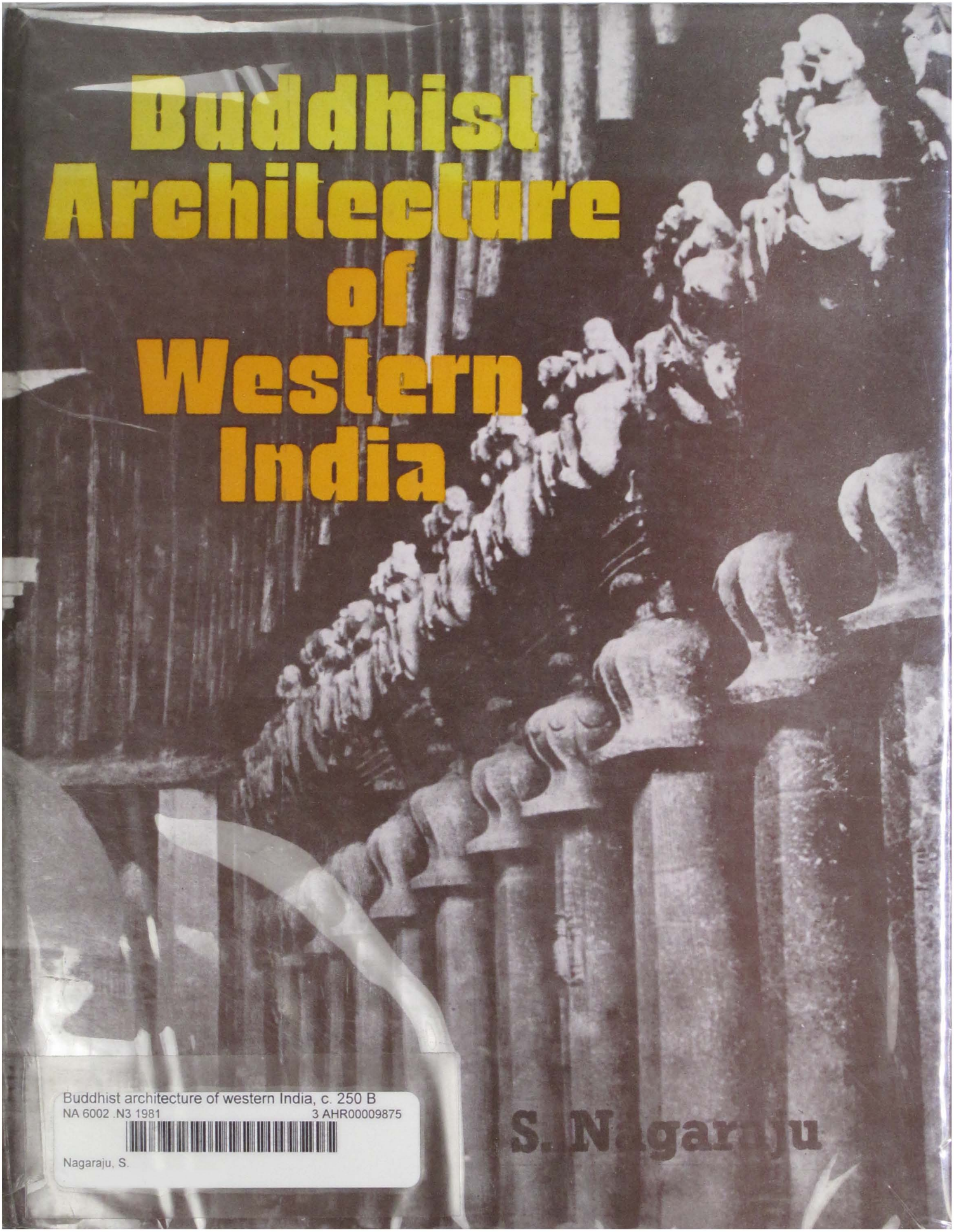
# Buddhist Architecture of Western India



Buddhist architecture of western India, c. 250 B
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Nagaraju, S.

S. Nagaraju

# BUDDHIST ARCHITECTURE OF WESTERN INDIA

(*C.* 250 B.C.—*C.* A.D. 300)

S. NAGARAJU

WITH A FOREWORD BY
M.N. DESHPANDE

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*TO*
*MY MOTHER*

# *Contents*

*Foreword* xi

*Preface* xiii

*Abbreviations and Special usages* xvi

*System of Transliteration* xvi

*List of Illustrations* xvii

**PART ONE : THE BACKGROUND**

I. INTRODUCTION 1-9

II. GEOGRAPHY AND GEOLOGY 10-14

Geographical Features, 10; Geological Features, 11; Influence of Geography and Geology on rock-cut Architecture, 11; On the distribution of centres of rock-cut architecture, 11; On architectural types and forms, 12; On the introduction of decoration, 13.

III. HISTORICAL BACKGROUND 15-44

*POLITICAL HISTORY, 15-25*

Nandas and Mauryas, 15; Satavahanas, 15; nature of sources, 20; the present position of research, 20; a new approach, 20; veracity of the puranic accounts, 20; evidence of the Kalachuri-Chedi era, 22; Ptolemy's evidence, 22: Nahapana-Gautamiputra succession, 22; reconstruction of Satavahana chronology, 23, a short history of Satavahana rule in relation to art history, 24; The post-Satavahana period, 25.

*ECONOMY AND SOCIETY, 25-32*

Socio-economic environment and development of sophisticated art, 25; Beginnings of urbanisation in Western India, 25; Economic progress in the Satavahana period, 26;

Patronage to art, 26; relative patronage by various socio-economic groups, 26; agriculturists and craftsmen, 28; increase of trade and the trading class, 28; internal trade, 28; communication system, 29; overseas trade, 30; rise of the trading class, 31; administration and the rise of the class of state officials, 31; women and the joint family system, 32; group subscription, 32; Socio-economic climate in general, 32.

*RELIGION, 32-37*

Beginnings of the spread of Buddhism in Western India, 33; Early Buddhism and the later Buddhist sects in the region, 33; Bhadrayaniya, 33; Dharmottariya, 34; Mahasamghika, 34; Chetika, 34; Aparaseliya, 34; Possibility of development of sectarian architecture, 35; Monastic practices and architectural types, 36; Buddhist rituals and architecture, 37; Process of introduction of Mahayanism into Western India, 37.

**PART TWO : AIDS TO THE RECONSTRUCTION OF CHRONOLOGY**

IV. DIRECT EVIDENCES FOR THE RECONSTRUCTION OF CHRONOLOGY 47-50

Historical dates, 47; Radiocarbon dates, 48.

V. PALAEOGRAPHY 51-64

*EARLY ATTEMPTS AND PROBLEMS IN METHODOLOGY, 51*

*PRESENT APPROACH, 52*

*DATA FOR IDENTIFYING TIME-STYLE STANDARDS, 52*

Historical data for dating royal inscriptions, 52; Date of the Nanaghat inscription, 53; Date of the earliest inscriptions from the Karle *chaitya* hall, 55; Palaeographical analysis of inscriptions, 56; Evaluation of palaeography as a chronological indicator, 62; Classification of inscriptions into evolutionary groups, 62.

VI. ARCHITECTURAL ANALYSIS 65-94

*METHODOLOGICAL ASPECTS, 65-67*

Art historical method of style-analysis, 65; Utility of archaeological methodology, 65; relative positions of caves, 66; technology, 66; typology, 67.

*CLASSIFICATION OF ROCK-CUT MONUMENTS, 68-71*

Chetiyagharas, 68; Lenas, 69; Matapas, 70; Podhis, 71; Asanapedhikas, 71; Kodhis, 71.

*TYPOLOGY OF ARCHITECTURAL MEMBERS AND DECORATIVE MOTIFS, 71-91*

Stupas, 72; Pillars, 77; Roof types, 80; Screen walls and verandah, 83; Door frames, 83; Windows, 83; Benches, 85; Chaitya arches, 86; Vedika, 89; Brackets, 89; Stepperd merlons, 90; Stepped cornice, 90; Hour-glass decoration 90; Studs, 90; Candrasilas, 91; Additional remarks, 91.

## PART THREE : ARCHITECTURAL DEVELOPMENT

VII. DESCRIPTIVE INVENTORY AND ANALYSIS OF MONUMENTS AND ARCHITECTURAL DEVELOPMENT IN DIFFERENT CENTRES 97-308

Ajanta, 98; Ambivale, 105; Aurangabad, 106; Bedsa, 107; Bhaja, 113; Jivadan-Virar, 130; Junnar, 133; Tuljaleṇa, 133; Manmodi, 140; Ganesh Pahar, 159; Sivaneri, 174; Kanheri, 190; Karle, 221; Kol, 231; Kondane, 242; Kondivite, 237; Kuḍa, 239; Mahad, 250; Nanaghat, 256; Nasik, 258; Pawala, 281; Pitalkhora, 283; Shelarwadi, 294.

VIII. SUMMARY AND CONCLUSIONS 309-327

*THE SETTING, 309-311*

*DEVELOPMENT OF ROCK-CUT ARCHITECTURE, 312-327*

The rise and decline of architectural activity in different centres, 312; Architectural types and their evolution, 312; Chetiyagharas, 312; Lenas, 317; Matapas, 322; Podhis, Kodhis and Asanapedhikas, 323; Transition from the Hinayana to the Mahayana architectural forms, 324.

APPENDIX : LIST OF BRAHMI INSCRIPTIONS FROM THE ROCK-CUT MONUMENTS OF WESTERN INDIA 328-346

*Bibliography*

*Index*

*Tables*

*Figures*

*Plates*

# *Foreword*

This treatise, "Buddhist Architecture of Western India" by Dr. S. Nagaraju is a welcome addition to the subject. The author has dealt with a mass of material in a rather unconventional manner. He has adopted a methodology which is both analytical and synthetic. In the novelty of approach lies the merit of the work.

Dr. Nagaraju has spent a period of about six years in actual field-work measuring monuments, observing priority of one cave over another from technological point of view, studied the inscriptional data, changes in the proportion, layout and decoration on the *stupas*, *viharas*, pillar orders and assigned a time sequence for each cave in a single group. After doing this thorough analysis in respect of other cave groups he has suggested chronology as a result of which he considers the cave at Jivadan-Virar as the earliest. One may not accept this without further corroboration and studied, but the chronology of other cave groups in coastal Maharashtra can be accepted as a working hypothesis.

The early dating suggested by the author for Kanheri, Bhaja, Kondane Caves can further be supported by my recent work at Thanala, formerly known as Nadsur Caves. This cave-group lies a few miles inland the port-town of Semulla (modern Chaul, dist. Kulaba) and a mountain pass leads on to the *Mamala* area wherein are located the caves of Karle, Bhaja, Bedsa and Shelarwadi. The Thanala group has a memorial *stupa* complex similar to the one at Bhaja and there I was able to detect clear evidence that this *stupa* complex was enlarged from time to time so that it now contains six structural *stupas* besides a few *stupas* in rubble masonery. From the developmental point of view, the structural *stupas* clearly betray four phases, the earliest of which could be assigned to early second cent. B.C. Here the earliest two are simple *stupas*, without the *harmika* or the railing on the drum. It is again interesting that while clearing the debris from the floor of this cave seven silver punch-marked coins were obtained besides a small terracotta votive *stupa* suggestive of the early age of the votive *stupas*. The subsequent *stupas* have been embellished with rock-cut *harmikas*, *chattras*, and in each succeeding case the *anda* is constricted at the base and there is a *Vedika* band at the apex of the drum, not to speak of the holes on the *anda* for fixing flag-staves. This four-phased development is reflected in other caves among which the *vihara* adjoining the astyler chaitya hall is of special significance as it contains very clear indications of the four phases. The *vihara* Cave was altered and enlarged and sculptures similar to those in the facade of the *vihara* Cave at Kondane were as a part of embellishment of the walls of the *vihara*. In the fifth cent. A.D. the caves came under *Mahayana* occupation and were painted with figures in the Ajanta style. In the same area there is another group of caves called Khadsamla (or Nenavali) which contains ancient cultured debris required to be cleared scientifically.

It has been generally believed that Buddhist rock-cut activity in Western India came to an end in about the 10th-11th cent. A.D., although it lingered on at centres like Kanheri for a couple of centuries

more. New evidence which has come to light at Panhale Kaji, a cave group consisting 29 excavations situated in the Dapoli taluka of Ratnagiri district, has shown that *Vajrayana* Buddhism survived and prospered in the mountain fastnesses of Sahyadri and that Buddhist Caves came to be carved as late as the 12th century, some of which were converted from their early Hinayana character. The study therefore, of Buddhist rock-cut architecture in a larger socio-economic, religious and technological perspective has become a desideratum.

In this larger perspective Dr. Nagaraju has shown a new insight in studying the early *Hinayana* cave temples in Western Maharashtra, and he deserves our warm congratulations and appreciation for evolving a purely objective methodology which can be followed by others in taking up fresh studies in other areas.

M.N. DESHPANDE

# *Preface*

This work is primarily an attempt to reconstruct afresh the chronology and development of the 'Hīnayāna' phase of Buddhist rock-cut architecture of Western India and is based mainly on a thorough re-examination of architectural and other available data from the rock-cut monuments of the region. Originally when I started this work it was my intention to make a general study of all the rock-cut monuments of the Satavahana period distributed in about fifty centres and to cover the associated sculptures and paintings too. But, when I progressed with my field study, I found to my surprise that the varied details available in these for the reconstruction of chronology and development alone are so rich, and, when viewed in the background of earlier attempts on the subject, are so inviting that I decided to restrict my attention to the reconsideration of only the chronology and development. Even here, the fresh data gathered was enormous and was impossible to cover the whole field in a work like this. The choice left was, therefore, either to take up a study of some important monuments selected from different sites or to make an in-depth study of a few sites only. The former job having been done by various earlier workers, which often resulted in divergent conclusions, I preferred the latter alternative. I have tried to make a judicious selection of the sites. Out of the nineteen sites chosen here for discussion, sixteen can be considered as the most important ones in the series, which not only include most of the well-known monuments of artistic and historical importance but also provide a fairly good picture of the general development of the rock-cut architecture of the region.

With regard to the reconstruction of chronology, though perforce the same tools as those adopted by earlier workers like style-analysis, palaeography, and historical dates have been made use of, I have tried to reassess the limitations and possibilities of these as chronological indicators in the context, and accordingly have brought in some changes in methodology in utilizing them, as could be seen from the details provided in Chapters I-IV. Further, probably for the first time in the study of Western-Indian rock-cut architecture, I have chosen to consider each site as an independent organic entity; besides providing a descriptive and analytical account of all the rock-excavations, a general chronology and history of architectural activity too has been worked out for each of the sites seperately. In the last chapter, these results have been synthesised together to delineate a broad picture of architectural development in Western India in general. Keeping in view the fact that architecture is essentially a utilitarian art, the nature and forms of which are often determined by various geographical, economic, social and religious factors, those too have been discussed in some detail and their impact on architectural development has been duly taken note of.

Besides, though the emphasis is more on the above mentioned aspects only, an attempt has also been made to review the most controversial Satavahana Chronology and the utility of radiocarbon dates, and to use the clues obtained from them for suggesting absolute dates for some of the monuments.

This work is a slightly revised version of my doctoral thesis, '*A Study of Rock-cut Architecture of Konkan and Western Deccan, C. 250 B.C.—A.D. 300*, submitted to the Karnatak University, Dharwar, in 1977. I am thankful to that University for permitting me to publish the same.

I am deeply beholden to Dr S.H. Ritti, Professor and Head of the Department of Ancient Indian History and Epigraphy, Karnatak University, who guided my doctoral work. But for his kindness and expert advice this work could hardly have been completed. Indeed he has been a source of encouragement to me throughout.

I have pleasure in recording my gratitude to Shri M.N. Deshpande, former Director-General of Archaeology in India, who opened my eyes to the vast possibilities that exist for making an in-depth study of the rock-cut monuments in Western India. He has favoured me often with many long and useful discussions on the subject and has also been kind enough to write a foreword to this book and enhance its value. I am thankful to him immensely for all his courtesies.

I recall with pleasure and gratitude the useful advice and encouragement I received from Dr H.D. Sankalia, former Director, Deccan College, Pune. In fact, it was he who offered me a significant suggestion, the result of which is to be seen in the pages of this work. He asked me to study the history of architecture not just as an account of stylistic changes, but to view architecture as one of the items of socio-cultural activity of an age and to trace and explain its development in the context of the associated economic, social and historical situation. I feel that this has given a new dimension to the present work. I also owe a deep debt of gratitude to my esteemed *guru*, the late Dr M. Seshadri, Professor and Head of the Department of Ancient History and Archaeology in the University of Mysore, under whose paternal care much of the initial work connected with this venture was done.

The officials of the Archaeological Survey of India have been of great help to me while I was carrying out my field studies. I would like to thank particularly Shri S.R. Rao, the then Superintending Archaeologist of the South-Western Circle, Aurangabad, who kindly took me to some sites and provided the plans of many sites and caves. Similarly, I have gained much help from Shriyuts K.M. Srivastava, C.L. Suri, G.B. Vidwans, M.V. Tyembe, K.V. Kulkarni and a host of other friends of the same Circle. I sincerely thank all these, as well as my friend Prof T.V. Pathy of the Marathawada University who accompanied me to some places for visiting monuments. Further, I am thankful to the University Grants Commission, the University of Mysore and specially Dr M. Seshadri and Dr A.V. Narasimha Murthy, the successive Heads of the Department of Ancient History and Archaeology in the University of Mysore, who were helpful in getting me some financial assistance for field work.

My esteemed friend Dr K.V. Ramesh, now Superintending Epigraphist, Archaeolological Survey of India, Mysore, was kind enough to go through the draft of my work and offer many suggestions. Shri Krishna Deva, formerly of the Archaeological Survey of India, Dr M.K. Dhavalikar of the Deccan College, Pune, Shri S.V. Gorakshakar, Director, Prince of Wales Museum, Bombay and many other have given me the benefit of their knowledge through personal discussions. Dr Pakshirajan, Professor and Head of the Department of Statistics, University of Mysore, has provided technical help and advice in working out the details relating to the radiocarbon dates. Prof D.P. Agrawal of the Physical Research Laboratory, Ahmedabad has offered useful comments on these. Dr H.M. Nayak, Director, Institute of Kannada Studies, Prof M. Rajeshwarayya and Dr P.V. Nanjaraja Urs of the Department of Hindi, Dr J.S. Paramashivayya, Professor of Folklore and Shri K.T. Veerappa, Executive Editor, Kannada Encyclopaedia, all of the University of Mysore, have extended many facilities to me for pursuing this work. My friends Dr B. Narasimhaiah and Shri C.L. Suri, and Shri K.S. Ramachandran of the Archaeological Survey of India, New Delhi, have offered a great deal of help while preparing the press-copy. I offer my grateful thanks to all of them.

The line drawings included in this book were mostly prepared by my young friends Shriyuts C.S. Sundereshan, C. Kuppachari and S.V. Padigar and the final drawings for the press were made by Shri A.T.P. Ponnuswamy, Senior Draughtsman, Archaeological Survey of India. My friend Shri Suresh Vasant of Pune has been kind enough to provide from his personal collections a large number of excellent photographs illustrated in this volume. The photographer of the Prince of Wales Museum

specially took the photographs of Kuḍa for this volume. I owe a special debt of gratitude to him for this kind gesture. Similarly Shri J.P. Joshi, Director, Archaeological Survey of India, New Delhi and Shri R.G. Pandeya, Superintending Archaeologist, South-Western circle, Aurangabad have kindly lent beautiful photographs for illustration from the collections of the ASI. Prof R. Subrahmanyam of the Nagarjuna University and Shri C.L. Suri of the Archaeological Survey have extended their help in getting several photographs made. Shriyuts Ranjan Gupta, G. Lakshminarayana and Budhi Singh, photographers of the Archaeological Survey of India, New Delhi, Shri K.S. Mani, Photographer in the Srisailam Excavation Project, Guntur, and Shriyuts Arkesh, P. Rama Prasad and P. Krishnakumar of Mysore have prepared the various photographs illustrated here. I sincerely record my thanks to all of them.

I am indebted to my friends Shriyuts P. Natarajan (Mysore), K. Janardhana Rao (Guntur) and A.K. Mishra (New Delhi) for typing the manuscript and Shri A.K. Bhargava of the Agam Kala Prakashan for going through the proofs. Dr B. Narasimhaiah, Superintending Archaeologist, and Shriyuts Cherring Dorje and S.V. Padigar, Deputy Superintending Archaeologist and Technical Assistant respectively, all of the Archaeological Survey of India, New Delhi, have prepared the Index. I offer my sincere thanks to all these.

It is with sincere gratitude that I would like to record that this work could not have taken the present shape but for the constant 'goading' by my esteemed friends Dr M.S. Nagaraja Rao, Director of Archaeology and Museums in Mysore, Dr K.V. Ramesh, Superintending Epigraphist, Archaeological Survey of India, Mysore, Dr B.K. Gururaja Rao, Reader, Department of Ancient Indian History and Archaeology and Dr B.R. Gopal, Epigraphist, Institute of Kannada Studies, both in the University of Mysore. Dr Nagaraja Rao particularly has helped me in various other ways too to push this work to print.

My wife, Smt Lalitha, has been a strength to me in carrying out this work. She has shown great patience and understanding. Words are inadequate to express my gratitude to her.

Lastly, I wish to record my appreciation and thanks to my friend and publisher Shri Agam Prasad of the Agam Kala Prakashan, Delhi, for bringing out this book in such a short time and in an excellant form and to Shri Ravi Mahajan of Print India, Delhi, for the neat Printing.

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18th July, 1980

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## ABBREVIATIONS AND SPECIAL USAGES

**Abbreviations**

| | |
|---|---|
| b | broad/breadth |
| cm | centimetre/s |
| d | deep/depth |
| dia | diameter |
| Exc | Excavation |
| h | high/height |
| km | kilometre/s |
| l | long/length |
| m | metre/s |
| sq | square |
| uf | unfinished |
| v | variant |
| w | wide/width |

**Note** : Abbreviations used for books and journals have been shown seperately in the Bibliography.

**Special Usages**

Any expression wherein a number follows the name of a site refers to the Cave of the corresponding number at that site as given in Chapter VII, *e.g.* AJANTA 10=The cave numbered 10 at Ajanta.

Any expression wherein the name of a site is followed by the word 'No.' and a figure refers to the Inscription of the corresponding number at that site, as listed in the Appendix, *e.g.* AJANTA No. 2=Inscription No. 2 at Ajanta.

All numbers given for individual line drawings in the Figures, unless otherwise stated, refer to the caves of the corresponding numbers at the site mentioned in the caption of that Figure.

## SYSTEM OF TRANSLITERATION

| | | | |
|---|---|---|---|
| आ=ā | ई=ī | ऊ=ū | ऋ=ṛi |
| ए=e | ऐ=ai | ओ=o | औ=au |
| | anusvāra=ṁ | visarga=ḥ | |
| च्=ch | छ्=chh | ट्=ṭ | ठ्=ṭh |
| ड्=ḍ | ढ्=ḍh | ङ्=ṅ | ञ्=ñ |
| ण्=ṇ | श्=ś | ष्=ṣ | ल्=ḷ |

# *List of Illustrations*

## *CHARTS* :

I. Karle Radiocarbon Dates.

II. Evolution of Brahmi Script in Western India.

III. Choronology of Inscriptions in Western Indian Caves.

IV. Typological classification of Rock-cut Monuments of Western India.

V. Chronology of Rock-cut Monuments of Western India.

## *FIGURES* :

1. MAP OF WESTERN INDIA
2. CHETIYAGHARAS—MAIN TYPES : A. Hall Type : 1. A ia; 2. A ib; 3. A ic; 4. A iia; 5. A iib; 6. A iii. B. Cell Type : 7. B i; 8. B ii.
3. LENAS –MAIN TYPES : A. Single Cell Type : 1. A ib; 2. A ib; 3. A ii; 4-5. A iii; 6. A iva; 7. A ivb. B. Multiple Cells Type : 8. B i; 9. B ii; 10. B iiia; 11, B iiib; 12. B iv.
4. MATAPAS—MAIN TYPES : A. Hall without Bench : 1. A i; 2-3. A ii. B. Hall with Bench : 4-5. B i; 6-7. B ii.
5. MAIN STUPAS IN CHETIYAGHARAS (1)—Type A i : 1. Bhaja 26; 2. Kanheri 2e; 3. Junnar-Tuljaleṇa 3. Type A ii : 4. Knodivite 9. Type A iii : 5. Bedsa 3.
6. MAIN STUPAS IN CHETIYAGHARAS (2)—Type B i : 1. Bhaja 12. Type ii : 2. Kanheri 3. Type C ia : 3. Ajanta 10. Type C ib : 4. Aurangabad 4. Type C ic : 5. Kondane 1.
7. MAIN STUPAS IN CHETIYAGHARS (3)—Type C iia : 1. Ajanta 9. Type C iib : 2. Nasik 18; 3. Bedsa 7; 4. Karle 8.
8. MAIN STUPAS IN CHETIYAGHARAS (4)—Type D : 1. Kanheri 4; 2. Kanheri 2c; 3. Junnar-Sivaneri 43; 4. Junnar-Ganesh Pahar 14.
9. MAIN TYPES OF PILLARS (1)—Type A i : 1. Ajanta 10. Type B 2. Ajanta 9. Type C : 3. Ajanta 9. Type E : 4. Kanheri 32.
10. MAIN TYPES OF PILLARS (2)—Type D i : 1. Nasik 18. Type D ii : 2. Bedsa 7. Type D iii : 3. Karle 8. Type D iv : 4. Nasik 10. Type D v : 5. Junnar-Ganesh Pahar 6. Type D vi : 6. Junnar-Manmodi 1.

11. ROOF TYPES IN CAVES : Sectional views. A. Vault roof on nave and quadrantal one on aisles; B. Vault roof on nave and flat roof on aisles; C. Flat roofed caves—with verandah ceiling higher than the hall; D. Flat roofed caves—with verandah ceiling on the same level as that of the hall; E. Flat roofed caves—with verandah roof at a lower level than that of the hall; F. Flat roofed caves—simples flat roof in caves without verandah.
12. DOOR FRAMES—MAIN TYPES—1. Simple rectangular door frame; 2. Rectangular door frame with ledge around; 3. Door frame with side jambs slanting; 4. Door frame with slanting side jambs and canopied by Ćhaitya arch (from Nasik 19); 5. Door frame with slanting side jambs and canopied by Chaitya arch but with semi-circular lintel (from Bhaja 6); 6. Rectangular door frame with Śākhās on sides and crowned by decorated chaitya arch (from Bhaja 22); 7. Simple rectangular door frame with decorated chaitya arch on top (from Junnar-Manmodi 45).
13. WINDOW TYPES—A. 1-2. Type Ai, Small open windows; 3-4. Type Bi, Grated window; 5-6. Type Aii, Large open windows.
14. MISCELLANEOUS DECORATIVE ITEMS—1. Bracket; 2. Stepped cornice; 3. Stepped merlon; 4. Studs; 5. Vedikā; 6. Vedikā with lotus medallions; 7. Roll-Vedikā; 8. Large rectangular window type panel.
15. HOUR-GLASS DECORATION—A. An example showing a beginning stage, Kanheri 56; B. Mahad 11; C. Mahad 8; D. Kuḍa 15; E. Kanheri 94; F. Kanheri 78; G. Kanheri 70; H. Kanheri 73; I. Kanheri 75; J. Kanheri 50; K. Kanheri 93; L. Kanheri 101; M. Kanheri 49; N. Kanheri 65; O-P. Kanheri 67; Q. Kanheri 79.
16. CHANDRAŚILĀS FROM KANHERI CAVES.
17. AJANTA 9—Plan, Longitudinal and Transverse Sections.
18. AJANTA 10—a, b, d. Plan, Longitudinal and Transverse Sections; c. Suggested reconstruction of the elliptical plan at the pavāḍa level; e. Front Elevation.
19. AJANTA—Cave 12 : Plan and Interior Elevation; Cave 13 : Plan and Bench with raised pillow; Cave 15A : Plan.
20. A. AMBIVALE—Plan of Leṇa; B : JUNNAR-Tuljaleṇa 3 : Transverse Section.
21. BEDSA 7—Plan and Logitudinal Section.
22. BEDSA 11—Plan and Interior Elevation.
23. BHAJA—Caves 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16—plans.
24. BHAJA 12—Plan, Longitudinal and Transverse Sections.
25. BHAJA—Caves 18, 19, 20, 21, 22, 24, 25, 26—plans.
26. JIVADAN-VIHAR—Caves 1, 2, 3, 4, 5, 7, 9 and 10—plans.
27. JUNNAR-TULJALEṆA—Site plan.
28. JUNNAR-MANMODI—Caves 1, 3, 7, 8—Plans; Cave 2—Plan and Longitudinal Section.
29. JUNNAR-MANMODI—Caves 21, 25, 27, 28, 38, 43 and 45—Plans.
30. JUNNAR-GANESH PAHAR—Caves 1, 2, 3, 4, 5, 5a—Plans.
31. JUNNAR-GANESH PAHAR 6—Plan, Transverse Section and Stūpa.
32. JUNNAR-GANESH PAHAR—Caves 7, 8, 9—Plans.
33. JUNNAR-GANESH PAHAR—Caves 11, 12, 13 and 15—Plans; Cave 14—Plan and Longitudinal Section.
34. JUNNAR-GANESH PAHAR—Caves 16, 17, 18, 19, 20a, 21, 21a, 22, 23—Plans.
35. JUNNAR-GANESH PAHAR—Caves 24, 25, 26, 27, 28, 29 and 32 a, b, c, d—Plans.
36. JUNNAR-SIVANERI—Cave 2—Plan and Longitudinal Section; Cave 18, 34, 35, 36—Plans.
37. JUNNAR-SIVANERI—Caves 3, 19, 24, 42, 57—Plans; Cave 43—Plan and Longitudinal Section.
38. JUNNAR-SIVANERI—Caves 49, 52, 59, 60, 64, 68—Plans; Cave 66—Stūpa, Plan and Longitudinal Section.
39. KANHERI—Cave 2 a, b, c, d, e, f—Plans; Cave 3—Plan and Longitudinal Section (Sculpture of Buddha on the wall of the verandah has not been shown in the transverse section).
40. KANHERI—CAVES 7, 21, 22, 32, 42—Plans; Cave 36—Plan and Stūpa.
41. KANHERI—Caves 50, 53, 54, 56, 57, 58, 59, 60—Plans.

42. KANHERI—Caves 64, 65, 67, 70, 73, 74, 78, 88, 91—Plans.
43. KANHERI—Caves 92, 93, 94, 95, 96, 97, 98, 99—Plans.
44. KARLE—Caves 4, 7, 11, 12 13, 14, 15—Plans.
45. KARLE 8—Plan and Longitudinal Section.
46. KONDANE—Cave 1—Plan and Longitudinal Section.
47. KONDANE—Caves 2, 3, 4, 5, 6, 7, 8—Plans; Cave 2—A Pillar (reconstructed).
48. KONDIVITE 9—Plan and Longitudinal Section.
49. KUḌA—Caves 1, 4, 6, 7, 9, 15—Plans.
50. KUḌA—Caves 2, 3, 5, 11, 12a, 12b, 13, 14, 14x, 16, 20, 22, 24—Plans.
51. KUḌA—Caves 10, 17, 18, 19, 23, 25, 26; NANAGHAT—Cave 11—Plan.
52. MAHAD—Caves 4, 7, 9, 11, 19—Plans; Cave 8—Plan and Longitudinal Section.
53. MAHAD—Caves 13, 16, 22, 23, 24, 25, 26, 27, 28—Plans.
54. NASIK—Caves 3, 10—Plans.
55. NASIK—Caves 7, 8, 9, 17, 19—Plans.
56. NASIK—Cave 18—Plan and Longitudinal Section; Caves 20, 21—Plans.
57. PAWALA—Caves 1, 2—Plans; Cave 2—Longitudinal Section.
58. PITALKHORA—Site Plan.
59. SHELARWADI—Caves 1, 3, 6, 8, 10, 11—Plans; Cave 5—Plan and Longitudinal Section.

## *PLATES*

1. Ajanta : General view of caves showing their location in the vertical scarp by the side of the river.
2. Junnar-Tuljaleṇa : General view of caves located at the foot of a hill.
3. Nasik : General view of caves at midway up the hill.
4. Junnar-Manmodi : General view of caves cut near the top series of trappean deposits.
5. Kanheri : Caves with forecourts cut in a gently sloping hill.
6. Kuda : A panoramic view from the caves.
7. Ajanta : Cave 9, Front view.
8. Ajanta : Cave 9, Interior view.
9. Ajanta : Cave 9, The octagonal pillars in the nave.
10. Ajanta : Cave 9, Square pillars in front of the nave.
11. Ajanta : Cave 10, Front view.
12. Ajanta : Cave 10, Interior view.
13. Ajanta : Cave 10, Inscription No. 2 on the left wall of the left Aisle.
14. Ajanta : Cave 12, Interior view.
15. Ajanta : Cave 12, Details of wall decoration on the front most cell to right
16. Ajanta : Cave 10, Quadrantal beams of the overhanging *pavada*.
17. Ajanta : Cave 15 A, Decoration on a cell doorway.
18. Ambivale : Front view of the *leṇa*.
19. Ambivale : Interior view of the *leṇa*.
20. Ambivale : The pillars in front of the cave.
21. Aurangabad : Cave 4, General view.
22. Bedsa : Cave 3, General view.
23. Bedsa : Cave 7, Front view.
24. Bedsa : Cave 7, View of the interior with the *stūpa* and the pillars.
25. Bedsa : Cave 7, Details of decoration on the left wall of the verandah.

26. Bedsa : Cave 7, The main doorway in the front screen wall.
27. Bedsa : Cave 7, The capital of an engaged pillar in the verandah.
28. Bedsa : Cave 11, Details of wall decoration inside the hall.
29. Bedsa : Cave 11, General view of the hall with cell doorways and wall decoration.
30. Bhaja : Cave 5, Front view.
31. Bhaja : Cave 6, The wall decoration in the hall.
32. Bhaja : Cave 7, The decoration wall in the hall.
33. Bhaja : Cave 7, Details of Decoration on the right wall.
34. Bhaja : Cave 10, Interior view showing the cell doorways.
35. Bhaja : Cave 10, A pillar capital with animal sculptures, now lying in front of Cave 7 below.
36. Bhaja : Cave 10, Remnant of step-and-pot base of a pillar in front of the varandah.
37. Bhaja : Cave 11, A view of the hall with cells and decoration on the wall.
38. Bhaja : Cave 12, Interior view.
39. Bhaja : Cave 12, General view.
40. Bhaja : Cave 13, Interior view showing cell doorways and decoration.
41. Bhaja : Cave 13, A grated window in the wall of the left cell.
42. Bhaja : Cave 20, *Stūpas* 3 to 6.
43. Bhaja : Cave 20, *Stūpa* 6.
44. Bhaja : Cave 20, *Stūpa* 7.
45. Bhaja : Cave 20, *Stūpa* 10.
46. Bhaja : Cave 20, *Stūpa* 11.
47. Bhaja : Cave 20, *Stūpa* 9.
48. Bhaja : Cave 20, *Stūpa* 13.
49. Bhaja : Cave 20, *Stūpa* 14.
50. Bhaja : Cave 22, Front view.
51. Bhaja : Cave 22, A view of the verandah showing the semi vault ceiling.
52. Bhaja : Cave 22, Details of sculpture and an attached pillar with animal capital on the left side of the verandah.
53. Bhaja : Cave 22, Interior view showing cell doorways and wall decoration.
54. Bhaja : Cave 22, Sculpture of a warrior on the wall inside the hall.
55. Bhaja : Cave 22, Pillars of 'Typa C' in front of the verandah.
56. Bhaja : Cave 26, The stupa inside.
57. Jivadan-Virar : Caves 1 and 2, Interior view.
58. Jivadan-Virar : Cave 5.
59. Jivadan-Virar : Cave 9, Front view showing the simple plain facade.
60. Jivadan-Virar : Caves 10 and 11.
61. Junnar-Tuljalena : Cave 3, General view.
62. Junnar-Tuljalena : Caves 4-16, General view.
63. Junnar-Tuljalena : Cave 12, The facade decoration.
64. Junnar-Tuljalena : Caves : 15-16, The facade decoration.
65. Junnar-Manmodi : Caves 1-3, General view.
66. Junnar-Manmodi : Cave 26, Front view.
67. Junnar-Manmodi : Cave 26, The *chaitya* arch above the doorway in the front screen wall.
68. Junnar-Manmodi : Cave 26, Unfinished pillars.
69. Junnar-Mannmodi : Cave 45, The decoration on the front wall of the line of cells.
70. Jannar-Manmodi : Cave 40, Front view.
71. Junnar-Ganesh Pahar : Cave 6, Front view.
72. Junnar-Ganesh Pahar : Cave 6, Interior view.
73. Junnar-Ganesh Pahar : Cave 7, Front view.
74. Junnar-Ganesh Pahar : Cave 14, The *stūpa* inside the hall.
75. Junnar-Ganesh Pahar : Cave 34, Front view.

