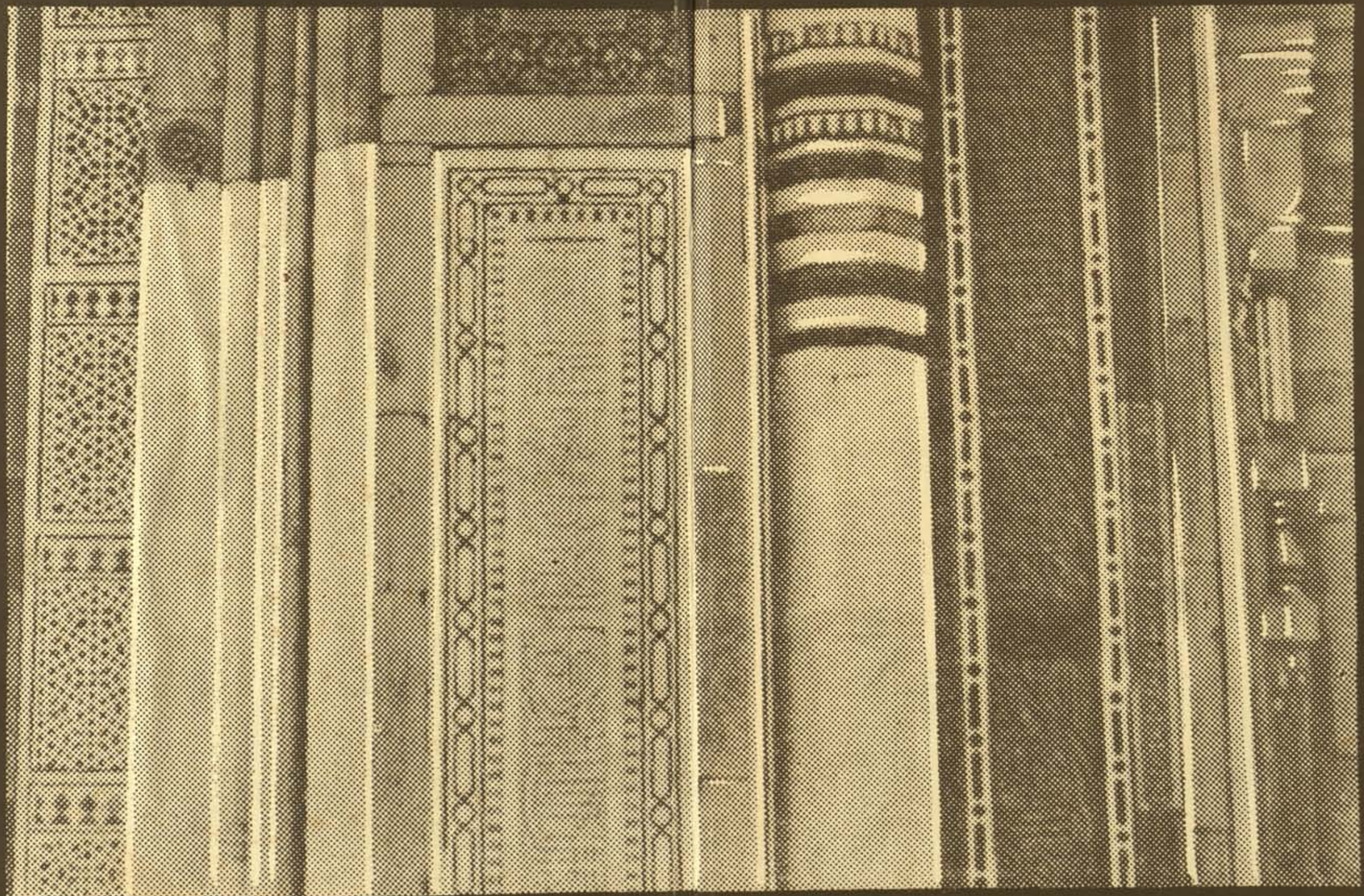


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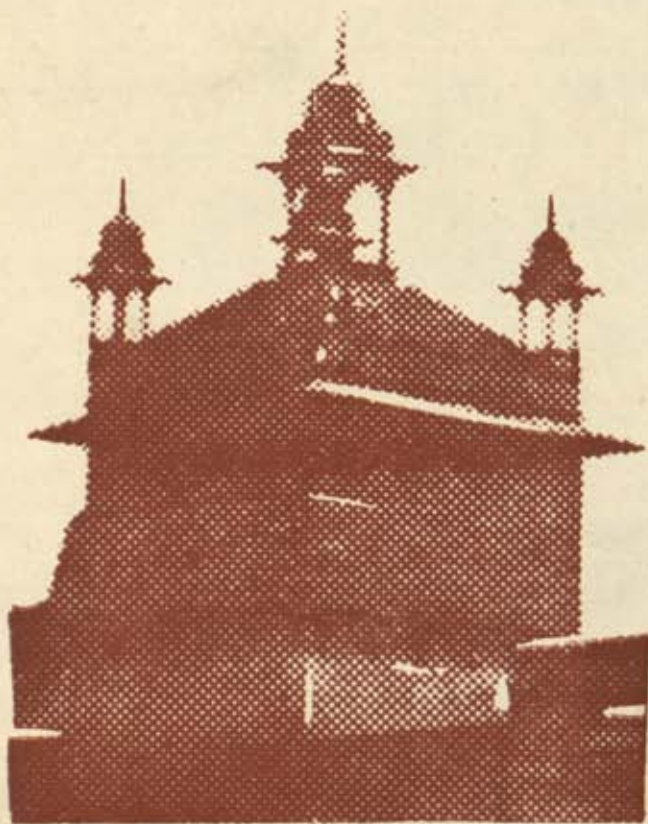
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ARCHITECTURE

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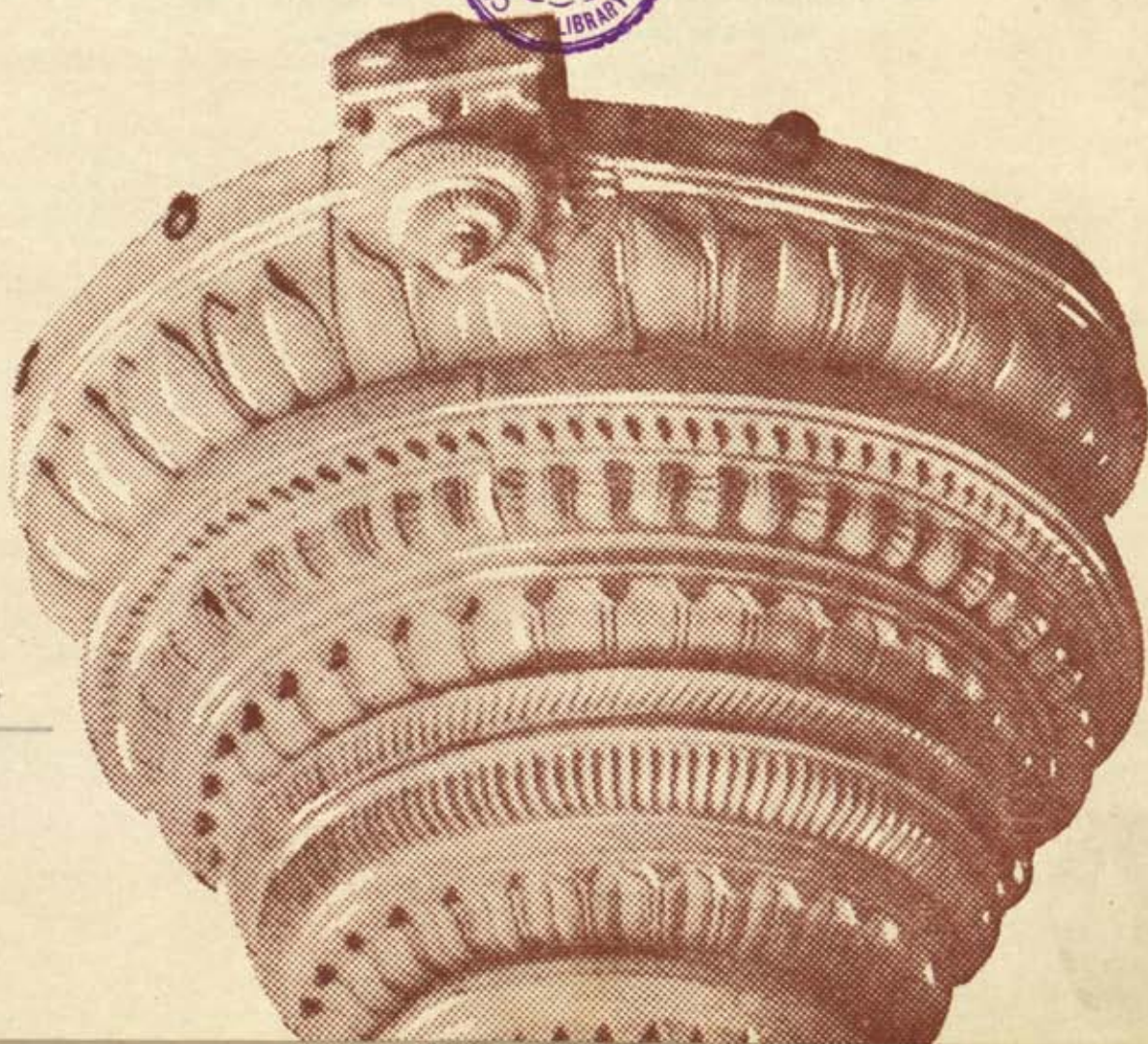
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TO

B A B U R

The King and the Prince of Gardens

whose advent in India marks the dawn of one of the
most glorious epochs of Indian History;

The Poet and the Aesthete

who possessed an extraordinary aesthetic outlook of life
which in due course became one of the
distinctive characteristics
of
Mughal Culture; and

The Dervish:

“Darvishān-rā agar neh az khwaishānem;
Lek az dil-o-jān mautqid aishanem;
Dūr-ast makoi shāhī az dervaisti;
Shāhīm valī bandah darvaishānem.”

—Babur

Preface



This is first volume of the 4-volume series: *HISTORY OF MUGHAL ARCHITECTURE*. It aspires to make a stylistic study of the monuments (mosques, tombs, gardens, palaces and other buildings) of Babur and Humayun and also includes those which were built at Delhi during the first two decades of Akbar's reign but did not belong to his style (a list of principal buildings included in the study is given). Thus chronologically, it covers the period from A.H. 933/1526 to 978/A.D. 1570.

With a view to assess the degree and extent of indebtedness of Mughal Architecture to pre-Mughal legacy, particularly in the context of the Medapāṭa-Gopādri-Agra connections, and to trace and fill in the gaps of the evolutionary process, a detailed historical background dealing with the Tomara monuments of Gwalior has been given. This would help to understand the process of its growth and development and identify the link between these buildings and the soil on which they stand.

All contemporary and near-contemporary sources in Persian, Sanskrit and Hindi have been examined, travelogue and memoirs tapped and the concerned epigraphs quoted for authentication of the data as best as it could be possible.

It is a pity that there is not even a single architectural text in Arabic or Persian. That such a grand 'practice' could not have been possible without a well-tried theory (śāstra) can hardly be doubted. An effort has been made to identify and write down a Theory of this Art, at the initial stages of its development, as it were.

Precisely, this is an humble attempt to study the aesthetic expression in stone of all the three basic constituents of an art-history, viz. the Land, the People and the Age, in a grand co-relationship.

List of Abbreviations contains titles of Sanskrit and Persian texts on which the study is based, and it is also bibliographical, as such a separate Bibliography has not been given. The text is illustrated by 4 maps, 55 figures of plans, sections and elevations and 169 plates, a list whereof is given.

However, this is not the last word on the subject and this is not the end. But I am confident that this is certainly the beginning of this study.

The scheme of the series is simple, i.e.:

- Vol. I. Study of the style during its *Formative Period*: the buildings of Babur and Humayun and those built in continuation in the same tradition;
- Vol. II. *The Age of Personality Architecture*, when Akbar's personality determined the form and fabric of the style, his buildings at Agra and Fatehpur Sikri;
- Vol. III. *The Age of Colour and Design*: the buildings of the transitional phase of the reign of Jehangir; and
- Vol. IV. *The Age of Architectural Aestheticism*: the buildings of the golden age of Shah Jehan, including the Moti Masjid and the Taj Mahal.

Much, however, depends on how God disposes these ambitious proposals.

I express my thanks to Janab 'Faiyaz' Gwaliari Sahib, Janab Agha Muhammad Afzal Sahib, my friend Mr T.R. Suyal (A.S.I.) and my former pupil Brijendra Roy; and to my wife Savitri, daughters Veena, Neelima and Sandhya and son Ajay Nath. I also thank Mr Shakti Malik (M/s Abhinav Publications, New Delhi) for publishing it so impressively.

Jaipur

R. NATH

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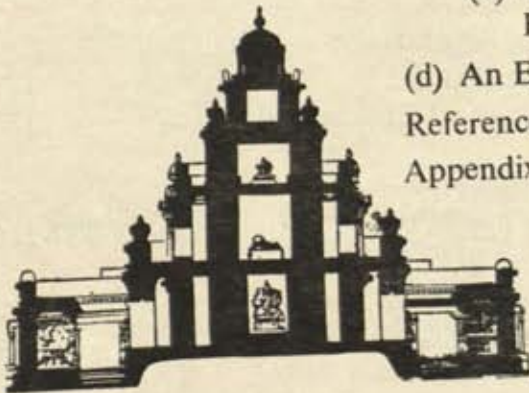
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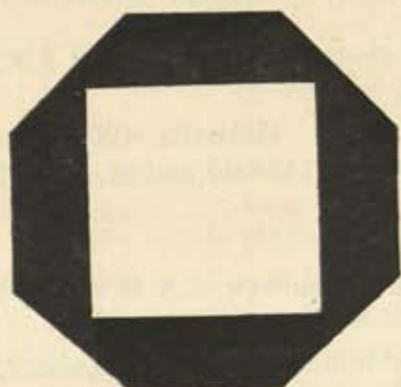
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List of Abbreviations

<i>Ain</i>	<i>Āin-i-Akbarī</i> of Sheikh Abul Faḍl, Vol. I (tr. H. Blochmann) (New Delhi, 1965), Vol. II (tr. H.S. Jarrett) (Calcutta, 1891), Vol. III (tr. H.S. Jarrett) (Calcutta, 1894)
<i>AN</i>	<i>Akbar-Nāmah</i> of Sheikh Abul Faḍl (tr. H. Beveridge), Vols. I-III (Delhi, 1972-73)
<i>Annals</i>	<i>Annals of the Bhandarkar Oriental Research Institute</i> , Poona
<i>AP</i>	<i>Aparājita-prachhā</i> of Bhuvanadevāchārya (ed. P.K. Mankad, Gaekwad Oriental Series No. 115, Baroda)
<i>AR</i>	<i>Asiatic Review</i>
<i>ASI AI</i>	<i>Ancient India</i> of the Archaeological Survey of India
<i>ASI AR</i>	<i>Archaeological Survey of India, Annual Reports</i> (Marshall Series, 1902-3 onwards)
<i>ASI Cun.</i>	<i>Archaeological Survey of India, Cunningham Series Reports</i> , Vols. I-XXIII (1862-84)
<i>ASI Mem.</i>	<i>Archaeological Survey of India, Memoirs</i> (Nos. 1-73)
<i>ASI NIS</i>	<i>Archaeological Survey of India, New Imperial Series</i> , Vols. I-LIII
<i>BN</i>	<i>Bābur-Nāmah</i> of Babur (2 vols in one) (tr. A.S. Beveridge) (New Delhi, 1970)
<i>Briggs</i>	<i>Tārīkh-i-Ferishta</i> or <i>Gulshan-i-Ibrāhīmī</i> of Ferishta (tr. John Briggs: <i>Rise of Mahomedan Power in India</i> , Vols. I-IV, Calcutta, 1966-71)
<i>CC</i>	<i>Chhitai-Charit</i> of Narayandas (ed. H.N. Dwivedi and Agarchand Nahta, Gwalior, 1960)
<i>E&D</i>	Elliot & Dowson's <i>History of India as told by its own historians</i> , Vols. I-VIII (Kitab Mahal, Allahabad, 1969)
<i>EI</i>	<i>Epigraphia Indica</i> of A.S.I.

- EIAPS* *Epigraphia Indica (Arabic & Persian Supplement)* (ed. Z.A. Desai) (1951-52 onwards)
- EIM* *Epigraphia Indo-Moslemica* (ed. J. Horovitz 1907-8 to 1911-12, G. Yazdani 1913-14 to 1939-40 and M. Ashraf Husain 1949-50)
- EIs* *Encyclopaedia of Islam*, 4 vols.
- HN* *Humāyūn-Nāmāh* of Gulbadan Begum (tr. A.S. Beveridge) (Delhi, 1972)
- HQ* *The Holy Quran*, 3 vols (tr. Abdullah Yusufali (Lahore, 1937)
- HSA* *History of Sultanate Architecture* (R. Nath) (Abhinav, New Delhi, 1978)
- IA* *Indian Antiquary*
- IHQ* *Indian Historical Quarterly*
- IsC* *Islamic Culture*, Hyderabad
- JAS* *Journal of the Asiatic Society*, Calcutta
- JISOA* *Journal of the Indian Society of Oriental Art*, Calcutta
- JOI* *Journal of Oriental Institute*, Baroda
- JOR* *Journal of Oriental Research*, Madras
- KS* *Kāśyapa-Śilpa* of Kāśyapa (ed. V.G. Apte) (Anand Ashram Sanskrit Series No. 95, Poona, 1926)
- LMHM* *List of Muhammedan and Hindu Monuments*, Vols. I-III.
- MKB* *Mughal-Kaleen-Bharat* (Hindi) (S.A.A. Rizvi) (*Babur*, Aligarh, 1960) (*Humayun-I*, Aligarh, 1961) (*Humayun-II*, Aligarh, 1962)
- MO* *Mānasollāsa* of Someśwara, 3 vols (G.O.S. Nos. 28, 84 and 138) (ed. G.K. Shrigondekar, Baroda, 1939-67)
- MT* *Muntakhābū'l-Tawārīkh* of Mullā Abdul Qadar Badāoni Vol. I (tr. G.S.A. Ranking), Vol. II (tr. W.H. Lowe), Vol. III (tr. W. Haig) (Delhi, 1973)
- MS* *Manusmṛti* (com. Harishchandra Vidyānāth) (Delhi, v.s. 2016)
- QH* *Qānūn-i-Humāyūn* of Khwandamir (tr. Bains Prasad) (Calcutta, 1940)
- Rehla* *The Rehla of Ibn Baṭṭūṭah* (tr. Mahdi Husain) (Oriental Institute, Baroda, 1953)
- Shah* *Viṣṇudharmottara-Purāṇa*, Third Khaṇḍa (tr. Priyabala Shah) (G.O.S. No. 137, Oriental Institute, Baroda, 1961)
- SR* *Śilpa-Ratnam* of Śrīkumāra (ed. T. Ganapati Sastri & K. Sambasiva Sastri) (Trivandrum Sanskrit Series Nos. LXXV & XCVIII, Trivandrum, 1922-29) 2 parts

- SS* *Samarāṅgaṇa-Sūtradhāra* of Bhoja (ed. V.S. Agrawala) (2 vols in one) (G.O.S. No. 25, Oriental Institute, Baroda, 1966)
- TA* *Tabaqāt-i-Akbarī* of Khwājah Nizāmu'd-Dīn Aḥmed, Vols. I-III (tr. B. De, Asiatic Society, Calcutta, 1973, 1936 and 1939 respectively)
- Tuzuk* *Tuzuk-i-Jehāngīr* or *Jehāngīr-Nāmah* of Jehangir (tr. A. Rogers & H. Beveridge) (2 vols in one) (Delhi, 1968)
- TV* *Tezkerah'al-Vakiat* of Jauhar Aftabchi (or Private Memoirs of Humayun) (tr. C. Stewart) (Delhi, 1972)
- UTKB* *Uttar-Timur-Kaleen-Bharat* (Hindi) (S.A.A. Rizvi) 2 vols (Aligarh, 1958-59)
- VDP* *Viṣṇudharmottara-Purāṇa* (ed. Priyabala Shah) (G.O.S. No. 130, Oriental Institute, Baroda, 1958)



List of Diacriticals (PERSIAN)

ا = a	س = s	و = ʔ
آ = ā	ش = sh	و = v, w, u, ū, o
أ = a'	ص = ṣ	ه = h, i, ah
ب = b	ض = ḍ	ی = y, i
پ = p	ط = ṭ	ے = ai, e, ei
ت = t	ظ = ṣ	ع = 'a, 'ah
ث = th	ع = ' , 'a, i,	پ (pesh) = u
ج = j	غ = gh	ز (zabar) = a
چ = ch	ف = f	ز (zair) = i, e
ح = ḥ	ق = q	
خ = kh	ک = k	
د = d	گ = g	
ذ = dh	ل = l	
ر = r	م = m	
ز = z	ن = n	

Note: To avoid confusion popular spellings of such words as Sultan, Muhammad, Bagh, Bazar, Chhatra, Dargah, Darwaza, Hauz, Humayun, Jehangir, Shah Jehan, Mughal, Rauza, etc., etc., have been retained.

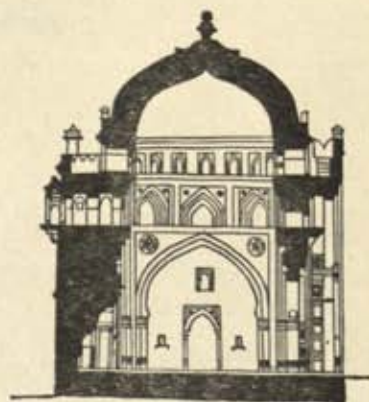
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(SANSKRIT)

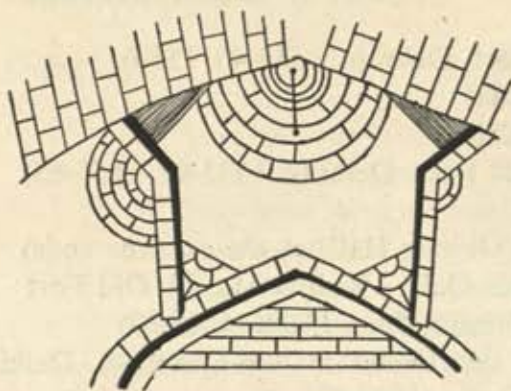
अ — a	ट् — ṭ	क्ष् — kṣ
आ — ā	ठ् — ṭh	ज्ञ् — jñ
इ — i	ड् — ḍ	
ई — ī	ढ् — ḍh	
उ — u	ण् — ṇ	
ऊ — ū	त् — t	
ऋ — ṛ	थ् — th	
ए — e	द — d	
ऐ — ai	ध् — dh	
ओ — o	न — n	
औ — au	प — p	
अनुस्वार — m	फ् — ph	
विसर्ग : — ḥ	ब — b	
क् — k	भ् — bh	
ख् — kh	म् — m	
ग — g	य् — y	
घ् — gh	र — r	
ङ् — ṅ	ल् — l	
च् — ch	व् — v	
छ् — chh	श् — ś	
ज् — j	ष् — ṣ	
झ् — jh	स् — s	
ञ् — ñ	ह् — h	

Note: Popular spellings of proper names of places (e.g. Gwalior), rivers (e.g. Chambal), persons (e.g. Mansingh, Tansen), monuments (e.g. Man-Mandir, Gujari-Mahal, Suraj-Kund etc.) and such words as Tomar, Jain, Gujar, Jali, Sultan, Raja, Man-Kutoohal etc., etc. have been retained to avoid confusion.

List of Principal Buildings Included in the Study

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2. Vikram-Mahal and Kirtti-Mandir, Gwalior Fort
3. Man-Mandir and Hathiya-Paur, Gwalior Fort (c. 1500)
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5. Bāgh-i-Gul Afshān, Agra (c. 1527)
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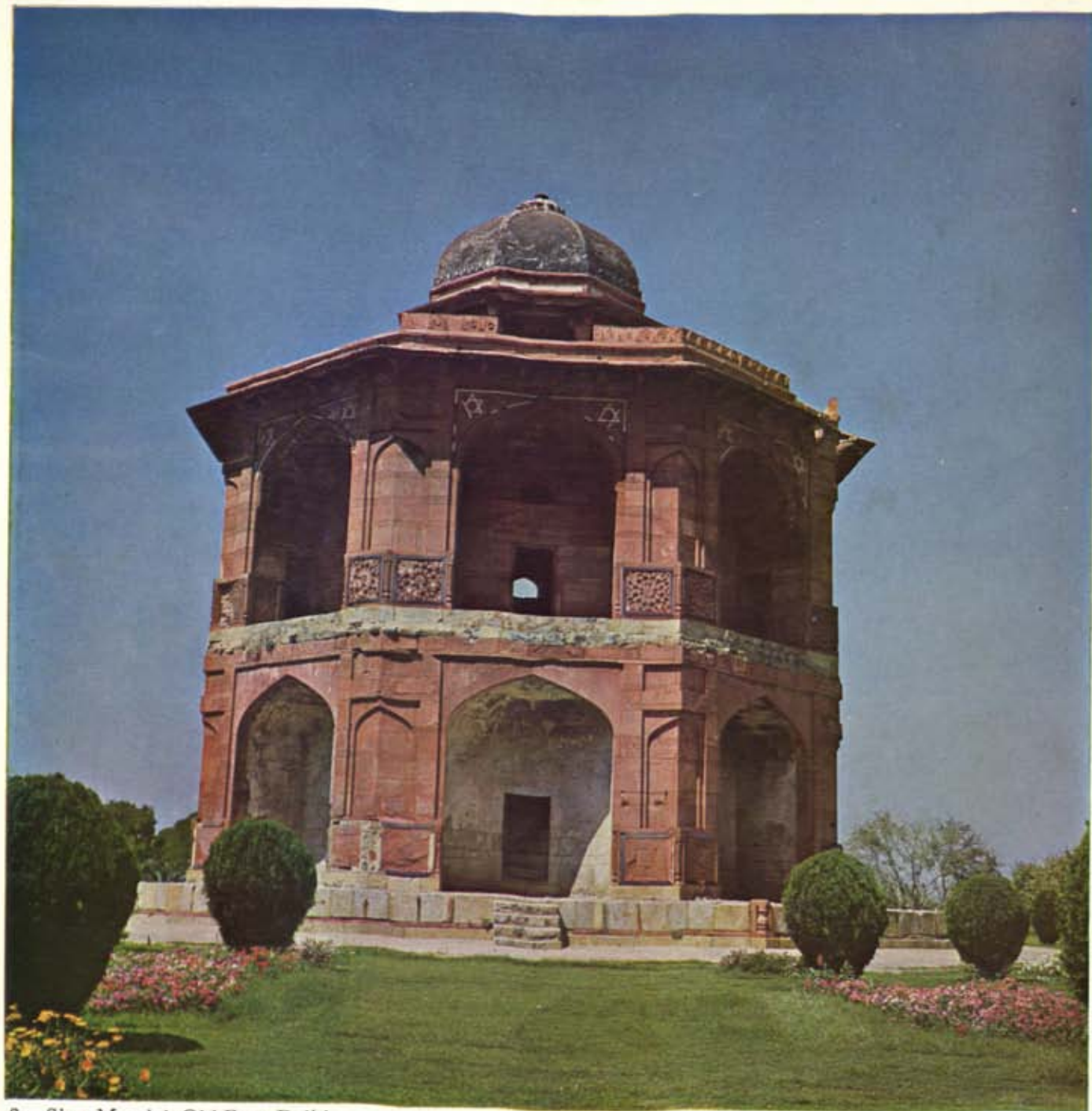
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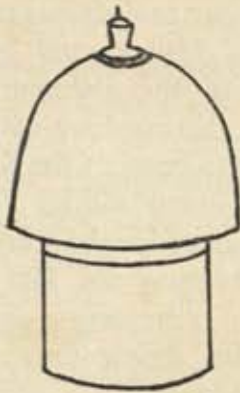


1. Humayun's Tomb, Delhi.



2. Sher-Mandal, Old Fort, Delhi.

CHAPTER I



HISTORICAL BACKGROUND

HISTORIANS of medieval India have almost always interpreted the invasion of Timūr (Tamerlane) (A.D. 1398-99) with partiality to the Delhi Sultanate. A.L. Srivastava, for example, painfully noted: "Timur left our country prostrate and bleeding. There was utter confusion and misery throughout northern India."¹ He recounted losses in men and material at great length. His greatest complaint, which unconsciously betrays his unjust sympathy to the central government of Delhi, is that "the Sultanate of Delhi which had already been broken up into fragments before Timur's invasion was now shrunk to the dimensions of a petty principality comprising the capital city and a few districts around it".² Historians' lamentations have been general and no less a scholar than R.C. Majumdar joined the universal condemnation of Timūr and shared the view that he inflicted "on India more misery than had ever before been inflicted by any conqueror in a single invasion".³

The decadent Sultanate of Delhi hardly deserves this sympathy. Except for a brief period under 'Alāu'd-Dīn Khaljī (1296-1316), it was a militant state and warfare was the only justification of its existence. It had no roots in the soil. It had no polity commensurate to the country and its people, and virtually no administrative system. Religious fanaticism of which Barnī's *Fatwā-i-Jahāndārī* is an eloquent testimony was the spirit of this government and loot and plunder its important source of revenue. There was no atmosphere for the growth of political institutions. The Delhi sultan ruled, as if, over an occupied territory without taking the masses with him in the matter of the governance of the country, and the people, therefore, viewed the sultan as an invader.

He had no cultural affinity with his subjects and ruled by sheer force. Whenever, therefore, the application or exhibition of this force was slack or weak, he was repudiated.

Chaos and confusion was already there and disintegration of this state had already set in during the reign of Muhammad bin Tughluq. The grand kingdoms of Vijayanagar and the Bahmanis had been founded and other distant provinces were also seething with unrest and preparing to alienate. Firoz Shāh's policy to convert the Sultanate into a full-fledged Islamic state in the land of overwhelming infidels, who refused to betray their faith even in the face of harshest coercion, made confusion worse confounded. His death rang the last bell and the decade following his death was a period of complete anarchy. There remained virtually no central government worth the name and the forces of disorder and lawlessness were let loose.

The miserable state of affairs which prevailed at Delhi before the invasion of Timūr, in fact, needed a violent shock. Nothing except a shock could have restored order out of the chaos, and retrieved a state out of the anarchy. The invasion of Timūr completed the process of decentralisation of the unwieldy centralised despotism of the Delhi sultan who had been proved unworthy of the territories he possessed. Thus it was not a holocaust alone. In fact, it released the forces of reconstruction and reorganisation. It closed the period of chaos and confusion and ushered in an era of cultural renaissance in the country. It broke the flimsy and artificial Delhi Sultanate and established independent kingdoms in Gujarat, Malwa, Gwalior and Jaunpur which soon became veritable centres of great cultural activities, viz., literature, music, painting and architecture. It is a matter of singular importance that the greatest rulers of the pre-Mughal period in India came from these states which had sprung from the pieces of the Delhi Sultanate and had prospered on its ruin. The names of Aḥmad Shāh (1411-43) and Maḥmūd Begarhā (1458-1511) of Gujarat, Maḥārāṇā Kumbhā (1433-68) of Mewar, Hoshang Shāh Ghori (1405-35) and Ghiyāthū'd-Dīn Khaljī (1469-1500) of Malwa, Devarāya I (1406-22) and Kṛṣṇa Devarāya (1509-29) of Vijayanagar, Fīroz I (1397-1422) and Maḥmūd (1482-1518) of the Bahmanī empire which also patronised such a great genius as Maḥmūd Gāwān (d. 1481), Ibrāhīm Shāh Sharqī (1402-40) and Husain Shāh Sharqī (1458-79) of Jaunpur and Raja Mansingh Tomar of Gwalior (1486-1516) may be mentioned by way of illustration. The period which followed the invasion of Timūr till the establishment of the Mughal empire by Bābur saw magnificent buildings (e.g., mosques, temples, tombs and palaces) rising from the ground at

Ahmedabad and Champaner; Chittorgarh, Kumbhalgarh and Ranakpur; Chanderi and Mandu; Vijayanagar; Gulbarga and Bidar; Jaunpur and Gwalior. They are rich in style as well as in number and some of them stand comparison with the splendid products of the Mughal age. Great schools of music and painting were established and great literary works were produced in these centres during this period. In fact, the Mughals built their cultural state upon the legacy which bequeathed upon them.

The masses sighed with relief; the fetters were removed and the freedom which now came within their grasp was utilised by them to review the situation and reorganise their house according to the changed conditions. With amazing dynamism, the Hinduism set to adapt to the change. The bhakti movement in medieval India was an outcome of this adjustment with the time. Such great savants of this movement as Kabir (c. 1450-1518), Nānak (1469-1538), Vallabhāchārya (1478-1530), Chaitanya (1485-1533) and Mīrābāī (1498-1546) were, indeed, the products of the age to which they belonged. Fifteenth century, this way, marks the beginning of the cultural renaissance in medieval India, which not only completely changed the socio-religious pattern of the country and the people which proved to be most befitting in the changed environment, but also gave an altogether new complexion to indigenous arts. This great change paved the way for the Mughals; it gave them the basic material to shape their state and also to give form to their arts.

(a) *Mahārāṇā Kumbhā of Mewar (1433-68)*

The first phase of art renaissance in medieval India set in with the accession of Kumbhā to the throne of Mewar in 1433. Not only was he a great patron of arts and literature, but he was also an excellent author, poet, musician and art-critic. He composed the *Śaṅgita-Rāja*, a grand treatise on fine arts which covered such subjects as śaṅgīta (music), nr̥tya (dance), nr̥tta (acting with dance) and vādya (instruments of music) in nearly 16,000 ślokas and dealt with the theoretical aspects of fine arts (e.g., rasa) in exhaustive details. It draws largely on such basic, ancient treatises as Bharata's *Nāṭya-Śāstra* and has been made up-to-date with suitable additions, elaborations and illustrations. Kumbhā's epigraphs and contemporary works allude to his having composed, likewise, a treatise each on erotics and dramaturgy, viz., the *Kāma-Rāja-Rati-Sāra* and the *Nāṭakarāja* respectively; their manuscripts, however,

have not yet come to light. His four plays, a work on music entitled the *Saṅgita-Mīmāṃsā* and a commentary on the *Saṅgita-Ratnākara* entitled *Saṅgita-Krama-Dīpikā* are also not available to us. He wrote an excellent commentary *Rasika-Priyā* on Jayadeva's *Gīta-Govinda*; his *Sūḍa-Prabandha* was an extension of this commentary. He also wrote a commentary on the *Chandī-Śataka* of Bāṇa, viz., the *Chandī-Śataka-Vṛtti*. He composed a work on the Kīrtistambhas which was engraved on stone tablets and fixed in the lower part of the Kīrtistambha of Chittorgarh; only a part of the first tablet has been found and is preserved in the Udaipur Museum.

He composed numerous poetic invocations to gods in various rāgas and tālas which are now contained in the *Ekliṅga-Mahātmya*. He was an accomplished musician and an unexcelled player on vīṇā and on account of his achievements in both the practical and theoretical sides of fine arts, he was known as 'Abhinava-Bharatāchārya' (New Bharata), which, in view of his masterly treatises on the subject, was not an exaggeration.

Kumbhā was also a great builder. He commissioned his able architect Maṇḍana to build the Fort of Kumbhalgarh and adorn it with palaces, tanks, temples and sculptures. The work began in 1443 and the edifices were finished in 1458. Kumbhā also built Achalgarh (Abu) and its various temples and tanks. He repaired and restored the Fort of Chittorgarh and built its seven poles (gateways). A large number of palaces, tanks and temples were also built in this fort. Like the Kumbhaswāmin temple of Kumbhalgarh (also called Māmādeva temple) and the Kumbhaswāmin temple of Achalgarh, a magnificent Kumbhaswāmin temple was built in the Chittor Fort. The most important of his relics, however, is the Kīrtistambha of Chittorgarh (which is erroneously known as the Jayastambha or the Victory Tower). It was built by his architect Jaita (Jaitra) with the assistance of his sons Nāpā and Panjā and was completed in v.s. 1505 (A.D. 1448). The tower which stands to the height of nine storeys and contains icons of gods and goddesses systematically arranged and indicated, so as to provide a veritable text of iconography personified in stone, is unique in the whole range of Indian art.

The Chaturmukha Jaina Temple of Ādinātha (Trailokya-Dīpaka Prāsāda) of Ranakpur was built during his reign by the architect Depāka at the behest of the Jaina seth Dhārṇaka. It was completed in 1439. It covers an area of 48,000 square feet and contains 25 maṇḍapas, 184 bhū-grhas, 84 devakulikās and as many as 1444 pillars each of 40 feet height – all of exquisitely chiselled marble, and no two pillars

being similar! The style of its architecture is as magnificent as gigantic and vast is the project.

A large number of Vāstu-texts were also composed during his reign, mostly under his patronage. His architect Maṇḍana, elder son of Kṣetra (or Khaṭta), wrote as many as eight standard texts on Śilpa, viz.:

1. *Rāja-Vallabha*
2. *Prāsāda-Maṇḍana*
3. *Rūpa-Maṇḍana*
4. *Vāstu-Sāra*
5. *Devatā-Mūrti-Prakaraṇa*
6. *Vāstu-Maṇḍana*
7. *Rūpavatāra*
8. *Vāstu-Śāstra*

Kṣetra's second son Nātha, younger brother of Maṇḍana, also wrote a treatise on the subject, viz., the *Vāstu-Maṇḍarī*. Maṇḍana's son Govinda wrote three standard works on different aspects of Śilpa, e.g.:

1. *Uddhāra-Dhorinī*
2. *Kalā-Nidhi*
3. *Dwāra-Dīpikā*

The creation of such a large number of texts during this period shows that there certainly was the need of a standard theory (śāstra) to strengthen and guide its practice (prayoga). Except for the Gupta age, no single epoch has such a large number of treatises to its credit.

Kumbhā revived the classical order of things, many of them in a way which would suit the changed conditions, i.e., by incorporation in the indigenous art of those elements which had been recently introduced into India, e.g., the arcuate modes of spanning the space in contradistinction to the horizontal system and the art of line and colour as distinguished from the art of mass and plane. Many lost texts were recovered and their standardised versions were produced. Scattered aphorisms were collected and compiled. New works were also written down and a vast literature on Śilpa was thus produced during his reign in Mewar by the family of architects whose ancestors had migrated from Gujarat; in fact, they are the product of the cultural milieu which can be conveniently termed as the Māru-Gurjara region (comprising of the Southern Rajasthan and Northern Gujarat).

Kumbhā's efforts to revive and revitalise the ancient Indian arts,

and to build the medieval arts upon the Śāstric dicta, mark the beginning of art renaissance in medieval India. It was he who laid the foundation, prepared the ground and paved the way for Raja Mansingh Tomar of Gwalior who derived wholesale inspiration, and also, as it seems certain, invited architects, from Mewar; the sources of the art of Gwalior lie deep in these attempts of Mahārāṇā Kumbhā to revive and reform the traditional arts of India. And ultimately it was on these secure foundations that the Great Mughals, Akbar and Shah Jehan, built their architectural style.

(b) *Indian Vāstu-Text on the Construction of Mosque (Rehamāṇa-Prāsāda)*

It is surprising that though they built large and magnificent mosques in Syria, Iraq, Iran, Turkey, Egypt and Spain, the Muhammedans have no written text as to the construction of their sacred architecture. Except the universal law that the congregation would face the Ka'ba (in Mecca) in accordance with the Quranic injunction⁴ and the Qiblah would mark its direction, there are no prescribed rules and absolutely no norms for its making. The Hindus, on the other hand, were very particular in this matter. The 'śāstra' (theory) closely followed the standardised form of 'prayoga' (practice) in India and they laid down principles for the construction of temple (prāsāda) in minutest details, in numerous types and varieties, from the Gupta age to the beginning of the Mughal period. Iconography similarly dealt with the subject of image-making in exhaustive details. Such grand treatises as the *Bṛhat-Saṃhitā*, *Śukra-Nīti-Sāra*, *Hayaśiṛṣa-Pañcharātra*, *Agni-Purāṇa*, *Viṣṇu-Dharmottara-Purāṇa*, *Kāśyapa-Śilpa*, *Mayamatam*, *Mānasollāsa*, *Mānasāra*, *Samarāṅgaṇa-Sūtradhara*, *Aparājita-Pṛchchhā*, *Śilpa-Ratnam*, *Viśvakarmā-Prakāśa*, *Pramāṇa-Maṇjarī*, *Vāstu-Sāra-Prakaraṇa*, *Prāsāda-Maṇḍana* and some 15th century texts on Śilpa (combining all the applied fine arts, viz., architecture, sculpture, iconography, iconometry and painting) are available to us.

It is extremely interesting that in accordance with their own classical way of looking at the things, the Hindus laid down a Vāstu-text on the construction of mosque (masjid) for the first time around the middle of the 15th century. This was made in the Māru-Gurjara region. The subject has been dealt along with the temple under the title 'Rehamāṇa-Prāsāda' (the temple of Rehamāṇa, viz., Allah), like *Sūrya-Prāsāda*, *Śiva-Prāsāda* and *Jina-Prāsāda* (the temple of Sun, the temple of Śiva

and the Jaina temple respectively). It consists of a chapter in the *Vṛkṣārṇava*⁸ which is one of the three important Māru-Gurjara works on architecture of the period. The Rehamāṇa-Prāsāda has been dealt along with the sacred structures of other sects, thus:

सन्यासीमठकर्मेषु अनास्तिक कुटिरके ।
 बौद्धारहन्तकेश्चैव ध्वाक्षश्च (सपुत्रके ?) ॥ ३५ ॥
 रहमाणप्रासादेषु सन्यासी सबंदशने ।
 सिद्धायतनतीर्थेषु ध्वाक्षं च तत्र निश्चलम् ॥ ३६ ॥

(Use 'dhvāṅkṣa' proportions in the construction of the maṭhas of the sanyāsins, the huts of the theists and the chaityas and vihāras of the Buddhists and the Jains; likewise this standard should be used in the construction of the Rehamāṇa-Prāsāda, viz., mosque and the residential structures of the sanyāsins and the siddhas.)

The text is in the form of dialogues between Viśvakarmān and his mānas-putra Jaya.⁹ The latter having listened to the detailed enumeration of Vairāja type of temples, palaces, houses, step-wells, wells, tanks and other water-devices, temples of Brahmā, Viṣṇu, Śiva and Sūrya, types of stones and the images made from them, reservoirs, temples of Brāhmaṇa, Chhatriya, Vaiśya and Śūdra natures, urged upon the former to explain to him the nature, proportions, rhythm, form and types of the temple built by the Muhammedans under the Sātvika-Bhāva (the sentiment of godly adoration).

Viśvakarmān replied: "Their temple is called 'Rehamāṇa-Surālaya' (abode of the god Rehamāṇa, viz., Allah). There is no image (as idol-worship is prohibited) and there they worship, through dhyāna (contemplation), the formless, attributeless, all-pervading Supreme God whom they call Rehamāṇa (Allah). After working out the āya and vyaya, the levelled ground should be marked into eight or ten parts according to Sūtra-Pramāṇa. If it is an Ekāṅga Prāsāda (Ekāṅgaṇa ? = single quadruple mosque as distinguished from Chaturāṅgaṇa = four-quartered mosque), it would have two arms (sides) (i.e., on north and south) with the western side closed and the Qibla with quoins on the sides marked out (in the centre). Interiorly, this part would have a beautiful mihrab. The temple will invariably face the east, i.e., its main entrance would be in the eastern side; enclosing walls would be given on the north and south sides. Directions should be precisely calculated and the prāsāda should exactly face east (so that the mihrab may be on the western side and the congregation may face the direction of the Ka'ba). The plinth would consist of series of bhitti, upabhitti and pīṭha

(so as to be sufficiently high). All ornamentation should consist of floral designs only. Externally, instead of the plain wall, various projections should be given so as to provide a number of pleasing quoins (which would be crowned by pinnacles); *chhajjas* should be provided to protect all external sides as well as the (sanctuary and) *dalans*, over which (i.e., on the superstructure) *chhatris* should be arranged in series of two, three or five. Ornamental arched niches should be carved on the walls. There should be medallions containing rosettes on the facades between the pillars; all facades should be composed of arches supported on pillars. The *mihrab* would consist of two parts (?) with pillars on its sides; the entrance portal would have three parts (?). The Qibla wall would be entirely closed. In all, the pillars would be used in seven parts of the *prāsāda* (?) and they would bear only the floral designs (consisting of flowers and leaves)."⁸

This prescription lays down some fundamental requirements of the mosque forum, e.g.:

- (i) that it would face east so that the Qibla marking the direction of the Ka'ba could be provided on the western side; it is in accordance with the Quranic injunction which ordains the believers to face the Ka'ba while offering *namāz*; the main entrance would accordingly be given in the eastern side;
- (ii) there would be no image and, instead, the *mihrab* would be given in the centre of the western wall facing which the believers would stand to worship their *nirañjana* and *nirākāra* god through contemplation (i.e., without rituals); there is specific injunction for making the *mihrab*;
- (iii) it would have a *high plinth*;
- (iv) there would be *dalans* on the sides;
- (v) *pillars* would be used in its construction and particularly the arches of the facades would be supported on pillars;
- (vi) only *floral designs* would be used in its ornamentation and no sculptures or animate figures would be employed.

This *śāstra* is true to the extant examples except for two vital points, viz., (i) that no domes to superimpose the mosque, (ii) nor minars to flank the central arch of the facade, or to flank the facade on sides, have been mentioned. As the available text is incomplete, it is quite likely that such subjects were dealt with in the later portion which has not come down to us.

This is strictly in accordance with the Islamic tenets and, as it is



3. Nila-gumbad, Nizamuddin, Delhi.



4. Qal'a-i-Kuhna Masjid, Old Fort, Delhi.

certain, the text was written down and the śāstra was made after the mosque had become a popular feature on the Indian scene and its innumerable examples were available to the śāstrakāra for making out a standardised version of the structure and laying down uniform norms and rules for its construction. It is a unique characteristic of the art of India that as soon as 'prayoga' (practice) is standardised through usage and evolution, its śāstra (theory) is invariably written down for bringing about uniformity in the style and also for putting restraints and limitations to the reckless tendencies of the builders to go along their own way in disregard of the sacred injunctions and norms of beauty. In fact, these śāstras were code of (i) sacred injunctions and (ii) norms of aesthetics.

Why the Hindus laid down the principles for the making of mosque and how they were concerned if it was built in a wrong way—is an important question. The explanation is simple. Guilds of Hindu artisans (salats or silawats) were constantly employed on the construction of mosques and they treated this subject technically, over and above any possible religious bias. They would worship the Vāstu-Puruṣa at the time of laying the foundations of mosque as they would normally do in case of temple and follow all other rituals of their own irrespective of the concurrence of their patron which might not have been available to them. Their art—whether it was used for making temple or mosque—was their *dharma* and an entirely technical matter for them. The text was prepared at their behest by the Brāhmaṇa Āchārya to provide technical, almost detached knowledge, on the subject as soon as its perfectly standardised form evolved after lot of experimentation—and this was also treated all along as a technical matter.

Religious bias, in fact, was never there in Indian art. The caves of Ellora are identical though their sectarian affiliations are different, viz., Jaina, Buddhist and Brahmanical. Indian art deals with its subject dispassionately and technically. The same set of building principles, plan, elevation, structural contrivances and ornamental themes governed the construction of temples of Jaina atheists and Vaiṣṇava theists at Khajuraho, and, except for a few iconographic details, the temples of the former resemble those of the latter. Like the artisan, the śāstrakāra too suffered with no taboos and discussed architecture of Jaina and Vaiṣṇava temples together in the same work. This phenomenon of Indian art depicts its amazing capacity to accept and assimilate extraneous inspirations and to adapt dynamically to changed conditions and situations.

Mosque was the sacred forum of the ruling people as well as a large

section of the urban subjects and a fact in the Indian socio-religious order around the middle of the 15th century and, naturally, the subject of its architecture was admitted into the Śilpa-Śāstras in accordance with the basic spirit of Indian thought which has been casually expressed by Vātsyāyan in the *Kāma-Sūtra* (II.9.41), e.g.:

शास्त्रार्थान्वयापिनो विद्याप्रयोगांस्त्वेकदेशिकान् ।

(The nature of śāstra is universal, i.e., all-covering, while prayoga is only local.) It is noteworthy that they laid down prescription for the construction of mosque only, and not for the construction of tomb (maqbara) which largely depended on individual taste and choice and also on the financial capacity of the patron. The mosque was a *social forum* like the temple and its architecture was not determined by individual taste and choice. It was a sacred architecture and, as such, it was treated by the śāstras like temple. In fact, it was deemed to be a type of the prāsāda for the worship of nirañjana and nirākāra God (Rehamāna—Allah, who was identical with Brahma) and, accordingly, it has been dealt along with the temples of the Hindus in the same work. The mosque was, thus, admitted, in supersession of much-professed taboos and inhibitions, into the orbit of the sacred architecture of India and this was indeed a great attempt, around the middle of the 15th century, to accept the things which had been introduced into Indian art subsequent to the establishment of the Delhi Sultanate and to assimilate them into the main current.

That the Hindus made a śāstra for the construction of masjid is a fact of singular importance, lastly, because this event is representative of the trend of cultural rapprochement which had then set in, developed under the provincial dynasties in Mewar, Gujarat, Malwa, Gwalior, Jaunpur, Bengal and Kashmir and bore fruits under the more congenial reign of the Mughals about a century later.

(c) *Raja Mansingh Tomar of Gwalior and His Monuments (1486-1516)*

While the Delhi sultans remained busy with their own problems and embarrassments practically during the whole of the 15th century, the provincial kingdoms, now and then, enjoyed peace and prosperity which greatly promoted cultural activities. The first phase of art renaissance had its due impact upon the neighbouring states of Mewar

and set things moving. The initiative was utilised in different ways in different regions, though the underlying trend to derive inspiration from the indigenous traditions of art remained the same.

The threads of the renaissance⁹ were picked up, soon after the death of Kumbhā, by Raja Mansingh Tomar of Gwalior which had also become, at the expense and discomfiture of the Delhi sultan, a powerful Hindu state of northern India. He ascended the throne in 1486 and, during his reign of 30 years, he devoted himself wholeheartedly to the patronisation of fine arts: music, architecture, sculpture and painting. Undaunted by the repeated invasions of Sikandar Lodi, which would have easily drained his genius into military channels, he invited the greatest musicians, architects, sculptors and painters to his court and the Gwalior Fort hummed with great cultural activity during his reign which marks the second phase of this great movement. Almost the whole of India was then feeling the impact of this cultural revolution and the raja was beset in an ideal setting. Such bhakti saints as Kabīr, Nānak, Vallabha and Chaitanya were his great contemporaries on the one hand and rulers and empire-builders as Sikandar Lodi, Babur, Maharana Sanga, Mahmud Begarha and Krishna Devaraya on the other.¹⁰ His own contribution to the most important aspect of this renaissance, viz., fine arts, is unique.

Like his august predecessor Kumbhā, Raja Mansingh was also an accomplished musician and equally well-versed in *Saṅgīta-Śāstra*. He revived the 'dhrupad' style (as distinguished from mārgī) and invented a few new rāgas and, this way, he initiated Indian music into the Deśī style. He held at Gwalior a conference of musicians in which almost all great artists of the age, viz., Baijū, Nāyak Bakhshū, Nāyak Pāṇḍaviya, Deva Āhaṅga, Nāyak Mahmūd Lohaṅga and Nāyak Karan participated. Various rāgas and rāginīs were examined in minutest details, their form and number were standardised and the conclusions of the scrutiny were compiled in classical order in the work *Man-Kutoohal*. This was, in fact, a more ambitious project than the *Saṅgīta-Rāja* of Kumbhā, as the latter was only a revised edition of the available texts on the subject mainly based on the *Nāṭya-Śāstra* of Bharata, while the former was a critical enumeration of the available data which was made up-to-date by incorporation of the style of music and the rāgas and rāginīs which had been introduced into India during the last two centuries and also of the innovations which had been made during this period. It had drawn from all great ancient works of Indian music, including the *Nāṭya-Śāstra* and the *Saṅgīta-Ratnākara*, as well as from the works of Amir Khusrau, the *Saṅgīta-Śiromaṇi* which was compiled under Bahādur

Malin at Kara-Manikpur in 1428, the *Lahzat-i-Sikandarshāhi* of Umar Yāhiyā and all those changes which had been suggested at the courts of Bengal, Jaunpur and Kashmir. *Man-Kutoohal*, in fact, was the most representative and the most up-to-date treatise on Indian music. An additional merit of this work lay in the fact that though a classical production, it was written in Hindi, the language of the people at large, to be easily intelligible to them.¹¹

This way, Raja Mansingh founded a great school of classical music at Gwalior which soon became the greatest centre of this art in North India. It was in this tradition that the greatest of musicians of the medieval period, including such a kalāvanta as Tansen of the Imperial Court of Akbar, were trained. In fact, most of the Great Mughal's first-rate musicians came from Gwalior.

The raja attached equal importance to architecture. He seems to have constructed extensively; it is a pity that only his buildings in the Gwalior Fort have survived and nothing outside it has come down to us. But there are enough of them to give an idea of the style which came into form under the raja, with distinctive characteristics.

Gwalior's is one of the most ancient forts of India and, as the epigraphical evidence shows, it is the most ancient of them. The earliest inscription recovered from the fort belonged to the Sun temple which was constructed in the 15th year of Mihirakula's reign, c. 530 A.D. It seems that the temple stood on the east bank of the *Suraj-Kund* where a Devi temple was built over its ruins in 1882. The *Suraj-Kund* itself is an ancient tank which has been repaired and restored from time to time. Excavated in rock and with built-up masonry embankments, it measures 350 feet (106.68 metres) in length, 180 feet (54.86 metres) in breadth and 40 feet (12.19 metres) in depth. In the centre is a small island-platform with a miniature Śiva temple, which is connected to the eastern bank through a bridge supported on pillars (Plates I and II).

The famous *Teli* (Teliṅgānī) temple was built by the Rāṣṭrakūṭa Dhruva (c. 790). The *Gangola-Tal* tank seems to have been an excavation of this period. It is in two beds, the upper one is only 12 feet (3.66 metres) deep while the lower is nearly 50 feet (15.24 metres) deep. A large number of inscriptions were found engraved upon its bed when it was recently cleaned and desilted.¹² The *Dhobi-Tal* also seems to have been excavated during this period.

The Rāṣṭrakūṭas were ousted from the region by the Pratihāras, most illustrious of whom was Bhoja or Mihirabhoja (Amoghavarṣa) who assumed the biruda 'Ādivarāha'. The rock-cut temple of *Chaturbhuj* was built during his reign; it bears two inscriptions dated in v.s.

932/875 and 933/876 A.D. respectively. The *Laksamana Gate* and the rock-cut baoli near it seem to have been built contemporarily. The most important of the Pratihāra epigraphs, viz., the *Sagartal Prasasti* (c. 875) was also found at Gwalior on the Sagartal and is now preserved in the Gujari-Mahal Museum. Three other inscriptions of the Pratihāras were found at Gwalior. This shows that they reckoned Gwalior as one of the most strategic places of their empire. One of them alludes to a palace of Bhoja in the vicinity and it seems that it stood at the site where, later, Raja Mansingh Tomar built the *Man-Mandir*. The Sas-Bahu temples were built in the last decade of the 11th century; there is an inscription in the larger one dated in 1093. Another inscription which belonged to the extinct *temple of Mahadeva* is dated in 1104. In fact, the fort played an extremely important part in the history of northern India and was always garrisoned and defended as an outpost by the paramount power.

Iltutmish, the first sovereign sultan of the Delhi Sultanate, captured Gwalior in 1232. He took it from the Urwahi side where he had an inscription placed on the gateway. It was seen by Babur in 1527; he recorded: "Above the Gate leading from the valley to this walled-well the name of Sultan Shihābu'd-Dīn Ailtmish (Iltutmish) is inscribed, with the date A.H. 630/1232 A.D."¹³ Ferishtah also mentioned it¹⁴ and his translator John Briggs personally noticed it *in situ* around 1825: "The stone and the lines are still to be seen."¹⁵ But this epigraph was lost thereafter and Alexander Cunningham, though he frantically searched, could not trace it between 1844 and 1865.¹⁶

The fort remained in possession of the Turks until the Tomars captured it from them around 1394. The early sultans kept it as an outpost. The Khaljis, however, used it as a state prison. Khidr Khān and other unfortunate sons of 'Alāu'd-Dīn Khalji, viz., Shihābu'd-Dīn, Abu Bakr Khān and Shādhī Khān were imprisoned here in the dark underground cellars situated at the *Dhondha-Paur*. The dungeons are now called the *Nay-Chowki Jail* (correctly, Nava-Chakra or nine-circuited prison). It was here at this place that they all were ultimately killed in cold blood.¹⁷

'Ibn Baṭūṭah, the famous Moorish traveller, visited Gwalior on 25 September 1342 and noticed the stone statue of elephant with its rider, on the *Hathiya-Paur* (Elephant-Gate): "At the gate of the fortress is the figure of an elephant sculptured in stone and surmounted with the statue of a mahout."¹⁸ He again alluded to this statue on his second journey to Gwalior. This shows that the famous statue was a pre-Tomar relic and stood near the series of Hindu buildings on the eastern facade of the fort.

The Tomars captured it from the later Tughluqs and, taking advantage of the invasion of Timūr, they became independent. They repaired the fort and strengthened its defences.¹⁹ It was during Mansingh's reign, however, that the fortifications were completely renovated, an outwork of the fort, viz., the *Badalgarh*, was built at its foot and the beautiful gateway, the *Hindola-Paur*, added to it. At least two of his palaces, viz., the *Man-Mandir* complex and the *Gujari-Mahal* complex and one of his administrative buildings, viz., the *Chaurasi-Khambha* (Assembly Hall of 84 Pillars) have also come down to us with most of their original fabric intact.

There was already a watch-tower on the extreme north-western point of the fort adjoining the *Trikonīa Tal* (Triangular Tank). Mansingh built two additional watch-towers on the north side, the direction of the possible attacks of the Delhi sultan. They were pillared pavilions with such features as projecting oriel-windows, bracket-forms, overhanging chhajjas and superimposing chhatris (Plate III). The existing palatial structures of this area, which were largely built by the Tomars, were renovated and rebuilt from time to time, under Humayun, Sher Shah, Jehangir and Shah Jehan, whose names still cling to these mansions. The Scindias and the Britishers converted them to suit their military requirements; they have almost entirely destroyed their original plan and fabric and, unmindful of their art and architecture, demolished parts of them. Some residential blocks have been converted even into horse-stables! Grotesque tin-sheds, pipes and wires have been fitted into their texture. Stone surfaces have been crudely white-washed and impression of a beautiful architectural style has been everywhere covered, eloquently, by the typical modern bad taste (Plate IV).

Raja Mansingh repaired and renovated the *Dhondha-Paur* complex²⁰ on the western side and provided it with additional defences. Following the Khaljī tradition, the Mughals also used this dreadful place, viz., the *Nav-Chowki Jail* as a royal prison; the underground cellars with the impregnable defences of the fort were the safest for this purpose and no prisoner ever came out of them alive. The jailor of this prison lived in the suite which was built at the head of this complex; the rooms still bear typically Mughal stucco and painting designs and a hammām. The Mughal jailor was independent of the governor of the fort and was directly responsible to the emperor.

The *Urwahi-Paur* was also renovated and enlarged by Raja Mansingh as the *Urwahi-Paur* inscription testifies.²¹ This small gateway overlooking the Urwahi valley was accessible only through a broad stairway cut into living rock (Plate V). It was essentially meant for the inmates

of the fort to fetch drinking water from the wells situated in the Urwahi valley. The wall over the stairway has a number of curious mason-marks which include pentagon, triśūla, aṅkuśa, svāstika and arrow, such words as नवपक्षी and गरुड़ and a few names probably of the artisans, e.g., सुदर्शन पौत्र पुत्र केशव (one who is grandson of Sudarśana and son of Keśava), रामदास and सन्जीवन.²²

The raja excavated a tank, viz., the *Man-Sarovar*, near the *Urwahi-Paur*. He also built a mansion on its bank but, unfortunately, this has now been reduced to a mound and only parts of the plinth, a few lintels and brackets, and water-channels have remained. The *Man-Sarovar* is still intact though due to the crevices, which have developed into its bed, water does not stand in it and it has now been dried up. Its northern and western embankments (Plates VI and VII) with regularly disposed chhatris at the cresting still give an idea of the original charm of this vast reservoir. The *Urwahi-Paur* complex overlooking the western side of the fort with the outlying green country and the picturesque Urwahi valley below, and the *Man-Sarovar* in the vicinity was an ideal site for a residential palace and it is a pity that its structures have almost completely been destroyed.

The raja excavated and built other spacious tanks in the fort. The *Rani Tal* (Queen's Tank) and the *Cheri Tal* (Maid-Servant's Tank), situated together on the south-western side of the fort belong to his age. The former is a spacious square tank with double stairways leading to the water on its eastern side. The latter is rectangular and smaller. Overlooking it on the northern side is a double-storeyed pillared pavilion (Plate VIII). Massivity is its distinctive characteristic. This shows that these tanks were not only meant to store rain-water but also to provide pleasure-retreats and probably picnic-resorts to the people. The *Katora-Tal* (Plate IX) also owes its origin to Raja Mansingh. It is a circular tank, hence the nomenclature 'Katora' (= Bowl). It is 150 ft (45.72 metres) in diameter and 23 ft (7.01 metres) in depth. Like other tanks, this has also been excavated in living rock. Double stairways have been provided on the eastern side; below the set is a dalan. In the exact centre of the vast tank is a double-storeyed circular tower (Plate X) standing on the rock plinth. Each storey is composed of eight circular pillars. The upper one is protected on all sides by a circular chhajja which is similar to the one used on the chhatris of the *Man-Mandir*. The tower is crowned by an elongated dome which bears traces of glazed-tiling. All this belongs to the style of Raja Mansingh Tomar. This is something novel in the otherwise simple water-tank; not only is it a beautiful feature in the body fabric of the tank, it also seems

to symbolise the concept of art to stand over and above the deep waters of harsh realities. Though an integral part of it, it outshines and over-stays in full bloom like a lotus flower. Similar is the idea of the *Ek-Khambha Tal* (Tank of One Pillar) which also has a monolithic sandstone pillar crowned by a square four-pillared miniature chhatra in its centre (Plate XI). It has a cupola and āmalaka finial (Plate XII). Here too its incarnation is guided exclusively by aesthetic consideration and it is not the least functional. This is also a spacious tank irregularly rectangular in plan measuring 200 ft (60.96 metres) on the longest side and 80 ft (24.38 metres) on the smallest. While the *Katora-Tal* is defunct, this tank retains water throughout the year.²³

(i) *Chaurasi-Khambha*

Situated in the neighbourhood of the *Hathiya-Paur* (Elephant Gate), slightly to the south of the *Man-Mandir*, this complex is made up of a large pillared hall with an imposing portal (iwan) attached to it on the northern side (Plate XIII), a broad deep double-storeyed, circular baoli (step-well) just on its southern side (Plate XIV) and a small pillared pavilion to its west (Plate XV). Originally, the pillared hall was open on all sides with raised āsana-paṭṭikās on the north. In fact, it is a double-storeyed building, the basement having been completely closed down though its entrance below the eastern porch has survived intact. It is rectangular in plan with ten series of eight columns each, composing the hall and two additional columns each in the eastern and western central porch, there being 84 columns in all (see Plan, Fig. 1), hence the nomenclature: *Chaurasi-Khambha* or the Hall of 84 Pillars. Thus there are 63 square bays in the hall, each having a plain flat ceiling supported on interconnecting beams. The western porch has been entirely destroyed and its two external columns also are no longer extant.

All the columns are circular with massive bases and shafts and heavy capitals, all of grey sandstone; they are plain and unadorned. In fact, the whole interior is plain and simple. The Hall was used as arsenal by the British during their occupation of the Fort. The columns were plastered over and white-washed, and serially numbered. All external sides were walled up and the interior was enclosed with four doored-entrances in the middle of the four sides. Only the vitānas (ceilings) of the central bay (marked A in the Plan) having a lotus design carved in the stone slab, and the eastern porch (marked B)

which is a typical Hindu corbelled ceiling of overlapping courses (Plate XVI), have remained unchanged; the eastern porch (Plate XVII)

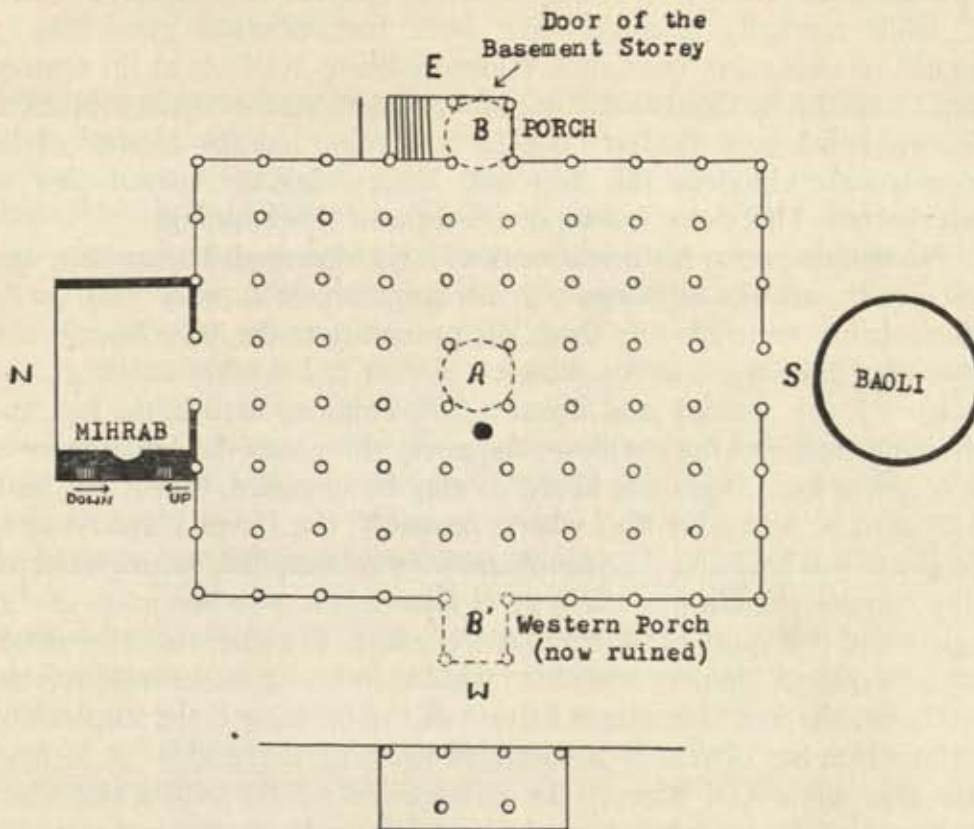


Fig. 1. Plan of the Chaurasi Khambha (c. 1500), Gwalior Fort.

and its stairs were also not disturbed. Later the building was used as a store-house and finally as a cattle-yard! Heaps of cow-dung still remain on the floor.

The eastern porch is roofed by a 'kamarakhī' dome (Plate XVIII) which rests on a square drum bearing merlons of stone. This dome is essentially ornamental as the ceiling of the porch is corbelled (see Plate XVI above) and it is only its filled-in exterior which bears the dome shape (Fig. 2). It could

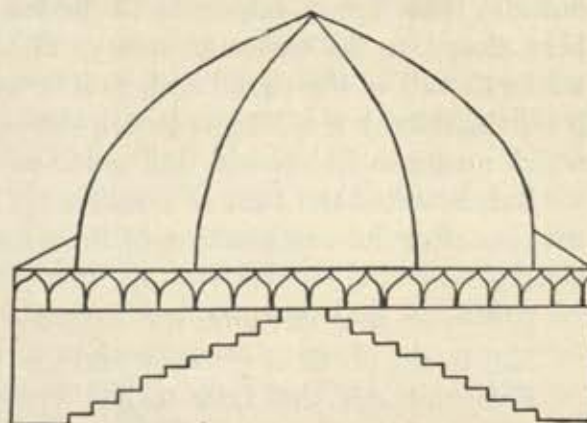


Fig. 2. Rough Section of the Dome over the Eastern Porch, Chaurasi Khambha.

have been plain and spherical instead of a six-sided 'kamarakhr' conformation and it is interesting to take note of the taste of the architect who chose this form to roof his corbelled 'vitāna'. It is slightly elongated while normally it could have been hemispherical resembling a cupola, or triangular, both such examples being available at the Qutub, Delhi, and the Ardhai-Din-ka-Jhompra, Ajmer, also over the corbelled vitānas. It has been plastered over; it seems that like the cupolas of the *Man-Mandir* chhatris, this too had been originally glazed-tiled in polychrome. This dome is a unique feature of this building.

No contemporary historical work of Raja Mansingh Tomar has come down to us, nor the buildings bear his epigraph. It is only their style which helps us to identify them. Its proximity to the *Man-Mandir*, the stone used in its construction which is similar in his other buildings, the design of the vitānas and form of the columns used in the hall, the adjoining baoli and the pavilion adequately show that the building owes its origin to him. It is quite likely, as may be surmised, that it was built to be used as Assembly Hall where, probably, the Great Conference of musicians was held and the *Man-Kutoohal* was compiled. In any case, an administrative building of the type of Diwan-i-am was the need of his regime and it is quite probable that while he built numerous other structures, an official building was also included in his architectural projects.

By far, the most important feature of the building is the stupendous portal which has obviously been added to its northern side at a later date (see Plate XIII above). In comparison to the yellow and white sandstone of the main building, the portal is made of red sandstone. It rises above the hall; in fact, it is a great iwan with a semi-vaulted soffit. It has a set of narrow stairways in the western wall accessible from outside. The upper one leads to the terrace, the lower which has now been closed, to the basement storey. There is a mihrab sunk in the western wall of the portal and, as it seems, this was used as a mosque. Near the mihrab is a Nāgarī inscription dated in v.s. 1586/A.D. 1529 which mentions Babur and Rahīmdād who held the Fort for him.²¹

Babur visited the Fort of Gwalior on 26 September 1528, about two decades after the construction of the palaces. He noted:

Riding on next day after the Mid-day Prayer, we visited the low hills to the north of Gwalior and the Praying-place, went into the Fort through the Gate called Hati-Pul [Hathi-Pole] which joins Mansingh's buildings and dismounted, close to the other Prayer, at those [buildings] of Raja Bikramajit in which Rahimdad had settled himself ... After visiting these buildings, we rode to a college

Rahimdad had made by the side of a large tank, there enjoyed a flower-garden he had laid out, and went late to where the camp was in the Charbagh.²⁵

This college seems to have been built on the *Gangola-Tal* where at a later date Jehangir erected a building which also had an inscription. Subsequently, however, this was destroyed. Babur's description shows²⁶ that Rahīmdād's charbagh was laid somewhere near the *Hathiya-Paur*. This garden is not traceable at present. The appearance of Rahīmdād's inscription in the portal of the *Chaurasi-Khambha*, however, shows that this building was adopted by him and, most probably, it was he who added the portal to the existing structure. There could not have been any other occasion for the carving of the inscription on its wall. Had he built the whole *Chaurasi-Khambha* himself, the fabric of the hall would not have differed so substantially from that of the portal. The Hall is certainly a pre-Babur structure. Iltutmish's Jami' Masjid had disappeared during the interval and there was no other mosque in the Fort when Rahīmdād captured it from Tātār Khān Sārang-Khānī. It is quite natural that the Mughal garrison needed a mosque and this, with the portal containing the mihrab denoting the direction of Qibla, fulfilled the need adequately. Its correct orientation and the distinctly marked out mihrab confirm the contention.

Cunningham mentioned another inscription of Babur in the Fort dated in A.H. 935/A.D. 1528,²⁷ but this is not traceable. The *Chaurasi-Khambha* bears another Arabic-Persian inscription on the exterior side of the stairway of the eastern porch. It is covered in relief in beautiful nas-khi (Plate XIX). It begins with Bismillah-al-Rehman-al-Rahim which is followed by kalma. The date 25th of the Moharram of A.H. 938/A.D. 1531 is recorded in Arabic syllables which follow the kalma. The rest of the epigraph is in Persian recording the construction of this public building by one Yār Muḥammad, son of Maulānā Bahlol Nālbanda Kābulī. Finally it mentions that this place is useful alike to the friend and the foe, meaning thereby that this place had a sanctity and it was used for dispensation of justice. It seems that the structure which was originally built by Raja Mansingh as Assembly Hall was first adopted by Rahīmdād who added the portal to it and then it was used by Humayun during the period he resided in the Fort. It was used as House of Prayer and also as a Hall where he held his durbar, heard petitions and dispensed justice. Hence the reference in the inscription.²⁸

The basement storey is entirely closed. The structure shows that this too would be a pillared hall, the lower columns supporting the

upper ones respectively. The height of the lower columns would be half of the upper ones, as it may be surmised. The sides are closed. There may be a number of rooms around the hall. In its original form this storey might have accommodated the administrative offices of the raja and served allied purposes. The pavilion situated west of the *Chaurasi-Khambha* has been restored haphazardly and gives a crude impression. The baoli (see Plate XIV above) on its south side, on the other hand, was a magnificent structure and still retains much of its original charm. It is circular, entirely built of stone, the main storey having 32 circular columns making up a beautiful *dalan* which rotates around, and overlooks the shaft of the well. Its perennial source has been dried up and it is now defunct. However, the fact remains that though a water-structure, and hence strictly functional, the architect did not lose sight of the aesthetic aspect and he has organised his material in an extremely beautiful way. It is the most important baoli of Raja Mansingh as the *Man-Sarovar* is his most important tank. The close proximity of this huge baoli to the *Chaurasi-Khambha* as an integral part of its scheme shows that both were built contemporaneously. The Hall was used as the *Diwan-i-am*; the baoli supplied water and also the cool retreat in leisure time. Without doubt, it derived its inspiration from the traditional baolis of Gujarat.

The greatest importance of the *Chaurasi-Khambha* lies in the fact that it was a forerunner of the typical Mughal *Diwan-i-am* which was, as a rule, an open pillared hall built separately, yet in close neighbourhood of the residential palace, generally near the main gateway.

(ii) *Vikram-Mahal and the Kirtti-Mandir*

The *Vikram-Mahal* which is ascribed to Raja Vikramaditya (Bikramajit) (1516-26), son of Raja Mansingh, is situated just north of the *Man-Mandir*, attached to it, overlooking the north-east cliff. It is a small building composed of an oblong hall in the centre with a square room on either side of it, each one having a single oblong doorway on the western side. There is a small square tank in front of the central doorway. Curiously, the eastern facade of the building is plain and crude and it is almost entirely closed. It is surprising that while ventilation should have been provided on the eastern side, this has only a small opening which too does not appear to be original. In fact, the building as a whole also is very poorly ventilated.

The western facade, on the other hand, is very interesting. The

central entrance is protected above by a beautiful slanting chhajja supported on exquisitely carved brackets; the chhajja covers it like an umbrella. Above it is another smaller chhajja which is supported by bolder and less ornate brackets (Fig. 3). As a whole, these two chhajjas along with their brackets impart a graceful effect to the otherwise plain and dull facade.

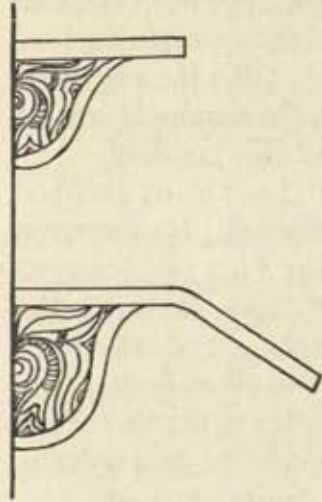


Fig. 3. Brackets of the Western Facade of the Vikram-Mahal (Section).

On the terrace is a square room on the southern side. It has a single entrance and regularly disposed niches. However, the stone construction is crude and entirely without decoration. Roughly plastered surfaces are almost repulsive. The only interesting and happy feature of this room is the composition of its crowning which is made up of four square slender chhatris at the corners and a bigger chhatri in the centre, all of finely chiselled stone—marvellously set upon a pyramidal roof (Plate XX). They shine exuberantly over a frieze which bears carved stone merlons on all the four sides. Merlons are arch-shaped with ogee. This superstructure is an extremely tasteful feature of this building (Fig. 4).

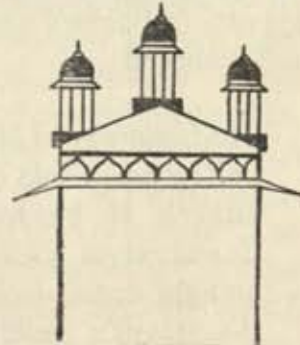


Fig. 4. Figure of the Vikram-Mahal Superstructure.

Ceilings of all the four rooms are similar. Though they look to be wagon-vaulted, in fact, there is no arcuate system involved as the roofing has been done with the help of long beams of stone. Each roof is slanting on the sides which appear to support the flat zone of the centre made up of stone beams which are visible. Two methods have been employed together to obtain this roof. Firstly, a large portion of the space which could not have been spanned by stone

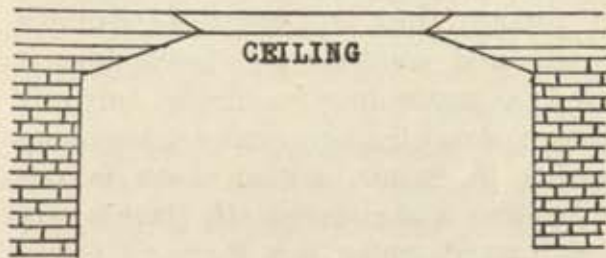


Fig. 5. System of the Ceiling, Vikram-Mahal.

beams, has been covered above by corbelling reducing it to the central zone. Secondly, stone slabs have been placed over them on the interlocking system (Fig. 5). The sides have been plastered over to conceal

the rough edges of the corbelled stones. Thus a strong and stable ceiling has been provided over a large hall which could not have been covered by stone slabs alone. This ceiling seems to have set the example for later constructions at Gwalior, Agra and Fatehpur Sikri. Like the organisation of the western facade and the superstructure, the manipulation of its ceilings constitutes a distinctive characteristic of this building.

The *Vikram-Mandir* (also called Vikram-Mahal) is popularly ascribed to Raja Vikramaditya (Bikramajit), son of Raja Mansingh. He ascended the throne after the death of his father in 1516. The Fort was besieged by Ibrahim Lodi soon thereafter. He is recorded to have captured the Badalgarh outwork. A bronze bull (Nandi) has been specifically mentioned as part of the booty. It is possible that it was taken from some Śiva temple which stood in the Gujari-Mahal complex at the foot of the Fort. Vikramaditya accepted the Lodi suzerainty and he died fighting for the Lodi sultan against Babur in the battle of Panipat in 1526.

There is no epigraph on the building. Any other Tomar record as to its history is also not available. The only reference of this palace appears in Babur's narrative. He visited the Fort in September 1528 and recorded:

The buildings of Mansingh's son Bikramajit are in a central position on the north side of the Fort. The son's buildings do not match the father's. He has made a great dome, very dark but growing lighter if one stays awhile in it. Under it is a smaller building into which no light comes from any side. When Rahimdad settled down in Bikramajit's buildings, he made a rather small hall on the top of this dome. From Bikramajit's buildings a road (secret passage, precisely tunnel) has been made to his father's, a road such that nothing is seen of it from outside and nothing known of it inside, a quite enclosed road ...²⁹

Over and above the fact that Babur was a contemporary of Vikramaditya and he could not have erred in recognising and naming the building correctly, the secret passage from this block of structures going to the *Man-Mandir* still exists and confirms his description. It seems that tradition has preserved the name *Vikram-Mandir* correctly though the building has undergone overwhelming changes, beginning from Rahimdād who had, according to Babur, settled down in this palace, to the British and the Scindias, and consequently there is very little original left in its fabric. As it stands today, it is more or less a patch-work.

The *Kirtti-Mandir* which is also called *Karan-Mandir* is a four-storeyed palace of much larger dimensions. It occupies the highest ground in the Fort, just west of the *Vikram-Mahal*. Tradition ascribes it to Raja Kirttisingh, grandfather of Raja Mansingh, who ruled from c. 1460 to 1480. Babur has not mentioned this palace specifically; probably he did not visit it. It is also likely, and possibly more likely, that on the eve of his visit, the palaces north of *Man-Mandir* were interconnected and enclosed within a single wall and the whole of it was then known as the *Vikram-Mahal*.⁵⁰ There is no other source available to us to examine the historicity of the nomenclature. The fact, however, stands out that the palace occupies the highest and, without doubt, the oldest of the palatial sites in the Fort and the name preserved by tradition may not be erroneous.

The two underground storeys are almost closed. They are dark and infested with bats. Curiously, the upper basement suites have a beautiful set of Mughal hammāms with furnaces, cascades and waterfalls, water-channels and lily-ponds and storage tanks. The arrangement of running water is so elaborate that there seems to be no doubt as to its being a cold-bath establishment. Walls have beautiful painting and stucco decoration in polychrome, in geometrical and arabesque designs in typical Mughal style exactly resembling the Fatehpur Sikri examples. These hammām-apartments show, beyond doubt, that the Mughal governor resided in this palace and it was he who had these suites constructed for his pleasure. The renovations in the basement area might have been done, thus, some time towards the end of the 16th or during the 17th century. Lower basement area is full of fearful dungeons.

The interior of the ground floor was completely renovated by the British who converted it into an office-cum-store. There is nothing original left inside it. The upper storey (this being the uppermost in the four-storeyed mansion) has, however, retained much of its original plan and disposal of rooms, verandahs, open courts and service quarters. The whole has been divided into several suites, each being self-contained with its own open court, rooms, stores, balconies and service quarters. Beautiful jharokhas for enjoying the distant vistas have been intermittently provided. There are raised platforms in open courts for open-air assemblies of the ladies. The construction is such that, if desired, strict seclusion could be enforced and purdah observed. As the palace stands independent of any other structure, it is open on all sides and perfect ventilation is facilitated. One is deeply impressed, in fact, by the ability of the architect who has successfully tackled the problems of

sanitation, ventilation and useful distribution of space, and has skilfully provided all the living comforts along with pomp and show and other aristocratic requirements. There are no loose fittings at all, like a modern airconditioner, and it is altogether an architecture which has been adjusted, nay exploited, to bring out the maximum convenience of living. This way, it is an ideal residential building and demonstrates the way feudal lords lived in medieval India.

Its eastern facade (Plate XXI) has some original features. Though the ground floor openings have been converted into ugly modern grilled windows, the chhajjas over three of them have remained. There was a panel, showing a pair of elephants posed on the sides of a vegetational motif, below each of these three windows (Plate XXII). Two are still *in situ*, the third one is preserved in the Gujar-Mahal Museum. The figure of the animal in each case is lively and impressive. This is a popular motif of panel-decoration on friezes of palaces in Mughal architecture, e.g., in the Agra Fort and, as it appears certain, the inspiration was derived from these examples of the *Kirtti-Mandir* which almost served as prototype.

The three oriel-windows which project on the upper storey provide this facade a beautiful impression. The side ones are two-pillared jharokhas with mañchikās given at the base which add immensely to the graceful effect of this composition. The central one is a four-pillared pavilion supported on finely carved brackets. It has a pyramidal roof. Originally, it was half-closed by jalis, two of which have remained. There are no chhatris on the superstructure which is conceived in such a way as to lay maximum emphasis on the central pavilion.

The northern edge of the palace has a semi-octagonal plan, the northernmost side having a set of two oriel-windows one superimposing the other and a beautiful chhatri crowning them—thus forming a unitary composition almost resembling a tower (Plate XXIII). The lower oriel has a beautiful mañchikā at its base. This is the most beautiful feature of the palace. Over and above its great utilitarian merit that it provides sitting space to jharokhas in two storeys and a chhatri in the third, admitting tempered and subdued light and fresh and free air in the former case, the architect has also succeeded, through this composition, in giving this edge a substantial aesthetic impression. Almost a marvel, it is representative of the lucid skill of the medieval builder who would not behave merely professionally like his modern counterpart, but would have several ingenuities to introduce into his production chiefly for aesthetic effect.

Jharokhas and oriels, pillared pavilion and chhatris, jalis and

mañchikā bases are the main characteristics of this palace. It would be interesting to investigate the source of their inspiration. There is no pre-Tomar palatial construction in the Fort or in the nearby region as far as Agra, which might have contained these pleasing features to provide guidelines for the builders of the *Kirtti-Mandir*. It is important to note that these elements have appeared in their perfectly evolved form without the slightest hesitation, and there is no doubt that the architect who employed them in his creation was fully conversant with their usage. In the absence of any local clue to the query, one is naturally led to surmise that Kirttisingh invited the builders from outside.

Kirttisingh of Gwalior was a contemporary of Maharana Kumbha of Chittor (1433-68) who was a great patron of architecture and who built a number of palaces at Chittor and Kumbhalgarh. Particularly, his palace at the former place has such features as jharokhas, oriels, pavilions, chhatris and jalis. They have been used there with emphasis and prominence as integral part of the architecture. As it appears, the builders of the Gwalior palaces, during the reign of Kirttisingh and, in a greater degree, in the reign of his grandson Raja Mansingh, came from Mewar. The point can be examined better, and in greater details, with reference to the *Man-Mandir*.

(iii) *Man-Mandir and the Hathiya-Paur*

The most important monument of Raja Mansingh Tomar is the *Man-Mandir* which is a vast complex of residential suites. Though the raja's epigraphs are largely available in the Fort, particularly wherever he did some construction or restoration work, e.g., at the *Urwahi-Paur*, the *Dhondha-Paur* and the *Gangola-Tal*, curiously the *Man-Mandir* does not bear any inscription. There is no court chronicle either.³¹ But the account of these buildings in the *Memoirs of Babur* who visited the Fort just twelve years after the death of Mansingh Tomar, and an allegorical description of the palace preserved in the poetic work *Chhitai-Charit* of Narayandas who lived at the court of the raja, help us fairly authentically to identify the palace and supplement the data. Babur went into the Fort on 26 September 1528/935 "through the Gate called Hati-Pul [Hathi-Pole or Elephant-Gate] which joins Mansingh's buildings [imarats] and dismounted, close to the other Prayer [time], at those [buildings] of Raja Bikramajit in which Rahimdad had settled himself".³² Babur thus confirms that the palace adjoining the Hathi-

Pole was built by Raja Mansingh and there is no ground to question the veracity of its legendary and popular nomenclature, viz., the 'Man-Mandir'.

Babur had a taste for architecture and his sense of observation was extraordinarily keen. He has left a graphic description of the palace:

I visited the buildings of Mansingh and Bikramajit thoroughly. They are wonderful buildings, entirely of hewn stone, in heavy and unsymmetrical blocks however. Of all the rajas buildings, Mansingh's is the best and loftiest. It is more elaborately worked on its eastern facade than on others.³³ This may be 40 to 50 qari (yards) high³⁴ and it is entirely of hewn stone whitened with plaster.³⁵ In parts it is four storeys high, the lower two are very dark; we went through them with candles. On one side of the building (i.e., on the eastern facade) are five cupolas having between each two of them a smaller one, square after the fashion of Hindustan (projecting square oriel-window with beautiful struts). On the larger ones are fastened sheets of gilded copper (upon the cupolas). On the outside of the walls is painted-tile work, the semblance of plantain-trees being shewn all round with green tiles. In a bastion of the eastern front is the Hati-Pul, hati [Hāthī] being what these people call an elephant, pul [pole] a gate [hence the Elephant-Gate]. A sculptured image of an elephant with two drivers [precisely riders, *fil-bān* = mahouts]³⁶ stands at the outgoing of this Gate; it is exactly like an elephant; from it the Gate is called Hati-Pul. A window in the lowest storey where the building has four, looks towards this elephant and gives a near view of it. The cupolas which have been mentioned above are themselves the topmost stage of the building; the sitting rooms are on the second storey in a hollow even; they are rather airless places although Hindustani pains have been taken with them... Next day (i.e., on 28 September 1528) ... we saw the imarat called Badalgarh which is part of Mansingh's fort.³⁷

Babur's narrative shows that during the four and a half centuries which have passed since he saw it, the palace has undergone tremendous changes. As for example, the main entrance of the palace which, in all probability, was also a ceremonial gateway, was given on the western side. It exists no longer. The through passage which connected the rooms on the eastern side with hanging balconies and jharokhas have been closed down. The broad corridor which maintained a liaison between the main court and southern apartments too has disappeared

amidst crude additions and renovations which have been done in the area.

Equally useful in this connection is the contemporary account of the palace given by the poet Narayandas in his Braja-Bhāṣā (precisely, Gwāliarī Hindi) work of poetry (Prabandha-Kavya, प्रबन्ध-काव्य) entitled *Chhitai-Charit* (छिताई-चरित).³⁸ Ratanrang and Devchandra enlarged, and probably completed, this work with the consent of Narayandas, contemporarily. The poet lived at the court of Raja Mansingh Tomar and composed this work at Gwalior about 1500. After the disastrous battle of Panipat and capture of Gwalior by the Mughals, Narayandas migrated to Sarangpur where he has recorded to have recited the CC at the Viṣṇu Temple in v.s. 1583/A.D. 1526. The work is a prema-ākhyāna (प्रेमाख्यान) or a long continuous love-poem of 1030 chaupāis (चौपाई). The story is related to Deogiri (modern Daulatabad) and the conflict of its ruler Raja Ramdev (Ramchandra) with Sultan 'Alāu'd-Dīn Khaljī of Delhi (1296-1316). Chhitai is former's beautiful daughter who is married to Samarsingh. The main theme of the poem is love and Śṛṅgāric play of Chhitai, in faithful adherence to the tradition of such compositions.

In this work Narayandas gave an account of the raja's cultural activities related to architecture, painting and music. Thus, he graphically described the construction of his palace. This is an allegorical description; in fact, the poet has given an account of the *Man-Mandir* palace which was built during his stay at Gwalior and to which event he was an eye-witness. It is the *Man-Mandir* palace which he has described in the CC and it is this palace which faithfully responds to his description.

Narayandas noted:³⁹

The raja (allegorically Raja Mansingh Tomar of Gwalior) invited architects and expert artisans of stone-work and commissioned them to build a palace. Guilds of śilpīns were brought to Gwalior to work on the project and a large section of the treasury was set apart for this purpose. Such skilful and experienced śilpīns as Lanku, Gigo and Gunadas took over the work. Under advice of the astrologer, its foundation was laid in an auspicious hour. The Kṣetrapāla (precisely, Vāstu-Puruṣa) was worshipped and his benevolent powers were invoked for the strength and long-life of the palace. Deep and broad foundations were filled in with the assistance of seven high-born nobles. It was a four-storeyed square palace with rooms and halls (disposed all around) and ornamentation largely comprising of

glazed-tile decoration, e.g., in the figures of peacock. Wood and stone were used in the structure and various entertainment halls (śālās) were tastefully adorned with paintings in which various bright colours including spots of gold were used.

The palace rose to a great height and almost went into the clouds. On the terrace several pleasing features as balconies, oriel-windows (jharokhas), ornamental pavilions (chhaparkhats) and chhatris were built to enable the raja to have a view of the country below. Golden kalāsas (finials) crowned these pavilions and chhatris. Many vegetational motifs, e.g., banana tree, were depicted in carved stone and mosaic of polychrome glazed-tiling. The beauty of this marvellous combination of stone relief and coloured glazed-tiling baffled the beholder. Fifty-two ingredients were used to prepare the lustrous glazed tiles⁴⁰ which shone like mirror and gave a unique impression.

A wonderful Chitraśālā (Hall of Painting) was built. The courtyards (i.e., their facades) were inlaid with precious stones. The system of interconnecting corridors and stairways almost made up a wonderful maze. Rooms and halls were also provided in the basement area where it was always dark like night. The columns were gilded (polished gold) and exquisitely ornamented like jewellery, and swings were given between them. A *sphaṭika* (emerald) throne was made in the Assembly Hall of the raja. Chakwa-Chakwi and other birds, aquatic animals, e.g., fish and tortoise, and the fabulous makara were tastefully carved on the walls. They looked lively and composed an extremely beautiful ornament.

The Sabhā-Manḍapa (Assembly Hall) had a pond which was similar to the one built by the Pāṇḍavas at Hastinapur (as we come across its account in the *Mahābhārata*). Those who came to see this building did not rest and went about the palace looking at these beautiful things. The manḍapa (pavilion probably built in the palace-garden) was made of sandalwood and was extremely cool in the summer season. On all sides of this pavilion, rooms were provided in order that the raja may rest there in the rainy season. The garden had fifty fountains of gold which sprayed water throughout and presented a rainy season the year round.

The chhatris on the superstructure had melon-shaped domes and wooden doors. Parrots and other birds had made their home in them and they generally sat on the projecting portions of the wall which bore glazed-tile ornamentation. They chirped and chattered and created an extremely pleasing atmosphere.

A suite had a concealed tank; apparently it looked to be a platform but when one tried to approach it, he fell into water. It was so skilfully made as to baffle comprehension. The kitchen had been entirely done with turquoise-blue glazed-tiles which looked like the blue waters of the sacred Yamuna. All the suites and apartments had been arranged symmetrically (in several storeys) in accordance with a regular plan and arrangement.⁴¹

These contemporary accounts help us to identify the palace and to partially reconstruct its architecture, the original fabric of which was much disturbed by subsequent changes, mostly under British occupation of the Fort. It must be recounted with regret that they treated the medieval heritage contemptuously and, with little or no appreciation or sympathy for the art of the natives, let loose the forces of destruction upon these beautiful structures. Thus, James Fergusson who made an on-the-spot study of these palaces about the middle of the 19th century, noted:

Of these buildings, which so excited the admiration of Emperor Babur, probably little now remains. The Moslems added to the palaces of the Hindus and spared the temples and the statues of the Jains, we have ruthlessly set to work to destroy whatever interferes with our convenience, and during the few years we occupied the fort, probably did more to disfigure its beauties, and obliterate its memories, than was caused by the Moslems during the centuries they possessed or occupied it. Better things were at times hoped for, but the fact seems to be that subordinates and contractors are allowed to do as they please, and if they can save themselves trouble, there is nothing in India that can escape the effect of their unsympathising ignorance.⁴²

The *Man-Mandir* was most ruthlessly treated. Sir Lepel Griffin thus noted in connection with the two rooms situated on the eastern side of the inner court, which even Gen. Alexander Cunningham, during his long stay in the Fort, could not have seen: "The opposite or eastern face is not perhaps so rich in scrolls and borders as the western but it shelters two rooms, by far the most artistic in the palace. I scarcely think that General Cunningham has seen these rooms; or if he has, it was when they were coated over with accumulations of Muhammedan chuna and Anglo-Indian whitewash. It is only the other day that I recovered them from the commissariat department who used them as a godown."⁴³ Such references are abundant in the various

accounts and reports of A. Cunningham, J.B. Keith and H.H. Cole. Whatever had remained was further altered by the Scindias in the pre-independence decades so much so that the plan of the Hindu palaces which was drawn up by Cunningham c. 1862⁴⁴ has now been completely disturbed and only its main apartments have survived.

As it stands today, the *Man-Mandir* has no unified or symmetrical plan and, presently, it is a haphazard combination of a few courts, scores of halls, rooms and verandahs, corridors, interconnecting passages and stairways, service quarters and open terraces – arranged in multiple storeys. The original ceremonial gateway which was given, as has been indicated above, on the western side is no longer extant. The high enclosing wall of the palace on this side has also dwindled, exposing the double-storeyed set of apartments to view (Plate XXIV). Instead, a broad stairway which was built, most probably, during the British rule, on the edge of this side, leads to the main plinth of the palace. This is, in fact, the first floor in relation to the ground level of the Fort. As shown in the plan (Fig. 6), 'T' is a simple entrance room.

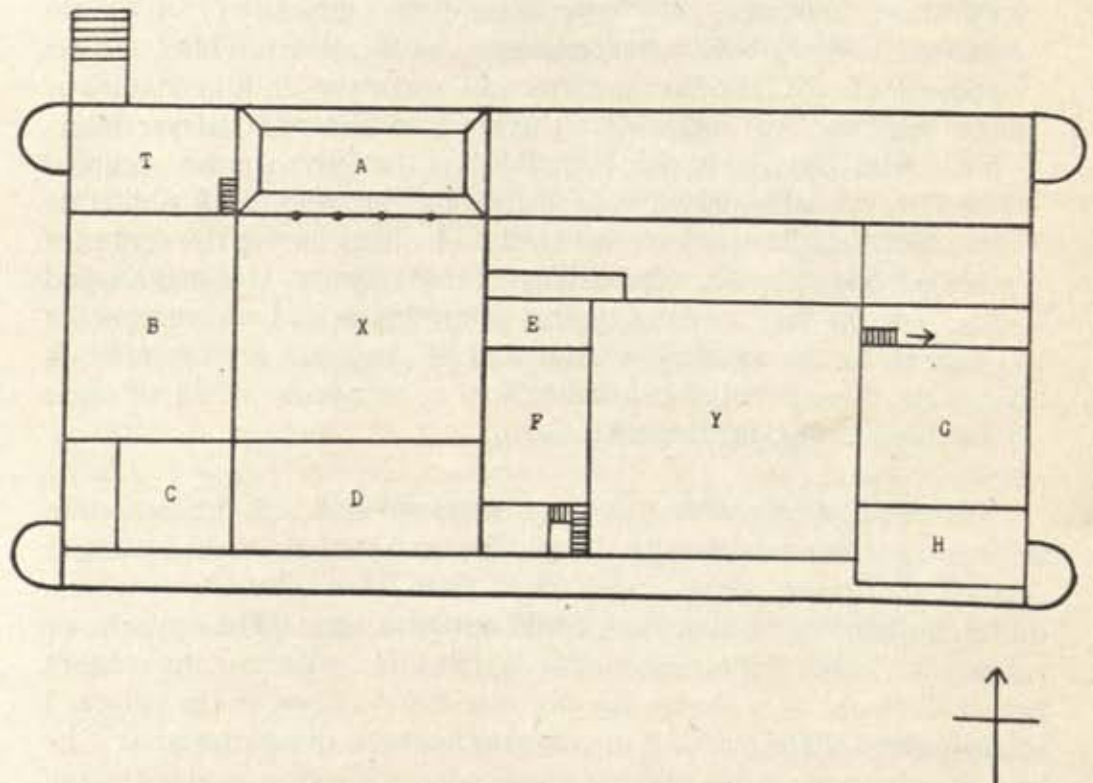


Fig. 6. Plan of the Man-Mandir (c. 1500), Gwalior Fort.

It leads into 'A' which is a beautiful oblong hall measuring 33'-11" × 14'-8" (10.34 × 4.47 metres). The pillars of this hall are in fact circular pilasters

attached to curvilinear piers—all in richly chiselled yellow-and-white sandstone. Their bases and shafts are plain and simple but the massive overbearing capitals have been exquisitely moulded and carved. They corbel out as they rise like a 'chhatra' (छत्र), each zone bearing a beautiful design. These capitals are unique at Gwalior. Over and above their function—that they support a load—they bestow an extremely graceful effect upon this hall (Plate XXV). Its ceiling too is unique (Plate XXVI). Wagon-vaulted in appearance, it is a variation of the ribs-and-panels system. In fact, there is a rotating flat ceiling on all the four sides, in the nature of a rotating chhajja, supported on the capitals of pillars and pilasters, leaving an open space in the centre. Balustrades, filled in with jalis, then rise from the edge of this flat roof, each one resting on a pillar or pilaster. These balustrades supported the sloping ribs-and-panels ceiling of the hall (for plan and section, see Fig. 7). It

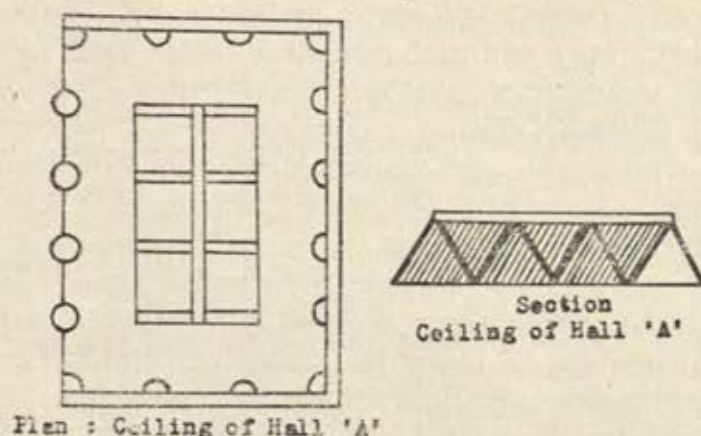


Fig. 7. Plan and Section, Ceiling of the Hall 'A'.

has been very ingeniously conceived. Not only does it provide a ceiling to the hall, it also imparts an aesthetic impression to it. Curious is the fact that this roof is not on the terrace; as the hall is double-storeyed, it is inside the upper room the inmates of which could easily watch the proceedings or the performances going on in the hall below, through the jalis. This ribs-and-panels system, which is trabeated in essence, tries to adopt the typically Muslim wagon-vaulted ceiling in its own way, in stone. In c. 1500, it is structurally as unique, as it is ornamentally marvellous. Obviously, similar ribs-and-panels ceilings in the buildings of Fatehpur Sikri and Agra, built between 1565 and 1585 under Akbar, imitate the Man-Mandir examples. Of course, there is no upper room on the Akbari ceilings and they also lack the extremely graceful aesthetic impression of their Gwalior prototypes; there they are structural, pure and simple.

Hall 'A' opens in the court 'X' which measures 34'-9" (east-west) and 36'-6" (north-south) (10.59 × 11.13 metres).⁴⁵ Its facade (this being the northern facade of the court) has been gorgeously conceived (Plate XXVII). Three oblong openings of the hall 'A' have the same voluptuous pillar-capitals, being four in number, as are in the interior. These beautiful capitals (see Plate XXV above) overhang the openings as if they provide a shade (chhatra) to them. The 'śiṛṣas' of these openings are filled in by exquisite jalis. The chhajja over them provides a rhythmic and harmonious horizontal line which pleasantly counteracts the vertical impression of the pillars. Over the chhajja on the second storey is a beautiful jaliéd balcony with an oblong opening. This too has been very impressively worked out. The jali-composition and, in fact, the composition of the hall as a whole is as chaste and exquisite as one may conceive it in ivory or wood; the whole of it and the graceful carvings are in stone and it seems incredible that the iron chisels and files could bring about such marvels in such a rigid material. This balcony is an architectural novelty, characteristic of the art of the Man-Mandir (Plate XXVIII).

On the western side of the court 'X' is situated the oblong hall 'B' which measures 33'-9" × 20'-6" (10.29 × 6.25 metres). It has a flat ceiling which is corbelled on all sides, reducing the span by about 4' (1.22 metres). Thus, by simple corbelling method (kaḍalikā-karaṇa), the breadth of the hall which measures 20'-6" on floor is reduced to about 16' over the corbels. It means that beams of 18' (5.49 metres) length have spanned the space. Each horizontal course of corbelling has a carved design, mostly composed of lotus-petals. This gives a pleasant effect to the otherwise plain interior (Plate XXIX). The traces on the main ceiling show that it had originally been painted.

This hall has a corridor (Plate XXX) measuring 2'-8" (81.28 cms) in breadth on its three sides; it is accessible through doorways on the smaller sides. The corridor also opens into the hall through square openings each measuring 10" × 10" (25.40 × 25.40 cms). They are three in one series, there being three series on smaller sides and five on the oblong side. This is an interesting feature. The openings certainly bring light and fresh air into the hall; over and above the provision of these ventilators, the corridor also has an interesting function. As an intermediary space between the hall and the exterior, it provides a sort of insulation to the hall, to protect it from the excessive heat and light of a tropical climate. It engulfs the hall on three sides and the latter consequently remains cool and comfortable. Exactly similar are the features of the southern hall of the Jehangiri-Mahal in the Agra Fort.

Obviously the Gwalior example has been imitated at Agra. The idea that this hall, as also the southern hall of the Jehangiri Mahal was used for puppet-shows and the ladies sat in the corridor in *purdah* looking through the square openings is far-fetched. There is nothing to sustain it and it is all hypothetical. It is necessary to keep in mind in such cases that whenever a residential palace was conceived, provision of maximum comforts of living was the basic concern of the architect and in such a hot climate as this, protection from the blazing heat and the dazzling light was his primary effort. Unfortunately, too much functional usage has been attached to this monument or that, almost entirely fancifully, to make the History romantic!

The facade of the hall 'B' (thus being the western facade overlooking the court 'X') has also been beautifully worked out. Unlike the southern facade which is in two storeys, this is only single-storeyed (Plate XXXI). The hall has three doorways which have, in fact, been made by horizontal beams resting on massive piers. But they are fitted in by semicircular jalis exteriorly, giving the impression of a semicircular arch, each (Plate XXXII). Interiorly, the stone slab over each opening has the shape of a seven-cusped enrailed arch. Both are ornamental features without any structural involvement. Jalis and carvings are again exquisitely worked out. Curiously, along with Hindu floral motifs, such typically Muslim designs as arabesques and stylised patterns have been used on a large scale. They combine perfectly harmoniously with the indigenous idioms. There are four circular discs in bold relief on the capitals of the four piers just below the chhajja (Plate XXXIII) which projects over the doorways; in these beautifully moulded and carved discs which bloom like full-grown lotus flowers culminates the beauty of the carved and jali designs. At present, each disc has a vacant circular space in its middle indicating that something was originally there which, probably due to its extremely graceful sculptural impression, fell an easy prey to the vandals. The mural space above the chhajja up to the parapet has been divided into several horizontal zones which have been ornamentally treated with carving and glazed-tile decor. Series of blind ogee arches have been carved in stone and filled in, nay, applied upon by polychrome glazed-tiles, yellow, green and blue predominating. This typically Muslim glazed-tile work has most harmoniously combined with the indigenous stone-carving art and the facade as a whole presents a magnificent surface.

The eastern facade of the court 'X' is virtually closed, there is only an oblong opening, closed by jali, of the room 'E' which is set with the inner court 'Y'. There is, however, a chhajja on the first storey level

supported by two beautiful peacock-brackets (Plate XXXIV). Over it is a balcony entirely closed by jalis which is also supported by moulded brackets. Here, too, the glazed-tiles have been inlaid tastefully with jali and carved designs. The art of colour has gorgeously combined with the art of planes.

Hall 'D' is situated on the southern side of the court 'X'. It measures 35'-2" \times 15'-5" (10.72 \times 4.70 metres). It has three openings, the lintels of which are supported on massive, yet extremely graceful brackets. Over the openings is a wide projecting chhajja which is supported on six vyāla-brackets. Each vyāla (composite animal) is composed of lion's body and elephant's head¹⁶ and obviously, it has drawn its inspiration from the indigenous art. It stands on its hind legs supporting a miniature elephant with its claws and also holding, simultaneously, a bud and garland motif (Plate XXXV). By far, this is the most artistic and beautiful bracket-form at the Man-Mandir. These brackets hardly take any load and are essentially ornamental. To impart a beautiful impression to the facade is the *raison d'être* of this composition. Over the chhajja is a frieze of glazed-tiles. In the centre of the parapet is given a projecting rectangular mañchikā; this too adds tremendously to the aesthetic impression of the facade. As a matter of fact, this court has very pleasing glazed-tile ornamental scheme on all the four sides.

The ceiling of the hall 'D' is divided into five compartments with the help of cross-beams given in the breadth. Each compartment is supported on extremely luxurious bracket-forms which not only take the load but also provide the interior a gorgeous ornament (Plate XXXVI). Slabs have been used to span each compartment independently. This method has also been imitated though with a lesser effect at the Agra Fort, in a eastern hall of the Akbari-Mahal. A broad corridor on its south side connects it with other parts of the palace, as privately as the Lord of the House could have desired. It has four square openings for ventilation and a central opening for passage. There is a carved door-jamb and a semicircular architrave, both features being purely ornamental, each on the east and west walls of this hall. The carving work of the hall, as a whole, provides a pleasing ornament in the interior. All is stone work.

Room 'C' is situated to the west of the hall 'D'. It measures 16'-7" \times 9'-9" (5.05 \times 2.97 metres). The former is, in fact, a box-room of the latter. Such small rooms, locally called 'koṭhās' which were attached to large halls, were provided as a matter of residential necessity. The room is connected with the hall and also with the corridor. Particularly interesting is its arched ceiling. It is supported on two engrailed arches

which have five cusps each (Plate XXXVII). These arches rise from two pilasters given in the middle of the oblong sides. In fact, the arches serve as ribs, intermediary space is filled in by circular slabs with key-system. This is also an ingenious way of spanning the space, in stone.

Court 'Y' is larger than 'X' and measures 41'-6" \times 40'-6" (12.65 \times 12.34 metres). Hall 'F' is situated on its western side. It is 17'-5" \times 13'-9" (5.31 \times 4.19 metres) in size. Another ingenious method of flat ceiling has been adopted here. In fact, as the extant examples adequately show, the architect of the palace was an extremely resourceful artist of his trade and he has taken recourse to a number of extraordinary methods of ceiling, both trabeate and arcuate. Thus, while he used simple cross-beams and corbelling in several halls, he also devised his own intricate methods of spanning the space. As shown in Fig. 8, two strong massive beams A and A' were inserted into the two opposite walls with their halves projecting outside, their ends being chiselled slantingly. Another beam B, with its ends similarly chiselled on the reverse side, was placed upon the ends of A and A', where it was automatically supported without any cementing agent. Either the whole ceiling was spanned with the beams placed in this manner, or, as an economical measure, only a few beams were placed at regular intervals on this principle and the intermediary space was covered with slabs. This was crossed both ways skilfully to facilitate roofing by small slabs on either side. However, there remained a sad lacuna, viz., the cross-beams of the ceiling were visible from below

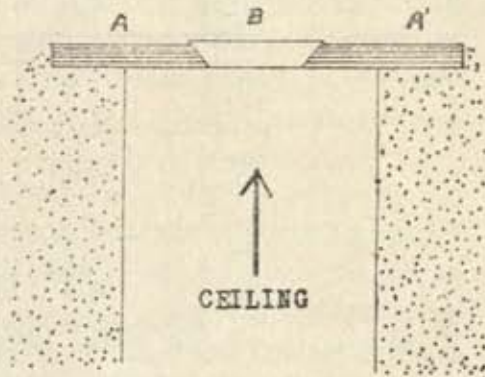


Fig. 8. Formation of the Flat Ceiling with Short Beams.

and disturbed its harmony. The indigenous builder's inventiveness knew no bounds. He devised a solution. He prepared beams and slabs of triangular formation, e.g., slanting along their sides so that the latter will not only fit on the slanting sides of the former but will also join together below them to form an absolutely regular flat ceiling (Fig. 9, beams A, A, A and slabs B, B respectively).

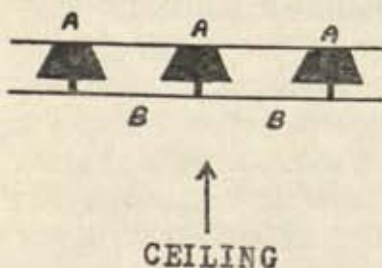


Fig. 9. Formation of the Flat Ceiling with Short Beams, Multiple System.

This system could be used in a number of variations without any

diminished effect or impression. The ceiling of the oblong hall 'F' provides probably the best example in the Man-Mandir. Slightly projecting capitals, brought about by corbelling, support the main beams on all sides on a svāstika-interlocking system as shown in the Plan (Fig. 10 and Plates XXXVIII a and b). The larger beams a, b, c and

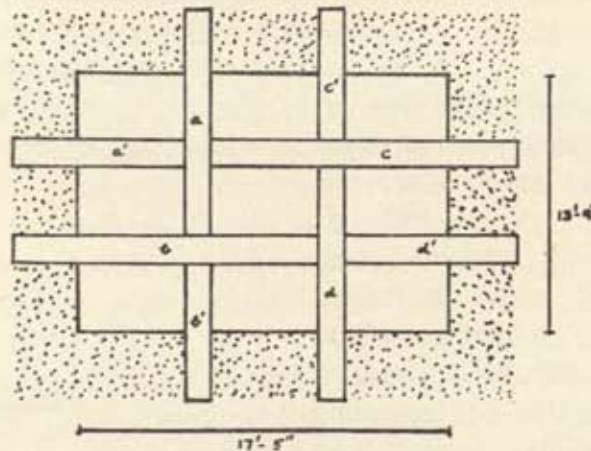


Fig. 10. Plan, Ceiling of the Hall 'F'.

d form an open svāstika and interlock the small beams a', b', c' and d'—a with a', b and c; b with b', d and a; c with c', a and d; and d with d', c and b—all the eight beams sunk adequately into the wall at one end. Monolithic slabs have been placed over this framework, on all the nine rectangles thus formed by the beam-work. The interlocking of beams has made this ceiling extraordinarily strong and stable. This system was later copied in the western hall of the Jehangiri Mahal in the Agra Fort. Cornices bear beautiful carved designs composed mainly of series of inverted lotus-petals. The central compartment of the ceiling has a chakra and padma medallion.

This hall has three bracket-and-lintel entrances. Along with the main brackets which support the lintel, beautiful ornamental struts, forming a toraṇa, crown each entrance. This is an exceedingly pleasing composition (Plate XXXIX). The chhajja is supported on six śārdūla brackets which too have been as artistically carved as their vyāla counterparts in the former court; the sculpture in each case is assertive and effective (Plate XL). Inspiration in either case is indigenous. The projecting stone chhajja is sloped and fluted exactly like 'khaprel' (खपरैल) (Plate XLI), the baked clay pieces of which are used on the huts in Indian villages since times immemorial, to throw off the rain-water, and folk-art is obviously the source of its inspiration. Above it, on the upper storey, is a beautiful four-pillared balcony (गोख) which

has three openings and a comfortable broad āsana for sitting—the whole supported on four brackets with a semicircular mañchikā in the centre and protected above by a chhajja. On the parapet is a slanting āsana-paṭṭikā crowning the balcony (Plate XLII) which is connected to the terrace. Carved designs in incised and low relief combine gorgeously with inlaid glazed-tile work as is the general scheme of mural ornamentation of the Man-Mandir. The western facade of the court 'Y' has been most magnificently composed with toraṇa doorways, khaprel-chhajja, mañchikā-based balcony and polychrome glazed-tiles set with carved designs; the effect of the composition as a whole imparts an extraordinarily graceful effect, which had been preconceived and anticipated. The *raison d'être* of this great effort is architectural aestheticism.

The north facade of the court 'Y' (Plate XLIII) has no room or hall opening on it; they are no doubt there in a double-storeyed arrangement but they are closed by jalis. The lower set of jalis shows an underground passage, the upper set a hall. Jalis have geometrical designs which betray Muslim influence which is also discernible in various arabesque and stylised compositions used for mural decoration in carved designs. The 'khoprel'-chhajja which rotates on all the four sides of this court is supported on this side by a double set of simple vertical brackets; the lower set brackets have fine mouldings (Plate XLIV). Their sculptural parts which were loose fitted into them are no longer *in situ* and the hollow space leaves us conjecturing as to the real nature of these constituents. The mural space above the chhajja is horizontally divided into several zones; one bears kalāṣa pattern, other a square cross pattern and so on, all carvings being gorgeously interspersed with mosaic of glazed-tiles mainly in yellow, green and blue colours. Yellow predominates in accordance with the climatic urge and consequential taste of the Indian people. The south facade is exactly similar except that instead of the double-storeyed arrangement of the north side, there is a running corridor 7'-11" (2.41 metres) broad. This is only a part of the vast arrangement of corridors-and-staircases, the intricate network of which was originally spread in the whole palace like the blood-arteries in the human body.

Hall 'G' is situated on the eastern side of this court. It is square and measures 20'-6" (6.25 metres) side. It has three brackets-and-lintel entrances towards the court and also three similar openings into its box-room 'H'. Hall 'G' is really the most beautifully designed in the whole Man-Mandir complex. It bears profuse carving work on all its mural surface which has been harmoniously and uninterruptedly

facilitated by the design of the ceiling. This ceiling is also unique. In fact, there are two beautifully designed ribs at the groins, running across from one corner to the other, crossing each other at the apex of the ceiling where hangs a beautiful lotus-shaped pendant. There is a semicircular arch (with a semicircular ornamental extension), each on the four sides; these arches and the ribs constitute the framework upon which the ceiling rests, the intermediate space having been filled in by small slabs on simple vault-system (Plates XLV a, b and c). The whole load thus rests on the two ribs and the four arches which, together, make up the four vaults and, essentially, this is an arcuate method of roofing. In fact, this is a beautiful adoption of the typically Muslim 'Chahār-Tāq' method, in an extremely refined way in carved stone. The aesthetic consideration appears to have superseded the structural, but, in fact, the latter provides the basis for the former. Beautiful carved designs are not isolated motifs but belong to the scheme as a whole. Most important is the architect's conception to use a vault in stone in his own ingenious way. It is noteworthy that many types of flat ceiling of this palace have been copied at Fatehpur Sikri and Agra Fort during the early Mughal period but at least this was not followed anywhere else and it still stands unique. The four devāṅgaṇā (heavenly damsel) sculptures which once adorned the central ribs on all the four sides exist no longer though their place is well marked out. The eastern side of this hall has niches and miniature openings; there is a jali in the central niche. It is surprising that no oriel ('jharokha' झरोखा) or balcony ('gaukh', गौख = गबाख) has been provided on this side to give an open view of the countryside below the Fort and also for ventilation, and this side has been unusually and almost unwisely closed.

Room 'H' is attached to the hall 'G' like a box-room; it measures 18'-6" × 10'-5" (5.64 × 3.15 metres). The architect had a variety of ceilings in reserve and it seems that every time he would use a different type. The most noticeable feature of this room also is its ceiling. Square bracket-forms have been used at the corners which support diagonal pendentives over which the wagon-vaulted ceiling, with a flat-roof in the middle, rests. It has been so designed as to look like a great flower in bloom (Plate XLVI). Here too, it has been worked out entirely in stone which has been tastefully carved. One wonders at the novelty of his conception. It is noteworthy that the stone-carver has invariably accompanied the architect in the planning and treatment of every part of this palace; they go side by side together and share the work almost equally.

The eastern facade of the court 'Y' shows three graceful bracket-and-lintel entrances of the hall 'G'; the 'khaprel'-chhajja over them, curiously, does not have any bracket support on this side, i.e., on the east side (see Plate XLIV above). This shows that brackets on other sides were mainly ornamental; and horizontal courses over the chhajja made up of carved and glazed-tiled designs. On the parapet, in the centre, is a beautiful lotus-shaped semicircular *mañchikā* overlooking the court in an extremely noble and dignified manner (Plate XLIV above). It is only this way that architecture represents the manners and customs, and personality and character of its builder! The stairway on the N-E corner leads up on the terrace. Profusely carved and glazed-tiled, this court is, in fact, a rare example of the Hindu relief art beset most harmoniously and pleasingly with a typically Muslim colour scheme.

A set of beautiful apartments has been provided over the halls 'F', 'E' and 'A' which are at present accessible through the stairways given in the entrance room 'T' and in the S-W corner in the court 'Y'. These are private, almost entirely detached, rooms which overlook both the courts. Extremely airy and open, they seem to have been designed to suit residence in the rainy season. Such upper storey rooms are popularly called 'Chaubārā' (चौबारा) and, undoubtedly, it is with reference to such apartments that Narayandas noticed:

चंदन काठ कटाइल आना ।
ते ग्रीष्म रितु हेम समाना ॥
चउबारे चउपखा सुदेसा ।
बरिखा बिरमंड तहां नरेसा ॥ १२६ ॥⁴⁷

Openings of this suite whether 'gaukh' or 'jharokha' have beautiful jalis, almost invariably.

Service quarters of the palace are situated to the northern side of the court 'Y'. In fact, there is an intricate arrangement of open courts, verandahs, rooms, interconnecting corridors and covered, through passages on this side. Originally, the courts 'X' and 'Y' were connected with this set; now the whole system has been closed up and only a few openings remain here and there into which inquisitive visitors peep and wonder at the vast paraphernalia of the palace of a medieval lord!

