi speaking regions.
117. Hasan, M *op cit*, p 56.
118. *ibid.*, pp 56-58. See also Rizvi, S A A *A History of Sufism in India* *op cit.* Writes that "the detailed study of love.....received fresh impetus in the *bhakti* movement especially that centering around Krishna".
119. *ibid.*, p 175 Hasan also refers to *Mahbub ka Sarapa* of Syed Miran Shah Abul Hassan of Bidar, p. 116.
120. Ahmed, N *Kitāb e Naurās Islamic Culture*, 1954<sup>19, p154</sup>. See also L Seigel *Sacred and profane dimensions of love in Indian traditions as exemplified in the Gita Govinda of Jayā Diva* , Oxford University Press, 1978, p 46: Acc to Seigel, "*Rasa* is a technical term in Sanskrit poetics indicating mood or sentiment or flavour.....The word points to various realms of experience". On p 43 the author writes, "In the *Rg Veda* , the word *rasa* refers to any liquid but particularly to the sap of the plants, juice, the essence of anything; and as the essential quality it came to mean taste.
121. Raghavan, V ed. *Srngaramanjari of St. Akbar Shah* Hyderabad Archaeological Department Publication, 1951. Dr. Raghavan was Head of the Department of Sanskrit, University of Madras at the time of this

publication. *Srngaramanjari*, based on old Sanskrit manuscripts\_ and Telgu scripts, is concerned with "an aspect of the rhetoric of love". For the influence of *nayika bhed* literature on Mohammad Quli's poetry, see M Hasan op cit., p 163.

122. Khan, Rehmat Ali ed Manuscripts of Hyderabad : A catalogue of Special Exhibition. Hyderabad: Salar Jung Museum, 1990.
123. Acc. to Raghavan, op cit., Syed Shah Kalimullah Hussaini (alias Akbar Shah) the author of *Srngaramanjari* was a scholar, linguist and poet (and a close friend of the last Qutb Shahi ruler; Abul Hasan Tana Shah). But work on the subject was popularised by other sultans. Dr. Raghavan adds that Sultan Abdullah Qutb Shah also commissioned Ksetranjna, the celebrated composer of Telgu *pādās* to write a work on *nayikas* and *nayakas*, a subject that was popular also at the courts of Akbar and Shah Jahan. Sunderdas who wrote several works on the subject (eg. *Sundarasrngara*) was a court poet of Shah Jahan while Keshawdās who was ambassador at Akbar's court wrote the *Rasakapriya*. *Srngaramanjari* is based on *Rasamanjari* (collection of *rasas*) of Bhanadutta who composed it in the first half of 17th century.
124. Wajhi, M *Sabras* (in modern Urdu) ed. Qazi Anis ul Haq Gorakhpur UP, Shandar Press, 1982.
125. Ahmed, N op cit.. The term *Naurās* as explained by Zuhuri, the (Persian) poet at Ibrahim Adil Shah's court in his preface to the *Kitab e Naurās*, refers to an Indian mix of nine *rasa* (juices). According to traditional aesthetics one or more of these nine essences or emotions is present in every work of art and determines its character. See also Ghani, S A A History of Persian Language and Literature at the Mughal court 3 vols, Vol 3, Allahabad 1930.
126. Goetz, H "The fall of Vijayanagar". Journal of Indian History Vol XIX, 1940.
127. Shah, M Q Q, *Kulliyāt* S Jafar ed. op cit. p 427. One of the poet's mistresses, *Gauri*, is referred to as the bud from the *rang ras* garden (garden of colour and flavour).
128. Hasan, M op cit., p 224 writes that Muslim and Hindu (or Iranian) holidays were viewed commonly as cultural events and this attitude encouraged the celebration of a hybrid local culture. Zor, S M Q op cit., pp 160-233 lists and describes 14 joyous occasions celebrated in the *qasidas* of Mohammad Quli (*Ashura* is expected of course) *Qasidas on Basant* (pp. 206-15), *Barsat* (pp. 216-26), *Nauroz* (pp. 200-206) and *Shab e Barat* (pp 180-89) predominate, since these were quasi religious or non religious celebrations.
129. Shah, M Q Q *Kulliyāt* S. Jafar ed. op cit., p 385.
130. *ibid.*, pp 346-50.
131. *ibid.*, p 450.
132. *ibid.*, p 413. The flower of *Madan* (the Hindu god of Love), Artabotrys

odoratissimus, is cream coloured with a pineapple-like fragrance. See Appendix.

133. *ibid.*, p 453. *Chugkar* in text refers to new leaves of tamarind. See Appendix.
134. *ibid.*, p 417. The *koel* (Indian Cuckoo) with which *Sāñwalī*, is compared to is black and lively.
135. *ibid.*, p 428 *Gulāl* refers both to the Damask rose and to the pink lotus.
136. *ibid.*, p 434 The poet refers to *Chhabeli* as *phuljarī* (a kind of fireworks, lit: flower sprinkler). The aromatic *dona* (a species of *Artemisia* grown annually in the Deccan and S.India - *Artemisia pallens*) is a popular constituent of garlands in combination with brightly coloured flowers eg *Crossandra* sp. or others like *bala* (*Hibiscus* sp. or *Pavonia* sp. from the mallow family). See Appendix.
137. *ibid.*, p 434. The term used is *bir bahoti* or ladybird.
138. A synonym for *bī/bahoti* is 'urōos e zamīn', bride of the earth. See Molvi Syed Ahmed Dehlawi ed. *Farhang e Asīfyā* 4 vols, Vols 1 &2, Lahore: Urdu Science Board, June 1977, p 464.
139. Shah, M Q Q *Kulliyāt* S. Jafar ed. op cit., pp. 433-36.
140. *ibid.*, p 410.
141. *ibid.*, p 447.
142. *ibid.*, pp 412-13. See also Zor, S M Q op cit., p 129.
143. *ibid.*, p 409.
144. *ibid.*, p 415.
145. Hasan, M op cit., p 224.
146. *ibid.*
147. Zor, S M Q. op cit., pp 110-13.
148. *ibid.*
149. *ibid.*, p 120.
150. *ibid.*, p 119 Cites Gilani, *Hadiqāt*, Bilgrami ed p 22.

## CHAPTER 3

### GARDENS OF THE DECCAN

Medieval Muslim gardens - called Turco-Iranian or Hispano-Arab or Islamic - were built in a variety of geophysical regions from Spain to India. Some examples of the type in India and Pakistan were surveyed during the days of British Indian archaeology. The built evidence has been re-examined since, giving rise to broad divisions of the type - and generating fresh interest and the need for closer scrutiny. In the face of its built evidence, the tendency to lay stress on the Mughal garden heritage of the subcontinent is justified and inevitable; although it limits the significance of the garden landscape (Muslim and Hindu) in pre-Mughal times. The term Mughal (or Mughal Indian) garden is somewhat inadequate too in describing the range of gardens built in the subcontinent from the 16th to the 18th centuries - including those built in the Deccan. In the sense that both Bijapur and Golconda arose from the Bahmani state (an offshoot of the Delhi Sultanate), garden development in these two states could be viewed even as a continuity of Sultanate and pre-Mughal traditions. Moreover, the Shi'ite rulers of Bijapur and Golconda were acutely conscious of their cultural ties with Safavid Iran (rather than with Mughal India); of the need to acknowledge Hindu feeling and to secure their roots in the Deccan plateau. And the sanctity of the tank could not be ignored in the glory of blue and green-tiled domes. This is not to say that the Mughal kings rejected their cultural heritage in India. (There is the evidence of Babar's Dholpur garden watered by the reservoir built by his predecessor Sikandar Lodhi by damming up a stream<sup>1</sup>). But the existence of perennial streams in N.India enabled the Mughals to engineer canals for irrigation and the efficient aquifer systems of the Indo-Gangetic *Doab* relieved them of excessive reliance on surface storage of water - the native practice.

It would be useful therefore to speak of the 16th and 17th century gardens of Bijapur and Golconda as Deccani Muslim gardens, acknowledging their roots in the soil and distinguishing these from the Mughal-built gardens in the Indo-Gangetic plains (and from those built in the Deccan following the Mughal capture of Nizam Shahi, Adil Shahi and Qutb Shahi territories). The essential distinction may be sought in variations of natural landscape and in source of irrigation water - and is highlighted in garden setting. What Alam refers to as the "mesa-like terrain of Maharashtra" and as "the tor-boulder-tank surface topography of Telingana"<sup>2</sup> (Figs 58-61) are landscapes totally dissimilar to the featureless alluvial expanses of the *doāb* regions of Northern India and Pakistan. In Haryana, Panjab and the UP, approximately half of irrigation needs are met today through ground water,<sup>3</sup> while the (now extensive) canal system has been a feature of irrigation since Sultanate times. In Andhra Pradesh and Karnataka, on the other hand, wells supply only a fifth of irrigation water today<sup>4</sup> and extensive areas of irrigation have depended on surface storage of water of which some spectacular examples are to be found at Warangal and Bidar - the work of the 11th century (Hindu) Kakatiyan kings of Warangal.<sup>5</sup> The large stepped well (*bāolī* or *baurī*) is a noticeable feature too in Karnataka, a well-preserved 17th century example being the *Tāj Baurī* (223 ft to a side) at Bijapur where arrangements for raising and supplying water south to a series of gardens (the *Nau Bāgh*) were observed by Cousens in the earlier part of this century.<sup>6</sup> Canals in Andhra Pradesh and Karnataka are small channels merely diverted from perennial streams to irrigate areas in their vicinity. At Bidar, however, Yazdani makes note of the subterranean canals in the impermeable trappean bed (100 ft or more below the porous laterite crust), created by widening natural rifts in the heart of the rock, the operation commencing from the mouth of the spring. (The valleys below these springs provided sites for extensive plantations, the Mughal governor of Bidar utilising one such site to create, in 1671, the terraced garden called *Farāh Bāgh*).<sup>7</sup> Yazdani also refers to the masonry



Fig 58 Western Deccan: Mesa-like terrain



Fig 59 Eastern Deccan: Tor and tank topography



Fig 60 Eastern Deccan: Rock formations  
Source: Hyderabad Archaeological series



Fig 61 Eastern Deccan: Rock formations  
Source: Hyderabad Archaeological series

channels at Bidar linking the Kakatiyan *Kāmthana* tank with a stone-lined square cistern, 260 ft to a side, a mile away - which is said to have been in the middle of a garden originally.<sup>8</sup> This practice of building extensive underground canals is said to have been developed by Persian engineers during the period of Muslim rule. At Bijapur Cousens has traced the "subterranean (masonry) tunnels", water supply piping and aqueducts from their sources in reservoirs on higher ground (without the city) to a succession of excavated *bāolis*, cisterns and water towers (Fig 62). The "subterranean tunnels" are said to have doubled up as catchment channels.<sup>9</sup> At Golconda and Hyderabad there is evidence for similar connections between the Durug Tank and the citadel of Golconda via the Qutb Shahi necropolis (referred to earlier)<sup>10</sup> and earth pipes carried water several miles from the Jalapalli tank to the *Chār Minār* water cistern; while the *Katorā Hauz* (200 yds x 200 yds)<sup>11</sup> which supplied drinking water to the *Bālā Hīṣār* (Golconda) was presumably part of a similar network (See Fig 13).

Needless to add, the large gardens of the Deccan were located, for the most part, on the margins of bunded tanks surrounding large tank-fed water cisterns (or *hauz*), both excavated and constructed, and occasionally along perennial streams. At Golconda and Hyderabad, a palace or pavilion-articulated hill surrounded by orchard and tank must have been a common sight. The citadel of Golconda, embowered in greenery once, was a conspicuous example of such a landscape. And seemingly also the two hills (terraced and pavilion-crowned)<sup>12</sup> beside the *Bāgh e Ibrahīm* in Golconda, overlooking the garden and tank at their feet (See Figs 14-16). Mention has been made of the *Koh-e Nābāt Ghāt* looming 300 ft above the garden-ringed Husain *sāgar*.<sup>13</sup>(Fig 63) The summit of the hill is no longer 'adorned' by the three storeyed palace mentioned in texts, but the remains of the Qutb Shahi garden pavilion - a *Chaukhandī* - could be seen here until recent years. To the Mughals this Qutb Shahi pavilion was the 'Stool of Satan' and the present

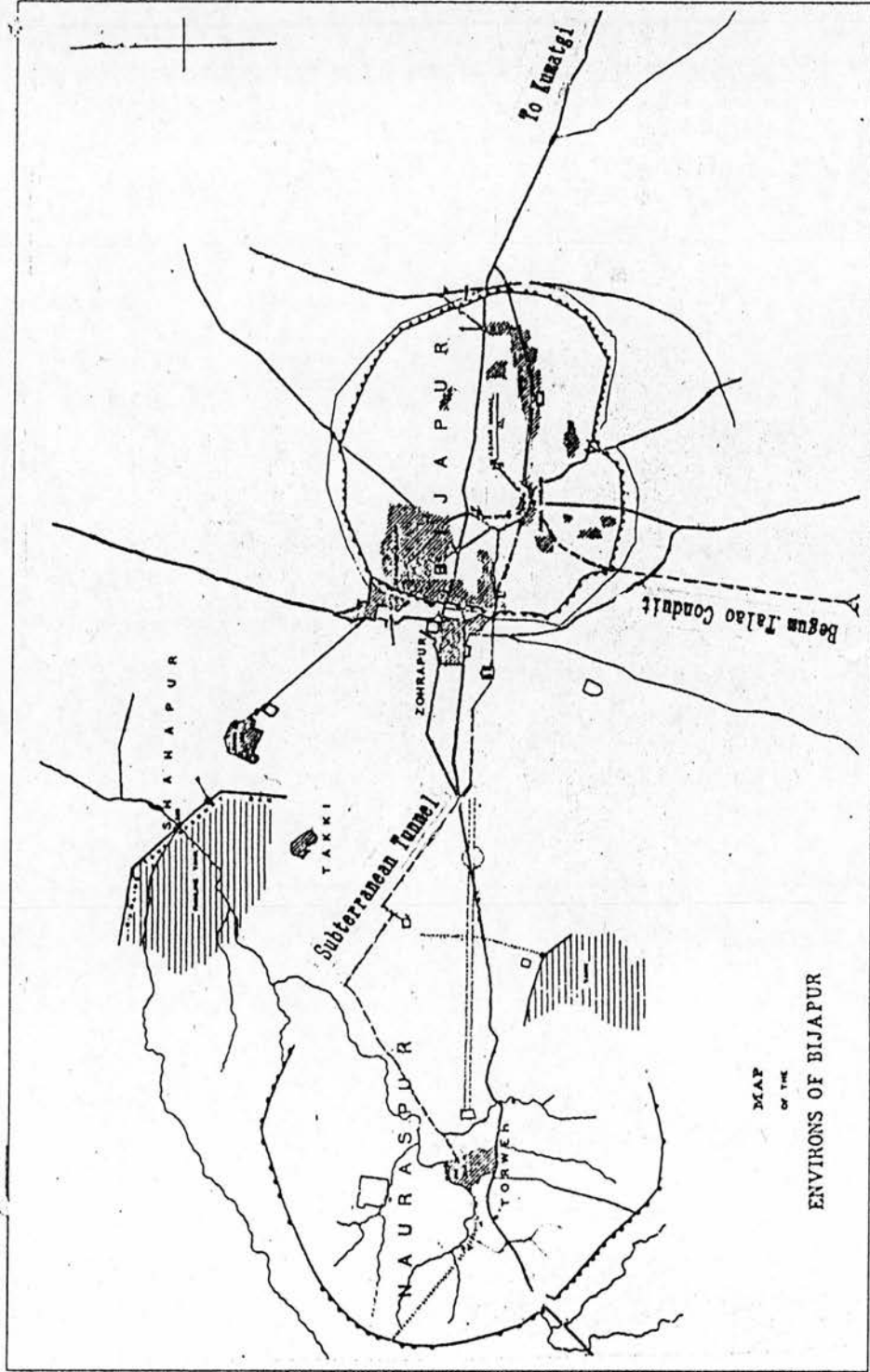
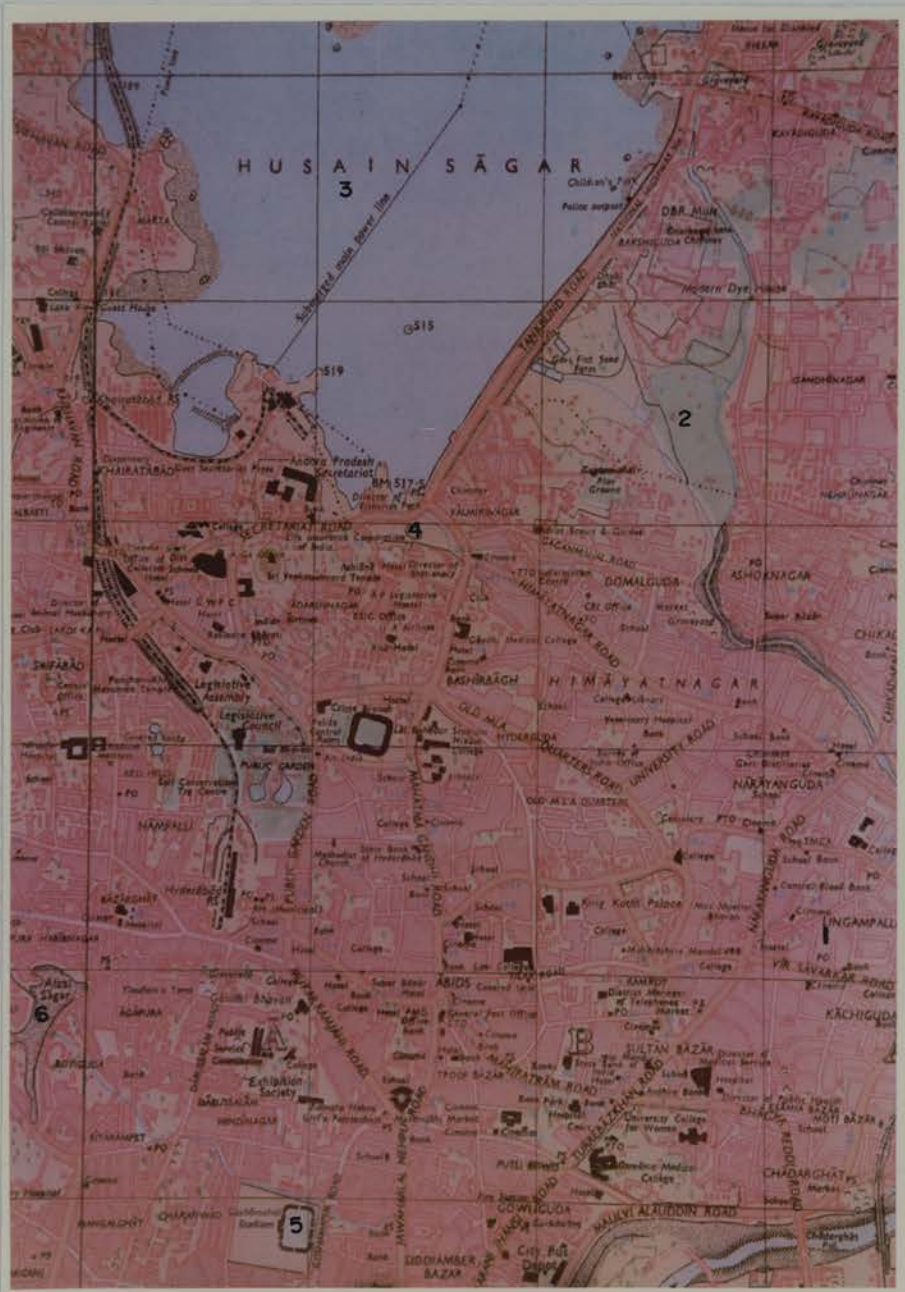


Fig 62 Bijapur and Environs: Water supply Source: Cousens

name of the hill - *Naubat Pahār* - evolved in the Mughal practice of making public announcements from its summit (the *farmāns* by *naubat* ).<sup>14</sup> Mention has also been made of the palace-crowned hills some miles south of the city - known now as the *Falaknumā* and the *Jahannumā* <sup>15</sup>: twin focal points in a landscape of tanks and gardens. A present day map records numerous garden sites here (Fig 64), all named after Asifya nobles to whom the Qutb Shahi gardens passed on as *jagirs* (estates).

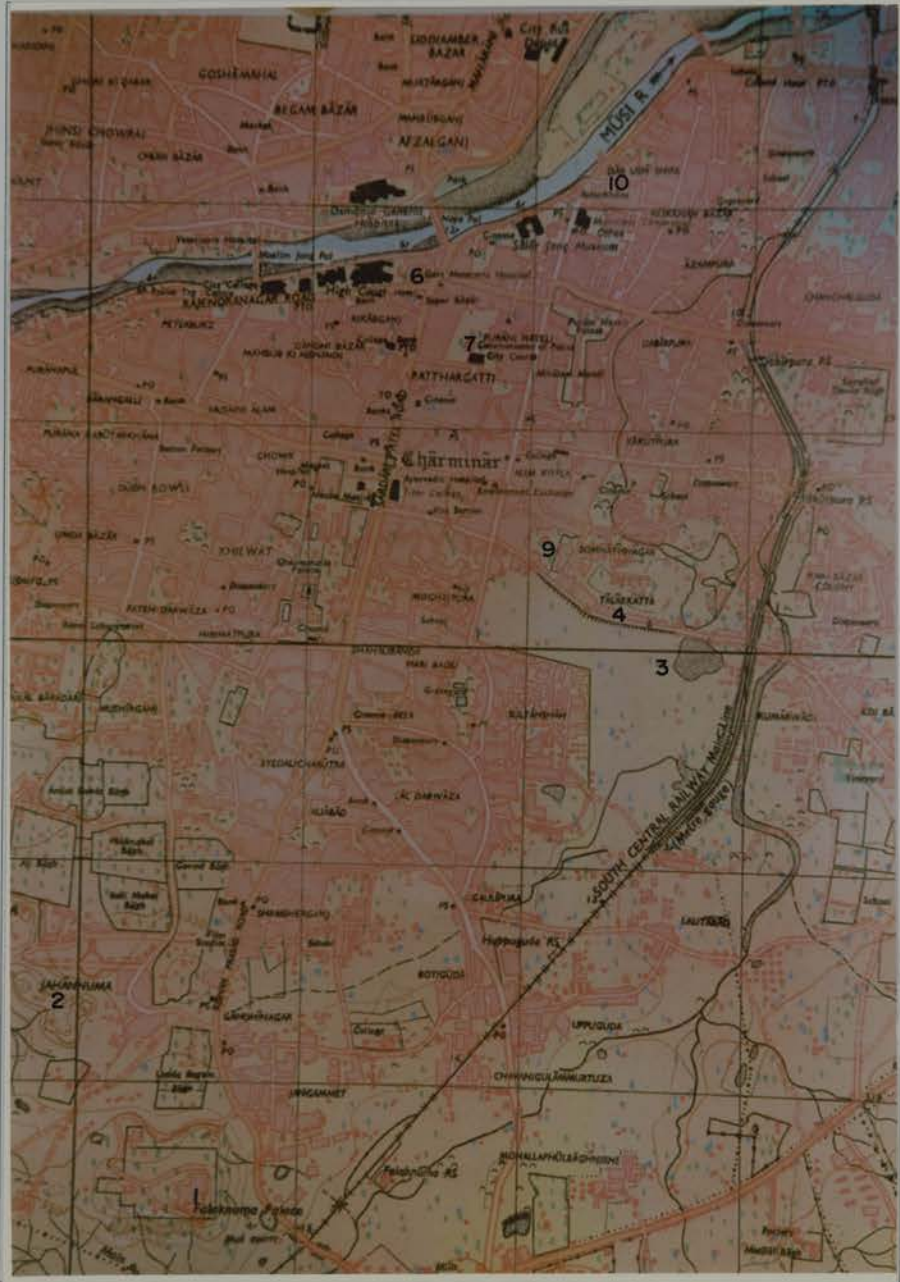
Of gardens situated below tank embankments, the remains of *Bāgh e Nayā Qilā* - described earlier<sup>16</sup> - are an example (See Figs 27-53). Another garden - the *Sultān Shāhī Bāgh* - is believed to have existed below the Mir Jumla Shah Muzaffar tank embankment in the heart of the city (Fig 64). According to Professor Sherwani, Abdullah Qutb Shah 'adorned' it in 1661 with two palaces which stood opposite each other across an extensive *hauz*. The present name of this locality is after this garden.<sup>17</sup> The present day Indira Gandhi park (*Phūl Bagh*, Fig.63) east of Husain *sagar* embankment is evidently built over an older garden. South of this was the *Bāgh e Lingampallī*, a large Qutb Shahi garden (frequently mentioned in texts in connection with week-long royal picnics)<sup>18</sup> which was fed by an overflow channel from Husain *sagar* (Fig 63) Sherwani in the mid-twentieth century referred to the misuse of the garden's *hauz* by locality inhabitants but there are no traces now of even the vandalised *hauz* although the name - Lingampalli - has survived.<sup>19</sup>

Kumatgi and Nauraspur (both outside Bijapur) may be cited for waterside garden pavilions and palaces. At Nauraspur, however, the two and a half mile long lake front which had been envisaged was only partially realised in the Ramling tank north east of the palatine city (Fig 62). The site was declared unlucky soon after construction commenced, the destruction of palaces soon after in 1624 (in Malik Amber's invasion) proving this to be so. The two pavilions of Kumatgi are better



- |                     |                       |                 |
|---------------------|-----------------------|-----------------|
| 1. Lingampalli      | 2. Indira Gandhi Park | 3. Husain Sagar |
| 4. Koh e Nabat Ghat | 5. Gosha Mahal        | 6. Afzal Sagar  |

Fig 63 Hyderabad Urban Area: Part Plan  
Source: Hyderabad Guide Map 1974



- |                             |                 |                    |
|-----------------------------|-----------------|--------------------|
| 1. Falaknuma (Koh e Tur)    | 2. Jahannuma    | 3. Mir Jumla Tank  |
| 4. Sultan Shahi Bagh        | 5. Chow Mahalla | 6. Amin Bagh       |
| 7. Peshwa's (Purani) Haveli | 8. Gosha Mahal  | 9. Daira Mir Momin |
| 10. Dar us Shifa            |                 |                    |

Fig 64 Hyderabad Urban Area: Part Plan  
Source: Hyderabad Guide Map 1974

preserved examples of pleasure houses of the nobility once in the midst of extensive gardens by the lake. The irrigation channels fed by the lake are still in use irrigating plantations in the village; and still intact too is the tower where water from the lake was stored for the cloud shower of a water pavilion - as noted by Cousens<sup>20</sup>(Figs 65-71).

For gardens surrounding large tank-fed cisterns, *Gosha Mahal* at Hyderabad, the pleasure retreat of the last Qutb Shahi ruler, may be cited. Its water reservoir fed by the Afzal tank is now filled up and part of a football stadium (Fig 63) and there are no remains now of the one league enclosure of the gardens and (two) palaces described in the 18th century by French troops stationed in Hyderabad.<sup>21</sup> *Goshā Mahal*, it is said, could accommodate more than 3500 people and it was even more substantial than the 18th century *Chow Mahallā* (or *Chār Mahal*) or what is left of its tank with 300 jets and surrounding four palaces and gardens.<sup>22</sup> A better preserved example of a palace with water cistern is the *Āsār Mahal* just outside the *Ārk Qijā* at Bijapur (and connected with it by a walkway over the moat) (Figs 72-73). *Āsār Mahal's* extensive *hauz* (65 yds x 50 yds) is eight feet deep and supplied with water from the Begam Talao reservoir south of the city (See Fig 62). The *hauz* was not excavated but constructed with thick masonry walls and along the two longer sides and at the upper level of the *hauz* are walks bordered with shallow pools, the whole bordered on three sides with lawns ten ft or so below. The palace forms the fourth side, the royal seat (*shahnashīn*) overlooking the *hauz* and surrounding garden across a two storeyed portico with a gilded wooden ceiling held up on immense columns of teakwood (Figs 74-81).

The typology of the pool-fronted palace-on-platform, common in the Deccan, may be traced at least to the evidence of the 6th century Sassanian palace - *Imarat e Khusrau* - which lay at the heart of an extensive enclosure - a 'paradeisos',

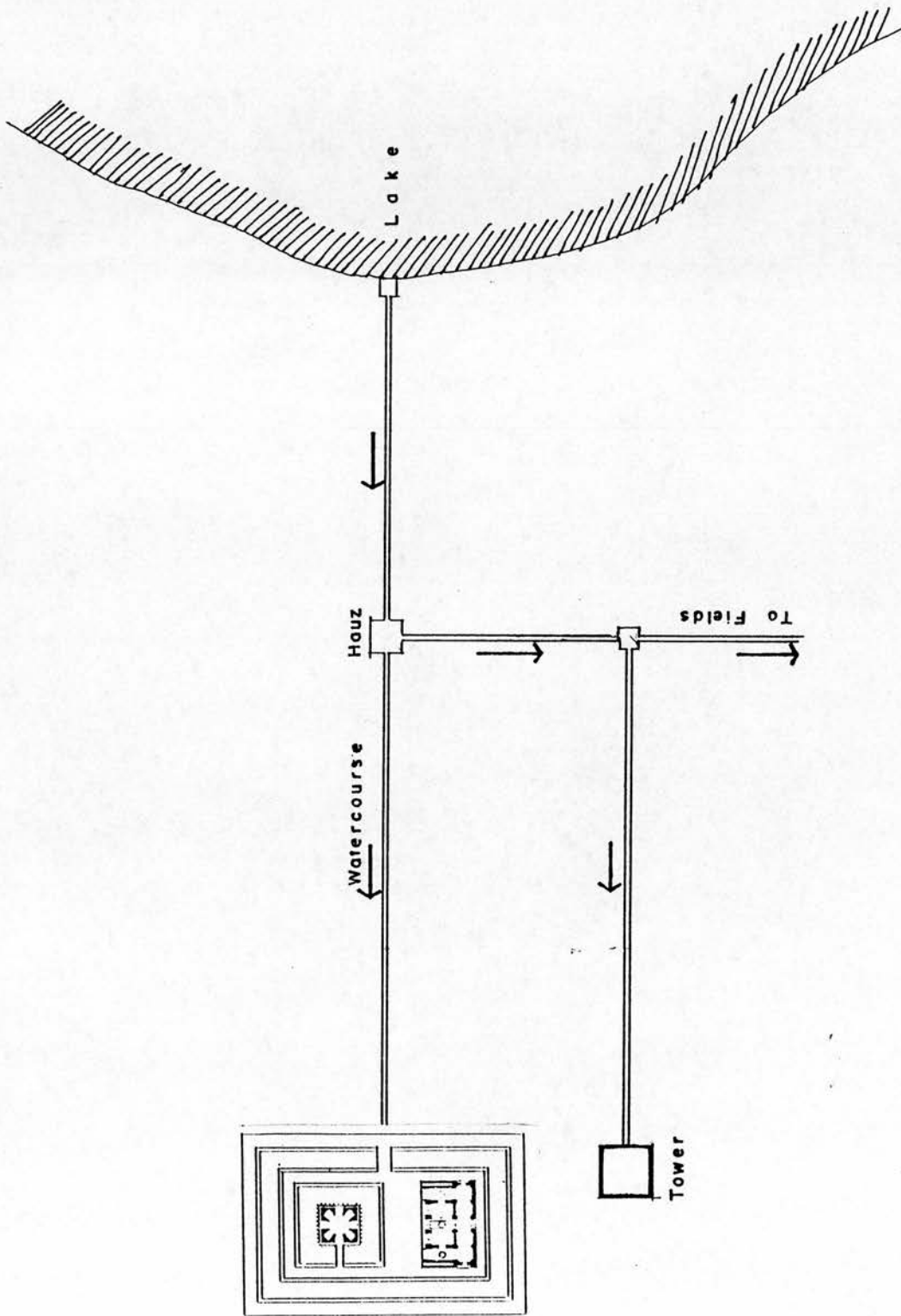


Fig 65 Kumatgi: Part Plan Source: Cousens



Fig 66  
Kumatgi: Water pavilion



Fig 67  
Kumatgi: Water pavilion



Fig 68 Kumatgi: View of lake from pavilion



Fig 69

Kumatgi: Water supply from lake to pavilion and tower



Fig 70



Fig 71 Kumatgi: Water tower

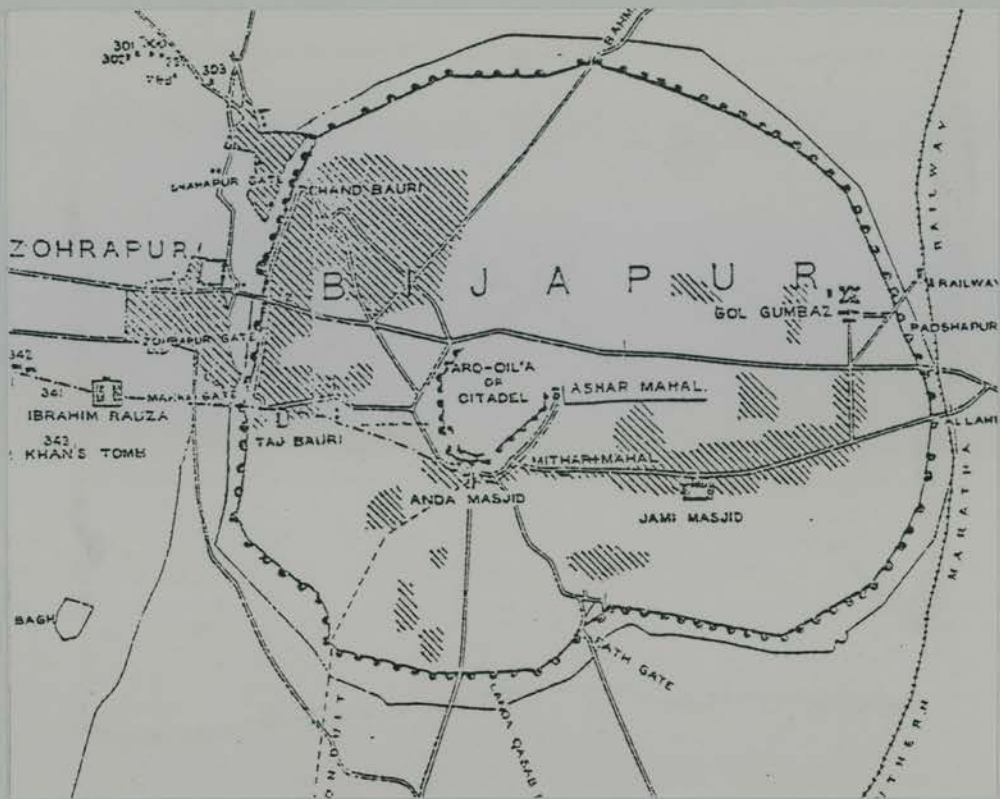


Fig 72 Asar (Ashar) Mahal, Bijapur: Location plan  
Source: Covsens

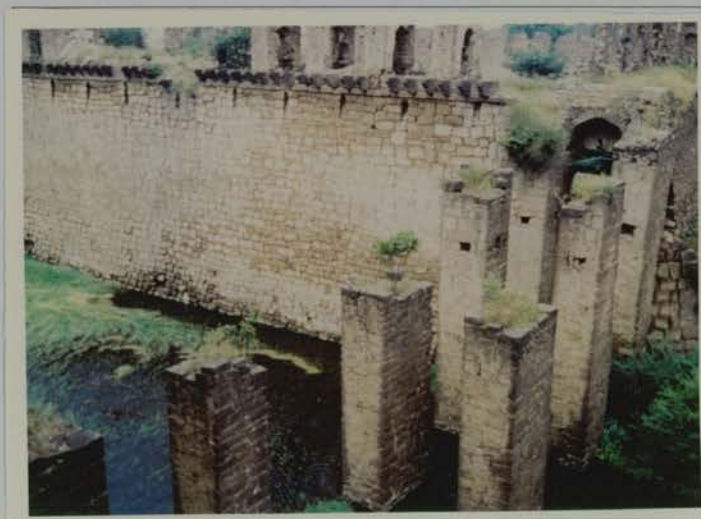
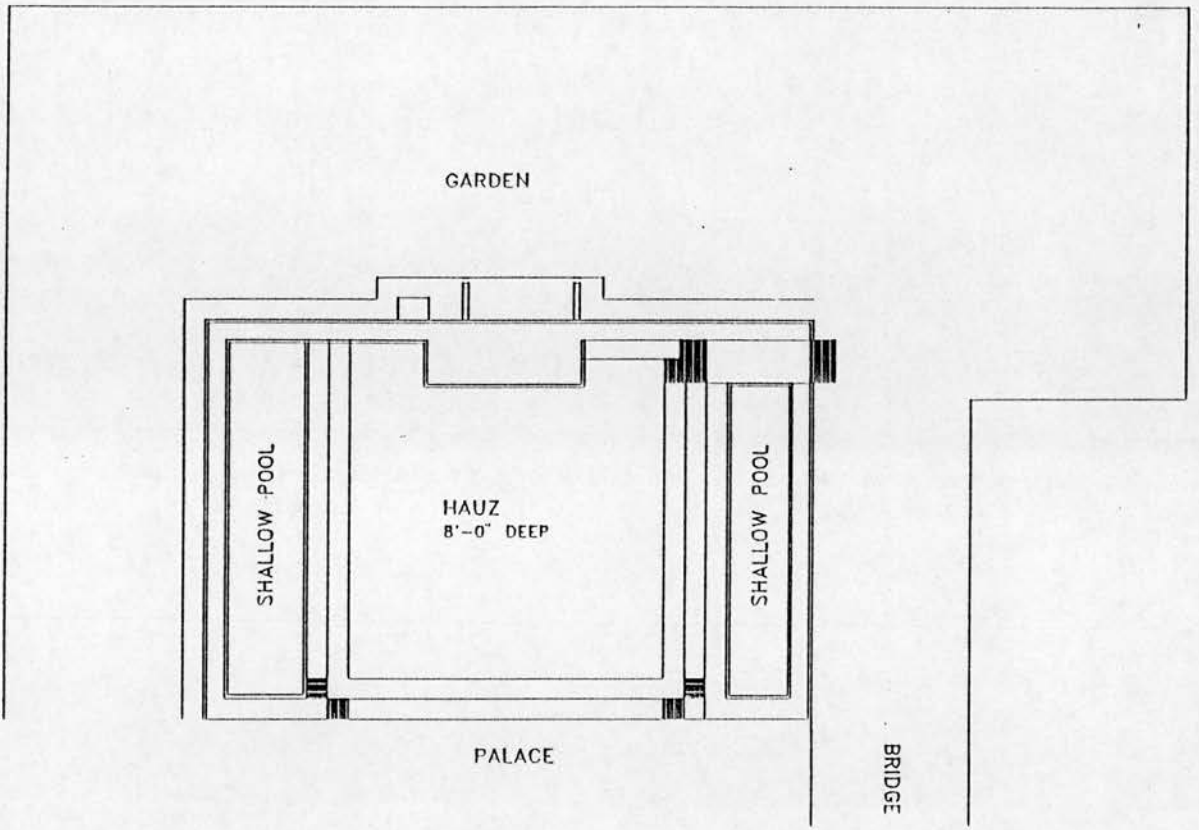


Fig 73 Bijapur: Arq Qila/Asar Mahal connection



Scale: 1" = 200 ft

Fig 74 Asar Mahal: Plan

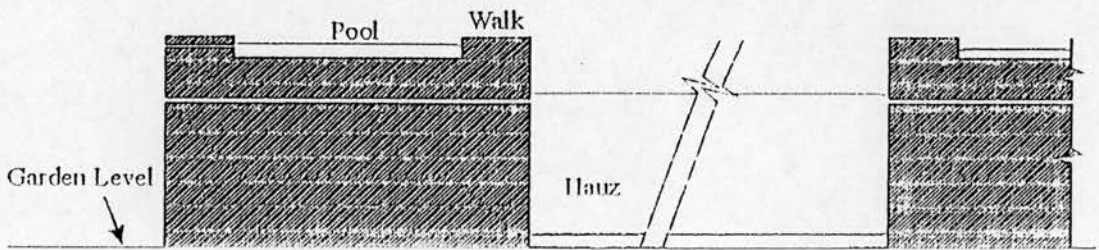


Fig 75 Asar Mahal: Part section through hauz



Fig 76  
Asar Mahal: Hauz  
(Jahaz Mahal back)



Fig 77  
Asar Mahal:  
Hauz and garden



Fig 78  
Asar Mahal  
Hauz and garden



Fig 79  
Asar Mahal  
Detail of corner



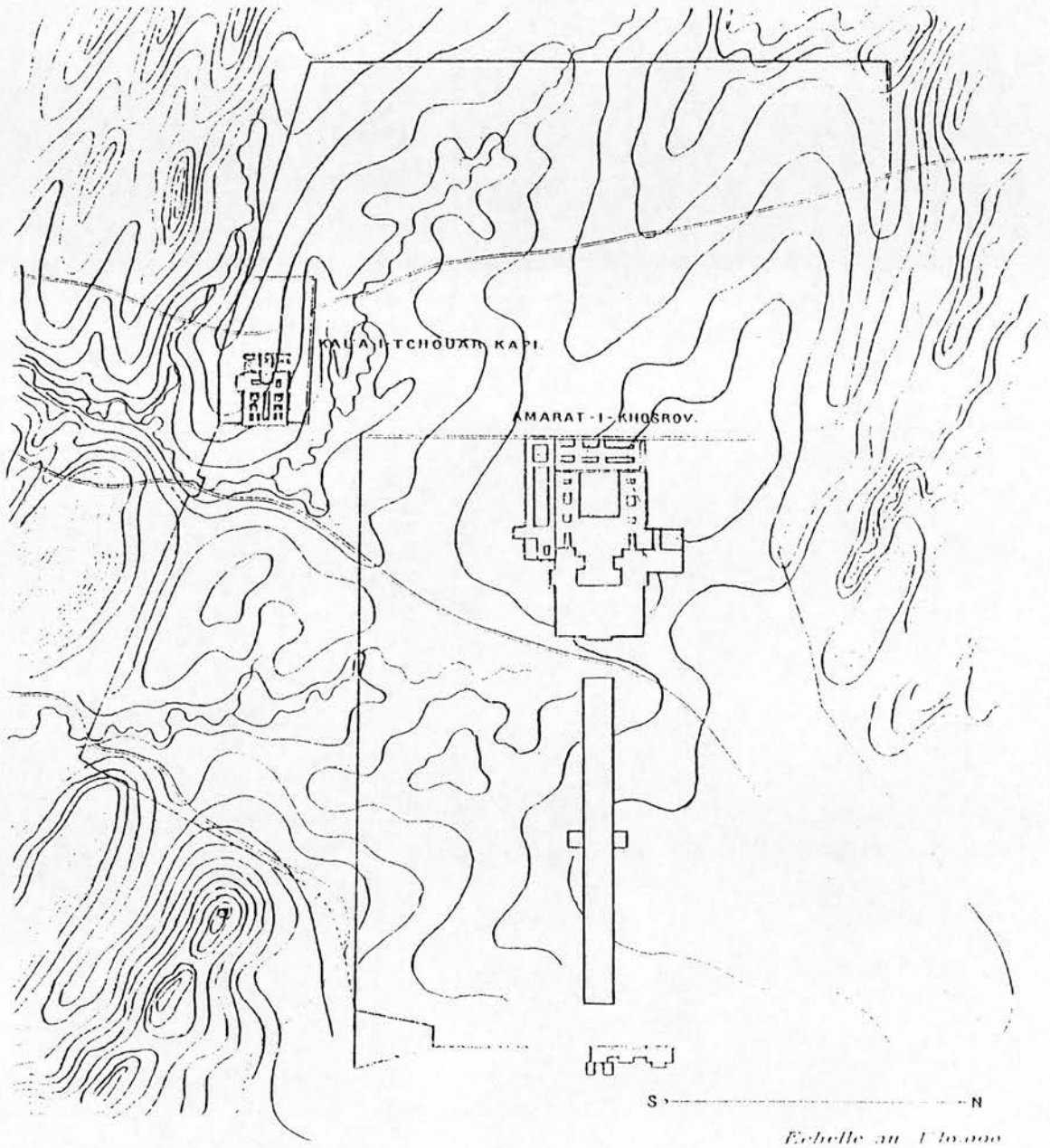
Fig 80  
Asar Mahal:  
Pool flanking hauz  
( 1 of 2)



Fig 81  
Asar Mahal:  
Water outlets for irrigation

supposedly, stocked with rare animals.<sup>23</sup> Linked by a long pool to a monumental entrance of this 'paradeisos', the palace formed a contained unit within this enclosure, the pool conceivably dividing this smaller unit into two gardens (Fig 82). It is immaterial here whether the *'Imārat e Khusrau* was based on an earlier model (and as such a replica or variation); or even whether it echoed a parallel development elsewhere (say in India). Its importance, apart from providing implicit evidence of a garden palace, would seem to arise from its association with the Sassanian king Khusrau whose architectural achievements were celebrated in (Arabic) Muslim poetry<sup>24</sup>

at about the time that the 'Chosroes' of Iran's Zoroastrian past were being glorified in the Iranian national epic (the *Shahnama* of Firdausi). The vaulted Halls of the 'Chosroes' (*'Āiwān e Kisrā'*) such as at Ctesiphon on the banks of the Tigris provided the Muslim panegyrist at all times with a metaphor for courtly grandeur<sup>25</sup> just as the Khusrau (of Shirin) formed the subject of romantic *masnawīs* written and illustrated many times throughout the medieval Muslim world. Although the palace of Khusrau was of figurative importance to Muslims centuries later, it would seem acknowledged in Muslim garden architecture and, arguably, to prefigure and anticipate later garden development. Thus, for instance, this 6th century evidence of a walled unit within a larger unity could signify the conception of a formal landscape within a park-like setting ('an *iram* within an *iram*'); while at the same time anticipating the definition of use zones within a large garden. As is more evident in later garden history of the region, the use of walls (or of terracing where terrain and farming practice dictated) enabled not only the separation of meadow or park from formal garden or of men from animals, but also of the king from his subjects or of men from women - a definition of use zones express in time as *Bāgh e Khās*, *Bāgh e 'Ām* or as the *Zenānā* or *Pardāh Bāgh*. It could be argued further that a building on a platform linked with an entrance portal corresponding to its face could conceivably be linked



2. Qasr-i Shirin, plan

**Fig 82** Imarat e Khusrau: Plan  
Source: Pinder - Wilson

in similar fashion with other portals particularly if the building was located at the centre of an extensive enclosure necessitating more than one entry. The palace, moreover, could be replaced by a tomb, the platform exaggerated, the pool embellished, the axially emphasised and so on. Reinterpreting the plan as two structures united by a pool, one could read in the *Imārat e Khusrau* an arrangement typifying many a 'villa urbana' in Spain,<sup>26</sup> say, or conceivably in Iran itself. While viewing the plan as a long pool culminating in a palace and of an enclosure divided into two gardens along an axis would yield the town house garden such as the 18th century *Nigaristān* (1810) or *Narangistān* (1870) in Iran (Fig 83) or the 18th century Mughal mansions of Hyderabad noted by the French troops stationed in Hyderabad.<sup>27</sup> Finally, variation in the shape of the pool - rectangular or square rather than elongated as at the *Imārat e Khusrau* would lead onto the *Hasht Bihisht* or *Chehel Sutūn* in Safavid Iran (Figs 84) and to the (contemporary) *Āsār Mahal* in the Deccan.

Only, of course, the pool of the *Āsār Mahal* is more a tank and, with *ghat*-like steps descending along two sides to the water, an expression perhaps of Indian identity. However the conception of a tank at the centre of an enclosure, (whether at its geometric centre or terminating a water axis) was possibly manifest at sites in Sassanian Iran too. Such as at Shiz in the Palace of King Kai Khusrau where Mustawfi, the Muslim historian, marvelled at the 'bottomless pool' in the palace court (always brimful although it fed a canal).<sup>28</sup> Doubtless, Abbasid Baghdad and Samarra would yield other examples, such as of the *Jawsaq i Khaḡqānī* and its immense (124m x 100m) central reservoir.<sup>29</sup> And the type has been seen in later times and noted (by Wilber) both in the Iranian plateau (at Tabriz and Shiraz) in the spring-fed '*daryācheh* gardens' and along the Caspian coast as at Farahabad in the so called 'lake gardens'.<sup>30</sup> While the spring fed-Mughal gardens in Kashmir, the canal-fed Shalamar garden of Lahore and most gardens of the Deccan fed by

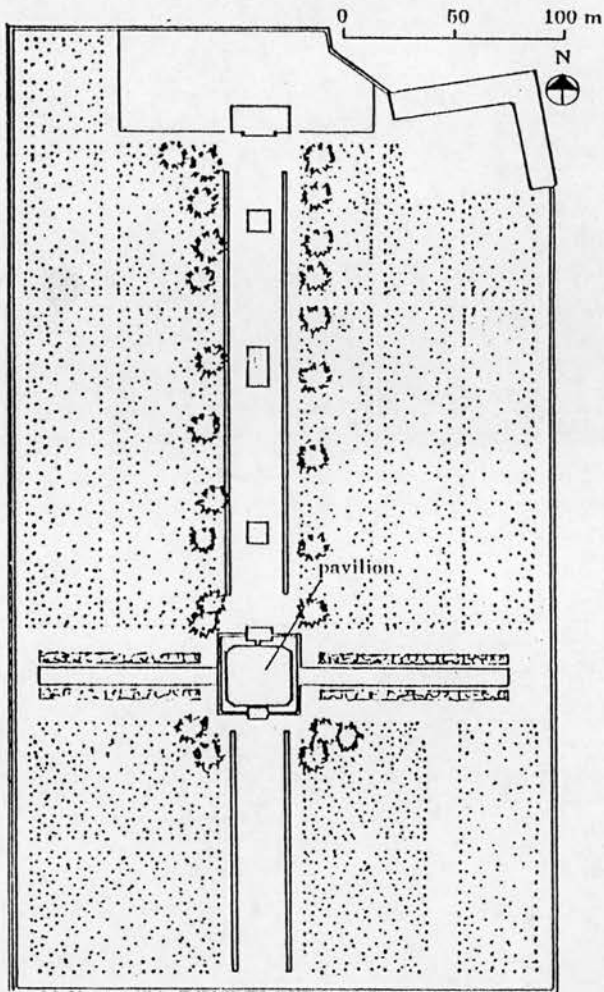


Fig 84  
Chehel Sutun, Iran: Plan  
Source: Brooke

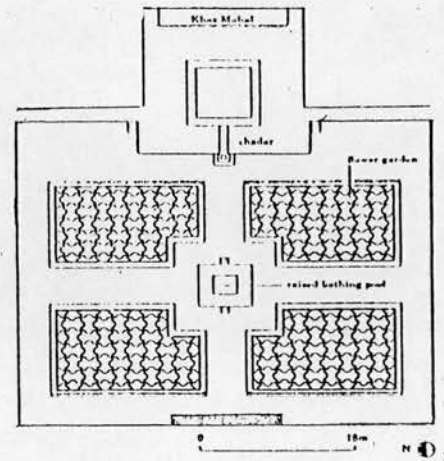


Fig 85 A  
Anguri Bagh, Agra: Plan  
Source: Brooke

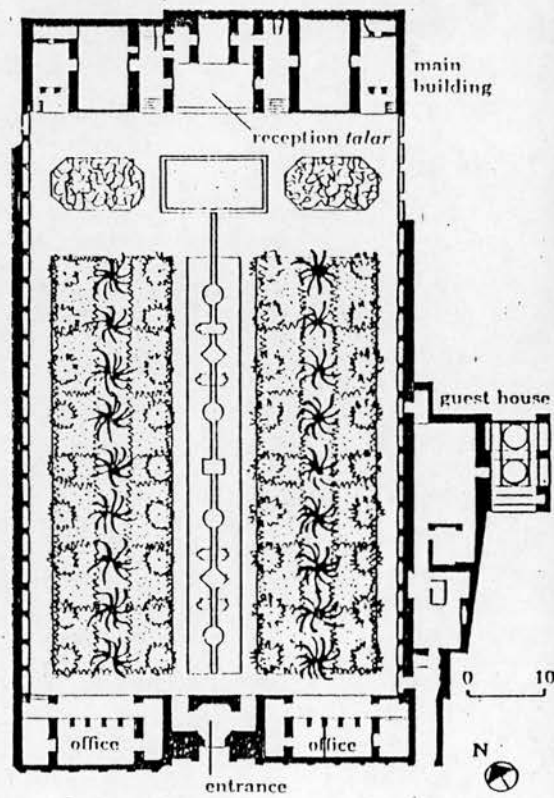


Fig 83  
Narangistan, Iran: Plan  
Source: Brooke

*bunded* tanks could be considered to share this 'family likeness'. The placement of a tomb within a central reservoir, the whole within an enclosure would seem one more example of the reservoir-dominated garden. This example may be seen at Delhi and at Sasaram<sup>31</sup> or in Lahore in the so-called Nadira Begam's tomb in the Mian Mir locality as well as in the Deccan plateau at Khuldabad in the Mughal-built tomb garden of Bani Begam (where however the tomb is merely platform linked with a bridge and not a purpose-built mausoleum).<sup>32</sup>

An aspect of family-likeness which needs attention at this point is the interdependence of pool and architecture and their fusion as an integral unit. The awareness of a palace-garden interrelationship as at the Palace of Khusrau is thought to be essential in understanding the nature of the garden tradition it - seemingly - reflects.<sup>33</sup> This interrelationship is found expressed - in garden history - both as garden contained within palace and as garden containing palace (and one may add, needlessly perhaps, that the Palace of Khusrau probably reflected both aspects of this interrelationship). The view that gardens may be classified on the basis of 'containing' and 'contained' would seem acknowledged in another perspective which discriminates between gardens 'attached as outdoor rooms to the quarters of the royal household' from those detached.<sup>34</sup> Moreover, both points of view would appear to acknowledge the differentiation of gardens in terms of scale; of the *andrūnī* (lit : inner) gardens from the *berūnī* (lit : outer); or of those more permanently used from those occasionally used; and also, one may suppose, the separation of those watered by wells from those reliant on other, more abundant, source of water supply. As such, a villa urbana may be distinguished from a villa rustica,<sup>35</sup> and, by and large, gardens within the walled settlements from those larger gardens lining river banks and reservoirs : tank-fed, spring-fed, canal-fed, river-fed, *bāoli* fed. A feature of these is the formal garden landscape within a hunting preserve an example of which has been uncovered recently at Vasant Vihar

near Delhi and said to be the (pre Mughal) garden of Feroz Shah.<sup>36</sup> Another division of these larger gardens would be the *Dāirā Bāgh* (lit: circular garden) surrounding the walled settlement (such as at Lahore), which is regarded as a distinct type from an urban design perspective,<sup>37</sup> while, for similar reasons, the *khānā bāgh*, or garden palaces of nobility, are singled out. Although within the city and, strictly speaking, not *berūnī*, such garden palaces are said to have been vast walled units and the determining features of the morphological pattern at Shahjahanabad (old Delhi).<sup>38</sup> At Hyderabad, too, the names of the localities such as Amīn Bagh, Sultan Shah, Purani Haveli and Gosha Mahal clearly originate in large palace garden complexes (See Fig 64), the *Goshā Mahal* said to have been capable of accommodating 3500 people, while the *Amīn Bāgh* functioned as the Safavid Iranian embassy in Hyderabad.<sup>39</sup>

The distinction between private gardens and public gardens (in the limited sense of the term) is recognised in the *Bāgh e Khās* and *Bāgh e Ām* of a Mughal terraced garden. In an earlier example - a Turco Mongol garden at Tabriz - this segregation is said to have been realised within one garden by confining the populace to its periphery.<sup>40</sup> But occasional public use of a royal garden may have been a matter of timing and Hakim Gilani notes that the populace of Hyderabad was allowed entry in the *Bāgh e Lingampalli* following the week long visit of Sultan Abdullah with his consorts<sup>41</sup> - presumably to enable the people to marvel at the waterworks and beds of annuals and all such special seasonal arrangements in anticipation of the royal visit.

Timing would seem as one way of regulating the use of large gardens by a company of royal ladies; although it might be supposed that women were restricted to an upper garden terrace or to the palace at the summit of a hill when they formed part of a court entourage stationed in a garden.<sup>42</sup> An extensive *zenānā* garden was

an important feature of all palace forts, a decorative attachment at the 'feet (so to speak)' of the *khwābgāh* and a prospect to be enjoyed by the sultan as well from the royal seat (Fig 85). The intimacy of the *zenānā* enclosure may still be experienced in the ruins of *Nau Mahal* in Golconda,<sup>43</sup> while the Bahmani *Lā'ī Bāgh* (Ruby Garden) is still a precious part of Bidar Fort, its very ornate cusped water cistern at the end of a long water axis a treasure closely guarded, seen by few<sup>44</sup> (Figs 86-90).

Distinguished from the pleasure garden - although also for 'earthly delectation' - are the mosque and *serai* gardens and the purpose-built mausolea. At Hyderabad, there is implicit evidence of mosque gardens at Karvan, the 16th and 17th century business district connecting Golconda with Hyderabad. Both the mid-17th century *Tolī Masjid* here and that dating from the same time in the locality of Kulsumpura nearby form part of walled enclosures each a little over two acres in area with their *hauz* terraces roughly centered within their enclosures, six ft higher than the surrounding ground levels<sup>45</sup> (Fig 91). At one corner in each mosque enclosure is to be seen a large well (Figs 92-93) and at the *Tolī Masjid*, the system of garden water supply is evident. Water raised up the well onto a water trough is piped to smaller wells (each approximately 3 ft x 3 ft) spaced at intervals along one side of the enclosure, a pair flanking each of the three entrances from the Karvan road (Figs 94-96).