76. Junnar-Ganesh Pahar : Cave 34, Decoration on the right wall of the front alcove.
77. Junnar-Ganesh Pahar : Cave 34, Decoration on the left wall of the front alcove.
78. Junnar-Ganesh Pahar : Cave 34, Decoration on the main arch of the front screen wall.
79. Junnar-Ganesh Pahar : Cave 34, Triskelis decoration on the main arch of the front screen wall.
80. Junnar-Sivaneri : Cave 19, A *stūpa* in relief in a niche in the left wall of the verandah.
81. Junnar-Sivaneri : Cave 18, The hour-glass decoration on a pilaster at the entrance of the cave.
82. Junnar-Sivaneri : Cave 2, A *stūpa* cut in relief in a niche in the left wall of the verandah.
83. Junnar-Sivaneri : Cave 33, A *stūpa* cut in relief in a niche in the left wall of the verandah.
84. Junnar-Sivaneri : Cave 2, The ruined *stūpa* inside the chaitya hall.
85. Junnar-Sivaneri : Cave 43, An attached pillar inside the *chaitya* hall.
86. Junnar-Sivaneri : Cave 42, A *stūpa* cut in relief in a niche in the back wall of the hall right opposite the front entrance.
87. Junnar-Sivaneri : Cave 49, A stepped capital of a pillar hanging from the roof in front of the verandah.
88. Junnar-Sivaneri : Cave 66, Part of a pot-capital of the side pillar in front of the verandah.
89. Junnar-Sivaneri : Cave 43, The *stūpa* inside the *chaitya* hall.
90. Junnar-Sivaneri : Cave 66, The *stūpa* inside the *chaitya* hall.
91. Kanheri : Cave 2, General view.
92. Kanheri : Cave 2c, The *stūpa* inside.
93. Kanheri : Cave 2e, The *stūpa* inside.
94. Kanheri : Cave 3, General view.
95. Kanheri : Cave 3, Interior view.
96. Kanheri : Cave 3, Details of two of two of the pillars in hall (Note the *stūpa* sculpture on one of the pillars).
97. Kanheri : Cave 3, Inseription No. 5, on a pillar of the front screen.
98. Kanheri : Cave 3, Lion pillar at the south wall of the forecourt.
99. Kanheri : Cave 3, Capital of the pillar at the north wall of the forecourt.
99a. Kanheri : Cave 4, The *stūpa*.
100. Kanheri : Cave 32, General view.
101. Kanheri : Cave 32, Left wall in front showing the hour-glass decoration on the pilaster (Note the groove on the wall meant for arranging the pavada).
102. Kanheri : Cave 32, The hour-glass decoration on the left pilaster.
102a. Kanheri : Cave 21, Doorway of the hall and the grated windows.
103. Kanheri : Cave 36, The *stūpa* inside.
104. Kanheri : Cave 49, The hour-glass decoration on the pilaster.
105. Kanheri : Cave 49, The *candrasila* in front.
106. Kanheri : Cave 49, General view.
107. Kanheri : Cave 50, General view.
108. Kanheri : Cave 53, General view.
109. Kanheri : Cave 67, General view.
110. Kanheri : Cave 71, General view.
111. Kanheri : Cave 72, General view.
112. Kanheri : Cave 73, General view.
113. Kanheri : Cave 50, A grated window.
114. Kanheri : Cave 74, General view.
115. Kanheri : Cave 53, Ornamental pilaster in the verandah.
116. Kanheri : Cave 75, General view.
117. Kanheri : Cave 78, General view.
118. Kanheri : Excavation 81 a.
119. Kanheri : Cave 88, front view.
120. Kanheri : Cave 94, General view.

121. Kanheri : Cave 96, General view.
122. Kanheri : Cave 88, Candrasila.
123. Kanheri : Cave 88, Hour-glass decoration on a verandah pilaster.
124. Kanheri : Cave 94, A grated window.
125. Kanheri : Cave 94, Hour-glass decoration on a verandah pilastes.
126. Kanheri : Cave 75, A view-seat in the forecourt.
127. Kanheri : Cave 101, A view-seat by the side of the cave.
128. Karle : Cave 8, front view.
129. Karle : Cave 8, Interior view.
130. Karle : Cave 8, Sculptural decoration on the right wall of the verandah.
131. Karle : Cave 8, A pillar inside the hall.
132. Karla : Cave 8, A *mithuna* panel on the inner screen wall.
133. Karle : Cave 8, The small doorway on the right side of the inner sereen wall.
134. Karle : Caves 11-14, General view.
135. Karle : Cave 15, Interior view.
136. Kondane : Cave 1, General view.
137. Kondane : Cave 1, The facade.
138. Kondane : Cave 1, Details of carving on the left side of the facade.
139. Kondane : Cave 2, Decoration on the upper part of the facade.
140. Kondane : Cave 2, Interior view.
141. Kondane : Cave 1, The *stūpa* inside.
142. Kondane : Cave 1, A *yakshi* figure carved on the front wall.
143. Kondane : Cave 2, Interior view showing the ceiling and the *stūpa* on the right wall.
144. Kondane : Cave 2, The *stūpa* cut in a niche in the right wall of the verandah.
145. Kondivite : Cave 9, Front view.
146. Kondivite : Cave 9, A grated window cut in the wall of the circular shrine.
147. Kondivite : Cave 12, Railing decoration in front of the cells.
148. Kada : Cave 1, General view.
149. Kuda : General view.
150. Kuda : Cave 6, Front view.
151. Kuda : Cave 6, Interior view.
152. Kuda : Cave 6, The *mithuna* figure to right on the back wall of the hall.
153. Kuda : Cave 6, Hour-glass decoration on the left pilaster in the front verandah.
154. Kuda : Cave 6, Decoration on the front side of the backed bench in the transverse verandah inside.
155. Kuda : Cave 6, Decoration on the backed bench in the front verandah.
156. Kuda : Cave 7, Front view.
157. Kuda : Cave 9, Front view.
158. Kuda : Caves 13-14, General view.
159. Kuda : Cave 15, The *stūpa* inside.
160. Kuda : Cave 16, Inscription No. 17 on the back wall of the verandah.
161. Mahad : Cave 3, Front view.
162. Mahad : Cave 5, Hour-glass decoration on the right pilaster in the verandah.
163. Mahad : Cave 15, The *stūpa*.
164. Mahad : Cave 5, A pillar and a pilaster in front of the verandah.
165. Mahad : Cave 8, Front view.
166. Mahad : Cave 10, Front view.
167. Mahad : Cave 3, A bench cut in the right wall of the verandah.
168. Mahad : Caves 11-15 and 21-22, General view.
169. Mahad : Cave 21, General view, with the *stūpa*.
170. Mahad : Cave 13, Hour-glass decoration on a pilaster in the verandah.
171. Mahad : Cave 27, General view.

172. Mahad : Cave 27, Relief *stūpa* in the kodhi cut in the right wall of the verandah.
173. Mahad : Cave 27, Inscription No. 3 on the right wall out side the verandah.
174. Mahad : Cave 27, Hour-glass decoration on the right pilaster in the verandah.
175. Nanaghat : The Nana pass.
176. Nanaghat : Cave 11, Remnants of the feet of the royal figures cut in relief on the back wall and label inscription above.
177. Nanaghat : Cave 11, Part of Nayanika's inscription (Inscription No. 1).
178. Nasik : Cave 3, General view.
179. Nasik : Cave 3, Interior view showing the relief *stūpa* on the back wall of the hall.
180. Nasik : Cave 3, A view of the verandah showing the central doorway and Vasisthiputra Pulmavi's inscription on top left.
181. Nasik : Cave 4, Front view.
182. Nasik : Cave 9, Front viev.
183. Nasik : Cave 9, A pillar and a pilaster in the front verandah.
184. Nasik : Cave 10, Front view.
185. Nasik : Cave 10, The verandah.
186. Nasik : Cave 10, Remnant of the *stūpa* cut on the back wall of the hall.
187. Nasik : Cave 6, Front view.
188. Nasik : Cave 11, Front view.
189. Nasik : Cave 14, Front view.
190. Nasik : Cave 17, Front view.
191. Nasik : Cave 17, Interior view showing the unfinished transverse verandah at the back of the hall.
192. Nasik : Cave 18, General view of the facade.
193. Nasik : Cave 18, Interior view.
194. Nasik : Cave 18, A closer view of the facade.
195. Nasik : Cave 19, Front view.
196. Nasik : Cave 19, Interior view showing the cell doorways and the wall decoration.
197. Nasik : Cave 20, Front view.
198. Nasik : Cave 20, Interior view.
199. Nasik : Cave 21, Front view.
200. Nasik : Cave 24, Decoration on the facade.
201. Nasik : Cave 19, Inscription (No. 22) of the Satavahana king Kanha.
202. Pitalkhora : Cave 3, Interior view.
203. Pitalkhora : Caves 3-4, General view.
204. Pitalkhora : Cave 4, The cells and the wall decoration at the back of the hall.
205. Pitalkhara : Cave 4, the corridor in front of the row of cells in the back wall.
206. Pitalkhora : Cave 4, The sculptured doorway leading from the forecourt to the cave.
207. Pitalkhora : Cave 7, A stone bed inside a cell.
208. Pitalkhora : Cave 9, Railing decoration inside the hall.
209. Pitalkhora : Cave 10, front view.
210. Pitalkhora : Cave 11, A view from the front showing the *stūpas* inside.
211. Pitalkhora : Cave 10, The *stūpa* inside.
212. Pitalkhora : Cave 12, A loose *harmikā* lying in front of the hall.
213. Pitalkhora : Cave 12, Front view.
214. Pitalkhora : Cave 13, Interior view.
215. Pawala : Cave 1-2, General view.
216. Shelarwadi : Cave 8, Inscription on the back wall of the hall.
217. Shelarwadi : Cave 8, Cells and decoration on the back wall of the hall.
218. Karle : Cave 4, Front view.
219. Kanheri : Cave 31, Front view.
220. Kanheri : Cave 31, Details of the developed form of the hour-glass decoration on a pilaster.

## NOTE

Figures 20A, 23, 25, 27, 30, 32-35, 44, 46-47, 55(17) and 59 are based on drawings preserved in the Archaeological Survey of India, South Western Circle, Aurangabad. The following have been adapted from previous publications; Figures 17, 18(a-b), 19(12-13), 22, 24, 31, 39, 45, 54 and 56 from Fergusson and Burgess 1883a, Figures 15 from Burgess and Indraji 1881 and Figure 58 from Deshpande 1959. The other drawings are by the author.

The following have kindly provided and permitted us to use the photographs listed against them :

Archaeological Survey of India :

Plates : 4, 5, 18, 25, 29, 42, 49, 50, 52, 53, 54, 92, 96, 98, 99, 99a, 108-111, 131, 137-143, 186, 192, 195, 196, 203, 206, 208, 212.

Prince of Wales Museum of Western India, Bombay :

Plates : 6, 148-160.

Shri Suresh Vasant, Pune :

Plates : 2, 3, 9, 10, 14, 15, 19, 20, 28, 38, 39, 51, 57-66, 69-73, 75, 91, 93, 94, 97, 128-130, 134-136, 161, 163, 165, 168, 169, 176-181, 183-185, 188-191, 193, 194, 197-202, 204, 205, 209-211, 213-217.

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Plates : 7 and 11. The other photographs illustrated here are from the authors collection.

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PART ONE

# The Background

*Chapter I*

# *Introduction*

In many ways, the rock-cut monuments of Western India occupy a definite place of importance in Indian art history. While in the rest of India the tradition of rock-cut architecture appears sporadically in space and time, it displays a vigorous and continuous activity in Western India for a period of nearly 1500 years, starting sometime in the centuries immediately preceding the Christian era and continuing almost upto the end of the 13th century A.D. In terms of sheer number of rock-cut monuments to be seen, this region surpasses the rest of India taken together. There is a large concentration of centres of rock-cut architecture here[1] and while many of the places have about 10 to 15 excavations, there are also centres like Kanheri and Junnar which account for more than a hundred each. The monuments in this area are also rich in variety, ranging from cisterns, halls and dwelling units to beautiful temples and belonging to all the major religious faiths—the Bauddha, Hindu and Jaina. Such a variety in type and religious affiliation is rare in any other part of the country.

Within this series of rock-excavations, the monuments of the early period, which form the subject matter of the present study, occupy a unique position; they being the earliest representatives illustrating the beginning and growth of the rich rock-cut architectural tradition of the region. Besides, for the whole of south India too, these happen to be the earliest surviving documents of sophisticated architecture.[2] In the wider Indian context, as it has been pointed out rightly by an art historian, these help us to fill up to a certain extent the lacuna in our knowledge of art and architectural traditions of the dim period between the end of the Mauryan rule and the establishment of the Gupta Empire; in contrast to the rich and continuous series of rock-cut monuments of this region, in northern India even there is a paucity of material evidence for the art of this period, except for what is provided by some four major sites—Bodhgaya, Bharhut, Sanchi and Mathura—which, however, are distantly located from one another, and a few isolated finds from places ranging from Gujarat to Bihar.[3] The structures of the period which were mostly of wood or brick have perished irretrievably everywhere. But the rock-cut architectural tradition here has preserved several models, as though they are contemporary wooden monuments transmuted into stone.

Deservingly, this unique series of artistic creations have attracted the attention of antiquarians and art historians from about the twenties of the last century. Initially for about five decades studies on these were mostly in the nature of descriptive notices. However, by the end of that period itself it had been well recognized that most of these 'caves', a term which had become established by that time to designate the rock-cut monuments, consist of different varieties like temples housing *stūpas* (*chaityas*)

and dwelling units for monks (*vihāras*) and that these occur in clusters near ancient trade routes and form part of Buddhist monastic establishments. In 1880, a more systematic study was inaugurated with the publication of the monumental work *The cave Temples of India* by Fergusson and Burgess, in which a comprehensive attempt has been made to understand the chronology, development and various other aspects of the cave monuments. The caves themselves being almost the only source for study available at that time, their account was primarily descriptive and the reconstruction of chronology was mainly based on style analysis. Further contributions by Burgess, Indraji, Bühler and Bhandarkar by way of providing additional architectural data and publishing the associated inscriptions gave a new turn to the study. These and various other scholars tried to utilize the historical information available in the associated inscriptions for a fresh review. The problem of chronology and development of rock-cut architecture became more complicated, because of the fact that though none of the associated inscriptions were dated in any known era yet they could not be ignored completely and the dating of the monuments depended mostly on the dating of the inscriptions. This was more a problem of epigraphy and history than art history, and different theories and chronological reconstructions began to appear reflecting all the vagaries of the most complicated contemporary historical chronology and palaeographical dating. Added to this, attempts done somewhat latter towards the reconstruction of chronology on the basis of stylistic comparisons of art items from Western Indian caves with those from distant art centres, which by themselves are not securely dated, brought in a new approach but with varied deductions. This fluid situation still persists.[4]

The net result of all these exercises is a crop of extremely divergent opinions as far as the chronology of rock-cut monuments is concerned. For instance, the dates suggested for the Great Chaitya hall at Karle are 50 B.C. to A.D. 1[5], 2nd century A.D.[6], not earlier than 1st century A.D.[7], beginning of Christian era[8], A.D. 100[9], 1st century B.C.[10], 1st quarter of 2nd century A.D.[11], 1st quarter of 2nd century A.D. or somewhat later[12], etc.[13] The latest suggestions are *C.* A.D. 40-100[14] and *C.* A.D. 50-70[15]. Eevn the relative sequences proposed are at variance; for example, while the Bhaja *chaitya* hall is the oldest Western Indian rock-cut monument according to Fergusson, Burgess and Brown, Dehejia feels that it is the *chaitya* hall at Kondivite. While much of these variations are due to the indecisive nature of the source material available, it looks that it is equally the result of piece meal approaches based upon partial source material and, sometimes, defective methodological approaches, about which more would be told in the succeding pages. Of course, any fresh data by way of discovery of datable inscriptions or by obtaining a good series of Carbon-14 dates[16] may substantially improve the situation. But we felt that even in the absence of these many of the discrepencies in our knowledge of rock-cut architecture can be removed or at least minimised if a consistent attempt is made to collect all data by examining every individual cave with a view to note the stylistic and other clues available in them and by analysing the various aspects of all known associated inscriptions; more comprehensive the data, better would be our understanding of their nature, limitations and possibilities and this can result in a more judicious assessment. These contentions have prompted us to underake the current venture.

The present work is an attempt to reconstruct afresh the chronology of early rock-cut monuments of Western India and to delineate broadly the development of rock-cut architecture of the region in its geographical and historical setting.

Though we have used "Western India" for the region covered in the present study, that being a time-honoured term in the context, we have chosen to confine our attention to a slightly limited region falling within that, viz. Konkan and Western Deccan. This has been done with a purpose of limiting ourselves to a well-knit politico-cultural territorial unit, so that the whole problem of architectural development could be viewed in a common historical context and it is also in this area that a major concentration of centres of rock-cut architecture is to be seen. Konkan includes the flat strip of land along the west coast lying between the Sahyadrian chain and the Arabian Sea and extending north-south from the Damanganga river, a little north of Thana district of Maharashtra, to the farther limits of Goa.[17] But as there are no early rock-cut monuments known in the area south of the Ratnagiri district of Maharashtra, Konkan would mean northern Konkan only for our purpose. The Deccan is consi-

dered generally to include the vast flat land bound by the Sahyadris in the west, Narmada in the north, the Eastern Ghats or Bay of Bengal in the east and roughly the Tungabhadra in the south.[18] But it is only the western part of the region that comes here into consideration. Thus geographically the territory covered by the present study includes the western districts of Maharashtra, viz. Thana, Greater Bombay, Kolaba, Ratnagiri, Kolhapur, Satara, Pune, Nasik and Aurangabad.[19]

In the history of the rock-cut architectural tradition of this area, it is well-known that two distinctive traits, the introduction of Buddha and Bodhisattva images in the monuments and the invariable use of Sanskrit for writing inscriptions, begin to make their appearance around the 4th century A.D. The monumments created in the region from the earliest stage of rock-cut activity up to the setting in of these two traits—*i.e.* the monuments of the so called 'Hīnayāna phase'—happen to be the subject matter of the present study. The period under consideration, in our view, as detailed below, spans roughly from *C.* 250 B.C. to *C.* A.D. 300.

In the area chosen for study and belonging to the period under consideration, there are about 50 centres of rock-cut architecture consisting of about a thousand independent rock-excavations in all.[20] Out of these, only 26 centres are of importance and these account for nearly 90 per cent of the total number of monuments of the period. It is mostly in these that the inscriptions too are to be seen. The others are small groups, consisting of just one to ten excavations of little architectural merit or in a very much ruined state of preservation. However, with regard to the general accounts like the pattern of distribution of centres of rock-cut architecture, etc., we have taken most of the sites into account. But, for a detailed analysis of monuments and reconstruction of architectural development in individual sites we have chosen to deal with nineteen sites only, viz. Ajanta, Ambivale, Aurangabad, Bedsa, Bhaja, Jivadan-Virar, Junnar, Kanheri, Karle, Kol, Kondane, Kondivite, Kuda, Mahad, Nanaghat, Nasik, Pawala, Pitalkhora and Shelarwadi.[21]

The main sources for the present study are of course the rock-cut monuments and the associated contemporary inscriptions. The work is based mostly on field investigations (1970-1972) in the course of which twenty-nine sites covering about eight hundred monuments were visited. The detailed field notes drawings and photographs prepared on these monuments form the basic data for our architectural study.[22] We have also made an effort to bring together and utilize all the known contemporary inscriptions available in the rock-cut monuments of the region (Appendix). The two hundred and odd inscriptions thus collected, despite the fact that these are mostly short records and none of these is dated in any known era, provide welcome data useful for building up the chronology, for understanding the nature of monuments and often their religious affiliation, besides throwing light on the contemporary political, social and economic conditions.[23]

Evidences from literary sources like, the *Purāṇas*, the *Mahavaṁsa* and other Ceylonese chronicles, and works of the Classical writers like those of Pliny, Ptolemy, and the *Periplus of the Erythraean Sea* have been made use of for the accounts in the preliminary chapters. But these have been utilised only in such instances where our main sources—architecture and inscriptions—are insufficient for the purpose or wherever some additional information by way of co-ordination, clarification or comparison is needed.

Though perforce we depend on the same types of sources as those used by earlier workers on the subject, we have preferred to deviate from them somewhat in the matter of evaluation and utilization of these. In our view, one of the important causes for the divergences in chronological frame work arrived at in previous attempts appears to be the method of utilization of stylistic and palaeographical evidences in a very wide context. In this regard we very much agree with Herman Goetz, when he points out aptly that the idea that things belonging to the same style belong to the same date may not be completely correct in a broader geographical context; fashion, after all is first created in certain politico-economically superior region and spreads to other regions and this is a process which takes time as the receiving ends are normally of conservative nature and changes appear slowly.[24] A similar note of caution has also been expressed by Douglas Barrett in the context of the study of Western Indian caves. He states, "Of course the question must remain whether a formal sequence, both of style and palaeography valid in the north-west Deccan runs contemporaneously with a similar sequence

in Andhra Pradesh and third in north India. A distinction has to be made, and here is the crux, between metropolitan and provincial centres, let alone between progressive and conservative craftsmen."[25] Whenever style and palaeographical comparisons are made from items in distant regions like Orissa, Andhra Pradesh, Central India or North-West India with items found in Western indian caves, these factors are to be borne in mind clearly. In addition, the art and polaeographical items taken from those regions are themselves in need of secure data for deciding their dates.[26] So, any exercise to use such materials for comparisons for purposes of dating the Western Indian caves look like making the blind to lead the blind. We have tried to avoid this error. For purposes of dating, we lay stress on the use of internal evidences only, which, as already stated, are more numerous and continuous than what are available for other regions. All comparisons of type, style and palaeography have been thus limited to the items found within the region under consideration.

During the age under review Konkan and Western Deccan formed a unitary politico-cultural territory, and consequently there is much uniformity in architectural types found in different centres. However, even within this area too, we have tried to take note of the differences in geographical setting from one sub-region to another and their effect on types and forms of the monuments. Further, considering each site as an organic entity by itself, we have made an attempt to provide initially a chronological scheme of development of rock-cut architecture for each one of the centres seperately, basing our conclusions mostly on all available internal evidences of changes effected in individual caves in successive times, damages caused by an excavation on another, the designers attempts to locate caves in unusual positions or to compromise symmetry and beauty of some caves so as not to damage the neighbouring ones, the stylistic and palaeographical evidences, etc. The result thus obtained is then synthesised with data from other centres within the region. We have purposely avoided all extraneous comparisons in this account, except for a few hints of subsidiary nature made here and there. This insistence to depend upon internal evidence mostly is a major change we have effected in the present work.

This change in approach has also set an onus on us in demanding a comprehensive collection of internal evidences and some changes in methodological approach in their evalution, if the results arrived at are to be fruitful and convincing. In pursuance of this we have endeavoured to take note of as many details as possible from the inscriptions and monuments found in the sites we have covered in this work and to specially evaluate each variety of evidence as to its validity, limitations and possibilities as an aid for chronological reconstruction. This has involved extensive documentation and analysis and several theoretical considerations, and these have been detailed in the succeding chapters. In short, about 600 rock-excavations have been documented; six major types with about thirty-five sub-types of monuments have been recognised; fifteen primary architectural items classified into about eighty categories have been taken note of and placed in an evolutionary sequence to be used as chronological indicators; about two hundred inscriptions have been analysed and placed in a palaeographical sequence consisting of seven epochal series; the problem of contemporary historical chronology has been reviewed and the degree of utility of this and the radiocarbon dates in the context of architectural study has been discussed; the principles and criteria to be used in palaeographical and style analyses have been examined. The ideas resulting from these have been utilized first to reconstruct chronological sequences of monuments in individual sites, and finally to provide an over-all picture of the development of rock-cut architecture of the region.

While, like Buddhism, Buddhist architectural forms and features might have been initially introduced from Northern India, when we see the creation of around a thousand rock-excavations in Konkan and Western Deccan in the course of about five to six centuries, we feel that rock-cut architecture could have become an established art tradition of the region; generations of architects and craftsmen could have developed their own techniques and ideas in fashioning the monuments in a way suiting to the local geographical and cultural situation. This aspect has been recognised by many previous workers to a certain extent with reference to the adoption of the rock medium instead of wood and the consequent changes that were gradually brought in by the local architects as and when their familiarity with the new rock medium increased. We have tried to extend this idea to another aspect also, that of the climatic situation, to find out how far the local architects have effected changes in the form of the monuments to

suit to the hot and heavy rainfall conditions prevailing in Konkan and Western Deccan. Similarly, while scholars have already recognised the differences in Hīnayāna and Mahāyāna architectural forms, we have made an attempt to examine whether the changes in Buddhist monastic practices and rituals that came up during the period under consideration, which can be inferred from other sources, had brought out changes in the rock-cut monastic architecture also. These lines of fresh enquiry have provided a new insight into the problem of development of rock-architecture and have yielded some surprising results, as could be seen narrated in the succeding chapters.

On the whole, we feel that the present attempt in mustering a large body of internal evidences and employing a few fresh approaches has resulted in providing a strong basis for chronological reconstruction and a better picture of the course of development of Western Indian rock-cut architecture. We submit these for scholarly scrutiny.

## NOTES AND REFERENCES

1. According to our estimate, in Konkan and Western Deccan region alone there are about 80 centres with a total of about 1200 excavations. Also see Fergusson and Burgess 1880, map opp. p. 37.
2. In south India, the prehistoric architectural remains are very few. Remains of dwellings of the neolithic-chalcolithic periods are known from Navdatoli, Nevasa, Inamgaon, Tekkalakota and other places (Sankalia 1974). The iron age monuments are mostly very crude and simple funerary constructions (Gururaja Rao 1972, p. 50).

   A few architectural remains of the Early Historical Period have come to light from excavations at Alagarai, Uraiyur and Tirukkampuliyur (Mahalingam 1970); Arikamedu (Wheeler 1946); Amaravati (Rea 1894, etc.), Nagarjunakonda (Longhurst 1938, *IAR 1953-54* to *1961-62* p. 1 ff.); Yeleswaram (Khan 1963); Salihundam (Subrahmanyam 1964); Peddabankur (*IAR 1967-68*, p. 2); Brahmagiri (Wheeler 1948); Banavasi (Seshadri 1971); Vadgaon-Madhowpur (*IAR 1971-72*, p. 38-30); Brahmapuri (Sankalia and Dikshit 1952); Ter (*IAR 1967-68*, p. 35; Barrett 1960); Nevasa (Sankalia *et al* 1960); Sopara (Indraji 1883, p. 27); etc. In most of these places, except some *stūpas* at Ter, Nagarjunakonda, etc., a few walls or foundations only remain. Further, the dates of many of these excavated remains are unsettled. Most of them, except a few remains of the *stūpa* at Amaravati are generally considered as belonging to the first three centuries of the Christian era.
3. Douglas Barrett in Dehejia 1972, p. 7. The only other area with a rich potential for the study of art of the period is Andhra Pradesh. But even there the architectural monuments are very few compared to more than six hundred early rock-excavations known from Western India.
4. For details of the early publications see Fergusson and Burgess 1880, p. xiii; Dikshit, 1942, p. 1 and also Bibliography at the end of this work. The last three decades of the 19th century saw enormous progress in the study of Western Indian rock-cut architecture. With the organisation of the Archaeological Survey for Western India in 1871 and the appointment of James Burgess as its superintendent, the work progressed more enthusiastically. His reports appeared from 1880 onwards. The *Indian Antiquary*, a journal started in 1872 by James Burgess, provided a good forum for publication of the findings by various scholars in the field and by lay enthusiasts as well. The Gazetteers of the Bombay Presidency published between 1877 and 1891 began to include extensive notes on the rock-cut monuments and their inscriptions. Fergusson and Burgess' work (1880) was followed by several publications of the Archaeological Survey of Western India, The most important of these are Burgess and Indraji's *Inscriptions of the Buddhist Cave Temples* (1881), Cousen's work on Nadsur and Karsambla (1891) and Burgess' *Buddhist Cave Temples and their Inscriptions* (1883). Subsequently some articles providing fresh or additional information on monuments or inscriptions have been published. Among them may be mentioned the works of Francke, Senart and Lüders and in recent years by Dasgupta, Dikshit, Deshpande, Sankalia and Dhavalikar. Most of the general works on Indian art and history like those of Fergusson, Smith, Coomarswamy, Marshall, Codrington, Brown, Rowland, Majumdar and Pusalkar (ed.), Nilakanta Sastri (ed.), etc. (see Bibliography for all these) include short chapters on Western Indian Caves. While many of these are just descriptive accounts, following Fergusson and Burgess, attempts towards reassessment and systematisation can also be seen in a few. In the works of this nature Percy Brown's *Indian Architecture* (1941) has achieved great recognition, the merit of that being the systematic methodology adopted in which the author has built up the chronology and development depending almost entirely on art-historical grounds. In the present century, so far, three scholars have worked on Western Indian rock-cut architecture. The earliest of these is M.G. Dikshit. His work *Origin and Development of the Buddhist settlements in Western India* (Ph.D. Thesis submitted to the Bombay University, 1942, unpublished) includes a lot of material on rock-cut architecture of the region. In a way, Dikshit opened a fresh

line of enquiry through his work by duly examining the contents of the contemporary inscriptions and applying the knowledge of the religious and socio-economic conditions derived therefrom to understand the development of Buddhist settlements. But Dikshit was working on a broad canvas. Geographically the whole of Maharashtra and Gujarat came under his purview and he had opted to deal with all the sites and monuments of the major period of Buddhist activity from the earliest times to about A.D. 1000. Despite his best approach, he was not able to synthesise well the historical and the art-historical materials together. Still his masterly analysis of many aspects of rock-cut architecture deserve merited consideration. By the way, Dikshit's is the only work to date in which a total account of Buddhism and Buddhist art of Western India has been attempted. The Hīnayāna rock-cut architecture forms only a part of this broad scheme. In 1954, Walter Spink submitted a thesis to the Harvard University, *Rock-cut monuments of the Andhra Period: Their style and chronology*. This is still unpublished. The latest contribution to the subject is *Early Buddhist Rock Temples—A Chronological Study* (1972) by Vidya Dehejia. As she says (P. 2), the aim of the study is largely chronological. But this book too covers the geographical and socio-economic aspects. Her approach towards the problem through analysis of data of varied character independently from one another is a valuable experiment in methodology. However, that work devotes only about 40 pages for architecture proper and mentions only about 34 monuments in all. There is evidence of more detailed work having been done but unexploited in the publication.

5. Fergusson and Burgess, 1880, p. 233.
6. Smith, 1930, p. 27.
7. Marshall, 1922, p. 637.
8. Coomaraswamy, 1927, p. 29.
9. Kramrisch, 1933, p. 161. In a later work (1954) she revised the opinion and gives the date 1st century B.C.
10. Brown, 1956, p. 27 (But under pl. XXIV, it is given as 2nd century B.C.).
11. Rowland, 1968 (3rd edition), p. 70. In the earlier editions of the same work the date given was the beginning of 1st century B.C.
12. Barrett, 1954.
13. More dates are listed in *Lalit Kala*, No. 3-4, p. 11.
14. *Ibid.*, p. 22.
15. Dehejia, 1972, p. 178.
16. Three carbon-14 dates have been obtained already for the wooden remains in the *chaitya* hall at Karle. There is more material available for C-14 determination, as the wooden umbrella on the *stūpa* at the Karle *chaitya* hall, the stave on the *stūpa* at the Bedsa *chaitya* hall, remnant wooden pegs in sockets in the *chaitya* hall at Kanheri, the facade beams in the Kondane *chaitya* hall, rice husk mixed with plaster in more than twenty caves at Junnar, etc.
17. Ketkar, 1924, p. 704.
18. Spate and Learmonth, 1967, p. 683 and map on p. 684.
19. The districts of Sangli and Ahmadnagar are also within this belt. But early caves are not known to exist in these districts.
20. This estimate is based on our enumeration in 29 sites where the monuments were studied in detail and on the descriptive accounts available in the *Gazetteers* and the *Antiquarian Remains in the Bombay Presidency*. The sites known are: Aurangabad District—Ajanta, Aurangabad, Pitalkhora; Nasik District—Chambharlena, Nasik; Pune District—Ayara, Bedsa, Bhaja, Induri, Jivadhan, Junnar, Karle, Kotaligad, Lohagad, Nanaghat, Nanoli, Pale, Pune, Seletana, Shelarwadi, Shindewadi (?), Sinde, Walak; Thana District—Indragad, Jivadan-Virar, Kanheri, Pulu-Sonala (?); Greater-Bombay District—Elephanta, Kondivite; Kolaba District—Ambivale, Chaul, Dhak (?), Gaur Kamath, Gomashi, Gorakhgad, Halkhurd, Karsambla, Kol, Kondane, Kuda, Mahad, Nadsur, Ramdharan, Uran; Ratnagiri District—Chiplun, Dabhol, Khed; Satara District—Bawadhan, Karad, Lohari, Pandavgad, Patan (Tamkhane), Sirwal; Kolhapur District—Pawala. (Pandavadara in Kolhapur District and Chandod in Nasik District have been described in the Gazetteers as consisting of early caves. Our examination of the caves at the site showed that these belong to a much later period. Despite much effort we were unable to locate two sites, Pandavgad and Ayara, mentioned in the list given above).
21. Originally it was our intention to cover about 40 sites, but in view of the growing bulk of the work, we were forced to restrict to 19 sites only. However, most of the major sites have been retained, except for Karad and Nadsur. Nadsur could not be visited. Though Karad has a large number of monuments, our study revealed that they present not much of progressive elements of importance to be noted for understanding the development of rock-cut architecture in the region. Instead of that a few smaller sites (*e.g.* Mahad) disylaying similar features have been included. Kol has been mentioned just to provide an idea of the nature of monuments that can be expected in sites with highly ruined caves. Another minor site, Pawala, has found place here by virtue of the fact that it happens to be the southern-most of the known groups of early rock-cut monuments in Deccan.

    Despite the fact that only 19 sites are treated, 570 monuments (including minor ones) have been covered in the present work. This amounts to nearly 60 per cent of the total number of rock-cut monuments of the area belonging to the period under consideration.
22. Our indebtedness to the earlier publications too is considerable. The Gazetteers of the Bombay Presidency, particularly those covering the districts of Thana, Kolaba and Pune were of much help. The detailed measurements given there for various caves have been depended upon mostly. Generally all descriptions have been checked on spot. Fergusson and Burgess 1880 and Burgess 1883a provided good descriptions of ab out sixty monuments and plans and sections for about

forty. However, these too were checked with reference to the monuments on spot, and corrections and fresh data have been introduced in a few cases. The help provided by these facilitated us to devote our attention for a detailed examination of monuments and to prepare more drawings and photographs. Similar help has been obtained from Brown 1941 and Deshpande 1959.

23. All the inscriptions are written in Brāhmī script and most of them are in Prakrit language, except three in Sanskrit and a few in a mixed Sanskrit-Prakrit dialect. With the exception of four or five the inscriptions are generally short and usually record donations of caves, parts of caves, water cisterns, land or money, either by private individuals or kings or other members of the royalty.

    For the inscriptions, we have mostly relied upon texts as given by the earlier workers. However, in the case of a few inscriptions, particularly wherever the published texts were ambiguous or meaningless, we have tried to verify them with the originals on stone or from estampages prepared from them. Corrections have been made wherever possible. 15 inscriptions from Kanheri, though noticed previously, had not been read and published. Texts of these too were prepared as well as of four inscriptions that we came across anew during field work. (See Appendix).

24. Goetz 1944, p. 304-309. He specifically quotes the Western Indian caves to illustrate the point.
25. Dehejia 1972, p. 8.
26. p. 1 and note 8 to chapter V.

*Chapter II*

# *Geography and Geology*

## GEOGRAPHICAL FEATURES

The centres of rock-cut architecture under study are located in the western and south-western parts of the present state of Maharashtra, between 16° to 21°N and 73° to 76°E. This region consists of two major relief divisions, the plateau and the coastal strip. The two are intervened by the Sahyadrian chain of mountains, and crossed by several parallel hilly ranges emitting almost perpendicularly on either side of that chain.[1]

The coastal strip in Maharashtra comprises of the districts of Thana in the north, Kolaba in the middle and Ratnagiri in the south. These districts, with a width varying from about 40 to 80 km, are flanked by the Arabian sea in the west and the Sahyadrian wall in the east. Unlike many coastal strips, Konkan is not a 'plain'. It is an undulating land characterised by low level plateaus of laterite, estuarine plains of rivers, transverse ridges having medium to low heights, and some isolated hills. The coastline is characterized by alternating bays and headlands providing many a natural harbour. The region experiences seasonal heavy rainfall from the south-western monsoon, mainly between June and October. During the rest of the period hot humid climate prevails. This climatic feature has resulted in the growth of medium to low forests on the hills and scrub on the plateaus. The rivers have a westerly flow. They rise from the Sahyadris to pour into the Arabian sea, bitting this peidmont strip to somewhat parallel units. Vaitarna, Ulhas, Savitri and Vasishti are some of the important rivers.

Minor variations in topography are noticeable even within Konkan. The north Konkan area has a greater stretch of flat surface of loam and alluvial soils which prompt easy exploitation by man. The central Konkan region, south of Panvel, is covered more by low transverse hills, lateritic levels often ending in bluffs on the coast line, and parallel flowing seasonal rivers with silted estuaries. The south Konkan area, below Ratnagiri, is a very narrow strip experiencing heavy rainfall.

To the east of Konkan, the Sahyadris stretch about in a north-south direction. They start in the Nowapur gap in the north and run down through the western parts of Nasik, Pune, Satara, Sangli and Kolhapur districts to continue further into Karnataka. The western face of this is a scrap showing steep cliff faces alternating with slopes. The eastern flank is more gentle with low gradients. The general height is over 900 m MSL. There are several peaks like the Saptasring, Trayambak and Mahabaleshwar. Many saddles and cols across the Sahyadris connect the upper plateau with the Konkan littoral. The west face of the Sahyadris receives heavy rainfall (about 500 cm annually) from the south-western

monsoon and the fall lessens gradually traversing eastwards. The climate, with heavy rainfall succeeded by hot humid summers, supports a thick evergreen forest vegetation with huge trees.

The eastern apron of the Sahyadris is a transitional strip making the change in landscape from the western wet hilly tracts to the drier stretches of remnant hills and undulating plateau. Here, gradually descending eastwards the rainfall decreases to about 100 cm and the thick forests give rise to grassy plains. The height of this region varies from 600 to 900 m from sea level. Several hilly projections from the Sahyadris run across this, but they shrink and subdue gradually towards east giving place to broad open valleys amidst which the rivers gushing out from the Sahyadrian catchment region flow gently. This topographical feature is much conducive to human exploitation of land, and hence this area is one of the most populous in the region.