A zigzag stairway, which takes its entrance on the S-W corner of the court 'Y', leads below to the basement. It is, at present, open only in two storeys. Most noticeable feature of this system of underground passages (Plate XLVII) and stairways is the wonderful provision of

long overflying circular ventilators which carry light and air into the innermost parts very efficiently. This system too was copied at the Agra Fort where such ventilators have been most successfully used in the baoli situated in the Akbari-Mahal complex near the Bengali-Burj.

Much of the underground arrangement has now been closed up. There is a circular hall of 39' (11.89 metres) diameter with eight massive

round columns which are set 9' (2.74 metres) from the wall and 9' (2.74 metres) also from each other (see Plan of the Basement, Fig. 11); below it is a similar hall of the same size and conformation with a tank in the centre and other water-devices. Traditionally, it is known as Kaiser-Kund. No doubt, the water-devices, e.g.,

tanks, cascades, fountains and water-channels of the underground palace of the Jehangiri-Mahal at Agra Fort are far more refined and elaborate, and belong to a different order of things. The whole of it, as also the water-system on the terrace, have become defunct and it is not possible to reconstruct them for a stylistic study. The two halls 'I' and 'J' are situated adjacent to the circular halls; in fact 'I' overlooks the lower

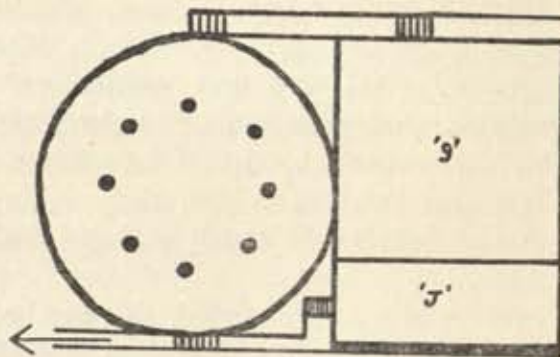


Fig. 11. Plan of the Basement.

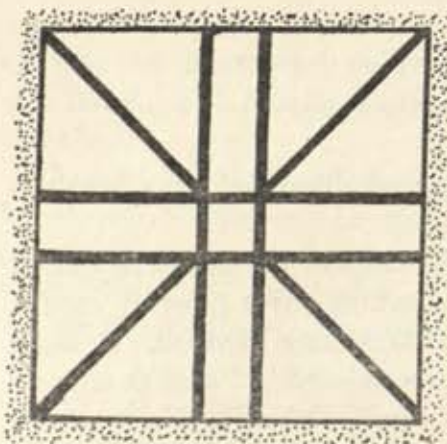


Fig. 12. Plan, Ceiling of the Basement Hall 'I'.

placed over the ribs into their built-up edges (Plate XLVIII). Later, this system was followed on a very large scale at Fatehpur Sikri on account of its feasibility over large floor-areas, non-involvement of pillars,

circular hall through jharokha-openings which also serve as excellent ventilators. It is square in plan and measures 21' (6.40 metres) side. Here again, ceiling is its most important feature. It is composed of ribs-and-panels method on a simple plan (Fig. 12). The load is passed through the slanting ribs on the massive walls. This was probably the safest and the best translation of 'vaulting' in stone. The ribs are so set over the space on temporary centering as to interlock each other and the intermediary space is filled in by slanting slabs

pilasters or brackets and greater stability and aesthetic impression. The hall is otherwise plain and, at present, crudely whitewashed. Long jharokhas given on the open side admit extremely tempered light and cool air. These basement halls were used, most probably, as summer retreat. It must be borne in mind that this part of the palace was never used as a state-prison, as fanciful guide-stories claim. As stated above, the prison was situated at the *Dhondha-Paur* Gate, viz., the fearful *Nauchowki Jail* and it was there that royal prisoners from the Khaljis to the later Mughals were kept and ultimately liquidated.

Hall 'J' is oblong and measures 17'-4" \times 9'-9" (5.28 \times 2.97 metres). Its ceiling is also very interesting. Pyramidal in form, it is made of central ribs and slanting slabs (Plate XLIX), on the same principle on which the ceiling of the hall 'I' was obtained. Camel's cart of Rajasthan had an exactly similar roof. It is essentially the village hut roof wherein the ends of two slanting bamboos are tied together, on either side, and support a horizontal bamboo across them; this is covered on either side by a roof of straw and leaves (called *chhājana* छाजन) (Fig. 13). The ceiling of the room 'J' has been obtained on an exactly similar system and, obviously, it has derived whole-sale inspiration from the folk-art. This ceiling has also been copied on a large scale at Fatehpur Sikri. The basement, as a whole, is devoid of that love of display of ornamentation which runs riot in the main storey courts and apartments. In fact, the whole of it is mainly functional and provision of a little light, abundant coolness and a set of refreshing water-devices was the main concern of the architect.

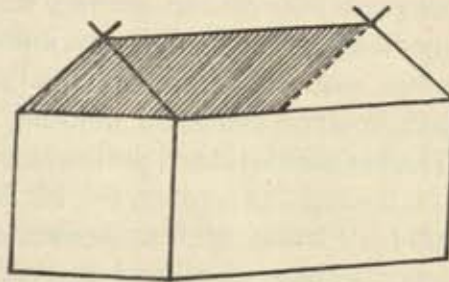


Fig. 13. "Chhappar" Roof of the Village Hut.

The eastern facade of the Man-Mandir has six circular bastions, five chhatris of which are set at regular interval on the long terrace on this side. They have high, elongated cupolas which had been originally glazed-tiled in a colour which gave Babur impression of copper. Thus he noted: "On one side of the building are five cupolas having between each two of them a smaller one, square after the fashion of Hindustan. On the larger ones are fastened sheets of gilded copper."⁴⁸ Traces of glazed tiles have survived. These chhatris were crowned by *āmalaka*-and-*kalaśa* finials, only the *āmalakas* of which have survived. The two chhatris over the Hathiya-Paur gateway have a ribs-and-panels ceiling with a beautiful lotus pendant—all in stone art which is reminiscent of

the chisels of the Khajuraho carvers (Plate L), though, technically, no devāṅganā sculptures are extant here. These chhatris are eight-pillared and circular in form; the upper chhajja and the slanting āsana-paṭṭikās which are interlocked one with the other, protecting the sides, are also circular and rotate all around uninterruptedly. Four square oriel-windows are set alternatively with the chhatris. They have cupolas, roofs and beautiful ornamental struts.

Unlike the plain screen of the terrace which crowns the parapet on the eastern side, the stone screen protecting the southern terrace has a beautiful cresting. It is broken at intervals by three chhatris (the one on the south-east corner, overhanging the Hathiya-Paur, being common to the set on the eastern side, and the chhatri of the bastion on the south-eastern corner not being extant) and three other wonderful structures. The central chhatri is closed by perforated stone slabs (Plate LI) in an extremely beautiful way. It is only in Rajasthan, where excessive heat, dust, winds and desert conditions much determine the way of life of the people, that such closed chhatris were used in the medieval period and this may point to the source of its inspiration. The other one is double-storeyed inside. Its soffit had been painted in simple green and white colours, much of which has survived (Plate LII). The beautiful stylised design is typically Muslim and it exactly resembles the one on the soffit of the Hathiya-Paur gateway. It seems that not only a Muslim glazed-tiler was employed by the raja, a Muslim painter was also patronised by him. Had this painting been done by a Hindu artist he would have also used his own motifs of indigenous flora and fauna and would have almost invariably depicted figural art composed of dancing dryads and nymphs.⁴⁹

The other three structures are extremely interesting and important. Two with pyramidal roofs, having several tiers, each zone having a carved design, are 'chhaparkhat'-forms⁵⁰ in stone (Plate LIII) which overhang the southern facade of the palace gorgeously and impressively in the form of a closed oriel-window (jharokha) (Plate LIV and LI above). 'Chhaparkhat' is a folk word which combines 'chhappar' (छप्पर, thatched sloping roof) and 'khāṭ' (खाट cot—charpoy) or 'kāṭha' (wood); obviously, it has drawn its inspiration from the primitive village structure made of bamboo, wood and straw. It is a beautiful translation in stone of an essentially folk-element. This is confirmed by Narayandas who observed, contemporarily:

बादल घनह उठी घन घटा ।

रचे अनूप अटारी घटा ॥

छाजे भरोखा रचे अनूपा ।
जिन्हहि उभक्ति रहे जे भूपा ॥
कठछपर⁵¹ सतखने अवासा ।
कंचन कलश मनहु कविलासा ॥⁵²

(The Man-Mandir palace, which was then under construction, rose high into the clouds and almost touched the sky. Several beautiful pavilions, viz., chhatris (अटारी), were built on its terrace where jharokhas (भरोखा) were also provided, through which the raja could enjoy the vistas. 'Chhaparkhats' (छपरखट) were built on the superstructure of this seven-storeyed palace and they were tastefully crowned by golden finials.)

These chhaparkhats have dual functions: to adorn gorgeously the superstructure of the southern facade of the palace, upon which they are set in the form of graceful oriels, as also to provide beautiful pavilions on the terrace on the internal side. In either case, however, the *raison d'être* of their use is aesthetic impression rather than a usage.

Unlike these two chhaparkhat-forms which are square, the third structure has a circular conformation which is predominantly emphasised by its round chhatra (छत्र, canopy) shaped superstructure supported on small graceful serpentine brackets (Plates LV and LVI). It has also derived its inspiration from primitive structures of India which had not only been used functionally in villages from the most ancient times but had also been depicted in the popular art. The best examples of the depiction of this form in stone come from the Lomas Rishi Cave (rock-cut) and the bas-reliefs of Sanchi and Mathura, dating from the 2nd

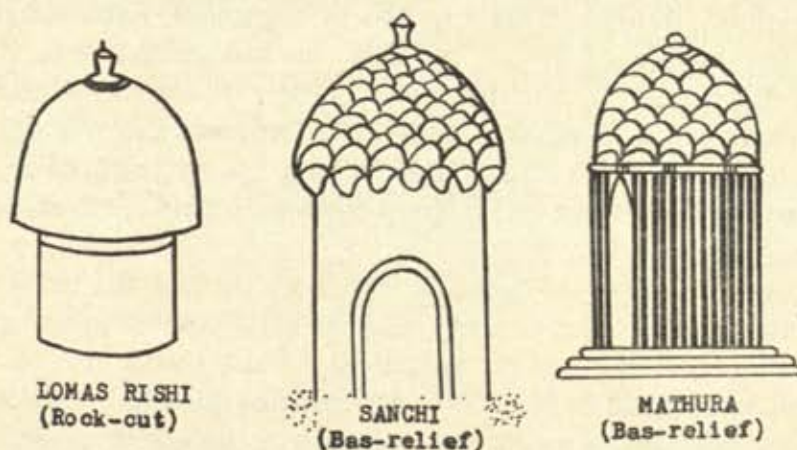


Fig. 14. Primitive Structures (Folk-Art).

century B.C. to 1st century A.D. (Fig. 14). Its essential form is 'Bīṭaurā'

(बिटौरा) which is generally used in villages for storing cow-dung cakes (कण्डे). The round sloping 'chhappar' throws off the rain-water efficiently and adequately protects and preserves the contents. Built of wood, bamboo or reeds, straw, leaves and such easily available and equally conveniently manipulative material, it is a primitive structure that is in use in India since immemorial antiquity. The hermits also build a similar round hut with an opening and hollow space inside, as the bas-reliefs of Sanchi and Mathura depict. The form, in both cases, essentially remained the same. Narayandas had these structures in mind when he observed:

गोमट खरबूजा आकारा ।
 तिन्हहि पवांरी जरे किवारा ॥१२७॥
 चहुंधा खुटी कांच की भली ।
 रहइ परेवा तहं जंगली ॥
 तिहं ठां सूवा सारो साखा ।
 खुमरी बोलहि अन अन भाखा ॥१२८॥⁵³

It seems, as the 'chhaparkhat' form also indicates, that the Tomar builder directly imitated the living primitive form, e.g., of 'Biṭaurā', rather than the art-motifs of Sanchi and Mathura. The folk-art of India was, until the beginning of the modern Nehru-period, a source of perennial inspiration to the artisans in all ages; while the Sanchi carver depicted it in bas-relief in two-dimension, the Gwalior builder reproduced the whole form in stone. Almost similarly thatched and supported, it is a unique structure in the whole range of medieval art. It is remarkable that kingship, nobility and aristocracy, in ancient and medieval times, did not hesitate to accept inspiration from the common life of the people of India, in their pursuit of fine-arts. It is only recently that a trend to imitate exotic models in painting and architecture has taken ground, as a result of the adverse effect of one-and-a-half centuries of British rule in India, which has contributed to alienate a large number of Indian intellectuals from their own śāstric literature on the subject.

Traces of a few water-channels have remained on the terrace which show that originally there was an overhead arrangement of water-supply into various apartments of the palace. But these traces are too meagre, broken and scattered to help us to reconstruct the whole water-system of the Man-Mandir. Narayandas, in fact, recorded contemporarily that there was a system of intricate water-devices in the palace⁵⁴ but now this has all been destroyed. One simply wonders how the architect

managed to raise water to such a great height in order to work these channels and tanks. Probably it was a system of relay-Rehants in six or seven stages like the one which is still extant at the water-works of the Elephant-Gate at Fatehpur Sikri. The great baoli situated to the north-west of the Gujari-Mahal at the foot of the Fort might have adequately served as the source of this system. In fact, there are still some traces around the baoli which show that it was used to feed an elaborate water-system.

The southern facade of the palace (Plates LVII and LVIII) which roughly measures 160' (48.77 metres) in length and 60' (18.29 metres) in height has three semicircular bastions disposed at regular interval. The two are crowned by chhatris, the central one being closed, while the chhatri of the south-west bastion is no longer extant. The facade has been divided into several zones horizontally by cornices and string-courses, each zone having a series of its own design which is repeated, without the least monotony, along the whole length. Remarkable is the fact that the whole facade does not have a single plain surface which was the ideal setting for the Muslim ornamentalist; instead, there are several series of string-courses in stone relief, e.g., one is a corrugated (like the rings of āmalaka) cornice running across the whole span, the other is a miniature chhajja supported on miniature brackets etc.—which project forward and set harmoniously with sunk planes and zones. Manipulation of the play of light and shadow was the most popular device of the Hindu ornamentalist and the Man-Mandir provides one of the most successful examples.

The lowest design has a pair of makara-form (Plate LIX) in stone relief interspersed with glazed-tiles. Though stylised in an ornamental idiom, the makara is playful and lively. It is a wonderful phenomenon that this stone relief has set extremely beautifully with polychrome glazed-tile work and there is no conflict or confusion. Narayandas's description of these aquatic animals stands true to this depiction:

चकई चकवा कीए कडारी ।
जल कूकरी मटामरियारी ॥१२३॥
तिहठां और जिते जल जीवा ।
भरे भरति की साजति नीवा ॥
मच्छ कच्छ लघु दीरघ घने ।
ते सब चलहि द्रिष्ट कर बने ॥१२४॥⁵⁵

Above it is a continuous series of blind toraṇas, each made up of a set of struts supported on a pillar-form which is, in fact, a pilaster. The

whole of it is in high relief, the intermediary space is plain. A miniature *chhajja* protects this *toraṇāvali* (तोरणावलि) in a graceful way. A series of *hamsas*, viz., *hamsāvali* (हंसावलि) set in glazed-tiles, runs above it along the whole length. Then is a series of ornamental ogee arches which are also glazed-tiled. The broad frieze has several pleasing features such as elephants and lions, carved along with *jalīs*; they too have been associated with glazed-tile art. Plantain (banana) trees have also been done in green and yellow tiles. The 'biṭaurā' structure overhangs this facade in the form of a semicircular oriel with a beautiful *mañchikā*-base, while the 'chhaparkhats' adorn it in the form of oblong oriels. They project forward gracefully and give an unprecedented effect to the superstructure. All the three are closed with *jalīs*. It is surprising that the architect had such a wide variety of motifs and designs, and techniques and methods of ornamentation to employ on this facade. Its most remarkable feature is the total effect of glazed-tiling. The whole of it shines gorgeously and brilliantly without being dazzling; the stone relief work with which it is invariably associated tempers and subdues its glare and produces a pleasant and beautiful effect. Narayandas has made a mention of the use of glazed-tile work at Man-Mandir as follows:

बावन वस्तु मिलइ कइ वानी ।
अति अनूप आरसी समानी ॥⁵⁶

But this is not a combination of 52 ingredients as he poetically conceived. In fact, this is 'Kāshikārī' which was a complicated and elaborate system of fusing plaster tiles made of siliceous sand and lime overlaid with metallic oxides in specially built kilns.⁵⁷ It was most popularly used for architectural ornamentation in Iran in the Islamic period. The Muslim ornamentalist who was employed by the early sultans of Delhi took recourse to this art freely, in fact, as a typical Muslim form of mural decoration. Multan and Sindh were the earliest homes of this art in medieval India. By the middle of the 15th century, it was universally applied throughout northern India and also in the Deccan region. It is surprising that the builders of Raja Mansingh Tomar, the *śilpīns* Lanku, Gigo and Gundas as named by Narayandas, e.g.:

गुनी लंकु गीगो गुन दास ।
जानहि सिलप ते बहुत अभ्यास ॥⁵⁸

chose to take recourse to this form of decoration. It is a fact of singular importance. A great movement to accept, adopt and absorb

various art inspirations which were introduced into India had already been set under Maharana Kumbha without taboos, inhibitions or even reservations so much so that even a śāstra for building mosque had been written down. Such typically Muslim features as arch, dome, vault, stalactite, squinch, geometrical and arabesque designs were being adopted in Hindu buildings—particularly non-sectarian—in Gujarat and Rajasthan. Dynamism of Indian art knows no bounds and no compulsion has ever restricted the scope of its inspiration or expression. It is at the Man-Mandir that all-absorbing liberal outlook of Indian art is writ large. Arch, vault, arabesques and geometricals have been used here without the least hesitation or reservation; it is, however, in the use of 'Kāshikārī' on its facades and interior courts that this is most pronounced. It set the ideals of a national art for posterity and inspired such a great genius as Akbar, much of whose eclecticism may be ascribed to his worthy predecessor. This art has been very judiciously used with sculptural decor denoting a happy marriage of the 'plastic' and the 'coloured'. It is surprising that the art of line and colour has been set so marvellously harmoniously with the art of planes and zones; an art with a two-dimensional appeal has nowhere else been set in the third-dimension with such a superb and exquisite effect. This also shows the Indian builder's lucid capacity to adopt and assimilate foreign art inspirations into his own system almost indistinguishably.⁵⁹

The arches used at the Man-Mandir complex are mostly ornamental; in a large number of cases it is either a single slab of stone shaped like an arch or two brackets or triangular slabs which together make up the arch-form. Mostly it is the ogee arch with a graceful curve at the apex. It is noteworthy that the ogee arch was used more popularly during the early Sultanate period than the typical three-centred oblong or four-centred broad arch; wherever the participation of the indigenous builder was decisive or even prominent, it is the ogee which has been preferred. Surprising, however, is the fact that not only the ogee, but several types of engrailing have also been experimented at the Man-Mandir. The most pronounced in this respect is the arch used in the southern annexe of the Man-Mandir. It is an ornamental ogee arch which has carved cusps along its intrados (Plate LX). Its appearance about 1500 at Gwalior is noteworthy. In a large measure, it anticipates the Mughal engrailed arch by more than a century.

A beautiful square chhatri (see Plate LX above) stands on the platform in front of the southern facade of the Man-Mandir. It has slender graceful elephant-brackets and a number of other carved designs and jalīs. On its southern frieze is a Jaina Inscription in Nāgarī

dated in v.s. 1661/A.D. 1604 during the reign of Akbar. It is doubtful that the 'karttā' of the epigraph also built this beautiful chhatri; it appears to be contemporary to the Man-Mandir.

The Hathiya-Paur (Elephant-Gate) is the main entrance of the Fort on the eastern side. It was so called popularly on account of a statue of elephant which adorned the gate for nearly four centuries. Ibn Baṭūṭah noticed this elephant when he passed by Gwalior on 25 September 1342: "At the Gate of the fortress is the figure of an Elephant sculptured in stone and surmounted with the statue of a mahout."⁶⁰ This shows that it was a pre-Mansingh and a pre-Tomar relic. Who installed it originally is not known. Surmises may ascribe its origin to the mighty Pratihāras who held the Fort for nearly a century, or to the Kachchhapaghāts. Babur, again, noticed it in 1527: "In a bastion of the eastern front is the Hati-Pul [Hathi-Pole], hati [hathi] being what these people call an elephant, pul [pole] a gate, [hence the Elephant-Gate]. A sculptured image of an elephant with two drivers (precisely riders, fil-bān=mahouts) stands at the outgoing of this gate; it is exactly like an elephant; from it the Gate is called Hati-pul."⁶¹ Ibn Baṭūṭah mentioned only one mahout. But his narrative generally lacks precision and is erroneous in details. Babur's account, in any case, is more reliable. It seems that the elephant had the image of a raja and the other of his mahout. Abul Faḍl also noticed this elephant: "Gwalior is a famous fortress and an elephant carved in stone at its gate fills the beholder with astonishment. It contains some stately edifices of its former rulers. Its climate is good. It has always been noted for its exquisite singers and lovely women; here is an iron mine."⁶² William Finch was the last to see it in 1610. Probably it was appropriated and removed by the Mughal governor Muzaffar Khan (1628-47) who made large-scale alterations in the Fort.

The double-storeyed gateway has been most magnificently conceived (Plate LXI). Two bastions flank it on the sides. They are crowned by beautiful circular chhatris which are superior in composition to other four chhatris of this facade; they have finely designed pillars, bracket-forms and exquisite ribs-and-panels soffit (see Plate L above) in contrast to other chhatris which are plain and unadorned. The gateway has a lintel-and-brackets entrance. The exterior carvings which are exquisite and bold at the same time, however, give it the appearance of a semicircular arch. Two miniature ornamental oriel-windows crown this entrance on the sides. Upper storey openings are closed by

beautiful jalis. The chhajjas in the respective storey impart the sheer verticality of the bastions a pleasing horizontal repose. The carving work has again been interspersed magnificently with 'kāshikārī', mainly on the bastions. Massive stone pendentives have been used in the phase of transition of this gate to support a vaulted soffit which still bears traces of painting (Plate LXII) exactly similar to the one on the soffit of the central chhatra on the terrace. It may be reiterated that this is a typically stylised Muslim design. The glazed-tiler who did the facades and the courts and the painter who worked out such designs might have come from Sindh, Punjab, Delhi, Agra, Jaunpur or, most probably, from Mandu.

The Hathiya-Paur is an imposing ceremonial gateway which not only provides entrance but also gives a grand and magnificent impression. It is likely that Akbar learnt the principle to build stately gateways to cast impression of imperialistic grandeur and magnificence at Gwalior. It is remarkable that he had a pair of elephants carved in stone on the north-western gate of Fatehpur Sikri and also had their two statues installed at the Delhi-Gate of Agra Fort, both of which were, accordingly, called Hathiya-Paur. Thus noted the court historian Abul Faḍl with reference to the elephants of the Agra Fort: "At the eastern gate are two elephants of stone with their riders graven with exquisite skill";⁶³ and of the Fatehpur Sikri statues: "A masonry fort was erected and two elephants carved in stone at its gate inspire astonishment."⁶⁴ In fact, in his venture to rule India in an Indian way, he had much to learn from his predecessor native rulers; it is from them that he learnt 'jharokhā-darśana' and 'Tulā-dāna', for example. He was an ardent believer in the chakravartīn concept of the Hindu king and, accordingly, he followed all institutions associated with it. He even had a Sūrya-Puruṣa symbol personified in stone at Fatehpur Sikri in the so-called Diwan-i-Khas.⁶⁵ It is likely that when he sat to formulate fundamentals which later made up his architectural style, he derived large-scale inspiration from Gwalior which was situated in close neighbourhood of his capital and was a strong fortress which contained a royal treasury and an important town which had a royal mint.

The eastern facade of the palace (Plates LXIII and LXIV) which roughly measures 300' (91.44 metres) in length and 100' (30.48 metres) in height, has six bastions, in all, disposed with regular interval, two of which flank the Hathiya-Paur. The whole of it, like the southern facade, has been divided into several horizontal zones by cornices and string-courses (Plate LXV). The lower parts are generally plain—obviously to give emphasis to the superstructure, on the treatment of which the

architect has given the greatest attention. Thus the makara series, though it is there on the gateway bastions, is not repeated on the main facade. The corrugated string-course has been used throughout its length. The series of blind toraṇas, viz., toraṇāvali (तोरणावलि) of this facade, unlike its counterpart on the southern side, bears beautiful glazed-tiled motifs in which plantain (banana) predominates. Some have the sun and chakra motifs. The colours used are green, yellow and blue. However, turquoise blue, the typical Muslim colour, is altogether absent. Series of blind ogee arches are also there though the hamsāvali has not been used here. The whole of it is effectively designed, stone relief being magnificently combined with glazed-tile art. The ornamental treatment of this facade and its extremely beautiful effect has remained unexcelled even by the best examples of the Mughal art; the latter gradually tended to rely more on architectonic than on applied decoration as such, and it is only in the expression of this phenomenon that the Man-Mandir is left far behind the Mughal art.

In between the four northern bastions, the plain wall is relieved by three long, pillared projecting balconies, regularly disposed at the level of the lower storey of the bastion-chhatris, one in the middle of two bastions respectively. They rest on brackets with a sloping āsana-paṭṭikā in the centre and a chhajja over them. All these horizontal features set harmoniously with the vertical pillars and the bastions, providing a rare example of beautiful interplay of horizontal and vertical lines in the third dimension. These and the rotating balconies of the chhatris are accessible by a long through corridor (Plate LXVI) given in the thickness of the wall. It is also connected to the various suites of the palace.

The four bastions north of the gateway are crowned by double-storeyed circular chhatris which have plain pillars. It is noteworthy that the load, in fact, rests on massive piers which are concealed inside the structure of the chhatris and the pillars are only ornamental. The lower storey has been conceived in the form of a rotating balcony. The elongated cupolas were originally glazed-tiled traces of which have remained. Four oriel-windows with graceful ornamental struts have been used alternatively with the chhatris, one in the centre of two bastions respectively, crowning the parapet impressively. They are integral to the composition of the superstructure. They relieve the monotony of the plain wall and also the monotony which would have been there by repetition of the chhatris; their slender graceful forms in fact, set among the overprotruding massive bastions, on the cresting of the parapet extremely beautifully. The parapet is made up of large

thin sheets of stone. Some are blind, while others have small jali designs. The whole of it has been most beautifully designed. It is surprising that the Tomar architect could handle the skyline (Plates LXVII and LXVIII) in such a wonderful way in c. 1500, much before the Shahjehanian architect learnt to manipulate it at Agra and Delhi about the middle of the 17th century.

(iv) *Hindola-Paur and the Gūjarī-Mahal Complex*

The *Dhondha-Paur* and the *Urwahi-Paur* are situated on the western side of the Fort. The former is built on a high rock which is accessible only by a footpath. It has a single gateway flanked by typical Tomar *chhatris*. There are sharp and crooked curves, steep rises and several trap-points to put the besiegers in a dangerously disadvantageous position. A continuous series of broad, long stairs further renders assault by elephant, horse and wheeled conveyance impossible. The *Urwahi-Paur* has a broad road, which leads up to the Fort, and it has comparatively larger space. Consequently it is more vulnerable to attack than other gateways. It was from this side that Iltutmish succeeded in storming the Fort in 1231. On the south-west is the inaccessible *GarGarj-Paur*. The eastern side has several gates on the winding steep road which rises from the level of the town to the level of the rock on which the Fort is built. Next to the *Hathiya-Paur*, when one descends, is the *Laksmāna-Paur* (Pole). The rock-cut temple of Chaturbhuja built during the reign of the Pratihāra King Bhoja Ādivarāha is situated near it. It has two inscriptions dated in v.s. 932/A.D. 875 and 933/876. Then is the *Ganesh-Paur* (Pole) which was a great centre of Mughal activity during the 17th century, as the Laksmāna-Gate was in the 9th. Motamid Khān, 'Ālamgīr's governor, built Nūr-Sāgar and a few palatial apartments near it in 1078/1667. The legendary shrine of Gwālīpā situated in close vicinity of this gate under the overhanging cliffs, though ravaged over and over again, had survived and was finally converted into masjid by him in 1075/1664, as the inscription on the mihrab testifies. This is the only documentary evidence of the existence of the Gwālīpā Temple. The *Bhairon-Paur* (Pole) comes next downwards. At the foot of the Fort is the magnificent Badalgarh-Gate which is also called the *Hindola-Paur* (Pole) (Swinging-Gate). The 'Ālamgīr-Gate was added to it as the exteriormost entrance by Motamid Khān in 1660. The Gūjarī-Mahal is situated in close neighbourhood of the Hindola-Paur and the whole complex was built by Raja Mansingh.

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Khwājah Nizāmu'd-Dīn Aḥmed who compiled his *Tabaqāt-i-Akbarī* in 1593-94 recounts that shortly after accession to the throne, in 924/1518, Ibrahim Lodi decided to take Gwalior and sent a large force under Āzam Humāyun Sarwānī to besiege its fort;⁶⁶ he noted further:

It so happened that at this time Raja Man, the ruler of Gwalior, who had been distinguished above all his peers and neighbours for bravery and liberality, and had contended for years with the sultans of Delhi, had died and his son Ray Bikramajit [Vikramaditya] having succeeded him, had made great exertions in strengthening the fortress. The amirs of Sultan Ibrahim in accordance with his orders had erected a palace and every day assembled there, and attended to all matters of importance and made all efforts and endeavours to carry on the siege. It so happened, however, that *Raja Man had erected a lofty building below the Fort which surrounded the latter and was very strong and was called Badalgarh*. After a considerable time, the sultan's soldiers excavated mines and filled them with gunpowder and set fire to it, and the walls of the Fort having been blown down, they entered it, and that place was conquered. At that place they found a brazen bull which the Hindus had for years worshipped. In accordance with the orders of the sultan that brazen bull was taken to Delhi and placed at the Baghdad-Gate. Up to the reign of Hazrat Khalīfah Ilāhī (the August Representative of God on earth, viz., the Emperor Akbar) that bull was at the Gate of Delhi. The writer of this History [Khwājah Nizāmu'd-Dīn] has seen it.⁶⁷

It seems that there was a Śiva Temple in the Bādalgarh outwork, most likely on the northern side of the Gūjarī-Mahal where large-scale ruins are still extant, and when the Lodi forces captured this outwork, the brazen Nandī was the most wonderful prize of this victory. Nizāmu'd-Dīn's account shows that the Bādalgarh complex was built by Raja Mansingh. This is more than confirmed by the style of the *Hindola-Paur* and the *Gūjarī-Mahal*.

Mullah 'Abdul Qādar Badāonī who wrote *Muntakhābu't-Tawārīkh* a little later, confirmed Nizāmu'd-Dīn's narrative, though he added:

The fortress of Badalgarh which lies below the fortress of Gwalior, a very lofty structure, was taken from Raja Mansingh and fell into the hands of the Muslims and a brazen animal which was worshipped by the Hindus also fell into their hands and was sent by them to

Agra, whence it was sent by Sultan Ibrahim to Delhi and was put up over the city-gate. This image was removed to Fathpur in the year 992 H. (=A.D. 1584), ten years before the composition of this history, where it was seen by the author of this work. It was converted into gongs and bells and implements of all kinds.⁶⁸

Ferishtah who compiled his history during Jehangir's reign repeated the narrative of the *TA*.⁶⁹ Abdullah too who wrote his *Tarikh-i-Dāudī* also during Jehangir's reign, exactly reproduced its narrative.⁷⁰ Aḥmad Yādgār who also wrote during Jehangir's time, repeated it with some alterations, that it was a copper bull which used to speak by itself and the sultan placed it at the Agra Fort where it remained until Akbar ordered it to be melted and a cannon was made of it.⁷¹

Gūjarī-Mahal is an integral part of the Badalgarh out-work, situated inside it at the foot of the rock-fort on its north-east corner. Militarily it occupies an extremely weak position; with practically no defences it could be easily taken. It seems, therefore, that Raja Mansingh built this palace before the Lodi menace precipitated. Possibly, the palace was built contemporaneously to the Man-Mandir, c. 1500, and the Badalgarh out-work was added later to defend it. The ruined structures situated to the north of the Gūjarī-Mahal definitely belong to an earlier period and they tend to show that the Tomar structures flourished on this site even before the accession of Raja Mansingh. The brazen Nandī which has been mentioned by Muslim historians might have belonged to an ancient or early medieval Śivālaya.

The Gūjarī-Mahal palace (Plate LXIX) has a square plan. The ground floor is at present entirely closed except for a 'Talghar (basement complex) in the centre of the plan, comprised of a double-storeyed set of rooms and verandahs, and a long, through corridor on the western side. It is not the plinth of the palace, as it appears. Though exteriorly the ground floor is closed on all sides, basement apartments and the western corridor show that this too was a full-fledged storey, probably divided into two sub-storeys, which had halls and rooms and inter-connecting corridors and stairways. All this has now been closed up and remains a mystery.

The upper storey (first floor) is accessible through a broad comfortable stairway provided in the centre of the southern side. Originally there was an entrance on the northern side too, but this has now been closed up. Both are private in nature. The southern entrance has a beautiful lintel and elephant-brackets doorway with a graceful sculpture, that of a door-keeper (pratihāra) on its either side (Plate LXX). Over

it, slightly to the west, is a double-storeyed oriel-window. The upper one contains a large stone sculpture of an elephant which faces west (Plate LXXI). There is a similar composition over the northern (closed) entrance of the palace with an exactly similar sculpture but, curiously, this elephant faces east. This is something mysterious. Certainly, there was a serious meaning behind the setting of the two elephants in opposite directions but now this is not known. Each one stands over the entrance, on either side of the palace, guarding it imposingly. That the sculpture of an elephant is placed over the gate inside an oriel-window just like a show-piece is also an unusual feature of an architecture.

As it stands at present, the *Gūjari-Mahal* is a large open courtyard around which, on all sides, oblong rooms and verandahs have been given which now house the famous 'Gujari Mahal Museum' under the M.P. State Department of Archaeology. There are a few larger apartments also which have ribs-and-panels and wagon-vaulted ceilings. It is all stone-work with a uniform system of construction. Brackets-and-lintel entrance and a flat ceiling are its characteristic features. The whole of it is utterly simple and unadorned; in fact, the interior has been so overwhelmingly converted to modern needs that there are no traces of any applied decoration and only the structure has remained.

The exterior, on the other hand, has not been disturbed and it has retained much of its original impression. The three facades, i.e., on the southern, eastern and northern sides, have been very gorgeously treated. The plain wall is relieved by a series of string-courses and cornices, which continue and rotate on all the three sides. A beautiful design in stone relief, resembling spear-headed cresting, is given at the first storey height. At the second storey height is an extremely slanting *chhajja* which is supported on regularly disposed, beautiful bracket-forms composed of elephant mouths. It looks to bear the beam on its tusk which has been raised in the effort to take it over and the sculpture is vigorous and lively. This elephant-bracket form is indeed an extremely beautiful composition, as are the *vyāla* and *śārdūla* brackets of the Man-Mandir. The *chhajja* also rotates on all the three sides and relieves the plain wall extremely magnificently (Plates LXXII and LXXIII). The broad frieze above it is divided into several horizontal zones which have carved and glazed-tiled designs. Most impressive is the *hamsāvali*, the series of *hamsas*, which though carved in stone have been done with mosaic of blue and yellow glazed-tiles; they give an extraordinary lustrous impression to the facade. *Hamsāvali* has been used here in exactly the same way and with exactly the same effect as

on the *Man-Mandir* and it confirms that both were built contemporaneously or, at the most, *Gūjarī-Mahal* followed the *Man-Mandir* in quick succession. Parapet is protected by a cresting of arch-shaped merlons. Noteworthy is the form of the arch which is emphatically ogee in distinct contravention to the typically Muslim type. The whole of the facade on each side has been judiciously treated so as to associate carved and glazed-tiled ornaments with adequate plain surfaces which automatically take the eye above to the beautifully adorned superstructure.

The pavilions of the *Gūjarī-Mahal* which make up most of the beautiful effect of its superstructure are unique in the whole range of medieval art. At the corners, it is a double-storeyed structure (Plate LXXIV) which is a balcony (*gaukh*), an oriel (*jharokha*) and a cluster of *chhatris*—at one and the same time. The *jharokhas* in both storeys are closed with typical Tomar *jalis* which are in fact plain thin sheets of stone having only simple partial perforations. Beautiful peacock-shaped struts which are entirely ornamental have been used with the *chhajjas* protecting the lower *jharokhas*. A few *jalis* of the upper *jharokhas* have been removed. The spherical cupolas of these oriels flank the dome of the main *chhatri* extremely impressively. Each one is crowned by *āmalaka*-and-*kalaśa* finial. In the centre of the eastern side is a similar *jali*-closed *jharokha*. In this case, however, graceful serpentine struts have been used instead of peacock-shaped struts (Plate LXXV). Here also its cupola rests on the skyline along with the dome of the main *chhatri*, almost as if the former is reposing in the shade of the latter. That the architect of the palace devoted such a great thought to devise these features with a view to bring about an exquisite architectural effect is a remarkable feature of this composition. No doubt, the *jharokhas* could have been used by the inmates of the palace for fresh-airing, and enjoying vistas and views, but their provision on the superstructure has been mainly guided here by aesthetic consideration.

The most important aspect of the *Gūjarī-Mahal* palace is the Arabic and Persian epigraph which has been carved and glazed-tiled upon the frieze of the window-opening above the southern entrance. It is in two lines. The first line is Arabic which reads:

“Bismillah-al-Rehman-al-Rahim Al-Mulko-Lillah
Malik-ul Mulq Zul-Jalal”

(The country belongs to God who is the Supreme Lord of the Universe; He sustains it.)

The verse itself is not Quranic; it is an adaptation of the Quranic dictum Sura LXVII Verse 1 which reads: "Blessed be He (God) in whose hand is dominion and He over all things hath power."⁷² Second line is Persian which reads:

"Een dua-e Madad-een ki Raja Mansingh bin Raja Kalyanmal"

(This palace was built by the blessings of Raja Mansingh, son of Raja Kalyanmal.)

The incidence of the use of (i) an Arabic-Persian epigraph on the palace-gateway and (ii) its depiction in such a typically Muslim ornamental scheme as glazed-tiling is an extraordinary feature of this palace. The whole of it belongs to the fabric of the structure and also coincides with the spirit of its glazed-tile ornamentation and there is no doubt that it was done, *in situ*, contemporaneously to the palace. There is no reason to suppose that somebody did it later under the Great Mughals who succeeded the Tomars in the possession of the Fort. Nobody would have liked to do it and, had somebody decided to inscribe something like this, he would have certainly, almost as a rule, used the name of the ruling Mughal emperor therein. This is not there.

Why the raja chose to use the Arabic-Persian inscription, in glazed-tiling with a Muslim invocation, instead of the Hindu: 'Om Namō Vasudevāya', over the entrance of his palace is an important question. There may be many surmises but there is nothing on record to sustain any hypothesis. Allied with this question is also the problem of its nomenclature: Gūjarī-Mahal. There is no contemporary record to support it and it is only the legend which names this palace as such. The legendary version further holds that the raja built this palace for the residence of his most beloved queen who was of the Gūjar tribe and came from the village Rāī, because she would not live in the Fort along with his other queens in the traditional royal way. There may be a lot of truth in the legend which has survived intact, but in the absence of any documentary evidence to corroborate it, it is not safe to rely on it for writing the history of the palace. Narayandas would have certainly alluded to the exceedingly interesting romance of the raja with the Gūjar damsel in a village setting in his CC. There is no mention whatsoever. It may be admitted, however, that the nomenclature of the palace owes its origin to her.⁷³

The Arabic-Persian epigraph is vitally related to the question of Raja Mansingh's sovereignty. It is noteworthy, in this connection, that

all his inscriptions which mention him as Mahārājādhirāja (and are all in Nāgarī) are limited to the Fort and we do not come across any epigraph or land-grant or consecration-tablet of the raja outside it. That he was ever coronated and possessed the paraphernalia of sovereignty as prescribed by the śāstras is not on record. The Persian chronicles give an altogether different version. Also significant in this respect is the fact that the Lodi coinage called 'Bahloli' was in currency at Gwalior itself and no coin of the raja has come to light so far. The Gūjarī-Mahal inscription furnishes an important clue to the Tomar polity.⁷⁴

Immediately attached to the *Gūjarī-Mahal* on its northern side are a number of palatial ruins. Sets of pillared verandahs and halls were given on all the four sides of a spacious stone-paved courtyard. They were double-storeyed structures. All this is simple stone-work with little carving or any other ornament. A basement storey was also there and a room with spherical soffit and a tunnel of this complex have survived intact. A number of stairways sunk into the depth of walls interconnected the various apartments in several storeys. On the south-western corner of this ruined palace is situated a huge baoli which was probably the main source of water-supply of the Fort. Traces of several channels which ran into different directions have survived. A deep, square, masonry storage tank situated close to the northern entrance of the *Gūjarī-Mahal* also drew its water from the baoli. However, this has all been long in disuse and defunct, and it is not possible to reconstruct its plan at present.

The *Hindola-Paur* is also an imposing gateway which introduces the visitor to the Badalgarh complex in as befitting a manner as the *Hathiya-Paur* stands in relation to the *Man-Mandir*. The arched entrance, which has a beautiful fringe of stylised spear-heads along its intrados and a similar motif at the apex, is flanked on either side by an oriel-window with mañchikā base, and a circular tower crowned by the typical Tomar chhatri of similar circular conformation having a similar round balustrade and chhajja (Plate LXXVI). The towers bear several carved and glazed-tiled designs, the most prominent being, again, the typical series of swans, viz., the haṁsāvali which has been carved and glazed-tiled. This too is exactly similar to the series which appear on the *Gūjarī-Mahal* and the *Man-Mandir*. The entrance arch is a true (radiating) arch with large, stone voussoirs and a huge keystone which bears the stylised spear-head design (i.e., at the apex). Both the external and internal arches are similar. The internal arch is flanked by

miniature ornamental oriel-windows which are set on an otherwise plain facade extremely beautifully (Plate LXXVII). Though this gateway has been designed in accordance with the defence needs of the time, it goes to the credit of the architect that he also gave it substantial aesthetic character. It is this way that physical needs were reconciled with the aesthetic tastes of the people and ornamentation went hand in hand with functional architecture. The Mughals, from Babur to Akbar, must have noticed this feature with admiration and of course with obligation.

(v) *Characteristic Features of Raja Mansingh Tomar's Style*⁷⁵

This study of the *Man-Mandir* and the *Gūjari-Mahal* palaces helps us to deduce the characteristic features of Raja Mansingh Tomar's architectural style, which may be summarised as follows.

(1) Stone (which was locally available in great quantity) in a wide variety of tints and tones, mainly being grey, yellow and white sandstone, is the building material of these palaces. Even when skeleton is made up of rubble or ashlar, facings have been done in dressed and polished stone. Generally, the skeleton-blocks themselves have made the facings, like the construction of the Hindu temple. There is no brick and the typical Tomar palaces have no plaster-work. This helps us to distinguish the original Tomar buildings from the later constructions, conversions and restorations.

(2) The palaces have been laid out with an inner courtyard in the centre of the plan and a smaller court in each annexe, around which rooms and halls have been disposed in two storeys. These apartments invariably open on the courtyard. Adequate arrangement of light and air has been made in them. Originally, provision of a number of water-devices was also made. The plan of these palaces in multiple storeys has been so disposed as to provide them with an efficient system of interconnecting corridors, secret passages and stairways, which receive their light and air through long overflying ventilators.

(3) It is mainly the trabeate (horizontal) system of construction, with overall emphasis on pillars and beams. Such trabeate features as *kaḍalikā-karaṇa* (corbelling), *mañchikās* (seats with lotus-shaped bases), *āsanas* (seats with slanting slabs), *jharokhas* (oriel), *toraṇas*, *chhajjas*, brackets and struts have been used on a large scale. The load is generally sought to be supported on the traditional horizontal system of the Hindus. True arch with *voussoirs* is rare but a large number of

arcuate ceilings have been used to roof the halls, and vault and dome are as characteristic of this art as is the flat ceiling. Some ceilings of the *Man-Mandir* are unique compositions. The new inspiration of construction has been marvellously used along with the indigenous technique.

(4) However, many of the structural features, as *vyāla*-brackets, struts, *āsanas*, *mañchikās* etc., have been used mainly ornamentally. Once the problem of supporting a load on the beam-and-post system was solved, the architect was free to use all subsidiary features to impart the structure an aesthetic impression as best as he could.

(5) Stone being the building material, carving and sculptural decor is the chief mode of ornamentation. With this indigenous art, typical Muslim colour scheme of glazed-tiling has been gorgeously combined. Polychrome surface ornament is beautifully set with the stone relief and this is a unique phenomenon of the art of these 15th century palaces. It raises many questions. How did it appear at Gwalior? Was it an attempt of the liberal raja to contribute to the development of a composite style of art? What was the source of his inspiration? Who did it for him? Was the glazed-tiler of these palaces a Muslim from Sindh, the traditional home of this art during the Sultanate period, or an indigenous artisan from Gujarat or Mandu? The excellent way in which he has expressed this art in terms of indigenous idioms shows that, whatever was the case, the glazed-tiler of Gwalior belonged, probably through several generations, to the soil and climate of the country and the overtones of the art had been Indianised. Noteworthy is the fact that his polychrome is always composed with stone-relief in carving and is never on a plain surface; tiles have been set in mosaic, direct on the stone surface without any associated plaster-work.

(6) Certain animal-forms have been used here predominantly, viz., *makara*, *hamsa*, *simha* (lion), *hastin* (elephant), *mayūra* (peacock), *śārdūla* and *vyālas* (composite animals). All stone-carved, they are motifs of indigenous art.

(7) Side by side with these forms, typically Muslim geometrical, arabesque and stylised designs have also been used. Some are carved and jali'd, but they are mostly glazed-tiled.

(8) Jalis have also been used on a very large scale and this art occupies an important position in its ornamental scheme. Both simple and complicated designs have been used. Geometrical and foliated designs predominate in this scheme. Parapet jalis are unique. It is noteworthy that jali-art is a later development in India. *Jālī* (*jālaka*) has

not been mentioned in the *Viṣṇudharmottara-Purāṇa* (c. 650 A.D.), or *Samarāṅgaṇa-Sūtradhāra* of Raja Bhoja (c. 1025), or *Aparājita-prachhā* of Bhuvanadevāchārya (c. 1200), or *Vāstu-Sāra-Prakaraṇa* of Thakkur Pheru (c. 1315). It is only later that jalis came into popular usage and, consequently, they found mention in the texts. Thus *Kāśyapa-Sīlpa* (c. 1450) and *Sīlpa-Ratnam* of Śrīkumāra (c. 1600) have a chapter each on Jālaka-Lakṣaṇam,⁷⁶ the latter following almost ad verbatim the former. They described six types of jali-designs:

गोनेत्रं हस्तिनेत्रं च नन्दावर्तं ऋजुक्रियम् ।
पुष्पकर्णं सकर्णं च जालकं षड्विधं भवेत् ॥
(KS, XI, 9)

Simple geometrical designs made up of straight lines and foliated designs are conceived under this prescription. But there is no provision for stylised designs or arabesques. Jali has been used on a very large scale in Gujarat, first in wood and then in stone, and it became a distinctive characteristic of its art during the 15th century. It seems that Gujarat provided the earliest source of inspiration of this art and Gwalior is also indebted to it for this inspiration, though it is likely that it travelled over such a vast distance through Mewar. The parapet-jalis of the Man-Mandir, with elephant and lion forms perforated into them, bear a distinct Rajasthani influence. In such a hot region as Gwalior, and in a 15th century composite society when purdah had come into vogue, it was an enormously useful architectural expedient.

(9) Treatment of the facade is also a special feature of this style. Each facade has been divided into several zones and planes, horizontal lines being harmoniously counterbalanced by the verticality of the towers. Several pleasing series, e.g., toraṇāvali, hamsāvali and makarāvali, which combine stone relief art with the lustre of polychrome glazed-tiles, are beset gorgeously in them. Openings are generally given by balconies (gaukhs) and oriels (jharokhas) which break the surface monotony extremely impressively.

(10) The Tomar architect was also master of superstructure which he knew well to manipulate to the best ideals of the architectonic effect. He used chhatris, gaukhs, jharokhas, chhaparkhats and other pleasing features to create a beautiful skyline.

(11) A number of folk-elements used in the Tomar architecture also constitute a characteristic feature of this art. Apart from the stylised forms of chhatri (pillared pavilion), gaukh (balcony) and jharokha (oriel), the following have also been used:

- (i) Khaprel design—in the chhajjas of interior courts;
- (ii) Bīṭaurā-form—in the cupola shapes and also independently;
- (iii) Chhaparkhat-form—on the superstructure; and
- (iv) Chhappar (slanting thatched-hut roof) form—in the ceilings.

As a whole, the Tomar architecture of Gwalior, of which *Man-Mandir* is the most representative example, is composed of changed structural expedients and ornamental themes and it shows a spirit of eclecticism; it marks the beginning of the formation of a composite style which, even at this early stage, is national in character.

(d) *An Estimate of the Pre-Mughal Legacy* ✓

The Mughals did not begin on a clean slate. The preceding styles which were in vogue in the territory they occupied, largely determined the form and fabric of their art. (Many experiments in the building art had been made and many techniques introduced during the period of more than three centuries after the establishment of the Delhi Sultanate and the things were gradually, unconsciously and imperceptibly evolving.) Chaturāsra (square) and Aṣṭāsra (octagonal) tombs, and Bṛhatmukhī (pylon) and Pañchamukhī (five-arched) mosques, for example, had come into full being and a number of pleasing features were already in the florescence stage” when the political change closed the old era and ushered in a new one.

However, a cultural change does not take over so suddenly; it comes only through the process of evolution which is spread over a long period and, generally, there is gap of a generation or two before the new order of things sets in, grows and comes into form. Thus, for example, the mosques which were erected during the brief period of Babur’s reign (1526-30) were all built in the preceding Lodi style. The tomb of ‘Isā Khān (1547) at Nizamuddin, Delhi, and even the tomb of Adham Khān at Qutub, Delhi (c. 1565), belong to the class of the Aṣṭāsra (octagonal) tombs of the Sultanate period. Many things were in practice and in fashion during the pre-Mughal period and they could not be replaced overnight, at least in such a discipline as architecture. The Mughals had an enlightened outlook and an ardent love of ‘*the beautiful*’ and they could pick and choose according to their own tastes and beliefs. They could identify and work on their preferences—which indeed prepared the bedrock for the formulation of their style. This

was, however, a long process of assimilation and transformation in which, no doubt, the Sultanate art had a lot to contribute.

But it was not the only source of their inspiration.

When Mansingh Tomar's style of architecture is compared to Sikandar Lodi's style, one is surprised to notice that, though Gwalior's was a small principality or a kingdom at the best while Delhi's was an empire, former's grace and magnificence is absent in the latter; the former is far more ingenious and resourceful structurally, and versatile and prolific ornamentally than the latter, and the former is decidedly a superior art. What was the source of the grace and magnificence of the Tomar style? It was the intellectual effort that went into its making; it was the decisive participation of the indigenous traditions of art in its expression that bestowed upon it such a wonderful aesthetic effect. Nothing appeared at Gwalior all of a sudden, as a miracle; the flower which blossomed at Gwalior had its roots in Mewar where the *vāstu*-traditions were revived and a large number of *śāstras* were written, and a great school of architecture had already come into being (c. 1465) for the first time in the medieval period in northern India. The sources of the art of Gwalior may be traced in the efforts of Maharana Kumbha (1433-68) to revive the classical order of things in a way which would suit the changed conditions, i.e., by incorporation, in the indigenous art, of those elements which had been introduced into India during the last three centuries. The sources of the art of Gopādri lie deep in *Meḍapāṭa*; the *śilpīns* of Gwalior were, mostly, the Gujarati *salats* of Mewar. Though no documentary evidence is available, nor do we expect them to leave their names upon the buildings which they brought into form, Indian art is truly so anonymous, the Tomar relics, as described above, bear their distinct stamp.

The Mughals who supplanted the Lodis on the throne of Delhi and Agra were quick to notice this difference and realise the weakness of the legacy of the Muslim art which had bequeathed upon them by sheer capture of the empire of Delhi. Babur did not approve what he beheld in and around Delhi and Agra which region he called by the name of 'Hindustan' in his *Memoirs*. He recounted the 'Defects of Hindustan' in detail⁷⁸ and noted in the same reference: "There are no running-waters in their gardens or residences. These residences have no charm, air, regularity or symmetry."⁷⁹ That this observation of Babur was related to the Lodi architecture is clear from his account of a *baoli* which he ordered to be built in the Agra Fort: "In an empty space inside the Fort, which was between Ibrahim's residence and the ramparts, I ordered a large chambered-well (*wain*) to be made... A

stone building stands at the mouth of the well and there is an outer mosque outside the enclosure in which the well is. The mosque is not well done; it is in the *Hindustani* fashion."⁸⁰ He again made a mention of this fashion of Hindustan by which he meant the region of Delhi and Agra; he noted with regard to the Man-Mandir of Gwalior: "On one side of this building are five cupolas having between each two of them a smaller one square *after the fashion of Hindustan*",⁸¹ by which, obviously, he observed that there were square cupolas like those used in the region of Delhi and Agra. It looks curious but it is a fact that unlike the word 'Hind' which denoted the whole of India, 'Hindustan' denoted the region comprising Delhi, Agra and Oudh since Amir Khusrau's times.

This explains why, as soon as the early phase of compulsions was over and the Mughals were free to choose, they borrowed, on a very large scale, from the Tomar architecture of Gwalior with which the first three Great Mughals, viz., Babur, Humayun and Akbar were closely connected, almost throughout their career, c. 1527 to 1600. The most powerful determinant of this phenomenon was the shifting of his capital by Akbar in 1560 from Delhi to Agra which is as inherently linked with Gwalior and Eastern Rajasthan, geographically as well as culturally, as the former is with Haryana and the Punjab. Among the inspirations which subscribed to the formation of the Mughal architecture, Gwalior's was probably the largest share.

References

1. Cf. *The Sultanate of Delhi* (Agra, 1972), p. 222.
2. *Ibid.*, p. 222.
3. *The Delhi Sultanate* (Bharatiya Vidya Bhavan, Bombay, 1967), pp. 120-21.
4. Sura II, verse 144: "Turn then thy face in the direction of the sacred Mosque; wherever you are, turn your faces in that direction", cf. *HQ*, p. 58.
5. M.A. Dhaky, 'Māru-Gurjara Vāstu-Śāstramān Masjid-Nirmāṇa Vidhi' (Gujarati), *Swadhyaya*, Vol. VII, No. 1, pp. 64-79; he refers to another text, the *Jayaprachhā* which contains an independent chapter on the Rehamāṇa-Prāsāda (mosque) and also casual references in connection with the making of lamp-posts, gargoyles etc. None of these works has, however, been published so far and Dhaky's paper is the only source of material in this connection.
6. The Sanskrit text (Dhaky, op. cit., pp. 78-79, duly corrected) is appended herewith, *Appendix A*.
7. Quite a few points of this account are not intelligible; they are question-marked.
8. This translation differs in a large

- measure from the Gujarati translation of M.A. Dhaky (cf. op. cit., pp. 66-67); in fact, the text is fragmentary and the gaps have been filled in on the basis of the specimens which were then in vogue in the 15th century in north India.
9. It is true, as Dr Pramodchandra has observed, that "The use of terms like 'Renaissance' and 'Neo-Classic' which have come to possess a very fixed, specific range of meaning and ideas in the English language may not be always applicable to the Indian situation." It has been used here in the sense of movement of rejuvenation and revival of the old order of things, full of vigorous artistic and intellectual activity, which lasts an epoch, age or a period.
 10. See *Appendix B* for a List of Great Contemporaries of Raja Mansingh Tomar of Gwalior.
 11. Unfortunately it is no longer available and we know of it only through Faqirullah's *Rāga-Darpana* which he compiled in 1073/1671, cf. H.N. Dwivedi, *Mansingh aur Man-Kutoohal* (Hindi) (Gwalior, v.s. 2010).
 12. For a few details of these inscriptions, see S.L. Katare, 'Two Gangolatal Gwalior Inscriptions of the Tomara Kings of Gwalior', *Journal of Oriental Institute, Baroda*, Vol. XXIII, No. 4 (June 1974). Two other inscriptions belonged to Raja Mansingh Tomar, as discussed hereafter. It is unfortunate that they were not recovered and again sank into 40' water.
 13. *BN*, p. 611.
 14. *Briggs*, Vol. I, p. 119.
 15. *Ibid.*, p. 119.
 16. *ASI*, Cun. II, p. 381; another inscription of a mosque built by him has recently been discovered by this author.
 17. Barni, *E&D*, Vol. III, p. 217; *Rehla*, pp. 43-45.
 18. *Rehla*, p. 45.
 19. Nearly all the Jaina caves around the Fort were excavated and their beautiful images and sculptures were also carved during the pre-Mansingh period from 1440 to 1473.
 20. This is attested by the Dhondha-Paur inscription; see *Appendix C* for its text at the end of this chapter.
 21. See *Appendix C* for text.
 22. Above the names is a carved panel which bears a hand pointing towards east. This is a mysterious sign.
 23. A large number of loose and carved sculptures and inscriptions engraved on the bed were found when the Gangola-Tal was cleaned and desilted by the Sikhs recently. The Ek-Khambha Tal, the Rani-Tal and the Cheri-Tal have never been cleaned and it is certain that their water and mud conceal a lot of valuable material of historical importance. The Archaeological Survey of India should take inspiration and directive from the Gangola-Tal example.
 24. See *Appendix D* for the text. Major portion of this epigraph is unintelligible.
 25. *BN*, pp. 607, 610.
 26. *Ibid.*, p. 613.
 27. *ASI*, Cun. II, p. 396.
 28. Cunningham mentioned another inscription of Humayun in the Fort dated in the same year, i.e., 938/1531 (cf. op. cit., II, 396), but this too has been lost.
 29. *BN*, 607-11.
 30. This is indicated by Cunningham in his plan of these palaces, cf. *ASI*, Cun. II, Plate LXXXVII. The arrangement has since been entirely disturbed; not only alterations have been made, a large number of structures shown in Cunningham's

- plan around 1862 have also been demolished and the ground cleared.
31. As regards paucity of material for writing the history of the Tomars of Gwalior, the author's paper 'On the Sovereignty of Raja Mansingh Tomar of Gwalior', *Journal of Oriental Institute*, Baroda (Vol. 28, No. 1, September 1978) would be an interesting and useful reading.
 32. *BN*, 607.
 33. This leaves no doubt that it was the *Man-Mandir* which has been described by Babur.
 34. Originally, the palace covered an area 300' × 160' in size, a large part of which is now in ruins.
 35. Traces of a thin over-coat of plaster were noticed by Cunningham, *ASI* Cun. II, 349.
 36. Ibn Batutah (*Rehla*, op. cit., p. 45) noticed only one mahout. But his narrative generally lacks precision and is erroneous at times. Babur's account, in any case, is more reliable.
 37. *BN*, 607-11.
 38. The *Chhitai-Charit* of Narayandas (ed. by H.N. Dwivedi and Agarchand Nahta, Gwalior, 1960).
 39. See *Appendix E* for the text of Narayandas.
 40. This is poetic fantasy. The glazed-tiling was a different process. This author's *Colour Decoration in Mughal Architecture* (Taraporevala, Bombay, 1970), pp. 12-14 may be referred to for details.
 41. *CC*, chaupais 113-131, pp. 15-17.
 42. Cf. *History of Indian and Eastern Architecture*, Vol. II (revised by James Burgess) (New Delhi, 1967), p. 176. He continues in fn. 3, "We occupied the fort during the mutiny and retained it long after. The first thing done was to occupy the Baradari as a mess-room; to fit up portions of the palace for military occupation; then to build a range of barracks, and clear away a lot of antiquarian remains to make a parade ground. What all this means is only too easily understood." He further quoted M. Rousselet from his *L'Inde des Rajahs* to lay emphasis upon this point.
 43. Cf. *Famous Monuments of Central India* (London, 1886), pp. 57-58.
 44. *ASI*, Cun. II, Plate LXXXVII.
 45. Cunningham's various measurements of the Man-Mandir Palace (vide *ASI*, Cun. II, Plate LXXXVII) are not correct. Thus he gives 33' × 33' as the size of this court. This author physically measured it 34'-9" × 36'-6". It seems that there were additional walls or other similar subsidiaries during the period from 1844 to 1849 when Cunningham resided in the Fort and took these measurements. In any case, this author has not followed Cunningham and he has taken his own measurements.
 46. It is a gaja-vyāla in accordance with the *Śilpa*-text:
इति षोडश व्यालानि उक्तानि मुख-भेदतः
(*AP*, 233.6) (cf. *Aparājita-prchchhā*, ed. P.A. Mankad, G.O.S. No. 115, Baroda, p. 595). For a similar study of vyālas at the Agra Fort, reference may be made to the author's 'Depiction of Fabulous Animals—Gaja-Vyāla at the Delhi-gate of Agra Fort' (*Medieval India: A Miscellany*, Aligarh, Vol. 2, 1972). Reference may also be made to his paper 'On the Gateways of Chanderi' (*Indo-Iranica*, Calcutta, Vol. 30, Nos. 3-4, Sept-Dec 1977).
 47. *CC*, op. cit., pp. 16-17.
 48. *BN*, 607.
 49. Lepel Griffin (cf. *Famous Monuments of Central India*, London, 1886, p. 51) has recorded, 'around 1886, to have seen, on the southern

facade, such figures: "They have representations of men holding chowries and all in the same charming tile-work." But they are not traceable at present.

50. For a detailed study of the 'Chhaparkhat' reference may be made to the author's paper 'Notice on Firoz Shah's Reference to CHHAPARKHAT in the Futūḥat-i-Fīrozshāhī' (*Journal of the Asiatic Society*, Calcutta, in press).
51. The editors also give the alternate reading: 'बटखपर'।
52. CC, op. cit., p. 16.
53. Ibid., p. 17.
54. Ibid., p. 17.
55. Ibid., p. 16.
56. Ibid., p. 16.
57. For details of this study, reference may be made to the author's *Colour Decoration in Mughal Architecture*, op. cit., pp. 12-14.
58. CC, op. cit., p. 15.
59. Percy Brown is not fair and just when he noted in this connection: "Viewed as a whole, therefore, this palace while on the one hand a representative example of decorative architecture is, on the other hand, also an exceptional type of architectural decoration, and its fault lies in the fact that its designers attempted too much in their effort to fulfill both objects" (cf. *Indian Architecture*, Islamic period, p. 127). It is a pity that Brown mostly wrote at Calcutta without actually personally seeing and studying all the monuments he described in an impressive and inimitable language, of which he was certainly a master. He spread the vast data, received from the Archaeological Survey of India and other sources, on the canvas and painted it through the colourful words and phrases into a beautiful composition the literary merit of which indeed remains unexcelled, without worrying for the historical aspect of his narrative, which is tremendously impoverished due to lack of first-hand knowledge. Unless one actually resides in the region and with the monuments which he ventures to interpret, the spirit of an architectural style is easily missed!
60. *Rehla*, pp. 45, 163.
61. BN, 609.
62. *Ain*, II, p. 181.
63. Ibid., p. 180; in fact, it is the western gate (and not eastern). It is also called the Delhi-Gate. It was completed in 1568-69. For details of this gateway reference may be made to the author's *Some Aspects of Mughal Architecture* (New Delhi, 1976), pp. 49-53.
64. *Ain*, II, p. 180.
65. See, for details of this matter, author's paper 'The Diwan-i-Khas of Fatehpur Sikri: A Symbol of Akbar's Belief in Sūrya-Puruṣa', cf. *Some Aspects of Mughal Architecture*, op. cit., pp. 7-21.
66. TA, I, 401.
67. Ibid., pp. 402-3; thus it was at Delhi c. 1593.
68. MT, I, 432-33.
69. Briggs, I, 347-48.
70. Cf. UTKB, I, 297.
71. Cf. ibid., p. 343. It is this curious way that the historians of medieval India followed one another, borrowed the things from their predecessors and fancifully added to the narrative—to make history romantic!
72. HQ, p. 1576.
73. Vrindabanlal Verma's Hindi novel *Mṛganayanī* is an excellent piece of literature; it is unfortunate that most of its fiction has, almost unconsciously, filtered into the Tomar history. That the raja arranged to bring the Rāi-water to the Fort for

the use of the Gujar queen, for instance, is a romantic imagination of the novelist, rather than a documented fact of history.

74. For a few details of this matter, reference may be made to the author's paper 'On the Sovereignty of Raja Mansingh Tomar of Gwalior', *Journal of the Oriental Institute, Baroda* (Vol. 28, No. 1, September 1978).
75. With its set norms and principles, STYLE is an evolutionary process which gradually grows and develops and ultimately reaches the stage of perfection at which these norms and principles are perceptibly symbolised. An independent style can be studied with regard to four basic aspects, viz., (i) lay-out and plan of buildings, (ii) structural contrivances employed, (iii) ornamental themes adopted, and, above all, (iv) adjust-

ment of usage and functional necessity with symbolic, ceremonial and, most important, aesthetic outlook of the builders—which, altogether, constitute its distinctive characteristics marking the whole evolutionary process.

76. *Kāśyapa-Śilpa* (ed. V.G. Apte) (Anand Ashram Sanskrit Series, No. 95, Poona, 1926), Chapter XI, pp. 32-33 and *Śilpa-Ratnam* (ed. T. Ganapati Sastri) (Trivandrum Sanskrit Series, No. 75, Trivandrum, 1922), pp. 142-43.
77. For a detailed study of the art of the Sultanate period, the author's work: *History of Sultanate Architecture* (Abhinav, New Delhi, 1978) may be referred to.
78. *BN*, 518.
79. *Ibid.*, p. 519.
80. *Ibid.*, p. 533.
81. *Ibid.*, p. 609.

Śrī-Rehamāṇa-Prāsāda-Lakṣaṇam
(Vṛkṣārṇava Text for the Construction of Mosque)
(श्री रहमाण प्रासाद लक्षणम्)

जयोवाचः

प्रासादानां च हे तात ! वास्तुशास्त्रविशारद ।
श्रुता मया तु प्रासादा वैराज्यकुलसम्भवाः ॥ १ ॥
राजवेश्मगृहादि च त्वया प्रोक्तं सुविस्तरम् ।
वापीकूपतडागाद्यं वारुणं विविधं पुनः ॥ २ ॥
प्रासादा अपि ते सर्वे गणादीनां यथाक्रमम् ।
ब्रह्मविष्णुशिवाकर्णां कथिता विविधालयाः ॥ ३ ॥
शल्यादीनां च सर्वेषां तेषामर्चाप्रनेकशः ।
कथिताः करुणासिन्धो ! श्रुता अपि मया पुनः ॥ ४ ॥
ब्रह्मक्षत्रियविदूषूद्राश्चत्वारप्रकृत्योत्तमाः ।
सात्त्विकं भावमपन्ना कारयन्ति सुरालयान् ॥ ५ ॥
म्लेच्छरूपेण विख्याता ये लोका म्लेच्छरूपिणः ।
तेषां सात्त्विकभावश्चेत्कथं कुर्यात्सुरालयम् ॥ ६ ॥
तस्य छन्दस्तदाकारं मण्डपं द्वारसंस्थितम् ।
प्रमाणाद्यं समस्तं मे कथयस्व जगत्प्रभो ॥ ७ ॥

श्री विश्वकर्मा उवाचः

शृणु पुत्र प्रयत्नेन सर्वशास्त्रविशारद ।
साधु पृच्छन्ति तन्नाम रहमाण सुरालयम् ॥ ८ ॥
तत्र ध्यायन्ति यवनाः देवरूप-विवर्जितम् ।
मायासंसर्गरहितं गुणत्रयविवर्जितम् ॥ ९ ॥
निरञ्जनं निराकारं तानैकमयमदभुतम् ।
तद्धानकं × × पुत्र ! रहमाणं विदुर्बुधाः ॥ १० ॥
चतुर्थं समं कुर्यादायव्ययविशोधितम् ।
भाज्येदष्टभिर्भागैर्दशभिर्वापिसूत्रतः ॥ ११ ॥
भुजद्वयं प्रकर्तव्यमेकाङ्गं कोणभङ्गयुक् ।
भित्तिवाह्ये प्रकर्तव्यं मिहिरावं मनोहरम् ॥ १२ ॥
पूर्वामुखं प्रकर्तव्यं अप्रशस्तं च दिक्त्रये ।
सूत्रेण साधयेद्विस्तिं मीयतां दक्षिणोत्तरे ॥ १३ ॥

ध्रुवेन शङ्कुना चापि प्राचीं यत्नेन साधयेत् ।
 दिङ्मूढं नैव कर्तव्यं कर्तव्यं पूर्वं सम्मुखम् ॥ १४ ॥
 भिट्टोपभिट्ट पीठं च सर्वोपरि च विन्यसेत् ।
 पुष्पकं पुष्पसंयुक्तं ऊर्ध्वं मण्डोवरं वरम् ॥ १५ ॥
 प्रासाद छन्द एकाङ्गो बहिः कोणादयलंकृतः ।
 ऊर्ध्वं फांसाऽऽकृतियस्य रहिमानः स उच्येत ॥ १६ ॥
 वीथिकायां ततो दिक्षु ससूत्रं कपिणीर्षकम् ।
 द्वित्रिपञ्चक्षणोपेतं तदूर्ध्वं मालिकां न्यसेत् ॥ १७ ॥
 अधःस्थाने वैष्णव्यं महिरावं मनोहरम् ।
 स्तम्भिके सम्मुखे तत्र तन्मध्ये पुष्पकं वरम् ॥ १८ ॥
 महिरावं द्विभागोऽथ स्तम्भिकोभय पार्श्वयोः ।
 त्रिभागं तु प्रवेशेन पृष्ठदेशे समांशकम् ॥ १९ ॥
 सप्तभागा स्थिता स्तम्भाः पुष्पकैश्च विभूषिताः ।
 तद्वदे लम्बि × × × × × ॥ २० ॥

APPENDIX B

Great Contemporaries of Raja Mansingh Tomar of Gwalior (1486-1516)

Bhakti Saints

1. Kabir (c. 1450-1518)
2. Nanak (1469-1538)
3. Vallabha (1478-1530)
4. Chaitanya (1485-1533)
5. Mirabai (1498-1546)

Kings of Sovereign States

1. Sikandar Lodi of Delhi (1487-1517)
2. Kumbha (1433-68) and Sanga (1509-28) of Mewar
3. Mahmud Begarha of Gujarat (1458-1511)
4. Ghiyathud-Din Khalji of Malwa (1469-1500)
5. Mahmud Bahmani (1482-1518)
6. Krishna Devaraya of Vijayanagar (1509-29)

APPENDIX C

Inscriptions of Raja Mansingh Tomar in the Gwalior Fort

(a) *Inscription on a Jaina Image on the Fort (v.s. 1552/A.D. 1495)*

श्रीमऊ गोपाचलगढ़ दुर्ग ॥ महाराजाधिराज
श्रीमल्ल (मान) सिंह देवराज्ये प्रवर्त्तमाने संवत्
१५५२ वर्षे ज्येष्ठसुदि ———¹

(b) *Inscription on the Dhvajastambha facing the Larger Sas-Bahu Temple (1545/1488)*

सिद्धि संवत् १५४५ वध्वो फाल्गुन
वदि २ — लिपिते पेगोमनु । —
लिष—त——²

(c) *Inscription in the Sas-Bahu Temple (carved on the pavement slab of western upper storey, along with several motifs, yantras and diagrams) (1553/1496)*

सतोषाला —रा—मान—त्रान्तिकेनेमहीपाल-प्रयत् १५५३ पौषे—त्रयि सुदि—२ गुरु——³

(d) *Inscription at the Dhondha-Paur (in the niche of the Dhondha-Deva) (1552/1495)*

सिद्धि (सिद्ध) संवत् १५५२ वर्षे असुनिसुर
महाराजाधिराज राजा श्रीमान ॥
सांघ (सिंह) देवधिराजे साटोवर ॥
ढोडादेव मूर्तिकारापित ॥
लि० साजसू सूत्रयारि (सूत्रधारि) महमे ॥
गढत घरमनन्दु ॥ नाथू हृपदास

1. Purnachand Nahar, *Jain Shilalekha*, Part II (1927), p. 93, Inscription No. 1429.
2. There are other inscriptions on this stambha but they are mostly unintelligible. It seems that these inscriptions record the restoration of the structures upon which they appear, under the raja.
3. This also seems to record restoration of the temple by the raja.

ढोढा की पौर राजा
मानसाहि नई (ई) कराई (ई).
प्रकरीण्ड ॥

(e) *Inscription at the Urwahi-Paur (on the pilaster in the interior Dalan)*
(1553/1496)

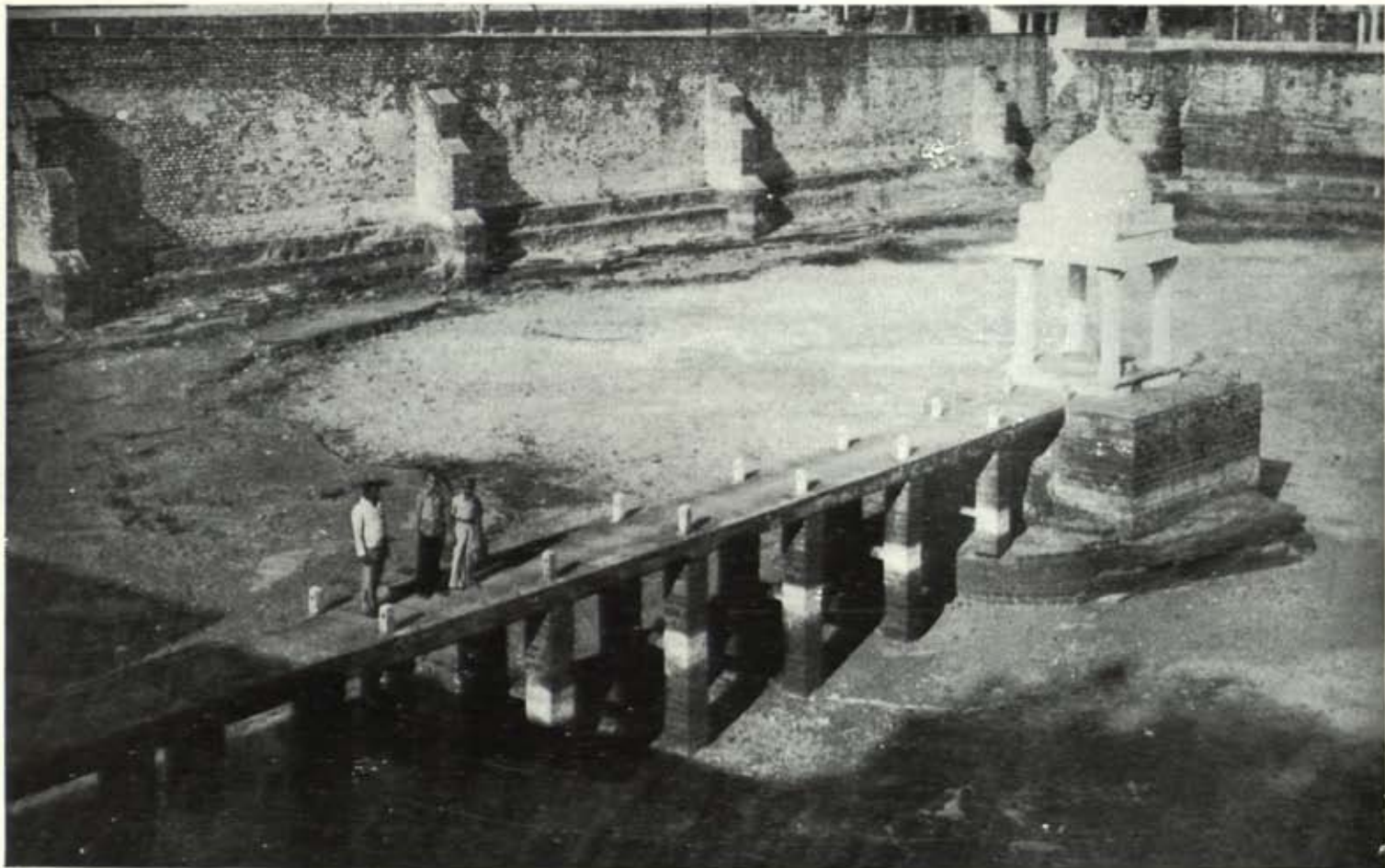
॥ श्री ॥
॥ श्री लडसुप्रीतमान
॥ सिध (सिह) श्री इष्टदेवता प्रशादात् ॥
॥ महाराजाधिराज राजा श्री
॥ मान सांघ (सिह) देव चिरंजीवी
तस्य अ (आ) जाकारी साटो
॥ वर उरवाही (ई) की पौर
बड़ी (डी) करवाही (ई) ॥ लि०
साजसू (मागैवारी) ॥ तस्मा
म (त्) साराणासटिहा ढोढा
सूत्रधारि महेसु ॥ गढ़त
सीध बर्मा वंद ॥ सुलम
॥ सू ॥ १ संवत् १५५३
वर्ष आसाढ़ सुदि १३
गुरुवासरे ॥ अनु
ना हा नु ह त्र
१ षेऊ सूत्रधारि ॥
म्वालिरी हिकमिति ॥⁴

(f) *Inscription of the Gangola-Tal (1551/1494)*

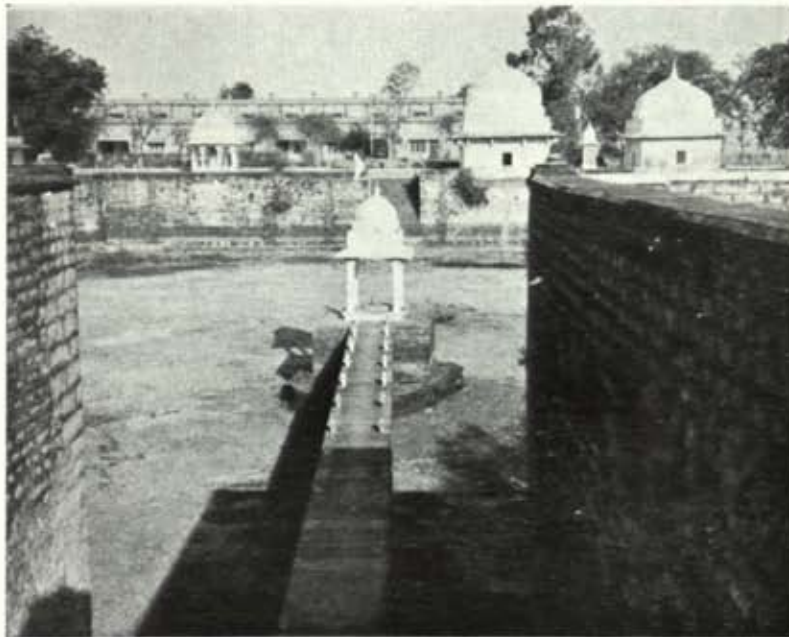
ॐ सिधि । श्रीगणेशायनमः । गोवर्धनगिरिवरं
करसाय एव । विप्रतुंगवांमुपरिवारिघरादितानां ॥
बाल्येपि विस्मयन् विधाबल सच्चरित्रं । कृस्नश्रिस्तु
तत्र तोमर मानसिधः ॥ १ ॥ चिरंजीव चिरनन्दा
चिरं पालयं ॥ × ॥ मेदनी । श्री मानसिह
राजेन्द्र जावच्छंद्र दिवाकरौ ॥ २ ॥

अथ संवत्सरेस्मिन् श्री विक्रमादीत्य राज्ये
संवत् १५५१ वर्षे वैसाख सुदि ३
मंगलवासरे । रोहिणी नक्षत्रे सौभाग्य नाम

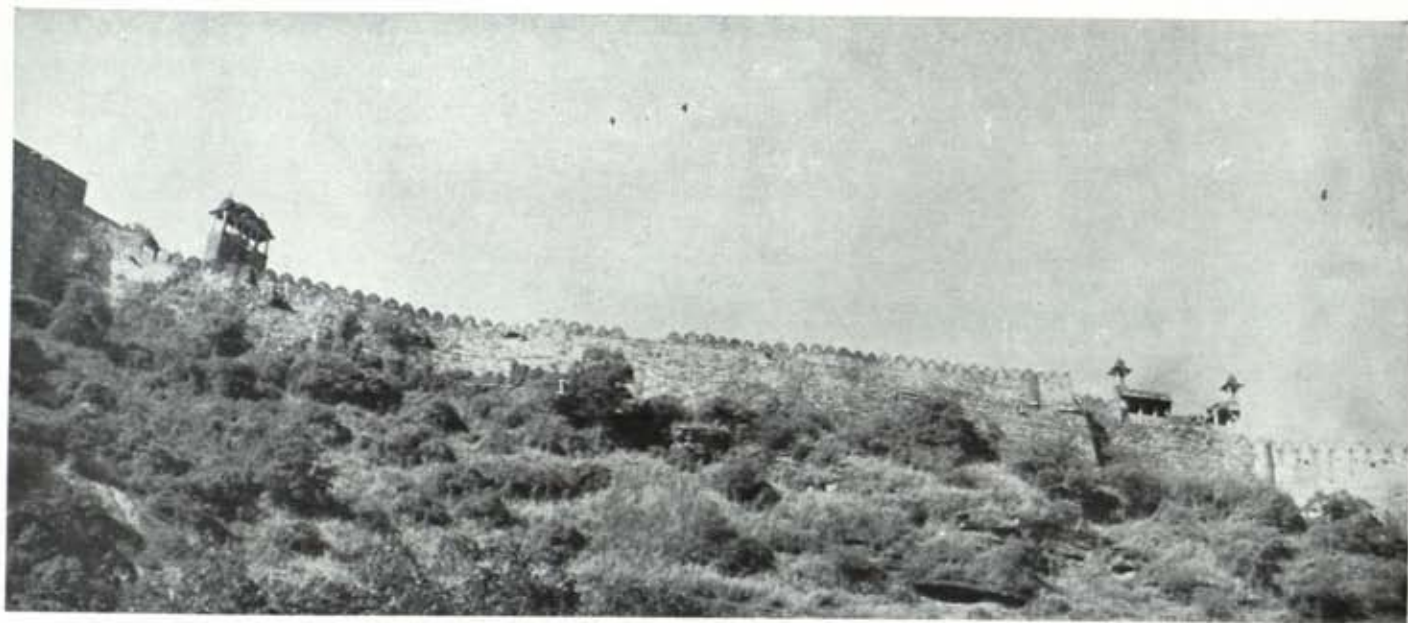
4. The last word of this epigraph is not झिलमिली (jhilmili) as has been read, obviously with a preconceived notion, by H.N. Dwivedi at the behest of Mr Arthur Hughes, I.C.S. (cf. *Gwalior-ke-Tomar*, Gwalior, 1976, p. 379).



I. Suraj Kund, Gwalior Fort



II. Suraj Kund, Gwalior Fort



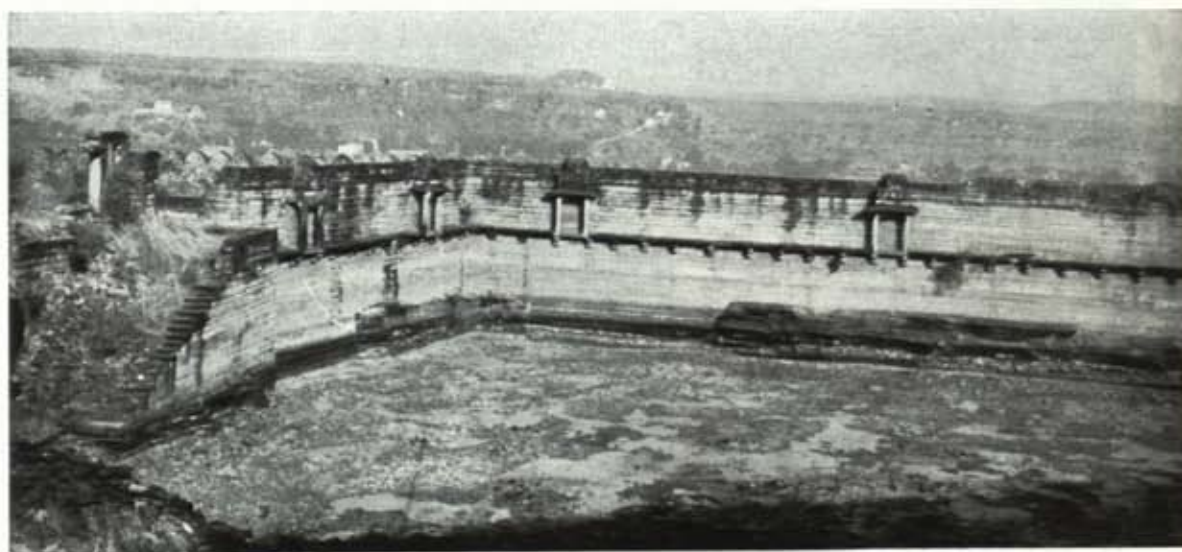
IV. Gwalior Fort
III. Northern Watch Tower, Gwalior Fort (above)



V. Urwahi Paur, Gwalior Fort

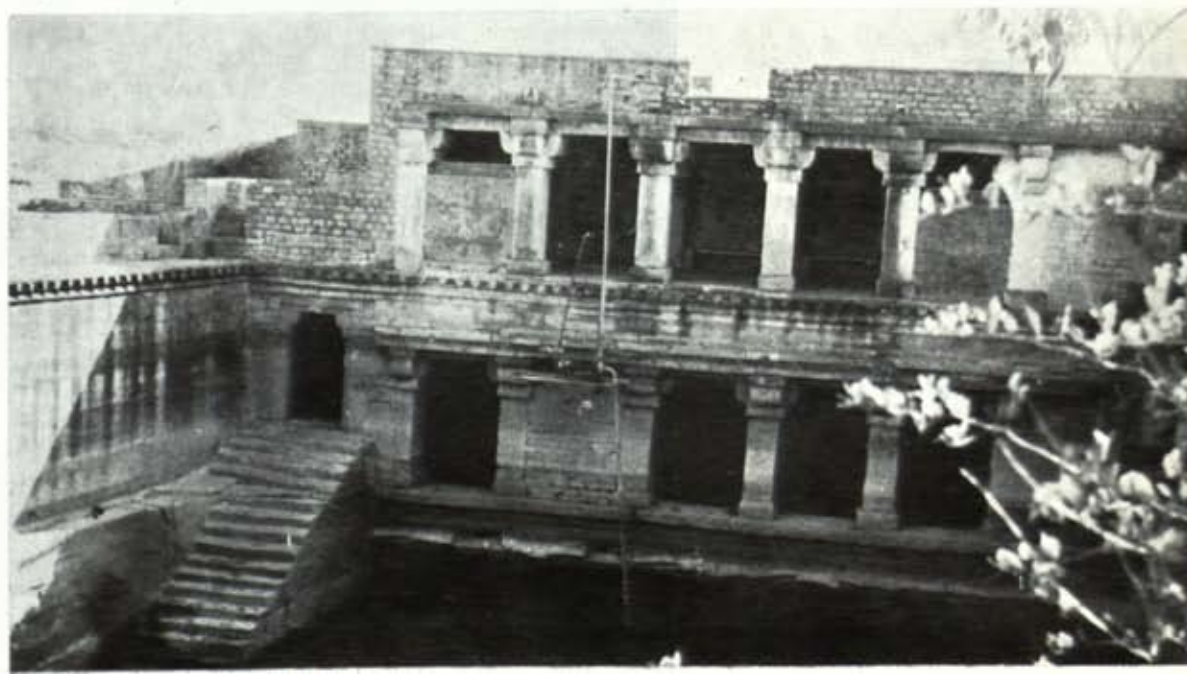


VI. Man-Sarovar,
Gwalior Fort



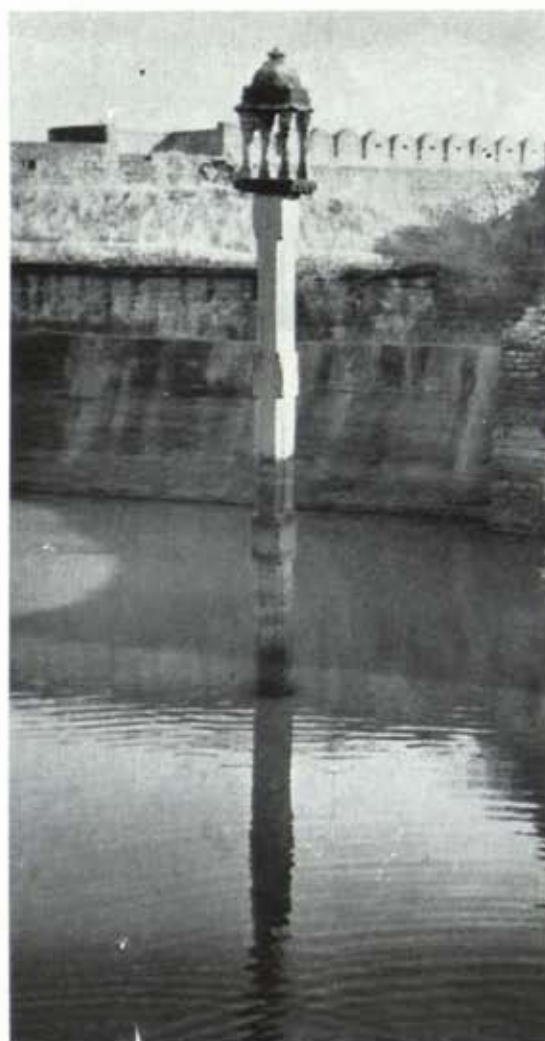
VII. Man-Sarovar,
Gwalior Fort

VIII. Rani Tal,
Gwalior Fort





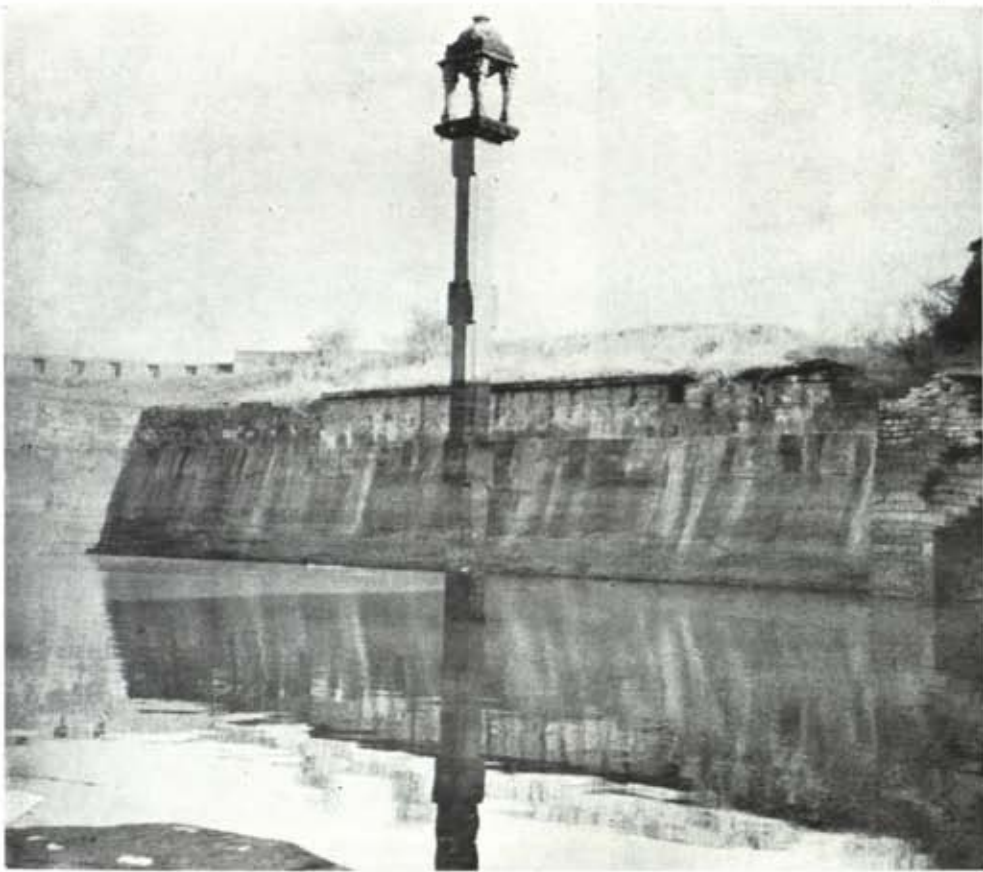
IX. Katora Tal, Gwalior Fort ↑



XI. Ek-Khambha Tal, Gwalior Fort →



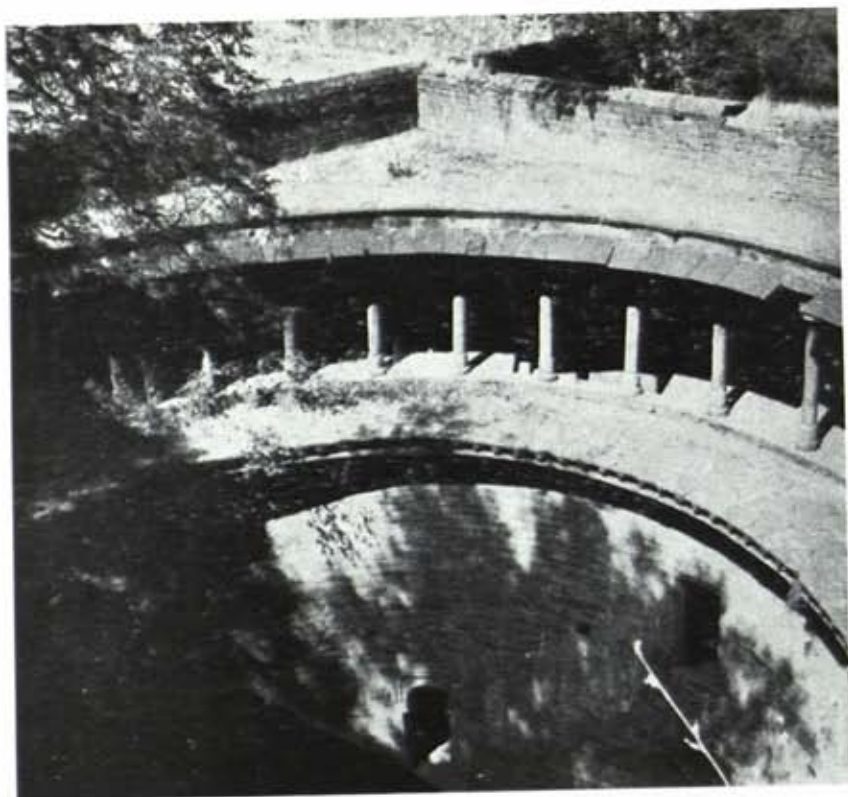
X. Central Tower of the Katora Tal



XII. Central Pillar of the
Ex-Khambha Tal

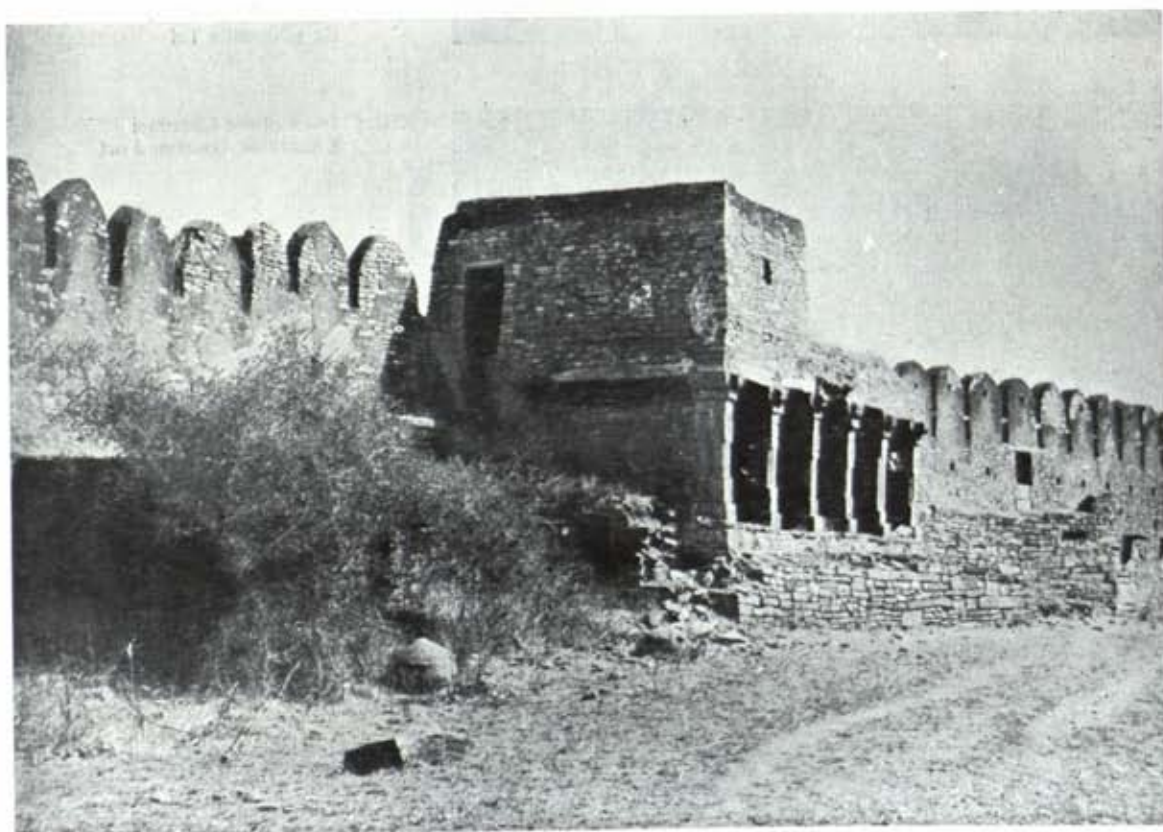


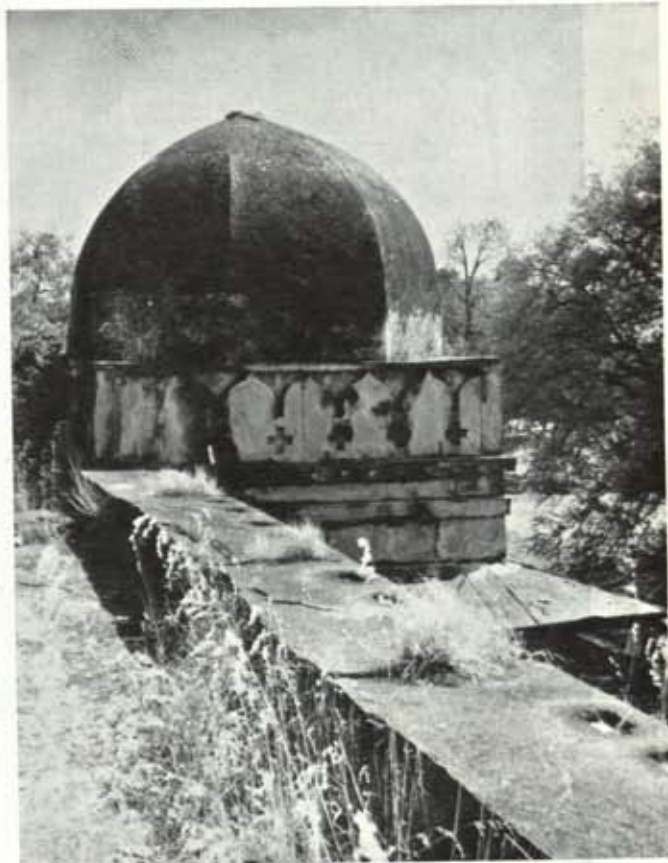
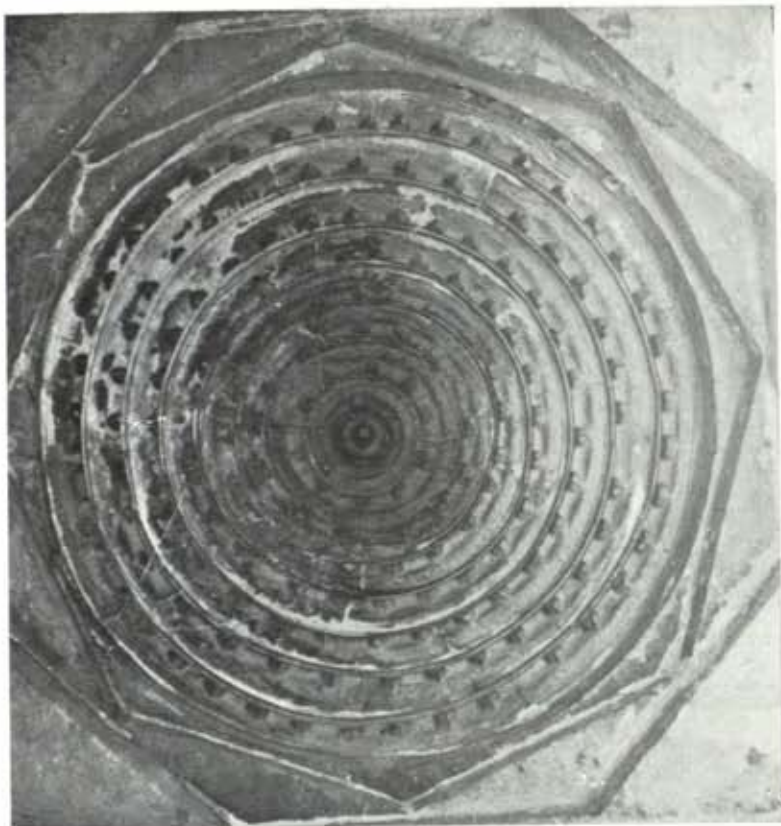
XIII. Iwan of the Chaurasi
Khambha, Gwalior Fort



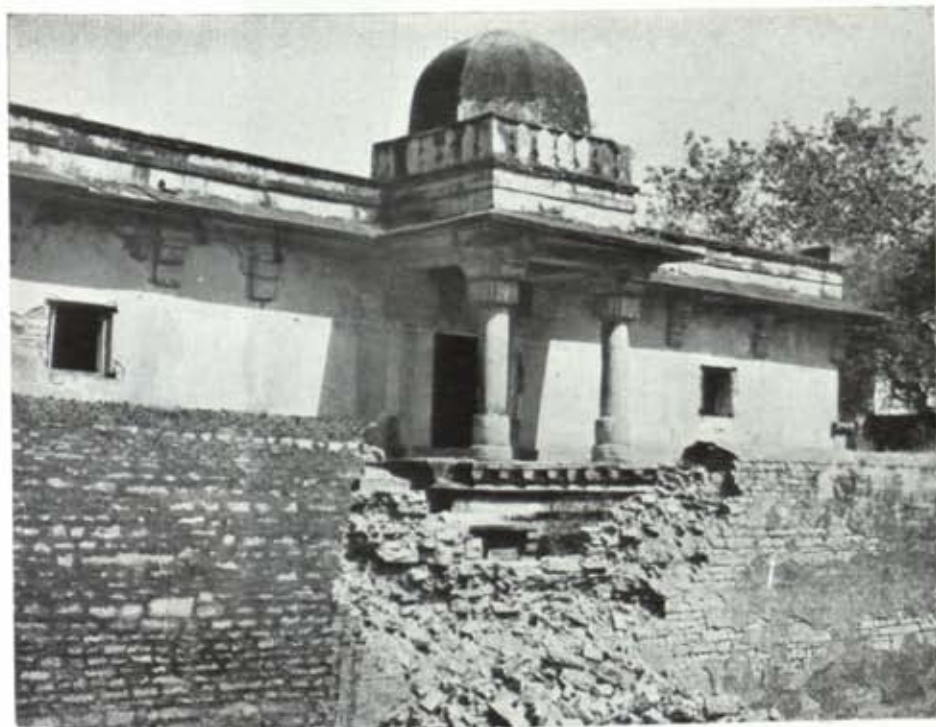
XIV. Step-Well of the
Chaurasi Khambha,
Gwalior Fort

XV. Pavilion near the
Chaurasi Khambha,
Gwalior Fort





XVIII. Dome of the Eastern Porch

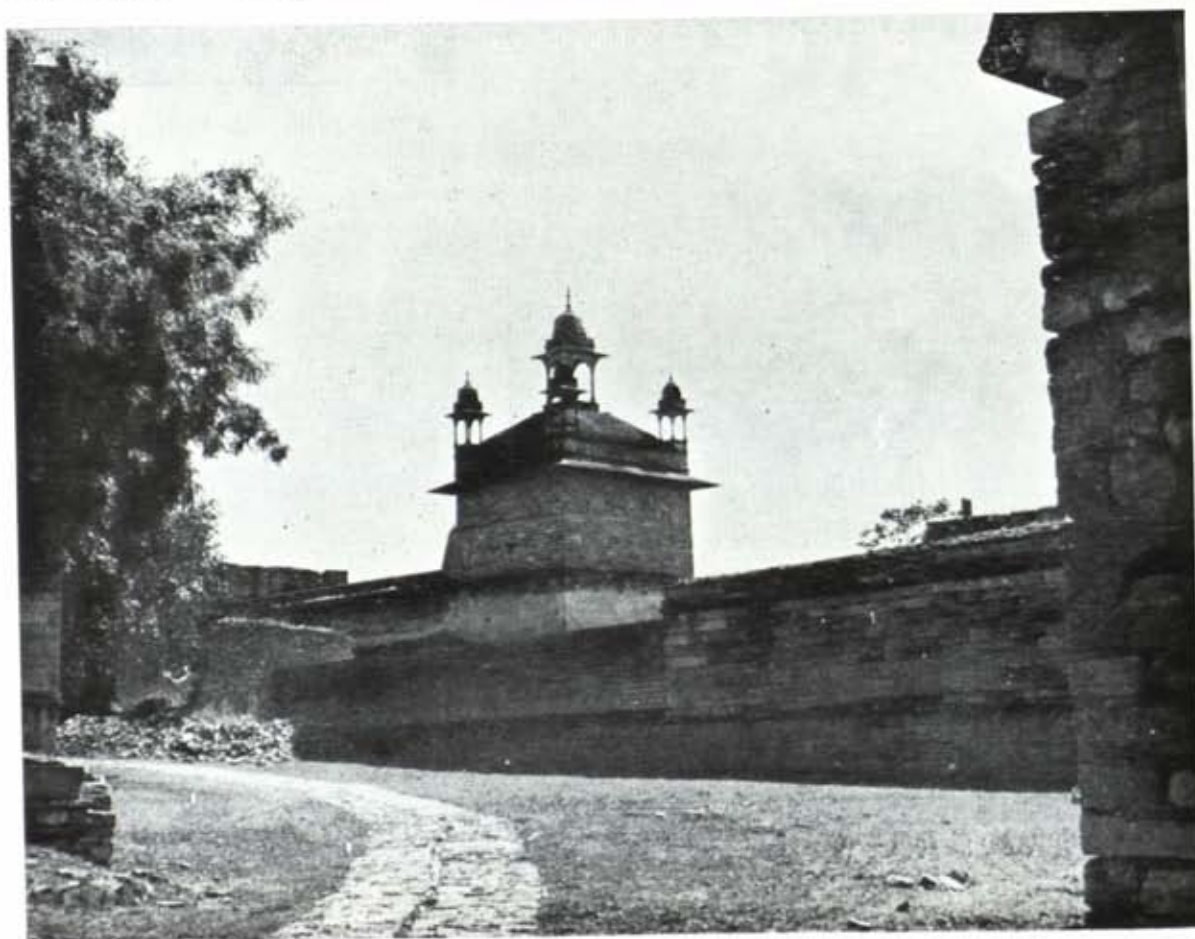


← XVII. Eastern Porch, Chaurasi Khambha

XVI. Vitāna of the Eastern Porch,
Chaurasi Khambha (above left)



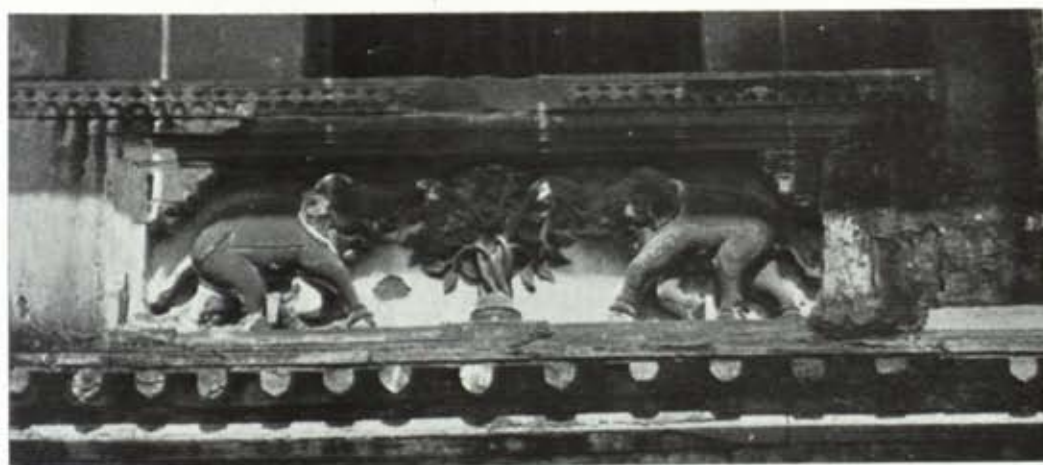
XIX. Arabic-Persian Inscription of the Chaurasi Khambha



XX. Vikram Mahal, Gwalior Fort



XXI. Eastern Facade of the Kirtti Mandir, Gwalior Fort



XXII. Pair of Elephants, Gwalior Fort



XXIII. Northern Composition of the Kirti Mandir, Gwalior Fort



XXIV. Western Facade of the Man Mandir, Gwalior Fort



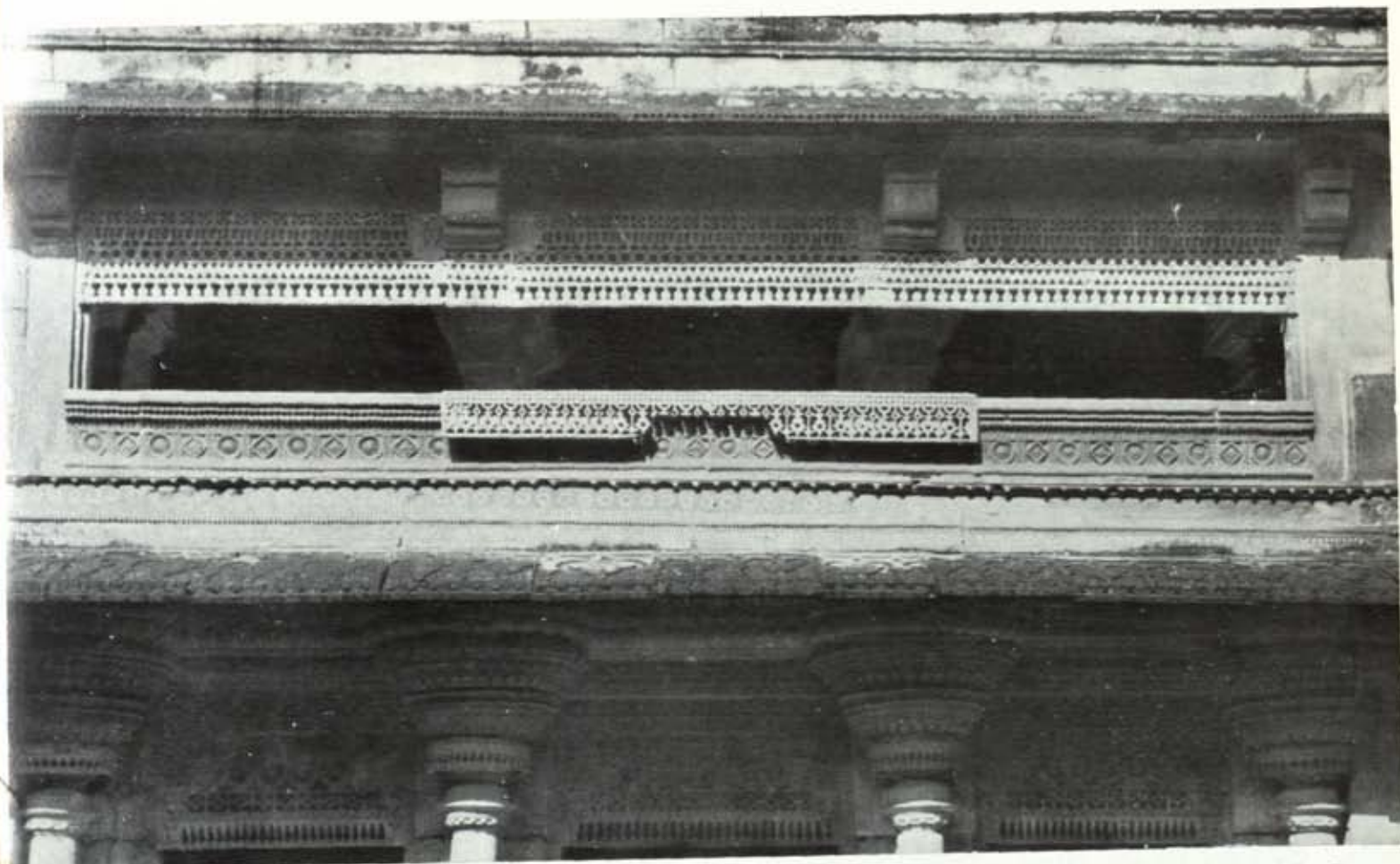
XXV. Pillar and Capital, Hall 'A' on Court 'X', Man Mandir



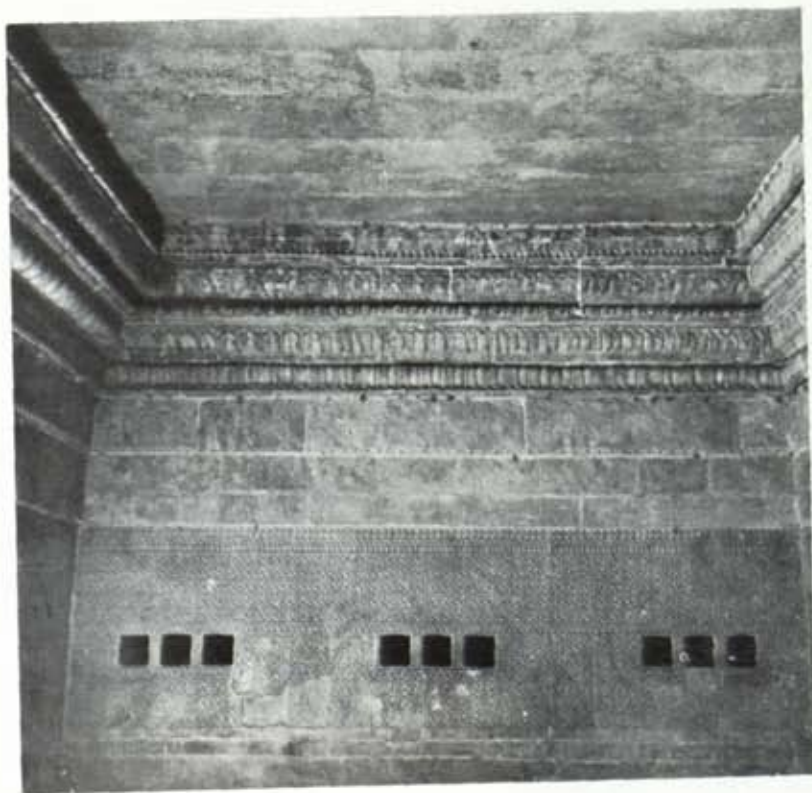
XXVI. Ceiling of the Hall 'A'



XXVII. Northern Facade of Court 'X'



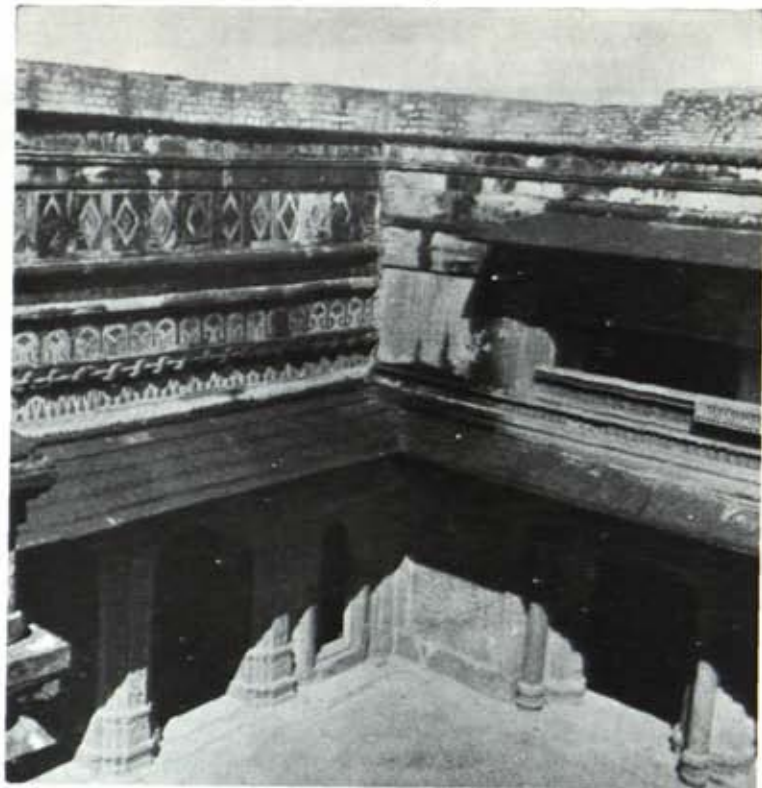
XXVIII. Northern Facade of Court 'X'



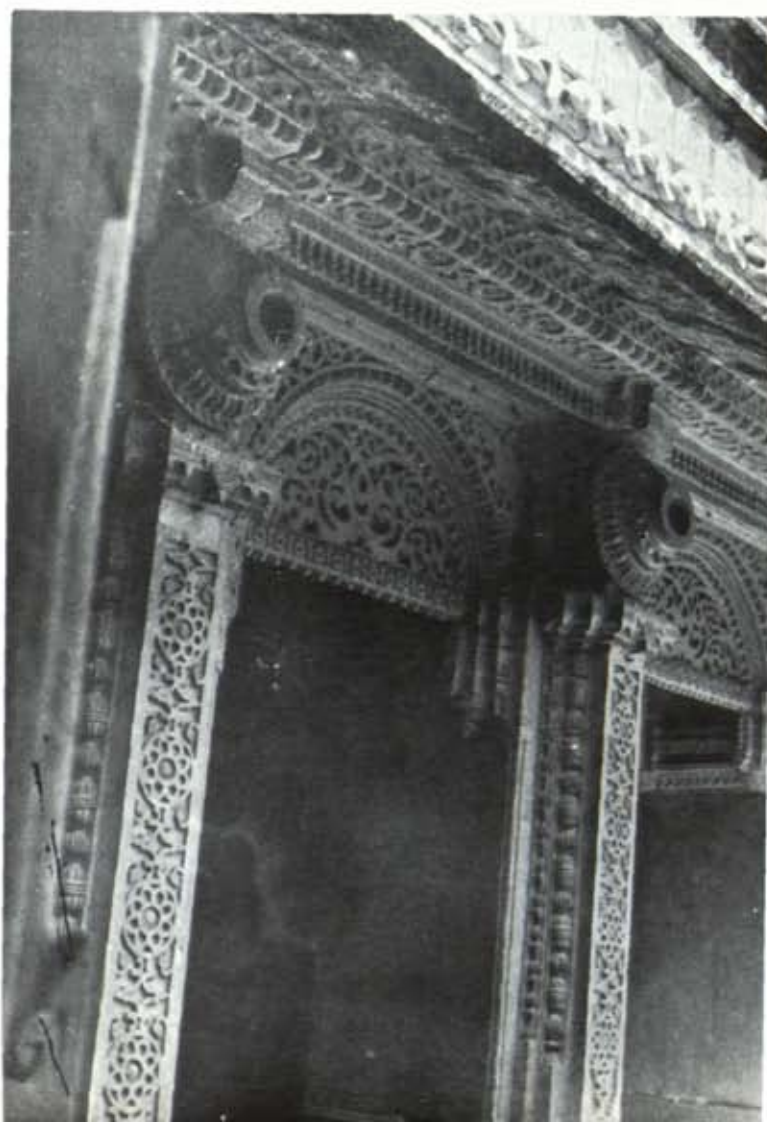
XXIX. Ceiling of the Hall 'B'



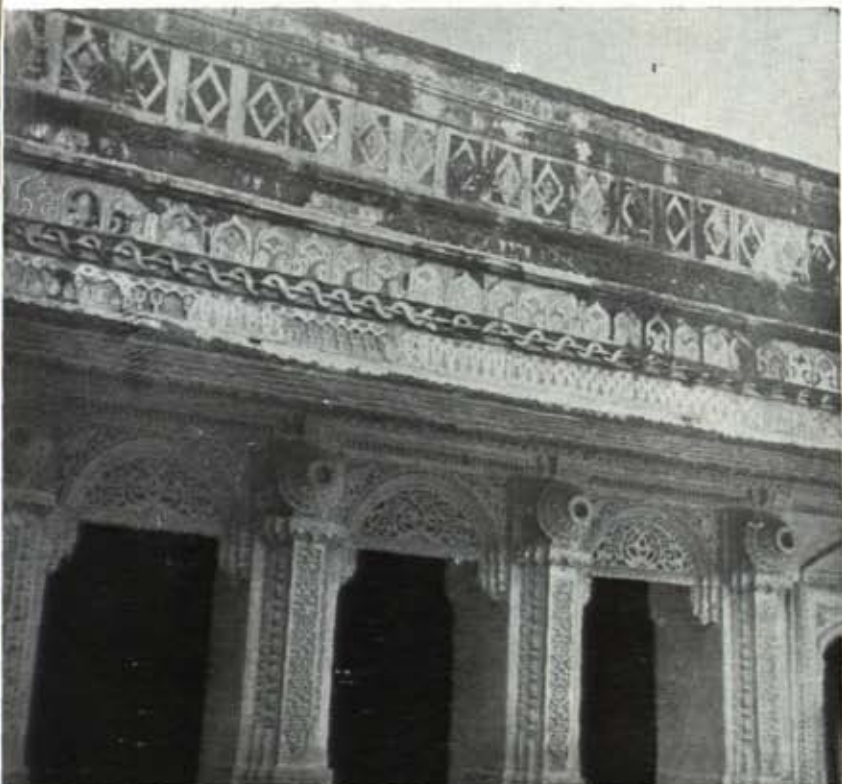
XXX. Corridor attached to Hall 'B'



XXXI. Western Facade of Court 'X'



XXXII. Doorways of the Hall 'B'



XXXIII. Doorways of the Hall 'B'



XXXIV. Peacock Brackets of the Eastern Facade of Court 'X'



XXXV. Vyāla Brackets of the Southern Facade of Court 'X'



↑ XXXVI. Ceilings of the Hall 'D'



XXXVII. Arched Ceilings of Room 'C'



XXXVIII. Ceilings of the Hall 'E'

जोगे ॥ श्री गोपाचल दुर्गे तोमरवंसे
 महाराजाधिराज श्री मानसिंहदेव विजैराज्ये ॥
 तस्य प्रधान सरषणं मुलवार ज्ञातीय साह
 वेमसाह श्री टोकर तसलीम साराण तेन
 गंगोला तडागं निर्मली कृता । आचन्द्राकं
 चिरनद्यात् । शुभं कल्यान्तं श्रियोस्तववु ।
 लिखितं श्रीमाल ज्ञाती साजस ॥ सूत्रधारि
 पजू ॥ श्री इष्ट देवताप्रसादास्तु ॥ श्री ॥ ॥ श्री ॥ ॥ श्री ॥⁵

(g) *Inscription of the Gangola-Tal (1551/1494)*

सिधे संवत् १५५१ वर्षे जेस्टवदे २ गूरजैर
 श्रीराजमानसीधदेवा वचनतु
 पूषाना सटोजरामलगेर सारयौ ॥ राजा
 की तसलिमा कामु जायै ॥
 सुत्रधरे पजू महलनं १ खीरसु १
 मनूव १ सानेग १ रमा बढई रमू
 सिलहरी गने घनूत महं ॥ चाहु १३ । ठूवल
 सूवाकयो वोहरीत्र ॥⁶

5. This and the following inscription were found carved on the bed of the Gangola-Tal when it was cleaned and desilted by the Sikhs recently. The epigraphs were not recovered and again sank into water. The text is reproduced here from the stampages taken by Dr S.L. Katare and first printed by his consent by H.N. Dwivedi, op. cit., pp. 130-31.
6. There are a number of other epigraphs of Raja Mansingh in the fort. But they are fragmentary and unreadable; mostly they are carved in rock.