Golconda's royal necropolis is perhaps its only remaining attraction (Figs 97,99,100). Little remains of the blue and green glazing of domes (Fig 98) but the structures have been repaired and the *chūnām* (lime) lining of domes whitewashed periodically. Some of the mausolea here involved a lifetime of labour while in the case of others even a lifetime was not enough apparently in the preparation of a last resting place. Stepping up in tiers from the surrounding ground, each mausoleum is a 'mountain of light' at the centre of a crossed axis plan and the relationship of one





Fig 87  
Lal Bagh, Bidar:  
Cascade end



Fig 88  
Lal Bagh, Bidar:  
Pool and watercourse



Fig 89  
Lal Bagh, Bidar:  
Detail of water cistern



Fig 90  
Lal Bagh, Bidar:  
Water cistern

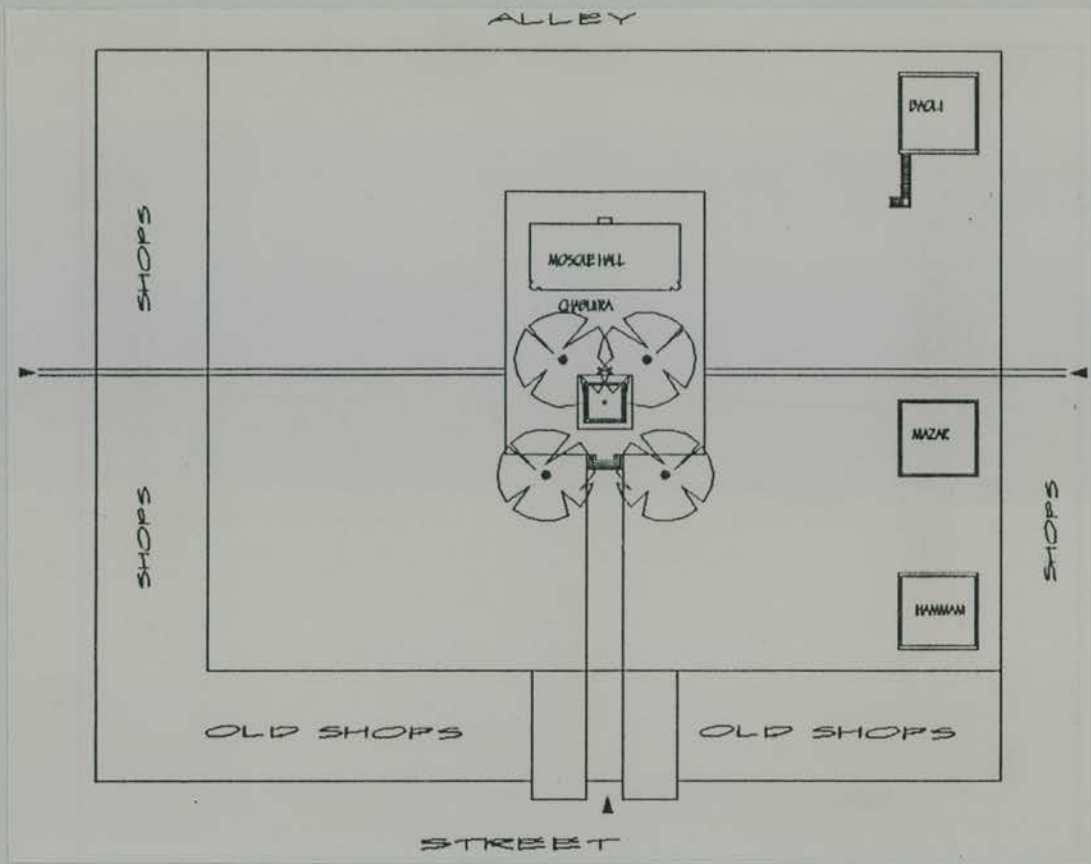


Fig 91 Mosque at Kulsumpura: Plan

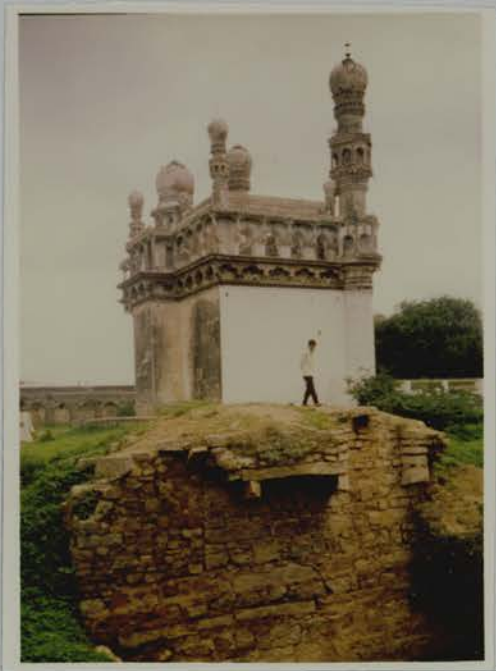


Fig 92 Mosque from baoli



Fig 93 Mosque at Kulsumpura  
Baoli from mosque

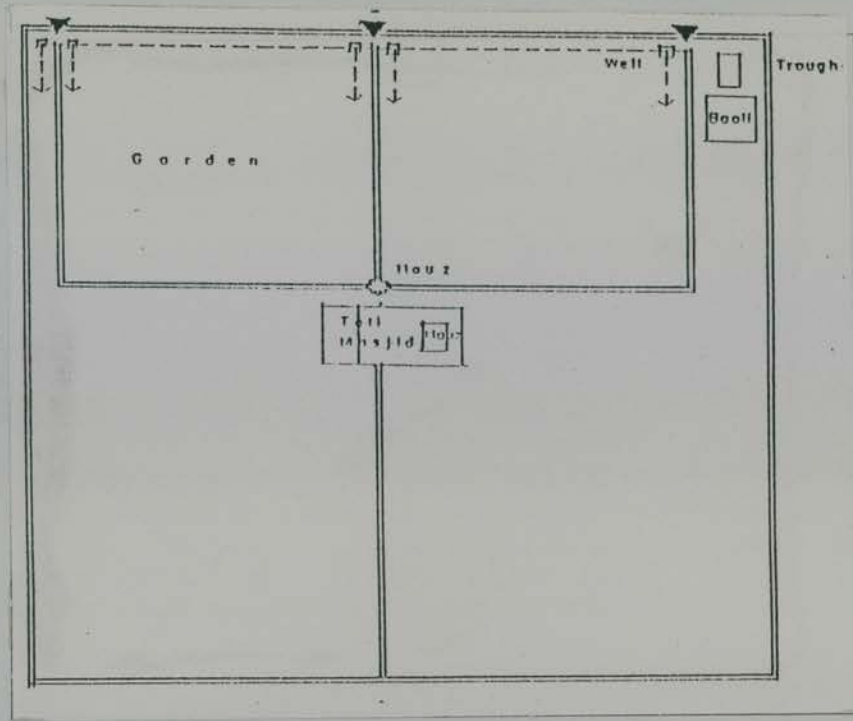


Fig 94 Toli Masjid, Karwan: Garden water supply



Fig 95 Toli Masjid, Karwan  
Hauz at garden level



Fig 96 Toli Masjid, Karwan  
Hauz at chabutra level



Fig 98 Qutb Shahi Tombs, Golconda  
Remains of glazed tiling



Fig 99 Tomb garden  
Mohammad Quli Qutb Shah



Fig 97  
Qutb Shahi Tombs, Golconda  
View across tomb garden of  
Hayat Bakhsh Begum to tomb  
garden of Mohammad Qutb Shah

Fig 100  
Tomb garden  
Mohammad Quli Qutb Shah  
(19th century)  
Source: Salar Jang Library



with the other would seem predetermined and planned (Fig 101). Of much interest within the complex is the 'attendant' *hammām* (or bath) for funeral rites of the royal dead.<sup>46</sup> This consists of three halls where cisterns for hot and cold water (aromatic water preparations, presumably) with waste pipes of mortar may be observed still; although the focus of interest is the circular marble platform with twelve rays or waves in black inlay radiating from its centre where the royal corpses were washed. The source in the Deccan for such a tomb group would appear to be the 16th century Barīdi enclosures at Bidar housing the tombs of ‘Ali Barīd (d.1580) and Ibrahim Barīd (d 1587) (Figs 102,103). Although not identical in area (the mausoleum of Ibrahim Barīd - 10 acres - being almost twice in area), both are square walled enclosures with (evidently) four entrances in the middle of their enclosing walls. The plan axes are defined by paths and each path creates two gardens one on either sides - as Yazdani puts it.<sup>47</sup> The successions of platforms leading up to the main structures are seen to grander effect at Golconda, however, where - as at Mohammad Quli's mausoleum - the upper terrace at sarcophagus level is eighteen ft above the surrounding ground<sup>48</sup> (Fig 99).

At Bijapur, where royal mausolea are to be seen at various sites in the town, much can be said for scale and boldness of conception on the one hand and for architectural detailing and compositional harmony on the other hand. The *Gol Gumbaz* (the mausoleum of Mohammad ‘Ādil Shah - d 1656) is a clear landmark. Its dome is unsurpassed in size in the subcontinent, illuminated by four gigantic *dīpdāns* (from a Jaina temple further north, or such, anyway, is the impression<sup>49</sup>(Fig 105). The *Gol Gumbaz* encloses forty acres of land (Figs 104,106) and an extensive area along its eastern side is taken up by irrigation arrangements - *bāolis*, water towers and the like. Ibrahim *Rauza* (the mausoleum of Ibrahim ‘Ādil Shah II-d 1627) is much smaller (136 yds x 144 yds) and infinitely more exquisite, more precious. Its two gardens, one on either side of the central



Fig 101  
Qutb Shahi Tombs, Golconda  
View along an axis



Fig 102  
Baridi Tomb Gardens, Bidar  
View along plan axis



Fig 103  
Baridi Tomb Gardens  
Gateway between  
tomb gardens of  
Ali Barid and Ibrahim Barid

platform (Fig 107), are 'gardens underneath which rivers flow' - carrying water from the Torweh reservoir to the city (See Fig 62)- and the word *Rauza* seems justified. In essential terms, both mausolea comprise tomb and mosque on a platform sharing a *hauz* which is framed with bands of steps in Hindu fashion (and a place for contemplation if also for ablutions - Fig 109). At Ibrahim *Rauza* the *hauz* is centered in the plan and the mosque and tomb masses on either side complement each other; (Fig 108) whereas Mohammad's tomb is clearly dominant both on its platform and within its setting (at the unfinished mausoleum of Ali Adil Shah II - d 1672, (Fig 110) - the mosque has been dispensed with altogether and the 215 ft square elevated basement of the tomb is considerably larger than that of Mohammad's - an indication, surely, of increased megalomania and insecurity). Much else can be compared and contrasted at the Ibrahim *Rauza* and the *Gol Gumbaz* - and summed up and resolved in the relative experience of their gardens. At Ibrahim *Rauza* there is consciousness of arrival once inside the entrance doorway, a sense of calm, of enclosure. At the *Gol Gumbaz* today, one is overwhelmed by building scale and the impression of emptiness - of broad and flat terraces sweeping up to the tomb - accentuated by isolated dots of *thujas* struggling in the heat makes mockery of the mausoleum. Lacking the trees with which it was filled ~~with~~ once, it lacks what is so vital and precious in a Muslim garden: coherence and unity and a sense of enclosure. The *Gol Gumbaz* now is no more a garden, merely monument - soon to be engulfed in the encroaching desert.

A sense of enclosure would seem to be the common, underlying experience of both a 'garden contained within the palace' and of 'garden containing the palace'. However, the function of planting in both kinds of garden could be expected to differ in an essential sense. In the former kind where space is contained within an architectural envelope (as in an 'outdoor room' of a palace fort) it would appear that the planting served primarily to 'clothe' this space - to articulate its shape,

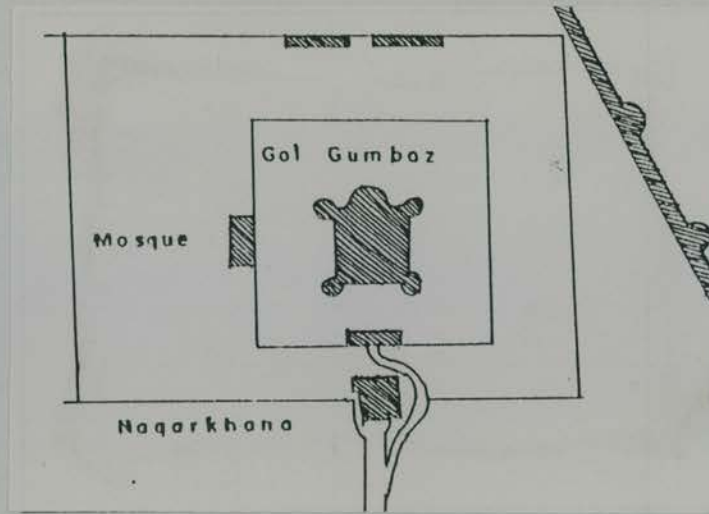


Fig 104 Gol Gumbaz Bijapur: Plan  
Source: Cousens

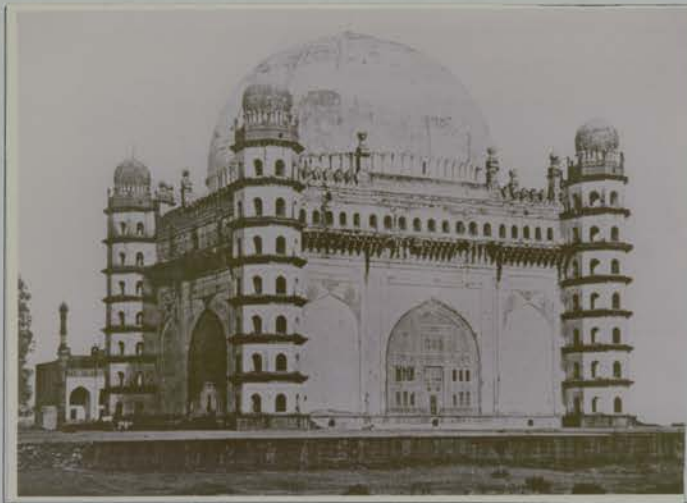


Fig 105  
Gol Gumbaz: Massing

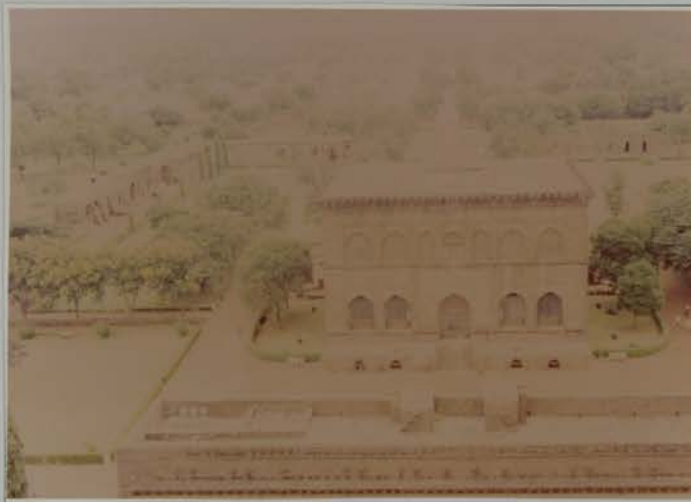


Fig 106  
Gol Gumbaz  
View from tomb parapet

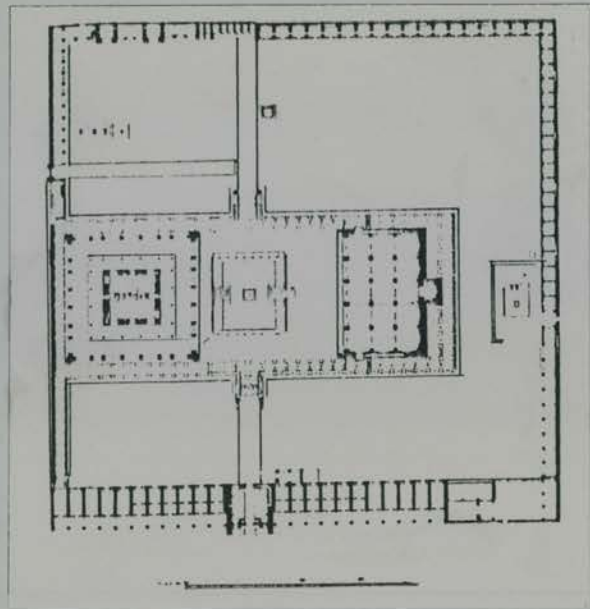


Fig 107  
Ibrahim Rauza, Bijapur: Plan  
Source: Cousens



Fig 108  
Ibrahim Rauza  
Tomb and Mosque



Fig 109  
Ibrahim Rauza  
Central Hauz



Fig 110  
Tomb Garden  
Ali Adil Shah II, Bijapur



Fig 111  
Tomb Hayat Bakhsh Begum  
View along plan axis



Fig 112  
Embankment and garden,  
Banjara Hills

emphasise its various planes and enhance their details. In a large 'detached' garden, on the other hand, planting would seem to have a more structural function : the provision of continuous canopy within the garden for one; and the necessary emphasis through 'walls', 'screens' and 'curtains' to built features (such as paths, pools, peripheral walls, plots, the trellises (*mandwā*); in addition to furnishing ground (or water) surfaces. Thus whereas in a large garden planting was the key factor, presumably, in the integration of architecture and landscape, the same could not be said for planting in the palace garden court where such integration would seem implicit (although within such a type of enclosure, files of building columns could be extended onto the terrace as files of trees to emphasise indoor outdoor links<sup>50</sup>).

However, whether comprising one or more, spatial enclosure characterises both kinds of garden - affording the means to awaken the senses - and indeed to revel in this awakening; the opportunity for reflection or for fantasy. In this context, garden perfume conceivably played a role, whether trapped and lingering in the 'static' space of a garden court or wafted along air tunnels - to an airy palace pavilion on a platform or across a sheet of water in the *hauz* to a *bārā* (or *char*) *darī* at its centre. One may suppose that water - both flowing and stationary - was one basis of enclosure. Trees and shrubs lined along or around a water channel, pool or tank reduced evaporative losses, shaded adjacent walks and created suitable growing conditions for moisture and shade-loving plants. The pleasures of such planting - the glow of fruit and foliage, of tree form and habit, for instance - were multiplied in the pool<sup>51</sup> and perfume too more perceptible in the calm, humid conditions by the water. Ofcourse, it would be difficult to envisage the planting of oranges and pomegranates of Bābar's *Bāgh e Wafā* pool around the large tanks constructed in the Deccan. For the large *hauz* and *bāolis* of Bijapur, whose walls rose well above the surrounding ground, fairly substantial trees would have been

required to provide necessary shade.

The enjoyment of water is manifest everywhere in the Deccan - in the bands of steps around the *Āsār Mahal* and the subterranean chambers of a *baoli*; in pools centered on platforms and pavilions in lakes or in the midst of canals (as at the *Nayā Qilā*, Golconda, or at Kumatgi near Bijapur). The enclosure around the pool or along a water channel was not the only form of water-based enclosure, ofcourse. For within large water bodies, forested islands were themselves enclosures surrounded by water expanse - and contemporary Deccani poets speak of *agar* (frankincense) and sandalwood forests around palaces on river islands; of *keorā ban* (pandanus forest) surrounding island pavilions within lakes;<sup>52</sup> or of creeper-festooned pavilions in large *hauz* (which, perhaps, is how the *bārādarī* of the *Naya Qila hauz* was conceived).

'Cloud showers (or shower baths)' at Kumatgi (near Bijapur) or at *Mubārak Khān Mahal* (within the city) would seem to reflect an Indian enjoyment of water, judging from the mention of such features in the *sastrās*.<sup>53</sup> The garden houses at Kumatgi and Bijapur (where these features were observed by Cousens) were built in the 17th century, each comprising a set of pavilions - a *chitar sal* (picture gallery) and water pavilion (Fig 65). At Kumatgi, the water pavilion is a two storeyed structure within a large square tank (Figs 66,67) with pipes within the building masonry leading up to water jets in both storeys which once spouted water into the tank. While the pavilion ceiling surmounted by a water cistern became a great 'perforated rose sprinkler (when needed)' - a 'shower bath' with a cistern below it to 'wallow in'. *Mubārak Khān Mahal* is a three storeyed structure and the water pipes here - even more ingeniously - feed 'peacock brackets' on all four faces of the building, nine on each face or forty in all, while tubs or cisterns (for 'wallowing in' presumably) were noted by Cousens on the floor of the first storey as well as in the

uppermost storey.<sup>54</sup> One may imagine that dense planting surrounded each set of pavilions keeping the sun out and providing necessary privacy for the pursuit of pleasure - and that conceivably sights, sounds and fragrances, blended together, effected a welcome escape from climate and from responsibility.

The creation of vista has not been mentioned so far. A feature of every garden, it has been sought in the enclosure of the *Imārat e Khusrau* too where presumably the water axis leading to the palace was once flanked with trees.<sup>55</sup> At the *Tāj Mahal* where a canal terminates in a building on a terrace too, present day experience of a vista would seem far removed from what apparently was the original conception. It would seem that originally the trees flanking the water axis and paths hid as much as they revealed of the mausoleum, lending distance and enchantment to the view at the entrance portal.<sup>56</sup> Such is the case at Hayāt Bakhshī Begam's mausoleum in the Qutb Shahi necropolis where the foliage of *nim* trees along the path framing the mausoleum casts a veil over the face of the building - a veil blown off tantalisingly in the wind transforming building into illusion (Fig 111). A similar sort of experience was to be had close by at the *Nayā Qilā* in Golconda. Perched here on the *Dal Bādāl* (cloud-like) *chabūtrā* twenty feet or so above the garden, the observer's eye is directed along the (600 yds long 125 ft wide) water axis to a *barādārī* centered in a *daryācheh* - and to "the vision of a palanquin suspended between star filled sky and star filled lake".<sup>57</sup> To a contemporary poet, this could be the vision of the moon and its halo too crowning the (cloud framed) Milky Way; or equally a *tīkā* (pendant) on the beloved's forehead fastened to a string of pearls in the (central) hair parting.<sup>58</sup> At the palanquin end the observer's eye would be naturally drawn along the (cloud-framed) water axis and up the water terraces to the 'mass of clouds' of the *Dal Bādāl chabūtrā*.

If the garden provided opportunities to savour the intimacy of pool-centered enclosures or to revel in the vision of the moon at the end of a string of pearls, it also provided opportunity for a panoramic view of the garden. From an upper storey of the pavilion, or from an embankment *chabūtrā*; from a palace roof terrace punctuated with *darīchās* (windows) or from the pavilion-crowned summit of a hill, not only the garden but its surrounding countryside, too, lay fully open to view, while from the hill top aquatic spectacles in large tanks could be enjoyed too. The significance of the elevated viewpoint is revealed only in poetic perception. It enabled the sultan to preside over a ranked assembly of trees - dense and rounded as the full moon, pyramidal and columnar - each presenting jewelled *khilā't* (robes of <sup>honour</sup>) to the sultan.<sup>59</sup> It provided the opportunity to enjoy the pageant of the spring god's army : of elephants, camels and horses all decorated with bells and streamers; of flywhisks and parasols, trumpets and tambourines, torches and lamps, rockets and starbursts.<sup>60</sup> (One might assume that the less appealing drought-time prospect of a lost battle-field - of fallen maces and rent parasols, of spears, standards and scaling ladders strewn about - was a prospect less frequently observed<sup>61</sup>). From the roof terrace of the palace, the garden below was also a feast laid out in honour of the messenger of spring and his army : of trays and platters of exotic food spread out on sun and moon-spangled velvet and of intoxicated trees extending cups and goblets to the basins of perfumed water at their feet.<sup>62</sup> And, of course, all too frequently an overall view could transform the garden into a Page of the Book too; complete with peripheral marginal channels, central dividing canals and lateral rivulets and rows of perfumed *raihān* to enrich its meaning.<sup>63</sup>

Building and rebuilding was common in Muslim gardens and in the Deccan, as elsewhere, the sultans took delight in ornamenting the gardens of their predecessors (or an orchard or grove of trees). Hakim Gilānī, a 17th century historian, notes that existing gardens both within and outside Hyderabad were

adorned with new palaces in his time (and presumably with new planting too). Ofcourse, princely or royal succession could mean a period of neglect in the garden's history rather than its embellishment; while wars all too frequently meant destruction - deliberate it would seem on occasion, such as the destruction of gardens around Bijapur by 'Ādil Shahi order in the later half of 17th century in anticipation of <sup>the</sup> Mughal siege of the walled town.<sup>64</sup>

Needless to say, gardens assumed varying aspects in rain and drought, as planting matured or as plants completed their life cycles; varied aspects too with the introduction of new species, strains or cultivars - and equally as neglect (or destruction) ravaged the garden. Naturally the larger the garden the more manifest all change. The large royal gardens provided the opportunity to witness the change of seasons or, as would seem more likely, to celebrate the onset and duration of *Barsāt* (monsoonal rains) and of the first harvest of the year - *Basant* - coinciding with the Iranian *Nauroz*. These were occasions when royal visits to large gardens were planned<sup>65</sup> and this occasional or seasonal use, entailing the enjoyment of seasonal or transient delights, could in itself suggest the life of the garden, in particular the significance of floral values in planting. For flowering, in both the 'dry' and 'moist' types of Deccani forests, would seem conditioned by increase in temperature after 'winter' dormancy on the one hand (that is at *Basant* time) or through temperature drop and moisture increase at the onset of rains.<sup>66</sup> If planting in Deccan gardens could be considered inspired to some degree by the floristic composition of surrounding forest types, then the image of the garden could be visualised in the flower-laden aspects of these forest types at *Basant* or *Barsat*. Many of the so-called ornamental trees and shrubs originating in the teak and sandalwood forests of the Deccan (in Karnataka, Tamil Nadu and Maharashtra) come into leaf and bloom during the rains; and ground vegetation during or after the monsoons exhibits a distinct seasonal aspect with a preponderance also of

annuals<sup>67</sup>. Within the moist vegetation series of the *Ghats*<sup>68</sup> the same phenomena may be observed at *Barsāt*, increased moisture and the slight reduction in temperature seemingly inducing flowering or profuse flowering in the tree layer and particularly in the evergreen species (such as of the Apocynaceae) forming the understorey as well as in the undergrowth (characterised by species of Rubiaceae, Acanthaceae and Anonaceae). Many tuberous-rooted perennials of the ginger tribe and of the bulbous Amaryllidaceae and Araceae emerge above ground during or just before the onset of rains.<sup>69</sup> The brilliance of their colour in flower offsets understorey gloom, attracting pollinating agents.<sup>70</sup> The phenomena of flowering may be observed in both deciduous and evergreen forest at *Basant* to spectacular effects in trees of deciduous habit such as the *kesu* (*Butea*), the *amaltas* (*Cassia fistula*), the *simal* (*Bombax*), the bauginias and the coral trees and trumpets; or in trees of 'semi evergreen' nature as the *jāman*, mango, *molsary* (*Mimusops* sp), *champā* (*Michelia* sp), the *nāgkesar* (*Mesua* sp), *punnaga* (*Calophyllum* sp), the *nīm*; while many scandent evergreen shrubs such as the jasmine commence a long period of flowering often lasting through the rains.<sup>71</sup>

To the Turco-Iranian Muslims gardening in the tropics, an Indian evening garden, prolonging the garden's enjoyment by day, was a new page in the book of the garden. By day, the 'flowers of the sun'<sup>72</sup> could be enjoyed for vividness of colour and beauty while at night pleasure could be sought in fragrance of night-pollinated species<sup>73</sup> and the glow of flower, fruit and foliage. As daylight faded, a new world emerged where insects and flowers<sup>5</sup> sought each other under the moon, when nectar was drunk from long-necked goblets and salvers dusted with pollen and the air filled with the wings of beetles bees, tropical hawks-moths and the silent music of floral bells, trumpets and tambourines.<sup>74</sup> The evening garden of the Deccan was a lamp-lit, moon-lit garden when the mica-washed, *chūnam* -plastered surfaces of the palace walls and *māhtābī* glistened like the scales of a fish, and each

'fingered citron' below the *chajjā* became a veritable *amritphal*; (Fig 113); where the string of 'lime' lotus buds on the parapet sparkled into life and each tiered tree<sup>75</sup> in the *āngan* was transformed into a *jhār fanoos*(a tree-like lamp),<sup>76</sup> its terminal panicles aglow like perfumed candles.

Muslims enlarged their experience of Indian forests through conquest and march and their pleasure of hunting took them to forests too. But it would seem that their experience was limited to the ('dry' or 'moist') deciduous forests of the subcontinent and the evergreen forests of the NE India or the *Ghāts* - still inhabited by tribal people where it survives - remained largely undiscovered then too. As such, Muslim response to the evergreen vegetation units of India was presumably a response to individual forest species distributed widely in the subcontinent, cultivated around temples or within Indian house compounds for use in worship, medicine or for consumption. And it was a response to the drought tolerant species of the drier forests and to those introduced from the Eastern Islands or from the New World.<sup>77</sup> But even their limited exposure to the Indian forests provided incoming Muslims an opportunity for comment. Among the earliest published records of this nature is that of Babar who expressed his sense of wonder at the cauliflory of the rain forest (exhibited by the 'clustered fig' and the jack fruit) and its gigantic herbaceous plants as the plantain ('something between a tree and a grass'). Babar noted the economic usefulness of Indian trees (as the Palmyra palm and coconut); their virtues of shade, habit and foliage (as of the tamarind, the *āmṭā* - *Phyllanthus* sp - and *jāman*); their potential as orchard makers (the mango and citrus species) and as garden ornaments (among which the freely flowering *kanīr* - or oleanders - and hibiscus were noted).<sup>78</sup> Some decades later, and better consolidated within the subcontinent, Muslims were speaking with greater ease and familiarity about Indian forest species, particularly about the all-time Indian flowering favourites (spoken of in *purānās*<sup>79</sup> and in Sanskrit drama<sup>80</sup>), such as the

*Pādal* (*Stereospermum suaveolens*), the *nāgkesar* (*Mesua ferea*), the *surpan* (*Callophyllum inophyllum*), the *sudarsan* (*Eugenia jambos*), the *kadamb* (*Anthocephalus kadamba*) the *siris* (*Albizia* sp.) and the *kesū* (*Butea monosperma*). And a larger available list of cultivated ornamentals enabled classification in terms of 'flowers notable for their beauty' or 'fine smelling flowers' (although one might add that many flowers tended to seem jasmine-like to them).<sup>81</sup>

But even as Mughal gardeners wrote feelingly of Indian plants, there was constant looking back to 'those countries' and endless comparison between 'these' and 'those' - the cypress, the willow, the poplar, the peach and rose recalled perpetually in Indian trees and shrubs. And, indeed, many 'fruitless' attempts were made to create the familiar orchards of 'those countries' in Agra through ceaseless irrigation - and horticulturists, seeds and cuttings imported from Iran and Turan even as pineapples from the New World were planted in gardens. On the other hand the Qutb Shahis and Adil Shahis appear to have reconciled themselves to their new homes in Deccan and their court poets had discovered by the 17th century that the coconut's umbrella was as green and broad as that of the *chinār*; that the betel nut palm planted by the cypress was even more graceful than the latter; that the paddy fields of the Deccan were a prettier sight than fields of melon, and watermelon; and that the Indian basil could boast as significant a spike as the Persian hyacinth.<sup>82</sup> And if the hundred-petalled rose could not be made to thrive in the Deccan one could always take comfort in the hundred-petalled marigold; while the 'evening fragrance' of the Indian *shabbu* (tuberose) was an equal match to the Iranian *shabbū* (wallflower and night scented stock), and indeed <sup>it was</sup> the 'queen of fragrances' as its Indian name - *rajnī gandh* - suggested. The element of substitution cannot be ruled out. It would certainly seem that where almond and walnut, for instance, are mentioned in Deccani poetry in realistic garden description,<sup>83</sup> the inference is to the Indian almond (*Terminalia catappa*) the Indian walnut (*Aleurites moluccana* -

although this as its name suggests was not indigenous but probably naturalised). While it would appear from Abdul's *Ibrahīm nāmā* (a *masnawī* in praise of Ibrahim Adil Shah II) that a Muslim garden in the Deccan could be made almost wholly from Indian trees - the *pādal*, tamarind, jack fruit, tar, *mari* (*Caryota urens*) mango, *jāman* - with the pomegranate, cypress, grapevine and beds of annuals as seeming acknowledgment to Muslim tradition.<sup>84</sup>

By the late 19th century when Kaniza Haji Pasha wrote her *Zirā'ate Āsifyā* (Agriculture of Asif Jahis)<sup>85</sup> many fruit trees from the Eastern Islands and from the New World had been naturalised in the subcontinent. These are included in Haji Pasha's list of 'fruit-bearing' Indian trees (Figs 116-118), which is apart from her list of 'flowering trees' as was customary in Muslim horticultural literature. The Indian trees, the author mentions, comprise mango, *jāmān*, *gulābī jāman* (*Eugenia jambos*), banana, coconut, date palm, tamarind, *amla* (*Phyllanthus emblica*) *chironjī* (*Buchanania latifolia*), *kathbel* (*Feronia elephantum*), *bel* (*Aegle marmelos*), *molsary* (*Mimusops elengi*), *burvoarī* (*Cordia myxa*), the lote tree and the mulberry. Among shrubs, pomegranate, citron, orange, lime, shaddock, fig, grape, *phālsā* (*Grewia* sp), *karaundā* (*Carissa* sp), and *harfā rewārī* (*Phyllanthus niruri*) are noted. Of the plants introduced and naturalised, she mentions *kamrakh* (*Averrhoa carambola*), guava, papaya, custard apple, pineapple, yam and *tupari* (*Physalis peruviana*) as well as the Indian walnut and almond. Sugarcane, melon and watermelon and waterchestnut are appended to this list of fruit as well as a few warm temperate region fruits - notably peaches, plums and pears. Although these (latter) were probably happier in the higher hills around Bangalore, their cultivation in the Deccan seems to have been met with some success<sup>86</sup> for Hāji Pāshā notes the abundance of plums in the gardens of the Deccan ("which ripen early due to the heat, before the onset of rains") and whose ornamental value she found was matched only by those of figs and the red, green and white berrying Indian

*karaundās*. Cultivars and varieties are mentioned against only a few plants of the list - the mango, the banana, the *gulābī jāman*, the *phālsā*, the *harfā rewārī*, citrus species, fig, grape, pomegranate (and plums) - suggesting that these were the principal orchard (and vineyard) makers of the time in the Deccan.

Some of these were noted in the 18th century garden of Salabat Jung where a long narrow water reservoir with jets terminating in the palace was flanked with "two beautiful gardens" filled with "orange, jack fruit, mango, guava, pomegranate and citron" and "in the rear....two beautiful vines".<sup>87</sup> While an 18th century description of the 'two gardens' of the more extensive Qutb Shahi *Goshā Mahal* makes similar note of "two beautiful vines (presumably one in each *chaman*) as well as rows of mango trees, date palms, coconuts, fig trees, bananas, oranges, citrons and some yew trees (presumably cypresses), forming many petty topes", the writer observing also the "squares of turnips, carrots, French turnips, cabbage, peas, lentil and other vegetables with paddy, spiked millet and *chollū* (or *Cynasorus*, a species of grass)".<sup>88</sup>

It has been observed frequently that the Muslim garden was both orchard and vegetable garden; that it incorporated both 'productive' and 'ornamental' planting.<sup>89</sup> However, any attempt to classify gardens in terms of their 'productive' and 'ornamental' planting or to separate vegetable garden from orchard (within a garden) would seem futile. For, traditionally, *sabzā* (lit: greens - herbiage and pasturage) has been regarded a 'veil of mercy' and a 'comfort to the eye' (*qurrat ul 'ain*) just as have 'flowering trees' and the orchard and vineyard. And as the above description of *Goshā Mahal* might indicate, not only were vegetable garden and orchard found within one garden but they could share the same plot division too. Nevertheless, fruit orchards would seem essential planting in a mausoleum, shade and pasture sought for the royal encampment, while in the small mosque garden,

aimed at self sufficiency, the production of edible roots and pot herbs could be expected rather than trees noted for conspicuous flowering. The question, therefore, as to whether planting was merely ornamental or merely utilitarian in a given garden would seem a question not only of perception but one of emphasis. And to determine where emphasis lay, the scale of the garden, its function and purpose and the degree of sustained or periodic use would need to be considered. In the small *Pāin Bāgh* attached to the royal quarters, all was ornamental perhaps. In the small mosque garden, all was functional perhaps. The oftspoken leafy bowers within large gardens were with tapestries made from flowering climbers trained up wooden trellises (or *mandwās* <sup>90</sup>). And in honour of royal visitors carpets of flowering herbs were spread out in these gardens - their chief ornament - along or around specific use zones such as the pavilion, the palace *chabutra* , the *hauz* and the paths linked to these.<sup>91</sup>

Planting character of Deccani Muslim gardens, it has been suggested earlier, could be sought in Muslim response to Indian forests - the response on the one hand to mix and association as possibly represented in Indian gardening around temples - and the response to drought-resistant orchard species and other economically useful plants originating in these forests as expressed in their widespread use in agriculture. Beds of single species of herbs in gardens would seem to reflect the seasonally changing patchwork of Indian fields. Plots of single species fruiting shrubs would seem a response to the local orchard. Plant choice and mix might seem suggested by Indian form of agricultural enterprise too such as the specialised gardens of *pān supīārī* (betel nut / betel leaf), of coconut, or of flowers. These were observed in Karnataka and Tamil Nadu (within the 17th century areas of Muslim settlement) by Dr. Buchanan who travelled widely in this region at the end of the 18th and early 19th centuries.<sup>92</sup> Buchanan noted that both the coconut and betel nut/betel vine plantations comprised a variety of trees ('to

freshen up the soil, as it were), the plantain being employed as a nurse crop for the young transplanted coconut palms and betel nut palms (on which the vine was trained frequently<sup>93</sup>). Among the trees noted were citrus species (lime, orange and citron), *jāman*, jack, mango and *āmlā*, tamarind and the *Spondias magnifera* (a mango-like tree); while under the shade of trees ginger and all kinds of root vegetables were cultivated.<sup>94</sup> Aspects of such planting might seem recorded in many 18th and 19th century Deccani paintings (Figs 119,120) if not actually part of 18th century garden description.<sup>95</sup> The flower garden, as an entity in itself (and usually planted on higher ground, on red soils), would appear to highlight some prized Indian ornaments. Hindu flower gardens include *donā* and *marwā* (species of *Artemisia* whose aromatic foliage is a popular constituent of floral bouquets in the Deccan); basil and origanum; varieties of (African) marigold, chrysanthemum and Chinese aster (*Callistephus* spp); the red (presumably Bourbon) rose and jasmine (of which three species are cultivated extensively) as well as the tube rose, the white fragrant oleander (of which large plantations were noted by Buchanan) and some species of the mallow and acanthus families (principally hibiscus and crossandra); while the *keorā ban* (pandanus garden) is a common feature below tanks (as in the Indira Gandhi park at Hyderabad below Husain *sagar* embankment) or surrounding the spring fed garden *Farāh Bāgh* in Bidar. Needless to add, most of the above-mentioned flowers may be observed in a flower seller's stall outside a Muslim graveyard, around a *dargāh* and in Hyderabad's flower market, *Jam Bagh* (Figs 114,115).

Present day planting in gardens (old and new) in Hyderabad may serve to highlight the preferred (drought-tolerant) species of Indian forests although many species that are popular today do not originate in these forests having been introduced over a long period of time. In the bungalow compounds and villa gardens of the rich and in the newer tank gardens (as at Banjara Hills - Fig 112)

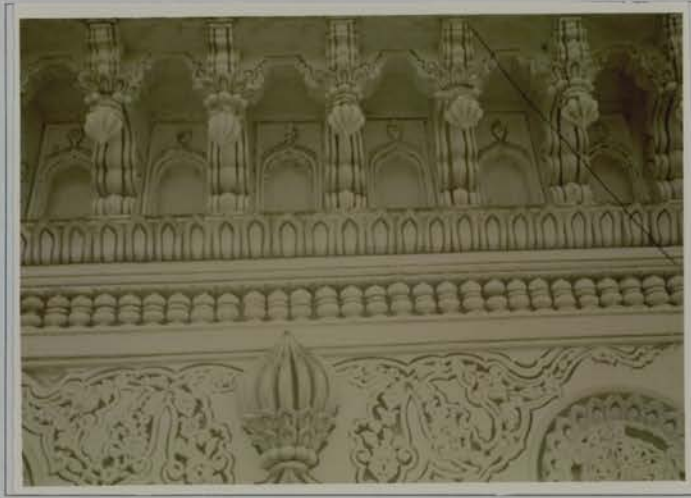


Fig 113  
Mosque in Khairatabad  
Amritphal ornament



Fig 114  
Flower market, Hyderabad



Fig 115  
Flower market, Hyderabad



Fig 116  
Fruit market, Hyderabad



Fig 117  
Fruit market, Hyderabad



Fig 118  
Fruit market, Hyderabad



Fig 119 Deccani painting (18th century)  
Source: Zebrowski

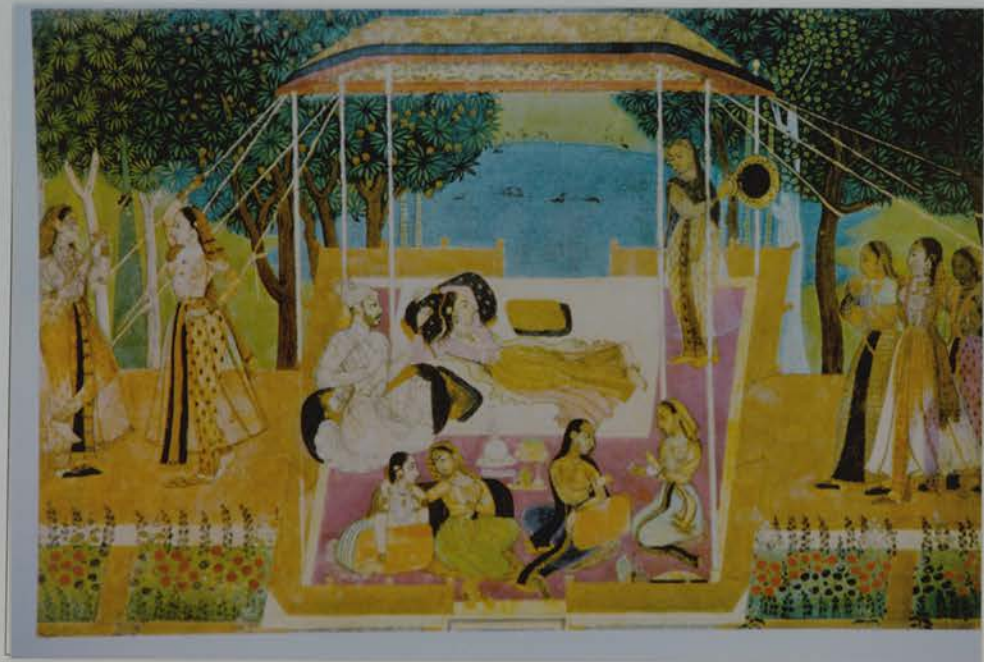


Fig 120 Deccani painting (17th century)  
Source: Zebrowski

popular shrubs are the scarlet ixoras, red and yellow caesalpinias and crossandras, the brilliant *gulnar* (a 'flowering' pomegranate cultivar), forms of hibiscus and mussaenda, pink and cream plumerias; the *gandh raj* ('king of fragrances' - *Gardenia florida*), the *madan mast* ('the love-intoxicating' *Artabotrys* sp.) and the *Chandni* (lit: moonlight - *Tabernaemontana* spp.); and the *chambeli* (*Jasminum grandiflorum*), *mogra* (*Jasminum sambac*) and *juhi* (*Jasminum auriculatum*)-Figs 121-129. Many of these flower profusely during the rains, some reputed to be intensely fragrant only on moon-lit nights - as the *Chāndnī* or 'moonlight'. Favourite hedging shrubs are the *henna* plant and *kaminī* (*Murraya parviflora* or Chinese box) while species of *Clerodendron* and *Duranta* were also popularised by the British for hedging and species of *Meyenia* for edging. Favourite climbing shrubs are the brilliant trumpets and salvers : bignonias, allamandas, tecomas and the potato family climbers, while the (twining) *jūhī* and *karaundā* (a scandent shrub) are to be seen in graveyards of the wealthy trained up on *mandwās* (trellises). Popular, too are species of *Clitoria*. The blue-flowered form may be seen in the wall-frescoes of *Āsar Mahal* (Figs 130,131). Lantanas and custard apples are weeds (presumably Mexican) and the coral creeper (*Antigonon*) is rampant everywhere too. Among the evergreen trees, the most commonly observed is *molsary* (*Mimusops elengi*) which is planted for its fragrant flowers (from which an *attar* is extracted) and for its edible berries. It is a characteristic feature of every mosque *chabūtrā* (in pairs flanking the *hauz* - Figs 132,133) and grand old trees can be seen around tombs (such as the 17th century tomb of Mian Mushk (Figs 134,135) and in the 18th century tomb garden of the poet-courtesan, Mah laqa Bai Chanda). Even grander specimens of the *molsary* may be seen in the gardens of the British Residents *kothī*, in the (British army officers) Sikandarabad Club and in the 19th century (Nizām-founded) *Bāgh e Ām*. The *champā*, the *punnagā* (*Calophyllum*), the *jāman* and the mango are other evergreen trees which may be seen in Hyderabad - Figs 136,137,139 (although the specimens noted are not as



Fig 121 *Mussaenda* sp



Fig 122 *Ixora* sp



Fig 123 *Plumeria* sp



Fig 124 *Caesalpinnia* sp



Fig 125 *Hibiscus* sp

Popular Garden Shrubs



Fig 126 *Gardenia* sp



Fig 127 *Jasminum* sp



Fig 128 *Artabotrys* sp



Fig 129 *Tabernaemontana* sp



Fig 131 Fresco Asar Mahal  
(*Clitoria* and *Oleander*)



Fig 130 *Clitoria* sp

Popular Garden Shrubs



Fig 132 Khairatabad Mosque



Fig 133 Kulsumpura Mosque



Fig 134  
Mian Mushk's Tomb  
Molsary trees



Fig 135  
Musa Qadri's Tomb  
Molsary trees

Popular Garden  
and Avenue Trees



Fig 136 Calophyllum sp



Fig 137 Pterospermum sp



Fig 138 Pink Cassia



Fig 139 Mango



Fig 140 Acacia sp



Fig 141 Gold Mohars



Fig 142  
Musa River Gardens,  
Hyderabad  
Tamarind trees



Fig 143  
Musa River Gardens,  
Detail



Fig 144  
Musa River Gardens  
Fish tail palms



Fig 145  
Coconut palms  
along Musa River



Fig 146 Ficus sp



Fig 147  
Local Date-palm plantation



Fig 148  
Baobab tree, Naya Qila

prodigious as these trees are in their native habitats). The Soap nut tree (*Sapindus* sp.) and the Marking Nut tree (*Semecarpus* sp.) of the Godavari forest are common everywhere and are self sown presumably like the tamarind, the *nīm*, the *sohānjanā* (*Moringa* sp.) and some acacias; while the most commonly planted species - usually along roads and paths within gardens - would appear to be introduced. Among these may be noted the pink cassias, the scarlet cordias, the gold *mohars*, the rain tree, the tiered Indian almond, the umbrella tree (*Thespesia populnea* - abundant in Bijapur), *Pithecolobium* sp. and *Lagestroemia flosreginae* (Figs 138,140,141). Among the palms, coconut (combined with banana) may be seen along the Musa river with melons and watermelons and other vegetables of the cucumber family planted below (Fig 145); the wild date palm is commonly seen in land hollows (Fig 147), the Palmyra palm on sandy wastes outside Hyderabad, while spectacular flowering specimens of *Caryota urens* (the fish-tail palm) may be seen in the 19th century gardens of the Nizams along the Musa river (Figs 142-144). The banyan tree is a significant feature of the region's highways (Fig 146); while the most prodigious specimen of the (African) baobab tree in the Deccan is said to be that at the *Nayā Qilā*, Golconda, adjacent to a 16th century Qutb Shahi mosque (Fig 148). *Keorā* (pandanus) plantations as has been observed, may be seen on marshy grounds below tanks. Waterside plants, typically, are canna, crinum forms, day lilies and spider lilies and aquatics observed are the pink lotus (*gulāl*) and the water chestnut (a weed from the New World). Ground surfacing in gardens tends to be gravel or baked earth for the most part and large expanses of grass or ground cover are rare.

The planting picture of large gardens that emerges from a survey of 17th century Deccani poetry is of a canopy formed by evergreen trees and shrubs for the most part; and of a ground surface formed of beds (*takhte*) of flowering annuals and of (more loosely planted) herbaceous and woody semi shrubs constituting

*sabza* (lit : green) and *sunbulistān* (lit : hyacinth field). Such a garden is often said to be contained within an *agar* (frankincense) and sandal (sandalwood) forest or within essentially a *chandan* (sandalwood) forest<sup>96</sup> and seemingly expressive of the moister riverain habitats within the (dry) teak and sandalwood Godavari forests or those of the Krishna gorges in the Nallamalai ranges.<sup>97</sup> A characteristic feature is the grape *mandwā* (centered in the palace or tomb *chabūtrā* - Fig 100 - or along two or more peripheral walls) and an occasional bower on two made up of edible-fruit bearing or conspicuously flowering climbers (the *mālatī* and *mādhavī*<sup>98</sup> for instance) with flowering and fruiting branches thrown down from tree summits. Characteristically, too, the garden incorporates a large pool or *hauz* (filled with *kamodini* or the white, night-opening lotus); smaller pools or *chehbecheh*, with ducks and geese, centered within *chamans*; and *jadwal* (water channels) lined with slender trees, forming margins and borders. The large garden, typically, has fields of sugarcane, *keorā* and paddy and orchards of citrus, fig, and pomegranate - interspersed with flowering shrubs and trees such as those of jasmine, henna, frangipanis and *gulnār* and of *pādal*, *molsary*, *champā* and *nāgkesar*; amongst which bees and butterflies and moths and brilliantly coloured beetles hover by day and luminous insects by night.<sup>99</sup> Gold-sprinkled and washed with saffron by day and smeared with silver and *chandan* (sandalwood paste) at night, the world of the garden is the world of the sky above it - a casket of pearls and perfume.<sup>100</sup>

Notes.

1. Moynihan, E Paradise as a Garden in Persia and Mughal India  
London: *Scolar Press*; 1980; pp 103-106
2. Alam, S M ed Planning Atlas of Andhra Pradesh, op cit., p. 11 of  
*Section on Relief*
3. Goodin, J R & Northington, D K ed Plants Resources of Arid and Semi Arid Lands, Florida, Academic Press Inc 1985, p.85.
4. *ibid*, p 87.
5. Yazdani, G Bidar: Its History and Monuments , op cit. p 203. Tanks at Kamthana, Pakhal and Ramappa in Warangal are noted. The embankment of Kamthana tank is described as a mile long, 30 ft to 40 ft above the water surface with earthworks 100 ft at top and much wider at base protected by masonry work. Cf the dimensions of the 16th century Husain *sagar* as provided by Hakim Nizam Gilani in his Hadiqat as Salatin, op cit.
6. Cousens, H Bijapur and its architectural remains, Bombay, 1916, p 124. Writes that the *Taj Bauri* was enclosed within high walls. Also gives dimensions of *Chand Bauri*, p 121, "another tank of the same class".
7. Yazdani, G op cit. pp 176-179 *Farāh Bāgh*, 'Garden of Joy', Yazdani writes, is "a spot where water oozes out from the bosom of the rock and the valley below is divided into natural terraces and clothed with luxuriant verdure". The site was sacred to "the votaries of Hindu faith.....and images of gods.....installed near the figures where water flows.....before the advent of Muslims in the Deccan." Consequently the Mughal garden and buildings "were given over by Asif Jahi's to the keepers of the Hindu shrine".
8. *ibid*.
9. Cousens, H op cit. p 122. Earthen pipes supplied water from the reservoir to water towers where silt was intercepted and as inlet and outlet pipes were at two different levels, this released necessary pressure.
10. Qayyum, A. Qutb Shāhī Gumbadain (tombs), op cit. <sup>p 33</sup> Repairs from the canals to the Durug Tank to Golconda's fort are referred to in Annual Report of the Archeological Department of HEH the Nizam's Dominions for the years 1937-1940, Yazdani ed.
11. Built by Ibrahim Qutb Shah in 1560.
12. where the *Baradari* of Taramati and the mosque of Pemamati were later constructed. See Sherwani, H.K. Cultural aspects in the reign of Abdullah Qutb Shah. Islamic Culture 1956 Vol 30 No 1, pp 45-75. *see Chapter 2 n 20*
13. Hadiqāt as Salātīn, op cit. Adjacent to the *Koh-e Nabāt Ghāt* (*Naubat pahār*) is the *Fateh Maidan* or Victory Square, a name which has been in use since Aurangzeb's conquest.
14. Sherwani, H K op cit. p 51
15. The *Falaknuma* is built on the site of Mohammad Quli Qutb Shah's *Koh-e Tūr* of the early 16th century.

16. op cit. p. 36
17. Sherwani, H K op cit. According to a chronogram, *Bāgh e Sultān Shāh* was erected in 1662 "in the vast park-like garden laid by the Mir Jumla on the banks of the Mīr Jumla Tank".
18. *Hadiqāt as Salātīn*, op cit, p 44. According to Sherwani, the garden was constructed in 1609 by Mohammad Quli Qutb Shah. It was used by Abdullah Qutb Shah as a resort and was rebuilt by Asif Jah II in 1761.
19. Sherwani, H K, op cit. p 52
20. Cousens, H K, op cit. p 126
21. Sarkar, J "Hyderabad and Golconda in 1750 as seen through French eyes : diary of an officer in Mon de Bussy's army" *Islamic Culture* 1936 pp 234-47.
22. built in the mid 18th century; ibid.
23. Pinder-Wilson, R "The Persian Garden; *Bāgh* and *Chahār Bāgh*" in *The Islamic Garden* R Ettinghausen ed. Dumbarton Oaks, Washington 1976; pp 71-73
24. Von Grunebaum, G<sup>ed.</sup> *Themes in Medieval Arab Literature*, London, 1981; <sup>Variorum Reprints</sup> p 286
25. Like poets writing in Arabic or Persian long before them, Deccani poets used the metaphor of the *Aiwān e Khusrau* in their descriptions of palaces to build up pictures of their grandeur. See for eg, Nusrati's *Ali Nāmā* ed. Prof. Abdul Majeed Siddiqui Hyderabad 1959; p 128.
26. such as at the *Madināt al Hamrā*. See Dickie, J *The Hispano-Arab Garden : Notes towards a Typology*. Not published. Kindly provided by author.
27. Sarkar, J op cit.
28. Le Strange, G *The Land of the Eastern Caliphate : Mesopotamia, Persia and Central Asia from the Moslem conquest to the time of Timur*. 3rd impression, London Frank Cass&Co Ltd 1966, p 223.
29. See, for eg. Grabar, O *The Formation of Islamic Art*, Yale Univ. Press, 2nd Edn 1986.
30. Wilber, D *Persian Gardens and Garden Pavilions* of 2nd Edn. Dumbarton Oaks, Washington 1979. Of the *daryācheh* gardens<sup>of</sup> the plateau, Wilber refers to the *Bāgh e Takht* in Shiraz and Shah Gol in Tabriz, both built (or restored) in Qajar times.
31. In Sikander Lodhi's and Sher Shah Suri's tombs, respectively.
32. This is a late 18th century garden near Aurangabad. See *Annual Report of the Archeological Dept. of HEH the Nizam's Dominions for the years 1928-30*, Yazdani ed. A photograph provided in *Annual Report*... 1919-20; op cit., Plate VI
33. Pinder-Wilson, R op cit.

34. attached as outdoor rooms "as in the palace forts of Agra, Delhi, Lahore;" - detached "as in the lakeside *bāgh* of Srinagar to exploit natural advantages". See Byrom, J Indian Gardens : An introduction in the University of Edinburgh Landscape Occasional Papers Paper 3 March 1984.
35. the example Dickie, op cit provides of the villa urbana is that of the *Madinat al Hamra* ; while the example provided of a villa rustica is that of the Generalife.
36. Welch, A "Gardens that Babar did not like." Paper read at Symposium on Mughal Gardens, Arthur M. Sackler Gallery and Dumbarton Oaks, Washington, May 1992. Garden excavated by F Siddiqui and believed to be the only extant garden of Sultanate period.
37. Blake: "Palace Gardens and Houses in Shahjahanabad." Paper read at Symposium on Mughal Gardens, op cit.
38. ibid. In addition to the *khānā bāgh* and the *dāirā bāgh*, Blake mentioned *serāi bāgh* .
39. Hadiqāt as Salātīn . op cit; p 119.
40. See for eg. Brookes J Gardens of Paradise : The History and Design of the Great Islamic Gardens, London 1987. Brookes (and other writers, as Wilber, op cit) give the example of the Palace of *Hasht Bihisht* of Uzun Hasan, 15th century ruler of White Sheep Turkoman at Tabriz. The example is taken from The Travels of a merchant in Persia in a narrative of Italian travels in Persia in the 15th and 16th centuries. Hakluyt Society, London 1873.
41. Hadiqāt as Salātīn, Urdu transl. op cit, p 44.
42. ibid. p 63. Gilani describes Abdullah Qutb Shah's month-long visit of the *Koh e Tūr* during *Barsāt* with his ladies.
43. Restored in the mid 18th century according to an inscription but now in ruins, op cit.
44. Yazdani, G op cit. p 52. This early 16th century (Bahmani) garden originally supplied with water from three wells in its immediate vicinity. The existing cusped stone cistern (in black basalt) located on a platform 41 ft square and 4 ft high; although no traces left of the pavilion in the middle. Length of garden is given as 136 yds, its breadth 70 yds.
45. *Toli Masjid* built by Mir Musa Khan in 1671 (1082 AH) is discussed in Annual Report of the Archeological Dept. of HEH the Nizam's Dominions for the year 1916-17; Yazdani ed. The enclosure of the mosque at Kulsumpura (nearby) measures 352 ft x 306 ft, the mosque-*hauz* platform being 120 ft x 88 ft The *hauz* is 24 ft square and the *bāoli* in the corner is 36 ft square (All dimensions approximate).
46. Royal Bath built by Sultan Quli, the founder of the Qutb Shahi dynasty of Golconda. See Rizvi, S A A op cit. p 297
47. Yazdani, G Bidar : its history and monuments, op cit. pp 156-60.