The plateau further, called Desh, is a drier climatic region and consists of wide river basins, but still retains high residual hill ranges and large plateau expanses.

Several hill ranges stretch across the transitional belt and the Desh plateau in an east-west orientation. These emit from the Sahyadris almost perpendicularly. In the north, there is the Ajanta range which emerges from the Saptasring-complex of the main Sahyadris and runs eastwards as far as the Buldhana-Yeotmal plateau. South of this is the Balaghat range which emerges from the Harishchandra-gad-complex and extends in the south easterly direction to merge into the low levels of the Bhima valley. South of this is the Mahadev range which starts from the Sinhagad-complex with its extension of Purandhar range, and ranges across the Nira valley and finally merges into the western flank of the Krishna valley.

The valleys in between these ranges are fertile and are drained by the Godavari, the Krishna and their tributaries like the Girna, Pravara, Bhima, Ghod, and Indrayani. All these rivers have an easterly or south-easterly flow. Now these river valleys form vast irrigational belts. Isolated hills, however, are common amidst these.

## GEOLOGICAL FEATURES

It is mainly the geological composition that has determined the topography. The major part is composed of rocks of volcanic origin, the lavas. The Sahyadrian chain is considered to be a result of crustal movements and the main hills and valleys are the results of climatic impact and the work of running water operating through aeons of time. Common to all relief features of this area is the 'staircase' like appearance of land forms, where several levels rising in successive steps with scrap or sloping sides and intervened by flat surfaces could be seen. This, as well as the domed peaks, flat summit plateaus, terraced flanks and buttresses at the base are related to successive deposition of horizontal lava flows. Lava beds developing local base levels appear to have given rise to residual hill ranges amidst broad river valleys formed by later erosion. Even in the continuous lava deposits, due to the nature of slow cooling molten lava, there is a recognizable change in the density and structure of rock composition which results in alternate horizontal courses of soft and hard strata.

## INFLUENCE OF GEOGRAPHY AND GEOLOGY ON ROCK-CUT ARCHITECTURE

### ON THE DISTRIBUTION OF CENTRES OF ROCK-CUT ARCHITECTURE

The geological prerequirement of the existence of hills and rock expanses suitable for excavating caves is of course obvious. This explains the absence of rock-cut caves in the regions adjoining the present area of distribution. For example the Surat district and the Tapti depression beyond the Ajanta range are almost bereft of regular hilly ranges of good trappean formation. In the region south of Ratnagiri and Kolhapur, though it continues to be trappean region, the upper deposits of the rock are usually much decomposed to form laterites and hence are unsuitable for hewing caves.[2]

Even within the region of trappean formations, the land features in North Konkan (Thana district and the northern part of Kolaba district) and the adjoining Maval area (western part of Pune district) appear to have been more favourable for exploitation by man, with good water resource, cultivable land

as well as forest wealth. To this day too this happens to be the most populous region in Maharashtra. Thus this region appears to have had the capacity to generate surplus wealth needed for the creation of sophisticated art and possibly this explains to a certain extent the major concentration of centres of rock-cut architecture within its limits (see map, Fig. 1). Trade, another factor contributing to economic surplus, about which more would be told in the next chapter, also determined the location of such centres. The Sahyadrian chain acts practically as a great barrier of communication between Konkan and the plateau, except for a few passes in between. Most of the trade routes had to traverse naturally through such pases. It has been recognized since long that most of the centres of rock-cut architecture are located on such trade routes linking cities on the plateau through the passes in the Sahyadris with the ports on the coast, or through the passes in the Satmala range with the cities in northern India. The distribution of sites on these lines (see map, Fig. 1) may be arranged as follows :

| *PORTS, CITIES AND ROUTES* | *CAVE SITES* |
|---|---|
| 1. Dahanuka (Dahanu) port to Nasik (almost along the present Palaghar-Wada-Igatpuri-Nasik road). | Indragad, Tringalwadi, Nasik. |
| 2. Sopara, Kalyan and Thana ports, up the Nana pass towards Junnar. | Jivadan-Vihar, Pulu-Sonala, Nanaghat, Jivadhan, Junnar. |
| 3. Sopara, Kalyan, Thana ports to up the ghat via Borghat and smaller passes like the Sava. | Kanheri, Kondivite, Ambivale, Kondane, Bhaja, Karle, Bedsa, Induri, Pale, Shelarwadi. |
| 4. Chaul and other ports on the Nagothna creek towards Borghat. | Chaul, Ramdharan, Nadsur, Karsamble, Gomashi. |
| 5. Chaul and other ports on the Rajpuri creek towards Mahad and up the Varandha pass leading further to Ter, etc. | Kuda, Mahad, Kol, Shirwal. |
| 6. Dabhol and Chiplun ports to Karad via the Kumbharli pass. | Chiplun, Patan, Karad. |
| 7. Bharukachcha (Broach) port to Paithan via probably Prakasha and Bahal. | Pitalkhora. |
| 8. High way from Ujjain through Mahishmati to Paithan. | Ajanta. |

It appears there was a major route along with the Maval transitional belt running from Kolhapur up via Karad, Wai, Pune, Junnar and Nasik. This was not only fed by the routes coming from Konkan, but also linked with other roads connecting major towns on the plateau like Ter, Nevasa and Paithan and in turn many other cities in the Peninsula and northern India. Several major groups in the Maval transitional belt appear to have been located near this route, particularly at places where the feeder routes from Konkan joined.

Most of the known centres of rock-cut architecture are situated in areas with comparatively heavier rainfall. Structural activity in such regions would be costly due to the necessity of constant repairs. So, it appears, in the case of religious establishments which were expected to last long, this difficulty was overcome here by resorting to rock-cut architecture. Befitting the purpose of these caves as dwellings for the monks, they are hewn in sequestered hills usually commanding a beautiful view of the natural surroundings (Pl. 6). They will be invariably located in places a little away from the towns so that the monks could engage themselves in study and meditation without much distraction, but not at too great a distance as to dissuade them from going to the towns daily for begging food or to keep the ardent devotees away from them.

## ON ARCHITECTURAL TYPES AND FORMS

The influence of geology and geography in introducing some distinctive features in the rock-cut architecture of the area can also be noted.

The area being comparatively rich in timber, due to the presence of heavy rainfall conditions, there was good scope for the development of wooden architecture locally, and this appears to have been copied

in early rock-cut caves. In the very early stages of rock-cut activity wood has been used freely, as at Karle, Bhaja, Kondane, etc.

As the region experiences seasonal rainfall from June to September only, in the rest of the period there will be dearth in water supply. This has necessitated the cutting of innumerable cisterns near the caves themselves. In the rainy season they would be filled by rain water led into them by channels cut in the rock. During summer these would serve as major water sources for the community of monks in the monasteries.

The very nature of geological structure has also decided the form of the monuments in several places. The central Sahyadrian chain and the adjoining hills in the Maval area present huge scarps. It is possible to cut caves in these with little preliminary work. Here the caves are mostly of this type cut into the scrap, as for example the caves at Ajanta, Pitalkhora, Kondane, Bhaja, Karle and Bedsa (Pls. 1, 2 and 136). But in Konkan and other outlying areas of trappean formation, the trap hills are low and they usually have a gentle slope on all sides. In these regions, one of the necessities is to obtain clear vertical faces for cutting the caves. The architects have achieved this by scooping out the front rock. This results in the formation of an open court in front of the facade. The presence of such fore-courts with their side walls sloping down from the top of the facade, is a common feature of the caves of this area. Many such examples can be seen at Kanheri, Kuda, Karad, etc. (Pl. 5).

The nature of rock formation has also determined often the dimensions of the caves. It can be seen from the descriptive inventary in Chapter VII that the caves in Sahyadri-Maval region are usually higher and bigger than those in Konkan.

The caves are generally cut half way up the hill where the living rock is most suitable. In order to facilitate easy approach to these, another geological feature of trappean hills viz. the 'staircase' formation —is exploited by the architects (Pls. 3 and 4). The second, third or the succeeding flat ledges of lava beds not only serve as approach paths, but also as natural platforms from which the workers could operate the cutting (*e.g.* Nasik, Bhaja, Bedsa, etc.).

Excavation of caves higher up the hill is a feature of Maval and Konkan coast only. It could be expected that here towns were situated in the river valleys below. The caves meant for the mendicants were located away from such towns to allow sufficient privacy for their religious pursuits. In the regular Sahyadri and Satmala regions, however, which are bereft of valleys that could have supported large townships, the location of caves was otherwise. There, the villages existed not in the valleys which are just narrow crevices, but on the plain tops of trappean formations (as on the Rajamachi hill). In such areas, the caves are normally situated down the village in the steep rocky sides of the ravines, possibly not far from the roads which ran along these. Best examples are Kondane and Ajanta.

## ON THE INTRODUCTION OF DECORATION

Even though the trap rocks look to be singularly uniform in texture, they do contain variations due to the slow cooling and consequent grouping of finer and coarser particles in the molten lava. In each bed, the heavier particles would settle down first. That part would have a coarse texture, while the upper part would be fine grained. The caves are invariably cut in a single lava bed starting from the softer strata on the top and coming down to the hard layers in the bottom. Such a feature of selection is well noticeable by close observation in the side and back walls of many caves. This feature has also resulted in the introduction of sculptures mostly on the upper part of caves. The bottom levels are hardly dealt with sculptural work (*e.g.* the facades of caves at Nasik, Junnar, Bhaja, Kondane (see Pls. 70, 135, 184, 192, etc.). In places where they are attempted (as in Nasik cave 3) the sculptures have hardly survived in good condition (Pls. 75, 178, etc.).

## NOTES AND REFERENCES

1. Detailed geographical descriptions of the region can be seen in BG Vol. I and the district volumes. A succinct account is available in Deshpande, C.D. 1971. The present description is based on the latter work mostly.
2. A few caves cut in this lateritic medium, like the group in Pandavadara near Panhala (Dist. Kolhapur) and some caves near Panjim (Goa) have hardly retained their form and are also of a later period.

   However, the situation in the Desh plateau needs some explanation. Though many trappean hills well-suitable for hewing caves exist, rock-cut caves are absent in this region. Here major villages and towns are located on the banks of rivers in the middle of broad valleys and they are usually removed from the hills at a distance not easily traveresible by monks for begging food daily. So structural establishments not far removed from the towns may have been preferred to rock-cut ones.

*Chapter III*

# *Historical Background*

The period in which the architectural monuments under consideration came into existence witnessed the sovereignty over this region by atleast two dynasties successively, viz. those of the Sātavāhanas and the Ābhīras. The Sātavāhana rule occupies the major period, but appears to have had a chequered career with ebbs and tides in its fortunes, including a short eclipse of its rule in between due to the Kṣaharāta occupation of this territory. The long span of time must have also witnessed in turn changes in the socio-economic and religious situation. All these bear their impact on the development of architecture in the region.

The purpose of the present chapter is not to delineate the history of the period comprehensively, but to consider only such of the aspects that have a bearing or utility for understanding the chronology and development of rock-cut architecture. In this context, however, a somewhat lengthy discussion of Sātavāhana chronology has been attempted here in view of the fact that we have considered that the few of the monuments that bear inscriptions of the kings of that dynasty can serve as useful time-style references for understanding architectural development, provided their dates or atleast relative chronological positions could be established reasonably on the basis of independent historical data (see Chap. IV).

## POLITICAL HISTORY

### NANDAS AND MAURYAS

The political history of Konkan and Western Deccan commences with the Magadhan hegemony. Aśoka's inscriptions at Sopara on the Bombay coast, Sanchi and Ahraura in Central India, Jaugada on the coast of Bay of Bengal and Erragudi, Maski, Brahmagiri, Kopbal in South Deccan indicate that the whole area amidst these was within the jurisdiction of Aśoka's empire. As Aśoka is not known to have made any conquests here, he may have enjoyed this territory by inheritance. Either during the time of the Nandas (Yazdani, 1960, p. 69) in about *C.* 364-324 B.C., or most probably by the time of Chandragupta Maurya (*C.* 324-300 B.C.) Western India may have come under Magadhan imperial hegemony.[1] It may have continued so atleast till the end of Aśoka's reign (232 B.C.).

### SĀTAVĀHANAS

The next dynasty that held sway over the area, for which any documentary evidence is available is that of the Sātavāhanas. Whether the Sātavāhanas began their rule here during the time or immediately after the disintegration of the Maurya empire, or long time after that, and how long the dynasty lasted are problems which have remained controversial still.

TABLE

## EVIDENCES FOR SĀTAVĀHANA

### PURANIC KING-LISTS[a]

| Sl. No. | *Matsya* | Yrs. | *Vāyu* | Yrs. | *Brhamāṇḍa* |
|---|---|---|---|---|---|
| 1 | 2 | | 3 | | 4 |
| | General Statement 29 kings | 460 | General Statement 30 kings | 456 | General Statement 30 kings |
| 1. | Śiśuka (Balī) | 23 | Sindhuka (Balī) | 23 | Sindhuka (Balī; Chismuka) |
| 2. | Kṛiṣṇa | 18 | Kṛiṣṇa | 18 (10) | Kṛiṣṇa |
| 3. | Śrī Mallakarṇi (Śrī Śātakarṇi) | 10 | Śrī Śātakarṇi | — | Śrī Śātakarṇi |
| 4. | Pūrṇōtsaṅga | 18 | — | | Pūrṇōtsaṁga |
| 5. | Skandastaṁbhi | 18 | — | | — |
| 6. | Śātakarṇi | 56 | Śātakarṇi | 56 | Sātakarṇi |
| 7. | Laṁbodara | 18 | — | | Laṁbodara |
| 8. | Āpīlaka | 12 | Āpīlava | 12 | Apīlaka |
| 9. | Meghasvāti | 18 | — | | Sandāsa |
| 10. | Svāti | 18 | — | | Āvi ? |
| 11. | Skandasvāti | 7 | — | | Skandasvāti |
| 12. | Mṛigendra Śātakarṇi | 3 | — | | Mahendra Sata |
| 13. | Kuntala Svātikarṇi | 8 | — | | Kuntala Sātakarṇi |
| 14. | Svātikarṇa | 1 | — | | Svātisena |
| 15. | Pulomāvi | 36 | Paṭumāvi | 24 | — |
| 16. | Riktavarṇa (Vikṛishṇa) | 25 | Nemikṛiṣṇa | 25 | — |
| 17. | Hāla | 5 | Hāla | 5 (1) | — |
| 18. | Maṇḍalaka | 5 | Puṭṭalaka | 5 | Bhāvaka |
| 19. | Purīndrasena | 5 | Putrikaṣeṇa | 21 | Pravillasena |
| 20. | Sundara Śātakarṇi | 1 | Śātakarṇi | 1 | Sundara Sātakarṇi |
| 21. | Chakora Śātakarṇi | ½ | Chakora Śātakarṇi | ½ | Chakora Sātakarṇi |
| 22. | Śivasvāti | 28 | Śivasvāmi(ti) | 23 | — |
| 23. | Gautamīputra | 21 | Gautamīputra | 21 | Yantramati (?) |

1

# HISTORY AND CHRONOLOGY[1]

| Yrs. | *Viṣṇū* | *Bhāgavata* | Other Literary Sources | Epigraphical[3] | Numismatic[4] |
|---|---|---|---|---|---|
| | 5 | 6 | 7 | 8 | 9 |
| 456 | General statement 30 kings 456 | General statement 30 kings 456 | | | |
| 23 | Sipraka (Balī) | Sindhuka (Balī) | | Nanaghat No. 2 | P[5] |
| 18 (10) | Kṛiṣṇa | Kṛiṣṇa | | Nasik No. 22 | |
| 18 | Śrī Śātakarṇi | Śrī Śātakarṇi | | Nanaghat No. 3 | P[5] |
| 18 | Purṇōtsaṁga (Pūrṇamāsa) | Pūrṇamāsa | | Nanaghat No. 1[6] | |
| | — | — | | Nanaghat No. 1[6] | |
| | Śātakarṇi | | | Nanaghat No. 1[6] (Probably Hasthi gumpha and Sanchi inscription)[7] | |
| | Laṁbodara | Laṁbodara | | | |
| 12 | Chibilaka (Divīlaka) | Chibilaka (Āpīlaka) | | | P[8] |
| 18 | Meghasvāti | Meghasvāti | | | |
| 12 | — | — | | | |
| 7 | — | — | | | |
| 3 | — | — | | | |
| 8 | — | — | Vātyāyana's *Kāmasūtra* and Rājasekhara's *Kāvyamīmāṁsa*[9] | | |
| 1 | — | — | | | |
| | Paṭumān | Paṭumān | | | |
| | Ariṣṭakarmā | Ariṣṭakarmā | | | |
| | Hāla | Hāleya | *Gātha Saptaśatī, Lilavai Abhidhāna Chintāmaṇi, Deśināmamāla*[10] | | |
| 5 | Puttalaka | Tallaka | | | |
| 12 | Pravillasena | Purīṣabhīru | | | |
| 1 | Sundara Śātakarṇi | Sunandana | | | |
| ½ | Chakora Śātakarṇi | Chakora | | | |
| | Śivasvāti | Śivasvāti | | | |
| 34 | Gōmatiputra | Gautamīputra | Niryukti on *Āvasyakasūtra*[11] | Nasik No. 2-3, etc. | Jogelthambī hoard, etc.[12] |

*contd.*

| 1 | 2 | 3 | 4 | |
|---|---|---|---|---|
| 24. | Pulomāvi | 28 | — | Sātakarṇi |
| 25. | Śivaśrī | 7 | — | 4 Āvi |
| 26. | Śivaskanda Śātakarṇi | 7 | — | Śivaskanda Śātakārṇi |
| 27. | Yajña Śrī Śātakarṇi | 29 | Yajña Śrī Sātakarṇi | 29 (19) Yajña Śrī Śatakarṇi |
| 28. | Vijaya | 6 | Vijaya | 6 — |
| 29. | Chanḍa Śrī Sātakarni | 10 | Daṇḍa Śrī Sātakarṇi | 3 Daṇḍa Śrī Śātakarṇi |
| 30. | Pulomā | 7 | Pulōvāpi | 7 Puloman |

*Notes and References* :

1. Very vague and indirect evidences have not been included here.
2. The lists are based mainly on Pargiter, 1913.
3. All the references to inscriptions with No. refer to the list given in the Appendix.
4. According to a rough estimate more than 10,000 coins of the period are known. A detailed bibliography is available from Shastri (ed.) 1972. Attempts have been made there to distribute the various coins to the different rulers to the dynasty. But the evidences are too scnty for such a consideration. In this table such of the cases in which coins are definitely ascribable to the different rulers on the basis the legends, and a few others on circumstantial grounds, have been shown with 'P'.
5. Rama Rao 1961, p. 30.
6. See discussion on Nanaghat inscriptions in Chapter V.
7. LL 346; Sircar 1942, p. 206.
8. Nilakanta Sastri 1957, p. 304.

| 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|
| 29 | Pulimāvi | Puremān | Ptolemy's Geography[13] | Nasik Nos. 4-5 Karla 33, Amaravati (221248) | P[14] |
| 4 | Śātakarṇi Śivaśri | — | | Banavasi inscription[15] | Chanda hoard, etc.[16] |
| 8 | Śivaskanda | Śivaskanda | | | P[17] |
| 19 | Yajña Śrī | Yajñaśri | | Nasik No. 23 Kanheri Nos. 4, 21, 74, China ins. (LL 1340) | P[17] |
| | Vijaya | Vijaya | | Nagarjunakonda inscription[18] | P[17] |
| 2 | Chandra Śrī | Chaṇḍavijña (Chaṇḍa Śrī) | | Kodavolu inscription (LL 1341) | P[17] |
| 7 | Pulomāvi | Pulomāvi | | Myakadoni inscription[19] | |

9. *Ibid.*
10. *Ibid.*, p. 305.
11. *Ibid.*, p. 306.
12. Rama Rao 1961, p. 33.
13. Yazdani 1960, p. 92.
14. Rama Rao 1961, p. 54.
15. Narasimha Murthy and Raghunatha Bhat 1975.
16. Rama Rao 1961, p. 32.
17. For coins of these later kings from the Chanda, Akola hoards and hoards from Godavari and Krishna districts, see references in A.M. Shastri 1972.
18. *EI*, XXXVI, p. 273.
19. *EI*, XIV, p. 153.

*Nature of sources*

The problem is very much complicated due to the fact that epigraphical and numismatic evidences are available sparsely and intermittantly, and these too are not dated in any known era. The major sources currently available are the *purāṇas*. The *Matsya*, *Vāyu*, *Brahmāṇḍa*, *Viṣṇu* and *Bhāgavata purāṇas* have king-lists and the first three provide the length of reign periods for individual kings. But, unfortunately, each *purāṇa* is at variance with the other as to the number of rulers and years of their rule. The names of kings too vary sometimes.[2]

A general review of the *Purāṇic* accounts shows that the *Brahmāṇḍa*, *Viṣṇu* and *Bhāgavata Purāṇas* have lists which are very near to that of the *Matsya*. So, major variance is seen between the *Matsya* and *Vāyu* accounts only (Table 1, p. 16). While the former provides a list of 30 kings whose reign periods totalled together amounts to 448½ years, the *Vāyu* has a list of 17 kings with a total reign period of 284½ years. The preference to either the shorter span account of the *Vāyu* or the longer span account of the *Matsya* has led scholars to propose varied chronological reconstructions. Further, the historical accounts thus built up were also to allow some chronological correlations with related historical events known from other sources. This complicates the issues further. This situation has encouraged the growth of enormous literature on the subject but still many uncertainties persist.[3]

*The Present Position of Research*

Broadly speaking there are two major chronological schemes. The first, with the *Matsya* evidence as the basis, allows a span of about four and a half centuries for the Sātavāhana rule and places its commencement around the end of the 3rd century B.C.[4] The second, having the *Vāyu* account as the main basis, assigns three centuries to the Sātavāhanas and places the beginning of their rule in the last quarter of 1st century B.C.[5] As to the origin of Sātavāhana rule a middle position, *C.* 73 and 120 B.C. respectively, has been taken by Bhandarkar[6] and Dehejia,[7] and an extreme position, *C.* 271 B.C. by Gurty Venkat Rao[8] and Ramachandraiya.[9]

*A new approach*

A review of the literature that has grown on the subject shows that the situation is not so hopeless as it looks to be. The whole problem of reconstruction of Sātavāhana chronology hinges upon the following considerations :

1. *a.* The validity or otherwise of the *purāṇic* accounts as historical sources is to be determined.
   *b.* If they are valid sources, the cause for the variations in the *Matsya* and *Vāyu* accounts is to be explained.
2. Any chronology of the Sātavāhanas built with the help of *purāṇic* data should not only take into account but also not contradict the various occassional evidences available from other sources like inscriptions, coins and literature.

*Veracity of the Puranic accounts*

The nature of differences in the *purāṇic* accounts of the Sātavāhana dynasty can be made out from Table 1 (p. 16). First of all, the variations in the names of a few kings come out glaringly. But on closer scrutiny it can be seen that generally they are nearer or related forms, and hence can be explained as due to the errors committed by successive copyists of manuscripts; the differences in spellings are noticeable mostly with reference to such letters, which have nearer shapes in the ancient *Brāhmī* script. The major difference noticeable is in the number of rulers mentioned, particularly in the lists given in the *Matsya* and *Vāyu Purāṇas*. The *Brahmāṇḍa*, *Viṣṇu* and *Bhāgavata Purāṇas* follow closely the *Matsya* details, and there is a general agreement as to the reign periods in the *Matsya* and *Brahmāṇḍa* and in the names in all. The few ommissions of names in the last three could again be due to the lapses of the

copyists. But all the *Purāṇas* are consistent in two things. Firstly, in their general account they invariably inform that among the Āndhrabhṛtyas there will be 30 kings ruling for 456 years.[10] Secondly, despite the omission of a few names, the relative sequence of kings is uniform. This is a significant point to be taken note of. So the reason for many ommissions in the *Vāyu* list, the one with greatest variations, may be otherwise. In fact the *Vāyupurāṇa* observes in the preface itself that it would mention only the leading ones—*Prādhānyataḥ pravakṣyāmi.*[11] Most of the *purāṇas* were reduced to writing in the Magadhan court in Gupta times. So the *Vāyu's* purpose was probably limited to describe what happened to the Āndhrās who displaced the Magadhan kings.[12] Ramachandriah says, 'It gives deftly the barest details for the earlier kings; for example Sindhuka the founder; Kṛiṣṇa who rendered their power *dejure*; Sātakarṇi...who extended the power over the whole of Dakṣiṇāpatha. Āpilava must have represented a stage in the Andhra expansion towards or retreat from Magadha. These four excepted all the other Āndhra kings are left out by the *Vāyu* until the advent of Puḷumāvi I. From then onwards its account becomes fuller and more complete....."[13]. Thus while the *Vāyupurāṇa* provided a short account concerning itself more with the events in Magadha,[14] the compiler of the *Matsyapurāṇa* appears to have opted to give a comprehensive account of the Āndhra dynasty. "There is no conflict of substance between the *Vāyu* and *Matsya* versions of the Āndhra Kings".[15]

The fact that these *purāṇas* are following a certain early source for their account can also be made out from the uniformity in their general account and occurrence of almost the same names (except copyists' errors) in uniform relative position. Even in the reign periods of individual kings it can be seen that there is general concordance. If all the king-lists are taken together, out of the details of 30 rulers of the dynasty inconsistencies are noticeable in the reign periods of six only, viz. Nos. 10, 19, 23, 24, 27 and 29 of the *Matsya* list. Between the *Vāyu* and *Matsya* lists differences are noticable only with regard to three kings, Nos. 15, 19 and 29.[16]

The fact that the kings, names given in these *purāṇic* lists are not just concoctions but must have been faithful attempts to recapitulate the history of the dynasty becomes clear by a glance on columns 7, 8 and 9 in Table 1 (p. 16). There is clear epigraphical evidence for the rule of ten kings of the dynastic lists. Coins issued by atleast six kings are definitely known. A few coins are ascribable on various considerations to some other rulers. The same epigraphical and numismatic material provides independent evidence to the general correctness of their relative positions too.[17]

In the light of the above facts it would be injudicious to neglect the evidence of the *purāṇas*. In fact, the support of numismatic and epigraphical evidences to the king-lists in the *purāṇas* is so strong that one can hardly overlook that. Their general consistency is remarkable. The above evidence also shows that the *Matsya* account is more comprehensive and hence preferable.

But there is a serious defect in the *purāṇic* accounts with regard to chronology. It is said in all the *purāṇas* that Sindhuka (or Śiśuka) of the Āndhrajātīyas kills Suśarma, the 1st king of the Kāṇvas, and enjoys this earth. This statement and the span of 456 (460) years of their rule, if taken together, would stretch the Sātavāhana regime upto the end of the 5th century A.D., which is absurd on the very face of it. Even the so called short chronology of the *Vāyu* with a total span of about 272½ years would bring down the end of the dynasty to about the end of the 3rd century A.D. which too would not be acceptable (see below). The mistake in the *purāṇas* here is apparent, and this needs explanation. The fact appears to be like this. The *purāṇas* were being compiled at a time when political situation was settled and, like the succession of kings, dynasties were considered as holding sway one after the other. In all the currently available *purāṇas* this sentence occurs as an introductory verse to the section on the Āndhras. It appears that the compiler simply linked together the last ruler of the preceeding section and the first ruler of the present section to provide a continuity; in the very next *pāda* after that verse occurs a statement "and (destroying) whatever shall have been left of the power of the Śuṅgas".[18] This shows that the compiler himself was in doubt whether the Āndhras succeeded the Śuṅgas or the Kāṇvas. This statement, therefore, deserves to be overlooked.

Many scholars have tried to build up Sātavāhana chronology on the basis of certain synchronisms of events connected with its history, particularly those relating to Nahapāṇa and Rudradāman. But these have their own limitations. Nahapāṇa's date is not definitely known and it is a much discussed problem

by itself; Rudradāman's date is known but his Sātavāhana contemporary, unnamed in the Junāgadh inscription, is only to be guessed on circumstantial grounds (see below).

*Evidence of the Kalachuri-Chedi era*

But there are other useful clues. It is known that the so called Kalachuri-Chedi era starts in A.D. 248-49. It has been well accepted on circumstantial evidences that this era originated in the Maharashtra-Konkan-Gujarat region.[19] The inauguration of a new era reckoning, as known in other instances in Indian history, must have marked an important event in the political history of the region. Here it is likely to be the overthrow of the Sātavāhana hegemony and the establishment of a new regime. Mirashi has shown from the palaeographical and orthographical evidences of Ābhīra Īśvarasena's inscription at Nasik (No. 15) that Īśvarasena was not far removed in date from Yajña Śrī Sātakarṇi and that the Ābhīras succeeded the Sātavāhanas (in Maharashtra region atleast) and the puranas too support this saying, "when the kingdom of the Āndhras will come to an end there will be kings belonging to the lineage of their servants and out of these there will be seven Āndhras and ten Ābhīras".[20] Collating several evidences together, A.D. 248-49, the initial point of the Kalachuri-Chedi era, has been taken to mark the establishment of the Ābhīra rule in Maharashtra.[21] So it also marks the upper limit of Sātavāhana rule.

The *purāṇic* evidence shows that there were seven Āndhra kings holding sway between the last king of the imperial Sātavāhana line and the establishment of Ābhīra power in A.D. 248-49. But the time span occupied by these intrusive kings is not known. As Ābhīra Īśvarasena's inscription and Yajñaśrī's inscription are so much nearer in their format and palaeography, the gap of time between the two may not be more than 25 to 30 years at the most. So placing tentatively the end of the Sātavāhana rule around say A.D. 225 the Sātavāhana chronology can be worked backwards on the bases of the *Matsya* account which we have accepted as comprehensive and reliable (p. 21).

*Ptolemy's evidence*

A hint available in Ptolemy's *Geography* provides a useful information to settle the issue finally. He informs that Chaṣṭana of Ujjain and Puḷumāvi of Paithan are contemporaries.[22] Chaṣṭana's date can be fixed around A.D. 130. An Andhau inscription provides a date 52, in which Chaṣṭana and Rudradāman are said to have been ruling together (the former as *Mahākṣatrapa* and the latter as *Kṣatrapa* possibly). By 72 Rudradāman was the only king and by that time he had been a stalwart in his own right with many political achievements to his credit. The dates mentioned in the Western Kṣatrapa coins and inscriptions have been accepted on indubitable grounds as referring to the Śaka era. So it is likely that Chaṣṭana was holding sway between *C.* A.D. 130-40.[23] Considering A.D. 225 as the end date of Sātavāhana rule, A.D. 130-40 would also fall consistently within a Puḷumāvi's rule, if we count backwards the reign periods of the last Sātavāhana kings available in the *puraṇic* accounts.

*Nahapāna-Gautamīputra succession*

With this fairly fixed date minor adjustments can be worked out with other data available. It is known from the Nasik inscription (No. 3) of Gautamī Balaśrī that Gautamīputra Sātakarṇi (No. 23 of the *Matsya* list) destroyed the Kṣaharāta family (*Kahārāta kula nisūdana*). The Jogelthambi hoard of coins has revealed that Gautamīputra has restruck the coins of Nahapāṇa, and in that hoard coins of no king other than Nahapāṇa are to be seen. So it is likely that Nahapāṇa, who is known from inscriptions as belonging to the Kṣaharāta family, was the person defeated and killed by Gautamīputra Sātakarṇi. In Western Deccan there are a few inscriptions of Nahapāṇa's rule dated between years 41 and 46. Nahapāṇa is known to have held his capital in Western India, possibly at Broach according to some Jaina works.[24] He was a *Kṣatrapa* as known from inscriptions. From the year 52 onwards the *Kṣatrapas* of the Kārddāmaka line held continuous sway there and hence Nahapāṇa could have flourished only in a period earlier than Chaṣṭana, the first known *Kṣatrapa* of the Kārddāmaka line. So there is all likelyhood of the dates of Kṣaharāta Kṣatrapa Nahapāna (*i.e.* year 41, 46) too being of the same era as used by the succeeding Kārddāmaka Kṣatrapa kings like Chaṣṭana (years 52) and Rudradaman (year 72) and their successors. The members of both the lines held the post of *Kṣatrapa* (satrap), probably under

the nominal suzerainity of some imperial power and used a common era for dating their epigraphs. If so, the dates of Nahapāṇa's inscriptions too would refer to the Śaka era.[25] The Nasik inscription (No. 2) of the the 18th year (Senart's reading) of Gautamīputra Sātakarṇi has an interesting piece of information. The preamble in that states, "From Govardhana, the victorious war-camp of the army gaining victory, Gotamīputa Siri Sadakani, the lord of Benākaṭaka, orders thus".[26] In the latter portion it states that certain lands hitherto enjoyed by Usabhadata[27] (Kṣatrapa governor at Nasik) be given to the monks living in the Triraśmi hill. This probably shows that Gautamīputra who was till then the lord of Benākaṭaka[28] had just then gained victory over the region and was still in the army camp. It was in the fitness of things to celebrate the victory by donating to the monks, a property acquired afresh from the enemy. As the last known date of Nahapāṇas rule is 46 (Junnar No. 3), either in that year or a little later Gautamīputra's expedition (of his 18th regnal year) may have taken place.[29] So collating all these data a fairly well fixed date in Sātavāhana chronology can be obtained, viz. year 46 of Śaka era = 18th regnal year of Gautamīputra Sātakarṇi.

## RECONSTRUCTION OF SĀTAVĀHANA CHRONOLOGY

With the above datum, and basing on the reign periods of individual kings mentioned in the *Matsya purāṇa*, which being fairly substantiated by epigraphical and numismatic evidences (p. 21 above) happens to be the most reliable, the Sātavāhana chronology may be built up as given in Table 2.[30]

TABLE 2

CHRONOLOGY OF SĀTAVĀHANAS

| | | | | | |
|---|---|---|---|---|---|
| 1. | Simuka | 228-205 B.C. | 17. | Hāla | 61-66 A.D. |
| 2. | Kṛiṣṇa | 205-187 ,, | 18. | Mandālaka (Puṭṭālaka, Puḷumāvi II) | 69-71 ,, |
| 3. | Sātakarṇi I | 187-177 ,, | 19. | Purīndrasena | 71-76 ,, |
| 4. | Pūrṇotsaṅga | 177-159 ,, | 20. | Sundara Sātakarṇi | 76-77 ,, |
| 5. | Skandastaṁbhi | 159-141 ,, | 21. | Chakora Sātakarṇi | 77-78 ,, |
| 6. | Sātakarṇi II | 141-85 ,, | 22. | Śivasvāti | 78-106 ,, |
| 7. | Laṁbodara | 85-67 ,, | 23. | Gautamīputra Sātakarṇi | 106-130 ,, |
| 8. | Āpīlaka | 67-55 ,, | 24. | Puḷumavi III (Vasiṣṭhīputra) | 130-158 ,, |
| 9. | Meghasvāti | 55-37 ,, | 25. | Śivaśrī (Sātakarṇi) | 158-165 ,, |
| 10. | Svāti | 37-19 ,, | 26. | Śivaskanda Sātakarṇi | 165-172 ,, |
| 11. | Skandasvāti | 19-12 ,, | 27. | Śri Yajña Sātakarṇi | 172-201 ,, |
| 12. | Mṛgendra Sātakarṇi | 12-9 ,, | 28. | Vijaya Sātakarṇi | 201-207 ,, |
| 13. | Kuntala Sātakarṇi | 9-1 ,, | 29. | Chandra Śrī Sātakarṇi | 207-217 ,, |
| 14. | Sātakarṇi III | 1-0 ,, | 30. | Puḷumāvi IV | 217-224 ,, |
| 15. | Puḷumāvi I | 0-36 A.D. | | | |
| 16. | Gaurakṛshṇa | 36-61 ,, | | | |

## VALIDITY OF THE PRESENT CHRONOLOGY EXAMINED

This chronological scheme not only satisfies the synchronisms of some of the events like the relationship of Nahapāṇa and Gautamīputra Sātakarṇi and the end of Sātavāhana rule leading to the establishment of Ābhira rule, but also answers many other problems in contemporary political history. One of the main defects in considering Sātavāhana rule to have commenced in the latter part of the 1st century B.C. is that it envisages a political vacuum for about two centuries between the end of the Mauryan rule and the commencement of the Sātavāhana regime. This position looks anomalous if viewed in the light of political organisation that had already been established during the Magadhan rule and also the well-knit socio-cultural and political situation witnessed during the time of the Sātavāhanas. Right from Mauryan times, Deccan had well-developed contacts with politically organised Northern

India; large towns had been established in this region with well-equipped armies (Pliny); regular uninter-mittent cultural growth is witnessed in the area throughout the period as evidenced from the excavations at Nasik, Nevasa and other places. These could have hardly been achieved in a state of political anarchy. The present chronological scheme corrects the anomaly; Sātavāhana rule began almost immediately after the death of Aśoka, when Mauryan hegemony was weakening.

It can also be made out that the events described in the Rudradāman's inscription, in which many territories in the north previously held by the Sātavāhanas are said to have been conquered by Rudra-dāman around A.D. 150,[31] appear to have taken place in the reign of Vāsiṣṭhīputra Puḷumāvi. A corroboration to this is possibly available in the omission of his name in the *Vāyu* list of Āndhra kings (see note 14).