APPENDIX D

Babur's Inscription dated V.S. 1586/A.D. 1529 in the Portal of the Chaurasi Khambha, Gwalior Fort

संवत् १५८६ वर्ष का—

बाबु (ब) (र) ना (नृ) पतिसहि (शाह) गजी तकेनज (?)

षोज (ख्वाजा) ना (र) हीम हह (दाद) कम हनस (?)

कनफुनाम (?) घी (बिन) अलह (अल्ला) दाद

धनासनी—

APPENDIX E

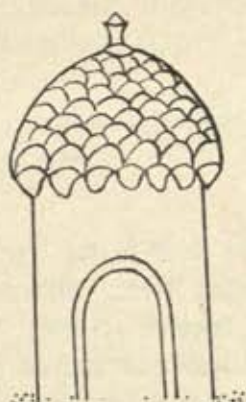
Narayandas's Account of the Building of Man-Mandir (Chhitai-Charit Text) (महल-निर्माण)*

जे प्रवीन पाहन सुतधारा । बीरा दीनौ राइ हकारा ॥ ११३ ॥
 कमठाने कहं आयसु भयो । अगनत दवं काम लगि दयो ।
 गुनी लंक गीगौ गुन दासू । जानहि सिलप ते बहुत अभ्यासू ॥ ११४ ॥
 बोलि जोतिषी साधी लग्ना । रची नीव सुभनीके सगुना ।
 खेतपातु पूजिउ करि भाउ । अविचल होउ ग्रेह त्रिठ राउ ॥ ११५ ॥
 गही नीव भारी चौराई । पुरिप सात कइ मेरि भराई ।
 चौबारे चउखंडि चौडोरा । कलिचा बने कांच के मोरा ॥ ११६ ॥
 एकते काठन पाहन पाटे । नव नाटक नव साला ठाटे ।
 नवीन रंग कुरि अति रबनीका । ठांव ठांव सोने के टीका ॥ ११७ ॥
 बादल घनह उठी घन घटा । रचे अनूप अटारी अटा ।
 छाजे भरोखा रचे अनूपा । जिन्हहि उभकिते रहे जे भूपा ॥ ११८ ॥
 कठछपर सतखने अवासा । कंचन कलश मनहु कविलासा ।
 रची केरि कांच की कडारी । रहिहि भूलि भ्रमु चतुर विचारी ॥ ११९ ॥
 बावन वस्तु मिलइ कइ बानी । अति अनूप आरसी समानी ।
 रची चित्रसारी चितलाई । देखत ही मनु रहिउ सिहाई ॥ १२० ॥
 मानिकु चौक ते मन मोहनी । रची अनूप चोर मिहचनी ।
 कीये भौहरे अन अन भांती । तिनमहि जनि अधियारी राती ॥ १२१ ॥
 बने हिंडोरे कंचन खंभा । मानहु उपजे उकति सयंमा ।
 करि सिंगार जे अधिक बिचारी । मानहु भरत की भरी सुनारी ॥ १२२ ॥
 सभा जोरि जहं वइसइ राऊ । फटिक पीठ बंध्यो सो ठाऊ ।
 चकई चकवा कीए कडारी । जल कूकरी मटामरियारी ॥ १२३ ॥
 तिहठां और जिते जल जीवा । भरे भरति की साजति नीवा ।
 मेच्छ कच्छ लघु दीरघ घने । ते सब चलहि द्रिष्ट कर बने ॥ १२४ ॥
 सभा सरोवर सोभइ तइसो । हथिनापुरि पांडव कउ जइसो ।
 और राइ जे देखहि आई । बस न सकहि रहहि भरमाई ॥ १२५ ॥
 चंदन काठ कठाइल आना । ते ग्रीषम रितु हेम समाना ।
 चउबारे चउपखा सुदेसा । बरिखा बिरमइ तहां नरेसा ॥ १२६ ॥
 सोने के पीपरि पंचासा । बरिखा बरखइ बारह मांसा ।
 गोमट खरबूजा आकारा । तिन्हहि पवारी जरे किवारा ॥ १२७ ॥

*Cf. *Chhitai-Charit* of Narayandas (ed. H.N. Dwivedi and Agarchand Nahta) (Gwalior, 1960), pp. 15-17 and 176-79.

चहुंघा खुटी कांच की भली । रहइ परेवा तहं जंगली ।
 तिहं ठां सूवा सारो साखा । खुमरी बोलहिं अन अन भाखा ॥ १२८ ॥
 एक महल नीर कौ दुराउ । दीसइ तह वइसन कौ ठाउ ।
 देखति बुधि न होइ सरीरा । चलति बूझीयइ गहर गंभीरा ॥ १२९ ॥
 हिलबी कांच भांति कइ करी । दीसइ जनु कालंदी भरी ।
 जिहं ठां राइ तणी जिउं नारा । दीसइ जमुना जल आकारा ॥ १३० ॥
 जिनस जिनस मंदिरि गिन सारा । अरु सब ग्रह बने इकसारा ।

CHAPTER II



BABUR'S INNOVATIONS

BABUR ascended the throne of Farghana in Central Asia in the twelfth year of his age, in the month of Ramzan A.H. 899/June A.D. 1494 at the difficult time when his adversaries were casting covetous eyes upon his tiny kingdom. This was the beginning of his turbulent career which was full of constant struggle and strife, and more failures than successes, until it closed at Agra in 1530. We know him as a general and the founder of the great Mughal empire in India. In spite of his thirty-six years' ventures in war, he was essentially a man of peace: honest and graphic author, poet, ardent lover of nature and maker of gardens, artist and, above all, a humanist. Much of it he had inherited as a family trait; a great part of his culture came through his early training in his father Umar Sheikh Mirza's household. The home milieu in which Babur was brought up favoured high standards of life and culture, and excellence in fine arts. His mother Qut-luq Nigār was a high-born lady and a scholar's daughter who would give her children a refined taste and love of nature and arts. Her mother Aisān-Daulat and mother-in-law Shāh Sultān Begum, both accomplished and cultured ladies, would also help the young boy, through their deep affection and tender care, to grow in an atmosphere which would leave an unobliterable cultural impress upon his mind and would make him what he was. Two great men: Yūnus Khān, the scholar, the painter, the musician and the artist; and the saintly Khwājah Ubaidullāh Ahrārī also share the making of the man in Babur. It was the cumulative influence of this environment and education that young Babur learnt to revere wisdom and virtue, appreciate fine arts: poetry, music and painting and, above all, pine for

beauty. This influence was so lasting that even thirty-six years' hard struggle with the realities of life could not erase or obscure it and Babur died as great an aesthete as the training had made him at an early age.

(a) *Organisation of the Environment*

The Hindus attached sanctity to the sites near water from the earliest times. Their 'tirthas' (centres of pilgrimage) were, almost invariably, situated on the bank of a river, sea-shore, lake or stream. Water, which is the life-giving reservoir of existence, was considered to be equally purifying. The presence of gods was felt more strongly and intimately on the sites near water than anywhere else. Hence the *Bṛhat-Samhitā* which can be assigned to the middle of the Gupta period, c. 5th century A.D., enjoined:

कृत्वा प्रभूतं सलिलमारामान् विनिवेश्य च ।
देवतायतनं कुर्याद् यशोधर्माभिवृद्धये ॥¹

(For fame and religion, a big tank with abundant water should be excavated and a garden laid, and there the temple should be built.)

And:

सलिलोद्यानयुक्तेषु कृतेष्वकृतकेषु च ।
स्थानेस्वेतेषु सान्निध्यमुपगच्छन्ति देवताः ॥²

(Gods come near the places which have water and gardens, either natural or artificial.)

And:

वनोपान्तनदीशैलनिर्भरोपान्तमूमिषु ।
रमन्ते देवता नित्यं पुरेषूद्यानवत्सु च ॥³

(Gods reside near forests, rivers, mountains, rivulets and in the cities which are full of gardens.)

The Hindus, thus, inseparably associated their religion with water

and natural surroundings. The Buddhists and the Jainas simply followed them when they selected the sites of Ajanta and Bagh, and Abu, Palitana and Junagadh respectively where mountains, forests, rivulets and a beautiful environment—so necessary in a tropical climate—were naturally available.

As early as in the *Rāmāyaṇa* of Vālmiki, systematically laid gardens have been mentioned:

उद्यानाम्रवणोपेतां महतीं सालमेखलाम् ।
(Bālakāṇḍa, V, 12)

(Giving a description of Ayodhya, the poet narrates that there were theatres for women everywhere; there were great gardens with mango groves which were adequately enclosed.)

The *Sundara-Kāṇḍa* contains beautiful references of Aśoka-Vāṭikā, the famous garden of Rāvaṇa in Laṅkā (XIV, 1-4, 25-26). At one place, the poet describes it thus:

कृत्रिमां दीर्घिकां चापिपूणां शीतेनवारिणा ।
मणिप्रवर सोपानां मुक्तासिकतशोभिताम् ॥
विविधमृगसङ्घैश्च विचित्रां चित्रकाननाम् ।
प्रासादैः सुमहद्भिश्च निर्मितैर्विश्वकर्मणा ॥
काननैः कृत्रिमैश्चापि सर्वतः समलंकृताम् ।
ये केचित् पादपास्तत्र पुष्पोपगफलोपगाः ॥
(Sundara-Kāṇḍa, 33-35)

(The artificial tank was full of cold water; its stairs were made of jewels and sand of pearls covered them. Viśvakarmān built wonderful palaces in this garden which was inhabited by birds and animals. There were artificial gardens. All trees were flowering and fruit-giving.)

References as to the laying of palace-gardens and tanks have been made in the *Artha-Śāstra* of Kauṭilya (4th century B.C.) (e.g., I, 15.19; I, 16.20; II, 18.2) which show that the ancient Hindus were not wholly dependent on the natural groves but laid down gardens also, which were properly maintained.

It is, however, in the literary works of the prosperous Gupta age that the gardens and their water-devices have been most abundantly mentioned and sometimes graphically described. Śūdraka in his famous

play *Mṛchchhakatika* alluded to the garden of Chārudutta (Act V) and the Puṣpakaraṇḍaka Garden (Acts VI & VIII). Kālidāsa in his *Raghuvamśa* mentioned the gardens of Ayodhya where the citizens were merry-making when Rama saw them from the terrace of his palace:

विलासिभिश्चाभ्युषितानि पौरैः

पुरोपकण्ठोपवनानि रेमे ॥

(XIV, 30)

In the *Kumārasambhava*, he described the garden of Auṣadhipraṣṭha, the capital of the King Himālaya (VI, 46). Viśākhadutta described an old garden in his famous play *Mudrārākṣasa* (VI, 11-13). *Ratnāvali* of King Harṣa contains a vivid description of the Makaranda garden of Kauśāmbī (I, 17-18; III, 8). There is no doubt that most of these accounts deal essentially with the natural phenomena, e.g., a wide variety of trees, blooming flowers, their attractive colours and sweet fragrance, humming bees, cold breezes, natural water-sites and a pleasant atmosphere and speak little of horticulture or artificial water-devices. It seems that gardens were generally laid on natural sites on the bank of a river or tank where trees grew by themselves and the gardener was only required to keep them in trim and order. A garden, therefore, until we go through the accounts of *Kādambarī*, was more a forest or a grove rather than a garden in the technical sense of the term. Flower-plants were rare and there was no arrangement of artificial water-devices.

However, in Bāṇa's *Kādambarī* (first half of the 7th century A.D.) which is probably the best treatise available on the subject in ancient India, we come across graphic descriptions of palace-gardens and water-devices. In its Ujjayini-Varṇan (I), Bāṇa describes the gardens which were situated on the outskirts of the city. Like his contemporaries, the poet portrays a beautiful picture of nature. More important than this is his allusion to the method of irrigation and a wonderful display of water-devices which were then used in the gardens. Bāṇa thus mentions 'Arghaṭṭi' (अरघट्ट) or 'Rehaṭṭi' (रहेट्ट), now popularly, though wrongly, known as the 'Persian Wheel':

चलित-जल-घटी-यन्त्र-सिच्यमान ।

Water was supplied to the garden through an efficient system of these Rehaṭṭis which were constantly worked. While describing the merry-makings of Raja Tārāpiṇḍa of Ujjain (Rāja-Bhoga-Vilāsa-Varṇan V), Bāṇa mentioned the indoor ponds of the palace for private swimming.

Again, he portrayed beautiful scenes of the gardens of the capital of Gandharvarāja Chitraratha, situated in the Hemakūṭa mountain (Kanyā-purodanta-Vaṇṇan LXXXV) almost with the precision of a painter. It is, however, in the Kādambarī-Hima-Gṛha-Vaṇṇan (CVIII) that his description of garden and artificial water-devices is most magnificent and vivid. Chandrapīḍa went to see Kādambarī in her garden where she was then resting; he was struck with the beauty of the place:

क्वचिद्—भय—तट—निखात—तमालपल्लव—
 कृत—वनलेखाः कुमुद—धूलि—वालुका—
 पुलिन—मालिनीश्चन्दनरसेन प्रवर्त्यमाना
 गृहनदिकाः क्वचिन्निचुल—मञ्जरी—रचित
 रक्त—चामराणां जलाद्रं—वितानकानां
 तलेषु ससिन्दूर कुट्टिमेषु अस्तीर्यमाणानि
 रक्तपङ्कजशयनानि क्वचिदेलारसेन
 सिच्यमानानि स्पर्शानुमेयरम्याभिस्तीनि,
 स्फटिकभवनानि क्वचिच्छिरीषपक्ष्मकृतशाद्वलानां
 मृणालधारा—गृहाणां शिखरमारोप्यमाणानां धारा—
 कदम्ब—धूलिधूसरितानां यन्त्रमयूकरकाणां
 कदम्बकानि— ।

(In the garden he saw beautiful water-channels which contained sandal-water; there were tamāla trees on their banks which were otherwise covered with lotus-sand. At a place, beds were provided beneath the hijjala trees; they were made of red-lotus flowers and were shaded by vitāna of wet mañjarī flowers. There were pavilions which had beautiful walls of transparent granite which could only be felt by touch; ilāyachī scent had been sprayed in these pavilions. Fountains were beautifully provided amidst clusters of flowers and their stems. These fountains, when worked, appeared like the dancing peacocks among those splendid groves. They sprayed water all around as if they were scattering petals of flowers.)

And:

क्वचित् क्रीडित—कुत्रिम—करि—कलभ—
 यूथकाकुलीक्रियमाणाः काञ्चनकमलिनीकाः,
 क्वचिद् गन्धोदककूपेषु बद्ध—काञ्चन—
 सुधा—पङ्क—कामपीठेषु—स्थूल—विसलता—
 दण्ड—घटितारकाणि कृतक—केतक—जल—
 द्रोणिकानि कुवलयवली—रज्जुभिग्रथ्यमानानि

पत्र—पुट—घटी—यन्त्रकाणि, क्वचित्
स्फटिकबलाकावली—वान्त—वारिधारा—
लिखितेन्द्रायुधाः सञ्चार्यमाणा
मायामेषमालाः— ।

(At a place, artificial animals played with golden stems of lotus, producing a captivating sight. There were wells which contained sandal-water; their platforms were gorgeously gilded with powdered gold. Rehanṭs were worked into those wells for drawing water. Their wheels, spokes and even the pots which drew water were made of vegetational stuff, e.g., of creepers and leaves. At a place, glass fountains were shaped as 'bagulas', through whose mouth water constantly splashed; the spray of water threw into the atmosphere a rain-bow and looked like artificial clouds on account of the great volume of water. This was an artificial arrangement made dexterously in faithful imitation of nature.)

And:

क्वचिन्मुक्ताफलक्षोद—रचितालवालकान्
अनवरतस्थूल—जलविन्दु—दुष्छिनमुत्सृजतो
यन्त्रवृक्षकान्, क्वचिद्विधुत—पक्ष—
निक्षिप्त—शीकरानीत—नीहारा भ्रमन्तीर्यन्त्रमयीः
पत्र—शकुनिश्रेणीः... दिनकरकरैरपि सर्वतो
जलयन्त्र—धारा सहस्र—समुत्सारितैरतिशीत—
स्पर्शभयनि—वृत्तैश्च परिहृतम्..... ।^{१०}

(There were mechanical fountains, the channels of which were neighboured by flower-beds filled with pearl-powder. Water-sprays were continuously falling upon those glittering beds, presenting an extremely beautiful scene. There were rows of artificial birds which moved mechanically into those spraying clouds... There were thousands of such streams of water coming out of the fountains on all sides producing an extremely cool and pleasant atmosphere into which even the rays of the sun could not penetrate.)

Bāṇa's descriptions are full of a subtle passion which comes out of a deep feeling of beauty. He is almost lost in the beauties of the gardens which he graphically portrays in inimitable words and phrases. Bāṇa, this way, excels any other poet or playwright of ancient India, of any age either anterior or posterior to him.

There are some extremely interesting references to artificial water-devices and water-houses in the *Samarāṅga-Sūtradhāra* of Raja Bhoja of Dhar (A.D. 1018-55). They are discussed in detail in the chapter on mechanical contrivances entitled 'Yantra-Vidhāna'; the vāri-yantra (water-machines) were both for sport and utility:

इदानीं प्रक्रमायातं वारियन्त्रं प्रचक्ष्महे ।
क्रीडार्थं कार्यसिद्धयै च चतुर्धातद्गतिविदुः ॥⁶

Their working involved raising of water to overhead tanks and its manipulation in several pleasing modes through pipes and channels. Underground water-channels were also used for effect:

सलिलं सुरङ्गदेशानीतं निम्नेन वत्येना दूरे ।
अद्भुतमम्भस्थानं तदिह समोच्छ्रायतः कुरुते ॥⁷

Five types of dhāra-grhas (water-houses) were also prescribed, one among them, viz., jalamagna (जलमग्न), being an underground palace. These houses had canals, water-channels, pipes, ponds, cascades and fountains, the last shaped as elephants or women figures which sprayed water through their trunks in the former case and breasts and navel in the latter.⁸ The author specifically noted that the king who enjoys sprays and ripples of water in a cool water-house as this, during the hot weather, is Indra the Lord of Gods:

य एतस्मिन् गाढम्लपितघनघर्मव्यक्तिकरे
शुचौ धाराधाम्नि स्फुटसलिलधारे नरपतिः ।
सुखेनास्ते पश्यन् विविधजलशिल्पानि स भवेन्न
मर्त्यः किन्त्वेष क्षितिकृतनिवासः सुरपतिः ॥⁹

That this organisation of water-devices was as much for cooling and providing relief from the scorching heat of the sun, as for pleasure and sport has again been reiterated by him:

इदं नानाकारं कुलभवनमाद्यं रतिपते—
निवासश्चित्राणामनुकरणमेकं जलमुच्चात् ।
पयःपातैर्ग्रीष्मे रविकरपरीतापशमनं
न केषामत्यर्थं भवति नयनानन्दजननम् ॥¹⁰

The *Samarāṅga-Sūtradhāra* is the greatest treatise of the Hindus on secular architecture; it also marks the stage when the art itself had

reached the highest and the most magnificent expression of affluence. But, while it provides for such arrangement of artificial water-devices, it may be noted, justifiably, that there is no reference to landscape-architecture. Water-devices have been treated as a subject in itself under the 'Yantra-Vidhāna' (mechanical contrivances) without anything to do with the aesthetic aspect of an architecture, viz., landscaping, of which we hear for the first time under the Great Mughals.

These literary and śilpa works give an idea of the gardening and water-devices of the ancient Hindus; they show that gardens were laid and water-devices were used in palatial architecture in ancient India. Architectural examples to corroborate these descriptions, however, unfortunately, are no longer extant. Though as late as in the 12th century A.D., Kalhaṇa in the *Rājataranginī* mentioned well laid-out gardens and their irrigation-system, e.g.:

सोमतीर्थं तथा तोयोद्यानादुद्द्योतितान्तिकम् ।

(VIII, 3360)

(King Jayasimha founded Somatīrtha in Kashmir about 1150 and laid there a garden which was constantly irrigated by a canal; it could have been a garden of the class of Shālīmār and (Nishāt), but no trace of these gardens has survived.)

The *Rājavallabha* which is an eminent Vāstu-text dealing with secular architecture, of Sūtradhāra Maṇḍana who was patronised by Maharana Kumbha of Mewar (1433-68) also contains some interesting references in this connection. Thus it enjoins that a garden should necessarily be provided with the rāja-prāsāda or the palace of the king for his play, a maṇḍapa be given in this garden and there be fountains in the maṇḍapa.¹¹ A system for fountains, channels and ponds has also been laid down in the following verse¹² which shows that the technique of artificial water-devices was not only known to the Hindus in the 15th century, but such an arrangement had also been so largely in vogue that its textual provision had to be made when the theory was written down. It is a pity that no trace of the Hindu gardening, water-devices and landscaping has been found, without which the texts remain largely unintelligible.

Some pre-Mughal monuments of India which have survived the ravages of Time and Man, contain traces of artificial arrangement of water, chiefly in the palatial apartments. The water-supply at Vijayanagar (1336-1565) provides one of the most prominent examples. Stone

aqueducts have been unearthed there, which supplied water to the mansions through small baked-clay pipes set parallel to each other and embedded in hard mortar.¹³ A large tank supplied water to a covered reservoir and the Queen's Bath, through similar pipes.¹⁴ Water was handled in a way which made living comfortable. Similar arrangement of artificial running water was made in the palaces of Bidar built by Ahmad Shah (1422-36); traces of tanks, fountains and hammāms have been found there along with the existing ornamental gardens and water-palaces. Recourse to artificial water-devices was also taken at Mandu, the capital of the Khalji sultans of Malwa. The Nilakanṭha Palace had the benefit of a waterfall which entered into the quarter from one side and emitted out from the other. Cool shades of banyan trees and various pleasing devices of running, gurgling, splashing water give its interior an atmosphere which is full of ethereal beauty, quietude and repose. Its charming surroundings so moved Shah Budagh Khan, the veteran Mughal general¹⁵ that he renounced the world and became a recluse; he built this palace and inscribed the following Persian couplet in its central pavilion:

“Tavān kardan tamām-e umra-rā masroof ābo-gil,
Ki shāyad yak damī sāhib dīle eenjā kunad manzil.”

(I wasted my life in worldly affairs, it is here that I found its destination in the long last.)

The Jahaz-Mahal in the same deserted capital had been planned to stand amidst an artificial lake just to appear like a ship, hence the nomenclature: “Jahāz-Maḥal”. Constructed by Mahmud Khalji in the latter half of the 15th century, this palace demonstrates the keen desire of the patron and his architect to associate architecture intimately with water which would provide it with a beautiful setting and, at the same time, would reduce the mid-summer heat of the tropical country.

But for all practical purposes there was little or no arrangement of landscape-architecture or artificial running water when Babur descended in the plains of northern India in 1526. There was no hillside gardening and no rippling of water from one terrace to the other, with which Babur was too well conversant. He lamentably, and no doubt faithfully, recorded:

The greater part of the Hindustan country is situated on level land. Many though its towns and cultivated lands are, it nowhere has

running waters. Rivers and in some places standing waters are its running waters. Even where, as for some towns, it is practicable to convey water by digging channels, this is not done¹⁶. . . The towns and country of Hindustan are greatly wanting in charm. Its towns and lands are all of one sort; there are no walls to the orchard and most places are on the dead level plain. Under the monsoon-rains the banks of some of its rivers and torrents are worn into deep channels, difficult and troublesome to pass through anywhere. In many parts of the plains thorny jungle grows, behind the good defence of which the people of the pargana become stubbornly rebellious and pay no taxes. Except for the rivers and here and there standing waters, there is little 'running water'. So much so is this that towns and countries subsist on the water of wells or on such as collects in tanks during the rains.¹⁷

Babur came to Agra soon after the Battle of Panipat in May 1526. It was the hottest season and he was much tortured by scorching heat, hot winds (known locally as loo) and dust. He took recourse to the provision of running water and gardening which could cool down the atmosphere and give relief, as much as they could provide a beautiful landscape. He observed:

One of the great defects of Hindustan being its lack of running water, it kept coming to my mind that waters should be made to flow by means of wheels¹⁸ [see Plate LXXVIII for example] erected wherever I might settle down, also that grounds should be laid out in an orderly and symmetrical way. With this object in view we crossed the Jun-water [river Jamuna] to look at garden-grounds a few days after entering Agra. Those grounds were so bad and unattractive that we traversed them with a hundred disgusts and repulsions. So ugly and displeasing were they that the idea of making a *châr-bâgh*¹⁹ in them passed from my mind, but needs must! as there was no other land near Agra that same ground was taken in hand a few days later. The beginning was made with the large well from which water comes for the Hot-Bath, and also with the piece of ground where the tamarind-trees and the octagonal tank are. After that came the large tank with its enclosure; after that the tank and 'talar' [probably dalan] in front of the outer residence; after that the private house with its garden and various dwellings; after that the Hot-Bath. Then in that charmless and disorderly Hind, plots of garden were seen laid out with order and symmetry, with

suitable borders and parterres in every corner, and in every border rose and narcissus in perfect arrangement ... Khalifa also and Shaikh Zain Yunas-i-Ali and whoever got land on that other bank of the river laid out regular and orderly gardens with tanks, made running waters also by setting up wheels like those in Dipalpur and Lahore. The people of Hind who had never seen grounds planned so symmetrically and thus laid out, called the side of the Jun [Jamuna] where [our] residences were, Kabul.²⁰

As a matter of fact, Babur was in search of a hillside spring around which he could lay symmetrical terraced gardens with water softly rippling from one terrace to the other in a series of waterfalls. Instead of the hillside, he came across the *level ground* on the bank of the river Jamuna at Agra where he intended to lay gardens. Hence his disgust and disappointment which he has faithfully recorded in his Memoirs! However, he ingeniously planned the land and though he could not get a hillside, he built artificial terraces with canals, ponds, water-chutes and cascades, and fulfilled his ideal of a garden.

Babur inherited this ideal of a *terraced-garden* from Persian tradition. Garden-craft was a favourite art in Persia and the references can be traced systematically as far back as to the Sassanian period,²¹ even if we set aside the fabulous hanging gardens of Babylon and terraced gardens of Persepolis. Gardening received greatest impetus in the Muslim period. Caliphs immensely favoured it. It is amazing that an underground aqueduct (qanāt) was brought from a distance of more than 18 miles to supply water to the walled garden and game-preserve at Qaṣr'al-Hair, dated A.D. 728-29.²² Writings of early Persian poets are full of delight in the gardens and their flowers. Particular mention may be made of Firdausi's *Shāh-Nāmāh* and Sa'dī's *Gulistān*. Sa'dī entitled his work '*Gulistān*' or the 'Rose-Garden' because, Sa'dī explained, "Mature consideration as to the arrangement of the book made me deem it expedient that this delicate garden and this densely wooded grove should, like Paradise, be divided into eight parts in order that it may become the less likely to fatigue."²³ The Garden of Paradise as it was promised to the faithful in the Quran was divided into eight parts or terraces and it was the ideal for the Perfect Garden. Hāfiz lavished unbounded applauses on the gardens of Shīrāz and so did the famous poet Umar Khayyām of Khorasan, who desired that his tomb "shall be in a spot where the north wind may scatter the roses over it". This came true!

The Persian garden almost as a rule was enclosed. The plan of this

garden was worked out in a regular arrangement of four squares often subdivided into smaller plots, with a lily-pond (or lotus-pool) or pleasure-pavilion in the centre. This was called the *chār-bāgh* or *chahār-bāgh* (four-quartered) plan. Four shallow canals ran at right angles from the central pool to the middle of the four sides. Flower-parterres and cypress-avenues bordered these canals. The Persians adored the cypress and the plane (*chenār*) trees the most. Cypress, the evergreen tree, was an ancient symbol of immortality and it frequently occurs in Persian art and literature. Plane is liked for its cool and refreshing shade.

Gardening was a national art in Persia. The spring, "the flowering season of the year with a wealth of bloom" brought a wonderful landscape around and deeply affected the imagination of the people. "As the snow melts, their whiteness is rivalled by the delicate sprays of early fruit blossoms as seen across the dark background of the cypress trees; while the pink mist of almond and apricot flowers shows in little patches of colour against the bare hillsides. Soon the ground under the trees is carpeted with bulbs, scillas, tulips, hyacinth, fritillaries and iris . . . lilac, jasmine and carnations follow; then last and best of all come the roses."²⁴ No doubt, love of flowers assumed a national character in Persia.

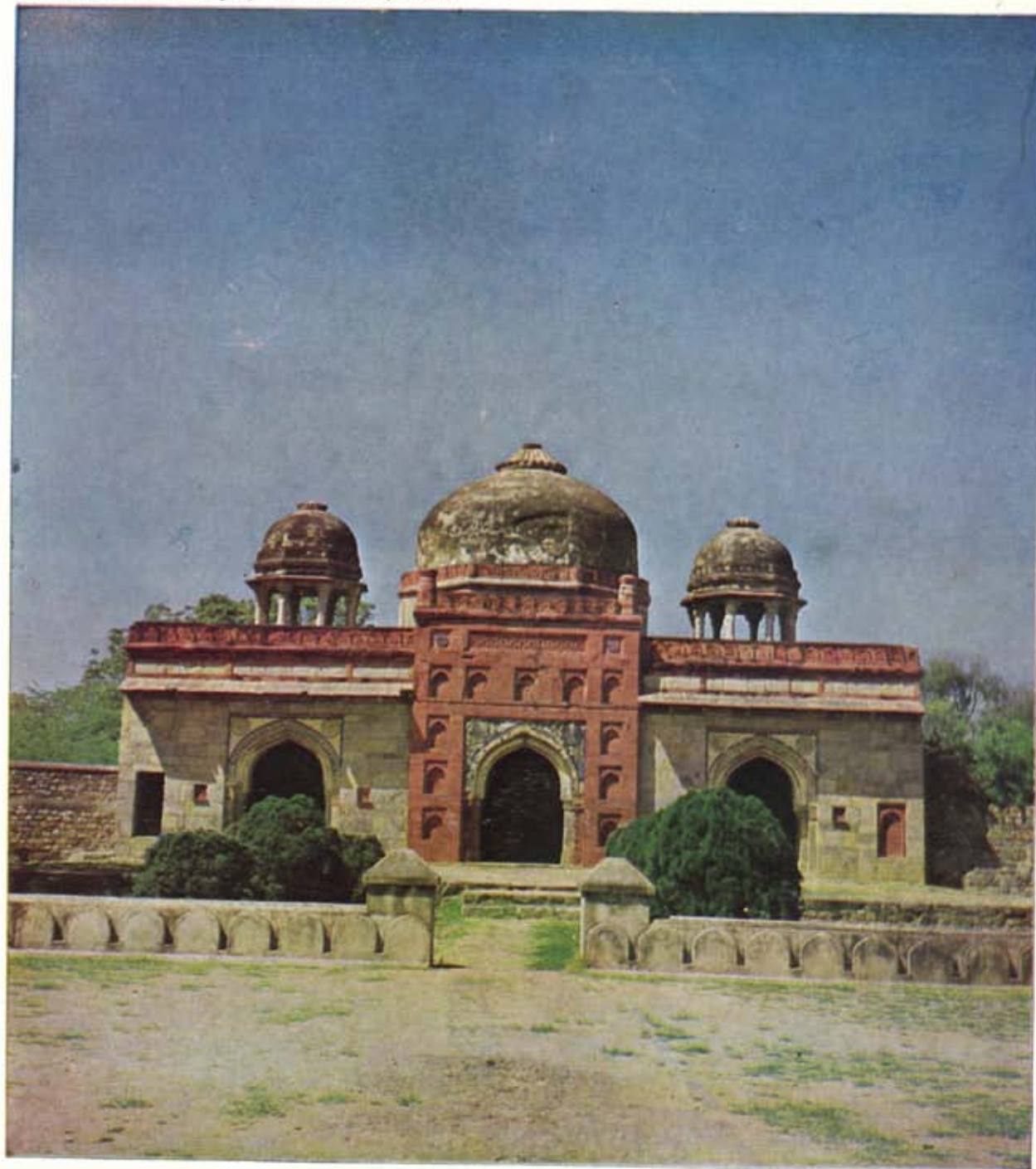
Persian garden is essentially a terraced garden—a garden in descending stages, with the life-giving water as one of the principal adornments as well as the very life and soul, the *raison d'être* of the garden itself. Water was manipulated beautifully in canals, jets of water, waterfalls, cascades, ponds and lakes. Canals and tanks were so constructed as to keep the water brimming to the level of the paths on either side.²⁵ The shallow water-courses were paved with brilliant blue tiles, "the clear rivulets running in and out between the gloom of the old cypress avenues reflecting even a deeper blue than the cloudless sky above them".²⁶ "Fish slip through the canals."²⁷ Each terrace had a *chār-bāgh* or four-quartered plan with paved-paths, flower-beds, cypress-avenues and other ornamental features.

The gardens of Samarqand also reflect the impact of the Persian tradition. The architects who planned these gardens came, almost invariably, from Iran. River Zar-Afshān and numerous other channels and streams supplied ample water in and around Samarqand for gardening. There Amir Timur (Tamerlane) (A.D. 1335-1405) laid many beautiful gardens some of which were personally visited in 1404 by Clavijo, the Spanish Ambassador, who left their commendatory description. Thus he mentioned the *Dilgushā-Bāgh*, *Bāgh-i-Shimāl* and

5. Subz Burj, Nizamuddin, Delhi.



6. 'Isā-Khan's Masjid, Nizamuddin, Delhi.



Bāgh-i-Naw which were founded by Timur. He described the garden in which he was lodged, "We found it to be enclosed by a high wall... there are here six great tanks, for throughout the orchard is conducted a great system of water, passing from end to end, while leading from one tank to the next they have planted five avenues of trees, very lofty and shady, which appear as streets for they are paved to be like platforms. These quarter the orchard in every direction and off the five main avenues other smaller roads are led to variegate the plan... in the exact centre there is a hill built up artificially of clay..."²⁸ over which several magnificent palaces were built. Some important characteristic features of the gardening which was in vogue at Samarqand were the vast enclosure within high walls, with splendid portals or gateways; division of the enclosed area into quarters; choice of a natural slope and the use of the main water-axis; location of a palace or pavilion at the centre of each section; and the provision of vineyards, orchards, tree-paths and flower-beds in perfect order.

Babur was fully conversant with these traditions of gardening. He conquered Samarqand a number of times and he has mentioned its beautiful gardens, e.g., the Perfect Garden, Heart-Delighting Garden, Garden of the Plain, Chahār-Bāgh of Dervish Muḥammad Terkhān and others, in his Memoirs. Though he could not maintain his hold against the invincible Uzbeks, and lost Samarqand to them, it left a permanent imprint upon his mind. The great nature-lover as he was, he was deeply struck by the inherent beauty of its terraced gardens. It was on this pattern that he founded Bāgh-i-Vafā or the Garden of Fidelity at Kabul in 1508.

He gave particular stress on the provision of running water which he made available in abundance everywhere he laid a garden. In Bāgh-i-Kalān at Kabul his attention was "turned to its perennial stream which flowed through the garden in a winding course; by altering this course to a regular one he considered that the beauty of the garden was much enhanced... along other streams Babur ordered water-courses straightened, fountains built, and circular platforms established for sitting in the open air."²⁹ Other similar gardens which he founded at Kabul were Bāgh-i-Banafshā (Garden of Violets), Bāgh-i-Pādshāhī (The Imperial Garden) and Bāgh-i-Chenār (The Garden of Plane Trees). No doubt he was imbued with the Persian and central Asian traditions of the art of garden-laying but his extraordinary love of gardens, flowers and flowing water was a personal characteristic too. Idealism was probably a dynastic trait of the Chaghtais and the sheer hardships which Babur had to bear throughout his turbulent career could not harden it in him.

Off and on, we find him enjoying a beautiful landscape or a Persian poem over a cup of wine. At Agra, he devoted more time in laying gardens and setting water-devices than on reorganising his revenue and the administrative system which, in fact, needed greater attention. To call him *The Prince of Gardens* would not, therefore, be an exaggeration.

It was because of the lack of the environmental features, viz., hillside and natural streams, that he was so reproachful in his description of the river-bank at Agra. A man of iron will and indefatigable determination, he was not to be outwitted even by Nature which he had learnt to train and culture. The Rambagh as it has come down to us is a grand garden in four distinct terraces, fulfilling all the necessary conditions and containing all the resultant beauties of a terraced garden. The main terrace has eight raised platforms in symbolic imitation of the *Bāgh-i-Hasht Bihisht* or the Garden of Eight Paradises. He founded a full-fledged *Bāgh-i-Hasht Bihisht* at Agra in imitation of its counterpart at Tabriz which was laid there at the end of the 15th century. He founded *Bāgh-i-Nilūfar* or Lotus-Garden at Dholpur. A *Fateh-Bāgh* was also founded at Sikri (Fatehpur Sikri) as he notes in his Memoirs:

Ramzan was spent this year [933/1527] with ablution and prayers in the Garden-of-Eight-Paradises. Since my 11th year I had not kept the Ramzan Feast for two successive years in the same place; last year I had kept it in Agra; this year, saying 'Dont break the rule!' I went on the last day of the month to keep it in Sikri. Tents were set up on a stone platform made on the north-east side of the Garden-of-Victory which is now being laid out at Sikri, and in them the Feast was held.³⁰

This way, Babur introduced the Persian garden traditions in India and introduced them as marvellously as he could. The garden-craft as he founded it in India was based on the fundamental principle of planning of some pleasure pavilion, residential palace or tomb in harmonious relation to the water-devices—canals, tanks, water-chutes and fountains—and in equally harmonious relation to the tree-avenues and flower-beds.

(b) *Bāgh-i-Gul Afshān at Agra*

Among the several gardens which Babur laid out at Agra, Rambagh is

the only one which has survived. It is situated on the left (eastern) bank of the river Jamuna, between the Buland-Bāgh and the Chini-ka-Rauza. Babur gave this garden the pleasing name of '*Bāgh-i-Gul Afshān*' (The Flower-Scatterer Garden). It was later renamed as 'Garden of Rest' or *Ārām Bāgh*. People dropped 'a' through constant use and now it is popularly known as Ram-Bagh, its original name: *Bāgh-i-Gul Afshān* having been completely obliterated from the memory. Much of its original arrangement has been disrupted by subsequent demolitions and repairs, yet enough remains to indicate how ingenious and magnificent was the *Bāgh* originally.

Fig. 15 shows the arrangement of water supply which was obtained

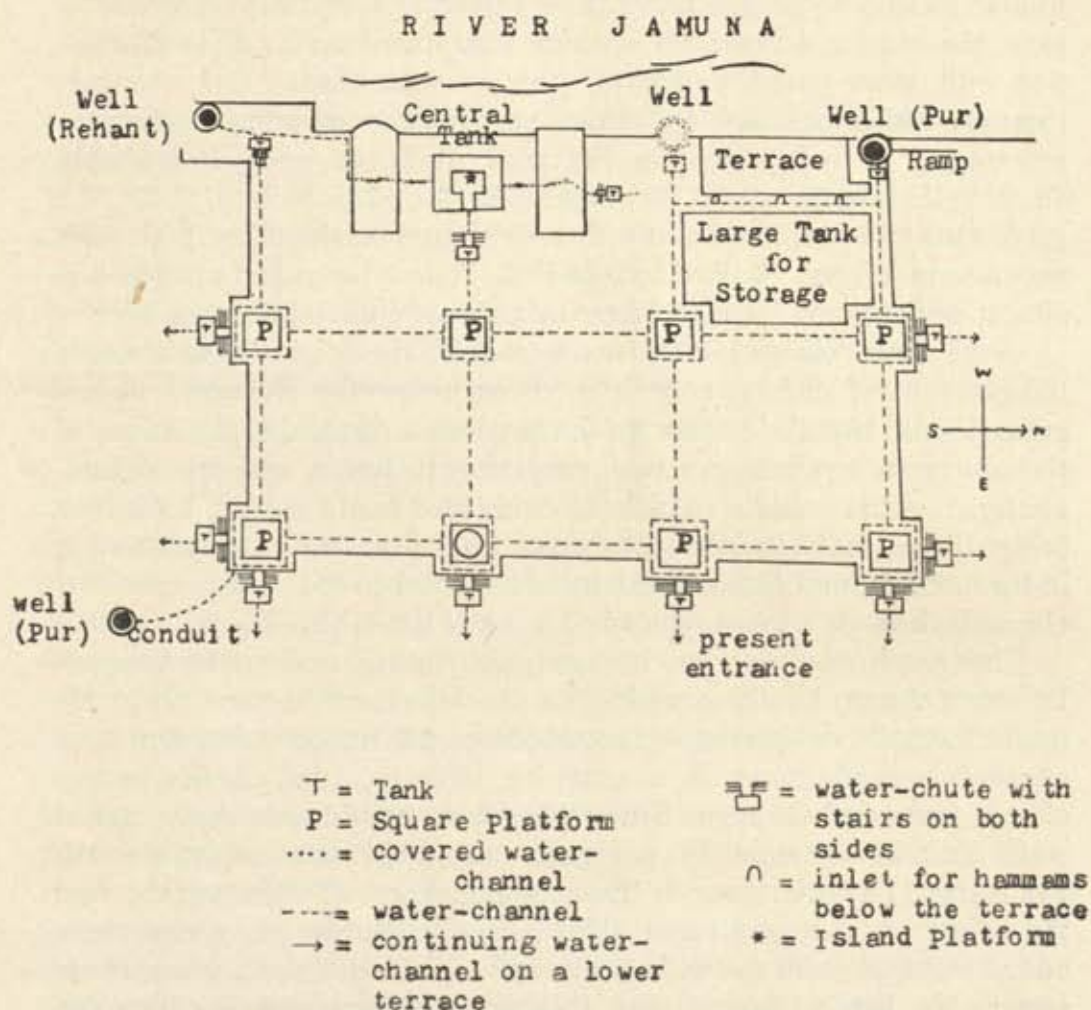


Fig. 15. Plan, First Terrace, Bagh-i-Gul Afshan, Agra (c. 1527).

from a well situated at a high point along the riverside on the south, through the Rehant system. Water first came in a tank and thence

descended below through a water-chute in a small pond. It was from this pond that water began its journey through broad water-channels on the terrace which was divided into uniform quarters having raised square platforms at regular intervals (Plate LXXIX). Water-channels rotated on all sides of each platform and maintained a regular supply of water on the whole terrace.

Water again descended below in the garden on the second terrace by eight extremely broad water-chutes, provided on the sides of the first terrace, each facing a raised platform. Each water-chute has stairs on both sides and ends in a small pond (Plate LXXX). Water continued its journey through stone channels from these ponds. Ultimately it was utilised to irrigate the garden. Thus it served as useful a purpose as it gave the garden an ethereal aesthetic character because of its association with stone-paved pathways, ponds, water-chutes and channels through which it moved, sometimes gurgling and splashing, sometimes murmuring in soft tones—in the cool shade of trees. It is simply amazing that water could be manipulated and associated with the garden on the one hand and with architecture on the other, with such magnificent effects. A third terrace had similarly been laid out but it is almost extinct; only a channel here or a cascade there has remained.

A separate channel took its course from the original tank towards the pavilions which have completely been renovated. It came underground and supplied water to the large tank situated in the centre of the courtyard between the two pavilions. It has a spacious island-platform in its middle, which is connected to the eastern bank by a bridge (Plate LXXXI). Water is thrown out of the bank by overflowing in the underground channel which is connected to the main system of channels through a water-chute and pond (Plate LXXXII).

The north-west quarter has a large storage tank which has now become defunct. On the riverside is a spacious stone terrace obviously meant for convivial parties or ceremonies and functions. Beneath it, in an underground storey is a complex of *ḥammāms*, cisterns, water-chutes, tanks and channels. Three inlets were provided in the attached water-channel to maintain a regular supply of water below, into the *ḥammāms*. Two wells, one in the neighbourhood of this terrace and the other on the south-east side, both operated by *pur*-system, were added to supplement the water supply at a later date. It is thus easily imaginable how elaborate was this artificial arrangement of running water in the well-laid garden to ensure relief from the scorching heat and hot winds of Agra. It shows the thorough planning of *Bāgh-i-Gul Afshān* by Babur and of the perfect coordination between architecture,

garden-planning and water-engineering. Babur, beyond doubt, earned tribute and applause for the great innovation he did at the Rambagh. He was pioneer of *landscaping* in India. He laid down a great garden; more than that he laid down a great tradition which served as the guiding factor to his descendants in the planning of their residential quarters, pleasure-pavilions and tombs. Rightly noted the historian Abul Faḍl in the *‘Āin-i-Akbarī*:

Formerly people used to plant their gardens without any order, but since the time of the arrival in India of the Emperor Babur, a more methodical arrangement of the gardens has obtained; and travellers nowadays admire the beauty of the palaces and their murmuring fountains.²¹

Babur laid down the tradition of architectural embellishment by gardening.

Possibly, the dictates of tropical climate led the ancient Hindus to attach religious significance to water and the water-sites. For Babur, it was different. He had most sophisticated artistic ideals. It was *the beautiful* which fascinated him more than a hieratic prescription or a spiritual conviction. He laid down gardens systematically and provided them with running water in a variety of different beautiful ways with continuous water-supply in every nook and corner. It was in the midst of such gardens that he built his pleasure pavilions and palatial mansions. This way Babur made an epoch-making innovation; he gave the medieval architecture a new direction and, undoubtedly, a new definition and impressiveness. He revolutionised the whole art of building. Henceforward, it was not the architect alone who planned; the garden designer and the water-engineer collaborated with him in fundamentals as well as in details, with the object of coordinating each element in order to produce a unified composition. The Mughal building henceforth did not stand in stern isolation but was presented through the garden, the stone-paved water-channels, stone tanks and water-chutes—all arranged as integral part of the whole scheme. The Hindus laid gardens from the small *‘vāṭikā’* to large *‘udyān’*, but architecture was rarely associated with garden, water-devices or landscape in the way the Mughals did it. The credit of this great master-stroke in the art of building for bringing totality of considerations goes to Babur who, moved by the ethereal effect of the Persian garden or the *chār-bāgh* which he personally saw during his turbulent career after his flight from Samarqand and of which he read in the Persian poetry

particularly of Firdausī, Sa'dī, Hāfiz, Khayyām and Nizāmī, gave expression to his ideals of *the beautiful* in the most impressive way. Formal garden is his greatest contribution to Indian art.

Non-availability of hillside and a perennial stream, and hot and dry climate of Agra were Babur's serious limitations. But the beginnings made by him successfully guided the later designers under his able descendants: Akbar, Jehangir and Shah Jehan. They retained the fundamentals and gradually adapted themselves to the climate, the site, the layout, the garden and the architecture, i.e., the *environment*. The palace-gardens of Agra and Delhi, terraced gardens of Kashmir, Lahore, Delhi and Pinjore and, above all, the grand tomb-gardens of the great Mughals at Agra developed from the modest initiations of Babur. It was in these palatial and tomb-gardens that Babur's dreams found grandiosity and fruition.

(c) *The 'Cold-Bath' Establishment*

Babur mentioned a hot-bath along with his description of gardens and water-devices which he instituted at Agra.³² Simultaneously, he spoke of a cold-bath which provided relief against the tortuous heat; thus he observed:

Three things oppressed us in Hindustan, its heat, its violent winds, its dust. Against all three the Bath is a protection, for in it, what is known of dust and wind? and in the heats it is so chilly that one is almost cold. The bath-room in which the heated tank is, is altogether of stone, the whole, except for the *Īzāra* [dado?] of white stone, being pavement and roofing, of red Biana stone.³³

It seems that while a hot-bath was built by him in imitation of the Turkish steam-bath, he also devised a cold-bath, or a series of such apartments which would be more useful in the hot climate of Agra. His account shows that though there was heated tank, the overall effect was cooling and *not heating*. His assertion that "*in the heats it is so chilly that one is almost cold*" is explicit and categorical and does not leave any doubt as to its being a cold-bath establishment. This was indeed a great innovation as a cold-bath was unknown in India, even at Bidar and Gulbarga where Turkish hot-baths had been built on Persian models.

A set of Babur's hammāms (cold-baths) with their paraphernalia – a furnace and hypocaust, tanks sunk into the depth of walls and also occupying centre of two rooms, cascades and water-channels, and baked-clay pipes travelling mysteriously into the walls – is extant at the Rambagh, the terraced garden of Babur who named it Bāgh-i-Gul Afshān. It is concealed below the spacious stone terrace on the river-side in the north-west quarter of the garden and constitutes an underground storey with spacious halls, sitting rooms and service quarters. Regular water-supply into the hammāms was maintained through the three inlets which were fed by the water-channel drawing water from the main water-supply line. Unfortunately, Babur did not explain how it worked and how the furnace, the hypocaust, the concealed wall-tanks and pipes could be used to produce a cooling effect. It remains a mystery.

The hammām or the cold-bath which conforms to the description of Babur, though in a completely dilapidated condition, is there outside the south boundary wall of the Rambagh near the new bridge on the bypass. The main chamber, adjoining the sitting room to its east, has a big tank (length 12' × breadth 5'-3" × depth 2' = 3.66 × 1.60 × 0.61 metres) just above the furnace with a series of pipes as inlets or outlets. Near it is a miniature tank (3' × 2' × 3' = 0.94 × 0.61 × 0.94 metre). Another series of pipes is provided in this tank; they shoot into different directions. Similar baked-clay pipes are there in all the four corners, into the walls and also the ceiling. Each pipe piece is 9" (22.80 cms) long and 8" (20.32 cms) in diameter. They are perfectly baked, strong and green glazed inside. The structure is in ruins and course of the pipes which are embedded in thick masonry is not exactly traceable. A miniature tank is also there on the roof which received water through an overhead stone channel from the well on the river which has also survived. All this appears to be too complicated a system to be intelligible. We do not know how the cold-bath was operated to justify Babur's assertion:

“in the heats it is so chilly that one is almost cold”,

and it remains a medieval secret.³¹

(d) *Bāgh-i-Nīlūfar at Dholpur*

Babur built several tanks and baolis (step-wells), and laid gardens in

the area which stretched nearly for forty miles from Agra on the Jamuna, to Dholpur at the Chambal. He liked Fatehpur Sikri and travelled sometimes from the former place to the latter and vice-versa via Fatehpur Sikri. This area lies at the outskirts of the desert and its climate is largely hot and dry. Babur made it the centre of his empire and he wanted to change its face by laying gardens and making ample provision of water through tanks and baolis.

His narrative, recorded in his Memoirs, of a rock-cut monolithic project undertaken at his command at Dholpur is extremely interesting:

On Friday the 24th of Zu'l-qa'da [933 A.H. = 24 August 1527], we set out to visit Dholpur [from Fatehpur Sikri]. That night I slept at a place half-way; reached Sikandar's [Lodi's] dam at dawn and dismounted there.

At the end of the hill below the dam the rock is of building stone. I had Ustād Shāh Muḥammad the stone-cutter brought and gave him an order that if a house could be cut all in one piece in that rock, it was to be done, but that if the rock were too low for a residence ('imārat), it was to be levelled and have a reservoir, all in one piece, cut out of it.

From Dholpur we went on to visit Bari. Next morning [26 August] I rode out from Bari through the hills between it and the Chambal-River in order to view the river. This done I went back to Bari ... On leaving Bari we went to Sikri; we reached Agra on the 29th of the same month [28 August].

[On 21 September 1528] ... we dismounted a kuroh [kos=2 miles] west of Dholpur, at a place where a garden and house had been ordered to be built.³⁵ That place is at the end of a beaked hill, its beak being of solid red building-stone ('imārat-tāsh). I had ordered the [beak of the] hill cut down to the ground-level and that if there remained a sufficient height, a house was to be cut out in it, if not, it was to be levelled and a tank [ḥauz] cut out in its top. As it was not found high enough for a house, Ustād Shāh Muḥammad the stone-cutter was ordered to level it and cut out an octagonal, roofed tank. North of this tank the ground is thick with trees, mangoes, jamun, all sorts of trees; amongst them I had ordered a well made 10 by 10; it was almost ready; its water goes to the aforementioned tank. To the north of this tank Sultan Sikandar's dam is flung across [the valley]; on it houses have been built, and above it the waters of the rains gather into a great lake. On the east of this lake is a garden; I ordered a seat and four-pillared platform [tālār] to be



7. Khair'ul-Manazil Masjid, Old Fort, Delhi.

8. Tomb of 'Isā-Khan, Nizamuddin, Delhi.



cut out in the solid rock on that same side, and a mosque built on the western one.

On Sunday the 19th of the month [4 October 1528] we rode before dawn from the *chār-bāgh*, crossed the *Kawārī*-water [river *Kuñwārī*] and took nooning. After the mid-day prayer we rode on, at sunset passed the *Chambal*-water, between the evening and bed-time prayers, entered *Dholpur* Fort, there by lamp-light visited a hot-bath which *Abu'l-Fath* had made, rode on and dismounted at the dam-head where the new *chār-bāgh* is in making.

Having stayed the night there, at dawn [Monday 20th = 5 October 1528] I visited what places had been ordered made. The face of the roofed-tank, ordered cut in the solid rock, was not being got up quite straight; more stone-cutters were sent for who were to make the tank-bottom level, pour in water, and, by help of the water, to get the sides to one height. They got the face up straight just before the other prayer, were then ordered to fill the tank with water, by help of the water made the sides match, then busied themselves to smooth them. I ordered a water-chamber [*āb-khāna*] made at a place where it would be cut in the solid rock; inside it was to be a small tank also cut in the solid rock ...

On Tuesday [9th *Rabi-II*, 21 December 1528], I went to see the buildings for a reservoir and well at *Dholpur*. I rode from the [*Agra*] garden at one watch [*pahr*] and one *gari* [9.22 a.m.] and I entered the *Dholpur* Garden when 5 *garis* of the first night watch had gone [7.40 p.m.]. On Thursday the 11th day of the month [23 December], the stone well [*sangin-chāh*], the 26 rock-spouts [*tāsh-tār-nau*] and rock pillars [*tāsh-sitūn*], and the water-courses [*āriqlar*] cut on the solid slope were all ready. At the 3rd watch of the same day, preparation for drawing water from the well was made. On account of a smell in the water, it was ordered, for prudence sake, that they should turn the well-wheel [*Rehant*] without rest for 15 days and nights, and so draw off the water. Gifts were made to the stone-cutters and labourers, and the whole body of workmen in the way customary for master-workmen and wage-earners of *Agra*.⁵⁶

In all probability, it was the garden which Babur named *Bāgh-i-Nilūfar* (Lotus Garden) on account of the abundance of lotus in the area. He has, in fact, referred to it as such several times, e.g.:

On the eve of Sunday, the 28th of the month [*Rabi-II* = 9 January

1529], we crossed the Jun [Jamuna] at the 6th gari of the 3rd watch [2.15 a.m.] and started for the Lotus-Garden [Bāgh-i-Nilūfar] of Dholpur.

On Thursday the 3rd of the first Jumada [13 January], a place was fixed in the south-east of the garden for a hot-bath; the ground was to be levelled; I ordered a plinth [kursi] erected on the levelled ground, and a bath to be arranged, in one room of which was to be a reservoir 10 × 10.

On Friday [Jumada-I, 4th = 14 January 1529] we rode out from the Lotus-Garden at the 6th gari [8.15 a.m.]; at the Evening Prayer we reached Agra.³⁷

Though in fragments, the rock-cut garden-complex of Babur which he named *Bāgh-i-Nilūfar* has survived. At present called the *Shāh-Bāgh*, it is situated in the village Jhor on the Dholpur-Bari road, exactly two miles west of the town of Dholpur as Babur described it. Sikandar Lodi's dam, which has been referred to by Babur, is also extant and exactly corroborates his narrative. The dam on the northern side has a stone building through which its water passes; it has beautifully carved pillars, obviously from some Hindu temple, built up into its masonry. Such pillars are also scattered around. This shows that material from the pillaged Hindu temples was utilised in its construction. There is an ancient Hindu site: *Muchukunda* (मुचुकुण्ड), about a mile south of this place. Surrounded by hills and possessing a natural setting, it still has ruins of a large number of temples, tanks and ghats. The place is still considered sacred by the local population. It is customary to take bath in its *kund* (sacred tank) before going home after one returns from pilgrimage.

Sikandar Lodi appears to have sacked Muchukunda about A.H. 906/A.D. 1500. He sent Khawās Khān, governor of Bianah, 'Ālam Khān, governor of Miwat, and Khān-i-Khānān Lohānī, governor of Rapri, to take Dholpur that year. Its Hindu ruler Rāy Vināyak Deo gave them a tough fight and, probably, defeated them. Then the Sultan came himself. The Rāy went away to Gwalior. "In the early morning, the Sultan entered the fort and after offering a brief thanks-giving, carried out the rites of Victory; and the soldiers stretched out their hands for pillage and destruction, laid waste the houses and uprooted the orchards all round Dholpur which had cast their shade to a distance of seven *karohs*."³⁸ Sikandar Lodi stayed at Dholpur for a month in the year 910/1504. He took Mundrael and demolished its temples. On his way to Agra he again stayed at Dholpur and rebuilt its fort. In 911/1505

while he went to attack Gwalior, he stayed at Dholpur for one and a half months.³⁰ It seems that Dholpur was the springboard for his adventures into the region beyond the river Chambal, which included such formidable pockets as Gwalior and Narwar.

It seems that Sikandar Lodi built his dam for collecting and conserving the rain water, between 1500 and 1505; the bow-shaped large dam overlooking the garden site on its north and western sides is still there, and functioning, and Babur's reference confirms its origin to him.

Babur supplanted the Lodis in the kingdom of Hindustan and, as a natural course, he visited all places which were connected to the latter, in one way or the other. This expediency appears to have brought him to the Jhor-Muchukunda site, at Sikandar Lodi's dam. This was an extraordinary place inasmuch as it comprised of a valley surrounded by hills where rain-water could be collected, a thick jungle around, the living rock of red sandstone and also a low-lying fertile land where a lush garden could be laid. Sikandar Lodi only built a dam as a source of irrigation in the dry season for the benefit of agriculture. Babur used the public-work in his scheme of gardening. He had a shallow water-channel excavated into the rock from the eastern edge of the dam and, through it, brought its water to his garden. Part of the long channel on the lower course has survived. There also remain a covered room which contains a small octagonal pond inside it, and a large tank outside it. Both the room and the outer tank are built by stone blocks and slabs put together, and are not excavated in rock. The interior octagonal tank is rock-cut, of course. Water from the dam first came into the pond inside the covered room and then passed into the outer tank. A channel, again excavated in living rock, took water to a set of apartments on a lower terrace; they have now been completely renovated. Thence it descended by a cascade to the third terrace where a large octagonal, foliated, beautiful pond has been excavated in rock. It is lotus-shaped! A channel then passed on the water to the fourth terrace through a small cascade and a shallow miniature tank. Everything thereafter has been destroyed.

The well of Babur's description is also there. Its water is brought to the tank outside the closed chamber through a high, stone conduit. Most probably, it was operated by *Rehant*. Its water was also utilised to irrigate the garden at several other points though the system has been mostly disrupted by the villagers who are cultivating the land. There are several other stone wells in the area. One contains a Persian inscription carved on a stone slab near its rim. Lotus still grow in the

main dam, on the south side, in great abundance and fully justified the nomenclature of the garden: *Bāgh-i-Nīlūfar* (Lotus Garden).

It is very interesting to note that Babur found here, unlike anywhere else, a hillside and a place suitable to his ideal of a *terraced-garden*. Though there was no perennial stream, the dam-water supplemented by a series of wells could be used to fulfil its requirements. It was on account of these facilities that Babur took such a keen interest in this garden and has left its detailed description in his Memoirs.

This is the first example of monolithic rock-cut architecture in Muslim India, Kaṭī-Ghāṭī Darwāzah Chanderi excavated by Jiman Khan in 1490 being only a rough, crude and piecemeal attempt in this direction. No Delhi sultan ever thought of excavating a mosque, tomb, house or even a tank into living rock and they solely relied on masonry work. Babur was the first to take it up. He had already excavated a 'Victory-Tower' in rock at Qandahar which had 40 steps of approach (*chihil-zīna*); two towers at the foot of the steps; sculptures of two tiger-guardians on the entrance; a spacious frontal arch (*pesh-tāq*) and a commemorative chamber measuring 12' × 12' × 8' (3.66 × 3.66 × 2.44 metres) which, on account of its lofty position and extensive view, was designated: *Rawāq-i-Jahān-Namāi* (World Showing Portal) in one of its several inscriptions which have also been incised in living rock.⁴⁰

Traces of a large garden have unmistakably remained. The octagonal roofed tank, the well (water of which went to the roofed tank), channels excavated in rock and a number of other accessories of Babur's description are extant on the site and may be identified. Lotus-shaped octagonal foliated pond excavated into rock is the most interesting remain. It is a pity that the monolithic seat and four-pillared platform, the mosque, the monolithic water-chamber, the 26 rock-spouts and rock-pillars of Babur have not survived during the four and a half centuries which have passed since he laid down this garden. Its importance, however, lies in the fact that here Babur found a hillside where he could fulfil his ideal of a terraced garden, and that here he brought into form a rock-cut architecture, howsoever modest it was, for the first time in Muslim India.

(e) *Assessment of his Style*

Gulbadan Begum noticed the Dholpur tank in her history and, in

addition, also recorded a large tank and *Chaukandi* (or *Chaukhandi* चौकण्डी = four-storeyed building) at Fatehpur Sikri:

When we had been in Agra three months, the Emperor went to Dholpur. Her highness Maham Begam and this lowly person [Gulbadan Begum] also went. A tank had been made there, ten [gaz] by ten, out of one piece [of living rock]. From Dholpur His Majesty went on to Sikri. He ordered a great platform made in the middle of the tank and when it was ready, he used to go and sit on it, or to row about. This platform still exists.⁴¹ They also made a *Chaukandi* in the Sikri garden, and my royal father put up in it a *Tur-Khana* where he used to sit and write his book.⁴²

It is, however, not possible to identify Babur's buildings at Fatehpur Sikri out of the 150 and odd monuments which were built during his grandson Akbar's reign, the small lot of the former having been completely lost in the great mass of the latter.

Babur refers, in his *Memoirs*, to the construction of a *baoli* (step-well) and an alms-house at Fatehpur Sikri before the battle of Khanwa [1527] on the eve of his renouncing wine. He notes:

What wine we had with us, was poured on the ground; what Baba Dost had brought was ordered salted to make vinegar. At the place where the wine was poured upon the ground, a well was ordered to be dug, built up with stone and having an alms-house beside it. It was already finished in Muharram 935 [September 1528] at the time I went to Sikri from Dholpur on my way back from visiting Gwalior.⁴³

The *baoli*, though in an extremely dilapidated condition, is extant and contains an inscription which reads:

1. At the orders of Zahīru'd-Dīn Muḥammad Bābur Bādshāh Ghāzī, may Allāh perpetuate his kingdom and sovereignty;
2. The completion of this well was achieved through the Divine guidance in the year nine hundred and thirty-three from the Migration [A.H. 933=A.D. 1526-27];
3. At the time of the Victorious return from the battle against the infidel Rana Sanga.⁴⁴

Babur also built a *baoli* in the fort of Agra. Thus he records :

In an empty space inside the Fort, which was between Ibrahim's residence and the ramparts, I ordered a large chambered well [wāin] to be made, measuring 10 [gaz] by 10, a large well with a flight of steps, which in Hindustan is called a wāin [baoli]. This well was begun before the chār-bāgh; they were busy digging it in the true Rains [ʿaīn bishkāl=Sāwan-Bhādon]; it fell in several times and buried the hired workmen; it was finished after the Holy Battle with Rana Sanga, as is stated in the inscription on the stone that bears the chronogram of its completion. It is a complete wāin, having a three-storeyed house in it. The lowest storey consists of three rooms, each of which opens on the descending steps, at intervals of three steps from one another. When the water is at its lowest, it is one step below the bottom chamber; when it rises in the Rains, it sometimes goes into the top storey. In the middle storey an inner chamber has been excavated which connects with the domed building in which the bullock turns the well-wheel. The top storey is a single room, reached from two sides by 5 or 6 steps which lead down to it from the enclosure overlooked from the well-head. Facing the right hand way down, is the stone inscribed with the date of completion. At the side of this well is another the bottom of which may be at half the depth of the first, and into which water comes from that first one when the bullock turns the wheel in the domed building aforementioned. This second well also is fitted with a wheel, by means of which water is carried along the ramparts to the high-garden. A stone building [tashdīn-ʿimārat] stands at the mouth of the well and there is an outer mosque outside the enclosure in which the well is. The mosque is not well done; it is in the Hindustani fashion.⁴⁵

This baoli has been traced in the basement area in the *Phansighar* complex of Agra Fort and, possibly, the mihrab of Ibrahim's Masjid has also survived.⁴⁶ The baoli has been completely submerged under later constructions mainly the Jehangiri-Mahal and the Shahjahani-Mahal. The inscription which has been referred to by Babur has not come to light. Babur's account of the step-well, however, shows that it was a grand structure in which chiselled stone was used on a large scale. If he detested the mosque of Ibrahim which was "in Hindustani fashion", it was probably because that was a simple brick construction plastered over, as the surviving mihrab shows, and it did not come up to the refined taste of Babur. Likewise, he would condemn the houses of the common people: "There are no running waters in their gardens

or residences. These residences have no charm, air, regularity or symmetry."⁴⁷ How he would have looked at the typical mud-houses of Hijaz is only a matter of conjecture!

A number of mosques is known to have been constructed during his short reign at Sambhal, Panipat, Rohtak, Maham, Sonapat, Palam (Delhi), Pilakhna, Agra and Ayodhya. He does not mention them, except the one at Dholpur,⁴⁸ in his Memoirs and it would be interesting to examine if these mosques really owed their origin to Babur or his name has appeared in their inscriptions which are mostly in Persian, and carved stone, only as the ruling emperor. The Sambhal mosque bears three inscriptions, one recording its construction and two its restorations. It is very difficult to distinguish the original work from the later restorations to be able to define its architectural style. The inscription does not ascribe its construction to Babur himself, but records that the mosque was built under his order by Mir Hindū Beg; thus it reads:

1. The compendium of the things of excellence and perfection,
raiser of the ensigns of state and religion,
Spreader of the wings of peace and security,
2. Founder of the edifices of knowledge and action,
King of Jam-like dignity, Muhammad Babur, may
Glorified and Exalted Allah keep him in His protection,
3. When he kindled the lamp of [his] government in India [i.e.,
founded an empire], a ray of it illumined Sambhal,
For the construction of this mosque,
4. May it remain immune from harm and destruction,
He issued orders to his humble slave, who is one of the principal
pillars of the government,
5. The intelligent and wise Mir Hindū Beg, who is proverbial for
good nature.
When by the order of the emperor of the world,
6. The mosque was completed through the guidance of eternal
providence,
7. Its date in year, month and day was [found in the chronogram]:
Yakum az shahr-i-Rabi'ul-Awwal.⁴⁹

It gives the date 1st Rabi'ul-Awwal 933 A.H. = 6 December 1526, which shows that the mosque was finished seven months after the Battle of Panipat. It was built in the preceding style of the Lodis, having broad four-centred arches, broad high and single dome and profuse plaster-

work. Pillars of the Hindu temple which stood on the site originally, have also survived in the aisles.

The *Baburi-Masjid* in the Kabulibagh at Panipat bears three inscriptions which ascribe its construction and that of a well and *chahār-bāgh* (near it) to Babur. The one on the entrance gateway reads:

1. In accordance with the saying of the respected Prophet and command of the Lord of Glory [Allah] and at the order of gold-bestowing Lord of bounty, Shah Babur, was completed [this] mosque, and the well and the *chahār-bāgh* in the year nine hundred and thirty-five [A.H. 935 = 1528-29]. The Darogha was ...
2. ... The just, the generous and of an unrivalled good disposition. It was built at the instance of the fortunate Khwājah of the world, Pahlwān, whose name is Muḥammad, son of Hasan, master of excellence.

The composer of these verses is the afflicted Munshi Shihāb who composed a poem like limpid water by the grace of God.⁵⁰

The second inscription on the central mihrab, which too is carved on a stone slab, is fragmentary; yet it explicitly records that the mosque owes its foundation to Babur.⁵¹ The third is in Arabic and is written in ink above the second. It mentions only the date Rabi'ul-Awwal 934/November-December 1527 which too is incomplete, and the name of the writer Malik Sāliḥ. Here, too, the building was renovated from time to time as the oblong openings and patch-work facades obviously demonstrate and what one can infer of the original work is extremely vague and doubtful. In all probability, the same style which was in vogue during the Lodi period had the final say in its presentation, with such features as broad yet adequately pointed arches, vaults in the phase of transition, plastered over with a stalactite design and a broad high dome. It is a brick-construction and there is very little stone-work. This is not in accordance with the spirit of Babur's narrative of his building-activity. His liking, obviously, was for the gracefully dressed stone-work as he records:

Another good thing in Hindustan is that it has unnumbered and endless workmen of every kind. There is a fixed caste for every sort of work and for every thing, which has done that work or that thing from father to son till now. Mulla Sharaf, writing in the *Zafar-Nāmāh* about the building of Timur Beg's stone mosque, lays stress on the fact that on it 200 stone-cutters worked from Azarbaijan,

Fars, Hindustan and other countries. But 680 men worked daily on my buildings in Agra and of Agra stone-cutters only; while 1491 stone-cutters worked daily on my buildings in Agra, Sikri, Bianah, Dholpur, Gwalior and Koil [Aligarh]. In the same way there are numberless artisans and workmen of every sort in Hindustan.⁵²

It seems, thus, that most of his building-work was done at Agra and the area in its neighbourhood and all this was stone-work. It is a pity that except for his gardens and a few garden-pavilions, his buildings have been mostly destroyed or renovated beyond recognition. Again, in another sequence he noted:

On Tuesday (1 February 1529), after writing letters to be taken by those going to Kabul, the buildings in hand at Agra and Dholpur were recalled to mind, and entrusted to the charge of Mullā Qāsim, Ustād Shāh Muḥammad the stone-cutter, Mīrak, Mīr Ghīās, Mīr-Sang-tarāsh [stone-cutter]⁵³ and Shāh Bābā the spadesmen.⁵⁴

These references from the pen of Babur himself confirm that:

- (i) most of his building-work was done at Agra, Fatehpur Sikri and Dholpur, and
- (ii) it was largely stone-work upon which 1491 stone-cutters were daily employed.

The spirit of the *Baburi-Masjid* of Panipat does not run parallel with Babur's narrative and it is extremely unlikely that this was raised in accordance with his artistic ideals. At the most it reflects the continuity of the architectural style and traditions, as does the *Jamali-Kamali Masjid* near the Qutub, Delhi, which was built exactly contemporarily in 1528-29.⁵⁵ Both are representative of the preceding style.

Then, Babur's description shows that his artisans were Hindu, e.g.:

All artisans, wage-earners, and officials are Hindus. In our countries dwellers in the wilds [i.e., nomads] get tribal names; here the settled people of the cultivated lands and villages get tribal names. Again, every artisan there is, follows the trade that has come down to him from forefather to forefather.⁵⁶

These artisans who, as he records, were stone-cutters, would have been more conversant with their own working methods than the typically

Muslim techniques of construction (e.g., vaulting) and ornamentation (e.g., glazed-tiling and stalactite) which they might have learnt under the Delhi sultans. As no building of Babur bearing distinctive characteristics has come down to us, the style in which these 1491 stone-cutters worked at Agra, Fatehpur Sikri and Dholpur, except for gardening and organisation of water-devices through tanks, water-channels and cascades, cannot be defined.

There is a *Baburi-Masjid* also at Agra on the left bank of the river Jamuna, in the close neighbourhood of Babur's *Bāgh-i-Zar Afshān*, near the tomb of Itmād'ud-Daulah. But the renovations have completely changed its fabric and very little, if at all, of the 16th century building remains. There is no inscription. The *Baburi-Masjid* of Ayodhya, near Fyzabad, originally had three inscriptions recording its construction by Mīr Bāqī in 935/1528-29¹⁷ by the order of Emperor Babur. They read as follows:

- I. (1) By the order of King Babur whose justice is an edifice,
meeting the palace of the sky [i.e., as high as the sky],
- (2) This descending place of the angels was built by the
fortunate noble Mīr Bāqī.
- (3) It will remain an everlasting bounty, and [hence] the date of
its erection became manifest from my words [chronogram]:
'It will remain an everlasting bounty' [A.H. 935/1528-29].
- II. In accordance with the wishes of the ruler of the world,
Babur,
A lofty building like the palace of the spheres, [that is]
this lasting house of God [mosque] was founded,
By the fortunate noble Mīr Khān [Bāqī]
May ever remain such a founder of its edifice,
And such a King [as Babur] of the world and age!
- III. (1) In the name of Allah, the Beneficent, the Merciful. And in
Him is my trust.
- (2) In the name of one who is wise, Great and Creator of all
the Universe and is spaceless.
After His praise, blessings be upon the Prophet who is
the head of prophets and best in the world.
The Qalandar [recluse]-like Babur has become celebrated
in the world since [in his time] the world has achieved
prosperity.
- (3) He has embraced [conquered] all the seven climes of the
world in the manner of the sky.

In his court, there was a magnificent noble, named Mīr Bāqī, the second Āṣaf,

Councillor of his government and administrator of his kingdom, who is the founder of this mosque and fort-wall.

- (4) O God, may he live for ever in this world, with fortune and life and crown and throne!

The time of the building is this auspicious date, of which the indication is nine hundred and thirty-five [A.H. 935/1528-29].

Completed was this praise of God, of Prophet and of King. May Allah illumine his proof! Written by the weak writer and humble creature Fathu'llāh Muḥammad Ghori.

This mosque was also restored and renovated from time to time and has come to be almost a modernised building.

The two mosques at Rohtak, viz., the *Masjid-i-Khurd* (Small Masjid) in the Fort and the *Rajputon-ki-Masjid* also bear an inscription each, of the reign of Babur. The former was, in fact, built by Ghiāthu'd-Dīn Tughluq in 724/1324 as the inscription on the outer archway shows. Babur's inscription, recording the construction of a mosque by Qāḍī Hammād, is not in situ and must have belonged to some other building which has, however, not survived. The inscription in the latter mosque originally belonged to the mausoleum of Masnad-i-Ālī Firūz Khān, which was completed on 10th Rabi-II 934/3 January 1528 during the reign of Babur, and this too is not in situ. These inscriptions read respectively as follows:⁵⁸

- I. In the name of Allah, the Beneficent, the Merciful.

The builder of this mosque is Qāḍī Hammād [who constructed it] during the period of the Khilāfat of His Majesty Zahīru'd-Dīn Muḥammad Bābur Bādshāh Ghāzī, May Allah perpetuate his kingdom,

And sovereignty ... nine hundred and thirty (?) ... carried out [nine hundred thirty-four as noticed by Rodgers in 1885; A.H. 934=1527-28].

- II. Completed during the reign of His Majesty Babur Bādshāh Ghāzī, may Allah perpetuate his kingdom and sovereignty, this noble edifice [viz.] the Tomb of His Excellency Masnad-i-Ālī,

Firūz Khān, son of Masnad-i-Ālī Aḥmad Khān, son of Masnad-i-Ālī Jamāl Khān, the deceased, all of them, on the 10th of the month of Rabi'ul-Akhar four and thirty and

nine hundred [10th Rabi-II, A.H. 934 = 3 January 1528].

Likewise, the *Shaikhzādon-kī-Masjid* at Sonepat bears an inscription which originally belonged to the tomb of Alī Khān built in 937/1530 and is not in situ.⁵⁹ The *Pīrzāde-kī-Masjid* at Maham, near Rohtak, bears a long inscription recording its construction by Khān Yūsuf Āghā during the reign of Babur and is dated in 936/1529.⁶⁰ It reads as follows:

1. In the reign of His Majesty, the Emperor, asylum of the world, Zahīru'd-Dīn Muḥammad Babur,
2. Bādshāh Ghāzī, may Allah perpetuate his kingdom and sovereignty, the slave of the court of the one on whom all depend [i.e., God],
3. The poor [and] humble Khān Yūsuf Āghā, son of Shaikh Yūsuf, resident of Hisār-i-Shādmān [in Transoxiana],
4. Was favoured with the Divine guidance by the grace of the Most High Allah to build the mosque in the Qasba [town] of Maham, may the Most High God,
5. Receive and accept with favour [his virtuous act] through His kindness and excellence, on the 5th of the month of Rabi'ul-Awwal year six and thirty and nine hundred [5th Rabi-I, A.H. 936 = 7 November 1529].

With large-scale renovations which have almost entirely changed their form and fabric, such buildings cannot be studied as architectural works of Babur with a view to make up and define his style.

The Jami' Masjid at Pilakhna near Aligarh was built during the reign of Babur by Shaikh Ghūran, one of the prominent Indian Amirs, in 935/1528-29. The Persian inscription compares it with the Ka'ba.⁶¹ It reads as follows:

1. In the name of Allah, the Beneficent, the Merciful. The Prophet, may Allah's blessings and salutations be on him, has said: 'Hasten to prayer before the expiry [of its time] and hasten to repentance before [death] overtakes you.'
2. This mosque [which is] like Ka'ba, an asylum for all, was built by the noblest of the nobles Ghūran, son of Muḥammad, son of Islām.
3. The reckoning of the year from the Migration was nine hundred and thirty and five [A.H. 935 = 1528-29] in the reign of Zahīru'd-Dīn Muḥammad Babur, the noble Ghāzī.

The *Ghazanfar-ki-Masjid* at Palam near Delhi was also built during his reign and is dated in 935/1528-29.⁶² It has two inscriptions which read respectively as follows:

- I. In the time of Zahiru'd-Din
Muhammad Bābur Bādshāh Ghāzī
May Allah perpetuate his kingdom and rule
This mosque and namāzgāh [i.e., place of prayer]
Was built by a servant of Nāsiru'd-Din
Amir 'Abdu'llāh named Ghazanfar in the year [A.H.] 935
[=1528-29].
- II. Ghazanfar built an elegant mosque,
A visit to which is as good as the pilgrimage to Ka'ba.
In Palam he built such a sacred edifice
As has won for him honour in the eyes of God.
He received a reward for [erecting] the best of mosques,
[And hence], its date of construction is [to be found] from
'The best of mosques'.
[The phrase 'zi khair-i-Masājid' gives the date 935/1528-29.]

It is unlikely that Babur had any say in the construction of these mosques or even he ever saw all the mosques which bear his name. They were built mostly in the prevalent Delhi Sultanate style and Babur's name was included as the ruling emperor, customarily, as the above-quoted inscriptions amply show. It is curious indeed that none of his mosques which he might have built at Agra, Fatehpur Sikri or Dholpur has come down to us, though these places were centre of great building activity during his reign and, apart from his innovations in gardening and organisation of various water-devices to make up landscape-architecture and, of course, a few garden pavilions, we have no concrete idea of his buildings upon which he has recorded to have employed 1491 stone-cutters. The architecture of the first Great Mughal, the founder of the dynasty, thus, consists mainly of gardening and water-devices, and landscape and bath-architecture.

(f) *Bāgh-i-Zar Afshān and Chauburj: Babur's Tomb at Agra*

Babur died on 6th Jamadi'ul-Awwal 937 A.H./26 December 1530 at Agra.⁶³ The event of his death has been differently described. Mrs

Beveridge, learned translator of his Memoirs, has noted⁶¹ that Humayun, his eldest son, fell ill at Sambhal. He suffered from violent attack of fever and could not be cured. Thence he was brought to Agra⁶² and the best Hakims attended on him but his condition did not improve. Thereupon, Mīr Abu Baqā, one of the most distinguished saints of the age, suggested the 'Rite of Intercession' and advised Babur to sacrifice his most valuable thing. Rejecting counsel to give away his best diamond, Babur decided to sacrifice his own life and moved thrice round the bed of his ailing son and cried, "I have borne it away." He fell ill the same day and died subsequently.⁶³ As it seems more probable, Babur died of the effect of the poison which was administered by the mother of Ibrahim Lodi quite some time ago.⁶⁷

Babur's epitaph quoted from Ilminski's fragment⁶⁸ gives an interesting reading in this connection:

In the year 937, on the 6th of the 1st Jemadi [26 December 1530], as the Emperor was in the char-bagh, which he had made, he was seized with a serious illness and bade farewell to this transitory world. Let it suffice to say that he possessed eight fundamental qualities: lofty judgement, noble ambition, the art of victory, the art of government, the art of conferring prosperity upon his people, the talent of ruling mildly the people of God, ability to win the hearts of his soldiers and love and justice.

Rushbrook Williams maintained the view⁶⁹ that the Chār-bāgh where Babur breathed his last was the garden which is now known as the *Rām-Bāgh* situated on the left (east) bank of the river Jamuna at Agra. He seems to have followed Aḥmad Yādgār and Mrs Beveridge. Yādgār recorded in the *Tārīkh-i-Salātīn-i-Afghānā*:⁷⁰

Two or three months after this event, it became evident that his Majesty's [Babur's] health failed him. He was carried to his garden [char-bagh]. On the bank of the river ... In the year 937 H. he departed by the decree of the Almighty, from this earth to Heaven, and forsook this thorny world of trouble for the rose garden of paradise.

Abul Faḍl too mentioned the Chār-bāgh on the bank of the Jamuna where Babur died.⁷¹ Mrs Beveridge named it as such: "The body was laid in the Garden-of-Rest (*Ārām-Bāgh*) which is opposite to where the Taj-i-Mahall now stands."⁷² This is confusing. The garden which is now

called Rām-Bāgh (precisely Ārām-Bāgh) is not situated opposite the Taj Mahal. It is situated about one mile upstream to the north of the tomb of I'timād-ud-Daulah. The garden which faced the site of the Taj Mahal is known as the *Mehtāb-Bāgh* and the traces around it, particularly the inscribed mosque of Kachhpura in its vicinity dated 1530, confirm that this garden was also laid by Babur or his nobles around 1526 when he occupied this bank for this very purpose.

Abul Faḍl's description of the actual site of this garden of Babur is still more confusing. He recorded: "On the opposite side of the river is the Chār-bāgh, a memorial of Babur."⁷³ Jarrett noted it in the footnote:⁷⁴ "Later called *Hasht-Bihisht* or *Nūrafshān* Garden, and now called the *Rām-bāgh*." 'Hasht-Bihisht' and 'Gul-Afshan' (which could have been renamed 'Nur-Afshan' by Jehangir later on) were two different gardens and one cannot be identified with the other. None of them was, however, situated opposite to the site of the Taj Mahal and these authors have obviously been lost in the maze of vague and sometimes self-contradictory Persian accounts.

There is no doubt that Babur founded a *Chār-Bāgh* at Agra⁷⁵ under the name of *Bāgh-i-Gul Afshān* (Flower-Scatterer Garden). Jehangir also mentions it under this name, that he (Babur)

established on improved land, a garden [chār-bāgh] which few places equal in beauty. He gave it the name of *Gul-Afshān* [Flower-scatterer] and erected in it a small building of cut red stone, and having completed a mosque on one side of it he intended to make a lofty building, but time failed him and his design was never carried into execution.⁷⁶

This garden should not be misunderstood for *Bagh-i-Hasht-Bihisht* or *Bāgh-i-Zar Afshān*. The situation of the former is absolutely uncertain. The latter, however, has been mentioned by Gulbadan;⁷⁷ while recounting the events of the year 1527 at Agra, she noted that Babur

made an excursion to the Gold-scattering Garden (*Bāgh-i-Zar Afshān*). There was a place in it for ablution before prayers. When he saw it, he said: 'My heart is bowed down by ruling and reigning; I will retire to this garden. As for attendance, Tahir the ewer-bearer will amply suffice. I will make over the kingdom to Humayun.'

There seems to be no doubt that this was the most beautiful and pleasing garden of Babur at Agra and he desired to renounce kingship

and retire, not to any other garden, but to this garden, viz., the *Bāgh-i-Zar Afshān*. It seems to have been situated to the south-east of the *Bāgh-i-Gul Afshān* towards the direction of the site of the Taj Mahal on the east (left) bank of the river Jamuna.

Gulbadan refers to a tomb of Babur at Agra where the body was laid to rest and where Humayun appointed 60 reciters:

His Majesty [Humayun] named Muhammad Ali Asas its guardian, and ordered the appointment of sixty good reciters of the whole Quran and readers with good voices, so that the congregational prayers might be said five times daily and the whole Quran recited, and prayer offered for the soul of the royal dweller in Paradise [Firdaus-Makānī]. The whole of Sikri—now known as Fathpur—together with five laks charged on Bayana, was given as an endowment to the tomb, for the support of the men of learning [‘Ulama] and the reciters who were attached to it.⁷⁸

It seems to have been a full-fledged tomb and was not a simple grave only, to accommodate such a large retinue and necessitate the expenditure of such a vast revenue. Probably the central pleasure-pavilion of Babur’s *Bāgh-i-Zar Afshān* was converted into the tomb. We know for certain, again from Gulbadan, that Babur’s body was not removed to Kabul at least till 1539 when Kamran came to Agra and “visited the tomb of Firdaus-Makani [Babur]”.⁷⁹ Babur is said to have, sometimes, desired that his body should be buried in the garden of his choice at Kabul “in a grave open to sky with no building over it, no need of a door-keeper”.⁸⁰ But howsoever distinctly this Will might have been made, this was not carried out immediately in 1530 or for another two and a half years during the life-time of Mahim Begum, mother of Humayun, who looked after her husband’s tomb with devotion; nor his body was conveyed to Kabul up to 1539⁸¹ when, we know for certain that, Babur’s tomb existed at Agra and Kamran went to pay homage to it. Humayun could have sent his father’s body to Kabul any time between 1530 and 1539 when he had enough leisure in spite of his prolonged conflicts with Sher Khan and Bahadur Shah so much so that he could take in hand such ambitious architectural project as that of the *Dīn-Panāh* at Delhi (in 1533) and his various astronomical projects which have been recorded by Khwandamir.⁸² Mrs Beveridge is, therefore, correct when she noted, “Precisely when it was removed from Agra we have not found stated. It is known from Gulbadan that Kamran visited his Father’s Tomb in Agra in 1539 A.D. (946 H.) after the battle of Chausa.”⁸³

Maham Begum died at Agra on 13th Shawwal 939/8 May 1533. It is not known where she was buried and which place was chosen to be her tomb by her son Humayun who was then reigning. She seems to have been buried alongside the grave of Babur. It is certain, however, that her body was never transferred to Kabul. She was the most influential queen of Babur and accompanied him to all his important campaigns. She also sat with her husband on the throne at Delhi. After her husband's death she hardly ever left Agra.⁸⁴ Muhammad Ali Asas, who was appointed superintendent of Babur's Tomb, was probably her brother. She looked after her husband's Tomb and made arrangement for the regular supply of the quantity of meat daily needed by its inmates, comprising of an ox, two sheep and five goats in the morning and five goats in the afternoon. This also shows that Babur's tomb at Agra was a big institution in itself, and not a simple grave.

Beveridge further observed:

It is known from Jauhar that the body had been brought to Kabul before 1544 A.D. (952 A.H.), at which date Humayun, in Kabul, spoke with displeasure of Kamran's incivility⁸⁵ to 'Bega Begum', the Bibi who had conveyed their father's body to that place. That the widow who performed this duty was the Afghan Lady, Bibi Mubarika [Bega Begum] is made probable by Gulbadan's details of the movements of the royal ladies. Babur's family left Agra under Hindal's escort, after the defeat at Chausa [7 June 1539]; whoever took charge of the body on its journey to Kabul must have returned at some later date to fetch it. It would be in harmony with Sher Shah's generous character if he safeguarded her in her task.⁸⁶

It may be mentioned that Hājī Begum (also sometimes called the Begā Begum)⁸⁷ was captured by Sher Khan at Chausa where she lost her daughter Aqīqā. She (the Begum) was later returned to Humayun with honour, but the date of her restoration is not known. Certainly, she was not returned up to 1540 and, as we find her at Kabul with the royal family after 1545, this event could have taken place some time between 1540 and 1545. In all probability, she was conducted directly to Kabul.⁸⁸ Similarly, there is no mention of the transfer of Babur's body to Kabul. Howsoever generous was Sher Shah, it has to be examined whether he could have opened the grave of Babur and arranged to transfer his body to such a distant region simply to carry out his will, the existence of which itself is very doubtful as it has not been

mentioned contemporarily. How he was bound to carry it out at all? However, Mrs Beveridge's conjectures are worth scrutiny; she noted⁸⁹ that Babur's body was still in its tomb at Agra in 1539. Maham was dead; Gulrukh had left Agra with her son Kamran before the final catastrophe. This lady known as Bibi Mubārikā remained at Agra to fulfil the duty to remove his body to Kabul. She must have, therefore,

remained behind the rest of the Royal family. This may have occurred in one of two natural ways. She might have stayed in Agra under the protection of one of the religious families⁹⁰ and safeguarded by pious duty to Babur's Tomb until Sher Khan gave permission to remove the body and a safe escort for her journey to his frontier; or she may even have been in Bengal and at Chausa with Humayun and like Bega [Haji] Begam have been made captive.

Mrs Beveridge, thus, means to state that it was this lady, Bibi Mubārikā, who removed the body to Kabul.

The significant fact of this matter is that though Jauhar did not record that a tomb of Babur existed at Kabul, his statement has been so interpreted. His words are explicit; Humayun exclaimed that "this is not fit food even for the devout persons who wait on the tomb of our father; What! could not we, his four sons, support his relict [widow] as he did?"⁹¹ Obviously, the reference is to Babur's widow on the one hand and the reciters and other poor attendants of his father's tomb on the other; the food was not fit even for the latter, yet it was the miserable subsistence of the former, hence Humayun's reproach. That the tomb existed at Kabul has not been pointed out. Supposing that it was at Agra, Humayun could have made exactly the same remark. Humayun remained in the area for nearly 15 years; but that he ever visited his father's tomb at Kabul is not on record. It is only during the reign of Akbar that Babur's tomb at Kabul is first mentioned. Akbar visited it in the 26th year of his accession and, again, in the 34th.⁹² Jehangir made pilgrimage to the Tomb in 1607.⁹³ Its references abound thereafter. The crux of the problem is that Babur's Tomb is not at Kabul between 1530 when he died at Agra, and 1556 when Humayun breathed his last at Delhi!

The Tomb of Babur at Kabul, as it now exists, is in reality a grave⁹⁴ open to sky and lies in one of his most beautiful gardens:

The terraced garden Babur chose for his burial-place lies on the slope of the hill Shāh-i-Kābul... looking towards an unsurpassable

view over the Chār-dih plain towards the snows of Paghman and the barren, rocky hills which have been the hunting grounds of rulers in Kabul. Several of Babur's descendants coming to Kabul from Agra have visited and embellished his burial-garden. Shah-i-Jahan built the beautiful mosque which stands near the grave; Jehangir seems to have been, if not the author, at least the prompter of the well-cut inscription adorning the upright slab of white marble of Maidan, which now stands at the grave-head. The tombstone itself is a low grave-covering ...⁹⁵

Beveridge's description of this tomb-garden has been quoted from Muhammad Amir of Kazwin's Pādshāh-Nāmah:⁹⁶

The burial garden was 500 gaz [yards] long; its ground was in 15 terraces, 30 gaz apart. On the 15th terrace is the Tomb of Ruqaiya Sultan Begam [daughter of Hindal and Akbar's first wife]; as a small marble platform [chabutra] had been made near it by Jahangir's command, Shah-i-Jahan ordered both to be enclosed by a marble screen three yards high. Babur's tomb is on the 14th terrace. In accordance with his will, no building was erected over it, but Shah Jahan built a small marble mosque on the terrace below.

The following facts may thus be deduced by an analysis of this much confused data of Persian chronicles:

1. There does not seem to be on record any WILL of Babur that his body be ultimately removed to Kabul. It is not there in his Memoirs. Neither Jauhar nor Gulbadan mentions it. Later historians too are silent. Who coined this WILL to the effect that his body be removed to Kabul?
2. Babur was born at Farghana and he captured Kabul at a later date when he was finally driven out of Central Asia. Kabul was not the only beautiful place he had seen in his stormy career. There is no reason to believe that he had desired to be buried at Kabul when he had finally decided to settle in India.
3. As he noted in his Memoirs, the east bank of the river Jamuna at Agra where Babur had laid down several Char-baghs was called KABUL: "The people of Hind who had never seen grounds planned so symmetrically and thus laid out, called the side of the Jun where our residences were, Kabul."⁹⁷
4. He founded *Bāgh-i-Zar Afshān* (Gold Scattering Garden) at Agra

and built the Chauburj in its centre. He liked this place the most and, at times, he wanted to renounce kingship and retire to this garden: "My heart is bowed down by ruling and reigning, I will retire to this garden. As for attendance, Tahir the ewer-bearer will amply suffice. I will make over the kingdom to Humayun." This man could not have desired to be buried anywhere else. The Bāgh was a well laid-out garden, with water-channels and ponds, parterres and flower-beds, pathways and tree-avenues and a magnificent building in its centre.

5. He died at Agra and was buried here in a tomb.
6. This was a full-fledged tomb and a permanent institution where 60 reciters of the Quran were regularly employed and a large revenue of more than 5 lakhs of rupees was permanently assigned for its maintenance. It could not have been a simple grave or a temporary repository.
7. His body was not transferred to Kabul up to 1539 when his son Kamran visited the tomb. This tomb of Babur at Agra, thus, continued to enshrine his bodily relics at least up to 1539, with unquestionable certainty.
8. Curiously, Humayun took no steps to remove his father's body to Kabul, if at all it was the latter's will and the former's pious duty to fulfil. If it was incumbent upon him, he could have easily done it between 1530 and 1539 when he had such leisures as to commission the *Din-Panāh*, the *Imārat-i-Tilism*, the Great Shamiāna and the Astronomical Carpet!
9. That Babur's body was ever removed to Kabul has nowhere been recorded. Jauhar and Gulbadan do not mention it. Nor the Afghan historians allude to it. Akbar's chroniclers: Abul Faḍl, Badāonī and Nizāmu'd-Dīn, are also silent. Later historians, including Jehangir and Ferishtah also do not speak of it. It is doubtful whether it was removed at all.
10. What actually could have been transferred to Kabul is also doubtful. Unless Babur's body was deposited in a metallic coffin (preferably a copper or bronze one) with special arrangement, his body would have decomposed in ten years' time and reduced to dust and a few skeleton bones, and it could not have been removed in this condition. Moreover, the religious divines would not have normally allowed to open the grave and disturb the 'Waiting Soul' after 10 or 12 years.
11. In spite of all these facts there exists a grave at Kabul which is traditionally ascribed to Babur. We do not know of it for at

least half a century, and it is during the reign of Akbar that Babur's tomb at Kabul is first mentioned. Akbar visited it in c. 1582. To be precise, it was certainly not there between 1530 when Babur died at Agra and 1556 when Humayun breathed his last at Delhi. On the other hand, his tomb is there at Agra in 1539 when Kamran visited it. This leads us to the only problem which remains to be solved: When was the famous garden at Kabul FIRST supposed to be Babur's permanent grave?⁹⁸

Except that the last point needs elaboration, these facts cannot be disputed as far as the available data are concerned. We know, from the Memoirs of Babur himself, that he was greatly interested in architectural projects associated with gardening and water-devices. He recorded: "Another good thing in Hindustan is that it has unnumbered and endless workmen of every kind ... 680 men worked daily on my buildings in Agra and of Agra stone-cutters only; while 1491 stone-cutters worked daily on my buildings in Agra, Fatehpur Sikri, Bayana, Dholpur, Gwalior and Koil [Aligarh]."⁹⁹ The great building activity which went on during his short reign has been confirmed by Gulbadan.¹⁰⁰ Particularly she mentioned:

He [Babur] commanded buildings to be put up in Agra on the other side of the river, and a stone palace to be built for himself between the haram [seraglio] and the garden. He also had one built in the audience court, with a reservoir in the middle and four chambers in the four towers. On the river's bank he had a *Chaukandi* built.¹⁰¹

This *Chaukandi* does not mean a four-storeyed mansion which would have destroyed Babur's concept of a garden-house, but a four-sided, i.e., a square building with towers at its four corners which might have been four-storeyed (*Chaukandi* or *Chaukhandi* चौखण्डी).

This may be identified with the extant *Chauburj* at Agra. It is situated on the east (left) bank of the river Jamuna just near the Tomb of I'timad-ud-Daulah and almost exactly occupies the site of Babur's *Bāgh-i-Zar Afshān*. As a matter of fact, the garden which now contains *Chauburj* in its centre, with an elaborate system of water-devices, is the *Bāgh-i-Zar Afshān* of Babur. This is not only confirmed by the legend which is prevalent in the neighbourhood which ascribes this place to Babur but also by the extant traces. Slightly to its west is the *Baburi-*

Masjid which, having been repaired and renovated over and over again, has very little original fabric. Yet it bears the name: *Baburi-Masjid* or the Mosque of Babur which seems to have been alluded to by Gulbadan with the description of the *Bāgh-i-Zar Afshān*.¹⁰¹ To the east of the *Chauburj* are its water-works. Water was drawn from the big well and stored in three overhead tanks which were interconnected. Thence it was conducted through underground baked clay pipes to the main building of *Chauburj*. Four tanks, precisely lily-ponds, one in front of each facade of the building, have survived, though the stone channels and pathways, running on four sides of the building, have been completely destroyed. It was obviously planned as a *chār-bāgh* (four-quartered garden). The entire stone work of the tanks has gone and the plunderers have also taken away most of the red sandstone of the main building.

The *Chauburj* (Plate LXXXIII) is square in plan (see Fig. 16 for

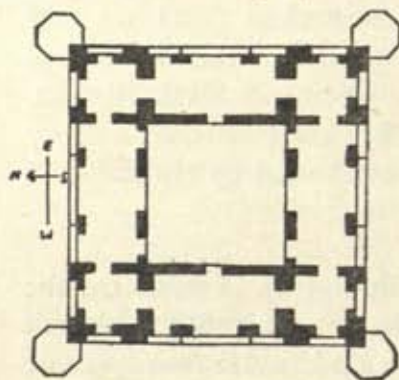


Fig. 16. Plan, Chauburj, Agra (c. 1527).

plan) with octagonal towers at its four corners. These towers (Plates LXXXIV and LXXXV) are two-storeyed at present but it seems that there also was an additional storey, the whole surmounted by a conventional octagonal *chhatra*. All towers have stairways; while one is connected to the garden, other three have access only from the terrace of the building.

Interior is composed of a square hall with square chambers at the corners and oblong rooms on the sides, all being interconnected.¹⁰² Each facade has three arched openings in the oblong room and one arched opening in each of the corner chambers. Side arches are, curiously, two-centred. Though the construction is arcuate, heavy massive beams have been used over the arches and, as a matter of fact, the weight of the ceilings is supported in each case on a network of these stone beams. Extraordinary massive piers have been used and the emphasis is on strength rather than on impression. The fabric is of brick and mortar which has been roughly brought about (Plates LXXXVI and LXXXVII) and the style of construction is more akin to the so-called Pathan period than to the refined and tasteful age of Akbar. The whole was stone-cased exteriorly, while the interior was plastered over. There was very little ornament. Alcoves above the *dados* had floral designs (*guldestas*) and a few examples have survived (Plate LXXXVIII). They could also have been redone later, probably during the reign of Jehangir.

As it seems, there originally was an underground cellar but it has now been completely closed down. The main hall too seems to have been dug out over and over again by the treasure-trover and nothing now remains to help us to build its history. The terrace, however, has a raised platform (dais) above and its broken edges (Plate LXXXIX) indicate that, probably, it was a domed pavilion. The central part seems to have been repaired some time back. This shows that this was a tomb and while the body could have been laid in the lower storey, a cenotaph was placed in the centre of this domed pavilion on the terrace.

As a whole, the tomb would have been, in its original splendour and glory, a majestic building (see Plate XC for conjectural restoration).

In all probability, as far as the available data help us to deduce, this is the tomb of Babur and its site, his *Bāgh-i-Zar Afshān*. *Chauburj* is its popular nomenclature, no doubt, but it was, more reasonably, known as '*Chaukandi*' as Babur built it. His body was laid to rest here and it was in its central mortuary hall that it remained. It was for this institution of the Tomb that 60 reciters of the Quran were appointed and a revenue of more than 5 lakhs of rupees was assigned to meet with its expenditure. It was here that Kamran came to pay his homage in 1539.

The only point that remains to be decided is the question: when was Babur's body transferred, and whether it was at all transferred, to Kabul and when was the famous garden at Kabul supposed to be Babur's permanent grave? It is possible that his body was NEVER transferred to Kabul and the CHAUBURJ continued to enshrine the mortal remains of the founder of the Mughal dynasty of India at Agra, and also those of his chief queen Maham Begum, mother of Humayun, until taking advantage of the 18th century anarchy villagers dug up the grave and destroyed it. There is every likelihood that Humayun, immensely, desperate and dejected as he was after his final defeat at the hands of Sher Shah and his flight from India, in 1540, was contented to bury the handful of dust which Bibi Mubārikā might have taken from her husband's grave at Agra into the famous grave of Babur at Kabul on the 14th terrace of his most beautiful garden. Or, Akbar might have chosen to plant it there for political reasons. This aspect of the study, however, remains to be further investigated and defined, specially from the Afghan side, and further researches may some day decisively prove CHAUBURJ to be the Tomb of Babur at Agra.

References

1. LV-1, *Brhat-Samhitā* of Varāhamihira (ed. A.V. Tripathi, Varanasi, 1968), Part II, p. 665.
2. LV-3, cf. *ibid.*, p. 666; *Bhaviṣya-Purāṇa* (I.CXXX.10) quotes the same śloka with only a slight variation in a similar reference.
3. LV-8, *op. cit.*, p. 667; *Bhaviṣya-Purāṇa*, I.CXXX.15; Stella Kramrisch (*The Hindu Temple*, Vol. I, Calcutta, 1946, p. 4) on the authority of these scriptures noted, "The gods always play where lakes are, where the sun's rays are warded off by umbrellas of lotus leaf clusters and where clear waterpaths are made by swans whose breasts toss the white lotuses hither and thither; where swans, ducks, curleys and paddy-birds are heard and animals rest nearby in the shade of Nicula trees on the river-banks. The gods always play where rivers have for their bracelets the sound of the flight of curleys and the voice of swans for their speech, water as their garment, carps for their zone, the flowering trees on their banks as earrings, the confluence of rivers as their hips, raised sand banks as breasts and the plumage of swans their mantle."
4. For details of this study, reference may be made to the author's paper 'Rehant versus the Persian Wheel', *Journal of the Asiatic Society*, Calcutta, Vol. XII, Nos. 1-4 (1970), pp. 81-84.
5. Cf. *Kādambarī* of Bāṇabhaṭṭa (ed. K.M. Sastri, Varanasi, 1971), pp. 612-16.
6. The *Samarāṅgaṇa-Sūtradhāra* (revised and edited by V.S. Agrawala, Baroda, 1966), Chapter XXXI.109, pp. 175-95.
7. *Ibid.*, XXXI.116.
8. *Ibid.*, XXXI.134-38.
9. *Ibid.*, XXXI.141.
10. *Ibid.*, XXXI.148.
11. *Rājavalabha* of Maṇḍana (Ahmedabad, 1965), IX.18.
12. *Ibid.*, IX.19.
13. A. Rea, Conservation in Madras, *A.S.I. Annual Report* 1908-9, p. 24.
14. *Ibid.*, p. 23 and Figs. 2 and 3 respectively.
15. For his career under Humayun and Akbar, see *Maasir'ul-Umara*, Vol. II (H. Beveridge and Baini Prasad) (Calcutta, 1952), pp. 745-47.
16. *BN*, p. 486; he mentions the 'Rehant' system in the same sequence, *ibid.*, pp. 486-87. Rehant is an ancient Indian device of drawing water from well and it should be called as such, instead of the misnomer 'Persian Wheel'. Also see n. 4 above.
17. *Ibid.*, p. 487.
18. i.e. by the Rehant system.
19. Four-quartered garden.
20. *BN*, pp. 531-32.
21. C.M. Villiers Stuart, *Gardens of Great Mughals* (London, 1913), p. 148; the garden carpet belonging to the reign of Khusrāu-I (A.D. 531-39) faithfully depicted all the elements of the typical Persian garden: canals, tanks, flower-beds and pathways; Donald N. Wilber, *Persian Gardens and Garden Pavilions* (Tokyo, 1962), pp. 31, 34; A.U. Pope, *An Introduction to Persian Art* (London, 1930), p. 205. Their garden much differed from the European ideal of gardening, "The Persians, like all good architects, make a house and its garden a continuous unit but whereas the European commonly unifies the two by carrying the house out into the garden with terraces, balustrades, benches and statues that reflect the garden facade, the Persian achieves coherence by

carrying the garden into the house and makes no opposite concession", cf. *ibid.*, p. 204. Recently Japanese gardening has come into fashion. No doubt, flowers and gardens play an important part in the national life and art of Japan. But the two aspects of garden-craft should be separately understood. One is the art of building, planning and laying of the parterres and avenues for all time and for all generations. The other is horticulture wherewith each generation plants and replants according to its taste. This is not an art but the science of improving form and flavour, scent and colour and is solely dependent for effect on the former. We, therefore, do not do justice when we attach greater importance to Isami Naguchi than to the Persian art traditions of laying beautiful garden in a beautiful architectural environment.

22. K.A.C. Creswell, *Early Muslim Architecture* (1958), p. 119. Seyrig actually followed it for 18½ miles.
23. Cf. Stuart, *op. cit.*, p. 6.
24. *Ibid.*, pp. 8-9.
25. Pool is "kept so full that it brims to the very roots of the surrounding trees. Often the surface is elevated a foot or more so that the ground beyond is hidden and the garden seems to rise direct from the smooth water. Generally the pool will be still. The unfractured quiet of the mirroring surface is the soul of the garden's spell." Cf. Pope, *op. cit.*, p. 207.
26. Stuart, p. 13.
27. Pope, p. 208.
28. Wilber, *op. cit.*, pp. 60-61.
29. *Ibid.*, p. 9.
30. *BN*, 584.
31. *Ain*, I, 93.
32. *BN*, pp. 531-32.
33. *Ibid.*, p. 532.
34. Hammām architecture developed to a great scale during the reign of Akbar at Fatehpur Sikri; it is discussed in detail along with his style.
35. It is situated at present in the village Jhor on the Dholpur-Bari road. Babur had ordered this to Ustād Shāh Muhammad the stone-cutter (in fact, the supervisor of the artisans who were locally collected) on 24 August 1527, cf. *BN*, p. 585. Ustād Shāh Muhammad was his favourite officer, a sort of Mīr-i-'Imarat in whom Babur reposed greatest confidence for his architectural works. The Ustād has also been mentioned as such in Babur's letter written from Etawah on 10 February 1529 to Khwāja Kalān at Kabul. This letter also shows his keen interest in architecture. See, for details, *Appendix F* given at the end of this chapter.
36. *BN*, pp. 606-7, 614-15, 634.
37. *Ibid.*, 639.
38. *TA*, I, 370.
39. *Ibid.*, 370-72.
40. *BN*, 333: "... Qandahar-hill where I am now having a rock-residence cut out." A.S. Beveridge in her footnote (cf. *ibid.*, p. 333, fn. 2) gives emphasis on the word 'Qāzdūrghān' = to dig out, to quarry stone or to cut out in the living rock. She explained this matter in *Appendix J* (*ibid.*, Appendices, pp. xxxii-xxxiv) and affirmed that the main inscription commemorates Babur's victory of Qandahar and gives this building the character of a Victory Tower and that "the excavation has been chipped out of the white-veined limestone of the bare ridge on and below which stood old Qandahar".
41. Can it be the *Chār-Chamand* tank of Fatehpur Sikri which has a large

- island-platform? It is possible that, originally, there was a garden around it which was later paved with stone and made pucca and buildings were erected in the compound during the reign of Akbar. Babur has also alluded to an island-platform in his Memoirs: "The octagonal platform ordered made in the middle of the lake was ready [1 December 1527]; we went over by boat, had an awning set up on it and elected for ma'jun" (BN, p. 588). It is not necessary, however, to use boat to reach the island platform of the Chār-Chamand as bridges are already there on all the four sides and, also, it is a small tank and cannot be deemed a lake where boating could have been possible, and the island-platform is not octagonal but square.
42. HN, pp. 102-3.
 43. BN, p. 552.
 44. EIAPS (1965), pp. 50-51; the inscription tablet was placed obviously after the battle. Babur saw it much later in September 1528, hence his date. There is no ambiguity in either case.
 45. BN, pp. 532-33.
 46. For details reference may be made to the author's article 'Mysteries of Phansighar at Agra Fort', *Journal of Indian History*, Trivandrum, Vol. XLVIII, Part III (December 1970).
 47. BN, p. 519.
 48. It has been referred to above, cf. *ibid.*, p. 607.
 49. EIAPS (1965), pp. 51-53.
 50. *Ibid.*, pp. 53-55.
 51. *Ibid.*, p. 55.
 52. BN, p. 520.
 53. Exactly, supervisor of stone-cutters.
 54. *Ibid.*, p. 642.
 55. For a detailed study of this mosque, reference may be made to the author's *History of Sultanate Architecture* (New Delhi, 1978), pp. 111-12.
 56. BN, p. 518.
 57. EIAPS (1965), pp. 58-62. One full and a fragment of other inscription have also been discussed by A.S. Beveridge, cf. BN, Appendices, pp. lxxvii-lxxix.
 58. *Ibid.*, pp. 56-57.
 59. *Ibid.*, p. 66.
 60. *Ibid.*, pp. 65-66.
 61. *Ibid.*, p. 64.
 62. *Ibid.*, pp. 62-63.
 63. HN, p. 109; AN, I, p. 277; L.F. Rushbrook Williams, *An Empire Builder of the Sixteenth Century* (Delhi), p. 179. Some hold that he died on 5th Jamadi'ul-Awwal while others accept 6th to be the date of his death. This is, however, immaterial for the present study.
 64. BN, pp. 701-2.
 65. He fell ill in the hot weather and was brought to Agra via Mathura where his mother Maham Begum joined him, cf. Rushbrook Williams, *op. cit.*, p. 175; also see S.K. Banerji, *'Humayun Badshah*, Vol. I (London, 1938), p. 13.
 66. BN, pp. 701-9; Abul Fadl repeats the story, cf. AN, *op. cit.*, pp. 275-77; Rushbrook Williams also refers to this episode, cf. *op. cit.*, pp. 175-77. The controversy whether it was the transfer of 'malady' or Babur's own sickness has provoked many writers to go into deep details. S.R. Sharma's article 'Story of Babur's Death' (*Calcutta Review*, September 1936) may be referred to in this connection.
 67. Rushbrook William's conclusion (*op. cit.*, pp. 177-78) in this respect appears to be more plausible, "There was a sudden acute disorder of the bowels which the doctors were quite unable to remedy and they said that they had discovered symptoms of

the same poison with which Buwa Begam, Sultan Ibrahim's mother, had before attempted to take Babur's life." S.K. Banerji (cf. op. cit., p. 15) concurred: "It was not the prince's malady that was transferred. He suffered from high fever while Babur's complaint was a disorder of the intestines. His physicians considered it to be the effect of the poison administered by Sultan Ibrahim Lodi's mother, four years back."

68. Cf. Rushbrook Williams, op. cit., p. 179.
69. Ibid., p. 179, fn. 2.
70. *E&D*, V, p. 43. Yādgar described himself as an old servant of the Sur kings. He wrote his history during the reign of Akbar.
71. *AN*, I, p. 277.
72. *BN*, p. 709; she confirms this name in the *HN*, p. 110, fn. 2.
73. *Ain*, II, p. 180.
74. Ibid., p. 180, fn. 4.
75. *BN*, pp. 531-32; it has been discussed above.
76. *Tuzuk*, pp. 4-5.
77. *HN*, p. 103. Jauhar Aftābchī confirms the existence of this garden in 1539 when he notes that Kamran who was at Agra after the disaster of Chausa encamped in the garden called the *Zar-Afshān* (Gold-Scattering), cf. *TV*, p. 19.
78. *HN*, pp. 110-11; Beveridge's version in the *BN* is as follows (*BN*, p. 709): "Muhammad Ali Asas was made the guardian of the tomb and many well-voiced readers and reciters were appointed to conduct the five daily prayers and to offer supplication for the soul of the dead. The revenues of Sikri and 5 lacs from Biana were set aside for the endowment of the Tomb and Mahim Begum (Humayun's mother) during the two and a half years of her

remaining life, sent twice daily from her own estate, an allowance of food towards the support of its attendants."

79. *HN*, p. 138.
80. *BN*, p. 709. It is in Beveridge's translation that we hear of Babur's Will explicitly *for the first time*. It is from her pen; *Babur himself never mentioned it in his Memoirs*.
81. *HN*, p. 138; *BN*, p. 709. Ferishtah's mention (*Briggs*, II, 41) of this transfer is too scanty to make up an idea: "According to his will his body was carried to Kabul, and interred in a sepulchre at that city."
82. cf. *QH*, pp. 10-70; these astronomical measures are confirmed by Abul Faḍl, *AN*, I, pp. 642-51; also see S.K. Banerji, op. cit., pp. 61-64, for these time-consuming eccentricities of Humayun.
83. *BN*, p. 709.
84. S.K. Banerji, op. cit., pp. 60-61.
85. Jauhar while recounting the events of 1544-45, including the retaking of Kabul by Humayun and flight of Kamran, mentioned this. Humayun and his party were hungry and sent message for food to Rayke Begum, widow of Babur, who supplied beef broth and curry made of same meat with vegetables. Humayun was surprised at this food and observed: "This is not fit food even for the devout persons who wait on the tomb of our father. What! could not we, his four sons, support his relict (widow) *as he did?*"—cf. *TV*, p. 83. This account of Jauhar convinced Beveridge that a tomb of Babur was there at Kabul in 1544-45 and Rayke Begum (Bībī Mubārīkā) was its keeper. But this was an erroneous inference.
86. *BN*, pp. 709-10.
87. *HN*, p. 218. She was a queen of Humayun and should not be confu-

APPENDIX F

Extract from Babur's Letter written from Etawah on 10 February 1529 to Khwājah Kalān at Kabul*

... The things that must be done are specified below; for some of them orders have gone already, one of these being, 'Let treasures accumulate.' The things which must be done are these: First, the repair of the Fort; again, the provision of stores; again, the daily allowance and lodging of envoys going backwards and forwards; again, let money, taken legally from revenue, be spent for building the congregational Mosque (Jami' Masjid); again, the repairs of the Karwān-sarā [Cārvān-Serāi] and the hot-baths; again, the completion of the unfinished building made of burnt-brick which Ustād Ḥasan 'Alī was constructing in the citadel.

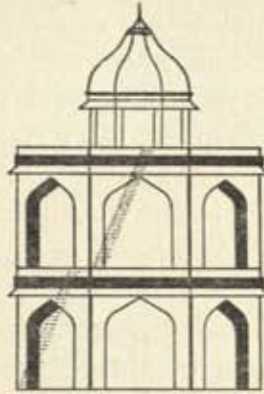
Let this work be ordered after taking counsel with Ustād Sulṭān Muḥammad; if a design exists, drawn earlier by Ustād Ḥasan 'Alī, let Ustād Sulṭān Muḥammad finish the building precisely according to it; if not, let him do so, after making *a gracious and harmonious design*, and in such a way that its floor shall be level with that of the Audience-hall.