48. See Annual Report of the Archeological Dept. of HEH the Nizam's Dominions for the year 1918-19. The lowest terrace 13 ft 6 in above surrounding garden is 200 ft square; the second terrace 3 ft 6 in higher, is 126 ft 3 in square; the tomb itself being 71 ft 3 in square, a foot higher.
49. The resemblance of the minarets of *Gol Gumbaz* to the *dīpdāns* of the *Khandeshwār kā Dewal* at Bir is striking. See Annual Report of the Archeological Dept. of HEH the Nizams Dominions for the year 1924-25 for photographs of the temple. A resemblance may be found with the mausoleum of Shah Ashraf Biyabani at Ambad, where four 45 ft high octagonal lanterns surround the tomb. See Annual Report of the Archeological Dept. of HEH the Nizams Dominions for the year 1933-34.
50. as in some of the mosque garden courts in Spain. See Dickie, J op cit.
51. as suggested in Muslim agriculture and gardening texts as for instance the *Kitab al-Filāhā* of Ibn al'Awam transl. into Urdu by Maulvi Hashim Nadvi, Rampur, 1933.
52. References to palaces amidst island - forests of sandalwood and *agar* (the Indian olibanum) may be found in *Masnawī Gulshan e' Ishq* of Mulla Nusrati ed. Syed Mohamḡammad Azam. Hyderabad n.d; p 69; in *Qissa e Benazīr* of Saḡati Bijāpurī ed. A Q Sarwarī Hyderabad 1350 AH p 101; in *Rizwan Shah Ruh Afza* of Faiz, pp 80, 132. Forests of fragrant screw-pine *keoraban* are also frequently mentioned in *Qissā e Benazīr*, op cit.
53. Byrom, J op cit. An example in N.India is the Deg Palace of the Rajputs.
54. Cousens, H op cit; pp 106-107. See also Bashiru'din Ahmed *Waqiāt e mamlakat e Bijāpur*, Hyderabad, 3 vols, Vol 2.
55. Pinder-Wilson, R op cit., p 71
56. As suggested by J. Byrom in his talk on 'The Sale and Auction of the Taj Mahal,' March 1993.
57. See *Ibrahim Nāmā* of 'Abdul Dehalwī, Masud Husain Khan ed. in *Qadīm Urdu* Vol III Special Number, 1969 p 97.

*wale unch mandap dise yūn so jān  
muhāfe ho lar ke gaggan darmiān*

58. See *Kulliyāt Mohammad Quli Qutb Shah*, Sayyada Jaffar ed. p 96.

*dise mang motiān ki bīch sar meñ  
ke diste hai tāre magar nīr meñ*

See also *Qissā e Benazīr* of Saḡati Bijāpurī, p 101

*dise kālvi sabz sabze meñ yūn  
pattiān meñ urūsān ke hai māng jun*

For reference to the 'stream of Milky Way' (*kekhshān kī nadī*), see '*Ali Nāmā*' of Mulla Nusrati. ed Prof Abdul Majid Siddiqui, Hyderabad 1959, p 190.

59. *Ibrahim nāmā* of 'Abdul Dehlawī, op cit. pp 91-93.

60. *ibid*, pp 88-90.

61. Masnawī Gulshan e Ishq of Mulla Nusrati, *op cit*. pp 223-227.

62. Ibrahīm nāmā, *op cit*. p 92.

63. See for eg. ‘Ali Nāmā of Nusrati, p 149.

*likhen rastān ke satrān nīt achche har kālyvi musattar  
kare shabnam te afshāni warq kandan ke har thal kā.*

See also p 150 of the same

*saba takhtān ke safhān par likhe sar loh phulān,  
liā har kālwa jāka kināra nīt jadwal kā*

See also Ibrahīm nāmā, *op cit*, p 53.

*likhiā loh-e mahfūz ālam-e shumār  
so is mahal kā ek takhtā-e kinār*

64. as recorded by Nusrati in his masnawī ‘Ali Nāmā *op cit*. p 226.

65. Hadiqāt as Salātīn, *op cit.*, p 44. See also Zor, S M Q ed. Kulliyat e Sultan Mohammad Quli Qutb Shah, *op cit*. p 209. Prof Zor believes the Bāgh e Naya Qilā was used for the kind of (Basant) celebrations that are described by Sultan Mohammad Quli in his poems on Basant. See Kulliyat Mohammad Quli Qutb Shah, Sayyada Jaffar ed. *op cit*.

66. Walters, H Ecology of Tropical and Sub tropical Vegetation. Transl. from German by D. Mueller Dombois. Edinburgh: Oliver and Boyd 1971; p 216

67. Puri, G S and others. Forest Ecology 2 vols, Vol.1 2nd edn, Delhi 1983; pp 406-40

68. *ibid*. See Series of Vegetation of Peninsular India : their classification and description. pp 397-458.

69. *ibid*. See also Bharucha, <sup>F.R.</sup> A textbook of the Plant Geography of India. Bombay: Oxford University Press; 1983; pp 21, 23, 41-44

70. Richards, P.W. The Tropical Rain Forest : An Ecological Study, Cambridge CUP, 1966; pp 90-95

71. Bilgrami, S H & Wilmott, C Historical and Descriptive Sketch of His Highness the Nizam's Dominions, 2 vols. Vol 1 Hyderabad. See also Chapters on Distribution habits of important Indian forest trees in Puri G S and others Forest Ecology, *op cit*. p.183.

72. Gul e Khurshid as in qitā on the gateway of the 17th century Gulābi Bāgh in Lahore.

73. See for eg. Genders, R Scented Flora of the World. London 1977.

74. Maxwell-Lefroy, H. Indian Insect Life. A manual of the insects of the plains of tropical India. Calcutta, Simla: Thacker, Spink and Co. 1909. About tropical hawkmoths (Lepidoptera), the author writes pp 464-466 that "(its) food is the nectar extracted from flowers...the moth hovering before the

flower, its long proboscis being inserted to suck out (the nectar). White flowers that bloom at night attract the moths". I H Burkill in an article on bees writes, p 222 that the large sized and long-tongued Xylocopias are the most important of flower-visiting insects....They visit flowers persistently by day (usually large, showy flowers) and also on moonlit nights. See also Loveglass, A.R. *Principles of Plant Biology for the tropics*, London 1983; pp 358-361

75. many tall species of the tropical rain forest have whorled branching arrangement. See also Longman, K.A and Jenik, J. *Tropical Forest and its Environment*, London: Longman 1974; p 61
76. A type of large, free-standing brass lampstand with branched candlesticks called *jhār fanus* is described in *Hadiqat as Salatin*, op cit. and frequently mentioned in Deccani poetry as well as in 18th century Urdu poetry written in Delhi and Lucknow (eg. *Masnawī Siḥr ul Bayān* of Mir Hasān).
77. for instance, the *Averrhoa carambola* (*kamrakh*) from Moluccas, pineapple from the New World, cashewnut and guava as well as flowers such as the *Gul e Abbās Mirabilis Jalapa*.
78. *Bābarnama*. Transl. ed. A.Beveridge. Memoirs of Babar. Reprint Lahore *Sange Meel*, 1975. 2 vols, Vol.1.
79. *Plants in the Indian Puranas: an ethno-botanical investigation*, Calcutta: Naya Prakash 1989
80. Thrasher, A. Sanskrit Sources for Mughal (garden) traditions. Paper read at *Symposium on Mughal Gardens*, op cit.
81. *Āin e Akbarī* of Abul Fazl, Blochman H ed.transl., Calcutta: Asiatic Society of Bengal, 1927
82. For eg. *Ali Nāmā* of Mulla Nusrati, op cit. p 149.

*nihālān nārkīlān ke biṣāreñ khush chinārā kūñ  
dis āwe sarū te sar lā<sup>ke</sup>sudang har jhār fofal ka.*

Also

*mīthī shālū barāi kar le pani kulangariān te  
kare shālū upār tārā tunak tar magh<sup>z</sup>manjal kā*

Here, *narkilan* refers to coconut palm, *chinārā* is the *chinār* tree; *shālū* is dehusked paddy, *kulangariān* are watermelons; *manjal* refers to the coconut itself.

83. as are garden descriptions of Deccani poets. References to almond and walnut in garden description may be found in *Gulshan e Ishq* op cit. p 190; in *Mah Paikar* of Ahmad Junaidi, ed. Sayyada Jafār, Hyderabad: Jamī' Osmania 1986, pp 107-112; in *Saif al Mulūk wa Badī' al Jamāl* of Ghawwasi, pp 126-127.
84. *Ibrahim nama*, op cit. pp 86-88.
85. Kaniza Haji Pasha *Zirā'ate Āsifyā*, Hyderabad Burhan al Din 1911. Compare Haji Pasha's list of fruit trees with a list of fruit trees from a description of *Farāh Bāgh* in Nusrati's *Gulshan e Ishq*, p 190. Among the fruits Nusrati lists are jujube, grape, apple, fig, mango, jackfruit, duryān (?), banana, *jāman*, mulberry, pineapple, *tendū* (synonym for *Molsary*), guava, citron, lime, orange, quince, *kamrakh* (*Averrhoa carambola*), sugarcane, the almond, walnut and pinenut (*chilghozā*).

86. as suggested by Firminger too in his Manual of Gardening. See Firminger's Manual of Gardening for India Ed. Revised W. Burns, 7th Edn., Calcutta: Thacker, Spink and Co; 1930; p 215
87. Sarkar, J op cit.
88. ibid.
89. See, for eg., Dickie, J, op cit.
90. References in 17th century Deccani poetry may be found in 'Ali Nāmā, op cit. pp 131, 137, 150, 227, 239; Gulshan e' Ishq, op cit. pp 186, 187, 281. Descriptions of bowers at the Pallawan dynasty capital, Kanchivaram, also referred to by Thrasher in Sanskrit Sources for Mughal (garden) traditions, in Symposium on Mughal Gardens, op cit.
91. as suggested in poetry. For eg Gulshan e' Ishq, op cit. pp 251, 276; Ibrahīm nāmā, pp 137, 187, 'Ali Nama pp 137, 187. The use of single species of annuals for each takhta (plot sub division) is suggested in Nusrati's Gulshan e' Ishq, p 276
- zamin̄ bāgh ki thī jittē farsang kī  
har ik takhtā hūī sadar yek rang kī.*
92. Buchanan, F Travels....from Madras....to Seringapatam London 1807  
3 vols Vol 1.
93. betelvine also trained on rawāsīn (Sesbania aegyptica), a quick growing tree of the pea family. The Deccani poet, Ahmad Junā'idi refers to this in his Māh Paikar, op cit. pp 107-108.
- so mil dāl men̄ dāl har dāl yūn  
rawāsīn kūn pān kī bel jīn̄.*
94. Buchanan, op cit. Among the roots, he mentions turmeric, ginger, onion, garlic, sweet potato, arum and Basella rubra. Among tarkari (vegetables) he mentions gourds, cucumber, brinjal, melon, the fibre plant (Crotalaria juncea), okra, species of Rumex.
95. mansions of Salabat Jung and Sayyid Lashkar Khan. See Sarkar, J op cit.
96. Not only were gardens said to be located in sandalwood and (Indian) olibanum (agar) forests, but the scented woods of these forests were also used for the chaubīnā in palace construction, as is mentioned in Gulshan e' Ishq, op cit. p 69 in the description of a palace. Agar (Boswellia sp.) is an important constituent of 'dry' and 'moist' teak forest and is also gregarious on the Deccan plateau just as is sandalwood.
97. Bilgrami, S H op cit; Puri G S and others, op cit; Partridge, E A Forest Flora of the Nizam's Dominions, Hyderabad 1911; Hyderabad Forest Magazine: a quarterly journal for forestry, agriculture, industries 1941-42 Vol 1 No 2 ; pp 20-3
98. Mālātī is Aganosma caryophyllata, mādhavī is Hiptage madablota (bengalensis).

99. Nusrati's and Sanā'ti Bijapuri's descriptions of gardens are good examples of detailed and realistic garden descriptions.

100. See *'Ali Nāmā*, op cit. p 110 for reference to the sky as *tablā e kāfūr*; *Qissa e Benazir*, op cit. for refernce to sky as *jawāhir ka darjuk*, Wali Aurangabadī's *qasidā* on Hazrat Shah Wajihū'dīn Nurullah for reference to sky as *tablā e mushk*. The garden referred to as *gulshan kā darjuk* in *'Ali Nāmā*, p 239.

## CHAPTER 4.

### GARDEN ORNAMENT

It has been suggested earlier that medieval Muslim gardens played a role in the introduction of 'exotic' plants in a given region and in horticultural experiment to improve quality and productivity. Such *istāh* or improvement in Muslim-region agriculture was inevitable perhaps if one is to believe in an Islamic agricultural revolution in the early centuries after the rise of Islam.<sup>1</sup> This revolution was experienced in regions with traditions of intensive irrigated agriculture (such as Arabia Felix, the Fertile Crescent and the Nile Valley); as well as, apparently, in the dry steppe regions and savannas of Africa opened up through Muslim conquest. Professor Watson, using the literary records of these times, lists a range of food and fibre plants available in the Muslim world - from arid-region grain (like hard wheat and sorghum) to (tropical) mango and coconut.<sup>2</sup> One may suppose like Watson that such plants were introduced in the royal gardens of a region at first - for novelty and ornament and in keeping with the "collecting instincts of Muslim caliphs". Le Strange and Mez, for instance refer to the Arab geographer, al-Maṣūḍī, who noted orange trees ("from India, via Oman and Basra") in Caliph Qāhir's palace garden in Tulunid Egypt ("the supremest pleasure of the Caliph"),<sup>3</sup> and mangoes are said to have formed part of the treasury of Caliph Harun ur Rashid (d. 809) in Southern Iraq.<sup>4</sup> The Taifa kings of Spain grew bananas and sugarcane in Seville; and the choicest items of display at a banquet (for instance in 'Abbasid Baghdad) included costly rarities such as quinces from Balkh, apples from Syria, pistachio nut and edible earth from Khurasan and "sugarcane washed with rose water"....with "towers of sugar as centrepieces".<sup>5</sup> But Muslim writers, as al-Maqrīzī, also speak of experiment in gardens - of "rare grafts" such as of "almond on apricot" in a Tulunid Egyptian garden, of varieties of rose and water lily; and in the 11th century, Nāsir e Khusrau found Cairo markets stocked with "fruit bearing

plants in tubs....for ready transplantation"<sup>6</sup> suggesting that the agricultural revolution had come of age. Fruit varieties were seen and counted everywhere. Al-Jahiz in the 9th century counted 360 kinds of dates in the Basra markets (presumably one for each day of the year) and Ibn Rusta spoke of 78 kinds of grapes in the vicinity of San'ā. Al-Ansārī in 1400 reported endless varieties of fig, grape, pear and apricot in the North African coastal towns, and Abdul Latif in 1300 was so wonder-struck at the varieties of citrus in Egypt he was barely able to make note of how many there were.<sup>7</sup> Muslim geographers also commented on the widespread cultivation of industrial plants - of dye plants and of perfume plants, particularly in the Iranian highland regions. According to Muqaddasī, Shapur, the (Sassanian) province of Fars, could boast an extensive perfume industry in the 10th century which produced essences from "violets, lotus (probably water-lily), narcissus, fragrant screwpine, lilies, white jasmine, myrtle, marjoram and orange peel"<sup>8</sup>. Jur (renamed Feruzabad) was famous for its red roses<sup>9</sup> (as Nisibis - or Nasibin - was famous for its white ones or as al Mizzah, outside Damascus was famous for the *dimishqī*<sup>10</sup> The rose water of Jur was exported far and wide and there were "fragrant waters" here of other flowers besides as of "palm flower, southernwood (*Artemisia abrotanum*), safflower (*Carthamus tinctorius*) and willow"- to which could be added the essence of pinks distilled at Kufa.<sup>11</sup> Yaqut (d. 1229) commented on the saffron fields of Nihavand and Isfahan;<sup>12</sup> Tabriz was famous for *qirmiz* (crimson dye);<sup>13</sup> and the district surrounding Old Mosul was renamed al Mahlabiyah after *Mahlāb*, a fragrance extracted from *Prunus mahaleb*, a cherry tree abounding in the district.<sup>14</sup> One may be sure that the cultivation of perfume plants in Iran preceded Muslim conquest, but it certainly appears to have received fresh impetus with the rise of Islam. In 'Abbasid Baghdad, poets presented *munāzarās* (disputations) of the rose and narcissus inspired no doubt by the sight of these in royal gardens,<sup>15</sup> and violet, hyacinth, lily, jasmine, camomile and water lily and others were to figure as well in later (Persian) garden *qasidā*.

Both the new and the old, the native and introduced, among plant species were subjects of interest and experiment, encouraged by early Muslim rulers or their advisers - interests sustained through later centuries of agricultural decline and through periods of change and upheaval. By the 9th century, works on agriculture and on related sciences were being commissioned by royal patrons as relevant Greek, Syriac or Sanskrit texts were made available through translations into Arabic.<sup>16</sup> In Kufa, Abu Hanifa al-Dināwārī (d 895) wrote his work on plants, the *Kitāb al-Nabāt*, based on older texts and on his "personal observations".<sup>17</sup> Some years later (in 904) Abu Bakr ibn Wahṣīyya composed his agricultural work, *Kitāb al-Filāhā al-Nabāṭiyā*, supposedly adapted from an ancient work on Chaldean agriculture and a sequel to his previous work on medical botany and toxicology (studied by Martin Levey.<sup>18</sup>) Soon after, Spain took up leadership in agricultural and botanical research. Here, as Leclerc observes, the natural sciences were studied by specialists in the field : botany was studied "more in nature than in books, not only for medicine but for agriculture and the other practical arts".<sup>19</sup> By the 10th century the royal gardens at Cordova, under the Umāyyad Andalusian branch, seem to have become "botanical gardens with fields for experimentations with seeds, cutting and roots brought from the outermost reaches of the world".<sup>20</sup> Following the 'Golden Age of Cordova' too and during the rule of Taifa kings, royal gardens in Spain continued to be in the charge of leading scientists. That at Toledo, writes John Harvey, was created by Ibn Wafid in the 11th century. After Ibn Wafid's death, his colleague Ibn Bassal, himself "a great botanist, plant collector and writer on agriculture", was put in charge of the royal gardens by Sultan al-Māmūn of Toledo. Following the Christian conquest of Toledo, Ibn Bassal migrated to Seville where he worked for Sultan al Mu'tamid, like his contemporary Ibn Hajjāj.<sup>21</sup> Ibn Bassal's lists of plants in his manual on agriculture and gardening is exceeded only by that compiled by Ibn al-Āwwām who assembled

all previous scholarship in a voluminous work, the *Kitab al-Filāhā*, written in Seville, a century later (in 1180).<sup>22</sup> Elsewhere, outside Spain - in Ghaznavid Iran; at Herat under the Timuṛids; and particularly in Arabia Felix during the period of Rasulid rule - sultans and amīrs took active interest in plant and agricultural sciences and in the related subjects of chemistry and pharmacology. In Ghaznavid Iran, the cultural historian and scientist, al-Berūnī (d. 1048) put together his compendium on plant animal and mineral drugs, the *Kitāb al-Saydanāh fi al-Tib*.<sup>23</sup> His botanical descriptions and lists of plant synonyms enabled identification of plants from many diverse parts of the world, including many new Indian plants which he had the opportunity to examine. In Sicily at the court of the Norman king, Roger II, the botanist al Sharif al-Idrīsī (d 1166), better known as a geographer in the west, compiled his *al-Jāmī....al-nabāt* - a "botanico-pharmacological work" like that of al-Berūnī, focused on the flora of Spain and North Africa.<sup>24</sup> In Damascus, the medical botanist Ibn al-Baitar (d 1241) presented his Collection of Simple Drugs (*al-Jamī al-Mufradāt*) to the Ayubīd sultan al-Sālih. Ibn Baitar had botanised in North Africa, Spain, Greece, Italy, Syria and Asia Minor and described as many as 1400 (mostly plant-based) drugs.<sup>25</sup> A surviving agricultural work of the 14th century is the *Kitāb e Bughyāt al-falāhīn....wal rayāhīn* (The desired book.....on useful trees and aromatic plants) of the Rasulid Sultan al-Malik al-Ghassāni (d 1364) who carried on the scholarship of his father and his grandfather, both prolific writers on the subject.<sup>26</sup> In Mamluk Damascus, al-Ghazzi (d 1529) completed his *Kitāb al malāhā fi ilm al-Filāhā* <sup>27</sup>about the time that Qasīm ibn Yusuf wrote in Herat his Book of Guidance in Agriculture (the *Kitāb Irshād az-Zirā'ah*). Qasīm's work has been discussed by <sup>Syed</sup> Hossein Nasr<sup>28</sup> and by Ralph Pinder-Wilson<sup>29</sup> but little is known of Al Ghāzzi who is said to have lived "a secluded life in the 16th century in the *Zawiyāt 'Ain al Lū'lū'a*, a Sufī cloister outside Damascus<sup>30</sup>. Samī Hamarneh, a Syrian writer on the history of Muslim medicine, argues that al-Ghāzzi's work is based on a personal observation of the plants he raised in his garden and on

research on plants in Egypt, Syria, Palestine and Arabia. Like other Muslim scientists, al-Ghāzzī contemplated upon the healing powers of Nature, made note of the varied benefits of cultivating plants and is credited with "a manual on the healing art".<sup>31</sup>

Al-Ghāzzī's relatively late interest in agriculture and gardening seems to have outlasted the 'Islamic agriculture revolution' by several centuries - a period in which Muslim agricultural knowledge was being transmitted throughout all parts of the Indian subcontinent. In Muslim India, Arabic works on agriculture and on the related sciences were copied, rewritten and modified, translated into Persian and commented upon; and increased familiarity with a wider range of plants (through survey of Sanskrit medicinal texts) meant that the botanico-pharmacological compendia now prepared included virtually unending plant lists.<sup>32</sup> The most substantial, as well as the last work of this nature, perhaps, in the subcontinent, is the *Khazāin al-Adwiyā* (Treasury of Drugs) of Hakīm Najm ul Ghanī - painstakingly detailed both in its description of plants and of their use as *mufridat* (simples). *Khazāin al-Adwiyā* was written in Urdu and published as seven volumes in 1926 - ironically, therefore, not in Mughal India but in British India but a testament nonetheless to the continued importance of the tradition it represented.<sup>33</sup>

It would appear that in Mughal India, as elsewhere in other Muslim regions, the initial experiment with rare seeds, cuttings and roots was carried out in the royal gardens where the success of the experiment was first gauged. Irfan Habib, referring to contemporary texts, observes that cultivars of sweet cherry, apricot, and of 'edible' mulberry brought to the Kashmir vale from Kabul during Akbar's rule were tried out in the Imperial gardens before their use in the valley was popularised. Similarly, mango cultivars from Deccan and Gujrat were tried out by Jahangir's governor in his own garden (in the UP) first. Habib adds that grafting

was apparently a royal Mughal privilege until it was officially declared open to the public by Shah Jahan, as a result of which many varieties of orange, in particular, are noted to have been raised.<sup>34</sup> Even a cursory view of Babar's Memoirs and its illustration<sup>5</sup> points to trial and experiment in the royal garden<sup>6</sup>, recording the novelty of banana and sugarcane in his garden at Jalalabad; of New World pineapples and of *Kabulī* and *Balkhī* melon and grape in his Agra garden along with a rose and narcissus *munazara*. Babar also had oleander specimens transported to his gardens from Gwalior and seems pleased with the clumps ('in our garden') of *chironjī* (*Buchanania latifolia*)<sup>7</sup>, a teak association of the Central Indian forests raised from its seed, in culinary use).<sup>35</sup> Presumably, it is this experimental planting in royal gardens, dutifully recorded in accompanying illustration, which has led to the occasional impression of "studied carelessness"<sup>36</sup> or of a randomly planted Muslim garden.<sup>37</sup> Indeed, one may wonder about the siting of a solitary specimen of fragrant screwpine in a garden plot<sup>38</sup> - detached from its natural habitat and unsightly anyway - until it is perceived that the painter sought to emphasise through its "rarity value" the richness of the plant collection - a fact of greater significance perhaps than, say, the record of orderly planting.

Novelty essentially being ornament, one should expect to find in a garden all manner of novelties promoted through agricultural *islah*. For novelty, it appears, entailed not the assembly of specimens from forest or plain merely, but their appropriate breeding to improve quality. In 19th century Deccan, Kaniza Haji Pasha reported eight varieties of pomegranate, twelve kinds of guava, seven varied *kamrakh* (*Averrhoa carambola*), four types of *karaunda* (*Carissa karandas*), three forms each of *harfa rewārī* (*Phyllanthus niruri*) and *phālsā* (*Grewia asiatica*) and two kinds each of *gulabī jāman* (*Eugenia jambos*) and woodapple (*Feronia elephantum*), not to mention a variety of citrus - each variety of fruit distinguished as such by colour or form or by taste and fragrance.<sup>39</sup>

In the context of agricultural *islāh* and the enjoyment of its fruit one might refer to the Quran and to what, apparently, it has to say on the subject. Sura VI.99 is a reminder to man that it is God who sends rain from the skies causing all kinds of *nabāt* (vegetation) to be produced.

From some We produce  
Green (crops) out of which  
We produce grain  
Heaped up (at harvest)  
Out of the date palm  
And its sheaths  
Clusters of dates  
Hanging low and near  
And gardens of grapes and olives  
And pomegranates  
Each similar  
Yet different  
When they begin to bear fruit  
Feast your eyes with the fruit  
And the ripeness thereof.<sup>40</sup>

And in Sura VI.141, man is urged again to contemplate on God's Blessings for

It is He who produceth  
Gardens with trellises  
And without, and dates,  
And tilth with produce  
Of all kinds, and olives  
And pomegranates  
Similar (in kind)  
And different (in variety)<sup>41</sup>

While again in Sura XXXV.27, man is told

Seest thou not that  
God sends down rain  
From the sky ? With it  
We then bring out produce (*thamarāt*; lit : fruit)  
Of various colours.<sup>42</sup>

Or colour (among other qualities) distinguishes between (fruit) species and between the varieties of each, as commented by Abdullah Yousuf<sup>6</sup>Ali<sup>43</sup> who draws attention to another reference to colour in Sura XVI.13

And the things on this earth  
Which He has multiplied  
In varying colours (and qualities)

Verily in this is a sign  
For men who celebrate  
The Praises of God.<sup>44</sup>

The enjoyment (through one's "faculty of sight and of feeling"<sup>45</sup>) of "produce of many colours"; of "similar and different" fruit and of their "degrees of ripeness" is the enjoyment seemingly of all that is ornamental. Ornamental too is the seeming wealth of pendant "clusters of fruit",<sup>46</sup> of "*sunbulā*"<sup>47</sup> (spikes and ears of various grain-bearing crops); and of spathaceous bloom ("*tal'eha* : flowers - or fruits - piled one above another"<sup>48</sup> as in the "*Talh* tree"<sup>49</sup>) More generally one might seek ornament in "enclosed gardens dense with lofty trees" (*hadāiqā ghulba*),<sup>50</sup> in "gardens of luxuriant growth" (*janatin alfafa*)<sup>51</sup>; "in odoriferous herbs" (*al rayāhīn*)<sup>52</sup> and in the "produce of the earth" (*nabat al ardḥ*)<sup>53</sup> as a whole which

....provides food  
For men and animals :  
(It grows) till the earth  
Is clad with its golden  
Ornaments and is decked out  
(In beauty).<sup>54</sup>

But this enjoyment is possible (with God's Will) if land has been cultivated and prepared in advance of the fertilising showers of God's Mercy for

From the land that is clean  
And good by the Will  
Of its Cherisher springs up  
Produce (rich) after its kind :  
But from the land that is  
Bad springs up nothing  
But that which is niggardly.<sup>55</sup>

According to 'Abdullah Yousuf Ali, the significance of breeding and cultivation may be sought also in the example of the Lote Tree. In its native habitat, "it is shrubby, thorny and useless, but in cultivation it bears good fruit and some shade"<sup>56</sup> and is worthy enough then for a place (as a "Lote Tree without thorns") in the Garden for the "Companions of the Right Hand."<sup>57</sup>

All this is perhaps best examined by detailed reference to one author - the Andalusian writer Ibn al-ʿAwwām and his Arabic work *Kitāb al-Filāḥā* of 1180. Ibn ul ʿAwwām's work was translated from Arabic into Spanish in 1802 by J.A.Banqueri who published the Arabic text in its original form.<sup>58</sup> This enabled Maulvi Hashim Nadvi to undertake an Urdu translation of the work in the days of Mir Osman Ali Khan (Hyderabad's last Nizām), following a directive from the Imad ul Mulk, Syed Hussain Bilgrami, and the Nizam's Education Minister, (Nawab Masud Jang) both of whom considered Ibn ul Awwam's work invaluable.<sup>59</sup> Judging from Nadvi's *muqaddimā*, too, the work was not considered of mere historical importance in the Deccan. Nadvi emphasises its educational value and on the benefits of an Urdu translation making the text available to the people of the subcontinent. He also recommends its review and consideration by the Ministry of Agriculture to assess, in particular, the practical value of the unusual horticultural practices the author records.<sup>60</sup>

Ibn al-ʿAwwām lists more than 30 Greek and Andalusian writers as the sources of his work on agriculture and gardening besides expressing his debt to the (works of) the Persians, the Nabateans and the Romans (meaning the Byzantines). He begins each of the 38 chapters (making up the two volumes of his work) by introducing his subject; following which he presents specialist views on the subject, referring first to the earliest writings he is familiar with and later to contemporary works. He notes the essential differences in specialist viewpoints on each subject of discussion, analyses the reason for these and, in authoritative manner, reserves his own judgement on the subject until all arguments are set forth. As such his work is detailed and instructive, providing a comprehensive view of traditional Muslim agriculture and gardening.

In the *muqaddimā* (preface) of his work Ibn al-ʿAwwām, commends the education and pursuit of agriculture which he says is fruitful both in ones present

life and the Hereafter. He cites various *hadīṣ* (tradition) in this connection recording their chains of transmission, usually through Abu Huraira (among the Companions of Prophet Mohammad pbuh). He notes, for instance, the importance Prophetic Tradition lays on production in agriculture - both on abundance in agricultural produce and its continuing benefits ("for which an equal measure in the Hereafter by way of reward awaits the cultivator"). He notes the significance Tradition attaches therefore to securing cultivation from oppression (which one may interpret to mean disease and pests) and the necessity for continuous *islāh* of land. In support of this Ibn al-ʿAwwām cites the (oft repeated) *hadīṣ* : "Seek your food in the fertile tracts of the land" - which may refer both to the utilisation of fertile tracts for agriculture and also to the rectification of barren, or excessively alkaline, land. Ibn al-ʿAwwām must have had both meanings in mind for he quotes Abu Huraira who is said to have drawn a parallel between the cultivation of human virtues

and *islāh* (cultivation) of land<sup>61</sup> - recording a tradition,

presumably in the light of the Quranic parable of the Goodly Word

Like the Goodly Tree  
Whose root is firmly fixed  
And its branches (reach)  
To the heavens  
It brings forth its fruit  
At all times by the Leave  
Of its Lord.<sup>62</sup>

Ibn al-ʿAwwām also makes note of the *hadīṣ* concerned with the virtues of (cultivating) particular food plants. For instance in his discussion on the cultivation of the pomegranate, he refers to a *hadīṣ* recommending the fruit (and its juice) which "dispels envy, illuminates the soul" and secures one from the "evil suggestions of Satan". Ibn al-ʿAwwām also recounts traditions associated with (*Haẓrat*) ʿAli and (*Haẓrat*) Ibn ʿAbbas recorded by (*Haẓrat*) Hārīs, each of whom it was observed took unusual care in eating up the entire fruit even picking up pomegranate seeds on the floor. When asked why, both are recorded to have said that "each pomegranate carries a seed of Paradise"<sup>63</sup> - the search for a fallen

seed on the floor, presumably therefore, signifying the act of seeking God's Blessing, of finding the one 'blessed' seed among a treasury of seeds. Regarding the quince, Ibn ul-ʿAwwām records a *hadīṣ* transmitted through (*Haz̤rat*) Ibn ʿAbbās that quinces (sent to the Prophet Mohammad, pbuh, in Madina from Ta'if) purify the heart and dispel melancholy and anxiety; also (via another chain of transmission) that they fortify and strengthen the heart.<sup>64</sup> Ibn al-ʿAwwām also relates a *hadīṣ* recommending fresh dates especially for breaking ones fast for (as recorded) fresh dates were said to be healing and solace-giving and a blessing from God for (*Haz̤rat*) Maryam (Mary).<sup>65</sup> Another *hadīṣ* extolling the fragrant, pleasure-giving virtues of *bādrūkh* (basil, balm, mint and similar labiate plants) is quoted.<sup>66</sup>

In their mention of the virtues of certain plants, one might make note of the - presumably - Shi'ite *hadīṣ* to which Hakim Nizamūddīn Ahmad Gilānī of the Qutb Shahi court refers to in his *Risālah-e Tibb*<sup>b</sup> (Manual on Medicine). The *Risālah e Tibb* forms a portion (ff 43 v to 49 v) of the *Majmū'ā e Ibrahim*, compiled by Mir Hamid Ali at the end of the 12th century AH for an Ali Ibrahim Khan. It is listed among the *Kashkoḷ*<sup>5</sup> Collection (as Kash Ms No.37) of the Salar Jang Library, Hyderabad and is a treatise on herbs which describes the merits of particular vegetables (*baqūl*) as recorded in the *hadīth*. Gilani lists endive, leeks, *ajmod* (*Apium graveolens var.dulce*), purslane, lettuce, cucumber, onion, garlic, carrot, radish, turnip, leaf beet, bottle gourd, brinjal and basil and mint.<sup>67</sup> These are vegetables whose dietary intake is recommended in contemporary works as preventive medicine too such as the *Khulāṣā Qawanīn ul' Ilāj*, (also referred to as *Zubdat al Hukamā*) of Shamsūddīn Nuruḷdīn, written (in Persian) for Mohammad Quli Qutb Shah;<sup>68</sup> as well as in the *Kh̤zān o Bahar*, a Persian agricultural treatise (both of which are discussed later). But what needs emphasising at this point is merely this perhaps that Ibn ul-ʿAwwām's field of inquiry included both *Hadīṣ* and (indirectly) Quran, which he

used to underline the values of agricultural education and practice. That, moreover, Ibn ul-‘Awwām drew upon *Hadīṣ* to emphasise the merits of seeking God's Blessings through agricultural cultivation in general terms; and cultivation in particular of plants with medicinal values such as those noted for their benefit to the heart, to the Muslims "the beast of burden for the faculties of man."<sup>69</sup>

In the first three chapters of his *Kitab al-Filāhā*, Ibn al-‘Awwām discusses various kinds of soil, manure and irrigation water and their relations with particular crops. He considers the (primary) importance of soil identification and the (subsequent) importance of land cultivation, manuring and mulching. The subject of soil and its management is taken up once more in Chapters 10 and 11 relative to tree and shrub planting as well as in Chapters 17 and 18 relative to the cultivation of grains and vegetables. In Chapters 17 and 18 the author discusses selection of seeds and seed treatment prior to planting and stresses the need to consider the measure of seed sown in relation to soil vitality. He considers measures of restoring soil fertility and examines patterns of intercropping and rotation.

Chapters 4, 5 and 6 deal with planting of trees and shrubs giving directions about plant spacing and grouping in a garden and about choice of species relative to the garden's built features. Appropriate seasons and hours of planting and irrigation are stated and popular views cited concerning the beneficial or harmful effects of the stages of the lunar cycle on gardening operations. Chapter 7 lists about 60 garden trees and shrubs 'common in Andalusia', including those raised from 'imported' seeds and cuttings and those transplanted from their natural habitat from forest and plain. The Chapter also details modes of cultivation of each individual species listed, its soil preferences, manuring and irrigation requirements, its method of propagation and the precautionary measure to be observed when transplanting in garden from 'nursery'. The writer also reflects upon the considered virtues of

certain trees and shrubs, their mention in *Hadīs* and the dietary benefits of their produce and their culinary uses. This subject of plant virtues forms an important part of the chapters concerned with the cultivation of grains and vegetables and of ornamental and economically useful crops. A hundred such species are discussed from Chapters 19 to 28, including some 25 herbaceous perennials and annuals for the 'ornament of the garden' and about 18 (separately listed) aromatic shrubs and herbs. (Appendix 1) Under each plant listing, forest, garden and other varieties are noted. Ibn al-ʿAwwām also discusses the cultivation of aromatic seed-bearing, mostly umbelliferous, herbs, and of root and leafy vegetables. Curcubitaceous and solanaceous fruit are discussed under a separate heading and the cultivation of fibre and dye plants and of essential food crops is examined at length.

Chapter 8 details principles of grafting and budding (*Tarkīb*) and Chapter 9 describes principles of pruning, trimming and thinning (*Taqlīm and Tashmīr*). The author considers the benefits of *Taqlīm and Tashmīr* and lists the trees for which these operations are especially recommended. The section on grafting is extensive. The author speaks of Nabatean, Greek and Roman (Byzantine) methods. He discusses root graft (which he calls *Tarkīb-e Ūnānī*-the Greek method); bark graft (which is *Tarkīb-e Rūmī*-the Roman or Byzantine method); side graft (which is *Tarkīb-e Nabī*-the Nabatean method). He also describes cleft and crown grafts and forms of patch and shield budding using diagrams to explain these concepts. The benefits of grafting and budding (including their utilisation "for purely ornamental purposes") are considered and the season for carrying out each method of grafting and the plant type for which each method is suited are noted. There is an extensive discussion too on preparing scions or grafts (*aqlām*) and precautionary measures for securing union are detailed with much stress on precautions to ensure cambial contact of scion and stock. The Chapter on grafting is concerned with plant classification too, as might be expected. In classifying trees and shrubs in terms of

families (*Ummahāt al-ajnās*; lit : Mother of genera or families), the writer distinguishes between *mawāfiq* (similar or compatible) and *mukhālif* (opposed and incompatible) trees and shrubs. He considers the possibilities of compounding dissimilar types (*ajnās*) through *inshāb* - that is, by linking their roots, or, more specifically, by leading the root of one through a hole notched in the other kind of plant. He also discusses the *Tarkīb e Āmā* (lit: Blind Method) of implanting seeds, stones or seedlings of one kind of plant in notches made in the roots or branches of another kind and of concealing the operation under a layer of soil (whether the operation is carried out on a root below ground or on a branch. In the latter case, union is effected in an earthen container held up on scaffolding - rendering possible, according to the author, the 'export' of ornamental plants raised in this manner). The Chapter closes with a discussion on the benefits of locating plants of a family, or compatible kinds, in close proximity to each other.

Chapters 12 and 13 are largely concerned with tree fertilisation, pollination and renewal (*Tazkīr* and *Talqīh*). The author notes here the importance of aerating roots, replacing old soil with fresh soil and the incorporating of animal wastes and other organic matter, working it in at planting time or as 'side dressing' during the plants growing season or mixed in with irrigation water. He describes various applications, too, of sprays, dusts, paints and vapours to hasten onset of fruit or to secure fruit in the tree and to promote abundance and size and quality of fruit (especially its *latāfat*, or 'refinement'). Many of the fertilising measures outlined here are considered in Chapter 14 too in relation to remedial and preventive measures against disease and insect pests of horticultural plants.

Chapter 15 describes some "unusual practices" to enhance the ornamental values of plants through (apparently) a combination of grafting, fertilisation and related techniques. Ibn al-ʿAwwam refers to treatment of seeds, bulbs, tubers and

roots with fragrances, sweet substances, *maghziat* (like almonds; lit : matter), *taryaq* (or antidotes, like opium) and *adwiya musehhila* (purgatives) - to promote fragrance, sweetness and *latāfat* (refinement) in flowers and fruits and to promote other desired qualities. He also elaborates ways of uniting tree or shrub cuttings to produce variously coloured fruit and branches and remarks on the possibilities of creating various colours in a grape cluster or in a compound fruit (like the fig). There are methods too of moulding radishes, bottlegourds, cucumbers and other fruits to desired shapes and sizes; of moulding a grape cluster (similarly) in the likeness of a single grape and (similarly) of imprinting and engraving quinces, pears, citrons, apples (and other fruit) with calligraphic writing and other ornament. Other ideas may be noted such as engraving an almond seed prior to its planting and seeing it to enlarged effect; and there are suggestions for the production of mottled bloom in the wallflower (*khairī*); suggestions for promoting blue and deep yellow colours in roses and for enjoying the beauty of evergreen planting in the centres of *hauz*, particularly of orange, myrtle, pine and cypress. The possibilities of producing apples and roses off season are discussed too and Ibn al-<sup>ʿ</sup>Awām also refers to the practice of preserving rose buds underground, causing them to bloom when desired.

Chapter 16 of Ibn al-<sup>ʿ</sup>Awām's work discusses harvesting, storage and preservation of field and garden produce. Chapter 30 discusses distillation and extraction of essences and describes ways of distilling essence of rose, of scenting it with camphor, aloe wood, musk, saffron or clove. It also describes ways of obtaining essences or oils from orange, lemon, lily, basil and from apple peel. Of the remaining chapters, four (31 to 35) deal with domestication of animals and birds, the rearing of pigeons and beekeeping.

Ibn al-<sup>ʿ</sup>Awām completed his work at a time when Syriac and Greek works

assimilating ancient scholarship had been translated into Arabic. The view that man reflected the hierarchy perceived in Nature as well as its composition, formed a popular (perhaps Aristotolean) basis to the study of the medicinal sciences. The view that Nature comprised a hierarchy of kingdoms - mineral, plant and animal - each governed by its soul- formed a philosophical basis for the study of relevant sciences. Like man, each plant, animal, mineral and drug was thought to possess a 'temperament' composed of the elements constituting matter.<sup>70</sup> In his agricultural work *al-Jamī...al-filāhā* of the 16th century, al-Ghāzzī speaks of the gradation of mineral, plant and animal souls (and of its reflection in man), referring to the plant as "a body whose soul is supported by seven powers", each of which is considered to be associated with a special function in the process of plant growth.<sup>71</sup> Therefore, that fertilisation regulates the performance of each of these 'seven powers' nourishing the soul of the plant thereby. Two centuries later in his *Kitab al-Nabat* (an Arabic work written at Mohammad Shah's court in Mughal India) Hakīm 'Alvī Khan (of Shiraz), d.1759, pointed out such similarities too between plants and man.<sup>72</sup> And three centuries before al-Ghāzzī, Ibn ul-'Awwām employed similar 'technical' jargon to explain that the diseased *qalb* (heart) of a tree could be purged through vapours, sprays and other such techniques or nourished with aromatic and sweet substances - as an interesting parallel to the use of fragrances recommended by physicians for *islāh e nafs* or the refinement of the (human) soul.<sup>73</sup>

The rationale that fragrance breeds fragrance, that purgatives purge or that incorporating saccharine matter in a plant's root causes sweetness in its fruits<sup>74</sup> would seem a corollary to the traditional view of grafting : "to render one according to the temperament of the other" - a view of the ancient people (noted by Ibn al 'Awwām<sup>75</sup>) which might also account for the redness in peaches when underplanted with red rose bushes<sup>76</sup> or the redness of oranges or citrons in the vicinity of pomegranate-bearing shrubs.<sup>77</sup> Similarly the lemon-like fragrance of

lettuce whose seeds were interspersed in a slice of lemon before planting,<sup>78</sup> or the deep yellow of cauliflower whose seeds were soaked in olive oil or honey before planting<sup>79</sup> might be interpreted too as rendering one according to the qualities of the other. A similar explanation would account for the blue colour of roses when injected with indigo or of deep yellow roses arising from treatment with saffron.<sup>80</sup> And it would seem, similarly, that, the hot, drying power of musk could encourage the production of *muiz* (dry grape) in the grapevine, the dry grape with healing qualities naturally requiring cold, dry opium.<sup>81</sup> And other such experiment may be noted : hanging the root of balm (*Melissa officinalis*) among grape clusters to encourage the taste and fragrance of balm;<sup>82</sup> or planting myrtle branches<sup>83</sup> or black hellebore<sup>84</sup> near the grapevine for grapes fragrant as myrtle or for grape juice with purging virtues. Similarly, garlic cloves squeezed inside narcissi bulbs (by making notches in the latter) might enhance the fragrance of the flowers,<sup>85</sup> and to ensure sweetness of grape, the planted branch was soaked in olive oil first and irrigated continuously at time of flowering with extract of date mixed in with irrigation water.<sup>86</sup> Presumably, the same rationale would explain why the fruit borne of melon seeds embedded in a man's skull when sown should promote intelligence and memory and why, conversely, the fruit should induce all kinds of foolishness when seeds were placed in the skull of an ass at planting time.<sup>87</sup>

To effect desired improvements in plants even more elaborate measures are noted by Ibn al-‘Awwām. Referring to a Granada writer, Hājī Gharnāti, Ibn al-‘Awwām describes a (Greek-based) preparation consisting of a measure each of fragrances like musk, camphor and clove in powdered form and a measure of purgatives like scammony or tamarind. The two types of substances are mixed in with crushed alum and tar, each three times their combined weight; and the mixture is rolled out in the shape of a wick and inserted into a notched root of the treated plant at the time that its sap (or *mā‘dā*) is descending to the roots (that is, in

October). In March when the sap rises again the drugs are carried up with it to promote fragrance and/or sweetness in flower and fruit.<sup>88</sup> Ibn al Awwam writes that the operation may be carried out with vegetables, with planted branches and transplanted shrubs and trees as well as with the grapevine. He notes that alum and tar are the essential ingredients of such preparations and that any kind of sweetness (like honey or crystalline sugar), *taryāq* (antidote), *maghziyāt* (such as crushed almonds) may be combined with these. It is something of a relief to hear Ibn al Awwām speak of what is more familiar - of promoting fragrance in rose and sweetness in fig through their cultivation in sandy soils, the sweetness of pomegranate in dry soils, or the excellence of taste in vegetables produced in alkaline soils.<sup>89</sup>

Just how old and successful these horticultural experiments were is difficult to say. But they appear to have been known all over the medieval Muslim world including Iran and the Indian subcontinent. There are references to similar experiment in two Persian manuscripts in the Oriental Manuscript Library of Hyderabad (discussed later) and Amānullāh Khan's 17th century agricultural work in Persian called *Ganj Bādāward* (The Treasure brought by the Wind - written at the Mughal court) is also believed to contain sections on how to produce scent in flowers and methods for effecting other desired improvements.<sup>90</sup> Infact the process of treating seeds, bulbs, tubers and roots for flower induction or for promoting fragrance is referred to as a 20th century practice by Dr. William McCartney in his 1968 publication titled 'Olfaction and Odours'. Referring to a US Patent of 1939 listed by GE Heyl, McCartney observes that "botanists in present times show that plants yielding scentless flowers can be caused to produce scented ones by appropriate breeding or by treating seeds or roots with odorous material".<sup>91</sup> The former has been clearly understood since the time of Mendal but modern science has largely discounted the latter. In any case what is of greater interest than the

actual success of the experiments described<sup>92</sup> is their (detailed) mention in more than one text. And the object of these experiments is of interest too since it reveals all that was of value.

The *Kitāb al-Filāhā* has much in common on the subject of plant *islah* with two Persian texts on the subject in a Hyderabad library. These two manuscripts, however, are smaller treatises on the subject of agricultural *islah*, the *Khazān o Bahār* (lit : Autumn and Spring) consisting of 27 folios and the *Risālā-e Bāghbānī* (Manual on Gardening) consisting of 9 folios (whereas Nadvī's published translation of the *Kitāb al-Filāhā* consists of more than 1200 pages). *Khazān o Bahār* was copied by (Al Haqīr al Maznab) 'Abdullāh ibn 'Azīz whose name is entered at the conclusion of the last Folio, although, unfortunately, no date is recorded. As both the choice of language and the title of the work (with its references to the two principal planting seasons - Autumn and Spring) would appear to indicate, the work was written in Iran and copied for the Persian-speaking Deccani sultans. Not only does the text denote months of the year by their Persian names (for instance in the description of agricultural operations month by month on Folios 2 and 3); but the plant species whose cultivation is described are those spoken about by Ibn al-'Awwām, and originate in warm temperate and Mediterranean climatic regions. The *Risālā-e Bāghbānī* was written in 1176 AH ( 1762-3 ) in Golconda, apparently in the period of Nizam Ali Khan II when Hyderabad became capital of the Asifya rulers after a long period of eclipse. The date of its writing is given at the conclusion of the work but the name of the writer is defaced. *Risālā-e Bāghbānī* describes the cultivation of tropical and subtropical plants for the most part giving their Indian synonyms and the only temperate-region fruit mentioned is the apple. In the kinds of treatment it suggests for quality improvement, it bears similarities with Ibn al-'Awwām's work and the *Khizān o Bahār* as well as with Sanskrit works on the subject such as the *Brihāt*

*samhita* or the *Uṣṣāna vinoda* (dating from the 14th century<sup>93</sup>).

The *Khayzān o Bahār* (OML Hyderabad *Mutafarriqāt* Ms No.686) begins with a discussion on the effects of the moon's progress (across the heavens) on agricultural operations. Folios 2 and 3 describe agricultural operations month by month noting the benefits of these operations with a waning or waxing moon. Briefly, the writer advises as Ibn ul 'Awwām does that trees and shrubs be planted in the light of the waning moon or when the moon is *taht ul arz* (lit : below the earth), for trees and shrubs planted in the first half of the lunar month achieve stature but bear little fruit. On the other hand, the planting of the herbs carried out in the last 14 days of the lunar month is profitable. Folios 3, 4 and 5 (Chapters 2 and 3) are concerned with the cultivation of grain and with all operations related to these, from soil identifying and soil improvement to the control of weeds, manuring and irrigation, ascertaining the quality of seed and its treatment prior to sowing to facilitate quick germination (or to "remove bitterness", in the writer's words). Folios 5 and 6 (Chapter 4) discuss harvesting, stacking, storage and preservation of grain and provide recipes for making kinds of bread and for promoting fragrance in each kind. Folios 7 and 8 (Chapters 5, 6, 7) are about tree planting : its season and time, methods of propagation, transplanting and fertilisation; and methods to secure trees and shrubs from disease. Coating roots with pigeon excrement, spraying extract of olive leaves under trees and underplanting with wild onion are general measures of protection from disease, according to the writer. A barren tree, the writer notes, is fertilised by threats to it and by tying appropriate *kali māṭ* (verses) on the branches just as it is fertilised by incorporating organic matter (such as broad beans) through irrigation. Folios 9 to 14 (Chapter 8) are concerned with the grapevine and the cultivation of olive, apple, fig, pomegranate, almond, walnut, peach, pear, date palm and cypress. Each is considered separately. Like Ibn al-'Awwām the author describes methods of increasing production and of improving

quality. He is concerned too with the production of seedless grapes and the production of "three various coloured branches in the grapevine (Folio 9)"; and of treating grapevine roots with musk and opium to produce desired changes (Folio 10). Like Ibn al-<sup>4</sup>Awwām he is interested in methods to enhance the redness of fruit - of apples and peaches and pomegranate seeds - and notes, as Ibn al-<sup>4</sup>Awwām does - that the peach tree when underplanted with red flowering plants produces redder peaches (Folio 14). An apple or peach tree, the author writes, can be stimulated("warmed up") to produce redder apples (or peaches) by fastening one of its lower branches to an iron rod driven into the ground (Folio 12). A fig tree is also 'stimulated (to hasten the ripening of its fruit)' by a 'coating' of hot black pepper, pigeon dung and sesame oil on the tree stem (Folio 13). And the writer observes that a common method of fertilising fruit trees (such as the pear) is by inserting pine or willow cuttings in tree roots; or in the case of the date palm (Folio 14) the addition of salt to its roots (presumably to release nutrients and improve soil reaction). The production of novelties like variously coloured figs in a fig tree (Folio 12) or of engraved and ornamented almond and fig (Folio 13) are familiar. And, likewise, the argument of locating compatible trees close to each other (such as the myrtle and pomegranate) so that they both prosper (Folio 14). Familiar, too, are the author's observations on the po<sup>5</sup>sibilities of intergraft in dissimilar species and its benefits (Folios 14 and 15) - the production of redness in pears and oranges when each shrub is grafted on the mulberry; the redness of orange when grafted on the pomegranate; and the production of seedless peaches by grafting the tree on the willow (a method said to be 'tried and tested'). Folios 16 to 19 (Chapter 19) detail out procedures for harvesting, storing and preservation of garden produce, referring to the extensive use of aromatic wood ash for preservation. Chapter 10 (Folios 20 and 21) pertains to the cultivation of agricultural produce. The writer elaborates on the treatment of seed (of melon, cucumber, radish and turnip for instance) with sweet and fragrant substances to render the fruit seedless or to

improve its colour sweetness and fragrance. In Chapter 11 (Folios 22 and 23) he elaborates on measures to safeguard cultivation from animal and insect pests, describing ways of securing riddance from locusts, mosquitoes, ants, rats, wasps, scorpions and snakes. His suggestions range from the application of garlic(paste) to stems to the use of sprays involving infusions of strong purgatives like colocynth root(or leaves of Celosia, Vinca and Althea species). He also considers the usefulness of fumigating with sulphur, colocynth or iris root and with aromatic woods and resins - and the usefulness, in this context, of appropriate planting. He notes, for instance, that the planting of *kharbaq* (black hellebore) and *afsantiin* (*Artemisia absinthum*) and of mustard and centaury around the garden provides protection from snakes and that no mosquitoes venture in a garden planted with turnip, cabbage, radish and lobia (broad bean). Chapter 12 (Folios 23 and 24) describes the dietary benefits of vegetables like lettuce, endive, celery, leeks, dill, rue, basil, cabbage, beetroot, radish, onion and garlic, bottlegourd and varieties of mallow (most of which, it will be recalled, are vegetables also mentioned in the *Hadīs* ). Chapter 23 (Folios 25, 26, 27) is concerned with the rearing of pigeons and the construction of pigeon towers in garden. The author notes that pigeons keep snakes away, that the voice of the pigeon is good for the human intellect and observes that fragrances like smoke of *mastakī*(terebinth) attract pigeons and that *mastaki* and honey mixed in their water will keep pigeons rooted to their homes in the garden.

The *Risālā-e Bāghbānī* (OML Hyderabad *Mutafarriqāt* Ms No.164) consists essentially of methods to improve the quality of garden produce. It is concerned mainly with the increase in sweetness, fragrance and redness in colour of fruit and it refers to various methods of treating seeds, roots and plant stems for these purposes. Like the *Kitāb al-Filāhā* and the *Kh<sup>ā</sup>zān o Bahār*, the *Risālā* observes in general that fragrance or sweetness is acquired - that treating plant parts with

sweetness and fragrances causes the enhancement of the same in the fruit the plant bears. The plants it discusses include mango, sugarcane, banana, pomegranate, apple, turnips, melons, radishes and bottle gourds (among fruits) and basil and waterlily (among flowers).

The storage of (melon and turnip) seed among fragrances ("fresh roses and musk and floral perfumes") or their treatment with sweet substances (for instance, the treatment of pomegranate with milk and *misrī* or sugar - Folio 6) would appear as 'standard' Muslim procedure. Similarly 'standard' protection from insect pests is through use of turnip seeds in irrigation water ensuring that these are soaked in honeyed water beforehand (Folio 6). Much of the *Risala* consists of recipes for organic mixes dug into plant roots or dissolved in irrigation water or pasted on plant stems or, occasionally, sprayed on foliage. The sections on Folio 4 on 'How to increase sweetness' or 'How to make sour fruit sweet' refer to preparations involving one or more of the following substances : sesame oil (sweet oil), chopped liquorice root (sweet root), costus (*Saussurea lappa*<sup>94</sup>), *Khassarwarā* ("a gum resin of the *Garuga pinnata*, similar to myrrh") honey, date, grape, cow's milk and water. The mix is incorporated either by digging it in, by irrigating with it or by treating the stem (at flowering time). Another set of preparations is described in the section dealing with "Medicines which increase fruit size and sweetness"(Folio 4). These preparations (which are fed to the roots) involve *Māhwā* (the fruit of the *Madhuca - Bassia - latifolia*), betel leaf and Orris root, all of which are pounded together and mixed in with honey. Or else a preparation might involve a mixture of equal weights of white sugar (*Shakar tabarzadā*) and *Bai Barang* (the berries of *Embelia ribes*<sup>95</sup>) mixed in with sesame oil and water (Folio 5). The *Risāla's* author recommends the mix of crushed liquorice root and anise seed in irrigation water for protection of sugarcane from insect damage and also for "increase in sweetness of the fruit"(Folio 5). He also suggests that musk and camphor be combined with

sugarcane leaves and the mixture incorporated in irrigation water for the enjoyment of fragrant sugarcane juice (Folio 5).

Elsewhere the *Risālā* author speaks of feeding (tree or shrub) roots with *Rosa damascena* (*Gul-e surkh*) : its wood ash, flower dust and "also its thorns" - for redder fruit; for reddish flowering spikes in the basil; and for variegated foliage of the grapevine (Folio 5). The use of *Rosa damascena* is also recommended for the pomegranate ("followed with copious irrigation") for abundance of large fruit on a tree apparently of dwarfing habit (Folio 7). There is the reference, too, to 'scorching' a banana with an iron rod dipped in a hot mix of miscellaneous animal waste for bananas "as long as an elephant's tusks"(Folio 6); burying iron rods with vegetable seeds for "large and abundant" radish, bottlegourd and turnip (Folio 7); and the reference to unusual fertilisers such as (crushed and burnt) elephant tusks and the dust of *Chatīl* antlers (Folio 2).

The use of costus and, of liquorice root, of the berries of *Embelia ribes*, of sesame oil and of cow's milk is mentioned both in *Kh<sub>z</sub>ān o Bahār* and the *Kitāb al-Filāhā* in the context of plant *islah*. The use of such substances is also recommended in the *Upavana vinoda* and the *Bṛīhat samhīta* (and probably in other Sanskrit texts) as noted by Professor Banerji in his publication titled 'Flora and Fauna in Sanskrit literature'.<sup>96</sup> Referring to the *Upavana vinoda*, Banerji speaks of foliar feeding with an infusion of costus leaves to ensure floral fragrance;<sup>97</sup> of soaking seeds of *palwal* (a curcubitaceous fruit of *Trichosanthes dioica*) in animal fat for fruit without stone;<sup>98</sup> of smearing tree trunks and fumigating trees with mixes involving oil of sesame, clarified butter or fermented rice water to encourage scent in flowers,<sup>99</sup> or of feeding roots with "earth perfumed with fragrant flowers" for the same purpose.<sup>100</sup> Quoting the same source, Banerji records similar treatment for abundance of perfume in the *Anthocephalus kadamba* (whose flowers

- kadamba flowers - are a favourite of the Indian poets)<sup>101</sup>.

A garden planted as directed by Ibn al-‘Awwām is one which all plants are disposed in orderly manner in files and rows, in relation to the specified mode of cultivation of each plant; and grouped (in plots) according to their considered affinities with each other.<sup>102</sup> Trees and large shrubs are cultivated in pits and trenches whose depths vary with plant root systems and whose interspacing is specified. Herbaceous plants are raised by ridge and furrow method or in beds and each plant or clump spaced apart as directed.