Another often discussed evidence relating to Sātavāhanas history is the mention in the *Periplus of the Erythraean Sea* of a 'Nambanous'. Identifying him with Nahapāṇa, attempts have been made to fix his date on the basis of the date of the *Periplus*. This is turn has been utilized to establish Sātavāhana chronology on the consideration of Nahapāṇa-Gautamīputra contemporaneity.[32] But the date of the *Periplus* itself has not been established finally. Due to the fact that the internal evidences available in the *Periplus* are confusing various dates ranging from A.D. 40 to 340 have been suggested for that work. Further the reading of the name '*Nambanous*' in the manuscript appears to be doubtful. It could as well be '*Mambaros*'.[33] Thus the evidence of *Periplus* actually causes more confusion than contribut-ing anything solidly to the reconstruction of Sātavāhana chronology. In fact, an author has tried to date the *Periplus* itself on the basis of Nahapāṇa's dates obtained from Indian sources.[34] Similarly no definite date is available either for Khāravela, who had a Sātakarṇi ruling contemporaneously in the west. These factors hardly contribute to or affect our chronological scheme.[35]

## A SHORT HISTORY OF SĀTAVĀHANA RULE IN RELATION TO ART HISTORY

We may recount a few aspects of Sātavāhana rule, as have a bearing on the architectural develop-ment in western India. The Sātavāhanas established the kingdom in a time of turmoil in the Mauryan empire that followed the death of Aśoka. Shortly afterwards political stability was achieved in the territory of the Sātavāhanas. The Nanaghat inscription (No. 1) of Nāyanikā, possibly wife of Sātakarṇi I, the third ruler of the dynasty, informs that, probably that king had already achieved the status of *Dakṣinā-patha-pati*, and either that king or one of his successors was quite wealthy enough to perform a number of Vedic sacrifices including the *rājasūya* and the *aśvamedha*.[36] If the Sātakarṇi mentioned in the inscriptions at Sanchi[37] and Hathigumpha[38] is wither this or the 6th king, the vast extent of the Sātavāhana territory during this time is also suggested. These details indicating a time of vast territorial control and consequent prosperity may have encouraged artistic activities too. A situation for royal patronage to art was present here, while Northern India itself was in a state of political chaos.

The next stretch of about nine decades from the end of Sātakarṇi II's rule (85 B.C.) upto the time of Puḷumāvi I (A.D. 0-36) is a blank period in Sātavāhana history. The mention of Āpīlaka alone in the *Vayu Purāṇa* list pertaining to this period and the discovery of his coins (and possibly of Meghasvāti also) in Madhya Pradesh appear to show the play of ebbs and tides in the fortunes of the empire. Again, if the *Vāyu* evidence as interpreted here (note 14) is correct, from the time of Puḷumāvi I there was continuous rule of Sātavāhanas in Madhya Pradesh region, indicating possibly that they were still powerful enough to hold these territories. However by about the time of Śivasvāti there was a set back. The rise of Kuṣāṇas by this time may have affected the fortunes of the Sātavāhanas. There is a faint echo of these troubled times in the *Periplus*. It mentions that the ships coming to the port of Calliena (Kalyan) were taken under guard to Barygaza (Broach). This appears to be a result of change of control over the Aparānta region.[39] Shortly afterwards the whole of Deccan and Konkan was over ran and controlled by the Kṣaharāta ruler *Kṣatrapa* Nahapāṇa, until it was retrieved again by Gautamīputra Sātakarṇi in *C.* A.D. 124. By about A.D. 130 the Western Kṣatrapas who rose to power began knocking at the northern borders of the Sātavāhana empire and succeeded in annexing vast areas north of the river Narmada.[40] During the time of Yajña Śrī again the imperial hegemony of the Sātavāhanas was strength-ened and vast territorial expansion was achieved. This period of Sātavāhana-Kṣatrapa conflicts,

however, saw the establishment of greater contacts between the regions held by the two dynasties, and this may have resulted in the inflow of a number of foreigners (*Śakas, Yavanas*). There was greater scope for fresh ideas to have crept into the art fabric of the Deccan during this period.[41] Similarly, it appears, that atleast from the time of Gautamīputra Sātakarṇi the Krishna region too appears to have come under the sway of Sātavāhanas.[42] The inclusion of such a fertile area to the empire has its own economic implications, and in turn can affect the development of art. That was also a culturally progressive area which had given raise to art activities in a very early period.[43]

Probably after the death of Srī Yajña Sātakarṇi (*C.* A.D. 201) the dissolution of the empire began and it terminated in *C.* A.D. 224.

### THE POST-SĀTAVĀHANA PERIOD

The collapse of the Sātavāhana empire resulted in the rise of a number of smaller principalities. A few kings of the Sātavāhana line ruled bits of territory for some time (note 20). Around A.D. 248-49 the Ābhīras established themselves in the Deccan. Even though the *purāṇas* mention 10 Ābhīra kings ruling for 67 years (*i.e.* upto A.D. 316 or for 167 years—*i.e.* upto A.D. 416) according to Mirashi[44], nothing is known of them except for the occurrence of an inscription of Maḍharīputra Iśvarasena at Nasik (No. 15). However, there is a stray indication to the fact that Ābhīras held power in about A.D. 350. In the Chandravalli inscription[45] they are said to have come into conflict with Mayūraśarman, the founder of the Kadaṁba dynasty.

Contemporaneously with the Ābhīras, many minor dynasties appear to have been in possession of different areas. A line of Mahābhojas is known from the Kuda inscriptions.[46] The Kolhapur region was under the Kuras.[47] At this time Ikṣvākus and Chuṭus had also risen to power in the Krishna Valley and north-western Karnataka respectively.[48] It was a period in which Deccan was politically much dissected.

A new political pattern appeared in the region in about the 4th century A.D. with the establishment of the rule of the Traikūṭakas, Vākāṭakas and Kadaṁbas.[49] The beginning of this new pattern roughly marks the end of the period of our study.

## ECONOMY AND SOCIETY

### SOCIO-ECONOMIC ENVIRONMENT AND DEVELOPMENT OF SOPHISTICATED ART

All sophisticated arts happen to be creations of well-developed, economically prosperous and socially well organised societies. Development of idealogical values in addition to the purely utilitarion ones is a prerequisite for such an activity. Creation of art works in a large scale, would further require a class of artists and craftsmen, as well as a class favoured with surplus wealth and time which could be easily diverted to patronise art. All these are conditions that could be visualised to exist only in an urbanised socio-economic stage.

### BEGINNINGS OF URBANISATION IN WESTERN INDIA

Konkan and Western Deccan appear to have been triggered towards urbanisation some where around the 5th or 4th century B.C. Possibly during the time of Nandas of Mauryas, when this region became part of the Magadhan empire, new ideas of an economically and culturally superior society began to spread here. For the first time the whole area became part of an organised political unit. Many officers of the Magadhan empire hailing most probably from the imperial court, and a host of petty officials and soldiers may have begum to settle here. There was also a close commercial contact from early times and this probably increased in volume to a greater extent due to the politically peaceful condition that was established. The state officials and the traders belonged to an economically superior group. The local people belonging to these groups may have begun to imbibe ideas and practices that had already well-spread in Northern India. Buddhism and Jainism began to percolate slowly. A new society began

to shape itself, being fertilised by novel ideas and economically activated by the increase of trade and other opportunities. A socio-economic set up of the pattern that was flourishing in contemporary Northern India began to evolve here also.

The process of this change can be guessed from the evidences available from literature and archaeology. Apart from stray references to Dakṣiṇāpatha in *Bodhāyana Dharmasūtra* and the Buddhist *Vinaya* texts, there are specific references in the *Rāmāyaṇa* to the places and rivers of Deccan like, Chitrakūṭa, Nāsika, Godāvarī and Narmadā. The *Mahābhārata* gives a good number of names in the *digvijaya* section of *Sabhāparva* wherein are described various events that are said to have taken place at Nāsika, Sañjayantī (Sanjan) and Karahāṭa (Karhad).[50] *Mahābhārata* knew Śurpāraka (Sopara) as a chief and holy city in Aparānta. This city has been referred to elsewhere also in the same text as well as in *Rāmāyaṇa* and early Buddhist literature.[51] The *Mahāniddesa* mentions Surata (Surat) and Śurpāraka as trade entrepots.[52] These references in early literature of northern India are indicative of a gradual increase of its contacts with Deccan. The evidence of Aśoka's inscription has already been referred (p. 15). Many ancient sites like Nevasa, Bramhapuri, Nasik, Prakash, Kaundanpur, Dhatva, Bahal and Ter have yielded sherds of the Northern Black Polished Ware, a pottery variety which had its origin and wide circulation in and around the Gangetic valley. Similarly punch-marked coins of various types have been discovered in some of the above sites. North Indian objects were popular here, a fact symptomatic of trade and culture-change.[53]

## ECONOMIC PROGRESS IN THE SĀTAVĀHANA PERIOD

This process towards shaping a new cultural and economic structure in Western India continued with greater vigour during the time of the Sātavāhanas. The fact that during this period the region was witnessing continuous economic growth can be visualised from the evidence of excavations conducted at various settlements of the period, such as Bramhapuri, Nasik, Nevasa, Ter, Prakash, Bahal, etc.[54] Successive levels of the early historical phase in these sites reveal that while in the earliest period a few potsherds, beads and bangles and such materials common to village settlements are available, in the later levels there is a gradual increase of materials indicating economic advance like better household equipments and weapons, beads and bangles of glass, coins, art objects in ivory and terracotta, brick structures and various items coming from far off lands, like Roman coins, earthern ware from the Mediterranean region, etc.

It is this change in the economic situation, coupled with the introduction of new religious ideas and changed structure of the society, that was responsible for art activities in this period. Literature and inscriptions of the Period which are more articulate than the above evidences facilitate a better delineation of the situation. Such of the aspects that have a bearing on architectural study would be considered here.[55]

## PATRONAGE TO ART

### *Relative Patronage by various Socio-economic groups*

Apart from the religious motive to acquire spiritual merit, the main factor that operates in the creation of rock-cut monuments and their maintenance is the availability of money and patronage. An analysis of the donatory inscriptions in Western Indian caves indicates that various classes of people patronised the monastic establishments. Out of the 222 inscriptions, excluding those that are fragmentary or otherwise useless for the purpose; there are 156 instances recording some details regarding the donors. The break-up of figures is shown in Table 3 (p. 27). It can be made out from that the class of traders tops the list with 46 donations. This would be 35 percent of the total recorded donations, leaving the indeterminable ones (24). Next in order come the royalty with 30 donations (23 per cent), state officials and the clergy with 16 donations each (12 per cent) and agriculturists and craftsmen with 14 donations (10 per cent). The foreigners (*Yavanas*) account for 10 donations (8 per cent). It can also b seen that the main structures, that is the *chaitya* halls and *leṇas*, are largely the donations of the traders (4 and 19), the royalty (4 and 4), State officials (2 and 8) and the clergy (1 and 12). Though these figures

TABLE 3

ANALYSIS OF DONATORY INSCRIPTIONS FROM WESTERN INDIAN CAVES

| *Class of Donors* | *Nature and Number of Donations* | | | | | | | | *Total 156* |
|---|---|---|---|---|---|---|---|---|---|
| | *Chaitya Halls* | *Leṇas* | *Others* | *Independent poḍhis* | *Parts af caves (facade, pillars, etc.)* | *Villages* | *Lands* | *Monetary endow-ments* | |
| 1. Royalty (Kings, Mahābhojas, Mahāraṭhis, Princes, Queens, Princesses) | 4 | 4 | — | 4 | 11 | 3 | 4 | — | 30 |
| 2. State Officials (*amātya, rājaveja, lekhaka, gaṇāpaka* and their wives and daughters) | 2 | 8 | 1 *maṭapa* 1 *poḍhi* | 1 | 1 | — | — | 2 | 16 |
| 3. Traders (Trader's śreṇis, members of *negamas*; *gahapati seṭhi, seṭhi, sāthavāha*, vāṇijiya, heraṇika, *lohavāṇiya, gamdhika* and their wives and daughters) | 4 | 19 | 1 *path* 1 *sata* 1 *stūpa* | 8 | 11 | — | 1 | — | 46 |
| 4. Agriculturists and Craftsmen Guilds of *suvaṇṇakāras, kāsākāras* and vasakāras; *suvaṇṇakāra, kāsākāras, mālā-kāra, Maṇikāra, Hālaki*; female members of their families) | — | 4 | 1 *path* | 3 | 2 | — | 2 | 2 | 14 |
| 5. Monks and Nuns | 1 | 12 | 1 *stūpa* | — | — | — | — | 2 | 16 |
| 6. Others | | | | | | | | | |
| a. Simply mentioned as *Yavana* | — | 1 | 1 *bhojana maṭapa* | 2 | 6 | — | — | — | 10 |
| b. Status of persons not determinable | 2 | 9 | 1 *upaṭhāna* | 4 | 7 | — | 1 | — | 24 |

*Note* : In some of the inscriptions donations of more than one item, like *poḍhi* or/and *akhayanivi* along with *leṇa* are recorded. In such instances the major donation alone (say *leṇa*) has been taken into account for the purpose of the above table.

pertaining to 70 excavations, out of the total of about 500 main excavations caused during this period, may not be conclusive as to the relative percentage of patronage available to the creation of rock-cut architecture, these may be taken as indicative of the situation.

*Agriculturists and craftsmen*

The socio-economic conditions of the age as can be gleaned from various sources also tally well with the above findings. Agriculture of course could have been the mainstay of economy. The fact that in this period, and more so in the succeding periods of Indian history, land grants were commonly made in cases whenever the results of the donation were to be permanent is suggestive of the situation in which land was considered to be an unfailing source of income and a stable economic resource. In the activities pertaining to producing economy, agriculture could have been supported by home industries. The Western Indian cave epigraphs mention a number of persons pursuing various crafts.[56] But neither agriculture nor industry creates such sections of the society which could accumulate sufficient surplus wealth and spend the same on economically non-productive items like patronage to sophisticated art. The donations given by the members of these classes are meagre in quantity and the items donated too are mostly those involving less expenditure (*cf.* Table 3). Between the two classes, it appears the craftsmen enjoyed a somewhat better position. Some of them had organised guilds (*seṇis*). Those guilds were considered to be so economically sound organisations as to rely upon depositing permanent endowments with them with a view to provide for certain regular annual expenditure from the interest accruing out of them.[57]

*Increase in trade and the trading class*

Commercial activities, which had gained fillip after this region came under a well-knit political organisation during the time of Magadhan rule, increased with greater vigour now. Trade had developed well and had organised into various sectors by this period. The contemporary inscriptions mention dealers even in such items as perfumes.[58] Dealers in metals and gold are known.[59] A colony of traders appears to have existed at the city of Dhenukākaṭa.[60] Traders of various categories like *Vāṇiyaka* or *Vāṇiya*,[61] *seṭhi*[62] and *seṭhis* who were also *gahapatis*[63] have been named in the inscriptions of the period. Merchants who carried on long distance trade, the *Sathavāhas*, find mention in three inscriptions from Kuda.[64] One of them is also termed *gahapati*. There appears to have been guilds of various categories of traders. A guild of corn dealers was responsible for the making of a large *leṇa* at Junnar.[65] There were traders' associations (*negama*)[66] in important cities.

*Internal trade*

The merchants carried on extensive trade within the region and outside. A picture of the movements of traders and craftsmen within the region can be obtained from the data available in contemporary inscriptions. Apart from these, other persons from different parts of the country were also visiting this region. Records of donations made by various people from different places to the monastic establishments of Western India provide interesting information. The details are given in Table 4.

TABLE 4

INTER-REGIONAL MOVEMENT OF PEOPLE

A. *Movement of merchants and craftsmen*

| *Trader/s* | *From* | *Made donation/s at* |
|---|---|---|
| Two gold merchants | Chemulaka[67] | Kanheri[68] |
| Two members of *negamas and a maṇikāra* | Sopāra | Kanheri[69] |
| Four members of *negamas*, wife of a *gahapati*, a goldsmith and a blacksmith | Kalyaṇa | Kanheri[70] |

*Contd.*

TABLE 4 : *Contd.*

| *Trader/s* | *From* | *Made donation/s at* |
|---|---|---|
| A gold merchant and a member of the guild of goldsmiths | Kalyaṇa | Junnar[71] |
| A seller of perfumes, a member of the merchant's quarter, a seller of playing balls (?) and a *gahapati* | Dhenukākaṭa[72] | Karle[73] |
| A merchant | Vejayaṁtī[74] | Karle[75] |
| ,, | Kāmavana[76] | Vaisarga[77] |
| ,, | Nāsika | Bedsa [78] |
| A metal merchant | Karahākaḍa[79] | Kuda[80] |

B. *Movement of other persons*

| *Person/s from* | *Made donations at* |
|---|---|
| Bāhaḍa[81] | Ajanta[82] |
| Bharukaccha[83] | Junnar[84] |
| Bhogavata[85] | Bhaja[86] |
| Dattāmitrī (a *Yavana*)[87] | Nasik[88] |
| Daśapura (A *Śaka*)[89] | Nasik[90] |
| Dhenukākaṭa | Pitalkhora, Kanheri, Karle and Shelarwadi[91] |
| Gatā[92] | Junnar[93] |
| Kalyāṇa | Kanheri[94] |
| Nāsika | Kanheri[95] |
| Paiṭhana[96] | Pitalkhora[97] |
| Sopāraga | Karle, Nanaghat[98] |
| Umehānakaṭa[99] | Karle[100] |

*Communication system*

The above evidence of movement of persons to distant places indicates the existence of a good communication system. From the currently available material it is possible to infer that there was a network of roads connecting various parts of the Indian sub-continent. Roads from various towns and cities in the far south, from Madurai, Kaveripattinam, Arikamedu, etc. appear to have passed up the ghat towards Bangalore and further on to Chandravalli (near Chitradurga, Karnataka), Vadgaon-Madhavpur (near-Belgaum), Kolhapur (Bramhapuri) and on to Karad, Sirwal and Pune.[101] Large sites of the Sātavāhana period have been noticed along this route. Bangalore itself may have been a big settlement, as atleast three hoards of Roman coins have come to light there. Chandravalli, Vadgaon (close to Belgaum), Bramhapuri and Karad are well-known Sātavāhana sites. A feeder route from Banavasi probably touched this.[102] The big Sātavāhana settlements at Tagara (Ter, Osmanabad district) and Kondapur (Medak district) show that they may have been on the highway connecting the sites in the lower Krishna valley like Dharanikota, Amaravati and Nagarjunakonda. Another feeder route leading from Chandravalli up to Maski and Sannathi (a newly discovered Sātavāhana town) appears to have continued further to touch this road at Ter. From Pune the highway went northwards to the city of Nasik via Junnar and further on a branch went north-west to Surat and Bharuch and another to Bahal (District : Jalgaon). Paithan could have been connected by roads from Ter, Nasik, Bahal and Junnar (via Nevasa).[103] Even though the Konkan strip is intervened from this net work of roads by the Sahyadrian chain of hills, there appears to have been many roads connecting the plateau with the littoral. The important roads linking the Konkan ports to the plateau above have already been mentioned (Chapter I). There were highways connecting the Deccan sites like Paithan and Nasik with Northern Indian cities. From Paithan one road appears to have led to the Tapti valley crossing the Ajanta range near Pitalkhora (a well-known centre of rock-cut architecture) and probably proceeded further towards the port of Bharuch (ancient Bharuachcha in Gujarat). Another link could have been via Bhokardhan leading through the

Ajanta range, near Ajanta, and proceeding to Māhiṣmatī (on the Narmada) from where access was available to the network of roads of Northern India. Early Buddhist literature refers to a highroad leading from Sāketa to Pratiṣṭhāna via Kauśāmbī, Vidiśā, Ujjayinī and Māhiṣmatī.[104]

How far the various roads were well-metalled and maintained for heavy traffic cannot be known. For example the Nanaghat pass, which appears to have been an important communication link as evidenced by the presencs of early Sātavāhana inscriptions, was, and still is, unsuitable for vehicular traffic. The *Periplus of the Erythraean Sea* informs that to Barygaza were brought 'by wagons and through great tracts without roads, from Paithana carnelian in great quantities, and from Tagara much common cloth, all kinds of muslins and mallow cloth, and other merchandise brought there locally from the regions along the seacoast'.[105] Whatever the condition of the roads, these had been pressed for use. Besides the ordinary modes of transport, like horse and pack-animals the variety of wheeled carts that had come into extensive use during this period must have facilitated the movement of men and materials.[106]

*Overseas trade*

One of the features of commercial activity of the period is that vast increase in overseas trade. There is evidence of maritime contacts of Deccan and South India with countries beyond the Arabian Sea even during protohistoric times.[107] A number of evidences are available in the Greek sources to indicate contacts between India, Ceylon, Arabia and Egypt that existed prior to the foundation of the Roman empire.[108] It appears, after the establishment of the rule of Parthians in Western Asia (*C.* 175 B.C.), though the traffic by overland route from India to the Mediterranean world passing through their territory was encouraged by them, trade through the maritime route got a fillip due to obvious reasons. In the beginning centuries of the Sātavāhana period Arab and Egyptian middlemen played an important role in the economic activities between Western India and the Mediterranean. An idea of the overseas trade of the time is available in a small treatise written by an Alexandrian, Agartharchides, in 110 B.C.[109] During Ptolemaic rule in Egypt, greatar facilities were created for Egyptian sailors for their commerce with countries beyond the Red Sea. Alexandria on the Mediterranean coast in Egypt had risen as a great trade emporium. Direct contact between the Mediterranean World and India was facilitated through the Nile-Red Sea canal which had been opened in about 190 B.C.[110] "The Ptolemies secured the straits of Bab-el-Mandeb by refounding Deine on the straits.....and their ships sailed direct to India. By 78 B.C. the general of Thebaid had become also general of the Red Sea and the Indian Sea, a new name which points to regular connection with India. Indian traders on their side began to come direct to the Somali ports, and Indians appeared in Egypt".[111] The foundation of the Roman empire 'gave peace, facilitated the communication and secured the trade route's resulting in unprecedented increase in the volume of trade. The discovery made by Hippalus in about 45 B.C. of the 'existance of the monsoon winds blowing regularly across the Indian ocean which enable the ships to sail easily with its help'[112] made the voyage easy. The occupation of Egypt by Octavius in about 30 B.C.[113] further facilitated the Roman control of the Red and the Arabian Seas. An expedition was sent by Augustus in 25 B.C. to secure the command of the sea route to India. 'Whereas before Hippalus' discovery hardly twenty ships a year made the voyage, after it, on an average a ship a day left the ports of Egypt for the East'.[114]

Such developments in seafaring and maritime trade had a sanguinary effect on the economic conditions of this region also. The Western Indian ports grew to become important trade emporia. The *Periplus of the Erythraean sea* and Ptolemy's *Geography* provide ample evidence of the ports and the trade carried on from them. In the west coast, partaining to the commerce of this region, the ports of Baryagaza (Bharuch, Gujarat), Soupara (Sopara, Thana district), Calliena (Kalyan, Thana district) and Semilla (Chaul, Kolaba district) have been mentioned in them. They also provide evidence to the interest evinced by Indians in maritime trade like the establishment of a colony of Indian traders in the island of Socotra.[115] Commodities of export and import must have been carried on to the various ports from different parts of the country through inland routes described above. The account of the *Periplus* about the commodities moved from Paithan to Broach has already been mentioned.

The volume of trade between the Roman Empire and India could be best understood by the discovery of a large number of Roman coins in different parts of south India, besides the occurrence of various ordinary items like the Arretine and the Rouletted Wares, amphorae, terracottas made by Gaul technique and clay Bullae in many a contemporary inland town like Brahmapuri, Karad, Paithan, Nevasa and Nəsik.[116] The fact that this trade had some importance to the state economy also can be guessed from a reference in the *Periplus* regarding the situation at the time of one Sandanes who had gained control over the West Coast and diverted ships coming to Kaliyaṇa towards Bharuch.[117] Probably as a mark of his mastery over the sea, by which much wealth accured to his treasury, Gautamīputra Satakarṇi had even issued coins with the symbol of a ship.[118]

The effects of the increase in maritime trade are manifold. Many foreigners settled in Indian towns, probably in pursuit of trade. Many inscriptions of Western India refer to the *Yavanas* of various towns in this area and also to those coming from far off regions.[119] Some of these participated in the cultural life of the country like making donations to the monastic establishments. These foreigners bring their own ways of life and ideas. The discovery of Roman bronzes at Bramhapuri,[120] a cornucopia at Thana,[121] various bronzes at Akota[122] indicate that foreign art objects too found their way into India. The new ideas and objects brought in by the foreigners may have had some impact on the art of the region.[123]

*Rise of the trading class*

More important effect of the development of trade, both internal and external, is the growth of the trading profession, the accumulation of wealth among them and the availability of patronage to religion and art from the members of that community. The whole development of trade was a continuous process of gradual growth. Facilitated by the economic changes taking place elsewhere in the Western World and well-protected by the administration of the state, the trade and commerce of the period grew up immensely. Coined money being an item of as much importance for the flow of trade as others are, the history of the Sātavāhana currency is also possibly indicative of the growth of better economic conditions gradually. If the discovery of coins is any indication, greater number of coins both in types and quantity, is known of the later kings of the dynasty than those of the earlier kings, the coins of Gautamīputra Sātakarṇi and Śrī Yajña Sātakarni constituting the major bulk. This may as well be symptomatic of the economic situation.[124]

*Administration and the rise of class of state officials*

The Sātavahāna state with a sufficiently huge territory under its control, and with a general increase of its wealth due to expanding trade had to organise itself with a suitable administrative system. Probably the state was initially patterned on the Maurya system.[125] The country was ruled by the king with the help of an array of officials in the centre and provinces, and aided by a large army. The royal grants of the period mention the king as *rājan* and *svāmī*,[126] and the members of his court probably included the queen and the *yuvarāja*, styled *kumāra*.[127] There were ministers (*amātya*, some even called *rājāmātya*)[1.8] departmental heads (*mahāmātra*),[129] treasurers (*bhaḍāgārika*),[130] royal physicians (*rājaveja*)[131] scribes (*lekhaka*)[132] and accountants (*Gaṇāpaka*).[133] *Mahātalavara*[134] and *Mahāsenāpati*[135] were military officers. The state had been divided into various provinces like *āhāras*. The name of Govardhana, Sopāra and Māmala *ahārās* are known from inscriptions.[136] *Amātyas* were entrusted with the provincial adminisetration. There were also chieftains like the *mahāraṭhis* and *mahābhojas*, who probably held sway over their own hereditary provinces.[137] These persons too had a body of officials to look after the administration of their provinces[138] The members of the royalty and, chieftains and important officers of the state whose number grew with the increase of state affairs were in the higher rung of the society both socially and economically. This class was naturally a major subscriber to religious and artistic activities (Table 3, p. 27).

*Women and the Joint-family system*

Women held a comparatively high position during this period. The custom of describing a person after the *gotra* of his mother—like Goutamīputra, Vāsiṣṭhīputra, Gotīputra, Kosikīputra—is widely prevalent.[139] This is indicative of probably the survival of a social substratum of matrilineal system, despite the fact that social pattern advocated by the *smṛtikāras* had come into vogue and widely respected.[140] However, the women of the age still enjoyed a position of prominence in the social and family structure. Several of them claimed the titles of hereditary offices. Instances of *Mahābhōyī Mahāraṭhinī, Mahāsēnāpatinī* and such are known in the epigraphs.[141] It appears the women had the right to own property by themselves. There are many instances of ladies making grants of money to Buddhist establishments; but no mention of husband or father is to be seen in many such cases. Nearly 30 per cent of the donations recorded in the epigraphs are made by women. A good number of these naturally belonged to the royalty and the trading class. But a significant group is that of nuns (*bhikhuni, Pavajitikā, aṁtevāsinī*). While some have made caves and cisterns and instituted permanent donations by themselves, some times they are described as donating along with their sisters who were not nuns.[142]

The joint family system is widely in evidence. The heads of the family joined with brothers, sisters, sons, daughters, sons-in-law, daughters-in-law, nephews and nieces have made donations.[143] Parents were highly respected. Several donations have been made by persons for the accrual of spiritual merit to their parents.[144] This system of family organisation was very much conducive to the continuity of cultural patterns and customs. Continued patronage to religious causes too was one such.

*Group subscriptions*

Another feature deducible from the inscriptions of the area was the making of caves by joint contributions by laymen. This may have been a common practice. In most of the instances, persons making caves and other donations have caused inscriptions recording that fact. But there are umpteen caves without any such record. While in the case of a few works the donors may have opted to remain anonymous, many have had no individual donor and hence no associated record. They were probably made with the help of small subscriptions from the people, and/or contributions made by individuals for the making of particular parts of the caves. Instances of recording the names of a few such donors are seen in the inscriptions at the *chaitya* halls at Karle and Junnar.

*Socio-Economic Climate in General*

The socio-economic climate of contemporary times was quite salubrious to the growth of religious art. In fact it is this factor which is mainly responsible for the development of rock-cut architecture in Western India. It would have been never possible to the homeless begging monks to achieve this, but for the social patronage. Zimmer has rightly remarked,[145] "Early Buddhist art.....was necessarily the art of laymen". It will be seen in the pages to follow how much these laymen were responsible for the course of development of art. To begin with the laymen contributed their mite to create facilities to monks in strict accordance with the religious demands of the latter; in due course the latter had to compromise their principles to meet the religious demands of the laymen. To a considerable extent, the history of rock-cut architecture is also the story of this socio-religious interaction.[146]

## RELIGION

The rock-cut architecture of Konkan and western Deccan is primarily religious in character. It is the result of a widespread fervour for acquiring spritual merit, which was considered to be achieved by providing accomodation, food and clothing for the monks. Many structural and rock-cut monuments were caused to be made with this religious urge.

All the centres of rock-cut architecture happen to be monastic establishments[147] and it has been well recognised that these are associated with Buddhism. Several inscriptions found in the caves clearly mention them as donations made to the *bhikṣus, saṁgha* or *bhikṣusaṁgha.* A few inscriptions inform

the names of Buddhist sects in favour of which the donations were made (see below). The history of rock-cut architecture in Konkan and western Deccan is intimately connected with the history of Buddhism and Buddist monachism.[148]

## BEGINNINGS OF THE SPREAD OF BUDDHISM IN WESTERN INDIA

The missionary zeal of Aśoka appears to have been responsible for the introduction of Buddhism to Konkan and western Deccan. The Ceylonese chronicle *Mahāvaṁsa*[149] informs that Tissa Moggaliputta who was the chairman of the third Buddhist Council (which was held at Pataliputra under the patronage of Aśoka in *C.* 250 B.C.)[150] despatched missionaries to various countries for the propagation of Buddha Dharma. And the list of countries there include Aparānta (north Konkan) and Mahārāṣtra (Deccan) to which Yonaka Dhammarakkhita and Mahādhammarakkhita were sent respectively. The chronicle further adds that *Mahākaśyahariṇa Jātaka* was preached by Mahādhammarakkhita in Mahārāṣtra. Similarly *Aggikhandopamasutta* (of *Aṅguttara nikāya*) was preached by Yonaka Dhammarakkhita and 37,000 people were converted.[151] Whatever be the correctness of figures of converts, these accounts reveal that Buddhism had entrenched itself in Western India in the 3rd century B.C.[152]

Buddhism by that time had achieved the status of an organised religion with definite principles and codified rules of conduct (the *Vinaya*) for the followers. It had the backing of the rulers of the day and many officers and others too may have begun to follow and patronize it. A situation for its easy spread had been established. The volume of patronage thus gained and the needs of the monastic community for their living according to the prescriptions of the *Vinaya* determined the nature and form of monastic architecture.

## EARLY BUDDHISM AND THE LATTER BUDDHIST SECTS IN THE REGION

By the time Buddhism spread in Western India, that religion had not remained as a solid entity. During the life-time of Buddha himself, there was a break-away group of Devadatta and his followers.[153] Immediately after the death of Buddha further schisms arose. By Aśoka's time, several sects with many differences in ideology and practices existed side by side under the common banner of Buddhadharma. The third Buddhist council convened at Pataliputra tried to put an and to the centrifugal tendencies. This resulted in the acceptance of a certain tradition as the true one, and all dissidents were kept away from the *saṁgha* and further schisms were attempted to be stopped by the threat of severe punishments.[154] The doctrine accepted at this council as the true one taught by Buddha was that of the *Vibhajyavādins*[155] and it can be construed that it is this sect that was introduced to Konkan and Western Deccan during Aśoka's time. The punitive measures that Aśoka had declared did not, however, stop the schismatic tendencies in Buddha's Order. The Ceylonese chronicles and other Buddhist works provide information about different sects which had risen in later times.[156]

Nothing is known of the monuments in this area which can be definitely associated with the early Theravāda. The early epigraphs are silent about their sectarian affiliation. The later epigraphs mostly datable to the early centuries of the Christian era[157] reveal that the following sects were flourishing in Western India.

1. *Bhadrāyanīya*[158]
2. *Dharmottarīya*[159]
3. *Mahāsaṁghika*[160]
4. *Chetika*[161]
5. *Aparaselīya*[162]

Further information about these sects are available in the literary sources.

1. *Bhadrāyanīya* : The *Dīpavaṁsa* (Ch. V, 39-48) refers to this school as *Bhadrāyanika* and as one of the subsects of the *Vajjiputtas*, under the larger group of *Theravāda* that is said to have developed in the 2nd century of the *Buddha-Nirvāṇa* era.[163] The northern Buddhist text of *Bhavya* calls it *Bhadrāyanīya*. *Āchārya* Bhadrāyana is said there to be its founder, and that the sect is named after him.[164]

The early history of this sect in Western India is not known. But in the 2nd century A.D. this secured royal patronage. The two Nasik inscriptions mentioning this sect are of the time of Vāsiṣṭhīputra Puḷumāvi and are to be seen in the famous cave 3 made by Gautamiputra Sātakarṇi. That cave was donated to the *Bhadrāyanīyas*. At Kanheri too the sect had gained a hold. The first inscription mentioning this sect (No. 4) is in the big *chaitya* hall. The other one (No. 20) is in a dwelling cave and is datable to about the 3rd century A.D.[165]

2. *Dharmottarīya* : According to the Buddhist chronicles this is another sect of the *Vajjīputtaka* coming under the *Theravāda*. The origin of this branch is generally traced to the 2nd century after *Buddha-Nirvāṇa*. According to *Bhavya* the sect is named after its founder Dharmōttara.[166]

This sect appears first in the epigraphical records in about the 1st century B.C. The two inscriptions from Karle (No. 8 and 9) mentioning this have the same content and record the donation of a pillar by a person hailing from Sopāra. In one he himself is described as belonging to the *Dhamuttarīya* sect where as in the other his preceptor—a *thera*—of the sect is named. It is not possible to know from the content whether the *chaitya* hall at Karle belonged to or was controlled by the *Dharmottarīyas* at that time. Inscriptions from the same place of somewhat later date, however, clearly mention the *Mahāsaṁghika* monks for whom a *leṇa* was donated. We can infer from another evidence that there could have been a *Dharmottarīya* community at Sopāra. An inscription from Junnar (No. 28) datable to the 2nd century A.D. records the donation of a cave by a person and the creation of a permanent endowment for the benefit of this and the nunnery of the *Dhammuttarīyas* located in the town.

3. *Mahāsaṁghika* : This is one of the well-known sects that had split off from the *Theravādins* right before the council of Pataliputra, and usually described by the *Pāḷi* chroniclers as a heretic sect.[167] However, it is known from the Buddhist chronicles that despite the exclusion of the *Mahāsaṁghikas* from the *saṁgha* favoured by Aśoka, they had a strong following and convened a seperate assembly. The *Pāli* chronicles themselves give in one place the number of members of the third Buddhist Council held at Pataliputra as 700, whereas the assembly convened a little later by the excluded as 10,000. They further mention this sect as *āchāriyavāda*, and this according to Kern suggests that the latter's cause was upheld by the more learned clements of the Order.[168] The *Mahāsaṁghikas* had branched off in later times as *Sarvāstivādins*, *Kāśyapīya*, *Dharmaguptaka*, *Mahīśāsaka*, etc., but the core sect too had remained intact.[169] The *Mahāsaṁghikas* had a wider distribution. The inscriptions of the early centuries of the Christian era show that they had spread in north-west India and central India. They had gained patronage at Mathura from the Kuśāṇa king Vāsudeva. Many inscriptions from Āndhradeśa give indication to the spread of the *Mahāsaṁghikas* there by mentioning many of their sectarian branches.[170]

In western India the *Mahāsaṁghikas* are referred to in two Karle inscriptions of the time of Vāsiṣṭhīputra Puḷumāvi. They are mentioned as the community living at Valūraka (Karle) and it is quite likely that the monks of this sect were in charge of the Karle monastery. The existence in this region of this sect which had wider distribution particularly in areas with distinct art traditions like Gāndhāra, Mathura and Āndhradeśa is of some interest for art-historical study.

4. *Chetika* : This school, also called *Chetikiya* and *Chetiyavāda*, is a subdivision of the *Mahāsaṁghika*. It is said that the sect is so named because of a *chetiya* situated on a mountain where its founder Mahādeva lived, and secondly due to its emphasis on the erection, decoration and worship of the *chaityas*.[171] It is also said that the *Chetikas* and *Lokottaravādins* are identical, as the emphasis on *chaitiya* worship is seen in the texts of the *Lokottaravādins* also. The *Chetiyavādins* are known to have been flourishing in Āndhradeśa contemporaneously.[172]

In Western India, the sect has been named in a Nasik inscription (No. 9). It mentions the making of a cave by a lay devotee of the *Chetiya* school (*Chetikupāsaka*).[173]

5. *Aparaselīya* : M.G. Dikshit was the first to point out the occurrence of the name of this sect in a Kanheri inscription (No. 26) of the third century A.D.[174]

*Aparaselīya* is one of the sects well-known from the contemporary inscriptions of the Krishna valley. In the Pāli tradition the *Pubba* and *Apara Selīyas* are mentioned as two subdivisions of the *Mahāsaṁghika* school. Hiuen Tsang refers to the derivation of the name from a monastery on the hill to the west of of Dhanakaṭaka. *Aparaselīya* is also considered to be one of the four sects of the *Andhaka* branch.[175]

A.M. Shastri (*op. cit.*) thinks that the *Śaila* schools, which were much favoured by the monks of the Krishna region round about Dhanakaṭaka migrated to Pratiṣṭhāna on the transfer of Sātavāhana capital.[176] This contention can however be passed over without comment as the shifting of the capital itself is a doubtful guess. But it is clear that this school which had originated and spread in the Krishna Valley had gained access to Konkan also by about the 2nd or 3rd century A.D.