Again, the Khwurd-Kabul dam which is to hold up the 'But-Khak' water [river named as 'Idol-dust'] at its exit from the Khwurd-Kabul narrows; again, the repair of the Ghazni dam; again, the Avenue-garden in which water is short and for which a one-mill stream must be diverted; again, I had water brought from Tūtūm-dara [Tutam-pass] to rising ground south-west of Khwāja Basta, there made a reservoir and planted young trees. The place got the name of Nazar-Gāh [Belvedere], because it faces the ford and gives a first-rate view. The best of young trees must be planted there, lawns arranged, and borders set with sweet-herbs and with flowers of beautiful colour and scent; again, Sayyid Qāsim has been named to reinforce thee; again, do not neglect the condition of matchlockmen and of Ustād Muḥammad Amīn the armourer; again directly this letter arrives, thou must get my elder sister (Khān-zāda Begum) and my wives right out of Kabul and escort them to Nilab.

*BN, pp. 646-47.

CHAPTER III

ARCHITECTURAL PROJECTS OF HUMAYUN



BABUR died at Agra on Monday, 6th Jumada I, 937 A.H./26 December 1530 and Humayun ascended the throne on Thursday, 9th Jumada I 937/29 December 1530. He inherited love of fine arts from his father, but he was an idealist in a larger measure. Unlike his father, he ardently believed in astronomy and astrology and regulated his life strictly in accordance with the movement of stars. We get a fairly good idea of his superstitious, at times eccentric, innovations from Khwandamir's *Qānūn-i-Humāyūnī*. Humayun commissioned him to record his rules and ordinances when the court was at Gwalior. Khwandamir started writing in March 1533 and he finished his work in May 1534. Thus he wrote contemporarily and supplies the first-hand information which throws a flood of light on the personality and character of Humayun. While Babur would fight and win the dangerous battle of Khanwa (1527) against the prediction of a fortune-teller, Humayun, Khwandamir narrates, "always takes auguries, while riding for pleasure and exploration, by enquiring the names of various people [whom he may meet], and on the warning of evil omens desists [from carrying out his intentions]".¹ This made the whole difference between the Father and the Son.

(a) *Humayun: A Grand Genius of Peace*

On accession to the throne, Humayun "divided all the officers of the

state, or rather all the inhabitants of his dominions into three classes"² viz. (i) Ahl-i-Daulat comprising of his brothers and relatives, 'Umara, Wazirs and soldiers, i.e., those who ran the state; (ii) Ahl-i-Saadat, holy persons, Sheikhs, Sayyids, Qadis and philosophers, i.e., the learned men, intellectuals of the realm; and (iii) Ahl-i-Murad, who possessed beauty and elegance, musicians, singers and artists, i.e., those who entertained. Days of the week were similarly divided and each day was assigned to one of the three classes, e.g., Saturday and Thursday to Ahl-i-Saadat; Sunday and Tuesday to Ahl-i-Daulat and Monday and Wednesday to Ahl-i-Murad. All assembled on Friday.³

Another innovation of Humayun "was that he had three arrows made of gold, and in reference [to the three classes mentioned above], named them respectively the arrows of Saadat, Daulat and Murad. Each of these three arrows was handed over to one of the firmly established leaders of the three classes..."⁴ Each class was further subdivided into twelve divisions, and an arrow "according to the different standards of gold" was assigned to each one of them. The twelfth arrow of the purest gold was reserved for the emperor.⁵ The main reason for this division into twelve subclasses was because this was an astronomical numerical, as Khwandamir explained: "The eighth heaven is divided into the twelve signs of the Zodiac, and the direction of the revolutions of the Sun, the Moon, and the stars and the seven planets is contingent on the Signs of the Zodiac. And the calculations for months and years are based on their revolutions, and the light of the truth of this idea shines as the passage of days and months in different parts of the Universe."⁶ This amply shows that he modelled his state as much as his personal life in accordance with his belief in astronomy and its various phenomena.

It is curious that he did not stop here and went on devoting his time, thought and energies to such innovations which appear to be eccentric in the context of the dangerous conditions which then prevailed. Instead of preparing to meet the Afghan challenge, reorganise the finances and army which were in complete disarray, and set his state on a sound footing, he continued to indulge in such ideal ordinances which did not help him at all in the time of his need and adversity. Khwandamir further records that he divided the affairs of the state into four departments, corresponding to the four phenomenal elements, viz., Ātashī (Fire) comprising of weapons and engines of war; Hawāī (Air): wardrobe, kitchen and stables etc.; Ābī (Water): wine, syrups and canals; and Khākī (Earth): agriculture, lands, buildings and exchequer. A wazir was appointed to each of these departments. This was not a workable



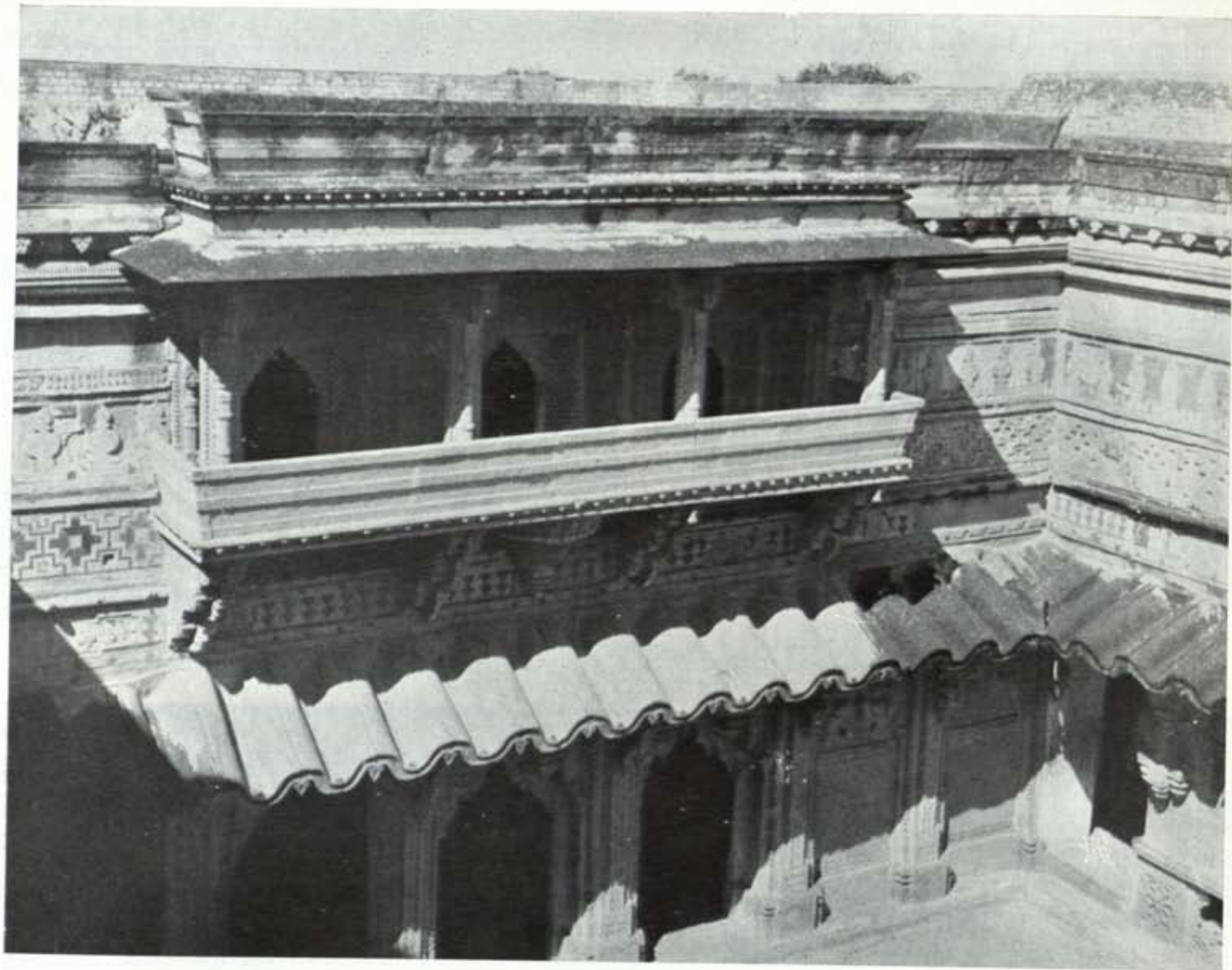
XXXIX. Facade of the Hall 'F'

XLI. 'Khaprel' Type Chhajja of the Facade of the Hall 'F'

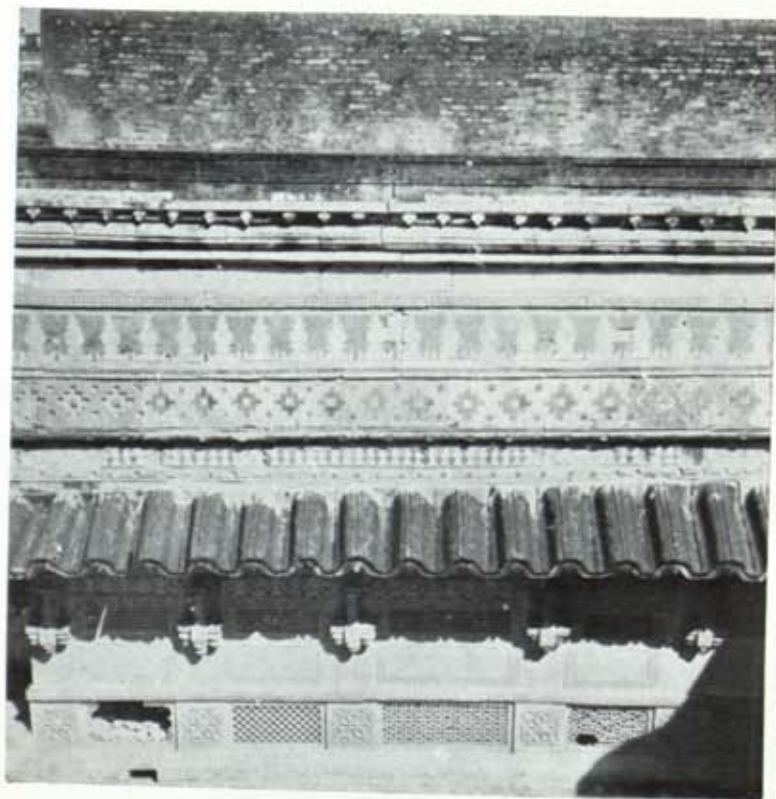


XL. Vyāla Brackets of the Facade of the Hall 'F'





XLII. Balcony of the Facade of the Hall 'F'

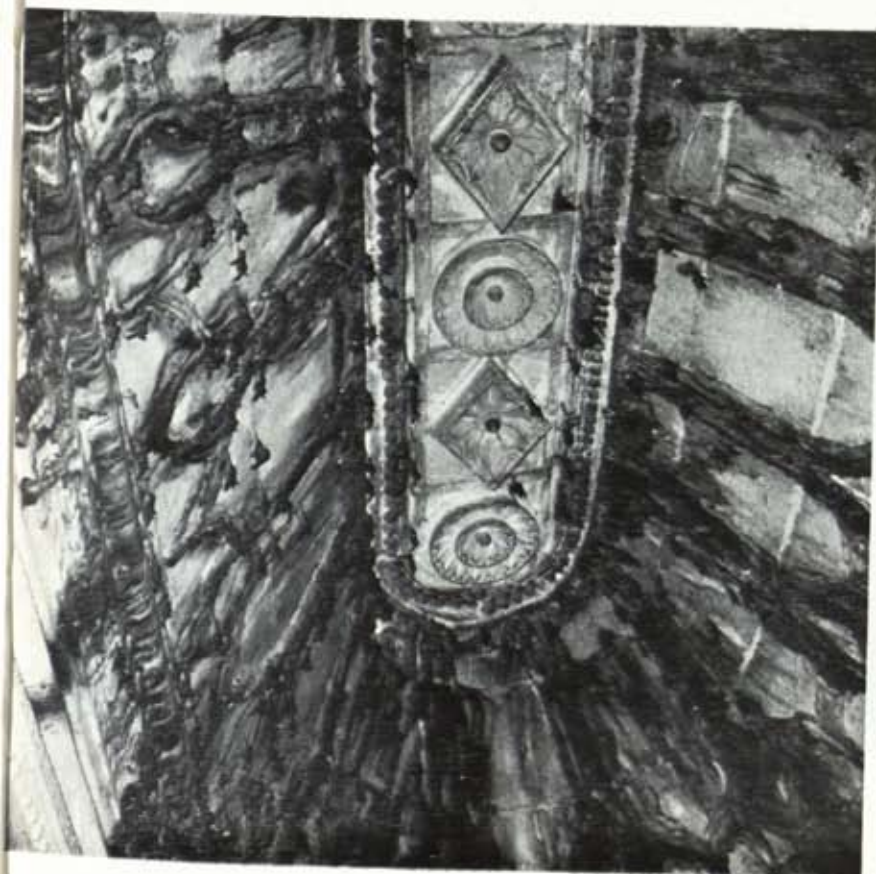


XLIII. Northern Facade of the Court 'Y'

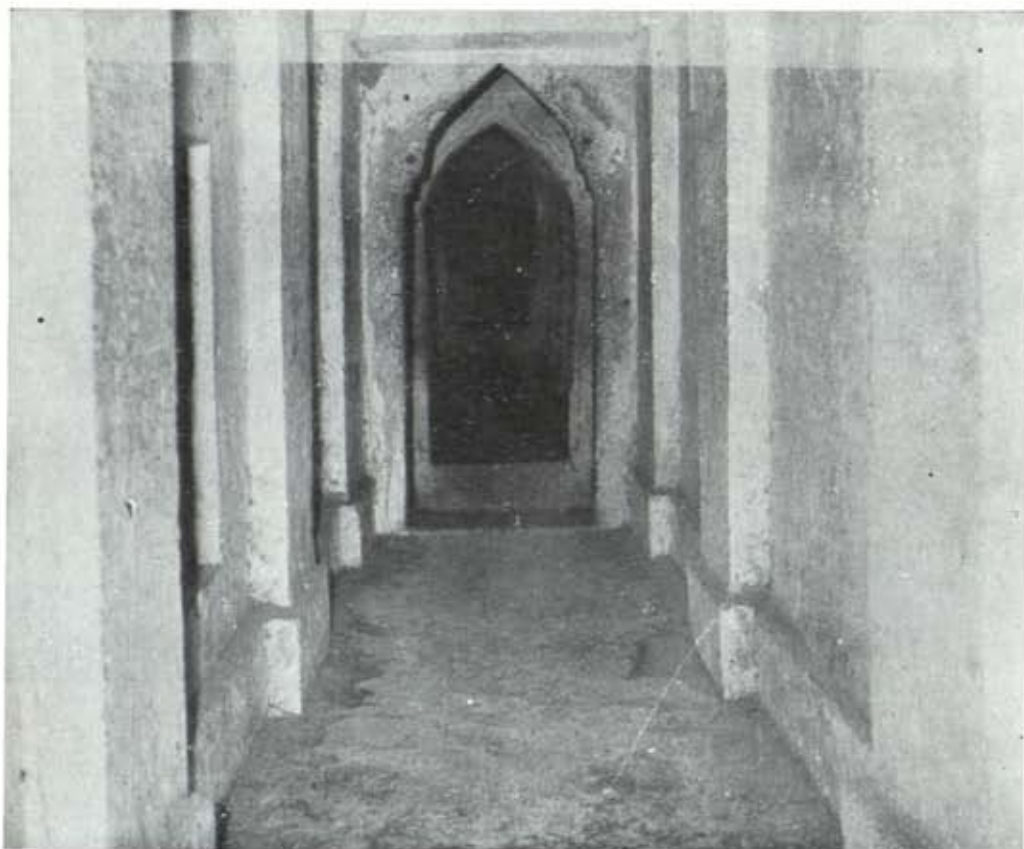


XLV. (a), (b) and (c) Vaulted Ceiling of the Hall 'G'

← XLIV. Brackets of the Court 'Y'



XLVI. Wagon-vaulted Ceiling of the Hall 'H'



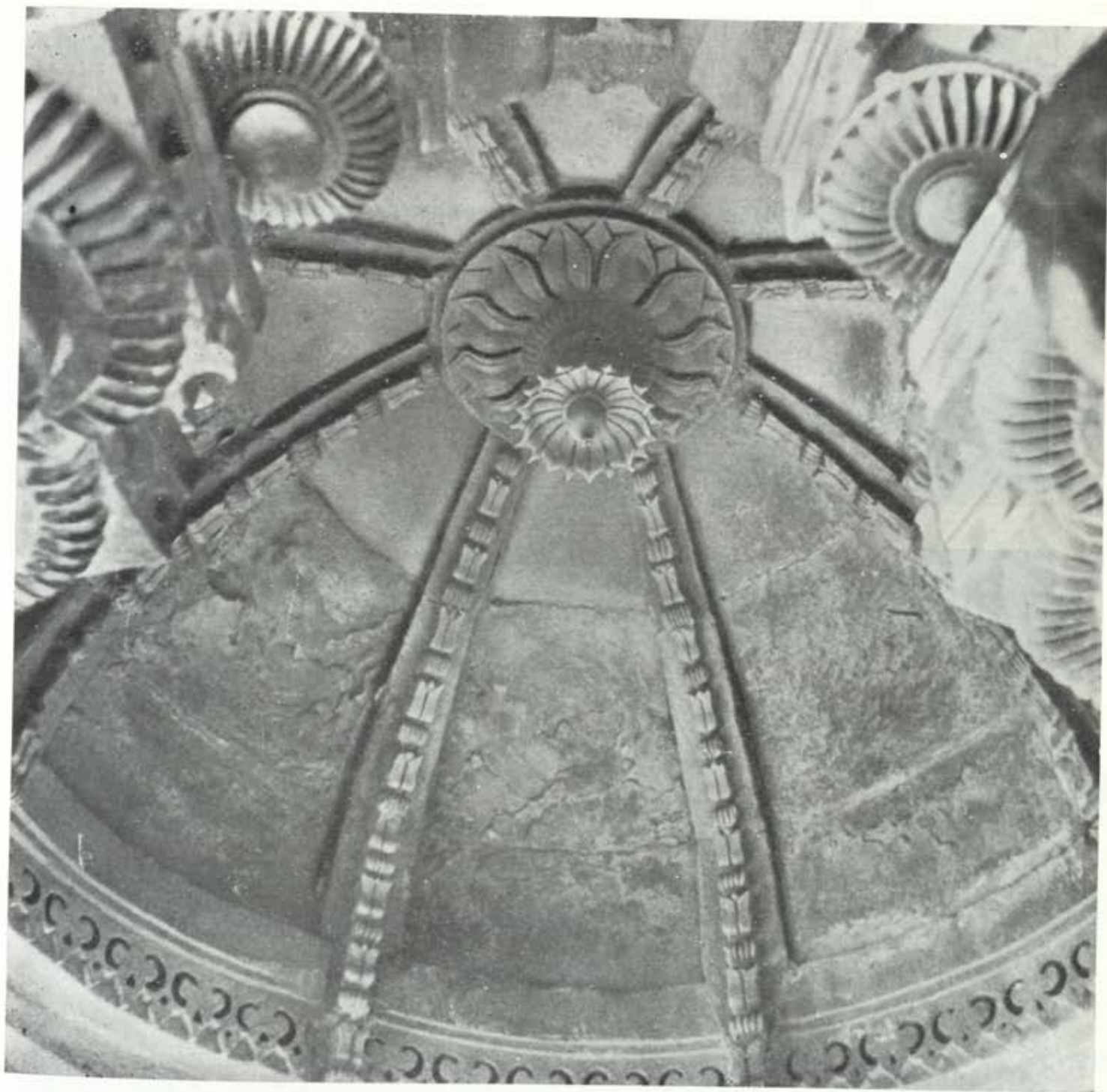
XLVII. Underground Passage,
Man Mandir



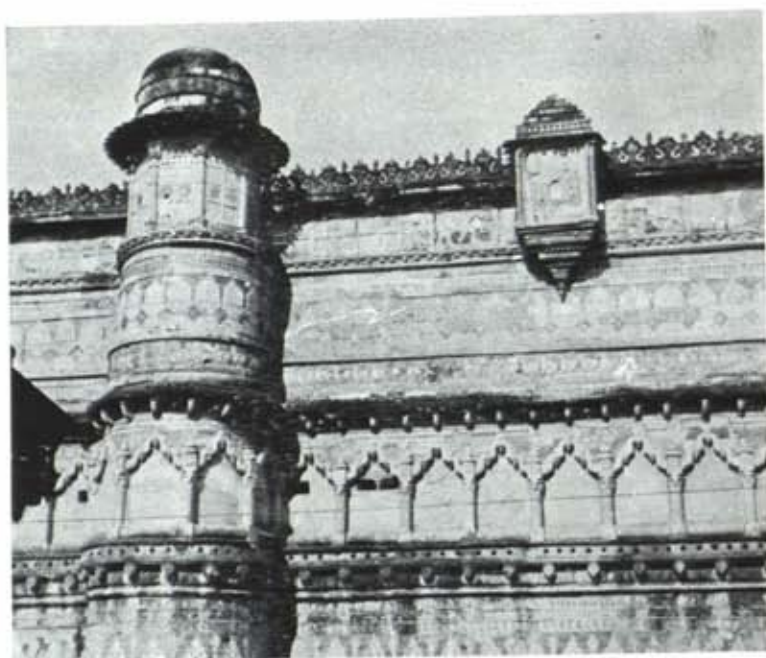
XLVIII. Ribs-and-Panels Ceiling Hall 'I'



XLIX. Ribs-and-Panels Ceiling Hall 'J'

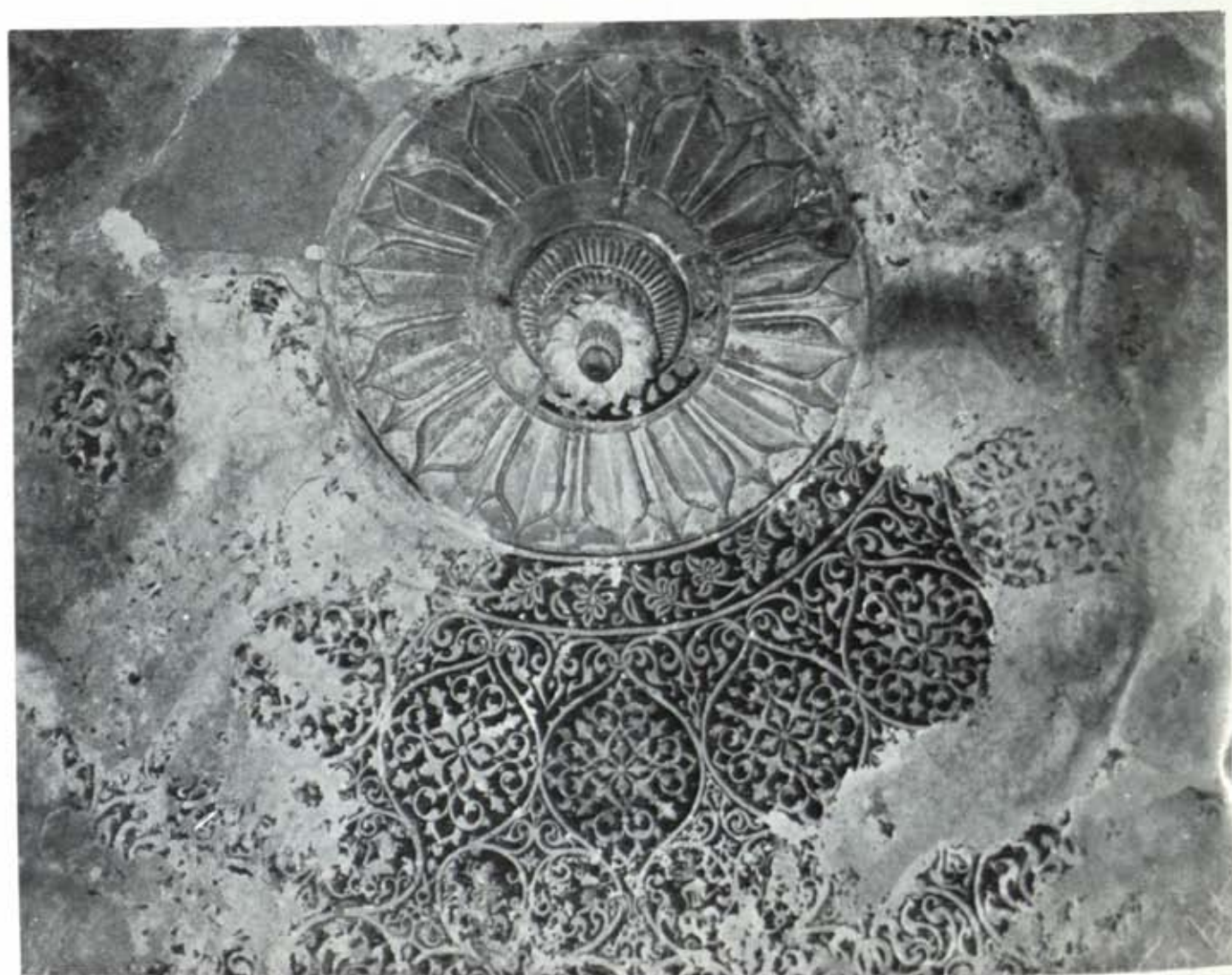


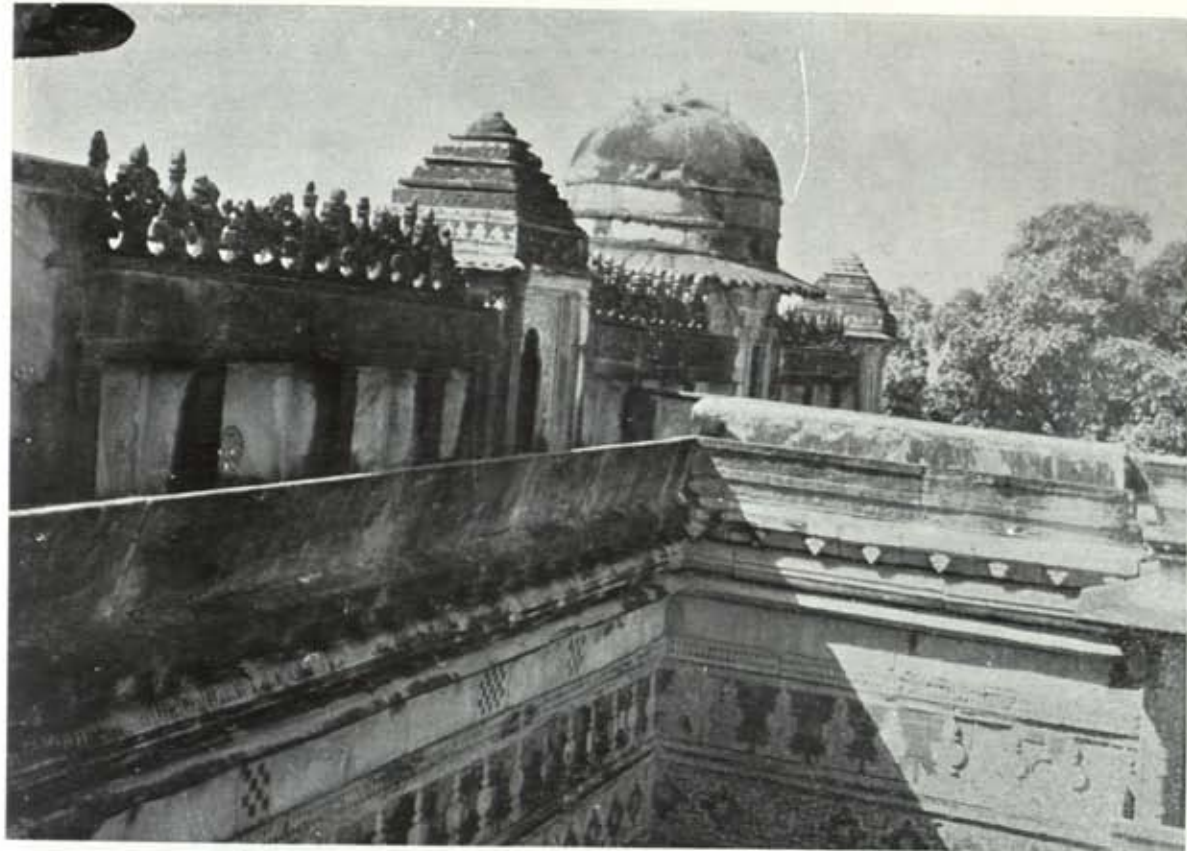
L. Ribs-and-Panels Chhatris, Man Mandir



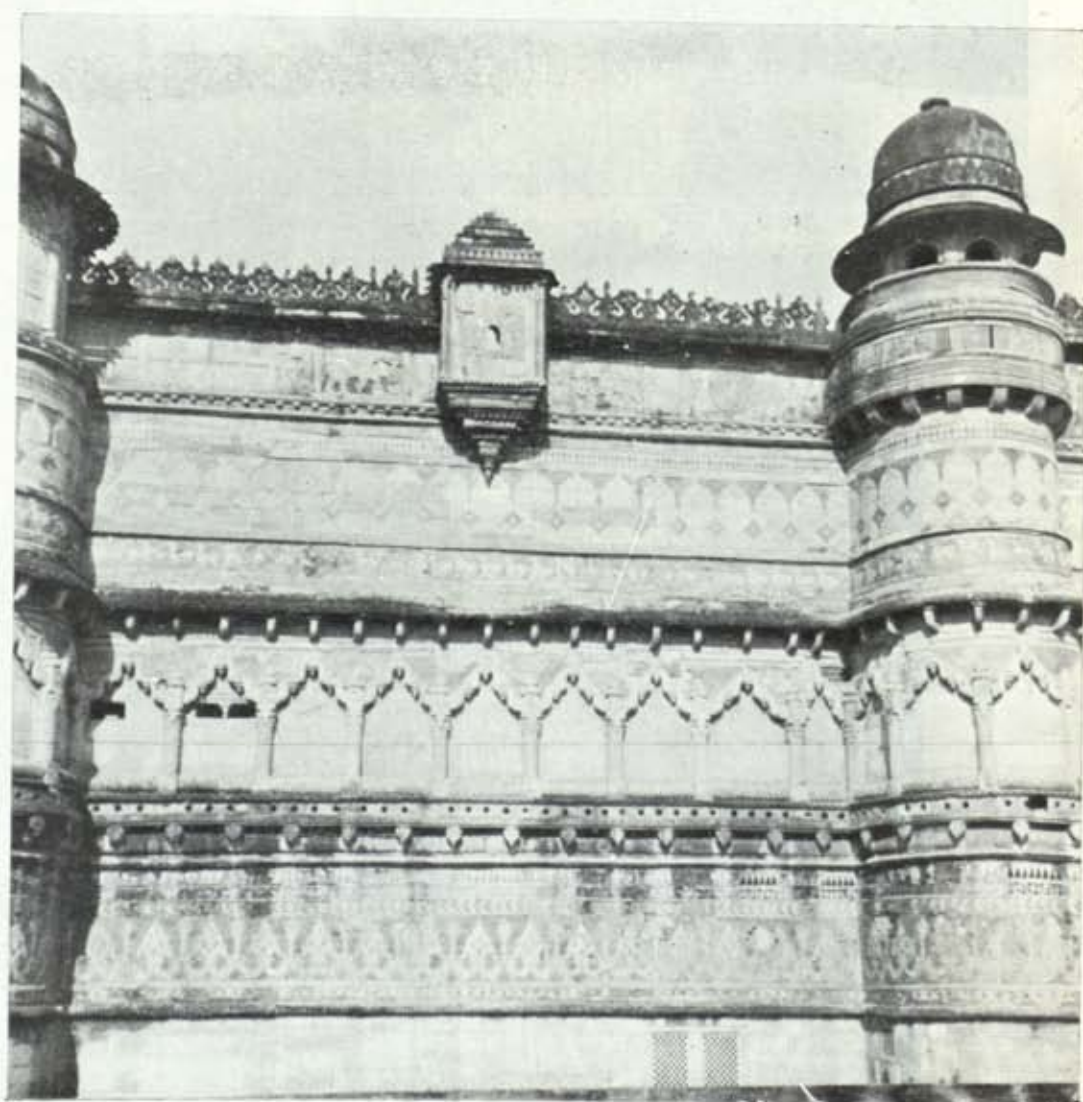
← LI. Southern Facade with closed Chhatri,
Man Mandir

LII. Painting, Ceiling of the Chhatri





LIII. 'Chhaparkhat', Man Mandir



LIV. Oriel Window, Man Mandir →



LV. 'Bitaura' form Chhatri, Man Mandir

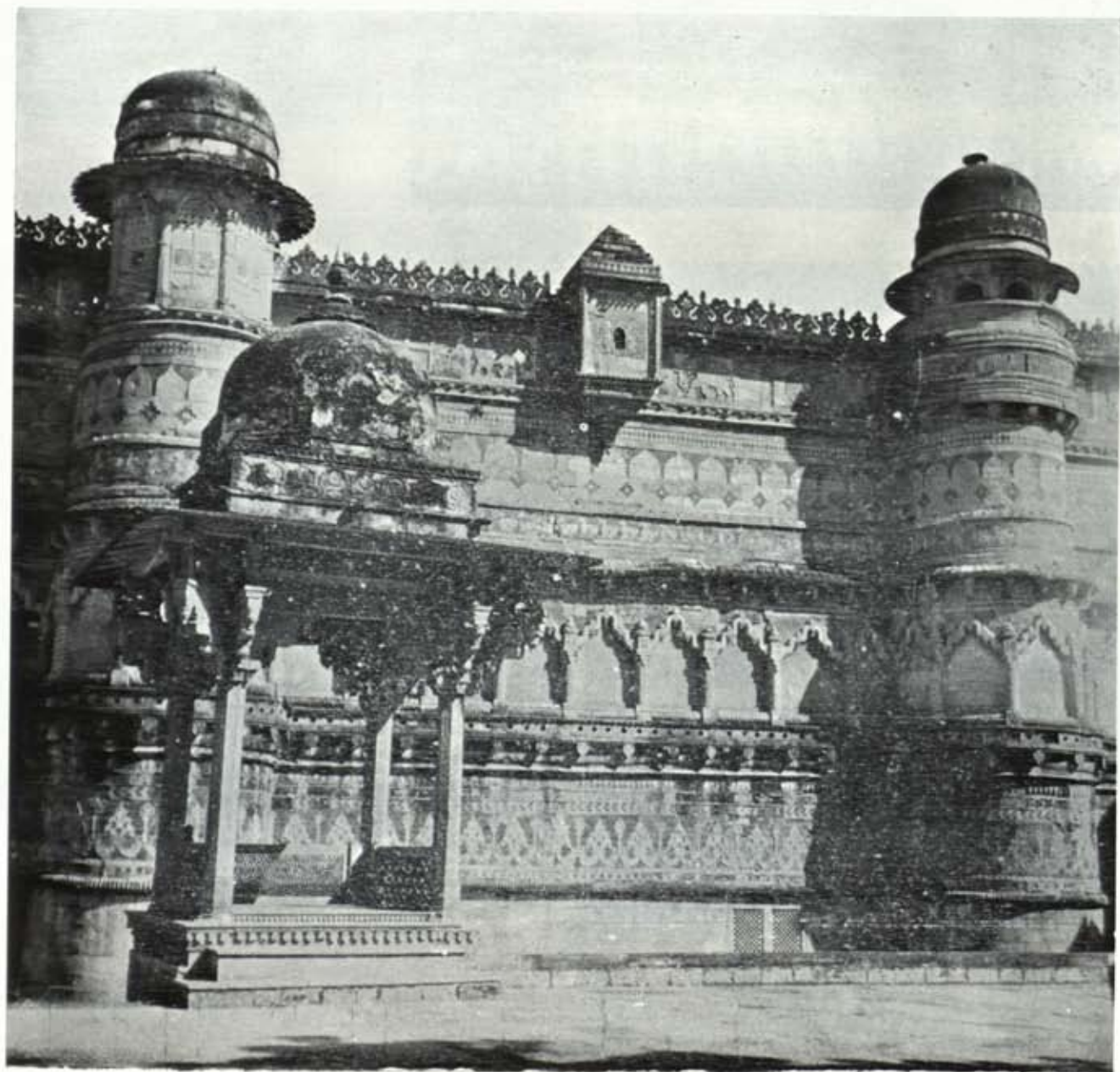


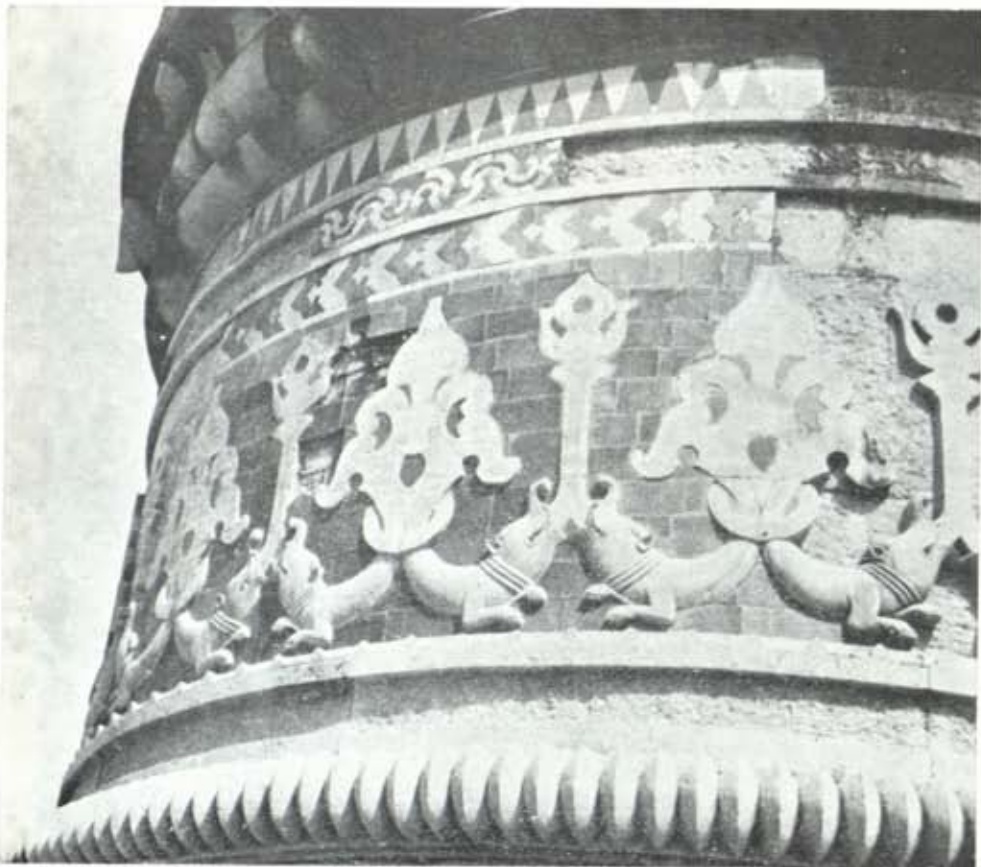
LVI. 'Bitaura' form Chhatri, Man Mandir



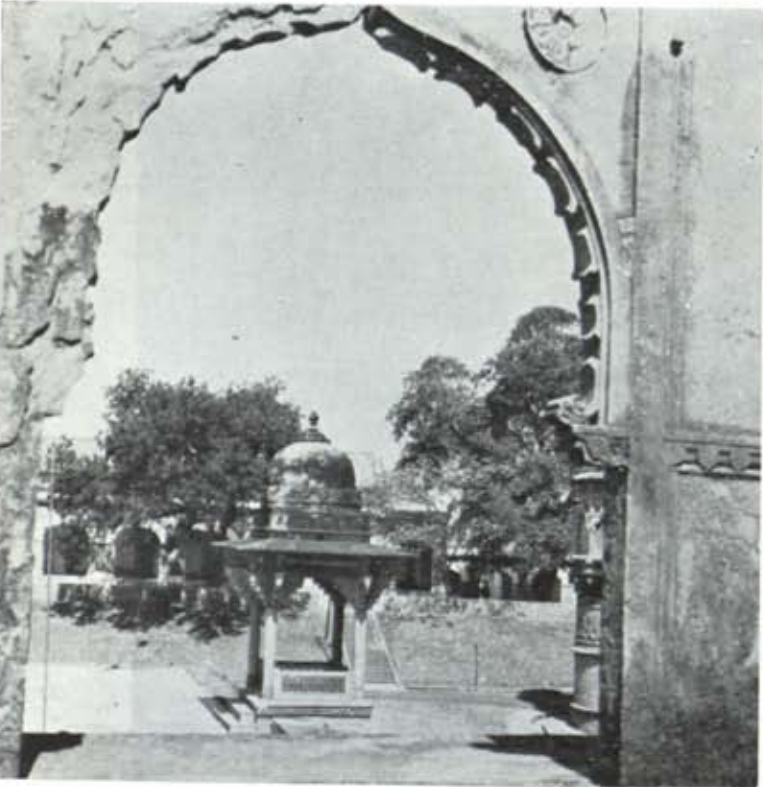
← LVII. Southern Facade of the Man Mandir

LVIII. Southern Facade of the Man Mandir





LIX. Makara Form at the Man Mandir

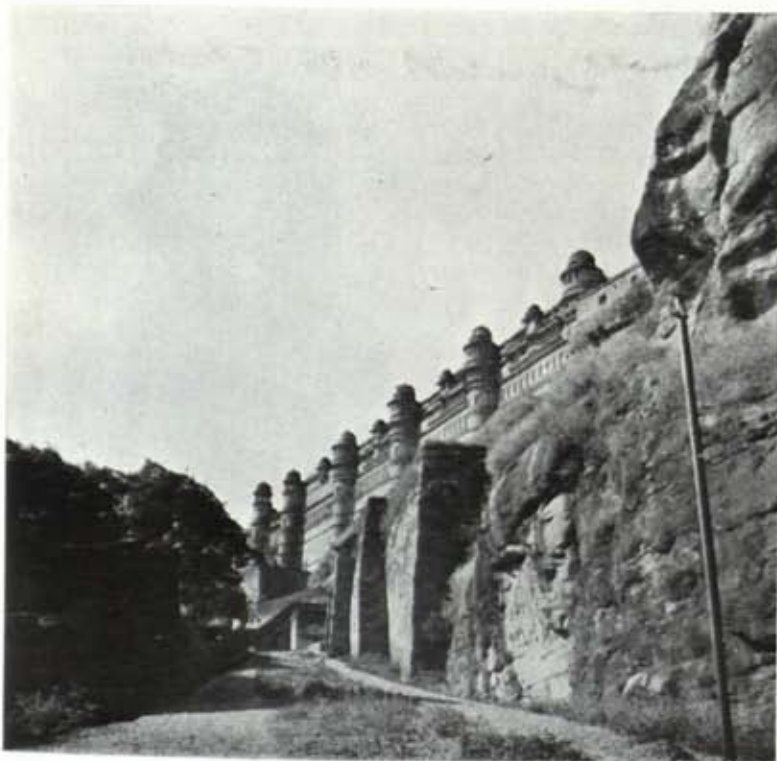


LXI. Hathiya Faur, Man Mandir

← LX. Ogee Arch with Cusps, Man Mandir



LXIII. Eastern Facade of the Man Mandir ↑



← LXIV. Eastern Facade of the Man Mandir

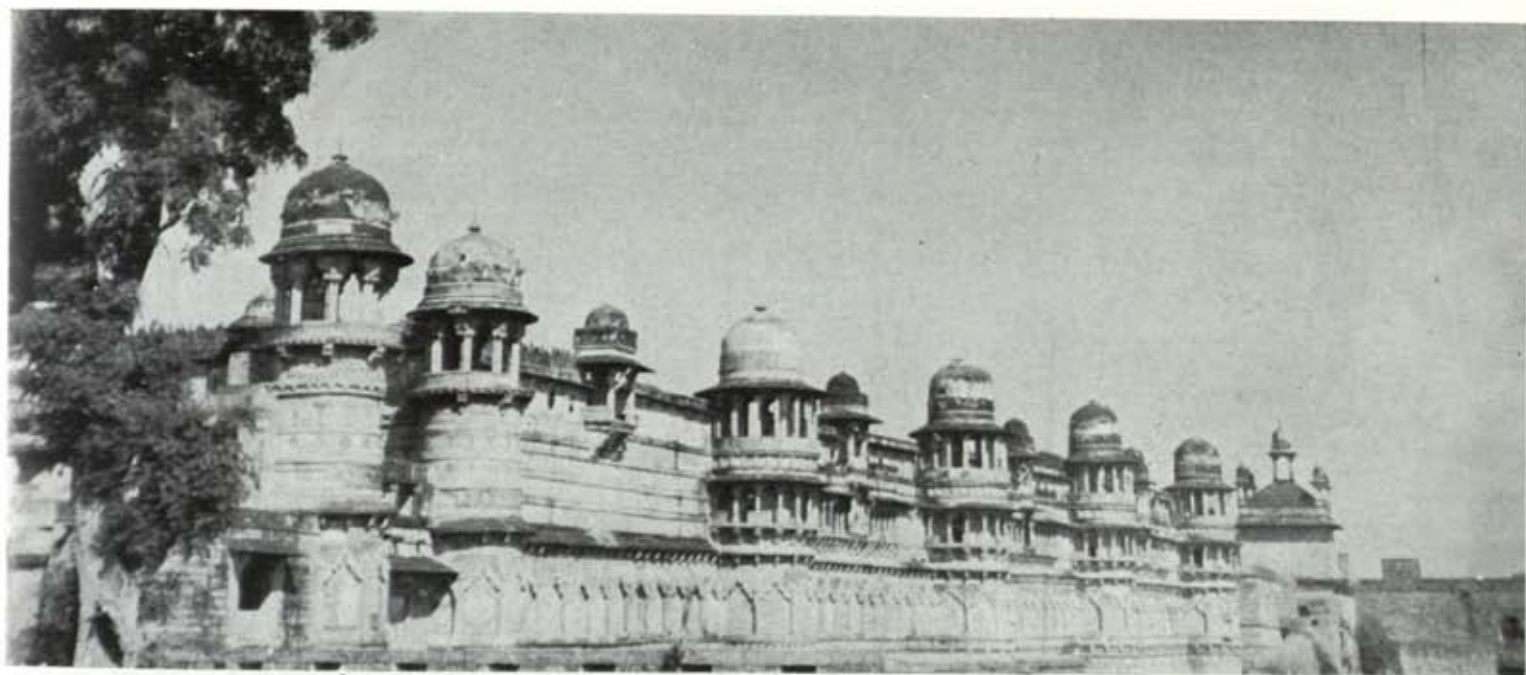
LXII. Painted Soffit of the Hathiya Paur (above left)



LXV. Cornices and String-courses, Man Mandir

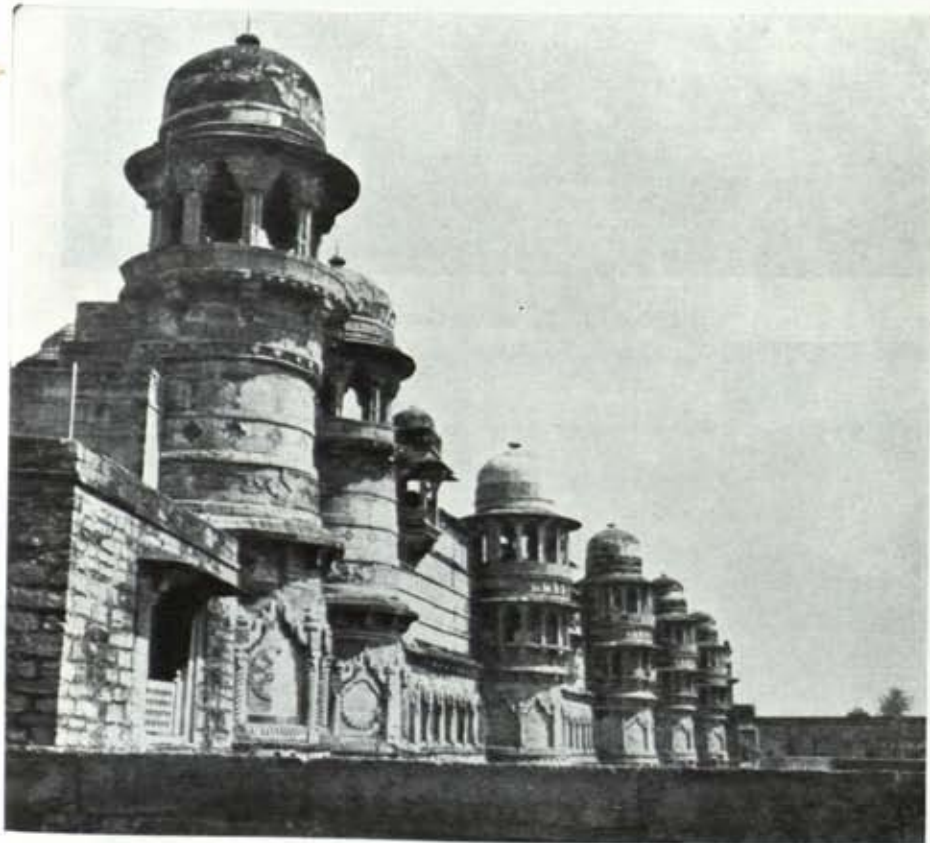


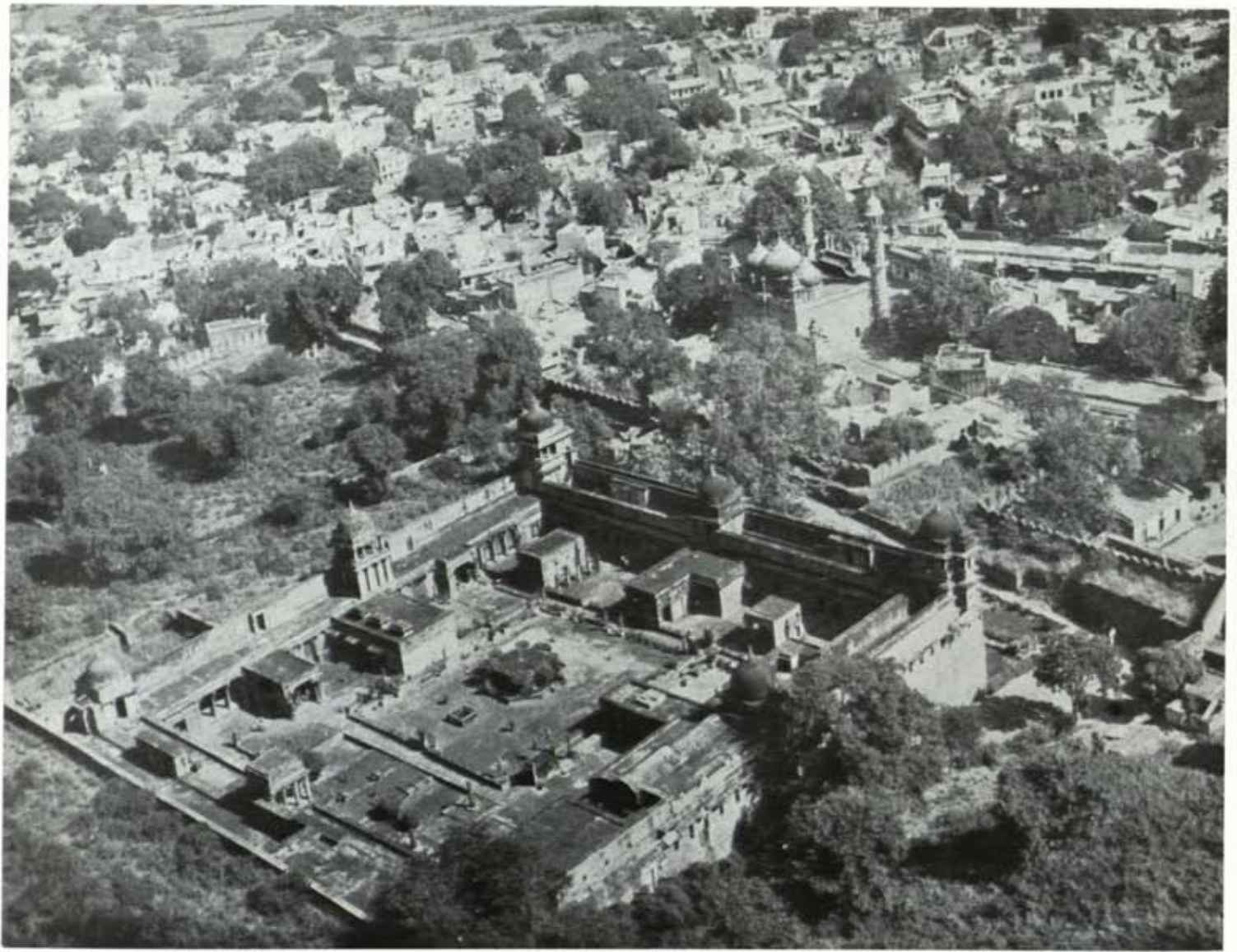
LXVI. Through Corridor, Eastern Facade of Man Mandir



LXVII. Skyline of the Man Mandir

LXVIII. Skyline of the Man Mandir





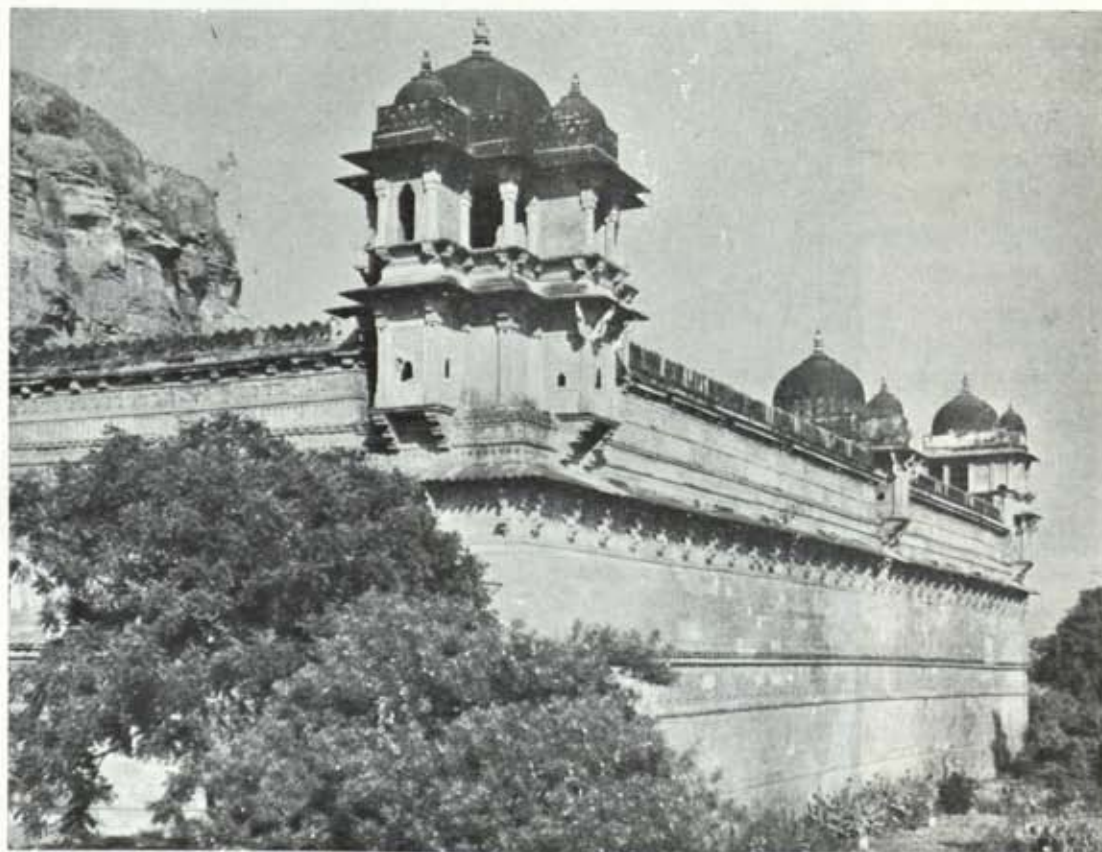
LXIX. Gujari Mahal Complex, Gwalior Fort



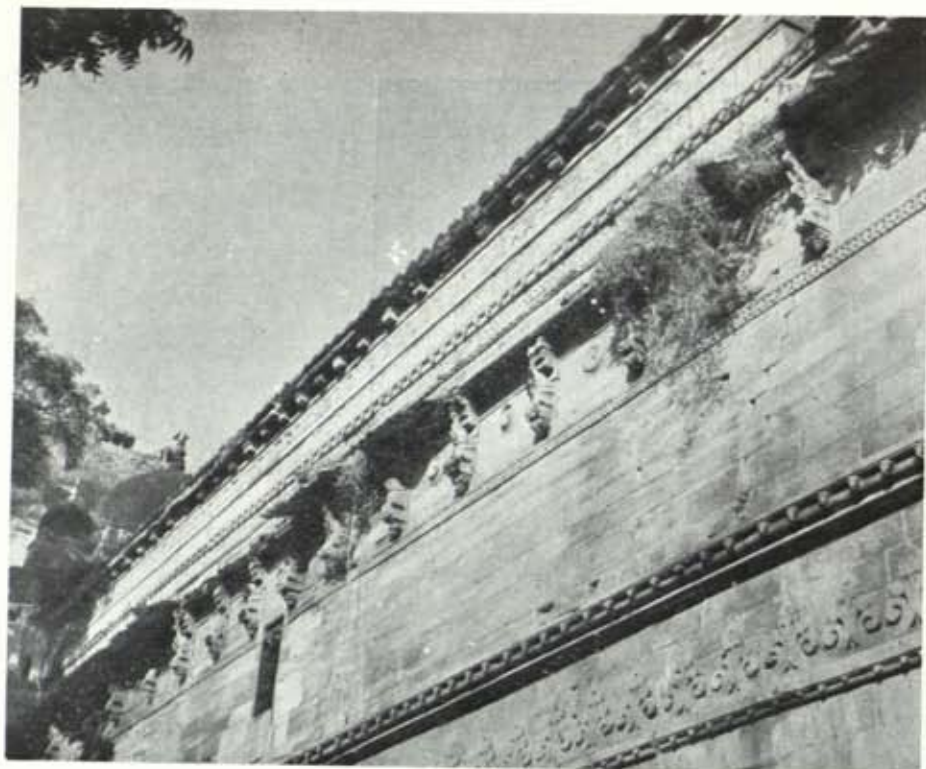
LXX. Southern Facade of Gujari Mahal,
Gwalior Fort



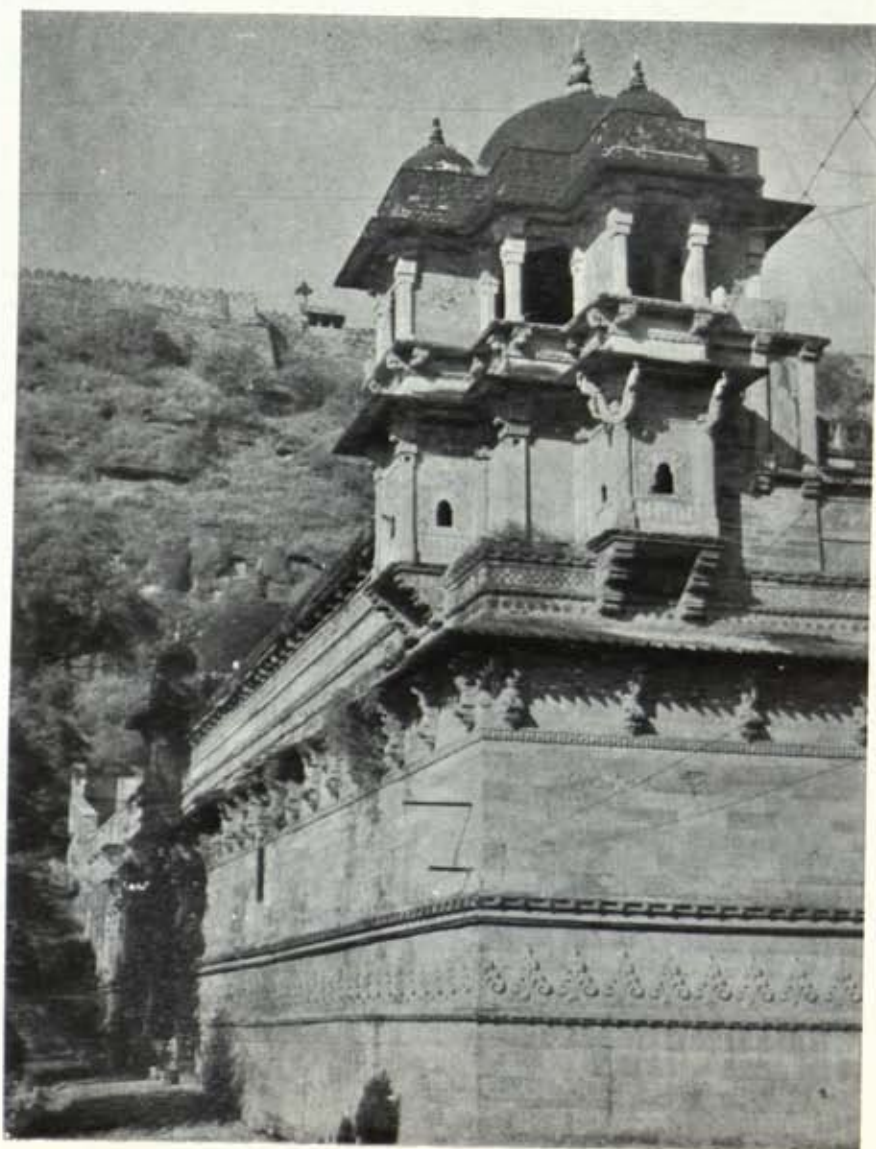
LXXI. Elephant Sculpture, Gujar Mahal



LXXII. Rotating Chhajja, Gujar Mahal



LXXIII. Chhajja and Elephant Brackets,
Gujari Mahal



LXXIV. Corner Pavilion, Gujarati Mahal

division in the circumstances of the case. No doubt, there was a Department of Warfare, like the modern Ministry of Defence, but to this department must have also belonged the matter of stables which constituted the vehicles of war. The Department of Khākī was too much misjoined and overloaded with work and there should have been a separate Department of Land and Agriculture, a Department of Revenue and Taxation, each under a separate Wazīr. Humayun's philosophical division could not have ensured a smooth working of his government. Instead of an *Amīr-i-Wazārat* (Minister of Finance) and an *Amīr-i-ʿAriz* (Minister of War), we hear, through Khwandamir, of such ministers as *Amīr-us-Sālāt* (Lord of Prayers), *Amīr-uz-Zakāt* (Lord of Alms), *Amīr-us-Saum* (Lord of Fasting), *Amīr-ul-Lutf* (Lord of Favours), *Amīr-i-Ghadab* (Lord of Wrath) and surprisingly, *Amīr-i-Farāghat* (Lord of Ease) which title was bestowed upon "Amir Shah Husain who was very stout and fat and was unable to perform any hard and fatiguing work".⁷ Khwandamir also received the title of *Amīr-ul-Akhhār* (Lord of Chronicles). Nobody drew attention of the emperor to the more urgent need of looking into the realities which were already there at the door.

A floating market on large *Chahār-Tāq* barges (boats) was invented by Humayun, where, according to Khwandamir himself, there was very little trade.⁸ A wooden palace of three storeys was also built; it could be dismantled, removed and reassembled at will.⁹ Instead of recruiting the army, and equipping it for the conflict which was looking him in the face, Humayun spent lavishly on the decoration of this useless palace: "This marvellously decorated palace was adorned in various colours by the most skilful painters; and the subtle goldsmiths had made a golden dome, which shone like the world-adorning Sun, and which was placed on its top. The Chamberlains of the throne, the nest of religion, had covered it with curtains of seven colours, made of clothes from Khotan, Turkey and Europe; and raised its adornment to the height of beauty and delicacy."¹⁰ It is a pity that Khwandamir also chose to compose "a poem in praise of this marvellous palace"¹¹ obviously with a view to flatter his patron and though a historian, who is the best judge of time, as he was, he did not advise him to look into the serious affairs of his state!

Then, Khwandamir informs us, Humayun invented a large tent which was divided into twelve compartments corresponding to the twelve signs of the Zodiac. It was like the movable palace and could be assembled as desired. "This wonderful tent also was of various colours. And long poles divided into parts, were ready and when required these parts were joined together, and the tent raised over them; its top rose higher than the star 'Ayyuq'."¹² Humayun's crown too was a curio and Khwandamir

would describe it at length; Shihābu'd-Dīn Aḥmad Mu'immai would compose a chronogram: '*Taj-i-Izzat*', giving its date, viz., 939/1532-33 and the *Amir-i-Zurfa* a poem in its praise. The emperor is also recorded to have devoted a lot of time on dresses, and wearing them according to the colour of the reigning planet of the day, e.g., green dress on Monday, red on Tuesday and blue on Wednesday, as if there was nothing else to be done by the person who was to preserve and safeguard the infant Mughal state in India. Supernaturalism and occultism was, in fact, his greatest and dominant interest.

The most curious innovation of the emperor was the commissioning of the *Bisat-i-Nishat* or the Carpet of Mirth. It was a huge round carpet, divided into astronomical circles each one assigned to a planet, e.g., Saturn, Jupiter, Mars, Sun, Venus and Mercury.¹³ Khwandamir noted: "For the sake of amusement of his prosperous mind, the emperor sometimes spread this carpet on a circular wooden platform which was equal to it in area. And himself occupying the circle of the gold-embroidered cloth, he, like the Sun, reflected to it beauty, light and purity. Each section [of the people] was ordered to sit, in accordance with one of the seven planets appropriate to it, in the circle to which it corresponds. For instance, officers of Indian extraction and Shaikhs would sit in the circle of Saturn, which is black; the Saiyids and the learned in the circle of Jupiter, which is of a light brown colour; and so on in other circles. And sometimes while people were seated in the above-noted circles, they used to throw dice on various sides of which figures of persons in different postures were painted by the creative pen; and whichever figure turned up on the throw from the hand of a person, he assumed the same position in his circle. For instance, if the picture of a standing person turned up he stood up, and if a seated one was presented he sat down, while if the reclining position was cast, he lay down and even went to sleep. Consequently, this assembly produced extremely novel pictures and became a source of mirth and gaiety. And of all good uses, to which this carpet full of mirth is suited, one is that each of the seven circles is divided into two hundred grades, so that there are fourteen hundred seats in the seven circles."¹⁴ It is hard to believe that while Sher Khan was consolidating his position and power in Bihar and preparing for the final contest for the kingship of Hindustan, Humayun was engaged in such idiosyncrasies and festivities at Delhi, Agra and Gwalior, incurring tremendous, though wasteful, expenditure. If the latter ultimately lost the empire to the former, it was mainly his own doing.

It may be noted, however, on the positive side of this matter that

such customs as Tula-Dan, Drum of Justice, celebration of the New Year's Day (Nauroz), regulation of the royal movement according to auspicious hour, regular beating of drums to mark time, and belief in the efficacy of the Sun which later made the very life and breath of his descendants and characteristic institutions of the Mughal Durbar, were all introduced by this simple man who was not well-versed in the art of war or in political craft, but was essentially a grand genius of Peace, an extremely refined and cultured prince, a lover of fine arts and, above all, a scholar of astronomy. Eccentricity was a rare quality in the medieval period; Humayun's fault lies only in the fact that his innovations were not timely.

(b) *Humayun's Dīn-Panāh, Old Fort, Delhi*

Khwandamir has also described the buildings which were erected by Humayun at Gwalior, Agra and Delhi. His building at Gwalior seems to have been a palace, all constructed of dressed stone and profusely decorated with glazed-tiles.¹⁵ It is not extant. The *Shahjahani* and *Jehangiri* palaces, situated to the north of the *Man-Mandir* in the Gwalior Fort, have been so completely renovated by the Britishers during their occupation of the Fort¹⁶ that it is virtually impossible to distinguish which part of either of these two palaces might have originally belonged to the Palace of Humayun. It may be noted that he very much liked Gwalior and it was here that great festivities to mark the commencement of twentieth year of his age were celebrated in early 1533.¹⁷

There is, however, a spacious building, viz., the *Chaurasi-Khambha* (Hall of Eighty-four Pillars) situated in the close neighbourhood of the *Man-Mandir*, which has a reference to Humayun. It was originally built by Raja Mansingh Tomar (1486-1516) as an Assembly Hall and was later adopted by Rahimdad during Babur's reign.¹⁸ There is an Arabic-Persian inscription carved in sandstone in relief in beautiful Naskhi on the exterior side of the stairway of the porch which is attached to it on the eastern side. It opens with *Bismillah-al-Rehman-al-Rahim* which is followed by *Kalma*. The date 25th of Moharram 938 (=1531) in Arabic syllables follows thereafter. Rest of it is in Persian recording its construction by one, Yār Mohammad son of Maulānā Bahlol Nālbanda Kābulī. It seems to have been further adopted by Humayun during his residence at Gwalior and, as the reference that it is equal to both friend and foe shows, he also used it as Assembly Hall and a

Court of Justice. Cunningham mentioned another inscription of Humayun in the Gwalior Fort dated in the same year, i.e., 938/1531¹⁹ but it is untraced.

Khwandamir begins his account of Humayun's building with the assertion that the emperor "had great love and incomparable inclination for erecting large buildings and strong forts".²⁰ He built a wonderful building, viz., the *Imarat-Tilism* in the capital city of Agra, probably in the Fort. When one goes through the narrative of the *Qānūn-i-Humāyūnī* and tries to reconstruct, it looks to be, indeed, a wonderful building. Thus notes Khwandamir:

"in the length of this wonderful building three rooms were made adjacent to each other. In the middle of the first room, which was the longest and octagonal, a reservoir of the same form was built, from the centre of which subterranean passages were constructed, and these passages radiated in all directions leading to other rooms and apartments. Round the mouth of the passages an octagonal tower joining the edges of the reservoir was constructed, and over it a large flat slab of chiselled stone was placed. Great care was taken in strengthening all crevices by filling them up with mortar and lime, so that when water filled the reservoir, it could not rush into the subterranean passages. And the central room was also octagonal, and had several galleries and windows. In this room also a reservoir had been constructed, and on all the four sides of this house was a portico. And the two doors of the portico, viz., one towards the largest room and the other to the third room which resembled a hall, had been so made and fixed, that if you opened one of them, the other disappeared; and on the disappearance of the second the first was thrown open. And alongside these three rooms, other large and capacious, upper and lower rooms were built; and they were all very elegant and magnificent. And over the third room was constructed a very lofty saloon, which was the envy of the heavens, and excited the jealousy of the residences of the Sun and the Moon."²¹

The chronogram composed by Maulana Shihābu'd-Din Aḥmad Mu'immai: '*No one has seen such a house*' gives the date 940/1533. Unfortunately, no trace of this wonderful palace is available and except for what we can gather from Khwandamir's description, we have no idea as to what it looked like.

Humayun built another palace in the Fort of Agra "on the founda-

tions of the house which in ancient days was the treasury of the Hindu rulers".²² It consisted of several rooms and porticos and was so high that, Khwandamir notes, the river Jamuna was visible for three or four krohs (kos). Obviously, it was situated at the highest point in the fort. As it appears, Humayun built it on the site where Salimgarh at present stands on the highest ground in the fort, west of the Diwan-i-Am quadruple. It is a square pavilion with a spacious open and airy hall in the middle and rooms and corridors on the sides, all built of red sandstone. The chief ornament is stone-carving in different pleasing designs. It seems that the building was renovated in the later ages, also probably by Salim (Islam) Shah Sur, hence its nomenclature: *Salimgarh*. There are no distinctive characteristics of its architecture and it remains an ordinary building in the great galaxy of red sandstone palatial mansions of the Agra Fort.

The only building at Agra which unmistakably belongs to the reign of Humayun and which also retains its original form and fabric is his mosque in the village Kachhpura on the left bank of the river Jamuna, opposite the site of the Taj Mahal. It is a sanctuary with a five-arched facade without such paraphernalia as the cloisters (side dalans), monumental gateways or a minar and belongs to the class of the *Pañchamukhī* mosques.²³ The wing on either side of the central nave is composed of the double bays in two aisles, thus having four chambers on either side (see Fig. 17 for plan) which were originally roofed by cupolas. The south wing has almost entirely fallen down. Curiously, the nave has a lofty iwan on its face (Plate XCI) which conceals the dome roofing the nave behind it. In essence, it is pylon of the *Begumpuri Masjid* of Muhammad bin Tughluq, which inspired the complexion of the Jaunpur mosque.²⁴ The construction is in brick and mortar with profuse plaster-work over it. The pylon bears distinct traces of glazed-tiling.

Two stone slabs in the nave bear carved inscriptions in Persian. The one on the right hand side reads: "The King of the domain of faith is Muhammad Humayun, the basis of whose worth is the vortex of the revolving heaven. At his high command and exalted decree this auspicious floor and roof were made. As date of completion of this home, 'The King of the domain of Faith, Muhammad Humayun' A.H. 937" (= 1530). The left hand side inscription reads: "This religious edifice is pure like the heart of a Sufi. To deny its purity were injustice. As it



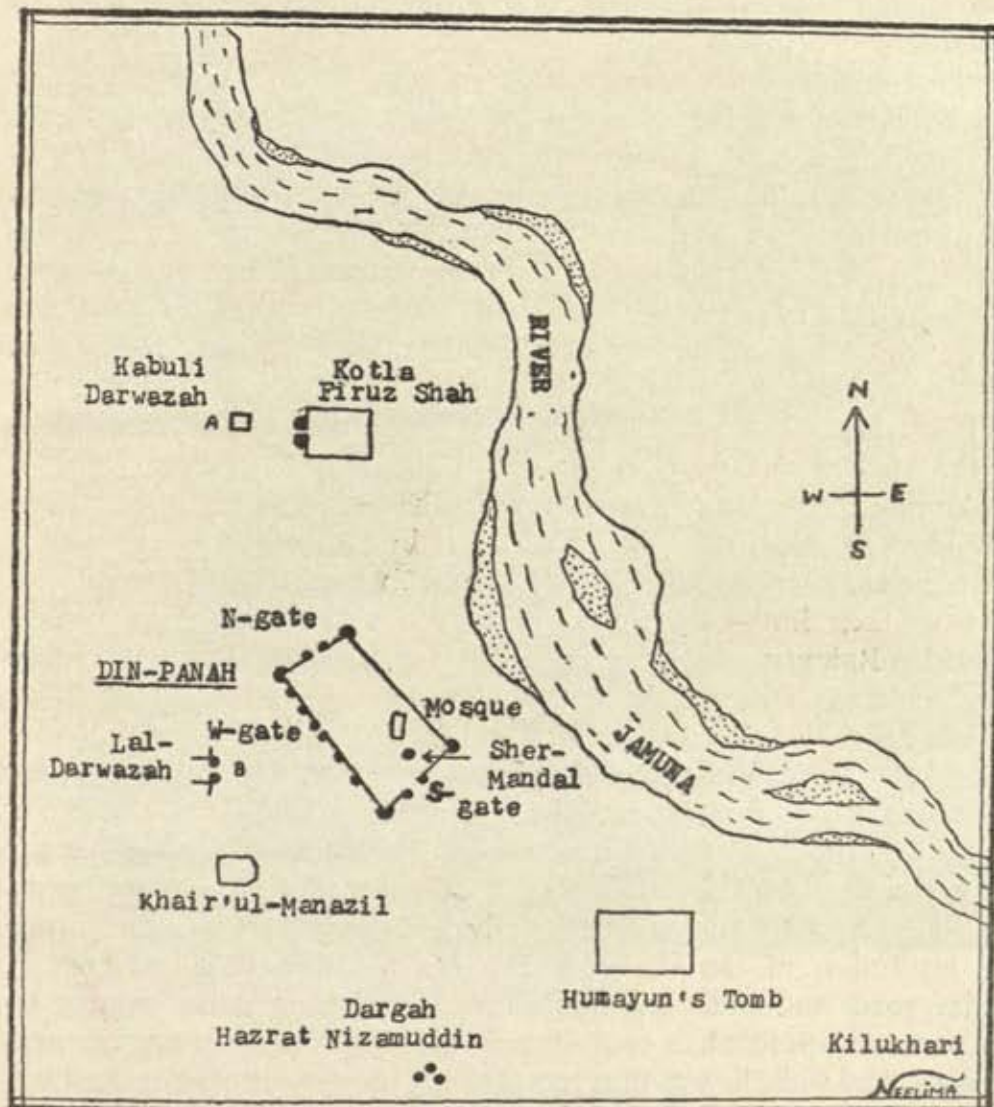
Fig. 17. Plan, Humayun's Mosque, Agra (c. 1530).

was completed at the expense of Zain of Khaf, its date lies in the words 'at the expense of Zain the Khafi' (= 937/1530). Pardoned may be he who remembers... the composer and writer Shihab." This mosque was, thus, built in the year of Humayun's accession and was financed by Shaikh Zain of Khaf. It is situated amidst the char-baghs which were laid down by Babur and his nobles, and it must have occupied a place in the garden which Shaikh Zain Khawafi had himself laid down, as Babur noted in his Memoirs.²⁵ He was a learned man, a friend and an important noble of Babur. He composed a *Fateh-Nāmah* on Babur's victory over Rana Sanga which graphically describes the battle.²⁶ The name of Humayun has been mentioned in the inscription as the ruling prince and it is extremely unlikely that he had any say in its planning or designing. It has been built in the preceding style. The artisans trained in the prevalent architectural style were employed to bring it into form and no adequate thought seems to have been given to its design and no effort made to build it with stone which was a costlier, though a much superior, material and what ultimately came up was a crude and confused building, the importance of which does not so much lie in its position in the evolution of the *Pañchamukhī* mosque as in the fact that it is one of the earliest monuments of the Grand Mughals which still stands in its original form and marks the primitive stage when the Mughal art had not even made a modest beginning and the prevalent norms and standards of art provided the sole criterion.

The most ambitious architectural project of Humayun was the building of the city of *Din-Panah* at Delhi. Khwandamir relates that when the emperor was at Gwalior in the month of Shaban 939 A.H., he expressed to his courtiers his intention to found a city at Delhi, containing gorgeous palaces, gardens and orchards and "this city which should be an asylum for the wisemen and the refuge of the watchful and vigilant people, should be called *Din-Panah*".²⁷ The idea was unanimously approved, as it would be, and Maulānā Shihābu'd-Dīn Aḥmad Mu'immai even gave a chronogram of the proposed city, viz., '*Shahr-i-Bādshāh Dīn-Panāh*' (= A.H. 940/1533-34)²⁸ to emphasise that its construction should be taken in hand immediately.

Humayun came from Gwalior to Agra and thence proceeded to Delhi in the beginning of *Dhu'l-Hijja* 939/July 1533. At Delhi²⁹ he selected a high ground on the river-bank which was at a distance of three *krohs* (kos) from the present city, whereby probably the most populous city of Siri is meant. The foundation of the city was laid in the middle of the month of *Muharram* 940/August 1533, in the most auspicious hour.³⁰ By the end of the month of *Shawwal* 940/middle of May 1534,

Khwandamir records, "The walls, bastions, ramparts and the gates of the city of Dīn-Panāh are nearly finished and ... the great and lofty buildings of that large city will soon be completed."³¹ His is a meaningful statement. It confirms Ferishtah's observation³² that what Humayun built at Delhi was a citadel. Khwandamir explicitly mentions its walls, bastions, ramparts and the gates which were nearly finished during the ten months' period. Other buildings inside it remained incomplete and were under construction. It seems that the high ground he selected for the construction of citadel was the ancient site of Indrapat as has been indicated by Abul Faḍl: "Humayun restored the citadel of Indrapat



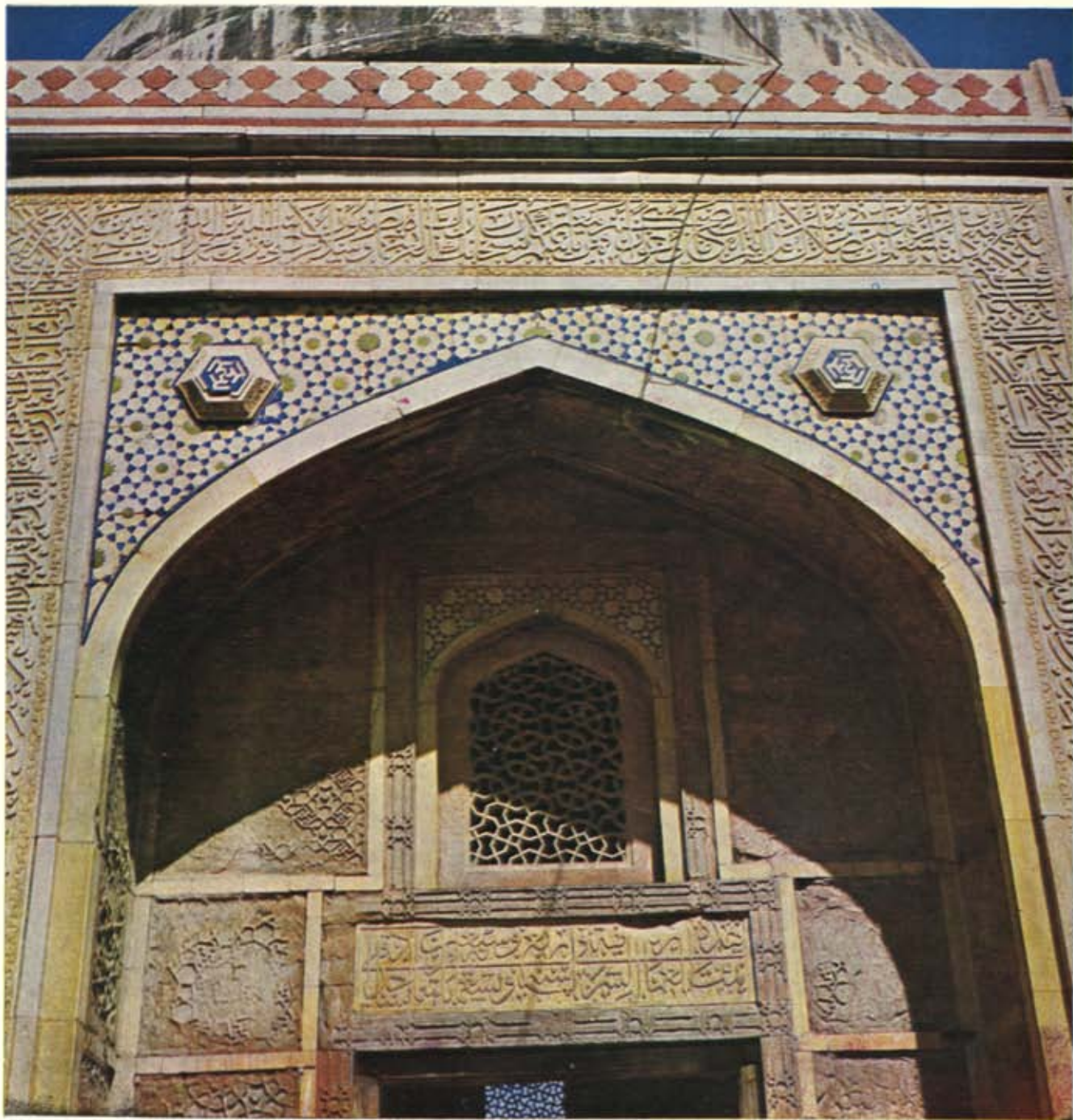
Map 1. Site of the Din-Panāh, Old Fort, Delhi.

and named it *Din-Panāh* (Asylum of the Faith)".³³ Work of no larger magnitude could have been done in such a short time and, as these Persian chronicles show, it is the present *Purana Qal'a* (Old Fort) situated between his tomb and the Kotla Firoz Shah on the river-bank which can be identified as Humayun's *Din-Panāh*³⁴ (Map 1).

The Old Fort of Delhi, its three gateways and the *Qila-i-Kuhna Masjid* and the *Sher-Mandal* inside it are generally ascribed, on the other hand, to Sher Shah.³⁵ These red sandstone buildings with exquisitely carved and inlaid ornamentation are so overwhelmingly in contradistinction to the typical architectural style of the Surs, as seen at Sasaram, that an intensive study of the available data, both historical and stylistic, is called for.

Sher Shah began his career at Sasaram in Bihar where his father Hasan Khan Sur held his jagir. He was a simple and practical man, intelligent, cool-headed and resourceful. Initially he had no plan or thought to oust the Mughals and, certainly, he would have been contented with Bengal and, at the most, Bihar, had not Humayun fanned his ambitions by his own mistakes. When it came to him as such, Sher Shah dreamed of restoring the Afghans to the central power in India. If not the battle of Chausa of 1539, the battle of Kannauj (Bilgram) of 1540 proved decisive. The Mughals were overthrown and driven out of India. Sher Shah occupied Agra and Delhi. The dismembered units of the Afghans rallied round him.

During the period of five years which he had on the throne from 947/1540 to 952/1545, Sher Shah remained overwhelmingly busy in guarding against the return of the Mughals, who, he knew, would not give up their Indian empire to the son of a petty jagirdar; suppressing the rising Rajputs; recovering the lost territories of the Delhi Sultanate; combining the loosened threads of polity by keeping the Afghan tribes together and founding a sound political basis of his government; and, above all, reorganising the administrative set-up. To create this order out of that chaos was a task of the greatest magnitude and called for utmost exertions of such a master-mind as Sher Shah. Though about 54, he kept personal vigilance on each and every trifle of his government. He dictated orders even while he washed his long hair, whence arose the institution of the *Ghusal-Khana*. His measures of law and order, justice, roads and serais, and agriculture and revenue stand witness to his personal approach to such chronic problems, political sagacity and wisdom. And while he was thus reorganising his state on a sound footing, he was constantly in the field fighting dangerous battles, one after the other, with his adversaries.



9. Tomb of Atagah Khan, Nizamuddin, Delhi.



Abbas Khan Sarwani, who wrote the biography of Sher Shah entitled *Tarikh-i-Sher Shahi*³⁶ at the command of Akbar about 987/1579, besides being distantly related to the Surs, collected his information from authentic sources and his history is fairly well reliable. He described at length Sher Shah's (then Sher Khan) capture of the forts of Chunar, Rohtasgarh and Gaur. After 1540, he had immeasurable difficulties to encounter in the Punjab, Malwa, Rajputana and Bengal. First he settled the affairs of the Punjab which could have provided an inroad to the Mughals. The disorders immediately thereafter called him to Bengal. Thence he returned to Agra. But before he could stretch his legs in rest, his presence was required at Gwalior, Mandu and other areas of Malwa which were ablaze. He captured Gwalior and proceeded to Sarangpur. After settling the affairs of Malwa, he captured Ranthambhor and returned to Agra. But the urgent problems again summoned him to Bihar and Bengal. There he fell sick and again returned to Agra. Affairs of Puranmal of Raisin became alarming and he rushed into Malwa once again in 950/1543. Puranmal was reduced and Raisin was taken after a prolonged siege of six months. Thence he returned to Agra and stayed there for a while. The fact that he returned to Agra after every campaign shows that Agra, not Delhi, was his seat and headquarters. It is at Agra that a Jami' Masjid which is now known as Kali (corruption of Kalān = large) Masjid was built during his reign. He laid roads from Agra to Burhanpur, Agra to Jodhpur and Agra to Lahore—which shows that Agra was the centre of his government, and if he kept his hand on the pulse of the nation, through these arteries of his empire and an efficient dak-chowki system, he kept it at Agra.

Soon after the Raisin affair, we find him pitched in a dangerous conflict against Maldeo of Marwar. But for his tact, ready wit and resourcefulness, he "had nearly lost the kingdom of Delhi for a millet (bajra) seed."³⁷ Then he besieged Chittorgarh and captured it. Thence, he went direct to Kalinjar and besieged its Fort. There, on Friday 9th of Rabi'ul-Awwal 952/1545, he was burnt and died the next day. This account of the Afghan chronicler adequately brings home the fact that Sher Shah was as great a military genius as great he was an administrator, and all the time he was constantly busy in the field.

One aspect of his personality, however, remains undefined, viz., what was the quality, nature and degree of his taste in fine arts. That he had very little time to exercise any decisive discretion in this matter is a fact which can be scarcely doubted. But more important than the time factor was the extent of his initiative. Did he actually commission the buildings which are generally ascribed to him? The so-called Sher Shah's

Mosque at Patna may be examined for example. It is a square building of brick measuring 63' (19.20 metres) side internally with an inner hall of 12 pillars (i.e., four on either side) covered by a semi-circular dome. Though the Qiblah has been marked out on the western side, as a whole it more looks to be a square tomb than a mosque. It does not reflect any personality, nor helps us to fix its place in any architectural style. It seems to have been built by someone as it came to be handy in accordance with the availability of masons and material.

The Jāmi' Masjid of Rohtasgarh bears a Persian inscription recording its construction by Azam Humayun alias Haibat Khan at the request of Farid Sadr in 950/1543.³⁸ Though both have a three-arched facade, this is different from the Patna mosque. It is a large oblong stone building with a central iwan which seems to have been inspired by the pylon of the Jaunpur mosque. It is only a sanctuary and not a square hall. The two do not belong to one style, conception or even a thought and were built as it was practical in each case.

In fact, the pre-Mughal Muslim buildings of Bihar have no style of their own and no distinctive characteristics. They are mainly shaped by the prevalent architectural style of the Delhi Sultanate with such local variations as were conditioned by the availability of the artisans and material. Bihar was almost always a province of the Delhi Sultanate and it was from there that it derived its inspiration, political as well as cultural.

Abbas Khan Sarwani also gives an interesting reference of the building activity of Sher Shah at Delhi. "The former capital of Delhi", he notes, "was at a distance from the Jamuna, and Sher Shah destroyed and rebuilt it by the bank of the Jamuna, and ordered two forts to be built in that city, with the strength of a mountain, and loftier in height; the smaller fort for the governor's residence; the other, the wall round the entire city to protect it; and in the governor's fort he built a Jama' Masjid of stone, in the ornamenting of which much gold, lapis lazuli and other precious articles were expended. But the fortifications round the city were not completed when Sher Shah died."³⁹

This account is significant in several respects. Firstly, it speaks that the former capital city of Delhi was at a distance from the river Jamuna and Sher Shah destroyed it. Which city did he actually destroy has not been mentioned by Sarwani. But it stood at a distance from the river and was not situated exactly on the bank. Thus it could not have been either Firozabad (present Kotla Firoz Shah) of Firoz Tughluq or Din-Panāh of Humayun, both of which stood by the river-side. Abdullah, who wrote his history of the Afghans, entitled *Tarikh-i-Daudi* during the

reign of Jehangir, specifically mentioned that Sher Shah went from Agra to Delhi in 947/1540 and destroyed the Fort of 'Alāu'd-Dīn (Khaljī) which stood in Siri.⁴⁰ This is confirmed by Abul Faḍl: "Sher Khan destroyed the Delhi of 'Alāu'd-Dīn and built a separate town."⁴¹ It is not correct, therefore, to conclude by this reference of Sarwani that Sher Shah destroyed the Dīn-Panāh of Humayun.⁴²

Further, it speaks that he built a new city by the river-side. Sarwani's account shows that he enclosed this city by a protecting wall and inside it he built a citadel for the governor's residence, and in this citadel he built a Jāmi' Masjid. Abdullah gives greater details of this aspect in his history. He notes that Sher Shah "built on the bank of the Jun, between Firozabad and Kilukhari, in the village of Indrapat, a new city about two or three kos distant from the old one. He filled it with inhabitants as it remains to this day. He also laid the foundations of a magnificent masjid which was quickly completed. The name of this fort he called 'Shergarh' and the walls of it were of great breadth, length and height; but on account of the shortness of his reign, he did not live to complete it. Within the fort was a small palace, also left incomplete, which he called 'Sher-Mandal'."⁴³

Former's narrative shows that it was only the inner citadel, i.e., for the governor's residence, that was completed and the fortifications round the city remained incomplete. The latter, in a way, confirms the site on the river-bank in the village Indrapat, but gives the additional information that this fort which he named 'Shergarh' remained incomplete on account of the shortness of his reign. Both mention a mosque, a magnificent Jāmi' Masjid, inside this fort, the latter in addition to it also alludes to a small palace called *Sher-Mandal* which also remained incomplete. It may be borne in mind that Sarwani wrote his history after a lapse of nearly forty years and Abdullah of nearly seventy. If not exaggerated, they seem to have misjoined many discordant facts together and have confused the whole matter. Where actually Sher Shah's small fort was situated and how far it was in form or incomplete has not been mentioned either in *Akbar-Nāmah* of Abul Faḍl or *Tabaqāt-i-Akbarī* of Nizāmu'd-Dīn. Ferishtah too is silent. Fortunately, Badaoni has noticed the event in his History, viz., *Muntakhabu't-Tawārīkh* and he is categorical in his statement: "And when he [Sher Shah] arrived at Old Delhi, which was founded by Sultan 'Alāu'd-Dīn [i.e., the city of Siri], he destroyed that also, and established between the fortress of *Dīn-Panāh*, which Muhammad Humayun Padshah constructed, and Firozabad [of Firoz Tughluq], an extensive city and built round [dauran] that fort a rampart of stone and mortar, having an

extent of three krohs."⁴⁴ This settles the following two issues:

- (i) that Sher Shah did not destroy the Dīn Panāh of Humayun but Siri of 'Alāu'd-Dīn Khaljī. This is corroborated by Abdullah and Abul Faḍl and, indirectly, also by Sarwānī.
- (ii) that he built a new city of his own between Firozabad and the Dīn-Panāh. That this city was enclosed is confirmed by Sarwānī and Abdullah; both, however, affirm that the fortification walls remained incomplete when he died.

It is quite likely that the *Kābulī Darwāzah*, later renamed the Khūnī Darwāzah, situated just opposite the entrance of the Kotla Firoz Shah, the citadel of Firoz Tughluq in his city Firozabad, and the *Lāl Darwāzah* also called Sher Shah's Gate situated adjacent to the *Khair'ul-Manāzil* Masjid opposite the western gateway of the Old Fort (A and B respectively of Map 1), are remains of Sher Shah's city which was not completed. The former (Plate XCII) is a plain and simple gateway which is mainly built of grey stone, though red sandstone has also been used on prominent parts for emphasis, e.g. nook-shafts, brackets of oriel-windows (Plates XCIII & XCIV), high-relief rosettes in the spandrels of the archway and even intermittently on the string-courses. The battlemented parapet has merlons (kanguras) and, curiously, covered machicolations, a feature not met in the buildings of Humayun, have also been given above the frieze. The northern gateway (Talāqī Darwāzah) of Humayun's Dīn-Panāh has no merlons, embrasures or machicolations; its western gateway (Barā Darwāzah) has embrasures but no merlons or machicolations, while the southern gateway (Humayun Darwāzah) has merlons and embrasures but no machicolations. The appearance of these features helps us to determine their age successively one after the other, the *Kābulī Darwāzah* being the latest of them all. This also puts this gateway nearer to Sher Shah's city than Humayun's *Dīn-Panāh*.

The structure of the *Kābulī Darwāzah* is in roughly dressed grey stone which is local quartzite but the emphatic outlines being in red stone, altogether it gives harmonious and pleasing appearance. Such structural features as finely carved nook-shafts and brackets are its chief ornament. The *Lāl Darwāzah* (Plate XCV) too is plain and functional, though in its composition red sandstone has been used on a larger scale; hence its nomenclature. Its upper pavilions (Plate XCVI) are in rough stone and the ruined portions have also betrayed large-scale use of rubble

in its structure. Only the facade has been artistically worked out and, in accordance with the taste of the age, recourse to glazed-tile ornament has also been taken here, chiefly on ornamental panels and frieze.

That Sher Shah built a Jāmi' Masjid inside his citadel has been mentioned both by Sarwani and Abdullah. It was completed in his lifetime, they assert. Others are silent on the matter. But whatever may be the case, Sher Shah's Jāmi' Masjid which he built in his own fort cannot be identified with the *Qal'a-i-Kuhna Masjid* of the *Din-Panāh*, viz., the Old Fort, of Humayun. Abdullah also refers to the *Sher-Mandal*. But his statement is hardly reliable in the context he has made. He calls it a small palace which remained incomplete. The *Sher-Mandal* is not a palace but a double-storeyed tower crowned by a chhatri. It has a single square small room inside it which cannot raise it to the status of a palace. With profuse plaster ornamentation in stalactite design, carved dados on the exterior and inlaid hexagons on the spandrels of arches, it is a wholly complete building, and as its composition is homogeneous, it is certain that it was completed by its original builder. By no stretch of imagination this can be the *Sher-Mandal* of the description of Abdullah. It seems that this building was famous as such during Jehangir's reign and Abdullah erroneously associated it with the incomplete architectural project of Sher Shah. The historical data, thus, do not help us to ascribe the Old Fort, its three gateways, and the *Qal'a-i-Kuhna Masjid* and the *Sher-Mandal* inside it, to Sher Shah. There is no epigraphical support; in fact, there is much of it, as shall be discussed hereafter, which goes in favour of Humayun. A close scrutiny of the architectural evidence in situ shows that the gateways which bear such Hindu symbols and motifs as śārdūla, ṣaṭkoṇa and hastin (elephant), the *Qal'a-i-Kuhna Masjid* which bears, besides large-scale Quranic inscriptions, such symbolic motifs as gavākṣa and padma, and inlay of coloured stones, and the *Sher-Mandal* which was originally, as its position at the highest point in the Fort and the prominently displayed 12-pointed star in accordance with 12 signs of the Zodiac signify, an astronomical observatory, which could have been named the *Saur-Mandal* by the astronomers, owe their origin to Humayun, the eccentric-philosopher, the superstitious-man and the astronomer-king.

Sher Shah commissioned his grandfather's tomb at Narnaul. But, again, his heavy preoccupations did not permit him to pay any constructive attention to the various projects he might have had in mind. We hear from Niamatullah who finished his history *Makhzān-i-Afghān and Tārīkh-i-Khān Jahān Lodi* in 1021/1612 during the reign of Jehangir, that on his death-bed Sher Shah deeply lamented for the work which

he was leaving unfinished;⁴⁵ he was sorry particularly for three or four desires which remained unaccomplished. First was to transfer the population of the Roh area to Nilab and to depopulate Lahore with a view to guard against the Mughals. Second was to build two fleets for Hajj (pilgrimage to Mecca). And, Niamatullah noted, Sher Shah said: "The last is to have raised a tomb to Ibrahim Lodi in Panipat, but on the understanding that opposite to it there should be another tomb of the Chaghtai Sultans whom I may have despatched to martyrdom; and to have constructed both with such architectural embellishments that friend and foe might render their tribute of applause and that my name might remain honoured upon earth until the Day of Resurrection. None of these aspirations has God allowed me to carry into effect and I shall carry my regrets with me to my grave."⁴⁶

Taking all these facts together, it seems that it was only at Sasaram his native place where he spent his early life and began his career and to which he was sentimentally attached, as with no other place of the country, that he commissioned his buildings chiefly tombs, to be raised with full deliberation and expense. He seems to have procured the artisans trained in the traditions of the Delhi style and the material from the nearby regions and placed these projects under the charge of his able architect Aliwal Khan who was allowed to evolve the design of these tombs as best as he could, in faithful adherence to the prevalent style and build in accordance with his ideals. Sher Shah himself does not appear to have played any such decisive role in this matter as was done by Akbar at Fatehpur Sikri and Shah Jehan at the Taj Mahal. This was as much due to his lack of taste in fine arts, as because of the lack of time at his disposal.

The Din-Panāh citadel is irregularly oblong in plan (Fig. 18), its

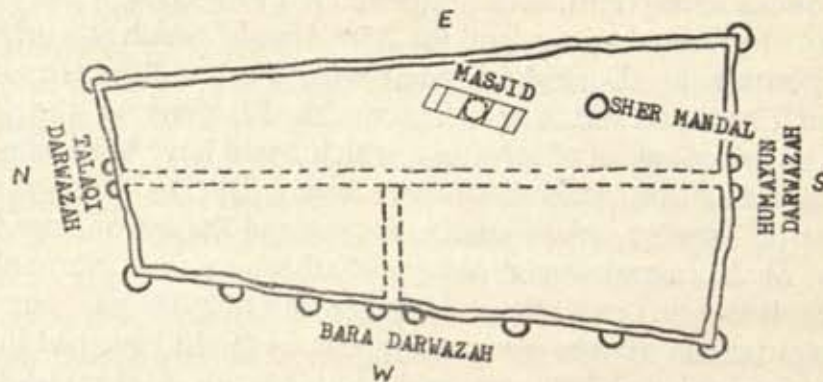


Fig. 18. Plan of the Din-Panah Citadel, Old Fort, Delhi (1534).

main axis lying parallel to the course of the river Jamuna which seems

to have originally flowed by its eastern wall. The other three sides were secured by a continuous moat, portions of which have survived. The river-gate has now been closed down and the ghat for anchoring the barges has also entirely dwindled. The high enclosing wall has projecting circular bastions at regular intervals. Embrasures, sometimes in double series, have been given therein, to shoot down the besiegers. Arched openings are there at regular intervals (Plate XCVII). A number of ornamental jharokhas have also been provided here and there, and sometimes an oriel-window has been given to break the monotony of the dull, plain wall which is built of undressed stones and otherwise presents an ugly and awesome sight without the plaster. There is slight batter on the external side, a feature which is reminiscent of the preceding style of the Tughluqs which was, in a more or less degree, in vogue in the first half of the 16th century. Internally, series of arched cells, two bays in depth, run along the ramparts. The rubble-and-mortar construction is extremely massive, crude and without any ornament. The cells originally served the purpose of the garrison.

The spirit of the three gateways, viz., the *Talāqī Darwāzah* on the northern side, the *Barā Darwāzah* on the western side and the *Humāyūn-Darwāzah* on the southern side, is altogether different inasmuch as finely chiselled red and grey stones along with black and white marble have been used in their construction and several pleasing features have been incorporated in the fabric of each gate to give it a substantial aesthetic character. The *Talāqī Darwāzah*¹⁷ is a three-storeyed gateway protected on either side by a circular bastion (Plate XCVIII) over which it towers stupendously and magnificently. It is mainly built of finely chiselled red sandstone. In essence, it is an oblong iwan which contains the archway giving the entrance and an arch above it belonging to the second storey apartments of the gateway. There is a beautiful stylised lotus design composed of eight petals (technically 'ardal') containing within it an eight-pointed star, inlaid with white marble on a red stone sunk panel on either side of the arch at this stage. Above it, on each side is a beautiful oriel-window with its four finely moulded brackets at the base and śikhara-shaped crest, which not only rhythmically arrests the upward trend of the oblong gateway but also breaks its monotony in an extremely befitting manner. The spandrels of the iwan have been done with black slate stone and they have lotus rosettes of red stone in high relief (Plate XCIX).

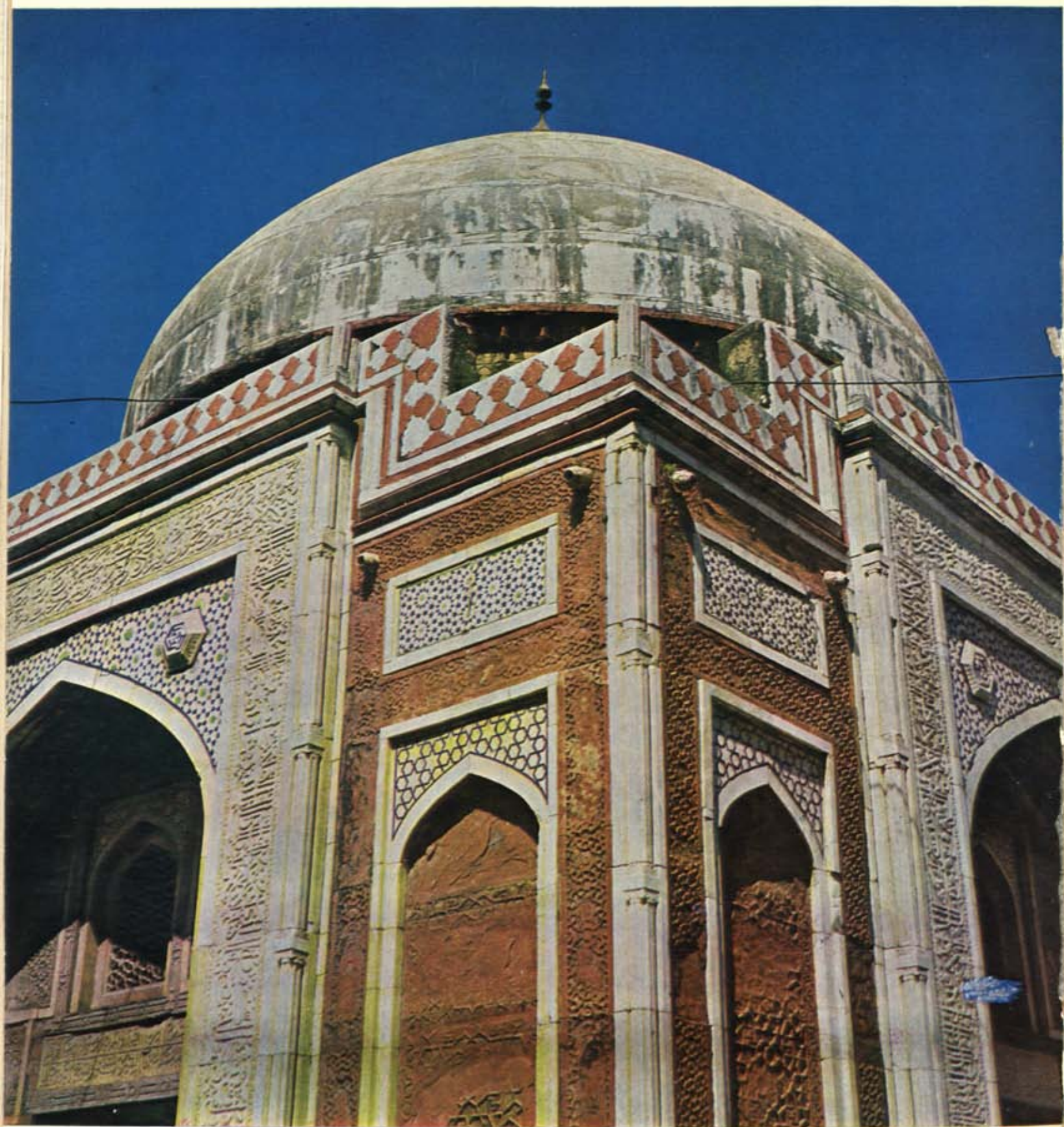
The frieze, above the iwan and the oriel-windows, has, on either side, i.e. each over the oriel-window, a sunk panel into which a śārdūla (शार्दूल) of white marble has been inlaid on red stone. It is in

high relief (Plate C) and has been marvellously set. Border of the panel has been glazed-tiled. The central oblong panel above the iwan is again a white marble slab which is curiously plain and without any adornment or inscription. What it could have shown originally is a matter of surmise. Again there is a white marble ornamental cornice near the frieze. The superstructure is composed of two red stone square chhatris, one on either side, and an octagonal red stone chhatra in the centre, a bit off the gateway. There is again a lavish use of green, turquoise and yellow glazed-tiles. The chhatris of the superstructure harmonise with the oriel-windows of the facade, a combination which is one of the most pleasing qualities of an architecture. This is at once reminiscent of the art of Gwalior. Equally important is the wonderful admixture of a wide variety of tints and tones which the architect has successfully presented in its composition. Thus, he has used local grey quartzite of at least three tints, red sandstone of two tones, black slate, white marble and glazed-tiles of green, turquoise and yellow colours. Some panels are sunk while rosettes and *šārdūla* are in high relief. This organisation of the colour, the mass of stone and the solids and voids, and the intermittently set curved and horizontal lines in the overall emphatic vertical axis of this gateway is a rare phenomenon in the architectural style of the Delhi Sultanate and, without doubt, proclaims the advent of a new trend of art with greater use of chiselled stone of different tones and, along with it, those indigenous traditions which more aspire to bring about an *architectonic effect* than the bizarre use of glazed colour on a barren surface. In a way, it marks the close of the previous style and beginning of a new one, with its own norms and concepts.

There was a faint Persian inscription on the east side of its entrance which has been put on record by Maulvi Muhammad Ashraf Husain.⁴⁸ It read: "The Gates of Paradise are opened and the Gates of Hell are closed",⁴⁹ meaning thereby that the Dīn-Panāh citadel is a paradise, and if one entered the citadel he entered the Paradise. The second inscription in the recess on the west side of the entrance is more important in this respect; it read: "O God, preserve this House of Humayun (Humāyūn-Khānah) from damage..."⁵⁰ The learned Maulvi, hence, placed this gateway in 940/1533-34, which appears to be its most appropriate chronology.

More important than the epigraphical evidence, at least in this case, is the unique phenomenon of the depiction of '*šārdūla*' on this gateway. Technically it is not lion, but is its stylised form which more resembles horse (see Plate C above). However, the mouth is unmistakably that of lion and it is, hence, a mythical composite animal (*simha-vyāla*).





10. Tomb of Atagah Khan, Nizamuddin, Delhi.

Two śārdūlas, one on either side, face each other. In either case, śārdūla is carved with a man, whom it has overpowered. The sculpture is forceful and assertive. The panel on which it is carved is sunk and the white marble śārdūla is in high relief.

The only earlier example of animate depiction of gateways for auspicious effect is at Chanderi. There the city gateway has, on each side above the archway, a carved lion. It is haphazardly done, though its delineation is clear. It is lion, without the slightest attempt of the carver to stylise it. The motif carved similarly on the Delhi-Gate of Chanderi, on either side, is also a lion though it is better done (Plate CI). Here it is depicted with an elephant whom it subdues. Though technically śārdūla, no apparent attempt has been made, in this case also, to śārdūlise it. The latter is dated in 814/1411 as the accompanying inscription affirms, while the former is obviously earlier.

Raison d'être of the depiction of this animate motif, which was much against the orthodox point of view,⁵¹ remains largely undefined. It was probably a superstitious belief in the auspicious effect of such symbols and motifs that led the Chanderi builder to depict it so prominently on the principal gateway of the city.

The other example in Muslim architecture of India of a similar depiction, and the third in this series,⁵² is the gaja-vyāla of the Delhi-Gate of Agra Fort which was built by Akbar between 1565 and 1569.⁵³ Instead of one vyāla figure being on either side of the gateway, they are there in a continuous series on the panels of the lower frieze of both the octagonal towers which project forward and protect the main entrance. In each case, they are inlaid with white marble on a red sandstone slab. It is composed of elephant, horse, lion and bird and is shown fighting with seven elephants simultaneously whom it has obviously overpowered (Plate CII). It is quite likely that led by superstition, as he initially was, Akbar had them depicted on the principal entrance of the citadel of his capital for auspicious effect. That he was born in the Leo (Lion = Simha) sign of the Zodiac and lion had a symbolical meaning to him is also a factor which might have contributed to the making of his belief in its depiction, the lion-element being obviously predominating in its delineation. It was intended to have an auspicious effect as much as to carry an impression of the might of the emperor which is more than reflected by its extremely vigorous and forceful presentation.

It may be noted that the Hindus depicted śārdūla on a very large scale in the scheme of their ornamentation, along with exquisitely sculptured figures of gods and goddesses, nymphs and dryads and mithunas, more for relieving the monotony of repetition of, and

providing a purposeful contrast to, those sculptures than for an auspicious effect or a symbolic meaning. In certain cases, e.g. at Khajuraho, śārdūla has almost invariably accompanied the sculptures alternatively in the sunk panels (Plate CIII) for effect which could be as architectural as it was sculptural. But the isolated use of two śārdūlas in this particular case at such a prominent height is not for mural ornamentation, which there is none, but for some extra-mural effect which, in the circumstances of the case, could only be superstitious. This is well in line with the character and personality of Humayun whose faith in things supernatural, indeed, knew no bounds. Khwandamir's account unmistakably shows that the walls and gateways of Humayun's Dīn-Panāh were completed by 1534. There does not seem to be any reason to doubt the veracity of his statement. Particularly, by any stretch of imagination, the depiction of this symbolic and superstitious motif cannot be ascribed to Sher Shah who was a hard-core realist. He did not have any faith in astronomy and his personal outlook was that of an orthodox Musalman, without the least compromise with such features which went against the spirit of the canon law. Reinforced by the epigraphical evidence, it seems certain that this gateway was built by Humayun and was completed in 1534.

The western gateway, called the *Barā-Darwāzah*, of the Dīn-Panāh is also built of dressed red sandstone with use of white marble and black slate for emphatic outlines, though it is much simpler in design (Plate CIV). It has two oriel-windows, one on either side of the archway. Except a series of embrasures in the frieze and a plain parapet which could have been glazed-tiled originally, there is no superstructure and the imposing impression of the *Talāqi-Darwāzah* is absent here. However, the circular bastions which protect the gateway on sides are crowned by hexagonal chhatris. Their pillars and brackets are in richly carved red sandstone, while their cupolas were beautifully glazed-tiled in green and blue colours.

This gateway has a hexagonal plan at the entrance and a multi-storeyed arrangement composed of open arched pavilions on the backside, like the Delhi-Gate of Agra Fort. The similarity of these features suggests that the former is nearer to the latter in stylistic relationship than to any typical building of Sher Shah. The latter, obviously, drew initial inspiration from the former which set the trend, and, it can be roughly claimed, laid foundation of the style which in the enlightened age of Akbar found a magnificent expression.

The most significant feature of this gateway is the *ṣaṭkoṇa* motif which appears above the archway, one on each spandrel. It is inlaid

with red upon a white stone background, and contains in its centre a lotus flower in high relief. It has been prominently displayed and, without doubt, the architect intended to present it emphatically. Like the *šārdūla* of the previous gate, it is not used for ornamentation but, pure and simple, for symbolic meaning in view which was in all probability an auspicious effect.

It is interesting to note that some 16th century buildings have the *šaṭkoṇa* motif depicted on spandrels of arches, sometimes even on the mihrab of the nave. The Jamali-Kamali Masjid near the Qutub has *šaṭkoṇas* on its mihrab. The Qal'a-i-Kuhna Masjid in the same fort too has *šaṭkoṇas* on its mihrab and other niches. *Šaṭkoṇa* appears on spandrels of all upper arches of the Sher-Mandal, also in the Old Fort. The Tomb of Humayun, in its vicinity, also has *šaṭkoṇas* similarly used on spandrels. The Delhi-Gate of Agra Fort has *šaṭkoṇas* on the principal archway on the western side while on its eastern side there is only one above the apex of the arch. The so-called Jodhabai's Palace at Fatehpur Sikri also has *šaṭkoṇas* on its gateway. The mihrab of the Jami' Masjid of Fatehpur Sikri has a *šaṭkoṇa* over it. The *šaṭkoṇa* of the tomb of Salim Chishti at Fatehpur Sikri is composed of six serpents in *nāga-pecha*. It is here that the mystery of its usage in the buildings of Akbar, and in those which closely preceded them without a break in the continuity of the tradition, is unravelled. It is essentially a Tantric symbol which was used by Akbar for its auspicious effect.⁵⁴

The hexagon on the Ghazni-Gate (c. 1030) (Plate CV) now preserved in the Agra Fort is only a geometrical motif which was used for panel-decoration. Likewise, the hexagon used in the 'Alā'i-Darwāzah (1311) is ornamental in its import. But the 16th century examples of *šaṭkoṇas*, invariably with a prominent lotus flower or 'bindu' inside it as its central theme, around which the hexagon has grown, are different. It cannot be identified with Solomon's Seal or the Star of David. It is not a mere ornamental motif but is associated with a meaning, hence its isolated and prominent usage on spandrels of arches, mihrabs and the gateways.

This gateway contains a Quranic inscription being portion of Verse 21 of Chapter XII, painted in similar way as inscriptions of other gateways are done.⁵⁵ It reads: "God hath full power and control over His affairs, but most among mankind know it not."⁵⁶ There is no explicit mention of the date but the style, mode and material of writing show that it is contemporary to the inscription of the northern gate. The gateway can, thus, be ascribed to Humayun.

The southern gateway called the *Humayun-Darwāzah*⁵⁷ (Plate CVI)

is similar to the two gateways in style, texture and design, with a similar iwan, arched entrance and openings, and oriel-windows on the sides. Green and turquoise glazed-tiles on the frieze of oriels and white marble rosettes on the spandrels in high relief appear as usual. Three features of this gateway, however, distinguish it from others. Two blank square sunk panels of white marble about the second storey height on the sides of the iwan leave much to surmise as to what they originally depicted. An oblong marble panel also remains blank over the iwan on the frieze, like the northern gate. Above the oriel-windows are two panels, one on either side, each containing a white marble elephant in high relief (Plate CVII). And, above all, is the battlemented parapet with neatly carved red stone merlons having embrasures, remains of two turrets on extreme sides and two hexagonal chhatris. Bases of the turrets are octagonal but above the string-course it is designed like the Qutb Minār with circular and conical projections alternated by flutes. The appearance of the elephant motif on the frieze of this gateway is also significant. Curiously, two extant merlons of the eastern bastion bear circular medallions, one each, containing exquisitely carved Kalma in plaster. The colours of the plaster have, however, gone.

The internal side of the gateway is three-storeyed (Plate CVIII), each one containing a series of halls, rooms, pavilions and interconnecting corridors and staircases. The skeleton is composed of rubble but arches have been built with heavy, finely-chiselled stone voussoirs (Plate CIX). Stone has also been used in interior masonry, niches and small ceilings, e.g., over stairways. Ceilings of rooms and halls are generally vaulted, cross-vaulted or wagon-vaulted, supported on pointed yet sufficiently broad arches. Fine plaster work has been done as beautifully on dressed stone surface as on rubble skeleton (Plate CX). Designs are typically Muslim arabesques and florals. Circular stucco medallions bear Kalma. There is a long Quranic inscription around the western arch of the main ruined hall, carved in plaster. Arabic letters, being fragments of inscriptions, appear on other arches also, which shows that recourse to calligraphic art for mural ornamentation was taken in its scheme on a large scale. Stone carving too, as represented by lotus rosettes in high relief, is of a superior quality. Altogether, the gateway gives a fairly good idea of the builders' love of beauty as much as of their physical needs, and marks a definite advancement of the art from the stage where Babur had found it on his arrival in India, as he has recorded in his Memoirs.

Maulvi Ashraf Husain placed on record a Persian inscription of this gateway written in Indian ink in Nastaliq.⁵⁸ It gave the date of its

erection in 950, 1543-44 by order of Ghāzī Khān Lohānī during the reign of Sher Shah Sur. This further confuses the problem. If the Old Fort is identified with the *Dīn-Panāh* of Humayun, the walls, ramparts and gateways of which were finished in 1534 according to Khwandamir's History, how this gateway could have been built by a noble of Sher Shah at his command around 1543? The fact stands out, no doubt, that Persian chronicles are vague and ambiguous on the subject and much of it will, therefore, have to be settled by the architectural evidence *in situ*. Thus, though the *Humāyūn-Darwāzah* is certainly the last of the three gateways to be built as its battlemented parapet shows, the spirit of the three gateways is one and the same, and they belong to the same style. Finely chiselled red stone, mixed with white marble and glazed-tiles has been used in all the gateways. The plaster ornamentation, however, predominates in the scheme of the third, i.e., the *Humāyūn-Darwāzah*. Oriel windows and chhatris have been similarly used. An oblong plain blank white marble panel above the iwan or the archway appears in either case. Form of the arch and the emphatic verticality of the iwan too is similar. Most important is the symbolic and meaningful use of *śārdūla* on the *Talāqī-Darwāzah*, Tantric *ṣaṭkoṇa* on the *Barā-Darwāzah* and the elephant motif on the *Humāyūn-Darwāzah*. None of these motifs belong to the style and scheme of Sher Shah and, certainly, he or any one of his Afghan nobles, orthodox Sunni as he would invariably be, could not have allowed its depiction prominently and emphatically on a gateway. These motifs belong to a liberal and, in a sense, superstitious thought to which only his great adversary, viz., Humayun Padshah, could have subscribed. As it seems, the backside pavilions of the gateway were renovated during Sher Shah's reign, and it is only to this fact that the inscription under reference may point out.