The necessity of relating temperaments of plant and soil is stressed. Ibn al-‘Awwām recommends not only the grouping of *zawāt al-dūhn* or oil-bearing types (like walnut, pistachio, terebinth, olive, almond) but also their planting (or transplanting) on dry soils “for little oil is produced if these are planted on wet soils”.....and “fruit takes longer to ripen because of greater moisture”.<sup>103</sup> He refers to the abundance in perfume of a walnut tree when appropriately sited, adding that its perfume would “induce drowsiness in a person standing in its shade”.<sup>104</sup> Ibn al-‘Awwām advises that trees with pome fruits and stone fruits (including pear, apple, apricot, quince, peach and plum) be planted along the waterways of the garden for such trees - *zawāt al-miāh*- are “full of moisture and contain scarce moisture in wood.”<sup>105</sup> Those like the *dulb* (the Oriental plane tree) the *nashm* (poplar), the *safsāf* (willow), the *finduq* (hazelnut), the *dardār* (ash) and the *tūt* (mulberry) must be planted on wet soils or along the banks of canals or in hollows..<sup>106</sup>And wooden scaffolds erected over the pits of large trees ensure that they are nourished with cool irrigation water.<sup>107</sup>.

The need to relate plant/soil *mizāj* is of special importance in grapevine planting. For instance "moist yellow grapes" should be planted in hot, dry soils,

"white grapes" on "shallow and very sandy soils" and "wet, black soils" are preferred for the dry old grapevine or for "small dry grapes".<sup>108</sup> It is suggested that on shallow soil, the grapevine be trained up a tree whose height is 8 *qadm* (approximately 20 ft) while on very deep soils it should be trained up taller trees, 60 *qadm* or more (approximately 140 ft).<sup>109</sup> And similarly the height of trellises for training the grapevine should be varied according to the depths or shallowness of soils; while 10 *qadm* (20 ft) between rows is considered 'standard' spacing.<sup>110</sup> Ibn al-<sup>ʿ</sup>Awwam observes that although the grape may be cultivated as a bush or trained up a tree, the grape which breathes *mu'tadil* (temperate) air is that which grows on a trellis.<sup>111</sup>

Orientation is of importance in planting of tender trees, in particular. The citron and the banana, the lemon and shaddock, needing warmth and protection from cold ("western and northern winds") should be planted in the shelter of south and east facing walls and open to winds from the *Qiblā* (the direction of the *Kā' bā*).<sup>112</sup> Half hardy plants like the myrtle should be protected in the winter through fumigation <sup>113</sup>and the pomegranate should be covered with branches of bottlegourd in winter.<sup>114</sup> The necessity of keeping together the male and female of a species (such as of the date palm and the pistachio tree) is remarked upon - for such grouping enables "the wind to carry the fragrance from the male to the female to fertilise it").<sup>115</sup>

Ibn al-<sup>ʿ</sup>Awwam's garden would appear to be a densely planted garden where fruiting shrubs of a kind are spaced apart from '5 hand spaces to 8 hand spaces (approximately 8 ft to 13 ft)'. For when closely planted thus, these trees are said to ornament the garden and fortify each other,<sup>116</sup> providing mutual protection from effects of hot or cold winds, shielding each other's fruit from the hot sun with their foliage to ensure that fruit skin is not burnt and fruit rendered bitter.<sup>117</sup> Closely

planted shrubs, adds Ibn al-ʿAwwām, produce an abundance of fruit and share each others load of fruit.<sup>118</sup> He remarks on the need to observe the (above) spacing in peach, plum and apricot shrubs as well as in quince, citron, myrtle, pomegranate, the henna plant and among brinjal shrubs (*Solanum melongena*).<sup>119</sup>

Among mutually beneficial associations, noted by Ibn al-ʿAwwām, are those of myrtle and pomegranate,<sup>120</sup> or of citron and pomegranate (which causes abundance of fruit or promotes its redness).<sup>121</sup> Such associations are based on natural, or innate, affinities and the question of compatibility therefore is a complex one involving not only plants of a type (*jins* or genus) but also plants with similar life forms - with similarities of form and habit; similarities in time of leaf shed or the appearance of new leaves, similarities in times of flowering and fruiting, in appearance of foliage, quality of wood, and so on.<sup>122</sup> In this way jasmine and willow might be found compatible; laurel and myrtle and *gulinār* and olive;<sup>123</sup> the fig, walnut and mulberry form a group;<sup>124</sup> while "a jujube tree in the company of the grapevine might be likened to a beautiful woman in the company of her mate"<sup>125</sup> The advantages of planting apple, peach and almond with the rose are cited on several occasions.<sup>126</sup> It is noted that larger roses and redder fruit in trees results, and the association also renders possible the grafting of rose on almond (an example of grafting "for purely purely ornamental purposes", notes Ibn al-ʿAwwām - "for when it is time for the almond to bloom it has the flowers of rose").<sup>127</sup>

Since the grape vineyard is a significant feature of Ibn al-ʿAwwām's garden, it is natural that he should dwell on the "friends and enemies of the grape". The grapevine is said to prosper when trained on the white poplar, for instance,<sup>128</sup> and Ibn al-ʿAwwām notes that where the spacing between each two rows of grapevine is about 15 hands (or 25 ft, approximately), the intervening space may be planted with shallow-rooted shrubs such as the pomegranate, apple and quince.<sup>129</sup> He also

suggests interplanting the vineyard (in the initial year of its cultivation) with broad bean, kidney bean, *mung* bean and field pea and with purslane, cucumber and coriander - all of which help improve the quality of the soil,<sup>130</sup> while bottlegourd and grape, he notes, are "life giving" for each other.<sup>131</sup> He cautions against the planting of spinach beet, turnip, radish, chick pea or of fig in the vineyard, since all such plants have "a higher degree of salt content and absorb all moisture from the soil"<sup>132</sup>; and the cabbage, he notes, is "a mortal enemy of the grape."<sup>133</sup>

Along the perimeter walls of the garden, according to Ibn al-ʿAwwam, poplar, willow and jujube should be planted and he proposes the planting of pine and cypress where the greatest shade is required - as along the east-west avenues (walks) of the garden or at its gateways.<sup>134</sup> Around the *hauz* and wells he recommends the use of shady evergreens like laurel, myrtle, lemons and oranges, jasmine and the henna plant.<sup>135</sup> He proposes others in addition to these such as the Bead tree (*Melia azederach*),<sup>136</sup> noting that the "*medlar* (*Mesphilus germanica*) is a beautiful tree too"<sup>137</sup> and enjoins the planting of both the sebesten (*Cordia myxa* - "for the beauty of its flowers and their fragrance") and the Judas tree (*Cercis siliquastrum* - which he observes, is "planted only for ornament").<sup>138</sup> Alternatively (or additionally) for the ornament of pools, he advocates the planting of fragrant evergreens (like myrtle - the 'king of fragrance' - and orange pine or cypress) in the centre of pools so that their beauty is multiplied in reflection.<sup>139</sup> He cites the practice of stacking earthen rings or collars (used in boring wells) in the centre of the pool and sealing up of all joints to create a confining basin around the transplanted species before filling up the pool with water.<sup>140</sup> The rose, Ibn al-ʿAwwam notes, is planted "on one side of the garden" - to ensure, perhaps, that its ornament is not lost among other planting and in consideration too, perhaps, of the numerous forms and varieties of rose. But, also it would seem, to provide the opportunity for the creation and enjoyment of rose *majmūʿās* (bouquets). Ibn al-

‘Awwām writes that cuttings from variously coloured roses are clustered together, one cluster or bouquet to each side of a trench and the cuttings caused to unite with each other. Each shoot is trained up the base of a glazed earthen jar (each a different colour) and kept embedded in soil until it sprouts. When all shoots, trained up thus on all four sides of the trench, burst into bloom, they present a remarkable display, "particularly in the contrast of individual sprays with the colours of containers."<sup>141</sup>

Ibn al-‘Awwām recommends the planting of certain trees as a safeguard against mosquitoes and ants, against snakes and scorpions. Among these, he lists the laurel ("whose fragrance repels all poisonous creatures"),<sup>142</sup> the hazelnut and the pomegranate (both of which, he notes, deter snakes and scorpions)<sup>143</sup> and the Oriental plane since the vapour it exudes destroys all insect pests, its presence among vegetables providing protection from ants.<sup>144</sup> The planting of turnip, radish, of cabbage and broad bean (and of all alkaline-soil loving species in general) guards against invasion of mosquitoes,<sup>145</sup> and shrubs such as the rose, citron and orange, when underplanted with garlic and wild onion, stay protected from insect disease.<sup>146</sup> Similarly black basil, mint and *nammām* (a species of thyme) planted along water channels in association with the white lily and blue iris (*Iris germanica*) protect the latter from disease and the growth of all these plants is rendered vigorous (presumably, as a result).<sup>147</sup> The planting of white Chrysanthemum species along water channels in which white lily is planted is recommended for similar reasons.<sup>148</sup> To deter snakes, flies and mosquitoes in general, Ibn al-‘Awwām suggests surrounding the garden with species of artemisia, herbane, centaury or sumach; or of locating the garden in mustard fields.<sup>149</sup> To keep away birds from fruit, he suggests that feathers of birds be bundled up in red wool and hung up in trees and, similarly, hanging up brightly coloured insects in trees serves to warn and deter.<sup>150</sup> A garden surrounded with bramble and boxthorn (species of *Rubus* and *Lycium*) and with the thorny dog rose stays protected from human

marauders, particularly in the absence of peripheral walls.<sup>151</sup>

The leafy vegetables Ibn al-ʿAwwām speaks of are mostly those grown in neutral to alkaline soils - such as lettuce, endive, purslane, amaranthus, blite, spinach, spinach beet, sorrel, cabbage and cauliflower, some of which (like sorrel and leaf beet) he recommends be grown in beds in dense shade.<sup>152</sup> Ibn al-ʿAwwām notes that curcubitaceous plants - cucumber, melon, watermelon, gourd, colocynth and so on - thrive in black moisture-laden soils and suggests that the shoots of these trailing plants be trained up wooden *takhts* (or platforms), each 12 hands (or 20 ft) long and 4 hands (or 6 ft) broad, with a water channel between each two *takht* in which seeds are planted (or, alternatively the use of a bamboo frame supported on wooden posts for the purpose).<sup>153</sup> Trailing plants, like these, it is added, are also trained up small trees.

Among the herbaceous plants for the ornament of the garden, one might consider the lists Ibn al-ʿAwwām provides of "Mint and other fragrant flowers" and of "Ornamental plants for export". There is the mention of varieties of *khairi* (wall flower) and of *banafshāʾi* (violet) for shady situations under trees;<sup>154</sup> and of species of basil, mint and mallow and of lily, iris and narcissus for the shaded water channels of the garden.<sup>155</sup> The *khatmī* (hollyhock or possibly a species of hibiscus), Ibn al-ʿAwwām observes, is truly an ornament of the garden (*ward al-zinat*). The sight of its large pink petals and of its foliage is "exhilarating, fortifying the heart.....and promoting the abundance of blood (and no wonder therefore that Ibn al-ʿAwwām should note the popularity of its leaf extract as an aphrodisiac.)"<sup>156</sup> Similarly the *khubāzī* (mallow) and the *khizāmī* (a species of iris) are said to promote joy and dispel melancholy.<sup>157</sup> Other moisture-loving species listed are the *lisān ul hamal* (*Plantago* spp)<sup>158</sup> The *mamīṣṣā* (the horned yellow poppy from whose flowers, Ibn al-ʿAwwām says, a cooling eye salve is prepared);<sup>159</sup> the

*karafs* or celery (whose roots manured with broad bean powder render it more fragrant and tasteful)<sup>160</sup> and a species of asparagus (whose 'branches' acquire varying tints of pink and violet, of green and yellow when its cuttings are soaked in honey and wrapped in wood ash of *bq̣lūt*, or holm oak, before planting)<sup>161</sup> The 'fennel tree' is an ornament of the garden for its pleasing fragrance and its refreshing green<sup>162</sup> and decorative too are the white and black cumin, caraway, dill and fumitory; while a particular favourite is *baram* (identified by John Harvey as a kind of milk vetch - *Astragalus lusitanicus*<sup>163</sup>) whose white flower buds are strung into necklaces, the buds opening with the warmth of the body to release their clove-like fragrance<sup>164</sup> Among ornamental herbs for the drier parts of the garden are camomile, calendula, origanum, thyme, and melilot (whose fragrances it is noted, are marred by excess of soil moisture);<sup>165</sup> and the sun-loving shrubs of decorative value include species of Artemisia, sumach, *Shajarāt al-Maryam* (lit : the Tree of Mary; *Anastatica* spp.) and *Shajarāt al-Tasbīh* (lit : the Rosary Tree; *Capparis* spp. - from whose fragrant berries rosaries are made)<sup>166</sup> Wild ginger (*Elecampane* or *Inula helenium*) is among garden ornament too. Its roots are said to be *mufarreh* (exhilarating) and *muqāwī e qalb* (lit : heart-fortifying)<sup>167</sup> And also listed among garden ornament is the ("crenellated") artichoke<sup>168</sup> Among the climbing and trailing garden ornamentals, Ibn ul Awwam lists species of *Ipomaea*, *Convolvulus* and ivy, noting that the fragrant white flowering *ipomaea* is planted with bamboo stakes and a wooden trellis is required for its 'larger form' - the *Ashiq al-Shajar* (lit : Lover of Tree)<sup>169</sup>

The impression of a Muslim garden from agricultural texts is of order and uniformity interspersed with the display of fig and grape or rose *majmu'as* - the spectacle of fingered citrons (*al-musabbā*)<sup>170</sup> and engraved apples and pools overhung with ripening oranges<sup>171</sup> It is a garden where melons multiply to the beat of drums,<sup>172</sup> where grape clusters ripen in the glow of lamps<sup>173</sup> and where

bananas elongate to become elephant tusks at the flick of an iron rod.<sup>174</sup> A Muslim garden is a precious garden where seeds are soaked in milk and honey<sup>175</sup> and stems 'sweetened' with olive or sesame oil;<sup>176</sup> where musk and camphor may be mixed with irrigation water<sup>177</sup> and pieces of gold embedded in tree roots.<sup>178</sup> It is a garden of the 'Chaste tree'<sup>179</sup> and the 'Blessed tree'<sup>180</sup> - purged and cleansed with incenses : with smoke of sulphur and *sausan* root and vapours of resins and gums; a garden of garlic-smearred stems and turpentine-painted roots with onions hung out among its apples<sup>181</sup> and its roses interplanted with garlic<sup>182</sup> A garden purged.....and a garden blessed thereby - with melons which smell of the earth<sup>183</sup> and grapes fragrant as balm<sup>184</sup> and with basil and mint which exhilarate the heart, and with lettuces and cucumbers which cool the brain.

## Notes

- For a study of the Islamic agricultural revolution, see
1. Watson, A M Agricultural innovation in the Early Islamic World Cambridge<sup>Cambridge :</sup> University Press 1983.
  2. *ibid*; pp 9 - 73.
  3. Mez, A The Renaissance of Islam. Transl. into English by S.K Bukhsh and D S Margoliouth. First Edn London: Luzaq<sup>s</sup> and Co. 1937; pp 384, 432.,
  4. Watson *op cit.* p 72.
  5. Mez *op cit.* pp 396 - 97.
  6. *ibid*, pp 384 - 85.
  7. Watson *op cit.* p 1.
  8. Le Strange, G, The lands of the Eastern Caliphate : Mesopotamia, Persia and Central Asia from the Moslem conquest to the time of Timur 3rd impression. London: Frank Cass and Co Ltd 1966; p 293.
  9. *ibid*; p 256
  10. *ibid*; p 94
  11. *ibid*; pp 81 293
  12. *ibid*; p 197
  13. *ibid*, pp 182,184.
  14. *ibid*, p 99.
  15. Von Grunebaum, G<sup>ed.</sup> Themes in Medieval Arab literature London 1981; p 147. See also Journal of American Oriental Society LXII 1942 p 287.
  16. Nasr, S H Islamic Science: an illustrated study; London: Kent World of Islam Publishing Co Ltd; 1976.
  17. *ibid*. An earlier work is the *Kitāb al Nabāt wa'l shajar* of Abd al Malik al-Asnāī (740-829), published in Beirut, 1914.
  18. Levey, M "Medieval Arab Toxicology (incorporating a translation of 'The Book of Poisons of Ibn Wahsiyya)". Transactions of the American Philosophical Society Vol 56, Pt 7 1966 pp 85 - 106
  19. as quoted by Levey, M Early Arabic pharmacology: an introduction based on ancient and medieval sources Leiden Brill 1973
  20. Watson, A *op cit.* p 118
  21. Harvey, J M "Gardening books and plant lists of Moorish Spain" in Journal of the Garden History Society p 10, 11. See also the author's "Garden Plants of Moorish Spain" in Journal of the Garden History Society Spring

22. Translated into Spanish in 1802 by J A Banqueri; translated into Urdu at Hyderabad in 1930 by Syed Hashim Nadvī, Rampur 1933. Ibn al Awwam's list of plants has been discussed by John Harvey op cit. n 21
23. Edited and rendered into English by Hakīm Mohd. Saīd of Hamdard Foundation, Pakistan as Al Berūnī's Book on Pharmacy and Materia Medica, Karachi 1973.
24. Levey, M Early Arabic pharmacology op cit.
25. ibid.
26. Sarton, G An Introduction to the History of Science Baltimore, 1927 p 1637
27. Hamarneh, S "Medicinal plants, Therapy and Ecology in al Ghazzi's Book on Agriculture" in Studies in History of Medicine and Medicinal Research New Delhi Dec 1978 pp 223 - 257.
28. Nasr, S H Science and Civilisation in Islam 1968.
29. Pinder-Wilson, R "Bāgh and Chaḥr Bāgh" in 4th Dumbarton Oaks Colloquium The Islamic Garden, 1976 pp 82 - 84.
30. Hamarneh, S op cit. p.227
31. ibid; p 230.
32. See in this connection Zuhūrī, Hakim S A W. 'Development of Greco-Arab Medical Literature in India', in Studies in History of Medicine, June 1979 pp 125 - 145.
33. Ghani, Hakīm M N Khazāin al-Adwiyā 7 Vols., Lahore: Mian Abdul Majid Publishers, 1926.
34. Habīb, I Mughal Gardens: economic and social aspects "Paper read at Symposium on Mughal Gardens Washington DC May 1992 "
35. Babār Nāmā, Transl ed. A Beveridge Reprint Lahore Sang e Meel, 1975 2 vols Vol 1
36. See Foreword of Dr Badāwī in John Brookes's Gardens of Paradise London: Wiedenfeld and Nicholson 1987; p 7.
37. Suggested by Ellen Smart in her talk titled : "Plants and gardens in Mughal painting"; Symposium on Mughal Gardens, Washington DC May 1992 See also John Brookes op cit, p 16.
38. in the Mughal miniature "(of 1610 - 1615)" illustrated in John Brookes work, op cit, p 117.
39. Kaniza Haji Pasha Zirā'at e Āsifyā. Hyderabad 1911. A copy each in the India Office Library, London and the Salar Jung Library, Urdu Collections, Hyderabad.

40. The Holy Quran: Text Translation and Commentary by Abdullah Yusuf Ali, Lahore Reprint 1987; *Sura An'am*
41. *ibid.*
42. *ibid*; Sura XXXV. 27 *Sura Fatir*
43. *ibid*; n 926; n 3910
44. *ibid*, *Sura Nahl*. See n 2032
45. *ibid.* S.XXIII. 78. *Sura Muminūn*. The complete transl. is  
It is He who has created  
For you (the faculties)  
Hearing, sight, feeling  
And understanding.
46. as in gardens of date-palms and vines.
47. *ibid*, S II.26 *Sura Baqarāh*
48. *ibid*; S VI.99 *Sura An'am* ; S.L10 *Sura Qaf* ; S.LVI.29.*Sura Waqi'a*
49. *ibid*; S LVI.29 *Sura Wāqī'a*
50. *ibid*; S LXXX.30 *Sura Abasa*
51. *ibid*; S LXXVIII.6 *Sura Nabaa*
52. *ibid*; S LV.12 *Sura Rahmān*
53. *ibid*; S X.24 *Sura Yūnus*
54. *ibid.*
55. *ibid*; S VII.58 *Sura Ā'raf*
56. *ibid*; S XXXIV.16 *Sura Saba* n 3814.
57. *ibid*; S LVI.27; 28 *Sura Wāqī'a*.
58. The work has been discussed by John Harvey, op cit. Sami Hamarneh, op cit also speaks of a Persian translation of the work. In 1927, the Bureau of Translation in Hyderabad (called the *Dāira tu'l Māārif*) lithographed the original Arabic work.
59. to which Nadvī refers in his *muqaddimā* of the Urdu translation; p 16.
60. *ibid*; Nasr, S H op cit; or for example Levey, M, op cit.
61. *ibid*; p 2 Vol 1
62. The Holy Quran op cit. S XIV.24, 25 *Sura Ibrahim*.
63. Kitab al-Filāhā Urdu transl. of Nadvi, op cit; p 237 Vol I

64. *ibid*; p 286 Vol I
65. *ibid*; p 305 Vol I
66. *ibid*; p 242 Vol II
67. Synonyms, including Indian synonyms, are provided.
68. Among the *Tibb*(Medicinal) Collections of Salar Jung Library, Hyderabad (Tibb 277). See Ali, M. "Medical Manuscript of the Qutb Shahi Period in the Libraries of Hyderabad", Bulletin of Indian Institute of History of Medicine, Vol XX pp 51 - 63
69. The alleged *hadīṣ* (popular and widely quoted) records according to C.Elgood's translation : "Fragrance is the food of the soul and the soul is the beast of burden for the faculty of man". See Elgood, C The Medical History of Persia Camb,1951.
70. Levey, M Early Arabic pharmacology op cit. (and of which more later).
71. Hamarneh, S op cit. pp 235 - 36.
72. Zuhuri, Hakim S A W. "Development of Greco Arab Medical Literature in India" in Studies in History of Medicine, Delhi June 1979 p 137.
73. See for example, AlAdwiyā al Qalbiā of Ibn Sīna (written 1015 AD). ed and transl. by Hakim Abdul Hamid as "Avicenna's Tract on Cardiac Drugs", Karachi: Hamdard Foundation, 1983; p 56. The work is examined at length in the following Chapter of this Thesis.
74. Kitab al-Filāḥā Urdu transl. of Nadvi p 503 Vol. I
75. *ibid*; p 375 Vol I
76. *ibid*; p 298 276 Vol I
77. *ibid*; p 296 Vol I
78. *ibid*; p 129 Vol II
79. *ibid*; p 145 Vol II
80. *ibid*; pp 572 - 73 Vol I
81. *ibid*; p 571 Vol I The writer also notes that crops which tend to suffer or wilt from summer heat are 'cooled' by irrigating with an infusion of crushed roots and stems of poppy; p 117 Vol II.
82. *ibid*; p 581 Vol. I
83. *ibid*.
84. *ibid*.
85. *ibid*; pp 229 - 30 Vol. II

86. *ibid*; p 581 Vol. I
87. *ibid*; p 190, Vol. II.
88. *ibid*, pp 568 - 71 Vol I
89. *ibid*; p 261 Vol I
90. Jaggi, O P History of Science Technology and Medicine in India Vol. 8 <sup>Medicine in Medieval India</sup>  
Delhi 1981. Prof Jaggi notes that the *Ganj Badaward* - based on 105 Arabic Persian and Sanskrit works - consists of 1 'Key', 3 'Treasures' and 1 'Talisman'. The last deals with agricultural cultivation and with 'love-exciting potions'. The *Risala e Naklbandia*, a work on agriculture of Ahmad Ali Jawnpore (in the British Library) was abridged in AH 1205 from Amanullah Husaini's work (Add. 16 662 Folios 95 - 119).
91. Mc Cartney, W Olfaction and Odours, Springer-Verlag Berlin Heidelberg New York 1968 pp 3,206
92. As an extract from the *Afarin nama*, (a poem written by a Samanid court-poet) suggests, too, the success of such experiments could not be guaranteed. Abu Shakur of Balkh writes that
- A tree whose temperament is bitter  
If you should plant it in the garden of Paradise  
And out of the river of Heaven sprinkle  
Its roots with pure and unadulterated honey  
In the end its nature will assert itself  
Bitter will be all the fruit it bears.
- See E.G.Browne A Literary history of Persia 4 vols Vol II, London : J.Fischer Unwin ; 1902
93. The approximate date of this literature kindly provided by Dr John Brockington of Dept. of Sanskrit Studies, Univ of Edinburgh. See also. Jaggi, O P. Technology in Ancient India : Chemical Practices, Vol I of the series History of Science, Technology and Medicine in India for references to the *Brihat samhita*.
94. *ibid*, p 319 Vol I 'Cashmere (Kashmir) root' is an ingredient of many perfumes as noted by William Dymock in Pharmacographica Indica : A History of the Principal Drugs of Vegetable Origin met with in British India of 1890, 3 vols. Reprinted by the Institute of Health and *Tibbi* Research, Pakistan, ed. Hakim Mohammad Said, Karachi 1972; p 299 Vol. II
95. *ibid*, p 349, Vol II. Dymock refers to its use in (*Ayurvedic*) medicine and quotes Susruta who recommended its use along with liquorice root for "the purpose of strengthening the body and preventing the effects of age." The berries, he notes, enter into the compositions of several applications for ringworm and other skin diseases. It might be added that Hindi works recommend the use of liquorice root in many external cooling applications (Dymock p 491, Vol I) and that sesame oil is used as olive oil in Europe (p 26 Vol 3).
96. Banerji, S C Flora and Fauna in Sanskrit Literature, Calcutta: Naya Prakash 1980.
97. *ibid*; p 54

98. *ibid*; p 65
99. *ibid*; pp 76,88
100. *ibid*; p 88
101. *ibid*; p 58
102. *Kitab al-Filāhā* Urdu transl. of Nadvi op cit; pp 111; 115 Vol I
103. *ibid*; p 111, Vol I
104. p 251, Vol. I
105. *ibid*; p 115 Vol. I
106. *ibid*; pp 113, 274, 290, 351, 354 Vol I
107. *ibid*, p 113, Vol. I.
108. *ibid*; pp 315, 322, 323, 328, Vol. I.
109. *ibid*; p 313 Vol. I.
110. *ibid*, pp 313, 373, Vol. I.
111. *ibid*; p 333 Vol I
112. *ibid*; pp 112, 280, 347 Vol I.
113. *ibid*; p 206 Vol. I
114. *ibid*; p 234 Vol I
115. *ibid*; p 225 Vol I
116. *ibid*; p 493 Vol I. Author refers to *Filāhat e Nabtiā* of Ibn Wahshiyyāh.
117. *ibid*; pp 207, 233, 275 Vol I
118. *ibid*; p 204 Vol II
119. *ibid*; pp 207, 234, 276, 285, 298 Vol I p 204 Vol. II. The above spacing is also recommended for the poplar, the willow and the Bead tree (Melia azederach)
120. *ibid*; pp 232, 276, 493 Vol I
121. *ibid*; pp 276, 494 Vol I
122. *ibid*; p 375 Vol I
123. *ibid*; pp 378, 494, Vol I | *Gulnār* is the double flowering variety of pomegranate (the "male" pomegranate) planted for its flowers.

124. ibid; p 494 Vol I
125. ibid; p 493 Vol I
126. ibid; pp 266, 298 Vol I
127. ibid; pp 372, 374 Vol I.
128. ibid; p 493 Vol I
129. ibid; p 314 Vol I
130. ibid; p 373 Vol I
131. ibid; p 493 Vol I
132. ibid; p 373 Vol I
133. ibid; p 495 Vol I
134. ibid; p 112 Vol I
135. ibid
136. ibid; p 292 Vol I
137. ibid; p 229 Vol. I. Mushtahi which is like *zú'rūr*, according to the author, may also denote a species of Sorbus.
138. ibid; pp 282, 283 Vol I
139. ibid; pp 585 - 87 Vol I
140. ibid; pp 585, 586 Vol I
141. ibid; pp 261, 264, 265 Vol I
142. ibid; p 201 Vol I
143. ibid; pp 306, 307, p 234 Vol I
144. ibid; p 352 Vol I
145. As noted too in *Kh<sup>o</sup>zān o Bahār* op cit.
146. ibid; pp 494, 499, 500 Vol I. Also as noted in *Kh<sup>o</sup>zān o Bahār* op cit, Folios 12, 13.
147. ibid; pp 224, 226 Vol II
148. ibid; pp 227 -28 Vol II. Ibn al-<sup>l</sup>Awwām adds that the root and leaves of the white chrysanthemum are burnt off to smoke insects.
149. As noted likewise in *Kh<sup>o</sup>zān o Bahār*, op cit.
150. ibid; p 497 Vol I.

151. *ibid*; pp 355, 356, 358 Vol I
152. *ibid*; pp 130 - 202 Vol II
153. *ibid*;
154. *ibid*; pp 222, 233 Vol II The author notes that both dislike water.
155. *ibid*; pp 229, 237, 243, 242, 248 Vol II
156. *ibid*; p 248 Vol II
157. *ibid*; p 245 Vol II
158. *ibid*; p 268 Vol II
159. *ibid*; pp 260 - 61 Vol II
160. *ibid*; pp 254 - 55 Vol II
161. *ibid*; p 270 Vol II
162. *ibid*, pp 214 - 15 Vol II
163. Harvey, John "Gardening Plants of Moorish Spain" *op cit.* p 80.
164. *Kitab al-Filāhā*, Urdu transl. of Nadvi, *op cit.* p 243 Vol II
165. *ibid*; pp 231, 239, 262, 263 Vol II
166. *ibid*; pp 260, 271 Vol II
167. *ibid*; p 26 Vol II
168. *ibid*; pp 251 - 52 Vol II
169. *ibid*; pp 256, 269 Vol. II. On p.256 the author discusses *Hab al nīl*, a species of Ipomaea, but on p 269 species of Bindweed would seem implied, while the word *lablāb* to denote these also denotes the ivy (with which the Bindweed is often confused)
170. Hamarneh, S *opcit*; p.238 - 39, writing about a 16th century agricultural work of al-Ghāzzi quotes the author's reference to a species of citron -*al musabba* (from *sabbaba* meaning the index finger) - noting that this variety of citron abounding in Egypt contain many fingers and hence known as *musabba*. He adds that one type is also reddish - *al misri*- another yellowish - *al susi* See also Firminger's Manual of Gardening for India, W.Burns Revised and Ed.7th Edn. Calcutta : Thacker Spinck and Co, 1930; p 242. Firminger writes: "The fingered citron.....resembling a man's hand with the fingers bent up with a cramp and not uncommon in the North-West Provinces ..... is ..... undoubtedly an abnormal form in which the carpels partly separate." For similar reference to the citron, see also al-Berūnī *Kitāb al-Saydanā* *op cit.*, p16. Author refers to the citrons of Ahwaz as *panjangushē*
171. *Kitab al-Filāhā*, *op cit.* p 277, Vol. I. Oranges the writer notes, are often left to ripen on the tree so that their various shades may be enjoyed. See also

p 585 - 87 for planting of oranges and myrtle in centre of pools.

172. *ibid*; p 190 Vol II

173. *ibid*; p 490 Vol I

174. Risālā-e Bāghbānī op cit. Folio 6.

175. Kitāb al-Filāhā, op cit. pp 234, 240 Vol I See also Risala-e Baghbani, op cit. Folio 6.

176. *ibid*; p 506 Vol I

177. Risālā-e Bāghbānī, op cit.

178. In citron and orange trees for their *tazkīr*(fertilisation). Kitāb al-Filāhā op cit. p 500 Vol I

179. Here it is not the Vitex agnus castus but the citron tree which is implied, spoken of as Shajarāt al-Tāhirā and said to be the tree planted by Adam. See Kitāb al-Filāhā, op cit. p 273 - 74 Vol I

180. The olive through reference to the Quran S XXIV. 35 (Sura e Nur) as noted by author of Kh̲ẓān o Bahār op cit. in the Chapter on Olive.

181. Kitāb al-Filāhā op cit. p 499 Vol I

182. *ibid*; p 500 Vol I

183. Kh̲ẓān o Bahār, op cit. Folio 19

184. Kitāb al-Filāhā, op cit. p 237 - 38 Vol II

## CHAPTER 5

### EXHILARATING FRAGRANCES

The need for 'exhilarating fragrances' in Muslim gardens would seem implicit in the significance of 'exhilarating drugs' (*adwiyyā mufarreḥā*)<sup>1</sup> in traditional Muslim medicine (known as *Yunānī*, or Greek, medicine in the subcontinent). The significance of exhilarating fragrances in an Indian Muslim garden is best understood by considering the views in particular of Abu 'Ali Ibn Sīna (Avicenna in the west) - the most celebrated in the Indian subcontinent of the physician-philosophers of the 'Classical' Muslim period.<sup>2</sup>

The theory underlying Muslim medicinal practice arises in the view that health is a matter of harmony (*i'tedāl*) of body humours (*akhlāt e badnī*).<sup>3</sup> The four humours or body fluids (namely blood, phlegm, black bile and yellow bile) corresponding to the four elements of matter (air, water, earth and fire, respectively) are said to be present in the body, ideally in a state of balance. Or, ideally, there is as much heat in the body as there is coldness; as much dryness as moisture. The dominant quality arising in the blend of body humours denotes *mizāj* (lit : temperament)<sup>4</sup> - a term that has wide cultural usage in the Muslim world. In its medicinal sense, *mizāj* is qualified as being 'hot' or 'cold', and 'dry' or 'moist' - to varying degrees, its pattern varying from person to person. This 'pattern of four elements' is thought to be susceptible to factors of environment and to time, as might seem obvious. Variations in seasons and in *āb o ḥawā*<sup>5</sup> (lit : 'air and water', in Persian); the age factor - all are thought to influence the 'proportions of four elements'; and Emotion, among other variables, may be singled out for its importance in this respect. It follows, therefore, that to maintain body equilibrium, all factors influencing *mizāj* must be regulated continuously. Above all, moderation must be observed in the "six essential matters" pertaining to health, which are

elaborated in treatises on health preservation, such as the *Zubdat al-Hukamā* (Compendium of Sages) written for Mohammad Quli Qutb Shah in the 17th century.<sup>5</sup>

*Mizāj* is a common denomination of maladies and their cures. Or, in other words, all food and drink, drugs and maladies, body organs and tissues and 'air-and-water' are describable in terms of *mizāj*. In elementary terms, to those persons whose *mizāj* is hot and dry (or to those who suffer from 'hot' maladies) the desire for coldness and moisture in *āb o hawā*, diet and drugs is an innate (or a natural) response of their bodies to restore equilibrium. Those of 'cold and moist' temperaments 'naturally' seek the opposite of their temperaments; while to a person of temperate (*mu'tadil*) *mizāj*, food and drink of corresponding *mizāj* is 'naturally' agreeable.<sup>6</sup>

The agents through which these 'natural' responses are said to operate are the so-called pneumas corresponding to the Liver, the Brain and the Heart - the principal organs necessary for the life of an individual and respectively the "seats of nutritive or vegetable faculties; of mental faculties, sensation and movement; and of the Vital Faculty (the source or starting point of Vital Power or innate heat.)"<sup>7</sup> These pneumas, it is believed, must be produced continuously and nourished with the substances they consist of: "fine vapours"; or "fine humoural substances"; or the "ethereal portions of digested food".<sup>8</sup> The various schools of *Yunānī Tibb* (Greek Medicine) agree commonly that the Natural Spirit (of the Liver) is drawn towards the 'taste' particularly of sweet substances which are "dense in matter and nourish the body". The Heart (Plato's "fountain of blood") is said to be fortified with joy and by "gladdening agents" (such as music and good company); and the sensory organs of the Brain in particular are strengthened with fine fragrances (*shamūmāt*) and fine vapours (*abkharā e latīf*): "the rectified air inhaled from

without".<sup>9</sup>

This view is elaborated (and perfected) in the "Galenist-Avicennian system" followed by most of the subcontinent's *hukamā* (physicians; lit: sages). According to Ibn Sīna (Avicenna), it is the Vital Spirit generated in the left ventricle of the Heart ("from purified air and blood") which requires essential nourishment since it is the source of innate heat "which keeps blood in the fluid state."<sup>10</sup> Avicenna explains that this Spirit (*nafs* or *rūh* which he equates with breath) is the vehicle of all faculties (including the Physical Faculty) and stimulates ("perfects") each faculty or power (*qūvvat*) associated with an organ as it courses through the body.<sup>11</sup> Moreover, "when it reaches the Liver it acquires a temperament capable of receiving the faculties of nourishment.....and when it reaches the Brain it becomes capable of receiving the faculties of sensation and movement". Circulation to the heart, in turn therefore, is 'charged' with the nourishing Natural Spirit of the body (Liver) as well as with the Brain's messages, causing Emotion to be experienced in the Heart (even if its sensation emanates in the Brain). The Psychical Faculty in this way is seen to be "peculiarly related to the Heart."<sup>12</sup>

Avicenna emphasises that to ensure smooth functioning of the Heart, it is essential that there is abundant production of that "radiant essence", the Vital Spirit. The abundance and vigour of the Spirit (its 'quantity') is thought to have an effect on the emotion of delight (for the Heart then responds to the slightest exhilarating stimulus),<sup>13</sup> and "the nobler the character of the Breath, the more luminous it becomes, its substance approaching the celestial (*Nūr* )."<sup>14</sup> A 'refined' (*latīf*) and 'equitable' Spirit made up of harmoniously blended humours (as is a perfume, seemingly) is thought to be capable of receiving life - capable, that is, of discernment and therefore of pleasure, pleasure being considered a function of perception.<sup>15</sup>

One function of cardiac drugs, it appears, therefore, is to condition the Heart to fine fragrances which "fortify and are naturally desired by the olfactory powers"<sup>16</sup> - this, in turn, leading to the sensation of pleasure. Or, more precisely : "A thing is delightful when it is the perfection of its corresponding faculty" as "sweetness is to the sense of taste (*zauq* ) and aroma is to the sense of smell (*shāmmeh* )."<sup>17</sup> But, whereas sweetness fortifies the body in particular, it is fragrance which fortifies the Spirit, in particular - all that is among fragrances being of benefit to the Heart, therefore.<sup>18</sup> Ibn Sina notes that failure to be happy results from a lack of perceiving power, while pleasure is inevitable when the sensory powers are fully functioning (or, as Aquinas puts it : "Delight is a perfection of operation"<sup>19</sup>).

Ibn Sīnā recognises that emotion is dependent on factors in addition to the 'quality' and 'quantity' of the spirit. External factors, he acknowledges, are the primary causes for joy or sorrow, for fear or anger; although each of these four emotions, he adds, tends to generate "its own type of breath", too. He explains that "when an emotion arises, the substance of the breath becomes conducive to the development of that emotion, the more so the oftener the emotion is repeated." In other words emotion itself tends to condition breath (or Spirit) - increasing or decreasing its amount or modifying it and so disposing it to joy or sadness. Those who are 'predisposed' to joy are thought to have strong hearts which are not easily shattered by grief, nor easily overcome by delusion, fears and obsessions; by hypochondriasis and depression and the other *nafsānī* (psychic) illnesses spoken of. Conversely an 'equitable' and 'rarefied' spirit (said to be manifest, through clinical examination, in quality and quantity of breath, blood, pulse etc.) is indicative of a heart which is filled with joy and hope.<sup>20</sup> Ibn Sīnā and other *Yunānī* physicians emphasise that essentially *islāh e nafs* (the improvement of the Spirit or

Self) begins with the discipline of the "passions of the Psyche" (*al infa'alat al nafsaniyah*)<sup>21</sup> Strength of mind, Moses Maimonides (d 13th century) notes, is gained by observing the "disciplines of the Law" and the "philosophy of morals."<sup>22</sup> Al Kindī (d 893) commends the (Aristotelian) logic of seeking contentment in what one has or is and advocates the pursuit of happiness in ones intellectual treasures which, unlike material wealth, are never exhausted.<sup>23</sup>

Referred to in his time as Sheikh al Rais (or 'Chief of Chiefs') and as *al Mu'allim al Thānī* or as The Second Philosopher ("the first having been Aristotle"<sup>24</sup>) Ibn Sīna (b 980 in Bokhara; d 1037 in Hamadan) is even more honoured today by Indian practitioners of *Yunānī* medicine, according to Hakim Abdul Hamīd of Hamdard Foundation. (The Institute of History of Medicine and Medicinal Research, based in Delhi and Karachi.)<sup>25</sup> Hamid observes that, in the subcontinent, Ibn Sīna's (Arabic) medical works continue to provide essential source material to all schools of *Yunānī Tibb* and to its practitioners. Some of these work like *al Qanūn fi'l Tibb* have been translated into Persian (as well as into Uzbek, Urdu and English); condensed and summarised as *Qanūnchās* and commented upon in voluminous *Sharhs* (Commentaries).<sup>26</sup>

Ibn Sīna's 'Canon of Medicine' ("a codification of the whole of ancient and Muslim medical knowledge", according to George Sarton<sup>27</sup>) was translated into Persian in 17th century India by Shah Jahan's court physician Mullah Fathullah. At Akbar's court, Hakim 'Ali Gilānī wrote an extensive commentary on the *Qanun* (*Sharh e Qanūn*, in four volumes) as well as detailed 'Marginal Notes' on the work. Among the well known Indian Muslim commentaries on Ibn Nafīs's Arabic abridgement of the *Qanūn* (of 1288) is that written in the 18th century after Aurangzeb's demise by his successor's eminent physician *Mu'tamid al-Mulk* Hakīm 'Alavi Khan (d 1749) of Shiraz, to whom reference is made in a previous

chapter. And among the most celebrated Persian translation of the *Qanuncha* is that of Mohammad Akbar Arzānī, a noteworthy physician of Aurangzeb who authored many original works on medicine as well. The translation is titled : *Mufarreh al Quloob* (Exhilarants of Hearts)<sup>28</sup> with its accent on the *islāh* of the Heart - of central significance in the body, in Ibn Sina's view.

The Canon was first translated into Urdu in the closing years of the last century by Kantūrī, and the entire work is currently being translated into English at the Institute of History of Medicine in Delhi, based on "the oldest available impression of the original Arabic text". O.C.Gruner using the Latin version of the Canon translated the first of its five volumes into English (published in 1930 in London as 'A Treatise on the Canon of Medicine'); and the work has been discussed by Carl Brockelmann. The Canon is known, therefore, in the west too and Campbell, infact, observes that "upto about 1650 AD.....it formed half the medical curriculum of European Universities at Montpellier and at Louvain."<sup>29</sup>

The other work of Ibn Sīna regularly consulted in the subcontinent (until atleast the 18th century) is his treatise on Cardiac Drugs, *al-Adwiyāt al-Qalbiā*. Reference has been made in this Chapter to the English translation of the work of Hakim Hamīd and Hakīm Saīd; and portions of the work have been "freely translated" into English by O.C.Gruner as well. Its Persian translation as *Tafrih al-Quloob* (Refreshment of the Heart) is well known in the subcontinent and the work was translated into Urdu as well in 1970. Among other works of Ibn Sina to be consulted by later *Yunānī* physicians is his treatise on preservation of health (*Risālā fi Hifz al-Sihhat*), an important aspect of this being the preservation of sexual vigour (*qūvvat e bāh*). These were subjects on which, perhaps, nearly all *Yunani* physicians wrote treatises - from Galen to the *Yūnānī* physicians of the Deccani Muslim courts. As an example, Nuru<sup>d</sup>īn bīn Shamsu<sup>d</sup>īn's treatise (in Persian) on

health preservation may be cited, a manuscript copy of which in the Salar Jang Medicinal Collection (Ms *Tibb* 277/6) has been examined<sup>30</sup>. It was written at the Qutb Shahi court and titled *Zubdat al-Hukamā* or Compendium of Sages, the author referring in his *muqaddimā* (on Folio 2) to all the 'sages' whose wisdom influenced his work - from the most ancient like Hippocrates, Aristotle and Galen to Razi and Ibn Sīna among the Muslim physicians. In view of his patron's (Mohammad Quli's) tastes perhaps, the writer devotes the last three Folios of the 14 Folios of the work to an unusually long discussion on *mubāhiyāt* (aphrodisiacs), listing nutrients and drugs which restore or fortify sexual vigour.

Speaking of Arab development of *Yūnānī* medicine, Martin Levey makes note of substantial additions to Greek *Materia Medica* (facilitated, in part, by "developments in chemical technology'), observing that this period is marked by "new ideas "and by "a serious questioning of Classical explanation."<sup>31</sup>. This view of Muslim medicine, naturally perhaps, is shared by Muslim writers. In his essay on the "Psychosomatic aspects of Cardiovascular disorders" (written in relation to Ibn Sina's treatise on Cardiac Drugs), Dr. M. A. 'Azīz observes that whatever the flaws in Ibn Sina's argument and the difficulties of the "synthetic language" he uses, it has to be conceded that it is the heart, beating fast or sinking ('expanding' or 'contracting'), where emotion is felt and which is the seat of emotion, therefore.<sup>32</sup> 'Azīz adds that it is common knowledge now that food contributes to the composition of blood and that blood exchanges ingredients with all parts of the body; that, moreover, the composition of blood affects physiological and chemical processes - these in turn affecting the health and mood of a person. He maintains that Ibn Sina laid "the foundations of chemo<sup>^</sup>therapy for patients with heart ailments, specifying the action of each drug on the heart; and suggesting, moreover, in the terms of the time, the "bio chemical basis for, psychological conditions" leading to heart ailments.<sup>33</sup> Hakīm Mohd. Saīd (of the Hamdard Foundation in

Karachi) points to Ibn Sīnā's error in assuming that the Vital Spirit is generated in the 'left ventricle of the Heart' whereas the mixture of oxygen and blood occurs in the 'preparative member', the lung, enroute the Heart. Sā'id hastens to add, however, that this fact had been recognised by Ibn Nafīs (a physician, writing in Cairo, two centuries after Ibn Sīnā) and does not change the essential basis of Ibn Sīnā's thesis<sup>34</sup>. It might be supposed, from a survey of *Yūnānī* medicinal literature upto the 10th century, that Ibn Sīnā's concern with the Heart was a refreshing change from the preoccupation with the bowel as a source of numerous symptoms and disorders such as headache, malaise, depression - ideas which date back to antiquity.

As suggested by Ibn Sīnā's *al-Adwiyyā al-Qalbīā*, cardiac drugs are employed in *Yūnānī* medicinal practice not only as tonics but also to control symptoms of heart disease and to facilitate recovery from *nafsani* or psychosomatic illnesses "contributing to the etiology of heart disease."<sup>35</sup> Of the 63 cardiac simples described (see Appendix 2), forty six (or nearly three fourth) are botanically based substances from many diverse parts of the known world. Of these, 39 are aromatic plant parts ranging from nard of the high Himalayas to fragrant screwpine of the Indian lowlands, and from tropical Indo-Malayan spice to fragrant resins and gums of arid region steppe forest or of evergreen, sclerophyllous forest. Our particular interest in these substances is in their refreshing or restorative functions as tonics - prepared by the *attar* and prescribed by the physician. As such, Ibn Sīnā's list of (aromatic) nutrients and drugs (principally - *mufradāt*) may be noted in treatises on aromatics as well as in treatises on health preservation. (In the latter sort, tonics are usually classed in relation to the body organs they are said to fortify).

Virtually all the aromatic substances mentioned in *al-Adwiyyā al-Qalbīā* are considered by Ibn Sīnā to be exhilarating or *mufarreh*, a term arising in

the same root as the verbal noun *tafrih* (lit : refreshment) as well as the term <sup>5</sup>*farhat* and *farahā* for joy (and, according to one explanation, joy which is bestowed <sup>36</sup>). It might be added that virtually all the aromatic Mediterranean-region herbs and shrubs described in the treatise (a large percentage of which are labiates) were prized garden ornamentals as suggested by Muslim gardening texts. And as stated earlier, these, together with the 13 or so tropical-region plants mentioned, may be noted in texts on preventive medicine and in treatises on aromatics and perfumery—from Ibn Masawaih's treatise on 'Simple Aromatic Substances' (written in Samarra in the 9th century<sup>37</sup>) to *Lakhlakhā*, a perfumery text written in 19th century Hyderabad.<sup>38</sup> To the extent to which medicinal values may be thought to influence garden planting, the association of aromatic substances with *tafrih* (or refreshment) would appear to be of significance. The oxidation of volatile oils in contact with air, which is responsible for some ozone production, is associated today (as well) with a sense of refreshment and recuperation and believed to contribute to a slight reduction in air temperature.<sup>39</sup>

In the sense in which the term is used by Ibn Sina, exhilaration has to do with the physiological state (of refreshment) associated with body equilibrium - a condition itself promoted by exhilarants (*mufarrehāt*) as has been observed earlier. The function of exhilarants is determined both by their "intrinsic property" (*Khāsiat*, which includes *mizāj* as well as odour quality); and by their "action" (affected by the 'innate heat' of the body)<sup>40</sup>. Thus, some substances may exhilarate by "facilitating respiration" through their "purging and cleansing action" (such as lavender). Substances may be exhilarating too by virtue of their antidotal properties (such as musk, zerumbet and the more penetrating odours). And certain tonic drugs (such as rose oil and 'sealed earth' may exhilarate through their "moderating action," cooling what is hot and warming what is cold. Wine, "in moderation", is said to exhilarate the spirit "by creating pure and plentiful blood of radiant quality";

pearls and silk-pods exhilarate by "illuminating"; camphor by "cooling" the Spirit's hot temperament; coral, yellow amber and myrobalans by "consolidating" it; doricum by "warming" it; and so on. Ibn Sina's treatise on Cardiac drugs indicates that while all exhilarants are not fragrant substances, all fragrances, by fortifying and refreshing the spirit, tend to be considered exhilarating.<sup>41</sup>

Ibn Sina qualifies cardiac drugs as 'hot', 'cold' or '*mu'tadil*' (temperate)<sup>42</sup> - qualities considered applicable to the experience of odours too. Another distinction, based on 'primary' and 'secondary,' is noted in Ibn Masawaih's Treatise on Simple Aromatic Substances, where 'primary' and 'secondary' would appear to denote degrees of odour intensity of aromatics (corresponding to their relative strength as drugs).<sup>43</sup> A similar distinction is made by the Andalusian writer al Zahrāwi (d 1026) between "scented spiced drugs" and "sweet smelling herbs" (*al rayahin*).<sup>44</sup> Mir Mohammad Husain, author of the well-known 19th century Persian work *Makhzan al Adwiya* (Storehouse of Drugs, written and published in the subcontinent) elaborates on the subject of fragrance. In his opinion the term 'fragrance' denotes all those substances whose effect on the Heart or Brain is determined by their odour (*rāihā*; root : *rih* ; lit : wind) even when these substances are consumed. Like his *Yūnānī* predecessors, Husain classifies odours in terms of intensity and *mizāj*. The stronger, more penetrating odours (such as "musk, black pepper, ginger, black cumin, castoreum") are considered "excessively hot"; or (as "camphor and sandalwood") "excessively cold." Among "mild" odours (*Rāihā mulayimā* ; lit: smooth, blended) which are indicative of *i'tedāl* (balance), Husain includes "water-lily, violet, fresh apple, cucumber, Rosa damascena, narcissus" and "all floral smells", in general. Another class of strong odours, according to Husain, is made up by all those which the spirit is averse to smelling, such as the odours of asafoetida, or garlic or that of corpses; and fragrant substances, Husain informs, are known by their dietary use too, as are all aromatic fruits and honey and

cane sugar. Husain concludes that the *Rāihā mulayamā* are odours of refined (*latif*) quality which calm the "heat of the spirit". They are called *mufarreh al qulūb* (lit: exhilarants of Hearts); *marātib e dimāgh* (Brain-cooling) and *munawwamā* (sedating). Like Ibn Sīna, Husain notes that olfactory powers are affected by the *latif* vapours characteristic of all mild odours and of some strong odours (such as of musk, ambergris, camphor, saffron and aloewood - the 'principal' aromatics); while *latif* vapours may also emanate from particular stones and gems and minerals.<sup>45</sup>

Ibn Sīna is popular in the Muslim world for the essential importance his thesis places on the health of the Heart, to Muslims the source of all *nafsānī* (spiritual or psychical) ailments.<sup>46</sup> His treatise suggesting relations between odours, Emotions and the Heart would appear to acknowledge, too, the oft-repeated *hadīṣ* : "Scent is the food of the soul, and the soul is the beast of the burden (that is, the vehicle) for the faculties of man."<sup>47</sup> This might be seen as another reason for Ibn Sina's popularity. His *qasidā* on the human soul is said to express an almost mystical understanding of the soul; and his discourses with the sufi, Sheikh Abu Saīd, at Nishapur (where each is said to have anticipated the other's views) has been referred to by several writers and said to be preserved in the form of correspondence.<sup>48</sup> Although, in popular view, the Sufi 'sees' intuitively with the 'light of the Heart', while the physician 'sees' with the 'light of reason', some correspondence in viewpoint is thought to be inevitable, particularly in the way each defines the essential nature of his task. The Sufi point of view - and its similarities with the philosophical - could be understood through reference to Abd al Razzaq<sup>al-</sup>Qashānī's 14th century definition of Sufi Technical Terms.<sup>49</sup> To Qashani, "Spiritual Medicine" is the "knowledge of the perfection of hearts - not only their afflictions and ailments, and remedies from these, but also the directions for keeping them healthy and warding off sickness" - a view akin to the physicians'

definition of his practice.<sup>50</sup> Similarly, the physician might agree with Qashani when the latter defines the "Alchemy of Happiness" as consisting of "the refinement of the Self (*nafs*) by protecting and purifying it from worthless things."<sup>51</sup> In interpreting the Light Verse of the Quran (*Sura e Nūr* XXIV.35), Qashani observes that 'Glass' signifies the Heart (*qalb*); the 'Lamp' signifies Spirit (*ruh*); "the tree from whose oil the glass is lit up - like a glittering star - is the Self (or *nafs*); while the Niche for the lamp is the body. The Oil, he says, denotes the "original light" for the preparation of the Self (which he defines as the "vehicle" and "external aspect" of the Heart, Spirit being its inner aspect).<sup>52</sup> In Qashani's opinion (or in the opinion perhaps of that "perfected Master", Ibn Arabi) good deeds or virtues (like "oil" or fragrances) purify the Self and refine the Heart making this "incorporeal luminous substance" receptive to "illumination" and to the resultant "powers of discernment"- analogous to "the function of sight for the Self."<sup>53</sup>

It is immaterial here whether the Sufi modified the physician's view, or whether, even both represent a continuity of older thought patterns. Certainly, both had read the Book and the Traditions based on these, and one direct source of their 'technical vocabulary' could be identified. Massignon maintains that the "technical vocabulary of the Sufis may be sought not only in the Quran, but in the scientific teaching of the time . . . in a kind of technical language "which had been built up.....during the first six centuries of the Christian era, deriving its terms sometimes from Greek, sometimes from Persian."<sup>54</sup> Perhaps it might suffice to observe that what Ibn Sina and the physicians reasoned was also sensed by the Sufis of the time and that the ideas they shared could be popularised - both through the practice of *Yūnānī* medicine and through the development of Sufi *silsilas* (chains). One may be sure, of course, that man's association with odour long predated both Ibn Sina and the Sufis, or the development of this 'technical language.'

A relation of odour with perceiving powers, which Ibn Sina presumes, might be read in the story of Joseph in the Quran (SX11.93; 94; 96). It was the sweet smell (of the virtues) of Joseph, retained in his shirt, which evoked his "presence" to the long suffering Jacob, restoring Jacob's sight<sup>55</sup> - as might, in popular view, the Breath of the Merciful (*Naf̣ṣar Rāhmān*). Little wonder, then, that essential oil, to Muslims, is *ghizā e rūh* (food of the spirit or soul); or that it should be termed *rūh* (or spirit) by the *attār*.

Perfumery is said to be one of the earliest recorded crafts and one whose basic techniques have remained little changed since their development in the Ancient World. Essential oils are still 'selected' and 'blended' to achieve an 'accord of odours' in which "the specific odours and personalities of the individual odorants have been submerged" into a wholly new odour.<sup>56</sup> The meaning of the word perfume (from the Latin *per* and *fȯmen* or 'through smoke'<sup>57</sup>) suggests that it was synonymous with incense in the days of its earliest 'civilised' use - whether in Egypt and the Ancient Near East or in Iran, India and the Far East. Incense, it is said, was used to pay homage due to deities and deified rulers (or even as their signs of their presence). And it was, and is, an essential part of funeral ceremonies including cremation of the body 'amidst a pile of scented woods' - a practice popular with Ancient Greeks and <sup>in</sup>India.<sup>58</sup> As a 19th century treatise on Muslim burial (based on Hanafi Law) would indicate, fumigation of the body before burial is common practice in the Muslim world.<sup>59</sup>

Incense has been popular in its more general or 'secular' uses associated with the living. Its significance in Deccani Muslim culture may be appreciated from study of a manuscript copy of *ʿItr e Nauras Shāhī* - a treatise on perfumery written in the 17th century Bijapur for Ibrahim ʿAdil Shah II (and among the Miscellaneous Oriental Collections of a Hyderabad library, listed as Ms *Mutafarriqāt* 217). The

author of the treatise, Nizamuddin bin Mulla Habibullah Sharif, describes the preparation of various kinds of *bakhurāt* (lit: vapours) for use in fumigation and deodorising contained spaces (such as the *khwabgāh*, or bedroom) as well as to perfume one's person (hair, clothes etc.).<sup>60</sup>

While incense preparations may include aromatic roots and seeds, twigs, woods and even foliage, (as in Vedic India in the making of the 'consecrated' fire) most *bakhurāt* may consist, often exclusively, of the resinous or gummy exudates from the barks of trees and other plants. These contain volatile oils which evaporate on exposure to air, leaving the resin to set hard in the 'wounded' bark. As their botanical function in repairing wounds to the bark, so too, seemingly, the use of myrrh and balm, for instance, in Ancient Egyptian embalming. Camphor, although a pharmaceutical product, has been long in use for funerary ritual too for its restorative and antidotal properties. The *Risālā e Tajhīs o Takfīn* (the treatise on Muslim burial referred to) recommends its use in preparing the body for burial<sup>61</sup> - and, as an Indian Muslim medicinal work explains, camphor repels insects and retards the process of body decay on account of "its excessive coldness and dryness."<sup>62</sup> For these reasons - and as has been stated earlier - most incense ingredients, including animal based substances, are classed among 'principal' aromatics.<sup>63</sup>

Incense ingredients are long known too in the preparation of pastes, salves and powders and in the preparation of oils, extracts and other pharmaceutical forms.<sup>64</sup> The use of aromatic herbal extract in body massage and in baths is ancient and still popular and, since the time floral extracts came into use (about 1350 BC, according to Levey<sup>65</sup>) these, too, could be expected to have entered into the composition of oils for massage, for baths and for miscellaneous other purposes as those suggested in the *Itr e Nauras Shahī*. In addition to describing aromatic

preparations for body massage, washing and anointing (including varieties of *chiksa* , a popular Indian paste for body massage involving up to three dozen ingredients<sup>66</sup>), the author of this treatise describes methods for making aromatic gargles and dentrifices (called *miswāk* )<sup>67</sup> and other such preparations (called *Mukh bās*)<sup>68</sup> to freshen breath. Since the consumption of *pān supārī* (betel leaf and betel nut) is considered to freshen breath too, one may expect to find methods for perfuming the ingredients of a betel-leaf preparation (including the betel nut, the *chūnā* - or lime - and the leaf itself<sup>69</sup>). In short, the fragrance of both body and breath would appear to be of significance.