## POSSIBILITY OF DEVELOPMENT OF SECTARIAN ARCHITECTURE

The brief account given above indicates that in Konkan and western Deccan, despite the possible earlier introduction of *Vaibhajya* school favoured by Aśoka, there were also the schismatic *Mahāsaṁghikas*. Both had their own subsects here, the first with the *Bhadrāyanīya* and *Dharmottarīya* and the latter with *Mahāsaṁghika*, *Chetika* and *Aparaselīya*.[177] Ideologically it is said that the first group stressed the ethical and moral descipline as of importance in following the Buddha's *Dharma*, whereas the second emphasised on the metaphysical and altruistic doctrine.[178] It appears some of these schools had developed their own *Vinaya* texts.[179]

In such a situation it is not unlikely that differences in ideological values and religious practices could have demanded different varieties of architectural forms. This raises the fundamental issue of recognition of sectarian architectural types.[180] But in the present context where only two *chaitya* halls (Karle and Kanheri) and five dwelling caves are possible to be associated with some sects, this matter is not easy to decide.

The contemporary inscriptions of the area reveal a different situation. It appears that despite the differences, some amount of catholicity of outlook existed there. For example, at Nasik where a small compact group of caves exist, while cave 3 has been donated to the *Bhadrāyanīya* monks, cave 8 has been donated by an *upāsaka* of the *Chetika* sect. At Karle the *chaitya* hall was under the control of the *Mahāsaṁghikas*. But a pillar inside was the donation of a preacher (*bhāṇaka*) of the *Dharmottarīya* sect. Again at the Kanheri establishment both *Bhadrāyanīyas* and *Aparaselīyas* have been mentioned. It is likely that monks of different sects may have lived there together.[181] After all they were knit together by the common bond, the Buddha. But what is difficult to explain is the way in which these monks could have co-operated in religious ceremonies. The *Theravādins* (*Dhammuttarīya*, *Bhadrāyanīya* here) according to the *Pāli* chronicles considered the *Mahāsaṁghikas* as heretics. The *Mahāsaṁghikas* had their own *Vinaya* redactions different from those of the *Theravādins*.[182] How different Buddhist ceremonies like *Uposatha Pravāraṇa* could have been performed at the same place remains a matter of guess. It is not unlikely that the sectarian differences much made of in the *Pāli* chronicles are the views of later zealots, but they counted very little in the period under review at least so far as monastic practices are concerned. The instances quoted above relating to the Nasik and Karle establishments indicate that the laity too may not have cared much for the sectarian differences. In one of the inscriptions (No. 29) of Kanheri there appears to be an instance of making a *leṇa* for the benefit of monks of all sects *savesu nikāyeneti*). The stipulation of the Buddhist canons for the monks to be on move from place to place may have served the purpose of providing a link to the monk of various Orders. The inscriptions of the period show that though monks of some particular sect could have been in charge of the monasteries, most of the monasteries were meant to be open to the *bhikṣus* coming from all regions (*chātudisa bhikhusaṁgha*). The provision made for the benefit of the monks from the four quarters at the Karle monastery which was probably under the control of *Mahāsaṁghikas* is a good instance to quote. An inscription from Shelarwadi refers to the making of a *chaitya* hall for the *Buddhasaṁgha* without any reference to a sect. There are many inscriptions in Western Indian caves which do not mention any sect but the *Chātudisabhikhu saṁgha* for the benefit of which caves were made, permanent money deposits were donated and provision for distribution of food and clothing was made.[183] In such a catholic religious atmosphere it may not be easy to think of the development of sectarian architecture. But an open mind is still necessary.

## MONASTIC PRACTICES AND ARCHITECTURAL TYPES

The architectural creations under consideration were meant for the use of monks, and hence the types, forms and other details of such works are to depend on the needs and practices of the monastic community. The *Vinaya* texts provide a glimpse of Buddhist monastic life.[184] But *Vinaya* itself is said to contain elements included in various times to make provisions for the changes that had crept into the monastic life due to various historical reasons.[185] It would be of great interest if the changes in the *Vinaya* regulations could be noted in a chronological order and the impact of these traced in the development of architectural types associated with monasteries.

The history of the Buddhist monastic order can be traced to a certain extent from the contents of canonical and non-canonical texts.[186] To start with, it appears, Buddhism had no conception of the *Saṁgha*. Buddha himself was an eremitic monk following the ways of the *munis*, *tāpasas* and *paribbājakas*, the antiquity of whose institution could be traced to the Vedic times.[187] Even when Buddha got a few followers there is no idea of the function of the *Saṁgha*. The earliest disciples, Tapussa and Bhallika took refuge not in the three jewels (*Buddha*, *Dharma* and *Saṁgha*) but in the first two only. When Buddha made up his mind to disseminate his ideas to the common people, the idea of a learned order following strict descipline may have evolved. It is said that the *Saṁgha* really came into existence with the conversion of the three Kāśyapa brothers along with their one thousand followers.[188] In the beginning Buddha insisted on his disciples to follow certain strict rules—the four *nissayas*, *i.e.* (1) to subsists on food obtained by begging only, (2) to put on the robes made of rags thrown away by laymen, (3) to dwell under the trees, and (4) to use urine as medicine.[189] This stage of Buddhist religious history exalting a life of solitude and austerity to the monks is not of much interest to art history.

But in later times, with the growth of Buddhist Order and the accumulation of lay disciples, these eremitic practices just remained ideals. The mendicants yielded to the pious care bestowed on them by the laity. Even during the career of Buddha the practice of making *ārāmas* and *vihāras* for the benefit of monks is attested to by Buddhist works.[190] Probably this initial allowance for the monks was connected with the introduction of the practice of *vassāvāsa i.e.*, retreating to some fixed place during the rainy season.[191] Buddha himself is said to have sanctioned five kinds of dwellings (*paṁchaleṇāni*) *vihāra*, *aḍḍhayoga*, *pāsāda*, *hammiya* and *guhā*.[192] But in the earliest stages the dwellings used by monks for *vassāvāsa* appear to have been simple units, each providing accommodation for a single monk, as can be seen from certain expressions in the *Vinaya-piṭaka*. In this stage of the growth of Buddhist cenobium, it appears that many practices of the earlier *muni* and *tāpasa* traditions continued. Some passages in the *Vinaya-piṭaka* give indication of the hard life the monks were expected to follow. Even when they lived in a hut or a *guhā* during *Vassa* months, it is ordained in certain traditions that they were not to use beds or even stretch themselves completely for sleep.[193] It is probably this stage of the history of monastic architecture that first appears in Konkan and Western Deccan.[194]

To begin with the residences were meant to be used obviously during *vassāvāsa*, and during other times the monks were not expected to stay at a place for more than three nights. Even during their stay in the *vassa* retreats, they had to subsist on food collected by begging only. For this they had to go to nearby towns and villages. It appears that continuous communication between the monks and the clergy thus established provided greater scope for an atmosphere of piety to develop amongst the laity, and resulted in providing various means to the monks to alleviate their difficulties in their ways of living. Groups of dwelling provided with stone beds, etc., began to be established at suitable places. In Western India, several inscriptions of the beginning centuries of the Christian era mention that permanent money endowments (*akhayanivī*) were made to provide for the clothing and footwear and even medicines for the monks living in rain-retreats.[195]

Taking residence in one or the other retreats in the rainy season became established gradually as a sanctified custom[196] and thus a process by which eremitical mendicants began to settle down to monastic life and organisation began. The provision of permanent endowments of money and sometimes land made to the monasteries demanded a few monks at least to stay in these pemanently to take care of the establishment and its assets. It is possible that at this stage additional structures like the refectory, the

rest house and such began to be added. Sometimes provision was also made to povide food in the monastery itself thus reducing the trouble for monks to go for begging.[197] It is also likely that monks began to live permanently throughout the year in these monasteries.[198] By this time, what used to be just retreats for the rainy season changed themselves to become established monasteries.[199] This change in the history of Buddhist monasticism is mainly responsible for the rich rock-cut architectural activity of Konkan and Western Deccan.

## BUDDHIST RITUALS AND ARCHITECTURE

The objects of reverence for the Buddhists are the three jewels—*Buddha, Dharma* and the *Saṁgha.* Besides these there were some material objects revered by them like the relics of holy persons and the monuments erected to their memory. However, the early canonical texts like the *Vinaya* are almost silent about the later aspect, even though several later stories do mention them. In the early *Vinaya* texts there is no mention of the existence of *chaityagṛhas* within the monasteries; while there are umpteen references to specific duties including sundry ones to be performed by the inmates of the monastery, no mention is seen of offering of worship to the *chaityas* or looking after them.[200] However, most of the rock-cut monasteries of Western India have one or more *chaitya* halls with a *stūpa* inside. This probably indicates that these belong to a stage slightly later than the one depicted in the early *Vinayas.* During this stage there might have been efforts to popularise certain practices like the worship of the *chaitya* mostly to satisfy the religious needs of the laity (p. 33). This in turn would pave way for a better communion between the Order and the laity resulting in the increase of patronage and more such creations.

While in the other regions of the Indian subcontinent various symbols and objects of reverence like the *Buddhapāda* the *triratna, nāga, chaityavṛikṣa* are to be seen, in the Western Indian caves, *stūpa* appears to be the most popular object of worship. Several representations of this even in relief are known. The large *chaitya* halls as well as the smaller ones invariably house a *stūpa.*[201] According to the Buddhist works there are three kinds of *stūpas—Śārīraka* (containing corporal relice of Buddha or other holy men of the Order), *Uddeśika* (built on sacred spots, etc.) and *Paribbājika* (containing objects used by Buddha). Most of the *stūpas* in Western India appear to be of the first type. Crystal caskets containing pieces of bone and ash, obviously the remains of holy persons, have been extracted from the *stūpas* in Pitalkhora.[202] Many *stūpas* actually contain inscriptions mentioning the names of *theras* in whose honour they were made (*e.g.*, Bedsa No. 1, Bhaja No. 5-8, Kanheri No. 6).

## PROCESS OF INTRODUCTION OF MAHĀYĀNISM INTO WESTERN INDIA

The art of Western India under review is often considered as that of Hīnayana Buddhism. The absence of figures of Buddha is taken to be an important mark to distinguish this as Hīnayana. The Mahāyāna Buddhist art is said to have commenced from about A.D. 450. A break of about 200 years is postulated in the art activity of Western India.[203] It is known that elsewhere in the Indian subcontinent Mahāyānism had bagum to make its wide impact right from about the 2nd century A.D. as in Mathura, North West India and possibly a little later in Āndhradēśa.[204] It does not look logical to consider Western India to be unaffected by new tendencies in Buddhist religion. In this context the very mention of the *Mahasaṁghikas* and their other branches (*Chetika, Aparaselīya*) are of some interest. It is said that Mahāyāna Buddhism itself originated with the *Mahāsaṁghikas* and it is said that the sects allied to this gradually introduced the idea of deified Buddha with his images made and installed for worship in the 3rd century A.D. in the neighouring Āndhradēśa.[205] Though this aspect of the anthropomorphic representation of Buddha can not be conclusively established to have been present in Western India within the period under consideration,[206] the inscriptions provide some evidences relating to the prevalence of certain ideas nearer to those held in Mahāyānism. In a Nasik inscription (No. 5) relating donation to the monks of the *Bhadrāyanīyas* Buddha has been referred to as illuminating and as the best of the victors. Another incription from the same place (No. 18) refers to the worship of many Buddhas (*save Buddha pujāya*). The idea of compassion regularly emphasised in Mahāyānism is to be seen in the expression appearing

in many inscriptions recording donations, as they having been done for the 'good and happiness of all the sentient beings.'[207]

These evidences probably indicate the need for a fresh look on the problem of beginnings of Mahāyānism in western India and the introduction of Buddha figures in turn. This has an important bearing on the chronology of not only the Mahāyāna caves, but also on that of the caves under consideration here.[208]

## NOTES AND REFERENCES

1. The exact date of expansion of Magadhan hegemony to the south of the Vindhyas is uncertain. There is some hazy evidence to the rule of the Nandas in south India (Nilakanta Sastri 1966, p. 82). According to Plutarch, Chandragupta Maurya overran and subdued the whole of India with an army of 60,000 men (Majumdar and Pusalkar 1953, p. 61 ff.). Bindusara too has been considered by some as responsible for the Mauryan conquest of south India (Yazdani 1960, p. 69).
2. Pargiter 1913, p. 35 ff.
3. We could list up more than 200 essays where attempts have been made to explain or reconcile the *purāṇic* account of the Sātavāhanas with the evidences available from other sources. This plethora of literature and the continued uncertainty is so despairing as to lead some to reject the *purāṇic* evidence altogether with the remark that the use of 'these misleading documents as a primary source of evidence is, to say the least, unhistorical' (Dehejia 1972, p. 14).
4. *e.g.* 240 or 230 B.C. by Smith, 1914, p. 207; Before 200 B.C. by Rapson, 1908, p. XIX; 235 B.C. by Gopalachari (in Nilakanta Sastri 1957, p. 301).
5. *e.g. C.* 30 B.C. by D.C. Sircar (in Majumdar and Pusalkar 1953, p. 195); Raychaudhuri (1950, p. 414) places Simuka's rule in *C.* 60-37 B.C.
6. Bhandarkar 1895, p. 30.
7. Dehejia 1972, p. 19.
8. Rao, Gurty Venkata, 1949, p. 243 and Yazdani 1960, p. 90.
9. Ramachandraiya 1958, p. 230.
10. i. *Vāyupurāṇa*, Ānandāśrama edition, Puṇe 1905, p. 383-84.
    *Ity=ete vai nṛpās=triṁśad=Āndhrā bhokshyanti ye mahīṁ |*
    *Samāḥ śatāni chatvāri pamchāśad=vai tath=aiva cha ||*
    ii. *Viṣṇupurāṇa*, Śrī Venkateśvara Press edition, Bombay, p. 199-200.
    *Evam=ete triṁśach=chatvary=abda=śatāni ṣatpaṁchāśad=adhikani pṛthivīm bhokṣanti |*
    iii. *Bhāgavatam*, 12th *skandha*, 1st *adhyāya*, vv. 22-24.
    *Ete triṁśan=nṛipatayaś=chatvāryy=abda-śatāni cha |*
    *Satpaṁchāśach=cha pṛithivīṁ bhokṣyanti Kurunandana ||*
    iv. The only difference is in *Mataya purāṇa*; Sri Venkateswara Press edition, Bombay, Chap. 273, v. 18, p. 296.
    *Ekonavimśatiry=ete Āndhrā bhoḳṣyanti vai mahīṁ |*
    *Teṣāṁ varṣa-śatāni syuś=chatvāri-śaṣtir=eva cha ||*
    v. *Brahmāṇda purāṇa*, Sri Venkateswara Press edition, Bombay, p. 186.
    The *śloka* is identical with that of *Vāyu purāṇa* quoted above.
    I am thankful to my friend Dr. K.V. Ramesh, who kindly provided me the extracts from the *purāṇas*, along with useful observations.
11. Quoted in Yazdani 1960, p. 86.
12. Ramachandraiah 1958, p. 230.
13. *Ibid.*
14. Extending the valuable observation of Ramachandriah quoted here, one more plausible explanation may be offered. If the *purāṇic* accounts are taken together a fact that strikes immediately is relating to their coverage, wherein detailed accounts pertain mostly to the dynasties of Uttarāpatha. Āndhra is the only dynasty which finds a lengthy treatment otherwise. Further amongst the dynasties of Uttrarāpatha, the accounts of those who held sway over the western part of that region have been hardly covered. So the dynastic accounts of the *purāṇas* happen to be mostly of the Magadha kingdom. Even in this, it is not clearly known what exactly the role of Sātavāhanas was as far as Magadha proper is concerned. So it is likely that the *purāṇas* were first compiled in the Vidiśā region, which was one of the cultural centres right from very early times and was also a town of certain political importance; in fact all the dynasties covered

in the *purāṇas* appear to have had something to do in the history of Vidiśā. It is not unlikely that the names of Sātavāhana kings included in the *Vāyu* account are of those who exercised suzerainity over the Vidiśā region.

15. Ramachandriah, 1958. p, 240.
16. The difference of 11½ years between the total span of Sātavāhana rule mentioned in the general account and the total of individual reign periods (460 and 448½) can also be noticed. This may be accounted for by the fraction of years that may have been left out while giving the length of each king's rule.
17. The palacographical evidence is covered in Chapter V. For the stratigraphical evidence of coins discovered in excavations, and for various other discussions relating to the coins of the period, see Shastri, 1972.
18. *Kāṇvāṃs=tato bhūpāḥ Suśarmāṇaḥ prasahya tāṃ |*
*Śuṅgānāṃ cha=iva yach-chheṣaṃ kṣapitvā tu Balīyasaḥ ||*
(*Matsya purāṇa*, Chapter 273, verse 1).
19. Mirashi 1955, intro., p. xxiii.
20. *Ibid.* The *puranic* stanza as quoted by Mirashi runs :
*Āndhrānāṃ saṃsthite rājye teṣāṃ bhṛtyānvayāḥ nrpāḥ |*
*Sapt—aiva=Āndhrā bhaviṣyanti daś=Ābhīrās=tathā nrpāḥ ||*
(Quoted in Mirashi, 1955, intro. p. xxiii). Kubha Sātakarṇi, Siri Saka Sātakarṇi, Kana Sātakarṇi and Ruda Sātakarṇi whose coins have come to light from the Tarhala, Brahmapuri and Kondapur hoards (Shastri, 1972, p. 43), and Chatur-pana Sātakarṇi of the Vaisarga inscription (No. 1) are probably some of the kings of the Āndhra lineage who followed the imperial Sātavāhanas. These were succeded by the Ābhīras.
21. Mirashi 1955, intro. p. xxiii.
22. Yazdani 1960, p. 92.
23. The Western Kshatrapa chronology has been well-discussed in Nilakanta Sastri (ed.) 1957, p. 275 ff.
24. *Ibid.*, p. 279.
25. It can be noted that this line of argument does not in any way impinge the fact of Chaṣṭana-Pulumāvi contemporaneity, and the end of Sātavāhana rule around the end of the first quarter of 3rd century A.D.
26. *Senaye vejayaṁtiye vijayaskandhāvāra Govadhanasa Benākaṭakā svāmi Gotamīputo Siri-Sadakani āṇapayati.*
27. *ajakālikiyaṁ Usabhadateṇa bhūtam (ajakāla=adyakāla).*
28. Benākaṭaka is identified by Mirashi as a place on the river Benā in Madhya Pradesh.
29. These points have been discussed in Rapson 1908, p. xxix, Nilakanta Sastri 1957, p. 276, Yazdani 1960, p. 91 f. etc.
30. In this list the names of kings have been corrected suitably with the help of epigraphical and other available evidences. The span of Gautamīputra Sātakarṇi's reign has been extended by 3 years, as suggested by Nasik inscription No. 3.
31. In the Junagadh inscription (*EI* VIII, p. 42) Rudradāman is said to have defeated a Sātakarṇi twice and to have made extensive conquests occupying many territories. The list of territories include Suraṭha, Kukura, Aparānta, Anūpa, Ākara and Avanti which had been claimed to have been under the control of Gautamīputra Sātakarṇi in Nasik No. 4. For various other views see Yazdani 1960, p. 97, 108 etc.
32. There are numerous articles on this topic. Some of the important ones are Altekar 1951, Shoff 1912 and 1917, Kennedy 1918, Nilakanta Sastri 1926, and Mirashi 1965. Details of the problem and views of various scholars on this are given in Majumdar and Pusalkar 1953; Nilakanta Sastri 1957 and Yazdani 1960.
33. Barrett 1959, p. 76.
34. Palmer 1947, p. 136.
35. Various other views on Satāvahāna chronology and historical synchronisms are discussed in works referred to in note 4 and 32.
36. The name of the king is lost in the inscription proper. But on circumstantial grounds the various details mentioned therein can be ascribed to him (p. 53).
37. Lüder's List, No. 346.
38. Sircar 1942, p. 206.
39. Yazdani 1960, p. 125.
40. See note 31.
41. The possibility of inflow of foreign ideas and men in the preceeding period can not be ruled out. The present time provided greater scope for that.
42. Majumdar and Pusalkar 1953, p. 201.
43. *Cf.* Amaravati school of art; Barrett 1954, Sivaramamurti 1942, Burgess 1887, and 1882 Longhurst 1928, Subrahmanyam 1964 etc.; Ghosh and Sarkar, 1967, Deheija 1970.
44. Mirashi 1955, intro. p. xxxiv. Nilakanta Sastri, 1957, p. 331 for other details on Ābhīras.
45. MAR., 1929, p. 50.
46. Kuda inscriptions are listed in the Appendix.
47. Nilakanta Sastri 1957, p. 338.
48. *Ibid.*, p. 333 and 336.
49. Majumdar and Pusalkar, 1954, p. 177; 192; 270.
50. Yazdani, 1960, p. 16 ff.
51. Charpentier, 1927, p. 111.

52. Sen, 1922, p. 613.
53. Northern Black Polished Ware—Brahmapuri, Sankalia and Dikshit 1952, p. 59; Dhatva (District Surat) IAR 1967-68, p, 19; Kaundanpur (District Amarcti) IAR 1961-62, p. 29; Nasik, Sankalia and Deo 1955, p. 20; Nevasa, Sankalia *et al* 1960, p. 161; Prakash, Thapar 1965, p. 74; Ter, IAR, 1957-58, p. 23. Punch-marked coins—Dhatva, *op. cit.*, Kaundanpur, *op. cit.*; Nevasa, *op. cit.*, p. 278; Prakash, *op. cit.*, p. 129.
54. For details see references in note 53 above and note 2 to chapter I.
55. Detailed general accounts are available in Nilakanta Sastri 1957, p. 293 ff.; Yazdani 1960, p. 131 ff.; Altekar 1952, p. 57.
56. *e.g. Hālika* (husbandman : Bhaja No. 1; Shelarwadi No. 1). *Suvaṇṇakāra* (Goldsmith : Kanheri Nos. 2 and 37; Junnar Nos. 5 and 23) and *Hiraṇṇakāra* (Goldsmith : Pitalkhora No. 11), *Kāsākāra* (brazier : Junnar No. 20), *Kamāra* (blacksmith : Kanheri No. 17), *Vadhaki* (carpenter : Kārle No. 6), *Selāvadhaki* (Stone-cutter : Kanheri No. 4), *Kolika* (weaver : Nasik No. 12), *Tilapisaka* (oil-presser : Nasik No. 15), *Vasakāra* (bamboo-worker : Junnar No. 20). The guilds of *Suvaṇṇakāras*, *Kāsākāras* and *Vasakāras* have also been mentioned in some inscriptions (References as cited above with those names).
57. *e.g.* : Uṣavadata, son-in-law of Nahapāṇa, deposited 3000 (2000+1000) *Kārṣāpaṇas* with two guilds of weavers of Nasik with an understanding that the interest gained by that, at the rate of 1 per cent and 3/4 per cent, be utilised for distributing robes for monks (Nasik No. 12). For other *śreṇis*, see note 56 and Yazdani 1960, p. 137.
58. *Gadhika* : Karle No. 4, Pitalkhora No. 1.
59. *Lohavāṇiya*, Kuda No. 14; *Heraṇika*, Kanheri No. 9, 11, Junnar No. 21.
60. Karle No. 22.
61. Ajanta No. 5, Junnar No. 5, Karle No. 28, Kanheri No. 4.
62. Karle No. 1, Bedsa No. 3, Kuda No. 21, Vaisarga No. 1.
63. The term *gahapati* is usually understood as 'the designation of the head of a certain number of households of cultivators (Yazdani 1960, p. 133). But the *gahapatis* mentioned in our inscriptions generally refer them as *seṭhis* too. Hence these are to be included in the class of traders (see Nilakanta Sastri 1957, p. 464 for discussion).
64. Nos. 20, 23, 24. The mention of the *Sathavāhas* in a coastal town like Kuda is of interest. The possibility of the name of the Sātavāhana ruling dynasty having any connection with Sathavāha is worthy of consideration. I am thankful to Dr. S.H. Ritti for this suggestion.
65. *Dhaṁñaka seṇi*, Junnar No. 20.
66. This is some times understood as citizens assembly. But the context of occurrence of the term appears to indicate the interpretation given here. See *Sopāraga-negama* (Kanheri Nos. 8, 12) and *Kaliyanakasanegama* (Kanheri Nos. 16, 28, 29). The members of these *negamas* are also described sometimes as *seṭhis*.
67. Chaul in Kolaba District.
68. Kanheri Nos. 9, 11.
69. Kanheri Nos. 8, 12, 35.
70. Kanheri Nos. 14, 16, 28, 29; 31; 2; 17.
71. Junnar Nos. 21; 23.
72. Not identified. Various suggestions are offered in Burgess 1883a, p. 24 and 1883b, p. 86; Senart 1903, p. 47; Johnston 1941, p. 208; Kosambi 1955, p. 51. Dhenukākata is most likely to have been located near Karle.
73. Karle, Nos. 4; 28; 31.
74. Banavāsi, North Kanara District, Karnataka.
75. Karle No. 1.
76. Not identified.
77. Vaisarga No. 1.
78. Bedsa No. 3.
79. Karād, District Satara.
80. Kuda No. 18.
81. Identified with Bahal, Jalgaon District, Maharashtra.
82. Ajanta No. 2.
83. Broach, Gujarat.
84. Junnar No. 14.
85. Not identified.
86. Bhaja No. 10.
87. The person from this place is described as a 'northerner' (*otarāha*). The town is identified with Demetrias in Arachosia (Burgess 1883a, p. 38).
88. Nasik no. 18.
89. A town north of the river Chambal, in Rajasthan (Burgess 1883a, p. 100, note 1).
90. Nasik No. 25.
91. Pitalkhora No. 9; Kanheri No. 26; Karle Nos. 6, 7, 10, 11, 23, 25, 26, 27, 29, 30; Shelarwadi No. 1.
92. Burgess (1883a, p. 92 note 4) locates this in north Punjab. There is another identification connecting this with the country of the Goths.

93. Junnar Nos. 30, 33.
94. Kanheri Nos. 41, 38.
95. Kanheri No. 1.
96. Paithan, Aurangabad District.
97. Pitalkhora, No. 2.
98. Karle Nos. 8, 9; Nanaghat No. 8.
99. Not identified.
100. Karle No. 20.
101. The Bangalore-Pune national highway still follows the same route.
102. Nagaraju in Venkatachala Sastry, T.V. (ed.) *History of Kannada literature*, Vol. II, Mysore, 1975, p. 137.
103. Deshpande 1959, pp. 58-59 and map.
104. *Ibid.*, and Nilakanta Sastri 1957, p. 437.
105. Yazdani 1960, p. 138.
106. Margabandhu 1973, p. 182 ff.
107. Nagaraju 1973, p. 75.
108. Filliozat 1950, p. 23 ff.
109. Dehejia 1972, p. 18.
110. Nilakanta Sastri 1957, p. 307.
111. Majumdar and Pusalkar 1953, p. 619.
112. *Ibid.*, p. 620.
113. Yazdani 1960, p. 130.
114. Majumdar and Pusalkar 1953, pp. 620-21.
115. *Ibid.*
116. Charlesworth 1951, p. 131; Wheeler 1955, p. 173 ff; Deshpande 1965.
117. Majumdar and Pusalkar 1953, p. 199.
118. Rapson 1908, p. 22; Shastri 1972, p. 22.
119. Karle Nos. 7, 10, 20, 23, 25, 26, 29; Junnar No. 19. Nasik No. 18 mentions a *Yonaka*, a northerner from Dattāmitrī. Junnar Nos. 30 and 33 mention a *Yavana* each hailing from the Gatā country. Dehejia (1972 p. 143) considers that the fact that many *Yavanas* do not describe their status or occupation would indicate that they were all following a general occupation, possibly trade.
120. Khandalawala 1960, p. 29 ff.
121. IAR 1961-62, p. 95.
122. Desai 1951. For these and various other discoveries of Roman objects in India see Wheeler 1955, p. 173 ff.
123. Deshpande 1965.
124. For the analysis of various aspects of coin evidence see Shastri 1972.
125. A general description of Sātavāhana administration is available in Yazdani 1960, p. 32.
126. Junnar No. 32, Kanheri Nos. 4, 7, 14, 27; Nanaghat No. 3; Nasik Nos. 1-5, 10-15; Karle Nos. 17-18, 33.
127. Nanaghat, Nos. 1, 3, 4, 6, 7.
128. *amacha*—Junnar No. 3; Kanheri No. 7; Karle 33; Nasik Nos. 2, 5; *rājāmācha*—Kuda No. 12; Nasik No. 2.
129. Nasik No. 22.
130. Nasik No. 2.
131. Pitalkhora Nos. 4-7.
132. Nasik Nos. 16, 25-26; Kuda Nos. 1, 6.
133. Nadsur No. 1, Nasik No. 15.
134. Nilakanta Sastri 1957, p. 318.
135. Nasik Nos. 5 and 24.
136. Nasik No. 5; Kanheri No. 5; Karle No. 19.
137. *e.g.* Nasik No. 2 informs the king's orders to the *amātya* who was in charge of the district. The Kuda inscriptions give information about a line of *Mahābhojas*. Also Yazdani 1960, p. 133.
138. Similar to the feudatory families of later times.
139. The custom is noticeable mostly in the upper classes of the society. The references in the Western Indian cave inscriptions to Gautamīputra Sātakarṇi, Māḍharīputra Sakasena, Vāsiṣṭhīputra Pulumāvi and Gautamīputra Śri Yajña Sātakarṇi are well-known. Many others also belong to the class of royalty, as for example the *Mahārṭhis* Kosikīputa Viṇhudata (Bhāja No. 6), Kośikīputa Mitadeva and his son Vāsiṭhīputa Somadeva (Karle No. 18) and Gotiputa Agimitranaka (Karle No. 2). Kochiputa Velidata is a *Mahābhōja* (Kuda No. 16). The *Rājaveja* Magila is a Vachhīputa (Pitalkhora Nos. 5-7). A brahman Aśvabhūti is described as Vārāhīputra (Nasik No. 10).
140. Gautamīputra Sātakarṇi is described as *eka bamhaṇa, dijāvara kuṭubavivadhana, vinivatita chātuvaṇa* (Nasik No. 4).
141. Kuda Nos. 1, 6; Bedsa No. 2, Kanheri No. 27; Nasik No. 23.
142. Altekar 1952, p. 63 ff. With regard to the donations made by nuns Altekar opines that even after accepting the robe, probably, these women retained the right over their share of hereditary property.

143. *e.g.* Kanheri Nos. 12, 26, 29; Kuda Nos. 1, 6, etc.
144. *'mātā pitaro udisa'*, Kanheri Nos. 16, 21, 27, 28, 32, 36; Nasik Nos. 18, 25; Shelarwadi No. 2, etc.
145. Zimmer 1960, p. 231.
146. See p. 37 and 105.
147. The only exception is the group of caves at Nanaghat (see Chapter VII).
148. The Buddhist association of the early phase of rock-cut architecture of Western India has been well-recognised almost from the beginning stage of research on the subject. In the forties of the nineteenth century itself Westergaard and Bird described the Bhaja and Bedsa monuments as Buddhist caves. From 1881 onwards many scholars are so much convinced about the Buddhist association of the early caves as to name their works on the subject as such as for example Burgess 1881a, *Buddhist Cave Temples and Their Inscriptions*, Dehejjia 1972, *Early Buddhist Rock Temples*. (These, however, are slightly misleading as not all the rock-cut monuments covered in these works are 'temples'). The specific mention of Buddha and Buddhist sects in many cave inscriptions is clear proof to this religious affiliation. The adoption of many early caves by the Mahāyāna Buddhists in later times by introducing sculptures of Buddha and Bodhisattvas at Ajanta, Kanheri, Karad, Karle, Kondivite, Kuda, Mahad (in one cave only) and Nasik, and paintings at Bhaja, Junnar-Tuljaleṇa and Pitalkhora, point out that these cave-groups could have been in use by the Buddhists even in earlier times.

    But there are more than thirty cave-groups for which no clear evidence of their Buddhist association is available. These too, however, have been considered as Buddhist establishments on the basis of similarities in plan, format and purpose of the caves in them with those known to be Buddhist definitely.

    Sankalia (1969, p. 167) has advanced a view recently that the cave of Lale (Puṇe District) could be of the Jains. The reason for his conjecture is the invocatory sentence of the inscription at that place which reads *namo arahaṁtāṇaṁ*. He has argued that *arhaṁta* is a technical term often used by the Jains. Even though the term is known to be used extensively by the Jains only there are some stray instances of the employment of this term by Buddhists too (Dehejia 1972, p. 222, note 5).

    There appears to be some more evidences pointing towards Jaina association of some caves. In three inscriptions from the Manmodi hill at Junnar (Nos. 10, 12 and 16) there are references to grants given to the monks of the *Siddhagaṇa* of Aparājita and there is a reference to the *gaṇāchāriya* also. The terms *gaṇa* and *gaṇāchāriya* appear to have been in vogue among the Jains only and were being used to designate specific mendicant groups or members of such groups (Deo 1956, p. 149).

    It is not unlikely that some of the cave-groups belong to the Jains. But at present, as there is no clinching evidence to this fact, and as there are no recognizable differences in cave-types in different groups, we are inclined to keep this question open, and to deal in this section the various aspects of Buddhism only, the association of which religion to the rock-cut monuments is very clear. It may also be mentioned that early Jaina and Buddhist monastic ideals and practices did not vary much from each other to cause easily distinguishable types in monastic architecture.
149. Chapter XII, Geiger, 1912, p. 82.
150. The council was held 236 years after Buddha's *nirvāṇa*. If Buddha's death occured in 486 B.C. (Majumdar and Pusalkar 1953, p. 36) the above date is obtained. According to Ceylonese tradition Buddha died in 544 B.C. Then it would be in 308 B.C., a date which does not fall within the reign period of Aśoka.
151. Similar accounts are seen in *Dīpavaṁsa*, *Sāmantapāsādikā*, *Milindapañha*, *Thūpavaṁsa* and *Saddharma Saṅgraha*. The historicity of the despatch of missioneries by Aśoka is corroborated by a few epigraphs found near Vidiśā (Frauwallner 1956, p. 17; Shastri 1965, p. 57).
152. Some late works like *Papañchasūdanī* and *Sāratthappakariṇī* have legendary accounts of the visit of Buddha to Śūrpāraka (Sopara) on the west coast at the invitation of a merchant Pūrṇa, and the erection of a monastery called Chandanasāla by the latter to mark the spot where Buddha stayed (Dutt, N. 1925, p. 258; BG XIII, part 2, p. 406 ff.). But there is no indication in any of the early Buddhist works for Buddha's sojourn in western India. But it is not unlikely that Buddhism could have spread a little earlier than the time of Aśoka to western India when contacts had begun to be established between this region and northern India, say from the time of the establishment of the Magadhan Empire. In the *Vinayapiṭaka* there is a reference to a monk from Bharukachcha (Dikshit 1942, p. 2).
153. Dutt, N., 1925, p. 222; Shastri 1965, p. 44.
154. Schism edicts at Sanchi, Sarnath and Kausambi (Sircar, 1942, pp. 73-75).
155. Shastri 1965, p. 58; Kern (1898, p. 110) considers that the Third Council was not a general assembly but a party meeting of the *Theravādins* or *Vibhajyavādins*.
156. Rhys Davids 1891, p. 409 and 1892, p. 1; Beal 1880, p. 209.
157. The dating of the inscriptions is considered in Chapter V.
158. Kanheri Nos. 4 and 20; Nasik Nos. 4 and 5; spelt in the inscriptions as *Bhadāyanīya*, *Bhadāvanīya* and *Bhadrājanijja*.
159. Junnar No. 28; Karle Nos. 8 and 9. Spelt *Dhamutarīya*.
160. Karle Nos. 19 and 33. Spelt *Mahāsaghiya*.
161. Nasik No. 9.
162. Kanheri No. 26, Dikshit, 1942b, p. 61.
    *Sovasaka* and *Tāpasiya* are sometimess considered as the names of sects mentioned in Western Indian inscriptions. *Sovasaka* appears in a Karle inscription (No. 33) of Vāsiṣṭhīputra Sātakarṇi. Bühler pointed out (in Burgess 1881a,

p. 113) that this may refer to *Suvarṣaka*, which according to Tibetan tradition is another name of the *Kāśyapiya* sect. Sircar (1942, p. 203) interprets it as 'a seller of scented objects' or as 'born in a country called Suvasa'. J.N. Banerjee (1948, p. 256) contributes to the view of Bühler. The context of occurrence of the term indicates that it is a place or personal name. It is so with the words *Tāpasiya* (Junnar No. 22) and *Apaguriya* (Junnar 28 and 31) which are considered by some as names of sects.