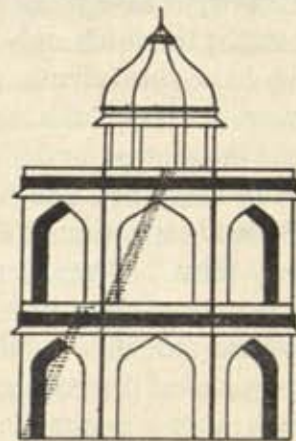
Its name *Humāyūn Darwāzah*, i.e., the Gateway of Humayun, is significant. Maulvi Ashraf Husain mentioned that the inscriptions were in Indian ink and extremely faint.⁵⁹ They were not carved in stone or even done in plaster on a structural feature, e.g., on an arch, to be unmistakably contemporaneous to the building respectively. As it seems, these epigraphs were painted during the reign of Sher Shah and preserved in their contents those nomenclatures which had become famous during the last ten years, e.g., the *Humāyūn-Khānah* (House of Humayun) in the first case and the *Humāyūn-Darwāzah* (Gateway of Humayun) in the last.

The only point which remains to be clarified is the difference of spirit of the construction of the gateways on the one hand and the enclosing wall, ramparts and cells on the other. Against the fine and

tasteful style of the former, the latter are crude, ugly and repulsive; their construction is entirely in rubble and mortar, with haphazard coating of rough plaster without any ornamentation whatsoever. There is no stucco or chiselled-stone, and no carved features. In fact, they are strictly functional—for use of the garrison—and the ceremonial aspect of architecture so necessary for aesthetic impression is altogether absent. Strength and stability was the only consideration of this construction. But the gateways, over and above their function, also ceremonially introduced the citadel and its builder to the visitor and were as well meant for a gorgeous and beautiful impression, commensurate to the imperial power and grandeur⁴⁰ as for protected entrance and it is here that a scheme had to be worked out and a style came into being. The gateways of the *Din-Panāh*, this way, mark a beginning which was as great and grand as it was momentous.

(c) *Sher Mandal, Old Fort, Delhi*

The *Sher Mandal* (Plate CXI) is situated at the highest point of the Old Fort (Purana Qal'a, Delhi), near its south-east end, in close neighbourhood of the *Qal'a-i-Kuhna Masjid* (Plate CXII). It is a double-storeyed octagonal tower of red sandstone, resting on an octagonal plinth

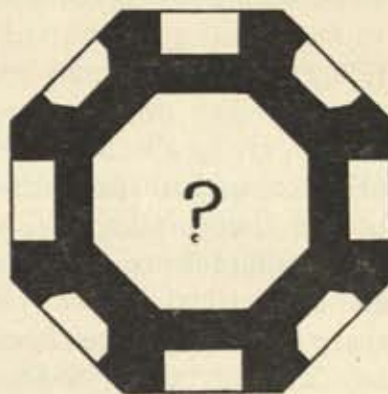


SHER-MANDAL
ELEVATION

Fig. 19. Elevation, Sher-Mandal, Old Fort, Delhi (c. 1533-40, 1555).

with ornamental stone nook-shafts at the angles, and is surmounted by a spacious chhatri on the terrace (Fig. 19). The lower storey is closed on all sides and remains a mystery. It could not have been

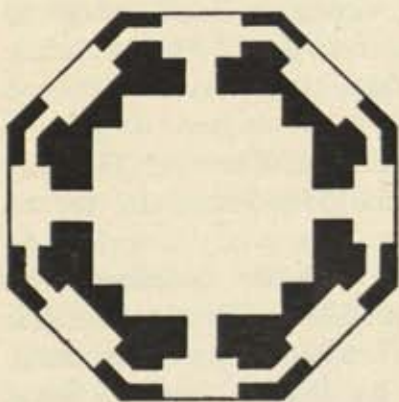
filled in altogether by masonry, as is generally surmised (Fig. 20). Eight alcoves have been provided in this storey, one on each octagonal side. They are rectangular and semi-octagonal alternatively. Tastefully carved red stone nook-shafts with chevron design at the angles favourably react at every turn. The staircase on the south-west side, as also the one on the other side of it, leads upwards; there is only one set of stairs from the upper storey to the terrace. The granite stairs are extremely steep, narrow and irregular. With an average tread of 6" (15.24 cms), the rise is 12" (30.48 cms) and sometimes it is even 15" (38.10 cms) high which though necessitated by the relative paucity of the horizontal space in comparison to the height due to a thin skeleton, is extremely dangerous. It is this way that an architectural mistake can create perpetual inconvenience of the living.



PLAN GROUND FLOOR
SHER-MANDAL

Fig. 20.

The chhajja above the lower storey has completely gone. The upper storey too has eight alcoves, one on each octagonal side, corresponding to the lower ones, though they are much deeper. Here they are all on a rectangular plan, with stalactite semi-soffits. On the external side, their spandrels have *şaṭkoṇas* in inlaid marble on a red stone background (Plate CXIII), one on each spandrel, there thus being $2 \times 8 = 16$ *şaṭkoṇas* in all.



PLAN UPPER STOREY
SHER-MANDAL

Fig. 21.

The intrados of the arches have geometrical designs inlaid with white marble. This inlay of coloured stones is more emphatic than the examples at the gateways of the *Din-Panāh*. Here it is a design in, what we technically know, a mosaic of inlaid motifs. Every angle has a carved stone nook-shaft flanked on either side, i.e., on the exterior, by a square panel which bears a geometrical design inlaid with white marble on a red sandstone slab, with a border of black slate. The design is a 12-petalled flower with a 12-pointed star (Plate CXIV) as its central theme.

Interior is composed of a single room which opens on four sides into four alcoves, which are all interconnected (Fig. 21) through an

external passage. It is square in plan, with semi-vaulted soffits on the sides, technically making the four arches on a *chahār-tāq* system and a vaulted ceiling supported on them, all bearing stalactite design (Plate CXV) in profusely coloured stucco and glazed-tiles. The geometrical designs on the dados too bear glazed-tiles. Stucco art is largely incised, giving a beautiful play of light and shade, and, in a number of cases, incised spaces have been filled with small glazed-tiles. In fact, the mural decoration of this small room belongs to a typically Muslim ornamental scheme composed of stucco and glazed-tile arts and stalactite and geometrical designs. Though the colours have faded, the lines are sharp to the day. The effect is exquisite. This finish completely dispels any doubt that the *Sher-Mandal* remained incomplete or was completed later after an interval. The structure, viz., the framework of vaults, has been so worked out as to receive the colourful stucco and glazed-tiles in stalactite designs as its integral form of ornamentation and the composition is entirely homogeneous.

The upper storey is protected above by a small *chhajja* which is supported on small brackets. Above it is a cornice and an ornamental frieze. The terrace has an octagonal *chhatra* in its middle on the same level, with 20'-6" (6.25 metres) span, its pillars set apart at a distance of 8'-8" (2.64 metres), one from the other. This is thus an extraordinarily spacious pavilion. Pillar-bases have *kīrttimukha* design, while shafts have chevron. Capitals too have conventional projecting mouldings. Pendentives have been used in the phase of transition. The soffit of the hemispherical cupola has an arabesque design in stucco. It was originally painted. There are three oblong niches on each octagonal side above the first series of pendentives, there thus being 24 niches. They are empty and one wonders what they could have contained originally.

The *Sher-Mandal* has been generally identified as Humayun's Library from the roof of which he fell and died in 963/1556. This calls for an intensive study of the available data. The contemporary historians do not allude to the event or its association with the building. Thus Khwandamir's *Qānūn-i-Humāyūnī* closed in 1534 and does not include history of the subsequent period. Jauhar's *Tazkirāt-ul-Vāqīāt* only mentions death of Humayun, but does not give its details.⁶¹ Bayazid Bayat also alludes to the death of Humayun, but does not narrate the event.⁶² Gulbadan's *Humāyūn-Nāmah* ends at the blinding of Kamran and there is no history of the later period.

However, Abul Faḍl, the court-historian of Akbar, gives a detailed account of the event:

At the close of Friday [7th of] Rabi'ul-Awwal 963 [20 January 1556], Shah Badagh, Alam Shah, Beg Mulak and others who had returned from Hijaz and Chaghtai Khan and some men from Gujarat came and made reports. Also Pahlwan, Dost Mir Barr and Maulana Asad came from Kabul with representations from Munim Khan. At the end of the day, he came out on the roof of the Library which had recently been fitted up, and gave the people who were assembled at the chief mosque the blessing of performing homage [Kornish]. For a considerable time he asked questions about Holy Mecca and about Gujarat and Kabul. After that he sent for all the mathematicians, for it was expected that Venus would rise on that night and he wished to observe her. It was his excellent intention that when Venus rose and the moment became auspicious, he would hold a grand assembly and make promotions of officers. At the beginning of the evening he wished to descend and when he came to the second step, a reciter [muqrī] by name Miskīn [literally, wretched] raised an untimely call to Prayer. His Majesty, out of respect to the call, wished to sit down where he was. As the steps [darjāt] of the stair [zīnā] were sharp [tez] and stones slippery [laghzanda], his blessed foot caught in the skirt of his robe at the moment of sitting down and his good staff slipped. He lost his feet and fell upon his head, his right temple receiving a severe blow so that some drops of blood issued from his right ear.⁶³

Abul Faḍl recorded subsequent death of Humayun and the chronogram by Maulānā Qāsim Kāhī: 'Humāyūn Bādshāh az bām uftād' (Emperor Humayun fell from the roof).⁶⁴

Badaoni, more or less, confirms Abul Faḍl's narrative and that Humayun "had ascended to the roof of the Library which he had built in the fortress of Dīn-Pānah in Dihli"⁶⁵ and while coming down the stairs, he heard azan, sat down to pay respect, when he rose, his staff stuck in robe, he slipped and fell down. Only he confuses the date of his death to be 15th Rabi'ul-Awwal; it is 11th Rabi'ul-Awwal/24 January 1556. Nizāmu'd-Dīn Aḥmed too confirms the account, its date, time, place, sequence of the event and the chronogram.⁶⁶ Ferishtah has also confirmed it in toto.⁶⁷ *Tārīkh-i-Alfī* of Mulla Aḥmad which was written during the reign of Akbar and was completed in 1588-89 and is a fairly reliable history, gives a similar account and confirms everything including date of the death and the chronogram.⁶⁸

Motāmid Khān in his *Iqbāl-Nāmah-i-Jahāngīrī* also records the event without any ambiguity and he also quotes the firman which was sent to

Akbar through Nazar Shaikh Choli.⁶⁹ It was purported to have been written by Humayun himself to impress that everything was all right: "I was coming down from the Kotha [open pavilion on the terrace] from behind the mosque which is near the palace⁷⁰ ... in the mid of the stairway [ba miyān-i-zīnah] I heard azan ... to show respect to azan I sat down. When azan was called off, I stood up to descend. Unfortunately my staff got stuck in my robe [jāmāh] and I slipped and fell down. A corner [goshah] of stair hit my temple and a few drops of blood came from the [right] ear. I was unconscious for some time. When I recovered consciousness, I was taken to the Palace [Daulat-i-Khānah]. Now it is well and there is no cause for worry."⁷¹

Turkish Admiral Sidi Ali Reis was present in Delhi at the time of the accident; he noted: "All was ready for the start [the Admiral's departure]. Humayun had given audience on Friday evening, when upon leaving his *Castle of Pleasure*, the muezzin announced the azan just as he was descending the staircase. It was his wont, whenever he heard the summons; to bow the knee in holy reverence. He did so now, but unfortunately fell down several steps, and received great injuries to his head and arm."⁷²

These accounts lead us to conclude the following facts of the matter:

- (1) That on 20 January 1556, Humayun went up on the roof of the building which was called Library and had been recently fitted up.
- (2) Badaoni points out that this building called the Library was built by Humayun himself in the fortress of Dīn-Panāh in Delhi.
- (3) This building stood in close neighbourhood of the Jami' Masjid which cannot be any other mosque than the present *Qal'a-i-Kuhna Masjid*. This is confirmed by the fact that while he was on the roof of this building (viz., Library) he received homage (kornish) of the people who had assembled in the mosque, i.e., in its courtyard.
- (4) He had gone there on the roof of this building to observe Venus which was scheduled to rise that night. He discussed with the mathematicians, e.g., the astronomers.⁷³ The occasion was to be auspicious and Humayun intended to hold a grand durbar. This shows that the building was an observatory—and could have possibly been converted into a Library.
- (5) For some work, which is not explained, he left the terrace and began descending the stairway. The stairs were steep, sharp and

slippery. While on the second stair he heard the call to Prayer and, as was his practice, he sat down to show respect to the call. While getting up, his staff got entangled, anyhow, with his long imperial robe; he lost his balance, slipped and came down headlong.⁷⁴ He received serious injury in the head. As nobody was there, in fact nobody could be there, with him on the second stair in the narrow stairway, it is not precisely ascertained as to how he slipped. But this is immaterial and superfluous in the present context.

- (6) Subsequently, he died on 24 January 1556. His tomb where his bodily relics were ultimately enshrined stands at a little distance from the place of the accident.
- (7) Finally, while the building where Humayun had gone to observe Venus and the accident took place was without any doubt the *Sher-Mandal*, there is no evidence to show that this Tower was built by Sher Shah.⁷⁵

It is through Abdullah that we hear the name of the building: *Sher Mandal* for the first time. But his narrative: "Within the Fort was a small palace also left incomplete which he [Sher Shah] called 'Sher Mandal' "⁷⁶ is vague to the extent of being unreliable. *Sher-Mandal* is not a palace nor, as has been discussed above, it ever remained incomplete. Moreover, we cannot identify the Old Fort and its buildings with the citadel of Sher Shah.⁷⁷ Badaoni, who is an earlier historian and is nearer to Humayun than Abdullah, has mentioned the building categorically: "Humayun ascended to the roof of the Library which he had built in the Fortress of Dīn-Panāh in Delhi..."⁷⁸ Functionally or stylistically, this building does not belong to Sher Shah. There is no documentary evidence to support it either. It cannot be linked with Sher Shah simply because it bears the name: 'Sher Mandal'; linguistic similarity which is, more often than not, misleading, is no basis for writing sober history. It is very likely, this way, that the building was originally called *Saur-Mandal* on account of its association with the study of the terrestrial bodies and it was later corrupted to *Sher-Mandal* out of the sheer misunderstanding that the Dīn-Panāh of Humayun was destroyed by Sher Shah and he built his own city in its stead.⁷⁹

There are many other interesting and important aspects of this small building which need elucidation and vindication. It is a free-standing tower and not a palace or adjunct of a palace. Its expansion in the vertical section is too obvious to be missed. There is no attempt of the builder to give proliferations to its sides, but to raise it to an

imposing and paramount height. There is a single square room in the upper storey which does not contain shelves or niches for keeping books; as a matter of fact, there is nothing in the room which could have justified its nomenclature as Library. The lower storey is entirely closed on all sides which remains a mystery. What is inside it? As the construction is arcuate, it could not have been filled in, and there must be a small chamber inside it. When and why this was closed up is an important question of this study. We know from the *Akbar-Nāmah* of Sheikh Abul Faḍl that when Akbar advanced from Jalandhar towards Delhi, in 965/March 1558, he ordered the army to move to Hissar to subdue Haji Khan while he himself "went to Sirhind in order to pay the respects of devotion, and that he might rejoin the army after having visited the shrine of His Majesty Jahanbani Jannat-Ashiyani [Humayun]. May his proofs be illuminated! For when the officers were defeated and Hemu was predominant, Khanar Beg and a number of the servants of the court *had brought that monarch's holy corpse to Sirhind and the coffin was now lying there, shrouded in curtain.*"⁸⁰ This shows that for a few months which passed between the death of Humayun and Hemu's advance upon Delhi, the royal corpse was kept in a place at Delhi, most probably in his own Dīn-Panāh, though this has not been mentioned. Again, when the Mughals vacated Delhi in the face of Hemu's threat, they dug out the body and took it to Sirhind where it was deposited in a *Supurdgah*. According to the account of the *AN*, Akbar went to pay respect to his father's temporary 'shrine' at Sirhind in 1558. This shows that it was lying there for about two years. Humayun's tomb was not finished until 976/1568 when, *AN* records, Akbar paid a visit to it and "conferred princely largesse on the attendants thereupon".⁸¹ It is quite possible that the coffin was brought to Delhi soon after Akbar's visit to Sirhind and again deposited at the place where it had been initially enshrined before its transfer to Sirhind in 1556.⁸² It seems that the lower closed storey of the Sher-Mandal is the first *Supurdgah* of the corpse of Humayun. He died in this building, which independent and self-contained as it is, also looked like an octagonal tomb and, most probably, he was initially buried here. It was again to this place that his corpse could be safely transferred and kept before its final burial into the monumental tomb which Mirak Mirzā Ghiyāth built for him under Haji Begum's commission. After the body was finally removed, the vacant chamber was closed up out of the great sanctity attached to this place. This explains the mystery.

Inlay of coloured stones is a unique feature of the *Sher-Mandal* (and also of the Qal'a-i-Kuhna Masjid). It is probably the first example

of this type at Delhi. Though red and grey stones and red-stone, white-marble and black-slate were used together for a pleasing colour combination as early as the Quṭb-Minār, the tomb of Iltutmish, the 'Alā'ī Darwāzah and the tomb of Ghiyāthu'd-Dīn Tughluq, and mosaic of polychrome glazed-tiling was also already in fashion on a large scale, it is here for the first time that a design is made up of this inlay, for mural decoration. It is an ornament in itself. This does not belong to the style of Sher Shah and there is no sign of it at Sasaram or Rohtasgarh. It was an innovation and its credit may go to Humayun who loved to introduce new things in various disciplines of life.

Şatkoņas appear on the spandrels of its arches prominently and emphatically. Though there is no bindu or padma inside them, each one is composed of two interlacing triangles. This composition is different from the Seal of Solomon or the Star of David which was a pure hexagonal motif used on a large scale in ornamental scheme of Muslim art. Here it does not constitute a design but is used mainly as a symbol with some superstitious meaning in view.⁸³ This is representative of the outlook of Humayun rather than of Sher Shah. Şatkoņas have been used similarly on the *Barā-Darwāzah* of this fortress.

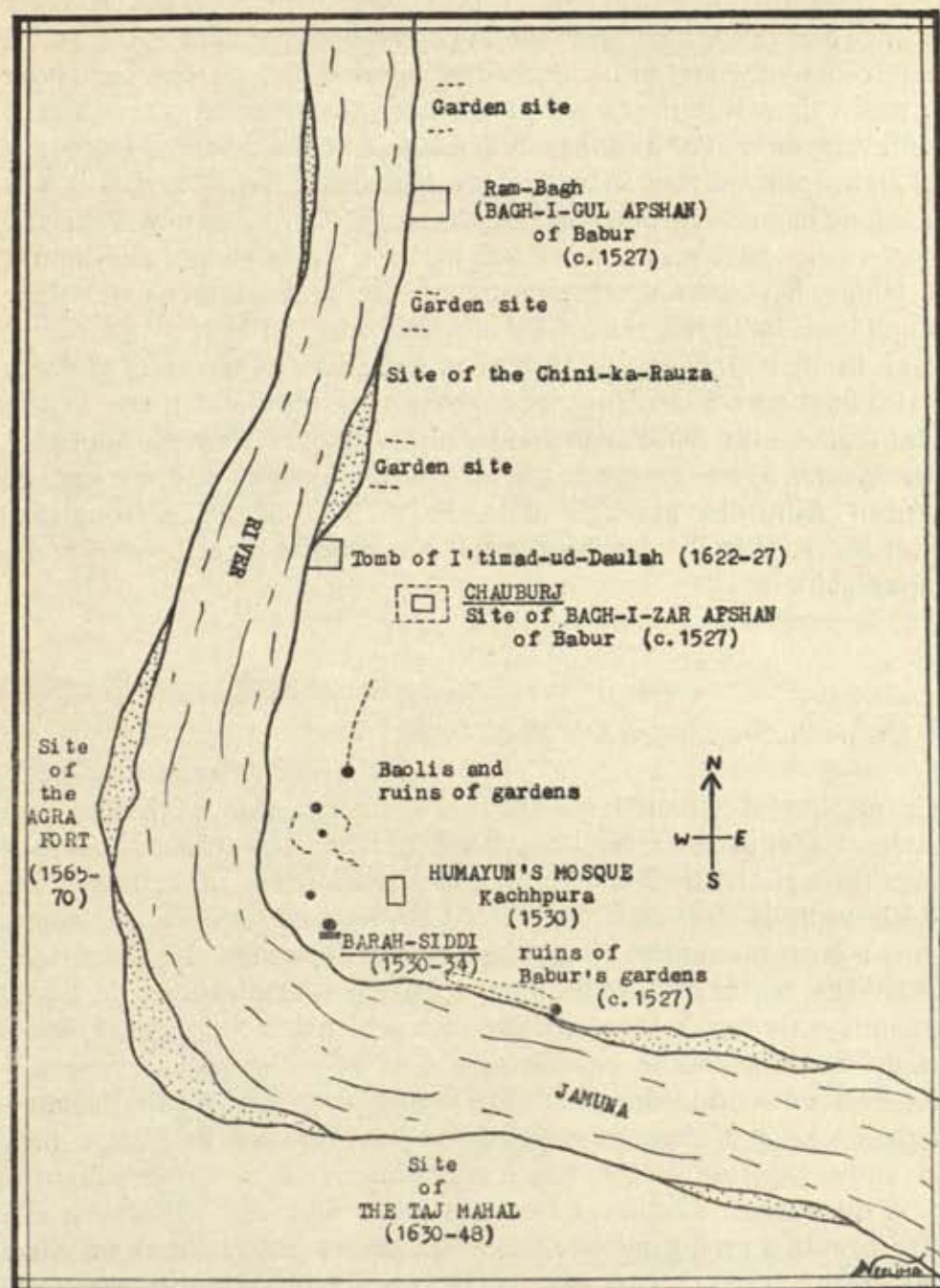
Then, the 12-pointed design on the upper storey (exterior) dados containing a 12-pointed star reflects the thought and belief of Humayun than anybody else. It was an astronomical numerical and Humayun ardently believed in its auspicious effect. We know for certain through Khwandamir that he grouped his officers into 12 divisions, corresponding to the 12 signs of Zodiac and assigned 12 arrows of gold one for each; "For", Khwandamir noted, "twelve is the number of digits on which the regulation of most worldly affairs and of every momentous business has been ordained since the creation of the world to the present time. Firstly, because the eighth heaven is divided into the twelve signs of Zodiac and the direction of the revolutions of the sun, the moon and the stars, and the seven planets is contingent on the signs of the Zodiac. And the calculations for months and years are based on their revolutions, and the light of the truth of this idea shines as the passage of days and months in different parts of the Universe."⁸⁴ He further noted that there are twelve hours and twelve months; the tribes were twelve and twelve also were their captains.⁸⁵ Humayun was fond of this number; he invented a large tent "which consisted of twelve compartments corresponding to the Signs of the Zodiac"⁸⁶ and followed it almost invariably. Naturally, it is the 12-pointed star within a 12-petalled flower that he would select for the most prominent depiction upon the dados of the building which, probably, he liked the most and where

he spent most of his time.

The most important aspect of the Sher-Mandal is that it occupies the highest point in the Fort, in its south-east corner and, being a high independent tower itself, it looks over its surroundings imposingly. Clear sky up to the horizon is perfectly visible on all sides from its terrace and *this* seems to be the *raison d'être* of its construction. It was an observation tower for the study of stars—technically an *Astronomical Observatory* of the type we can expect during the first half of the sixteenth century. This is the only function it could have fulfilled in his lifetime. It could not have been used for military observation as the thick jungle around the fortress would not allow the far-off things of the land to be visible from the tower. Sher Shah was an extremely practical man and he had no love of, or faith in, astronomy. Heart and soul, it belongs to the personality of Humayun.

We know that he built an observatory at Agra, on the left bank of the river Yamuna. It was situated in the close neighbourhood of his inscribed mosque in the village Kachhpura, on the site opposite the Agra Fort on the one hand and the Taj Mahal on the other. There was a garden-palace on the site⁶⁷ and whenever Humayun stayed at Agra, he resided in this mansion which commands an extremely pleasant situation on the river exactly where it takes a sharp turn (see Map 2). The place is commonly known as *Gyārah-Siddi* (Place of Eleven Stairs) on account of a huge stone block which has stairs neatly cut into it, which stands on the site just on the river, with the help of two other blocks (Plate CXVI). In fact, there are twelve steps but one is generally ignored to make up the popular figure of 11. Ruins of other buildings abound near the place including stone water-channels, miniature-ponds, a large stone tank and, above all, a great baoli (step-well) which has two storeys. Now it is filled up and defunct (Plate CXVII). Pucca stone stairs originally led down to the water. Entirely built of finely chiselled red sandstone, it has such pleasing features as brackets and ornamental arched niches. Originally, there was an inscription on the slab built into the wall of the baoli near its rim; the inscription has almost completely peeled off and only the slab has remained. The area as far as *Bāgh-i-Zar Afshān* in the north-east and the site of the *Mehtāb Bāgh* in the east is studded with ruins all around and, here and there, one comes across a well or baoli with obsolete Rehant-ramps and other garden paraphernalia. Unmistakably, this is the site of Babur's gardens which the people of Hind used to call '*Kabul*'. A railway track and sheds, factories, private houses and other construction all in typical modern bad taste have, however, changed its face almost entirely.

The *Bārah-Siddi*, as it may appropriately be called, seems to be an astronomical yantra and it is quite likely that the monolith was used as



Map 2. Site Plan of Humayun's Mosque and Barah-Siddi at Agra.

a gnomon (*Śaṅku*). Immediately attached to it is a tank which might have contained in it a reading-scale. The shadow of the yantra fell on

the scale and provided some astronomical data.⁸⁸ There probably was a water-system which fed the observatory and some huge astrolabe or other apparatus was worked by it. Though there is no documentary evidence and this is a surmise, the huge monolith containing 12 stairs, reinforced by the fact of its ideal situation on a high ground just above the water, though in the east-west orientation, yet having access almost into every direction, and the circumstances of the case that Humayun had an unbounded taste in astronomy, adequately indicates that it was something like an Astronomical Observatory. Unfortunately, Time and village rustics have played too much havoc with the system and almost everything has been destroyed except the architectural core which though leads us to this reasonable surmise, does not help us to reconstruct it. It is only natural that when he had an Observatory at Agra, he also built such a structure, of course on a greater and more magnificent scale, in the Dīn-Panāh citadel of his prospective capital at Delhi. *Sher-Mandal*, in any case, owes its origin to Humayun and, as can be deduced from the available data, he built it as an Astronomical Observatory, though after his death it was used as his temporary tomb (Supurdgāh).

(d) *Qal'a-i-Kuhna Masjid, Old Fort, Delhi*

This mosque is situated on the south-eastern side of the Old Fort (Purānā Qal'a) in close neighbourhood of the *Sher-Mandal*. As one enters through the Barā-Darwāzah and proceeds towards it, its rear, i.e., Qiblah wall, is first noticed (Plate CXVIII). All at once, one comes across a great monument with pleasing proportions and highly tasteful finish. The whole back wall of grey quartzite is artificially divided into two storeys through a stone cornice over which a broad band of inlaid design—made of white marble pieces set on red stone background—runs from one end to the other. The central zone marking the Qiblah—on the backside of the nave—slightly projects forward; its quoins have red stone tapering turrets which are surmounted by simple pinnacles, above the terrace. The lower storey is plain but the upper one has three beautiful oriel-windows, one in the centre and one each on either wing, which project over the plain blank wall extremely gracefully. Each one, with a four-brackets base, two-pillared void, chhajja and semi-pyramidal roof, is a perfect composition. This beautiful expedient has been used, obviously, to relieve the monotony of the plain wall rather

than for any functional purpose. It is remarkable that the typically Muslim device to relieve the monotony of a plain wall was to take recourse to a colour scheme: stucco or, preferably, glazed-tiling; the use of oriel-windows for this purpose essentially belongs to the indigenous art. Battlemented parapet with merlons provides a suitable cresting to this wall.

At either end of the rear wall is attached an octagonal tower of three storeys (Plate CXIX). The lowest storey is entirely closed, though ornamental niches, depicting lintel-and-brackets forms and arches, have been given on its five sides. The second storey has lintel-and-brackets openings. These two storeys are built of red sandstone but the uppermost storey which has arched openings is of local grey stone. Each storey is protected by a rotating chhajja; the lower two chhajjas are supported on beautifully moulded brackets. The stone piers which bear carved designs, brackets and chhajjas impart these towers an extremely graceful effect. The inspiration of these towers attached to the rear wall has come to this mosque from the *Moth-ki-Masjid*, but here they have been used far more effectively than the Lodi prototype.

Like the rear wall, the north and south external walls have also been similarly divided into two storeys through a broad cornice. Instead of the inlaid border of the rear wall, a carved design on a red stone band has been used on the sides. An oriel-window has also been given on each side, on the same level on which the rear oriels are set, overhanging an archway which leads into the sanctuary from either side (Plate CXX). Here too it has been used to relieve the monotony of the plain wall which is of local grey stone. It is noteworthy that though the skeleton of the mosque is in grey quartzite stone, red stone has been used here on a very large scale particularly on all prominent parts as cornices, oriel-windows, towers, arches, pilasters and carved panels. This colour combination imparts a unique tonal effect to the building.

The sanctuary has five bays (Fig. 22) and, accordingly, five arches on the facade (Plate CXXI), thus technically belonging to the *Pañchamukhi* class. Each arch is contained in its own portal (or *iwān*) (Plate CXXII). Central one is the largest and the most prominent. The frame which contains it has white marble casing up to the dado-height and it also has beautifully designed fluted turrets rising from the

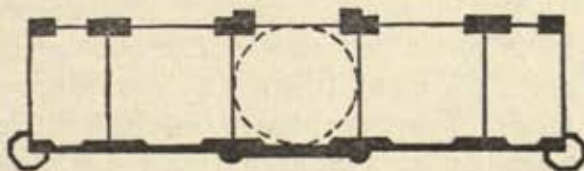


Fig. 22. Plan, Qal'a-i-Kuhna Masjid, Old Fort, Delhi (c. 1533-40, 1555-65).

marble nook-shafts at the quoins (Plate CXXIII). The Quranic verses have been carved in relief on the oblong panels around the arch (Plate CXXIV). The portal has a fringe of lotus-buds along its intrados and a miniature oriel-window over the archway (Plate CXXV). The pointed arch is double-recessed and has a set of beautiful nook-shafts on the external side. Most important aspect of this portal is the exquisite inlay of coloured stones with which the whole of it is covered (Plates CXXV above and CXXVI). White marble and black slate pieces have been inlaid in red stone slabs; curiously, red stone pieces have also been used here for inlaying on white marble slabs—all in geometrical designs. This gives the central portal an unprecedented gorgeous and magnificent impression. The intrados of the portal bears inlaid and carved designs which have been used together harmoniously (Plate CXXVII). Spandrels have circular stone medallions in high relief. They resemble lotus medallions of the Sultanate period, yet they are different.

The portals on either side of the central arch are comparatively plain. Though calligraphic designs appear upon them, there is no inlay. The fringe of lotus-buds which is as complementary to the effect of the respective arch as is the *vandanamālikā* to the *mukhachatuṣkī* of the Hindu temple has also been used here but instead of the portal-arch, it is given along the intrados of the inner archway. There is also an arched opening over the archway in each case. Like the central arch, these two portals are built of red stone. The extreme side portals, instead, are of grey quartzite with sparse use of red stone. These are still simpler and do not have even the calligraphic designs. Like the central portal, these too have an oriel-window each, supported on a *chhajja* and four brackets. The wings, on either side of the central arch, are protected above by a *chhajja* in faithful adherence to the style of the *Moth-ki-Masjid*. But the curious fact of this feature at the Qal'a-i-Kuhna Masjid is that the *chhajjas* over the arches next to the central one have beautiful struts while the *chhajjas* over the extreme side arches have no brackets and are absolutely plain.

The interior is composed of a square nave with a similar hall next to it on either side and an oblong hall at extreme ends (see Fig. 22 above for plan). It is mostly red stone work, with carving as the chief mode of ornamentation. Squinches have been used in the phase of transition in the nave (Plate CXXVIII). Pendentives supported on bracket-stones further convert the octagon into a 16-sided false storey which has ornamental niches and bears glazed-tile decoration (Plate CXXIX). On this rests the hemispherical dome of the single type

(Fig. 23). It is possible that the soffit was originally stuccoed and painted.

The white marble main mihrab has been most beautifully designed (Plate CXXX). The ornamental semi-vault, fringe of lotus-buds along its intrados and the double nook-shafts which support it—all set in a rectangular frame having carved Quranic verses on the border—is a single and unitary composition. Inside it is a similar, smaller semi-vault with two nook-shafts and, again, inside this too is a miniature semi-vault bearing a talisman—all

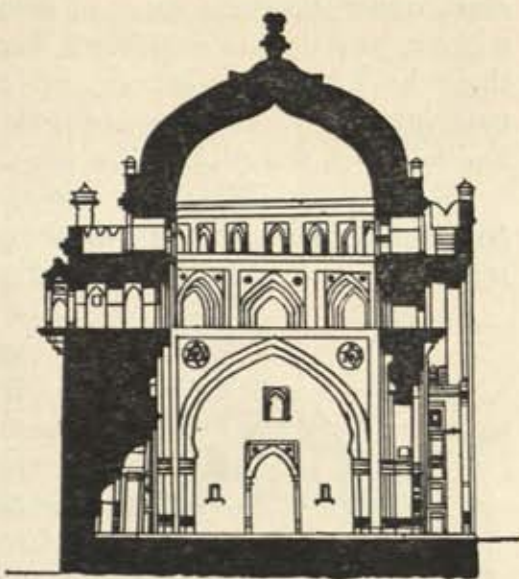


Fig. 23. Section, Qal'a-i-Kuhna Masjid.

exquisitely carved in white marble. Black slate and red stone have been used along with white marble judiciously. Inlay of coloured stone has also been used. Nook-shafts, fringe of lotus-buds, circular medallions in high relief and calligraphic designs carved around it—all together present this mihrab as a three-dimensional painting inside a gorgeous frame. It is surprising that the architect bestowed so much attention to the design of the mihrab and he was able to bring about a composition of rare charm and effect.

The four main arches of the nave supporting the dome have red stone *ṣaṭkoṇas* on their spandrels set on local grey stone background, each with a full-blown lotus in high relief. This Tantric symbol was used here, as also on the western gateway of the *Din-Panāh* for its auspicious effect. As far as the use of such isolated symbols is concerned, superstition rather than aesthetic effect was the main determinant. Similar is the case of the talisman used inside its mihrabs.

The mosque has no pillars and the load everywhere rests on massive piers which have pilasters projecting on external sides, obviously to serve as buttresses. These red stone pilasters also have nook-shafts; particularly impressive is the *kirttimukha* design carved in incised relief upon their bases (Plate CXXXI).

The halls next to the nave have extremely beautiful stalactite pendentives in the phase of transition (Plate CXXXII)—all in tastefully carved stone. Obviously, they are more ornamental than functional and the load rests horizontally. These halls are roofed by a shallow soffit

each, which still bears traces of painting direct on the stone surface without any intonaco (plaster background). The mihrab in either of these halls too is recessed and carved, like the main mihrab, and contains nook-shafts, fringe of lotus-buds, medallions (Plate CXXXIII) and inlay art, though they are simpler.

The oblong halls at extreme ends of the sanctuary are also built of red stone internally. They have an unusual and ingenious mode of roofing (Plate CXXXIV). Two transverse arches, which rest on two

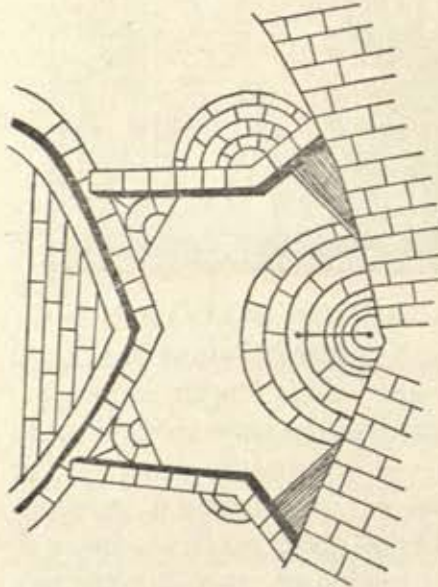


Fig. 24. Ceiling, Qal'a-i-Kuhna Masjid.

cross-ribs, support the semi-vaults upon which rests the main vault (Fig. 24). In fact, there is no dome and only a flat roof is involved. The entire load is thus taken by the cross-ribs which rest on side arches with massive abutments. Here too the stone ceiling had been originally painted, part of which has remained. Mihrab in either of these side halls is much simpler than the other examples (Plate CXXXV). Though double nook-shafts and medallions have been used there is no fringe. Curiously, it has an inlaid cresting above it. Like other mihrabs, Islamic talisman has also been used in it.

Calligraphics, carved in relief and highly polished, also appear around these mihrabs.

Stairways given in these side halls lead up to an inner arrangement with a through corridor serving as its spinal cord. It runs along the whole length of the sanctuary on the rear wall (Plate CXXXVI), connecting the towers, the oriel-windows and the small cells; this also leads to the terrace. The corridor, several stairways, cells and passages have all been sunk into the thickness of the walls, almost secretly, and nothing is perceptible from outside. This shows the sheer massivity of the construction. The corner towers have profuse carving work in red stone. Stylised designs carved in incised relief on the ornamental niches and brackets are particularly noticeable (Plates CXXXVII and CXXXVIII). Stone walls are otherwise plain. Piers and shafts of pilasters too are mostly plain. Their bases have beautiful *kirttimukha* designs—also in incised carving, similar to those in the sanctuary. The vaulted stone soffits are divided ornamentally into sixteen floral petals,

like the gateway chhatris of the Hathiya-Paur at Gwalior. Traces of painting on alternate ribs have survived. Here too the painting was applied direct on the stone surface without any intonaco. This is also reminiscent of the *Man-Mandir* art where painting was applied direct on stone, without a plaster background, probably for the first time in medieval India. The turning points of stairways have flat roofs bearing a lotus design in bold relief. Medallions have also been used in this complex on a large scale.

The single, hemispherical, slightly pointed dome (for section see Fig. 23) rests on a sixteen-sided drum which has ornamental niches on the exterior, corresponding to the internal niches. Pieces of green, blue and yellow glazed-tiles have survived on them. Pinnacles rise from the angles of the drum; thus the dome reposes amidst a cluster of sixteen pinnacles. It has been plastered over at present. Probably, it was originally glazed-tiled. It is crowned by a plaster mahāpadma and a red-stone-and-white-marble finial, the floral effect of which has been very skilfully worked out. The finial and mahāpadma bestow upon the dome an impression which, though known during the Sultanate period, had not been realised so far.

It is likely that the corner towers were originally surmounted by chhatris, possibly of the octagonal conformation. They are architecturally needed to complete the effect of such a vertical feature as an attached tower. But no trace of them has remained. Similarly, there is no trace of any other dome or chhatra adjoining the central dome over the side bays. It seems that originally too the superstructure was made up of a single dome only, and there was no other structure on its sides. This is also confirmed by the extremely shallow soffits of the halls next to the nave. In either case it is the original roof as it still bears traces of the original painting.

The bays on the extreme sides are of local grey stone (externally) against the other three bays which are built of red sandstone. They are also different in several respects. They are plainer and simpler and practically there is no ornament. These bays are also smaller in size and the size and proportions of their archways and portals are also different. The chhajjas over them have no brackets or struts, while the chhajjas over the bays next to the nave are supported on beautiful struts. J. Ph. Vogel recounted these differences at length⁸⁹ and held that the extreme bays were added to the mosque later and "the wings do not belong to the original building".⁹⁰

This is not correct. The oriel-windows overhanging these bays on the sides, the three oriels of the rear wall and the towers which are

attached to the rear corners of these bays form integral part of the original plan and design. In fact, these are the characteristic features of the architecture of this mosque which are so fundamental that we cannot conceive it without them. The stairways on the sides, the through-corridor of the rear wall and other parts—provided into the skeleton of the building including the side-bays are integral to the original conception of the mosque and it is not possible that these features could have been added to it later. It was planned and designed as a full-fledged *pañchamukhī masjid*.

The characteristic features of the Qal'a-i-Kuhna Masjid are as follows:

1. It is a typically *pañchamukhī masjid* with a five-bays sanctuary and a five-arched facade.
2. The sides and the rear wall have been ornamentally divided into a *double-storeyed exterior*.
3. *Oriel-windows*, one each on either side and three on the rear wall, have been used on the upper side of the exterior for aesthetic effect. They belong to the indigenous art.
4. Ornamental octagonal three-storeyed *towers* are attached to rear corners.
5. *Miniature oriel-windows* have also been used over the arches of the facade.
6. *Fringe* of lotus-buds has been used along the intrados of the arches and the mihrabs.
7. *Mihrabs* have been worked out extremely artistically.
8. It is all stone-work and sheer *massivity* is the first impression of the beholder.
9. Though the skeleton rests on heavy stone piers, *pilasters* have been used invariably on all external sides. Pilasters were also used on a very large scale at the Man-Mandir, Gwalior.
10. Extraordinarily beautiful *nook-shafts* have been used on the angles of arches and mihrabs.
11. Though it is mainly built of *red stone*, white marble has been used with red sandstone and red sandstone with grey quartzite—for tonal effect. It is noteworthy that red stone was last used at the tomb of Ghiyāthu'd-Dīn Tughluq (d. 1325) at Tughlaqabad and the Tughluqs after him, the Sayyids and the Lodis used it only very sparingly. Red stone as the chief building material came into vogue with Babur who raised buildings at Agra, Fatehpur Sikri and Dholpur where red stone was

abundantly available from the quarries of Fatehpur Sikri and Tantpur.

12. Wings are protected by chhajjas which are supported on beautiful *struts* over the arches next to the central arch (facing the nave). Strut, which is mainly an ornamental device, was not used at Delhi before, and it was an innovation. Both chhajja and strut are characteristic features of the art of the Man-Mandir, Gwalior.
13. As it is all stone-work, *carving* in incised, medium and high relief is the predominant mode of ornamentation.
14. Recourse to *glazed-tiling* in green, blue and yellow colours has also been taken for ornamentation of some prominent parts, e.g. frieze and drum, but its use is minimal.
15. *Inlay* of white marble and black slate on red stone, and of red stone on white marble has been done on the central arch, the mihrabs and other prominent parts. This art too was an innovation at Delhi where it had not been used before it. Nor was it used at Gwalior. Other buildings of this phase which have inlay-art are the tombs of Atagah Khan and Humayun, both having been built contemporarily. This way, appearance of inlay at the Qal'a-i-Kuhna Masjid is significant and it may help us to fix its chronology correctly.
16. *Painting* has been done here direct on the stone surface without any intonaco or plaster background. Earlier examples of painting on stone are available at Man-Mandir, Gwalior, but at Delhi it was for the first time that this art was used for architectural ornamentation.
17. Though the arches are broad and technically four-centred, they have a *pointed form*. Its is probably the most beautiful arch since the establishment of Muslim rule in India.
18. Squinch, stalactite-pendentives and cross-rib and semi-vault methods have been used in the *phase of transition*, one each in the three sets of bays—all in stone.
19. There is a *single dome* crowned by mahāpadma and finial on the skyline. This is a peculiarity of the period. All contemporary mosques, pañchamukhī or tṛmukhī, if they had a dome, it was only one dome of the single type, e.g. Jamālī-Kamālī Masjid, 'Īsā Khān's Masjid and the Khair'ul-Manāzil—all have one dome each.
20. *Geometrical designs* have been used on a large scale. *Arabesques* and *stylised designs* have also been used.
21. But the most important form of decoration is the *calligraphic*

art in carved stone, in Kufic and Naskhi. They are mostly the Quranic verses, though a few Persian couplets have also been given.

22. Such Hindu *symbols and icons* as padma, kīrttimukha and ṣaṭkoṇa, and a number of Islamic *talisman* have been used on medallions, pilaster-bases and inside the mihrabs—of course for auspicious effect, superstitiously.
23. For an exquisite effect as a whole, the architect has relied on a rhythmic play of *depths* in the third dimensions through provision of a wide variety of zones and plains, in other words, through provision of pleasant *shadows* which react aesthetically on the beholder's perception at all moments. This is the most important feature of its architecture. A characteristic element of the Hindu temple, it has come through the indigenous sources.

Though the Qal'a-i-Kuhna Masjid belongs to the pañchamukhī class and it does not have minars, cloisters or gateways, and some of its distinctive features have been borrowed from the preceding examples, e.g. the Moth-ki-Masjid and the Jamālī-Kamālī Masjid, viz.:

- (i) a five-bays sanctuary and a five-arched facade;
- (ii) attached towers at the rear wall;
- (iii) oriel-windows over the arches; and
- (iv) chhajjas over the wings

its design has been overwhelmingly revised and reformed and a large number of innovations have raised it head-and-shoulder above all other mosques of this class. It is the most perfectly developed example of this type on the one hand, and a new phenomenon on the Indian scene, on the other. Stucco-art was the characteristic feature of the Sultanate mosques (which trend also continued during the early Mughal period) but the Qal'a-i-Kuhna Masjid has no stucco. Painting is limited to stone ceilings and glazed-tiling to the frieze, the drum and the dome. The principal modes of decoration are inlay and stone-carving; the latter is predominant. This shows that instead of the typical Muslim colour schemes, emphasis has been given on the indigenous stone art. The Jamālī-Kamālī Masjid and the Qal'a-i-Kuhna Masjid were built almost contemporarily in the same city. Yet there is vast difference between the two. The former, though it marks a development from the Moth-ki-Masjid, is in the Delhi Sultanate style. The architecture of the latter registers a distinct departure from the prevalent style; it

shows that there was some other inspiration at work and a set of more skilled artisans participated in its construction. Such features as inlay of coloured stones, lotus-medallions, kirttimukhas, struts, oriel-windows with tastefully moulded brackets, towers and predominance of stone-carving assert that the inspiration came from the indigenous sources, most probably from Gwalior which was an integral part of the empire of Delhi right since the advent of the Mughals, and the artisans were the *salats* (*salawats*) (guilds) trained in the *śāstric* system. Instead of the sobriety of the Sultanate architecture: plain plaster surfaces, vacant facades, unimpressive skyline, blank voids and sombre looks, the Qal'a-i-Kuhna Masjid is distinguished by a refined scheme of decoration, richness of colour and a pleasing and harmonious architectural effect. The freshness and impression, so perceptible in its fabric as a whole, was infused by the indigenous norms of art. It marks the beginning of a rich architectural style. It is the first successful expression of the aesthetic ideals which later guided the course of the development of a great art at Fatehpur Sikri and Agra.

Origin of the Qal'a-i-Kuhna Masjid has been generally ascribed to Sher Shah. Abbas Khan Sarwani referred to his construction of "a Jami' Masjid of stone, in the ornamenting of which much gold, lapis lazuli and other precious articles were expended" in the governor's Fort at Delhi.⁹¹ Abdullah nearly corroborated his statement: "He also laid the foundations of a magnificent masjid which was quickly completed. The name of this fort he called 'Shergarh'..."⁹² The Qal'a-i-Kuhna Masjid has been identified as this mosque of Sher Shah on the authority of these Persian histories.

This is not correct.

The mosque has no gold or lapis-lazuli or any other precious article, nor is there any evidence to show that anything more than stone-work was architecturally incorporated into its body originally. Abdullah's statement too is vague. How quickly it could have been completed? Lime-mortar takes *time* to set and the builders could not have gone haphazardly in such a construction as this. It has already been discussed above in detail that for five years which he had on the throne he was constantly busy in the battlefield and in the affairs of his government and Sher Shah had no time or taste for such pursuits.⁹³

The tombs which he commissioned to be built at Sasaram are altogether different in style. The deep-red sandstone masjid with exquisitely carved and inlaid ornamentation and a number of stone expedients is so completely different from the typical style of Sasaram that it seems impossible that he could have thought to build such a

mosque at Delhi. Curiously, he built no mosque at Sasaram or anywhere else, as extant examples of other structures affirm. The Jami' Masjid of Rohtasgarh was built by Āzam Humāyun alias Haibat Khān at the request of Farīd Sadr during his reign in 950/1543. Rohtasgarh was most important fort of Sher Shah; he also liked it the most because he started his adventurous career from this fort and also due to its impregnability. It may be safely expected that a mosque at Rohtasgarh would be in accordance with the taste of Sher Shah in the best of the prevalent style. The Rohtasgarh mosque belongs to the class of the Sasaram tombs. The Qal'a-i-Kuhna Masjid is altogether different and not only does it belong to a different style, but also to a different person.

As has already been discussed above,⁹⁴ it is also erroneous to identify the Old Fort (Purānā Qal'a) as Sher Shah's Shergarh or citadel. It is Humayun's Dīn-Panāh which, according to Khwandamir's narrative, he founded in Muharram 940/August 1533. By the end of the month of Shawwal 940/middle of May 1534 "the walls, bastions, ramparts and the gates of the city of Dīn-Panāh are nearly finished and the great and lofty buildings of that large city will soon be completed".⁹⁵ Sher Shah's Jami' Masjid was built in his own city inside the Governor's Fort, which has not come down to us. As to the situation of his city, Badaoni's statement is conclusive: "And when he [Sher Shah] arrived at old Dihli, which was founded by Sultan 'Alāu'd-Dīn [i.e., the city of Siri], he destroyed that also,"⁹⁶ and established between the fortress of Din-Panah, which Muhammad Humayun Badshah constructed and Firozabad [of Firoz Tughluq] an extensive city and built round that fort a rampart of stone and mortar, having an extent of three krohs."⁹⁷

These facts lead us to the conclusion that this mosque was commissioned by Humayun simultaneously with the citadel in 1533 and the work on its construction was in progress in 1534 when Khwandamir made the aforesaid observation. Though he did not mention explicitly that a mosque was also built, his narrative shows that it was also an integral part of the project: "And in this city, a magnificent palace of seven storeys should be erected, surrounded by gardens and orchards. It should be such that all people, who hear of the elegance and beauty of these buildings, should hasten from all corners of the world for its inspection. And this city, which should be an asylum for the wise men, and the refuge of the watchful and vigilant people should be called Dīn-Panāh."⁹⁸ It was the most natural course that a city which was to be an attraction for the co-religionists of the whole

world and which was named the *Din-Panāh*, the Asylum of the Faith, should have possessed an exceptionally beautiful mosque. It was in accordance with the liberal attitude and extremely refined taste of Humayun that stone-carvers of the indigenous art were invited to participate in its construction. It is remarkable that the idea to found the city of *Din-Panāh* struck to Humayun at Gwalior and it was there itself that the decision to start the work of its construction immediately was taken, so much so that Maulana Shihābu'd-Dīn Aḥmed Mu'immā'i composed the chronogram: '*Shahr-i-Bādshāh Dīn Panāh*' then and there.⁹⁹ Most probably, the artisans came from Gwalior. That is why many features of the Man-Mandir, e.g. struts, oriels, pilasters, lotus-medallions in bold relief, painting on stone surface without intonaco, stone-carving as the chief mode of ornamentation, etc. as discussed above, have appeared in this mosque.

As may be surmised in the circumstances of the case, it was not completed in 1540 when Humayun had to flee from India. He had very little time on the throne after his restoration in 1555, and it is unlikely that the mosque was completed in his lifetime. In all probability, it was finished during the early reign of Akbar almost contemporaneously with the tomb of Atagah Khan and the tomb of Humayun. That is why, such features as the use of white marble with red stone and inlay of coloured stone which were of late origin and constitute characteristic features of these tombs, have been incorporated in its fabric. Interpretation of its inscriptions confirms this contention and helps us to fix up its chronology fairly authentically.

The Qal'a-i-Kuhna Masjid has an extraordinarily large number of Quranic verses carved in stone in medium relief.¹⁰⁰ A few Persian inscriptions also appear intermittently. Kalma and such phrases as 'Ya-Allah', 'Ya-Fateh', 'Subhan-Allah', 'Al-Mulk Allah' and 'Hasbe-Allah' have also been used, chiefly on medallions. 'Bismillah al-Rehman al-Rahim' precedes almost all Quranic inscriptions. Except a few instances of Kufic, they are in Naskhi style of writing.

The Quranic verses Chapter XLVIII.1-14 entitled 'The Victory' preceded by 'Bismillah al-Rehman al-Rahim' have been carved around the central archway of the facade (No. 1 of the Plan, Fig. 25).¹⁰¹ The second arch from north (No. 2 of the Plan) has chapter LXXIII.1-20¹⁰² and the second from south (No. 3 of the Plan) has chapter LXVII.1-20 (entitled 'Mulk').¹⁰³ The Quranic texts have also been inscribed on all the five mihrabs of the sanctuary. The mihrab on the extreme north (No. 4 of the Plan) has chapter II.1-6, CVII.1-7, III.25-26 and a portion of XII.21 on its various planes and zones. The second mihrab

from north (No. 5 of the Plan) has LXII.1-9, CXIII.1-5, CXIV.1-6

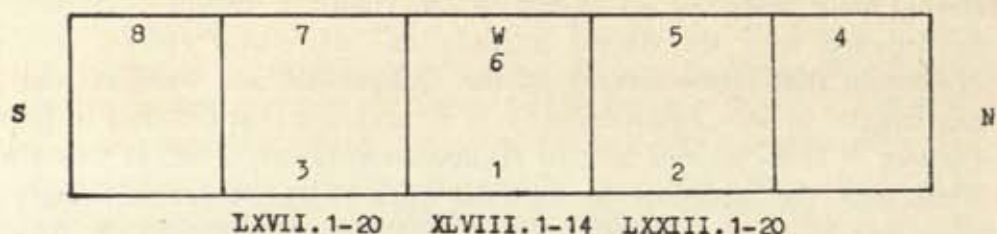


Fig. 25. Plan of the Quranic Inscriptions, Qal'a-i-Kuhna Masjid, Old Fort.

and CXII.1-4, the last three being the last full chapters of the Quran.¹⁰⁴ There is also a Persian couplet carved inside this arch, it reads:

Tā jahān ābād bāshad een muqām ābād bād
Khalq 'ālam andarash ham kharm va ham shād bād.

(This place may be populated and it may flourish so long as this world is in existence. May its inhabitants live happily and cheerfully.)

It is significant that the author has prayed for the welfare of not only the masjid but also of the place i.e. the citadel which contains it and of its inhabitants. This is, pointedly, a reference to the city of Dīn-Panāh.

The main mihrab (No. 6 of the Plan) has XXXVI.1-12, II.284 and I.1-7 (full chapter entitled 'Fātiḥa').¹⁰⁵ The single verse II.284 has such philosophical references as "To God belongeth all that is in the Heavens and on earth... God hath power over all things."¹⁰⁶ At the end of the chapter I.1-7 are the words: 'Āmin Allāh Kāfir' (So let it be. God is enough to look after anything).

The second mihrab from south (No. 7 of the Plan) has LXXI.1-20, XVIII.107-10, (portion of) IX.108, III.17-18, VI.1-2, II.255 and CXII.1-4. Verse II.255 is famous as 'Āyat'ul-Kursī' and is found most frequently in Mughal monuments. Its contents are philosophical: "There is no God but He... He is self-subsisting, and Eternal... His throne doth extend over the Heavens and the earth... He is Most High... The Supreme."¹⁰⁷ Two Persian couplets also appear on this mihrab. They read: "O God have mercy on us since we are sinful; our liver is washed with the blood of our heart. Guide us to righteousness for we have little wisdom and need your help."¹⁰⁸ The statement 'ba-khūn dil jigar palud' (Our liver is washed with the blood of our heart) is not intelligible.

The extreme southern mihrab (No. 8 of the Plan) has LIX.21-24,

CV.1-5 and CIX.1-6. Under this inscription is carved the curious Arabic phrase:

“Lā ilāhā illallāh Ibrahīm Khalīl Allāh.”

(There is no God but Allah; Ibrahim is the friend of Allah.)

Ibrahim was one of the six great prophets to whom God delivered special laws.¹⁰⁹ He is designated as Khalīlullāh (Friend of God) to whom 20 portions of Scripture were revealed. He has been mentioned in the Quran a number of times.¹¹⁰ But the appearance of the phrase: “Lā ilāhā illallāh Ibrahīm Khalīl Allāh” instead of the Kalma: “Lā ilāhā illallāh Muḥammad Rasūl-Allāh” is a unique and the most unusual feature of the calligraphic scheme of this mosque. It is noteworthy that nowhere else, either before or after it, this has appeared in any sectarian building of Islam in India. If it was an innovation of thought, the credit of its inscription will go to Humayun the idealist, rather than to Sher Shah the realist and the most practical statesman who would not meddle in religious matters at any cost.

However, the most significant is the set of Quranic verses Chapter XLVIII.1-14 entitled ‘The Victory’ which have been carved on the central and the most important archway of the mosque. The verses begin with ‘Verily, we have granted thee a manifest Victory’. This is meaningful. At the first instance, it appears as if Sher Shah would select these verses for depiction on the facade of the mosque to proclaim his victory over the Mughals. But really this has something else to convey to the beholder. The verses refer to the return of the Prophet Muhammad to Mecca and the Treaty of Ḥudaibiya by which the Meccan Quraish were finally subdued and they recognised Islam. It is not the matter of a simple victory but that of reconquest and restoration. Humayun too returned to Hindustan and he was restored to the throne in 1555. And (as if his exile into Persia was a Hijrat) the person who was in charge of the calligraphics and who selected these verses for depiction on the most important part of the mosque wanted to show that like Muhammad, Emperor Humayun was also restored to his throne which he has received from his father and his opponents were finally subdued. This shows that the mosque was finished after his return to India, i.e., after 1555. The construction of this mosque may thus be assigned to the period from 1533 to c. 1565, with an interval of about 20 years from 1535 to 1555 and, in all probability, it was completed along with the Tomb of Humayun.

Khwandamir recorded that Humayun "had great love and incomparable inclination for erecting large buildings and strong forts".¹¹¹ He is said to have built a magnificent water-palace at Agra on the river-bank. Khwandamir described it at length:

It may be said without exaggeration and without flattery in its praise that the prudent mathematician is incapable of drawing its picture, and the tongue of the greatest author fails to write in praise of its amenities. The holy words: *'it was a part of the garden of Paradise'* were said in its praise; and the phrase: *'a garden in which rivulet of water flowed'* was composed in praise of its great qualities (verse). In the length of this wonderful building, three rooms were made adjacent to each other. In the middle of the first room, which was the longest and octagonal, a reservoir of the same form was built, from the centre of which subterranean passages were constructed and these passages radiated in all directions leading to other rooms and apartments. Round the mouth of passages an octagonal tower joining the edges of the reservoir was constructed and over it a large flat slab of chiselled stone was placed. Great care was taken in strengthening all crevices by filling them up with mortar and lime, so that when water filled the reservoir, it could not rush into the subterranean passages. And the central room was also octagonal, and had several galleries and windows. In this room also a reservoir had been constructed, and on all the four sides of this house was a portico. And the two doors of the portico, viz., one towards the largest room and the other to the third room which resembled a hall, had been so made and fixed, that if you opened one of them, the other disappeared; and on the disappearance of the second the first was thrown open. And alongside these three rooms, other large and capacious, upper and lower rooms were built; and they were all very elegant and magnificent. And over the third room was constructed a very lofty saloon, which was the envy of the heavens, and excited the jealousy of the residences of the Sun and the Moon. Whenever the King, who is as powerful as Alexander the Great, adorned this blissful place by holding his court, the Jamshed of the Sun without the help of the chair of the heavens could not obtain the honour of kissing the ground before him; and the sweet-singing Venus, having been deprived of joining the chorus of the singing girls of this delightful assembly, could not make its voice reach them. And the following chronogram of this pleasant palace reached the ears of understanding of the great and small, and the young

and old from the sound of the eloquent pen of the Lord of witty persons Maulānā Shihābu'd-Dīn Aḥmad Mu'immā'i.¹¹²

Unfortunately, this palace has not come down to us and several details of Khwandamir's narrative are incomprehensible.

There is a ruined structure in the close vicinity of the Sher-Mandal in the Old Fort. Water was brought from the big baoli, situated near the Qal'a-i-Kuhna Masjid, through clay-pipes sunk into masonry, part of which with the pipes has survived. Two miniature tanks received this water. Curiously, sunk earthenware pots have been used into the tanks. Thence water was conducted into an underground chamber and the adjoining corridors through long cascades. Much of the structure is ruined and it is impossible to imagine how the water was manipulated after it fell by the cascades. It is certain, however, that water was the *raison d'être* of this building and probably it was a cold-bath establishment. Most likely, this was also built by Humayun along with other buildings of the Dīn-Panāh.

References

1. *QH*, 24.
2. *Ibid.*, 25.
3. *Ibid.*, 26-27.
4. *Ibid.*, 28.
5. *Ibid.*, 31.
6. *Ibid.*, 32-33.
7. *Ibid.*, 42.
8. *Ibid.*, 43-44.
9. *Ibid.*, 46.
10. *Ibid.*, 46.
11. *Ibid.*, 47.
12. *Ibid.*, 48-49.
13. See Appendix G at the end of this chapter for a few details of the astronomical data.
14. *QH*, 80-81.
15. *Ibid.*, 59; Gulbadan confirms the construction work at Gwalior, cf. *HN*, 117.
16. It would suffice here to mention that living rooms were converted into stables by the British garrison and a large number of buildings were destroyed only for the sake of their material.
17. *QH*, 74 and fn. 3.
18. It has been discussed above under Chapter I, subsection (c)(i). For a detailed study of this building, reference may also be made to the author's paper 'Chaurasi-Khambha of the Gwalior Fort', *Vishveshvaranand Indological Journal*, Hoshiarpur, Vol. XVI, Pt. 1 (March 1978).
19. *ASI*, Cun. II, 396.
20. *QH*, 55.
21. *Ibid.*, 56-57; Gulbadan has also noticed it in the *HN*, 118.
22. *QH*, 58.
23. For details of this study, reference may be made to the author's 'Panchmukhi Mosques of the Afghan Period', *Islamic Culture*, Hyderabad, Vol. L, No. 1 (January 1976).

24. See for details the author's paper 'Jami' Masjid of Muhammad bin Tughluq at Jahanpanah, Delhi', *Indo-Iranica*, Calcutta, Vol. 29 (1976).
25. *BN*, 532. Badaoni also mentioned him: "Another poet was Wafā'i, by which takhallus Shaikh Zainu'd-Din Khāfi (or Khawāfi) is commonly known, who was Sadr-i-mustaqill (Judge-plenipotentiary) during the reign of Babur Padshah. There is a mosque in Agra to his memory, and a school situated on the other side of the river Jamuna", cf. *MT*, I, 609-10.
26. *BN*, 559-75. It seems that Babur was affectionately attached to the company of his friends including Shaikh Zain, Mulla Shihab, the scribe of his inscriptions and Khwandamir the historian, e.g. see *BN*, 683. Shihāb has been mentioned in the inscription of the Baburi-Masjid at Panipat as its composer, in 935/1528-29, cf. *EIAPS* (1965), p. 55; in the inscription of Mahdi Khwājah on the tomb of Amir Khusrau at Delhi about the same time, cf. *ASI*, Mem. 10, p. 23; and again in this mosque of Humayun at Agra dated 937/1530, A.C.L. Carlleyle's reading as 'Shitab', cf. *ASI*, Cun. Report for the year 1862-65, Vol. IV, p. 101, is not correct.
27. *QH*, 59-60.
28. *Ibid.*, 60.
29. *Ibid.*, 61.
30. Gulbadan confirms, *HN*, 117; Ferishtah also speaks of the building of only a citadel named Dīn-Panāh at Delhi on the bank of the river Jamuna in the year 940/1533, *Briggs*, II, 47.
31. *QH*, 62.
32. *Briggs*, II, 47.
33. *Ain*, II, 279.
34. Ishwariprasad's observation (*The Life and Times of Humayun*, Calcutta, 1956, p. 56) that no trace of the Din-Panah is in existence, thus, needs revision. A.L. Srivastava's comments (*Akbar, the Great*, Vol. III, Agra, 1973, p. 275): "no trace of it remains" and "Probably it was razed to the ground by Sher Shah" are popular misnomers which appear, almost as a rule, in all text-books on the subject. S.K. Banerji (*Humayun Badshah*, Vol. II, Lucknow, 1941, p. 350) is right, in this respect, when he noted: "Sher Shah had not demolished any of Humayun's buildings. In fact, it was in the Mughal king's *Din Panah* that he chose his own headquarters."
35. E.g. Banerji (op. cit., I, 64) stated that the Qila-i-Kuhna Masjid and the Sher-Mandal were added in Sher Shah's time, noting that the latter building was used for secular purposes(?). This he reiterated later (II, 344).
36. Cf. *E&D*, IV, 301-419.
37. *Ibid.*, pp. 404-6.
38. *EIM*, 1923-24, p. 27.
39. Op. cit., p. 419.
40. *E&D*, IV, 477.
41. *Ain*, II, 279.
42. This is, however, a popular misnomer and has been generally quoted by the guide-book writers and historians, the latest in the series being Dr Y.D. Sharma (cf. *Delhi and its Neighbourhood*, New Delhi, 1964, p. 101 and *Archaeological Remains, Monuments and Museums*, Part II, New Delhi, 1964, p. 301). Percy Brown, curiously, had just the opposite version to give: "Purana Qila or 'Old Fort', a walled enclosure of considerable size and forming the citadel around which Sher Shah

planned his capital, the sixth city of Delhi. Two isolated gateways only remain to mark the size and position of this city, for it never fully materialized, and the citadel also is now merely an empty shell, bare of all its edifices, save for one building, a mosque which has escaped demolition on account of its sacred character. From the appearance of its remains it is clear that the Purana Qila when complete was an impressive concentration of military and palatial architecture, and the destruction of the palatial halls and pavilions it once contained probably ordered by the Mughal Emperor Humayun when he resumed power in 1550 . . ." (cf. *Indian Architecture*, Islamic Period, IV ed., p. 86). This is not true at all. Neither Humayun recaptured Delhi in 1550, nor he ordered any destruction. This is a subjective and fanciful thinking of the art-critic, as Brown was, whose weakest point was history.

43. Op. cit., 477.
44. *MT*, I, 472.
45. Cf. *E & D*, V, 107-9.
46. *Ibid.*, 108-9.
47. Correctly, its orientation is in the N-W direction.
48. *ASI*, Mem. 47, p. 9.
49. Compare it with Shaikh Faiḍī's chronogram: '*Binā-i-dar-i-Bihisht*' (The Building of the Gate of Paradise) for a gateway of Agra Fort, cf. Badaoni, *MT*, II, 75.
50. *ASI*, Mem. 47, p. 9; he has also referred to 'The List of Hindu and Muhammedan Monuments in the Delhi Province', Vol. II, p. 94. However, the author could not trace these epigraphs in situ, and it seems that they have since been destroyed.
51. How far the Hadith injunction forbidding such depictions was followed in practice has been discussed by the author in his paper 'Depiction of Animate Motifs at the Tomb of Itimad-ud-Daulah at Agra', *Islamic Culture*, Hyderabad, Vol. XLVII, No. 4 (October 1973).
52. First is of Chanderi dated in 1411, second of the Din-Panah 1533-34 and the third and the last of the Delhi-gate of Agra Fort, 1565-69.
53. For details reference may be made to the author's paper 'Depiction of Fabulous Animals (Gaja-Vyāla) at the Delhi-Gate of Agra Fort', *Medieval India: A Miscellany*, Aligarh, Vol. 2 (1972).
54. For details of this aspect, reference may be made to the author's paper 'Depiction of a Tantric Symbol in Mughal Architecture', *Journal of Indian Society of Oriental Art*, Calcutta, Vol. VII (1975-76). The subject shall be dealt with in greater details in Part II of this work along with the monuments of Fatehpur Sikri and Agra.
55. *ASI*, Mem. 47, p. 9.
56. *HQ*, II, 557.
57. Correctly, it is in the S-E.
58. *ASI*, Mem. 47, p. 10.
59. Op. cit., pp. 9-10.
60. Abul Faḍl noted that Akbar greatly believed in the dictum that fortresses guarded honour and prestige and he "gave directions for the building in Agra—which by position is the centre of Hindustan—of a grand fortress such as might be worthy thereof, and correspond to the dignity of his dominions" (*AN*, II, 32).
61. *TV*, 120-21.
62. Cf. Rizvi, *MKB*, I, 855.
63. *AN*, I, 654-57.
64. *AN* also mentions other chronograms by Mir 'Abdul Hai and Maulana Mas'aud of Hissar.
65. *MT*, I, 600-601; Rizvi, *MKB*, II, 172.

66. *TA*, II, 136-37; Rizvi, *ibid.*, 137.
67. *Briggs*, II, 109; Rizvi, *ibid.*, 234-35.
68. Rizvi, *ibid.*, 89.
69. *Ibid.*, 405. He is also named as Nazr Shaikh Jūlī and Nazr Shaikh Jūnī.
70. The term 'Kotha from behind the mosque which is near the palace' is unintelligible. Sher Mandal is not behind the mosque but on the south-east side of it. Certainly, there are some palatial ruins near the Sher Mandal, a large block still showing a miniature tank, water-channels and series of corridors and rooms. Probably, this is the palace which has been mentioned in the firman.
71. *Ibid.*, 405; that a firman of welfare was sent to Akbar is confirmed, among others, by Abul Faḍl, *AN*, I, 657.
72. A. Vamberry, *The Travels and Adventures of the Turkish Admiral Sidi Ali Reis*, pp. 55-58, cf. *AN*, I, 655.
73. S.K. Banerji, while conforming to the sequence of the event, agrees that he had gone up "for a closer view of the planet" (*Humayun Badshah*, op. cit., II, 254-55); Ishwari-prasad too agrees (*The Life and Times of Humayun*, op. cit., p. 357).
74. Hajji-ad-Dabir, *Zafar-ul Walih Bi Muzaffar wa Alihi*, Vol. II (tr. M.F. Lokhandwala, Baroda, 1974), p. 887, adds that "he was overwhelmed with a drowsy state". This is quite possible as Humayun was a habitual opium-eater and had taken a dose in the afternoon.
75. Thus H. Beveridge's statement (*AN*, I, 654, fn. 3) that Sher-Mandal was built by Sher Shah is a conjecture which is not placed correctly. The upper room is not octagonal but square in plan and there are no niches as book-shelves. His wife Mrs A.S. Beveridge too erred when she noted (*HN*, Introduction, p. 54) that Humayun "met his death in a building of Sher Shah". Except that the small cupola of her description is a big spacious chhatra, she has, otherwise, described the building and the event correctly.
76. *Tarikh-i-Daudi*, *EdD*, IV, 477.
77. That this is, without doubt, the Dīn-Panāh citadel of Humayun has been discussed above under subsection (b). The point that Sher Shah had no time, discretion or taste to undertake the construction of this fortress or its buildings has also been dealt with above in detail. Except the *Lal-Darwazah* and to some extent the *Kabuli-Darwazah*, no building of the Shergarh of Sher Shah has survived.
78. *MT*, I, 600.
79. It is noteworthy in this connection that Sayyid Ahmed Khan who published second edition of his *Athar'al-Sanadid* in 1854, mentioned a manuscript *Tarikh-i-Mirza Hidayatullah Khan* which stated that Sher Mandal was built by Humayun and not by Sher Shah. Sayyid Ahmed did not agree with him. Unfortunately, the ms. is not available to us at present. That Sayyid Ahmed has used this ms. on a very large scale shows that it was a sober history and was thoroughly reliable. Mirza Hidayatullah Khan must have some strong evidence in his possession to be able to counter the popular version (*Athar'al-Sanadid*, English translation by the author: *Monuments of Delhi*, A Historical Study, New Delhi, 1979, p. 48).
80. *AN*, II, 101-2; H. Beveridge (*AN*, I, 656, fn. 3, continued from p. 654) notes: "As we know from the *Maasir-Rahimi* it was brought away from Delhi when Himun defeated Tardi Beg and got possession of the

- city. It was kept for a time at Sirhind and then brought back and kept near the Purana Qil'a till the grand tomb built by Humayun's widow, Haji Begum was ready." S.K. Banerji (op. cit., II, 262) concurs.
81. *AN*, II, 489; Badaoni gives 977/1569-70 as the date of its completion (*MT*, II, 135). This shall be discussed later in this volume, in connection with the tomb of Humayun.
82. Though there is a chronological gap in the narrative of S.K. Banerji (op. cit., II, 262): "Humayun's corpse was wrapped in cotton and buried in Delhi. When Himu advanced to occupy the capital, the body was dug out and taken to Sirhind for a temporary burial. When the Mughals once more regained the possession of Delhi after the second battle of Panipat, the body was once more taken to Din-Panah. There it lay for a number of years", he is correct in identifying the Din-Panah as the place of initial burial.
83. For details of this matter, the author's 'Depiction of a Tantric Symbol in Mughal Architecture', *Journal of the Indian Society of Oriental Art*, Calcutta, Vol. VII (1975-76) may be referred to.
84. *QH*, 32-33.
85. *Ibid.*, 33, cf. *The Quran*, VII.159-60 and V.13.
86. *QH*, 48. The faith in the number of 12, corresponding to the 12 signs of the Zodiac was inherited by Akbar whose personal shield (Prince of Wales Museum of Western India, Bombay, No. 16.100) dated 1002/1594 also has 12 divisions, marked by 12 signs of the Zodiac, accordingly. His son Jehangir went a step further and issued 12 coins bearing 12 signs of the Zodiac in 1027/1618, cf. *Tuzuk*, II, 6-7.
87. S.K. Banerji (op. cit., I, 250-51) noted that after the battle of Kannauj (10th Muharram 947/17 May 1540) Humayun retreated to Agra but he did not go to his "palace situated opposite the present site of the Taj" and proceeded to the residence of the renowned saint, Sayyid Rafi'u'd-Din Safavi. In a later reference too (op. cit., II, 348) he asserted that Humayun resided in Babur's chahār-bāgh or the palace situated opposite the Taj. There were two mosques, the latter was dated in 937 A.H. The former had been built by Babur's friend, the author Shaikh Zainu'd-Din Khawafi. Other buildings have not survived.
88. Several such yantras were built by Sawai Raja Jaisingh of Jaipur (1686-1743) in the five observatories (Vaidha-Śālās) which he founded at Delhi, Jaipur, Mathura, Varanasi and Ujjain during the first half of the 18th century. They are still in a good state of preservation at Delhi and Jaipur. For details of these yantras, reference may be made to Sawai Jaisingh's Sanskrit work *Yantra-Rāja-Rachanā* (ed. Pt. Kedarnath, Jaipur, 1953). For information *On the Astronomical Observatories*, see *Appendix H* given at the end of this chapter.
89. Cf. *ASI*, Annual Report 1902-3, pp. 77-78.
90. *Ibid.*, p. 79.
91. *Tārīkh-i-Sher Shāhī*, cf. *E&D*, IV, 419.
92. *Tārīkh-i-Dāudī*, cf. *ibid.*, 477.
93. This aspect of his personality has been examined in detail above in sub-head (b) of this chapter.
94. Under sub-head (b), op. cit., of this chapter.

95. *QH*, 62.
96. This is confirmed by Abul Faḍl as has been discussed above in sub-head (b) of this chapter.
97. *MT*, I, 472.
98. *QH*, 60.
99. *Ibid.*, 60.
100. *ASI*, Mem. 47, 6-9.
101. For a translation of these verses see *HQ*, III, 1391-95.
102. *Ibid.*, III, 1633-38.
103. *Ibid.*, III, 1576-81.
104. *Ibid.*, III, 1805-10.
105. *Ibid.*, I, 14-15.
106. *Ibid.*, I, 115-16.
107. *Ibid.*, I, 102-3.
108. *ASI*, Mem. 47, 8.
109. T.P. Hughes, op. cit., p. 4; Ibrahim was also an infant son of Muhammad by his slave-girl Mary, the Copt, born in A.H. 8, died in 10/631 A.D., cf. *ibid.*, 190.
110. E.g. II, 124-27, 260; VI, 74-82; XI, 74-78; XIX, 41-47, 58; XXI, 51-72 etc.
111. *QH*, 55.
112. *Ibid.*, 56-57.

APPENDIX G

Table showing Signs of the Zodiac

Sl. No.	Greek Name	Arabic Name	Sanskrit Name	Represented by	Sun enters	Symbol
1.	Aries	Al-Hamal	Maiṣa	The Ram	March 21	♈
2.	Taurus	Al-Thaur	Vṛśa	The Bull	April 20	♉
3.	Gemini	Al-Jauzā	Mithuna	The Twins	May 21	♊
4.	Cancer	Al-Saratān	Karka	The Crab	June 22	♋
5.	Leo	Al-Asad	Simha	The Lion	July 23	♌
6.	Virgo	Al-Sumbulah	Kanyā	The Virgin	August 23	♍
7.	Libra	Al-Mizān	Tulā	The Balance	September 23	♎
8.	Scorpio	Al-Aqrab	Vṛścaka	The Scorpion	October 24	♏
9.	Sagittarius	Al-Qaus	Dhanu	The Archer	November 22	♐
10.	Capricornus	Al-Jadi	Makara	The Goat	December 22	♑
11.	Aquarius	Al-Dalw	Kumbha	The Water-Carrier	January 20	♒
12.	Pisces	Al-Hūt	Mina	The Fishes	February 19	♓

Table showing the Planets

Sl. No.	Greek Name	Arabic Name	Sanskrit Name	Symbol
1.	Saturn	Zuhal	Śani (शनि)	♄
2.	Jupiter	Mushtari	Br̥haspati (बृहस्पति)	♃
3.	Mars	Mirrīkh	Maṅgala (मङ्गल)	♂
4.	Sun	Shums	Sūrya (सूर्य)	☉
5.	Venus	Zuhrah	Śukra (शुक्र)	♀
6.	Mercury	Atārad	Budha (बुध)	☿
7.	Moon	Qamar	Chandra (चन्द्र)	☾

APPENDIX H

On the Astronomical Observatories

Maharaja Sawai Jaisingh II of Jaipur (1686-1743) was a great lover of astronomy. He built five observatories at Delhi, Jaipur, Ujjain, Banares and Mathura. He is said to have consulted the following works in this connection:¹

1. Ptolemy's *Almagest* which Arabs called *Al-Majisti*. Jaisingh's assistant astronomer Pandit Jagannath translated this work under the title 'Samrāt-Siddhānta'.
2. Timur's grandson Ulugh Beg's so-called *Gurgānī Astronomical Tables* (completed in 1436 A.D.).
3. French Astronomer P. de La Hire's Tables called *Tabulae Astronomical* (1640-1718).
4. Naṣīr'al-Dīn al-Tūsī's *Ilkhānic Tables*. Tūsī made observations at the Maragha Observatory.

With their help a set of astronomical tables were prepared under Jaisingh's direction in 1138/1725-26; it was named the *Zij-Muhammad Shāhī* after the name of the ruling Mughal emperor Muhammad Shāh 'Rangilā'.

Jaisingh's works also refer to the following astronomers:

1. Euclid (c. 290 B.C.)
2. Hipparchus (130 B.C.)
3. Ptolemy (c. 150 B.C.) (author of *Almagest*)
4. Abdul Rehman b. Omar Abul Husain al-Sūfī (died 986 A.D.)
5. Naṣīr'al-Dīn al-Tūsī (born 1201) (author of *Ilkhanic Tables*)
6. 'Alī b. Muhammad al-Sayyid al-Sharīf (1339-1414)
7. Jamshid b. Masūd Jijāt'al-Dīn al Kāshī (c. 1440) (who was one of Ulugh Beg's astronomers)
8. Ulugh Beg (author of *Gurgānī Tables*) (died 1449)

1. G.R. Kaye, 'The Astronomical Observatories of Jaisingh', *ASI, NIS*, Vol. XL (1918), pp. 1-4 etc.

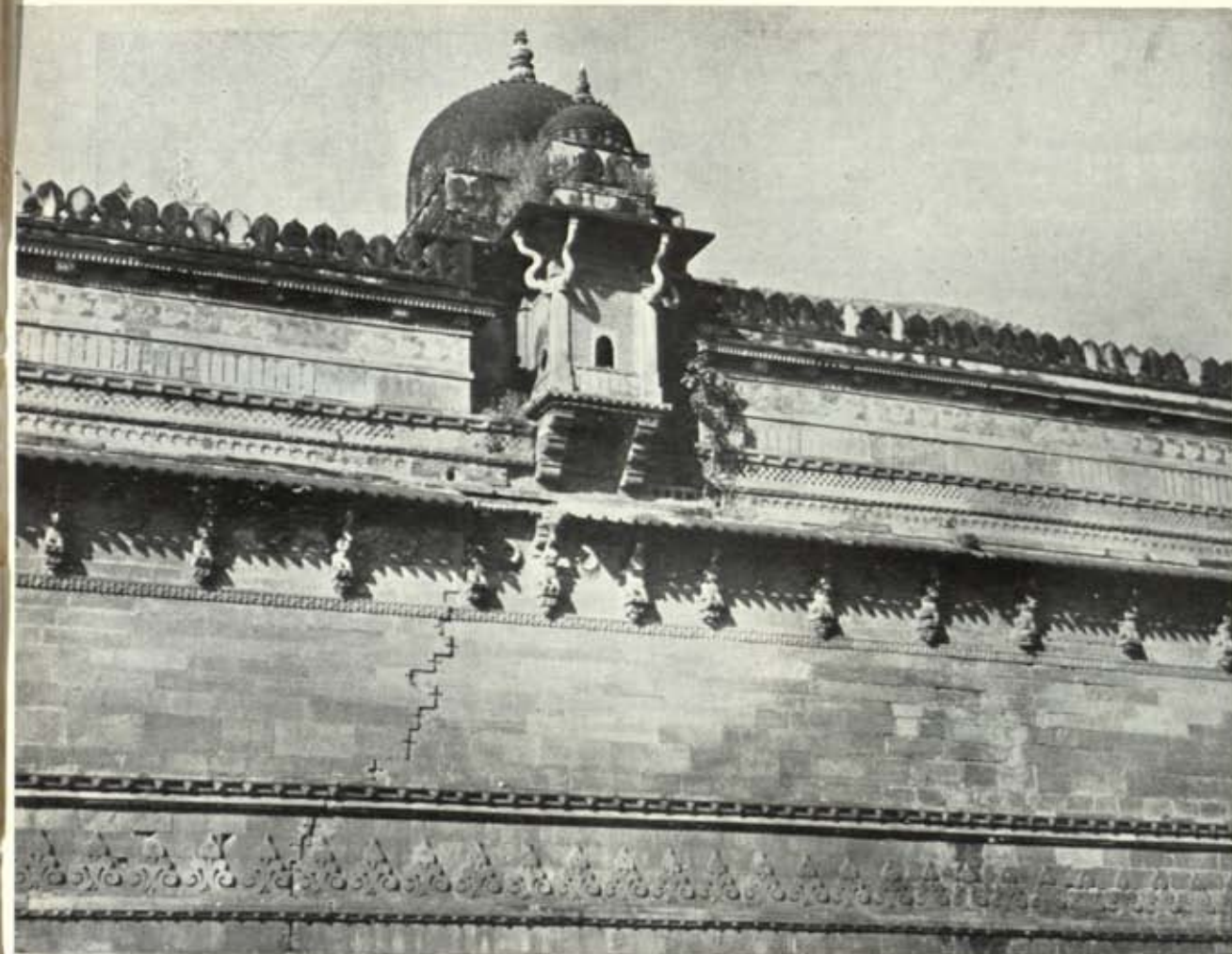
9. Maulānā Chānd (c. 1555) (he came to India during Humayun's reign and settled here; he was attached to the Mughal court)

It is a pity that Indian astronomers of the early 18th century had forgotten the names of their ancient forefathers who were the founders of astronomy.

The pre-Aryan Indians reckoned time by Solar months. The invention of the Zodiac is generally ascribed to the Chaldaeans but the Indians had already recorded their astronomical observations on the *Zodiac* on the seals, which have come down to us, thousands of years before the Chaldaeans learnt the Zodiac, obviously from them.²

Al-Beruni discussed Indian astronomy in great detail, c. 1030. He mentioned its five Siddhāntas, viz., Sūrya-Siddhānta, Vasiṣṭha-Siddhānta, Pauliṣa-Siddhānta, Romaka-Siddhānta and Brahma-Siddhānta³ and such great Indian astronomers as Brahma-Gupta, Āryabhaṭṭ and Varāhamihira along with their theories.⁴ Abul Faḍl who took up the subject and discussed it in detail, after more than five centuries, mostly drawn on Al-Beruni.⁵ Amir Khusrau who composed his *Nuh-Sipihr* in 1318 stands between these two great authors. He too confirmed that Indians were great astronomers and the whole world learnt mathematics (including zero) and astronomy from them.⁶ Arabs too learnt astronomy and mathematics from the Indians. Philips K. Hitti, the greatest historians of the Arabs, thus noted: "The scientific study of Astronomy in Islam was begun under the influence of an Indian work, the *Siddhanta*, brought to Baghdad in 771 (A.D.). Early in the ninth century the first regular observations with fairly accurate instruments were made in south-west Persia and before the middle of

2. P.A. Mankad, cf. *AP* (Baroda, 1950), Introduction, p. lxxxviii. ZODIAC (Latin: ZODIACUS; Greek: ZOIDIAKOS) is an imaginary belt in the Heavens usually 18° wide that encompasses the apparent paths of all the principal planets except Pluto, that has the ecliptic as its central line and that is divided into 12 constellations or signs each taken for astrological purposes to extend 30° of longitude.
3. The five Siddhāntas named by Varāhamihira in the first chapter of *Pañcha-siddhāntikā* are: Sūrya (Saur)-Siddhānta, Romaka-Siddhānta, Pauliṣa-Siddhānta, Paitāmaha-Siddhānta and Vasiṣṭha-Siddhānta, cf. *Pañchasiddhāntikā* (ed. by G. Thibaut and S. Dwivedi, Varanasi, 1968), Introduction, p. viii.
4. *Alberuni's India* (tr. E.C. Sachau) (Delhi, 1964), I, 152-59, 278, 306-10 etc.
5. Cf. *Ain*, III, 12-15 etc.
6. The third chapter of the *Nuh-Sipihr* has been translated into English by the present author and Mr Faiyaz Gwaliari (in print). Its fourth chapter contains details about the learning of the Brahmans, including their inventions in the field of mathematics and astronomy.



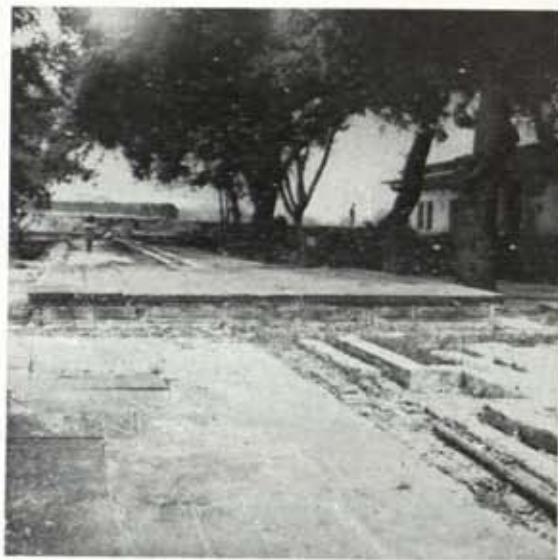
LXXV. Eastern Facade
and Central
'Jharokha',
Gwalior Fort

LXXVI. Tower of the Hindola Paur, Gwalior Fort



LXXVII. Hindola Paur





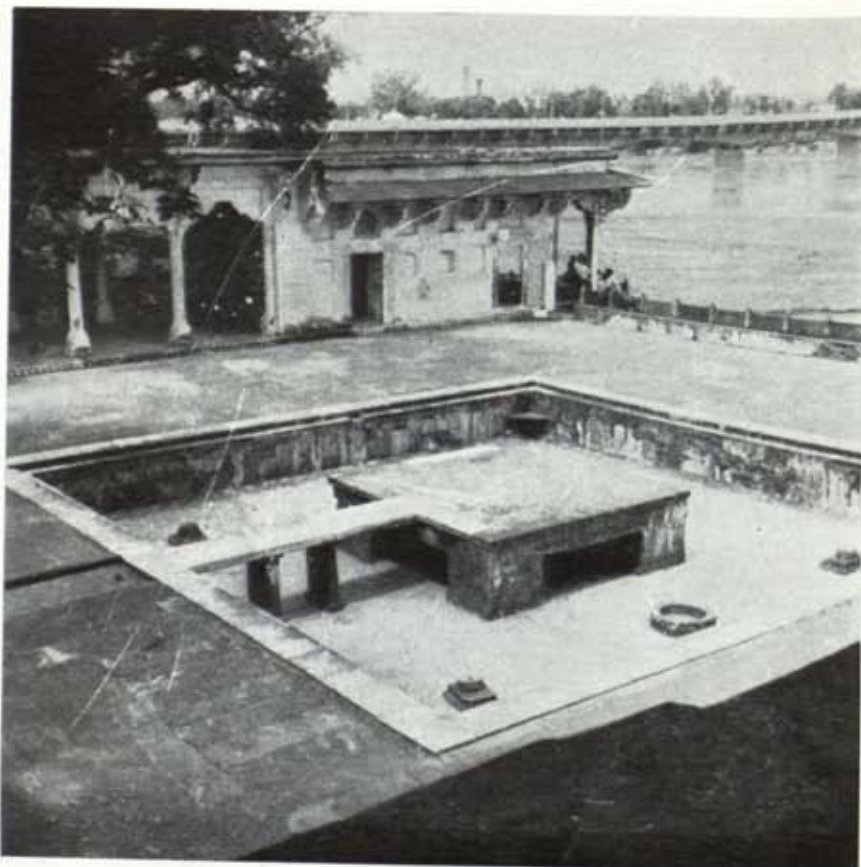
LXXIX. Bagh-i-Gul Afshan, Agra



LXXVIII. Rehan Apparatus in operation (above left)

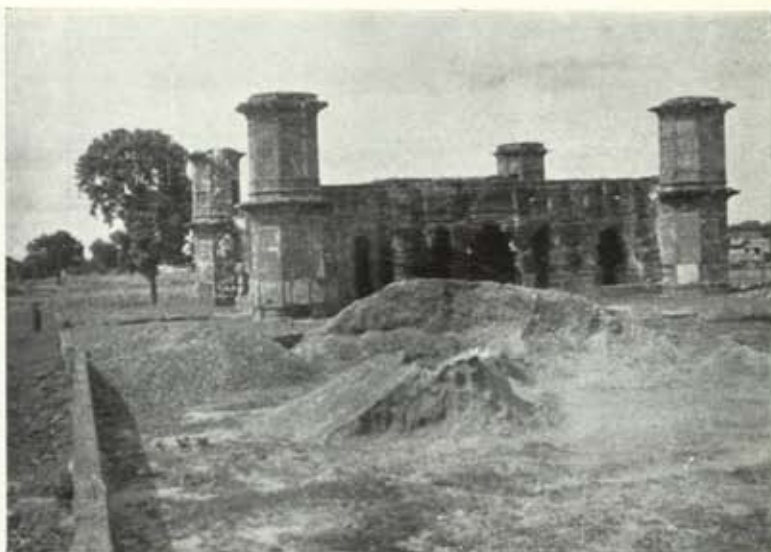
← LXXX. Water-chute and Pond

LXXXI. Central Tank and Island Platform





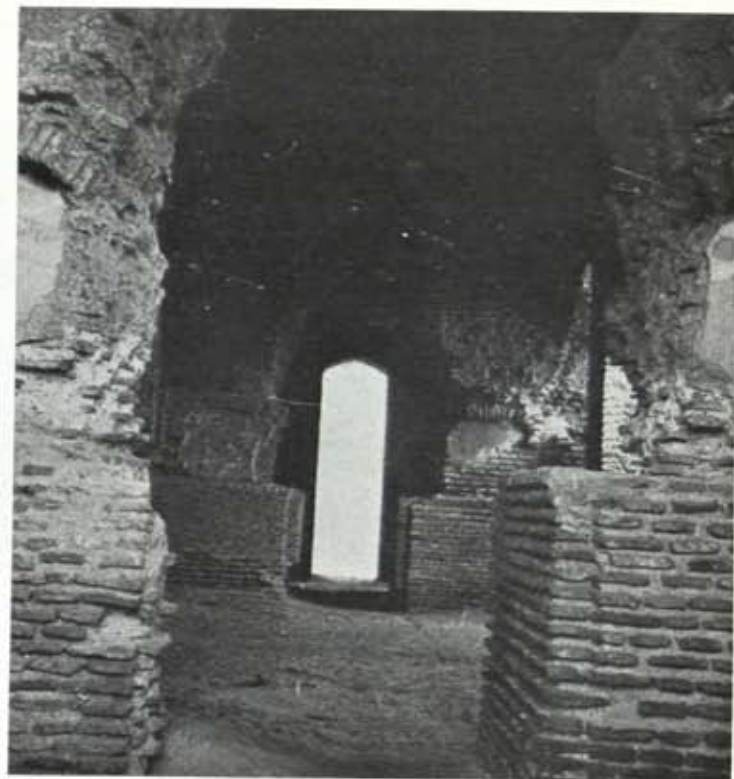
LXXXIV. Eastern Facade and Towers, Chauburj



LXXXIII. Chauburj, Agra

← LXXXII. Water-chute and Pond





LXXXVI. Brick Masonry construction, Chauburj

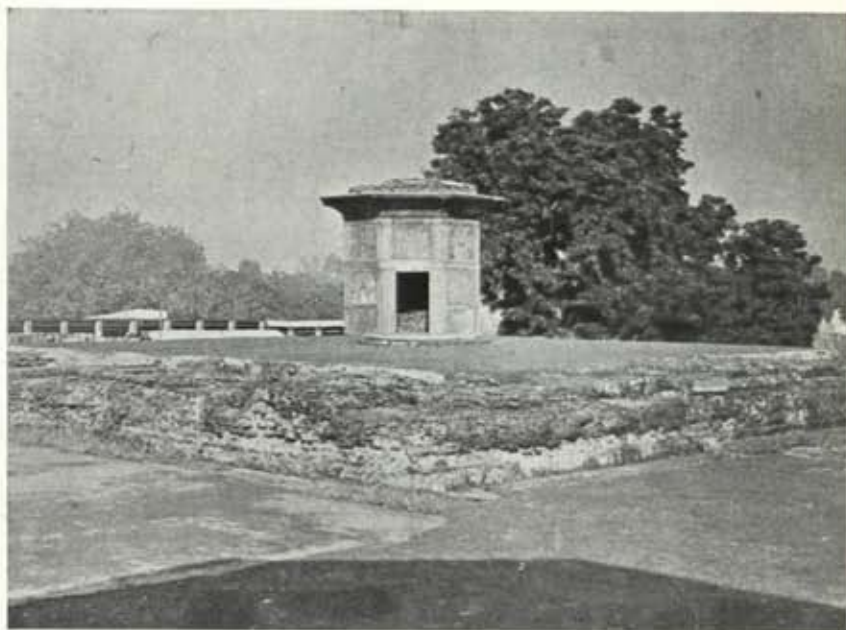
← LXXXV. Corner Tower, Chauburj



LXXXVII. Brick Masonry construction, Chauburj



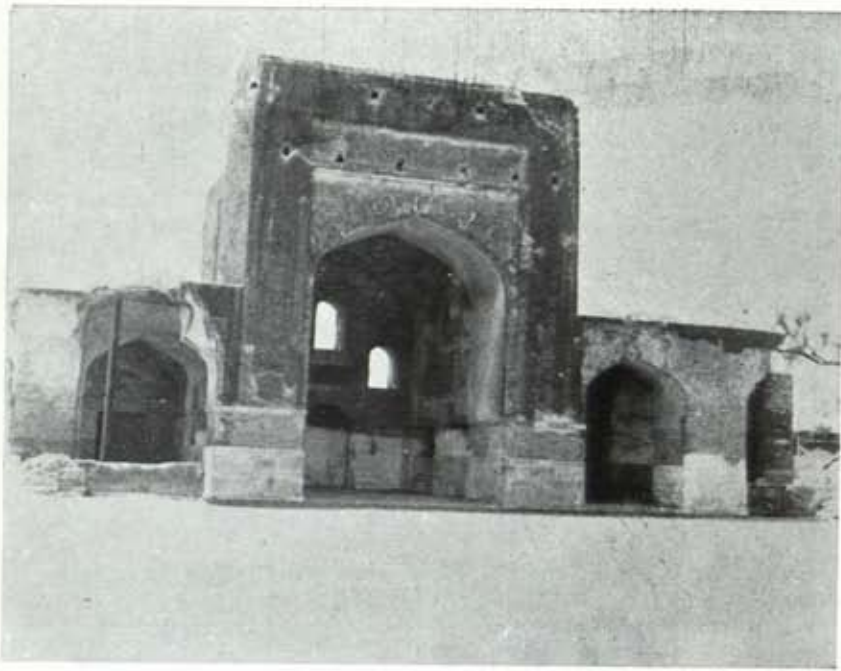
LXXXVIII. Stucco Decoration in Alcove



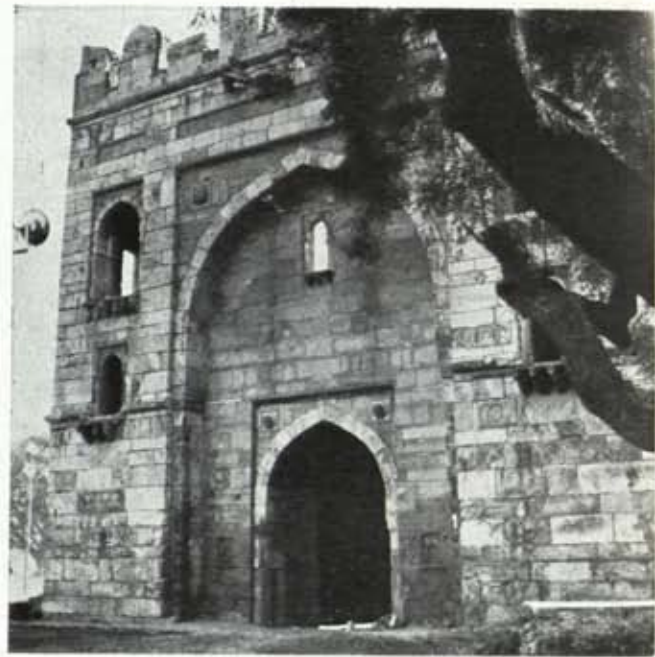
LXXXIX. Raised Platform on the Terrace

XC. Conjectural Restoration of the Chauburj

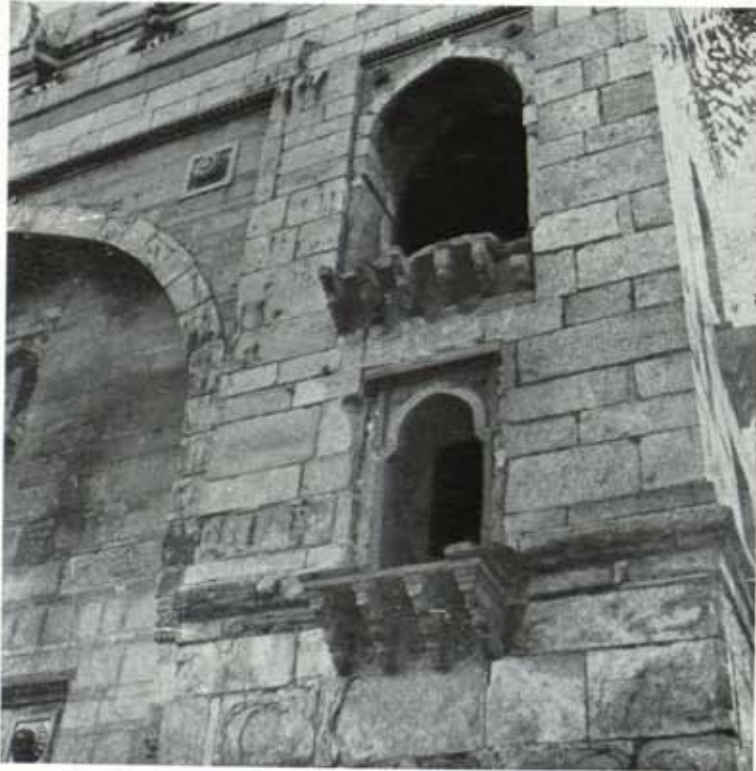




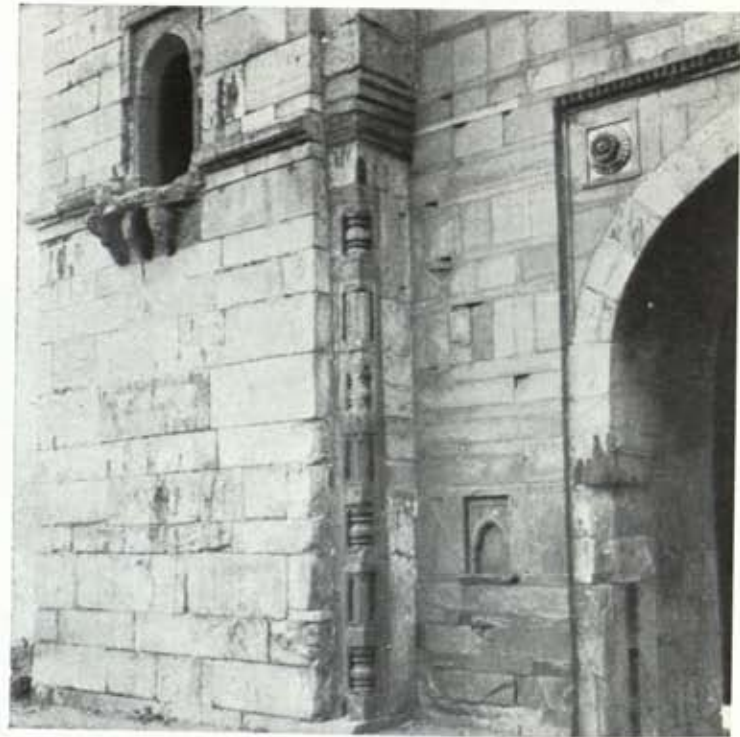
XC1. Humayun's Mosque at Agra



XCII. Kabuli Darwazah, Delhi



XCIII. Details of the Kabuli Darwazah



CXIV. Details of the Kabuli Darwazah



XCV. Lal Darwazah, Delhi



XCVI. Upper Pavilions, Lal Darwazah

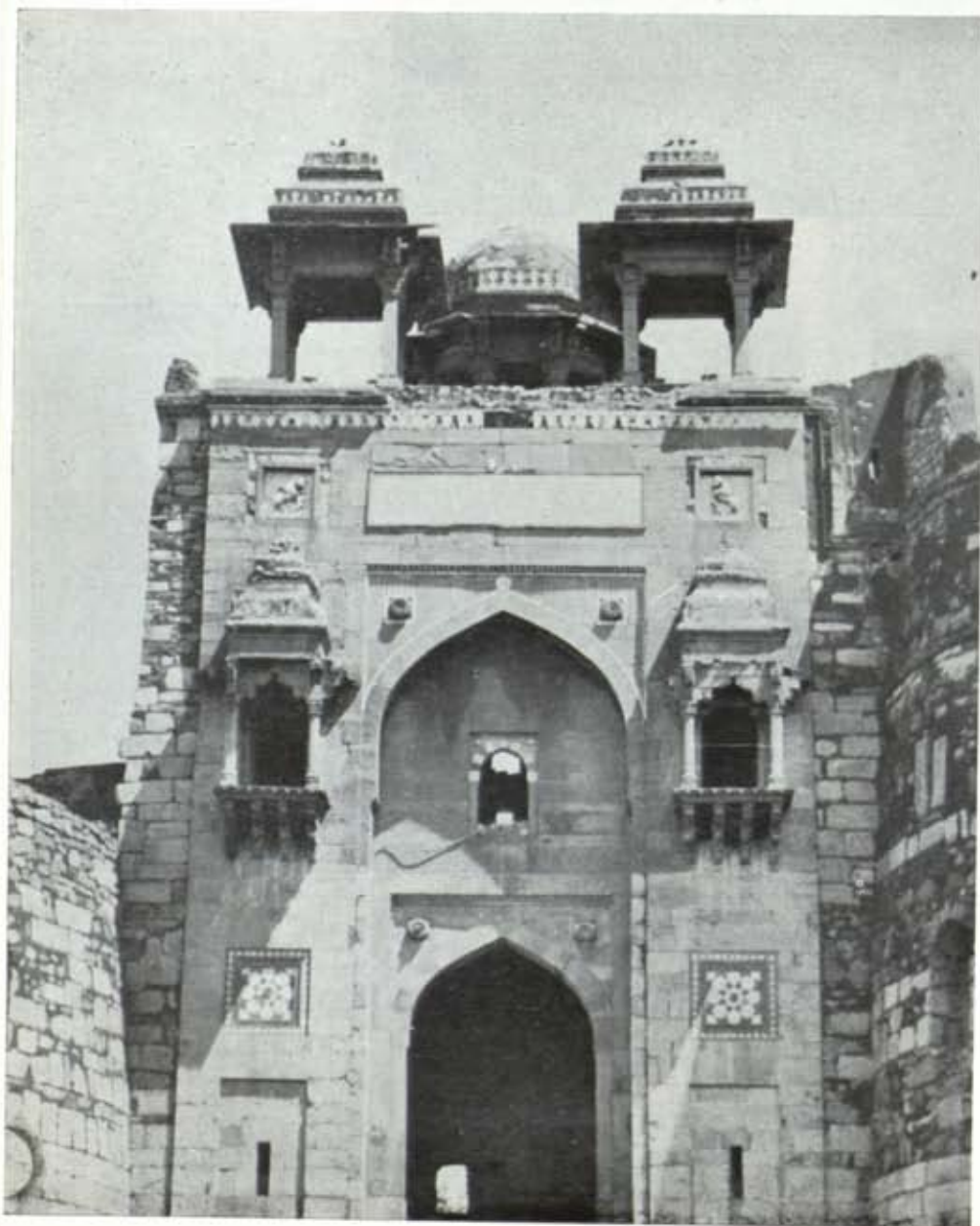


XCVII. Old Fort, Delhi



C. Śārdūla, Talaqi Darwazah

← XCVIII. Talaqi Darwazah, Old Fort, Delhi



XCIX. Details of the Talaqi Darwazah

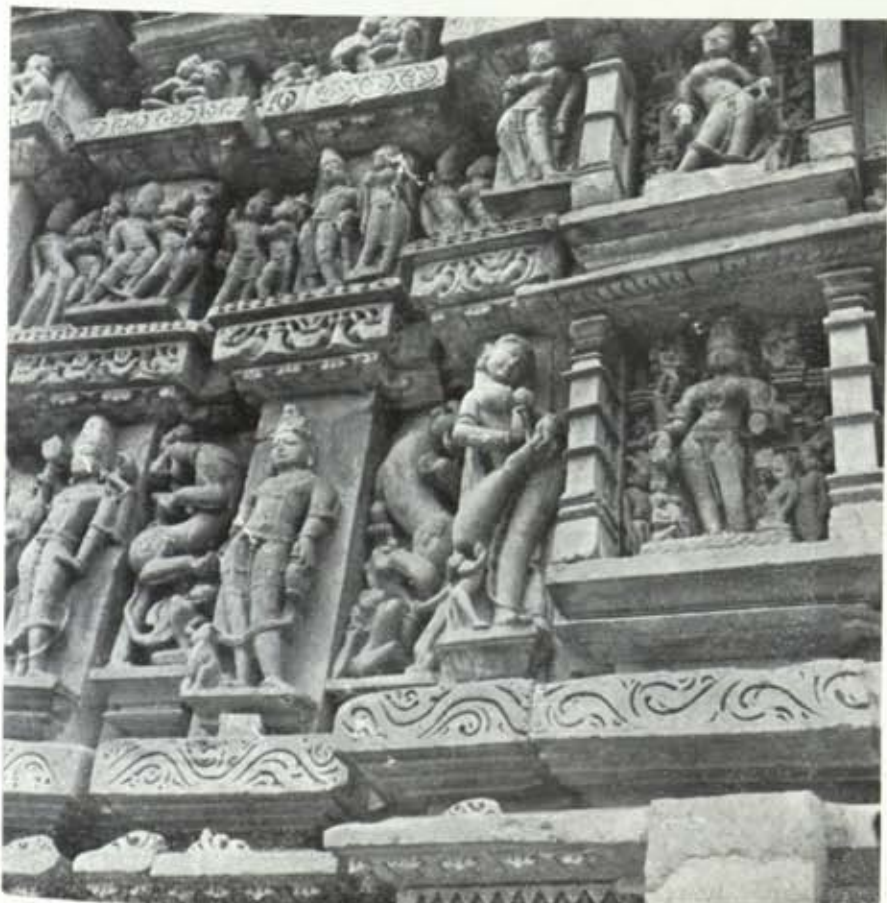


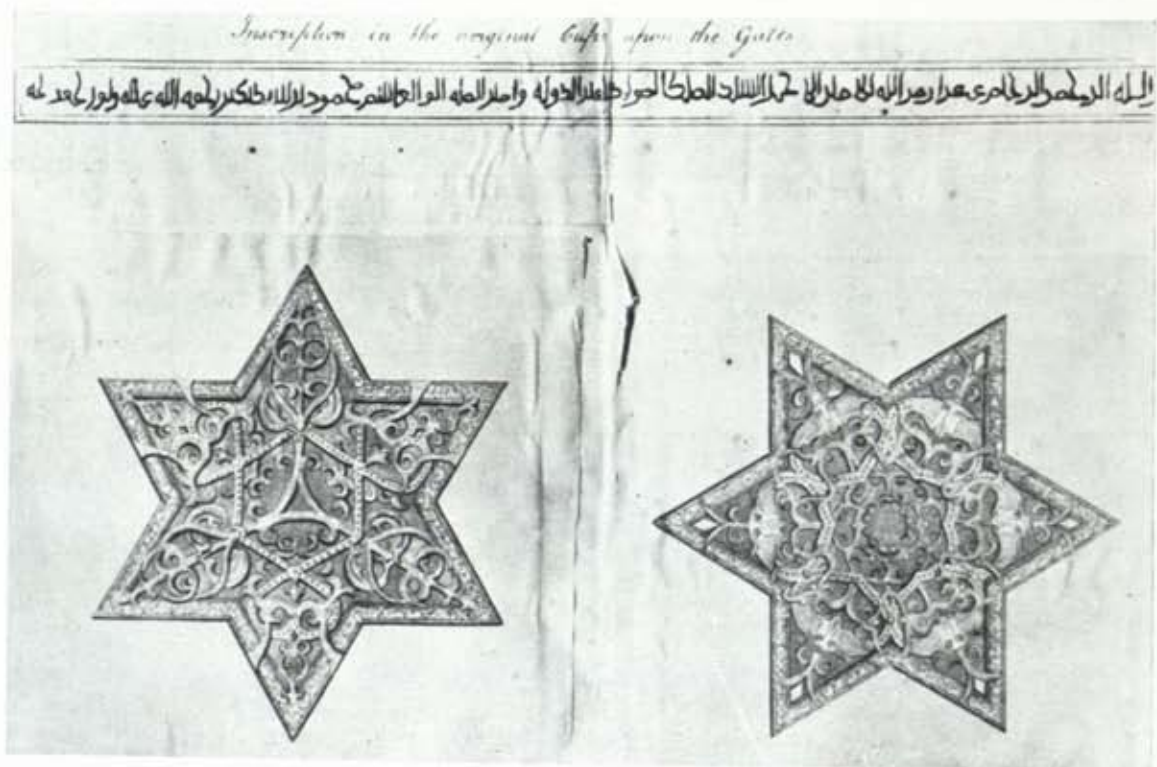
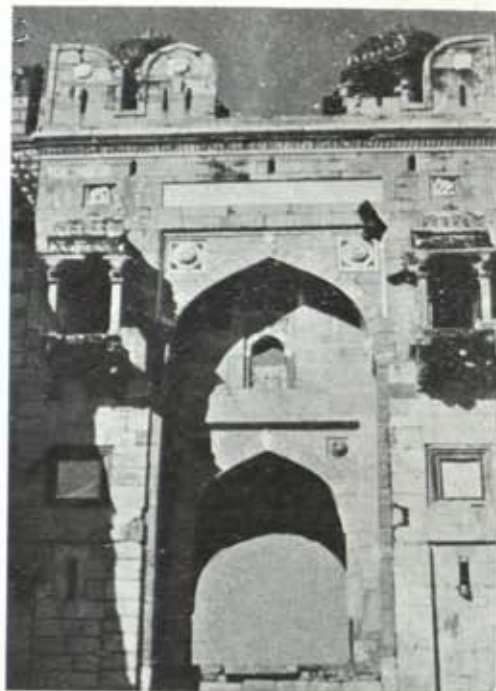
CI. Lion Motif, Delhi Gate, Chanderi



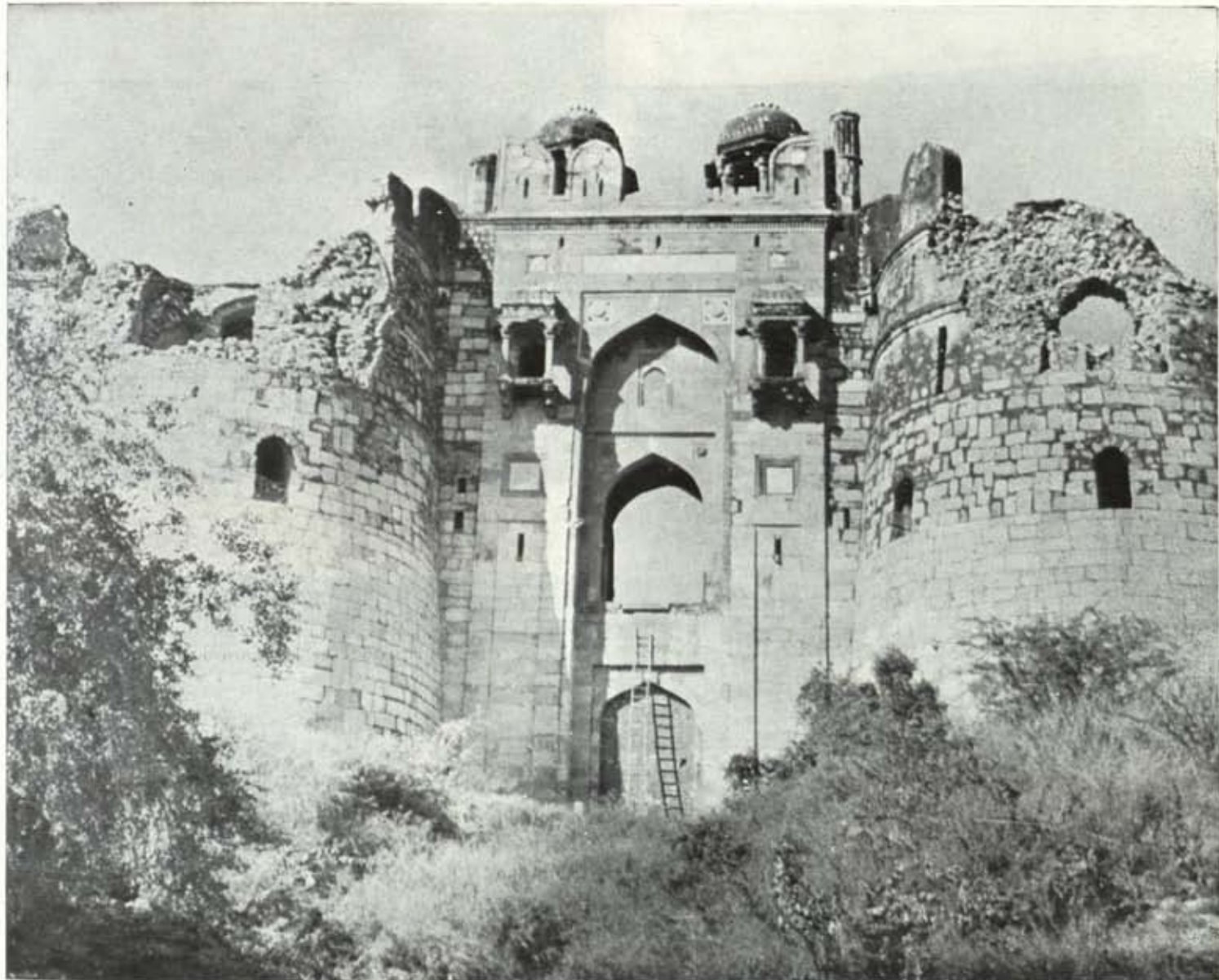
CII. Gaja-Vyāla, Delhi Gate, Agra Fort →

CIII. Typical Śārdūla of Khajuraho





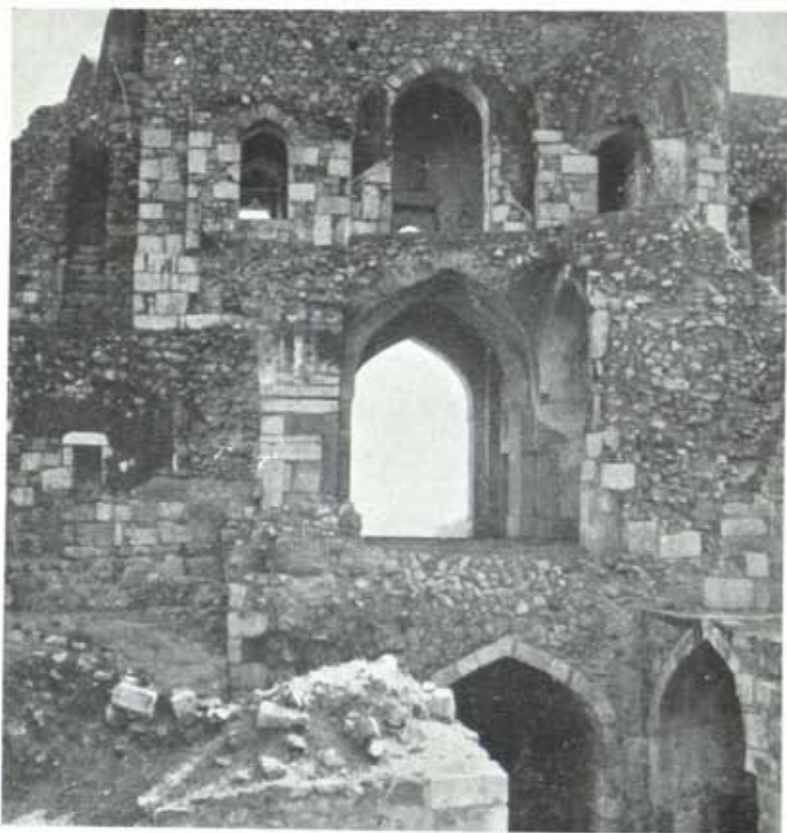
CV. Hexagon of the Ghazni Gate (now preserved in the Agra Fort)



CVI. Humayun Darwazah, Old Fort, Delhi

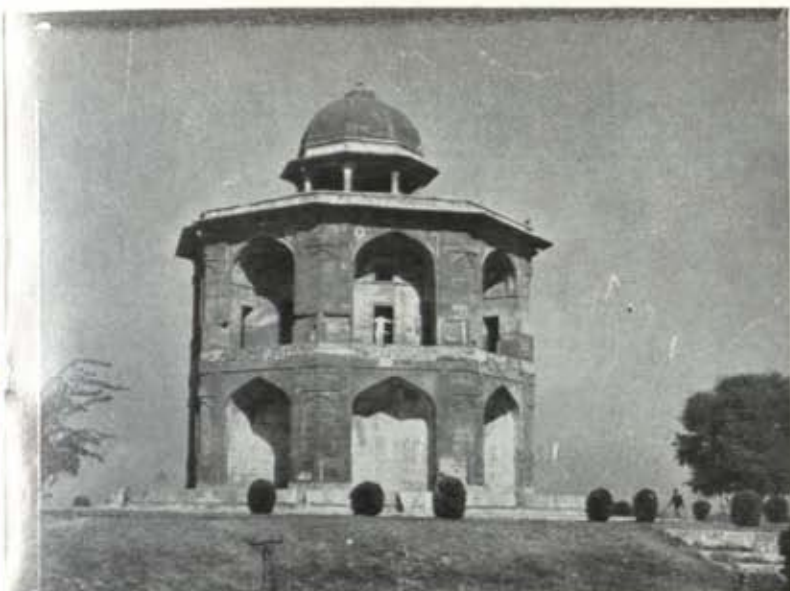


CVIII. Interior of the Humayun Darwazah



CX. Plaster Work

← CIX. Arches and Rubble construction

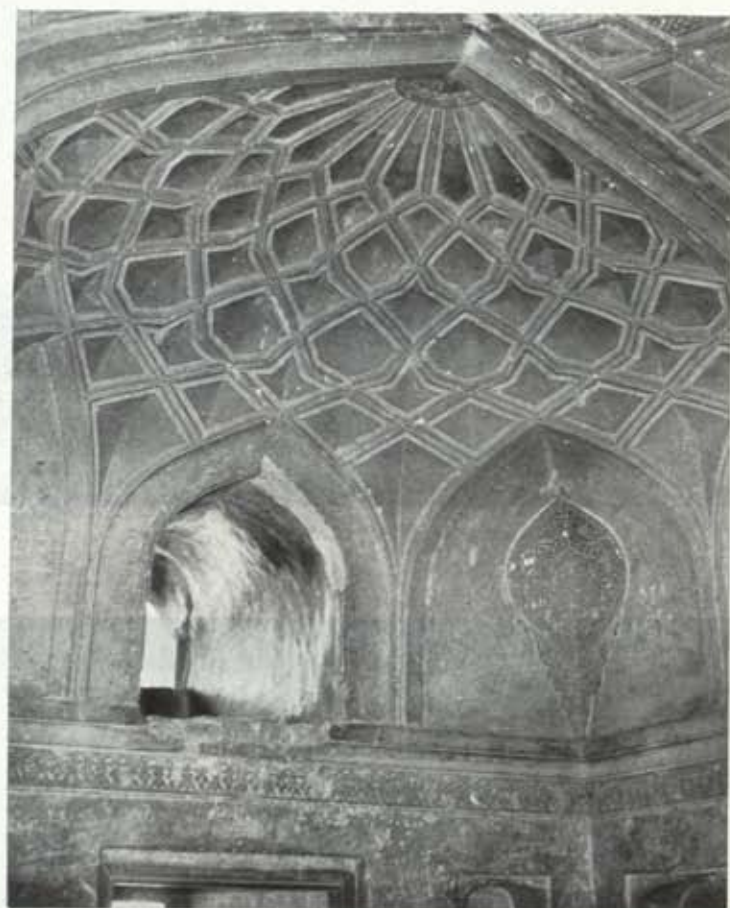


↑ CXIII. Saṁkṛāṣṭas on the Spandrels



CXI. Sher Mandal, Old Fort, Delhi
(above left)

← CXII. Sher Mandal, Old Fort, Delhi



CXVI. Gyarah Siddi, Agra ↑

CXVII. Baoli near Gyarah Siddi, Agra →

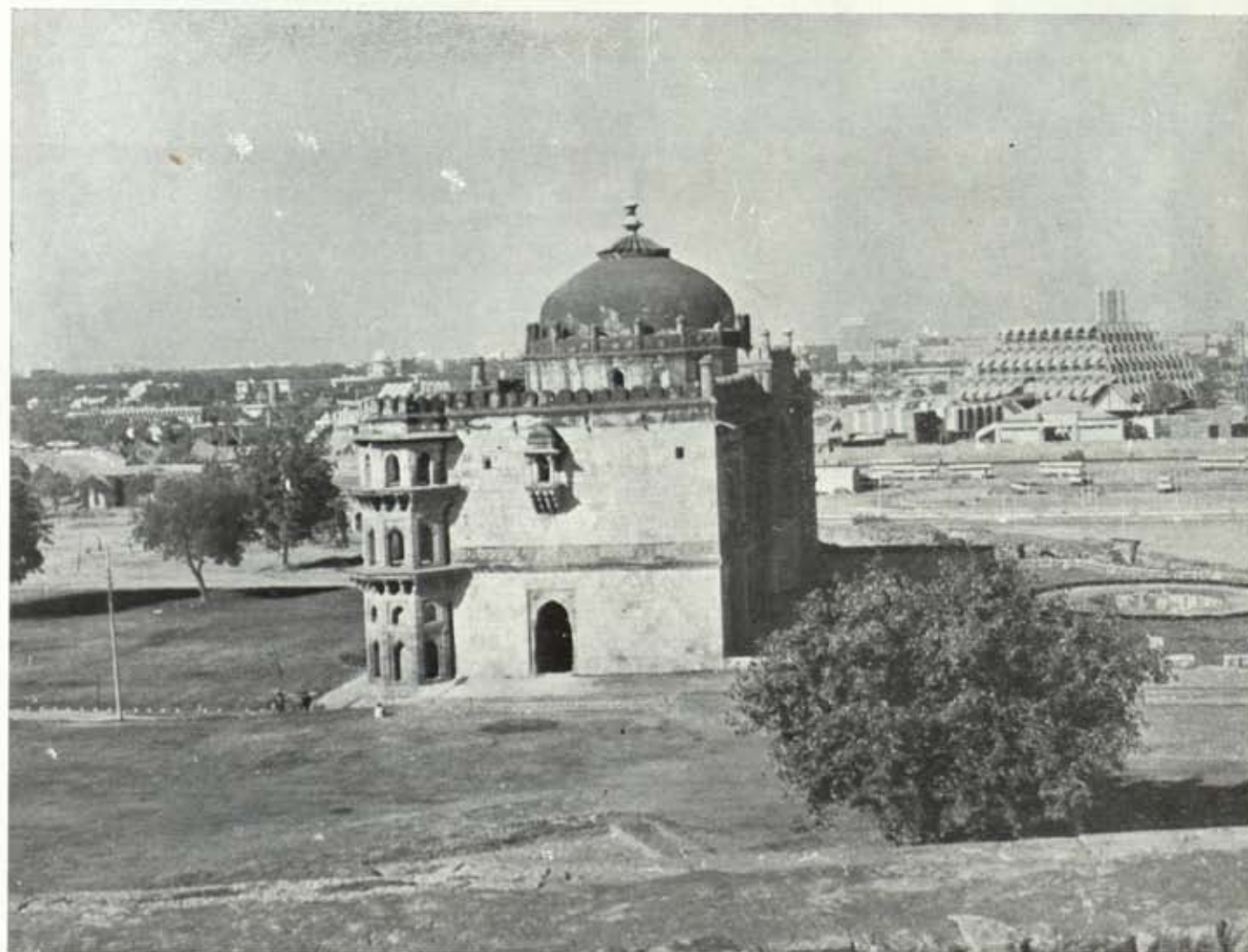
CXIV. 12-Pointed Star (above)

CXV. Sialactite Design, Ceiling of the interior, Sher Mandal (above right)

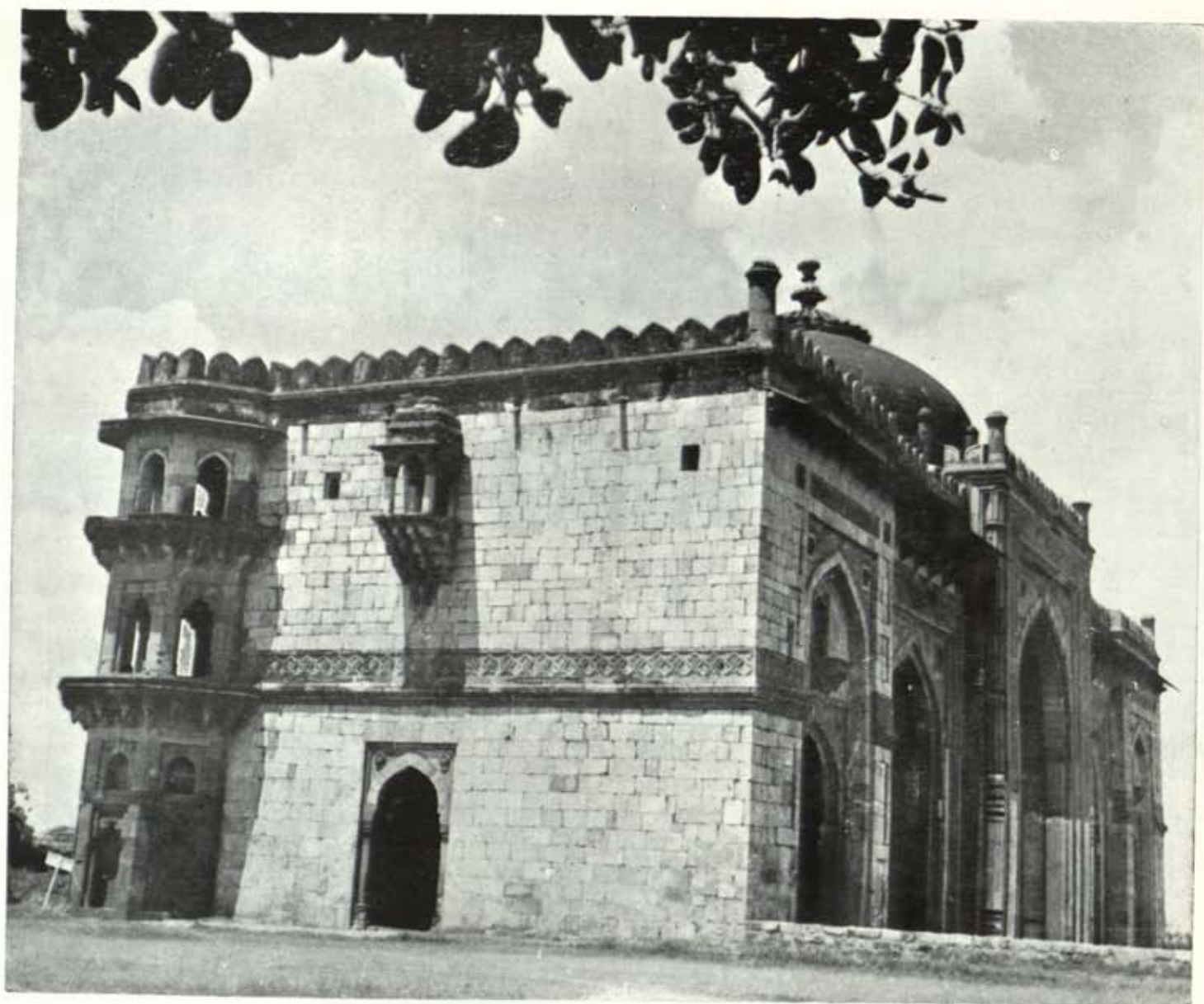




CXVIII. Qiblah Wall, Qal'a-i-Kuhna Masjid, Old Fort, Delhi



CXIX. Octagonal Tower, Qal'a-i-Kuhna Masjid



CXX. Northern side with Oriel-window

that century the Caliph al-Mamun erected astronomical observatories in Baghdad and outside Damascus. The equipment in those days consisted of quadrant astrolabe, dial and globe."⁷

It is true that after the last flicker of the Gupta period was out, the Indian science of astronomy declined and the Arabs took the lead, about the beginning of the 9th century A.D. They gave greatest emphasis on methodical *observation* and established a number of observatories. The Observatory of Baghdad was founded during the Khilāfat of Al-Māmūr (813-833) and fundamental elements of Almagest, e.g., the obliquity of the ecliptic, the precession of the equinoxes and the length of the solar year were verified. The Observatory of Cairo was founded in the 10th century. It produced *Hakimid Tables*. The Observatory of Nishapur (Persia) was founded in 1074 and there al-Khazini compiled his *Sanjaric Tables* in 1118. A great observatory was founded at Maragha (in north-west Persia) in 1259 and there Nasir'al-Dīn Tūsī published his *Ilkhanic Tables*. Ulugh Beg founded a great observatory at Samarqand and prepared *Gurgani Tables*.