In addition to incenses, the use of oil-lit lamps has been customary in the religious ritual of many cultures.<sup>70</sup> We are told that in Ancient Egypt, lamps lit with fragrant oils were used to pay homage to the Sacred Bull and that sacrifices were often officiated by the kings with perfumed oils for libations to be poured on the altar.<sup>71</sup> The use of perfumed candles, too, is ancient. The use of branched candle stands (*jhār fanṣ*) holding camphor candles, or of free-standing camphor candles, has been referred to in an earlier chapter in relation to Deccani Shi'ite ritual.<sup>72</sup> The preparation of ambergris or camphor or musk or *ūd* -perfumed candles ("to perfume an assembly") is described in the utmost detail in *Itr e Nauras Shahī* as well as in *Lakhlakhā*.<sup>73</sup>

As a PhD dissertation on "The use of aromatics in Ancient Mesopotamia" (based on Akkadian sources) indicates, aromatics were administered by physicians-priests and that it is in medicinal texts that they are most frequently mentioned.<sup>74</sup> The plants the author lists, as the basis of aromatic preparations, include conifers (juniper, cypress, pine, cedar), drought-tolerant evergreen shrubs (including myrtle, balm, frankincense terebinth and hemp), reeds and rushes (such as *Cyperus* sp. and *calamus*) and umbellifers including *Sagapenum* and *Galbanum*. (A more

extensive list may be found in R.C.Thompson's study of Ashurbanipal's 'Dictionary of Plants'<sup>75</sup>).

According to Myer (author of the study on Mesopotamia), plants such as cedar, cypress, juniper and myrtle were planted in Assyrian botanical gardens and employed in palace construction (in 8th century BC). Myer does not mention 'exhilarating drugs' although Vedic (and Avestan) records suggest the popular use of an exhilarating drink (the *hāoma* of the Persians, which is equated to the *soma* of the Vedas<sup>76</sup>). In the Vedic Myth of Creation, *somā* is associated with the promotion of sexual vigour<sup>77</sup> and the suggestion, therefore, that it was considered exhilarating for this reason. *Somā* is now thought to be a species of Ephedra endemic to the western Himalayas and named after ephedrine, a stimulant it is known to contain.<sup>78</sup> It would appear, therefore, that *somā* served to stimulate the respiratory tract which may have been the cause for the sense of refreshment or exhilaration experienced. Whether that contributed to sexual vigour is arguable.

Since perfumery as a craft is said to have remained unchanged in its essential sense since its use in the Ancient World, it might be supposed that its perception is unchanged. Therefore, that contemporary views about the effects of odour on the human sense could suggest how olfaction has been understood culturally (or, universally, according to another point of view). A variety of view points on the subject is inevitable, reflecting the individual biases of the variety of academic and commercial backgrounds associated with the sense of smell.

For those arguing from the perspective of biology, man's (the scented ape's) sense of smell is the result of an evolutionary and biological relationship with his ancestors. Stoddart maintains that humans developed incense culture and body perfumes "based on the odours reminiscent of mammalian sex attractants.....but so

deeply buried are the memory traces of long ago" that such biological messages are "no longer capable of releasing the behaviour they once would have although they are still able to penetrate to the deeper levels of the psyche (the subconscious) to gently stimulate the emotions". He adds that incense is widely used in social circumstances where it is advantageous that "all minds think alike" for the mind is alert and open to suggestion.<sup>79</sup> Naturalists remind continually that the most sought-after and expensive perfumes contain odours of animal origin. They believe that the "universal liking for musky molecules" is natural because one experiences this type of inherently stimulating odour in "human secretion of musky molecules" From this point of view, a successful perfume usually has a 'top note' (made up of the most volatile, usually floral odours), a 'heart' (usually 'spiced'), and a 'base' or 'bottom' "loaded with human pheromones."<sup>80</sup> A perfumer might explain the need for "human pheromones" of animal origin in that these are fixatives which prolong the 'staying power' of milder, more volatile, odours and which are usually blended with resinous gums and with scented woods and roots associated with a similar function.

Biochemistry as "one of the best developed sciences involved in the smell science" approaches the subject of olfaction in terms of "odour molecules". As a biochemist, Dodd is concerned with analysis of "odour-structure relationships". He observes that it is the properties of perfume molecules which attract smell-receptors, terming these "mood-modifying chemicals". Dodd argues that specific receptors sites occur in the brain for classes of odorants, or <sup>at least</sup> for some important perfumery chemicals, especially "the musky / sandalwood / ambergris / urinous note."<sup>81</sup>

That smells influence moods states is an idea underlying the practice of aroma therapy, apparently. Aroma therapists maintain that massage with essential

oils works psychosomatically (on body and mind) to modify mood often relieving stress and helping to enhance the powers of perception.<sup>82</sup> Thus it is supposed too that the Holy Anointing Oil and Incense which the Prophet Moses (pbuh) was asked to prepare (from eight resinous ingredients) helped to evoke "a spiritual atmosphere or a heightened awareness in some sense" for certain odours are capable of creating an "emotional ecstatic state of consciousness that would render individuals more susceptible to religious experience."<sup>83</sup>

Psychology would appear to argue against the existence of innate mechanisms responsible for odour response. Engen maintains that there are "few if any inherited reactions to smell" and that odour associations are 'learnt' and shaped by experience for the most part. Perfumes, he says, will evoke "pleasant or sensual responses" because these are the responses mainly associated with them. He rejects the chemist's view that certain smells 'imprint' more readily than others maintaining that "all perfume molecules are equipotent in eliciting mood" - the 'learnt' response, usually, to an olfactory sensation.<sup>84</sup>

While recognising the "biological foundation of emotion" and the existence of a few "primary emotions", Van Toller, a psychologist with "an expertise in the area of emotion", concedes that "the study of olfaction from the perspective of emotion has tended to be ignored by theorists in the field of emotion." According to Van Toller the relation of olfaction with emotion can be studied by observing the behavioural changes accompanying the physiological response to odour (indicated by changes in muscle tension, heart rate, brainwave patterns etc.). He adds that an important determinant of emotional states is change of sensory perception whose significance can be understood by considering the "controlled generation of fear and anxiety in fairground rides" or in a horror movie. He relates the story of a man who dreamt he was a dog and the heightened awareness of the world and the associated

pleasure which his awakened senses brought him. Van Toller believes that, although perfume is likely to evoke an emotional response in a person, this response may also depend upon the person's "internal, physiological state." (The smell of food, he notes, while causing pangs of hunger before the meal might be actually aversive after the meal).<sup>85</sup>

Present day views about chemoreception (based on experimental analysis, one must add) may have been anticipated in mediaeval medicinal literature, especially since, as Van Toller remarks, man has a long history in the use of odours for "aesthetic sensory experiences." It may not be so difficult to understand therefore the emphasis the mediaeval physician placed on the physiological conditioning of certain organs of the body (especially the Heart); or the view that these organs could be made so receptive to stimuli that a person could be stimulated with the mere idea alone of a stimulus - which would suggest even a psychotherapeutic use of drugs.

As a 'List of Materia Medica' in the *Yunani* tradition of pharmacological writing, the *Khazāin al Adwiyyā* (Treasury of Drugs), written in Urdu in the early 20th century, may well be the most comprehensive work in this nature, written in the subcontinent.<sup>86</sup> Najm al Ghani's 'Treasury', incorporating the Materia Medica of both the *Yūnānī* and the Indian (*Ayurvedic*) systems, includes 2612 drugs, combining detailed botanical description of each plant drug with virtually all its known Indo-Muslim plant synonyms (including Deccani synonyms and frequently Latin nomenclature). Many of the synonyms for aromatic plants in Ghani's 'Treasury' would appear to originate in the (animal and plant-based) substances considered of 'primary' or 'secondary' importance in aromatics - the basis of such synonyms, apparently therefore, the quality of odour of the substance (together with its colour occasionally).

Thus *bed mushk* (lit : musky willow; in Persian for *Salix caprea*); *mushk dana* (musk-seed) or *lata kasturi* (musky creeper) for Hibiscus abelmoschus, in Hindi; *nār mushk* in Persian for Mesua ferea, *gul e mishkīn* (in Persian for the musk rose). In the same way plants are named for their camphoraceous odour. As *kapūr kachrī* (lit: camphor slices in Hindi) for the rhizomes of Hedychium spicatum; *‘Urūk al kāfūr* (lit.: camphor root) in Arabic for Curcuma zedoaria; or as *kafuri* (camphoraceous) may be used to denote certain herbaceous species of the Composite family - chrysanthemum or camomile, for instance. Plants named for their clove-like odours are Ocimum gratissimum (*qaranfulī*, in Persian) ; Luvunga scandens (*long pushp* - or clove bud - in Sanskrit); Dianthus caryophyllatus (*gul e qaranful*) as well as many rutaceous shrubs (Clausena, Lallelantia). A synonym for *lādān* (or ladanum - a glandular secretion in a species of *Cistus*) is *‘ambarī* or ambergris-like; and while *‘ūd*, in Arabic, denotes Aquillaria agallocha, the term is used for many other incense ingredients too, such as *lobān*, the Indian olibanum, a species of *Boswellia*. Names may originate in the odour of fruit - the odour of citron, for instance, to which the odour of Meliśā officinalis (*baqlāt al utrujiyā*, in Arabic) is likened, and also that of sweet basil (known as *utrunj mishk* in Arabic). The *gulāb e jāman* (Eugenia jambos) carries the odour of *gulāb* (Rosa damascena); the odour of Orris root (*bīkh e banafshā* in Persian) is similar to the violet's; and the odour (or more likely, the flowering spike) of *sunbul a tibb* (the medicinal *sunbul*, Nardostachys jatamansi) is likened to that of the Hyacinthus orientalis.

Ghani's Treasury suggest that names for fragrant plants may be sought also in words denoting odour in Persian, Arabic, Sanskrit or in the Indian vernacular tongues. As *bu* in Persian may be recognised in *khairbūā* or *hal būwūā* (the 'lesser' cardamom); in *jauzbūyā* (fragrant nut, or nutmeg); in *azarbūyā* (a species of *Calendula*); in *shabbūi* (the 'evening fragrance' of tuberose, wallflower and

night-scented stock); in *nāz̄bū* (the 'delicate odour' of sweet basil). Similarly, the Arabic *shāmmeh* (for smell) may be perceived in *shīmām* (melon); or in *Gul Yas Shāmiā*, of which *Gul yasman* (jasmine) is said to be the abbreviated form. Among plant synonyms rooted in the Sanskrit *gandh* or *amoda* (for odour), examples are *rājgandh* and *rājani gandha* (lit: the king and queen of fragrance respectively; names for gardenia and tuberose); or *gandha madana* (the 'Love-intoxicating odour' of *Artabotrys odoratissimus*); or *gandha ras* (the 'aromatic juice' of species of resinous shrubs, *Boswellia* and *Commiphora*). *Amoda* may be recognised in *ajmod* (denoting the wild celery, *Apium graveolens*).

In Arabic and Persian, the terms *rih* and *bad* (lit : wind) are associated with odoriferous substances whose odour is 'in the manner of the wind': as refined, that is, as air particles; or 'intermingled in the wind'; or 'flying like the wind' (that is, highly volatile). Camphor is of that nature, whence *rīyāhī aswajā* (lit: in the manner of the winds). *Bādrang* (which means the same in Persian) is a synonym for citron and for sweet basil; while *raihān* (lit : odoriferous herb, in Arabic) is used interchangeably for both myrtle and basil and, according to an alleged *hadis*, the henna plant is *sayyidu raihān* (or the 'chief of fragrances').

Frequently, Indian synonyms for aromatic plants originate in the substantive *madh* (honey), to describe the honey-like sweetness of the taste or smell associated with a plant. Examples are *mādmalātī* (a synonym for the Indian arbour-maker, *Aganosma caryophyllata*); *mādhavī* (denoting another popular Indian climber, *Hiptage madablota*); or *Madhuka indica* (Syn. *Bassia latifolia*); named for the sickly-sweet odour of its flowers.

In the naming of tropical Indian plant species with bold, showy, scented flowers (and prominent reproductive parts), floral colours (and flower morphology)

would seem to be as important as floral odour. The (frequently) golden or cream-coloured *chamṗā* flower (*Michelia champaca*) is often recalled in the names, for instance, of *Mesua ferea* (*nag|chamṗā*); ;of *Calophyllum inophyllum* (*sultanā|chamṗa*); of *Pterospermum acerifolium* (*kanak chamṗa* ); of *Ochna squarrosa* (*randan chamṗa*); of *Artabotrys odoratissimus* (*hara chamṗa*); and of *Plumeria* sp.(*kshira chamṗa*) and *Sesbania* sp.(*chamṗai* ). While the Sanskrit synonym, *kadamb* (for *Anthocephalus kadamba* and for an Indian perfume 'from 72 constituents') would seem arisen in the '72 stigmas' of *kadamb* flower heads. Needless to add, perhaps, all the 'principal' and 'secondary' aromatics have colour connotations too.

It could be argued that the association with aromatic plants is a function of odour-associations, as suggested in plant synonyms and as revealed in medicinal literature. Medicinal values would certainly appear to have played a part in determining, or influencing, aesthetic values - the restorative functions of fragrant substances used in ancient embalming practices or in therapeutic massage and baths possibly colouring and fixing odour associations from the earliest times. The association of certain fragrances with pleasure may stem from the sense of relief accompanying the fulfilment of a desired 'sedating' or 'stimulating' effect. Present-day experiment suggests it is possible to describe the response to odour in these terms. And as both present-day speculation and plant synonyms might suggest, the association of certain fragrances with pleasure may also lie in their abilities to invoke ancient systems of communication, particularly the communication of biological messages. Ultimately, perhaps, it is the association of fragrances with pleasure-giving sensations, as an idea sustained over centuries, which in itself is the greatest stimulus - and a reason for the use of fragrant plants in gardens, whether real or painted.

Tropical plant products, especially aromatics, have been known in the Early Muslim heartlands probably since antiquity; although the association in these regions with the ancient *samhītas* of the Indian physicians is thought to be more recent.<sup>87</sup> Muslim familiarity with Sanskrit medicinal texts is said to have been promoted in 'Abbasid Baghdad following their translation from the Persian. As maintained by Levey, Indian plant-based drugs were interpreted at Baghdad (and at other centres of Early Muslim culture) in terms of *Yunani* medicine rather than in terms of the Indian system, now known as *Ayurvedic* .

Although writing in 20th century British India, Najm al-Ghani describes simple drugs like his *Yūnānī* predecessors in Muslim India, Iran or Spain; in Samarqand, Baghdad or Cairo. Like Ibn Sina, Ghani terms most aromatic substances *mufarreh* (exhilarating), observing likewise that the sense of exhilaration they provide arises from the potential of these substances to 'cool' or 'heat' or 'moderate'; to 'fortify', or 'purify' or 'illuminate'; from their use in 'deodorising breath' or in 'rendering air fragrant'; and their potential to provide *farhat, rāhat, tafrih* (terms for pleasure). Pleasure is frequently said to result from inhaling the odour alone from scented flowers, fruits and foliage - in gardens, one may assume. This observation extends to the odour of many tropical Indian forest trees and shrubs Ghani describes and with which he expresses a keen sense of association. Many of these are Hindu flowering favourites of the moister forests, judging from the frequency of their mention in Hindu *puranic* literature (all of these Indian favourites being known to the Deccani perfumer, one might add).<sup>88</sup> While the floral odours of some forest species such as of the *pātala* (*Pterospermum suaveolens*), the *kadamb* and the climber, *madmālatī*, are considered to be *mu'tadil* (temperate) and exhilarating, the odours of others such as of the *molsary* (*Mimusops elenga*), the *nāgkesar* (*Mesua ferrea*), the *hārsinghār* (*Nyctanthes arbor-tristis*) or of the *bel* (*Aegle Marmelss*) is considered exhilarating as well as

moderately, even excessively, 'hot;' while massage of essential oils distilled from these is quite plainly said to fortify sexual vigour (*maqāvi e bāh*). This stimulating function is associated with other life forms of the forest, such as the climbing species of the pepper family, or with the arboreous gum-barks, and particularly with the herbaceous species of the Ginger, Amaryllis and Lily Families (whose flowers are enjoyed in gardens at certain times of the year for their scent and colour).

A similar view of plant species of tropical Indian forest may be noted in the *Alfāz<sup>al-</sup>Adwiyyāh* (Vocabulary of Drugs), a 17th century List of Materia Medica. This Treatise (in Persian) was written at the Mughal court by Shahjahan's personal physician known as 'Ain al-Mulk Shirāzī and is one of the very few Indian Muslim works to have been translated into English.<sup>89</sup> Shirazi's work includes a section on nutrients and drug tonics for the various body organs, classified as Cephalica (*maqāvi e dimāgh*), Cardiaca (*maqāvi e qalb*), Aphrodisiaca (*maqāvi e bāh*), Hepatica and so on. As might be expected, there is considerable overlapping function of some of these tonic preparations, while Shirāzī's list of cardiac drugs may be compared to Ibn Sīna's and found to be essentially the same. His list of aphrodisiacs includes all those substances which are considered 'nutritious', 'fattening' and 'hot' - the essential properties of aphrodisiacs, according to the Deccani treatise on health preservation, *Zubdat al-Hukamā*.<sup>90</sup> Some of the substances included in Shirāzī's list of aphrodisiacs (Indian spice and the 'principal aromatics', for instance) are thought to be exhilarating, too - serving to emphasise that exhilaration, as a state of body equilibrium, has much to do with sexual vigour, perhaps increasingly so in its Indian context.

Although Indian plant-based drugs have been described in Muslim medicinal works in terms of *Yūnānī* medicine, it could be argued that the

association with these - as spice and as tonics - is ancient, predating the development of *Yūnānī*-Arab medicine. In this sense, at least, Indian *rasas* could be found permeated in Muslim culture by mere fact of the use of Indian plants - as drugs, as perfume ingredients, or in Indian Muslim gardens. In its *Ayurvedic* sense, *rasa* (lit : the juice or sap of plants; the essence of anything) is considered to be the quality resulting from the dominance of one or more *bhutas* or elements composing man and universe alike.<sup>91</sup> Like *mizāj*, which denotes a key concept underlying *Yūnānī* medicinal theory, *rasa* dictates the selection of diet and drugs in the *Ayurvedic* system. Each of the six essential or primary *rasas* is thought capable of producing certain physiological effects;<sup>92</sup> while habituating oneself to all six tastes is thought to be essential for health and longevity.<sup>93</sup> By extension, an artistic creation has a lasting or eternal value when it is permeated with all six (or occasionally nine - *Nauras* ) flavours, especially when it is dominated by the *madhura* (sweet) flavour (or taste). Symptomatic of the "predominance of water in the body", the *madhura* flavour is believed to be capable of "increasing blood, flesh, fat, marrow, semen and life" and capable of "fortifying the six senses."<sup>94</sup> It is a prized flavour, essentially because it is associated with sexual vigour - of primary significance in Hindu life (as might be thought by recalling the ancient *Vedic* Myth of Creation). In artistic terms, the *madhura* flavour is associated with erotic mood (*sringara rasa* ) - the longing for sexual union, or 'Love's longing', the taste for which has been cultivated since the first Hindu portrayals of actors and actresses in the drama of life (love).<sup>95</sup>

From its association with the exhilarating *somā* juice of the ancient sages (the "nectar of the gods"),<sup>96</sup> it might be thought that in a popular sense, the term *rasa* itself is synonymous with pleasure, especially sensual pleasure. And in the curious way in which the sense of taste and odour are linked, as in an aromatic taste, *rasa* signifies an association not only with taste but also with aroma. Whether

the sexual connotation of some heavily scented floral odours is due to the presence of chemicals like indole (as in tuberose and jasmine); and whether the stimulus of other odours is the 'inherent' stimulus of musky molecules is difficult to say. But, undeniably, the association with such and similar odours has been conditioned by a long period of their use (or of their mention) as aphrodisiacs. As the *Kāmaśūtra* might indicate, aromatic substances played a significant role in the hedonistic *nāgaraka's* toilet.<sup>97</sup> And the endless stimulus of forest spice is well-known from endless stories of Hindu gods and their consorts in their endless pursuit of love in the Indian forests. The Indian god of Love, Kamadeva, is commonly shown armed with a bow made of sugarcane, the string of which consists of bees. He has five arrows, each tipped with the blossom of a flower which "pierces the heart through the five senses", his favourite dart being pointed with the *chuta* or mango flower.<sup>98</sup> As noted earlier, the Indian names of many aromatic and sweet substances, including the names of many scented flowers, have to do with *Kāma* (or *Madana*, a synonym) - with sweetness and scent and their arousing power. *Madanmast* is an example, denoting both the edible roots of *Amorphophallus campanulatum* (a renowned aphrodisiac) as well as the Love-intoxicating fragrance of *Artabotrys odoratissimus*.<sup>99</sup>

The most extensive list of perfumery plants is obtained from perfumery texts, of which manuscript copies of two Deccani treatise have been examined, as stated earlier.<sup>100</sup> Of the 100 or so aromatic substances, 90 at least could be associated as products of plant species, with the plains and hills of Tropical and Sub tropical India (see Appendix 4). While the choice and selection of aromatic substances would appear determined by their abilities to 'blend' with others, to 'mask' and 'modify' strong odours; their virtues as solvents and fixatives; or other technical reasons, it would appear too - judging by the names of aromatic preparations - that choice and selection was influenced by the aphrodisiacal virtues

of certain substances.

The use of fragrances to 'charge' a space with associated qualities and to assist induction of appropriate mood may well be among ancient secular uses of perfumes. The *Itr e Nauras Shāhī* describes nine methods of perfuming the royal *khwābgāh* (bedroom), each of which is referred to as a *Nauras* method, made up, that is, of the 'significant nine' flavours.<sup>101</sup> Each method inevitably involves the use of incenses frequently in combination with deodorising sprays (of powdered mixes); in addition to 'strewing' (fragrant flower petals and aromatic foliage); and the arrangement of floral garlands on walls or of bouquets of aromatic fruit and flowers in bowls of silver and glass. According to one *nauras* method, scented floral bouquets are to be arranged at different heights in the room and sprayed over with a powdered mix of nine aromatic substances soaked in rosewater (or herbal extracts), while at the same time *'ūd* (incense) is to be burnt and the room fumigated. According to another *nauras* method, citrons topped with flowers of *mogra*, *chambelī* and *niwālī* (species of jasmine); with *kuza* and *gul e lāl* (species of rose) and *gul e champā* and *molsary* are to be kept by the bedside in a glass bowl - and the writer advises that as soon as incense is burnt, the bedspread be lifted so that the bedsheet can absorb the fragrance, which he promises will be *mast*, *shah<sup>wat</sup> afzā* and *nishātāwar* (intoxicating, aphrodisiacal and exhilarating)<sup>102</sup>.

A comparison of perfume plants listed in Deccani perfumery texts with those recorded in Deccani *masnawīs* (See Appendix 4, 5, 6) would suggest that the *majmū'ās* which permeated the space of the *khwābgāh* were also part of the garden's spaces : its arbours, walks and pools. The suggestion therefore, that a Deccani garden could be interpreted thematically as a bouquet redolent of the scents of *Barsāt* or *Basant* - of evening and day-time fragrances : mild and cooling as well as musky and penetrating. The essential experience of this bouquet may be thought to lie in its exhilarating function - its ability to tone up the Heart or *qalb*, enabling its

awakening to the Breath of the Merciful - or, in a Deccani Muslim context, to the "odour of the god of Love" as well.

## Notes.

1. As defined by Goodman L and Gilmour A in The pharmacological basis of therapeutics, New York 1947, the term drug "refers to any substance which by its nature and chemical structure influences the physiological function of the living organism and/or its metabolism and anatomical action".
2. Classical Muslim period generally taken to mean the period from the 9th century AD to mid 11th century AD. See for eg, Grabar, O. The Formation of Islamic Art. op cit.
3. The importance of *aml e 'teqāl* (the practice of moderation) is emphasised by Shamsu'din bin Nuru'din in the *muqaddi'ma* to his Zubdat al-Hukamā, a medicinal manuscript written for Mohammad Quli Qutb Shah, a copy of which is in the Salar Jang Manuscript Collection, Hyderabad, Tibb 277/6, Folio 2.
4. *Mizāj*, more specifically, is "the temperament resulting from the interaction of four primary, opposed qualities". See Levey, M Early Arabic Pharmacology: an introduction based on ancient and medieval sources. Leiden; Brill 1973.
5. op cit. n.3. The manuscript also known as Khulāsā Qawānīn ul-'Ilāj. The "six essential" rules for *hifz e sihhat* (health preservation) unchanged since *Yunani* times have to do with work and play, with diet and rest, bathing and excretion. The author outlines the need for (i)*durustagī ta'am o āb o hawā* (ii)*durustagī ghizā o mashrūb* (iii)*durustagī harkat o sukūn e badnī* (iv)*durustagī harkat o sukūn e nafsānī* (v)*durustagī auqāt shabkhwābī o baidārī*. etc.
6. Levey, M Early Arabic Pharmacology, op cit.
7. Gruner, O C "The four temperaments" in Avicenna's Tract on Cardiac Drugs and Essays on Arab Cardiotherapy ed. Hakim M Said Karachi: Hamdard Foundation 1983, pp 119-23
8. Fi Tadbīr al Sihhāh of Moses Maimonides. The Treatise to King al Afdal son of Saladin Concerning the Regimen of Health transl. Bar-Sela, A, Hoff, H.E, Faris, E. Transactions of American Philosophical Society Vol 54, PT 4, 1964 pp 16-64. *Præumas* are defined as "fine vapors in the body of living creatures : their origin and the main part of their substance...(being) the air inhaled from without;" p 27. Maimonides also observes that "the vapor of blood found in the Liver is the Natural Spirit; the vapor of blood found in the Heart is the Vital Spirit; the vapor of blood found in the ventricles of the brain is the Psychic Spirit", p 27.
9. *ibid.*
10. Al Adwiyā al Qalbiā of Ibn Sīna. Written 1015 AD. Transl. ed. Hakim A. Hamid and Hakim M Said. See Avicenna's Tract on Cardiac Drugs and.....Arab Cardiotherapy. op cit. In his essay on "Fight against heart disease in ancient and medieval times," pp 97-104 in Avicenna's Tract... op cit., Hakim M. Said declares that Aristotle (384-322 BC) observed long before Ibn Sina did that "blood was kept in the fluid state by body warmth or innate heat". A century before Aristotle, Hippocrates observed that the Heart

initiates pneumatic circulation; while Galen (130-200 AD) believed (erroneously) that the mix of air and blood occurred "when the left ventricle was reached" with the production there of <sup>the</sup> Vital Spirit.

11. as stated by Ibn Sina in al-Qanūn fi'l Tibb. Urdu transl. Hakim Syed Ghulam Hussain Kanfuri 5 vols, Vol 3. Lucknow 1886-1900; pp 342-367 in Section on Diseases of the Heart. The same was observed by Galen (as stated by Hakim M Sa'id op cit) who imagined that the blood flowing into the liver was "imbued at that site with a special type of pneuma called the Natural Spirit".
12. Gruner, O C "The Four Emotions" incorporating a "free translation" of extracts of Ibn Sina's al Adwiyyā al Qalbiā in Avicenna's Tract....and Essays... op cit; pp 105-118.
13. ibid. This is so because "the breath is radiating through the various members more freely"; p 109
14. ibid., p 109
15. Al Adwiyyā al Qalbiā of Ibn Sina. Transl. Hakim M. Sa'id op cit. Section 3 on Pleasure pp 15-17.
16. ibid. Section 10 on Pneuma, Aroma and Sweetness, p 26.
17. ibid. See also Gruner's transl., op cit., p 108
18. Al Qanūn fil Tibb. Urdu transl Kanturi, op cit Vol 3, p 355.
19. as quoted by O.C.Gruner in "The Four Emotions" op cit., p 108
20. ibid. See also al-Qanūn fil Tibb op cit. p 355; Zubdat al Hukamā, op cit. Folio 2.
21. Fi Tadbīr al Sihhāh of Moses Maimonides op cit. p 25.
22. ibid. p 26.
23. Hamarneh, S "On Expedients for Relief from Sorrow. Al Kindi: 9th century physician, philosopher and scholar," Medical History no 9 1965.
24. Graziani, J S Arabian Medicine in the 11th century as represented in the Works of Ibn Jazlāh. Karachi : Hamdard Foundation 1980, p 26. Hakim A Hamid refers to the more frequently-used title of Ibn Sina as Shaikh al Rais. See Hakim A. Hamid and Hakim A. Bari, "Impact of Ibn Sina's Medicinal Works in India" Studies in History of Medicine Vol VIII nos. 1-2, 1984, p 2.
25. Hakim A Hamid. "Impact of Ibn Sina...." op cit.
26. ibid.
27. ibid. The reference is to Sarton's An introduction to the history of Science, Baltimore 1927 op cit.
28. ibid.

29. Campbell, D E Arabian Medicine and its influence on the Middle Ages. London 1926, Vol 1, p 79.
30. The Zubdat al Hukamā consists of 14 Folios : a Muqaddimā and four Maqālās. Maqālā 1 outlines the six essentials; Maqālā 2 is concerned with precautionary measures to be observed in the four seasons; Maqālā 3 is concerned with the care of individual body organs; Maqālā 4 discusses the uses of various vegetable and animal products. The author of the treatise is known and the scribe's name is also entered as Syed Mohammad Hadī Mohammad Hashim. The treatise was copied for Mu'tamid al Mulk Syed 'Alavī Khan.
31. Levey, M Early Arab Pharmacology op cit.
32. 'Aziz, M A "Psychosomatic aspects of Cardiovascular disorders" in Avicennā's Tract....and Essays.... op cit pp 97-104.
33. ibid.
34. Hakīm A Saīd "Fight against heart disease...." in Avicennā's Tract... and Essays... op cit.
35. ibid.
36. Farhang e Āsafiyā ed. Molvi Syed Ahmad Dehlavī 2 Vols. Lahore: Urdu Science Board. 2nd. Public. July 1987. The root word is said to be rūh or rīh in al-Mukhit of al-Ferozābādī, ed Maktab Tehqīq Taurāt, Beirut 1987
37. Levey, M "Ibn Masawaih and his Treatise on Simple Aromatic Substances Studies in History of Arab Pharmacology" Journal History of Medicine 16, 1967 pp 397-408. The discussion is centered on Levey's translation of Ibn Masawaih's treatise titled Kitāb jawāhir al tib al mufradā.
38. Lakhlakhā of Hakīm Janāb Mirza Hasan Qasid, Madras 1872 (1289 AH). A Manuscript copy in the Mutafarriqāt collections of Salar Jang Library, Hyderabad. Written in 1265 AH (1858) as indicated on Folio 2.
39. Genders, R Scented Flora of the World op cit.
40. Al Adwiyyā al Qalbiā of Ibn Sina. Transl. of Hakim A Hamid op cit. See Section 9 on Functions of Exhilarants and Section 12 and 13 on Characteristics of Drugs and Cardiac Drugs respectively; pp 26-27; 31-40
41. ibid.
42. Al Qanun fil Tibb Transl of Kantūrī, Vol 3 op cit. p 352. Hot drugs are classed adwiyya harra; cold drugs are adwiyya bareda; and temperate drugs are considered qarib ba e'tedal.
43. Levey, M "Ibn Masawaih and his Treatise...." op cit. The same differentiation between primary and secondary aromatics is made by al Masudi (d 937) in his Murūj al dhahāb... (Meadows of Gold....)
44. Hamarneh, S "The first known independent Treatise on Cosmetology in Spain," Bulletin History of Medicine 1965, 39, pp 309-325. A translation of the 19th treatise of al-Zahrawī's al-Tasrif

45. Makhzan al-Adwiyā of Mīr Muhammad Hussain. Published copy in Library of the Indian Institute of History of Medicine, Hyderabad, p.20. Work composed in 1259 AH (1852).
46. See Hakīm A Hamīd The Holy Prophet as Healer Studies in History of Medicine Sept 1977.
47. as translated by Cyril Elgood in Osiris 1962  
from Suyūti's Tibb e Nabavī (Medicine of the Holy Prophet).
48. Rizvī, S A A A History of Sufism in India 2 Vols, Vol 1. Delhi 1978 p 72.  
See also E.G.Browne A Literary History of Persia 4 Vols, Vol 2 *op cit.*, pp 110-111.
49. Glossary of Sufi Technical Terms of Abdal Razzāq al Qāshānī. Transl. Safawat, N ed. Pendlebury, D., London 1991. Qāshānī's work was translated previously as Dictionary of the Technical Terms of the Sufis, in Calcutta 1845, as indicated by A.J.Arberry in An introduction to the history of Sufism: The Sir 'Abdullah Suhrawardy Lectures for 1942, London : Longmans Green;
50. *ibid.* See under Tibb e Rūhānī p.30
51. *ibid.* See under Kīmīyā e Sā'adāt p 34
52. *ibid.* n.108, n.112, n.113, p 25
53. *ibid.*, p 10
54. as quoted by A J Arberry An introduction to the history of Sufism....op cit.
55. The Holy Quran : Text Translation and Commentary of A Y Ali. Abdullah Yusuf Ali translates S XII.94.(Sura Yusuf)... "I do indeed Scent the presence of Joseph". See n.1770: "Literally I feel the scent, or the air, or the atmosphere or the breath of Joseph (rīḥa Yūsuf)".
56. Perfumery: the psychology and biology of fragrance Ed S V Toller and G H Dodd, London: Chapman and Hall Ltd. 1988.
57. *ibid.*
58. Rimmel, E The book of perfumes London: Chapman and Hall 1865.
59. A Manuscript copy of the Risālā e Tajhīs o Takfīn (Manual on Funerary Rites) in the Mutafarriqat Collection of Oriental Manuscript Library, Hyderabad, Ms No 545 and the work of Mohammad Imrān Ghaffarullāh. Published Kanpur 1871 (1288 AH)
60. A manuscript copy of Itr e Nauras Shāhī in Mutafarriqāt (Miscellaneous) Collection of Oriental Library, Hyderabad (Mutafarriqāt 217). See Folios 18 to 27 for bakhurat (incense); Folios 44, 45 for perfuming khwabgah (bedroom); Folios 34, 35 for jamhāi khushbūi (perfuming wearing apparel).
61. Risālā e Tajhīs o Takfīn, *op cit.*

62. Khazāin al Adwiyā of Hakim Najm al Ghani 7 vols Lahore 1926. See under heading Kaf.
63. By Ibn Masawaih. See Levey, M "Ibn Masawaih and his Treatise...."op cit.
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77. of the Heavenly King Indra after the winter of his impotence. See Brown, N.B "The Creation Myth of the Rig Veda" in Journal of American Oriental Society 62, 1942.
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100. Itr e Nauras Shahi. op cit. and Lakhlakha op cit.
101. Itr e Nauras Shahi. Folios 44-45. The subject heading is : *Dar bayān sākhtan mo'qātar mahal o khwābgāh*. Faruqi Rehber also relates an incident (cited by contemporary historians) when the Persian invader Nadir Shah, suffering from severe headache, had Hakim 'Alavī Khan summoned for his cure, where upon the latter with the help of a fan made from the strongly fragrant *sadā gulāb* (evergreen rose) succeeded in sending off his master to sleep dispelling his headache thereby. This story adapted from Faruqi Rehber's

*Islami Tib*<sup>b</sup> (in Urdu) in Medicine in North India. Bulletin Indian Inst Hist Medicine. Vol XV pp 73-88.

102. *Itr e Nauras Shahi*, op cit.

103. Plants mentioned in Deccani *masnawīs* are discussed in Chapter 3 on Gardens in Deccan and in a later Chapter concerned primarily with Deccani poetry.

## CHAPTER 6

### THE SCENTED GARDEN IN DECCANI MASNAWIS

It has been said of (the Persian poet) Sā'idi's *Gulistān* that its plan suggests the spatial arrangement of an actual *gulistān*.<sup>1</sup> A poetical work in Deccani Urdu might also yield a *gulistān* or two on analysis of its plan - especially so, if the work is titled *Gulshan e 'Ishq*, (Flower) Garden of Love. Nusratī (d 1684), beloved of the 'Ādil Shahi court and author of this 17th century work, manifests a certain bias in favour of his Persian literary heritage even as he acknowledges his debt to Sanskrit phraseology (*bachan*).<sup>2</sup> In keeping with Persian literary conventions, he describes his *Gulshan e 'Ishq* as (a garden) adorned with flowering trees (*phul jhārān*) of a kind (lit : *yek saz ke*) and with variously-coloured (*rang birange*) *chaman* (garden plots).<sup>3</sup> He boasts that each episode of the romance he narrates is a select *būstān* (*būstān dil guzīn*);<sup>4</sup> and one may be sure that even if the whole falls short of being a Persian *Gulistān* or *Būstān*, his work is the choicest garland (*yek khūb hār*), atleast, woven with flowers from an Indian *phulban* or *phulbārī* (terms denoting garden in Deccani Urdu).<sup>5</sup> The contemporary Qutb Shahi poet, Ghawwasi, insists likewise that his *Tūtī Nāmā* is no mere tale but a *būstān* permeated with the flavours of innumerable fruit. Like Nusratī, he holds his work to be a choice bouquet (*guldasta khāsā*) of the *bāgh* of his mind and a cure for grieving hearts.<sup>6</sup> The poet, Wajhī (who lived through the rule of three Qutb Shahi sultans), makes a similar claim, declaring that the eternally fragrant flowers of his eternally green *Sabras* never cease to freshen a receptive mind, to renew the spirit.<sup>7</sup> And so on.

The expression of similarities discerned between a garden's layout and a *warq* (leaf) or *safhā* (page; lit: face) of a book of verses is probably commonplace in Persian poetry. To a poet writing in Deccani Urdu, too, the silvery *kālvi* (Sanskrit

for watercourse), which divides, subdivides and borders the garden, is to be perceived in the *jadāwal* (margins) of an illuminated page<sup>8</sup> - in its central, longitudinal division, its lateral subdivisions as well as in the (usually double) page margins. Much else on the 'face' of the garden is compared by the Deccani poet with the embellishment of the page - from each row (*satr*) of the flower-filled *chaman takhte* (beds) to the gold or silver dew-bright foliage of each row (and indeed the fragrance too of *sabzā* or *raihān* may be savoured occasionally in the *raihānī* script of a page).<sup>9</sup>

It is easy therefore to read a *nazm* (poem; lit : the arranging of a string of pearls) on the garden's golden *warq*. A more discerning poetic eye might perceive a (*pur maghz* - brimful) *qasidā*<sup>10</sup> written on the garden face; a detailed poetic scrutiny of the garden's book perhaps revealing an entire collection of *qasida* - and as such a Deccani *masnawi* (as is the *Ibrahīm Nāmā* of 'Abdul Dehlawī).<sup>11</sup> And similarly the perception of the garden page as the wondrous Preserved Tablet (*Loh e Mahfūz*)<sup>12</sup> is easily understood too.

As a poetical creation, a Deccani *gulshan* is imperfect and incomplete without (a use of) the trellis-trained flower climber (*bel mandwā*). To the Deccani poet, the climber scaling the canopy of the sky signifies the perfection of his art - or, more precisely, of idiomatic expression (*bachan*, in Sanskrit).<sup>13</sup> Thus, if a *qasidā* is admired for the order manifest in the rows of its *chaman takhte*, or a *masnawī* for its flowering trees 'of a kind,' the literary merit of each form of creation is sought also in the 'ascent' of *bachan bel* (lit : climbing phrases) - that is, in the heights scaled by phraseology in each flowering *gulshan*. The metaphorical use of *bachan bel* as a measure of literary skills is a commonplace in Deccani Urdu poetry; although the significance of 'word-power' is emphasised through other garden metaphor too. Thus *bachan* may be quite simply the fragrance (*bas*) of the

Flower of Intellect, and it is also the fruit of the Tree of Intellect laden with meaning as the pomegranate is with seeds.<sup>14</sup> In his *Ibrahīm Nāmā* ‘Abdul Dehlawī compares the art of composing verse with the hunter's skill at picking off the deer's musk bag.<sup>15</sup> And Nusratī in a *munājāt* implores God to shower his poetical *Gulshan* and fill up each flower (word) with the rosewater of heavenly *āb* (lit : water; dew).<sup>16</sup>

If, in Deccani poetry, the word is seen arranged in row after row of Persian style *chaman kāri* (*chaman* -making), it is also perceived in the fragrance diffused from the lofty summit of the flower-festooned *mandwā*. Thus, despite his predilection for Persian literature even Nusrati acknowledges that his *Farsi* -styled Deccani verses (of the *Gulshan e’Ishq*) express a blend of both *Hindi* and *Farsi* poetic skills (*Fārsī* eloquence combined with Sanskrit idiom), adding that a complete Persianisation of the essentially Hindi spirit of the work is virtually impossible.<sup>17</sup> It is commonly observed by <sup>specialists in</sup> Deccani Urdu literature that Deccani Urdu poetry is a mingling of two cultural streams and Mohammad Hasan seems to be echoing Nusrati when he writes that 'if the style (*pirāyā*) of Deccani poetry is Persian its *mizaj* is distinctly Hindustani.<sup>18</sup> This perhaps may be said of Deccani Muslim gardens as perceived in Deccani *masnawīs*. Incorporating both the Persian *chaman* and the Hindi *mandwā* they may be expected to provide an image of the Muslim garden rooted in Indian soil.

A *masnawī* - "narrative in rhymed couplets"- may be a considerable poem in several volumes as is the Iranian national epic, the *Shahnāmā*. Although not as extensive, Nusrati's *masnawi*, ‘*Ali Nāmā* (which he calls the *Shahnāmā e Deccan*) is also a detailed *razmiā/bazmiā* (politico-culturo-historical) retelling - a picture of the pageantry of great battles and of the splendour of royal *darbārs* in anticipation or in celebration of military successes. In true loyalty to his Deccan and to his patron, ‘Ali ‘Adil Shāh II, Nusrati records only the successes of the Adil Shahis

against the Deccan's Mughal-Maratha aggressors, ignoring the humiliations suffered. It is the poet's descriptive ability which gives the 'Ali Nāmā essential literary merit; and the same might be said in connection with other Deccani *masnawīs* whatever their subject matter. Relying on description to supply the content of his work, the *masnawī* writer is able to enlarge and perfect the poetical snapshot of the garden which the *qasidā*, for instance, provides. The *qasidā*, as ode or panegyric in praise usually of a royal patron, is decidedly dependant on court patronage. A garden *qasidā* - praise usually of the patron's palace garden - is a poetic form or genre in itself. The *Kulliyāt* of the Deccani poet-sultans (principally those of Mohammad Quli Qutb Shah and 'Alī 'Adil Shah II) are good examples of Deccani *manzar nigari* (Nature description). Typically however the Deccani *qasidā* tends to be part of a long *masnawī*, interjected from time to time in the course of the narrative to break the monotony of its rhythm. Wajhi's *masnawī Qutb Mushtrī*<sup>a/</sup> (written in 1609) and Nusrati's *masnawī 'Ali Nāmā* (of 1665) are examples of *masnawīs* interspersed with *qasidās*. On the other hand, 'Abdul's *Ibrahim Nama*, although a *masnawī* technically, is considered a long *qasida* thematically since it is written in praise of the poet's *jagat gurū*, Ibrahim 'Adil Shah II and is essentially a picture of the 'Adil Shahi court<sup>19</sup>. A Deccani *masnawī*, which may incorporate a *qasidā* or itself be considered a *qasidā* would appear, therefore, as the most appropriate poetic form for a study of Deccani garden description.

*Masnawīs* written in 16th and 17th century Deccan in Urdu - or in Deccani as the poets insist - are classed according to their subject matter and termed (somewhat arbitrarily perhaps) *razmiā* (politico-historical), *bazmiā* (culturo-historical), *ashqia* (romantic), *tamsili* (allegorical) or as *mazhabī* (religious).<sup>20</sup> Nusrati's 'Ali Nāmā of 1665 and Hasan Shauqi's *Fateh Nāmā* (written twenty years earlier) are termed *razmiā masnawīs* since they are concerned, more or less with the military struggles of Deccani sultans with the Mughals one the one hand or

else, as in the case of the latter *masnawī*, with Vijayanagar. However, Ashraf's *Nau sar hār* whose subject is the Kerbala battle cannot be considered a *razmiā masnawī* nor even *mazhabī* (religious). Nor even for that matter is the *Nau sar hār* true *marsiya nigāri*. Rewriting the Kerbala event in the Deccan in 1524, not only has the poet Indianised it wholly (in the way in which all 'stories' originating outside India tend to be naturalised by Deccani poets), he has also altered the essential basis of the Kerbala event by incorporating an 'ashqīā flavour rather in the manner of a Hindi *razmiā* poem. 'Abdul's *Ibrahim Nāmā* (of 1607), illustrative of the 'Adil Shahi court is a *bazmiā masnawī* if also thematically a *qasidā*; and so too is Hasan Shauqi's *Mezbānī Nāmā* which records courtly culture revealed in the description of a royal wedding. San'atī Bijāpūrī's *Qissā e Benazīr* (of 1645) is called a *nīm mazhabī* (semi religious) *masnawī* concerned as it is with the miracles associated with religious preceptors. The poet describes a series of miracles which transport a Companion of the Prophet Mohammad (pbuh) through a progression of - what the poet calls - *maqāmat* (stations). As such the *masnawī* is *takhayyālī* (imaginative), even *matsūfānā* (mystical) in tone or for that matter *tamsīlī* (allegorical).

The boundary between an 'ashqīā and a *tamsīlī masnawī* is even more uncertain. Among the so-called 'ashqīā *masnawīs* in Deccani, Wajhī's *Qutb Mushfīrī* of 1609, Ahmed Junā'idi's *Māh Paikar* of 1642, Nusrati's *Gulshan e 'Ishq* of 1657 and Fa'iz's *Rizwān Shāh Rūh Afzā* of 1682 are stories describing the 'path of Love', its trials and triumphs. It must be added that although Love is idealised as an ennobling experience, it is not the path to God but the means for creating worldly order and harmony. However, Mirza Mohammad Muqīmi's *Chandar-bādan o Mahyar*, based on a contemporary 'love story' involving a Muslim boy and a Hindu girl, is more *tamsīlī* than 'ashqīā. Muqīmi finds Love's essential truth (its intensity and ardour) revealed in the suffering and anguish endured for love. And

since Chandarḥbadan's and Mahyar's true love transcends their mortal death, supposedly, the poet has reason to rejoice in his *mazhab e'ishq* (Love as religion) which overcomes the artificial barriers of caste and creed created by religion and society. Ghawwāsi's *Maina Satwantī*, supposedly adapted from the Persianised version of a Sanskrit tale, is clearly *tamsīlī*. The story of a faithful wife who honours her chastity in her husband's long absence despite overwhelming temptation is clearly too - in its lesson of patience and devotion - an expression of the believer's relations with God. Ghawwāsi's *Tūtī Nāmā* originates in the well-known Sanskrit tale of Sukasaptati, rendered by Nakhsābi into Persian and subsequently into Deccani by Ghawwasi - a process in which the 72 tales related by the parrot to his owner's wife are reduced to 49. The *Tūtī Nāmā* is *tamsīlī* too. The parrot who keeps a woman entertained in her husband's absence preventing her from unfaithfulness could be perceived as the woman's inner voice - and the 72 or 49 tales he relates, therefore, the unending story of man's struggle with temptation. Wajhi's *Sabras* of 1635 is considered among other things as the expression of an inner conflict too and the ways in which it is quelled or resolved. Although the *Sabras* is not *nazm* (poetry) but *nasr* (prose), it is a good Deccani example of *tamsil* - the story itself adapted from Fattāhi's *Dustūr e 'Uṣṣhāq* or from a Sanskrit source. Here, Love and Beauty and the Heart and the Intellect, as also the weaponry and army each is equipped with, are personified. Heart, son of Intellect, falls in love with Beauty, the daughter of Love and, in the ensuing and inevitable war between Love and Intellect, Love is victorious; and order is restored when Intellect submits to work in the service of Love. Wajhi's *Sabras* (All Flavours) written (in 1625) towards the end of his long poetical career is replete with the wisdom of a life-time - a message (of manners and morals) and a gift to all, as the title of the work might suggest. The writer lapses from time to time during the course of his narrative to advise and admonish and precious pearls of wisdom on Sultanate administration are held out even to his patron 'Abdullah Qutb Shah.

Although Love in its association with Beauty is the essential subject of *‘ashqia masnawis*, the conception of Love is of significance in other classes of *masnawi* as well as other poetic forms. Love may be glimpsed in a wife's devotion to her husband (in Ghawwasi's *Maina Satwantī*); in the poet ‘Abdul's praise for his patron (in his *Ibrahim Nāmā*). It is seen expressed as the celebration of desire (in Mohammad Quli's and Shahi's *Kulliyat*); or as the sublimation of desire (in Muqimi's *Chandarbadan o Mahyar*). In Wajhi's *tamsīl*, love is the means to the order of life; in Ashraf's *Nau sar hār* it leads to the chaos of Kerbala.

If the early phase of Indo-Muslim literature (in the Hindi-Urdu vernacular) is seen as Indian Sufi literature,<sup>21</sup> then Old Urdu (as another name for this mixed dialect) might seem a language for the Sufic expression of love and of universal oneness. Reference is frequently made to *Chishtiyā Sufi malfūzāt* (sayings) dating from the 14th century as an example of early Sufic expression in the mixed dialect of the Delhi area. It is also thought that Sufic cultivation of *sama‘* at this time in Delhi fostered the use of Hindi, Dhlavi or of *Khari Boli* (as this mixed dialect was known) for Sufic verses based on traditional themes of Hindu love poetry. Such Sufic verses are credited in particular to Shaikh Hamidu din Nagauri (d 1274) whose poetry is believed to be modelled occasionally on the traditional Hindu theme of separation and reunion of lovers and on the woman's expression of *birāha* (pangs of love).<sup>22</sup>

However it is in the Indianised form of the (Persian) *masnawi* first seen in 1379 in the *Chandāyan* that a foremost example of literary expression in the Hindi-Urdu vernacular is seen. A Sufic reworking of a Sanskrit *prem kahānī* (romance), written in the Eastern Gangetic *Doāb* in the *Āvādhi* variant of Hindi-Urdu, Maulana Dāūd's *Chandāyan* is "the first clearly known major work of Hindi

literature" as also the "continuity of ancient literary traditions in Sanskrit".<sup>23</sup> As an Indian *masnawī* illustrating through Sanskrit-style parable the Sufi's *Prem Marg* (lit : Path of Love), *Chandāyan* also represents the evolution of new literary and religious traditions. It provided the model for S.M.Jāisi's *Padmāvāt* (of 1520) and for Shaikh Qutban's *Mirgavati* (of 1503). Written in Eastern India in *Āvadhī* both are stories about Love which as a dangerous pilgrimage involving sacrifice and offering and purging of impurity ends with the lover's "death unto God". Saiyid Manjhan Rajgīrī's *Madhumālātī* (written in 1545) is also about the savour of mystical love, a Sufic reworking of the story of Malati and Madhavi as told by the 8th century Sanskrit dramatist Bhavabhūti or as related in the Sanskrit *Kathasaritā sāgara*.<sup>24</sup>

These North Indian *masnawīs* may be seen as the product and expression of a composite medieval Indian culture<sup>25</sup> - towards which not only Sufi *silsilās* contributed but also *bhaktī tahrik* (the medieval Hindu devotionalist movement). As one of the many faces of *bhaktī*, "the cult of ecstatic devotion" for Krishna (Krishna *bhakti*) was popular in South India long before its scriptural basis was provided in 1000 BC in the Sanskrit *Bhagavat Purāna* (which narrates the life of Krishna). In addition to Krishna songs or narratives on the Krishna-Radha theme (in the *Brāj bhāsha* vernacular), an aspect of *bhakti* is seen also in the efflorescence of vernacular poetry inspired by devotion for the deity Rama (and referred to as Rama *bhakti*). While the vernacular literature of *nāth saivās* (who expressed the devotion to Siva in *Khari bolī* and the mystical literature of *sānt* (the good, the holy) poets, who expressed their devotion in Hindi to the Nameless and Formless One, may be seen as other faces of *bhaktī*<sup>26</sup> and as homogenising factors, too, whose influence on Indian Sufi literature was inevitable. For to the *sānt* poet as to the Sufi poet, the signs of God were

everywhere and if Sufi *zīkr* (remembrance) was the recourse of all, so too was the savour of *bhaktī* (devotion).

The story of Old Urdu's linguistic and literary development is incomplete without the mention, for instance, of Masud Sā'īd Salmān (d 1121) the Ghaznavid poet's *bārā māsās* in Hindī<sup>v</sup> which he is believed to have written in Lahore; or the reference to Amīr Khusraw's (d 1325) use of Dehlawi or Hindi to voice the Indian dimension of his life.<sup>27</sup> As such the contribution of non-Sufic literature on the literary development of Old Urdu needs to be considered and acknowledged. However, as a literary form based on the Persian *masnawī* and acknowledging both the formal and popular aspects of native Indian literary traditions, the North Indian Sufi literary romance would appear to be the best record of the nature of influences operative on the literary development of Old Urdu - and it is a direct forerunner of the Gujjari and Deccani *masnawīs* of its kind.<sup>28</sup>

The early surviving works in the Gujjari variant of Hindi-Urdu include the writings of Shah 'Ali Jeogām Dhanī, Shaikh Bahau<sup>d</sup>īn Bājan and Qāzi Mahmūd Daryāī, all of whom were renowned Sufis of Burhanpur or Gujrat in the 14th and 15th centuries. Of the Deccani Sufis of this time, both Miranjī Shamsul. 'Ushshāq (1498) and his son Burhanu<sup>d</sup>īn Jānam professed their use of Gujjari too for some of their Sufic works, although their Gujjari is not seen as substantially different from the use of the Deccani vernacular in the Sufic works attributed to Khwaja Banda Nawaz Gesū Darāz ('Of the Long Locks'), the Deccan's most revered Chishtiyā Sufi.<sup>29</sup>

Like Nagauri's Sufic verses written in Rajasthan in the 13th century, Sufi poetry in Gujjari is found to be coloured by the *dohās* and *pādās* of Krishna devotionalism, Love being described in terms of the *birhan's* experience of *hijr*

and *firāq* (separation) from her beloved. In Daryai's verse, the beloved is usually the *gopī's* Krishna although occasionally seen too as *Husn e Haqīqī* (Absolute Beauty). Moreover, just as the colloquial speech of Old Delhi was used for verses to be sung in Delhi's *khānqāhs* (as is thought) so, too, the Gujjari vernacular was used to compose *jakariān* in select *rag* and *ragini* (musical modes) for Sufi *samā* in Gujrat. Technically, as a class of poems in rhymed couplets, *jakariān* (from *jakr*, the Gujjari equivalent of *zīkr* or remembrance) were similar to *masnawīs*. However, thematically - expressing relations between Love and Beauty - they were more like *ghazals* (lyrics) and described, in the manner of Persian *ghazals*, the ardour of the lover, the indifference of the beloved, the desire for *didar* (glimpse), the longing for *wasl* (union).....<sup>30</sup>

A characteristic feature of the *Avadhi* Sufi romance (of which *Chandayan* is said to be the earliest example) is Persian-style *ṣrāpā nigārī* (top-to-toe description) and Hindu-style *nakh shikh* (its near equivalent). Through the use of *sarāpā nigārī*, the Sufi poet provides a glimpse of Beauty (or rather more than a glimpse, perhaps). *Ṣrāpā nigārī* was popularised by Deccani Sufis too, an early example being Shamsu U<sup>sh</sup>haq's *masnawī*, *Khushnaghz* or *Khushnama*. A whole Sufic poem could be devoted, in fact, to the description of the beloved, such as the Deccani *Mahbūb ka Sirāpā*, attributed to a much revered Qadiriyyā Sufi, Syed Miran Shah Abul Hasan Qadrī (d 1635), where the description of the jewelled ornament of women is used by the poet as a *misāl* (example) illustrating the 'ornament' of virtues. But while the *tamsīl* of the beloved's *ṣrāpā* may be seen as an all-time literary device (in Persian and in the Indo-Muslim vernacular), to the Deccani Sufis daily life itself furnished a variety of examples through which Sufic instruction could be imparted. As Abul Hasan Qadri's *masnawī Ānkh Machāli* or *Sukh Anjan* (of 1634) suggests, a Sufic point of view could be understood in the children's game Blind Man's Buff.<sup>31</sup> And as the proliferation of Deccani *Chakī nāme* and

*Charkh nāme* might indicate too, the endless chores of spinning, grinding or drawing water in which women were engaged daily could also be subjects for Sufic poems - to be sung by women, moreover, at their daily grind.<sup>32</sup>

Literature in Old Urdu is viewed as a phase of Muslim literary history, naturally too. It may be seen as offshoot of the *Sābḳ e Hindī* School or as the revival of the Iraqi-style - and as such as the Impressionist or Mannerist stylising of poetry in Old Urdu.<sup>33</sup> The Indo-Muslim courts, especially the Deccani Muslim court, provided many opportunities for the stylistic development of Old Urdu which was as important in the Deccan as Persian as a medium for literary expression. Wajhi's *Sabras* in Deccani prose, for instance, is thought to be styled after the Persian preface of the *Kīṭāb e Nauras* written by Ibrahim's Persian court-poet, Zuhuri.<sup>34</sup>

Although North India's cultural links with the Muslim world across the Hindu Kush preceded the rise of the Bahmani State, once established, Bahmani Deccan too set about to strengthen similar cultural ties. The wealth of the Deccani court may have lured Perso-Arab literati and political pressures, it is thought, also forced out soldiers and sufis from the Iranian regions drawing them to North India and to the Deccan. The Persian poet, Salim Tehranī (of the so called *Sābḳ e Hindī* School) had some such reason for migrating to the Indo-Muslim court, for, in his *masnawī Shirīn o Farhād*, he declares that

In Iran the palate of my soul has become bitter  
I must hie me away to Hindustan

where all the "sugar-chewing ones of parrots tongues have sought shelter."<sup>35</sup> Ships and invitations, of course, also brought eminent men of letters from the Persian Gulf to the Muslim courts in India. The invitation to the Bahmani court extended to the Persian poet Hafiz speaks of the regard in which Persian poetry was

held - although the Bahmani ruler's invitation failed to bring Hafiz in person, only his *ghazal*.