163. Rhys Davids 1891, p. 409; Kern 1891, p. 111; Frauwallner 1956, p. 8 note 2.
164. Shastri 1965, p. 83.
165. These dates and others mentioned further are based on discussion in Chapter V. Also see chart III.
166. Shastri 1965, p. 83.
167. Frauwallner 1956, p. 7.
168. Kern 1898, p. 105; Dutt, N., 1925, p. 255 ff.
169. Frauwallner 1956, p. 8; Shastri, 1965, p. 56.
170. Shastri 1965, pp. 89-93.
171. *2500 Years of Buddhism*, pp. 117-18.
172. Shastri 1965, pp. 94-95.
173. This is the interpretation of Burgess (1881a, p. 115). By the context of its occurrence it is possible to consider the *Cheṭika* of the inscription as a personal name. The word *Cheṭiyasa* occuring in a Junnar inscription (No. 16) is also interpreted as the name of the sect (Shastri 1965, p. 95). But it is clearly a personal name.
174. Dikshit 1942b, p. 61. The text of this inscription has been read otherwise by Burgess. As verified from the original Dikshit's reading is acceptable.
175. Shastri 1965, p. 98 ff.
176. *Ibid.*
177. For the classification of sects see Rhys Davids, 1891, p. 409 and 1892, p. 1.
178. Subrahmanyam 1964, p. 15.
179 Frauwallner 1956, p. 7 ff.
180. For an attempt of this kind with regard to monuments at Nagarjunakonda, see Sarkar 1960 and 1966.
181. Later, in the 7th century, Hiuen Tsang saw teachers of different schools living in the same monastery (N. Dutt 1925, p. 291).
182. Frauwallner, 1956, p. 2 ff.
183. For example Kanheri Nos. 14, 16, 21, 26, 31, 36 and 41; Karle Nos. 18 and 33; Nasik Nos. 6, 7, 10, 15, 17, 18 and 24. It is to be noted, however, that the expression *chātudisa bhikusaṁgha* appears only in later inscriptions, when the practice of making donations in favour of particular sects had also come into vogue. It is also of interest that the provision made for monks of all sects is noticeable only at Kanheri, Karle and Nasik. (Other details relating to *Chātudisa bhikhusaṁgha* are available in Shastri 1965, p. 145 and Dutt, S., 1924, p. 67 ff.).
184. Various redactions are available, but there appears to be close concordance among them in the contents and general treatment of the subject matter (Frauwallner 1956, p. 2, 4 and 68 ff.).
185. Shastri 1965, p. 117; *2500 years of Buddhism*, p. 162.
186. Kern 1898, p. 73 ff; Dutt. S., 1924, p. 95, etc.
187. Shastri 1965, p. 112.
188. *Ibid.*, p. 115.
189. *Ibid.*, pp. 116-17.
190. For example the gift of Veluvanārāma, Jetavana at Śrāvasti, the construction of sixty *viharas* by the merchants of Śrāvasti (Shastri 1965, p. 117).
191. *Mahāvaṁsa* indicates that *vassāvāsa* starts on the 13th day of bright half of the month of *Aṣādha* (chapter XVI-2) and ends on the full-moon day of the month of *Kārttika* (Chapter XVII, 1). For the origin of the *vassāvāsa* as described in the *Mahāvagga*, see Shastri 1965, p. 136 and Dutt, S., 1924, p. 101.
192. Dutt, S., 1924, p. 101; the evidences relating to architecture available in Buddhist literature have been summarised in Acharya, 1927 b, p. 9 ff.
193. For details see Shastri 1965, p. 118.
194. Probably this stage when the monks still continued such practices is indicated by a few single cells in the Jivadan-Virar hill where they are small and open and where again there is no stone bed cut in them (see p. 130).
195. *e.g.* Kanheri Nos. 16, 18, 21, 22, 26, 28; Nasik Nos. 10, 12, 13, 15, 17.
196. Dutt, S., 1924, p. 90, 112.
197. *e.g.* See p. 70, 173.
198. See p. 220.
199. See Kern, 1898, p. 81 ff. and Dutt, S., 1924 103 ff. for gradual changes in the *Vinaya* rules made to suit to the changed way of life of the order. *Mahāvaṁsa* provides a good picture of the monastic life as was prevailing in the early centuries of the Christian era.
200. Dutt, S., 1924, p. 146.

201. The occurrence of *Buddhapāda* has not been noted in western Indian caves. Instances of *nāga* representation is known from Chaul, Kondivite, Kanheri, Nasik and Pitalkhora only. There is only one instance of representation of *chaitya-vṛksha* (*e.g.* Junnar-Ganesh Pahar 34). Architectural monuments housing these are unknown. Could this be due to the differences in sectarian beliefs or something else ? This is a point we have not been able to decide.
202. Information from Sri M.N. Deshpande.
203. This idea of break in rock-cut architectural tradition between the Hīnayāna and Mahāyāna stages, initiated by Fergusson and Burgess (1880, p. 184-85) has been accepted by most of the scholars (Brown 1941, p. 68; Coomaraswamy, 1965, p. 65; Dehejia 1972, p. 9, etc). However, it may be noted that Fergusson and Burgess themselves were not convinced of their theory as in another page of the same work (p. 170) they refer to the Buddha images appearing in the 1st century A.D. and many so called Hīnayāna monuments were also made in the 1st and 2nd centuries A.D. according to them.
204. Dutt, N., in Majumdar and Pusalkar 1953, p. 388.
205. Sarkar, 1960, p. 16.
206. An early representation of Buddha is seen, however, on the base of the lion pillar at the Kanheri *chaitya* hall (p. 541).
207. Junnar No. 29; Kanheri Nos. 16, 20, 21, 22, 26, 31, 32, 36; Karle No. 33; Nasik No. 15.
208. The causes and circumstances for the break in cave architecture for a period of two centuries and the sudden revival of the same later have not been explained so far. The whole problem requires reconsideration. These aspects have been touched upon to a certain extent in Chapters VII and VIII.

PART TWO

# Aids to the Reconstruction of Chronology

*Chapter IV*

# *Direct Evidences for the Reconstruction of Chronology*

Some evidences which can provide an idea of the dates of desired items directly, without depending on relative phenomena like style-evolution or palaeography, are available for the Western Indian rock-cut monuments too. But unfortunately in the present context they are not of a clinching nature. There are many inscriptions associated with these monuments, but none of them is dated in an known era. A set of radiocarbon dates is available for a monument, but there is a general feeling among scholars that the radiocarbon dates, as they are presented today, are too crude to be useful for the histororical period. So, we would like to make it clear before hand that the present chapter does not aim at deciding absolute dates of making of any of the monuments. Here is an attempt to present the evidences, whatever their nature be, and to find out the degree of utility of the same towards the reconstruction of chronology of rock-cut monuments.

## HISTORICAL DATES

There are a few inscriptions in Western Indian caves which mention the contemporary rulers of the region. The dates of making of such of those monuments which have foundation inscriptions can be postulated on the basis of the dates of the rulers, which have been arrived at in the previous chapter. They are as follows :

| *Monument*[1] | *Inscription*[2] | *King and Year* | *Date*[3] |
|---|---|---|---|
| Nasik I9 —a *leṇa*[4] | No. 22 | Kṛiṣṇa | *C.* 205-187 B.C. |
| Nanaghat 1 —a *maṭapa*[5] | Nos. 1-7 | Sātakarṇi I | *C.* 187-177 B.C. |
| Nasik 10 —a *leṇa* | Nos. 10-14 | Nahapāṇa year 42 | A.D. 120 |
| Junnar-Manmodi 7 —a *maṭapa* | No. 3 | Nahapāṇa year 46 | A.D. 124 |
| Nasik 3 —a *leṇa* | Nos. 2, 3 | Gautamīputra Sātakarṇi year 18 and 24 | A.D. 124-130 |

*contd.*

| *Monument*[1] | *Inscription*[2] | *King and Year* | *Date*[3] |
|---|---|---|---|
| Nasik 24 —a *leṇa* | No. 24 | Vāsiṣṭhīputra Puḷumāvi year 2 | A.D. 132 |
| Nasik 2 —a *leṇa* | No. 1 | -do- year 6 | A.D. 136 |
| Karle 15 —a *leṇa* | No. 33 | -do- year 24 | A.D. 154 |
| Nasik 23 —a *leṇa* | No. 23 | Sri Yajña Sātakarṇi year 7 | A.D. 203 |
| Kanheri 21 | No. 16 | -do- year 14 | A.D. 212 |
| Kanheri 74 —a *leṇa* | No. 29-30 | Māḍharīputra Sakasena | end of 3rd century A.D. |

A few more inscriptions in caves record the additions done to the monument or donations made at a later date than the making of the caves. These are of help in determining the dates of additions or the upper date limits of caves. Such monuments are :

| | | | |
|---|---|---|---|
| Karle 8 *chaitya* hall | No. 17 | Nahapāṇa | earlier than A.D. 124 |
| Nasik (addition) | No. 4 | Vāsiṣṭhīpura Puḷumāvi year 19 | A.D. 149 |
| Kanheri 3 (final stage of the main *chaitya* hall) | Nos. 4-5 | Srī Yajña Sātakarṇi | *C.* A.D. 196-225 |

The acceptance of these dates for the respective monuments depends entirely upon the validity of the historical chronology we have suggested. In view of the nature of date availabe for the reconstruction of historical chronology even if doubts are to be raised with regard to the initial date and the total span of Sātavāhana rule, we have shown elsewhere how all the sources like the literary, epigraphical and numismatic are well in agreement with regard to one point, that is the relative chronological position of the various kings of the dynasty (p. 21). Hence, even if we agree with regard to this point only, a point which has not been disputed by any historian so far, here we have a set of monuments arranged in a relative chronological order. This can provide a succession of stylistic data, consisting of concomitant architectural and decorative material associated with each one of the above caves, useful for building up and verifying the style-sequence of monuments. This itself is a valuable aid to art-history in the context of early rock-cut monuments of Western India. And again, in this context and purely with reference to art history, there is little harm in provisionally accepting the above dates as a working hypothesis. Even if dates of individual kings, and hence of the monuments, are to be changed in view of any fresh data forthcoming they are likely to shift at the most enblock and would not materially affect the relative style-chronology based on this.

## RADIOCARBON DATES

Three radiocarbon dates are known for the wooden remains in the *chaitya* hall at Karle. They are :

(A) 2240±150 (290±150 B.C.) for a wooden pin[6]

(B) 2180±95 (230±95 B.C.) } for the wooden ribbing[7]

(C) 2075±100 (125±100 B.C.) }

The nature of dates offered by the radiocarbon method, as seen above, shows that it is difficult to rely upon the central dates excluding the margin of error. As all the dated pieces come from the wood-work of the same *chaitya* hall it cannot be guessed as to how wood cut in a distance of more than 185 years (290-125) could have been used together. So this feature of radiocarbon dates curtails their utility for finer dating.[8]

But when a series of dates is available as in the case noted above, we feel, that its indication can not altogether be overlooked. Scientists consider that the true age of an object lies fairly probably (in 2 cases out of 3) within the limits of one standard deviation, and probably (19 cases out of 20) within the limits of two standard deviations and highly probably (997 cases out of 1000) within the limits of three standard deviations, and that 'for ordinary purposes one can say that there is a reasonable certainty that the true result lies within the limits of two standard deviations from the experimental value.'[9]

Applying this standard deviation factor to the Karle dates an interesting fact emerges. The dates would be :

| | *Range of one standard deviation* | *Range of two standard deviations* |
|---|---|---|
| (A) 290±150 B.C. | 440 to 140 B.C. | 590 B.C. to A.D. 10 |
| (B) 230±95 B.C. | 325 to 135 B.C. | 420 B.C. to 40 B.C. |
| (C) 125±100 B.C. | 225 to 25 B.C. | 325 B.C. to A.D. 75 |
| Span of time common to all ranges. | 225 to 140 B.C. | 325 B.C. to 40 B.C. |

It can be seen from the above that the upper limit of none of the three dates, even with two standard deviations does not shoot beyond A.D. 75. So there is very little possibility of the Karle *chaitya* hall having been made after the 1st century A.D.

It can also be seen that the span common to all the three dates in the two-standard deviation ($2\Sigma$) group is 325 B.C. to 40 B.C., and the one standard deviation ($\Sigma$) group is 225 to 140 B.C. If we accept the principle of probabilities mentioned above these ranges become more meaningful. If there is a probability of 2/3 in the case of a range of one-standard-deviation ($\Sigma$) of a single date, there is a greater probability of the true date being within the common span covered by the ranges of three dates. So it is possible that the wood employed in the *chaitya* hall at Karle having been cut in a period between 225 and 140 B.C. If a certain time for seasoning too is allowed the fixing of the wood work may not have been done say after 120 B.C. While this could be taken as a reasonable conjecture, when this logic is applied to the two-standard-deviation range ($2\Sigma$) we feel, the indication obtained therein can hardly be doubted. In this case, the common span covered by the dates is 325 to 40 B.C. There appears to be little possibility to bring down the date of the Karle woodwork beyond the end of 1st century B.C.

Recently another method has been suggested for computing the mean date and error for a set of radiocarbon dates determined for a single archaeological event.[10]

If the dates are A±dA, B±dB and C±dC;

$$T \pm dt = \frac{\left[\left(\frac{A}{dA}\right)^2 + \left(\frac{B}{dB}\right)^2 + \left(\frac{C}{dC}\right)^2\right] \pm \left[\left(\frac{A}{dA}\right)^2 + \left(\frac{B}{dB}\right)^2 + \left(\frac{C}{dC}\right)^2\right]^{\frac{1}{2}}}{\left[\frac{A}{(dA)^2} + \frac{B}{(dB)^2} + \frac{C}{(dC)^2}\right]}$$

Inserting the three rediocarbon dates of the Karle wood work (viz. A±dA=2240±150; B±dB=2180 ±95; C±dC=2075±100) the result obtained[11] is 2151±63, *i.e.*, 201±63 B.C.

Again applying the single-deviation factor ($\Sigma$) the range of date would be 264 to 138 B.C. With the two standard deviations, the probability of which is about 99.7 per cent, the range obtained is 327 B.C. to 75 B.C. It is most unlikely that the true date is beyond this range (Chart I).

These radiocarbon and statistical values can serve as clues for finally fixing the date of the making of the Karle *chaitya* hall, which, however, will have to be done with reference to other criteria too.[12]

## NOTES AND REFERENCES

1. All numbers of monuments refer to those used in Chapter VII.
2. The number of inscriptions are those listed up under relevant sites in Appendix I.
3. *cf.* Table 2, p. 23, above.
4. *Leṇa* is a dwelling cave.
5. *Maṭapa* is *maṁtapa;* a simple hall. The associated inscriptions here are not foundation inscriptions. But these appear to be of the same age as the cave itself, However, see p. 53.
6. Barker and Mackay 1964, p. 55.
7. Agrawal and Kusumgar 1966, p. 448. The wood work in the *chaitya* hall at Bhaja too has been dated by radiocarbon method. But the sample taken for that appears to belong to the insertions done during repairs in the 19th century, and thus has yielded a very late date. So this has been ignored here.
8. It has been well-recognised that the use of radiocarbon method in the field of historical archaeology is limited, while it is highly useful for prehistoric periods where differences in the span of about a century or two (as in varied central dates as well as $\pm$ standard deviations) are of a negligible nature.
9. Barker 1958, p. 259 ff.
10. Kusumgar 1973.
11. I am thankful to Dr. Pakshirajan, Professor of Statistics, University of Mysore, for kindly working out the value.
12. If more determinations are also to be obtained for samples from different centres—all processed under common experimental conditions—we feel, there would be a good series of data utilizable for the reconstruction of the chronology of rock-cut architecture (see note 16 to Chapter 1).

*Chapter V*

# *Palaeography*

Out of the six hundred and odd monuments under consideration, 128 of them bear inscriptions.[1] The number of excavations that are datable on the basis of direct evidences is hardly twelve (Chapter IV). So, in order to fix the age of the monuments, at least relatively, the palaeographical characteristics borne out by the inscriptions would be of help. These can be futher used as verificatory material for building up relative sequences of architectural types, members and motifs.

## EARLY ATTEMPTS AND PROBLEMS IN METHODOLOGY

The fact that the Brahmī script used in the inscriptions of the period developed gradually from the Aśokan Brahmī (which is the earliest known) and that the various inscriptions can be placed in a relative chronological sequence by tracing the evolution of letter-forms in a logical sequence of development have been well-recognised. Burgess was the first to work on these lines as far as the Western Indian cave inscriptions are concerned.[2] His pioneering attempt has a great value as the one based on pure palaeographical data without being influenced by knotty historical considerations that were to come up later. The stages of evolution of letters given by him in Pl. V of his work still stand valid. The works of Ojha (1918) and Bühler (1904) that followed the above are also useful to a certain extent but they being on an ambitious scale could not devote special attention to the Western Indian cave inscriptions. Bühler and his contemporaries like Fleet and Hoernle introduced a number of new ideas useful for understanding palaeographical evolution, like the recognition of development of regional varieties, the changes in technological process in writing and their effect on letter-styles, etc.[3]

Almost at this stage these scholars as well as the historians began to recognize the value of palaeographical development as providing a time-scale against which the various undated inscriptions could be placed and thus dated, so that these could be used further for historical chronology. This is an understandable step. But, unfortunately, tendencies that developed later failed to appreciate the nature and limitations of palaeography. As and when the chronological positions of kings and historical events were to be put forth on the basis of various historical data, the dates of the attendent inscriptions began to be dragged to a chronological position suiting their assumptions. When sufficient palaeographical evidence is lacking in the very region, long range comparisons of letter-styles (say from Taxila to Mathura, or Hathigumpha to Nanaghat, etc.), were put forth. The whole study has been made slushy by such attempts.

This situation is well-illustrated in the case of the dating of the famous Nanaghat inscription (No. 1). This inscription and Hathigumpha inscription of Khāravela were compared palaeographically as some

possibly connected or connectable historical event is available in the two. As and when the idea of date of Khāravela of the Hathigumpha inscription changed, the date of the Nānāghat inscription was also suitably adjusted. Similar attempts are also seen with regard to the comparision between the Nanaghat record and the Sanchi inscription mentioning a Śātakarni. As a result the date of the Nanaghat inscription is placed variously between a long span running from early 2nd century B.C. to the latter half of the Ist century A.D.[4]

Recently Dani[5] has reappraised the position, mostly on palaeographical grounds. He has taken the changes in technique of writing and its effect on letter-styles as an important basis. In the context of palaeography of the present period it is the introduction of the reed-pen and the consequent appearance of head-marks of letters. Even though he recognises the existence and independent development of regional writing styles, the single premise he has taken into account has led him to anomalous conclusions. As for example, while the inscriptions of Nahapāṇa, Gautamīputra Śātakarni, Vāsiṣṭhīputra Puḷumāvi and Śrī Yajña Śātakarṇi, which display not many significant changes in letter-styles are placed in a span of about a century (2nd century A.D.), and in the same run the inscriptions from Bhaja, Ajanta, Nasik (early) Nanaghat and many others containing distinct variations and many developmental steps (chart II) have all been huddled within the span of Ist century A.D. He, however, recognises that there are developmental stages in these, but by a strange logic assigns them to first half, middle or latter part of first century A.D. How the writing tradition could change extensively in the course of just three or four decades is not known. The well-dated inscriptions of the later periods at least do not show such a feature.

Very recently Vidya Dehejia[6] has made an elaborate study of Western Indian cave inscriptions. She has recognised the defects in Dani's approach (and the anomalous position to which the art-historian is led to by his results). She has questioned the most important premise of Dani that of the date of introduction of the reed pen. Dehejia's critical analysis of the inscriptions of this region has led her to arrive at fairly consistent sequences of groups of inscriptions. But the method she has utilised for fixing epochal dates is not convincing. She has attempted to suggest dates for early Western Indian inscriptions on the basis of comparisons with inscriptions from distant regions as central India, Mathura and Gujarat. The defects of such a method have been stated already (p. 6).

## PRESENT APPROACH

Barring minor variations, the results of Burgess, Bühler, Dani (to a certain extent) and Dehejia reveal that all of them are in agreement with regard to the relative chronological positions of important inscriptions and/or classified groups of inscriptions. They diverge widely with regard to the absolute or epochal dates fixed for them.[7] Even here, consistency is noticeable with regard to the inscriptions of the 2nd century A.D. and onwards. Major differences are to be seen in dates given for the early groups. The cause for this is understandable, that in the 2nd century A.D. dated or fairly datable inscriptions occur. So if similar data that could be used as time-style indexes are available for the whole period, atleast at a distance of about a century from one another, much of the difficulty would be overcome.

## DATA FOR IDENTIFYING TIME-STYLE STANDARDS

As the possibility of palaeographical sequences running parrallel in distant areas is remote as stated above (p. 6), the time-style indexes are to be selected seperately for different areas and this is possible when some independent data too are available for fixing some inscriptions in a chronological scheme. In this context, we feel, Western India is in a far better position than any other region in particular, so far as the early period is concerned.[8]

### *Historical data for dating royal inscriptions*

There are atleast 24 inscriptions which contain names of kings by whom or during whose reign they were caused to be carved and they are datable on the basis of the chronology built up in Chapter III,

as follows :

| *King* | *Year* | *Date* | *Inscription/s* |
|---|---|---|---|
| Kṛiṣṇa | | *C.* 205-187 B.C. | Nasik No. 22 |
| Nahapāṇa | | *C.* A.D. 119-124 | Nasik Nos. 10, 11, 13, 14; Karle No. 17 |
| -do- | 42 | A.D. 120 | Nasik No. 12 |
| -do- | 46 | A.D. 114 | Junnar No. 3 |
| Gauṭamīputra Śātakarṇi | | (*C.* A.D. 106/124-130) | Karle No. 19 |
| -do- | 18 | *C.* A.D. 124 | Nasik No. 2 |
| -do- | 24 | *C.* A.D. 130 | Nasik No. 3 |
| Vāsiṣṭhīputra Puḷumāvi | | (*C.* A.D. 130-158) | |
| -do- | 2 | *C.* A.D. 132 | Nasik No. 24 |
| -do- | 6 | *C.* A.D. 136 | Nasik No. 1 |
| -do- | 7 | *C.* A.D. 137 | Karle No. 18 |
| -do- | 19 | *C.* A.D. 149 | Nasik No. 4 |
| -do- | 22 | *C.* A.D. 152 | Nasik No. 5 |
| -do- | 24 | *C.* A.D. 154 | Karle No. 33 |
| Vāsiṣṭhīputra Śiva Śrī Puḷumāvi | | (*C.* A.D. 158-165) | Kanheri No. 72 |
| Gautamīputra Śrī Yajña Sātakarṇi | (date lost) | (*C.* A.D. 196-225) | Kanheri No. 4 |
| -do- | 7 | A.D. 203 | Nasik No. 23 |
| -do- | 16 | A.D. 212 | Kanheri No. 14 |
| Ābhīra Īśvarasena | 9 | A.D. 257 | Nasik No. 15 |
| Māḍharīputra Śakasena | 8 | (*C.* end of 3rd century A.D.) | Kanheri 29 and 30 |

It is seen from the above that sufficiently well datable inscriptions occur from the beginning of the 2nd century A.D. to the middle of the 3rd century A.D. Palaeographical comparisons so far as this period is concerned can be easily done. There is only one inscription (Nasik 22) which can serve as illustration of the characters of the beginning of 2nd century B.C. Further, there is a long gap of three centuries from the time of Kṛiṣṇa to Nahapāṇa and again a period of about a century or so after the time of Ābhīra Īśvarasena. The first gap, however, can be filled up partially with the help of the Nanaghat inscriptions and the earliest Karle records.

*Date of the Nanaghat inscriptions*

Out of the seven inscriptions from Nanaghat (Pls. 176, 177) the first one (No. 1) is a long record detailing the religious benefactions of a queen. The name of the king is lost. The others are short labels which were once associated with portrait sculptures of the members of the royal family (all the portraits are lost now). The first of these (No. 2) mentions Simuka, the founder of the Sātavāhana dynasty. Then was a figure, but there is no trace of its label. Then comes an inscription (No. 3) mentioning Devi Nāyanikā and (her husband) king Siri Sātakani. Then comes in order the names of prince Bhāya.....(No. 4), Mahāraṭhi Traṇakayira (No. 5), and princes Hakusiri (No. 6) and Sātavāhana (No. 7).

All the portraits, above the heads of which these inscriptions were seen, had been set in relief on the back wall of the cave. The arrangement of the portrait sculptures was in such a way that the figures of Nāyanikā-Sātakarṇi were to occur prominently in the middle. Among the portraits Sātakarṇi

is the only king who is shown along with his wife. Further, there is no other king depicted after Sātakarṇi, all the other sculptures being those of *kumāras* and of one *Mahāraṭhi*. The whole arrangement indicates that the set of sculptures may have been made during the time of Sātakarṇi whose figure and that of his wife were to occur prominently in the centre of the panel. Sātakarṇi's portrait is the 3rd from left, the first being of Simuka the first ruler of the dynasty. If the second, the label of which is now lost, could be considered as that of Kṛiṣṇa the second ruler of the dynasty the sequence of their occurrence becomes meaningful by fitting very well in sequence with the first three kings of the Āndhra dynasty mentioned in the *purāṇas*.[9] It can also be seen that palaeographically these label inscriptions are not much removed in time from the Nasik inscription (No. 22) of Kṛiṣṇa (chart II). Hence it can be construed that the portraits and their labels were made probably during or immediately after the time of Sātakarṇi I, whose date according to the chronology adopted by us is *C.* 187 to 177 B.C. (p. 23).

The larger inscription (No. 1) is very much damaged. The name of the king is lost. But here too circumstantial evidence provides help. The very position of the inscription, which commence in the left side wall and concludes in the right side wall, indicates that the carving of the same was done after the portrait sculptures were made. But the palaeographical features of the label inscriptions and the longer record are very much akin; despite the fact that there are slight differences they are not far removed in date.[10]

The text proper eulogises the achievements of a queen. Her name too is lost. But the importance given to Nāyaṇikā in the label inscriptions, she being the only lady to be depicted therein, the very occurrence of this record in that very cave with the portraits and labels, as well as the palaeographical proximity of this record and the set of label inscriptions, possibly suggest that the queen praised in the longer inscription could be Nāyanikā herself. The epithets associated with this queen, like *gaha-tāpasāya* and *charitabrahmachariyāya* (1. 5) indicate that by this time she may have been a widow. These circumstantial evidences and internal clues betray that the longer inscription could have been carved a little time after the death of Sātakarṇi I, but when his widow Nāyanikā was still living and leading a pious and austere life befitting a widow according to Hindu custom.

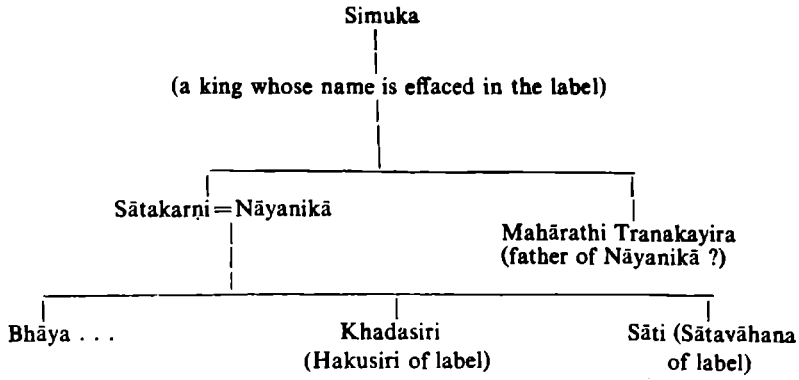
Bühler and Bhagavanlal Indraji who have discussed the problem of the Nanaghat inscription have shown that the persons of three generations met with in the labels can also be traced in the longer inscription. The persons that find mention in the longer inscription are :

Line 1. One Khadasiri (Vedisiri)[11] appearing immediately after the invocation.
Line 2. Then a great king who is an *apratihatachakra* and was possibly lord of Dakṣiṇāpatha.
Line 3. A Mahāraṭhi of the Aṁgiyakula.
Line 4. One Siri-Sa.....with possibly royal epithets. His queen who is the mother of

(*a*) (Khada) siri with high flowing epithets and
(*b*) Sāti described as *sirimata*

Comparing these names with the names in label inscriptions and identifying the queen here with Nāyanikā wife of Sātakarṇi, the whole sequence lends itself to easy explanation. In accordance with the practice in the early inscriptions (*e.g.* Nasik 4) the name of the ruler of the day appears first, immediately after the invocation. He is Khadasiri. Then the genealogical connections of the queen whose religious benefactions are to be recorded are given. The person that next appears can not be made out due to the fragmentary nature of the inscription. He could be Śātakarṇi I husband of Nāyanikā. It is quite natural that the dead husband of the queen whose benefactions are being recorded in the present inscription is praised with high flowing epithets like *apratihatachakra* and *Dakṣhiṇāpathapati*. Next comes the name of the Mahāraṭhi of the Aṁgiya Kula who must have been closely related to Nāyanikā. Then comes the mention of the queen along with her husband *siri Sa* . . . (evidently Sātakarni I), to introduce her as the mother of (Khada) siri and Sāti, the *Sirimata*.

The sequence of names here tallies well with the sequence in which various members of the royal family have been depicted in the portrait panel.[12] So, varying slightly from the genealogy reconstructed by Bühler and Indraji, the following relationships could be established for the persons, taking all the Nanaghat inscriptions together into consideration.




Comparing this genealogy with the *purāṇic* list of kings the position becomes clear. As stated already the first three names are those of the first three rulers of the dynasty. The Purāṇic lists inform that Sātakarṇi I was succeeded by Pūrṇotsaṁga (variant readings : Pūrṇōtsarga, Pūrṇāsaṅga, Pūrṇesaṅga, Pūrṇamāsa, etc.). The latter part of his name *Aṁga* is suggestive. The person could have been the Mahāraṭhi who is of the *Aṁgiya* family mentioned in Nanaghat No. 1, who was closely related to the king to find his mention in the genealogical description in the beginning of the inscription and to have his portrait along with those of the members of the royal family. The most likely possibility is that he held the throne after Sātakarṇi's death, possibly due to the fact that the rightful heirs to the throne were very young.[13] By the time of Pūrṇotsaṁga's death, it appears, Bhāya... the eldest son of Sātakarṇi I was dead and hence does not figure in Nanaghat No. 1. So Pūrṇotsaṁga was succeeded by Skandastaṁbhi of the *purāṇas*. It is this ruler who is mentioned prominently as Khadasiri (Skanda=Khada) immediately after invocation in Nanaghat No. 1, suggesting that he was the ruler of the day when that inscriptions was caused to be written. Hence the date of the longer inscription at Nanaghat (No. 1) falls in 159-141 B.C. (p. 23).

For easy reference, the dates of Nānāghat inscriptions may be set as follows :

| | | |
|---|---|---|
| Nanaghat Nos. | 2-7 | *C.* 170 B.C. |
| Nanaghat No. | 1 | *C.* 150 B.C. |

*Date of the earliest Inscriptions from the Karle Chaitya hall*

The Karle *chaitya* hall has inscriptions of various dates and it is obvious that the earliest of them would be those recording the donations of the essential parts of the cave.[14] Such would be the inscriptions on the pillars inside the *chaitya* hall. Comparing the palaeographic features of these records (Chart II), it can be made out that these belong to a time sufficiently later than the date of the Nanaghat inscription of *C.* 150 B.C. and much earlier to the time of Nahapāṇa's records of *C.* A.D. 120.

On the evidence of radiocarbon date for the wood-work in the Karle *chaitya* hall, it has been stated already (Chapter IV) that its true date lies within 325-40 B.C., which is the common span covered by the two-standard-deviation range of the three C14 dates available, or more probably within the $2\Sigma$ range of the computed date of the three dates, *i.e.* within the range of 327-75 B.C. (p. 49).

The Karle *chaitya* hall has a consistent plan in its measurements and features, as to show that the whole cave, so far its architecture is concerned, is the result of a single design and possibly continuous execution. Hence, the interior pillars on which the inscriptions are seen and the ceiling in which the wooden beams are inserted may have been done almost together. This leads to the conclusion that the true date in the radiocarbon date-span of 327-75 B.C. must be somewhere in its latter part, sufficiently later than 150 B.C., the date of the Nanaghat inscription, to account for the palaeographical developments seen in the Karle pillar inscriptions. It could be anywhere around 100-80 B.C. As any early date

within the date-span of 327-75 B.C. is ruled out due to the above consideration, even if we take 75 B.C. as the true date, *i.e.* the date of the cutting of trees from which the beams have been made (for which event the radiocarbon date is applicable), and even allowing some span of time for the seasoning of the wood before their insertion in the ceiling, the date of the architectural work in the Karle *chaitya* hall can not be taken beyond the middle of the 1st century B.C. In view of the general trends of palaeographical development in Western India too (Chart II), this date for the Karle pillar inscriptions looks consistent. For easy reference, the date of the Karle inscriptions could thus be taken as *C.* 60 B.C.

So, these evidences from Nanaghat and Karle supply useful datable records for palaeographical verification for the three century gap between Kṛiṣṇa and Nahapāṇa, as follows :

| | |
|---|---|
| *C.* 170 B.C. | Nanaghat Nos. 2-7 |
| *C.* 150 B.C. | Nanaghat No. 1 |
| *C.* 60 B.C. | The inscription on the interior pillar of the Karle *chaitya* hall Nos. 5-11, 20-31. |

*Palaeographical Analysis of Inscriptions*

Chart II provides the letter-forms of the datable records as well as of a few others which are significant in tracing the developmental stages of the script. The chart is self-explanatory.

However, some of the features of importance, useful for building up the palaeographical evolution and chronology may be analysed herein with reference to the important datable inscriptions.

*CHART LINES 1-3*

*C. 250 B.C. Aśoka's inscriptions*

The three series of letter-forms of Aśoka's time given in the chart have been selected with a view to provide an idea of the features of variance in letter-types during Aśoka's time itself. Upasak, Dani, etc., have argued that there is no strict regional peculiarities in the script and that no particular type can be specifically assigned to any particular region.[15] Whatever be the situation, the fact that variants have begun to occur in Aśoka's inscriptions is significant. So we have illustrated here letters from the Aśoka's inscription from Sopāra which is in the very region under consideration and Maski and Girnar edicts which are just in the neighbourhood of the territory of the Sātavāhanas. With reference to these earliest forms of writing available for the region further evolution of letters could be recognised.

*CHART LINE 7*

*C. 200 B.C.*[16] *Inscription of Kanha (205-187 B.C.) Nasik No. 22* (Pl. 201)

(i) Comparing this with the inscriptions of Aśoka, it can be seen that this still retains many of the old letter-types intact. The letters particularly noticeable in view of changes that have appeared later are *Ga* and *Ta* in which the angular forms have continued.

(ii) Differences are seen only in the case of *Pa* and *La*. In both there is a tendency to slightly shorten the length of the vertical line.

Medial *i* shows a definite deviation. The right-angle shape is lost and it is now a small slightly curved upward stroke.

*CHART LINE 9*

*C. 150 B.C. Nāyanikā's inscription, Nanaghat No. 1.*

(i) Continuation of the earlier types is seen in :
*A*, (i), *Ka, Kha, Cha, Chha, Na, Ṭa, Ta, Tha, Da, Dha, Na, Ba, Ma, Ya, Ra, Va, Sa* and *Ha*.

(ii) Variants too occur along with the old forms :

*Ka, Na, Ra* : Have a tendency to lengthen downwards the verticals.
*Pa, La, Ha* : Show a tendency to reduce the upward length of the verticals.
*Kha* : Has a slight bend of the right bottom.
*Cha* : The lower semi-circle is compressed to the form of an irregular pear.
*Da* : The central semi-circle opening to left is somewhat compressed.
*Va* : The lower circle takes the shape of a triangle with rounded corners.

(iii) Definite change is visible in :

*Ga* : Instead of the angular type, one with the angle part rounded and also a regular parabolic form appear.

*CHART LINE 13*

*C. 60 B.C. Early inscriptions from the Karle chaitya hall (Nos. 4-11, 20-31).*

These show significant variation from the early inscriptions with two easily recognizable features.

A. The letters generally bear a head-mark, achieved by slightly thickening the top ends of verticals.[17]
B. There is a general preference to regular geometrical forms, like straight lines, regular angles, square, circle and semi-circle. The squarishness of many letters is emphatical.

Apart from these, some general observations may be made on the letter forms.

(i) Continuity of earlier forms is seen in :
  (a) Letters which already had geometrical shapes as in *U, Ṭa, Ṭha, Ṇa, Tha, Dha, Na, Ba, Ya* and *Ra.*
  (b) Other letter types to continue the earlier features are :
  *Ma* with round bottom (occasionally), *Sa* and *Ha.*

(ii) Some types which were appearing as variants in the early inscriptions become common and standard ones :
*Ga* with rounded top (the earlier angular type went out of vogue)
*Ja* with horizontal lines and straight or angled back.
*Ma* and *Va* with triangular bottom.

(iii) Characteristically new forms (compared to Nasik 22 and Nanaghat 1) appearing here are to be seen in the case of :

*A* : A slight downward elongation of the vertical is seen.
*Ka* : Dagger shape is achieved with the lower line tapered and slightly elongated.
*Cha* : Peculiarly the finer shape of this letter seen earlier is lost and an irregular pear shape is seen with a small vertical rising above, slightly towards right.
*Da* : Sometimes rounding of corners is seen.
*Bha* : A semi-circle with a straight line rising from the apex is the general type. (The earlier angular variety does not appear any more).
*Ra* : Lower elongation and tapering is seen as in *Ka.*

(iv) Tendencies of change are visible in the following :
  (a) An attempt to equalise the verticals of several letters and/or introducing angles instead of curves is seen in *Gha, Pa, La* and *Ha.*
  (b) Definite transitional forms with the occurrence of many variants are seen in the case of :

*Ta* : Semi-circle with the vertical raising from the apex; two distinct curves meeting at a point from which the vertical rises; a straight line to left with a curve slanting from its middle and tending downwards.

*Da* : The central semi-circle variety is lost but a slightly compressed curve appears in its place, the lower line is either straight or sometimes it shows a tendency to curve to right.

*CHART LINE 15*

*C. A.D. 120-124 Inscription of Nahapāṇa*

(a) *Nasik variety (Nasik Nos. 10-14)*

All the inscriptions of Nahapāṇa's time found in the Nasik caves are beautifully written and generally continue the tradition of squarishness and head-mark noticed previously in the Karle records.

Noticeable features are :

(i) Continuity of earlier (Karle) varieties is seen in *A, I, U, E, Ka, Ga, Ṭa, Ṇa, Tha, Dha, Na, Pa, Ba, Ra, Va, Sa.*

(ii) Equalising of the verticals and introducing angles which were just tendencies in Karle have become regular feature here in :
*Gha, Ja, Ña, Pa, Pha, Ma, Ya, Ṣ, Ha.*

(iii) Other changes are visible in :

*Chha* : Now this is a horizontally placed figure '8' with the short vertical rising from the left circle.

*A, Ka, Ra* : A slight bend to left is visible in the elongated tails.