It was exclusively this material which was available to Maharaja Jaisingh when he planned to build observatories and it is this material which he used in the preparation of his *Zij*, as well as in the building of his observatories. Naturally, he has acknowledged his indebtedness to these sources, to the total exclusion of Indian astronomers whose works do not seem to have been available to help him in the practical side of this science.⁸

The following instruments (yantras) have been mentioned in Jaisingh's works for the study of the planets and their movements, eclipses, calculation of time and other related matters:

1. Nādi-Yantra (नादि-यन्त्र) — Sun-Dial
2. Gola-Yantra (गोल-यन्त्र) — Sphere
3. Digāṁśa-Yantra (दिगांश-यन्त्र) — Azimuth
4. Dakṣiṇo-Digbhitt (दक्षिणो-दिक्भित्ति) — Mural-quadrant
5. Vṛtta-Ṣaṣṭāṅśaka (वृत्त-षष्टांशक) — An arc of 60° placed in the Meridian

7. Cf. *The Arabs*, A Short History (Gateway Edition, Chicago, 1964), p. 146.

8. Varahamihira's *Pañchasiddhāntikā* deals with the subject of direct observation and inspection of certain mechanical contrivances in detail in its Chapter XIV (cf. op. cit., p. x of Introduction, pp. 37-42 of the Sanskrit text and pp. 75-85 English translation). It has been assigned to c. 550 when Islam had not brought light to the Bedouin Arab.

6. *Samrāt-Yantra* (सम्राट्-यन्त्र) — An Equinoctial Dial, the Supreme Instrument
7. *Jaya-Prakāśa* (जय-प्रकाश) — Crest-jewel of all Instruments

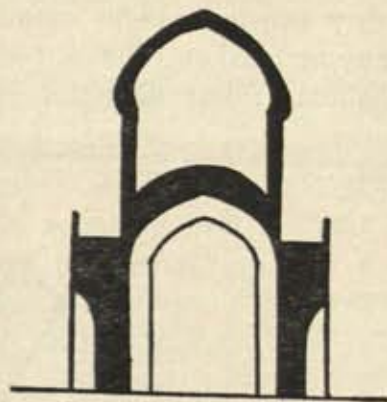
Yantra-Rāja is Indian name for Astrolabe. *Śanku* (शङ्कु) is *Gnomon* (pointer) on a Sun-Dial.

Last two are the most important instruments:

Samrāt-Yantra: It is an equinoctial dial consisting of a gigantic triangular gnomon with the hypotenuse parallel to the earth's axis. On either side of the gnomon is a quadrant of a circle, parallel to the plane of the equator. The instrument is intended to measure the time of the day correct to half a second and declination of the sun and other heavenly bodies.

Jaya-Prakāśa-Yantra: It consists of two concave hemispherical structures used for ascertaining the position of the sun and other heavenly bodies. This is an efficient dial showing at any instant the local time, the sun's declination and the signs of the zodiac.

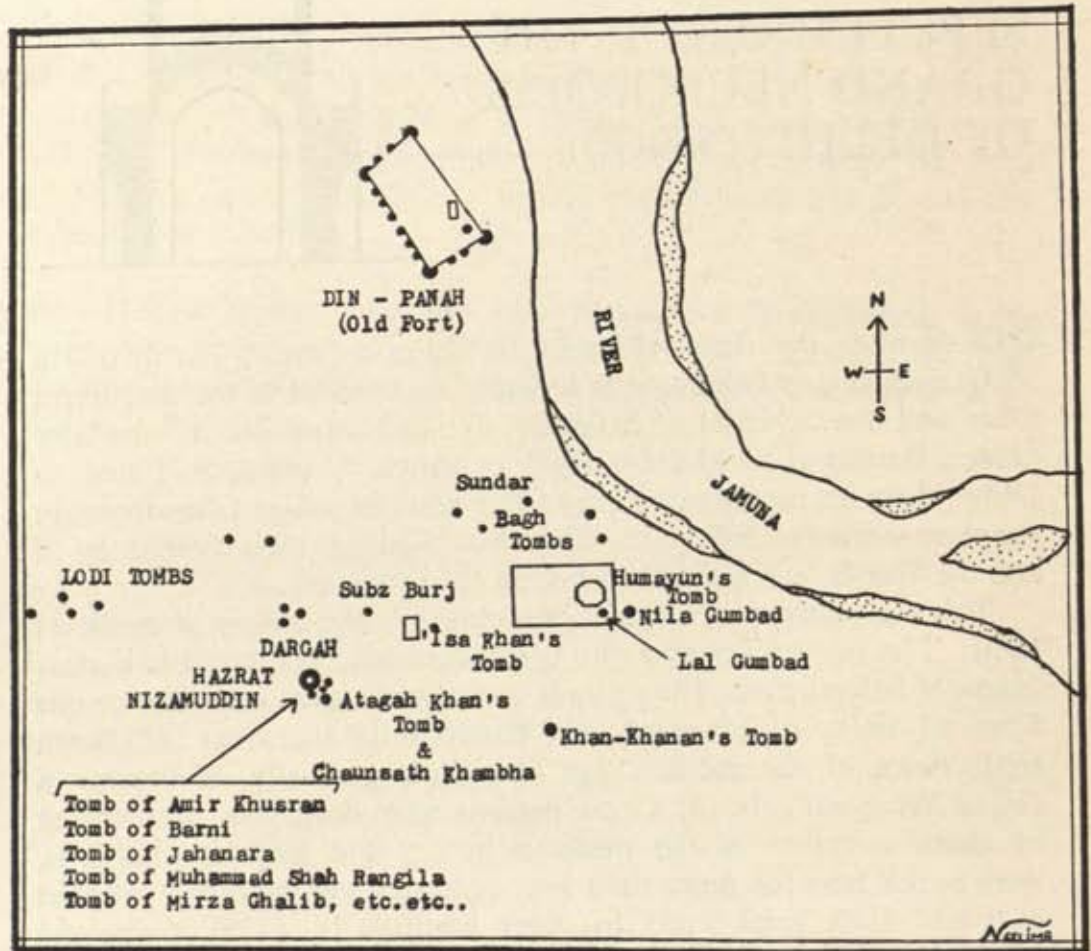
SEPULCHRES OF THE GRAND NECROPOLIS OF DELHI (1530-70)



SOON after the death of his Pīr Bābā Farīd (Sheikh Farīdu'd-Dīn Ganjshakar) of Pak-Patan in 664/1265 and receipt of the traditional relics and the Khilāfat of his order, Sheikh Nizāmu'd-Dīn, who later became famous as 'Sultān'ul-Auliya' or simply 'Auliya', migrated to Delhi where he settled at a lonely place near the village Ghiyathpur, in the close vicinity of Kilugarhi. The river Jamuna then flowed by it and the Sheikh built a thatched hut on the river-bank.

This was an event of singular importance in the history of medieval India. The place soon grew into prominence and developed to a great centre of Sufi religion. The site was considered sacred and the people from all walks of life liked to be buried in the area from 1325 down to the dawn of the modern age and thus, gradually, it became a *Grand Necropolis* (Map 3). Great persons who decisively participated in many a drama of the medieval history and made it what it is, were buried here for more than five centuries continuously, without a break. Such great poets as Amir Khusrau (d. 1325) at one end of this vast chronology and Mirza Ghalib (d. 1869) at the other; historian like Barni (d. 1357); great nobles like Khān-i-Jehān Maqbool Telingānī (d. 1368-69), 'Isā Khān (d. 1547), Atagah Khān (d. 1562) and 'Abdu'r-Rahīm Khān-i-Khānān (d. 1626); great Mughal emperors from Humayun (d. 1556) to the 'Later Mughals' including the care-free Muhammad Shah (d. 1748) who, in spite of the decadent age, lived so colourfully that he earned the nickname of 'Rangilā'; and above all, the great Sufi saint Haḍrat Nizāmu'd-Dīn Auliya (d. 1325) whose dargah is one of the greatest centres of Muslim pilgrimage in

India, second only to Khwājah Moinu'd-Dīn Chishtī's dargah at Ajmer, were all buried here. A wide variety of tombs were built, almost in all materials, styles, sizes, forms and colours. Thus, some tombs have only a small enclosure and a grave or two inside it open to sky, and they proclaim their insignificance to the world humbly and without any pretension. The tombstone of Jahanara, the illustrious Begum Sahiba, eldest daughter of the Grand Mughal Emperor Shah Jehan,



Map 3. Main Buildings of the Grand Necropolis, Delhi.

who professed to call herself: "Malikā-i-Jehān (Empress of the World); the Grandest; the Most Dignified; Deputy of Heaven; luminous like the Sun; whose grace is piety; The Lady of the Sublime Chastity; Supreme among the women of the age; Mistress of the Ladies of the Realm..." in the wake of her power and prestige (as inscribed on the central portal of the Jami' Masjid of Agra), thus, bears the Persian couplet on the epitaph-tablet at the head of her humble grave (d. 1681):

“Bagher subzah na poshad kase mazār marā,
Ki qabr posh gharibān hamīn gayah bas-ast.”

(Let green grass be the only covering of my tomb, for grass only can provide suitable covering to the tomb of a poor fellow.)

On the other hand is the monumental tomb of Humayun situated in the centre of a spacious Char-bagh adorned by waterways and tanks. There are octagonal (aṣṭāsra अष्टास्र) and square (chaturāsra चतुरास्र) tombs; however, the octagonalised-square (aṣṭakoṇika-chaturāsra अष्टकोणिक चतुरास्र) tombs composed of a single mortuary hall without a circumambulatory, and covered by a dome, have been built here on a larger scale than any other type. In spite of the fact that the modern age does not look upon these ‘burjs’ and ‘gumbads’ with the traditional sanctity and a large number of them have disappeared since Sayyid Ahmed Khan recorded the most prominent of them in the *Athar’al-Sanādīd*,¹ several scores of these tombs are still standing in the area which extends from the Purana Qal’a (Old Fort) to the Bārah-Pulā, and the river Jamuna to the environs of the Dargah of Haḍrat Nizāmu’d-Dīn Auliya as far as the Lodi Gardens. The river has shifted eastward and the *Grand Necropolis* is no longer on the river-bank. This has deprived it of much of its natural charm, comfort and quietude.

Maulvi Muhammad Ashraf Husain surveyed the whole area in the thirties of this century to place on record the inscriptions which were then found on the monuments.² Apart from a large number of structures which he could not identify, obviously because the area was studded with them and the sheer abundance made it look like a great graveyard, for which purpose indeed it had been used for nearly six centuries, he mentioned the following most important tombs under the names which were then popularly attached to them:

1. Sunderwālā Burj
2. Manahārī Gumbad
3. Chhotā Batāshewālā Mahal
4. Chhotā Batāshewālā Gumbad
5. Barā Batāshewālā Mahal
6. Lakkarwālā Gumbad
7. Nīlī Chhatrī
8. Nīlā Gumbad
9. Afsarwālā Gumbad
10. Barber’s Tomb

11. Subz Burj
12. Tomb of Atagah Khan
13. Chaunsath Khambhā
14. Bārah-Khambhā, etc.

Mostly, these are misnomers which have been preserved traditionally; they give no meaning or historical data. It is funny that a dome looked like 'Batāshā (बताशा) to the people! who bestowed this title upon the building over which it rested; it was sometimes 'Chhotā' (small, i.e., sunken), sometimes 'Barā' (big, i.e., elongated). Anything that bore blue glazed-tiles was named 'Nīlī', e.g., Nīlī Chhatrī, Nīlā Gumbad and Nīlī Masjid. When pillars were used instead of piers, the total number of pillars made the popular name. Hence arose the nomenclatures Bārah-Khambhā (12-pillared building), Solah-Khambhā (16-pillared building), Battīs-Khambhā (32-pillared building) and Chaunsath-Khambhā (64-pillared building).

It must be admitted, however, that these misnomers are coined by the people unconsciously as it is only due to the convenience of identification that the most distinguishing feature comes into popular usage and almost everything else is then forgotten. This is, though a curious yet, a bare truth of the history of the tombs of this Grand Necropolis.

It shall, therefore, be futile to take into consideration the whole lot and discuss them one and all, and repeat the same data over and over again; only the most representative examples which belong to the early phase of Mughal architecture may be taken up, studied and stylistically evaluated.

(a) *Gumbad Atagah Khan*

Tomb of Shamsu'd-Dīn Muhammad Atagah Khān³ (Plate CXXXIX) situated close to the Dargah of Haḍrat Nizāmu'd-Dīn Auliya is a square (chaturāsra) tomb which measures 18'-10" (5.74 metres) side internally, and is covered by a shallow marble dome. The arched doorways on the three sides are closed by jalis, the entrance being given on the south side (for Plan, see Fig. 26). The western side, as in most of the square tombs of the Sultanate period, is not closed and there is no mihrab. White marble has been used here on a larger scale than



Fig. 26. Plan, Tomb of Atagah Khan, Nizamuddin, Delhi (1566-67).

any other previous tomb. Inner core of the building is made up of rubble. The dados have mosaic of white marble pieces on red sandstone slabs in geometrical designs—an ornament which was later followed at Fatehpur Sikri and Agra. The wall above the dados, in fact, the whole interior above them, had been plastered over, stuccoed and painted, mostly in exquisite incised arabesque, geometrical and calligraphic designs. Much of it has now been destroyed. Squinches have been used in the phase of transition, to support a double-dome. There are three tombstones inside the tomb and a small kachchi grave marked out on the floor.

White marble has been used lavishly along with red stone on the exterior. All central piers and arches which project forward a little, are composed of white marble (Plate CXL). The spandrels of the arches have beautiful mosaic of white marble and green and blue glazed-tiles. The use of marble with glazed-tiles in a mosaic scheme is an unprecedented phenomenon of architectural decoration. Quranic verses have been carved in Naskhi on white marble panels around the arches. Beautifully carved nook-shafts have been used along with them. The linings around the ornamental red stone arches on the sides are also of white marble. Exterior dados also bear mosaic of white marble and black slate on red stone slabs, in geometrical designs.

The white marble dome rests on a spherical drum which bears bold geometrical designs of white marble on red sandstone. There is an exquisite stalactite design in carved stone at the springing. A double-dome has been used in this tomb and there is space between the two layers. Like the tomb of Humayun which was built almost contemporarily, this also does not have a padmakōśa. The slender finial which crowns it at present is not original.

Apart from a large number of Quranic inscriptions which adorn this tomb in the interior as well as on the exterior,⁴ there are a number of other inscriptions which throw light on its history. On the western arch, at the end of the Quranic verses, is a piece of Arabic prose carved in stone relief in beautiful Naskhi, which contains the name of the scribe Bāqī Muhammad of Bokhara. His name also appears on the northern arch, and again on the southern arch along with the date 974/1566-67. The southern arch bears on the left panel a historical inscription in Arabic prose which records the construction of the tomb in 974/1566-67 under the superintendence of Ustād Khudā Qulī.⁵ It is likely that he was the architect of the building and, as his name indicates, he came from Persia.

On the western side of this small compound is a stone wall which,

altogether, bears glazed-tiles in yellow, green, blue and white colours. It is surprising that the builder of the tomb liked to adorn, with this ornament, a plain wall which hardly served any purpose except a gorgeous display of colours in a pleasing combination. It is noteworthy that instead of a dazzling turquoise blue, a soothing light yellow predominates in this scheme.

Much has been damaged yet enough remains to give an idea of the things which were later to go into the making of the Mughal style, e.g., liberal use of white marble along with red stone; mosaic of glazed-tiles with stone; dado-art as the most emphatic form of mural decoration; employment of incised stucco and painting for interior decoration; free and assertive use of arabesque, geometrical and calligraphic designs; and particular emphasis on the display of calligraphic art on the most prominent parts, e.g., alongside the central arches.

It may be noticed, however, that there are no *chhatris* at the corners around the dome which reposes solitarily on the skyline. There is no *āmalaka*, *padmakōśa* or a *kalaśa* finial as suitable crowning element of the dome which even the Sultanate architect used on a large scale. It does not impress and the superstructure of the tomb of Atagah Khan is weak and deficient.

Except for a little outward similarity—that both have an arch in the centre of each side, flanked in either case by ornamental arch or arches and the building is roofed by a dome—the tomb of Atagah Khan is different in content and spirit from the typical square tomb of the Sultanate period.⁶ The Sultanate tomb is entirely built of rubble stone plastered over or, in more cases, of ashlar while Atagah Khan's tomb, though also of rubble skeleton, is wholly covered by red stone and white marble casing all around. Rubble and ashlar construction was gradually given up for lack of facility to treat surfaces at will, more specially due to absence of any surface for mosaic of coloured stones which had come into fashion since the advent of the *Qal'a-i-Kuhna Masjid* of the Dīn-Panāh. It is noteworthy that rubble stones of the skeleton are of very small size. This was done to make the material more manipulative. This need ultimately led the architect to take recourse to brick. Headers-and-stretchers system had, no doubt, been long in vogue in India but with brick coming to a preponderant position as the chief building material, this system was adopted almost invariably. It was particularly conducive to the construction wherein large slabs of stone were used to provide the casings. It was useful for strength as the headers remained firmly embedded into the skeleton, as well as for effect as the stretchers provided ideal surface for mosaic

and other ornamentation. As against the Sultanate tomb which is massive and sober, *Gumbad-Atagah Khan* is a small graceful building of delicate proportions and much colour.

(b) *The Lal-Gumbad*

This red stone tomb is situated in the garden of the tomb of Humayun to the south-east side of the main mausoleum, in its close proximity. It is square (*chaturāsra*) in plan and rests on a high plinth. Though small, it is a beautiful building (Plate CXLI) composed of rich red sandstone along with which local quartzose of a grey colour has been used tastefully. Each side has a portal in the centre, which contains double arches one over the other, closed by jalis, except on the south side where the lower arch gives the entrance. A small panel marking the Qibla has been cut into the western jali. Each portal has a semi-vault made up of ribs which take the load. Ornamental double arches have been given on the sides of the portal on each facade, in the fashion of the typical square tomb of the Sultanate period. They are in grey stone while all linings and edges are reinforced by red stone.

It is interesting to note that the openings, in each case, including the three filled in by jalis, have ornamental arches only. A single stone slab has been chiselled to look like an arch. There are no voussoirs and technically the load rests horizontally. This was a marvellous conceit of the architect which facilitated the construction without loss of any effect.

Beautiful pinnacles crown the quoins at all angles of the tomb, which are distinctly marked out. Square *chhatris* with slender pillars gracefully flank the dome at the four corners. The *chhatris* are emphatically oblong, their elevation being in the proportion of 3 : 1 with the breadth. The great double-dome rests on a sixteen-sided, high drum which has a pinnacle at each angle. Among the crowning elements, only the *padmakōśa* has survived. Composed of four *chhatris* and a dome reposing amidst a cluster of 28 pinnacles, this is an extremely beautiful superstructure. The architect has, obviously, given emphasis to the elevational axis of the building which he has adorned with all expedients which were then available to him.

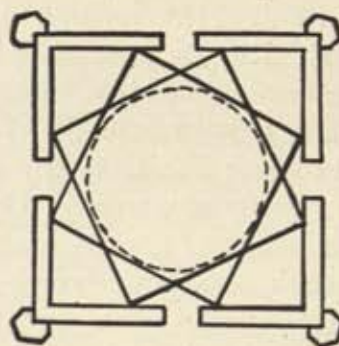
Interior is a single square room covered by a double-dome. An ingenious system of roofing, hitherto unknown in this region, has been adopted. The dome is supported on four intersecting arches, made up of stone-ribs, which cross to the opposite side and interlock each other

(Plate CXLII) leaving a squinch at each corner. They rest on eight pillars, two on either side, and, altogether, make up the frame upon which the dome is securely placed. Though an experiment carried out on a very small scale, this was a novel conception of the architect. Squinch, stalactite or vault had long been in use to convert the square hall below into an octagon above, to obtain a conformation over which a spherical dome could rest conveniently. Technically, there is no phase of transition in this instance, and the four main arches themselves have been exploited to support the dome. They rise almost to the total height of the interior and, altogether, they compose a *perfect vault* which is strong enough to keep in position the small inner shell of the double-dome as also to support the main load. The employment of stone-ribs has secured the building against any lateral thrust. The famous *Gol-Gumbad* of Bijapur which enshrines the mortal remains of Muhammad 'Ādil Shāh (1627-57) and was built around the middle of the 17th century, about a century after the *Lal-Gumbad* of Delhi, has a similar, though a far more intricate arrangement of arches which support its single dome and it is quite likely that the Bijapur architect derived initial inspiration to dispense with the squinch or stalactite and

adopt a frame of arches to support the main load from the Delhi example. His arches also intersect and interlock each other, though they do not cross to the opposite but to the adjoining side in each case (Fig. 27). There are some other differences: The dimensions at Bijapur are colossally enlarged and consequently a frame of eight arches has been used

instead of four and, therefore, they intersect sideways; there is a huge single dome at Bijapur instead of the small double-dome of the Delhi tomb; and the Delhi example is in stone blocks while Bijapur's is a brick masonry construction. But the principle essentially remains the same.

There is no ornamentation in the interior—neither relief-work nor colour-scheme and it is entirely plain. Traces of blue and green tiles have remained on the frieze of the chhatris. Probably the dome too had been originally glazed-tiled.



GOL GUMBAD BIJAPUR



LAL GUMBAD
DELHI

Fig. 27. Plan of the arches supporting the dome at Lal-Gumbad, Delhi (c. 1570) and Gol-Gumbad, Bijapur (1627-57).

The tomb does not have any Persian inscription. There are two marble tombstones one male and the other female—which are inscribed with Quranic verses. The latter bears the figure 999 which may be the date 999 A.H. equivalent to 1590-91 A.D. This is, however, confusing. Stylistically the tomb seems to have been built contemporaneously to the tomb of Humayun and it can be assigned to c. 1570 at the latest. It appears that the husband, probably a close friend or relative of Humayun who was also held in high esteem by Haji (Bega) Begum, died some time between 1560 and 1570 and a tomb was built for him about 1570 in the same compound; his wife died later in 999/1590-91 and was buried along his side with this date inscribed on her tombstone.

It is a pity that the tomb is popularly known as the Barber's Tomb. There is nothing to sustain this nomenclature which is, in fact, a woeful misnomer. As it is built of red sandstone of a rich colour, it would be more appropriate and indicative to designate it as the *Lal-Gumbad*.

Following are the characteristic features of this tomb:

1. It has a regular square plan and there is no attempt to recess the angles.
2. Ornamental niches and the iwan-frame containing the central portal on the facade have been borrowed from the typical square tomb of the Sultanate period.
3. All quoins are crowned by pinnacles which contribute to the total effect of the superstructure.
4. Grey stone is used though sparsely yet assertively, along with red stone for simple colour effect.
5. Intersecting arches resting on eight pillars, thus forming a vault, support the load of the superstructure.
6. Ornamental stone arches have been used over openings each technically making a lintel.
7. A double-dome has been used.
8. Beautiful square chhatris flank it impressively at all corners. Pinnacles of the drum also add to the effect.
9. Blue and green glazed-tiles adorned the frieze of these chhatris.
10. A padmakōśa and probably an āmalaka-and-kalāśa finial were used to crown the dome.
11. The architect has given emphasis to the elevation of the building. He used a high plinth and an unusually high superstructure, viz., the oblong chhatris and a dome resting on a high drum. This is the most important phenomenon of this tomb.

(c) *Gumbad-Afsarwala*

It is situated inside the compound of Humayun's tomb on its south-western side near the 'Arab-Serāi and Mandī, on a spacious platform which also has a ṭimukhī mosque close to the tomb (Plate CXLIII). Popularly, the tomb is called *Afsarwala-Gumbad* and Masjid the *Afsarwali-Masjid*. The names are not intelligible. There is no record, either documentary or epigraphical, to throw light on the history of these two monuments, which thus remains obscure.

The tomb has a square plan but its angles have been so chamfered as to give it an octagonal conformation (see Fig. 28 for plan). The side arches have lintel doorways on all sides, there also being an arched opening over each doorway. The western side is also open and there is no mihrab. Semi-octagonal alcoves have been given on the corners; they are merely ornamental. The construction is in rubble and plaster but red stone has been used along with grey stone on a large scale, particularly at all edges and angles, for emphasis and strength. Red stone arches bear white marble linings. This adds to the aesthetic effect. Red stone nook-shafts have been used on all the four main facades. Panelling with the help of red stone edges and borders and white marble linings has divided the external surface into a number of ornamental niches which help a lot to relieve the monotony of the plain exterior.

Red stone rosettes in bold relief have been used on the spandrels of the main arches. Curiously, white marble and black slate pieces have been inlaid into them to make up a stylised design. As a matter of fact, it was the stone-carver who held sway in the finish of the exterior.

Stalactite has been used in the phase of transition. A hemispherical double-dome, resting on a high octagonal drum which has arched niches on all sides, surmounts the building. It is crowned by a padmakōśa and flower-finial. The dome-complex occupies nearly half of the total elevation of the building. As in the preceding example, here also the elevational axis predominates in the design of the building. There are no chhatris at the corners, or pinnacles at the quoins; no chhajja protects the sub-structure and shadows so necessary

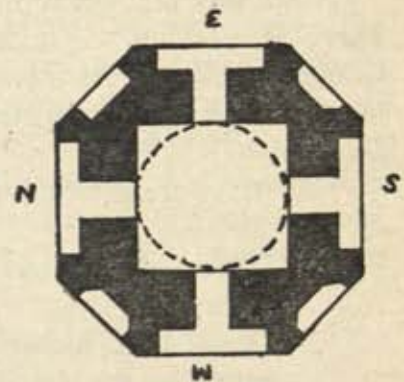


Fig. 28. Plan, Gumbad Afsarwala, Delhi (1566-67).

for a pleasant effect are altogether wanting. Its is, in fact, a very simple design.

There are three tombstones in the interior. One of them bears the figure 974 which may be 974 A.H. equivalent to 1566-67 A.D. to which date the tomb may be rightly ascribed. It may be pointed out, however, that though the *Afsarwala Gumbad* and the *Afsarwala Masjid* are built on the same platform, both are not contemporary and the masjid is an earlier construction. As against the high double-dome of the tomb, the dome of the mosque is single. It is a rubble construction with still simpler details and practically no use of dressed stone. It is possible that both were built by the same person (who lies buried in the tomb) but the mosque certainly preceded the tomb by nearly a quarter of a century.

The characteristic features of the *Gumbad-Afsarwala* are its chamfered angles; a double-dome; a high octagonal drum; and a simple design without any architectural paraphernalia.

(d) *The Nila-Gumbad*

It is situated at the south-east corner of Humayun's compound, just outside it, overlooking the railway track. It has a square plan with chamfered angles, covered by a single dome of less than hemispherical shape, resting on a cylindrical drum (Plate CXLIV). Four archways on the sides are open and there is no mihrab. Angle-alcoves are semi-octagonal. Built of rubble and plaster, this magnificent tomb was once entirely covered with white, blue and green glazed-tiles. Turquoise blue predominates in the colour scheme of this tomb, hence our preference to call it the *Nilā-Gumbad*.

Each side has ornamental arches marked in plaster, which too had been originally glazed-tiled. Glazed-tile work is mostly intact on the northern facade. Tiles are in green, blue, yellow and white colours. Blue predominates. Designs are geometrical. Interior is a square hall which has been artificially divided into two storeys. All the inner arches have bold stucco medallions bearing arabesque designs. Squinches have been used in the phase of transition. They convert the upper storey (i.e., the terrace) into eight-sided conformation internally through which arched openings, one on each side, are pierced for ventilation. Exteriorly, however, the drum as it is, is cylindrical rather than octagonal. Stalactite takes over at this stage. The soffit of the

single dome has a very beautiful arabesque design exquisitely cut in incised stucco. Blue and deep red colours predominate. Similar in style are the eight tablets around the central design, which appear to hang from the ceiling like colourful chandeliers. Stucco and glazed-tile decoration originally covered the whole of the interior too. Much of this graceful ornament has been, however, destroyed yet enough remains to give an idea of the original magnificence of this small macabre.

The single dome which is of brick, in contradistinction to the rubble sub-structure, rests on a cylindrical drum. The dome and the drum are integral to each other; the dome has come down into the drum and the drum has gone up into the dome. It is this way that the bulbous form of dome later evolved and came into usage. The drum bears white, blue and indigo tiles. Surprisingly, finely dressed red stone bricks have been used on the drum at the point of springing of the dome. They provide a beautiful design and a wonderful colour-contrast at the same time. Dome is entirely covered by blue tiles. Much of this tile-work has peeled off and the brick-skeleton has been exposed to view. A padmakōśa and āmalaka-and-kalāśa finial crown the dome.

There is no tombstone. There is no Persian inscription either, to help us to fix its chronology. Popularly it is ascribed to contain the mortal remains of Fahīm Khān, a servant of 'Abdūr-Raḥīm Khān-i-Khānān, who died during Jehangir's reign. This seems to be a misnomer. There is no documentary or epigraphical record to support this view. The whole area was once covered with such gumbads, as to some extent it is at present also, and it seems that the epitaph-tablet or inscribed tombstone of Fahīm Khān's tomb was recovered somewhere in its neighbourhood and this tomb was illogically connected to him. Its single dome, incised stucco and glazed-tile decoration and absence of stone work show that it is a much earlier tomb than the age of Jehangir. Stylistically, it can be assigned to c. 1560.

(c) *Subz-Burj and the Bulbous Dome*

It is situated at the crossing of the Mathura Road and the Lodi Road, with the tomb of Humayun on its east and the Dargah of Haḍrat Nizāmu'd-Dīn Auliā on its south-west side. It has an octagonalised-square (aṣṭakoṇika-chaturāsra अष्टकोणिक चतुरास्र) plan (Fig. 29). Mainly, it is a rubble-and-plaster construction. Portals on all the four sides give entrance through oblong lintel doorways which have a similar opening

over them, one in each case (Plate CXLV). All sides are open and,

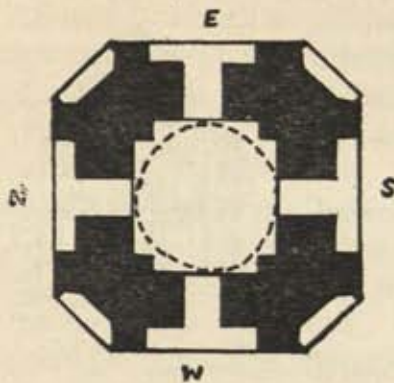


Fig. 29. Plan, Subz-Burj, Delhi (c. 1560).

like other tombs of this class, there is no mihrab on the western side. It seems that the sultan of Delhi incorporated a mihrab in his tomb to bestow upon it the sanctity of the masjid so that his sepulchre may not be desecrated by his political antagonists after his death. But the conditions settled around 1560 and the builders of the tombs of the Grand Necropolis did not consider it necessary to provide a mihrab on the western side of their tomb to appropriate part of the sanctity of the masjid.

Three corner-alcoves have a semi-octagonal plan, the one on the north-east angle is rectangular. The semi-soffits of these alcoves have beautiful incised stucco work, in geometrical design, in deep red and white colours inlaid with black slate (Plate CXLVI). Inlay in stucco is an unprecedented phenomenon of art. All this gives an exceptionally exquisite effect.

The interior is a square hall. Squinches have been used in the phase of transition to support a high, bulbous double-dome. The internal decoration has been destroyed but traces of stucco and painting have remained.

The plaster surface of the exterior of the sub-structure is generally plain at present. The dome over it appears to rest on an exceptionally high cylindrical drum but, in fact, there is no such feature as drum and it is only the lower part of the dome itself which looks like drum. Drum (base or neck) essentially belongs to the sub-structure upon which dome rests as a gem reposes in its casket. Here it is a unitary composition which is hollow inside, that is, there is space between the inner shell (which roofs the hall below) and the outer shell, made up of eight ribs inside (which proclaims the monuments from afar) (Fig. 30).

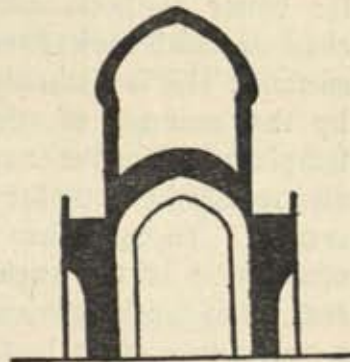


Fig. 30. Rough Cross Section, Subz-Burj, Delhi.

The load of the whole dome is uniformly passed down to the piers of the mortuary hall which, by the chamfering of the angles, are adequately reinforced. This was a device to meet the lateral thrust uniformly. The dome is entirely covered by blue and green glazed-tiles,

which have given it the present name: Subz-Burj (Green Tower). It is noteworthy that even the people did not fail to be impressed by its elevation which is emphatic and, indeed unmistakable (Fig. 31), and named it 'Subz-Burj' (technically Green Tower) instead of 'Subz-Gumbad' (Green Tomb).

There is no epigraph and no other historical record. It seems to have been built a little earlier than the tomb of Humayun and, stylistically, it can be assigned to c. 1560 A.D.

This is an extremely important building inasmuch as it is here, for the first time in the history of medieval Indian art that two features appeared in perfectly developed state, viz. (i) the octagonalised-square plan and (ii) the high bulbous (so-called 'Tartar') dome.

The plan gradually evolved from the square to the octagonalised-square by way of 'chamfering' or 'recessing' the angles, i.e., by elimination of the corners. Total elevation of the building including the form of the dome, which with the passage of time became a double-dome, determined the development of the plan from square to octagonalised-square. The architect was confronted with two basic problems in this respect, viz. (i) how best to manipulate the load and (ii) how best to give the architectural effect. The recessed angles, on account of changed courses of masonry and direction, provided a sort of buttresses and reinforced the piers and at the same time they gave far better aesthetic effect than an altogether flat facade due to the *shadows* which took over at the corners, and provided ornamental surfaces. This is distinctly revealed by the example of the Hindu temple wherein the angles were also recessed exactly for these two reasons. Though the mode of elimination of the angles is different, the principle essentially remains the same in both these cases (see Fig. 32 for a comparison). It is noteworthy that square tomb of the Sultanate period is strictly square without any attempt to recess or chamfer the angles. The Mughals adopted the square plan, and not the octagonal plan, as the tombs of the Grand Necropolis testify.⁸

It is only about this time that the architect took over the problem and worked out a happy solution. Initially, it was a simple chamfering



Fig. 31. Subz-Burj, Elevation.

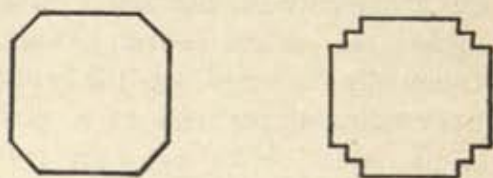


Fig. 32. Treatment of angles in the Hindu Temple and early Mughal Tomb.

of angles but gradually, with the acquisition of experience of handling the load, the architect developed it to an octagonalised-square plan. It is a square plan with chamfered angles when each angle-side is less than half of the larger side; it is octagonalised-square plan when the angle-side is more than half of the larger side (see Fig. 33 for comparison). The Subz-Burj provides the first fully developed example of the latter, c. 1560.

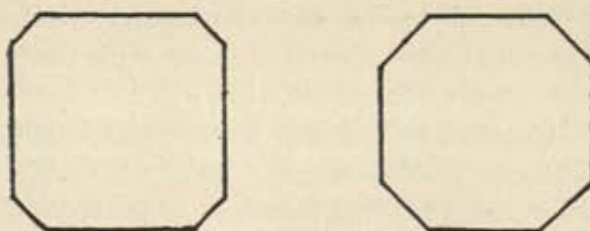


Fig. 33. Square plan with chamfered angles and octagonalised-square plan.

An exactly similar tomb with an octagonalised-square plan, semi-octagonal alcoves at the angles, a square mortuary hall and high bulbous double-dome was built only a little later, c. 1575 at Thattah in Sindh to enshrine the mortal remains of Nawāb Amīr Khalīl Khān.⁹ It is surprising that in plan and design both, the Thattah tomb has closely followed the Delhi example.

As the foregoing account of this class of tombs situated in the Grand Necropolis at Delhi indicates, the octagonalised-square plan evolved indigenously, through experimentation and many stages of trial-and-error, though it is likely that the architect was influenced by some extraneous inspiration during the course of the evolutionary process. In fact, the design and the plan are interdependent and, together, they constitute a single formula of art; it would be worthwhile to trace the original sources of its inspiration.

Dome which is a distinctive characteristic of Muslim architecture—and which, along with the arch, became symbolic of the faith of Islam towards the end of the 9th century A.D.—has a long history of its evolution. It was known in ancient Egypt and was used over small and unimportant buildings like granaries even in the pre-Pyramid ages.¹⁰ It was also in vogue in ancient Chaldaea and Assyria. Layard found a bas-relief in the palace of Sennacherib at Nineveh (705-681 B.C.) which



Fig. 34. Nineveh Bas-Relief (705-681 B.C.).

shows buildings, some with hemispherical shape and some with śikharas (Fig. 34). It was, however, in Persia that dome developed to most magnificent scales and became the most conspicuous feature of its architecture. The earliest notable Persian examples come from the palaces of Firuzabad (c. 224 A.D.) and Sarvistan (c. 350 A.D.). The dome of Firuzabad is 45' (13.72 metres) in diameter and it

has been built on squinches which is an entirely Persian device.¹¹ "By the squinch, which here consists of a series of concentric arches, thrown across the angle, and advancing one over the other, the square is reduced to an octagon, upon which it is easy to set a dome."¹² Squinches were also used along with the semi-domes of the sides which support the central elliptical vault at Sarvistan.¹³

Creswell held the view that the Persian dome developed independently and indigenously¹⁴ and in a variety of denominations. "Persian architects, profiting from the advantages offered by brick showed great ingenuity in erecting widely differing domes. Such is the ribbed dome, of light arches crossing above the space to be covered and supporting counter-arches which fill the intermediary gaps."¹⁵ This was known from the time of the Sassanids.¹⁶

The earliest Muslim dome is there at the Great Mosque at Kum (878 A.D.) which is 80' (24.38 metres) in height. Tomb of Muhammad bin Musa (976) also at Kum has a similar hemispherical dome. Dome of the tomb of Sultan Sanjar at Merv (1117-57) has been built on squinches while that of the tomb of Muhammad Khudabanda at Sultanieh (1307) rests on stalactite pendentives. Latter is the largest dome in Persia being 84' (25.60 metres) in diameter and is unique in planning and decoration.

The Persians devised an accurate mathematical formula and soon learnt to construct domes of immensely enduring character. It was found at the tomb of Khudabanda (1307) that, "The interior and exterior elevations were set out in a framework of squares and equilateral triangles, the intersections of which gave all the chief fixed points such as the width and height of the doorway, the level of the upper gallery, height of cornice and so forth, so that the size of every part was related to every other part in some definite proportion..."¹⁷ It was a plan wherein equilateral triangles or the right-angled triangles governed. This shows that the Persians knew fully well the curious mathematical theorem that the weights of the sections of a hemispherical dome are in proportion to their heights.¹⁸

Origin of the Persian dome has been differently defined by the scholars. The central Asian tents have a bulbous conformation and it is probable that the bulbous dome of north-eastern Persia was inspired by these forms. D.T. Rice discussed gumbat, turbe or tomb-tower of the Seljuks in this connection and observed: "These were usually circular in plan, though sometimes there were star-like projections all round and the later examples were sometimes polygonal."¹⁹

Gumbat-i-Qabus in North Persia (1006 A.D.) enshrining the mortal

remains of Emir Shamas-al-Ma'ali Qabus and Gumbat of Mumina Khatun at Nakchevan (1186)²⁰ are exact copies of the conical tents or YURTS of the Seljuks, and Rice traced the origin of the former from the latter.²¹ He did not agree with Diez that these towers were derived from pre-Islamic prototypes and held they may be regarded "as a transformation of the fragile abode of the living into a more lasting accommodation for the dead, set up in a more substantial, more permanent material. The fact that the earliest of these buildings are to be found in northern Persia and the regions closest to transoxiana, where the Seljuks first settled, supports this suggestion."²² It is quite possible that the local forms served as architectural prototypes. But the matter of distinction between a spherical or hemispherical dome on the one hand and a cylindrical or bulbous dome on the other yet remains to be defined.

The theory of the Indian origin of dome, mainly propounded by Gosset, Choisy and Havell, is also extremely interesting. A. Gosset and M.A. Choisy²³ held that the double-domes of Persia were introduced from India. The brick temple of Bhitargaon belonging to the Gupta age (c. 5th century A.D.) has a double-dome device, i.e., its śikhara is hollow inside.²⁴ In other words, the sanctum has an upper cella of equal size just above it which was also constructed on the vault system. It was closed and inaccessible and no function can be assigned to it. Its provision was thus solely guided by aesthetic consideration. The architect gave additional height to the śikhara to make it more imposing. The upper cella gave an adequate ceiling to the lower chamber and, at the same time, gave a grand elevation to the superstructure. The space of the upper cell reduced the weight of the śikhara and also allowed it to rise majestically high above into the sky to the desired height. Without this device the main chamber would not have allowed the superstructure to go up beyond certain limits. The sole purpose of the upper vault was thus to proclaim the monument from afar by giving the superstructure a grand elevation.

Bhitargaon provides the earliest extant example of the use of the technique of the double-dome in India. Other brick temples, e.g., Parauli and Kurari in Uttar Pradesh, and Sirpur and Pujaripali in Madhya Pradesh also have double-dome. A concealed hollow cella was provided above the sanctum also in stone-śikharas on a very large scale and some prominent examples come from the Lingaraja Temple, Bhuvaneswar,²⁵ the temples of Khajuraho and South Indian temples.

It is quite probable that cylindrical or bulbous stupas or śikharas were in usage in Gandhara and the regions contiguous to it, about the

close of the 9th century A.D. Their unmistakable imposing elevation could have worked wonders on the imagination of the people and it is possible that these prototypes were later translated into actual structural bulbous domes in Persia and Central Asia. Choisy's masterful assertion, thus, appears to be plausible and even practicable.

This is something related to the technique of construction. There is another aspect of the same problem related to the appearance of the

dome. The ancient Hindus used spherical superstructure. The domical roof was part of the secular architecture in wood and thatch in ancient India as is depicted on the bas-reliefs of Bharhut (Fig. 35) and Amaravati,²⁶ and on the Sarnath relief of a later age. The commemorative Buddhist dome installed inside the chaitya-halls for worship, e.g., at Ajanta, was also spherical (Fig. 36). The Buddhist stupa had hemispherical (anḍākāra) shape, the most prominent being at Sanchi (Fig. 37). Monolithic stupas, with a hemispherical cupola resting on



Fig. 35. Bharhut Bas-Relief (2nd century B.C.).



Fig. 36. Buddhist Dome, Ajanta (1st century A.D.).

a high broad drum were also commonly used in Buddhist chaitya-halls, e.g., at Bhaja.²⁷ They were cylindrical or bulbous in the region of Gandhara and both these forms were used in the Buddhist art. Though he admitted that the earlier inspiration of the Islamic dome came from the Roman and Byzantine models,²⁸ Havell held that the stupa-dome inspired it later, "The bulbous dome of Muhammedan



Fig. 37. Sanchi Stupa (2nd century B.C.).

Persia is undoubtedly derived from the stupa shrine of the type sculptured in the stupa-houses XIX and XXVI at Ajanta. The principle of its construction by which the outward thrust is counteracted by a system of internal ties in the form of a wheel with eight spokes—the eight-petalled lotus—instead of by external abutments as in the Roman and Byzantine dome is certainly Indian and Buddhist."²⁹ He reiterated the point³⁰ when he refuted Creswell's arguments:³¹ "The miniature stupa domes at Ajanta exhibit the same constructive principle, though they themselves are only a sculptor's representation of real structural domes, with a bamboo or wooden framework, which were probably

built in thousands by Buddhist temple craftsmen of the same and earlier periods, not only in India, but wherever Buddhism was planted in Asia. If it be granted that these Ajanta domes are not mere fanciful creations of a sculptor's imagination, like the decorative motifs of the Italian Renaissance, but exact representations of contemporary buildings—a proposition which can hardly be disputed—it follows that the original domes must have been hollow structural one, built in the first instance upon a bamboo or wooden framework, for it is a physical impossibility to place a solid dome of brick, stone, plaster or wood and of a similar design, over a life-size image. The only question to be decided, then, is by what method such hollow domes of large size could have been made structurally possible? Certainly bent bamboo ribs must have been used originally to produce the characteristic curve of the dome, just as they were used to form the lotus-leaf arch, or window of early Buddhist buildings, and are used in the roofing of modern Indian cottages. The use of radiating wooden or bamboo ties, like the spokes of wheel, is suggested in several of the earliest Indian stupas, e.g., the ancient Jaina stupa found near Mathura: They would have been a necessary means of producing stability in bamboo or wooden structures of this kind, and the symbolism is peculiarly appropriate for a Buddhist shrine. An inner dome, such as is used in Persia at the present day, to serve as a support for the wheel and for the king-post to which the ribs of the dome were attached at the crown, is a natural development of the same structural principle. But that *Persia borrowed the lotus dome from India is certain, for bent bamboo in roof-construction is peculiarly an Indian method.* Its application to domes is clearly indicated in the domed canopy shown on the Sanchi gateway which is the prototype of the so-called Dravidian temple dome and also of the Ajanta stupa-domes. The appropriate name, 'Lotus-Dome', is not my invention: it was given to it by Indian craftsmen who worshipped the rising sun as the mystic world lotus and carved its petals at the neck (*grīvā*) and crown (*mahā-padma*) of the dome. The Indian lotus dome is the technical modification of the primitive hemispherical dome of Mesopotamia, due to the use of bamboo and thatch instead of clay in the forest āśramas. In the same way the curvilinear śikhara is the technical modification of the conical hut of Mesopotamia and Persian villages. In both cases the forms were fully developed constructively in India many centuries before Indian craftsmen were pressed into the service of Islam and applied the same principle to the roofing of mosques in Arabia and Persia, and eventually to mosques in India." Though there is much substance in Havell's argument, his assumption that the

monolithic dome later became structural³² is not supported by archaeological evidence. These Indian domed forms, depicted on bas-reliefs, could also have been inspired by domed village hut or round straw-cover, viz. *Biṭaurā* (बिटौर) either of which has remained unchanged for nearly five thousand years and is essentially a primitive thing, made of impermanent material. As far as the available data is concerned, a dome of spherical conformation, supported on vaults or squinches, or stalactite or any other arcuate device was never constructed in India prior to the advent of Islam³³ and it remained primarily and essentially either monolithic or ornamental, having a spherical appearance but actually constructed on the trabeate system. The question, however, remains undecided and Havell's strong conviction as also Choisy's assertion can be re-examined on the discovery of new archaeological material any time in future. Truth, at least in such matters which deal with the silent travel of art-inspirations from one country to the other in a hoary past, is never conclusive.

The point may be scrutinised in terms of the temple *śikhara*s. In Northern India, the *śikhara* evolved on the vertical section developing a curvilinear form in which the horizontal courses slowly and gradually converged towards the central point and culminated in the *stupikā* and the *kalaśa*. *Śikhara* in the South, on the other hand, consistently preserved the horizontal lines and it is there that the domical roof has been employed prominently.³⁴ Dharmaraja Ratha, Mamallapuram (625-45) (Fig. 38), Malegitti Temple, Badami (625), Virupaksa Temple, Pattadakal (740), Kailāśa Temple, Ellora (8th century), Kailāśanātha Temple, Coonjeeveram (c. 700), Shore Temple, Mamallapuram (c. 700), Vaikuntha Perumal Temple, Coonjeeveram (710-20) (Fig. 39) and Brhadeśvara Temple, Tanjore (1000) (Fig. 40) provide some of the most notable examples in this respect. It may again be emphasized that they are domical in appearance only; structurally they were built on the trabeate system.³⁵

Thus, as it appears, the primitive local forms afforded the source



Fig. 38. Dharmaraja Ratha, Mamallapuram (625-45).

of inspiration of the spherical superstructure in India and also under similar conditions in Persia. Havell was probably more to the point



Fig. 39. Vaikuntha Perumal Temple, Coonjeeveram (710-20).

when he noted: "Stone built temple spires in Northern India are sometimes conical in shape, closely resembling the conical mud huts of villages in Mesopotamia at the present day. Huts of this description are sculptured on one of the reliefs of Sennacharib's Palace at Nineveh discovered by Layard. I have suggested that the Indo-Aryans may have used such a hut in the Vedic fire ritual, a tall conical hut with vents at the top being obviously the most practical especially in the rainy season, for sacrificial ritual in which fire plays the principal part."²⁶

The double-dome, of slightly bulbous conformation, having an inner space between the ceiling of the hall below and the external surface of the dome above, seems to have developed in Persia and the region contiguous to it, independently and indigenously. It first appeared towards the end of Timur's (Tamerlane's) reign. While the domes of the *Shah-i-Zindah* are single, the dome of the tomb of his wife Bibi Khanum (1399-1403) and that of his own tomb *Gur-i-Mir* are "double-domes with slightly swelling outline, a type of dome which henceforth became a common feature in Persian architecture".²⁷ Some later prominent examples come from the Mosque of Gawhar Shad, wife of Shah Rukh (1418) at Mashhad, the Blue Mosque at Tabriz built by Jahan Shah (1437-68) and the tomb of Sultan Husain Mirza at Herat (1487-1506).²⁸

Inspiration of the double-dome of swelling outline, according to Creswell, came from the Great Umayyid Mosque of Khalif al-Walid at Damascus (705-13) which was double and of wood in Timur's time.²⁹



Fig. 40. Brihadeshvara Temple, Tanjore (1000).

This was intact in 1184 when Ibn Jubair visited Damascus. He has left a graphic description of the dome which he saw and particularly noted: "From whatever quarter you approach the city you see this dome, high above all else, as though suspended in the air."⁴⁰ This was attested by Ibn Baṭūṭah who passed through Damascus in 1326. It was probably for the sake of this external effect that this form was devised and became popular elsewhere. Timur sacked Damascus in 1400 and he must have noticed the dome of its mosque. Impressed by the imposing form of this wooden dome he copied it in brick at the tomb of his wife and that of his own, the latter having 64 ribs in comparison to 48 of its prototype. The inspiration travelled from Samarqand to Mashhad, Tabriz and Herat. "In the 16th and 17th centuries we find the double-dome with slightly swelling outline in general use for all important buildings",⁴¹ so much so that it became a popular motif in the hands of the Persian painters. The *Haft-Paika* ms. dated 941/1534 preserved in the National Library, Calcutta, for example, contains illustrations of a high bulbous dome of exactly the same shape.⁴²

The first attempt during the Delhi Sultanate period to build a dome on arcuate system was made at the tomb of Iltutmish at Delhi (c. 1236). Probably it was a conical dome and it did not rise to an adequate height to be in proportion to the span of the hall it covered and consequently it fell. The dome of the 'Alā'i-Darwāzah at Qutub is the first successful example of this period. It has a single hemispherical dome, built with the help of squinches at the corners. However, the dome looks to be shallow in proportion to the building it superimposes. The architect of the tomb of Ghiyāthu'd-Dīn Tughluq Shāh was conscious of this weakness of the dome of the 'Alā'i-Darwāzah and, consequently, he raised his dome higher in the spherical formation, culminating in the kalāśa finial. Gradually the architect learnt that overall impression of a building depends largely on the elevation of the dome and his desire to raise the dome higher and higher is distinctly perceptible. The formal base of the dome also rose and became a full-fledged drum, mostly of a polygonal plan. The dome became a grand, imposing superstructure of spherical conformation resting on a high ornamental drum in the 15th century. The *Shish-Gumbad* situated in the Lodi-Gardens provides an illustrative example.

The dome was the determining factor in the aesthetic effect of an octagonal tomb, more than the square one, and the architect, strengthened by the fact that the octagonal plan of the tomb facilitated the construction of the dome there being no problem of the phase of transition, still raised it higher. The tomb of Sikandar Lodi has a lofty

dome which is almost as high above the parapet as is the substructure below it.⁴³ Though broad and massive, and of the single type, it crowns the tomb impressively. The architect of Sher Shah went a step further in this direction. It is the superstructure of the tomb of Hasan Khan Sur (father of Sher Shah) at Sasaram which dominates his conception. It is composed of an ornamental parapet with three cupolas over each octagonal side. The drum is raised almost to the height of an independent storey and on its each corner rests a beautiful chhatra. Above this cluster of marvellous details, rises the extremely broad and massive dome crowned by a stupendous finial. It is noteworthy that though a single dome it occupies two-thirds of the total height of the building! This illustrates that age of functional architecture had long passed by, and the architect was now more devoted to the aesthetic aspect of his production. Two weaknesses of this tomb, viz., lack of setting and lack of coherence and harmony in details were removed at the tomb of Sher Shah. It is set amidst a lake, on a plinth which rises direct from water through steps, having chhatris on all of its four corners. Details have been marvellously refined. Chhatris are used at the corners of the terrace, as well as on the fully raised drum which altogether encircle the heavy, broad, massive, single dome with an impression of grandiose and magnificence, unexcelled by any other example of its class.

These octagonal tombs have octagonal dome-chamber, i.e., the mortuary-hall inside, and are covered by a single dome. Creswell thought that purpose of the use of octagonal dome-chamber was to facilitate superimposition: "As for the *raison d'être* of the octagonal dome-chamber itself, I consider it to be chiefly the fact that by it the problem of the pendentive—the great problem in the evolution of domical construction—was avoided, the octagon being such a close approximation to a circle that the setting of a dome upon it offers no difficulty."⁴⁴ It appears strange that dome-chamber of the tombs of this phase situated at the *Grand Necropolis*—whether square, square with chamfered angles or octagonalised-square—is square.⁴⁵ This shows the merit of Creswell's hypothesis which is correct only so far as the single dome was concerned. The double-dome tremendously facilitated superimposition as the inner shell could be worked out only in relation to the hall below which it roofed, without having anything to do with its external surface, while the outer shell had nothing to do with the dome-chamber and it could rise to as great a height as the architect desired. This was an ideal bifurcation of two functions which the single dome fulfilled alone, almost always awkwardly! Hence, except at the

tomb of Humayun, there was no attempt of the architect to use an octagonal dome-chamber as a matter of compulsion, and his preference was for a square interior, as its corner abutments at 90° were far more useful in counteracting the lateral thrusts than the 135° angles of octagonal mortuary hall.

Humayun was greatly impressed by Persian culture and art during his stay in Persia where he spent most of his time in such pursuits. "In Khurasan His Majesty visited all the gardens and the flower-gardens, and the splendid buildings put up by Sultan Husain Mirza and the grand structures of old days."¹⁶ He brought two Persian painters Mir Sayyid 'Alī of Tabriz and Maulānā Abdu's-Ṣamad of Shiraz with him. Probably, he also brought a few artisans, particularly a dome-builder (gumbad-saaz) with him. It is significant that the bulbous double-dome appeared at Delhi *only after Humayun's return to India*, i.e., after 1555 and there is not a single example before it. This shows that it was mainly the Persian inspiration which was responsible for the appearance of high, bulbous, double-dome at Delhi, e.g., at *Subz-Burj* and almost contemporarily at the tomb of Humayun. The former's dome of a bulbous shape with slightly pointed apex, resting on a cylindrical drum can be compared with the dome of *Gur-i-Mir* (Plate CXLV above and Plate CXLVII) with a large measure of similarity and there is hardly any doubt that the latter in the form it was most popular in Khurasan during the first half of the 16th century, i.e., without the flutes, is the former's prototype. Surprisingly, the glazed-tile designs in both cases, except the calligraphics, too are exactly similar.

References

1. Its Urdu edition was first published in 1847, and the second revised edition appeared in 1854. The present author has translated the 1854 edn. in English, cf. *Monuments of Delhi: A Historical Study* (New Delhi, 1979).
2. Cf. *ASI, Mem.* 47 (Calcutta, 1936).
3. Atagah Khan was husband of Akbar's wet-nurse Jiji Anagah. He served faithfully under Humayun and rose to become Vakīl (Imperial Chancellor) in the reign of Akbar. Adham Khan, son of Maham Anagah, another nurse of Akbar, killed him in 970/1562. This tomb was built by his son Mirza 'Aziz Kokaltash (Koka) in 974/1566-67. Though Atagah Khan was killed at Agra, his tomb was built at Delhi in the Grand Necropolis. Probably this was done in fulfilment of his own desire. 'Aziz Koka himself chose to be buried here and his white marble tomb popularly known as the *Chaunsath Khambha* (Hall of 64

- Pillars) is situated in the neighbourhood; his grave bears the date 1030/1623-24.
4. For details, see *ASI, Mem.* 47, pp. 23-26; Maulvi Zafar Hasan (*ASI, Mem.* 10, p. 31) alludes, on the authority of the ms. *Sairu'l-Manāzil* (folios 46 and 47a) that there also were a large number of verses written inside the tomb presumably on the tiles which have now all disappeared.
 5. *ASI, Mem.* 47, p. 21 and *ASI, Mem.* 10, p. 31.
 6. For a study of the square (vargākāra) tombs of the Sultanate period, see the author's *History of Sultanate Architecture*, op. cit., pp. 76-83.
 7. There is also a *Lal-Gumbad* also called *Rakabwala Gumbad* at Malviya-nagar. It is the tomb of Sheikh Kabiru'd-Din, a disciple of Nasiru'd-Din Chirāgh-i-Dehlī. It was built in 800/1397, cf. *History of Sultanate Architecture*, op. cit., p. 77.
 8. Of the octagonal type, there is a Mughal tomb at Delhi, viz., the Tomb of Adham Khan situated at the Qutub which belongs to this phase. Adham Khan who assassinated Atagah Khan was killed by Akbar's order in 969/1562. His body was brought to Delhi and buried in this tomb which seems to have been built c. 1565. It has an octagonal plan and an octagonal mortuary hall which is open on all sides. The massive broad dome rests on a sixteen-sided drum. There are three storeys in all; the middle one inside the thickness of walls provides a network of rooms, passages, corridors and stairways, which is now called Bhool-Bhulaiyan (भूल-भुलैया, maze). Essentially it belongs to the class of aṣṭabhuja tombs of the Delhi Sultanate period. This is the isolated Mughal tomb of the octagonal type built during this phase at Delhi.
 9. Henry Cousens, *The Antiquities of Sind, ASI, NIS*, Vol. XLVI (Calcutta, 1929), Plate XXXVI and pp. 116-17.
 10. K.A.C. Creswell, 'The History and Evolution of the Dome in Persia', *IA*, Vol. XLIV (1915), p. 133.
 11. *Ibid.*, p. 135.
 12. *Ibid.*, p. 135.
 13. *Ibid.*, p. 137.
 14. *Ibid.*, p. 139.
 15. G. Marcais, *The Encyclopaedia of Islam*, Vol. I (1960), p. 1229.
 16. A Godard, *Voutes iranniennes, Athar-e-Iran* (1949), cf. *ibid.*, p. 1229.
 17. Creswell, p. 142.
 18. *Ibid.*, p. 141. Hence Fergusson's famous dictum, "The dome is itself so perfect as a constructive expedient, that it is almost as difficult to build a dome that will fall as it is to build a vault that will stand" (*History of Indian and Eastern Architecture*, Vol. II, Delhi, 1967, p. 276). He explained the theory of its construction in detail, cf. *ibid.*, pp. 276-77, which is, in fact, too technical for a student of history. Creswell also refers to E.B. Denison's paper, *The Mathematical Theory of Domes*, read before the Royal Institute of British Architects, in which the author found pointed domes considerably superior to hemispherical ones.
 19. Cf. *Islamic Art* (London, 1965), pp. 60-63.
 20. *Ibid.*, Figs. 58, 59 and pp. 60-63.
 21. *Ibid.*, Fig. 60 shows an engraving of a drawing made in Central Asia by Friar Rubruquis in 1253 depicting a typical Mongol tent of identical conformation.
 22. *Ibid.*, p. 63.
 23. *Les Cupolas d'Orient et d'Occident and Histoire de l'Architecture* (Paris, 1889) respectively, cf. Creswell, *IA*, p. 146; also see H. Saladin, *Manuel d'Art Mussulman*, Vol. I (*L'Architecture*) (Paris, 1907), p. 360, fn. 1.

- Choisy affirmed that these bulbous cupolas can be attributed to Indian origin.
24. See this author's monograph on the Brick Temple of Bhitargaon, *MARG*, Vol. XXII, No. 2 (March 1969), pp. 28-31.
 25. "These internal spaces have no part in the effect or symbolism of the Prāsāda; they are technical devices for lessening the weight of the superstructure", cf. Stella Kramrisch, *The Hindu Temple*, Vol. I (Calcutta, 1946), p. 148.
 26. A.K. Coomaraswamy, *History of Indian and Indonesian Art* (Delhi, 1972), Figs. 43, 136, 145 and 146. "Globular Stupa dome form was not confined to solid monuments or miniature votive dagabas, but was also a common feature of the open structural shrines, as represented at Bharhut, Amaravati and Ajanta", cf. A.K. Coomaraswamy, *The Arts and Crafts of India and Ceylon* (London, 1913), p. 109.
 27. E.B. Havell, *A Handbook of Indian Art* (London, 1927), Plate I(B).
 28. *Ibid.*, p. 108.
 29. *Ibid.*, pp. 108-9.
 30. Cf. *ibid.*, pp. 145-47.
 31. See Creswell's paper, *op. cit.*, *IA*.
 32. Cf. *ibid.*, p. 115.
 33. D.N. Shukla is not correct, thus, when he noted that "according to the observation of P.A. Mankad (Introduction to the *Aparājita-prchhā*, p. cxxxv) domes and vaults (the characteristics of the Moghul architecture in the later medieval period) did exist in India in multifarious forms long before the advent of the Mohammedan rulers", cf. *Vāstu-Śāstra*, Vol. I (Lucknow, 1960), p. 365. They could have existed originally in wood and thatch and later translated into solid monolithic or rock-cut domes as Stella Kramrisch (*op. cit.*, p. 183) noted, "Apart from these vaulted roofs there are several types of domes represented in the reliefs mentioned. They belong to the huts of hermits, to chapels or to temples. The Nāga or fire chapel represented in one of the Sanchi reliefs is supported on four posts and has a dome which shows a construction in sections. In this and other examples four or eight spherical triangles are joined with sharp edges. It is seen in other reliefs that round domes were frequent over circular buildings. These various dome shapes were transmuted, as extant examples show, from their leaf covered prototypes (*parṇakūṭa*, *parṇaśālā*) and bamboo frame into brick and stone; they form the solid dome-shape of the small high temple which crowns the South Indian Prāsāda with its pyramidal superstructure."
 34. "The Dravidian temples are clearly distinguished from those of Hindustan by their great towers horizontally divided in terraces and by the form of the roof, either a barrel-roof of the chaitya-hall type, or a globular dome. These roof types are taken over directly from the old Buddhist forms. The dome is usually ribbed, affording clear vestigial evidence of an original construction dependent on the elasticity of bent bamboo; thus the Dravidian and Aryavarta śikharas are actually closely related; the one has developed in height and is differently terminated, the other retains a bulbous form. The Aryavarta dome has never been adapted to secular purposes; but the Dravidian dome, always recognisable by the lotus moulding or calyx beneath and inverted lotus (*Mahā-padma*) above the actual globe, reappears in the Rajput chhatris and is, moreover, the predominating

- element in the design of even such typical Indo-Muhammedan domes as those of the Taj, or the Bijapur tombs . . ." A.K. Coomaraswamy, *The Arts and Crafts of India and Ceylon*, op. cit., pp. 123-24.
35. Regarding the rock-cut architectural domical forms of Bamiyan (Afghanistan), Benjamin Rowland noted that they were "Iconographically and stylistically derived from Greco-Roman and Iranian sources. It may be supposed that all these types existed in now vanished structural buildings in Gandhara. It is likely that these cupolas roofing the sanctuaries and assembly halls at Bamiyan were in addition to their structural function, symbolical embodiments of the sky", cf. *The Art and Architecture of India* (1959), pp. 98-99. He observed in the same reference that the dome "an ancient Near Eastern symbol of the sky covering the earth, was incorporated into the symbolism of the stupa". He refers to two very interesting articles on the subject, viz., Karl Lehmann's 'The Dome of Heaven' in *The Art Bulletin*, XXVII (March 1945) and A.C. Soper's article of the same title published in the same journal of December 1947. Most important in this connection is A.K. Coomaraswamy's monograph: 'Symbolism of the Dome', *IHQ*, Vol. XIV, No. 1 (March 1938).
36. *The Himalayas in Indian Art* (London, 1924), p. 31.
37. Creswell, op. cit., p. 145; "In both these buildings may be seen the earlier type of pointed dome covered over by an outer slightly bulbous shell, a large space being left between", cf. Creswell, 'Indian Domes of Persian Origin', *AR* (*The Asiatic Review*), New Series, Vol. V (1914), p. 478.
38. Creswell, *AR*, p. 478; he also refers to his erudite article on the subject entitled, "On the Origin of the Persian Double Dome" in *The Burlington Magazine* (November-December 1913).
39. Creswell, *IA*, pp. 147-48.
40. Creswell, *AR*, p. 489.
41. Creswell, *IA*, p. 153; Andre Godard, *The Art of Iran* (tr. M. Heron) (London, 1965), p. 298, commented: "Then another feature was invented. Since monumental religious buildings from the Mongol period onwards tended to rise to an enormous height against the blue sky and the interior height of these buildings was not under any compulsion to copy this movement, they conceived the idea of topping large domed halls with two vaults instead of one; the height above ground level of the first was dictated by the interior decoration of the building, while the second outlined the monument in space." He further analysed the spirit of this feature very aptly, "So once again we have reached an important moment in the history of Iranian art, the one which saw the most enormous dome which that country ever reared into the sky, which would for a time ensure the victory of the constructional point of view over the decorative. Only for a time, of course, for as I have previously remarked art in Persia as elsewhere under penalty of stagnating in repetition, monotony and finally the sleep of death must keep on oscillating between the two poles generating its energy—construction and decoration. Movement, this alternating movement is a vital necessity for it . . . a little later under the Safawids, as we shall see, the reaction to this occurred", cf. *ibid.*, p. 308.
42. Klaus Fischer, 'The Half-Paikar Illustrations in a Nizami ms.', *Indo-*

Iranica, Calcutta, Vol. VIII, No. 2 (June 1955), Fig. 1 and 3. It contains seven stories which the King Bahram Gur listened from his seven queens during seven nights in seven domes, each dome bearing a different colour, e.g., black, yellow, green, red, blue, sandal and white. The bulbous dome was in such a popular use that when the miniature-painter wanted to draw a dome, in accordance with the subject-matter of the text, it was the

most prevalent bulbous form of the dome which he did as naturally as anything else.

43. For a study of all these tombs of the Sultanate period, the author's *History of Sultanate Architecture*, op. cit., may be referred to.

44. Cf. *AR*, op. cit., pp. 486-87.

45. See *Appendix I* given at the end of this chapter.

46. *HN*, p. 169.

APPENDIX I

Table showing Architectural Details of the Tombs of the Grand Necropolis, Delhi

Sl. No.	Name of the Tomb	Date (A.D.)	Plan	Plan of the Interior	Environmental Cues	Plinth	Building Material	Schemes of Ornamentation	Superstructure
1.	Gumbad-Atagah Khan	1566-67	Square	Square	Isolated building, no setting or cues	No plinth	Rubble skeleton, red stone and white marble	Stone relief, stucco-painting and glazed-tiling	Double-dome, without chhatris or pinnacles
2.	Lal-Gumbad	c. 1570	Square	Square	Isolated building, no setting or cues	8' high plinth	Red and grey stone, rubble, dome of brick	Plain, only jali-art	Double-dome with chhatris and pinnacles
3.	Gumbad Afsarwala	1566-67	Square with chamfered angles	Square	Stands with a mosque on a large platform, no cues	Plinth of medium height	Rubble and plaster, use of red stone on facade edges etc.	Plain	Double-dome, no chhatris or pinnacles
4.	Nila-Gumbad	c. 1560	Square with chamfered angles	Square	Isolated, no setting or cues	High plinth	Substructure of rubble, only dome is of brick and plaster	Profuse glazed-tiling, some stucco and painting	Single dome, no chhatris or pinnacles

Sl. No.	Name of the Tomb	Date (A.D.)	Plan	Plan of the Interior	Environmental cues	Plinth	Building Material	Schemes of Ornamentation	Superstructure
5.	Subz-Burj	c. 1560	Octagonalised Square	Square	Isolated, no setting or cues	Low plinth	Rubble and plaster	Profuse glazed-tiling, some stucco and painting	High bulbous double-dome, no chhatris or pinnacles
6.	Tomb of Humayun	1560-70	Square with slightly chamfered angles	Octagonal main hall with octagonal chambers at the corners—all water-connected in the manner of a circum-ambulatory	Gorgeous garden-setting on the Char-bagh (Four-quartered) plan with water-channels, ponds, and cascades, magnificent environmental cues	Lower 5' high and upper 20' high plinths	Brick skeleton, red stone and white marble casing	Stone carving, jali-art, stucco and painting etc.	High bulbous double-dome with chhatris and pinnacles
7.	Tomb of Sheikh Muhammad Ghauth at Gwalior	c. 1565	Square with hexagonal towers attached to the corners	Square with a broad verandah on all sides of the mortuary hall	No architectural remains of a garden setting or water-devices are available	Low plinth	Inner skeleton is of brick, otherwise it is mostly local sandstone	Stone-carving, painting and, above all, jali-art	Broad, massive, single dome with square and hexagonal chhatris all around

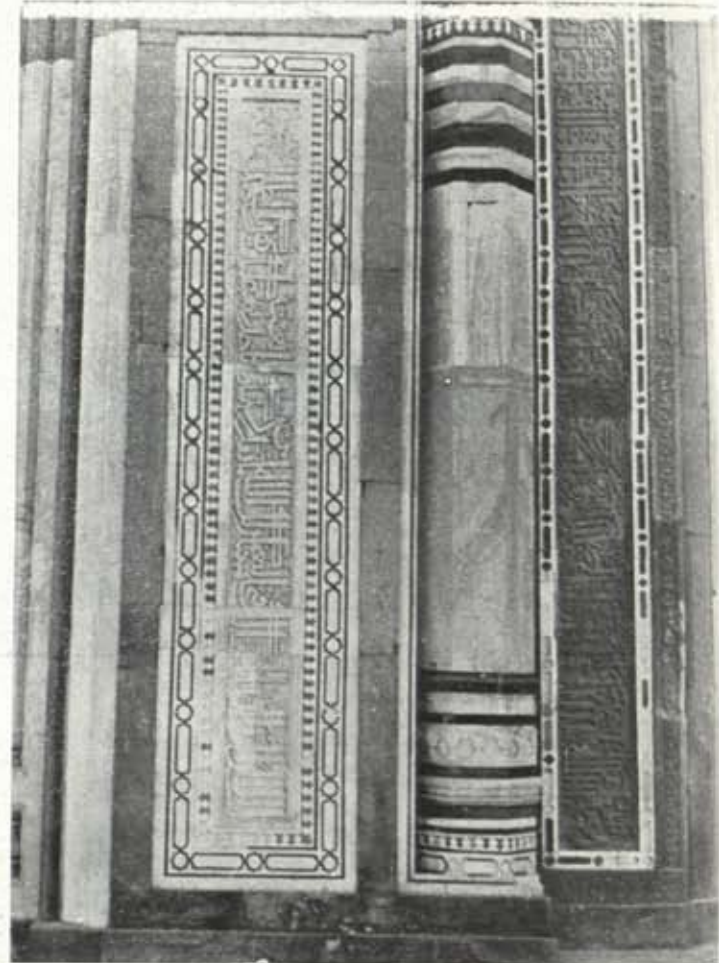
NOTE—Details of the Tomb of Sheikh Muhammad Ghauth at Gwalior which belongs to this phase may also be included in this list.



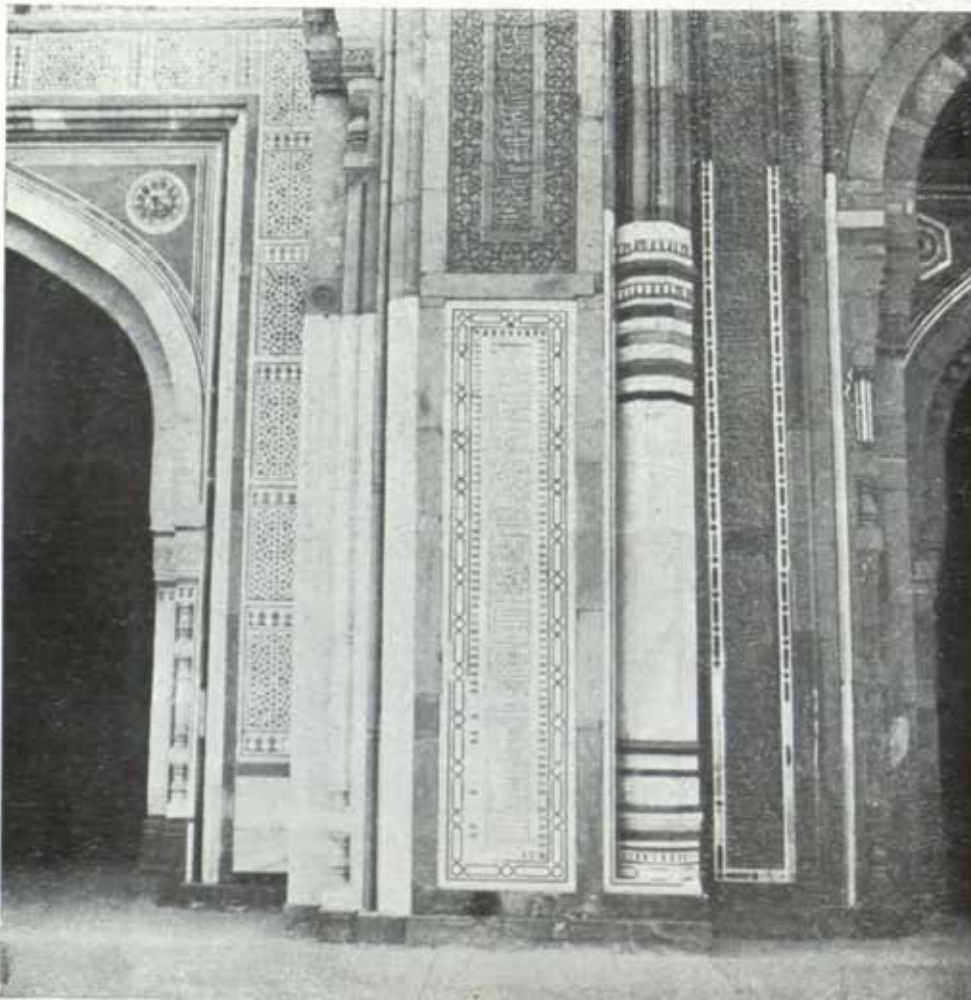
CXXI. Facade

CXXII. Facade



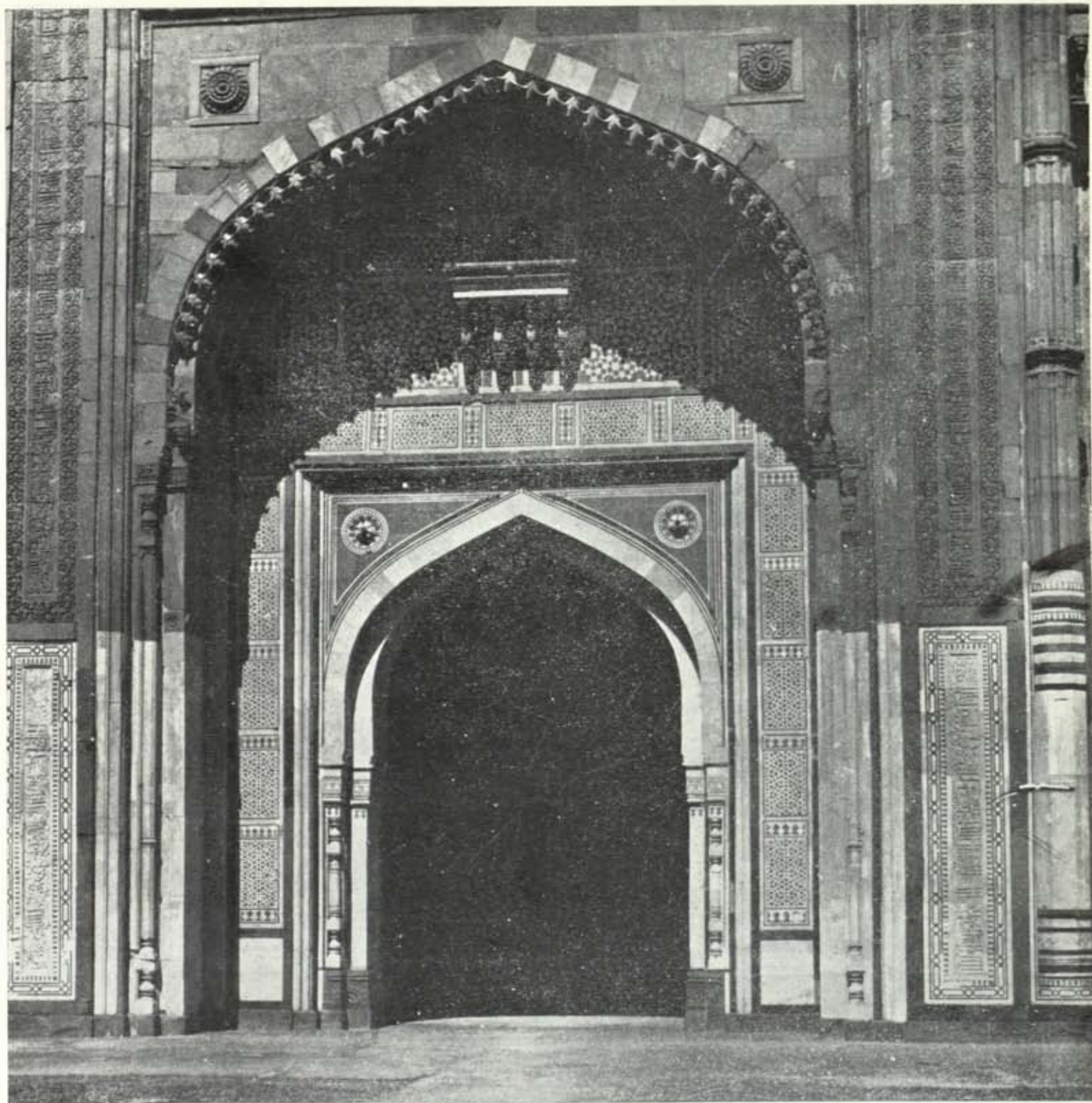


CXXIV. Quranic verses and Mosaic

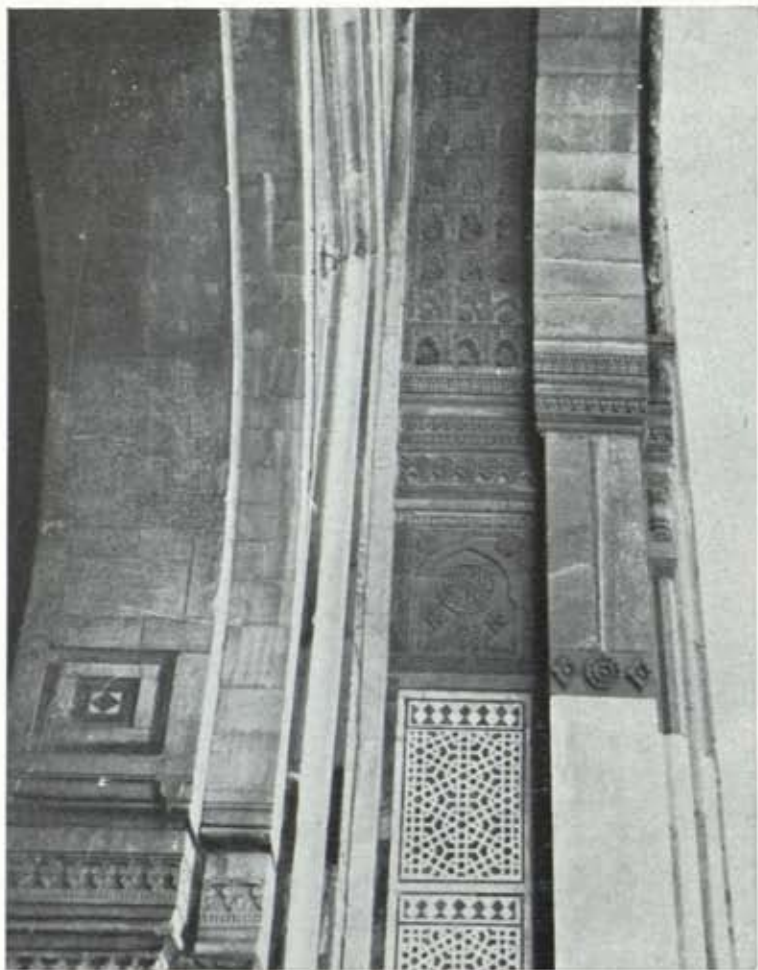


←CXXVI. Inlay of coloured stones

CXXIII. Central Iwan (above left)

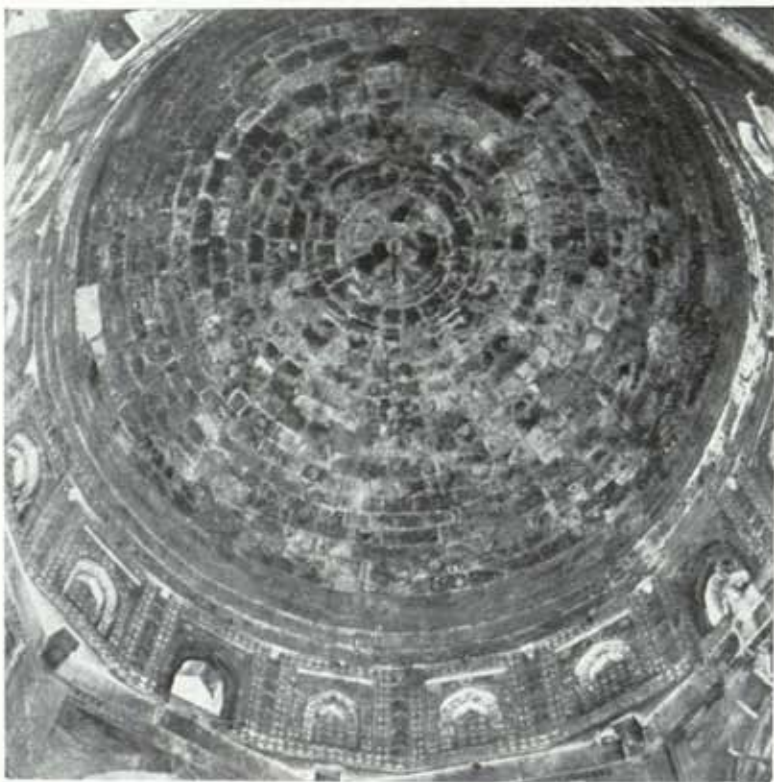


CXXV. Central Archway

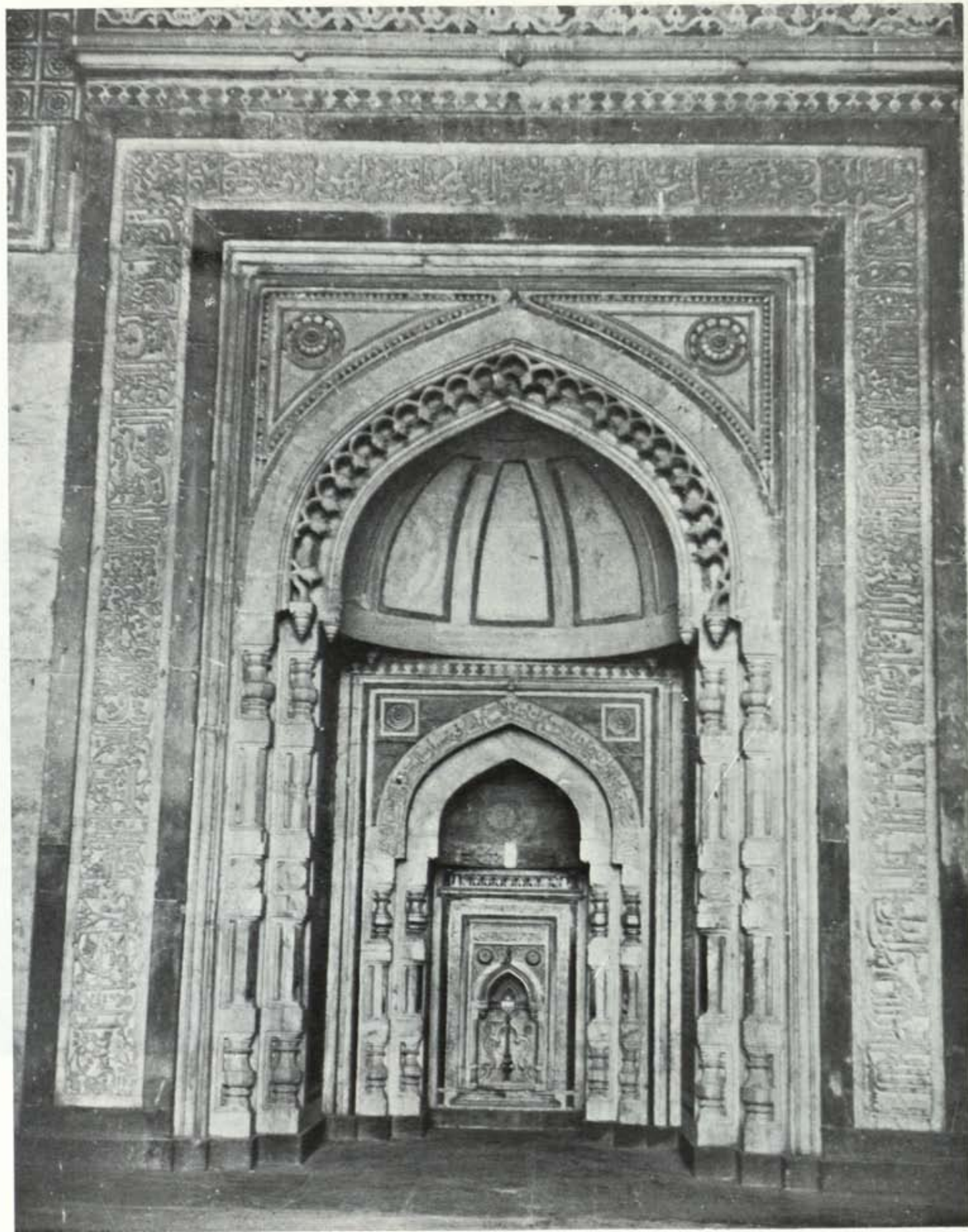


CXXVIII. Squinch in the Nave

← CXXVII. Intrados in the Portal



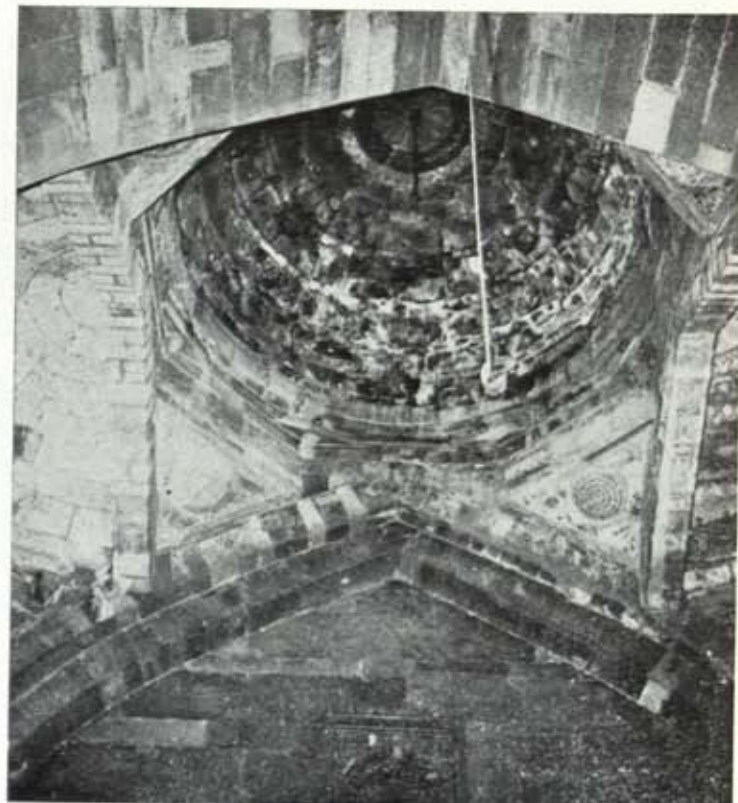
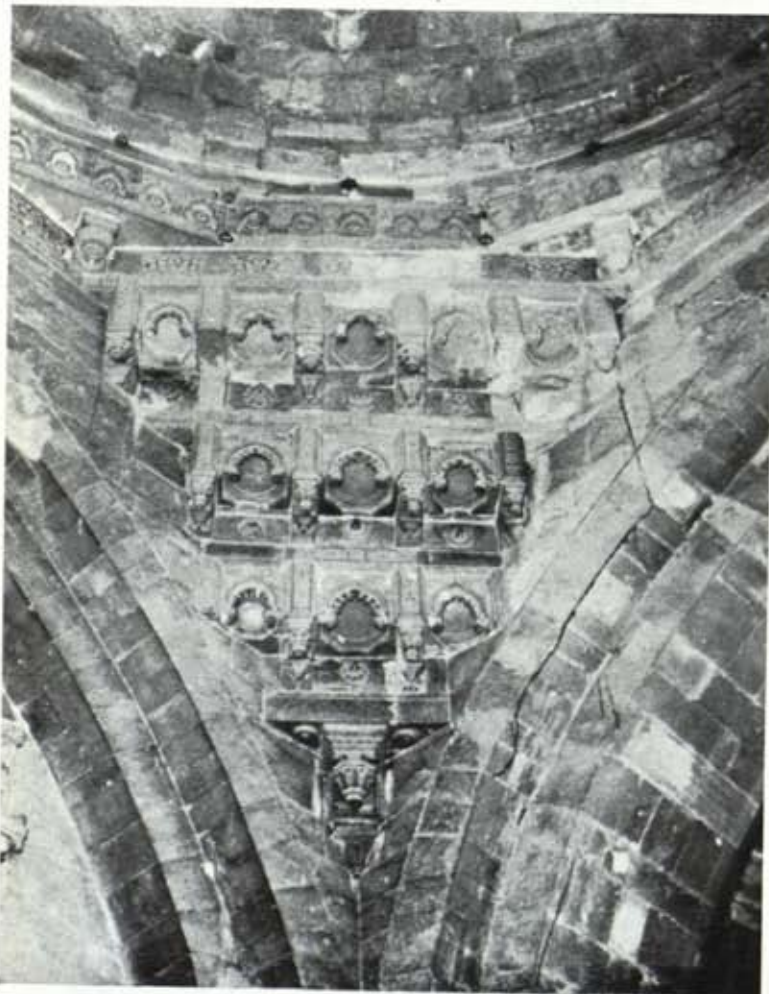
CXXIX. Soffit of the Nave



CXXX. Main Mihrab

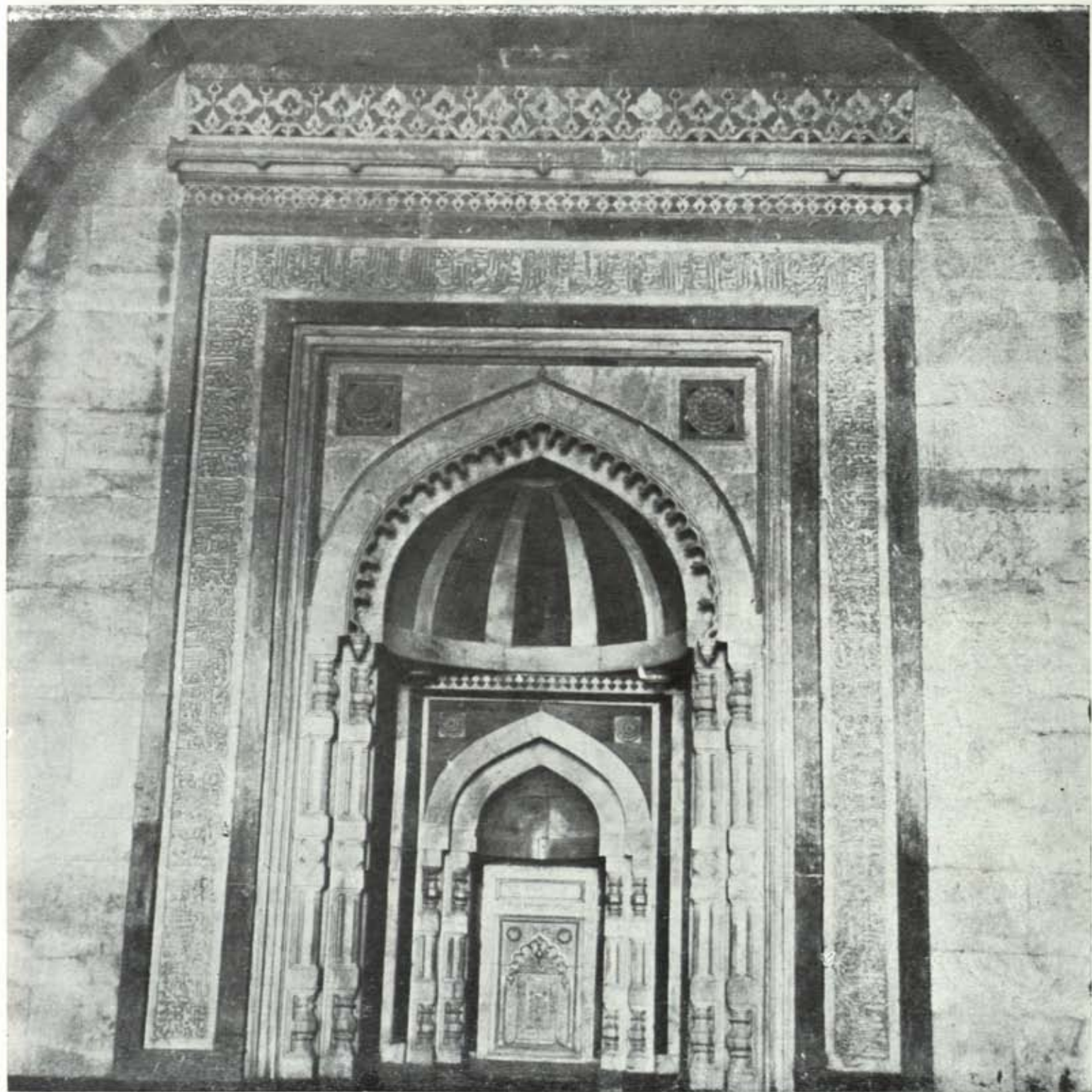


CXXXI. Incised Carving on Pilaster

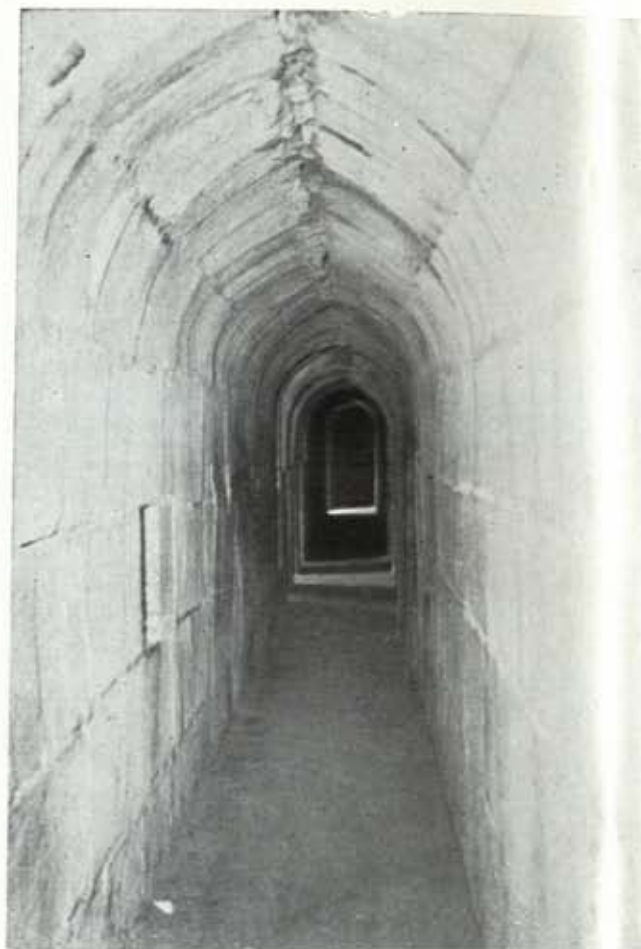


CXXXIV. Arched and Vaulted Ceiling of extreme side halls

← CXXXII. Stalactite Pendentives



CXXXIII. Side Mihrab



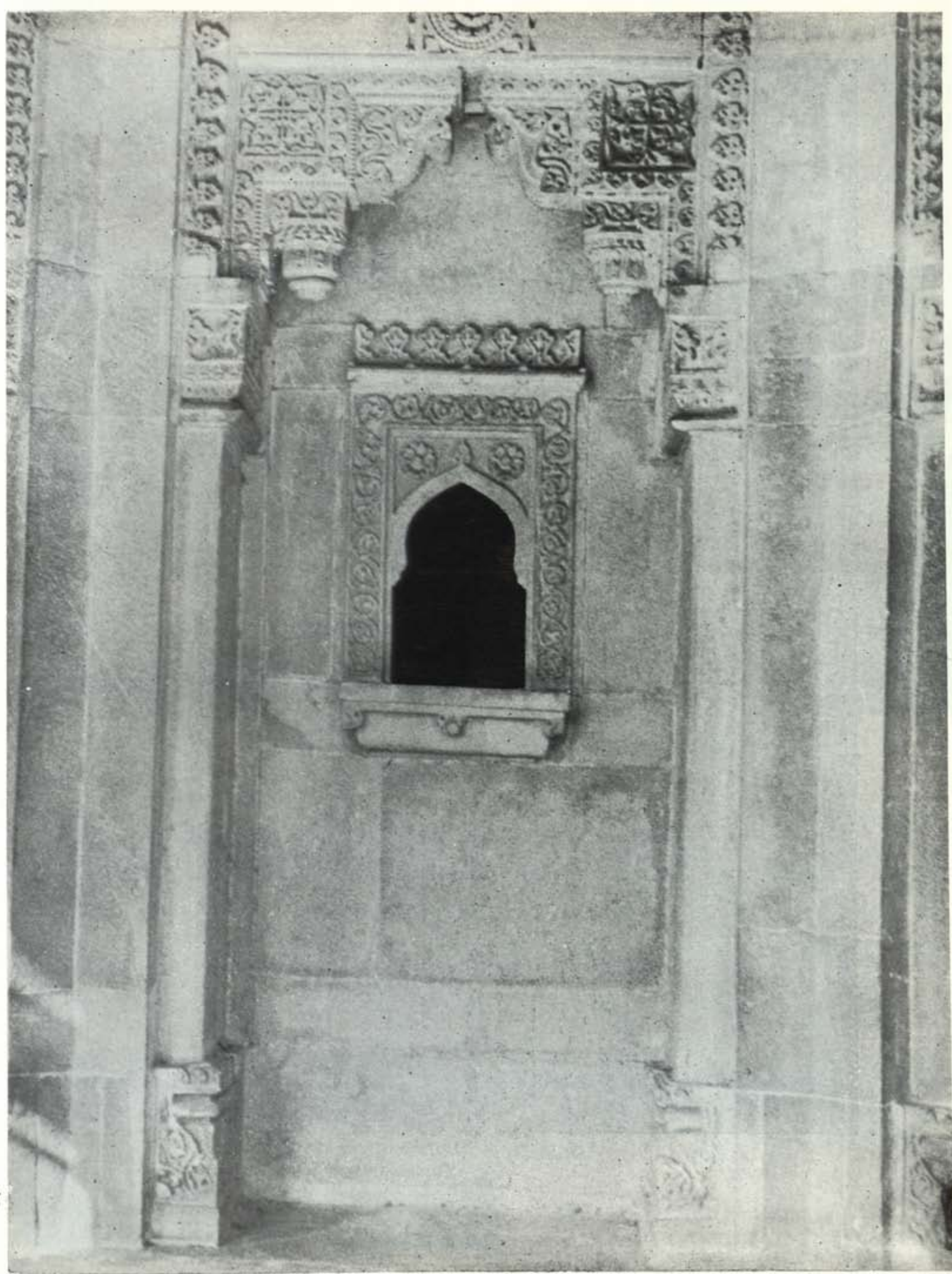
CXXXVI. Through Corridor in the rear wall

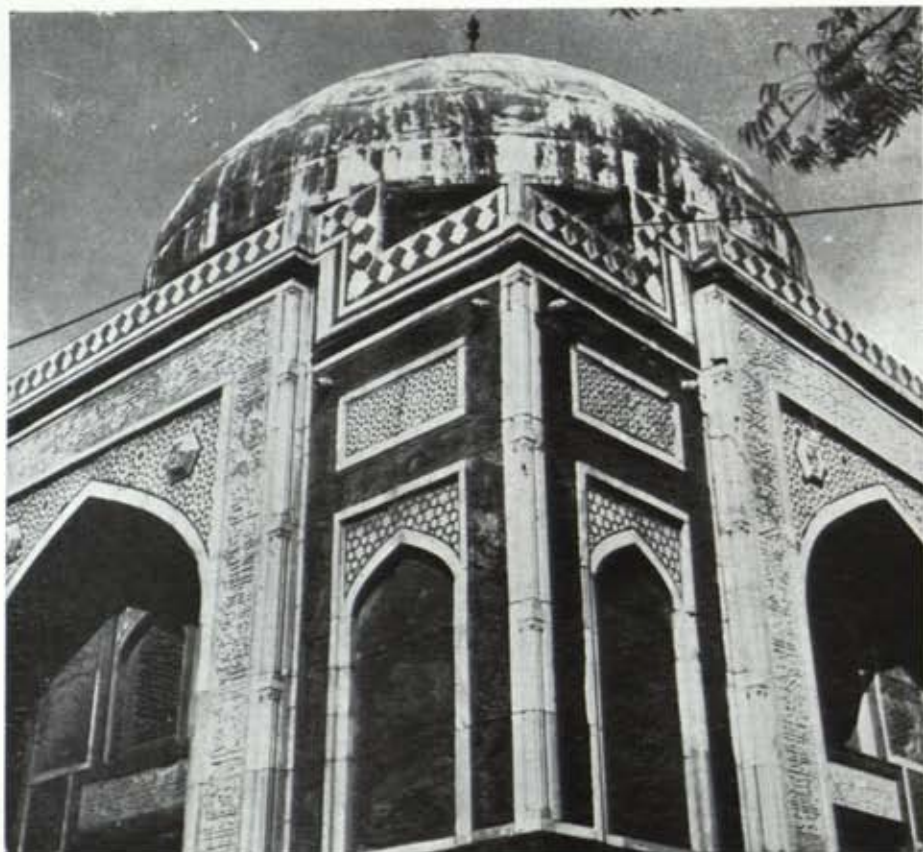


← CXXXVII. Ornamental niches and brackets, Corner Tower

CXXXV. Extreme side Mihrab (above left)

CXXXVIII. Ornamental niches and brackets, Corner Tower

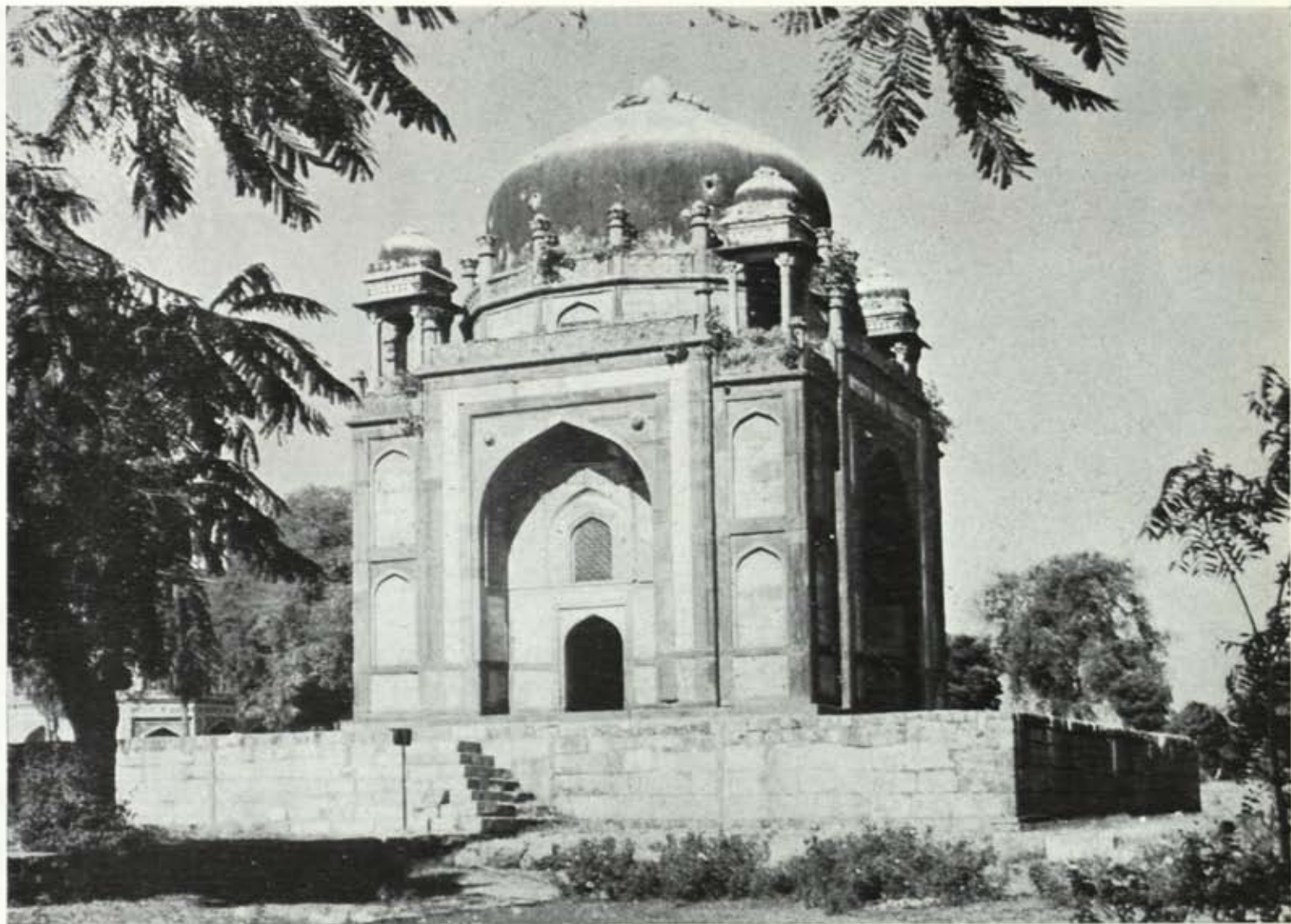




CXXXIX. Tomb of Atagah Khan,
Delhi



CXL. Facade



CXLI. Lal Gumbad, Delhi



← CXLII. Ceiling of the Lal Gumbad



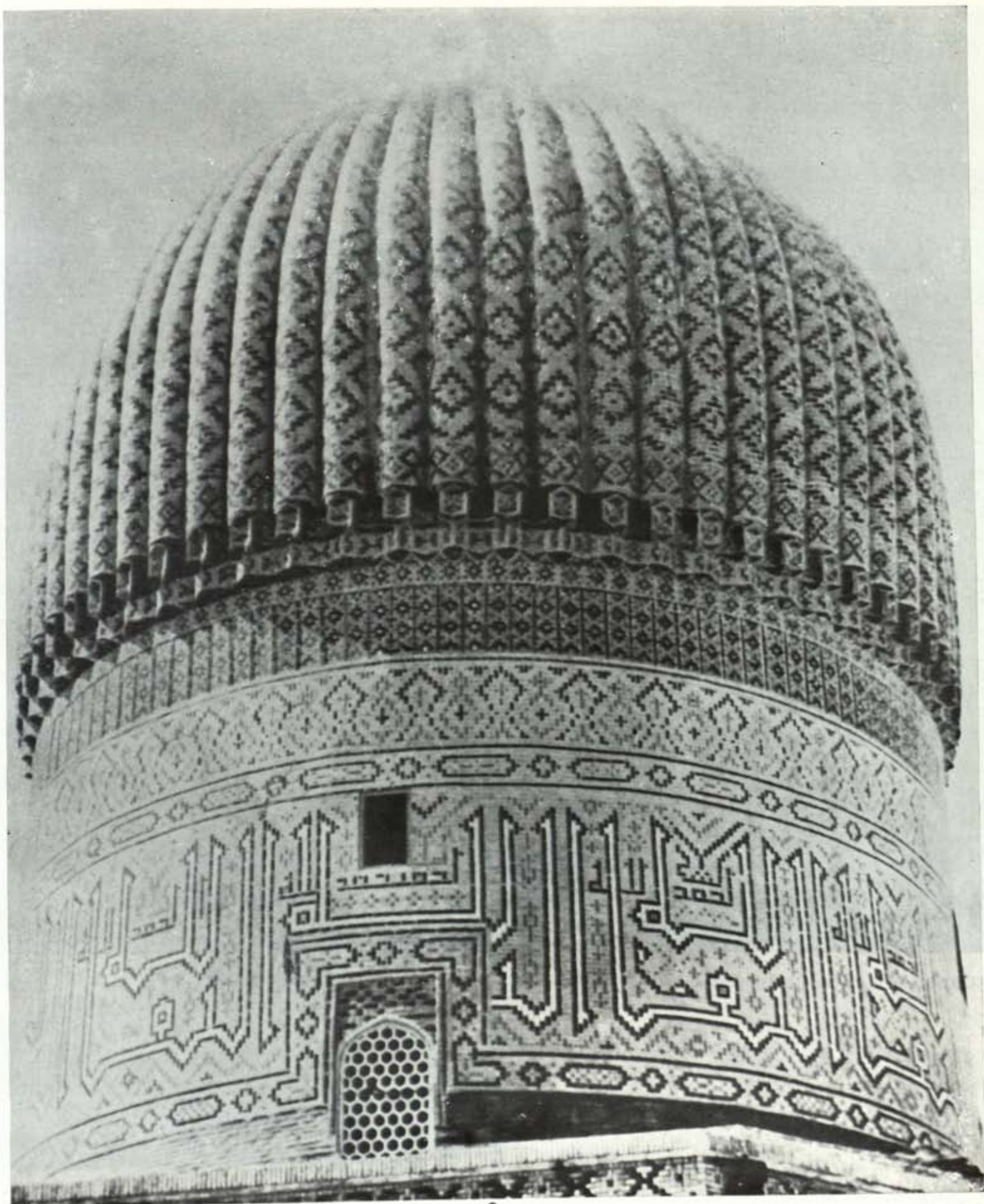
CXLIII. Afsarwala Gumbad, Delhi



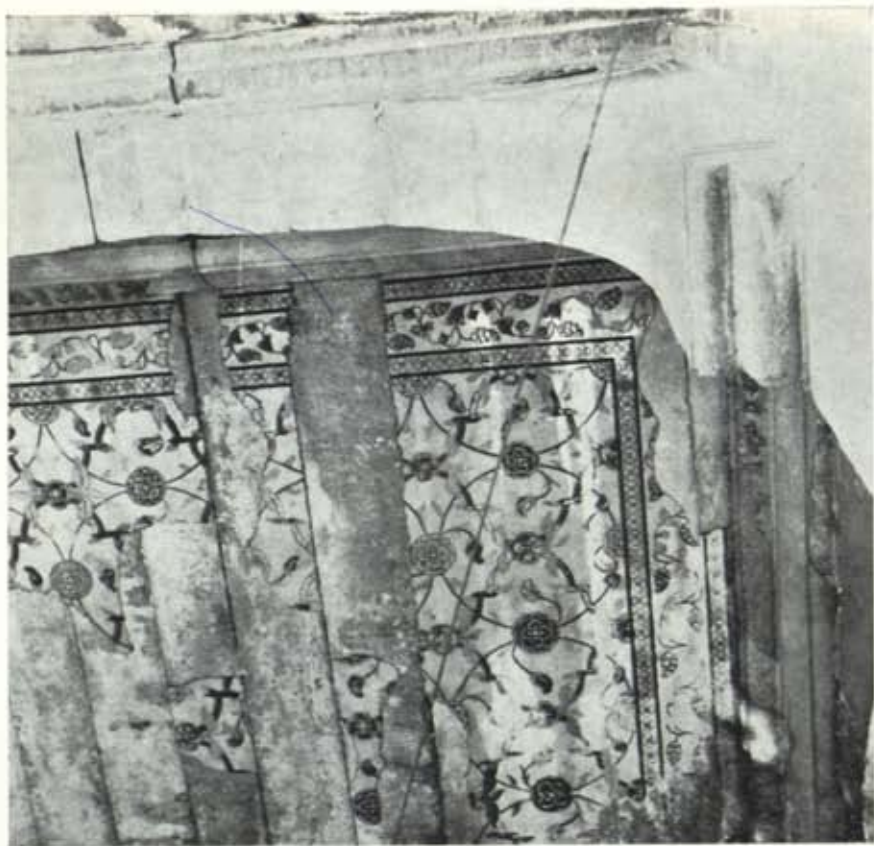
CXLIV. Nila Gumbad, Delhi



CXLV. Subz Burj, Delhi



CXLVI. Corner Alcove, Subz Burj

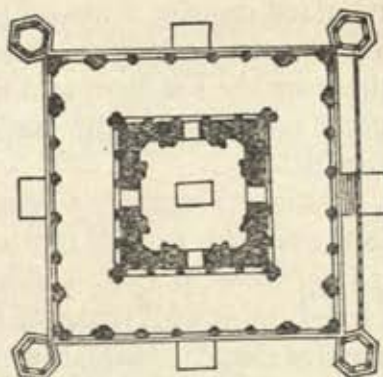


CL. Painting on the ceiling,
Tomb of Muhammad Chauth

CLI. Pillars ↓



TOMB OF SHEIKH MUHAMMAD GHAUTH AT GWALIOR (c. 1565)



THERE is an extremely interesting Mughal tomb at Gwalior which belongs to this phase and also to the class of square tombs, though it is as different from the octagonalised-square tomb of the Grand Necropolis as it is from the typical square tomb of the Sultanate period. It is the tomb of Sheikh Muhammad Ghauth which is situated below the Fort of Gwalior, to its east, at a little distance from the 'Ālamgir-Gate. It is regularly square in plan measuring 100' (30.48 metres) side and it has, instead of chamfered angles, hexagonal, pillared, double-storeyed open towers, crowned by chhatris, attached to its corners (see Fig. 41 for plan and Plate CXLVIII). It is entirely built of local grey, slightly yellowish, sandstone. A square projection, crowned by a square chhatri, has also been attached to the middle of each side of the tomb. The corner hexagonal chhatris, crowning the towers, have cupola roofs while the side square chhatris have pyramidal roofs. These attachments constitute a unique feature of the tomb providing such corners and recesses on each side as are necessary to break the monotony and impart that pleasant play of

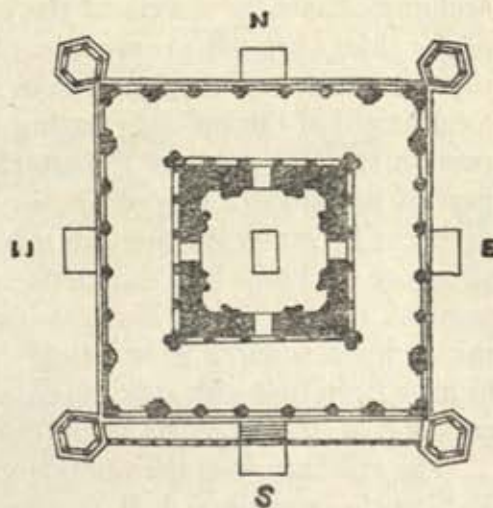


Fig. 41. Plan, Tomb of Muhammad Ghauth, Gwalior (c. 1565).

shadows which was a distinctive characteristic of the Hindu temple architecture.