Together with Hāfiz's mystical verses, the Deccan received stories of romance and adventure popularised in Persian and Arabic poetry, including Nizāmī's version of Laila and Majnūn and (eventually) Jāmī's version of Yūsuf and Zulaikhā. These or other accounts were adapted into Deccani and inevitably Indianised. An early example of a Deccanised Laila and Majnūn is that credited to Shaikh Ahmad of Mohammad Quli's court. Ahmad's son 'Azīz also wrote versions of Yusuf and Zulaikha and Laila and Majnūn (in 1634 and 1636); and Hashmi's *masnawi Yūsuf o Zulaikhā*, written in 1687, is said to be a wholly original account adapted from the Quran. In the same way, stories in Persian arisen in the Arabian Nights or spun around Sassanian 'heroes' were adapted to the Indian environment. Bahram Gur's romance, for instance was rewritten at the Golconda court by Malik Khushnud as *Hasht Bihisht*; Taba'i adapted Nizami's *Haft Paikar* in his *Bahram o Gul Andām* (of 1675); Ghawwasi's *Saif al Mulūk wa Badī' al Jamāl* is the Indianised version of a tale from the Arabian Nights written in Persian; and Fa'iz's *Rizwān Shāh Ruḥ Afzā*, likewise, based on a story in Persian. The promotion of cultural links with Timuṛid or Safavid Iran brought back many Sanskrit works translated for Muslim courts outside India. Among these, the Tales of the Parrot (Persianised as *Tutī Namā*) and *Kalilah wa Dimnā* (rewritten in Persian as *Anwār e Suhailī*) were rendered available too for their translation into Deccani. Moreover, in continuity of the traditions set up at 'Abbasid Baghdad, Indian Muslim rulers patronised Persian and Deccani translations of Sanskrit epics and of the Vedas.<sup>36</sup>

While a *bhakti* reappraisal of Sanskrit epic, parable and *prem kahānī* (romance) tends to be acknowledged as a major influence on Old Urdu poetry, relatively little significance seems attached to the Hindu's rediscovery of classical

Indian theories of poetics and rhetoric - and the effects that this renewal of *srngar* and *nayika bhed* literature had upon Indo-Muslim *masnawis*. Hindu works, describing classes of lovers, the range of possible love situations and the moods of love, were patronised at the Gwalior court. They were patro<sup>n</sup>ised by Hindu rajas in the service of the Mughals too and by Hindu feudal lords of the Deccan. We know also that Muslim rulers themselves extended patronage to many a *Rasamanjari*, a *Rasakapriya* or a *Srngaramanjari* - and to other such works of Hindi *riti-kal*. Mohammad Quli's sketches of his twelve (or more) favourite mistresses<sup>37</sup> or Ibrahim Adil Shah's songs and dohas in his *Kitāb-e Nauras*<sup>38</sup> both bear the imprint of this portrait of Hindu culture. Little is said too of Krishna songs or *padas* concerned with particular rites or festivals; although Mohammad Quli's *nazm* and *qasida* describing the merriment at Basant or Barsat, or 'Abdul's description of the advent of Spring in his *Ibrahīm Nāmā* are clearly aspects of such Hindu poetry in the vernacular.

Given their range of subjects, their blend of literary traditions, their emphasis on description (frequently on *manzar niḡari*) and given too the descriptiveness of *masnawī* writers, Deccani *masnawīs* are the portrait of a composite culture - a collection of images centered on the Deccani court if one is to consider court patronage of *masnawīs*. If, as a whole, Deccani *masnawis* would appear to illustrate Sufic perceptions, Deccani romantic *masnawis* (as for instance Wajhi's *Qutb Mushtri*, Nusrati's *Gulshan e 'Ishq* and Fa'iz's *Rizwān Shah Rūh Afzā*) may be seen as reflection of a Deccani cultural *mizāj* too. A romance adapted from Shaikh Manjhan's 16th century Hindi version of the Sanskrit Manohar and Madmalati, or from its Persian version as *Mehr o Māh* written by 'Aqil Khan Razi Alamgiri in 1065 AH,<sup>39</sup> Nusrati's *Gulshan e 'Ishq* is the story of a prince who dreams up his love for a princess far away - and his relentless efforts to attain his goal. While Nusrati would seem concerned with the experience of the spirit, prince

Manohar, the key figure of his story, gains this experience at the surface of life, overcoming the tangible obstacles in Love's path rather than by dissolving the thorn in his heart. As such even if an allegorical interpretation is made, it cannot be denied that it is the aspect of the external world and the prevailing cultural values which receive essential emphasis. If a lesson is to be drawn from the *masnawi*, it is summed up in Nusrati's couplet:

*mile jab yo Zohrā jo wo Mushḥri<sup>ā</sup>  
diwe jag kūn it sād tab behtari<sup>40</sup>*

Or, prosaically, when Jupiter and Venus are brought together (or as Qutb and Mushḥri<sup>ā</sup> in Wajhī's *masnawī*), the world holds greater promise of prosperity. Love being accepted by the poet as the key to life, its dream, its quest, its fulfillment and its immense power to transform the world is theme and background, naturally therefore, to what is essentially illumination of the 17th century Deccani court : the spectacle of royal celebrations and festivity, of attire and ornament, of palace architecture and gardens.

Although the flavour of a Deccani garden may be sought, rightfully, in a Deccani 'ashqiā *masnawī*, much would appear to depend upon the descriptive ability of the writer of 'ashqiā *masnawīs*, particularly on the writer's skill at *manzar nigāri* (Nature description). Bijāpūrī poets like Nusrāfi, 'Abdul or Sanā'ū who excel in *manzar nigāri* demonstrate this ability in all classes of *masnawī* as 'Abdul does so in his *Ibrahim Nāmā*, Sanā'tī in *Qissā e Benāzīr* or as Nusrāfi himself demonstrates in his 'Ali Nāmā). Like his Persian contemporaries at the Bijapuri court (as for example Zuhuri) and true to the *Sābk e Hindī* style, Nusrāfi relies on an original conception of imagery, on a keen sense of observation, on simile, metaphor and hyperbole <sup>41</sup> to adorn his *gulshan* and *Āinā khāneh* (*Halls of Mirrors*). Nusrati's landscape paintings may be termed Impressionistic but the poet paints impressions of his Indian environment rather than impressions of the *gul* and *bulbul* of an

imagined Iranian landscape. Moreover, a sense of consistency prevails in his masnawi descriptions and whether supplying details of garden plants, of palace architecture and its furnishings, or of attire, the most sustained, recurring impression is that of a fragrant, an illuminated, world created through metaphors of light.

As a sort of prelude to his love-narrative, Nusrati relates the circumstances in which Manohar is born to a childless king and queen after their long wait. Before he can be blessed with a son the king must first, in *nāth yogi* fashion, live in solitude in a forest practising penance and burning desire. And then a long lesson in patience follows at the garden of a derwish in the forest deep before the king can claim the fruit of the derwish's garden laden with fertilising powers. This prelude provides Nusrati the opportunity to describe the king's moment of respite in a forest garden<sup>42</sup> perfumed with *agar* and *chandan* trees and illuminated with fairies in a pool. Nusrati also describes the garden of the Derwish (of the Illuminated Heart) where the pools and water channels are filled with wine, the lotus buds are *champāi* (golden) perfume bottles, the trees and their birds drunk with joy.<sup>43</sup>

This prelude is followed by descriptions of courtly celebrations when the prince Manohar is born and when he attains maturity. A dream-like sequence of the king's palace on a moonlit night follows next as an appropriate setting for the descent of fairies on the palace roof top where the prince Manohar lies asleep. Enveloped in a jewel-encrusted veil, its terraces shimmering like *abrak* (mica) and its garden flowers like china cups filled with the milk of moonlight, the king's palace to the flying fairies is a perfumed mountain (*mo'ambar jabal*) drenched in light - an illusion far better than the reality of the heavens it mirrors.<sup>44</sup> And as the prince slumbers, fairies carry him away to the *shabistān* (chamber) of the princess Madmalati who lives in distant Maharsanagar. Here follows a long description of palace architecture and an exercise in *sīrāpā nigārī* - or perhaps in an Indian *nakh*

*shikh*, for the Indian princess must be described in relevant terms. And so, for instance, above her dawn-bright forehead the gleam of pearls lining the hair parting is an unfathomed mystery. The princess's nose is a *chamṡā* bud, her tongue is a *gulnar* petal; her teeth are pomegranate seeds; her mouth is a wine-cup; her cheeks are gold-sprinkled pages; her chin rounded like a Samarkand apple. Her arms are lotus stems; her fingers are a cluster of *sowan* bananas; her finger nails redder than lady-birds. Her plaited hair is the Ganges river; her *rumāoli* (the line of down on the stomach) is the Godavari; her thighs are banana stems; her stature like the sugarcane; her walk as graceful as an elephant's....and so on.<sup>45</sup> The prince and princess fall in love but the fairies, having completed their mission of linking the destinies of the two, are obliged to return the prince to his palace. Therefrom begins the love-lorn Manohar's quest for Madmalati in Maharashtra - his quest that is for the savour (*rasa*) of Love, Madmalati being the name of a beautiful tropical Indian climber (*Aganosma caryophyllata*), Maharashtra being the city of *rasa* (juice). Manohar travels through summers of fire and winters of ice, through the all-pervading darkness of dense jungles (with their imprisoning Love-knots of vegetation) and through burnt wastelands. Ultimately, assisted by Champavati - a friend of the princess Madmalati who he rescues from the hold of a djinn (from the djinn's palace at the edge of the wasteland) - Manohar meets Madmalati in a garden (the *Farāh Bakhsh* or Joy-Bestowing garden) described lovingly by Nusrati as the Garden of Union (See Appendix 8.1).

Its beds (*takhte*) illuminated by the fire of *gaird makhmal* (African marigold) and *gul e aurang* (globe amaranth); with *kalghā e ātishī* (*Celosia cristata*) and *lālā* (poppy), the garden of a Love entangled in the Knot of Beauty is Nature adorned and perfection itself. The love-filled fragrance of its *madan ban* bush (*Artabotrys odoratissimus*) is more intoxicating than wine; the brilliant red of its *sankesar* flowers (*Mesua ferrea*) is brighter than henna-dyed fingers; its *gul e*

*chānd* (moonflower<sup>46</sup>) is the envy of the moon, its *gul e sūr* (sunflower<sup>47</sup>) the envy of the sun. The fragrant knots (racemes) of its fields of *raihān* (a species of basil<sup>48</sup>) are more enticing than the beloved's curls, the fragrance-diffusing spike of the *keorā* (screw pine) is a comet's tail<sup>49</sup>; the line of *sarw* (cypresses) along the walks is the line of *hourīs* (in Paradise).....The garden's *phul mandwās* (arbours)<sup>50</sup> are spun and woven with flowers, the (blue) waterlily-filled pool of each *chaman a mīna* -filled<sup>51</sup> silver tray The plots dense with trees are green velvet canopies (*mandap*) below which the ground is a page of green sprinkled alternately with silver and gold. And as if to celebrate the occasion, the moon has gathered the colours and fragrances of the flowers to adorn each bird - the sandalwood of *shab e gush* (tuberose<sup>52</sup>), the aloewood<sup>53</sup> of *bed mushk* (musky willow), the ambergris of *raihan* and the rosewater of flower buds. As for the fruit garden, it is filled with fruit trees from the tropical as well as the temperate zones. There are apples (*seb*) and quinces (*safarjal*), jujube (*ber*) and grape clusters (*angur*), fig (*injir*) and mulberry (*tūt*), almond (*bādām*), walnut (*akhrot*) and pine nut (*chilghozā*). There are mangos (*naghzak*) and bananas (*mauz*), *jāman* and *jām* (rose apple); oranges (*narangiān*) and citron (*jhamberiān*), lime (*nībū*) and *kamrakh* (the ribbed fruit). And jack fruit (*phannas*) and pineapple (*annas*) and sugarcane (*neshkar*) besides. And *tendu* and *duryan* and others of the kind.<sup>54</sup>

But this dream-like world of the Garden of Union melts away all too soon for clearly the lesson of Love's longing is not over. When Madmalati is transformed into a *tūtī* (parrot), the bird of love flies away, as it were, from the lover's heart and he must wait now - as Majnūn the half-crazed victim of his love - until the *tūtī* is brought back to Maharashtra and restored to its human form. Madmalati's saviour is Chandarsen, prince of the kingdom where the bird flies away.

Meantime, the *Farāh Bakhsh* Garden of Union has all but withered away reflecting the state of suffering of the separated lovers. The flower beds have lost their lustre; the wine-cup of the *bhuīn champā* (lit: ground champa) lies shattered; a few limp, lifeless leaves hang perilously in the exhausted trees; the winds are hot, the skies steamy, the pools and *bāolis* empty. The impression of a lost Kerbala battlefield which the poet creates - with images of fallen maces, standards and scaling ladders; of broken lances and spears and rent parasols; of strewn banners and tassles - is infact the dry, dust-laden aspect of the garden at the height of a Deccani summer when, poetically, the world's governing star is Saturn in place of Jupiter.<sup>55</sup> (See Appendix 8.2)

Eventually, the lovers are united as indeed they must be - and as if to illustrate the flow of harmony from this perfection of Love, Nusratī concludes his *masnawī* firstly by describing the wedding of Madmalati's friend (Champavati) with Madmalati's saviour (Chandarsen); and secondly by relating the story of Manohar's return journey (with his bride) to his rightful place in his kingdom.

The last quarter of the *masnawī* (following the return of the *tūtī*- princess to Mahārasanagar) is taken up by a series of descriptions. It includes details of the splendour of a palace constructed as a setting for the wedding festivity of Manohar and Madmālāti.<sup>56</sup> It includes the description of a memorable feast prior to the wedding day where the spread *kandūriān* (floor spreads) are colourful *chamans* and each item of food assumes an aspect of the *phulban* - this being an opportunity too to refer to garden plants hitherto not mentioned, including a variety of culinary herbs, gourds and other garden vegetables.<sup>57</sup> Thus, for instance, the slices of beetroot (*chuqandar*) are pink lotuses; the (white) brinjal halves are cups of *bhuin champā* (ground champa<sup>58</sup>); the mince-filled *karelā* (bitter gourd<sup>59</sup>) bound with string is the *kākanj mandwā*<sup>60</sup> The chopped *turā*<sup>61</sup> around the piled-up qubūlī (rice

with lentils) is like the *kaddū* (bottlegourd) *mandwā* and like the *chachūndā* (snake gourd<sup>62</sup>) *mandwā*. The layer of clarified butter (*rakībī ka ghee*) is the garden's green covering of dill (*soyā*) and fenugreek (*methī*); the aroma of coriander (garnishing) recalls aromatic *donā* and *marwā* (species of Artemesia); the fragrance-filled betel leaves recall the *keorā ban* ...

The feast Nusrati describes is followed by song and dance entertainment. Finally, Nusrati provides details of the wedding day itself, beginning with the bride's toilet.<sup>63</sup> Attired in red and silver, perfumed and fumigated and ornamented with jewels, the radiant bride is the garden of the evening sky glimmering with stars and spheres. The black rings of her musky *tilā* (forehead pendant) are as though Saturn; her *sunbul pattiān*<sup>64</sup> (lit: hyacinth bands) as though Jupiter. Her fragrance of *zavād* is as though Venus; the rouge on her cheek as though fiery Mars; the turquoise clouds of *baramkī* perfuming her hair as though Mercury. Her rounded face is the moon drenched in *chūā*, the sun its saffron hue.<sup>65</sup> There is also the description of the wedding procession through a bazar lined with women waving *ārtis*<sup>66</sup> and others singing songs, the palanquins heralded with the golden cypresses of lamps (*hilālān*) and waving tree branches; with fans, banners and incense censers; while rockets and starbursts, whirling *keorās*, pomegranates and *bhūin champās* add to the joy of the occasion.<sup>67</sup> Nusrati describes the *Arsi musaf* too when the sun and moon are separated by the bright veil of the Day and he concludes his wedding description with the vision of the Bride's Unveiling.<sup>68</sup>

The description of Chandarsen's and Champavati's wedding at the conclusion of the *masnawī* is another opportunity for *śrīrāpā nigārī*. And another opportunity, too, for the description of a large pleasure garden where Chandarsen catching his first glimpse of the radiant Champavati on a garden *hindolā* (spying her through a shrub thicket enclosing the garden) is struck by Love's arrow and lightning bolt.

With its rows of lily and tuberose, its beds of poppy, African marigold, globe amaranth and chrysanthemum; with its fragrance-diffusing trees (*chamṡā*, *molsary*, *surpan*, *sankesar*<sup>69</sup>) and its fragrance-diffusing shrubs (*donā* and *marwā*, *jāi* and *jasmine*<sup>70</sup>), its flower-filled *ākās bel*<sup>71</sup> and its *kamūdi kanwal*<sup>72</sup>, the garden of Champavati and Chandarsen 'colours the sight and perfumes the heart' like Nusrati's *Farāh Bakhsh Bagh*.<sup>73</sup> (See Appendix 8.3). But like *Koh-e Tūr* (the Mount of Moses) it rises up in flames in that one glimpse of Champavati and as if suggesting too how perception, charged with colour and perfume, is sharpened, Nusrati brightens up his earlier image, comparing the varieties of floral inflorescence now with the aspects of stars and spheres and drawing attention to the flaming torches of *kesu* trees (*Butea frondosa*), the glowing tiers and bands of *gulchin* (*Plumeria* sp.) and to the dense smoke of the *sunbulistān* (hyacinth field)<sup>74</sup> (See Appendix 8.4).

Nusrati's masnawi '*Ali Nāmā*' written eight years after the poets' *Gulshan e 'Ishq* is concerned mostly with his patron 'Ali 'Adil Shah II's struggle to safeguard Bijapur against Mughal and Maratha military aggression. It is a retelling of battles, of their prelude and aftermath. Images of armies on the move, of battles in the Ghat forests are interspersed with scenes of royal assemblies in preparation of battle or of State celebrations following military successes. It would seem natural that Nusrati should have sought to emphasise the strength and splendour of Bijapur State at a time when the State's political existence was under threat. The attention lavished on Bijapur's gardens symbolising as it were the hopes of the State is understandable too. The poet praises the fertility of the Bijapur land referring to its numerous brimming *hauz* and *bāolis* - their depth and clarity of water;

the diversity and abundance of the produce of the gardens and their extent. As might also be expected there is much praise of familiar garden plant species of the poet's homeland - of coconut (*naryal*) and betel nut palms (*fofal*), or of standing ricefields (*shālu*) which the poet compares <sup>respectively</sup> with the Oriental plane (*chinār*), the cypress (*sarw*) and with fields of watermelon (*pāni kulangriān*) much admired by the Mughals.<sup>75</sup> There is the opportunity too for description of a garden landscape in winter (when the trees are assaulted by bullets of dew, the pools are sheets of crystal and the garden having drunk of infertility wears the blue robe of mourning).<sup>76</sup> And the passage of the 'Adil Shahi armies through Malabar forests provides opportunity for description of bamboo thickets and of forested landscapes. A forest garden near the Badnur fort (fiercely contested between the Marathas and 'Adil Shahis) is described, where the poet discovers fragrant sandalwood and *darchinī* trees (*Cinnamomum zeylanicum*); rose apple (*Eugenia jambos*) and *jāman* (*Eugenia jambolana*), *phannas* (the jack fruit tree), *bhilāwā* (the Marking Nut tree), *harrāh* (the myrobolan tree) and *taindū* (a species of Diospyros) apart from groves of *rāi champā* (*Michelia champaca*)<sup>77</sup>.

As in the *Gulshan e 'Ishq*, there is the tendency to relate garden descriptions to their context, Nature adorning itself, as it were, to celebrate the achievements of man. When the young 'Adil Shah is crowned, crests, wreaths and garlands ornament the *phulbārī*, *chaman takhte* and *keorā ban* and the fragrance of each flower, simulating man-made fragrances, is rendered even more exquisite (See Appendix 8.5). In the moon-washed garden, it is as if light itself is the sprinkling of fragrant 'abīr from the casket of the moon. The opening buds of the moonflower unfold their mystery of *chandān*; the henna flowers diffuse the fragrance of *mehndī*; the *jūī*

(*Jasminum auriculatum*) is as if scented with *Gul e Molsary* (*Mimusops elengi*), the *chamṡā* with musk. The (catkins of the) *bid muskh* (musky willow) are ambergris-perfumed candles; the *raihān* (basil) is the fragrance of (dry) ambergris. The dew-bright *karn phūl* (clove flower) is as if revived with rose water and rose water, too, are the scent bottles of lotuses.<sup>78</sup>

Similarly, the world of the garden is reborn - a picture of youth and spring-time and hope-when the sun-like sultan appears at a State assembly. (See Appendix 8.6) Under the sheltering parasol of this sun, the garden trees stand erect and proud once more, filled with heart-like buds or bosom-like fruit, or garlanded with climbers as the *champa* tree (*Michelia champaca*) garlanded with the *chambeli kī bel* (*Jasminum grandiflorum*) The flowers of the *chaman* are red and sparkling and aromatic herbs and shrubs (such as the basil) sprout and spread once more, filled with the fragrance of love.<sup>79</sup>

There are numerous other occasions for garden description in the *‘Ali Nama*. When the Shah holds a darbar prior to the Adil Shahi battle with the Maratha chief, Jai Singh, the casket (*darjuk*) of each garden bursts open (with joy) to reveal the face of the *Mahbūb* or Beloved (See Appendix 8.7). The garden’s central canal being her hair parting, the walks across either side are the *Mahbūb’s sunbul pattiānī* (lit: hyacinth bands)<sup>80</sup>. The curls of the rampant *raihān* (basil) are her coiled-up hair; the garden chrysantemums (along the walks) the flowers in her hair (*sis phūl*) The beds of *gul e Aurang* (globe amaranth) are the brilliance of her forehead pendant (*tīkā*), the clusters of *asgand* flowers (*Withania somnifera* ?) her pearl strings. The pendulous *sirna* (Abutilon) flowers are her *jhumkas* (cone-like ear pendants); and, likewise, the globose clove buds (*gul e qalanfar*) are her *karnphul* (lit; ear rings) with *champa* buds as their pearl fringes. The shade and shine of garden pools is the

*dhup chāon* (lit: sun and shade) of her *chādar* (veil); the yellow flowering jasmine bush is the flower-woven veil over her bosom. The Beloved's face is bright with dew, her eyes lined with the *anjan* (collyrium) from the violet's pot, and her beauty, as it were, reflected in the rounded *gul e chānd* (moon flower) transformed into a polished mirror. The fragrant *madan bān* (*Artabotrys* sp) is as if numb and paralysed by the *Mahbūb*'s beauty; the fragrant *molsary* flower (*Mimusops* sp), oozing drops of fragrant oil, is as if entranced. As if illuminated, too, the apples in the fruit garden are (become) clear drops of water, the grape clusters are rows of lanterns; the pomegranates are ruby caskets and the *jamans* are sapphires. Each *āmb* (mango) pitcher is filled with *Āb e Hayāt* (the Life-Bestowing water); each *jam* (rose apple) brimming with rosewater; each ripening *anjir* (fig) dripping honey; each orange and citron an *amritphal*. And the poet goes on. There are banana clusters too (each cluster of five as delicate as the *Mahbūb*'s fingers), as well as the treasure chests of *phannas* (jack fruit); and sweet and sour peaches besides; while the standing ricefield is like a saffron *sherbet*, the clear water it holds a pot of yoghurt (*dahī ki handī*) or a tray of *firni*.<sup>81</sup>

Other garden descriptions of the 'Ali *Nāmā* are as detailed and, as in other Deccani *masnawīs*, elaborated with metaphors drawn from the illuminated world of the palace and the worlds it mirrors. Beds of flowers are trays of saffron, *lāc* or jewels (*ratan ke tabaq*) or sheets of fire. Flowering trees are fragrance-diffusing mountains (*khusbūn ke pahār*) or lamps with branched candlesticks; or adorned maidens. Their flowers and flower buds are cups and goblets, candles and caskets, gems and stones - to perfume the heart and to colour the sight.<sup>82</sup> Lotuses and waterlilies may be seen like incense censers amidst clouds of 'ūd-black bees and moths;<sup>83</sup> or like silver candle-

filled platters (*artis*) behind a veil<sup>84</sup>. The grape *mandwā* is illuminated with lanterns, invariably; and the *phūl bārīs* and *phūl mandwās* (usually) spun and woven with floral tapestries. The garden itself, filled with perfume and the colours of light can become the perfumer's casket (*attār kā tablā*) - or, in summer, a cup filled with cooling sandalwood.<sup>85</sup>

There are metaphors drawn from the battlefield as well. The flower, occasionally, is a shield, the flower bud a mace.<sup>86</sup> The *keorā's* fruit is mace-like and *rāi champā* petals are curved dagger<sup>87</sup> The tree-entwining forest climbers (*ishq paichās* or Love's knots) with their racemes of red flowers are evocative of blood-stained scaling ladders and the red foliage of Celosias (*kalghi ke pāt*) reminders of blood-stained shields.<sup>88</sup> As is common in *masnavi* description, a distinction is made (in the '*Ali Nāmā*') between the flower garden and the fruit garden, their descriptions usually followed with accounts of birds attired in the colours of flowers. There are pigeons, doves, cockatoos and parrots; herons and cranes, ducks and geese; painted partridges and Indian cuckoos; peacocks, quails and teal of many different species. The birds, invariably are drunk with joy and reciting *kalām* (verses), or intoxicated lovers, each like a storm within a heart.<sup>89</sup> Most garden descriptions in the '*Ali Nāmā*' following upon the description of the Shah's palace-court, would appear to be accounts of the large pleasure gardens within the city of Bijapur, those outside the walled precincts having been destroyed, according to the poet, following the threat of Mughal siege of Bijapur.<sup>90</sup>

'Abdul Dehlavi who calls his language Hindavi and himself Dehlavi expresses a frank ignorance of '*Arabī*' and '*Ajamī*' masnavis. His long *qasidā* on Ibrahim 'Adil Shah II (*Ibrahim Nāmā*) is the poet's attempt to carry out his patron's request for an original work (*nawī bāt mazmūn kar ke kitāb*).

Written seventy years before 'Ali Nāmā at a time when Deccani was still in the process of evolution, Ibrahim's work lacks the eloquence and fluidity of Nusratis *masnavīs* and is permeated with Hindi loan words, allusions to Hindu gods and the *bachan pūjā* (worship of words) which characterises Sanskrit poetry, apparently. All the same, it is a rare portrayal of Ibrahim's Bidyapur (City of Learning), another name for Bijapur (or Vijayapura - City of Victory) which had come into use at the close of the 11th century.<sup>91</sup> Beginning with accounts of the might and splendour of Bijapur's citadel (Ark Qila), the teeming life of the town's bazars and the glittering palaces of Nauraspur (the town which Ibrahim founded), Abdul follows up with a sequence of images supplying details of Ibrahim's army - his mountain-like elephants, his camels and horses, his *sikhedār* (army chiefs) and soldiery. The Shah's patronage of learning and music are revealed in accounts of *majālis* at the palace court when *jot diwe* (lamps) scatter musk and ruby in the *āngan* (terrace) and, in the haze of incense, the *angan* trees are as if star-filled, the palace moon-like, while women in colourful attire (*lāl, pīlā, surmāī, māvī, kunjānī, zā'frānī, ajal, haryā*) diffuse the seventy two fragrances of *kadam* (*kadam bās bāwan*) which fill up the skies.<sup>92</sup> The *masnawi* concludes with an account of the Shah's birthday celebrations, with scenes of *nauras* and *bad parkash* songs and the performances of dancing girls.

As the eight-branched tree whose canopy is the sky and whose fruits and flowers are the sun and moon and stars,<sup>93</sup> 'Abdul's *jagat gurū* is the ideal king whose fragrance pervades heaven and earth, reaching the angels above and diffused on earth to the far limits of the forest (*ban*). It is in this context of the Shah's virtues that 'Abdul further enlivens his *masnawī* with a memorable description of Spring.

Stirred up (from their winter slumber) by the wind which bring them the fragrance of 'royal' virtues, the forest trees will not rest until they have seen the Deccan's Shah; and maddened with his thoughts they cast off their clothes and shake off their ornaments. The god of Spring, *Basant Rāo* sends his physician-bees (*tabīb-bhanwar*) to examine the forest trees, to feel each pulse and vein and ascertain the cause of their distress. When the *bhanware* report to *Basant Rāo* that the withered (winter) trees are suffering from the malady of love whose cure is not *dārū* (drug) but *ḍīdār* (glimpse), *Basant Rāo* decides to take his army of forest trees for a visit to the Deccan's Shah. Accordingly, the *koel* (Indian cuckoo) is summoned to announce these plans and each forest tree leaps up with joy, its flags and banners flying.<sup>94</sup>

Here follows an account of *Basant Rao's* travelling army (See Appendix 8.8). Of swaying elephant-like *āmb jhār* (mango trees) decorated with flowers and bell-strings (*ghungrū mālā* being a reference to their fruit), the hordes of nectar-drinking moths and bees as if their riders. Of trains of camels - that is, the *tār jhār* (fan-tailed palms; *Borassus flabelliformis*); and of rows of horses - that is the *mār jhār* (fish-tailed palms; *Caryota urens*). There are *nālīr jhār* (coconut palms) as well holding green parasols (*chhatriān*), their fruit clusters like parasol tassles (*phundne*). And *phannas jhār* (*Artocarpus integrifolia*) too, firmly holding on to their jars and pitchers (*kūzdān*) The *kele ke jhār* (banana trees), their foliage (*pān*) blown by the wind, are flags and banners and the lines of upright *sarw ke jhār* (cypresses) are lines of lances and spears. There are references to swaying *kajhūr jhār* (date palms) and rows of *imbliān* (tamarinds) may be seen too, their pods as though the twisted iron bars (*ankas*) held by elephant riders. Dispersed among these rows and ranks are the *pāidal jhār* (Indian trumpets; *Stereospermum* sp.) announcing the moving

army, as it were, with their falling leaves. And, similarly, the flaming *anār jhār* (pomegranate trees), with their flowers strewn around them are the fire-fountains (*nale*) accompanying an army on the move. Laden, thus, with all varieties of trees and carrying the *bās bāwan phūlān* (seventy two floral fragrances), *Basant Rāo* arrives at the Shah's palace-garden to the feast hosted in his honour.<sup>95</sup>

'Abdul provides an account of this *Basant* feast too (and of the *Holī* merriment afterwards).<sup>96</sup> He refers to the velvety (*makhmalī*) and gold-woven (*zarbaḥ*) *kandurīān* (floorspreads) ornamenting the chamans. He makes notes of the golden platters (*ratan āle*) around trees, filled with fragrant waters (*khushbūī pānī*) and mentions the food-sampling gardeners (*chāshnī gīr māli*) who replenish each circular tray and platter of fragrant water with tasteful fluids (*pānī sokhān*<sup>97</sup>). The trees having feasted, and nourished and revived, rise up in trains and rows once more, adorned with the silken clothes and jewels of their foliage and flowers, assembling before the Shah to offer *khilā't* (robes of <sup>honour</sup> ). Surrounding each fragrant pool (*hauz khāne kadam*) of the garden, their boughs rising and falling, it is as if the trees gather fragrances in their hands from bowls and cups (*kāse*). Each fragrance-filled *hauz khānā* lined with slender trees and reflecting the ball of the sun and the white of the sky is the image of the eye, as it were. And as the wind breaks up the water surface into ripples and waves, it is as if sight itself is flooded by ten thousand fragrances.<sup>98</sup> (See Appendix 8.9)

Another master of *manzar nigāri* among Deccani *masnawī* writers is Sanā'atī Bijāpūrī who lived during the period of Muhammad 'Ādil Shah. Sanā'atī is remembered by his 'Wondrous Account' or *Qissā a Benazīr*, a

*masnawī* termed semi religious for its account of miracles associated with Abu Tamīm Ansārī, a Companion of the Prophet Muhammad (pbuh). Kidnapped by a djinn as he prepares for a morning prayer and trapped in a world of djinns and fairies, Sanā'tī's hero alternates between despair and hope as he labours through a series of *maqām* or stations (twelve in all), some of which are garden stations. Ultimately, when his faith is sufficiently strengthened, the wind blowing to Mecca brings him back to the world he has left. Although the actual setting of the story is Arabia, the gardens and landscapes described are Indian and Deccani. It is when he reaches the second *maqām* - seeking refuge in a garden, or *marghzār*, on a plateau top - that San'atī's hero perceives a glimpse of the Light and realises the object of his journey. It is a forest garden on a *Barsāt* night which is San'atī's setting for this first revelation. The garden of the Night-sky, its parterres filled with jasmine-like stars, is mirrored below on earth. Led on at first towards the garden's pool and its surrounding thicket of trees illuminated by the magic of fireflies and the brilliance of glossy, rain-wet leaves (like the candles of a lamp), San'atī's hero is drawn next towards another part of the garden by an unusual fragrance which drops dew-like from the foliage of trees, like 'attar, and is unlike any thing he has experienced.<sup>99</sup> (See Appendix 8.10). There is opportunity for other garden descriptions, too. A densely-planted garden which is accessible through a cave-like opening is described on *Maqām* 4; a palace garden on a forested island in *Maqām* 8. Similarly, there are references to palaces and palace gardens on *Maqāms* 9, 10 and 11. While *Maqām* 12 (where 'Ansārī meets the mythical 'green' prophet of Islam, Khawājā Khizr) is a garden bordered by a *keorā* plantation, within a thicket (*bāri*) of *agar* (frankincense) and *sandal* (sandalwood) trees.<sup>100</sup>

Garden descriptions in Deccani *masnawīs* serve both to define and to elaborate a *masnawī* situation. Within their broader understanding as praise of a sultan or raja (real or imaginary), descriptions occur frequently as extended accounts of royal assemblies or *darbārs* (the prelude to or aftermath of battles, as in the *‘Ali Nama*); or as accounts of celebrations such as of a king’s crowning or of his coming of age; or, again, as in the *Ibrahīm Nāmā*, as celebrations marking the advent of seasons. Typically, too, as in the *Gulshan e ‘Ishq* gardens are settings for the meeting and union of lovers and settings, highlighting their separation; settings; moreover, as in the *Māh Paikar*, for Love’s search and for its discovery.<sup>101</sup> Gardens may be described to suggest the pleasure of a walk enjoyed by a company of royal ladies<sup>102</sup> or to enlarge upon a traveller’s moment of respite during the passage of a long journey.<sup>103</sup> Descriptions may serve to illustrate stages of spiritual enlightenment, and, likewise, may serve to highlight a moment of revelation.<sup>104</sup> Descriptions, moreover, may serve to reveal a particular time of day or to reveal a particular time of year, although the aspect of gardens though the various seasons is illustrated more vividly in Muhammad Quliś *nazm* and *qasidā* rather than in the *masnawī*.

Deccani *masnawīs* provide glimpses of a Garden of Union and of a Garden of Separation; a Garden of the Book and a Garden of Revelation; a Garden of the Derwish and a Garden of the Bride; a Garden of the Kerbala battlefield and of a *Rauzat al Shuhadā*.<sup>105</sup> *Masnawīs* are glimpses of a Garden of Assembly and a Garden of the Feast; a Garden of the Sun and of the Moon; and glimpses too of the Gardens of the Skies - of the green sky of day, the fiery pink evening sky and of the musky black night sky.

Light - its presence or its absence - being central to garden description, the images of gardens in Deccani poetry are woven largely with the colours and patterns of light and with the sparkle of fragrances (*bās kī jhalkār*<sup>106</sup>). The perception of fragrances as illuminating is clear in Nusratī's memorable description of the bride's toilet in his *Gulshan e 'Ishq* - the fragrances, as she is perfumed and fumigated, bringing down the heavenly spheres, as it were.<sup>107</sup> Fā'iz also speaks of the illuminating effects of fragrance. In his *masnawī*, *Rizwān Shah Rūh Afzā* (the story of a prince's love for a fairy), Fā'iz explains how the love-lorn prince pining for the elusive fairy has his chance one evening in the palace *āngan* rendered fragrant with incenses. It is the fragrance of *'agar* and *'abīr*,<sup>108</sup> of musk and ambergris, illuminating the palace and its *āngan*, which draws the fire-born fairies to the palace. Emerging from the palace pool like a pool of light themselves, they appear in the *āngan*, waving their incense censers (of *lobān*,<sup>109</sup> *agar*, *sandal*, *mushk* and *'abīr*) for, as they lament, fragrance is the only food of the fire-born.<sup>110</sup> In his *masnawī*, *Ibrahīm Nāmā*, 'Abdul illustrates, by comparing the eye to the tree-lined pool of the garden, how sight is brightened by garden fragrances.<sup>111</sup> In the *'Ali Nāmā*, when the sun-like Shah presides over a *majlis*, the brilliance of Sirius (*tāb e Suhailī*) pales before the rising clouds of *baramkī* (an incense composition).<sup>112</sup> And when Love rules the world, as in the *Gulshan e 'Ishq*, moonlight can well be the sprinkling of *'abīr*.<sup>113</sup> The most frequently-occurring association of fragrances with light is in images of the evening garden with its lamp-like trees whose flowers and foliage are perfumed candles or earthen lamps. In the *hamd* which precedes his *masnawī*, *Qutb Mushīrī*, Wajhī compares the earthen lamp with the human heart. Its wick, he says, is the human spirit, while its flame, a symbol of human life, is kindled by the (fragrant) oil of God's Mercy.<sup>114</sup>

The association of fragrances with colour is also common in Deccani poetry. Filled with clouds of incense, the sky is the 'Attār's *tablā* (casket),<sup>115</sup> a casket of camphor commonly (*tablā e kāfūr*) and also the leathern shagreen (*kīmakht*) holding perfumed water.<sup>116</sup> The darkening sky at dusk recalls clouds of ambergris-incense above the fire of the sun.<sup>117</sup> The night sky, filled with incenses from an 'Ashurā *majlis*, is the musk-pod of Tartary.<sup>118</sup> Flower buds are caskets filled with colours of fragrant compositions - with *parmal* or *champā*, *chandan* or *chūā*.<sup>119</sup> And in Love's flower garden, the moon opens up these caskets and scatters their fragrances and colours on the birds, bees and moths.<sup>120</sup>

While Deccani poets may describe fragrance in terms of colour and light ('stylising common experience'<sup>121</sup> in the manner perhaps of *Sābk* e Hindi or Iraqi School poets), there are numerous direct references as well to the perception of fragrance as refreshment - as strengthening and reviving; as pleasure-giving and (perhaps in the tradition of Indian poetry) as pleasure-awakening. It is through the fragrances of ambergris and aloewood, of musk and saffron, that the world is transformed into a *gulistān*, sings Mohammad Quli in his *qasidā* on *Basant*. And the trees of his garden wave with joy as the wind, carrying the seventy two fragrances of *kadam*, surges through them. And the flowers of the garden open up to sing songs of *Basant* with their fragrances.<sup>122</sup> At *Nauroz*, the Sultan urges his lady loves to scatter happiness around by burning 'ūd and *baramkī* and by anointing the *hauz khāne* of their bosoms with *kadamb*.<sup>123</sup> And at *Barsāt*, when his lady loves troop into the garden (like a train of red rain beetles on the grass), and when the bees and moths sing *Malhār* in the jasmine bushes, the Sultan reminds that it is

time to usher in the fragrances of *Basant* and to set aside thoughts of hot summer scents.<sup>124</sup>

Fragrance is the food not only of the stars and spheres, of angels and fairies and all creatures of light - but of the dust of the earth too. And while Saturn may revive and become ambergris-like as *Darbār* incenses fill up the skies,<sup>125</sup> the red dust of garden walks, impregnated with *chaman* fragrances, becomes *rāndhā* itself.<sup>126</sup> Like the *‘Attār* himself, the wind opens up the caskets of flowers to revive the *chaman*, filling up the garden's cup on a hot summer day, with cooling sandalwood.<sup>127</sup> In the *Gulshan e ‘Ishq*, the bridegroom fortifies his senses with a fragrant *lakhlakhā* (an incense composition);<sup>128</sup> the bride is led to the *takht* (ceremony platform) when revived and restored with fragrances.<sup>129</sup>

Fragrance is of significance in the Deccani garden of romantic *masnawīs* because it is seen as an aspect of Love, or as Love itself, in fact. When the flower bud opens, the poet *Wajhī* reveals, Love is the fragrance it diffuses.<sup>130</sup> To *Wajhī*, the (diffusive) quality of Love's fragrance is like the fragrance of *‘ūd* (aloewood) which spreads from house to house; or like the fragrance of the *keorā* flower which, like a wayward woman, cannot be confined.<sup>131</sup> It is for its fragrance, reminds *Wajhī*, that a flower is called a flower.<sup>132</sup> And, again, it is intangible fragrance (neither musk, nor ambergris; neither *chandan* nor *kesar*) which draws *Abu Tamīm Anṣārī* into the forest of his heart.<sup>133</sup> No wonder, then, that *Nusratī* should seek to perfume (the flowers of) his poetic composition with the rosewater of heavenly dew.<sup>134</sup>

The Deccani garden in poetic description is a large, densely-planted pleasure garden, usually, the interlaced branches of its files of trees forming vaults (*dāt*) and canopies (*mandap*). The gardens of *masnawīs* usually surround a palace (a *mahal*, also called a *chitarsāl* or picture gallery) on three or on all four sides and this palace structure may be supplemented with (one or more) smaller *chitarsāls*. The palace would appear to extend out to a *chabūtrā* or an *āngan* (terrace) with a water reservoir (*hauz*) beyond or a lotus-filled, fountain-sprinkling pool (*chehbache*) - the palace mirror (*ārsi*). A large water reservoir may be located, additionally, at the centre of the planted area - presumably on the palace-pool axis. The garden beyond the *hauz* or pool is divided into plots (*chaman*) seemingly, with (usually) a well-defined main axis created by a central watercourse with flanking walks bisecting the garden into its principal divisions. Subdivided with watercourses (*kalviān*) and their bordering red gravel paths, the *gulistān* is broken up into numerous *chaman*, interspersed with stone-lined pools - the whole, seemingly, simulating a chessboard arrangement. There are references to watering and feeding pits (*thālās*) around trees and to beds (*chaman takhte* or *thāle*) of annuals (in some plots), each bed planted, as it were, with annuals of a single colour. *Phul bārīs* (upright trellises for climbing shrubs) and *phul mandwās* (overhead trellises or arbours,) forming nets and tapestries, are mentioned in every garden description. The references to the grape *mandwā* (*dāk mandwā*) would suggest its location in the *āngan* fronting the palace or along one or more of the garden's enclosing walls (when these are mentioned, for the garden may be enclosed with shrub thickets or *bārīs*, too). A *keorā ban* is frequently mentioned too forming as it were a boundary (or *patī*) of the garden proper; and a (coconut) palm-defined ricefield, mentioned in two garden descriptions (in the *‘Ali Nāmā*) would appear to have been a common

feature as well, particularly in the moister regions which came under Adil Shahi control.

There are references in the *‘Ali Nāmā* to gardens within the Bijāpūr citadel, within the town walls and outside these. In the *Gulshan e ‘Ishq* there are references to gardens beside shady tank embankments (*pāl*) and to extensive gardens enclosed by *baris* (thickets) outside the town walls. In both *Qissā e Benazīr* and *Rizwān Shah Rūh Afzā*, there are numerous references to river-island garden settings of *agar* and *sandal* forests. These would appear to be the teak or sandalwood-dominated forests along the lower reaches of the Godavari or along the river (Krishna) gorges in the Nallamalai ranges beyond which both Bijāpūr and Golcondā had extended their political control by mid 17th century.

Filled with tropical Indian forest trees - *molsary* and *champā*, *nāgkesar* and *surpan*, *pāidal*<sup>135</sup> and *kadamb*<sup>136</sup> mango, *phannas*, *jāman* and *jām*; with the *larīs* (wreaths) and *mālās* (garlands) and the *pechans* (knots) of spectacular flowering climbers; with fragrant *madan bān* and the ten tongues of *sausan*,<sup>137</sup> the Deccani garden in *masnawī* description would appear to distil the experience of the moister riverain habitats of the *agar* and *sandal* forest tracts lying transitionally to the semi arid zones of settlement at Hyderābād and Bijāpūr, Gulbargā or Bīdar.

With their myrobalans and tamarinds; their forest flames and incenses; their Marking nuts and Soap nuts; their jasmine and carissa - and with their bamboo thickets and clumps of aromatic grasses, Deccani gardens in description evoke not only the riverain forests but the general aspect of the

dry, deciduous forests of the plateau too or the evergreen scrub thickets of the eastern coastal zones.

With their rows of coconut and betel nut palms; their *pan vari* (betel vine thickets) and ricefields; their varieties of gourd and brinjal, their clumps of ginger and turmeric and their carpets of aromatic mint and fenugreek, Deccani gardens would seem a reminder of the region's *nārial* (coconut) or *pān supīārī* (betel nut) gardens too, where a variety of trees, planted to shelter the young transplanted palms, provide necessary (light or dense) shade for the cultivation of cucurbitaceous fruit and of root and leafy vegetables.

With their *donā* and *marwā* (Artemisias) and *bālā* and *belā* (Abutilon and jasmine); their tuberose and chrysanthemum, China asters and African marigolds and with their basil and origanum, Deccani gardens in poetry are a glimpse of Deccan's commercial flower gardens.

With their fig and pomegranate citron and orange, *kamrakh* and *tendū* and their apple and plum, Deccani gardens, in description, are a glimpse of the Deccan's commercial orchards.

With their plots of poppy and marigold, of globe amaranth and celosia, their *sausan* and *sunbul*-lined watercourses, their groups of similar flowering trees, and their groups of similar fruit trees; with their lines of cypress and musky willow, their lily-filled pools and their rose and jasmine bushes, Deccani gardens are a glimpse too of Fars and of Southern Spain. And, indeed, not only of Fars and Southern Spain or of peninsular India, but of the Moluccas and of the New World, too.

The scented garden of Deccani *masnawīs* is a harmonious joy-filled world which comes into bloom in anticipation or in realisation of perfect unions; of victory in battle; or of stations in a journey - a garden illuminated by the sun on earth at his appointed place in the assembly. Redolent with the 'attars of aromatic herbs and the incenses from forest trees - woody and resinous, floral and fruity, musky and camphoraceous - the garden of *masnawīs* is a *majmū'ā*-filled casket: a *majmū'ā* that is enduring and diffusive; an *Itr e Nauras Shāhī*; a whole new *rasa*. With its brimming cups and goblets, the candles aglow in its trees, the garden of Deccani *masnawīs* is the garden of the heart too and the heart's lamp and bud - kindled with the dewdrops of Mercy and the sweet breath of Love.

## NOTES

- 1 Hanaway Jr, WL, <sup>“Paradise on Earth:”</sup> *The Terrestrial Garden in Literature*, <sup>in</sup> R Ettinghausen, ed <sup>and E MacDougall</sup> *The Islamic Garden*, Dumbarton Oaks Colloquium, Washington DC 1976, pp 60-62
- 2 *Masnawī Gulshan e ‘Ishq* of <sup>Muhammad Nusrat</sup> Mulla, Nusrati ed S M Azam, Hyderabad 1941; p 44.
- 3 The same sentiments are expressed in *‘Ali Nāmā* of Mulla Nusrati ed A M Siddiqui, Hyderabad 1959; p 37. The poet writes  
*Laga phul jhārān sab yek sāj ke  
Kiā sab chaman rang birang nāj ke*
- 4 *ibid*; p 303  
*Har yek dāstān būstān dil guzīn  
har yek bait hai yek mahal jānashīn*
- 5 *Gulshan e ‘Ishq* op cit p 59  
*Gullan khush khialān ke ban ke utār  
Gundhun naushahāni so yek khūb hār*
- 6 *Tūtī Nāmā* of <sup>Mulla</sup> Ghawwāsī ed MSA Rizvī, Hyderabad 1357 AH (1938)  
*yo guldastā khāsā mere bāgh kā  
dawā dard mandoñ kā hai dāgh kā*
- 7 *Sabras* of <sup>Asadullah</sup> Mulla, Wajhī tr Q. A. Haq, Gorakhpur, UP 1982; p 52. Haq translates (in Modern Urdu):  
*Jin ke dimāgh me in phulun ki khushbū jaigī un ke tan men tājā  
arwāh āin ge*
- 8 See for eg *Qissā e Benazīr* of Sanā‘atī Bijāpūrī ed A Q Sarwarī, Hyderabad 1350 AH, p 55  
*Har yek kālva jūn ke jal sīm kā  
Warq jadwal sabz par sīm kā*  
or *Gulshan e ‘ishq* op cit p 275  
*suhe kālve har chaman gird yūn  
harī loh ko saf jadwal si jiōn*  
See also Chapter 3 n 63 for similar reference in *‘Ali Nāmā*.
- 9 *‘Ali Nama* op cit p 149  
*Likhe rastān ke satrān nīt achhe har kālvi musattar  
Kare shabnam te afshānī warq kundan ke har thal kā*

- 10 For the literal meaning of *qasidā* as *pur maghz* or brimful, see *Farhang-e Āsifyā* 4 vols ed Māulvi Syed Ahmad Dehlavī op cit.
- 11 See editor's *muqaddimā* in *Ibrahīm Nāmā* of 'Abdul Dahlavī ed Maṣūd Husain Khān in *Qadīm Urdu* Vol III 1969 Special Number.
- 12 *Ibrahīm Nāmā* op cit p 59, where Abdul Dahlavi refers to the flower beds of Nauraspur's palaces
- 13 *Āli Nāmā* op cit p 37  
*Kia main bachan bel kūn yūn barī*  
*badī so falak kāch mandwā charhī*
- 14 As in *Ibrahīm Nāmā* op cit p 22. See also editor's *muqadimmā*, p 39
- 15 *ibid*; p 25 where in praise of the Pen, the Paper and the Verse, the poet elaborates that writing paper is a field of camphor, the pen a musk deer and Intellect, the hunter, concealed behind the hillock of the heart. The hunter releases his arrow striking the deer's musk-pod and the reader's eye, then, like a bee, absorbs the diffused fragrance.
- 16 *Āli Nāmā* op cit, p 9  
*Mere fan ke ban ko aṭā kar wo āb*  
*Ke har phul hue chasṃa-e pur gulāb*
- 17 *Gulshan e Āshq* op cit p 304  
*Mā'ne kī surat te ho ārsi*  
*Kia shēr Dakhni kun jīōn Fārsī*  
*Fasāhat main gar Fārsī khush kalām*  
*Dhare fakhr Hindi par madām*  
*Wagar she'r Hindi ke bā'ze hunar*  
*Nasakte hain lia Fārsī sūn sanwar*  
*Main is do hunar ke khulāsīān kūn pā*  
*Kahyā she'r aisā dono fan milā*
- 18 Hasan, M *Qadīm Urdu adab kī tanqīdī tārikh* (Critical study of Old Urdu literature) Lucknow 1986; p 162
- 19 op cit n11
- 20 Hasan, M op cit
- 21 *ibid*
- 22 McGregor, RS *A History of Indian Literature; Hindi Literature from its beginning to the 19th century*, Weisbaden : Harrassowitz, 1984  
 See also M. Hasan op cit, pp74-76; 175

- 23 *ibid*
- 24 *ibid*; pp 69-70; 71-72
- 25 *ibid*; p 66
- 26 *ibid*
- 27 Schimmel, A. A History of Indian Literature: Classical Urdu Literature ... op cit, p 129. See also Chapter 2 n 15
- 28 Qissā e Benazir op cit p 26.
- 29 Hasan, M op cit., pp 26-7
- 30 *ibid.*, p 78
- 31 *ibid.*, p 116
- 32 *ibid.*,<sup>p 115.</sup> See also Eaton, R M The Sufis of Bijapur: 1350-1700 op cit., pp 157, 161
- 33 Schimmel, A. "Persian poetry in Indo-Pak subcontinent" in ed E Yarshater Persian Literature Columbia Lectures on Iranian Studies No3 Persian Heritage Foundation, 1988; pp 405-421.
- 34 That is, the *Sehr e Nasr* of Zuhuri Turshizi.
- 35 Vittor Jr, C The Herāt School: Persian Poetry in the Timurid Period PhD dissertation, University of California, Berkeley, 1978; p 918
- 36 Hasan, M op cit. pp 154-166. See also, <sup>Asar, M.A</sup> Urdu adab ka Dakni daur '(The Deccani phase of Urdu literature)' in Dakni Shā'iri: Tahqīq o Tanqīd, osmania Univ, Hyderabad 1988 pp 13-32
- 37 Kulliyat Mohammad Ouli Qutb Shah ed Sayyada Jaffar op cit., p 413-438
- 38 Kitab e Nauras ed N Ahmed op cit. See also Chapter 2 n120
- 39 See editor's *muqaddima* in *Gulshan e Ishq* Syed Mohammad ed p 16
- 40 Gulshan e Ishq op cit p 246
- 41 For other facets of the Sabk e Hindi, see The Indian or Safavid style: Progress or Decline in E Yarshater ed Persian Literature op cit; pp 248-288. See also C. Vittor; The Herat School op cit., pp 912-923. The period of the Sabk e Hindi style is 1591 to 1721 (from 'Urfi Shirazi to Bidal); p 912
- 42 Gulshan e Ishq op cit; p 69
- 43 *ibid*; pp 73-74 Nusrati also calls this garden *Darwesh sar mast ka mast ban*.

- 44 *ibid*; pp 90-93
- 45 *ibid*; pp 96-99
- 46 Judging from its description elsewhere as salver-shaped or as rounded as the *phulka* (Indian bread), a species of *Ipomaea* is referred to by the moon flower.
- 47 This may be *Helianthus annuus* of the New World, or a species of *Calendula* (Pot marigold).
- 48 For *raihan*, *Ocimum basilicum* (sweet basil) is suggested by *hukama* in Indo Muslim medicinal literature. See, for example, Hakim A Wahid and Dr H H Siddiqui, *A Survey of Drugs*, Delhi, Institute of the History of Medicine, 1957; p26
- 49 Infact *rās* and *zanab*, the rising star and the invisible star, are indicated in the text, the rising fragrance of *keorā* suggestive of the invisible tail of the comet.
- 50 *Phul mandwās*. more precisely, are overhead trellises for flowering climbers See Duncan Forbes *A Dictionary of the Hindustani language*, op cit
- 51 *Mīna* refers to a kind of floral embroidery as well as to blue (coloured) glass and enamel.
- 52 Lit: corner of the evening.
- 53 '*Ūd batī*' is the term used in the text.
- 54 *Gulshan e Ishq*; pp 185-193
- 55 *ibid*; pp 223-226
- 56 *ibid*; pp 247-249
- 57 *ibid*; pp 251-255
- 58 *Kaemferia rotundus*. Also appears in Abūul Fazl's list of "Flowers notable for their beauty" in the *Āin-e Akbarī* op cit.
- 59 *Momordica charantia*
- 60 The trellis for a species of *Physalis* with edible red berries. The species *Physalis alkekengi*- winter cherry - is listed by Ibn al-Awwām
- 61 *Luffa acutangula*

- 62 Trichosanthes anguina
- 63 Gulshan-e 'Ishq op cit pp 261-262
- 64 Sunbul pattian are hair clips or fasteners of some sort, apparently
- 65 The skin softened with unguents, of which turmeric and sandalwood are important constituents, takes on a saffron hue. Chūā is distilled wood of aloes, baramkī is an incense composition, zavād is an aromatic paste of which civet is the key component. For the detailed mention of these and others, see Ms 'Itr e Nauras Shāhī and Ms Lakhlakhā op cit.
- 66 Lamp-lit platters to ward off the evil eye
- 67 Gulshan-e 'Ishq, op cit; pp 258-59
- 68 ibid; pp 265-267
- 69 Champā is Michelia champaca, molsary is Mimusops elengi, surpan denotes Ochrocarpus longifolius as well as Calophyllum inophyllum; sankesar is the nāgkesar, Mesua ferrea, or alternatively a species of Ochrocarpus called suringī or rakt kesar, common in the Deccan. See Firminger's Manual of gardening for India op cit., pp 249, 612, 613
- 70 Dona and marwā are species of Artemisia, although marwā also denotes a species of Origanum cultivated for its aromatic foliage. The aroma of its foliage is likened to that of Artemisia pallens. Jāī is the quick-growing Sesbania aegyptica. Gulāl also mentioned in the text refers to Rosa damascena, although in Southern India, it would be natural to expect this to be substituted by the red Bourbon rose.
- 71 Cassythia filiformis
- 72 White night-opening lotus
- 73 Gulshan e 'Ishq op cit pp 275-278
- 74 ibid; pp 278-80
- 75 'Ali Nāmā of cit p 239 See also Chapter 3 p 82 for reference to relevant verses
- 76 ibid; pp 106-109
- 77 ibid; p 166
- 78 ibid; pp 40-41

79 *ibid*; pp 376-377

80 See n 64

81 *‘Ali Nāmā* *op cit*; pp 239-240

82 *ibid*; p 152

*Naẓr ke rang dene kun har yek gulrang kā kāsā*  
*Moẓatr man ke karne kūn kalī har huqqa parmāl kā*

83 *Qissā e Benazīr*; *op cit.*, p 99

*Kanwal khil ko us dhāt nikle bhanwar*  
*Ke ‘ūd sozān se ‘ūd ka jun dhuṅar*

84 *Ali Nāmā* *op cit*; p 151

*Khumiān dālīān ke diste yo kanwal pānī ki chasmiān main*  
*rūpe ki ārtī kī jūn chamak par ot ānchal kā*

85 *‘Ali Nāmā* *op cit* p 152

*Suraj gar dhūp kāle main jo sar par bāgh ke āwe*  
*Hawā lag yek ghārī main ho thandā jun kāsā sandal kā*  
See also Chapter 3 n 100

86 *ibid*; p 3

*Sipar kī tū surat diā phūl main*  
*Nishān bhāl ka ghunchā e maqbūl main*

87 *ibid*; p 151

*Madan ki bānkiān bhālān kaliān main rāi champe kiān*  
*Phalā barchhe ka keorā hai yekan ki sīj sondal kā*

88 *ibid*; p 211

*Lagā har kamand ‘ishq pechi ki bel*  
and  
*Suhe har sipar la‘l kalghī ka pāt*

89 *ibid*; p 377

*Pankhi har har yek gul pe shaidā dise*  
*Yek yek dil main yek hāl paidā dise*

90 *‘Ali Nāmā* *op cit*; p 222

91 See editor’s muqaddima in Masūd Husain Khān ed *Ibrahīm Nama* *op cit*;  
p 17

- 92 Ibrahīm Nāmā op cit; pp 61-63  
*Lā'ī* is red; *pīlī* yellow; *surmaī* black; *māvi* glittering (the dust of gems); *zā'frān* is saffron, *banafshā* is violet; *haryā* green, *ujāl* shining
- 93 ibid; p 28  
*Tarf āth dāliān gaggan ho jivn pān*  
*Sūraj chānd phal phul diste nishān*
- 94 ibid; pp 83-85
- 95 ibid; pp 88-90
- 96 ibid; pp 94-96
- 97 Here, fragrant liquid manures, such as are described by Ibn al-ʿAwwām, may be implied
- 98 ibid; pp 91-93
- 99 Qissā e Benazīr op cit., pp 57-58
- 100 ibid; pp 101-102
- 101 Māh Paikar of Ahmed Junā'idī ed Sayyeda Jāfar, Hyderabad 1986; pp 107-109
- 102 Gulshan e 'Ishq op cit pp 163-164
- 103 ibid; p 60 See also Qissā e Benazīr op cit
- 104 Gulshan e 'Ishq op cit pp 275-281
- 105 See 'Ali Nāmā op cit p 137 for description of the garden-like 'Ashūrā procession. where  
*chhatriān shadiān ke pīt sūn tāzā khilāyān phūlban*  
 References to *jannat ke gulshan ke panje* and to *kanchhan ke shadde* may be noted also
- 106 Kulliyāt Mohammad Quli Qutb Shah ed Sayyeda Jāfar op cit p 367
- 107 Gulshan e 'Ishq op cit p 261
- 108 *Agar* is an incense composition, *'abīr* a perfumed powder. For detailed mention and recipes, see Itr e Nauras Shahi op cit

109 Denotes the Indian frankincense

110 Rizwān Shāh Rūh Afzā op cit p 47 For eg

*Buddi bhī karī thī munawwar mandher  
Jalāt agar aur chhinki ‘abīr  
Bharyā thā dikhe Nūr sārā gaggan  
‘Ambar mushk chhirkī thī charon kadhan*

and also

*Ke hai ādmī khai khane ko bās  
Use ātishiān bas lete hain bās*

111 Ibrahīm Nāmā op cit p 93

112 ‘Ali Nāmā op cit p 74

*Jab baramkī kā charh dhuan tāb e Suhailī rad kiā*

113 Gulshan e ‘Ishq op cit p 41

*Dibbī se sapūran kī chandnā ‘abīr  
Kiā sab kūn khushbū chhirak benazīr*

114 Outb Mushṭrī op cit p 57

115 ‘Ali Nāmā op cit p 74

*Khushbū ‘Itr nāb ki yun sab jahān main bhar rahī  
jab subhe ke hat te falak tablā huā ‘Attār kā  
See also Chapter 3, n 100*

116 ‘Ali Nama op cit p 74

*kīmakht hai so āsman khushbū dharyā buedār kā*

For the first line of this couplet, see n112. For detailed mention of *kīmakht*, see ‘*Itr e Nauras Shāhī* op cit.