*Ta* : The semi-circular type is standardised.

*Da* : Now the standard form is a right facing lower curve with a left slanting line on top.

*Bha* : The geometrical shape of the earlier variety is now replaced by a type having a compressed cushion shape, open bottom and short slightly bent vertical line rising up from its right side.

(iv) The method of delineation of medial vowels and conjunct consonants is generally the same as seen in earlier inscriptions. Medial *I* is indicated by a small semi-circle, opening to left, sometimes with a slight rise, attached to the top of the letters. For *Ī* the bottom arm of the *I* symbol is slightly extended obliquely.

*CHART LINE 16*

*C. A.D. 124 Inscription of Nahapāṇa*

(b) *Junnar-variety (Junnar No. 3)*

The letters are practically similar to those in the Nasik variety except for the following differences :

*A* : The vertical stroke bends much to left. The lower prong of the left stroke is slightly curved.

*Kha* : The left bend is longer. At the bottom of the letter is a small triangular attachment.

*Chha* : The vertical stroke rises from the middle knot of horizontal '8'.

*Ta* : In the two instances of its occurrence one is similar to the Nasik type. In the other the vertical stroke rises from the apex of the semicircle.

*CHART LINE 17*

*C. A.D. 120 Inscription of Nahapāṇa*

(c) *Karle variety (Karle No. 17)*

This inscription shows a number of divergences from its contemporary varieties seen in Junnar and Nasik. The inscription, however, is written with less care than what is bestowed on the others of the

same donor (Uṣavadata). Generally there is less emphasis on squarishness; for example *Ja* of curved side type is retained; *Ha* is more slanting.

*CHART LINE 18*

*C. A.D. 124 and 130 Nasik inscriptions, Nos. 2 and 3 of Gautamīputra Śātkarṇi, year 18 and 24.*

These inscriptions belong to the same period as those of Nahapāṇa. The letters are also almost of the same type; still a few differences are noticeable. It appears the characters used in these inscriptions represent the script that was in use locally in the Sātavāhana territory while those of Nahapāṇa's inscriptions were written by the scribes employed by the Śaka rulers who may have been brought up in a different tradition, probably in a different area. The possibility of a local script-tradition being prevelent is also indicated by the Karle inscription of Nahapāṇa which, as shown above, displays some differences from the standard Kṣatrapa script seen in the Nāsik inscription of the same ruler. Karle No. 17 (of Uṣavadata) has also certain features comparable to the inscriptions of Gautamīputra Sātakarṇi.

The main features recognizable as different from the Kṣatrapa scriptal tradition is the lesser emphasis on squarishness and regular geometrical forms, eventhough the length-breadth evenness is almost maintained in many of the letters.

The following comparitive items provide an idea of the relation between the local (Sātavāhana) script and the contemporary Kṣatrapa (Nahapāṇa) variety.

(i) (a) Common forms between Nahapāṇa and Gautamīputra's inscriptions are :

*A, U, E, Ka, Kha, Ga, Gha, Cha, Chha, Ja, Ña, Ṭa, Ṭha, Ḍa, (Ḍha), Ṇa, Tha, Da, Dha, Na, Pa, Bha, Ma, Ra, La, Va, Sa.*

(b) In the case of the following, variants too are noticeable.

| | |
|---|---|
| *A* | : Sometimes the lower left prong is turned inwards in hook shape. |
| *A, Ka, Ra* | : Sometimes show a little more elongation of the bottom bend. |
| *Gha* | : Sometimes the central prong is shortened. |
| *Ja* | : The curved side *Ja*, as well as the type with angles formed by three prongs occur. |
| *Dha* | : The regular reversed 'D' shape is not always maintained. Often it looks like an irregular triangle with rounded corners. |
| *Na* | : Sometimes shows slight bend of the lower line. |
| *Pa* and *Ba* | : The left arm is sometimes bent in the middle. |
| *Ma* and *Va* | : The types with circular bottom, instead of the triangular alone, also occur. |

(ii) The following occur consistently in a way different from the standard Kṣatrapa.

| | |
|---|---|
| *I* | : Has three horizontal lines, than dots. |
| *Chha* | : The vertical line rises from the central knot, instead of the left circle as seen in Kṣatrapa variety. |
| *Ta* | : The vertical prong rises from the apex of the semi-circle. |
| *Ya* | : Has an inward bend of the left arms. |

(iii) In two instances medial sign opens towards right, than the usual left facing position.

*CHART LINE 19*

*C. A.D. 149-152 Inscriptions of Vāsiṣṭhīputra Puḷumāvi*

*Nasik Variety (Nasik Nos. 4-5)*

(Vāsiṣṭhīputra's Nasik inscriptions 1 and 24 of *C.* A.D. 132 and 136 are in the same characters as those of Gautamīputra Sātakarṇi.)

Nasik Nos. 4 and 5 of A.D. 149 and 152 also have the general characteristics of Gautamīputra's inscriptions. But the letters appearing as variants in Gautamīputra's inscriptions become regularly

established here. In these cases the earlier Nahapāṇa types hardly appear except for a single instance each of *Ta* and *Chha* where the vertical strokes rise from the left. Some new features appearing along with may be noticed.

(i) Some variants occur in :

*Ja* : The English 'E' type *ja* as well as the types with angular and curved side too are seen.
*Dha* : Often occurs as a triangle.
*Ma* : Triangular as well as circular bottom types are seen.

(ii) Some letters appear with new features.

*Kha* : Has a small horizontal stroke to right below and looks like Arabic numeral 2, except for the fact that the lower horizontal line is short.
*Na* : The bottom line of this letter is bent down on either side slightly.
*Ba* : The left side line is slightly curved inwards.
*Bha* : Is invariably written with a straight line to right, and a horizontal or slightly curved line running to left from a point a little above the bottom of the straight line and ending with downward bend. This looks like a bench with straight back and curved seat.
*La* : The smaller left line is first slanted to right and the top portion of that bends to a hook shape. The long line to right is also slanted to right and elongated and bent at the top.
*Ha* : Always occurs with an inward bend in the middle of the left arm.
*I* medial : Always occurs as a slanted 'C' on the top of the letters.

*CHART LINE 20*

*C. A.D. 150 Inscription of Vasiṣṭhiputra Pulumavi, Karle Variety*

The general features noticed in the Nasik variety continue here also. But there appears to be still lesser emphasis on geometrical shapes. Many show cursive varieties.

Distinct features are seen in the following :

*Ka, Ña* and *Ra* : Have their tail ends curved up.
*La* : Has the right vertical slanting inwards in contrast to the outward bend seen in some earlier inscriptions.

*CHART LINES 21-22*

*A.D. 196-225 Śrī Yajña Śātakarṇi's inscriptions (Nasik No. 23, Kanheri Nos. 4, 14)*

These inscriptions belonging to a time five decades after the inscriptions of Vāsiṣṭhīputra Puḷumāvi have most of the so called variant forms well systematised. The features may be analysed as follows. (For the purpose the Nasik inscriptions datable to A.D. 203 has been taken into consideration mostly. Slight variations noticeable in the Kanheri record may be made out from the Chart, Line 22).

(i) Generally the squarishness and regular geometrical shapes are lost now. Even in characters having such a feature from the earliest times they have not been maintained. For example :

*U* : Does not remain a well-fashioned right angle.
*E* : In one case, it looks like a bun.
*Gha* : Neither the squarishness nor the equal size of the horizontal lines remains.
*Na, Na* : The bottom line begins to appear with a bend.
*Ṭha* : Looks like a triangle with rounded corners.
*Pa, Ba, Ha* : A slight bend of the left arm is seen.
*Ma* and *Va* : The triangle bottom is not invariable; though retained the corners are almost rounded.

(ii) Other notable features are :

*A,Ka,Na,Ra* : These letters with vertical lines are much elongated towards bottom and the end bent to left, some show even a tendency to curl upwards.

*Kha* : A small knot appears at the bottom instead of the horizontal line.

*Cha* : Gets a pointed tip to left.

*Chha* : The horizontal 8 remains but the vertical line now rises regularly from the left circle. The central stroke variety disappears.

*Ja* : Occurs more often with rounded back.

*Ta* : Along with the semi-circular bottom type a new one having a knot at bottom left makes its appearence.

*Ya* : An arc with a central stroke becomes a common type, though-some earlier types survive.

*Sa* : The earlier form survives, but a type, with the verticals equalised add the bottom left stroke to occur in line with the body, becomes common.

(iii) The method of adding medial signs and consonants continue but these features are regularised.

*I* medial : A thin elongated curve pressed like a tong is placed on top to open leftwards.

*I* medial : A three quarters circle placed on top to open rightwards.

*U* medial : This is very much elongated and bend leftwards at the tip.

*CHART LINE 23*

*A.D. 257 Nasik inscription (No. 15) of Ābhīra Īsvarasena, Year 9*

In the course of another five decades the letters have changed in their form slightly. A peculiarity noticed in this inscription is the retaining of forms seen in Nahapāṇa and Vāsisthiputra's inscriptions, like the triangular *E*, circular *Tha* and rectangular *Pa*. Further, the tails of *A, Ka, Ra* are still retained with a slight bend only, though a little upward twist is seen in the letters of Śrī Yajña. So it appears this is a variant script than the regular local Sātavāhana variety.

Still several previously unknown forms begin to make their appearance leading to the evolution of the southern alphabet of 4th and 5th centuries A.D.

The following features are noteworthy :

*Ka* : There is an indication that the upturning of the tail was already making its appearance.

*Kha* : The bottom knot seen in the earlier days has now become sufficiently enlarged to the shape of a triangle, and this has become the major part of the letters.

*Gha* : The stem is much shortened.

*Ṅa* and *Na* : Both these appear regularly now with the bottom line slanted both ways.

*Bha* : The stem is shortened; the lower part now attains hooked legs and double bend on back.

*Ya* : Compared to the left half, the right portion of the letter has become smaller.

*Va* : The vertical stem is much shortened.

*Śa* : This appears with a straight or curved stroke on the right arm inside.

*Sa* : A slight bend is sometimes seen in the bottom curve to left.

*La* : The left arm appears with a bent back, the bottom line shows somewhat an upward bend, the right arm is turned to left.

*CHART LINES 24-25*

*Late 3rd century or Early 4th century A.D. Kanheri Inscription of Māḍharīputra Sakasena (No. 29) and the Shelarwadi inscriptions (Nos. 1, 2).*

These inscriptions which belong to the latest stage in the evolution of the script as far as the period under our consideration is concerned show several distinctive features.

One aspect that is generally recognisable is that the emphasis on squarishness is completely lost. All letters generally appear in cursive forms.

The following features may be mentioned :

(i) Generally all letters with elongated lower verticals curl up towards left. (This feature which had already appeared sporadically before is now standardised). *e.g. Ka, Na, Ra* and medial *U*.

(ii) Even the regular geometrical shaped letters of the earlier period show cursiveness. *U, Ṭa, (Ṇa), Dha, Ba.*

(iii) The looped variety of *Ta*, the sickle shaped *Ṭa* and *Da* are to be noted specially.

It can be seen that these forms ultimately lead towards the southern variety of Deccan Brāhmī.

## EVALUATION OF PALAEOGRAPHY AS A CHRONOLOGICAL INDICATOR

The above analysis shows that there is continuous change in letter forms from time to time. While the general letter styles are easily distinguishable in long spans, as between that of Sātakarṇi I and Nahapāṇa, in shorter spans of time it is not easy. The process of change follows a pattern. First a few letter types appear as variants, along with the older forms. Than these variants themselves become established as regular items. A few more variants appear and then they become regular, and thus continuity and change are maintained. An idea of this process is of fundamental importance in attempting dating on the basis of palaeography. As certain types of letters continue for a length of time, just on the basis of occurrence of one or two letter-types of known date it will not be possible to date epigraphs to the very date or even very near that. At best, a span of time may be indicated for certain letter types. But certain letter types which go out of vogue completely after a time, (like angular *Ga* and *Ta*) are highly useful in determining the age of the inscriptions.

On the basis of 'tendencies', and particularly with the help of letters which are in the process of change—the so called test letters—certain general sequence in large time-brackets can be built up.

Such a sequence too is not of absolute value when individual inscriptions are to be considered, unless there is a regular verifiable data like that available for the 2nd century A.D. Even here, as noticed in the case of differences in Nahapāṇa's inscriptions at Nasik, Karle and Junnar, there is likelihood of various types appearing together. The cause for this, like the existence of regional sub-varieties, or the differences (as often noticed in many cultures) between the traditions of metropolitan centres and rural areas are to be taken note of. Further in a period witnessing alien culture influx, writing traditions of different areas may appear here depending on the donor who is causal to the carving of records (and sometimes even the scribes employed). A good instance to emphasise this fact is Ābhira Iśvarasena's inscription, in which case a number of letter types of Nahapāṇa's inscriptions appear, even though many of those types had gone out of vogue in the Deccan proper in the intervening time.

Though these factors reduce the utility of palaeography as a firm aid to the building up of the chronology of monuments, it can be used as a supporting evidence. However, when questions relating to the placing of any inscription in longer time-brackets is to arise, palaeographical dating is certainly useful. With this view in mind a general sequence of epigraphs of the area becomes a desideratum.

## CLASSIFICATION OF INSCRIPTIONS INTO EVOLUTIONARY GROUPS

Analysing the various inscriptions from Western Indian caves, they have been arranged in chronological groups in Chart III. The method employed for the purpose can be made out from Chart II, wherein several undated inscriptions, not discussed above, have been included in the proper places on the basis of letter-styles. For example, various inscriptions from Bhaja, Ajanta, etc., have been grouped with Kanha's inscription (Nasik 22). They belong to a time later than Aśoka for obvious reasons and should be certainly earlier than Nanaghat 1 wherein variants have begun to occur, particularly in letters like angular *Ga* and *Ta* and many others. Similarly it can be seen that Nasik No. 19, found in the *chaitya* hall at that place, bridges the gap between Nanaghat 1 and the earliest Karle inscriptions. It can be seen that in Nasik No. 19 various froms of Nanaghat 1 type continue, but along with them certain letters with the thickened head-mark and squarish types have begun to make their appearance. *Da* of an intermediate type too appears there.

Epochal dates for the various successive series have been provided with the help of dated inscriptions. It is certainly impossible to lay stress on the veracity of these date brackets. They are only to serve as aids for easy reference for the approximate chronological span to which the inscriptions in question may belong. There is every likelihood of a few inscriptions in each group falling away by two or three decades previously or succeeding to the terminal years of the bracket.

Certain subtler divisions too have been made in the case of several inscriptions or in groups. For example it can be seen from Chart II that the Karle inscriptions have been classified and shown in two separate lines. An apparent difference and possibly a stylistically developed stage can be recognised in the second group when compared to the first. Such attempts have been done with regard to many other inscriptions also in grouping them in sub-varieties of major groups. But, while there is a general indication of succession, we do not insist upon suggesting any absolute chronological span for the sub-divisions. The appearance of some earlier letter-types in later records as in the case of Ābhīra Iśvarasena's inscription forces one to be cautious. A general vagueness is apparent in palaeographical style which, however, is caused by various circumstances; the continuation of earlier tradition by some people (say older generation) or in a culturally backward region, and making their appearance along with the newer ones, and such other factors cannot be ruled out. However, when the chronological position of the sub-groups could also be substantiated by other evidences it appears it could be taken as a certainty.

The succession of major groups, however, stand on logical basis and these could be generally used as chronological indicators.

Charts II and III display the results of our palaeographical analysis. Chart II has been designed in such a way as to illustrate mainly the palaeographical features of the important dated or datable inscriptions from Western Indian caves. The inscriptions included not only provide an idea of the letter-styles prevailing in chronologically successive dates, but also, to a certain extent, an idea of variant palaeographical types prevailing at the same time. The few undated inscriptions utilised for this chart provide important link-forms of certain letters, thus facilitating the tracing of logical steps in palaeographical development.

Chart III presents the chronological positions of most of the inscriptions from Western Indian caves. The positions of the individual incriptions have been determined by analysing their palaeographical features and comparing with the features noticed in the dated inscriptions described above.

As a result the various inscriptions have been grouped into seven epochal series. Sub-groups have also been suggested, but we lay less emphasis on these. The major series have been organised as follows (also see chart III) :

SERIES I : *C.* 250 B.C.—175 B.C.
Inscriptions belonging palaeographically to a stage leading from the inscriptions of Aśoka towards the Nanaghat records. Typical varieties of letters are represented by Nasik No. 22.

SERIES II : *C.* 175 B.C.—125 B.C.
Inscriptions belonging palaeographically to a stage from Nanaghat No. 1 upto Nasik No. 20. Typical features of the series are represented by Nanaghat No. 1.

SERIES III : *C.* 125 B.C.—60 B.C.
Inscriptions falling between Nasik No. 20 and Karle 4-11. Typical varieties are as in Nasik No. 19.

SERIES IV : *C.* 60 B.C.—A.D. 100
Palaeographical stages leading from Karle Nos. 1-3 to the inscriptions of Nahapāṇa.

SERIES V : *C.* A.D. 100—A.D. 180
Inscriptions of the time of Nahapāṇa, Gautamīputra Sātakarṇi and Vāsiṣṭhīputra Puḷumāvi. (In this Series two variant types appear simultaneously. They are : (*a*) Kshatrapa (or northern) variety, and (*b*) Sātavāhana (or southern) variety.

SERIES VI : *C.* A.D. 180—A.D. 230
Inscriptions of the time of Śrī Yajña Sātakarṇi and those palaeographically tending towards the inscription of Ābhīra Īśvarasena.

SERIES VII : A.D. post 230
Typical examples are provided by inscription of Ābhira Īśvarasena (Nasik No. 11), Māḍharīputra Sakasena (Kanheri No. 21) and the Shelarwadi records.

## NOTES AND REFERENCES

1. See Appendix. Most of the caves contain one foundation inscription. A few, particularly those made by joint effort, have more inscriptions recording the donations of different parts of the cave by different persons (*e.g.* inscriptions in Ajanta 10, Pitalkhora 4). Some have records of donations made successively in different times (*e.g.* inscriptions in Nasik 3). Rarely, as in the Karle *chaitya* hall, records of the nature of both the varieties are seen. A few are stray inscriptions not associable directly with the individual rock-excavations.
2. Burgess 1883 a, p. 72. In the same year R.G. Bhandarkar also made a limited attempt to the study of the palaeography of the inscriptions at Nasik (BG XVI, p. 607).
3. Dani 1963, p. 5.
4. Gopalachari in Nilakanta Sastri 1957, p. 301; Sircar in Majumdar and Pusalkar 1953, p. 198 and 213; 1942, p. 186; Banerji 1931; Barua 1938; Chanda 1919; Jayaswal and Banerji 1930. Raychaudhuri (1950, p. 406) gives a good illustration of the nature of this approach. A similar attempt to provide a date for the inscription disregarding palaeographical clues can be seen in Gupta 1975, p. 59 ff.
5. Dani 1963, p. 65 and 93, Pl. VI, VII and IX.
6. Dehejia 1972.
7. It can also be seen that divergences in Dani and Dehejia's attempts are due mainly to the methods they evolved to find out the verifiable data.
8. Even in northern India right from the end of Mauryan rule to almost the beginning of the Gupta period (2nd century B.C. to 4th century A.D.), there are few securely datable inscriptions. There is no inscription which can be definitely assigned to any particular ruler of the imperial Śuṅga or Kāṇva lines. The genealogy and chronology of kings of many minor dynasties cannot be built up easily due to lack of sufficient data. Even though the royal inscriptions begin to appear during time of the Kuṣāṇas, the Kuṣāṇa chronology still remains a vexed problem. Probably the one exception is the Besnagar pillar inscription, which on the basis of the mention of the Indo-Greek king Antialcidas could be placed to *C.* 120 B.C. A similar position exists even in eastern Deccan and southern parts of peninsular India. Compared to this, the situation in Western Deccan in somewhat better. (In Gujarat and Malwa Śaka-Kṣatrapa inscriptions dated in a known era begin to be available from the early part of the 2nd century A.D.).
9. Gopalachari 1941.
10. The letters of the label-inscriptions and the bigger inscription bear slightly different features as to suggest a gap in time between them, or, at least, the play of different hands. The similarities are so close that two palaeographers who have considered the relative sequence of the lebel-set and the long inscription have held opposing views. Sircar considers the label inscriptions as anterior to the large inscriptions (1942, p. 184-86); Dani holds it to be otherwise (1963, p. 67).
11. Originally (in Burgess 1883 b, p. 65 ff.) Bühler read the same as *Vedisiri*. But the letter *Va* in the record is peculiarly shaped and partly broken. A more plausible restoration has been suggested by Krishna Sastri (ARASI 1923-24, p. 88) and Sircar (1942, p. 186) who have read the words as Khadi (a) siri.
12. Various other points suggested in support of this theory by Bühler and Bhegavanlal Indraji are available in Burgess 1883 b, p. 65 ff.
13. According to the *purāṇas* Sātakarṇi I ruled for only 10 years. His sons are simply mentioned as *kumāras* in the labels. They must have been very young at the time. It can also be seen from the impressions of portrait sculptures left below the labels on the back wall of the cave that the sculptures of *kumāras* were shorter compared to the others, indicating probably that they were still boys. It may be noted further that while the *purāṇic* account is fairly consistent in giving the relationship of a ruler to his predecessor (as *tatsutaḥ, bhrāto*, etc.), the accounts are silent in this regard in the case of Purṇōtaṁga. They simply introduce him as *tato rājā* (Pargiter 1913, p. 39).
14. The inscriptions in the verandah are of later dates (Chart II and Appendix).
15. Upasak 1960; Dani 1963, p. 48.
16. There is no clue to the exact date but this well falls within his reign period *C.* 205-187 B.C. For further records too a similar method of providing a single date has been used. This has been done only to facilitate easy reference. All dates are with reference to Table 2 (p. 23).
17. It has been pointed out by Bühler, Dani, etc. that this feature is the result of introduction of reed pen for writing.

*Chapter VI*

# *Architectural Analysis*

Out of six hundred and odd monuments created during the period under discussion about one fourth of them only are datable with the help of associated inscriptions. The other monuments require the application of altogether different criteria for building up a chronological sequence for them.

## METHODOLOGICAL ASPECTS

### ART HISTORICAL METHOD OF STYLE-ANALYSIS

Style-analysis happens to be one of the important methods used by art-historians for chronological reconstruction in the context of undated art-works. The theoretical basis of the method has been built up by the study of well-dated series of art productions of certain regions (particularly Classical Art). In simple terms, it is to trace the evolution of an art form from its initial simple way of depiction through a series of increasingly sophisticated stages and possibly on to its devolution. It is also said that the process of art evolution takes place in three stages :[1] (1) The ardent and inspired embodiment of a great idea, (2) the original inspiration tempered by increased knowledge and clearer appreciation of limitations, and (3) the ebbing of inspiration and recourse to elaborate details. These stages are represented by art works with : (1) strength and grandeur, (2) symmetry and (3) brilliant but somewhat disproportioned style. It is possible to a certain extent to associate various monuments with the above mentioned stages. While this can serve as a guideline to a relative class-sequence of groups of monuments, when the individual monuments are taken for analysis and dating various difficulties arise. The method has more limitations in the context of architecture, which happens to be an equally utilitarian art as it is a fine art. Various factors—economic, social, religious, etc.—operate here and they too require consideration. A slightly different approach is called for.

### UTILITY OF ARCHAEOLOGICAL METHODOLOGY

The abundance of varieties of architectural forms, members and motifs displayed by the Western Indian rock-cut monuments can provide a good basis for building up a chronological frame-work. The methods employed in the descipline of archaeology in the context of cultural assemblages of unknown dates, viz. relative position of occurrence, technology and typology can as well be applied here fruitfully. It will be seen from the paragraphs below that the archaeological methods too incorporate, to a certain extent, the ideas adumbrated in the style-analysis methodology of art-history. The aim of both desciplines is after all the same.

*Relative positions of caves*

In many centres of rock-cut architecture the caves have been cut in groups. Even though the architects have taken care to hew neighbouring caves with sufficient space between the two, there are several instances where they almost abut each other. Such cases are of great value in fixing up their relative chronological position. For example, it can be seen in the Pāṇḍulena group at Nasik that an attempt to make a cell in cave 11 has damaged the wall of a cell of cave 10 which shows that cave 11 must have been made after 10 (Chapter VII). It is obvious that the fronts of caves were hewn first and then the back portions and similarly from the evidences available in certain caves like Nasik 18, Junnar-Manmodi 2, etc., it can be made out that the cutting of the caves is commenced first at the top and, usually finishing even the sculpture work at that level, the work proceded downwards. The recognition of these aspects is an important element to decide the relative positions of making of various parts within a cave. Several misconceptions relating to the association of certain typological forms as of the same date just because they happen to be in the same cave, and various wrong deductions done thereon can be easily avoided by the recognition of the relative positions of their occurrence and other circumstantial data. The relation between the staircase and *Yakṣa* figure at the bottom and the upper carvings of the facade, in the *Chetiyaghara* at Nasik is a good illustrative case (Chapter VII).

In many instances the architects themselves have realised the possible danger that may occur to the neighbouring monument by the cutting of a cave with a set plan. There are instances where they have changed the plan of the new excavation sacrificing beauty and symmetry. For example, the plan of the fore-court of the *chaitya* hall at Kanheri is slanted rightwards by about 20° which gives somewhat an akward look (Fig. 39). But close observation there provides the clue that cave 4 was existing before the making (or broadening) of the forecourt of cave 3. Instances of deviations in plan or design can be cited from many other caves like Gautamīputra's *leṇa* at Nasik and the great *chaitya* hall at Bhaja (Chapter VII). All such cases of deviations are useful in fixing up the relative ages of neighbouring caves or cave parts.

*Technology*

The technique involved in the making of caves appears to have remained the same throughout the period under consideration. It is to select suitable rocks without much internal defects and hack the rock with the help of picks and then dress the surface by chiselling.[2] This technique is hardly of any chronological value.

The methods of finishing employed in Western Indian caves are somewhat useful in providing a glimpse of the technological changes that appeared in course of time. A few of the caves display polish, or, it would be better to say in the context of trap rock which does not take high polish, smoothening (*e.g.* Ajanta 10, Jivadan-Virar caves, some caves of Junnar-Tuljaleṇa group). But most of the caves have just rough finish. It is difficult to say whether the caves with the last feature too had painting or were left as such.

The evidences now available show that plastering and painting were adopted generally in later caves. There is evidence in the Nasik inscription (No. 4) of A.D. 149 regarding the provision made for the painting of Nasik 3 (*Chitaṇa-nimittam*). Many caves in Ganesh Pahar and Sivaneri groups at Junnar consisting of epigraphs palaeographically datable to 2nd and 3rd centuries A.D. contain plastered walls and there are also traces of early painting. So it is likely that at least around the 2nd century A.D. the practice of adorning caves with plaster and painting was prevalent. Recently, in cave 10 at Ajanta, an inscription (no. 2) assignable to palaeographical series IA written on the smooth wall surface, but covered later by plaster has come to light. This possibly indicates that the walls of the caves used to be smoothened in early times and somewhat later the practice of plastering and painting over them came into vogue.

It may be noted that stone polishing (smoothening) had been well-developed in Aśokan times. This is possibly indicative of the fact that this technique derived from the Mauryan craftsmen continued for some more time in the Western Indian caves, and then disappeared gradually after the introduction of plaster and paint.[3]

So far as Konkan and Western Deccan region is concerned rock-cut architecture of the period is a new innovation. Most of the art historians have recognised that the earliest rock-cut monuments copy faithfully the contemporary architecture in wood. The general shape of the wooden buildings and all details of wooden construction, even joints and fastenings, were faithfully reproduced in stone. The pillars and door-jambs are shown with slight tilt, eventhough in the rock-cut monuments these were not serving any more the technical pupose which their counterparts set in that way in the wooden buildings had to serve. It appears the early craftsman who made these rock-monuments were workers in wood as seen from the names mentioned in inscriptions (*Vaḍhaki*).[4] The technique in design and fashioning in the early stages was necessarily that of carpentry. It is not unlikely that in the very early stages an enclosure was just hewn and the appearance of a neat structure was obtained by freely introducing various architectural members made of wood. A glimpse of a stage somewhat nearer to this can be obtained from the extant wooden attachments in the *chaitya* halls at Bhaja, Karle and Kondane, as well as by a number of indications like socket holes, etc. seen in various other caves.

When we see nearly a thousand rock-cut monuments to have come up in a limited area as Maharashtra in the course of about four to five centuries since its inception, we feel that rock-cut architecture may have developed there to be an independent tradition gradually with its own specialised craftsmen. The designers as well as workmen are likely to have become familiar with the new medium they have adopted. In the later caves (those associated with the inscriptions of series IV onwards) such extensive wood work as seen at Bhaja, Karle, etc., is hardly to be noticed. Though the general features of appearance are retained to a certain extent many parts which were once used to be in wood are fashioned in rock itself. The change in technique is evident. It is no more carpentry but regular rock-cutting. Thus the progress in the process of achieving familiarity with the new medium itself is a good technical aspect which could be of value for chronological reconstruction.[5]

The very fact that rock-cut architecture was a new element in Western India to begin with and that it became established later is indicative of gradual progress in the technique of rock-cut architecture in various other aspects too than just the emancipation from conventions of wooden architecture. In the Indian sub-continent the earliest experiments in creating rock-cut monuments are seen in Magadha (*e.g.* caves in Barabar hills) and it is most likely that the architectural tradition of that region provided models to the early architects of Western India. But Western India is a region having a climatic situation different from Magadha; the architectural productions of this region required slightly different forms to suit to the heavy rainfall and hot summer conditions prevailing here. It appears the Western Indian architects adopted their own formulae by making innovations like the verandahs, rough screen walls in front and such other items. The introduction of these items appears to have taken place gradually through continuous experiments. This process of architectural adjustments to suit local environmental conditions is also of value for chronological reconstruction.[6]

*Typology*

The varieties of monuments, associated members and motifs can form a solid basis for tracing the chronology and development of the monuments by the employment of typological classification and analysis. The principle involved in this archaeological methodology is to classify the various items into categories and sub-categories on the basis of their type-forms, and to consider the items of the same type as belonging to the same age, provided they belong to a limited area and a unitary cultural situation. In the context of rock-cut architecture, the rider involved in the enunciated principle is well-satisfied as the area chosen happens to be a geo-cultural unit, and the cultural situation is singular throughout, the monuments being made to serve as part of Buddhist monastic establishments. The principle of synchronism of typological analogues could be applied here. The relative chronological positions of these age-types can be worked out to a certain extent on the basis of evolutionary principle of simple forms devoloping into more complex varieties, or to be more precise, by recognising factors causing typological variations like technological advancement, changes in socio-cultural demands and taste.[7] It is also possible to cross-check and supplement the results of such typological sequences by utilizing the other aids to chronology discussed in the preceding chapters.

# CLASSIFICATION OF ROCK-CUT MONUMENTS

Fergusson and Burgess, who first gave a systematic account of rock-cut architecture of the region, suggested a classification of the Buddhist monuments into six types, viz. *stupas*, ornamental rails, *stambhas*, *chaityas*, *Vihāras* and *Pondhis* (*sic*).[8] In the rock-cut series, however, the first three varieties do not occur independently. Further, the abundant sub-varieties of monuments described by those authors themselves show the inadequacy of their classification.[9] The terms *chaitya* and *vihāra* too, to be applied to the monuments for which they are intended by the above authors, are misnomers.[10]

By recognising the differences in plan and purpose of the various kinds of monuments seen in the rock-cut series, and by adopting the very names used for these in the contemporary inscriptions, these may be classified into six groups viz. (1) *Chetiyaghara*, (2) *Leṇa*, (3) *Maṭapa*, (4) *Poḍhi*, (5) *Āsanapeḍhika* and (6) *Koḍhi*.

These are further divisible typologically into the following types and varieties (*Figs.* 2-4; *Chart IV*).

## I. CHETIYAGHARAS (FIG. 2)

Temples consisting of a hall or a cell with a *stūpa*, the object of worship.[11]

### A : *HALL TYPE (CHAITYA HALLS)* :

These consist of a large hall with a *stūpa* at the farther end and a large space in front for the congregation.

#### i. *Apsidal Variety*

These have a rectangular hall in front and semi-circular apse at the back. The *stūpa* is placed near the apse. The whole interior is divided into a nave and aisles by a colonnade running parallel to the walls. Usually these are vault-roofed.

Good examples are Ajanta 10, Bhaja 12, Karle 8, Kondane 1, Kanheri 3, Nasik 18, Pitalkhora 3, Junnar-Ganesh Pahar 6 and Manmodi 40 (uf) :

Noticeable sub-verieties in these are :

(a) with open front—*e.g.* Ajanta 10, Bhaja 12, Kondane 1, Pitalkhora 3,
(b) with stone-screen wall—*e.g.* Nasik 18,
(c) with stone screen wall and verandah—*e.g.* Bedsa 7, Junnar-Ganesh Pahar 6, Kanheri 3, Karle 8.

[Ajanta 9 and Aurangabad 4 are practically of the same type, except for the hall being rectangular instead of having apsidal back.]

#### ii. *Oblong Variety*

The hall is usually plain, generally without pillars or partition and is flat-roofed. The *stūpa* is placed at the farther end of the hall. Two subvarities are seen :

(a) without verandah—*e.g.* Kanheri 2c, 2d, 2e [Variant—Kondivite 9],
(b) with verandah—*e.g.* Junnar—Manmodi 2, Ganesh Pahar 14, Sivaneri 2, 43, 56; Kuḍa 9, 15 and 21. [Variant : Junnar – Sivaneri 43].

#### iii. *Circular Variety*

The *stūpa* in the centre is surrounded by a circle of pillars. The roof is domed—*e.g.* Junnar—Tuljaleṇa 3.

### B : *CELL TYPE*

These also contain *stūpas* but there will not be any space intended for the congregation. The verandah is invariably absent.

i. *Oblong Variety*

Small cel with flat roof.—*e.g.* Junnar-Manmodi 25, Sivaneri 56; Mahad 15 and 21.

ii. *Circular Variety*

Small cell with domical or flat roof.—*e.g.* Bedsa 3, Bhaja 26, Kanheri 4
[Variants—Bhaja 24, Kanheri 36]

C : *CELL, HALL AND VERANDAH TYPE*

A cell housing a *stūpa* at the back, a hall in the middle and a verandah in front. All rectangular and flat roofed.
Kuḍa 1 is the only clear example.
Practically *leṇa*-cum-*chetiyaghara* varieties (see *leṇa* Type B (iv) below) too belong to this type.

D : *ABERRANT TYPES*

Bhāja 19, Kondivita 9, Pitalkhora 10-13.

II. LEṆAS

These are dwellings for monks. Generally all these are flat-roofed.[12]

A : *SINGLE CELL TYPE*

i. *Simple Cell Variety*

(a) With open front. This looks like a large recess without front wall or door-way *e.g.* Jivadan-Virar 1-5, Junnar-Tuljaleṇa 1, 6-7, 9-11, etc.
(b) With front wall provided with a door-way *e.g.* Bedsa 12, Bhaja 23, Junnar-Sivaneri, 7, 12, 16.

ii. *Cell and verandah variety*

The cell is set behind an oblong verandah. The verandah is usually open and may or may not have pillars in front,
*e.g.* Junnar-Manmodi 8, 17, 18, 20, 24, 46, 47; Ganesh Pahar 3, 4, 25, 29, 31, 33a-b; Sivaneri 1, 3, 5, 11, 20, 21, 33, 38, 47, 50, 57, 65, 68; Kanheri 47, 60; Mahad 2, 3, 7, 11, 12, 14, 22, 23, 25; Nasik 8, 12, 22; Kuḍa 11a, 12-14, 20, 25-27.

iii. *Cell, hall and verandah variety*

The cell is placed behind or on a side of a square or oblong hall/cell with a narrow verandah in front,
*e.g.* Junnar-Manmodi 44; Sivaneri 15; Kanheri 13, 16, 21, 22, 26, 32, 33, 35, 40, 42, 49, 54, 56-59, 61-66, 68, 71, 73-82, 88, 91, 93-96, 98-100; Mahad 4, 9, 10, 13, 16, 18, 19, 26-28; Kuḍa 10, 16-18, 23, 24.

iv. *Cell, hall and recess variety*

(a) A cell and a recess are set behind or a side of an oblong or square hall with open front. *e.g.* Junnar-Ganesh Pahar 24, 26, 28; Kuḍa 29, etc.
(b) The cell and recess are set behind or a side of an oblong or square hall with a verandeh in front.
*e.g.* Junnar-Ganesh Pahar 1, 2, 8, 10, 12, 13, 17, 18; Nasik 11, etc.

B : *MULTIPLE CELL TYPE*

i. *Cells and verandah variety*

Cells set in a row behind an oblong verandah. The verandahs have a line of pillars in front *e.g.* Junner-Manmodi 1, 9, 19, 27-30, 32, 43, 45; Sivaneri 4, 10, 34, 35; Kondane 5-7; Mahad 24; Nasik 2, 5, 13, 14, 24; Kuḍa 5.

ii. *Cells and hall variety*

The cells are usually cut in one or more than one side of a square or oblong hall *e.g.* Ajanta 8, 12, 13, 15a; Bhaja 8 (11, 13, 14), 15, 16, 18; Junnar-Tuljaleṇa 2.

iii. *Cells, hall and verandah variety*

(a) The cells are cut in one or two sides of the square/oblong hall as in ii but there will be a verandah in front,
*e.g.* Bhaja 8, 9, 10; Junnar-Manmodi 21, 38, 39; Sivaneri 26, etc.

(b) The cells are cut in all the three sides of the square/oblong hall and the verandah is present in front,
*e.g.* Nasik 3, 10; Junnar-Ganesh Pahar 7, etc.

iv. *Cells, hall, verandah and shrine variety*

This is substantially of the type of (iii), but a shrine chamber is added at the centre of the back wall of the hall.
*e.g.* Mahad 8; Shelarwadi 8.