A broad slanting *chhajja* supported on beautifully carved and moulded massive brackets projects over the arches on all sides. The arches are entirely closed by *jalis* on the northern and eastern sides; those on the southern and western sides are open and *jalis* have been used only up to the dado-height. It seems that these sides were not completed.

Superstructure has been gorgeously worked out. On the terrace just over the central mortuary hall is a high square drum in the upper part of which is again a *chhajja* rotating on all sides and above it a carved frieze with typically Mughal *merlons*. The extremely broad and massive dome, crowned by a small *padmakōṣa*, rests on an octagonal drum over this square platform which has been constructed obviously to give the dome an additional height. Four hexagonal open *chhatris* placed at the corners of the square drum provide the massive dome and its overbearing solid a beautiful and a harmonious setting. Though the single dome is pressed-down and lacks that elevation which under Shah Jehan became an inherent merit of this feature, the entire composition with the dome first surrounded by *chhatris* of the drum in close vicinity and then by *chhatris* of the towers and the sides reacts wonderfully on the aesthetic sense. It now becomes clear that the architect attached towers at the corners and projections at the middle of the sides as much to provide *chhatris* in the composition of the superstructure as to give profiles and recesses to the substructure, the total height of the building having been equally divided between these two parts. This exhibits a masterly manipulation of the skyline on the part of its builder, preceding the skill of the Shahjehanian master-architect by nearly three-quarters of a century. It is essentially this superstructure—a beautiful dome reposing amidst a cluster of *chhatris* like a peacock resting among his hens—which has been imitated on the small square tomb situated in its neighbourhood (Plate CXLIX) which seems to have been built towards the close of this century. The dome and the cupolas of the *chhatris* seem to have been originally glazed-tiled.

The entrance into the tomb is given, as usual, on the south side. The single mortuary hall is square with 43' (13.11 metres) side with squinches at the corners which support the single dome. At present the interior is plastered over and whitewashed, in typical modern bad taste. The painted designs which seem to have originally decorated this hall have been completely obliterated. In the centre of this hall stands the oblong white marble *chhatri* closed on all sides, except the

entrance on the south, by exquisitely chiselled jalis. With a pyramidal roof and pinnacles at the corners, it is a beautiful replica of the 'chhaparkhat'. It contains the tombstone of the Sheikh. All around this mortuary hall rotates an extremely high verandah of 19'-3" (5.87 metres) width. It has a flat ceiling which bears traces of painting in conventional designs (Plate CL). Its 28' (8.53 metres) high pillars and wide open space give an impression of greatness and grandeur (Plate CLI).

The arches are almost semicircular in shape and are entirely filled in by jali-panels on the northern (Plate CLII) and eastern sides. All except a few are geometrical designs which have been tastefully repeated (Plate CLIII). There appear about 100 jali-panels having 20 and odd designs. They precede the exquisite jali-art of Fatehpur Sikri by nearly a decade and that of the Tomb of Akbar at Sikandara (Agra) by nearly four decades. Tomb of Sheikh Muhammad Ghauth is thus rightly the first Mughal building where jalis have been used on such a large scale with extremely refined taste and skill (Plate CLIV). Some jalis stand comparison to the best examples of the later period.

The southern side has a porch in its middle. The extreme corner bay on the south-east side is closed by jali-panels. Other arches on this side and the west are open, jalis being used only up to the balustrade height. On an abutment at the south-west corner is carved the Persian inscription recording Akbar's expedition to the Deccan in 1008/1599. It is surprising that there is no other inscription in the tomb, not even the epitaph-tablet.

Sheikh Muhammad Ghauth was a sufi saint of the Shattārī order and disciple of Sheikh Zuhūr and Ḥājī Huzūr.¹ Mulla Abdul Qādar Badāonī, who generally despised those who violated the orthodox way of life, held the Sheikh in high esteem and affirmed that he was engaged in austerities at Chunar for 12 years and that he possessed supernatural power.² The saint was on very cordial terms with Babur whose general Rahīmdād secured possession of the Fort of Gwalior through his intercession.³ Babur held him in esteem and always spoke of him with admiration.⁴ Humayun also much venerated him. Sher Shah seems to have oppressed him much on this count. The Sheikh, finding the region inhospitable, went to Gujarat where he took Sheikh Wajihu'd-Dīn into his discipleship and gradually became popular. He seems to have returned soon after the accession of Akbar,⁵ who was initially favourably disposed towards him. But due to the hostility of Sheikh Gadai and Bairam Khan he fell from royal favour and was neglected.⁶ The Sheikh consequently withdrew to Gwalior where he settled. He

breathed his last at Agra at the age of 80 in A.H. 970/1562 and was buried at Gwalior.

Akbar may or may not have been enrolled as a disciple of the Sheikh,⁷ there seems to be no doubt that the Sheikh was enrolled as a distinguished saint of the empire. Abul Faḍl in his account of the learned men, in *Ain-30*, under the general heading 'The Grandees of the Empire', gives a list of the learned men of the age whom he divides into five classes. His criteria of this division is as interesting as it is curious. Thus, he notes:

The first class, in the lustre of their star, perceive the mysteries of the external and the internal, and in their understanding and in the breadth of their views, fully comprehend both realms of thought and acknowledge to have received their spiritual power from the throne of His Majesty.

The second class pay less attention to the external world; but in the light of their hearts they acquire vast knowledge.

The third class do not step beyond the arena of observation [nazar] and possess a certain knowledge of what rests on testimony.

The fourth class look upon testimony as something filled with the dust of suspicion, and handle nothing without proof.

The fifth class are bigoted and cannot pass beyond the narrow sphere of revealed testimony.⁸

Abul Faḍl places Sheikh Mubārak and eleven other sheikhs, Jaina Muni Hariji Sur and eight Hindu saints in the first class. Sheikh Muhammad Ghauth has been placed in the second class along with Bābā Kapūr, Sheikh Burhān, Sheikh Dāud, Sheikh 'Alāu'd-Dīn Majzūb and Sheikh Salim Chishtī.⁹ Jadrūp and another Hindu saint also figure in this list. It seems that class one honour was conferred upon those who were special repositories of the imperial favour while class two saints were those who either did not care for it and devoted themselves to their saintly pursuits or who did not receive it due to the hostility of the powerful courtiers.

The Sheikh died in 970/1562¹⁰ at Agra and was buried at Gwalior. Who built this stately sepulchre for him? That he built it for himself has nowhere been mentioned. Badaoni alludes to his having built a khanqah at Gwalior where he "occupied himself with the ecstatic dances [sama'] of dervishes".¹¹ Abul Faḍl is silent on the Sheikh's tomb at Gwalior. Sheikh's own works as *Gulzār-i-Abrār* and *Jawāhir-ul-Khamsa*¹² do not make any mention of the construction of the tomb.

Author of *Darbār-i-Akbarī* also does not speak of it. Other contemporary and later Persian sources do not help to fix it up. Fazl Ali's *Kulliyāt-i-Gwāliarī*, though profuse in details, does not help us in this respect.

Badaoni states in the reference that "clad in the garments of poverty he held a high and majestic position and possessed a subsistence allowance of a karor of tankas".¹³ This is an apparent exaggeration. Akbar never conferred such a vast grant either in land or money upon the Sheikh. It is incredible that some local chieftain would have granted this large subsistence to the Sheikh. In all probability, the Sheikh led an extremely austere and secluded life and could not have afforded to build such a beautiful tomb himself.

His relations with Akbar were strained and it is not possible that Akbar could have financed this project. Besides, Akbar was hardly secure on the throne in 1562 and possessed only a tiny kingdom, with vast revenues of an empire yet to be added to the royal exchequer. We know for certain that when construction on his father's tomb began about the same time, it was Humayun's widow Haji Begum who largely financed the project. These circumstances render it extremely unlikely that Akbar could have taken the interest and exerted his treasury to build this tomb for the Sheikh.

Sheikh Abdullah, the eldest son of the Sheikh, was first a Sufi faqir and lived a retired life. Later, he entered the emperor's service and gradually became mansabdār of 3000.¹⁴ The Sheikh's second son Ziyaullah lived as a faqir. He studied under his father's disciple Sheikh Wajihu'd-Dīn of Gujarat. Had the Sheikh left a big estate, his sons would not have become faqirs. It indicates that the successors of the Sheikh too were not in a position to build this beautiful building for their father.

Who, then, built this grand memorial? We hear of a great courtier of Akbar who was closely attached and devoted to the Sheikh. He was Miyan Tansen, the greatest musician of the age. Abul Faḍl noted: "A singer like him has not been seen in India for the last thousand years."¹⁵ Tansen not only originally belonged to Gwalior, but he was also trained under the Gwalior school of Indian music, the sublime traditions of which were founded by Raja Mansingh Tomar (1486-1516). It was the principal seat of music in northern India and produced some greatest musicians of the age. It is remarkable that the first five musicians of Akbar's court, in Abul Faḍl's list, viz., Miyān Tānsen, Bābā Rāmdās, Subhān Khān, Srigyān Khān and Miyān Chānd, came from Gwalior.¹⁶

Besides learning music and the art of composition from Swami Haridas, Tansen became a disciple of the Sufi saint Sheikh Muhammad Ghauth and, as it seems, he embraced Islam under his influence. As he was born around 1530, most probably, he lived with the Sheikh about 1550. He served for some time with the Sur Prince Muhammad 'Ādil, popularly known as 'Ādalī, who was a great patron of music. Thereafter, he went to Raja Ramchand Baghela of Bandhogarh (Rewa), who rewarded him munificently. The record thus goes that:

गान्धर्वविद्यामययेहभाजयेस्तानसेनाय कलाविदेऽदात् ।
रागं प्रतीहप्रतितानमेतत् प्रतिध्रुपत्कोटिशशाङ्कटङ्का ॥¹⁷

(For every song and each tāna and each dhrupad, he, Raja Ramchand, gave a crore of rupees to this musician, Kalāvid, namely Tansen, who was the embodiment of the art of music.)

It seems quite probable that he became famous throughout the country for his musical talents and bore the title *Tansen* even when he was staying at the court of Raja Ramchand.

While narrating the events of the year 970/1562, Abul Faḍl records the coming of Tansen to the Mughal court.¹⁸ He notes:

As the fame of Tan Sen, who was the foremost of the age among the kalāwants of Gwalior came to the royal hearing and it was reported that he meditated going into retirement and that he was spending his days in attendance on Ramchand, the Rajah of Pannah, His Majesty ordered that he should be enrolled among the court-musicians. Jalāl Khān Qurchī who was a favourite servant was sent with a gracious order to the Rajah for the purpose of bringing Tan Sen. The Rajah received the Royal message and recognised the sending of the envoy as an honour and sent back with him suitable presents of elephants of fame and valuable jewels, and he also gave Tan Sen suitable instruments and made him the cheek-mole of his gifts. In this year, Tan Sen did homage and received exaltation. His Majesty the Shahinshah was pleased and poured gifts of money into the lap of his hopes. His cap of honour was exalted above all others. As he had an upright nature and an acceptable disposition he was cherished by a long service and association with His Majesty and great developments were made by him in Music and in compositions.¹⁹

A few important facts come out of this narrative of Abul Fadl:

- (i) that Tansen became famous as a great musician even before he was patronised by Akbar;
- (ii) Raja Ramchand munificently rewarded Tansen and loaded him with gifts on his departure to Agra;
- (iii) Akbar received him with equal generosity and if the author of *Iqbāl-Nāmah* is to be relied upon, he gave him two lakhs of rupees on his first performance at the court. He was graciously and liberally patronised throughout his career at the Mughal court; and
- (iv) he came to the Mughal court in 970/1562 when he was *meditating going into retirement*. Coincidentally, his mursheed Sheikh Muhammad Ghauth had died the same year, most probably a few months before this event. It is possible that Tansen was shocked by the death of the Sheikh to whom he was dearly attached and was planning to go into retirement. The new assignment, at the Mughal court, however, induced him to give up the idea and settle at Agra.

As it appears, it was Tansen who constructed the beautiful tomb of his teacher and preceptor Sheikh Muhammad Ghauth at Gwalior. Tansen had the resources to finance such a grand project and also the taste, a great artist himself as he was, to advise, as to its design, the architect who could not have built it, without doubt, without some of the prevalent architectural features having been unconsciously incorporated into its style. It may be noted in this connection that Tansen's attachment to the Sheikh, and his native place Gwalior, knew no bounds. It was ultimately at Gwalior, about 1590 that the great musician breathed his last and was buried at the feet of his mursheed in a simple open pillared pavilion (*Bārahdarī*), where an annual 'urs and a music-concert are held with great celebration. Though no direct epigraphical or documentary evidence is available, as far as the circumstances of the case show, there does not seem to be any other person except Tansen who could have been capable of, or interested in, building this stately mausoleum for the Sufi saint. Tansen seems to have begun its construction soon after his coming to the Mughal court, about 1562, and the date of the tomb may, thus, be fixed c. 1565.

Following are the characteristic features of this tomb:

- (1) regular square plan, without chamfered angles;

- (2) hexagonal double-storeyed towers attached to the corners;
- (3) square projection in the centre of each side surmounted by a square chhatri;
- (4) wide projecting chhajja on all sides, supported on beautiful, typically Gujarati, brackets;
- (5) rotating verandah on all sides of the central mortuary hall in the manner of circumambulatory (*pradakṣiṇā-patha*); it was a novel feature;
- (6) high, square drum with a chhajja, and chhatris at the corners;
- (7) single dome of a high, broad, massive conformation reposing on the skyline amidst a cluster of chhatris which have been judiciously arranged;
- (8) use of square chhatris with pyramidal roofs, obviously following the design of 'chhaparkhat'; square chhatri with pyramidal roof is a typical feature of Akbari buildings at Agra and Fatehpur Sikri;
- (9) use of painted floral and stylised designs on stone surface;
- (10) predominance of the jali-art in its ornamental scheme;
- (11) provision of ample *shadows* with the help of profiles and recesses, essentially following the effect of the Hindu temple.

There are several important departures and epoch-making innovations in this tomb. Jalis, chhajjas supported on brackets, chhatris and shadows are pre-eminently indigenous elements of art which have been used in this tomb emphatically, almost decisively; they impart it an extremely refined and graceful effect. It paved the way for the Mughal style of architecture which used these features on an elaborate scale in a wide variety of modes and methods as is testified by the buildings of Akbar at Fatehpur Sikri. Akbar seems to have been particularly impressed by its art and he followed these pleasing features not only in his prospective capital Fatehpur Sikri,²⁰ but also in his proposed tomb at Sikandara (Agra) where he practically imitated its design and used attached chhatris all around the main building. Barring the central dome which could not be built at Sikandara, Tomb of Muhammad Ghauth served as prototype to the Tomb of Akbar.

This way, the Tomb of Sheikh Muhammad Ghauth made a marvellous beginning and laid the foundation of an art which flourished so exuberantly for nearly a century that followed it. Though deterioration by time and reckless restorations and additions have much altered the impression of this magnificent memorial, yet the tomb, as the earliest relic of Mughal art, occupies an extremely important position in its evolution.

Its dome so closely resembles the typical Pathan dome, the examples of which abound at Delhi, e.g., at the *Chhote-Khan-ka-Gumbad*, *Shish-Gumbad*, *Bara-Gumbad*, *Khan-i-Alam-ka-Gumbad* and *Bare-Khan-ka-Gumbad*, that it appears certain that the dome-builder of the tomb of Sheikh Muhammad Ghauth was trained in the traditions of the Sultanate architecture of Delhi. The inspiration of jalis and brackets, on the other hand, and to a large degree of chhatris on the superstructure, came from the indigenous sources. These features are so prominent in the 15th century architecture of Gujarat that one is easily led to believe that Gujarat art inspired them at Gwalior. It may be noted that a great family of Gujarati architects was invited by Maharana Kumbha of Mewar (1433-68) to work for him. Maṇḍana and Nātha belonged to this family. They created several wonderful relics and also wrote a number of Vāstu-texts.²¹ It is extremely likely that Raja Mansingh Tomar (1486-1516) who closely followed Maharana Kumbha during the 15th century itself, was assisted by an architect of this family in the construction of the Man-Mandir and his other buildings. The art-inspiration thus travelled from Gujarat to Rajasthan and from Rajasthan to the Madhyadeśa. The *Man-Mandir* in several respects is a standing testimony of this inspiration, as it is of liberal acceptance and fusion of some typically Muslim features in its style. It is likely, therefore, that the architect of the Tomb of Muhammad Ghauth and particularly Tansen who inspired its construction and who must have visited the *Man-Mandir* a hundred times out of the affection for the great patron of music who resided in it and who held musical parties in its assembly-halls, drew inspiration from its art. The profuse and pleasant use of jalis, brackets and chhatris at the tomb of Sheikh Muhammad Ghauth unmistakably points in this direction.

However, it looks curious that such a beautiful sepulchre should have been built to commemorate the memory of a Sufi saint. The Sufis preach extreme poverty and complete renunciation of worldliness. They lived an utterly humble life. Sheikh Nizāmu'd-Dīn Sulṭān'ul-Auliya (d. 1325) lived at the capital during the reign of several sultans but never went out to see any one of them and never accepted any royal grant. When Khidr Khān, heir-apparent of 'Alāu'd-Dīn Khaljī, built a beautiful mausoleum and offered it to him for his burial he politely, though firmly, declined and the tomb had to be converted into mosque by addition of a wing on either side. The tomb of Sheikh Ruknu'd-Dīn at Multan was originally built by Ghiyāthu'd-Dīn Tughluq for himself and was presented to the Sheikh after Ghāzi Tughluq captured the throne of Delhi and built there another tomb for himself. Tombs of the Sufis

built during the first three centuries of Muslim rule in India are architecturally poor, sometimes insignificant, memorials and their importance lies only in the religious faith they symbolise. Tomb of Sheikh Muhammad Ghauth at Gwalior, on the other hand, is a stately mausoleum which not only vies with but also, sometimes, excels royal sepulchres. It is, thus, a superior and relatively far costlier construction than the tomb of Ghiyāthu'd-Dīn Tughluq, Firuz Tughluq, Sayyid Mubārak, Bahlul Lodi or even such a powerful sultan as Sikandar Lodi!

The tradition of building stately memorials to saints and Sufis belongs more to Gujarat than to Delhi Sultanate, Jaunpur, Bengal, Punjab or Malwa. Several beautiful tombs were raised over the remains of saints at Ahmedabad, the most prominent among them being the Tomb of Sheikh Ahmed Khattu at Sarkhej, built between 1446 and 1451. This is also a square building measuring 104' (31.70 metres) side with elaborate use of jalis. The domed mortuary hall of the tomb of Khattu measures 36' (10.97 metres) side. Except for the four-aisles deep pillared cloisters, it almost stands comparison to the tomb of Sheikh Muhammad Ghauth at Gwalior. The Sheikh resided in Gujarat for a number of years and it is quite probable that he was inspired by these Gujarati examples to build a commemorative tomb for himself and was particularly impressed by the tomb of Khattu which he must have viewed with admiration during his stay at Ahmedabad and he conveyed his desire to his devoted disciple Tansen. Thus while there does not seem to be any necessity or even justification of such a tomb having been built over the remains of the Sufi recluse, it looks fairly certain that the inspiration came from Gujarat and it ultimately set a trend. We hear that another great monument was built at Fatehpur Sikri to the memory of Sheikh Salim Chishti only after two decades of its construction. This is how a part of the imperial grandeur was appropriated by the Sufis who, on account of their influence among the masses and their capacity to mould the public opinion, wielded a considerable political power. If architecture was a ceremonial function of a prosperous state, the religious divines would share it!

References

1. *MT*, III, pp. 6-7.
2. *Ibid.*, II, p. 28, III, p. 6. He saw him at Agra in 966/1558-59. See *Appendix J* at the end of this chapter
- for Badaoni's account of Sheikh Muhammad Ghauth.
3. Cf. *BN*, 539-40.
4. *Ibid.*, pp. 539 and 690.

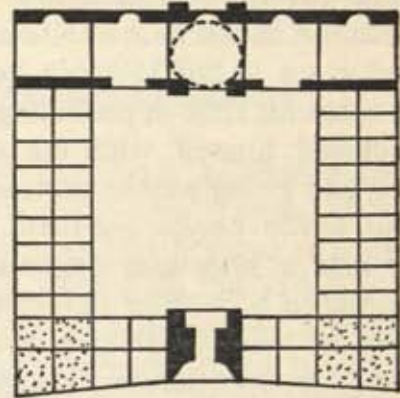
5. Badaoni notes that it was in 966/1558-59 that he came from Gujarat to Agra.
6. *MT*, II, p. 28; *Ain*, I, p. 509.
7. Abul Faḍl (*AN*, II, p. 134) humorously describes the incident of Akbar's interview with the Sheikh at Gwalior. The emperor went to meet him to procure some rare bullocks which the Sheikh had brought from Gujarat. The latter received him with all respect. "At the end of the interview he asked His Majesty the Shahinshah if he had become the disciple of anyone. His Majesty who had placed the hand of trust in God's hand and was a treasury of the treasures of spiritual and temporal truths and sought to conceal his status and spiritual rank, had withheld the hand of his genius from the empty-handed, and was a spectator of the varied spectacle of the universe formally replied in the negative. The Sheikh put out his arm and laid hold of the sacred hand of that divinely nurtured one and said: 'We have taken your hand'. His Majesty the Shahinshah in abundance of his courteousness and modesty took no notice but smiled and departed. His Majesty the Shahinshah often used to relate in high assemblages that 'On that same night we returned to our tents and had a wine party and enjoyed ourselves and laughed over the way to catch bullocks and the Shaikh's dodge of stretching out his arm'." Abul Faḍl always treated the Sheikh with distrust in his narrative and always spoke lightly of him.
8. *Ain*, I, p. 606.
9. *Ibid.*, pp. 607-9.
10. On 3 Ardibihisht, Divine month of the 8th year corresponding to Monday, 17 Ramzan 970, 10 May 1562, cf. *AN*, II, p. 135.
11. *MT*, III, p. 9.
12. This is a grand treatise on magic and occultism. For details see T.P. Hughes, *Dictionary of Islam* (London, 1880), pp. 72-78.
13. *MT*, III, p. 9. Abul Faḍl put it in a different way and accused the Sheikh of deceiving the simpletons, putting saintship to sale and acquiring lands and villages by fraud (*AN*, II, p. 135).
14. *Ain*, I, p. 509.
15. *Ibid.*, p. 680.
16. *Ibid.*, p. 680.
17. *Virabhanaudaya-Kavyam*, cf. *ASI, Mem.* 21, p. 14.
18. *AN*, II, pp. 279-80.
19. *Ibid.*, pp. 279-80.
20. His buildings shall be treated in Part II of this work.
21. As has already been discussed above in Chapter I under sub-head (a).

Badaoni's Account of Sheikh Muhammad Ghauth*

He was the disciple of Shaikh Zuhūr and Ḥājī Ḥuzūr, otherwise known as Ḥājī Ḥamīd and his spiritual descent could be traced back, through the line of the Shattārī order of ascetics to Shaikh Bāyazīd of Bustām, the prince of the knowers of God. When entering on the religious life he spent twelve years on the lower slopes of the hills of Chunar and the adjoining country, practising the most severe austerities having his dwelling in caves and subsisting on the leaves of trees. He was an acknowledged master in the science of exorcism, he possessed supernatural powers and was drawn in a mysterious manner towards God. He obtained leave to practise this science (exorcism) from his elder brother, Shaikh Bahlol who was a worker of miracles and wonders. His late Majesty, the Emperor Humayun on whom God's mercy has descended, had the greatest faith in and attachment to these two saints, so much so that there were very few that ranked with them in his estimation. From these venerable men he learnt the science of exorcism. After the rebellions in India, when Sher Shah began to oppress Sheikh Muhammad, he betook himself to Gujarat where also he brought princes and rulers under the yoke of subjection to him and belief in his teaching, so that all alike were ready to do him service. Shaikh Wajihu'd-Dīn too, a knower and a doer of the things that belong to God, a profound thinker and a teacher, drew upon his shoulders the saddle-cloth of obedience to Shaikh Muhammad. All these things are an indication of the Shaikh's perfections and of his power of working miracles. Many other great and famous holy men in Delhi, Gujarat and Bengal have risen from the fringe of his robe and memorials of his perfection still remain in Hindustan. One day in the year H. 966 [1558-9] I saw him from afar off, riding along in the market place at Agra, a throng of the common people surrounding and preceding him, so that no one could pass through the crowd. In his courteous humility his head was never for one moment still, as he returned the salutations of the people on either side of him, bowing continually down to his saddle-bow. It was in this year that he came from Gujarat to Agra, and

*MT, III, pp. 6-10.

with much exhortation and persuasion, availing himself of the influence of those about the court, enrolled the Emperor Akbar, then a youth, among his disciples, but the Emperor soon rejected his teaching, and since Shaikh Muhammad's companionship was distasteful to the Khān-i-Khānān Bairam Khān and to Shaikh Gadāi [Akbar's Ṣadru-ṣ-Ṣudūr up to 968/1560-61], he withdrew, ill-pleased to Gwaliyar, where he spent his time in perfecting his disciples, and having built Khanqah occupied himself with the ecstatic dances of darvishes [samā'] chanting and giving way to transports of religious ecstasy [vajd]. He himself also wrote books on these subjects. Clad in the garments of poverty he held a high and majestic position and possessed a subsistence allowance of a karor of tankas. Whomsoever he saw, were he a beggar even, he treated with great honour, standing before him. For this reason some few from among those who were vowed to poverty blamed him and denied [that he was a true ascetic]. But God alone knows what his motives were in this matter . . . In the year H. 970 (1562-3) after completing his eightieth year, he died in Agra, leaving this world for the next and was buried in Gwaliyar.

TRIMUKHĪ MOSQUES
OF DELHI (1530-70)

IT is a curious paradox of history that more types of mosque were built in the land of Hindustan where the non-believers almost always remained in great majority, than in any other Muslim country. Thus, the beginning was made with the *Ekāṅgaṇa* (एकाङ्गण) Masjid which has a single quadruple, sanctuary (prayer-hall) on its west and dalans (cloisters) on three other sides, the main gateway being on the eastern side, sometimes with subsidiary gateways on the north and south. This was the most popular type from the earliest mosque, viz., the *Quwwat'ul-Islam Masjid*, Qutub, Delhi, to the Noble Masājīd of the Shahjehanian era. The *Bṛhatmukhī* (बृहत्मुखी) Masjid had a stupendous and over-dominating pylon in the centre of the facade of the sanctuary as its most distinctive characteristic. The first example of this type is the *Begumpuri Masjid* of Muhammad bin Tughluq at Delhi.¹ Later, this type was followed and developed to perfection in the mosques of Jaunpur. The *Chaturāṅgaṇa* (चतुराङ्गण) Masjid was built during the reign of Firoz Tughluq and the two examples, viz., the *Kalan Masjid*, Nizamuddin, and the *Khirki Masjid* have come down to us. Its plan was divided into four quarters, each having an open courtyard, there thus being four courts in the interior.² Hence the nomenclature.

The *Pañchamukhī* (पञ्चमुखी) Masjid was a five-bays' sanctuary having a five-arched facade, without cloisters, gateways or any other architectural paraphernalia. It appeared on the scene towards the close of the 15th century.³ The *Bara-Gumbad Masjid*, the *Moth-ki-Masjid*, the *Jamali-Kamali Masjid* and the *Qal'a-i-Kuhna Masjid* are its most prominent examples. The first two belong to the reign of Sikandar Lodi and the other two to that of Babur and Humayun.

(a) *Ṭṛmukhī Mosques of Sikandar Lodi's Reign*

The last type which also made its appearance during the late Sultanate period was the *Ṭṛmukhī* (त्रिमुखी) Masjid which had a three-arched facade as the most distinctive feature of its architecture and, normally, no gateway, minarets, dalans or even an enclosure and it stood isolated on its plinth. Though the *Jam'at-Khānah Masjid* at Nizamuddin also has a three-arched facade, it was originally a square tomb and the wings were added to it later, and a three-arched facade did not constitute part of the original design.⁴ The *Ṭṛmukhī Masjid* was first built during the reign of Sikandar Lodi, almost simultaneously with the *Pañchamukhī Masjid*. The so-called *Nili Masjid* which seems to have been originally covered with blue glazed-tiles, now situated at Hauz-Khas, is the most prominent among the earliest examples. In fact, it is only the sanctuary which stands on the western half of the plinth. There is no dalan or gateway and, as a matter of fact, no such thing as an enclosed compound.⁵ The facade has three broad arches of equal size, the central one set in a double-recessed frame (Plate CLV). There is an arched opening over it and an inscribed tablet. Stucco medallions ornament the spandrels of the arches. The side arches, i.e. wings, have *chhajjas* supported on bracket-stones; *chhajja* is not there over the central arch. The frieze bears glazed-tiles. Pinnacles crown the quoins. Superstructure is composed of a dome of the single type, essentially resembling the typical dome of the Lodis. Probably it was originally glazed-tiled.

Nave has stalactite in the phase of transition. Mihrab bears designs in stucco. There is no stone-work, except the heavy stone piers of the skeleton which is of rubble and mortar above the piers, thickly plastered over. By and large, nave and side bays are plain. Broad tapering turrets, reminiscent of the Tughluqian style are attached to the backside of the Qiblah. This is also a distinctive characteristic of this mosque. As a whole, its is a plain and simple architecture.

The inscription over the central arch records its construction during the reign of Sikandar Lodi when Khān-i-‘Āzam Masnad-i-‘Alī Khawās Khān was the governor of Delhi, by a lady named Kasunbhl (probably a Hindu convert) who was the nurse of Fateh Khān, son of Khawās Khān, on 2 Rabi’ul-Awwal 911/3 August 1505. The writer’s name: Barkhurdār Nāsir Kamāl Aḥmad Khān, has also been mentioned.⁶

A *Ṭṛmukhī Masjid* is situated on the Rājōn-ki-Bā’im at Mehrauli. The grand baoli is three-storeys deep having dalans on three sides with true arches of ashlar. On the western side, overlooking the baoli, over

the dalans, are a chhatri and a masjid. The chhatri is a large pavilion, square in plan with four pillars on either side.⁷ Diagonal pendentives and bracket-stones have been used in the phase of transition to support the high broad dome. The mosque is just attached to it. Here, too, it is only a sanctuary having three bays and, accordingly, three broad and pointed arches on the facade. The whole interior has been profusely decorated with stucco. The incised medallions on the central arch are particularly impressive. Stalactite at the corners has been used here only ornamentally as there is no dome on the superstructure and the skyline is absolutely flat. Local grey stone of a yellowish tone is the chief building material.

The domed chhatri bears an inscription which records that it was built by Daulat Khan during the reign of Sikandar Shah on 1 Rajab 912/17 November 1506.⁸ The tombstone which occupies the centre of the pavilion indicates that the chhatri is the tomb of the builder. In all probability, the mosque was also built by him. It might have preceded the tomb, or both could have been built simultaneously, but in any case it was built during Sikandar Lodi's reign itself.

There is also a Trmukhī Masjid at Sheikh-Serai, in close neighbourhood of the inscribed tomb of Sheikh 'Alāu'd-Dīn Nūr Tāj which was built during the reign of Sikandar Shāh in the month of Muharram 913/1507.⁹ The mosque is popularly called 'Khānqah' and the tomb 'Majlis-Khānah'. The mosque also bears an inscription carved on a red stone slab fixed over the central arch. It records the construction of the mosque during the reign of Humayun in 941/1534-35 by 'Alā Nūr Tāj.¹⁰ This is significant. This shows that though there was a gap of a quarter of a century, the same type and form continued to be in vogue.

This mosque also is a three-bays' sanctuary and has, accordingly, a three-arched facade. Broad pointed arches, typical of this age, have been used. There are two miniature arches on the sides also, but they are closed; probably they contained stairways leading to the terrace. Central arch is slightly higher and is beautifully contained in a broad frame which has sunk niches around. This mode of surface-treatment has been borrowed, obviously, from the *Moth-ki-Masjid*. There is a broad projecting chhajja supported on bracket-stones over each wing; it provides a pleasant shadow on the horizontal axis. Sunk niches have also been used on the frieze below the chhajjas. Whole construction is in red stone. Like its sister mosque at the Rājōn-ki-Bā'in, this also does not have a dome and the roof is absolutely flat.¹¹ It is only the sanctuary like other mosques of this class, and there is no compound, dalan or gateway.

Some other mosques of this class which also belong to this period are traceable among the ruins at Muhammadpur, Ramakrishnapuram, Hauz-Khas, Chiragh-i-Dehli and other suburbs of south Delhi. Except for difference of minor details, they are identical, and have the same characteristic features, viz., rubble or ashlar construction plastered over; a three-bays' sanctuary and a three-arched facade; attached conical bastions or tapering turrets on the rear side; and either a single dome on the superstructure or a flat roof. There is very little stone-work. Ornamentation is limited to stucco-art, chiefly in the form of incised medallions on the spandrels of the arches, and the composition of these mosques is extremely plain and simple.

The pañchamukhī mosques which were built during Sikandar Lodi's reign, e.g., the *Moth-ki-Masjid* and the *Bara-Gumbad Masjid*, are different in spirit inasmuch as they are far more ornately and tastefully finished than the contemporary ṭṛmukhī mosques of Hauz Khas and Rājōn-ki-Bā'in. The former type was largely adopted by royalists and the nobles, while the latter by the middle-class people. This is also the case during Humayun's reign, the *Qal'a-i-Kuhna Masjid* belonging to one class and the contemporary *Sheikh Serai Masjid* to the other. There is no architectural problem involved and the patron's capacity to finance the project much decided the type of the building within the ambit of the same style. It is remarkable that no large congregational mosque (Jami' Masjid) of the size of the *Begumpuri Masjid* or the *Khirki Masjid* was built at Delhi during the whole span of the 15th century. The Sayyids did not build any Jami' Masjid. The *Moth-ki-Masjid* is the largest mosque of the Lodis. The *Jamali-Kamali Masjid* belongs to the reign of Babur and the *Qal'a-i-Kuhna Masjid* to Humayun; both are pañchamukhī. The ṭṛmukhī mosques of the Lodi period betray a middle-class architecture which is stereotyped and conventional, rather than resourceful and ingenious; it shows signs of stagnation and decay due to absence of a new inspiration. It is only after the advent of the Mughals on the scene that things were revived and rejuvenated.

The two mosques of Sher Shah's reign, viz., Sher Shah's Mosque at Patna and the Jami' Masjid of Rohtasgarh, have already been referred to above.¹² The composition of the former is too plain to be impressive and if there is an effect it is of dullness. The Rohtasgarh mosque is better and more impressive. As its inscription records,¹³ it was built by 'Āzam Humāyun alias Haibat Khān at the request of Farīd Sadr in 950/1543. It is built of ashlar. Here too three small arches have been used on the facade. The central frame rises well above the terrace; it has ornamental sunk niches on the sides and also an arched opening

over the central arch—both features borrowed from the Delhi examples, e.g., the *Moth-ki-Masjid*. Cornice and a battlemented parapet have been used over the sides. Three domes over the three bays of sanctuary are high, broad and more effective than the Patna mosque. But composition of this mosque too is plain and simple. Essentially, both these mosques belong to the class of the *ṭṛmukhī* mosques of the Sultanate period and show no sign of improvement.

(b) *Afsarwali Masjid* (c. 1530)

There are a few representative *ṭṛmukhī* mosques situated at the Grand Necropolis, Delhi, which belong to the period under study (c. 1530-1570). The first in this series is the *Afsarwali Masjid* situated adjacent to the Afsarwala Tomb, on the same platform, south-west of the tomb of Humayun and north-west of the 'Arab-Serāi, in its neighbourhood. It is an earlier construction than the tomb. Though there is no inscription, stylistically, it can be assigned to c. 1530. The sanctuary has three bays and accordingly the facade has three broad arches, each contained in its own frame (see Plate CXLIII above), which is technically an alcove. This was a more effective device than the recessed planes. Arches bear red painting on spandrels. Two oblong openings on the extreme sides contain stairways which lead to the terrace. Construction is in rubble which is adequately plastered over. Interior has some stucco decoration; arches bear beautiful incised medallions. Particularly impressive is the painted incised stucco design on the soffit of the nave.

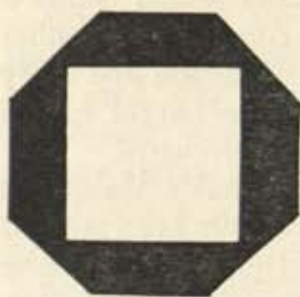


Fig. 42. Plan of the dome, Afsarwali Masjid, Delhi (c. 1530).

Squinches have been used in the phase of transition. A dome of the single type resting on an octagonal drum roofs the nave. It is curious that the plan of the drum is square internally (Fig. 42). Obviously, this method has been adopted to reinforce the walls which are directly taking the load of the dome. The frieze of the drum also bears red painting. There is no other dome or *chhatra* on the superstructure and the skyline is ineffective. Emphasis has been given to the horizontal axis and the building lacks elevation. There is, in fact, very little in this mosque too which may show improvement upon the earlier mosques of this class and the architect has followed the same conventional forms and themes.

(c) 'Īsā Khān's Masjid (1547-48)

This is the first successful example of the tirmukhī mosque. It was built by an Afghan noble, 'Īsā Khān Niyāzī who first served Sher Shah Sur and then his son Islam Shah Sur. It occupies the western side of the octagonal lay-out of the compound of his mausoleum which is situated in its centre (Fig. 43). The compound is enclosed by a massive wall of rubble construction, and has sunk arches on the internal sides. The tomb complex also has a monumental gateway on the northern side. The octagonal tomb of 'Īsā Khān bears an inscription on the mihrab which records its construction in 954/1547-48 by Masnad-i-'Ālī 'Īsā Khān son of Niyāz Aghwān. The mosque also seems to have been built simultaneously with the tomb.

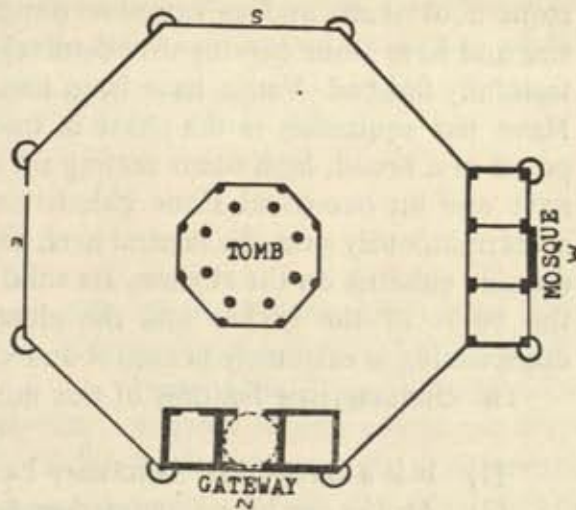


Fig. 43. Plan of the Lay-out, Tomb and Mosque of 'Īsā-Khān, Nizamuddin, Delhi (1547-48).

by Masnad-i-'Ālī 'Īsā Khān son of Niyāz Aghwān. The mosque also seems to have been built simultaneously with the tomb.

The sanctuary (Plate CLVI) has three bays and, accordingly, three arches of equal size on the facade. Arches are broad and pointed and in double-recessed planes, supported on stone-pilasters. Their external outlines are inlaid with green and blue glazed-tiles; this feature and the pointed form give these arches an extremely gorgeous impression. The central arch is contained in a frame of red stone which has ornamental sunk niches on all the three sides of the arch. This feature has come from the *Moth-ki-Masjid*. Red stone nook-shafts have been used. The frame has been magnificently decorated with glazed-tiles in turquoise-blue and green tiles. Its quoins are crowned by pinnacles. In contrast to the red stone central arch, side arches are of local grey stone. They bear stucco-decoration. The medallions on the spandrels of these arches have floral, arabesque and stylised designs in incised stucco, inlaid with green, blue and yellow glazed-tiles. They are set over the arches extremely beautifully. The exquisite effect of these medallions rivals the best Moorish work of this class. These wings are protected by an extremely slanting chhajja each; there is no chhajja over the central arch. Red stone frieze is plain and, obviously, it has been used

to give the facade a pleasing colour combination. Parapet has ornamental trefoiled merlons bearing the word 'Lillah'.

Interior is composed of a nave roofed by a single dome and a bay on either side. The Qiblah wall has three mihrabs which have carved stone nook-shafts and calligraphic designs. All mihrabs are equal in size and have stone carving ornamentation. The central mihrab is most tastefully finished. Vaults have been used in the side bays for roofing. Nave has squinches in the phase of transition. Superstructure is composed of a broad, high dome resting on an octagonal drum, over the nave and an octagonal stone chhatri on its either side. The dome sets as harmoniously over the central arch along the elevational axis as with the side chhatris on the skyline. Its solid is beautifully reconciled with the voids of the arches and the chhatris all at once, and the whole composition is extremely beautiful and effective.

The characteristic features of this mosque are as follows:

- (1) It is a three-bays' sanctuary having a three-arched facade.
- (2) Arches are broad, pointed and double-recessed, and they have emphatic outlines.
- (3) Central frame (containing the central arch) bearing ornamental arched niches, rising well over the terrace, is the most conspicuous part of the facade.
- (4) Use of a chhajja over each wing gives a pleasant horizontal shadow over each side-arch.
- (5) A broad high dome resting on an octagonal drum surmounts the nave.
- (6) Use of chhatris on the superstructure reinforces the effect of the dome.
- (7) Polychrome glazed-tiles have been used emphatically on the outlines of arches, medallions and other prominent surfaces.
- (8) Recourse to stone and stone-carving has been taken in this mosque more liberally than any other building of this class, e.g., in the arched-niches on the central frame, parapet, mihrabs, pilasters and other features.
- (9) The whole composition is unitary and homogeneous; arch-and-chhajja and dome-and-chhatri have been used together most harmoniously.
- (10) Judicious combination of red sandstone and local grey quartzite gives the monument a beautiful colour effect as a whole.
- (11) Stone-work and glazed-tiles have adopted each other as integrally as at the *Man-Mandir* of Gwalior and there is no

sign of any conflict or confusion in the use of these two essentially different forms of decoration, the former being an art of depth, in the third dimension, and the latter an art of colour and line on a flat surface in two-dimensions. The provision of pleasant shadows so necessary in the architecture of a tropical region is the most important aspect of this mosque.

(d) *Khair'ul-Manāzil* (1561-62)

It is situated on the western side of the Purana Qal'a (Old Fort), opposite the Bara-Darwazah, on the northern outskirts of the Grand

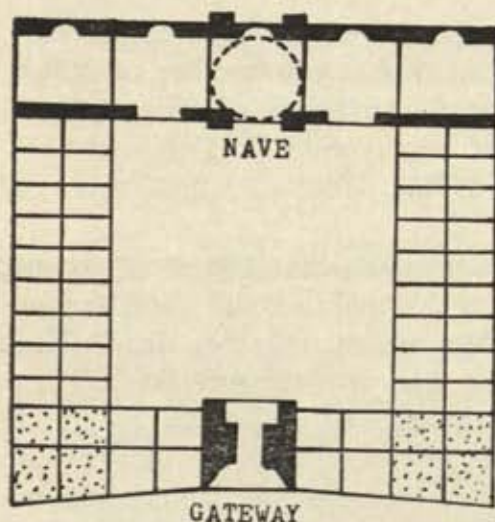


Fig. 44. Plan, *Khair'ul-Manāzil*, Delhi (1561-62).

Necropolis. It is a fully developed mosque having a large quadruple in the centre with a three-bays' sanctuary on its west, double-storeyed dalans on the sides (Plate CLVII) and a monumental red stone gateway on the east (Plate CLVIII)—all judiciously disposed on the *ekāṅgaṇa* plan (Fig. 44). Though, technically, the sanctuary has been divided into five bays, there are only three arches on the facade as the extreme arch on either side is closed on the respective dalan. Hence, it belongs to the *ṭṛmukhi*

class. The dalans which originally housed a madrasa are built on the system of square-bays, each making up a cell with a portal, with broad arches on the facade. The dalans are mostly in ruins at present.

The monumental entrance gateway in the centre of the eastern side is entirely built of red sandstone. The sanctuary, on the other hand, is a rubble and plaster construction. It has three recessed arches on the facade. The central (Plate CLIX) is higher and larger than the side arches. Beautiful stucco medallions containing Arabic words: 'Allah', 'Ya Allah', 'Muhammad', 'Ya Fateh', 'Al-Mulk Allah' and the Kalma in exquisite Naskhi, have been used in the spandrels of the inner and outer arches on the sides. Originally, there was a *chhajja* over each

wing on the facade but it has gone and only the red stone brackets which supported it have remained. They are tastefully moulded and designed. The central arch has octagonal turrets attached to its quoins, their pinnacles too have gone. The frame which contains the central arch has a running band of Quranic inscriptions,¹⁴ in exquisite stucco, inlaid with polychrome glazed-tiles which have mostly peeled off. Only the blue border of this beautiful calligraphic composition has survived. Spandrels of the arches still bear yellow, green and turquoise-blue glazed-tiles which were originally used over the whole facade. The mihrabs had been most tastefully treated with stucco and painted designs; the colour effect was reinforced by glazed-tiles (Plate CLX). Much of the original magnificent effect is missed and at various places the rubble and mortar skeleton has been exposed. Nave is covered by a dome. There is no other feature on the superstructure and the skyline is unimpressive.

The Persian inscription over the central mihrab records its construction by Akbar's wet-nurse Māham Anagah (mother of Adham Khan) in 969/1561-62 under the superintendence of Shihābu'd-Dīn Aḥmad Khān. The chronogram of its erection is contained in the words: 'Khair'ul-Manāzil' (The Best of the Houses) which gives the date.¹⁵

It is remarkable that while its middle-class character was retained during this phase, its design was later adopted in a still miniature, and much more refined form by Shah Jehan (reign 1628-58, death 1666). When the Grand Mughal Emperor who was the greatest builder of the medieval period desired to build mosques of a private nature, he chose the *ṭṛmukhī* type which was most suitable for the purpose. In this aspect lies the chief merit of this mosque. Its design was overwhelmingly reformed and refined and many novel features were introduced to it. He built three mosques of this type, almost contemporarily, all in pure white marble, viz., the *Mina-Masjid* and the *Nagina-Masjid* in the Agra Fort and the *Moti-Masjid* in the Red Fort, Delhi.¹⁶ The white marble *Moti-Masjid* built by Shāh 'Ālam Bahādur Shāh I in 1121/1709 just adjacent to the Dargah of Quṭb Sāhib at Qutub, is also a *ṭṛmukhī* Masjid. With the most refined details and most sophisticated ideals of art, the *Moti-Masjid* of Red Fort, Delhi, marks the perfect moment in the evolution of this mosque. A large number of such mosques were also built during the 18th century at Delhi which, in accordance with the impoverished condition of the state and the people, were built in red sandstone. However, all this falls beyond the scope of this volume.¹⁷

References

1. For details of the Begumpuri Masjid, see the author's 'Jami' Masjid of Muhammad bin Tughluq at Jahanpanah Delhi', *Indo-Iranica*, Calcutta, Vol. 29 (1976); for Jaunpur mosques reference to the author's 'A Stylistic Study of the Sharqi Mosques of Jaunpur', *Itihas*, Hyderabad, Vol. IV, No. 2 (July-December 1976) may be made.
2. For details see the author's 'Chatu-rāṅgaṇa (Four-quartered) Mosques of the Firuzian Era', *Itihas*, Hyderabad, Vol. III, No. 2 (July-December 1975).
3. See the author's 'Panchmukhi Mosques of the Afghan Period', *Islamic Culture*, Hyderabad, Vol. 50, No. 1 (January 1976).
4. Reference for details may be made to the author's 'The Jam'at-Khanah Masjid at Nizamuddin Delhi', *Studies in Islam*, New Delhi, Vol. XVI, No. 3 (July 1979).
5. The Department of Archaeology has had it enclosed at present.
6. For text, see *EIM*, 1919-20 (ed. G. Yazdani), pp. 5-6 and *LMHM*, III, p. 161. A translation has been given herewith in *Appendix K*.
7. The popular term for such a square pavilion having four pillars and, consequently, three openings on either side is 'Bārahdari' (pavilion of twelve openings). Truly, there are twelve pillars and twelve openings in all. This pavilion was more frequently built for pleasure, effect, enshrining the mortal remains of a departed soul and other commemorative purposes during the whole span of the medieval period, than any other structure.
8. *EIM*, 1919-20, p. 7.
9. *Ibid.*, pp. 7-8.
10. *LMHM*, III, p. 144; for translation see *Appendix K* at the end of this chapter. For Persian text see *ibid.*, p. 144.
11. As it is in private possession and a family resides in it, it is not possible to study its interior composition.
12. Under chapter III(b).
13. *EIM*, 1923-24, p. 27. For a translation see *Appendix K*.
14. The Quranic verses: II.255 (Āyat'ul-Kursī) and XVII.1-8 (cf. the *HQ*, 102-3 and 693-95 respectively) have been used.
15. *ASI, Mem.* 47, p. 10.
16. For a study of this mosque reference may be made to the author's 'Curved Roof and Bent-cornice Style of the Mughals', *Medieval India: A Miscellany*, Aligarh, Vol. 3 (1975) and 'The Moti Masjid of the Red Fort, Delhi', *Indica*, Bombay, Vol. VIII, No. 1 (March 1971).
17. These mosques shall be studied in detail in Part IV of this work.

APPENDIX K

Translation of the Inscriptions

I. *Translation of the Inscription of Nili-Masjid, Hauz-Khas, Delhi*¹

In the name of God who is merciful and clement. This strong mosque was built during the reign of the King of Kings, the shadow of God on both the worlds, who has trust in God [named] Sikandar Shah, son of Bahlol Shah the King, may God perpetuate his kingdom and] reign, and always make bright his demonstrations, under the supervision and during the governorship of Khān-i-Āzam Masnad-i-Ālī Khawās Khān, may he ever be great. The foundress of the aforesaid building is the weak, the infirm and the expectant of compassion from the beneficent God [named] Kasumbhīl, the nurse of the generous and the great Khānzādā Miyān Fath Khān, son of Khawās Khān, on the second of the month of Rabi-I, the year 911 [1505-6]. Anyone coming to this mosque for worship should pray for the faith of the said foundress and for the welfare of Fath Khān in both the worlds. God knows [the secrets of Heavens]. The scribe of these letters is the fortunate Kamāl Aḥmed Khān.

II. *Translation of the Inscription of the Sheikh-Serai Masjid*²

This Khanqah was erected in the name of the pole star of the world Shaikh Farīd'ud-Dīn Ganjshakar during the reign of the great Sulṭān Naṣīru'd-Dīn Muḥammad Humāyun, the King and Champion of Faith, by 'Alā Nūr Tāj, the grandson [precisely, a descendant] of the Shaikh, in the year 941 [1534-5].

III. *Translation of the Inscription of the Jami' Masjid, Rohtasgarh*³

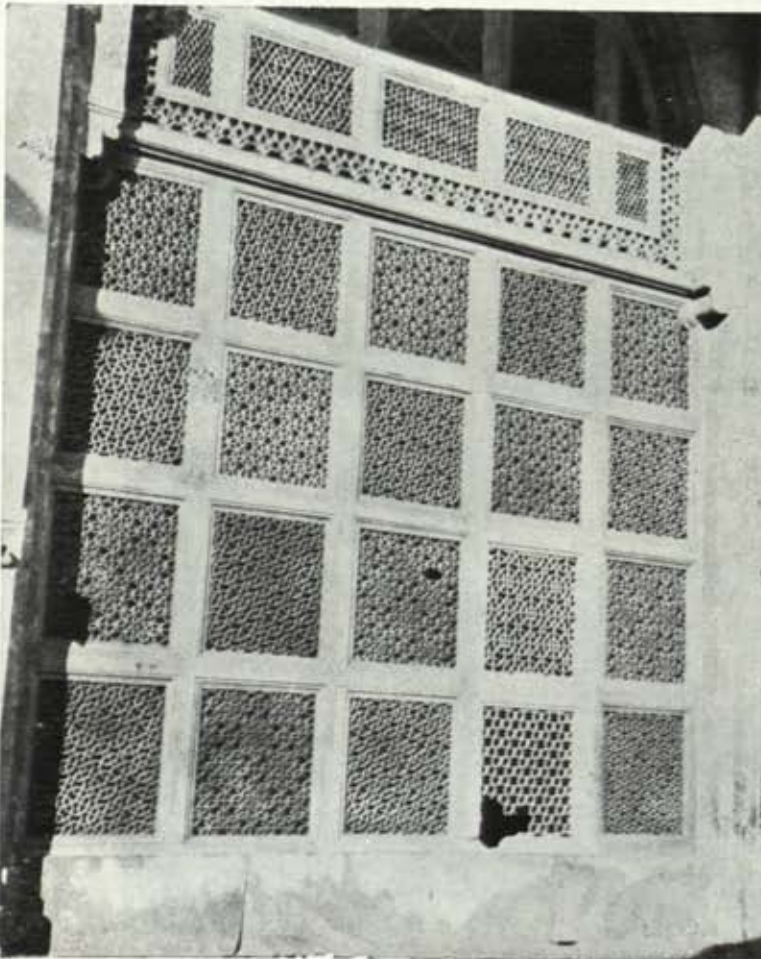
In the name of God the most merciful and compassionate. Praise be

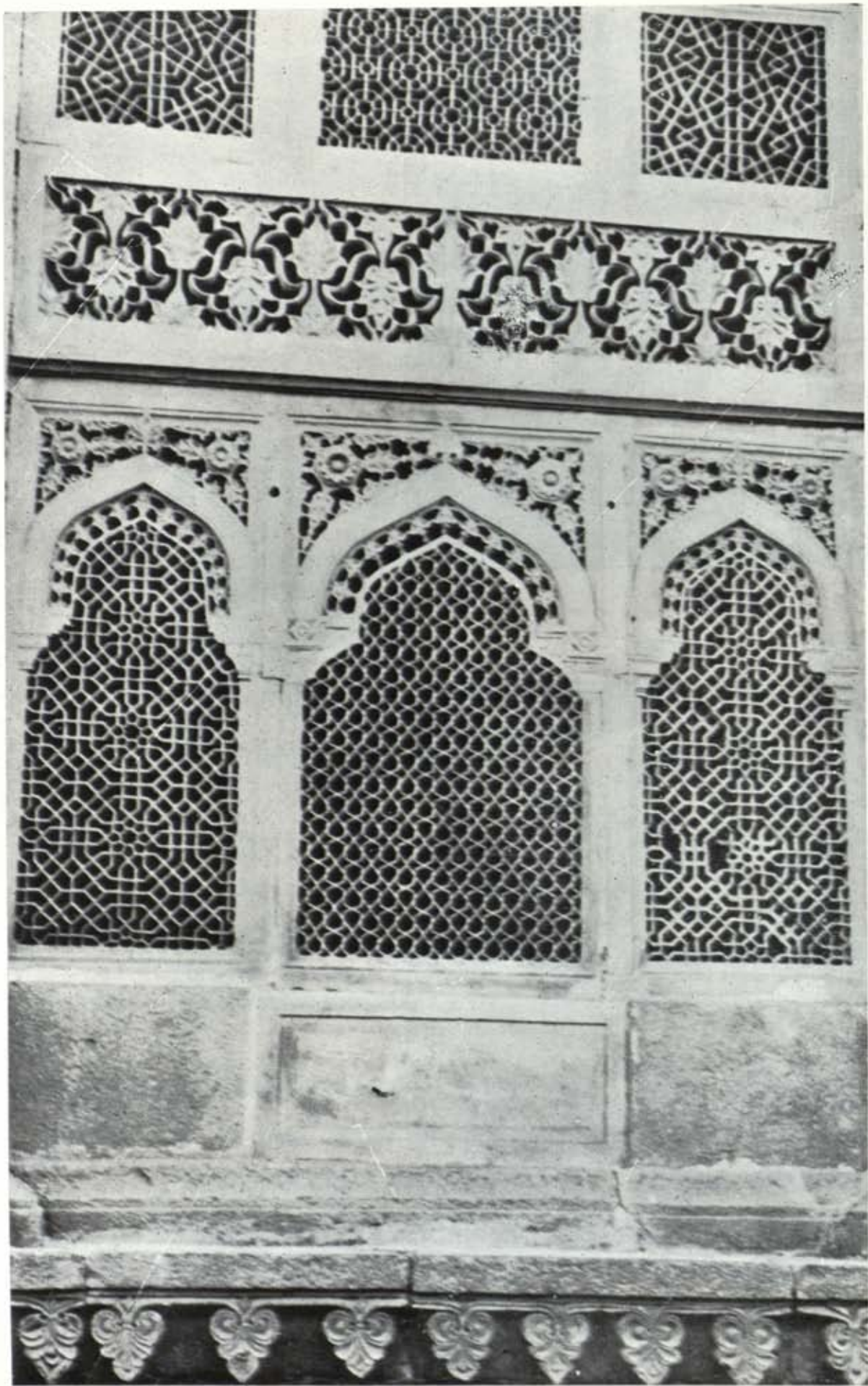
1. *LMHM*, Vol. III, p. 161; also see *EIM*, 1919-20, pp. 5-6. For Persian text see *LMHM*, III, p. 161 and *EIM*, 1919-20, p. 6.
2. *LMHM*, III, p. 144. For Persian text see *ibid.*, p. 144.
3. *EIM*, 1923-24, pp. 27-28; for Persian text, see *ibid.*, p. 27.



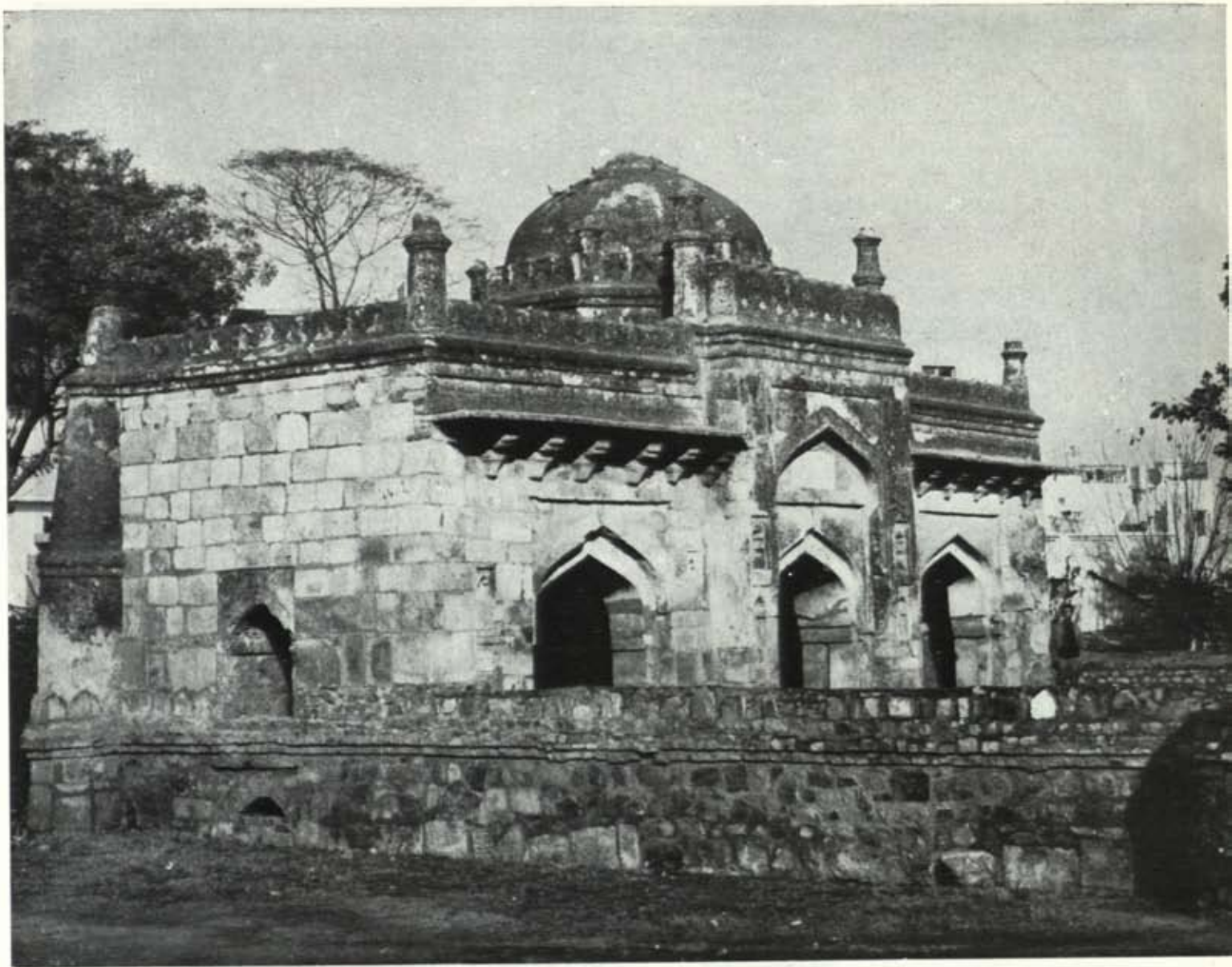
CLII. Jali Work

CLIII. Geometrical Designs of the Jalties

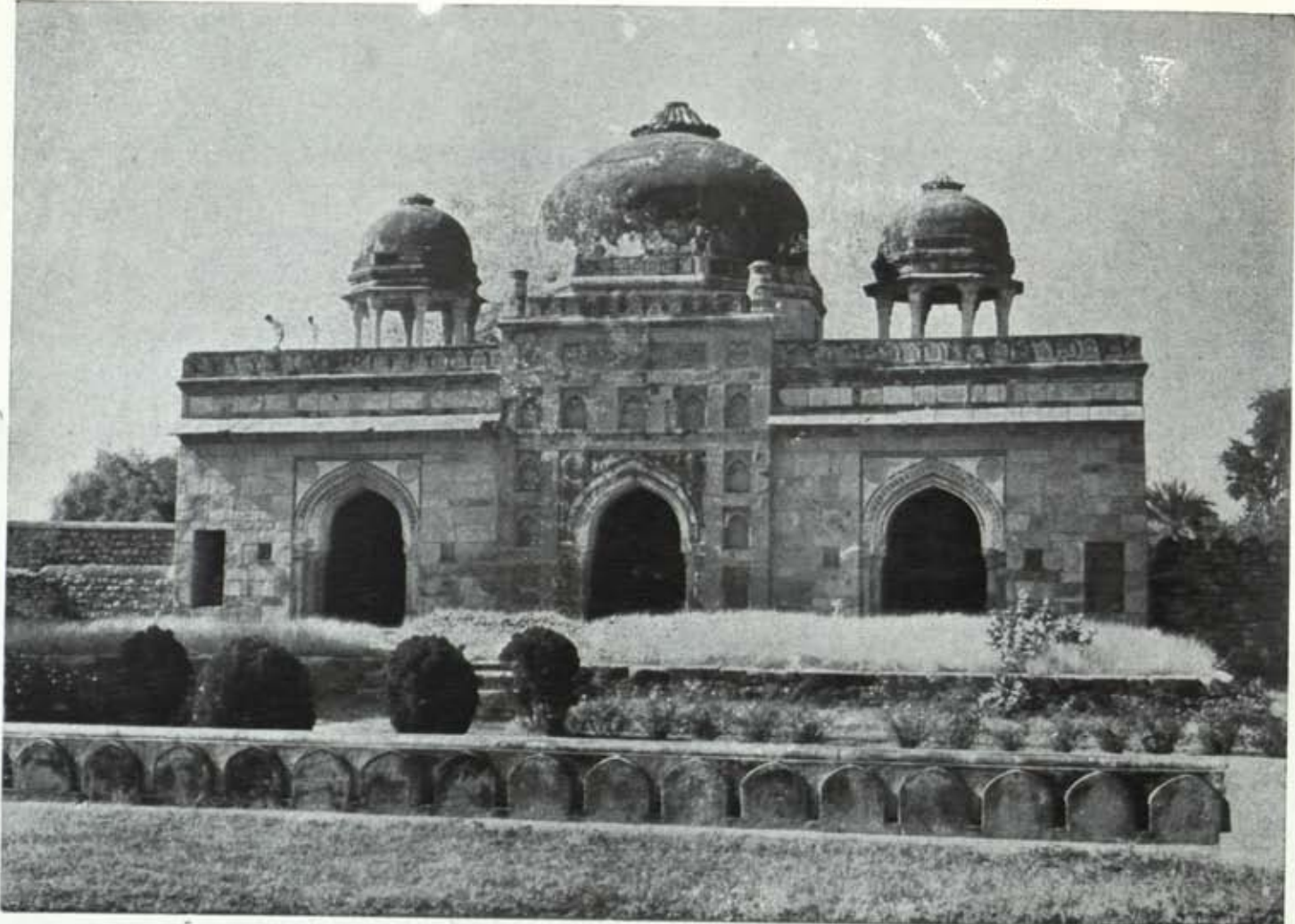




CLIV. Jalis

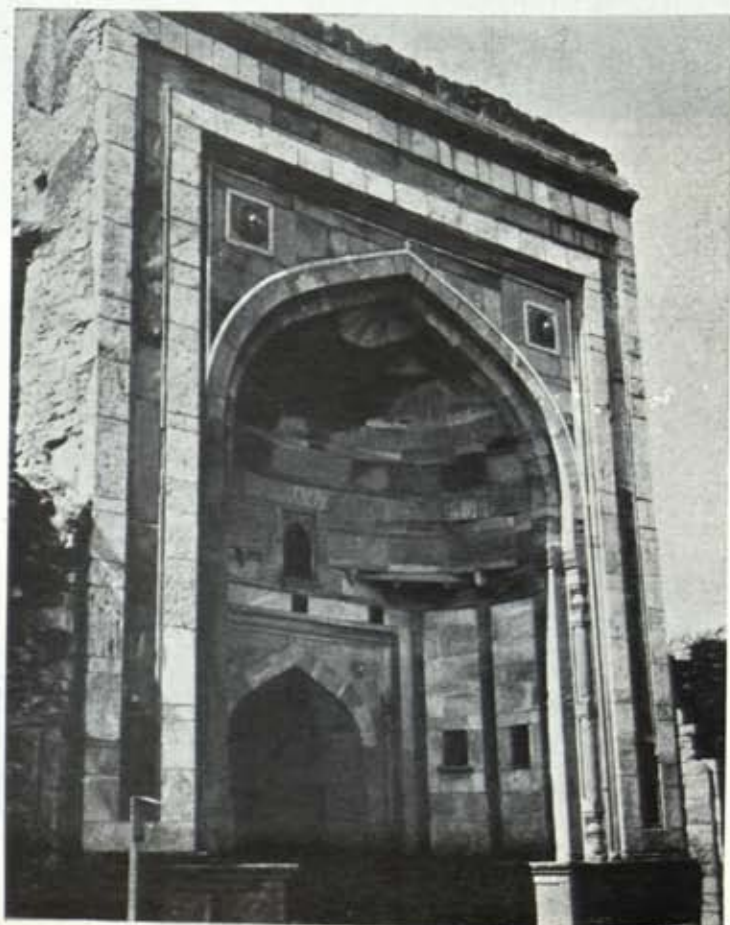


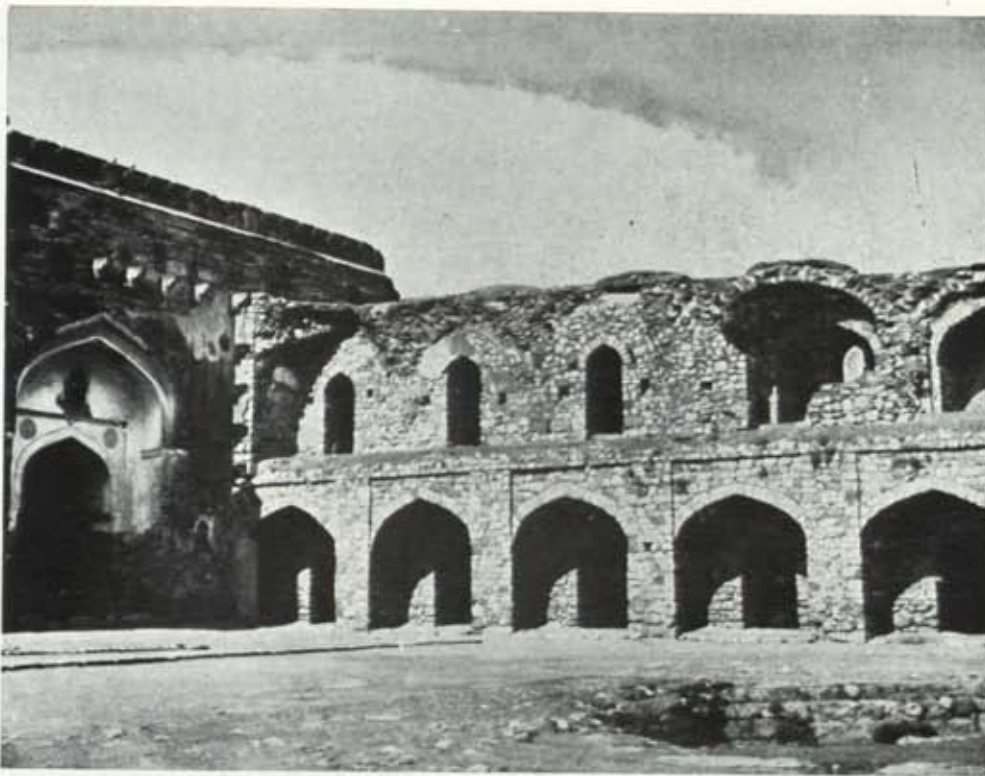
CLV. Nili Masjid, Hauz Khas, Delhi



CLVI. 'Isa Khan's Masjid, Delhi

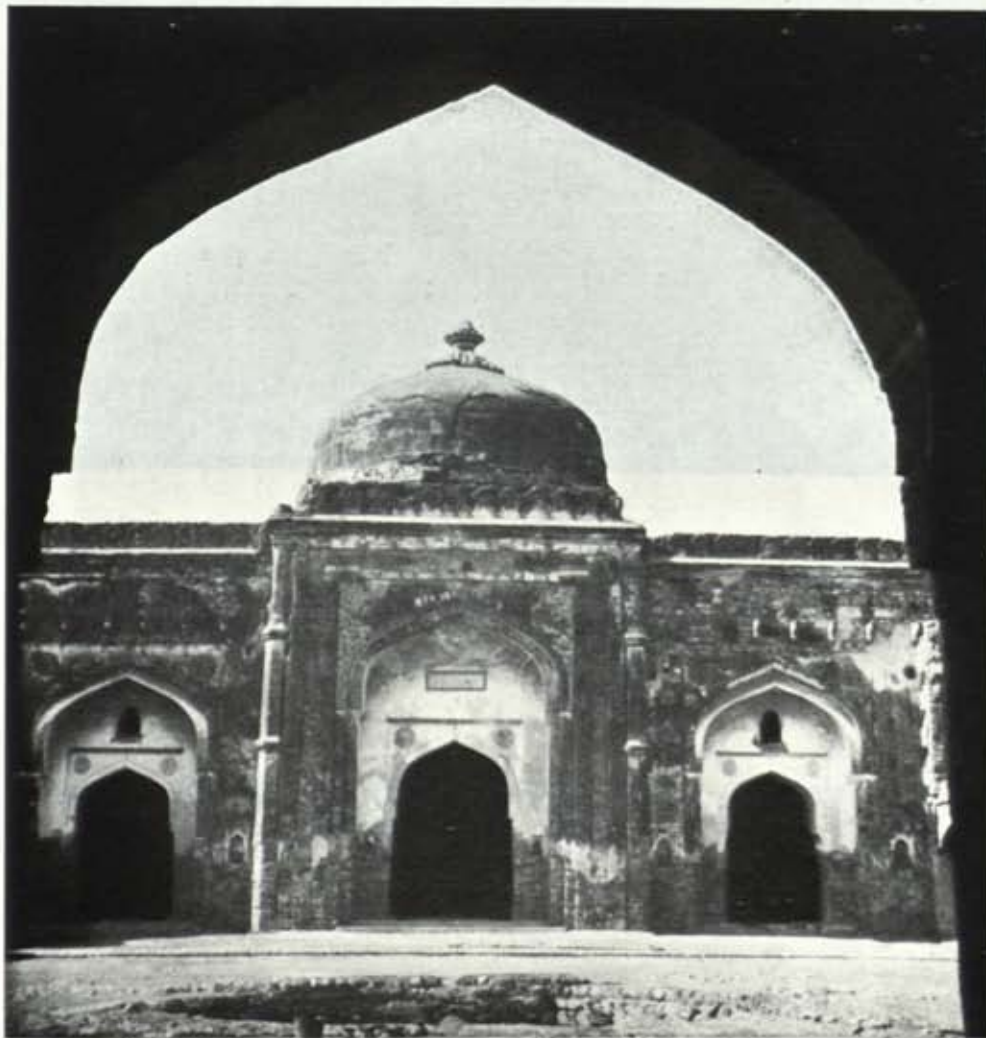
CLVII. Khair'ul Manāzil Dalans →

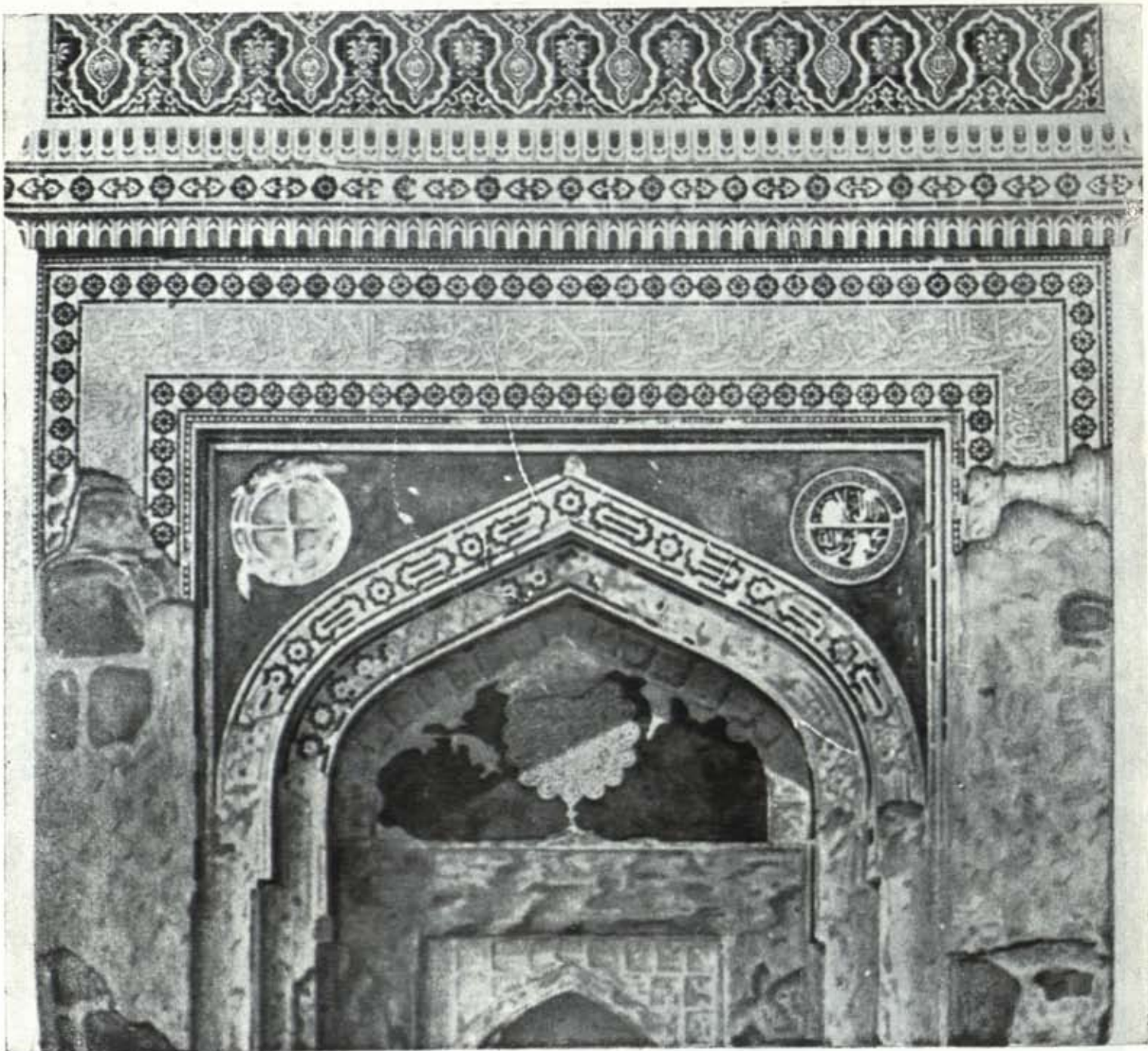




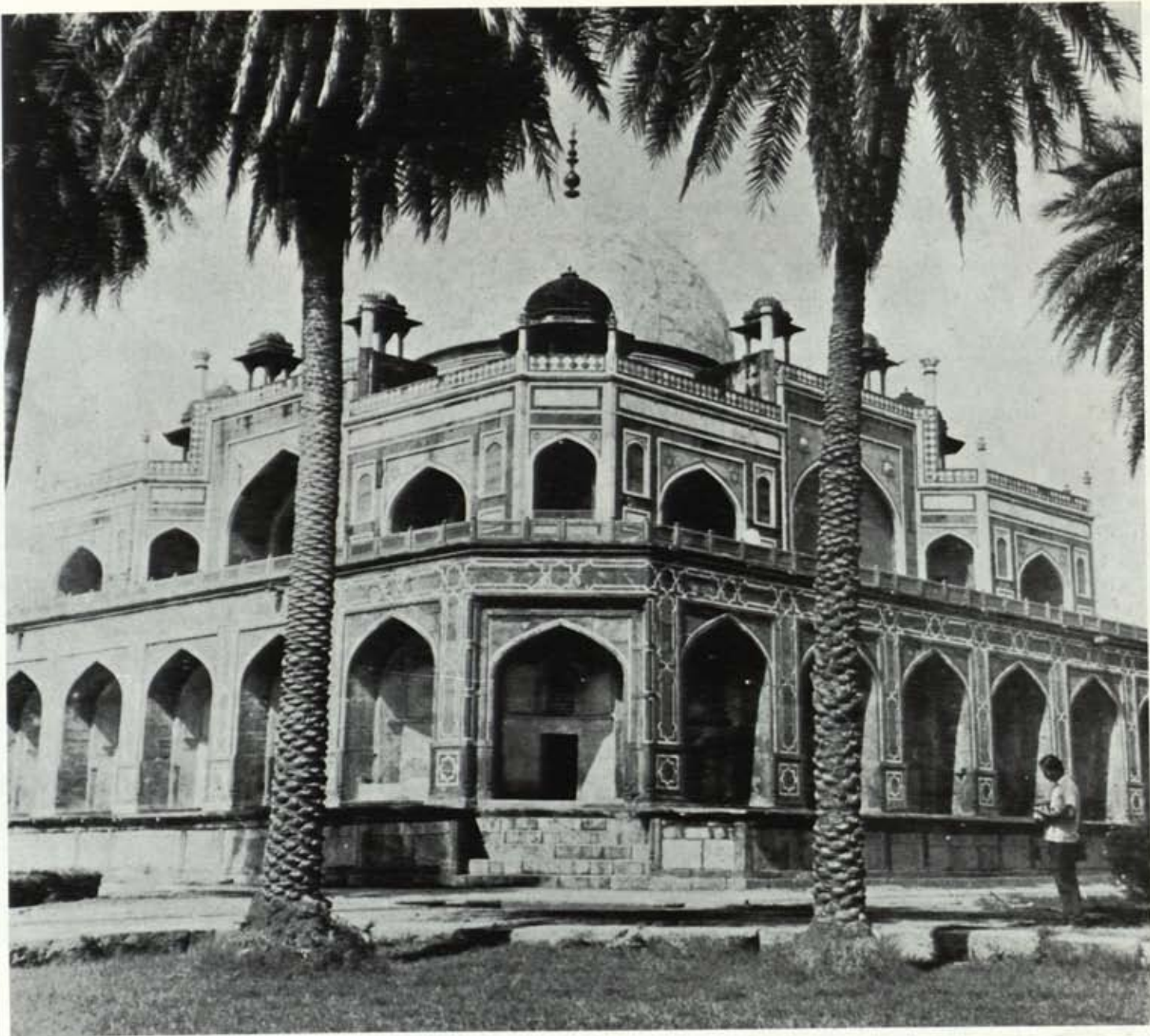
CLVIII. Khair'ul Manāzil Gateway

CLIX. Khair'ul Manāzil Facade of the Sanctuary





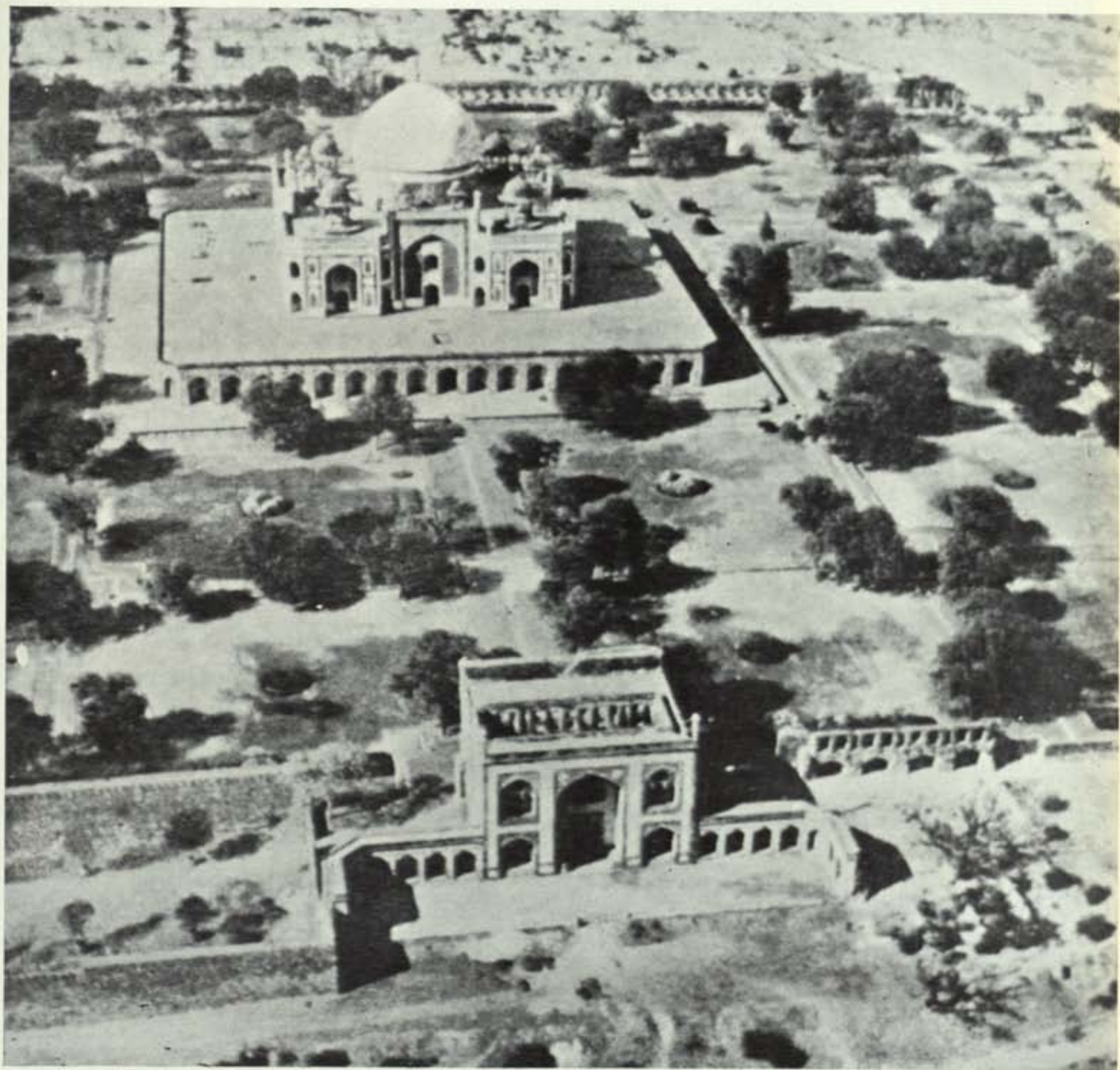
CLX. Ornamentation of the Mihrab



CLXI. Humayun's Tomb, Delhi, Corner View

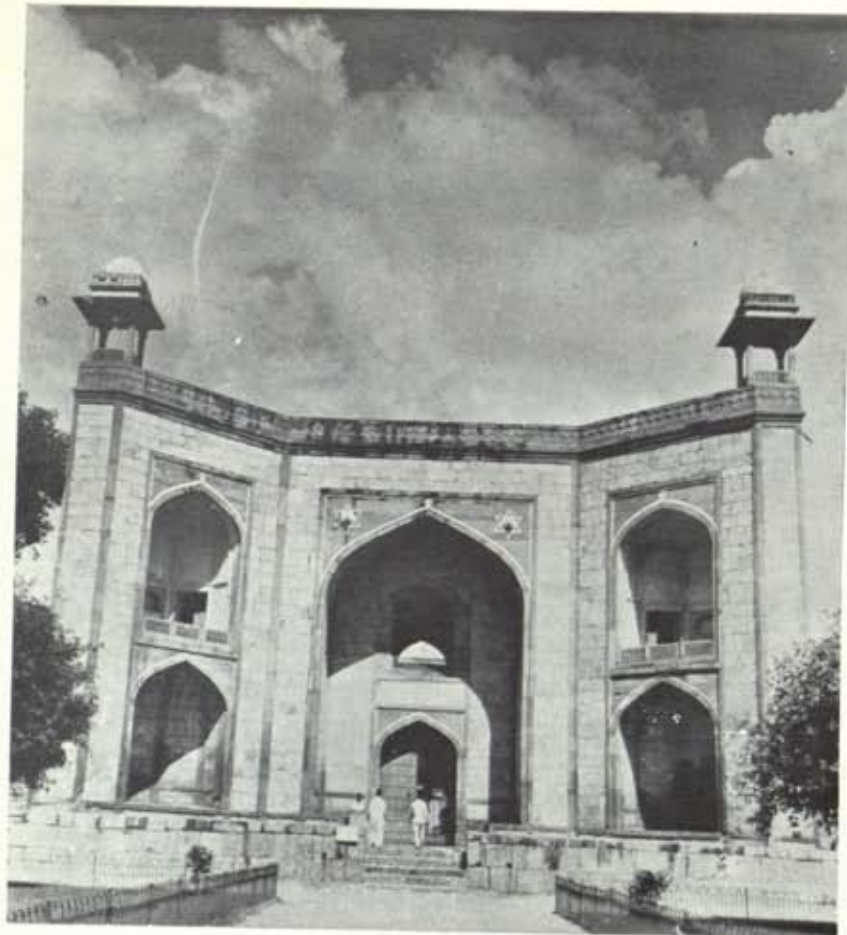


CLXII. Humayun's Tomb, Delhi, Corner View



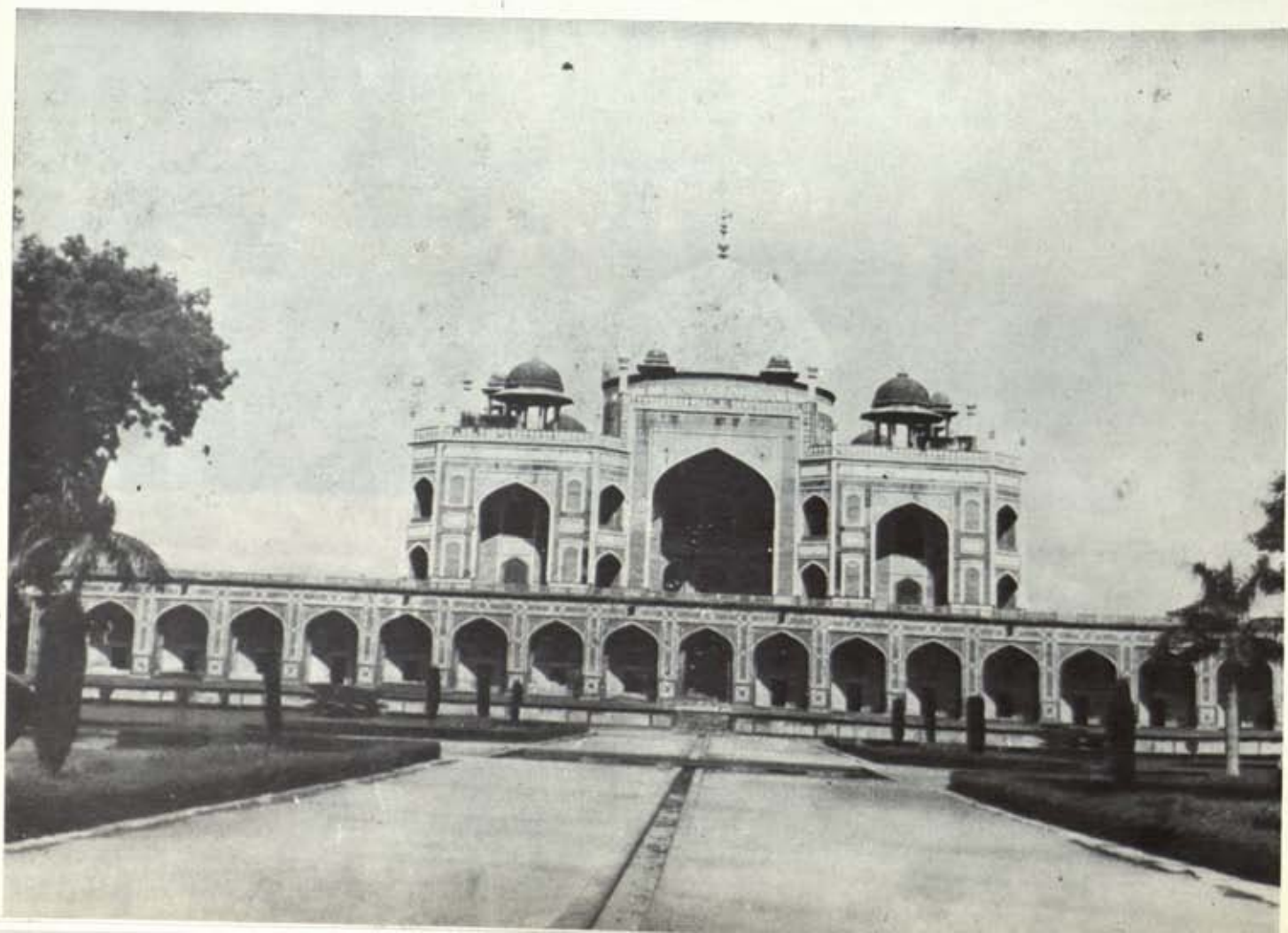
CLXII. Humayun's Tomb, Delhi, Southern Gateway

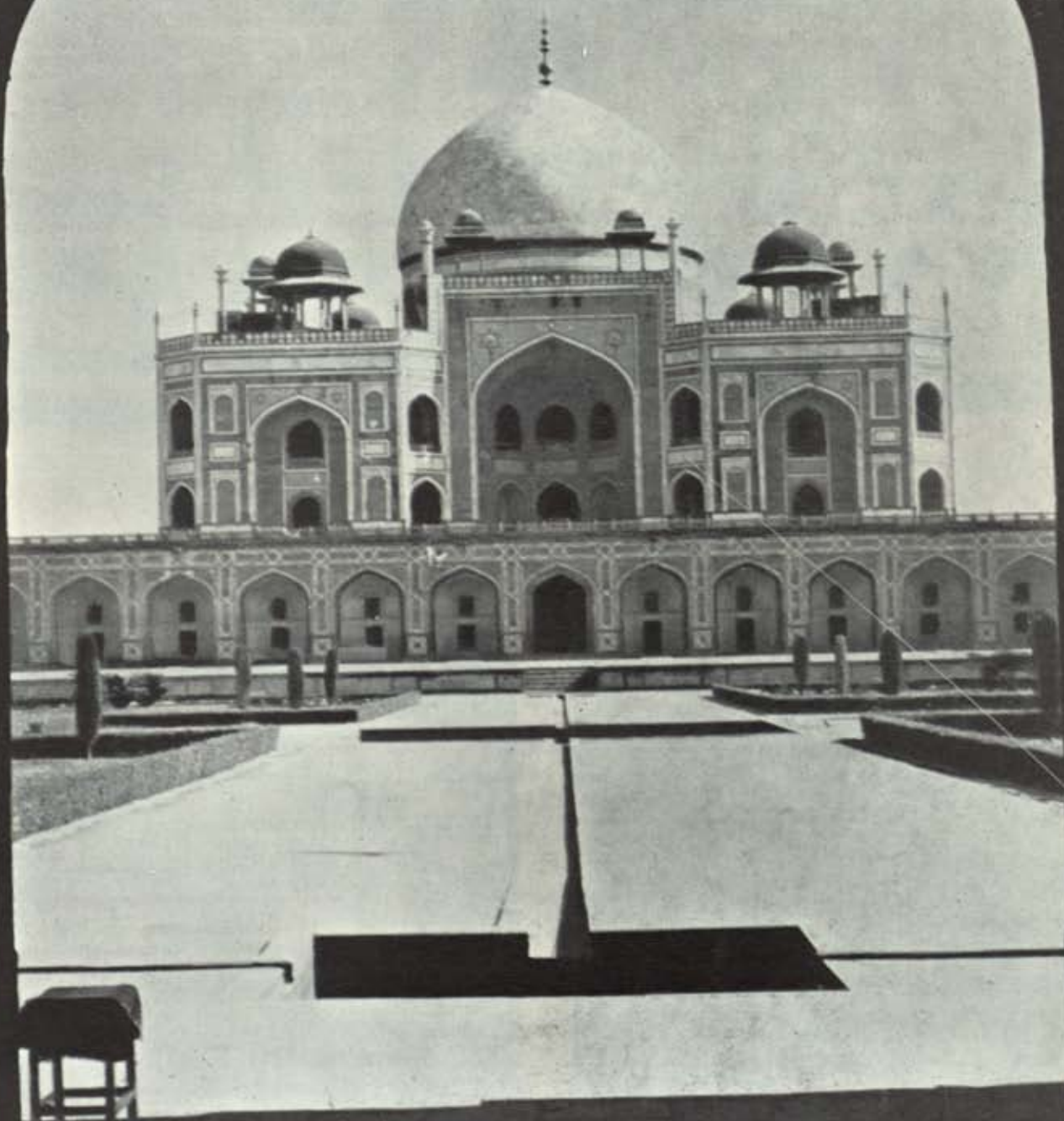
CLXVI. Setting →

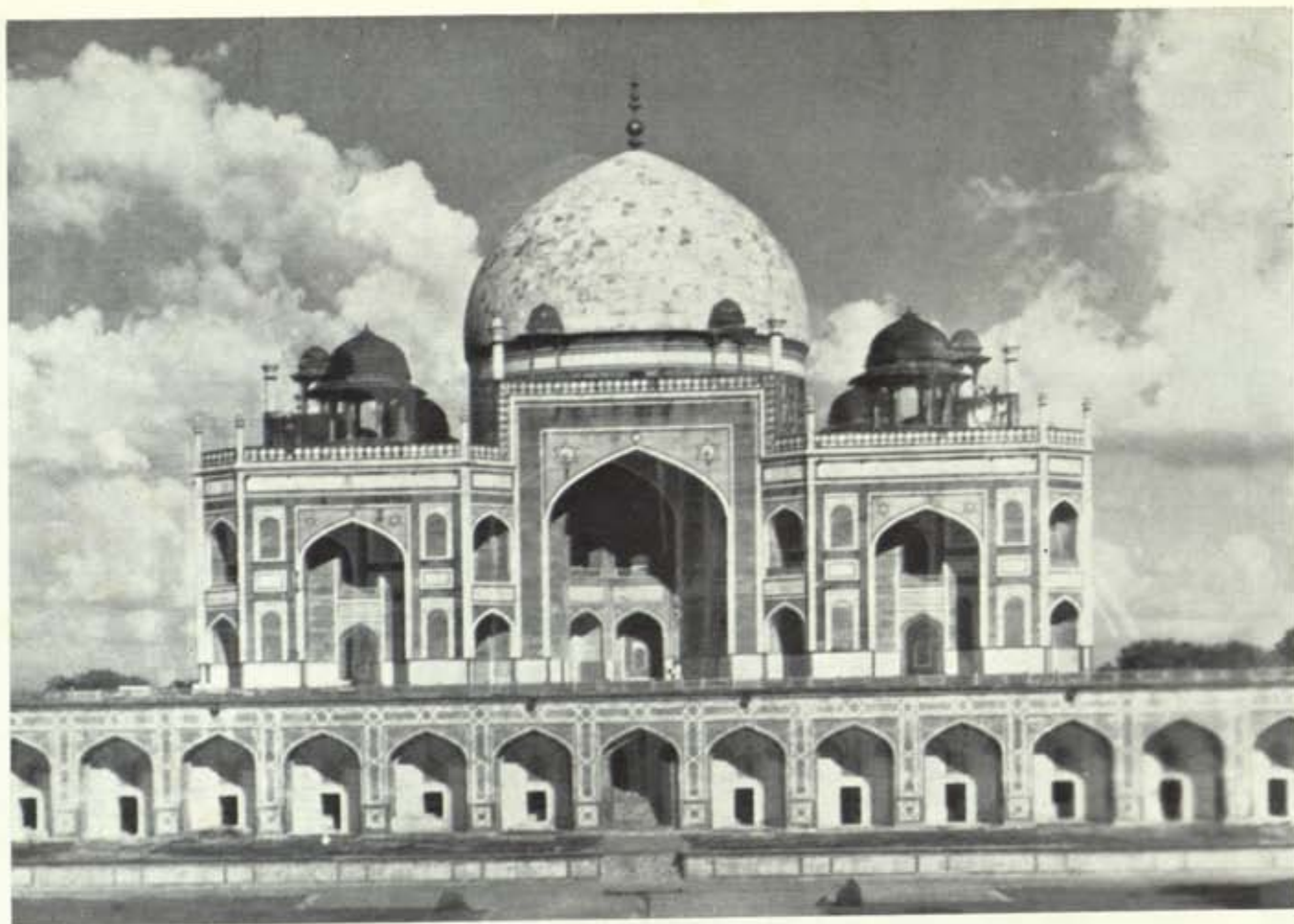


CLXIV. Western Gateway

CLXV. Setting ↓







CLXVII. Facade



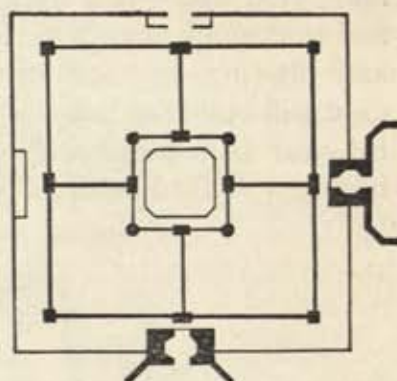
LCXVIII. Details of the Facade



CLXIX. Details of the Facade

to God who graced 'Āzam Humāyun, known as Haibat Khān to build this Jami' Masjid in the reign of His Majesty, the Sultān of Sultans [Sultān'al-Salātīn], chosen and favoured by God Haḍrat Sher Shah, may God the Most High increase what He has bestowed upon him and lead him to that which pleases Him! Says the Holy Prophet, peace and blessings of God be upon him, "He who builds a mosque here, God will build for him a house in the Heavens." And this was built in the year Nine-hundred-fifty in the flight of the Prophet [A.H. 950/1543], blessings of God be upon him ... at the request of Farid Sadr ...

TOMB OF HUMAYUN AT DELHI (c. 1560-70)



(a) *The Prelude*

HUMAYUN died unexpectedly on 24 January 1556 and his body was placed in the Sher-Mandal inside the Dīn-Panāh citadel, as has been discussed above.¹ When Hemu advanced upon Delhi and the Mughals had to vacate it, the coffin of Humayun was dug out and taken to Sirhind where it was deposited temporarily. It remained there for quite some time. This is attested by Abul Faḍl. When Akbar was proceeding to Delhi from Jalandhar in 965/March 1558, he ordered the army to move to Hissar to subdue Ḥājī Khān while he himself

went to Sirhind in order to pay the respects of devotion, and that he might rejoin the army after having visited the shrine of His Majesty Jahanbani Jannat-Ashiyani [Humayun]. May his proofs be illuminated! For when the officers were defeated and Hemu was predominant, Khanar Beg and a number of the servants of the Court had brought that monarch's holy corpse to Sirhind and the coffin was now lying there, shrouded in curtain. In a short space of time he had paid his devotions . . .²

When was the coffin brought back to Delhi is not on record. Possibly, the arrangement was made soon after Akbar's visit to the Supurdgāh (temporary tomb) at Sirhind. It seems to have been buried in the Sher-Mandal again,³ and it remained there until the magnificent mausoleum of Humayun was completed in the heart of the Grand Necropolis, at Nizamuddin.

All authorities are unanimous as to the point that his tomb was built by Hājī Begum (Begā Begum). She was Humayun's chief queen. The Begum was captured at Chausa and she also lost there her daughter 'Aqīqā. Sher Shah sent the Begum back to Humayun with honour.⁴ She came to Hindustan again in 964/1557 along with Hamīdā Bānū Begum (mother of Akbar) and Gulbadan Begum (Babur's daughter and author of the *Humāyūn-Nāmah*). Hājī Begum decided to build a tomb for her husband and the work on its construction started soon after her arrival, c. 1558. She went to Mecca in 972/1564-65 for Hajj; hence her title Hājī Begum.⁵ She returned three years later. She died in 989/1581 and was buried in the same tomb.

Abul Faḍl records that when Akbar started for the conquest of the Fort of Ranthambhor on Monday 1 Rajab 976/21 December 1568, he went to Delhi to visit its religious shrines and:

Especially did he visit the perfumed shrine of that sitter on the spiritual and temporal throne, His Majesty Jahanbani Jannat-Ashiyani, and did he confer princely largesse on the attendants thereupon.⁶

This shows that the tomb had been finished about this time. There is a little chronological difference in Badāoni's narrative:

And in this year [977/1569-70] the building of the tomb of the late Emperor which is heart-delighting, paradise-like, was completed. It is at Dihli on the banks of the river Jamuna and took Mīrak Mirza Ghiyās eight or nine years to build. Its magnificent proportions are such that the eye of the spectator gazing on it admits it only with wonder.⁷

Ferishtah's statement that he was buried on the bank of the river Jamuna at New Delhi and a magnificent mausoleum was built on his grave in 973/1565-66⁸ is also slightly at variance. In any case, the construction of the tomb may be assigned to the period from c. 1558 to 1570. The opinion maintained by Sir Sayyid Ahmed Khan and S.K. Banerji⁹ that it was built in 16 years' time (from 1565 to 1581) is not admissible in view of the statements of such contemporary historians as Abul Faḍl and Badāoni.

The inscriptions which appear on various tombstones of this mausoleum also help us, to some extent, to fix up its chronology. Some are undated. The south-west corner chamber has two tombstones

marking the grave of Shāh 'Ālam Bahādur Shāh and his wife. Ayat'ul-Kursi (The *Quran*, II.255) appears on the female, and the *Quran*, LV.26-27 preceded by 'Bismillah-al-Rehman-al-Rahim' on the male tomb. The south-east chamber has three marble tombs traditionally known to be the graves of Humayun's three daughters.¹⁰ The first bears the Ayat'ul-Kursi with the date 988/1580-81, Kalma and also the *Quran*, LV.26-27. The second and third also bear these verses, but the date on the third tomb is 1001/1592-93. The north-east chamber contains two white marble female tombstones marking the graves of Hājī Begum and Hamīdā Bānū Begum.¹¹ The former's tombstone bears Ayat'ul-Kursi and the date 990/1582 (though she died in 989/1581). The tomb of Muhammad Sultan, son of Roshan Koka, situated on the terrace to the north-west of the mausoleum bears the date 978/1570-71. There are several other tombstones with Quranic verses and some of them also bear dates but they are all later. Curiously, there is no date on either of the two tombstones of Humayun. Except the epitaphs, there is no other inscription in the mausoleum. In this context, the relevant dates are 1570-71, 1580-81, 1582 and 1592-93. The earliest is 1570-71. Though the grave is on the terrace and not inside the building, it is not likely that it was placed there before the completion of the tomb; on the other hand, the need to place it on the terrace and not somewhere in the garden could have arisen only after its completion. This also indicates that the tomb had been completed in 1570-71. In any case, Abul Fadl and Badāoni's statements are conclusive in this respect.

(b) *The Builders*

Badāoni's statement: "It is at Dihli on the banks of the river Jamuna and took Mīrak Mirza Ghiyās eight or nine years to build",¹² tends to show that Mīrak Mirza Ghiyāth was the architect of the tomb of Humayun. This is an extremely important reference and warrants careful scrutiny. His name has also been mentioned by Babur in his Memoirs; he noted that the buildings which were under construction at Agra and Dholpur were placed in charge of "Mullā Qāsim, Ustād Shāh Muḥammad the stone-cutter, Mīrak Mīr Ghiās Mīr Sang-tarāsh (stone-cutters) and Shāh Bābā, the spadesman".¹³ Babur's reference shows that Mīrak Mīr Ghiyāth was the Mīr or superintendent of the stone-cutters and Shāh Bābā was in charge of unskilled labour engaged on daily wages. In all probability, Mīrak Mīr Ghiyāth of Babur's

account is the same person who has been mentioned by Badāonī as Mīrak Mirza Ghiāth. Apart from a number of military officers of Babur who continued to be closely associated with Humayun, a few civil officers of Babur also continued to serve Humayun and there is nothing unusual if an officer, who specialised in building-work during Babur's reign, also lived with Humayun and participated in the construction of this tomb. Maulānā Shihābu'd-Dīn Aḥmed Mu'immāi who wrote under the poetical name Haqīrī, for example, came from Herat to India and joined Babur at Agra in 935/1528; Babur thus noted in his Memoirs:

Next day waited on me the historian Khwandamir, Maulānā Shihāb, the enigmatist and Mīr Ibrāhīm... [on 7 June 1529]... I had sent this little couplet of invitation to Shaikh Zain, Mullā Shihāb and Khwandamir:

'Shaikh and Mulla Shihab and Khwandamir,
Come all three, or two or one.'¹⁴

He, as also Khwandamir, continued to serve Humayun. He composed verses of the inscription of Humayun's mosque at Kachhpura Agra dated in 937/1530.¹⁵ He composed in praise of Humayun, his movable palace, his wonderful building at Agra and the Dīn-Panāh for which he also composed the chronogram giving the date 940/1533.¹⁶ There is another person, Maulānā Nūru'd-Dīn Tarkhan, the mathematician, astronomer and poet, who composed under the nom-de-plume of 'Nūrī'; he also joined the Mughal service under Babur and remained with Humayun and even served Akbar in his early reign. He was Mutavalli (custodian) of Humayun's tomb at Delhi for a long time.¹⁷ In any case, Mīrak Mirza Ghiyāth was Mīr-Sangtarāsh or officer-incharge of stone-cutters who supervised their work and paid them.¹⁸ It is not correct to deduce from this account that he was architect of the tomb, as Percy Brown erroneously did.¹⁹

Likewise, the view generally entertained by the historians that 'Arabs participated in its construction and they were lodged in a nearby serāi which, therefore, came to be known as the 'Arab-Serāi is incorrect. The 'Arabs were never artists, architects or builders. It would have been more to the point had the credit for its double-dome, stucco, painting and some designs been given to the Persian artisans.²⁰ The 'Arab-Serāi was a travellers' lodge (serāi or inn) of an earlier period which was renovated during Jehangir's reign by Meharbān Āghā

Khawajāserāi in 1021/1612 as the extant Christian and other typically Jehāngiri paintings on its gateway and the Persian inscription on its facade show. Two stone slabs bear 'Bismillah al-Rehman al-Rahim' and Kalma. The third reads: "Meharbāno qadīmī Jahāngir Shāh" (The old building renovated by Meharban during Jehangir Shah's reign).²¹

In fact, the references of Badāoni and Abul Faḍl are too meagre to give us an idea of the inspirations and influences which went into the making of this magnificent mausoleum. Who took the initiative to begin its construction, commissioned the builders, planned, designed and financed it? Shall we give the entire credit to the Haji Begum? Did not Akbar play any decisive role in the planning and designing of his father's tomb? It does not seem probable at all that while the construction on the tomb was going on, Akbar remained aloof and unconcerned and everything was decided by the Begum. Many other buildings were raised contemporarily with the tomb of Humayun between 1560 and 1570, the most notable being the tomb of Sheikh Muhammad Ghauth at Gwalior, the tomb of Atagah Khan at Delhi and a few palatial mansions and gateways of the Agra Fort. The last series is most important to give us an idea of the forces and urges which worked silently under the surface, under such a rare genius as Akbar. It shows that not only did he possess a taste for architecture and an outlook of the type of imperial construction, but he also had a philosophy of architecture in mind—and this philosophy, rather than anything else, was the driving force behind his various projects. Abul Faḍl, his court historian, noted among the principal events of the year 972/1565:

*... He establishes spiritual and temporal dominion by building fortresses for the protection of products and the guarding of honour and prestige. Accordingly, he at this time gave directions for the building in Agra—which by position is the centre of Hindustan—of a great fortress such as might be worthy thereof, and correspond to the dignity of his dominions ... It was to be stable like the foundation of the dominion of the sublime family and permanent like the pillars of its fortunes. Accordingly, lofty-minded mathematicians and able architects laid the foundations of this great building in an hour which was supreme for establishing a fortress ... This sublime fortress the like of which had never been seen by a fabulous geometrician, was completed ...*²²

Abul Faḍl gives a still clearer appraisal of Akbar's philosophy of

architecture in the *‘Āin-i-Akbarī*, in *‘Āin-85* entitled: ‘On Buildings’ as follows:

Regulations for house-building in general are necessary; they are required for the comfort of the army, and *are a source of splendour for the government*. People that are attached to the world will collect in towns, without which there would be no progress. Hence *His Majesty plans splendid edifices, and dresses the work of his mind and heart in the garment of stone and clay*. Thus mighty fortresses have been raised, which protect the timid, frighten the rebellious, and please the obedient. Delightful villas, and imposing towers have also been built. They afford excellent protection against cold and rain, provide for the comforts of the princesses of the Harem, and *are conducive to that dignity which is so necessary for worldly power*.

Everywhere also *Sarāis* have been built, which are the comfort of travellers and the asylum of poor strangers. Many tanks and wells are being dug for the benefit of men and the improvement of the soil. Schools and places of worship are being founded, and the triumphal arch of knowledge is newly adorned.

His Majesty *has inquired into every detail connected with this department*, which is so difficult to be managed and requires such large sums. He has passed new regulations, kindled the lamp of honesty, and put a stock of practical knowledge into the hands of simple and inexperienced men.¹³

These accounts of the contemporary historian who was also a close, personal friend of the emperor and who knew every bit of his personality intimately, show that Akbar was inherently interested in architectural projects and he deemed it to be “a source of splendour for the government” conducive to the dignity of the empire.