117 ‘Ali Nāmā op cit p 189

*Shafaq āg par sat nis kī ‘ambar kā chūr  
Lia khol dāman kūn mushkī bakhūr*

118 *ibid*; p 133

119 See n82

120 Gulshan e ‘Ishq op cit pp 188-189

121 See Von Grunebaum<sup>ed</sup>, The response to Nature in Arab poetry » Themes in Medieval Arab Literature op cit

122 Kulliyāt Mohammad Ouli Outb Shah op cit p 371

'Ambar o 'ūd o mushk o zā' frān ka rawwit āyā  
Isī te anokhā jag main kartā hai gulistani

and p 368

Hawwā hai hawwā har taraf har jins kā  
Hawwis sūn hare ban hazarān hilāyā

and p 372

Phul har ek khil ke ab bāsān tain gāyā Basant

123 ibid; p 337

Shādian sigal kalāo  
Khushbūi kadam kalāo  
Chaundher 'ūd jalāo  
Dhūnkār baramki kā

124 ibid; p 333

Basant ke phulān ka bhīd ya hai bas rūn rūn  
Dhūp kāle phul bāsān ab man the gañwāo

125 'Ali Nāmā op cit

Khush bās ka mehkar idak haftam falak main jā paryā  
Parwardgī pā kar Zūhal khushbūi pakaryā 'ambari

126 Gulshan e 'Ishq op cit p 276

Dekhat ban ke tis sang aur khāk e gil  
Acche 'ambar o mushk o rāndhā khajil

127 Kulliyāt Muhammad Ouli Outb Shah op cit

'Attar bāo pan main phulān ke khol table

See also 'Ali Nāmā op cit p 189

Pawwin le ke har gul ke table te bās  
Mo 'atr kiā phir ke tis ās pās

128 Gulshan e 'Ishq op cit p 257

Rahe 'aql kā maghz jam man ke pās  
Liā nih kā lakhlakhā nit so bās

129 ibid

Jo khushbū se parwardā ho gule 'zār  
Bithāi so liā takht par zarnagār

130 Sabras op cit; p 120

*Jab 'ishq kā ghunchā phūl ban ke khiltā hai to is phūl kī bās  
main se Khudā miltā hai*

131 Outb Mushfī of Mulla Wajhī ed M.A Haqq, Delhi, 1939, p 43

*Jo yek ghar mane 'ūd kūr koī jāi  
To sau ghar lag is 'ūd kā bās jāi  
Keh phūl keore kā jo bās hai channāl  
na rakh sakhī har giz use koī sambhāl*

132 Sabras op cit.

*Bū bās se phūl ne sharf pāyā; bū bās se phūl ko phūl kahā gayā*

133 Qissa e Benazir op cit., p 58

134 See n 16

135 Stereospermum suaveolens; but other species may be implied too

136 Anthocephalus kadamba; syn Nauclea kadamba

137 In the Deccani context *sausan* would suggest the numerous varieties of Crinum or the blue African lily, Agapanthus sp, in place of the Iris germanica and Lilium candidum

## APPENDIX 1

### LIST OF PLANTS FROM IBN AL-'AWWAM'S KITAB AL-FILAHA

Source: John Harvey

#### FRUITS AND NUTS

Almond	Lauz
Apple	Tuffāh
Apricot	Mishmish
Banana ( <i>Musa</i> sp.)	Muz
Bramble ( <i>Rubus fruticosus</i> )	'Ulliq
Carob ( <i>Ceratonia siliqua</i> )	Kharūb
Cherry	Qarasiyā; Habb al-muluk
Chestnut ( <i>Castanea sativa</i> )	Qastal; Shah-ballut
Citron	Utrujj
Date-Palm	Nakhl
Fig	Tin
Grapevine	Karum; 'Anāb
Hazel and Filbert	Fjnduq
Jujube	Sidr
Lemon	
Medlar ( <i>Mespilus germanica</i> )	Zu'rūr
Melon	Battikh
Mulberry, White	Tūt
Olive	Zaitūn
Orange	Naranj
Peach	Khūkh
Pear	Kummasrā
Pistachio	Fistiq
Plum	'Ain al-Baqr
Pomegranate	Rummān
Quince	Safarjal
Sebesten ( <i>Cordia Myxa</i> )	Sapistān
Service ( <i>Sorbus domestica</i> )	Ghubairā
Shaddock	Zanbū
Walnut	Jauz
Water melon	Battikh-e-Hindi

#### FOREST AND ORNAMENTAL TREES AND SHRUBS

Acacia ( <i>Acacia arabica</i> )	Khatmī
Althaea ( <i>Hibiscus syriacus</i> )	Dardār
Ash ( <i>Fraxinus</i> sp.)	Ban
Azedarach ( <i>Melia azedarach</i> )	Rand
Bay ( <i>Laurus nobilis</i> )	Sarw
Cypress	Habb al Khizrā
Hawthorn ( <i>Crataegus</i> spp)	
Holm Oak	

Ivy  
 Jasmine  
 Judas Tree (*Cercis siliquastrum*)  
 Lavender  
 Myrtle  
 Oleander  
 Pandanus tectorius  
 Poplar  
 Pine  
 Plane (*Platanus orientalis*)  
 Reed  
 Rose  
 Rue  
 Terebinth (*Pistacia terebinthus*)  
 Willow

Lablāb.  
 Yāsman  
 Dāẓi  
 Khuzāmā  
 Ās  
 Dafli  
 Kāẓi  
 Nashm  
 Sanaubar  
 Dulb  
 Qasab  
 Ward  
 Sadāb  
 Butm  
 Khilāf

### FLOWERS AND HERBS

Anise  
 Balm (*Melissa officinalis*)  
 Basil  
 Camomile  
 Caraway  
 Colocasia  
 Colocynth  
 Coriander  
 Cumin  
 Dill (*Peucedanum gaveolens*)  
 Dragons (*Dranunculus vulgaris*)  
 Elecampane (*Inula helenium*)  
 Fennel  
 Fumitory  
 Hellebore, Black  
 Henbane  
 Hollyhock  
 Iris  
 Lily  
 Mallow (*Malva SPP*)  
 Mandrake  
 Marjoram  
 Meililot  
 Milk Vetch (*Astragalus lusitanicus*)  
 Narcissus spp  
 Nigella  
 Plantain  
 Poppy, White  
 Poppy, Red  
 Rocket  
 Saffron

Habaq  
 Habaq  
 Uqhuwān  
 Karwayyā  
 Qulqās  
 Hanzal  
 Kazbarā  
 Kamūn

Lof  
 Rāsan  
 Bisbās

Kharbaq  
 Banj  
 Khatmī  
 Irīsa  
 Zanbaq  
 Khubāzi  
 Luffāh  
 Marzanjūsh  
 Iklīl al-Malik  
 Baram  
 Narjis

Isapghol  
 Afiyun  
 Shaqā'iq Ahmar  
 Jirjir  
 Zā'frān

Savory ( <i>Satureia</i> SP)	Sā'ar
Violet	Banafshā
Wallflower	Khairī
Stock	Khairī
Water Lily	Nilufar
Wormwood ( <i>Artemisia absinthium</i> )	ifs:īntīn

#### VEGETABLES AND SALADS

Artichoke	Harshaf
Asparagus	Halyūn
Bean, Broad	Bāqla
Blite ( <i>Chenopodium capitatum</i> )	Yarbūz
Cabbage	Qinnābīt
Carrot	Jazr
Cauliflower	Karamb
Celery	Karafs
Chick Pea	Hummās
Cucumber	Khiār
Egg-plant ( <i>solanum melongena</i> )	
Chicory or Endive	Sarīs
Fenugreek	Hilbā
Garlic	Ṣom
Leek	Kirās
Lentil ( <i>Lens esculenta</i> )	'Adas
Lettuce	Khas
Lupin	Tirmus
Onion	Basl
Parsnip	Shaqaqūl
Pea	Karsanāh
Purslane ( <i>Portulaca oleracea</i> )	Rijlā
Radish	Fijl
Spinach	Isfanāj
Spinach Beet	Silq
Turnip	Lift
Thyme	Nammām

#### ECONOMIC PLANTS

Caper ( <i>Capparis Spinosa</i> )	
Chufa ( <i>Cyperus esculentus</i> )	
Clover ( <i>Trifolium alexandrinum</i> )	Nafī
Cotton ( <i>Gossypium arboreum</i> )	Qatn
Flax ( <i>Linum usitatissimum</i> )	Katan
Hemp	Qinnāb
Henna	Hinna
Indigo	
Lucerne ( <i>Medicago sativa</i> )	Fisfisāh
Madder ( <i>Rubia tinctorium</i> )	Fuwwāh
Mustard ( <i>Sinapis alba</i> )	Khardsal
Safflower ( <i>Carthamus tinctorius</i> )	

Saffron  
Sesame  
Sugarcane  
Sumach (*Rhus coriaria*)

Zāfrān  
Simsim  
Qasab al-sukkar  
Summāq

## APPENDIX 2

### LIST OF PLANTS FROM IBN SINA'S TREATISE ON CARDIAC DRUGS

SOURCE: Hakim Abdul Hamid

SCIENTIFIC NAME	NAME IN TEXT
<i>Helianthus annuus</i> (sunflower)	Azarbūyā
<i>Aquillaria agallocha</i> (Aloewood)	‘Ud
<i>Asparagus racemosus</i>	Shaaqul
<i>Bambusa arundinacea</i> (Bamboo manna)	Tabashir
<i>Borago officinalis</i> (Bugloss)	Lisān al-ṣaur
<i>Boswellia glabra</i> (Frankincense)	Kundur
<i>Camphora officinarum</i> (camphor)	Kāfūr
<i>Centaurea behen</i>	Bahman
<i>Cichorium intybus</i> (chicory)	Talkshaqūq
<i>Cinnamomum zeylanicum</i> (cinnamon)	Sāzij
<i>Citrus medica</i> (citron)	Utrujj
<i>Coriandrum sativum</i> (coriander)	Kazbarā
<i>Crocus sativus</i> (saffron)	Zaḥfrān
<i>Cyperus rotundus</i>	Sāḍ
<i>Doronicum hookeri</i>	Dārūnaj
<i>Delphinium denudatum</i>	Jadwār
<i>Amomum Subulatum</i> (Greater Cardeemum)	Qāqlā
<i>Elettaria cardamomum</i> (small cardamom)	Khair būwwā
<i>Emblica officinalis</i> (Emblic myrobalan)	Amlāj
<i>Abies alba</i> (Silver fir)	Zarnab
<i>Iris florentina</i> (Iris)	Sausan āzād
<i>Lavendula stoechas</i> (Lavender)	Ustukhuddūs
<i>Melissa officinalis</i> (Balm)	Bādranjbūyā
<i>Mentha arvensis</i> (Mint)	Nā'nā
<i>Terminalia chebula</i> (chebulic myrobalan)	Ḥalilāj
<i>Myrtus communis</i> (Myrtle)	As
<i>Nardostachys jatamansi</i> (Nard)	Sunbul
<i>Ocimum basilicum</i> (Basil)	Badhrūj
<i>Nymphaea lotus</i> (water lily)	Nilofar
<i>Ocimum gratissimum</i> (Basil)	Firanjmuskh
<i>Paeonia officinalis</i> (Paeony)	Fawāniā
<i>Pandanus odoratissimus</i> (fragrant screwpine)	Armāk
<i>Parmelia perlata</i> (Rock moss)	Ushnā
<i>Pistacia terebinthus</i> (Pistachio)	Fistūq
<i>Punica granatum</i> (pomegranate)	Rummān
<i>Pyrus communis</i> (Pear)	Kummasvā
<i>Pyrus malus</i> (apple)	Tuffah
<i>Rheum emodi</i>	Ribās

Rosa damascena  
Santalum album (Sandalwood)  
Tamarindus indicus (Tamarind)  
Thymus serpyllum (Wild thyme)  
Zingiber zerumbet (Zedoary)

Ward  
Sandal  
Tamarē Hindi  
Nammām  
Zaranbād

APPENDIX 3

**LIST OF PLANTS FROM IBN MASAWAIH'S TREATISE ON AROMATICS**

SOURCE: Martin Levey

Amomum subulatum  
Aquillaria agallocha  
Cinnamomum zeylanicum  
Cinnamomum camphora  
Crocus sativus  
Elettaria cardamomum  
Eugenia caryophyllata  
Falanjah (unidentified)  
Foeniculum vulgare  
Juniperus communis  
Myristica fragrans  
Nardostachys jatamansi  
Piper cubeba  
Pistachia lentiscus  
Prunus mahaleb  
Rosa damascena  
Rottleria tinctoria  
Santalum album  
Sassurea lappa  
Styrax officinalis  
Vitex agnus castus  
Zanthoxylon sp.

APPENDIX 4

LIST OF PLANTS FROM DECCANI PERFUMERY TEXTS:  
‘ITR E NAURAS SHAHĪ AND LAKHLAKHĀ

SOURCE: Self

SCIENTIFIC NAME	NAME IN TEXT
<i>Acacia catechu</i>	Khair
<i>Acorus calamus</i>	Bach
<i>Aloe vera</i>	Sugandh s̄a‘iri
<i>Alpinia officinarum</i>	Qulanjan
<i>Amomum subulatum</i>	‘Elāichī Kaṭān
<i>Andropogon schoenanthus</i>	Azkhar
<i>Anethum sowa</i>	Shabath
<i>Aquillaria agallocha</i>	Agar/ūd
<i>Aristolochia longa</i>	Bāg nakh
<i>Artemisia pallens</i> and other spp	Donā; Brinjāsaf
<i>Asarum europaeum</i>	Asarūn
<i>Astragalus lusitanicus</i>	Baram
<i>Azederachta indica</i>	(Gul e) Nīm
<i>Boswellia serrata</i>	Lobān
<i>Carthamus tinctorius</i>	Asfar
<i>Cedrus deodara</i>	Deodār
<i>Centaurea behen</i>	Behman
<i>Centaurea moschata</i>	Nāfarmushk
<i>Chrysanthemum chinensis</i>	Gul e Dāūdī
<i>Cinnamomum camphora</i>	Kāfūr
<i>Cinnamomum tamala</i>	Tejpāt
<i>Cinnamomum zeylanicum</i>	Taj
<i>Cistus creticus</i>	‘Ambar/lādān
<i>Citrus acida</i>	China patti
<i>Citrus aurantium</i>	(Gul e) Bahār/Nārangī phul
<i>Commiphora mukul</i>	Sughanda goggula
<i>Crocus sativus</i>	Zā‘frān
<i>Cupressus sempervirens</i>	Sarū
<i>Cucumis sativus</i>	Khiār
<i>Curcuma caesia</i>	Nar kachūr
<i>Curcuma longa</i>	(Dār e) hald
<i>Curcuma zedoaria</i>	Donkī kachūr
<i>Eleagnus sp.</i>	(Gul e) Sinjid
<i>Elettaria cardamomum</i>	Elāichī khard
<i>Eugenia caryophyllata</i>	Qarnphūl; Long
<i>Eugenia jambolana</i>	Jāmūn
<i>Ficus carica</i>	‘Anjīr
<i>Ficus glomerata</i>	Gūlar

Hedychium spicatum  
 Hibiscus abel moschus  
 Illicium verum  
 Inula helenium  
 Ipomoea muricatus  
 Iris germanica  
 Jasminum sp  
 Jasminum auriculatum  
 Jasminum grandiflorum  
 Jasminum sambac  
 Juglans regia  
 Lawsonia inermis  
 Lilium sp.

Litsea sp.  
 Liquidambar orientalis  
 Magnifera indica  
 Malus sp.  
 Matricaria chamomila  
 Mentha sp.  
 Mesua fer`ea  
 Michelia champaca  
 Mimusops elengi  
 Myristica fragrans  
 Narcissus sp.

Nardostachys jatamansi  
 Nigella sativa  
 Nyctanthes arbor-tristis  
 Nymphaea sp.  
 Ocimum basilicum  
 Ocimum gratissimum

Ocimum sanctum  
 Origanum vulgare/maru  
 Pandanus odoratissimus

Parmelia perlata  
 Piper betle  
 Piper cubeba  
 Pistacia integrima  
 Pistacia lentiscus  
 Plantago ovata  
 Prunus mahaleb  
 Psoralia corylifolia  
 Rosa moschata  
 Rosa damascena  
 Salix caprea

Kapūr kachrī  
 Mushk dānā  
 Bādiān khitaī  
 Rāsan  
 Nīl dānā  
 Bīkh banafshā  
 Niwālī  
 Juhī  
 Chambelī/Gul e Yāsmīn  
 Motīa  
 Jauz  
 Hiñā  
 Gul e zambac/Gul e  
 saūsan

Maida lakrī  
 Silāras  
 Amba  
 Seb  
 Gul e Babūnāh  
 Podīna; Nā`nā  
 Narmushk  
 Champā  
 (Gul e) Molsary  
 Jauz būyā  
 Narjis bālā; gul e  
 nargīs  
 Sunbul/ut Tibb  
 Tukhm e shunīz  
 Dandī hār singhār  
 Gul e nilofar  
 Sabzā; Raihān  
 Firinj mushk; Raihān  
 śīāh  
 (Barg e) Tulśī  
 Manzangūsh; Marwā  
 (Gul e) Keorā;  
 (Gul e) Ketkī  
 Chharīlā  
 Ghatūnā; Tanbūl  
 Kabābā  
 Kākṛā singhī  
 Mastakī  
 Bārtang  
 Khīla khelī  
 Bavachī; Bāchī  
 Seotī; gul e Nasrīn  
 Gul e surkh; Gul āl  
 (Roghan) Bed

Santalum album  
Saussurea lappa  
Sida sp.  
Symplocos racemosa  
Taxus baccata  
Valeriana wallichii  
Vateria indica  
Vitis vinifera  
Withania somnifera  
Wrightia tinctoria

Sandal  
Qust shirīn  
Bālā  
Lodh  
Barmī  
Tagar  
Rāl  
(Gul e) Angūr  
Isgandh  
Indarjā<sup>u</sup>shirīn

## APPENDIX 5

### LIST OF PLANTS FROM DECCANI MASNAWIS

SOURCE: Self

#### TREES AND SHRUBS

SCIENTIFIC NAME	NAME IN TEXTS
Aganosma caryophyllata	Mālatī
Aleurites moluccana	Akhrot
Amygdalus communis	Bādām
Areca catechu	Fofal
Artabotrys odoratissimus	Madan mast; Madan ban
Artocarpus integrifolia	Phannas
Averrhoa karambola	Kamrakh
Borassus flabelliformis	Tār
Boswellia sp.	Agar; Lobān
Butea sp.	Kesū
Calophyllum inophyllum	Surpan
Carissa sp.	Tendū
Caryota urens	Mār
Cercis siliquastrum	Arghwān
Cinnamomum zeylanicum	Dār sinī
Citrus aurantium	<i>Sangtarā, Nārangī</i>
Citrus medica	Jhamberī.
Citrus medica var Limonia	Nībū
Citrus maxima	
Cocos nucifera	Nalīr; Nārjīl
Cupressus sempervirens	Sarū
Cydonia sp.	Safarjal
Datura sp.	Dhatūrā
Dendrocalamus sp.	Baps
Eugenia caryophyllatus	Guḷe qalanfar; Qarnphul
Eugenia jambolana	Jāmūn
Eugenia jambos	Jām. ****
Ficus carica	Anjīr
Jasminum auriculatum	Juhī
Jasminum grandiflorum	Yāsman; Chambelī; Saman
Jasminum humile	Jīu
Jasminum sambac	Mogrā; Bat mogrā; Belā; Motiyā
Juglans regia **	Akhrot

Lawsonia sp.	Hinā <sup>n</sup>
Magnifera indica	Amb; Naghzak
Malus sp.	Seb
Mesua ferēa	Sankesar
Michelia champaca	Champā; Rāi
	champā
Mimusops elengi	Molsary; Gu <sup>1</sup>
	Molsar
Morus sp.	Tūt
Myristica fragrans	Jāiphal
Ochrocarpus sp.	Surpan; Suringū
Pandanus odoratissimus	Keora
Phoenix dactylifera	Khajūr
Phoenix sylvestris	Sendhī
Pinus gerardiana **	Chilghozā
Pistachia vera	Pistā
Platanus orientalis **	Chinār
Plumeria sp.	Gul <sup>e</sup> chīn
Psidium guava	Jām <sup>1</sup> *****
Punica granatum	Anār
Punica granatum var	Gulnār
Quercus incana **	Menphal
Rosa damascena and bourboniana	Gulāl
Rosa brunoni	Seotī
Rosa lyelri	Nastaran
Salix caprea	Bid mushk
Saccharum sp.	Neshkar
Santalum album	Sandal; chandan
Sesbania aegyptica	Rawāsin
Sesbania grandiflora	Jāi
Semecarpus marsupium	Bhilāwā
Stereospermum; syn. Bignonia sp	Pāidal
Tamarindus indica	Imblī
Terminalia catappa	Bādām
Terminalia chebula	Harrāh
Vitis vinifera	Angūr; Dāk
Zizyphus sp.	Ber

SEMI SHRUBS, PERENNIALS, ANNUALS\*

Abutilon sp.	Sirnā; Jhumkā
Ananassa sativus	Anas
Anethum sowa	Soyā
Artemesia pallens	Donā
Beta vulgaris	Chuqandar
Cassythia sp.	Ākās bel
Celosia cristata	Taj khūrūs; Kalghā
Chrysanthemum chinensis	Shewantī
Citrullus vulgaris	Kulangar
Coriandrum sativum	Kothmir
Iris sp.	Sausan****
Crocus sativus	Zā' frān
Cuminum sp.	Kamūn
Gomphrena globosa	Gul e Aurang
Helianthus annus	Gul e Sūr
Hyacinthus orientalis	Sunbul
Ipomoea sp.	Gul e chānd
Kaemferia rotundus	Bhūn champā
Lagenaria vulgaris	Kaḍū
Lilium sp.	Sausan****
Luffa acutangula	Turai
Momordica charantia	Karelā
Nelumbium speciosum	Kanwal
Nymphaea alba	Kamūdi Kanwal
Ocimum basilicum	Raiḥān; Sabzā
Ocimum gratissimum	Gul, damirān
Origanum sp	Marwā
Orzya sativa	Shālū
Physalis sp	Kākand
Piper betle	Pān ki bel
Psoralia corylifolia	Bābchī
Papaver rhoeas	Lālā
Pavonia odorata	Bālā ***
Sida sp.	Bālā ***
Tagetes erecta	Gaind makhmal
Trichosanthes anguina	Chachūndā
Trigonella foenum-graecum	Methī
Viola odorata	Banafshā
Withania somnifera	Asgandh

A few remain unidentified.

- \* including a number of scandent or climbing shrubs cultivated as annuals.
- \*\* obviously not cultivated in the Deccan but mentioned in texts to emphasise the richness of colour in the garden and its variety of produce. Some such as the almond and walnut may have been substituted by their Indian 'equivalents' -- Terminalia catappa and Aleurites moluccana
- \*\*\* Bālā - a term used loosely in garden description would refer to a variety of Malvaceous species such as of Hibiscus, Abutilon, Pavonia, Sida and possibly to the hollyhock, as well, floriferous over a long period in the Deccan.
- \*\*\*\* The scented sausan in its Deccani context would suggest a variety of lily (Crinum sp., day lilies as well as some of the scented species of the ginger family). The scented sunbul in its Deccani context would imply not the hyacinth but the varieties of blue spike-bearing basil or the trumpets of the African lily - Agapanthus sp.).
- \*\*\*\*\* Jām denotes both the guava and the rose apple rather than the pear.

APPENDIX 6

**LIST OF 'EXHILARATING' PLANTS FROM NAJM AL GHANI'S TREASURY**

<b>SCIENTIFIC NAME</b>	<b>NAME IN TEXT</b>
<i>Aganosma caryophyllata</i>	Madmālati
<i>Alpina officinarum</i>	Qulanjān
<i>Amomum subulatum</i>	Elāichī kalān
<i>Amygdalus communis</i>	Bādām
<i>Ananassa sativus</i>	Ananās
<i>Andropogon muricatus</i>	Khas bālā
syn. <i>Cymbopogon muricatus</i>	
<i>Andropogon schoenanthus</i>	Azkhar
syn. <i>Cynbopogon schoenanthus</i>	
<i>Anthemis nobilis</i>	Babūnā
<i>Anthocephalus kadamba</i>	Kadamb
<i>Apium graveolens</i>	Karafs
<i>Aquillaria agallocha</i>	Agar
<i>Artemisia pallens</i>	Donā
<i>Boswellia</i> sp.	Kundur; lobān
<i>Buxus sempervirens</i>	Shamshād
<i>Capparis</i> sp.	Karel
<i>Carissa</i> sp.	Karaundā
<i>Centaurea behen</i>	Behman
<i>Cercis siliquastrum</i>	Arghwān
<i>Chenopodium</i> sp.	Bathwā
<i>Chrysanthemum sinensis</i>	Sewanti
<i>Cistus</i> sp.	Lādān
<i>Cinnamomum camphora</i>	Kāfūr
<i>Cinnamomum tamala</i>	Tejpat
<i>Cinnamomum zeylanicum</i>	Dārchīnī
<i>Citrus aurantium</i>	Sangtarā
<i>Citrus maxima</i>	Chiknī Supārī
<i>Citrus medica</i>	Karnā; Utrujj
<i>Citrus medica</i> var. <i>limonia</i>	Sharbati līmūn
<i>Coriandrum sativum</i>	Dhanīa
<i>Crataeva religiosa</i>	Barn
<i>Crinum</i> sp.	Nāgan
<i>Crocus sativus</i>	Zāfrān
<i>Cucumis melo</i>	Kharbūza
<i>Curcuma caesia</i>	Nar Kachūr
<i>Curcuma zedoaria</i>	Jadwār
<i>Cydonia oblonga</i>	Behī; safarījal
<i>Elettaria cardamomum</i>	Elāichī
<i>Eugenia caryophyllatus</i>	Long
<i>Eugenia jambos</i>	Gulābī jāman
<i>Feronia elephantum</i>	Kawīt

Grewia asiatica  
 Hedychium spicatum  
 Hibiscus abel moschus  
 Hibiscus rosa sinensis  
 Inula helenium  
 Ipomaea sp.  
 Iris germanica  
 Jasminum auriculatum  
 Jasminum grandiflorum  
 Jasminum humile  
 Jasminum sambac  
 Juglans regia  
 Lactuca sativa  
 Lavandula stoechas  
 Lawsonia sp.  
 Lilium sp.  
 Liquidambar orientalis  
 Luvunga scandens  
 Malus sp.  
 Melia azederach  
 Melissa sp.  
 Mentha sp.  
 Mesua ferrea  
 Michelia champaca  
 Mimusops elengi  
 Myrica Nagi  
 Myristica fragrans  
 Nardostachys jatamansi  
 Nelumbium speciosum  
 Nyctanthes arbor-tristis  
 Ocimum spp.  
 Ochrocarpus spp  
 Origanum sp  
 Pandanus odoratissimus  
 Parmelia perlata  
 Pimpinella anisum  
 Piper cubeba  
 Piper betle  
 Pistacia integerrima  
 Pistacia lentiscus  
 Pistachia vera  
 Phyllanthus niruri  
 Plantago ovata  
 Polianthes tuberosa  
 Prunus mahaleb

Psoralia corylifolia

Phālsā  
 Kapūr kachrī  
 Mushk dānā  
 Gurhal  
 Rāsan  
 Gul e chāndnī  
 Erīsa; sausan  
 Jūhī  
 Yāsmīn; chambelī  
 Jāī  
 Mogrā; Motiā; Belā  
 Akhrot  
 Khas  
 Ustukhudūs  
 Mehndī  
 Zanbaq; sausan  
 Silāras  
 Long mushk  
 Seb; Seo  
 Ban  
 Baqlāt al utrujj  
 Podīna  
 Nagkesar  
 Champā  
 Molsary  
 Kaiphal  
 Jaiphal  
 Bālchhar  
 Kanwal  
 Hār singhār  
 Bālangu; Raihān  
 Punnag  
 Marzanjush; Marwā  
 Keorā; Ketkī  
 Chharīlā  
 Bādīyān e Rumī  
 Kabāb chīnī  
 Pān  
 Kākṛā śīngḥī  
 Mastakī  
 Pistā  
 Harfā lewārī  
 Gāozabān  
 Shabbū; Rājīni gandh  
 Hab al mahlāb; Khīla  
 Kheḷī  
 Ghīonī  
 Tikol; Latā Kasturī

Punica granatum  
Quercus incana  
Rosa brunonii  
Rosa damascena  
Salix caprea  
Salvadora oleoides  
Sassurea lappa  
Sesbania grandiflora  
Stereospermum suaveolens  
Tagetes erecta  
Tamarindus indica  
Taxus baccata  
Terminalia chebula  
Thymus sp  
Zanthoxylon  
Zingiber zerumbet

Anār  
Ballūt  
Seotī  
Gulāb  
Bid mushk  
Pīlū  
Qust  
Agasta  
Pādhal  
Gaiṇdā  
Imli  
Zarnab  
Baherā  
Nammām  
Harnawā  
Adrak

## APPENDIX 7

### DESCRIPTION OF SCENTED PLANTS MENTIONED IN TEXTS \*

SOURCE: Roy Genders

#### **(ACORUS (Sweet flag) (Araceae - Arum Lily Family)**

A small genus of semi-aquatic herbaceous plants, closely related to the Arums and native to many parts of the world. It is not a flag but a rush with a creeping rootstock and flag-like leaves, found by streams and ponds. It is increased by division of the rootstock in spring.

**Species.** *Acorus calamus*. Both the leaves and the roots have the refreshing scent of cinnamon, hence the great esteem in which the plant was held during the Middle Ages: the bright-green leaves were used for strewing. .... The volatile oil is contained in the outer skin of the rhizome and to peel the rhizome, as is done in Europe, before it is used is most wasteful for the most potent part is lost. The root is yellowish-brown when lifted but after peeling is greyish-white. The oil from the root is more powerful than from the leaves and is likened to that of camphor.

#### **AGANOSMA (Apocynaceae - Periwinkle Family)**

A genus of 10 species, inhabiting the tropical forests of south-eastern China and Indonesia, and climbing plants of vigorous habit. They bear large panicles of pure-white flowers with a powerful scent, and the leaves of several species are fragrant.

**Species.** *Aganosma caryophyllata*. A climbing plant of giant proportions, it has large leathery leaves which release a powerful clove-like perfume when handled.

#### **ALBIZZIA (Leguminosae - Laburnum Family)**

A small genus of deciduous trees native of South Africa, Rhodesia and Western Australia, and famed for their beautiful fern-like foliage. They bear either pale-yellow or pink flowers which diffuse the delicious sweet-pea scent of the family.

#### **ALPINIA (Zingiberaceae - Ginger Family)**

A genus of tropical plants, mostly native of South-east Asia and Japan with one species native to New South Wales. They are perennial herbs with a rhizomatous rootstock and bear a terminal inflorescence on a leafy shoot.

**Species.** *Alpinia aromaticum*. Native of the valleys of eastern Bengal where it blooms before the rains commence. The flower stems are enclosed by the leaf sheaths, the lanceolate leaves being about 30 cm (12 in) long and 7 cm (3 in) wide. The flower spikes are borne at a height of about 90 cm (3 ft) and are

composed of pale-yellow blossoms, each emerging from the axil of a concave bract, the corolla being a long slender tube of 3 segments. ....

*A officinarum*. From the thick tuberous roots (rhizomes), a product is obtained which has the same peppery aromatic taste as ginger. *A officinarum* is a native of China where from the early fifteenth century, the product galangale was in common use. The plant grows to a height of 0.9 to 1.2 m (3 to 4 ft) with leaves borne in long, smooth sheaths of brightest green. The flowers are white with red veinings and are borne in terminal spikes. The roots are cut into 7-cm (3-in) lengths whilst fresh, the external surface being reddish-brown in colour with the parenchyme cells filled with resin and essential oil, the whole root giving off a pungent odour.....

#### **AMOMUM (Zingiberaceae - Ginger Family)**

A genus once comprising 150 species of tropical plants with aromatic seeds, but now reduced to one, the rest being mostly transferred to *Afromomum*. This is *Amomum kepulago* (syn. *A. cardamom*), which furnishes the 'round' cardamom described by Dioscorides and by Pliny: the fruits are round like a black cherry, and the seeds when dry have a powerful comphoraceous smell. The seed is usually bleached before commercial use..... The plant reaches a height of about 90 cm (3 ft) and produces rather small, yellow flowers in August.

#### **AMORPHOPHALLUS (Araceae -Arum Lily Family)**

A genus of about 100 species of tropical plants native of Africa and Asia with a large corm-like rhizomatous root.

**Species.** *Amorphophallus campanulatus*. Native of South-east Asia and the Fiji Islands, it forms a large corm from which develops a single, segmented leaf. When dying, a conical purple-brown flower appears, and when ripe for pollination develops a fetid smell to attract carrion flies and midges.....

#### **APIUM (Celery) (Umbelliferace - Parsley Family)**

A genus of a single species, present in Europe and India, northern and southern Africa.

**Species.** *Apium graveolens*. A biennial <sup>with</sup> stems <sup>that</sup> are too bitter to be palatable, though when broken they release the pungent aromatic smell characteristic of the plant. The seeds, which have the same smell, are used for flavouring soups and sauces and are valuable for kidney complaints. The blanched stems of the cultivated forms make a delicious vegetable

#### **AQUILARIA (Thymeleaceae - Mezereon Family)**

A genus of 15 species, native of China and South-east Asia, being evergreen plants with thick leathery leaves.

**Species.** *Aquilaria agallocha*. A large evergreen tree 30 m (100 ft) tall found in the forests of Malaysia and western China. It has alternate lance-shaped

leaves and bears its snow-white bell-shaped flowers which are sweetly scented at the leaf axils and at the ends of the shoots. Mature trees become saturated with resin and the fragrant wood is burnt as incense in the temples and the bark used to make joss-sticks; from it is distilled an essential oil used in Eastern perfumery.

#### **ARISTOLOCHIA (Aristolochiaceae - Birthwort Family)**

A genus of about 180 species of evergreen and deciduous herbaceous and climbing plants scattered throughout the world. The plants have a tuberous root-stock and bear strangely curved tubular flowers of various shades of yellow, brown and crimson, like those of the stapelias and with the same fetid smell of decaying flesh, hence their attraction for flies which ensure their pollination. ....

#### **ARTABOTRYS (Anonaceae - Anona Family)**

A genus of about 100 species, mostly native of tropical Africa and India, which climb by means of recurved hooks.

**Species.** *Artabotrys odoratissima*. Native of India and Java, it is a plant of shrubby climbing habit with handsome elliptical leaves. It bears fragrant pale-yellow flowers followed by small golden pear-shaped fruits which are most ornamental. From the flowers, which smell of ripe apples and are almost hidden by the leaves, an Eastern perfume is made.

#### **ARTEMISIA (Compositae - Daisy Family)**

A genus of 200 species of the northern temperate zone of hairy herbs or sub-shrubs with alternate pinnately dissected leaves and bearing flowers in drooping racemes. Since earliest times they have been held in great esteem for the highly scented leaves had many uses. The plants prefer an open, sunny situation and a well-drained soil. They will tolerate a poor dry soil, and the scent of the leaves will then be more pronounced.

#### **ASARUM (Aristolochiaceae - Birthwort Family)**

A genus of some 60 species of perennial herbs, mostly native of the tropics, with creeping rootstocks and long-stalked heart-shaped leaves. The roots of all the American and European species have a pungent, aromatic smell.

#### **ASTRALAGUS (Leguminosae - Laburnum Family)**

A genus of about 1,600 species of herbs or sub-shrubs, common throughout the world except for Australia, mostly bearing purple-blue flowers and pollinated by bees. Few have any scent but *A. glycyphyllos*, native of the British Isles, has scented foliage and *A. gummifera* may have been the 'bed of spices' referred to in the Song of Solomon.

### **BAUHINIA (Leguminosae - Laburnum Family)**

A small genus of deciduous winter-flowering trees or shrubs distributed from Assam eastwards to Burma and into China... and are planted for ornamental purposes. The genus was named after the sixteenth-century herbalists, Jean and Caspar Bauhin, Linnaeus remarking that 'the two lobed leaves recalled the noble pair of brothers'.

### **BIGNONIA (Bignoniaceae - Bignonia Family)**

A family of almost scented plants, represented also by the Jacaranda tree and the Tecoma, and taking its name from the Abbe Bignon, librarian to Louis XIV of France. They are all tropical, mostly climbing plants of India and tropical South America though they are hardier than most plants growing in those parts. With their long trumpet-shaped flowers, they are pollinated mostly by humming-birds, also by bees.

**Species.** *Bignonia chelonoides* (syn. *B. tereospermum chelonoides*). In Hindustani, it is Padri and is native to India and the islands of the Indian Ocean where all parts, including the roots, are used medicinally. The tree attains enormous proportions with thick, scabrous brown bark, slightly scented and from which, as well as from the fragrant flowers, a cooling sweet drink is made and used in fevers. It blooms during the hot and rainy seasons, the pale-yellow flowers having a pronounced fragrance.

*B. quadrilocularis*. Native of the Circar Mountains where it forms a large straight trunk of considerable height, its grey bark having a few scabrous spots. The branches spread out widely to form a large head, with pinnate leaves up to 60 cm (2 ft) long. The flowers, which appear at the beginning of the hot season, are borne in large erect terminal panicles and are an attractive rose-pink with a delicious sweet perfume.

*B. suaveolens*. Native of the moister parts of central and eastern India where it is known as *Madonna-Kama-pu*. It is the Patala (meaning rose-coloured) of Sanskrit writers and its flowers are said to intoxicate the bees. It blooms early in spring, before the leaves appear, and in India is known as the 'Messenger of Spring'. The flowers are large and dull purple, described by Sir William Jones in his *Asiatic Researches* as 'light purple above, brownish purple below ... exquisitely fragrant ... The whole plant except the root, being very downy and viscid'. The fruit, which is not ripe until the winter, is white and is sweet and delicious.

### **BORAGO (Boraginaceae - Forget-me-not-Family)**

A genus of hairy annuals or perennials bearing drooping blue flowers in loose cymes.

**Species.** *Borago officinalis*. A native of the British Isles growing 45 cm (18 in) tall. Its leaves and flowers possess a cool cucumber-like flavour and smell ..... The plant prefers a dry, well-drained soil and a sunny position. It may be sown about the flower border, for its drooping sky-blue flowers, with their striking black anthers and hairy sepals held on 5-cm (2 in) stems, are most

colourful. It is also valuable for bees, supplying them with large quantities of nectar which is secreted at the base of the ovary.

### **BOSWELLIA (Burseraceae - Frankincense Family)**

A genus of 24 aromatic trees or shrubs all parts of which are fragrant and which furnished the frankincense of the ancients. They are native of Africa, Arabia and tropical Asia.

**Species.** *Boswellia serrata* (syn. *B. thurifera*) Native of the southern end of the Red Sea, the Yemen, parts of north-western Pakistan, India and the Malayan Archipelago. It is a smooth-barked tree yielding the sweet-smelling gum olibanum which is dried and burnt as incense in holy places. The leaves, when bruised, and wood emit an aromatic citrus-like odour.

To the ancient world it was the most prized commodity of all and was the chief source of wealth of that part of Southern Arabia ruled over by the Queen of Sheba. It supplied the temples of Egypt with incense and was as much in demand in Imperial Rome.

The flowers are star-like and greenish-white, the leaves resembling those of Mountain ash. The gum exudes from the branches as bright oblong drops and is brittle. It is yellow or pale red in colour and has a bitter taste, but when warmed or burnt gives off a pleasant balsamic odour. It is collected by making incisions in the bark.

### **CALENDULA (Marigold) (Compositae - Daisy Family)**

A genus of about 20 species of annual plants, mostly native of southern Europe and North Africa, of which *C. officinalis* with its pungent scent is the best known .....

**Species and Varieties.** *Calendula officinalis*. An annual which in spite of being native to the warmer climes is so hardy that it will remain green and bear flowers almost throughout the coldest winter. It seeds itself so readily that from an original planting will follow a never-ending supply.

The plants grow 30 to 37 cm (12 to 15 in) tall and have succulent stems covered with fine hairs. The oblong sessile leaves are bright green and pungent to the touch, and impart their flavour to salads and soups. The flowers are 5 to 7 cm (2 to 3 in), in diameter, often with fluted petals which radiate from a central boss, and they possess a similar pungency.

### **CALONYCTION (Convolvulaceae - Bindweed Family)**

A large genus of mostly climbing plants numbering about 500 species, mostly native of tropical North and South America.

**Species.** *Calonyction aculeatum*. A native of Greece, it has long been grown in the British Isles, but to modern gardeners is almost unknown. Until recently it was called *Ipomaea bona-nox* (Beauty of the Night) for its large, trumpet-shaped flowers resemble those of the convolvulus, having a waxy-white appearance at even-tide, hence the common name of Moonflower.

It is a plant of climbing habit, and in a warm summer will attain a height of nearly 6 m (20 ft) in a single season, bearing its large trumpets in succession from July until October. The blooms often measure nearly 15 cm (6 in) across and diffuse a powerful scent at night.

#### **CALOPHYLLUM (Guttiferace - St John's Wort Family)**

A genus of more than 100 species of trees, distributed throughout tropical South-east Asia, Australia and the Fiji Island, and yielding a valuable sweet resinous compound.

**Species.** *Calophyllum inophyllum*. Native mostly of the Fiji Isles and the East Indies, where it is usually found in coastal areas, growing to a height of 12m (40 ft) or more. The evergreen, opposite leaves are thick and shiny; the small flowers of 6 petals, formed in inflorescences, are creamy-white, unusual in this family, and have a soft, sweet perfume. The flowers are followed by globular fruits of the size of a horse-chestnut, and from them an aromatic resinous oil is obtained which is used as a liniment. The wood is also resinous.

#### **CANNABIS (Cannabinaceae - Hemp Family)**

A genus of a single species.

**Species.** *Cannabis sativa*. Hemp is an annual plant, native of India and central Asia where it grows to a height of 2.4 m (8 ft) or more and is cultivated for the valuable fibrous content of its stems. It has alternate leaves, divided into 5 to 11 lance-shaped segments, and they emit a resinous compound. The flowers appear in June, the males in short panicles, the females clustered between the sessile bracts.

#### **CARUM (Umbelliferae - Parsley Family)**

Its name is derived from the Arabic *Karawya* (the name of the seed), and it is a plant indigenous to all parts of Europe and the Near East, found from Iceland to the Western Himalayas, especially around the Mediterranean.

#### **CEDRUS (Pinaceae - Pine Tree Family)**

A genus of four species, native of North Africa. Lebanon and the western Himalayas, being amongst the most noble of all evergreens and reaching enormous proportions. Indeed, the name is derived from an Arabic word denoting strength.

**Species and Varieties.** *Cedrus atlantica*. The Atlas cedar, native of the Atlas Mountains of North Africa, with cones resembling those of the Cedar of Lebanon. It makes a dense, closely branched tree of pyramidal form. *C. glauca* is even finer and, with its blue foliage, is known as the Blue cedar.

*C. deodara*. The Indian cedar, native to the western Himalayas. In its native haunts it always grows in almost soil-less rocky formations, and on the cold northerly side of mountains, which will give some idea of its hardiness. It is perhaps the most beautiful of all coniferous trees, with gracefully dropping

branches almost to the ground, and forming an elegant pyramid of soft grey-green.....

#### **CENTAUREA (Gentianaceae - Gentian Family)**

A genus of more than 600 species, few of which are plants of garden merit whilst fewer still have any degree of perfume. Of the several annual or biennial species, only *Centaurea moschata* (syn. *C. odorata*) has perfumed flowers.....

**Species and Varieties.** *Centaurea moschata*. The Sweet Sultan named in honour of the Sultan of Constantinople, bears thistle-like flowers in shades of purple, lilac, yellow and white. The plants grow about 60 cm (2 ft) tall and are raised by sowing seed where they are to bloom, early in spring. The plants bloom from July until October and diffuse the musk-like perfume of the East.....

#### **CHEIRANTHUS (Wallflower) (Cruciferae - Wallflower Family)**

A small genus of perennial or biennial herbs, amongst which is *Cheiranthus cheiri*, the wallflower which, though perennial, is usually treated as a biennial, the seed being sown in May each year for the plants to bloom in the early summer of the following year.

**Species.** *Cheiranthus cheiri*. The wallflower is a member of the same 4-petalled family as the Stock and Sweet rocket whose flowers are amongst the most powerfully scented of all, though most plants of the family are scentless. The scent of the wallflower, similar to that of the pink and carnation, earned for it the name of (Wall) Gillyflower, a name used also for the Stock and Sweet rocket.

#### **CHENOPODIUM (Chenopodiaceae - Beetroot Family)**

A genus of about 50 species of mostly annual herbs, native of subtropical regions, with alternate flat leaves which in several species emit a most disagreeable odour. They usually grow on the banks of rivers and canals and are a maritime order.

#### **CHRYSANTHEMUM (Compositae - Daisy Family)**

A genus of about 200 species of annual or perennial plants, usually woody at the base and with alternate leaves, lobed and toothed. The flowers are borne solitary or in loose corymbs.....

**Specie.** *C. indicum*. The leaves possess the same pungent fragrance, refreshing and lemon-like, similar to that given off by the foliage of the artemisias and camomile of the same family.....

#### **CINNAMOMUM (Lauranceae - Bay Tree Family)**

A genus of 250 or so aromatic trees of economic importance, mostly evergreen and native of the damp forests of northern India and Ceylon and

South-east Asia, with alternate leaves, simple and entire and containing aromatic oil glands. The flowers are borne in terminal or axillary inflorescences and are pollinated by Diptera.

**Species.** *Cinnamomum camphora*. Native to southern India, Japan and the islands of the Malayan Archipelago, it makes a tall tree with alternate, glossy leaves and from its wood, cut into chips and boiled, it yields on cooling a white crystalline substance which is the finest form of camphor. The wood was also burnt during epidemics. ....

*C. cassia*. An evergreen growing 6 m (20 ft) high, it yielded the 'cassia' of the Scriptures. All parts of the tree are fragrant. The plant is present in Afghanistan, northern India and Western China and yields the cassia oil of commerce. The best oil is obtained from young bud-stalks but the leaves also yield a brightly coloured distillate with the smell and taste of cinnamon. ....

*C. glanduliferum*. In its native northern India and western China, it makes a tall tree and is evergreen, with broad leathery leaves, pale green above, white beneath and covered in pellucid dots. They are pleasantly aromatic when crushed. The bark, known as the Sassafras of Nepal, has the refreshing scent which we associate with cinnamon. It is dark brown and is readily removed from the tree without causing it to die. As the tree becomes older, the strength of the bark's aroma diminishes.....

*C. zeylanicum*. This is the species which provides most of the commercial product, the bark in powdered form being much used in cookery whilst the essential oil is a powerful bactericide. A native of Ceylon, where the tree grows to a height of 9 to 12 m (30 to 40 ft), it is evergreen, with aromatic leaves.

#### **CISTUS (Cistaceae - Rock Rose Family)**

They are amongst the most beautiful of shrubs, being evergreen and mostly with resinous leaves. They are native of the Mediterranean regions, and more especially of Cyprus and the lofty mountains near the town of Baphos.

**Species.** *C. cyprius*. It abounds in Cyprus, and is a vigorous shrub with leaves of dull grey-green, sticky to the touch. From this species it is said that the purest labdanum is obtained. It grows 1.8 m (6 ft) in height and blooms during May and June, bearing its clear-white flowers in clusters; at the base of each petal is a scarlet spot.

#### **CITRUS (Rutaceae - Rue Family)**

A genus of 12 species of small trees or shrubs, often spiny, with alternate leaves in certain species joined to the stem with a winged footstalk. The flowers are extremely fragrant and are white, appearing in never-ending succession at the same time as the fruit.....

The blossom most used in perfumery is that obtained from *C. bigarradia*, the Bitter orange, from which the essential oil known as neroli is obtained, one of the chief ingredients of Eau de Cologne.....

**Species.** *Citrus aurantium*. The Seville orange of Spain and Portugal which grows 1.2 to 1.3 m (4 to 5 ft) tall, its oblong leaves having a winged stalk. The flowers are white and sweetly scented and are followed by small sour fruits with a reddish-orange skin, used to make Oil of Portugal.

*C. bigarradia*. Its blossoms are those most used in the making of perfume, its essential oil being one of the chief ingredients of Eau de Cologne. It makes a small bushy tree with large creamy-white flowers which drench the surrounding air with a delicious perfume.....

*C. limonia mayeri*. It is known as the Chinese lemon and makes an ideal and easily manageable pot plant, never exceeding a height of 50 cm (20 in) and growing dense and bushy. It blooms in profusion, the white blossom being attractively tinted with pink and it gives off a heavy, jonquil-like perfume.....

*C. maxima*. The Grapefruit, being the largest of all the citrus fruits and making a tree 1.8 m (6 ft) tall with large glossy leaves. The small white flowers are not as heavily scented as those of the other citrus species but are sweet and pleasant and are followed by large pale-yellow fruits of between 15 to 20 cm (6 to 8 in) diameter, flattened at one end.

*C. medica*. A small spiny tree with a stalk that is not 'winged'. The flowers are large, some being 7.5 to 10 cm (3 to 4 in) across and are shaded with purple on the underside. Extremely fragrant, the flowers are followed by long, narrow fruits which have a lemon-coloured skin, used in candying. This fruit is known as the Citron lemon.

#### **COMMIPHORA (Burseraceae - Frankincense Family)**

A genus of about 180 species of highly aromatic trees or shrubs, mostly native of the Arabian Peninsula and western India, of which *C. myrrha* furnished the most valuable of all perfumes known to the ancients; gum myrrh was used in the manufacture of pastils and fumigating spirits. The Arabs feed it to their horses to prevent fatigue.

#### **CORIANDRUM (Umbelliferae - Parsley Family)**

A genus of a single species.

**Species.** *Coriandrum sativum*. It is an annual, forming an attractive plant nearly 90 cm (3 ft) tall, with glossy dark-green leaves and bearing small pale mauve-pink flowers. Whilst its leaves are useful for flavouring soups, stews, curries and other Eastern dishes, it is the small round seeds that are most in demand, to flavour pickles and to cover with sugar in making 'sweets'.....

#### **CRINUM (Amaryllidaceae - Narcissus Family)**

A large genus of bulbous plants native of the southern United States, South Africa and South-east Asia, producing large bulbs with long necks and

bearing several large funnel-shaped flowers on stems 90 cm (3 ft) in length.....

**Species.** *C. asiaticum*. It forms a huge rounded bulb from which arises a stout stem some 90 cm (3 ft) tall at the end of which appear 40 to 50 flowers in an almost circular umbel. The lily-like blooms recurve considerably and are white shading off to palest pink. They emit a sweet, lily-like perfume which is especially pronounced at night to attract night-flying Lepidoptera for their pollination.

#### **CROCUS (Iridaceae - Iris Family)**

A genus of 75 species, native of southern Europe and the Mediterranean regions. The flowers are visited by bees and butterflies and close up at night. By day, many species are scented and by planting for a succession of bloom throughout autumn, winter and spring, the flowers will provide perfume when few other flowers will do so.....

**Species.** *C sativus*. The Saffron crocus, one of the oldest plants in cultivation, believed to be the Karkom of the Song of Solomon which gave the name Crocus to the genus. The blooms give off a delicate perfume when inhaled near to, and it is more pronounced in the dried saffron collected from the stigmata which hang out of the flowers in a most peculiar manner. Another peculiarity is that its flowers remain open during dull weather and at night-time, for once having opened they seem unable to close again. The blooms are produced only following a hot, dry summer and are extremely beautiful, being reddish-purple with deeper veining of violet.

#### **CUMINUM (Umbelliferae - Parsley Family)**

A genus of a single species.

**Species.** *Cuminum cyminum*. It is a native of Egypt and Ethiopia but will ripen its seed as far north as England and the Baltic countries..... The plant grows 45 cm (18 in) high with fern-like leaves which have a pungent aroma when bruised. During midsummer it bears umbels of rose pink flowers.....

#### **CURCUMA (Zingiberaceae - Ginger Family)**

A small genus of semi-tropical plants with perennial tuberous rootstocks and annual stems. The roots are highly fragrant and, when dried and powdered, form an ingredient (Zedoary) together with cloves, deodar and other aromatics, of a compound known to the Hindus as Abir.....

**Species.** *Curcuma longa*. Native to South-east Asia and the East Indies, with Malabar, Java and Haiti the main centres of its cultivation, it is a perennial plant with a rhizomatous rootstock known in commerce as turmeric.....

All the Curcumas flower during the warm April-May period, soon after the leaves appear. The plants require a rich soil, usually that occupied by sugar cane the previous year. Planting is done along the top of ridges, using

small pieces of root and setting them 60 cm (2 ft) apart. The plants are lifted at the end of the season when the roots are dried and marketed.

*C. zedoaria*. This is native, not only of Bengal where it is common in gardens around Calcutta, but also of Malaya, China and of several islands of South-east Asia. The roots are deep yellow, whilst the flower stem consists only of the sheath of the leaves which are covered with down. From the sheath the flower spike arises, the tubes being pink with a fleshy yellow interior, and they have a powerful aromatic perfume; the roots emit a powerful camphor-like smell.

*C. zerumbet*. It is a native of Chittagong and, like *C. zedoaria*, the roots have a camphor-like smell. In the Bombay markets, the root is known as Kachoor, with an odour described by Dr Dymock as being 'analogous with that of ginger until the rhizome is powdered, when it develops a powerful aromatic odour similar to that of cardamoms'.....

### **CUSCUTA (Dodder) (Convolvulaceae -- Bindweed Family)**

A genus of slender, twining leafless parasitic plants, mostly annuals. The flowers are white and rose and borne in dense clusters.

### **CYMBOPOGON (Gramineae - Grass Family)**

A genus of perennial aromatic grasses, closely allied to *Andropogon* and distributed about dry, stony places in North and South Africa, in India and South-east Asia, which are valued for their aromatic principles. They form densely tufted plants with the inflorescences crowded at the end of naked stems with the spikes borne in pairs.....

*C. schoenanthus*. By the oil distillers of Khandesh it is called 'Motiya' when the inflorescence is young and bluish-white in colour, and 'Sonfiya' after ripening to a crimson-red colour, for the oil obtained from the young grass has a more delicate odour. It grows freely on open hillsides in West Khandesh and is cut and harvested late in September, after the rains.

### **CYPERUS (Galingale) (Cyperaceae--Sedge Family)**

An order of some 2,000 or more grass-like plants usually found growing by the banks of ponds and streams and in wet copses and marshland. The name Souchet is used by French perfumers for the fragrant tuberous roots of *Cyperus longus* and other species which when dried and powdered, or by distillation, yield an aromatic perfume used for making cosmetics.

**Species.** *C. rotundus*. It is a common Eastern species, especially in India .....

The plants grow from rhizomes which become long and sausage-like. Externally they are dark brown turning black when dried, but white within. They have the aromatic smell of *Acrostichum calamus*.

On examination by microscope, it is found that the outer layer is composed of bundles of reddish-brown cells containing essential oil, starch granules and resinous matter.

*C. scariosus*. In Sanskrit it is *Nagar moostaka*, in Arabic, *Soade-Kufi*, and like *C. rotundus* it is tuberous-rooted with numerous dark-brown fibres

which when bruised emit a power fragrance. Its slender delicate form distinguishes it from other species. It grows 0.9 to 1.2 m (3 to 4 ft) tall, its flowers appearing in compound umbels. The roots yield a perfume for the hair, which is also used in the dyeing and preparing of fabrics. It grows about damp ground in Bengal and Rajputana and is sold on the Bombay market as surat.

#### **DIANTHUS (Caryophyllaceae - Pink Family)**

A genus of about 80 species of annual, biennial or perennial plants with glaucous grass-like foliage and bearing their flowers either solitary or in terminal clusters. They are mostly plants of the northern temperate zone, able to survive intense cold. A number of species bear clove-scented flowers.....

*Dianthus caryophyllus*. With their pink or rose-red flowers and long narrow passage in which the honey is secreted, the flowers are visited by butterflies, though the protruding anthers are taken advantage of by insects which act as secondary pollinators.

#### **ELAEAGNUS (Elaeagnaceae -- Oleaster Family)**

A genus of 45 species, native of Europe, Asia and America. They are shrubs or small trees able to survive in barren land and tolerant of sea winds. The shrubby species are natives of China and Japan .....

The flowers which are produced at the leaf axils are mostly hidden by the foliage and at a distance cannot be seen, but as one approaches the bush a powerful sweet scent is observed, almost as strong as orange-blossom when the day is calm. It is remarkable that so tiny a flower is able to diffuse so redolent a perfume.

#### **ELETTARI (Zingiberaceae -- Ginger Family)**

A tropical genus of large perennial herbs, similar in appearance to *Amomum* but distinguished from it by the elongated form of the corolla and by the filaments not being prolonged beyond the anther. They are native only to tropical India, the best known being *E. cardamomum* whose fruit is known as the Malabar cardamom

**Species.** *Elettari cardamomum*. It grows in abundance on the mountainous coast of Malabar to an altitude of about 1,500 m (5,000 ft) but for commercial purposes is cultivated in clearings by inducing spontaneous germination. This is achieved by felling trees and shaking the soil; in about a month, seedlings appear and produce a crop four years later.....

#### **EUGENIA (Myrtaceae - Myrtle family)**

A genus of evergreen trees or shrubs, native of the sub-tropical West Indian Islands, the islands of Madagascar and South-east Asia; one species is native of New Zealand. The leaves are oblong, lanceolate, pointed at the tip, while the flowers are borne in axillary or terminal corymbs. Like the myrtle, all parts of the plant have an aromatic fragrance, the essential oil of the leaves and seeds being widely used in commerce.

**Species.** *E. caryophyllus*<sup>at</sup>. The harvesting of the cloves commences when the tree is six years old and continues until it approaches 100 years. The opposite leaves are lance-shaped, about 15 cm (6 in) long, and covered with oil glands which release a clove-like aroma when pressed. The crimson-purple flowers are also fragrant and are borne in cymes at the end of the branchlets.

It is the dried flower buds that yield the cloves.

#### **FERULA (Umbelliferae - Parsley Family)**

A genus of about 130 species of annual and perennial plants. In deep, rich soil they are most handsome, growing 2.4 to 3.6 m (8 to 12 ft) tall with fern-like leaves, deep green in colour which appear early in spring. The plants however are quite without the pleasant sweet, hay-like smell of the fennel and instead have a fetid smell of stale fish.

**Species.** *Ferula asafetida*. The drug asafetida, used in Persia as a condiment, is obtained by notching the stem just above soil level. It has a most unpleasant smell and is used in medicine as a stimulant.

*F. galbaniflua* (syn. *F. perscia*). Galbanum was obtained from the strong-rooted perennial which forms umbels of unpleasant-smelling yellowish-white flowers and produces a milky juice from incisions in the stem which solidifies in the air. When collected it has a pleasing pungent, balsamic smell and is used medicinally and to make varnishes.

#### **FOENICULUM (Fennel) (Umbelliferae - Parsley Family)**

A small genus of perennial, annual or biennial herbs, native of Mediterranean countries and of central Asia, and grown commercially for the flavouring power of the seeds.....

**Species.** *Foeniculum vulgare*. Fennel grows nearly 1.8 m (6 ft) tall and bears yellow flowers in June and July, whilst later, its feathery leaves take on a bronze tint. It grows in any soil but requires a sunny position to ripen its seed. The pungent leaves are used as required whilst the roots may be eaten braised like celery. The aromatic water in which the seed has been steeped is good for stomach disorders.

#### **GARDENIA (Rubiaceae - Bedstraw Family)**

A large genus of mostly evergreen trees and shrubs, named by Linnaeus in honour of Dr. Garden, a botanist of Charleston, U.S.A. They are native of tropical Asia and Africa, Japan, China and the East Indian island..... They will come into bloom in early spring and continue throughout summer. They are deservedly prized for the exquisite fragrance of their blossom which is produced in great fragrance of their blossom which is produced in great freedom though usually solitary, borne at the leaf axils and at the extremities of the shoots.....

*G. jasminoides* (syn. *C. floride*). It is native of Florida and of Central China where it is called Pak-sema-Liva and is used to flavour tea. It is an erect shrub 0.9 to 1.2 m (3 to 4 ft) tall, unarmed and much branched with the

leaves elliptic. The salver-shaped flowers, like those of the jasmine, are borne at the end of the shoots and are of purest white and with the scent of white jasmine. There is a double-flowered form, *flore pleno*, described in Miller's *Gardener's Dictionary*, which bears flowers 10 cm (4 in) across and of remarkable perfume.....

*G. lucida*. Native of the Philippine island of Luzon, it is a deciduous tree growing 4.5 m (15 ft) tall. From its bark a fragrant gum is exuded and, as with *G. gummifera*, the buds are also resinous. The glossy oblong leaves measure up to 22.5 cm (9 in) long whilst the terminal, solitary flowers are large and though opening white soon turn pale yellow. They have a rich lily-like perfume.

#### **GLYCYRRHIZA (Leguminosae - Laburnum Family)**

A genus of 18 species of sub-tropical and temperate regions of the world, most important being *G. glabra*, the liquorice.

#### **HEDYCHIUM (Zingiberaceae - Ginger Family)**

A genus of eastern Indian herbaceous plants amongst the most beautiful and sweetly scented known throughout the entire world. They grow between 0.9 to 1.5 m (3 to 5 ft) tall, and when grown indoors require an ample amount of pot room. The blooms are produced in the form of large erect spikes at the apex of the shoots and are mostly either purest white or pale yellow, their scent being particularly pronounced towards evening.....

**Species.** *H. spicatum*. It takes its name from two Greek words meaning 'sweet snow' from the snow-whiteness of its sweetly smelling flowers. The dried roots are used by the Hindus to burn as incense, and the plant is native of the Punjab Himalayas where the roots form a considerable article of commerce. The root is reddish-brown and marked with white rings. Internally it is starchy in substance with a fragrant, somewhat pungent smell and bitter to the taste. Dr. Dymock, in his *Notes on Indian Drugs* has described the scent as similar to that of orris-root but more powerful. There is a Chinese form which is rather less strongly scented.....

*H. coronarium*. It is known in the East as the Indian Garland flower and is a stately plant with handsome foliage and bearing pure-white flowers of delicious perfume over a long period. There is also a pale-yellow variety.

#### **HELIANTHUS (Compositae - Daisy Family)**

A genus of about 50 species, mostly native of North and South America, one of which, *Helianthus annus*, the Sunflower of Peru, has aromatic properties.

**Species.** *Helianthus annus*. A native of Peru. The plant sends up a stem 2.4 to 3 m (8 to 10 ft) in height and has large heart-shaped leaves. At the end of the stem appears a flower of brilliant golden-yellow some 30 cm (12 in) across.

### **HYACINTHUS (Liliaceae - Lily Family)**

A genus of 30 species, native of the south-eastern Mediterranean regions and closely related to the Scilla. The flowers of most species have a delicious balsamic perfume which is most appreciated indoors.....

**Species and Varieties.** *H. orientalis*. Native of the Near East, especially of Persia and Turkey, it is a charming plant in its own right, bearing a dozen or more nodding bells of palest mauve on stems 25 cm (10 in) long. The bells open like stars and diffuse about them a perfume equalled only by that of the stock.....

### **ILLICIUM (Magnoliaceae - Magnolia Family)**

A genus of only six species of tender evergreen trees or shrubs, native of the warmer regions of America, and of China, India, and the islands of the Pacific. Its name means 'allurement' from the attractive fragrance and appearance of the trees. The leaves when bruised emit a powerful aromatic odour, due to the volatile oil contained in tiny pellucid vessels which are clearly visible under a microscope. The flowers are borne from the axils of the leaves and also possess a spicy odour. The fruits are most attractive being flat and star-shaped, with eight rayed carpels, similar to starfish in appearance, and they have since earliest times been exported from the Chinese province of Kuang-si. ....

### **INDIGOFERA (Leguminosae - Laburnum Family)**

A large genus of deciduous and evergreen shrubs, indigenous to the East and West Indian islands and to parts of India, China and Korea. Several species bear scented flowers.....

### **INULA (Compositae - Daisy Family)**

A genus of about 60 species of hardy perennial plants, mostly native of Eastern Europe and the Himalays. Included are the Elecampane and the Ploughman's spikenard, natives of the British Isles.

### **IRIS (Iridaceae - Iris Family)**

A genus of hardy perennials which for convenience may be divided into two main groups, those having a rhizomatous root-stock, and those which grow from a bulb.....

**Rhizomatous Species and Varieties.** *I. germanica*. The Common Flag or German iris is a native of central Europe, and the oldest iris to be given garden cultivation.....

### **IXORA (Rubiaceae - Bedstra Family)**

A genus of 400 species of evergreen shrubs or small trees, native of Indonesia, Madagascar and southern Indian, including Ceylon.

**Species.** *Ixora alba*. A native of southern India, it bears pure-white flowers which are most handsome against the dark evergreen foliage, whilst they are sweetly scented.

#### **JASMINUM (Oleaceae - Olive Tree Family)**

A genus of about 200 species of erect or climbing shrubs with opposite leaves, bearing their flowers from the tips of the branches or in forked cymes. They are mostly native of southern Europe and Asia.

**Species and Varieties.** *J. humile glabrum*. Native of Nepal, it is a plant of vigorous habit growing 2.4 m (8 ft) in height, and from May until August bears clusters of slightly scented yellow flowers.....

*J. officinale* reaches a height of 3 to 3.5 m (10 to 12 ft), and bears its glistening, white, funnel-shaped flowers in elegant sprays, which are most beautiful against the dark-green leaves. The variety *affine* has large flowers, tinted with rose, whilst *aureo-variegatum* has cream-coloured variegations on the leaves and bears ivory-white flowers. The perfume of the flowers is amongst the most powerful of all scents, difficult to extract and to imitate. The associated species, *grandiflorum*, is grown in large numbers near Grasse and the scent is extracted by *enfleurage*.

*J. polyanthum*. A native of India closely related to *J. officinale*, it is evergreen .....

..... It bears powerfully scented white flowers, flushed with pink on the outside and distinguished by its paniculate inflorescences.....

#### **JUGLANS (Walnut) (Juglandaceae - Walnut Tree Family)**

A genus of eight species having resinous bark and leaves. In many an old garden is to be found a walnut tree, planted not for its fruit but for the resinous quality of its pinnate leaves which are believed to keep away flies during summer. The scent of the leaves when bruised is most pleasant, for though resinous it has a sweetness not usually present in other leaves of a similar nature, but resembling that of the Balsam poplars.

#### **JUNIPERUS (Cupressaceae - Cypress Family)**

A genus of about 60 evergreen species with pungent foliage. Pencil-thin of habit, the junipers may be used almost anywhere about the garden, being planted in small groups and taking up little space. Two species especially, *J. communis* and *J. thurifera*, emit a powerful fragrance from the wood and foliage but thrive only in a heavy soil which is well-drained in winter.....

#### **LAURUS (Lauraceae - Bay Tree Family)**

A genus of two species, one, an evergreen tree *L. nobilis*, being native of southern Europe, the other, *L. benzoin*, inhabiting damp woodlands from Canada to Florida. Both have alternate oblong leaves, deliciously fragrant when handled, and bear dioecious flowers in short racemes, with the parts arranged in fours.

### **LAVANDULA (Lavender) (Labiatae - Lavender Family)**

A genus of 20 species. (*L. vera* and its varieties being most widely grown) of perennial herbs or shrubs having opposite, entire or toothed leaves and bearing tubular flowers in short spikes. The plants are native of southern Europe, extending from southern France to the eastern Mediterranean and possibly into India....

**Species and Varieties.** *L. stoechas*. The French lavender, found growing on the Isles of Stoechas near Marseilles which should only be grown in a mild climate. It grows 30 cm (12 in) tall and bears fat short spikes of dark purple in dense heads and it has narrow foliage, densely covered in white hairs.

### **LAWSONIA (Lythraceae - Loosestrife Family)**

A genus of a single species, to be found growing in the Middle East, in northern India and into Burma and China. From its leaves, henna is obtained which from earliest times was used to stain the body and to colour the hair.

### **LIGUSTICUM (Umbeliferae - Parsley Family)**

A small genus of aromatic plants distributed through the northern temperate regions of Europe and extending south to Egypt, Persia and Afghanistan.

**Species.** *Ligusticum ajowan*. A small tender annual, commonly known as the Bishop's weed and native to Egypt, Persia, Afghanistan and Bengal. It is a plant of upright habit, growing 37.5 cm (15 in) tall, the stems having few leaves which are divided into numerous filiform segments. The tiny white flowers are borne in umbels and are followed by strongly ribbed fruits covered with small blunt tubercles. When dry and rubbed in the hands, the seeds yield a powerful thyme-like odour, much valued for culinary purposes whilst the distilled water is used as an aid to cholera. The seeds yield an aromatic volatile oil identical with Thymol.

### **LILIUM (Liliaceae - Lily Family)**

A large genus of flowering plants growing from a (usually) scaly bulb. On an erect leafy stem branched at the end, it bears one or more drooping or erect flowers in racemes. The flowers consist of six segments, the three inner petals being larger and broader than the three outer petals. The lily is widely distributed throughout the northern temperature regions from Oregon in the west, across North Africa and Europe to China and Japan, usually growing where they are exposed to a severe winter with little rain, followed by a long period of sunshine.....

### **LIQUIDAMBAR (Hamamelidaceae - Witch Hazel Family)**

A genus of six species of balsam-bearing deciduous trees with 5-lobed maple-like leaves which take on brilliant colourings in autumn. Native of North America and western Asian, they require a moist loam to grow successfully. The trees yield a fragrant balsam known as storax; and a valuable wood, satin walnut (satinwood).

**Species.** *Liquidambar orientalis*. A slow-growing bush rather than a tree but it eventually attains a height of 6 m (20 ft). It is native of the Levant, and the resinous gum it exudes is now the storax used in perfumery having replaced the true *Styrax officinalis*, a Levantine shrub which is now rarely to be found. The balsamic fragrance is present to some extent in the foliage and is noticeable when the leaves are pressed in the hand. The bark is burnt in the homes of eastern peoples, to counteract unpleasant smells due to poor sanitation.

Liquid storax gives greater permanence to the odours of flowers extracted by maceration. It is also used in the imitation of other scents as an alternative to vanilla, ambergris and benzoin, or to complement them.

#### **LITSEA (Lauraceae - Bay Tree Family)**

A small genus of shrubs or trees, native to the North Island of New Zealand, the shining leaves pale brown when young, usually alternate; the flowers borne in axillary umbels of four or five.

#### **MATRICARIA (Compositae - Daisy Family)**

A genus of small annual plants growing about dry wastelands and cornfields, several of which have fruit-scented foliage when handled. Known as the Mayweeds, they have leaves divided into narrow segments. The flowers are borne singly or in corymbs.

#### **MATTHIOLA (Stock) Cruciferae - Wallflower Family)**

A genus of about 50 species of branching annual or biennial herbs amongst which is *M. bicornis*, the Night-scented stock; also the Spring-flowering Brompton stocks, and the Summer-flowering Ten-week stocks. Each bears a flower with an exotic penetrating clove perfume which is more pronounced than in any other flower.

#### **MEDICAGO (Leguminosae - Laburnum Family)**

A genus of shrubby plants known as the Trefoils, one of which, *M. arborea*, the Moon trefoil of southern Europe which is especially prominent in Greece, bears flowers with the well-loved vanilla or sweet-pea scent of the family. The plant requires a sunny situation and a light loamy soil.

#### **MELIA (Meliaceae - Mahogany Family)**

A genus of several sub-tropical trees, native of India, Malaysia and south-western China where they are used for their timber which smells strongly of musk. A number of species at one time classified under *Melia* are now allocated to the genus *Guarea*.

**Species.** *Melia azedarach*. It is known in southern Asia as the Bead tree for its pea-sized seeds are heavily musk-scented and are used to make rosary beads. It is the hardiest of the genus, being native of the lower Himalayan regions, Malaya and western China, where it grows to a height of 18 m (60 ft).....

### MELILOTUS (Leguminosae - Laburnum Family)

A small genus of coumarin-smelling herbs bearing white or yellow flowers in narrow racemes. They grow in fields and about dry ditches, and are annual or biennial plants which release their pleasant smell as they become dry.

**Species.** *Melilotus albus*. It is biennial, native of the eastern Mediterranean, especially of the Nile Delta, and is perhaps a variety of *M. officinalis*. It is a stiff tall-growing plant bearing small white flowers in elongated racemes. Known as Bokhara clover....

... The whole plant gives off a sweet fragrance when dry.

### MELISSA (Balm) (Labiatae - Lavender Family)

A small genus of herbs, differing from *Calamintha* only in the curved corolla tube ....

**Species.** *Melissa officinalis*. It is an erect hairy plant of the hedgerows of South-west England with wrinkled crenate leaves, and during July and August bears white flowers at the leaf axils and in I-sided whorls.

### MENTHA (Labiatae - Lavender Family)

A genus of 25 species of the northern temperate regions and with several in South Africa and Australasia, all of which release a pungent smell when pressed.

**Species and Varieties.** *Mentha aquatica*. It is the Water or Bergamot mint, found growing wild on the banks of streams and in meadowland, and its pungent fragrance of bergamot is extremely refreshing. It is a compact, small-leaved plant, and is some times called the Orange mint and also Wild peppermint, though it is quite a different species.

*M. arvensis*. It is the Corn mint which possesses a very strong, almost oppressive mint fragrance. It is able to prevent milk from curdling to a greater degree than any of the mints and in olden times was grown almost entirely for this purpose.....

*M. sylvestris*. It is the Hairy mint, also known as the White Woolly mint, to be found in damp, shady places, generally by a stream running through deciduous woodlands.

### MURRAYA (Rutaceae - Rue Family)

A genus of 12 species of trees or shrubs native of China, India, Java and Polynesia, and which in the British Isles and North America are grown as stove plants, requiring a minimum winter temperature of 18°C (65°F). They have dark-green pinnate leaves and bear their flowers in terminal corymbs.

**Species.** *Murraya exotica* (syn. *Marsana buxifolia*) It makes a large shrub or small tree 3 m (10 ft) in height with deep-green shining pinnate leaves. The pure-white flowers, most striking against the foliage, are borne in crowded

terminal corymbs and are exquisitely scented. They are followed by succulent fruits the size of a pea, the skin of which is covered with small resinous glands, like an orange. The leaves are used in curries.

#### **Myristica (Myristiceae - Myristica Family)**

A genus of about 120 trees or shrubs confined to the tropics. In India they are mostly found on the Khasi Hills. In tropical America and the Malayan Archipelago grow several species, of which *Myristica fragrans* (syn. *M. officinalis*, *M. moschata*, *M. aromatica*), the best known, is the Nutmeg tree.....

**Species.** *M. fragrans*. An evergreen tree growing 9 m (30 ft) high, usually with a lofty, undivided trunk; the leaves shining, deep green and aromatic. The small, fragrant, white flowers cluster in the axils of the leaves and are followed by fruits which are pear-shaped, golden-yellow in colour, and with a longitudinal groove on one side (like a peach) which, when ripe, bursts into two parts. The seed is covered by a red fleshy part known as the aril which is dried and sold as mace, whilst the seed itself has a thick, hard, outer shell enclosing the nutmeg which is wrinkled, due to the pressure of the aril.....

#### **MYRTUS (Myrtle Family)**

A genus of 60 species of small trees or shrubs, native of sub-tropical America, with the Common myrtle native also of, or long naturalized in, Mediterranean regions. ....

**Species.** *Myrtus communis*. The Common myrtle of southern Europe and northern Africa, with glossy box-like leaves of darkest green and bearing in July pure-white flowers with protruding golden stamens.

#### **NARCISSUS (Amaryllidaceae - Narcissus Family)**

A large genus of bulbous plants bearing their flowers in clusters or singly at the end of a space. They are amongst the most richly scented of all flowers, in some cases being so powerful as to bring on headaches and dizziness to those who inhale them.....

#### **NELUMBIUM (Lotus) (Nymphaeaceae - Water-lily Family)**

A small genus of aquatic plants represented by *N. speciosum*, the Sacred Pink lotus of the Buddhists, distributed throughout the sub-tropical areas of Asia and Africa.

**Species and Varieties.** *Nelumbium speciosum*. The flowers are like large tea roses and with the same sweet fruity perfume as the hybrid tea rose Tahiti.

#### **NERIUM (Apocynaceae - Periwinkle Family)**

A genus of mostly tropical shrubs of which *N. oleander*, the Oleander, bears scented flowers, which is rare in this almost scentless family. All contain poisonous milky juices, used by the natives of central Africa to make poison for darts and arrows. The plants are also fatal to cattle, if consumed.

**NIGELLA (Ranunculaceae - Buttercup Family)**

A genus of 20 species of annuals, native to the Mediterranean regions and central Asia.

**Species.** *Nigella sativa*. It is an annual plant of the Mediterranean regions and grows 45 cm (18 in) tall with hairy stems and leaves which are divided like those of the fennel. The pale-blue flowers are borne in July and August.....

**NYCTANTHES (Verbenaceae - Vervain Family)**

A genus of two species of shrubby trees, native of India and the Indonesian Islands and known as the Indian jasmine.

**Species.** *Nyctanthes arbor-tristis*. It is common throughout India and is a deciduous tree, bearing a profusion of white star-like flowers which open at night, diffusing a honeysuckle fragrance far and wide. After pollination by moths, the petals fall at sunrise and are collected for pot-pourris for they retain their perfume for a considerable time.

**NYMPHAEA (Nymphaeaceae - Water-lily Family)**

A genus of 50 species present in the British Isles, South-east Asia and the tropical marshes of the Amazon.

**OCHROCARPUS (Mammea) (Guttiferae - St John's Wort Family)**

A small genus of tall trees, native of tropical America and the West Indies, Madagascar and islands of the Pacific.

**Species.** *Ochrocarpus odoratus* (syn. *Mammea excelsa*, and at least 12 others). It makes a tree 18 to 21 m (60 to 70 ft) tall, the close-grained wood being used in building; the Fijians once used the sap for dyeing the hair orange. The tiny white flowers diffuse a powerful sweet perfume.

**OCYMUM (Basil) (Labiatae - Lavender Family)**

A genus of several aromatic species native to the East Indies, tropical Africa and the Near East. *O. basilicum*, the Sweet basil, is an annual plant. There are three distinct forms, one possessing a mint aroma and with purple stems; *pilosum* has a lemon scent, whilst another smells of peppermint.

**Species.** *Ocymum basilicum*. A native of Persia. It has smooth oblong leaves, acutely serrated, which yield about 1.5 per cent essential oil; this when crystalized becomes Basil Camphor.....

*O. canum*. It is native of Madagascar, China and Brazil and is the most potently scented of all the basils. It makes a shrubby upright plant 30 cm (12 in) tall and has leaves which narrow at both ends.

*O. gratissimum*. Native of Persia and eastern India, the whole plant emits a powerful lemon odour whilst the leaves also have a citrus taste. In the East, it is planted in temple gardens where it may grow to a height of 1.8 m(6

ft) or more whilst the drooping leaves are 15 cm (6 in) long. The pale-yellow flowers are borne in terminal racemes. It is perennial.

*O. sanctum*. Native of all parts of India, inhabiting dry places. It is known as *Tulasi* and for its fragrance is venerated by the Hindus, hence its Western name of the Holy basil. It is a short-stemmed woody perennial with purple hairy stems and downy leaves 3.5 cm (1" in) long.

### **ORIGANUM (MARJORAM) (Labiatae - Lavender Family)**

A genus of about 25 species of somewhat tender herbs of neat shrubby habit, likened to the upright thymes and native of the Near and Far East.

**Species.** *O. majorana*. Native of the Mediterranean countries it takes its name *Origanum* from the Greek words meaning 'joy of the mountains'. .....

*O. maru*. A rare species of the eastern Mediterranean growing 30 cm (12 in) tall with sessile hairy leaves which emit a powerful mint-like smell when pressed. The white flowers are borne in cylindrical heads. The form *aegyptiacum* is a familiar Egyptian plant with less hairy (and less grey) leaves than the type but equally aromatic.

### **PANDANUS (Pandanaeae - Screw Pine Family)**

A genus of 600 or more strong-growing plants of the sub-tropical coastal regions of the Eastern Hemisphere, extending from Madagascar and Mauritius across southern India to the East Indies, where they are known as Screw pines from the screw-form in which the leaves take as they arise from the main stem. The leaves have spiked edges and taper to a point whilst the flowers of several are powerfully scented.

**Species.** *Pandanus odoratissimus*. It is the *Pandang* of India and the Far East, a tropical tree of coastal areas bearing spiked leaves and white flowers from which is distilled the richest and most powerful of all perfumes, much used by the Hindus women for toilet purposes. Dr. Roxburgh writing in the nineteenth century said that it is the male flowers which yield the most powerful perfume though both male and female are present on the same plant, the former appearing above the latter in a dense cylindrical spike.

### **PAPAVER (Papaveraceae - Poppy Family)**

A genus of about 100 species of almost scentless plants though one, the Alpine poppy, native of the European alpine regions, has a slight musky perfume about it. Almost all the family are self-pollinating, and though they are visited by Diptera in search of pollen the flowers do depend upon them for fertilization.

### **PAVETTA (Rubiaceae - Bedstraw Family)**

A small genus of evergreen tropical trees or shrubs native of South Africa, the Isle of Bourbon and India, with mildly scented flowers but with powerfully scented roots used for medicinal purposes. Several species have handsome foliage.

### **PHOENIX (Palmae - Palm Tree Family)**

A genus of 17 species of trees native to northern Africa and extending to South-east Asia, the columnar stems being covered with the old leaf bases.

**Species.** *Phoenix dactylifera*. The Date palm, native of the dry sub-tropical regions, extending from the Canary Islands across the Sahara and Arabian Desert to South-east Asia.....Both sexes of flowers appear on different trees but only the males are scented. They are creamy-white and are borne in large panicles at first in sheathing spathes. The flowers have a cup-like calyx and 3 thick perianth segments and 6 stamens. They are followed by highly nutritious fruits, some 5 cm (2 in) long and yellowish-brown in colour, which are soft and sticky from the high sugar content. Commercial growers assist pollination by placing a bunch of the male flowers amongst the females.

### **PIMPINELLA (Anise) (Umbelliferae - Parsley Family)**

A genus of annual or biennial plants with pinnate leaves and native of southern Europe and northern Africa extending into western Asia.

**Species.** *Pimpinella anisum*. It is a native of Egypt and Asia Minor and grows about 30 cm (12 in) tall, bearing in umbels pretty white flowers.....

### **PINUS (Pinaceae - Pine Tree Family)**

A genus of 80 to 100 resinous evergreen trees of the northern temperate regions.....

### **PIPER (Piperaceae - Pepper Family)**

A genus of about 700 species distributed throughout tropical South America and in several islands of the South Pacific. The plants are mostly shrubs with simple heart-shaped or elliptical leaves with conspicuous nerves. The flowers are borne in terminal spikes and are mostly wind pollinated.

### **PISTACIA (Anacardiaceae - Cashew Family)**

A genus of five or six evergreen or deciduous trees or shrubs abounding in resinous juices. They are mostly native of the Canary Island and islands and countries of the Mediterranean.....

**Species.** *Pistacia lentiscus*. The Mastic tree of the Island of Chios from which is obtained the drug Mastic used in medicine and in making varnishes. It reaches a height of 6 m (20 ft) or more with pinnate leaves and it bears in spring at the leaf axils scented flowers of palest green resembling catkins.

*P. terebinthus*. The Turpentine tree of Cyprus and of Gilead. It is a deciduous tree which reaches a height of 9 m (30 ft), its leaves resembling those of the ash and enhanced with a beautiful red hue when young, like those of the walnut. They are resinous.....

### **PLUMERIA (Apocynaceae - Periwinkle Family)**

A small genus of ornamental trees or shrubs, native of the tropical regions of Mexico and Guiana and the islands of the West Indies. The plants have alternate fleshy leaves which grow in tufts at the end of the branches and

from which grow upright clusters of funnel-shaped blooms; these distil at night an almost overpowering perfume likened to that made up by the Italian nobleman Frangipani and his family during the Renaissance, from which the plants take their name in commerce.

**POLIANTHES (Amaryllidaceae - Narcissus Family)**

A genus of a single species, native of Mexico and possibly the most powerfully scented of all flowers.

**Species.** *Polianthes tuberosa*. From the tubers arise linear leaves of brightest green, spotted on the underside with purple, and the flower spikes reach a height of nearly 90 cm (3 ft), with a terminal raceme of pure-white funnel-shaped flowers, wax-like and opening flat like stars. The double variety the Pearl has greater beauty and even more pronounced fragrance than the single form.

**POPULUS (Salicaceae - Willow Family)**

A genus of 35 species distributed throughout northern Europe and America, several of which have scented foliage and fragrant resin covering the buds.

**PSIDIUM (Myrtle Family)**

An extensive but exclusively tropical genus of about 50 species consisting of trees and shrubs with opposite, entire, feather-veined leaves and bearing large, white flowers, produced either singly at the axil of the leaves or in pairs on axillary stalks. The flowers have an egg-shaped calyx with 4 or 5 free petals and numerous stamens. All are deliciously scented. They are native of sub-tropical South America and the West Indies, India and Ceylon, Indo-China and Indonesia.

**PSORALEA (Leguminosae - Laburnum Family)**

A genus of shrubs or herbs covered with resinous dots on the leaves and sepals. The leaves are usually trifoliate, the pea-like flowers blue. They are plants of the Mediterranean and of Cape Province, growing on sand dunes and mountainous slopes, and they bloom during October and November.

**PTEROCARPUS (Leguminosae - Laburnum Family)**

A genus of 100 species of flowering trees, native of tropical Africa, India and Burma, the Malayan Archipelago and South-east Asia, which bear sweetly scented flowers and exude a sweet-scented gum. *P. santalinus* is famed for the fragrance of its wood.

**ROSA (Rosaceae - Rose Family)**

**Species.** *R. bourboniana*. The natural crossing of the China rose with a Damask, which took place at the Isle de Bourbon about the year 1817, resulted in the Bourbon group of roses which, apart from the Quatre Saisons Damask, were the first roses with the recurrent flowering habit. Their flowers

range in colour from white and pink to crimson and purple, the large globular blooms being quartered at the centre and filled with overlapping petals.....

*R. centifolia*. This is the Old Cabbage-rose, so called because the petals fold over like cabbage leaves. ....

*R. damascena*. Its origin is lost in antiquity. It may be descended from *R. gallica*, the oldest known species, and as it is closely allied to *R. centifolia*, both may have a common ancestor in *R. gallica*. .....

*R. moschata*. The Musk rose, native of the Middle East and of northern India, Spain and North Africa. It is a climbing plant of vigorous habit, sending up its arching stems to a height of 6 m (20 ft) and more. The flowers, are borne during July and August, and they emit a delicate musk-like perfume.

#### **RUTA (Rutaceae-Rue Family)**

A genus of 60 species and one of a large family of more than 600 species of trees and shrubs, many of which bear flowers which carry the fragrance of oranges, whilst the foliage has the pungent smell of orange.

**Species.** *R. graveolens*. The Common rue which is readily distinguished from the former by the smooth petal edges of its yellow flowers and by the pleasant orange-like fragrance of the leaves. It is a perennial, growing about 60 cm (2 ft) tall, its serrated leaves being almost blue-green in colour.

#### **SALIX (Salicaceae - Willow Family)**

A genus of 500 species of trees and shrubs mostly of the northern temperate regions, amongst which are included the White and Weeping willows.

#### **SANTALUM (Santalaceae - Sandalwood Family)**

A genus of parasitic trees, native of India, Malaysia and eastern Polynesia, the roots of which are scented.

**Species.** *Santalum album*. A parasitic tree native of Malaya, south-eastern India and the island of Timor where it grows in dense forests. It attaches its roots to those of other trees and will eventually attain a height of 12 m (40 ft) or more though it is one of the slowest growing of all trees. The opposite leaves are oval, terminating to a point whilst the flowers are composed of 4 stamens only which arise from the calyx. The yellow wood is highly scented and is used to make chests and cabinets whilst the essential oil obtained from it by distillation is used in perfumery.

#### **SAUSSUREA (Compositae - Daisy Family)**

A genus of 400 or more species of annual and perennial plants, mostly native to temperate Asia. Very few have scented attractions.

**Species.** *S. lappa* (*syn. Aplotaxus lappa, Auchlondia costus*). From the dried root, costus, a favourite perfume of the East, is obtained. It has something of

the mossy smell of the violet when fresh but tends to develop a fur-like aroma with age, becoming goat-like and most unpleasant the longer it is kept. Like the Valerian, it is a plant of the higher Himalayas.

**SYMPLOCOS (Storax Family)**

A genus of about 350 species of downy trees or shrubs with leathery toothed leaves and bearing their flowers in loose spikes or racemes. They are mostly native of India and South-east Asia, and the United States.

**SYZYGIUM (Caryophyllaceae - Pink Family)**

A genus of 500 or so species, closely related to *Eugenia* and native to Indonesia and South Pacific islands. It now includes the clove. The close-grained timber is in demand for building underwater structures whilst the fruits of several species are edible. The opposite leaves are evergreen and glossy, the flowers being borne in terminal cymes on long footstalks. The fruits are pleasantly scented.

**Species.** *Syzygium aromaticum*. A mature clove tree attains a height of 12 m (40 ft) and comes into bearing when 5 to 6 years old, continuing for at least 50 years. Cloves are the expanded buds of the tree which at first are a pinkish-yellow colour, becoming deep red as they mature. The 'season' lasts 4 months when the trees are picked over once a month, the stalks and buds being removed together for drying which takes about a week. Red cloves are more valuable than black.

**TABERNAEMONTANA (Apocynaceae - Periwinkle Family)**

A genus of about 100 species, native of the tropics of the Old World. They are evergreen shrubs and bear gardenia-like flowers whose scent is most pronounced at night.

**Species.** *Tabernaemontana coronaria*. A hard-wooded evergreen stove plant of India which forms a dense bush of compact habit and has handsome glossy foliage.

**TAGETES (Compositae - Daisy Family)**

A genus of some 20 species, usually classified as French and African marigolds though all are of Mexican origin.

**THYMUS (Labiatae - Lavender Family)**

A genus of perhaps 400 species, native of warm Europe and Asia. They may be divided into two main groups, (a) the prostrate or creeping thymes and (b) those of upright bushy habit, like miniature shrubs. The former are members of the *T. serpyllum* and *T. nitidus* groups, valued for their culinary qualities.

**TRIGONELLA (Fenugreek) (Leguminosae - Laburnum Family)**

A genus of annual herbs, native of the eastern Mediterranean, which release a smell of new mown hay as they become dry. The genus takes its name from the Latin *foenum graecum*, Greek hay, for in southern Europe

the plant was grown especially to provide its sweet scent to hay of inferior quality. The leaves are trifoliate with dentate leaflets.

#### **TSUGA (Pinaceae - Pine Tree Family)**

A genus of 14 species, native to the Himalayas, North America and Japan, they are handsome yew-like trees with horizontal branches and drooping branchlets. They require a moist, deep soil to grow well and are hardy in all parts of the British Isles and northern Europe. *T. canadensis* was called Hemlock spruce by the early American settlers as the needles emit the unpleasant smell of the native British hemlock when crushed.

**Species and Varieties.** *Tsuga brunoniana* (syn. *T. dumosa*). Native of the eastern Himalayas, it emits so powerful a balsamic scent that it is known as the Fragrant fir. It grows to 24 m (80 ft) in height with drooping brittle branches and has leaves which are flat and borne in 2 row, glossy above, powdery silver below. The cones solitary sessile, are borne at the ends of the branches.

#### **VALERIANA (VALERIANACEAE - Valerian Family)**

A genus of some 300 species, the plants containing valeric acid, also present in perspiration, hence the unpleasant smell given off by the flowers and leaves of *V. officinalis* though from the roots of the Himalayan species, *V. jatamansi* (syn. *Nardostachys jatamansi*), spikenard is obtained. Their habitat extends from Britain across central Europe to the Himalays and as far east as Sikkim, growing at anything up to 5,000 m (16,000 ft) above sea-level.

#### **VETIVERIA (Gramineae - Grass Family)**

A genus of 10 species, native of tropical India, Africa and South-east Asia, and closely related to *Andropogon*.

**Species.** *Vetiveria zizanioides* (syn. *Andropogon muricatus*). Native of India and from its violet-scented rhizomatous root known as vetivet or kus-kus, the perfume known as Mousseline is made; the name is derived from Indian muslin with its peculiar odour as at one time it was treated with the perfume before being sent to the European markets.

In India and the East, sun-blinds are made from the roots, and when watered in the sun release the pleasing scent of violets. The roots are also used to weave into baskets which release a sweet perfume when damp.

#### **VIOLA (Violaceae - Violet Family)**

Many of the species of *Viola* are of tufted or creeping habit, the dainty flowers being held above the foliage on thin wiry stems. The flowers are hermaphrodite, with 5 sepals, elongated into a spur. Petals and stamens are also 5 in number. In their native haunts the plants remain comparatively inconspicuous, requiring careful search and for this reason are all the more appreciated. ....

Most important of all the species is *Viola odorata*, the Sweet violet.

### **VITEX (Verbenaceae - Vervain Family)**

A genus of smooth, hairy or downy shrubs or trees with deciduous palmate leaves, downy on the underside. Of some 60 species, only one, *Vitex agnus-castus*, has attained garden stature but several species native of India and Ceylon have valuable scented properties.....

*V. trifolia*. A variable shrub of India and Ceylon, the branches and the leaves being covered in white down.

### **VITIS (Ornamental Vine) (Vitaceae - Vine Family)**

A genus of more than 200 species of ornamental climbing plants amongst which are included the self-clinging Ampelopsis. All are noted for the brilliant autumnal tints of their leaves which they take on before they fall. Making rapid growth and being completely hardy the ornamental vines are valuable for growing against a trellis for all bear edible purple-black fruits after flowering in summer. The flowers of several species are attractively scented of mignonette. The plants grow best in a rich, moist soil.....

*V. vinifera*. The Grape vine, common in all temperate regions of the world since earliest times for seeds have been found in the tombs of ancient Egypt, and from the juice of the fruit wine has been made by civilized people everywhere. It is a deciduous woody plant which climbs by tendrils. It has 3 to 5 lobed leaves almost 15 cm (6 in) wide and 15 cm long and bears racemes of small greenish-white flowers opposite the leaf stalks. They are intensely fragrant whilst the berries (grapes) yield wines of rich bouquet.

### **ZANTHOXYLUM (Rutaceae - Rue Family)**

A genus of about 80 species, mostly native of North America, which are smooth or downy trees or shrubs, with or without spines. The leaves are alternate, usually 3-foliolate. The flowers are borne in axillary cymes. The species described below are hardy and easily grown.

### **ZINGIBER (Ginger) Zingiberaceae - Ginger Family)**

A genus of tropical plants.

**Species.** *Zingiber officinalis*. Well known for the pungency of its roots, it is a plant of the tropics and is a particularly valuable crop in Jamaica, China, and in Queensland.

*Genders' list and description of scented plants*  
\* Does not include all tropical Indian plants mentioned in texts. Forest trees like *Mimusops elengi*, *Magnifera indica*, *Anthocephalus kadamba* and forest climbers, such as *Hiptage madablota*, which appear regularly in Deccani texts are not included.

## APPENDIX 8.1

### GARDEN DESCRIPTION GULSHAN-E 'ISHQ

*Farah Baksh yeb sabz tar bagh tha  
Falak kun har ek phul jis dagh tha*

*Saten aks so tis munawwar chaman  
Sitare bharya ho harya yo Gaggan*

*Dekhat is ke tain gul rukhan par kali  
Kare dil kun khuban ke wo gudguli*

*Banafsha dhari lala Iqbal butan  
Surang gal jaise gul e arghwan*

*Madan mad asar ke madan ban jam  
Nain mad tian ki so nargis tammam*

*Sankesar ke sar nin hina dar dast  
Kare naqsh mehndi kun chunre te past*

*Chandar gul te chandar ki chhati pe dagh  
Ke gul e sur te sur ka zard bagh*

*Rahi keore ki jo khush bas ghum  
Hilawe to ras o zanab sis o dum*

*Achhe ja'd khuban pe raihan giran  
Lia pench khush panja e dilbaran*

*Dhare husan yun ishq pechi ki pech  
Achhe kes jis girah jashn ki hech*

*Suhe sunbulistan kun dil kashi  
Dil afroz achhe kalgha e atishi*

*Gul e aurang ka takhta yun rawwit ka  
Ke jio pach men kam yaqut ka*

*Lagi gaird makhmal ke rukh tab dar  
Khana ke magar sham'a hain nur dar*

*Wale war achhen saru yun har taraf  
Khari jion hai jannat main huran ki saf*

*Nagh rukh nihalan athe kache ke  
Na chamnan ke takhte akhand pach ke*

*Idak jalwa gar sabz saj rach acche  
Upar chhaon patan ki chha gach achhe*

*Upar atlati jion mandap unch qā'ār  
Talen jiun kare sabz makhmal ki sadr*

*Pari dhup chandni te tis din nazar  
Sate sim o zar har warq sabz par*

*Phulan ke bi mandwe mandap mehbali  
Hua lala ban sadr akhand makhmali*

*Rangarang chandnian gulistan kian  
Bichhayan to aisanch Kirman kian*

*Kian phul bejan ne yun charh ke ar  
So bari kun har yek qalmkar bar*

*Suhawen safajal sun chamnan hare  
Rupehri tabaq jiun ke mina bhare*

*Pankheru pe satne kun rang subha gah  
Kite gul ke kan se bharya rang mah*

*So pilak ki choli kun chhor is paran  
Gul e zā'fran ne satya zā'fran*

*Barastin idak rang kar jigjiggi  
Pukare nazakat sun Ai shu bhigi*

*Le lala ke kanse kusumbha bhare  
Surang apni surkhab choli kare*

*Li shab gush te sandal war gaja  
Lian kubuk o qumrian ne kasut bhuja*

*Banafshi ke kansian te lai nawa  
Bhanwar hor bhangraj 'ambar chua*

*Bati 'ud ki bid mushk azkhari  
So raihan shamamma hua 'ambari*

*Gulaban ke shishe gulan ki kalian  
Gulab is tarf bi jidhar wo dhalian*

*Mithe ber o khoshe khush angur ke  
Safa tar surraya te pur nur ke*

*Sugand seb o injir o naghzak phannas  
Duryan mauz jamun shahtut annas*

*Girahdar tendu sugand narm jam  
Bhigai hain phul nir sun jiun tammam*

*Turunj nar o shakkar nibu narangian  
Safarjal o khamruk jhanberian changian*

*Safa naram o shirin sudang neshkar  
Bandhe ganth so qad pe khuban ke war*

*Jo chilghoza akhrot badam achhe  
Pankhian ke ankhian kun wo badam achhe ..*

APPENDIX 8.2

**GARDEN DESCRIPTION GULSHAN E' ISHQ**

*Suka tha har yek ba'in ka ot jal  
Zamin khushk tar ho rahi thi sigal*

*Lejate the ban ke nihalan ruku'  
Kiye the gulan sab sujud o khushu'*

*Jiti shakh gulbar zamin dhar adab  
Gulan bi athe khak aluda lab*

*Chandar gul chhatar ap kia tha kharab  
Satia tha suryapan Gule Aftab*

*Pare the surang khush nazr<sup>o</sup> kai 'alam  
Dhale the panje ke shadian ke jhilaam*

*Athi yasman te gharanbian ki rez  
Sate the jite khar barchhian se tez*

*Pilarak jo the sakht tarkom ke  
Nikal ab ja rah'ye the mom ke*

*Dhare dal raihan ke jhinde park  
Pare gal ke sunbul ke kai sarg*

*Jhare the kaliaan ke gazran masand  
So khul'Ishq pechi ki rah' thi kamand*

*Gul e aurang ke dipak te tha saru jam<sup>a</sup>  
Bujhe gaird makhmal ki khan dar sham<sup>a</sup>*

*Itha kalgha pila ho dhar at udas  
Kia tha banafsha kabudi libas*

*Kanwal ke kupe ka suka tha dimaagh  
Paria tha kumal bhuin champe ka ayag*

*Na tha tab lala ke rukhsar men  
Nichi ab nargis ke didar men*

*Rahe the sigal barg bimar ho  
Muk addar ho jio tan the bezar ho*

*Shikam bech shakhan ki reh jiu pakar  
Na bad sak kaliaan sab rahian thian ankar...*

### APPENDIX 8.3

#### **GARDEN DESCRIPTION GULSHAN E' ISHQ**

*....Ke tha bagh aisach is shahr pas  
Na kashmir na mawar al nahr pas*

*Hawa ruh parward ho wan ki jam  
Masiha ka har dam kare taza dam*

*Na phulan ke kase rakhe rang bhar  
Ke har gul kun hui dekh rangin nazar*

*Chambeli o bat mogra sewti  
Madan ban sausan saman rewti*

*Surang lala haur jai jui gulal  
Banafsha gul e arghwan be misal*

*Sankesar o surpan gul e nastaran  
Rangarang shab gusha tha manharan*

*Gul aurang haur gaind nargis nawwal  
Nichhal jal basandi kamud o kanwal*

*Champa marwa dona o bala sugand  
Kare khush nazr taj surkhan ke chhand*

*Gul e molsar thi hawa ho sobas  
Chui ka dibba ho rahya tha akas*

*Dikhat ban ke tis sang haur khake gil  
Achhe ambar o mushk o randha khajil*

*Zamin bagh ki thi jitne farsang ki  
Har ek takhta hui sadr yek rang ki*

*Chiraghan kun phulan ke roghan ho nir  
Jaga jut gulshan kare char dhir*

## APPENDIX 8.4

### GARDEN DESCRIPTION GULSHAN-E'ISHQ

.... Chandarsen yekayek nazr̄ yek rati  
Kia so disi chak main hampavati

Jaga jut achānba ujala disya  
Jita 'alam takht o bala disya

Wohi Nur chak main hua dhan anjan  
Ghari khub dikhya na lag chak sun dhan...

Disāyan buland thar yek tur sa  
Haur yek tis par shō'la so pur Nur sa

.... Dharya Nur ka nir tufan idak  
Kia jag dabane kun tughyan idak

Rukhe rukh ke tan main lagi ag ise  
Har yek pat main dhak ke rag rag dise

Chandar/gul dhare Badfe kamil ki tab  
Lagya Sūr namne gul e Āftāb

Dise sewanti Zohra tab beguman  
Gulechin main Mushfi ka nishan

Banafsha 'Utari'd se nila dise  
Zuhl jilde raihan rasila dise

Dise 'ain Mirrikh aurang ki chhab  
Hue keore asal Ras o Zinab

Hua ban jaga jut tarian numan  
Dise lala jalte angarian numan

Ho atishkada sab gulistan disya  
Dhuen ke numan sunbulistan disya

Kanwal jal ke ho rahe angethian ke sar  
Samandar dise sab bhanwar tis manjhar...

APPENDIX 8.5

**GARDEN DESCRIPTION 'ALI NAMA**

*...Suraj roz zar baft ka basta khol  
Kare pai andaz Shah ka amol*

*Chandar har ren a ke Shah ke angan  
Lage chhanp jane chare is chandan*

*Zamana tabaq bhuin ka bhar gul sanwar  
Le ane mangia hadya e naubahar*

*Bharya phul barian ke guldan kai  
Kian kewrian ke patidan kai*

*Gundya phulbelan ke haran nawwil  
Gundya gaird makmal ke turre nachhil*

*Kanwal kian kalia shishhai gulab  
Bhare zafran tas gule aftar*

*Kusambe sun lake ke kanse bharya  
Chaman lajwardi tabaq main dharya*

*Kali chand main parkia phuns chandan  
Hina gul main mehndi ke jorya 'alan*

*Kalaya jui main gul e phulsary  
Champe ku dia phut mushk azfari*

*Rakhia kar ke ambar batian bid mushk  
Shamama hai raihan ambar ka khushk*

*Dibbi te sapuran ki chandna abir  
Kia sab kun khushbu chhirak benazir*

*Karnphul parwarda gulab thar  
Satia tispe shabnam phuyarian ke sar*

*Bati 'ud sozan kamudan surang  
Hua subh 'umudi pankhali ipang*

*Pawan ka pankha le saba khush dulai  
Dhuan pech kha sunbulis itan dis ai*

*Hare lal pile nawwil dhat dhat  
Bane khas sarposh kalghi ke pat*

*Surang saru nazuk nihalan hue  
Nihalan ara'ish ke tehalan hue*

*Upar sab ke zarin mandap dhar ke tab  
Sharf jan apna hua Aftab*

APPENDIX 8.6

**GARDEN DESCRIPTION 'ALI NAMA**

*Suraj a jo bait al sharaf ke manjhar  
Dia bhuin kun jab khila't Naubahar*

*Kia abru phulban kun abhal  
Gulan surkhru ho rahe bale bal*

*Liye chhin gul gul ezaran te rang  
Le ayan kalian dil kun khuban ke tang*

*Bache saru ke qad main sidhe hue  
Gulan chand ke nur dide hue*

*Hansi phul ho shauq sun kar kali  
Rahi naz main muskatati kali*

*Chali jiun jo barti chambeli ki bel  
Gale har ho lai champe sun khel*

*Jawani main sabze ne ata chalia  
Madan bas raihan pata chalia*

*Har yek gul ke dide main datia madan  
Har yek shakh kun phal ki nikli joban...*

## APPENDIX 8.7

### GARDEN DESCRIPTION 'ALI NAMA

.... Saba kar ke māshata ki khub adek  
Sanwaria har yek ban ki mehbub adek

Safa kalwe ban ke chondher jiun  
Dis awe nazr main u dekhe to yun

Ke paini hai mehbub rang ras bharya  
Tiggat ke kinare ka wala harya

Zamin le ke gulshan ke darjuk kun khol  
Har yek phul bast paini amol

Chaman mang sunbul patjan main chhora  
Bandi ja'd e raihan ka sabza jora

Kare tel shabnam kun kar mukh manjan  
Dibbi te banafshe ki paini anjan

Dia sab ko rang pan ka lala lal  
Disya nuqta tis dant chhalni ka khal

Hue sewanti sis phul rawwit ke  
Kal aurang kari hai yaqut ke

Disya zeb o khubi sun mathe upar  
Tila pach o yaqut ka khush nazr

Disen phul sirne ke jhumke alag  
Rahe bawalian ho ke niche dhalak

Karanphul khush gul qalanfar hue  
Champe in khile kan ke dur hue

Gul e iftikan jart ke hain jhal  
Kamun hue bal kari main ke lal

Joban par ki jali dise jio ki bel  
Mukatmal argand ke ghunchian ki jel

Rahya ho dars dekhne bar bar  
Gul e chand saf aina tab dar

Madan ban ka phul falij hua  
Chua polsary kach ra'ij hua

Dabane sudang ban main khuban ke qad  
Karain nazni saru khush laf bad

*Gulan sun to yun jalwa karain apang  
Rakhe the duji khub mewian te ang*

*Siah abar ho nur barsya so tund  
Hue seb is saf pani ki bund*

*Jo dakan ke khosh<sup>e</sup> rangile disain  
Munawwar qandilan ke jhile disain*

*Hua huqqa la<sup>l</sup> har yek anar  
Disain jamanian 'aqd nilam ke sar*

*Bharya kuza har amb ka nir sat  
Jamue hain pan bha ke ābe hayat*

*Labalab dise jam main khush gulab  
Tapakta hai anjir sun shahd nab*

*Hue shalwan sherbeti kumkumi  
Laban narm kharai te firni jami*

*Nichhal jal main shalu ke kharai thandi  
Jamue jun ke imrat dahi ki handi*

*Phannas tarfa sanduq hai khana dar  
Bharya mewa har khana behter dil bahar*

*Kalian par dikhen inhi anfan sun saind  
Har yek narangi ke chhabelian te gaind*

*Joban par hawwis kar nanian chanchalan  
Dikhen rak ko choli main imrat phalan*

*Har yek mauz ki phak pache pur hor  
Dikhen dilbaran apni unglian jor*

*Tursh haur shirin jo khuk dise  
Har abrue Mahbub beshak dise...*

## APPENDIX 8.8

### **GARDEN DESCRIPTION IBRAHIM NAMA**

*...Basant Rao lashkar milya ai kar  
Har yek jins ke jhar har rup dhar*

*Nishanan pakar phul har ek dal  
Harek rang har jins lai so dhal*

*Har yek jhar dalthian so mil yun sanwar  
Jiun sardar lashkar har ek thar thar*

*Disain amb ke jhar jiun hast chal  
So la phul sar kan har ek taraf hal*

*Lage phal nanhi rup kirian so yun  
Ghungar mal bandhain disain rast jiun*

*Pate bund ras phul chu chu parain  
Mahawat bhanwar sawar ho kar phirain*

*Kaprikar ankhen chali mil nigar  
Disain rup ho kar so jiun tar jhar*

*Chale saj sun rup unton qatar  
Disaintal mil jor kar jhar mar*

*Chale bahar ghoryon har ek jins jhar  
Hue sawar rawāt lage phal jo bar*

*Siron nalir jhar chhatrian dhare  
Lage nalir ghur jiun phundne pare*

*Phannas jhar ho are bhui so jan  
Pakr phal phannas taraf kuzdan*

*Urawain mahaldar ho kar rumal  
Disain jhar kailay pawwan pan hal*

*Urain rup parchham ho dise nigar  
Dulain bao lag nil khajuron ke jhar*

*Khare jor talwe so imblian ke jhar  
Barad dap ankas phallan ke nigar*

*Lanki kari ho kar saru mil chale  
Pawwan lagiye dal naize hile*

*Chale paidal har taraf yun so jan  
Urain pawwan lag jhar parain phir jo pan*

*Nale jhar atish dhare bhui sanwar  
Jharain phul bare so lag kar anar*

*Kiya dakh mandhwe agan bel bhar  
Disain pan jhalan ho phal phul jhar*

*Har ek jhar tal chhaon suraj nishan  
Dhare rat ban main chandar jut jan*

*Chalya saj kar yun so Banpat karo  
Milya jhar lashkar har ek jins ao*

## APPENDIX 8.9

### **GARDEN DESCRIPTION IBRAHIM NAMA**

*Jahan Shah e 'Alam baithe the hawa  
Har ek jhar ban rup lagia nawa*

*Basant Rao us than utar ai kar  
Milya Shah sun dhari kar pai kar*

*Liya bas bawan phulon nath dhar  
Har ek jhar sar bhuin dhare ai kar*

*Basant Rao mil Shah laya kinar  
Khara sath lashkar har ek rup jhar*

*Basant Rao ko Shah farman ho  
Haman thaon lashkar sun mehman ho*

*Bichhaya kandurian chaman an kar  
Har ek taraf makhmal bhi zar baf bhar*

*Dhare ratan ale so jiun thal kar  
Har ek taraf khushbui pani so bhar*

*Hue chashnigir mali sajan  
Bharain liyai thalon main pani sokhan*

*Khala khan har ek yun rast dhar  
Har ek jhar khush ho uthe pet bhar*

*Diye an tashrif har ek jhar  
Qumashan mudhe dalh har ek thar*

*Har ek jhar gal main ratan bah har  
Disain har jins ho so phulan nigar*

*Har ek dalh hathon patian pan dhar  
Khare jhar ho bagh majlis main bhar*

*Rakhe darmian kanse khushbu sanwar  
Bhare hauz khane kadam thar thar*

*Disain jhar dalian sun parchhain yun  
Sate har taraf hath kasion main jiun*

*Dule bao lag yun disain darmian  
Har ek jhar hathon le khushbui tan*

*Wale hauz khane gaggan chhaon par  
Har ek taraf mil kar suraj rup dhar*

*Disain rup ankhian zamin jan yun  
Safaidi gaggan suraj dide hain jiun*

*Har ek jins ke rang khushbu bhare  
Dulain mauj darmian jiun dide bhare*

*Palak bal ho jhar do rast mil  
Disain bao lagte so jiun palak hal*

*Yun har ek jins jhar laskhar milai  
Kiye Shah mehmani Ban pat Rai*

APPENDIX 8.10

**GARDEN DESCRIPTION QISSĀ-E BENAZĪR**

....Kia yek pahr ren ne jab guzr̄  
dekhyā nagihan yek chasme upar

Kitak jhar raushan idak tabdar  
Har yek pat dipak numan jutdar

Har yek jhar zinat main taus tha  
Har yek pat jun sham e fanus tha

Zabarjad ke patan upar ba firagh  
Phire bhi magar gauhar shab̄ chiragh

Yu dekhat 'ajjab raushni be badal  
Chalya wan ke main is tamāshe badl̄

Kia jis waqt is darkhtan kane  
Tā'ajjub sun kuch sad na rahi muj mane

....Magar wan kitak jhar the bardar  
Ke patan te phul jis athe beshumar

Kare gar̄che u idak pat sab  
Wale pat yek bhant ke the 'ajjab

Jo aise main wan khush bhayanak paṁwwan  
Bharya har taraf̄ mushk e Khaṁ

Dekhya main kitak jhar wan bebadl̄  
Jo ambar te khush bas dharte sigal

Tapakte the patan te us be hisab  
Bundan'itr ke jun mo'atr gulab

Na u bas kain mushk ambar mane  
Na chandan na kesar na parmā mane

Bhallai mere dil kun u bas jab  
Rahya subh lag main usi thar tab

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