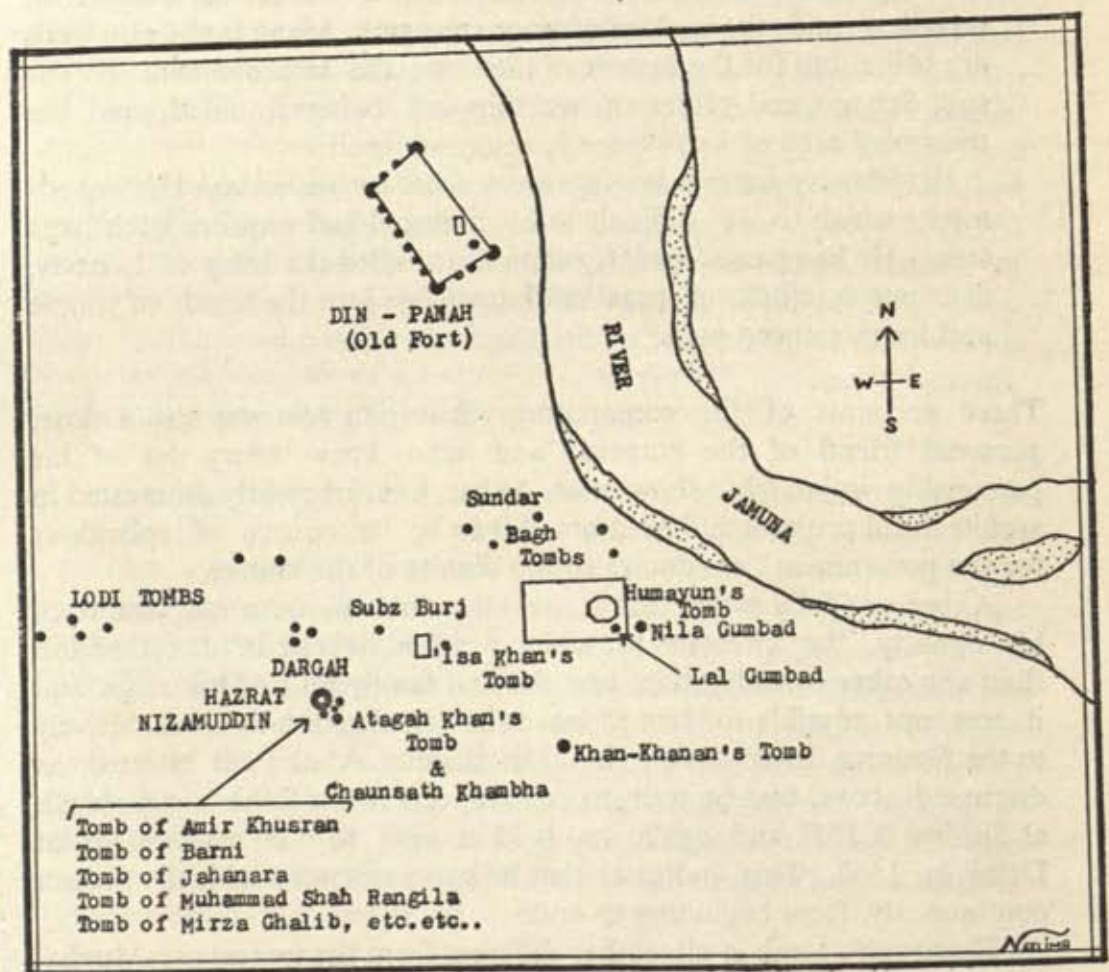
Akbar was fully aware that it was the first monumental tomb of his dynasty, the interests of which weighed heavier in his estimation than any other consideration, and the first family relic of his reign and it was not possible for him to leave the construction-work exclusively to the feminine discretion of the *Hājī Begum*. Abul Faḍl attested, as discussed above, that he went to pay respects to his father’s *supurdgāh* at Sirhind in 1558 and, again, he paid a visit to the mausoleum at Delhi in 1568. This indicates that he was associated with the project continuously, from beginning to end.

Humayun’s tomb is altogether different from the typical pre-Mughal tomb in respect of its site, lay-out, plan and design and it is, in fact, a

marvellous innovation on the Indian scene. Can we afford to ascribe this 'marvellous innovation' to an old mediocre lady of the deceased king's Harem? This is impossible. Only a rare genius of Akbar's thought, approach and decision could have worked it out! The circumstances of the case thus show, without the least doubt, that Akbar took keen interest in the project and exercised decisive discretion in the matter of planning and designing of the grand sepulchre of his father.

(c) *The Sources*

The tomb of Humayun is laid-out on the bank of the river Jamuna (see Map 3 below) which has now shifted its course much off its



Map 3. Main Buildings of the Grand Necropolis, Delhi.

eastern wall and, consequently, deprived it of the beautiful natural setting with which the architect had originally associated it. Its planning on the river-bank was also an innovation at Delhi. The pre-Mughal tombs of the seven royal seats of Delhi²⁴ are isolated structures without any such natural setting or surrounding. There is only one example, the tomb of Sher Shah, Humayun's greatest adversary, at Sasaram which has been planned in the midst of a vast lake.²⁵ There is absolutely nothing to show that the inspiration either in the case of the tomb of Sher Shah or the tomb of Humayun came from any Islamic source and, in fact, there is no Arabic or Persian text to enlighten us in this respect. As it seems, the inspiration came from the indigenous sources. Sites near water were considered to be sacred in India since times immemorial. We get the earliest references in the *Bṛhat-Saṃhitā* of Varāhamihira assigned to the Gupta period, c. 5th century. First eight śloka of its Chapter LV deal with the subject of ideal site for the construction of temple, e.g.:

सलिलोद्यानयुक्तेषु कृतेष्वकृतकेषु च ।
स्थानेष्वेतेषु सान्निध्यमुपगच्छन्ति देवताः ॥ ३ ॥

(Gods come near the places which have water and gardens, either natural or artificial.)

And:

वनोपान्तनदीशैलनिर्भरोपान्तमूमिषु ।
रमन्ते देवता नित्यं पुरेवूद्यानवत्सु च ॥ ४ ॥

(Gods reside near forests, rivers, mountains, rivulets and in the cities which are full of gardens.)

These ideals were not only very well known to the indigenous builders, they were also very much in vogue in the country and one only needed the discretion to apply this formula of temple-art to tomb architecture. With such a bold innovator as Akbar, there was hardly any difficulty or even hesitation to adopt it. It was in accordance with these ancient dicta that the planners selected a site on the river-bank for construction of the tomb which would enshrine the sacred relics of the ruling emperor's father.

Babur introduced the *chār-bāgh* (*chahār-bāgh*) or the four-quartered square plan of the garden and created a forum where the gardener,

the water-engineer and the architect could associate and combine their

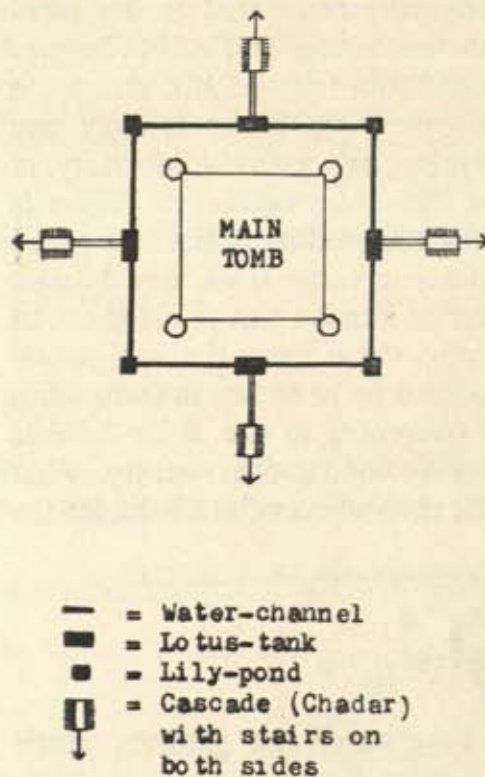


Fig. 45. Char-Bagh Plan of Chauburj (Bāgh-i-Zar Afshān of Babur) at Agra (c. 1527).

gigantic in scale and vast in space came to be materialised at such an early stage of Akbar's reign? The mortal remains of the departed soul could be permanently buried in the Sher-Mandal or a small tomb could have been built in the Dīn-Panāh citadel itself. What led the planners to adopt this design amidst a beautiful environment on the river-bank in the heart of the Grand Necropolis and raise a monument the like of which had not been built in India, or outside it, so far?

C.M. Villiers Stuart made an extremely interesting observation in connection with this concept:

The fourfold field-plot of Babur and also the Hindu mythologised geography of the world. This was a Holy Land, with Mount Meru in its midst, from which the waters of a secret spring flow north, south, east and west in four great fertilising streams. On the central mount grows the sacred tree, the Tree of Knowledge of Good and Evil, with Naga, the Holy water-snake, the embodiment of the spring, coiled about its roots. These same ideas of the sacred moun-

efforts to bring about a homogeneous architecture. His tomb: CHAUBURJ, at Agra was planned in the centre of the four-quartered garden (see Fig. 45 for plan), viz., the Bāgh-i-Zar Afshān,²⁶ which was enclosed on all sides and adorned with water-channels, lily-ponds and lotus-tanks at regular intervals. The building was gorgeously set amidst these pleasing water-devices and the garden on all sides with flower-parterres and cypress-avenues. This was a novel idea for the lay-out of the proposed tomb of Humayun and it was on this plan that a beginning could be made (see Fig. 46 for the Chār-bāgh plan of the Tomb of Humayun).

Its is, however, a grand concept. How the idea to raise such a beautiful commemorative tomb which is magnificent in splendour,

tain and the holy tree with its secret spring and guardian snake are connected with all early conceptions of a Paradise, and in every language the very word Paradise, or garden means 'enclosed'. Such was the Eridu of the Assyrians; the Eden of the Jews; Mount Olympus, the Greek Garden of the Gods; the Vara or Pairideasa of Ancient Persia . . .²⁷

It is important to note that Islamic law does not command its followers to raise monumental sepulchres and, instead, it lays down that the dead body should be deposited into the ground and only unburnt bricks and earth should be used to close the grave. In fact, the Hadith prescriptions strictly forbid construction of a tomb over the grave with stones or burnt bricks, or to write a verse on it.²⁸ Pure in content and simple in practice, Islam teaches utmost austerity in respect of fine arts. The Prophet, Haḍrat Muhammad who had a distinct vision as to the course his zealous followers would adopt, was very particular in this matter and prayed that "God would not allow his followers to make his tomb an object of idolatrous adoration."²⁹

According to the Islamic mythology, seventy-two souls will rise from each grave on the Day of Resurrection. This shows that the grave should be covered by earth only, and it should be left 'kachchi', so that during the course of centuries and millenniums, other dead bodies could also be deposited in the same piece of land. Erection of monumental tombs is, thus, explicitly ruled out under the orthodox law of Islam.

The Indian texts, on the other hand, contain explicit references of monumental structures, including *sepulchral*, which were quadrangular in plan, with a spacious plinth called *bhadrapīṭha*, and assumed a circular

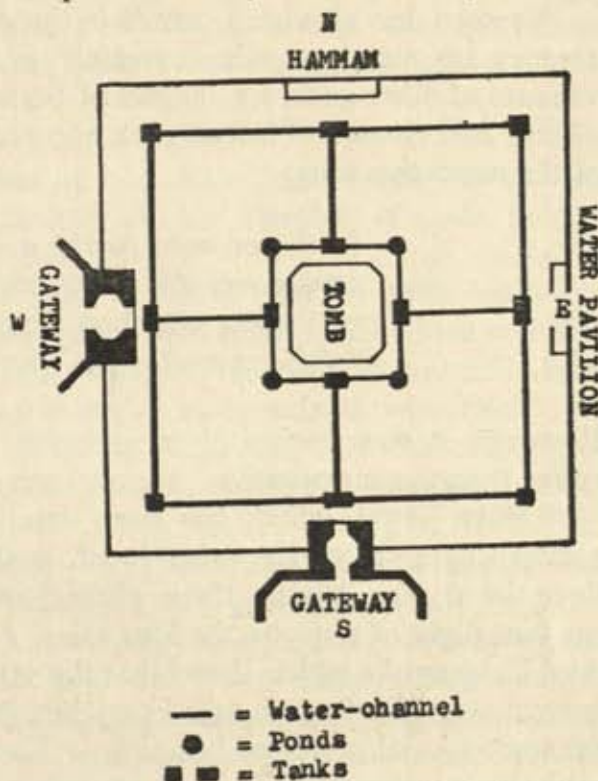


Fig. 46. Charbagh Plan of Humayun's Tomb, Delhi (c. 1558-70).

form above. The *Viṣṇudharmottara-Purāṇa*, assigned to c. 650 A.D., is the earliest text in this respect. The Sage Mārkaṇḍeya described to King Vajra the form (rūpa) of the formless³⁰ ākāśa (आकाश) (or gagana गगन)³¹ and vyoman (व्योम), the difference between them lying in the fact that the former is a personified deity, while the latter has the shape of Meru (मेरु). Vyoman has been described at length.³² It is quadrangular at base, then it becomes circular; above, it is again quadrangular and is shaped like Meru; the third part of vyoman, viz., the main plinth is called bhadrapīṭha. There is a second bhadrapīṭha on which an eight-petalled lotus is placed.³³

Vyoman has also been treated in the *Aparājita-pṛchhā*, of late 12th century A.D. mainly as vāhana (vehicle) of Sūrya (Sun), along with the vāhanas of other gods, e.g., haṁsa of Brahmā, garuḍa of Viṣṇu, vṛṣabha of Śiva and vyoman of Sūrya, each one occupying a position in front of the respective deity:

शिवाग्रे वृषभः स्थाप्यो विष्णोरग्रे च पक्षिराज ।
ब्रह्माण्डे सदा चैवं श्वेताङ्गो हंस एव च ॥ ४८ ॥
सूर्याग्रे च भवेद् व्योम देव्याग्रे पादुका तथा ।
अर्चायाः पादपद्माग्रे पादुका तुल्यमुच्छ्रिता ॥ ४९ ॥³⁴

However, it was exclusively a sectarian relic and, in any case, it was votive than commemorative.

Aiḍūka (ऐडूक) which has been described in the same Purāṇa at greater length³⁵ is, on the other hand, a sepulchral structure. It is a three-tiered (i.e., having three plinths) quadrangular structure which has four flight of steps on the four sides. A liṅga-form is placed on the third bhadrapīṭha which shows that the structure assumed a circular form above. This form is called prajāhita (प्रजाहित) which implied that it has some special power of bringing welfare to the people. It was a symbolic construction; instead of being a specific deity it is, like vyoman, a structure symbolising the cosmic divinity.

Aiḍūka's mention in the *Mahābhārata* is very interesting and enlightening in this connection. In its Vana-Parva, the Sage Mārkaṇḍeya spoke to the eldest Pāṇḍava Yudhiṣṭhara about the Kali-Yuga that would be coming after the Dwāpara-Yuga; he gave a detailed account of how the things would go wrong, the varṇāśrama-dharma and the whole social order would turn topsy-turvy and evil would prevail.³⁶ He stated in the same reference:

विपरीतश्च लोकोऽयं भविष्यत्यधरोत्तरः ।
एडूकान् पूजयिष्यन्ति वर्जयिष्यन्ति देवताः ॥ ६५ ॥

शूद्राः परिचरिष्यन्ति न द्विजान् युगसंक्षये ।
 आश्रमेषु महर्षीणां ब्रह्मणावसथेषु च ॥ ६६ ॥
 देवस्थानेषु चैत्येषु नागानामालयेषु च ।
 एङ्कचिह्ना पृथिवी न देवगृहभूयिता ॥ ६७ ॥

(The world-order shall be reversed; high would become low and vice-versa. People would worship tombs instead of the temples of gods. In Kali-Yuga, Śūdras would not serve the high castes. Everywhere, in the forest-retreats of sages, houses of Brahmanas, temple-sites, chaitya-sites and places of Nāga-worship, the aiḍūka-signs would be displayed and the earth would not be adorned by temples of gods.)

Precisely, it makes out that in the Kali-Yuga people would take recourse to *tomb-worship* instead of the worship of gods in their respective temples.

Aiḍūka has been mentioned in some later Sanskrit works and Sanskrit lexicons which refer to it as a wall or structure which contained bones. Originally, aiḍūka was a structure where a post-cremation burial was made, i.e., it was a sepulchre which enshrined bone-relics.³⁷ This quadrilateral structure was sepulchral in essence, which developed from the Chatuḥ-srakti śmaśāna (four-sided cemetery) mentioned in the *Śatapatha-Brahmaṇa*,³⁸ like the stūpa which developed from Parimaṇḍalaśmaśāna of the Āsurī or Prāchī-Prajā (eastern people). Both aiḍūka and stūpa are *pre-Buddhist funerary structures*. While the former is quadrangular, the latter is circular. The former is commemorative rather than votive; though the latter too was originally commemorative, later it became votive after its association with Buddhism. Aiḍūka was, thus, a sepulchral, four-sided structure which contained relics as a memorial. The most important aspect of its concept was that its construction was considered to be auspicious to the subjects (prajāhita) which shows that it was associated with the state's ceremonial function and, rather than being a private venture, it had a public relevance and more than an ordinary meaning.

Though the *Viṣṇudharmottara-Purāṇa* commended it as sublime object of cosmic divinity, the idea of its worship, connected with śmaśāna originally as it was, never gained currency in the ritualistic Hinduism and the later texts do not mention it. In fact, aiḍūka's is the least discussed subject in the Hindu iconography. Nevertheless, the word continued to be in use and its meaning was known to the acharyas; lexicons mention it over and over again, from Amarasimha's

Amarakośa (c. 4th century A.D.) at least to Hemachandra's *Abhidhāna-Chintāmaṇi* (12th century A.D.).³⁹

Precisely, it was a three-tiered quadrangular structure which assumed a circular form above the third plinth, having flight of steps on all the four sides; if the Hindus had a purely commemorative sepulchral structure, a memorial which was also related to the state's ceremonial function, it was this. That the Tomb of Humayun is also a three-tiered quadrangular structure, crowned by a dome above the third terrace (Fig. 47 and Plates CLXI and CLXII), having flight of steps on all the four sides—even on the western side which, in the main mausoleum, is closed—built as a sepulchral memorial was not a coincidence. We cannot think of such a great form and the incarnation of such a great art as this without a theory which, truly, the Muslim art had none. As it seems to have been the only course

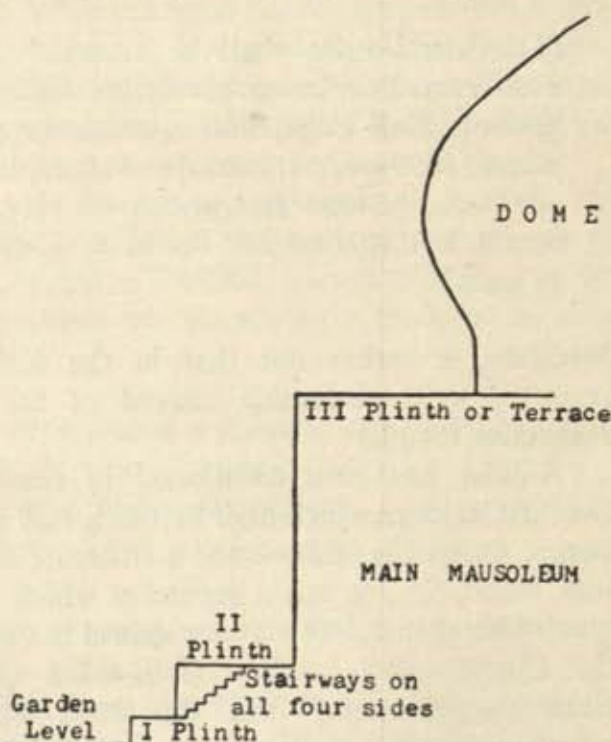


Fig. 47. Rough section showing three-tiered domed design of Humayun's Tomb.

open to Akbar and his architects, they looked at the theory which was readily available to them in the land of Hindustan; they borrowed the idea of its design from the indigenous sources, though, of course, they adopted it in their own magnificent way along with such features as a four-quartered garden (*chār-bāgh*) and water-devices, *iwan* and alcoves, arches and a dome, which were very much on the scene during this age. The *concept* of the tomb belongs to the soil where it stands.

(d) *The Garden and the Water-Devices*

Humayun's Tomb is situated in the centre of the four-quartered garden (*chār-bāgh*) which is enclosed on all sides by a high rubble wall. Each

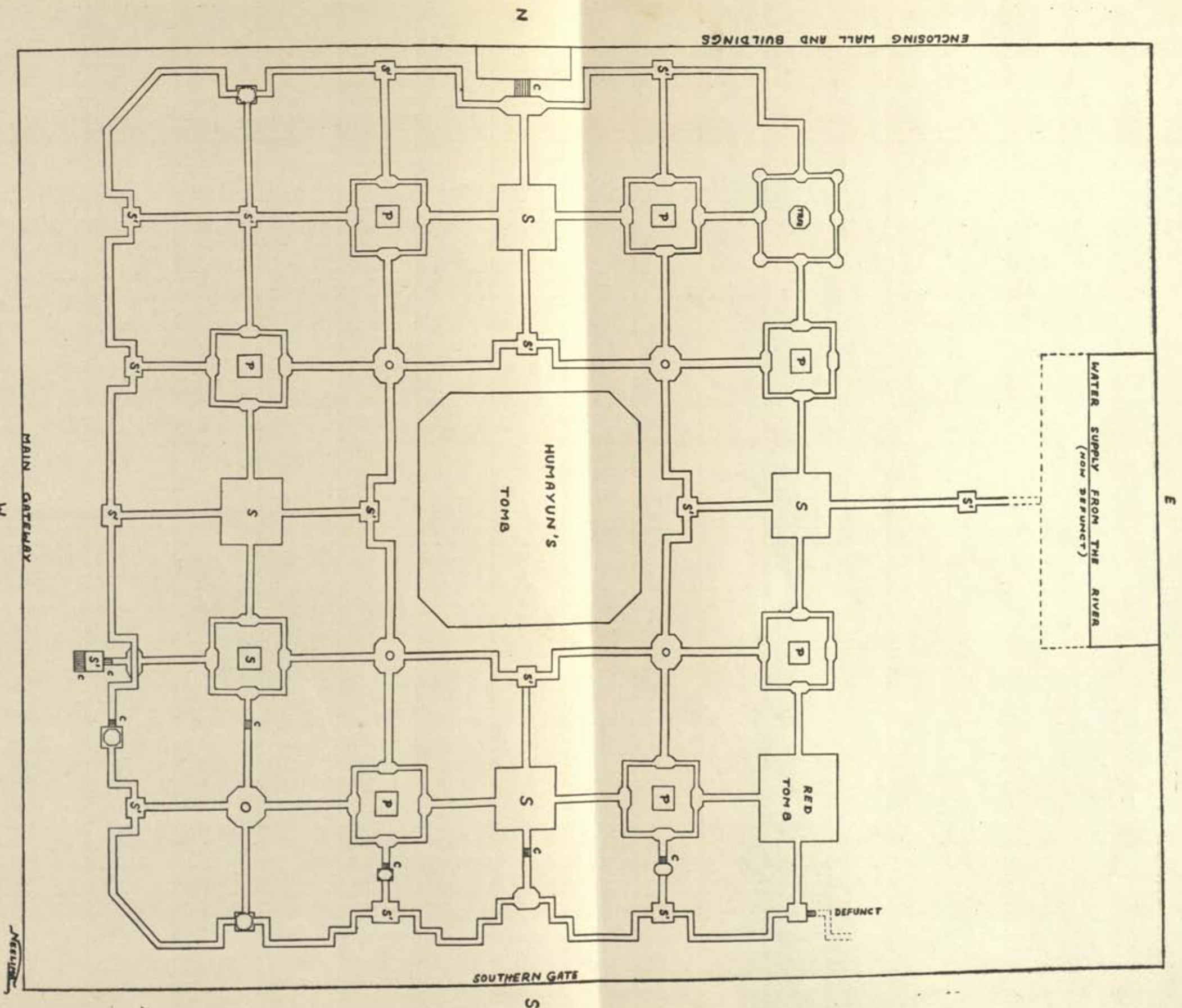
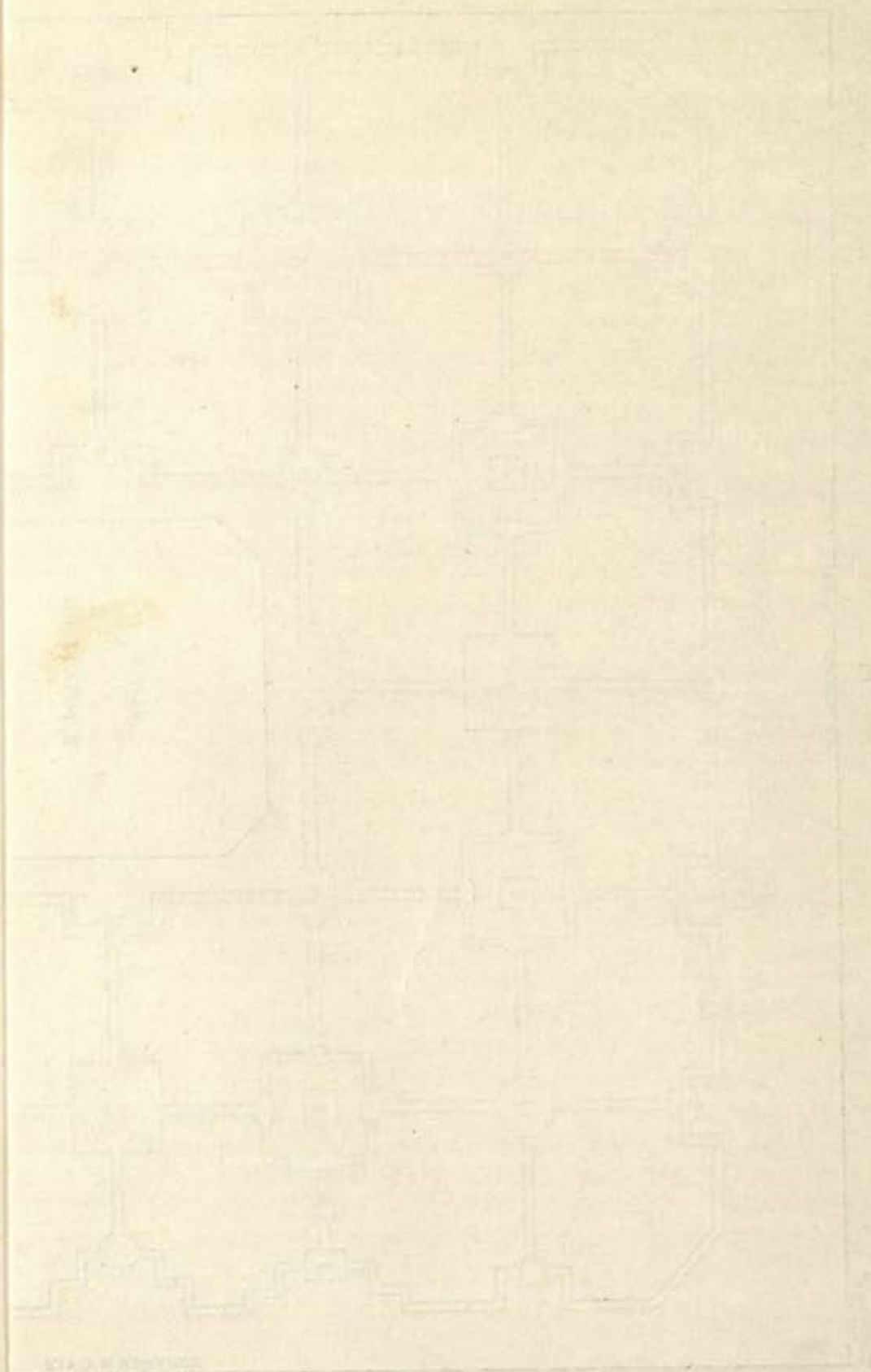


Fig. 48. Garden Plan with water-courses and tanks, Humayun's Tomb.



side has, in the middle, a pavilion or gateway (Fig. 46). Thus a spacious multi-apartment hammām is there in the middle of the northern and a water-pavilion in the eastern wall. It may be conjectured that when the river flowed by the tomb-enclosure, water was drawn from it and supplied to the garden for irrigation and this point was the source of the elaborate water-system of the garden-complex. There are two monumental gateways respectively in the centre of the southern and western side. Southern gateway which is closed at present (Plate CLXIII) was the main entrance originally. It is a spacious double-storeyed building of local grey quartzite with which red sandstone has been used lavishly on all edges, and white marble on all prominent outlines, e.g., of the arches. The central portal which gives entrance, rises almost to the whole height of the building. It is flanked on either side by double arches, one over the other. A screen of arches attached to the gateway on either side at an inclined angle adds to the grand effect of this imposing gateway.

The western gateway is, comparatively, a smaller structure having a central portal and a wing of double-arches attached to it on either side at an inclined angle (Plate CLXIV) giving a plastic rather than a monumental impression. As in the former case, the skeleton is made up of grey stone with all the edges finished in red stone and outlines of arches in white marble for emphasis as well as pleasant colour contrast. There is no plaster and no ornamentation, and there could not have been a better way to relieve the monotony of the plain surfaces. Şatkoņas adorn the spandrels of the central portal like the southern gateway. Frieze has been entirely finished in red sandstone having a series of incised cross. Each side is crowned by a beautiful square chhatri composed of jaliéd balustrades, slender pillars, chhajja and a white marble cupola resting on a square inlaid drum. The whole composition is extremely pleasing and effective.

The tomb-structure occupies the central position in the square plan of the garden which is divided into four quarters, each separated from the other by paved pathways having sunk water-channels in the middle and tanks and lily-ponds at regular intervals. It is, in fact, an elaborate and extremely intricate network of water-courses, square and octagonal tanks and ponds, raised platforms and cascades—all interconnected—which surround the tomb gorgeously and symmetrically on all sides (Fig. 48 for Garden Plan). An octagonal shallow pond has been provided in front of each (chamfered) angle of the first plinth and a small square tank facing the centre of each side, as shown in the plan. Thence water is conducted to the four quarters through a series of

shallow water-channels, tanks and ponds—all in deep red sandstone which besets in the green setting of the lush garden extremely pleasingly. Thus there are four small and four large tanks in front of each side (marked by S' and S respectively in the plan), four octagonal ponds at the corners (marked by O) and eight platform-sets (each comprising of four oblong octagonal ponds on the four sides of a raised red stone platform), two on each side (marked by P) around the main mausoleum. The system is further extended on all the four sides. O and O' are shallow ponds; some are gracefully cusped. Chādars (cascades, water-chutes) each making a charming waterfall, have been provided intermittently, mainly on the south side of the garden where there is a natural slope which has been used by the garden-planner in this beautiful way. In fact, it afforded a second terrace to him partially fulfilling the ideal of a terraced garden. These little beautiful chādars, white 'shawls' of water, in shell and wave designs, down which water softly ripples, collects reposingly in a cusped pond and moves leisurely on, are a characteristic feature of the garden-design of Humayun's Tomb where there are no fountains. They infuse life in the adjoining avenues, orchard-subquarters and flower-parterres. Though the whole system has undergone an overwhelming change during the four centuries which have since passed and it is now practically defunct, much of the original charm and splendour is still comprehensible with the assistance of the surviving architectural features.

The garden-designer of the Tomb of Humayun is substantially indebted to Babur, the Prince of Gardens. He learnt the technique of an artificial terraced garden and the system of water-courses, tanks and waterfalls through chādars from the latter. Of course, he utilised the inspiration in his own ingenious way with reference to the Grand Mausoleum which he was required to provide with a beautiful setting. The eight P platforms of Babur's Bāgh-i-Gul Afshān denoting the eight divisions of the mythological Paradise (see Fig. 15 above) were set in two rows independently without being in relation to a tomb or palace and each one had, around it, a network of water-channels only. The garden-designer of Humayun's Tomb has used the same eight P platforms, of equal dimensions, in the setting around the main mausoleum, two on either side (Fig. 48), here each one having four oblong octagonal ponds around it interconnected by the water-channels. This marks a marvellous development of the original plan. The planner's ingenuity is reflected also in the setting of different types of tanks and ponds—octagonal, square and oblong, deep and shallow, plain and cusped, small and large, at different points of the garden in an extremely

befitting manner. This water-system was worked out not only for irrigating the garden but also to provide the tomb with a setting; indeed, aesthetic impression was more an object of this attempt than a mere utilitarian function. The tomb reposes in this setting splendidly, amidst a number of charming environmental cues (Plates CLXV and CLXVI) which are integral to the architectural composition as a whole. This was a novel arrangement and it was here for the first time in India, as also anywhere else, that a garden-setting was manipulated in relation to a building in such a judicious and effective way. The seed of landscape-architecture which Babur sowed at Agra bore its first fruits at the Tomb of Humayun at Delhi.

(e) *The Design*

The first plinth of the tomb is of about 5' (1.52 metres) height. It is entirely built of red stone. Its angles have been chamfered; each one has comfortable stairs with nook-shafts on the edges. Second and the main plinth is of 20' (6.10 metres) height. It has arched alcoves, each containing a room, on all sides. Its angles have also been chamfered in accordance with the overall design of the tomb (see Plate CLXI above). There is no (detached) minar or (attached) tower. A chamfered angle and an octagonal or hexagonal tower attached to the angle belong to two different dynamics of architectural design and give altogether different impressions (Fig. 49). The former is certainly weak aesthetically as there always remains a vacuum which in the latter case is adequately counterbalanced. The latter is stronger too as the attached tower serves as a substantial buttress and counters lateral thrusts which the dome and the *iwān*-portals may throw to the angles. It is only in case of the perfect confidence of the architect who does not have apprehension of any lateral thrust whatsoever that such a valuable buttress can be dispensed with. But the need to provide something facing it to counterbalance the corner vacuum, aesthetically, remains in any case and that is why the architect of the Taj Mahal who followed the

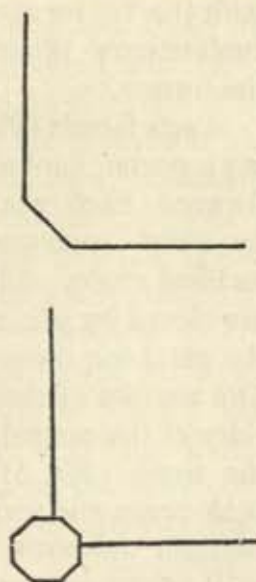


Fig. 49. Treatment of the Angle.

design of the Tomb of Humayun in a large measure, devised beautiful minarets at the angles of the main plinth facing the chamfered angles of the main mausoleum.

This plinth like the lower one is also entirely built of red sandstone but white marble has been used liberally on the outlines of the arched alcoves, giving emphasis to their graceful form. There are 17 alcoves on one side and one on each angle, there thus being $17 \times 4 = 68 + 4 = 72$ alcoves in all. This is an auspicious figure. Some alcoves have tombs inside them. The central one leads to the basement arrangement of a long passage and the mortuary room which contain the real grave. The main plinth has sunk stairways in the centre of all the four sides and is protected by a jali balustrade all around. Tombstones are also there on this plinth. In fact, so many personnel of the blue blood are buried at this tomb that it has assumed almost the status of a Royal Cemetery.

The tomb-structure which is square in plan with 156' (47.54 metres) side reposes in the centre of this plinth, leaving a spacious terrace on all sides. There is no minar or tower or chhatri at the corners of this plinth and the absence of any flanking member has left this grand sepulchre isolated and hence in a pensive mood. We do not expect to see an emperor or empress alone and our dismay is justified. The Mughal architect corrected this mistake at the Taj Mahal. It may be noted, however, that this was the first venture of its type and many features were only in the experimental stage. We cannot compare it with the Taj on every step, as the latter marks perfect moment in the evolutionary process of the same style which made a beginning at the former.

Each facade (Plate CLXVII) is composed of a central *iwān* containing a portal, flanked by a wing on either side, which slightly projects forward. Each wing again has a small portal in the centre flanked first by blind ornamental double-arches and then by double-alcoves at inclined angles—all in a double-storeyed arrangement. All lower arches are closed by jalis except the central one in the south *iwān* which gives the entrance; there is no portal on this side (Fig. 50 for west elevation). The amount of chamfer on each corner of the tomb is repeated on both sides of the central *iwān* in each case—thus the basic square plan of the tomb (Fig. 51) has been manipulated in a unique way to provide sunk zones and projections on each facade in order to bring about pleasant SHADOWS. The architect's desire to respond favourably to the need of this tropical region to provide shadows for a cool repose to the eyes for aesthetic appreciation is truthfully reflected. Though the tomb does not have such an important feature as *chhajja*, which was a typical

constituent of this formula of Indian art, the *shadows* have been provided by a skilful use of inclined angles, and deep rectangular and semi-octagonal alcoves, arches and iwāns. The interplay of shadows reacts beautifully on the aesthetic sense which a flat surface in profuse polychrome, so common in the buildings of Iran and other Muslim countries, could not have produced.

Humayun's Tomb, Delhi.
West Elevation

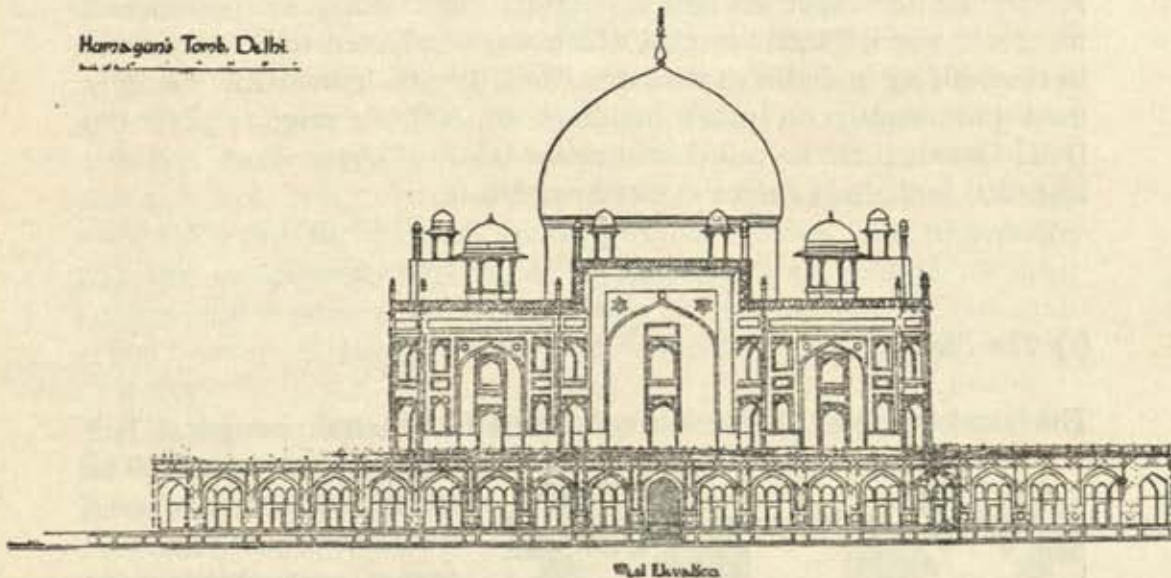


Fig. 50. West Elevation, Humayun's Tomb.

Another feature which has also contributed substantially to the grand effect of the exterior is the lavish use of white marble and black slate on all edges and outlines of arches and also, intermittently, on oblong panels, along with red sandstone with which the skeleton of the tomb has been finished. This simple colour combination, in natural stone tints, has given the Tomb of Humayun an exceedingly pleasing tone. There is no glazed-tiling or any other typically Muslim colour scheme on the exterior and the treatment of the facade is entirely an indigenous order of things. It is noteworthy that extremely glazed, lustrous and dazzling exteriors are potential irritants to the eye under the Indian sun, almost completely marring the aesthetic appeal, and that is why the temple always bore a natural colour or, at the most, a light cream-or-yellow. This is how the climatic dictates determine the material and standard of aesthetic appreciation, of course, quite imperceptibly!

White marble and black slate had also been used along with red stone at the gateways of the Dīn-Panāh, and the Qal'a-i-Kuhna Masjid inside it. Their use at the Tomb of Atagah Khan is lavish. In fact,

white marble and red stone were used together, this way, on a large scale in this phase from 1560 to 1570. This formula has been exploited most liberally at Humayun's tomb, truly for an unprecedented unique effect.

It is curious that all upper arches bear *şaṭkoṇas* upon their spandrels (Plates CLXVIII and CLXIX); they are not there on the lower arches. The *şaṭkoṇas* on the four *iwāns* have a beautiful lotus each, in over-protruding high relief, set into it. Rather than being an ornamental motif, it was a Tāntric symbol which was considered to be auspicious to the building and also to its patron.⁴⁰ *Şaṭkoṇas* have been similarly used prominently on other buildings of Akbar's reign, e.g., on the Delhi-Gate and the so-called Jehangiri-Mahal of Agra Fort and the so-called Jodhabai's Palace at Fatehpur Sikri.

(f) *The Plan*

The interior plan of the tomb is comprised of a central octagonal hall

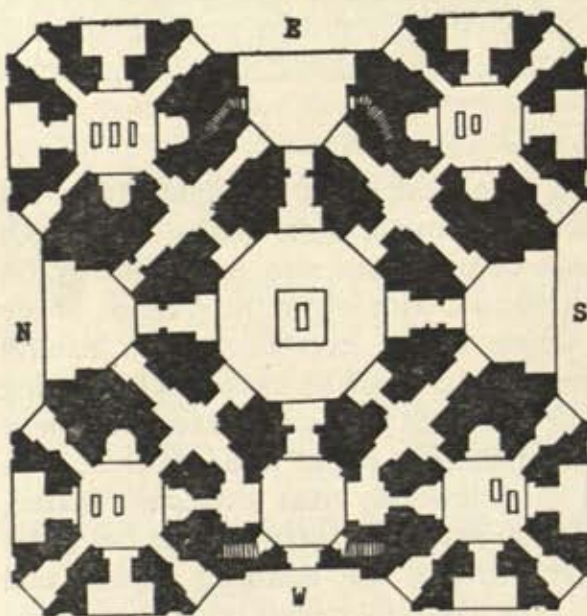


Fig. 51. Ground Plan of Humayun's Tomb.

containing the cenotaph of Humayun, corner-rooms which are octagonalised-square and oblong side portals—all interconnected through radiating passages and corridors in an intricate network (Fig. 51). All external openings except the entrance have been closed by jalis. The central octagonal hall has eight alcoves, one on either side, divided into a double-storeyed elevation. The third storey above them has jali openings; above them is the stalactite which takes the double-dome.

Marble has been used up to the dados as on the central archway of the Qal'a-i-Kuhna Masjid; plaster-work has been done above them. Spandrels of the arches have medallions bearing arabesque designs in stucco. Some stylised designs have also been used.

This plan is unique inasmuch as the tombs of the Delhi Sultanate period did not have corner-rooms and side portals in the style of a circumambulatory around the main hall with a regular arrangement of recesses and projections on all the external sides. There was, at the most, a verandah rotating on all sides of the mortuary hall in the typical *aṣṭāsra* (octagonal) tomb, e.g., that of Sikandar Lodi and Sher Shah. The *chaturāsra* (square) tomb did not have even this feature and it was composed of a large square hall on the ground plan, all around. Where the original inspiration of such a plan came from—is an important question. There is no such intricate arrangement of the main floor plan anywhere else outside India prior to it and the inspiration does not seem to have come to us from Afghanistan, Iran, Central Asia, Syria, Arabia or Egypt. As the external recesses and projections and the underlying spirit of a circumambulatory suggest, the most natural course open to the builders, again, was to look at the indigenous order of things, make a choice and adopt a formula in their own way.

The ground plan of the Tomb of Humayun is, in fact, a modified and enlarged version of the plan of the Temple Hemakūṭa (compare Fig. 51 Plan of the Tomb of Humayun and Fig. 52 Plan of the Temple Hemakūṭa). As described in the *Samarāṅgaṇa-Sūtradhāra* (first half of the 11th century A.D.), Hemakūṭa is a regularly quadrangular (*chaturśrī*) temple having portals on all the four sides (*nirgatāścha...chaturdiśam*), sanctum in the centre of the plan and four corner-rooms (*chatuṣṭambhāśchatuspārsvā...karṇaśālāntaram...chatuskarṇaiṣu...*), these being interconnected, thus making up a circumambulatory, with specific recesses and projections (*bhadrās* and *karṇas*) on the external sides, all in a five-storeyed elevation (*pañcha-bhaumastu*) with a five-spined (*ittham pañchāṇḍakaḥ*) superstructure.⁴¹ The *Aparājita-prachhā* (late 12th century A.D.) also discussed the Temple Hemakūṭa among the several types of *Sāndhāra prāsādas* (temples which had circumambulatory), which looked like mountain (Meru), had *śikhara* of different shapes and were many-spined (e.g., *pañchāṇḍaka* = five-spined), thus:

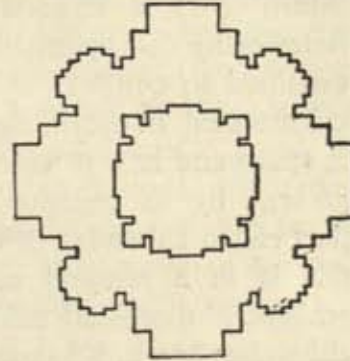


Fig. 52. Plan of the Temple Hemakūṭa.

सान्धारोश्च ततो वक्ष्ये प्रासादान् पर्वतोमान् ।
शिखरैर्विविधाकारैर्नैकाण्डेऽथ विभूषितान् ॥

आद्यः पञ्चाण्डको ज्ञेयः केसरी नाम नामतः ।

तावदन्तं चतुर्वृद्धिर्याविदेकोत्तरं शतम् ॥⁴²

The Tomb of Humayun responds to these dicta in all fundamentals, over and above the details of deities and ornaments. It is also quadrangular with portals on four sides, with a mortuary hall in the centre and rooms on the corner—all interconnected in the form of a circumambulatory, the plan having suitable recesses and projections on the external sides. Three-storeyed main tomb is superimposed by a double-dome making up a five-storeyed (*pañchabhaumika*) elevation, the superstructure being composed of a central dome (roofing the mortuary hall) and four *chhatris* at the corners (over the corner rooms of the ground plan) fulfilling the ideal of a five-spired (*pañchāṇḍaka*) *śikhara*. The basic similarity of the two forms shows that its architect has drawn, fundamentally, on the indigenous theory of art for preparing his plan and design of the proposed tomb.

The most important fact of this matter is that the Temple Hemakūṭa is treated in the *Śilpa-Śāstras* among the types of the *prāsāda* 'Meru' (मेरु), a structure which looked like mountain (पर्वतोमान्).⁴³ It is noteworthy that *vyoman* and *aiḍūka*, as discussed above, were also ordained to conform to the form of 'Meru'. The *acharyas* took up and enumerated, in detail, the question: how a structure would be disposed in space and how it would look like as a whole or what view it would present by its contour against the sky, i.e., on a silhouette. It is what they called *chhandas* (छन्दस्) which is the spirit of a building as *laya* or *tāla* is in a musical composition. The *Śilpa*-texts, e.g., the *Aparājita-prchchhā*,⁴⁴ discussed the subject in detail and laid down six types of *chhandas*: Meru, Khaṇḍameru, Patākā, Sūchī, Uddhiṣṭa and Naṣṭa:

मेरुश्च खण्डमेरुश्च पताका सूचिका तथा ।

उद्दिष्टं नष्टमिति षट् छन्दांसीह प्रचक्षते ॥

(AP, LXVIII.31)

First four are the main *chhandas*. Meru and Khaṇḍameru are most important. The former looks like 'Meru' mountain with its shape like a *śarāva* (or a clay bowl used in village feasts, also called 'sakorā') whose contour against the sky is a perfect curve:

मेरुर्मैरूपमः कार्यः शरावस्येव चाकृतिः ।

सृष्टिस्तदुद्भवा सूत्र पात्रे पात्रनिवापरम् ॥

(AP, LXVIII.30)

In the latter, the sides are slightly cut off leaving there vertical surface. The *form* of the Tomb of Humayun appears to have the 'Khaṇḍameru' chhandas. But, obviously, the technical prescriptions, e.g., measurements and proportions of the temple have not been followed because a dome instead of a śikhara was to superimpose the tomb and it was absolutely necessary to adopt them here with suitable modifications in accordance with the norms which proved to be most befitting at the moment. Its



Fig. 53. Silhouette of the Tomb of Humayun.

contour fits well within a semicircle (see Plate CLXI above and its silhouette Fig. 53) and the form also looks like 'Meru' so that it appears to have drawn roughly on both these outlines. In any case, the concept of the temple type 'Meru' was the original

source of its inspiration. Though extremely important, this aspect of the plan and design of the tomb is most easily missed because of its very subtle, abstract and imperceptible nature and also because the historians and scholars begin its study with the preconceived notion that it was commissioned by the Hājī Begum, designed by Mirak Mirza Ghiyāth of Persian origin and built by the 'Arab artisans who lived in the nearby 'Arab Serāi. This basic error has led to the gross misunderstanding that it is Persian in form and spirit. An art cannot assume a *form*, much less a *spirit*—and an individuality of its own—unless and until it is fundamentally related to the soil where it stands.

(g) *The Superstructure*

The first floor of the tomb is a spacious and comfortable set of apartments (see Fig. 54 for plan) overlooking the mortuary-hall in the interior and also on the four facades of the tomb, in the respective iwāns and alcoves, thus receiving abundant light and air from all sides. The legend that it housed a madrasah may be true as it is quite a suitable place for the purpose. It is too much, however, to attach a function to every building, or every part of a building, as many portions were built for the sake of symmetry and harmony or for giving the structure an imposing elevation as a matter of *architectural necessity*

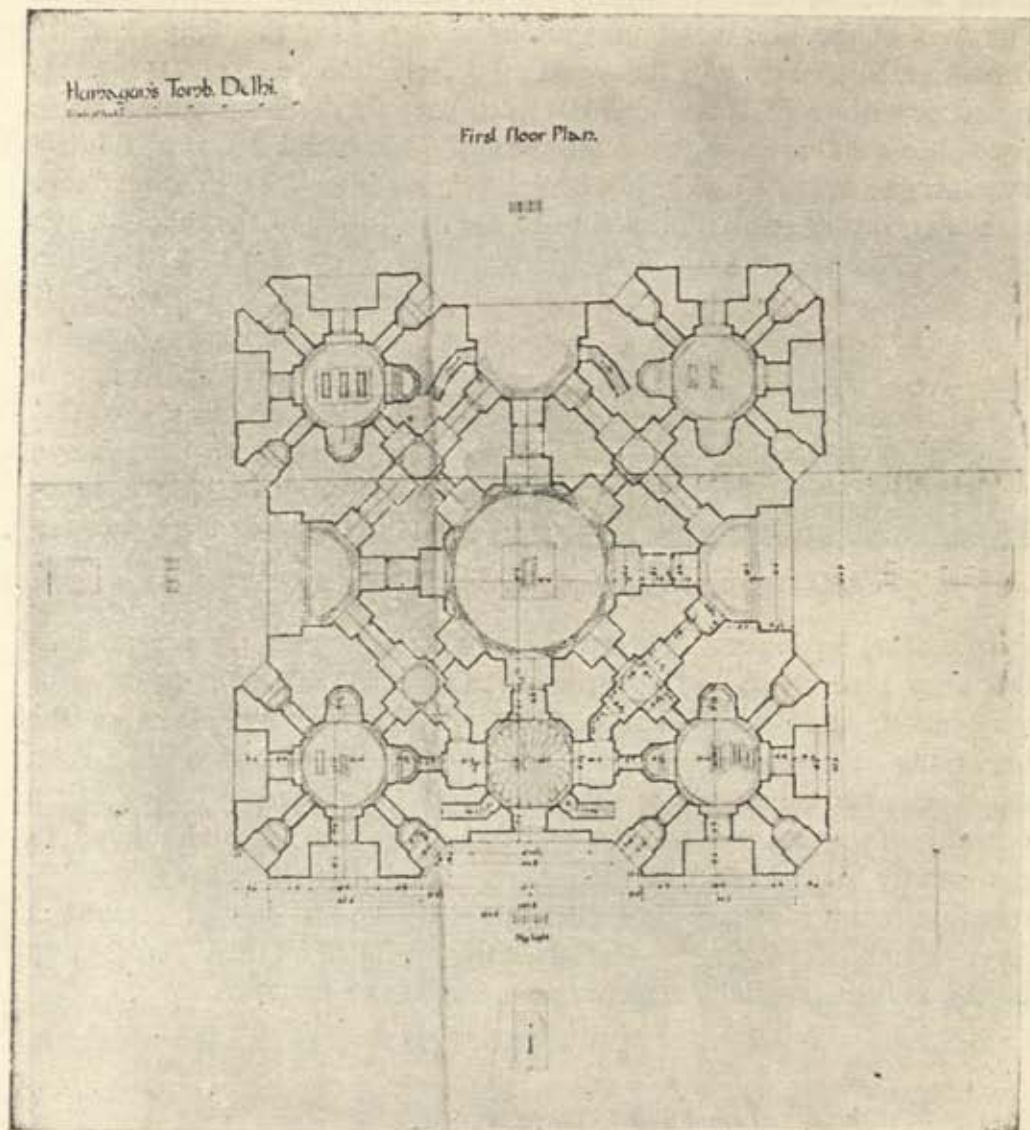


Fig. 54. Plan, First Floor of the Tomb of Humayun.

and multi-storeyed arrangement of the tomb is more a vindication of this need than to serve the function of a house or madrasah.

The tomb, however, lacks in elevation and it is too broad in relation to its height. The total height of the building is only 140' (42.67 metres) while it measures 156' (47.54 metres) on each side of the ground plan. This is a bad proportion. The height was to exceed the breadth proportionately in order to bring about an imposing elevation. Thus the total height of the building should have been something more than 215' (65.53 metres). No *vāstu dicta*, not even those of the Temple Hemakūṭa,

have been followed in this respect, obviously because a dome instead of śikhara was to superimpose the structure and the proportions had to be changed accordingly, of course experimentally. Only experience could dictate the need of greater height than breadth, as it did in the later cases, e.g., at the Tomb of 'Abdur-Rahīm Khān-i-Khānān and the Taj Mahal.

Otherwise, this superstructure has been magnificently worked out. Turrets rising from the quoins are crowned above the parapet by white marble lotus pinnacles which also have a stone kalāśa each (Plates CLXII and CLXVIII above); the pinnacles of the central īwān are larger and more ornately finished. There are thus 24 pinnacles in all, which surround the dome on all sides and adorn the skyline gorgeously.

Two square chhatris are set up on the parapet over the central portal on each facade (Plate CLXVII); they are integral to the composition of the superstructure and are not mere subsidiaries. On the corners of the terrace, roofing the corner rooms of the plan are four broad and spacious octagonal chhatris which flank the dome on all sides (Plates CLXII and CLXVI). Over them towers imposingly the stupendous bulbous dome (Plates CLXV and CLXVII). While the pinnacles are built of white marble and chhatris of red stone, the dome which has a brick skeleton is entirely finished in white marble. There is no mahā-padma or āmalasārikā over it and only a simple metallic finial, which also does not seem to be original, crowns it. The dome is not only the main constituent of the superstructure, it is also the most important feature of the tomb which it crowns as effectively and prominently as head crowns the human body.

The corner chhatris are set up on the terrace too far away from the dome and they are too much detached to make up a balanced and harmonious composition (Plates CLXV-CLXVII). There remains a sad vacuum between them and the lapse is noticeable. This was later reconciled at the Taj Mahal where the corner chhatris are placed closer to the dome and, though they are detached, they always appear to be attached to it beautifully.

Indeed, the handling of the *space* was the most difficult aspect of an architect's job; it is always a task of greatest subtlety to treat an art-form, e.g., a building, in *three-dimensions* judiciously. He learns various measurements and proportions ('māna' and 'pramāṇa') by experience. These māna and pramāṇa are key to the disposal of the total mass of the building in space. That is why, the ancient Hindus wrote down the śāstra, the theory, which is record, in a condensed or sūtra form, of their vast experience of the subject which they acquired through several millenniums of practice.

The dome of the Tomb of Humayun is a double-dome (see Fig. 55 for Cross Section), i.e., it has space between the inner shell which roofs the central mortuary hall and the outer shell which outlines the monument on the skyline. It has a bulbous form; instead of rising vertically from the 25' (7.62 metres) high drum, it corbels out so as to overhang it a little, with a slightly swelling outline, like a bulb. This is similar to the domes of the tombs of Bībī Khānam and the Gur-i-Mīr at Samarqand and there is no doubt that this dome has derived its form from

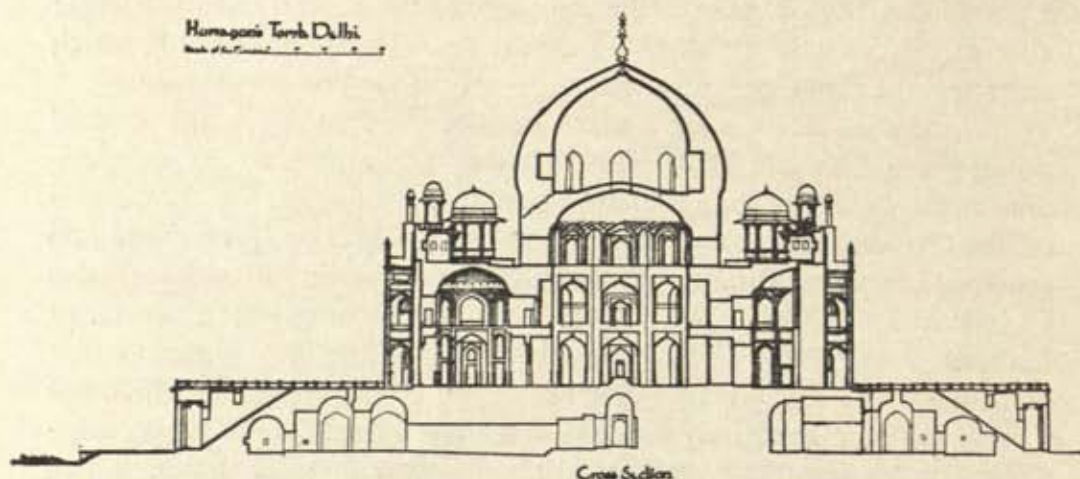


Fig. 55. Cross Section, Tomb of Humayun.

the Samarqand examples. The dome of the Subz-Burj (c. 1560) is an earlier experiment of a double-dome; the dome of the Tomb of Humayun is a fully-developed and perfect form of the same type.⁴⁵

As a whole, the Tomb of Humayun at Delhi is the first grand experiment of the Mughals in funereal architecture. It set a style of architecture and initiated a trend of art, which found their culmination at the Taj Mahal at Agra on the bank of the same river, Jamuna, downstream, in the same cultural region. The Tomb of Humayun is the best sepulchre of this phase, as the Qal'a-i-Kuhna Masjid is its best mosque.

References

1. Under Chapter III, sub-head (c).
2. *AN*, II, 102.
3. H. Beveridge noted: "As we know from the *Ma'assir Rahīmī* it was

brought away from Delhi when Himun defeated Tardi Beg and got possession of the city. It was kept for a time at Sirhind and then

brought back and kept near the Purana Qil'a till the grand tomb, built by Humayun's widow, Hājī Begum was ready (AN, I, 656, f. 3). S.K. Banerji (cf. *Humayun Badshah*, Vol. II, p. 262), on the authority of Ferishtah, concurred: "Humayun's corpse was wrapped in cotton and buried in Delhi. When Himu advanced to occupy the capital, the body was dug out and taken to Sirhind for a temporary burial. When the Mughals once more regained the possession of Delhi after the second battle of Panipat, the body was once more taken to Din-Panah. There it lay for a number of years."

4. HN, 218
5. Ibid., p. 220. Her name was Begā Begum. After her performance of the Hājī, she was called Hājī Begum. Maulvi Muhammad Ashraf Husain confused her for Hamīdā Bānū Begum, mother of Akbar (ASI, Mem. 47, p. 15). Hamīdā was not Hājī Begum. Hamīdā died in 1013/1604 and she was also buried in the same tomb in its N-E chamber near the grave of Hājī Begum. Thus, both are buried in the same room.
6. AN, II, 482.
7. MT, II, 135.
8. Cf. Rizvi, MKB, II, 235.
9. Cf. *Athar'al-Ṣanādīd* (English translation: *The Monuments of Delhi*, New Delhi, 1979, op. cit., p. 52) and *Humayun Eadshah*, II, 262 respectively. Sayyid Ahmed made this statement on the authority of the *Mirāt-i-Āstānnumā* which recorded that its construction was begun by Hājī Begum in 973/1565 and it was completed in 16 years' time at the cost of rupees fifteen lakhs. He has largely drawn on this work in his *Athar'al-Ṣanādīd*.
10. ASI, Mem. 47, p. 16.
11. Hamīdā Bānū Begum was not called Hājī Begum as Maulvi Muhammad Ashraf Husain misunderstood (ASI, Mem. 47, p. 16), as has been clarified in a preceding reference. It was Begā Begum who was called Hājī Begum.
12. MT, II, 135.
13. BN, 642.
14. Ibid., 605, 683.
15. It has been discussed above under Chapter III, sub-section (b).
16. QH, 18-19, 22-23, 46-47, 57-58 and 60. It has also been discussed above under Chapter III, sub-section (b).
17. Ain, I, 611.
18. This aspect of Mughal architecture has been discussed by the author in detail in respect of the builders of the Taj Mahal in his research paper: "Scrutiny of the Persian Data related to the builders of the Taj Mahal", *Indo-Iranica*, Calcutta, Vol. 32, No. 1-2 (March-June 1979). It has been shown that the persons whose names have come down to us through various lists of builders, were not builders themselves; they engaged the real builders, supervised their work and paid them wages. They were like heads of various departments.
19. *Indian Architecture* (Islamic Period, Bombay, 1964), p. 90; Percy Brown's statement is more fanciful than historical: "Here it was that the Begum Sahiba settled down in 1564 with her retinue, the latter sufficiently large in number to form a small colony, and proceeded with the project on which she had evidently set her heart. The Begum had shared in all Humayun's eventful experiences, including his forced sojourn in Persia, and seems to have absorbed something of the artistic spirit of that country, as she turned to it not only for its traditional knowledge in the art of building but also for the personnel to carry out her scheme. For it is recorded that her architect was

Mirak Mirza Ghiyas, almost certainly of Persian origin, while in addition to this fact, near the tomb is an enclosure still known as the Arab Serai, evidently a misnomer derived from the presence of alien artisans for whose accommodation while engaged on the work it was specially built" (ibid., p. 90). Hājī Begum did not settle down at this place in 1564; instead, she went to Mecca in 972/1564-65 for Hajj and returned three years later. That she absorbed a Persian taste is a surmise. That Persian artisans were recruited to work on this project has not been mentioned by any source whatsoever. Mirak Mirza Ghiyāth's name is on record but, as noted above, not as an architect. Brown's statement about 'Arab Serāi too is a surmise and there is nothing to sustain it historically.

20. As Percy Brown, ibid., p. 50, tried to explain.
21. Sayyid Ahmed's view (cf. op. cit., p. 51) that it was built by Hājī Begum in 968/1560 and three hundred 'Arabs resided in this Serāi, hence it came to be known as the 'Arab-Serāi is not corroborated by any other source and the style also goes against it.
22. *AN*, II, 372-73.
23. *Ain*, I, 232.
24. E.g. Old Delhi of Rai Pithaura, Kilughari, Siri, Tughlaqabad, Jahanpanah, Firozabad and Mubarakabad, cf. *HSA*, 43.
25. It has been discussed in the *HSA*, 91-94.
26. It has been discussed above under Chapter II, sub-head (e).
27. cf. *Gardens of the Great Mughals* (London, 1913), pp. 45-46.
28. T.P. Hughes, *A Dictionary of Islam* (London, 1885), pp. 46, 48, 150, 635 etc; he quotes from *Mishkāt* (Book V, Chapter VI, Part I) the sayings of

Jābir, Abū'l Haiyāj al-Asadī and Sa'd ibn Abī Waqqās, e.g., Jābir says, "The Prophet prohibited building with mortar on graves, and also placing inscriptions upon them (*Mishkāt*, Book V, c. VI)"; and "Amir relates that his father Sa'd ibn Abī Waqqās said on the death-bed, "Make a lahd (or lāhid=a recess made on the side of the grave to receive the corpse) for me towards Makkah, and put unburnt bricks upon my grave, as was done in the case of the Prophet (*Sahīḥu-Muslim*, p. 211)"; and "Abu'l Haiyāj al-Asadī relates that the Khalīfah 'Alī said to him: "Shall I not give you the orders which the Prophet gave me, namely, to destroy all pictures and images, and not to leave a single lofty tomb without lowering it within a span from the ground." "

29. Ibid., p. 183; this seems to have been strictly followed as the record shows: "Abū Dā'ud relates that al-Qāsim the grandson of Abū Bakr came to 'Āyishah and said, 'O Mother, lift up the curtain of the Prophet's tomb and of his two friends, Abū Bakr and 'Umar', and she uncovered the graves which were neither high nor low, but about one span in height, and were covered with red gravel" (*Mishkāt*, Book V, Chapter VI, Part 2). Cf. ibid.
30. *VDP*, LXI.5, *Shah*, II, 184.
31. *VDP*, LXII. 1-2.
32. Ibid., LXXV; see *Appendix L* given at the end of this chapter for the Sanskrit text.
33. *Shah*, II, pp. 153-54.
34. *AP*, Sūtra 219, p. 561; for Vyoman-Lakṣaṇa described cf. ibid., Sūtra 136, pp. 338-39, see *Appendix L* given at the end of this chapter.
35. *VDP*, LXXXIV, *Shah*, I, 220-21, II, 168-75; for Sanskrit text, see *Appendix M* given at the end of the

- chapter.
36. The *Mahābhārata*, Vol. II, Vana-Parva, Chapter 190 (Gita Press, Gorakhpur, V.S. 2023), pp. 1494-99.
37. *Shah*, II, pp. 172-73: "the Deśya word eḍūka, which later on became sanskritised and accepted in Sanskrit lexicons, originally must have meant a structure containing bone relics."
38. *Ibid.*, p. 173 fn. 3.
39. *Ibid.*, pp. 171-72.
40. It has been discussed in detail in the author's paper 'Depiction of a Tantric Symbol in Mughal Architecture', *Journal of the Indian Society of Oriental Art*, Calcutta, Vol. VII (1975-76).
41. *SS*, LVII.50-86, pp. 354-57.
42. *AP*, CLIX.1-2, pp. 388-89.
43. *Ibid.*, CLIX. 1.
44. *Ibid.*, LXVIII. 26-45; for text see *Appendix N* at the end of this chapter.
45. The appearance and development of double-dome in India and the Subz-Burj have already been discussed above in detail in Chapter IV, sub-head (e).

APPENDIX L

Viṣṇudharmottara-Purāṇa Text on Vyoman-Rūpa

वज्रः व्योमरूपं समाचक्ष्व सर्वधर्ममृतां वर ।
 व्योम्नि तु पूजिते पूजा कृता स्याज्जगतो भवेत् ॥ १ ॥
 मार्कण्डेयः चतुरस्त्रं भवेन्मूले ततो वृत्तं महाभुज ।
 ततोऽल्पचतुरस्त्रं च चतुरस्त्रं ततो भवेत् ॥ २ ॥
 ततोऽल्पचतुरस्त्रं च मेरुवत्संस्थितं ततः ।
 भद्रपीठमिदं प्रोक्तं व्योमभागं तृतीयकम् ॥ ३ ॥
 सर्वेषां भद्रपीठानामेतल्लक्षणमुच्यते ।
 स्तम्भवश्चतुरस्त्रं तु मध्यभागं प्रकीर्तितम् ॥ ४ ॥
 भद्रपीठं ततो भागे तत्र पद्मं निवेशयेत् ।
 शुभाष्टपत्रं तन्मध्ये कर्णिकास्याद्दिवाकरः ॥ ५ ॥
 पत्रेषु कल्पयेत्तस्य दिक्पालाश्च यथादिशम् ।
 भद्रपीठमधस्तात् पृथिवीं परिकल्पयेत् ॥ ६ ॥
 अन्तरिक्षं तथा पद्ममूर्ध्वभागं ततो विदुः ।
 ततः सन्निहिताः सर्वे भवन्ति त्रिदशोत्तमाः ॥ ७ ॥
 सर्वदेवमयं व्योम कथितं ते महाभुज ।
 तस्य संपूजनं कृत्वा सर्वान्कामानवाप्नुयात् ॥ ८ ॥
 व्योम्नः स्वरूपं कथितं मर्यतद्
 व्योम्नः सुपूजाकरणात्समग्रम् ।
 संपूजितं स्याज्जगदेक बीर
 चराचरं यादववंश मुख्य ॥ ९ ॥

इति श्रीविष्णुधर्मोत्तरे मार्कण्डेयवज्रसंवादे
 व्योमरूपनिर्माणं नाम ॥ ७५ ॥^१

Aparājitapṛchhā Text on Vyoman

सुशृङ्गं केशराद्यं च अष्टपत्रं सकर्णकम् ।
 एवंविधं प्रकृतं व्योमं सूर्याग्ने व्योमलक्षणम् ॥ २२ ॥
 पीठं च मण्डलं प्रोक्तं प्रतिधारा च नासिका ।
 वेदी व्योम तथा कुण्डं पञ्चाङ्गं सूर्यमण्डलम् ॥ २३ ॥
 मेरुस्तस्याऽग्रतः कार्यस्त्रिगर्भान्तरं संस्थितः ।
 पञ्चसप्तनवान्तःस्थो ह्यत ऊर्ध्वं न कारयेत् ॥ २४ ॥
 हंसो वृषोऽथ गरुडो व्योम वै ज्येष्ठमध्यतः ।
 इषुस्थानेषु कृतं व्योमं नाज्यपदाश्रितं भवेत् ॥ २५ ॥^२

1. Cf. VDP, LXXV, Vol. I, p. 206.

2. AP, Sūtra 136, pp. 338-39.

APPENDIX M

Viṣṇudharmottara-Purāṇa Text on Aidūka-Rūpa

मार्कण्डेय :

ऐडूकरूपनिर्माणं शृणुष्व गदतो मम ।
 ऐडूकपूजनात्पूजा कृतास्य जगतो भवेत् ॥ १ ॥
 भद्रपीठं बुधः कुर्यात्सोपानैः शोभनैर्युतम् ।
 चतुर्भिर्यादवश्रेष्ठ यथादिशमरिन्दम ॥ २ ॥
 तस्योपरिष्ठादपरं भद्रपीठं तु कारयेत् ।
 तस्योपरिष्ठादपरं तादृग्विधमरिन्दम ॥ ३ ॥
 तस्योपरिष्ठात्कर्तव्यं लिङ्गरूपं विजानता ।
 न तु तत्रापि कर्तव्यं लिङ्गं रेखाविराजितम् ॥ ४ ॥
 तस्य मध्ये ध्रुवां यष्टिं चतुरस्त्रां तु कारयेत् ।
 तस्योपरिष्ठात्कर्तव्या भूमिकास्तु त्रयोदश ॥ ५ ॥
 तस्योपरिष्ठात्कर्तव्यं तथैवामलसारकम् ।
 तस्योपरि पुनर्यष्टिः कार्या राजन्मुवर्तुला ॥ ६ ॥
 समाकंचन्द्रमध्यस्थ चन्द्रकेण विराजिता ।
 भूमिका या मया प्रोक्ता तथैवामलसारकम् ॥ ७ ॥
 भुवनास्ते त्वया ज्ञेयाः तथा राजंश्चतुर्दश ।
 लिङ्गं महेश्वरो देवो वृत्ता यष्टिः पितामहः ॥ ८ ॥
 चतुरस्त्रा तु या यष्टिस्ता च देवो जनार्दनः ।
 गुणरूपेण विज्ञेयं भद्रपीठत्रयं तथा ॥ ९ ॥
 गुणाधानमिति प्रोक्तं त्रैलोक्यं सचराचरम् ।
 अधस्ताद्भुवनानां तु लिङ्गोपरि तथा नृप ॥ १० ॥
 लोकपालाश्च कर्तव्याः शूलहस्ताश्चतुर्दिशम् ।
 विरुढो घृतराष्ट्रश्च विरुपाक्षश्च यादव ॥ ११ ॥
 कुबेरश्च महातेजाः सूर्यवेशधराः शुभाः ।
 सर्वे कवचिनः कार्याश्शुभामरणभूषिताः ॥ १२ ॥
 विरुढकं विजानीहि शक्रं देवगणेश्वरम् ।
 घृतराष्ट्रं विजानीहि यमं भुवननायकम् ॥ १३ ॥
 विरुपाक्षं विजानीहि वरुणं यादसांपतिम् ।
 राजराजं विजानीहि कुबेरं घनदं प्रभुम् ॥ १४ ॥
 ऐडूकरूपं कथितं मयैतत्
 प्रजाहिताख्यं यदुवंशमुख्यम् ।
 ऐडूकपूजानिरता लभन्ते
 सुखं मनुष्यादिवि वासमन्ते ॥ १५ ॥

इति श्रीविष्णुधर्मोत्तरे मार्कण्डेयवचनसंवादे
 ऐडूकरूपनिर्माणं नाम ॥ ८४ ॥^१

1. Cf. VDP, LXXXIV, Shah, I, 220-21.

**Aparājitapṛchhā Text on 'Meru'
and 'Khaṇḍameru' Chhandas**

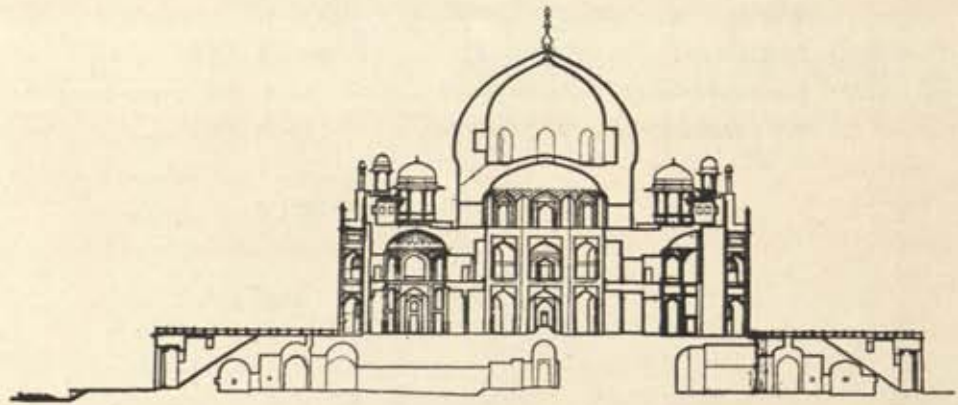
पृथ्व्याकारो यथा छन्दो मेवाकारसमुद्भवः ।
 षड्विधं मेरुच्छन्दश्च षट्त्रिंशच्छन्दभेदकाः ॥ २६ ॥
 भेदस्तत्र त्र्यष्टशतैर्दशभिर्गुणितैस्ततः ।
 चतुर्विंशत्सहस्राणि छन्दभेदाश्च सङ्ख्याया ॥ २७ ॥
 इन्द्रोद्भवक्षमावृद्धी भूतकोणान्तमध्यमैः ।
 इषु प्राणेषु भक्षन्ती प्रत्येकविषमेपदम् ॥ २८ ॥
 षड्भिर्नभशद्वैः कौटिमैरुच्छन्दे तु सङ्ख्याया ।
 तत्रोक्तमेवप्रमाणं सृष्टाऽम्भोजप्रकाशिना ॥ २९ ॥
 मेरुर्मरूपमः कार्यः शरावस्येव चाकृतिः ।
 सृष्टिस्तदुद्भवा सूत्र पात्रे पात्रमिवापरम् ॥ ३० ॥
 मेरुश्च खण्डमेरुश्च पताका सूचिका तथा ।
 उद्विष्टं नष्टमिति षट् छन्दांसीह प्रचक्षते ॥ ३१ ॥
 मृत्युभीतैः पुरा देवैरात्मनश्छन्दनायकः ।
 संस्मृतानीह छन्दांसि छादितैस्तैस्ततो महाः ॥ ३२ ॥
 छन्दे छन्दं समुद्दिष्टं वाससी कृतिरेव च ।
 छन्दोभिरावृतं सर्वं वन्द्यं सर्वत्र नान्यथा ॥ ३३ ॥
 त्योम्नः पतते विन्दु पतितो सविन्दुगर्भतो भवेत् ।
 गुरुलंघुलंतायाश्च तस्य चाष्टौ समुद्भवाः ॥ ३४ ॥
 आद्यगुरोरधोच्छ्वं पुनः शेषं यथोपरि ।
 अङ्कुलि पूरयेत् पश्चाद् यावत् सर्वहृतं पदम् ॥ ३५ ॥
 गुरोरधस्ताच्च गुरुं निधाय शेषं समानं परिलक्ष्य सम्यक् ।
 खण्डं प्रकुर्याद् गुरुपूरणार्थं यावत्पदं सर्वलघुस्थमेते ॥ ३६ ॥
 भवन्ति प्रस्तारगताश्च एते षट् सप्तमीप्रत्यय वै गृहाणाम् ।
 ये नैव जानन्ति गुरूपदिष्टान् ते सूत्रधारा रिपवः प्रजानाम् ॥ ३७ ॥
 एकाद्येकोत्तरान् कोष्ठान् विन्यसेदिच्छयात्मनः ।
 आद्यादारभ्य तद्वृद्धिर्यथास्यात्पाश्वर्योः समम् ॥ ३८ ॥
 मेरोरेकाधिका संख्या शरावस्येव चाकृतिः ।
 प्रथमे कोष्ठके रूपमत्तं यावच्च पाश्वर्योः ॥ ३९ ॥
 आसनोर्ध्वस्थयोन्यस्येन्मध्ये सङ्कुलितं पृथक् ।
 तस्मिन्निष्टविकल्पानां सङ्ख्या स्यादन्त्यपङ्क्तिगा ॥ ४० ॥

इति मेरु छन्दः ॥

खण्डमेरुं तु वित्यस्येत् तद्वदेवैकपाश्वरतः ।
 प्रवृद्धैः कोष्ठकैस्तत्रात्यङ्काः प्राग्वत् फलं यथा ॥ ४१ ॥
 अथापरः खण्डमेरुः कोष्ठांस्तत्रेष्टसङ्ख्यया ।
 कृत्वैकापचितान् वामविभगापचितानघः ॥ ४२ ॥
 एकाद्येकोत्तरानङ्कानाद्यपङ्क्तौ निवेशयेत् ।
 अन्यासु पङ्क्तिष्वप्राप्तं शून्यानाद्येषु कल्पयेत् ॥ ४३ ॥
 द्वितीयेषु च कोष्ठेषु तासामेकैकं साधयेत् ।
 द्वितीयायां तृतीयादिकोष्ठकेषु यथाक्रमम् ॥ ४४ ॥
 विकर्णयोगजानन्यान्ध्विधोयोगसम्भवान् ।
 फलं विकर्णयोगोत्थमेकस्मिन् परिकल्पयेत् ॥ ४५ ॥

इति खण्डमेरुः ॥

EPILOGUE



THE invasion of Timur (1398) broke the political fiction of the Delhi Sultanate and led to the establishment of independent regional dynasties such as the Ahmedshahis in Gujarat, the Ghorides and the Khaljis in Malwa and the Sharqis at Jaunpur. They took roots in the soil and soon Ahmedabad, Mandu and Jaunpur became veritable centres of culture and arts.

It marks the beginning of the bhakti movement and an era of religious upheaval which produced great thinkers and reformers like Kabir, Nanak, Ballabh and Chaitanya. They exerted to revolutionise the socio-religious pattern of the North Indian society to suit the changed conditions.

The momentous change also accorded opportunity to the intellectuals to realise their responsibility to preserve culture and to revive ancient arts which were gradually dying out, more for want of patronage than by onslaughts. Dynamism was the call of the hour.

Maharana Kumbha (1433-68) of Mewar (Medapāṭa) spearheaded the attempt to revitalise and rejuvenate the classical order of things. He was a great builder and commissioned a large number of forts, temples, palaces, tanks, reservoirs and other public works. Not only that, in order to provide a sound bedrock to the practice (prayoga and abhyāsa) of vāstu (architecture), he initiated his architects to rewrite the Śilpa-Śāstras. Many texts were retrieved from oblivion and their standardised versions were produced. Scattered aphorisms were collected and compiled. New works were also written down, some on such

new subjects as 'Rehamāṇa-Prāsāda' (Mosque) and, thus, a vast literature on śilpa (plastic and visual fine-arts which include painting, sculpture, iconography and architecture) was produced during his reign by the family of architects whose ancestors had migrated from Gujarat. In fact, they had been actually working in accordance with the prescriptions of such ancient texts of the Maru-Gurjara region as the *Aparājita-prchhā*.

Kumbha's efforts to revive and revitalise the ancient Indian arts on a sound śāstric (theoretical) basis mark the beginning of art renaissance in medieval India, around the middle of the 15th century.

The thread was picked up, in quick succession, by Raja Mansingh Tomar of Gwalior (1486-1516) who also had an inherent taste in fine arts. He was overwhelmingly inspired by Kumbha's work. Like Kumbha, he also patronised music; in his attempt to revive this ancient art and make it upto-date, he called a conference of the renowned musicians of the age. The subject was considered in the minutest details and the results of this great assembly were compiled in the work: *Man-Kutoohal*.

The Tomar ruler was, however, handicapped in the matter of architecture as he held his sway in the region which had been completely devastated in about three centuries' time which had preceded him. No texts or traditional builders were available here and the regional art had practically died out. He had to look again to Mewar, the nearest place where the texts and the builders—both theory and practice—were available when he decided to build a number of palaces for him and probably a Śiva-Prāsāda too which, unfortunately, has not come down to us. He invited the architects from there. The contemporary poet Narayandas mentioned in his work: *Chhitai-Charit* the construction of the Man-Mandir palace allegorically and noted in the same reference:

कमठाने कहं आयसु भयो ।¹

'Kamaṭhāna' has been used here for the śilpīns who came to Gwalior to work on the Man-Mandir. This word, originally, denoted Rajasthani śilpīn or śilpa-work as the Javara inscription of Ramabai, daughter of Kumbha, dated contemporarily in v.s. 1554/A.D. 1497 points out:

श्रीमेदपाटे वरे देशे कुम्भकर्णनृपगृहे ।
क्षेत्राकसूत्रधारस्य पुत्रो मण्डन ।
आत्मवान् सूत्रधार मण्डन सुत ।
ईशरए कमठाणु विरचितं ॥

(This was built by the Śilpīn Īśwara, son of Sūtradhāra Maṇḍana, son of Sūtradhāra Kṣetrāka, the family-architect of the King Kumbhakarṇa of Medapāṭa [Mewar] country.)

It indicates into the direction of the source of the art of Gwalior.

This evidence is reinforced by the unmistakable similarity which exists between Kumbha's and Mansingh's palaces in respect of such architectural features as:

- (i) plan and disposal of palace-interiors;
- (ii) composition of the superstructure;
- (iii) variety of ceilings including kaḍalikā-karaṇa;
- (iv) bracket, strut, toraṇa, āsana, mañchikā, chhajjā and chhatrī;
- (v) use of colour with stone relief-work;
- (vi) painting on stone surface without intonaco;
- (vii) motifs like vyāla, makara, haṃsa, hastīn, mayūra and śārdūla; and
- (viii) jali-art; etc etc.

These features are altogether new at Gwalior in c. 1500; they could not have appeared here as a miracle. In all probability, they have travelled to Gwalior from Mewar with the builders. With an interested and enlightened patronage and healthy environment, a prolific and versatile art came into vogue at Gwalior. The Medapāṭa-Gopādrī (Mewar-Gwalior) relationship is the key to the understanding of the art of Raja Mansingh Tomar.

The scene of the Islamic world had also changed by the time Babur descended in the plains of India and founded an empire at Delhi and Agra in 1526. The Khalīfah of Baghdad had been overthrown. The Shīahs firmly held Persia and the seats of orthodoxy were gradually mitigating. Khalīfah was the source from whom the sultans of Delhi, who lived constantly under the warning eye of the 'Ulema, derived inspiration of the theocratic concept of state. With him, this myth also disappeared and religious frenzy cooled down. Islam lost its momentum as a world force. The sovereigns of different lands could now take up and resolve their problems in their own way.

The appearance on the Indian scene of such a great man as Amir Khusrau was an event of singular importance. He was a Šūfī-philosopher, thinker, musician, poet, litterateur, historian, courtier and, above all, a patriot to the core who repudiated the Khalīfah and all that was associated with the Khilāfat. He laid down the dictum that '*Patriotism is the*

Most Sacred Duty'.² He declared that India was the Paradise on earth. The third chapter of his great Mathnawī, the *Nuh-Sipihr*,³ is the living testimony to his love of his motherland and his intense feeling for the things Indian. For the first time, he set up an ideal before the state and the society to whom he belonged. His was a great innovation inasmuch as it guided the outlook and behaviour of his co-religionists in the land of Hindustan which they had been professing to conquer by the might of their arms and hold by sheer force; it was this way that they learnt to settle down in the soil.

The Mughals did not begin on a clean slate. The preceding styles which were in vogue in the territory which they occupied, extending from Delhi to Gwalior, largely determined the form and fabric of their style. They had an enlightened outlook and an ardent love of the beautiful, and they could pick and choose according to their own tastes and beliefs. They could identify and work out their preferences which indeed prepared the bedrock for the formulation of their art.

Mosques of several types were built during the Sultanate period, e.g., *ekāṅgaṇa* (single-quadruple mosque), *br̥hatmukhī* (pylon mosque), *chaturāṅgaṇa* (four-quartered mosque), *pañchamukhī* (five-arched mosque) and *tr̥mukhī* (three-arched mosque). The *chaturāṅgaṇa* plan had been adopted on an experimental basis and while there was no doubt as to its efficacy and success, some how or the other, it was given up. The mosques of the phase under study generally follow the *pañchamukhī* or the *tr̥mukhī* plan, and to some extent its design too, of the preceding Delhi Sultanate style. The Qal'a-i-Kuhna Masjid, for example, belongs to the *pañchamukhī* class and the Afsarwalī Masjid to the *tr̥mukhī*. The rear towers of the former have been borrowed from the Moth-ki-Masjid of the Delhi Sultanate period. Nook-shafts at the angles, fringe of lotus-buds or spear-heads along the intrados of the arch, a broad four-centred, or a slightly pointed three-centred arch, and a broad massive single dome were also the features which had been consistently in use. In fact, a large number of buildings of this phase were constructed in the preceding style and it was only gradually that the Mughal art assumed its individuality.

However, the buildings of the Sultanate style did not much appeal to Babur (1526-30) who deprecated them as being in the 'Hindustani fashion'; he was impressed by the more graceful and the more ingenious art of Gwalior. His successors Humayun (1530-40, 1555) and Akbar (1556-1605) too were carried away by the simple originality of its conception and thought and its wonderful aesthetic appeal. This art decisively inspired the early Mughals, who were closely connected with Gwalior

throughout their career, to shape their style in accordance with the graceful impressions they gathered here. It was ultimately the art of Gwalior which contributed to the formation of the early Mughal style of architecture. The art of this phase, thus, shifted geographically from Mewar to Gwalior under Raja Mansingh Tomar, from Gwalior to Agra, Fatehpur Sikri and Dholpur under Babur and thence to Delhi under Humayun.

A study of the monumental relics of the period from c.1500 to 1570, the inspirations which went into the making of the architectural style of the Grand Mughals and the forces and urges which shaped its distinctive characteristics reveals extremely interesting and important historical data. It must be noted, pre-eminently, that a style is an evolutionary process in itself, long-drawn and imperceptible, with its own set of norms and principles of art, which, through this process and in accordance with these norms and principles, grows and develops, and ultimately reaches the stage of perfection at which those norms and principles are perceptibly symbolised. A style is studied with reference to its four basic aspects, viz lay-out and plan of buildings; structural contrivances; ornamental themes and adjustment of usage and functional necessity with symbolic meaning, ceremonial need and, most important, aesthetic outlook of the builders, and essentially it is a study of techniques, norms and concepts.

Though the GEOPHYSICAL factor (e.g., availability of the building-material and the climatic conditions) was always the most powerful of the determinants, the personal factor was also responsible, to some extent, to lead the art under study, in the various stages of its development, from Medapāṭa (Mewar) to Gopādrī (Gwalior) and Gopādrī to Agra, Fatehpur Sikri, Dholpur and Delhi, into the direction it has taken.

The patron who took the decision to undertake and finance an architectural project played only a very minor role in ancient India as, as soon as he passed on the idea to the acharya and the sthapati, the śāstras took over the matter effectively and everything thereafter right from the selection of the site for the construction (bhūmi-parīkṣā) to the consecration of the deity (prāṇa-pratiṣṭhā) or auspicious entry into the house (gṛha-pravaiśa) was decided in accordance with the śāstric dicta. The patron had hardly anything to suggest in the matter of actual construction, except initially speaking his mind to his architect as to the type of building he desired to be built in accordance with his capacity to finance it.

But the PERSONAL factor became more decisive, and even preponderant, in medieval times, as the Muslim patron had no theory of architecture of his own and his faith in the śāstras of the conquered people

was also not unlimited. He selected the type of building—tomb, mosque or palace—over which he chose to spend. He invited builders also according to his choice and the recruitment of a particular set of artisans from amongst the various guilds, who ultimately gave the building a distinct individuality, was also a matter of his preference. He considered various plans and designs which were submitted to him and here too he could exercise some discretion and suggest additions or modifications. His liberal attitude to accept, assimilate and absorb the new things and his fine aesthetic sense were two most powerful factors in this respect. Truly, he could not interfere in the matter of constructional expedients but, over and above the technical subtleties, he helped to work out various features: environmental, structural and ornamental which gradually became distinctive characteristics of the art of his period. He selected the Quranic and Persian verses for depiction in the building, for example, and the calligraphic art as an architectural ornament was almost exclusively a matter of his or his adviser's personal jurisdiction.

The Mughal style of architecture unmistakably bears the stamp of its patron's personality. Babur's love of gardening and landscape-architecture led him to lay a number of beautiful gardens with artificial water-devices as stone-channels, tanks and cascades, tree-avenues and flower-parterres with which architecture was associated integrally. Humayun's love of astronomical measures and novelties is reflected upon the type of building he commissioned, e.g., the Sher-Mandal at Delhi. He was a superstitious man and such symbolic motifs as *şaṭkoṇa* with a lotus inside it, 12-pointed star denoting the 12 signs of Zodiac and *śārdūla* came into the Mughal art through his inspiration. He had lived in Iran and was impressed by the bulbous form of the dome used there; it was certainly after his restoration that the bulbous double-dome appeared at Delhi. The most important phase of *personality architecture* ushered in with Akbar, the rare genius on the Indian scene and probably the greatest innovator who had no taboos or inhibitions whatsoever and had greatest regard and feeling for Indian culture and arts. His buildings are typically *AKBARI* in style bearing distinct stamp of his personality. Even his first great relic, the mausoleum of his father at Delhi is representative, in respect of its conception, plan and design, of his liberal attitude to accept and follow the indigenous order of things.

It was this personal factor which, to a considerable extent, emancipated the Indian art from the rigid *śāstric dicta*. It had remained mostly theoretical and its practical side was being gradually forgotten. It had been refusing new inspirations. From a state which may be termed as

stereotyped, static and even stagnant, without much exaggeration, it developed to become a vigorous and dynamic art under the personal patronage—interest, attention and care—of the Great Mughals.

The GEOPHYSICAL factor was the other most powerful determinant in the evolution of this architectural style. Stone, in a large variety, was abundantly available in this region—at Delhi, Fatehpur Sikri, Dholpur and Gwalior—and stone's was its traditional building art. The artisans were also proficient in handling stone both for structural and ornamental purposes. There was not much need, therefore, to take recourse to typically Muslim technique of brick construction unless arch or dome was necessarily to be incorporated as a symbol of the faith or to bestow upon the building a Muslim complexion to distinguish it from the indigenous edifices. This view too was later given up by Akbar and the art of Fatehpur Sikri, both in form and spirit, is as indigenous as is that of Gwalior.

It is interesting to note that both trabeate (flat) ceilings and arcuate (vaulted or domed) ceilings were used during this phase, though after Babur the preference was undoubtedly given to the latter. Squinch and stalactite were used in the phase of transition almost as a general rule but here, more than in the matter of ceiling, the indigenous trabeate system asserted itself and we notice that stone pendentives have been used in a large number of cases. System of corbelled pendentives soon took over, e.g., at the Qal'a-i-Kuhna Masjid, and mixed with ornamental arch-forms carved on each horizontal course which give impression of stalactite, it became a pleasant formula in the phase of transition. It is from this source that the wonderful pendentives of the Jami' Masjid of Fatehpur Sikri were inspired.

It was always a true (radiating) arch in brick or ashlar, with voussoirs and a key-stone. But its dynamics also changed when stone came to a preponderant position. As in the Lāl-Gumbad, the single stone slab was carved and shaped like it and it was an arch in appearance only, otherwise it supported load exactly like a lintel. Thus stone converted a true arch into an ornamental arch during this phase. It was this way that assimilation and transformation took place in the evolutionary process. Shahjehanian architect derived inspiration from this simple technique of arch and followed it on a large scale, for instance, in the Moti-Masjid and palatial mansions of Agra Fort, about a century later.

The climatic conditions much determine the type and character of architecture of a region. The tract from Delhi to Gwalior has a hot climate and it is the scorching sun, which blazes from March to

October, i.e., for nearly eight months, that guides and determines the way of life of the people. They eat, wear and live in accordance with the dictates of this climate. Its compulsions also work tremendously, though unconsciously, upon their outlook of the subtle things and they develop attitudes also in accordance with the urges of this climate. 'Shadow' is as much a physical necessity as it is a requirement for aesthetic appreciation, as in this region the eye is trained to find repose and comfort in a cool shade and consequently 'shadow' is an essential ingredient of aesthetics. The temple is a grand effort to provide pleasant, harmonious and rhythmic shadows which work imperceptibly on the aesthetic sense; what one feels under the deep shade of a big banyan tree, he has the same feeling on a subtle level inside the so-called large Sas-Bahu Temple of Gwalior Fort, for example. In nature, it gives physical quietude; in stone it mystifies too, and gives a feeling of wonder (adbhūt) which is the key to aesthetic appreciation.

'Shadow' is a sheer necessity in such a tropical climate as this and the architect gradually learnt to incorporate shadows in his architecture through such expedients as *chhajjā* (छज्जा), *chhatrī* (छत्री), *chhaparkhaṭ* (छपरखट), *jharokhā* (झरोखा, oriel), *gaukh* (गौख), *gavākṣa* (गवाक्ष, balcony), niches and alcoves, i.e., through a skilful and judicious use of solids and voids; through handling of planes and zones; and through stone-carving, as a form of ornamentation, in incised medium, high and round relief, in other words, through treatment of the surface in the third-dimension instead of the typical Muslim technique of painting, stucco and glazed-tiling in polychrome on a flat surface, from the Man-Mandir, Gwalior, at the beginning of this phase to the Tomb of Humayun at its end. Monotony of plain mural surface on the exterior is relieved almost invariably by the use of sunk niches and alcoves on the one hand, and rosettes and medallions in high relief, on the other. *Chhajjas* have been used over the wings of the facade of the *pañchamukhī* and *trīmukhī* mosques; *jharokhas* (oriel) have been used in them on the sides and also on the facade in the central arch, for a pleasant effect. This shows that the principle of 'light-and-shadow', as determined by the unconscious urges of the environment and the climate, predominated the imagination of the builders and went into the making of this art.

Babur was much tortured by the excessive heat of Agra and, in order to get relief from it, he devised the architecture of cold-bath in contradistinction to the traditional Mesopotamian hot-bath or *hammām* establishment. His cold-bath at Agra was so cold in summers that one felt chill inside it—he recorded.

He laid down gardens and made arrangement of running, rippling, splashing and falling water in them as much as a result of his love of gardening as with a view to live comfortably under the cool shades. Open pavilions, chhatris and chhaparkhats on the terraces, and verandahs before the rooms were preferred for the same reason.

Babur, the Prince of Gardens, was pioneer of landscaping in India; he laid down the tradition of architectural embellishment by gardening which served as the guiding factor to his worthy descendants in the planning of their tombs, residential-quarters and pleasure-pavilions. This way, Babur's innovation which gave the medieval architecture of India a new direction, and a new definition and impressiveness, was epoch-making. He revolutionalised the art of building. Henceforward, it was not the architect alone, who planned; the garden-designer and the water-engineer collaborated with him in fundamentals as well as in details. The seed which Babur sowed at Agra bore its first fruits at the Tomb of Humayun at Delhi, upstream on the same river Jamuna, where it reposes in the garden-setting splendidly amidst a number of charming environmental cues which are integral to the architectural composition as a whole.

Lustrous glazed colours are repulsive and irritating under a dazzling sun and excessive heat. From this point of view, the colour-scheme of the Nīlā-Gumbad, for example, was a failure which soon became apparent and led the builders to give up the mode of finishing the dome in applied colour, e.g., glazed-tiling, in preference to a red sandstone or a white marble dome, as we find at the Tomb of Atagah Khan and the Tomb of Humayun. The dome of the Taj Mahal at the end of this evolutionary process, too, was finished in white marble instead of the typical Iranian glazed-tiling, also as a result of this urge.

The architect of the Man-Mandir, Gwalior, used mosaic of polychrome tiles but he tempered its glaze by providing stone relief work side by side with it. This combination of two different modes of ornamentation—mosaic of glazed-tiles and stone relief—proved to be an exceedingly pleasant formula of art and this technique was followed by the later builders as we notice at Delhi at the Qal'a-i-Kuhna Masjid, 'Īsā Khān's Masjid and Atagah Khan's Tomb.

Crimson red, turquoise blue, jade green and other sharp colours were not suitable for use on the exteriors of the buildings here, on account of the *tropical climate* and also due to a particular *complexion of the terrain*—which (both climate and terrain) rendered them to look garish and gaudy. They were discarded in preference to the typical Indian yellow in various soothing shades and tones.⁴ Man-Mandir,

Gwalior, was the first monument to proclaim the efficacy of this colour scheme which was followed in the later buildings of this phase, e.g., the Tomb of Atagah Khān, 'Īsā Khān's Masjid and Khair'ul-Manāzil. It was this way that indigenous norms of the stone-art gradually asserted themselves even before such a great genius and innovator as Akbar appeared on the scene.

Use of monochrome on the exterior, unless it is such a basic colour as cream or light yellow, has a monotony of its own. A judicious distribution of stones of different tints and tones considerably relieves this monotony. The architect of this phase soon learnt this marvellous formula of art and he employed this technique most liberally at Delhi. Red stone has been used with grey stone on all edges and outlines of arches for emphasis in the tombs and mosques of this phase, e.g., at the Qal'a-i-Kuhna Masjid, 'Īsā Khān's Masjid, the Lāl-Gumbad, Gumbad Afsarwālā and, above all, at the gates of the Tomb of Humayun. When the structure was finished in red stone, white marble was used for the same purpose as we notice at the tombs of Atagah Khan and Humayun. The latter is a unique example of this colour combination.

This technique was unknown in ancient India. The Hindu temple had a unitary complexion and generally bore a single colour: cream or light yellow and it was by a mysterious play of shadows through innumerable planes and zones, recesses and projections, that the temple reacted effectively on the aesthetic sense. Credit goes to the ingenuity of the builder of this phase who, though he could not imitate the effect of the Hindu temple in mosque or tomb, successfully relieved the monotony by a judicious and skilful use of red sandstone with grey quartzite and white marble with red sandstone.

Again, it was at Man-Mandir, Gwalior, that the mosaic of stone and glazed-tiles, in the inlay technique, was used for the first time. It was as impressive a mode of ornamentation as was the inlay of coloured stones. Architect of this phase took recourse to both these formulae effectively. The latter has been employed most assertively at the Sher-Mandal and the Qal'a-i-Kuhna Masjid, while the best examples of the former come from the Tomb of Atagah Khān, 'Īsā Khān's Masjid and Khair'ul-Manāzil. Tomb of Atagah Khan has examples of both these techniques; mosaic of stone and glazed-tiles has been done on the spandrels of the arches and mosaic of coloured stones on the exterior dados.

With stone gradually coming to the foreground as the chief material both for construction and ornamentation, use of such typically Muslim forms of applied decoration as stucco and painting declined. Inscript-

tions too were more carved in stone in beautiful relief than finished in stucco. Obviously, the Muslim calligrapher designed it on the stone slab; the indigenous artisan of stone chiselled it accordingly. Painting was done on stone surface without intonaco at the Man-Mandir, Gwalior; the architect of the Qal'a-i-Kuhna Masjid followed the technique on a larger scale and, of course, with greater impression.

Jali-art also came into usage about the same time. It is noteworthy that jāli (trellis or lattice work, perforated screen) has not been mentioned in the *Viṣṇudharmottara-Purāṇa* (c. 650), *Samarāṅgaṇa-Sūtradhāra* (c. 1025), *Aparājita-prchhā* (c. 1200) or *Vāstu-Sāra-Prakarāṇa* (of Thakkur Pheru, c. 1315). Curiously, *Parimāṇa-Maṇjarī* of Malla, assigned to early 11th century, which is a treatise of wooden art, mentions jali (śloka 110 and 111). The medieval texts, e.g., the *Kāśyapa-Śilpa* (c. 1450) and *Śilpa-Ratnaṃ* (c. 1600) each has a chapter on Jālaka-Lakṣaṇaṃ. This shows that jali was already in vogue in wood and it was introduced in stone-art in the early medieval period, probably from Gujarat where wooden forms were first translated in stone. It was a characteristic feature of the medieval art of Gujarat. The things seem to have been standardised in the early 15th century, hence its mention in the later texts. Jalis have been used at the Lāl-Gumbad, the Tomb of Atagah Khan and the Tomb of Humayun at Delhi and most effectively in the Tomb of Sheikh Muhammad Ghauth at Gwalior. The Gwalior jalis set examples for the wonderful jali-art of Fatehpur Sikri and Agra of the reign of Akbar, Jehangir and Shah Jehan.

A mixed corpus of designs and motifs has been followed in the art of this phase. While there are such typically Muslim designs as geometricals, arabesques, calligraphics and stylised florals, right from the Man-Mandir, Gwalior, to the Tomb of Atagah Khan, Delhi, typically Hindu motifs and symbols as swāstika, padma, chakra, kīrttimukha, toraṇa, ṣaṭkoṇa, vyāla, makara, haṃsa, śārdūla, hastin and mayūra have also been used side by side. The gateways of the Dīn-Panāh bear śārdūla and hastin. Kīrttimukha in different variations became a popular motif on the bases of pillars and pilasters. Brackets and struts assumed the form of hastin, mayūra and makara. Padma and chakra were commonly used for mural ornamentation. Ṣaṭkoṇa has been depicted on the spandrels of the arches during this phase most popularly; use of Islamic talisman, on the other hand, was strictly restricted to the inner niches of the mihrabs of the mosques, probably on account of its sanctity. Truly, the use of animate motifs was minimal on account of the Hadith proscription, which only the enlightened age of Akbar could have relaxed.

This is how the extraneous inspirations were accepted and absorbed with the indigenous art in the evolutionary process and the style grew and developed under the liberal patronage of the Mughals.

Along with the *handling of shadows* and the harmonious and pleasant *disposal of the mass of stone in space*, the *treatment of the skyline* is a distinctive characteristic of the art of this phase. Openings are a marvellous combination of arches on the one hand, and jharokhas (oriel) and gaukhs (balcony) on the other. The superstructure, likewise, is gorgeously composed of dome on the one hand and a set of chhatris or chhaparkhats on the other. The second set, in each case, was inspired by the living art of Gwalior which had already incorporated and absorbed such folk elements as *biṭaurā* (बिटौरा) and *chhaparkhat* (छपरखट) in solid stone! One set beautifully reconciled with the other without the slightest weakness. The architect of this phase acquired valuable experience particularly in the treatment of the skyline which he ornamented gorgeously with domes, chhatris and pinnacles. The superstructure of the Tomb of Humayun composed of a bulbous double-dome in the centre, spacious octagonal chhatris at the corners, square chhatris on the sides and pinnacles disposed regularly around, is a beautiful illustration of his doing.

Pinnacle of the Delhi Sultanate period is a shapeless feature of rubble and plaster which crowned the tapering turrets rising from the quoins or angles of the substructure, over the parapet around the single dome of the square or octagonal tomb. The pinnacle of red stone and white marble with spreading petals and a *kalaśa* over them—looking like a blooming lotus flower—was an invention of this phase and the set used in the composition of the superstructure of the Tomb of Humayun provides the best example of this period. It continued to be a constituent of Mughal superstructure and was used most magnificently at the Taj Mahal.

The domes (except the dome of the Tomb of Humayun) and cupolas of chhatris and chhaparkhats were surmounted by *mahāpadma* (sheath of lotus-petals) and *āmalasārikā*, and crowned by *kalaśa* finial—which are basically temple elements. The hemisphere of dome and cupola received, through this crowning device in India, an unprecedented grace and impression which is not found anywhere else. The uncrowned domes of Iran and Syria look barren, mediocre and devoid of that majesty of the Indian dome which is its most distinctive characteristic. It is this way that the indigenous sources have played decisively in the growth of the art of this phase.

The evolution of the square plan of the tomb is also an interesting

aspect of this study. It is noteworthy that square tomb of the Sultanate period is regularly square without any attempt to recess or chamfer the angles. The plan evolved during this phase from square to octagonalised-square by way of 'chamfering' or recessing the angles, i.e., by elimination of the corners. Total elevation of the building including the form of the dome which, with the passage of time became a double-dome, guided the course of its development into this direction. The architect was confronted with two basic problems in this respect, viz (i) how best to manipulate the load, and (ii) how best to bring out the architectural effect. The recessed angles, on account of changed courses of masonry and direction, provided a sort of buttresses and reinforced the piers and, at the same time, gave far better aesthetic effect than an altogether flat facade due to the *shadows* which took over at the corners and provided ornamental surfaces. It is interesting to note that the angles were recessed in the Hindu temple exactly for these two reasons. Though the mode of elimination of the angles is different, the principle essentially remains the same in both these cases. Initially, it was a simple chamfering of the angles when each angle-side was less than half of the larger side; gradually with the acquisition of experience of handling the load, the architect developed it to an octagonalised-square plan when the angle side was more than half of the larger side. The Afsarwālā Gumbad and the Subz-Burj are its most illustrative examples. The chamfered and octagonalised-square plans, thus, evolved indigenously during this phase through experimentation. It formed the basis of the grand funereal architecture of the Mughals and it was ultimately on this principle of chamfering that the Tomb of Humayun and the Taj Mahal were planned.

The interior plan of the Tomb of Humayun is comprised of a central octagonal hall, corner rooms and oblong side portals—all interconnected through radiating passages and corridors in the style of a circumambulatory. This is unique inasmuch as the interior plan of the square tombs of the Grand Necropolis as also of the square tombs of the Delhi Sultanate period remained square and any earlier or contemporary tomb did not have corner rooms and side portals in the manner of a circumambulatory around the main hall with regular arrangement of recesses and projections on all the external sides. Where did the original inspiration of this plan come from?

The HISTORICAL factor also plays a vital role in the formation of an architectural style. Unless an art takes roots into the soil and draws on the traditional culture of the people, which is, at least in such a country as India, a perennial source, it dries and dies out with the change of the

epoch as happened with Firoz Shah Tughluq's art at Delhi and Mahmud Gawan's at Bidar. The historical factor goes into the *form* and the *spirit* of an art and, more than that, feeds and sustains it and helps it to grow and develop through the course of changing times.

It was particularly a decisive factor in this case as the Muslim art had no theory of its own and it was introduced into India in fragments—some time by way of an arch and some time by way of an ornamental design, and never as a comprehensive scheme of architecture as a whole. Without a theory whatsoever it was left to the personal liking of the builder how to accept and incorporate these fragments into his work. Precisely, it did not provide him with a concept of architecture which the Indian sources were ready to supply in as minute details as he could afford to have.

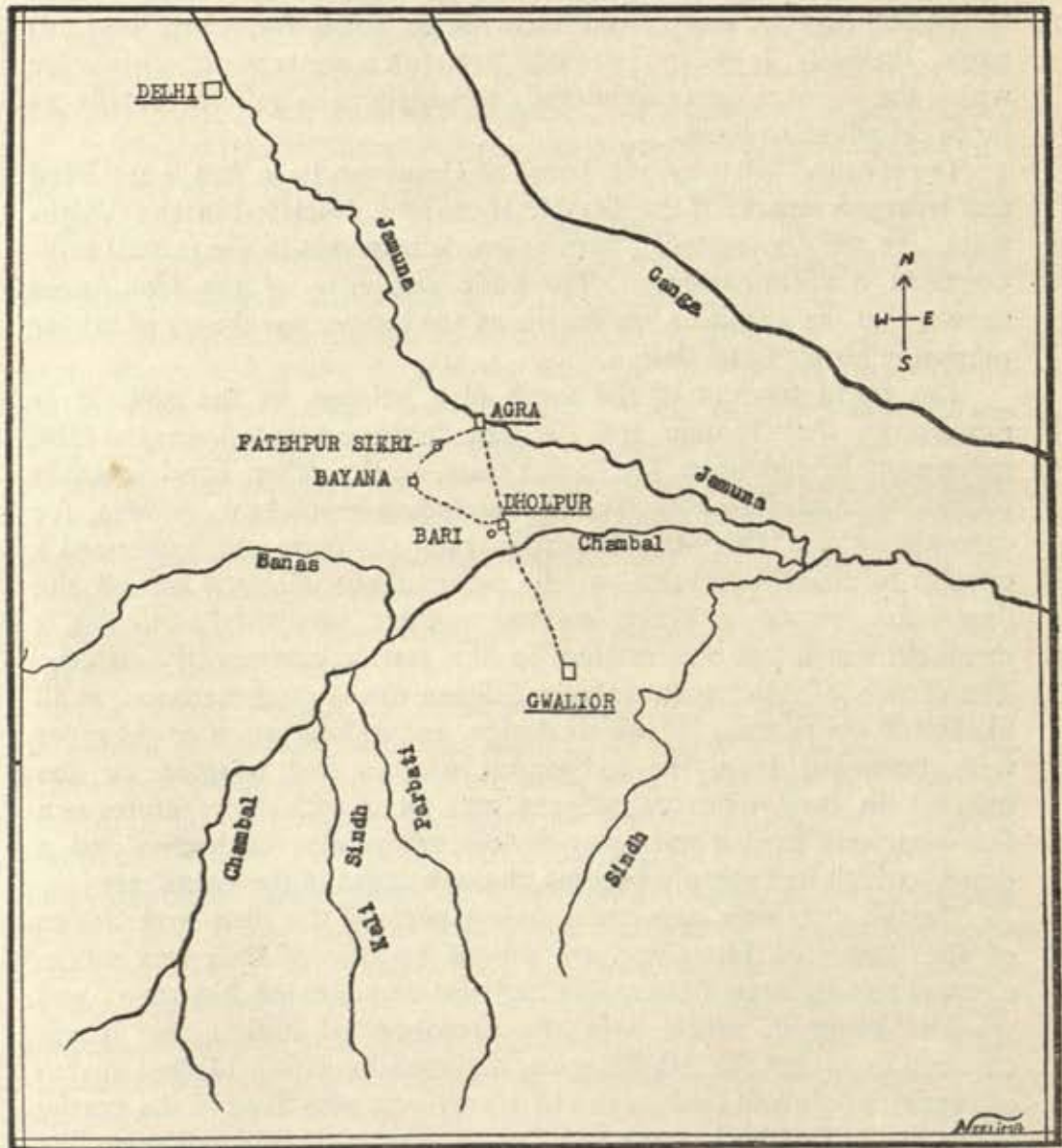
The ground plan of the Tomb of Humayun is, in fact, a modified and enlarged version of the Temple Hemakūṭa described in the Vāstu-texts like the *Samarāṅgaṇa-Sūtradhāra*. It responds to the textual prescriptions in all fundamentals. The basic similarity of the two forms shows that its architect has drawn on the indigenous theory of art for preparing his plan and design.

The grand concept of the tomb also belongs to the soil. It is noteworthy that Islamic law did not command its followers to raise monumental sepulchres. The Indian texts, on the other hand, contain references of monumental structures including sepulchral. Aīḍuka, for example, was a three-tiered quadrangular structure which assumed a circular form above the third plinth, having flight of steps on all the four sides; it was a purely commemorative sepulchral structure, a memorial which was also related to the state's ceremonial function. The Tomb of Humayun exactly follows this arrangement and in all likelihood the original idea of its design, and its basic spirit or *chhandas* were borrowed from the indigenous sources and adopted by the builders in their own magnificent way along with such features as a four-quartered garden and water-devices, *iwāns*, alcoves, arches and a dome—which had already become characteristics of the rulers' art.

Though extremely important, these aspects of the plan and design of the Tomb of Humayun are missed because of their very subtle, abstract and imperceptible nature and also because the historians and scholars begin its study with the preconceived notion that it was commissioned by the Hājī Begum, designed by Mīrak Mirza Ghiyāth of Persian origin and built by the 'Arab artisans who lived in the nearby 'Arab-Serāi. This basic error has led to the gross misunderstanding that it is Persian in form and spirit. An art cannot assume a *form*,

much less a *spirit*—and an individuality of its own—unless and until it is fundamentally related to the soil where it stands.

The art of this place is essentially the product of the cultural affluence of the *Jamuna-Chambal Region* which includes Braja, touching Delhi in the north and Gwalior in the south, with Braja-Bhāṣā as its main dialect. It was watered by such ancient rivers as Yamuna on the north and north-east, Banas in the west, Chambal, Kali-Sindh and Parbati in south-west, and Sindh in the south-east (Map 4). It lies



Map. 4. Site of Early Mughal Architecture (Jamuna-Chambal Region).

to the west of the Ganga-Yamuna doab, south-east of the Punjab plains, east of Rajasthan and north of the Malwa-Daśārṇa region. It was a *single cultural unit* lying within the ancient Madhyadeśa which the scriptures eulogised as the most important tract of the Aryāvarta. The *Manusmṛti*, for example, enjoined:

सरस्वतीदृषद्वयोर्देवनद्योर्दन्तरम् ।
तं देवनिमित्तं देशं ब्रह्मावर्तं प्रचक्षते ॥
(MS, 2.17)

(The land situated between the sacred rivers Saraswatī [eastern Punjab] and Dṛṣadvatī [probably modern Ghagghar, near Thaneshwar] is called *Brahmāvarta*; it is created by the gods.)

And:

कुरुक्षेत्रं मत्स्याश्च पञ्चालाः शूरसेनकाः ।
एष ब्रह्मर्षिदेशो वै ब्रह्मावर्तदन्तरः ॥
(MS, 2.19)

(Adjacent to Brahmāvarta is situated the *Brahmarṣi* region comprised of Kurukṣetra, Matsya, Pañchāla and Śurasain.)

And:

हिमवद्विन्ध्ययोर्मध्यं यत्प्राग्विनशनादपि ।
प्रत्यगेव प्रयागाच्च मध्यदेशः प्रकीर्तितः ॥
(MS, 2.21)

(The region situated between the Himalayas and the Vindhyas, east of the river Saraswatī [eastern Punjab] and west of Prayag [Allahabad] is called Madhya-Deśa.)

This was the heart of the country and the most important region for nearly five thousand years. The Imperial Guptas and Harṣa held their sway in this region; it was the playground of the Gurjara-Pratihāras. It was the land of Lord Kṛṣṇa from the antiquity of the *Mahābhārata* to the medieval period when such great poets as Mirabai and Surdas created classical poetry in His devotion. It was here that the capital of the paramount power of northern India was mostly situated, a geographical compulsion which the Delhi sultans and the Great

Mughals too had to submit to. It became the seat of the glorious Mughal empire of India for nearly three centuries and it was here that such great emperors as Akbar and Shah Jehan held their courts and spent the larger part of their life. This region always played an important role in the cultural history of India for about five millenniums and the art of the phase under study was the vindication of the typical intellectualism of this land!

References

1. See *Appendix E* above. The Man-Mandir palace has been described above in Chapter I, sub-head (c) (iii).
2. For details of this matter, reference may be made to the author's paper: 'Amir Khusrau's Experiment in Nationalism', *Indo-Iranica*, Calcutta, Vol. 31, Nos. 1-2 (March-June 1978).
3. This has been translated by the author and Mr Faiyaz Gwaliari in English under the title 'India as seen by Amir Khusrau' (in print).
4. Dr Raghu Vira made a detailed study of colours in the Introduction of his *Comprehensive English Hindi Dictionary* (New Delhi, 1973), pp. 81-117; he recounted 25 shades of yellow alone, cf. *ibid.*, p. 85; he also gave a detailed Sanskrit terminology of these shades, *ibid.*, pp. 112-13.

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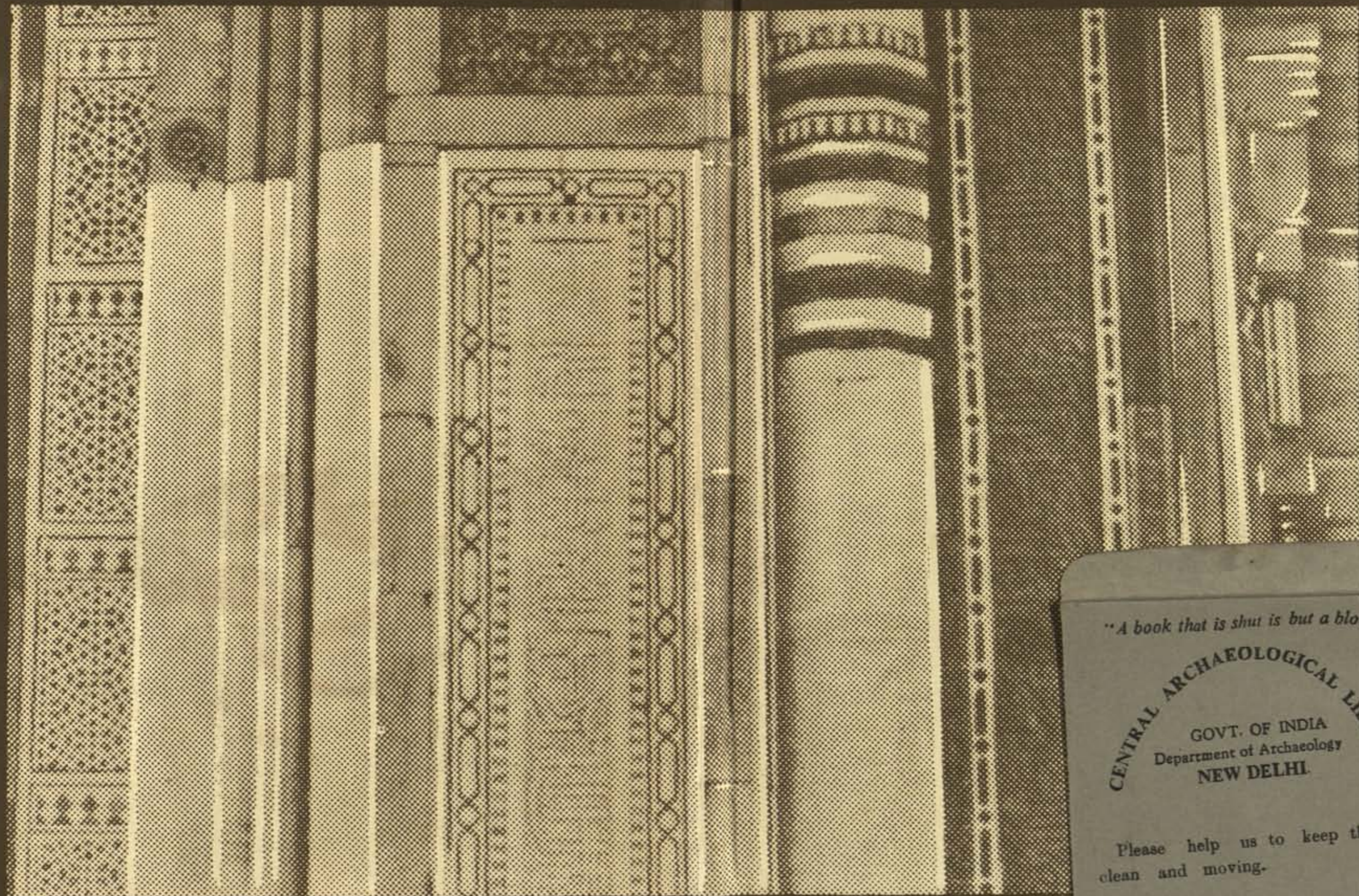
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