C : *ABERRANT TYPES*

i. Cells around an apsidal hall,
*e.g.* Bedsa 11.

ii. Cells or hall with vaulted roof,
*e.g.* Bhaja 22, Pitalkhora 4.

III. MAṬAPAS (FIG. 4)

Simple halls provided with benches or without it and/or verandah (*Upaṭhana, Maṭapa, Bhojana Maṭapa*). All are flat-roofed.[13]

A : *SIMPLE HALLS WITHOUT BENCH (Upaṭhana)*

i. *With verandah,*
*e.g.* Junnar-Ganesh Pahar 9, Sivaneri 6 (uf), 8, 37, (55) [Varient : Mahad 5].

ii. *Without verandah*
*e.g.* Bhaja 2, Junnar-Sivaneri 19, 29, 30. [Varient : Nasik 21]

B : *SIMPLE HALLS WITH BENCH ALONG BACK AND/OR SIDE/S*

i. *With verandah*
*e.g.* Junnar-Manmodi 3, (16), (33); Ganesh Pahar 19; Sivaneri 24, 49: Kanheri 83, 101; Kuḍa 4. [Varient : Sivaneri 18]

ii. *Without verandah*
*e.g.* Bedsa 15; Bhaja 3; Junnar-Tuljaleṇa 17; Manmodi 7; Sivaneri 14, 23, 25, 64, 67; Kanheri 26, 14. [Variant : Kanheri 53, 70]

## IV. POḌHIS

Water cisterns.[14]

These are subterranean cavities of sufficiently large size meant to store water. Usually they have a small square mouth at the top. With the help of narrow groove-channels rain water is led into these. The water thus collected serves for the summer season.

### A : *PĀNIYA POḌHIS*

Drinking water cisterns.

Many of the caves have one or two *poḍhis* in front of them. Sometimes these are seen independently too. Two sub varieties may be mentioned.

i. *Cisterns in the open*
These are just made on a flat open surface in front or near the *leṇas* and by the side of pathways. There are examples of this variety available in almost every monastery.

ii. *Cisterns under recess*
The mouth of the cistern will have been made on the floor of a rectangular recess. The location of these is similar to category (i).

### D : *SANĀNA POḌHIS*

Bathing cisterns. Cisterns of this type are rare.
*e.g.* Jaunnar-Manmodi 14a, Kuda 14 x.

## V. ASANAPEḌHIKĀS (PLS. 118, 127)

Simple rock-cut benches.[15] These are seen sometimes cut along the forecourts of caves and independently too.

Generally these are about 1.5 to 2 m long 40 to 50 cm broad and about 75 cm high. The back is usually sloped slightly. The arm-rest too is seen at either end sometimes. In a few instances a small circular tub is made on the seat in the middle. The examples come mostly from Kanheri.

## VI. KOḌHIS

Recesses hewn into the rock.[16] These are generally small about 1 to 1.25 m broad, 30 to 50 cm deep and 1 to 1.5 m high. The purpose of these is not easy to make out. These could have been just 'view-seats' or may have been meant to place an object of worship.

This typological classification of monastic rock-cut monuments illustrates the wide range of varieties. With the help of the typological differences displayed by the various items it is possible to recognise gradual increase in sophistication and use of better techniques in design and execution and a chronological scheme can be built up. However, this being one of the major aims of the present work and as it has to be done with the help of various other data too, its consideration shall be taken up at a later stage (Chapter VII).

For the present mention may be made of typological varieties of *poḍhis* which do not have any accessory items. Among the two varieties of *Pāniyapoḍhi*, those with recess appear to belong to a later developmental stage than those without them. In fact most of the *leṇas* consisting of inscriptions of the time of Gautamīputra Śātakarṇi and later have *poḍhis* of A (ii) variety. But this need not mean that A (i) variety went out of vogue completely. Our evidence detailed elsewhere points out otherwise.

## TYPOLOGY OF ARCHITECTURAL MEMBERS AND DECORATIVE MOTIFS

Apart from the major types, the associated architectural members and decorative motifs may also be isolated and studied on the typological basis individually.

# STŪPAS

In the cave groups examined in the present work there are 86 *stūpas*. The majority of them are to be seen as main objects of worship in the *chetiyagharas* and some are cut in relief in the walls of *leṇas* (Many decorative *stūpas* also occur but these have not been taken into account here).

The full fledged *stūpa* varieties consists of four parts—drum, dome, capital and umbrella. The relative proportion of the dimensions of these different parts in individual *stūpas* often reveal some principle or the other. But no standardised formula can be arrived at for a group or class of *stūpas*.

Similarly it is not easy to make out any logical groups on the basis of other associated elements like the presence or absence of the socle, the *vedikā* bands, the forms of the *harmikā*, and for that matter even the shapes of the different parts of the *stūpa*. It looks as though every *stupa* forms a type by itself. In this context Dehejia (1972, pp. 76-77) has remarked that, "The detailed tabulation of various *stūpa* elements reveals that the different factors do not appear to have been standardised. There is no consistency in the occurrence of single, as opposed to a double drum, or in the absence or presence of *vedikā* bands." She adds that even though the proportion of the drum to the *aṇḍa* is said to be of some chronological significance "with regard to the early Buddhist caves, we are on rather uncertain grounds in trying to obtain a sequence on the basis of the form of the *stūpa*."

The situation is not so hopeless as it looks to be, if the problem is viewed in the proper context. It can be seen that the *stūpas* which have broad drums occur in caves having very broad naves (Ajanta 10, Karle *chaitya* hall, Kanheri 3), whereas the tall *stūpas* with lesser base diameters are to be seen in *chetiyagharas* with comparatively narrower naves but with greater roof height (Bedsa 7, Nasik 18). The *stūpas* are made within the caves almost as one of the architectural components and hence their dimensions were to be in harmony with the architecture of the particular caves. Under this curcumstance, if any chronological sequence of *stūpas* is to be made out it would be based more on architectural chronology than on iconometric formulae.

But there are other criteria. The original models for the *stūpas* were those raised in brick and stone. The well-preserved early *stūpas* at Sanchi and elsewhere show that the drum and the dome were constructed solidly and the capital and umbrella were later added as separate pieces in stone. The forms of the latter two items happen to be copies of wooden models (for example the *harmikā* of the Sanchi stūpa). So it can be presumed that originally these parts were in wood only. When such *stūpas* were to be copied in the rock-cut monuments of Western India it is natural to expect the drum and the dome cut in stone and the rest added with wooden items. Such examples still survive in the fine wooden umbrella adorning the *stūpa* in the Karle *chaitya* hall, and the wooden staff rising above the *stūpa* in the *chaitya* hall at Bedsa. With the familiarity gained with the new rock medium it is likely that the sculptors realised that the wooden additions could be replaced by stone-cut members themselves. This process can provide a basis for classification and chronology.

It can be seen from the illustrations of *stūpas* (Figs. 5-8) and Table 5, (p. 74) that there are some *stūpas* with drum and dome only cut in stone, some with the *harmikā* also in addition and some include the stone umbrella too. These possibly indicate the successive stages of better adaptation to stone medium. With this criterion the *stūpas* in Western Indian caves can be classified as follows :

A. *Stūpas* with drum and dome only in stone.

B. *Stūpas* with drum, dome and *harmikā* in stone.

C. *Stūpas* with drum, dome, *harmikā* and inverted stepped pyramidal capital in stone.

D. *Stūpas* with drum, dome, *harmikā*, inverted stepped pyramidal capital and umbrella in stone.

Various other elements associated with the *stūpas* like the presence or absence of socle, *vedikā* decoration on drum etc., provide indications for further classification.

## A STŪPAS WITH STONE DRUM AND DOME ONLY (FIG. 5 and PLS. 22, 56, 93)

This type can be recognised in the *stūpas* in Bhaja 16, Bedsa 3, Junnar-Tuljaleṇa 3, Kondivite 9, and Kanheri 2e. It can be seen that *stūpas* in Bhaja 26, Kanheri 2e, and Junnar-Tuljaleṇa 3, are very

plain types. All others have a decorative *vedikā* band at the brim of the drum. The *stūpa* in Bedsa 3 stands out separately with an inward slant of the drum wall. In fact all these *stūpas* had the *harmikā* and *chhatra* in wood, as can be made out from the sockets on the top of the dome. It is not unlikely that the *vedikā* band which occurs as a common decoration in most of the *stūpas* were to be seen in these *stūpas* too either in paint or stucco. If the *stūpas* with *vedikā* decoration cut in stone are to be considered as further improvement in stone cutting it is possible to recognise another successive stage within the first group. The *stūpas* with slanting sides of the drum is possibly due to a change that had taken place in the brick and mortar constructions of the age and hence probably belong to a later stage.[17]

## B. STŪPAS WITH STONE DRUM, DOME AND HARMIKA (FIGS. 6 (1-2) and PLS. 38, 95)

The *stūpas* in Bhaja 12 and Kanheri 3 are the only examples of this type available in the *chaitya* halls. The Bhaja *stūpa* is quite interesting in displaying a stage in technical advancement. Practically this has the features of the *stūpas* in Junnar-Tuljalena 3 and Kanheri 2 e. The only addition is the stone *harmikā*. This *harmikā* too is not a part of the monolithic *stūpa*, but is of a separate stone slightly different in composition and is placed above the dome. For that matter instead of placing a seperate wooden *harmikā* as was being done previously, a stone one has been used here. Thus this *harmikā* is possibly the earliest known in Western Indian caves. It is square, has the *vedikā* decoration in two stages one above the other wrought on its four sides. On the top surface of the *harmikā* is a square depression and a deep circular hole in the centre. It is likely that originally the hole was meant to fix the stave of the wooden umbrella and the square depression was to keep in position the inverted pyramidal capital (of the type seen in Type C) which may have been in wood. The *harmikā* of the big *stūpa* in the Kanheri *chaitya* hall is broken, but the extant part shows that it is part of the monolithic *stūpa*. Amongst the two, the *stūpa* in Bhaja 12 can be considered as earlier in date than the one in Kanheri 3.

## C. STŪPAS WITH STONE DRUM, DOME, HARMIKĀ AND INVERTED STEPPED PYRAMIDAL CAPITAL (FIG. 6 (3-5) and PLS. 8, 12, 24, 72, 129, 193)

The third type is characterised by the inverted pyramidal capital made of square plates of successively increasing dimension placed on the top of the *harmikā*. This element appears now as part of the monolithic *stūpa*. There are eight examples in the main *chaitya* halls, viz. in Ajanta 9 and 10, Aurangabad 4, Bedsa 7, Junnar-Ganesh Pahar 6, Karle *chaitya* hall, Kondane 1, and Nasik 18.

In this group too successive stages can be recognised on the basis of increased sophistication found in them. Sub-varieties can be recognised with the help of various features. Leaving Kondane in which the capital is much damaged, the *stūpa* in Ajanta 10 and Aurangabad 4 have only three steps in the square pyramid where as all others have five except Karle which has seven steps. The *stūpa* in Ajanta 10 does not have the *vedikā* decoration. Even though the *stūpa* in Aurangabad 4 does not have the *vedikā* band, there is already the idea of introducing that decoration. A large undecorated band surrounds the brim of the drum there. The Kondane *stūpa* has (or had) a *vedikā* band at the brim and this feature becomes common to most of the other *stūpas*. Among the *stūpas* with *vedikā* bands on the drum, those in Bedsa 7 and Karle *chaitya* hall have 3 and 2 bands respectively. The *stūpa* in Junnar-Ganesh Pahar 6 has in addition to the *vedikā* band a line of square knobs below that—a feature which becomes common in the *stūpas* of Type D.

It appears, the shapes of the dome, the height and number of stages in the drum, the dimensions and other features had not been standardised and the forms of these depended on the size and form of the monument in which they were located. The decoration of the capital too does not show any principle. All the *stūpas* had the umbrella in wood. The remnants found in Bedsa and Karle have already been referred to. In others, socket holes are usually seen in the centre of the top flat slab.

TABLE
ANALYSIS OF MAIN STUPAS

| | *MAIN ELEMENTS IN STONE* | | | | *DRUM* | | | |
|---|---|---|---|---|---|---|---|---|
| | *Drum and Dome* | *Harmikā* | *Stepped capital* | *Umbrella* | *Single* | *Double* | *Sloping sides* | *Tall* |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Ajanta 9 | + | + | + | | + | | | |
| Ajanta 10 | + | + | + | | | + | | |
| Aurangabad 4 | + | + | + | | + | | | |
| Bedsa 3 | + | | | | + | | + | |
| Bedsa 7 | + | + | + | | | + | | + |
| Bhaja 12 | + | + | | | + | | | |
| Bhaja 26 | + | | | | + | | | |
| Junnar | | | | | | | | |
| Tuljaleṇa 3 | + | | | | + | | | |
| Manmodi 25 | + | + | + | + | + | | + | |
| Ganesh Pahar 6 | + | + | + | | + | | | |
| Ganesh Pahar 14 | + | + | + | + | + | | + | |
| Sivaneri 43 | + | + | + | + | + | | + | |
| Sivaneri 61 | + | (Broken) | | + | + | | + | |
| Kanheri 2c | + | + | + | + | + | | + | |
| Kanheri 2e | + | | | | + | | | |
| Kanheri 3 | + | + | | | + | | | |
| Kanheri 4 | + | + | + | + | + | | + | |
| Kanheri 36 | + | + | + | + | + | | + | |
| Karle 8 | + | + | + | | | + | | |
| Kondane 1 | + | + | + | | + | | | |
| Kondivite 9 | + | | | | + | | | |
| Kuḍa 6 | + | + | + | + | + | | | |
| Mahad 15 & 21 | + | + | + | | + | | + | |
| Nasik 18 | + | + | + | | + | | | + |

Mutilated and unfinished *stūpas* omitted here.

5
IN CHETIYAGHARAS

| | | | *DOME* | | *HARMIKĀ* | | | |
|---|---|---|---|---|---|---|---|---|
| *Vedikā deco-ration* | *Vedikā & knobs* | *Socle* | *Hemi-spherical* | *3/5 sphere* | *Single vedikā* | *Double vedikā* | *Vedikā & studs* | *Stepped capital Number of plates* |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| | | + | + | | + | | | 5 |
| | | + | + | | + | | | 3 |
| | | + | | + | + | | + | 4 |
| + | | | + | | | | | |
| +(3) | | + | + | | | + | + | 5 |
| | | | + | | | + | | |
| | | | + | | | | | |
| | | | + | | | | | |
| + | + | + | | + | + | | | 5 |
| + | + | + | | + | + | | | 6 |
| + | + | + | | + | + | | | 5 |
| + | + | + | | + | + | | | 5 |
| | | + | | + | | | | |
| + | + | + | | + | + | | | 5 |
| | | | + | | | | | |
| | | | + | | + | | | |
| + | | + | | + | + | | | 4 |
| + | + | + | | + | + | | | 5 |
| +(2) | | + | + | | | + | + | 7 |
| + | | | + | | | + | | ? |
| + | | | + | | | | | |
| + | + | + | | + | | | | 5 |
| + | + | + | | + | + | | | 5 |
| + | | + | + | | | + | + | 5 |

## D. STŪPAS WITH STONE DRUM, DOME, HARMIKĀ, INVERTED STEPPED PYRAMIDAL CAPITAL AND UMBRELLA (FIG. 7 and PLS. 74, 89, 92, 103)

The *stūpas* of this type are all of a standardised form, probably achieved after continuous experiments in the previous stages. All these are to be seen in low roofed *chetiyagharas* and have the drum, dome, *harmikā*, capital as well as the umbrella cut in stone. The drums show upward tapering and the domes are invariably bulbous with incurved sides looking almost like 2/3rd part of a sphere placed above the flat drum. The socle and *vedikā* band on drum too are common. The *harmikā* has only one panel of *vedikā* decoration. It is extremely difficult to make out chronologically placeable sub-types amongst these.

Thus the *stūpas* in Western Indian *chetiyagharas* can be classified as follows (Figs. 5-8) :

*Type A* : *STŪPAS WITH DRUM AND THE DOME, ONLY CUT IN STONE*

i. *With no decoration*
*e.g.* Bhaja 26, Kanheri 2e, Tuljaleṇa 3.

ii. *With vedikā decoration on the drum*
*e.g.* Kondivite 9.

iii. *With vedikā decoration and tapering drum*
*e.g.* Bedsa 3.

*Type B* : *STŪPAS WITH DRUM, DOME AND HARMIKĀ CUT IN STONE*

i. *With the harmikā made in separate stone and inserted*
*e.g.* Bhaja 12.

ii. *With the harmikā cut together with the drum and dome*
*e.g.* Kanheri 3.

*Type C* : *STŪPAS WITH DRUM, DOME, HARMIKĀ AND THE INVERTED STEPPED SQUARE PYRAMIDAL CAPITAL CUT IN STONE*

i. *With inverted square pyramid of 3 or 4 steps.*

(a) Without *vedikā* decoration
*e.g.* Ajanta 10.

(b) With a plain band around the brim of drum
*e.g.* Aurangabad 4.

(c) With *vedikā* decoration
*e.g.* Kondane 1.

ii. *With inverted square pyramid of 5 or more steps.*

(a) With no *vedikā* decoration
*e.g.* Ajanta 9.

(b) With *vedikā* decoration
*e.g.* Nasik 18, Bedsa 7, Karle *chaitya* hall, Junnar-Ganesh Pahar 6.

*Type D* : *STŪPAS WITH DRUM, DOME, HARMIKĀ, INVERTED STEPPED PYRAMIDAL CAPITAL AND ALSO THE UMBRELLA CUT IN STONE*

These are often seen with slight upward sloping of drum.
*e.g.* Junnar-Ganesh Pahar 14, Sivaneri 43, Kanheri 2c, 4 and 36.

The succession of typological varieties noted above, as already stated, is indicated by gradual employment of stone replacing the wooden items. It can be made out that types A i, A ii and B are simple ones and possibly belong to a very early date and Type D represents a well-developed standardised variety. But the slanting of the drum seen in A iii is a feature well associated with the *stūpas* of Type D. It is to be placed possibly to somewhat later date than the others, nearer to the latter. Type C ii,

iii and iv have many minor variations and it is difficult to recognise any chronological scheme for them. (Table 5 on p. 74 provides a picture of the situation relating to the use of minor elements).

The palaeographical date from the inscriptions associable with the *stūpas* roughly confirm the above succession and also provide hint to the epochal dates for the use of various types as follows :

| *Palaeographical Series* | *Stūpa Type* |
|---|---|
| I A | B i and C i a |
| I B | C i c |
| III, IV, V | C ii b |
| IV | A iii |
| VI, VII | D |

Associated inscriptions are not available for A i, A ii, B ii, C i b and C ii a, but the above cited stylistic sequence may be of help in these cases.

## PILLARS (Figs. 9-10)

The pillar types found in Western Indian caves appear to serve as consistent chronological indicators. On typological and other grounds the varieties can be considered as typofossils regular to certain periods of time. The use of the same variety of pillar in different monuments often indicates, if not contemporaneity of such monuments, their proximity in age, particularly when compared to the architectural works consisting of altogether different types of pillars.

The pillar types fall into five groups :

Type A : Octagonal pillars without base or capital.
Type B : Hexagonal pillars with one of the faces projected to front.
Type C : Square pillars with their arrises cut in the middle 1/3 part.
Type D : Pillars with octagonal shaft with ornamental pot-base and/or pot- or bell-shaped capitals.
Type E : Simple octagonal pillars with square base but no capitals.

Further typological sub-varieties too can be recognised in the above.

### A. OCTAGONAL PILLARS WITHOUT BASE OR CAPITAL (FIG. 9 (1))

If tall trunks of trees are to be converted to a pleasing geometrical shape the octagonal form is the easiest one. The circular curvature can be sawed off vertically without much reduction of the size and strength of the tree trunks. The tapering noticed in the pillars is also explained by this. So these octagonal pillars bereft of any attempt towards sophistication may be considered to be the earliest types too.

Pillars of this type are seen used exclusivaly in Ajanta 10, Bhaja 12, Junnar-Tuljaleṇa 3, Kondane 1, and Pitalkhora 3 (Pls. 12, 38, 61, 202). All these are large *chaitya* halls with vault roofs. In order to neutralise the outward thrust of the curved roof, the pillars are seen set at an angle. This rake is a significant item which displays technological simplicity, wherein the features of wooden architecture have been copied faithfully in stone. This aspect too indicates an early date for the pillar type. The contention is further confirmed by palaeographical evidence. All the available inscriptions associable with the caves of the type *i.e.* Pitalkhora Nos. 1 and 2, Ajanta Nos. 1, 2 and 3 and Kondane No. 1 belong to series I which could be dated to late 3rd and early 2nd century B.C. (Chart III).

The use of this pillar type continued even further. But in these both the taper and rake are much reduced or almost absent, which indicates a tendency towards eschewing features of wooden architecture which are unnecessary in the rock medium. The pillars of this stage, are noticeable in the interior of Ajanta 9 and Bedsa 7 (Pls. 8, 9, 24) and in the apsidal portion of Kanheri 3, Karle *chaitya* hall and Junnar-Ganesh Pahar 6 (Pls. 72, 129). These too are vault-roofed *chaitya* halls. In all these however, the octagonal pillars are used in the interior only. Pillars of other types too occur along with them. Thus at Ajanta 9, a pair of hexagonal pillars with a face projected to a side (type B) and another pair of pillars

of type C have been used in the front part of the pillar line inside the *chaitya* hall. At Bedsa too a similar feature is present. Besides, the pillars in the verandah in that cave are of Type D. In the Karle *chaitya* hall, Kanheri 3 and Junnar-Ganesh Pahar 6 the octagonal columns are set only at the back, while the pillars on either side of the nave are of Type D. These details provide a further chronolgical clue with reference to the use of pillars of Type A. So pillar Type A can be subdivided on the basis of changes of their form and employment as follows :

| | | |
|---|---|---|
| A. | i. Octagonal columns with recognizable tapering and rake | Used exclusively as the only type in the early group of *chaitya* halls. |
| | ii. Octagonal columns with less rake and tapering | Continues to be the main pillar type in *chaitya* halls, but pillars of Type B and C occur in the front line. |
| | iii. Octagonal pillars with no rake or tapering | Used only in the apsidal end of the colonnade inside *chetiyagharas*. Pillars of Type D also occur alongside.[18] |

B. OCTAGONAL OR HEXAGONAL PILLARS WITH ONE FACE PROJECTED (FIG. 9 (2))

These are used as only subsidiary pillars to be the front most pair of the colonnade inside the *chaitya* halls where otherwise pillar type A is the general variety employed. Pillars of this type have been noticed in Ajanta 9, Nasik 18, Bedsa 7 and the Karle *chaitya* hall.

Inscriptions (wherever present) found in the above belong to palaeographical series III.

C. SQUARE PILLARS WITH THEIR ARRISES CUT IN THE MIDDLE (FIG. 9(3) and PLS. 10, 50, 55, 195)

While the pillars of Type A are to be seen in the large vault-roofed *chaitya* halls, these pillars of square cross section having the arrises cut in the middle part appear to have been made use of generally in smaller flat-roofed *leṇas* too. Usually the pillars are slender and are closely set to carry beams supporting the flat roof. The pillar form is simple in design, and appears to have been copied from wooden models in which the logs are just sawed longitudinally four times to take off the curvilinear outer portions leaving the core with square cross section. Understandably, the sharp corners of such pillars are chamfered vertically in the middle, at a level likely to hurt the shoulders of the people moving around. This pillar type was in use in early times only, and occurs in the verandahs of Nasik 19 (Kanha's *leṇa*) and Bhaja 22 (New Vihara). This has been employed for subsidiary columns along with Type A ii in Ajanta 9 as stated above, and for the pilasters in front of the same cave (Pl. 7). Though no pillar has survived completely, it will be shown that the pillars of Kondane 2, *i.e.* the *leṇa* adjoining the *chaitya* hall at that place, are also of the same type. Pillar type C can be considered as a distinctive feature appearing in caves belonging to a period around the time of Kanha (205-183 B.C.).

D. PILLARS WITH OCTAGONAL SHAFT POT-BASE AND POT-CAPITALS (FIG. 10)

The pillars of this type are prolific in occurrence and are seen both in the *chetiyagharas* and *leṇas*. The essential features consist of pot-shaped base raised on a stepped square pyramid, octagonal shaft (rarely hexagonal) and a capital consisting of a pot/bell surmounted by an inverted stepped square pyramid carrying animal figures. There are many subvarieties too.

This pillar type appears to be a form created with an eye towards greater ornamentation. This is much different from the simple varieties of types A, B and C and its direct evolution from the local forms is unlikely. But exactly analogous forms or prototypes are not easy to be located in other region too. This variety appears to have been developed by a combination of varied types prevalent here, by combining with them certain features drawn from elsewhere. The idea of pot-base may have been borrowed from the practice seen in large buildings of early times wherein pillars are raised on stone bases, as known from the Mauryan pillared hall at Pataliputra.[19] The idea of the capital is distinctly traceable to the Persepolitan and Aśokan pillar capitals.

The clue for the fact that earlier Mauryan 'Persepolitan' forms began to be adopted to the local architectural fabric appears from an instance in Pitalkhora 4. There the bell-*cum*-animal capital is

introduced on the pilasters copying pillar type C. Further, in Bhaja 22 and the relief decoration on the facade of cave 18 or Nasik the same types of capitals are seen on shafts of octogonal shape (*i.e.* of pillar type A) (Pl. 194). But later, it appears the finer varieties of type D were evolved after sufficient experiment, which was probably being done in contemporary brick architecture.[20] A chrono-typological succession of sub-varieties of type D pillars may be postulated, starting the series from Mauryan capital types.

After an initial experiment to introduce the bell and animal capital of the Mauryan 'Persepolitan' type on the pilasters of square type, the use of octagonal shaft for the pillar type was standardised finally. The capitals, however, show changes. Probably the earliest varieties are those which still retain the essential characteristics of the Mauryan type viz., the bell-shaped member surmounted successively by a thin neck, the abacus, and the animal sculptures. Such a pillar type was first attempted in the annexe to the 'New Vihara' *i.e*, Cave 22, at Bhaja (Pl. 52).[21] Very grand pillars of the type, however, are to be reen in the verandah of the *Chaitya* hall at Bedsa (Pls. 23, 25, Fig. 10, D ii). Here the 'bell' part is still of the Aśokan variety. The petals on its surface are well depicted. The neck above, however, is of the *āmalaka*-shape and is set inside a square box-frame. The abacus is an inverted square pyramid consisting of four steps. Instead of the simple animal sculptures, there are animals carrying female riders. The changes wrought in the shape of the abacus and sculptures above it are probably results of experiments towards sophistication done through a distance of time between the Aśokan pillars and the present ones.

The next stage is represented by examples having the 'bell' with similar incurve, but the petals being shown roughly with just ridges. Examples of this type are available in the *chaitya* hall at Karle (Fig. 10, D iii; Pl. 131).

In the succeeding stage the 'bell' shape with distinct incurve is maintained but the petal markings are discarded. The surface of the bell is completely smooth and looks like a pot with prominent everted rim. This stage is well seen in Nasik 10 (Fig. 10, D iv; Pls. 184, 185).

In the next stage even the prominent incurve is lost and the bell becomes rounded achieving the shape of a globular pot with constricted neck and everted rim. Examples occur in Nasik 9, Junnar-Ganesh Pahar 6, etc. (Fig. 10. D v; Pls. 72, 96, 182).

The last stage is represented by pillars with pot-capitals surmounted by a inverted stepped square pyramidal member, but with no animal sculptures. The pillars of this variety are seen in Junnar-Manmodi 1, 2 etc. (Fig 10, D vi; Pls. 65, 82, 157).

Even in the representation of the animals a gradual decrease in their size and modification in the mode of presentation can be noted. By the end stage the animals are represented as relief sculptures over the beam resting on the inverted pyramidal abacus as in Nasik 9, Junnar-Ganesh pahar 6, 7 etc.[22] (Pls. 71, 73). This is in contrast to the Bedsa variety where the animal and rider sculptures are shown prominently almost in high relief. The transitional stages from the Bedsa types to the types seen in Nasik 9 etc. may provide a clue for relative chronology.

The pot-base with the stepped square pyramidal support appears to occur through almost all the stages mentioned previously. But in the latest stages, the pillars are often seen without any ornamental base in cases where the shafts directly rise from a bench (*e.g.* Nasik 3, Pl. 178). Probably the earliest attempt to introduce pot-base to the octagonal shaft is to be seen in the pillars inside the unfinished chaitya hall Nasik 18 (Fig. 10, Di, Pl. 193).

This analysis facilitates the grouping of Type D pillars into the following sub-varieties (Fig. 10).

*TYPE D*

i. *With octagonal shaft and pot-base only*
(*e.g.* Nasik 18).

ii. *With base similar to* i *but having elaborate capital of the 'bell' shape with prominent incurve and marked with petals and surmounted by the inverted stepped pyramidal member and the animal sculptures.*
(*e.g.* Verandah pillars in Bedsa 7).

iii. *With similar features as* ii, *but having a 'bell' type with the petal markings replaced by broad bands seperated by ridge.*
(*e.g.* Pillars in the Karle *chaitya* hall).

iv. *Similar to* iii, *but with no ridges on the 'bell'. This looks now like a pot with broad neck and everted rim.*
(*e.g.* Nasik 10).

v. *a. With features similar to* iv, *but the 'bell' of the capital looks like a globular pot with everted rim. The animal figures (which were forming part of the capital formerly) are now depicted as reliefs set in line on the beam carried by these pillars.*
(*e.g.* Junnar-Ganesh Pahar 6, Nasik 9).

*b. Of the same type as* va *but the pot base is absent. The pillars usually rise from low benchs.*
(*e.g.* Junnar-Ganesh Pahar 7).

vi. *a. 'Pot' capital similar to* v *but with no animal sculptures.*
(*e.g.* Junnar-Manmodi 1).

*b. Of the same type as* vi a, *but the pot base is absent.*
(*e.g.* Junnar-Manmodi 2).

One of the pillars with pot-base (D i type) in Nasik cave 18 bears an inscription of Series III. D ii and D iii varieties at Bedsa and Karle *chaitya* halls are associated respectively with the inscriptions of Series III & IV A. Subsequently, however, there appears to be some overlap in the occurrence of typological varieties. D iv variety well desplayed in the Nahapaṇa's cave (10) at Nasik is securely dated to *C.* A.D. 120. D va seen in Junnar-Ganesh Pahar 6 too is datable to the stage of palaeographical Series V A and there is another instance in Nasik 2 where it is associated with an inscription of A.D. 136 in the reign of Vāsiṣṭhīputra Puḷumāvi. D v b is seen in Nasik 3 of the time of Gautamīputra Sātakarṇi. The D vi variety without the animal sculptures on the capital appears to start at a time slightly later than those of D v. There is some indication in Junnar-Ganesh Pahar 14, in which this type could be associated with palaeographical series Vb. The instance at Kuḍa 9 also appears to suggest the same. This type continued during the time of Śri Yajña Sātakarṇi and later, as in Nasik 20. There is one instance where there is evidence for the continuation of this type in a *chaitya* hall even in the late 3rd century A.D., being in association with palaeographical Series VII (Junnar Sivaneri cave 43).

A variant of this type, viz. D vib, is noticed at the Ambivale leṇa (Pl. 20) and there the palaeographical association is that of Series VII.

E. SIMPLE OCTAGONAL PILLARS WITH SQUARE BASE, BUT NO CAPITAL: (FIG. 9(4) and PLs. 100, 109, 110, 112, 150, 161, 164).

These pillars with simple short octagonal (rarely hexagonal) shaft with their lower part square in cross section are seen in the *leṇas* only. They rise straight from the base or generally from the backed benches in the verandah (*e.g.* Kanheri 32, 49, 54, 88, 101, etc., Mahad 2-3, 16-19; Nasik 5, 6, 8, etc.).

The inscriptions seen in the caves with this pillar type are all of Series VI and VII. The type, thus appears to have been in vogue in the last phase of rock-cut architecture under consideration.

The use of varions pillar types and sub-types in different times as indicated by palaeographical series are shown in the accompanying Table 6.

## ROOF TYPES (Fig. 11)

Understandably, due to the nature of rock-cut monuments of the times it is possible to make out the interior forms (ceiling) of the roofs only. There are only two varieties of ceilings, flat and vault-shaped. The vaulted ceiling however, is a variety best suited for wooden architecture. It appears, in the earliest times, this form was blindly copied in some monuments along with the use of wooden members themselves and later with the experience gained in working in the rock medium this was given up.

TABLE 6
PILLAR TYPES AND ASSOCIATED INSCRIPTIONAL SERIES

| *Type* | *Series* | *Type* | *Series* |
|---|---|---|---|
| A i | I A | D iii | IV |
| A ii | I B | D iv | VA |
| A iii | III, IV, VA | D va | VA, VB |
| B | III | D vb | V B |
| C | I B | D via | VB, VI (VII) |
| D i | III | D vib | VII |
| D ii | III | E | VI, VII |

The extensive use of wood is in evidence in the large vault-roofed *chetiyagharas* at Bhaja, Karle, Kondane, etc., and is almost avoided completely in examples like Junnar-Ganesh Pahar 6. The forms of the roofs of nave and aisles—either vault, quadrantal or flat—and the use of wood in them can be seen from the analytical Table 7.

TABLE 7
ROOF TYPES IN CHETIYAGHARAS
(P=Present, or evidence of their presence available)

| | Nave | | Aisles | | |
|---|---|---|---|---|---|
| | Vault roof | | Quadrantal roof | | Flat roof |
| | Wooden ribs | Stone ribs | Wooden ribs | Stone ribs | |
| Ajanta 9 | P | — | — | — | P |
| Ajanta 10 | P | — | — | P | — |
| Aurangabad 4 | — | P | — | — | P |
| Bedsa 7 | P | — | — | — | — |
| Bhaja 12 | P | — | P | — | — |
| Junnar | | | | | |
| Tuljalena 3 | P | — | P | — | — |
| Manmodi 26 | P | — | (unfinished) | — | — |
| Ganesh-Pahar 6 | — | P | — | P | — |
| Kanheri 3 | P | — | — | — | P |
| Karle *chaitya* hall | P | — | — | — | P |
| Kondane 1 | P | — | P | — | — |
| Nasik 18 | P | — | P | — | — |
| Pitalkhora 3 | P | — | P | — | — |

There are also a few other vault-roofed *chetiyagharas* as Pitalkhora 10, 12 and 13, but these are aberrant types. Leaving these the clear examples listed in the chart show that the standard pattern of vault-roofed *chetiyagharas* with nave and aisle divisions is to make the aisle roof quadrantal and to set curved wooden rafters in both nave and aisle roofs. This is seen in five examples Bhaja 12, Tuljaleṇa 3, Kondane 1, Nasik 18 and Pitalkhora 3. These stand as a class by themselves.

The Karle *chaitya* hall and Kanheri 3 share the common characteristics in having the vault-roof in nave with wooden ribs and flat ceiling on aisles.

Ajanta 9 and Aurangabad 4 too have flat ceiling on aisles, and these are also closer in design with their oblong halls, despite the parabolic arrangement of the colonnade. Between the two, Aurangabad 4 which has stone ribs may be considered as representing an improved stage from Ajanta 9 which had wooden ribs.

Ajanta 10, Bedsa 7 and Junnar-Ganesh Pahar 6 have the vaulted ceiling on nave and quadrantal ones on aisles. Junnar-Ganesh Pahar 6 stands out distinctly with stone ribs introduced both in aisle and nave ceilings whereas the other two have that feature for aisle ceiling only.

The verandahs, wherever present, in the *chaitya*-halls have flat roof only.

The above groupings suggest a general proximity in age of the monuments with common assemblages. But it is not easy to find a chronological scheme for all the members individually. The introduction of stone ribs in nave and aisle ceilings appears not to have been standardised till a late period. Various othes factors are to considered along with the above features for fixing relative chronological positions.

The indication of atleast some typological consistency in chronological spans is evident in the types with wooden ribbed ceilings like Bhaja 12, etc. Many of these have the simple octagonal pillars with recognizable rake and tepering. Some of these are also known to have inscriptions assignable palaeographically to Series I. Junnar-Ganesh Pahar 6 with the ceilings of both nave and aisle adorned with stone ribs has an inscription assignable to Series VA, besides advanced features in other members like the *stūpa* form of type C ii b and the pillars of type D. An apparent iconsistency in concomitances is noticed only in the *chetiyagharas* falling between the above to groups.

Flat ceilings commonly seen in many *chetiyagharas* (Kanheri 2 b, c, d, Ganesh Pahar 14, etc.) do not have any typological variations of chronological value. But it appears the realtive levels of the ceilings of the hall and verandah (wherever present) are of some interest. It can be seen in instances like Junnar-Sivaneri 43 that the caves with the verandah ceiling in a lower level than that of the hall are datable to a very late period. At least in 3 instances they are associated with inscriptions of the time of Srī Yajña Sātakarṇi and onwards.

Almost all the *leṇas* and *maṭapas* too have flat roof only. Any chronological classification on this basis is impossible. Here too, the relative levels of the hall and verandah ceilings appear to be of some interest in this regard.

There are aberrant varieties of ceilings in three leṇas in Bedsa 11, Bhaja 22 and Pitalkhora 4 where an attempt has been made to introduce vault roofs. It appears these belong to a period of experimentation.

The roof types can thus be classified as follows (see also Fig. 11) :

A. VAULT ROOFS

i. *Vault roof on nave and quadrantal roof on aisles.*
*e.g.* Ajanta 10, Bhaja 12, Junnar Ganesh Pahar 6, Kondane 1, Nasik 18, Pitalkhora 3, etc.

ii. *Vault roof on nave and flat roof on aisles*
*e.g.* Ajanta 9, Aurangabad 4, Kanheri and Karle Chaitya halls etc.

B. FLAT ROOFS

i. *Simple flat roof*
*e.g.* Kanheri 2c, 2e, etc.

ii. *Roof of the verandah at a higher level than that of the hall.*
*e.g.* Junnar-Manmodi, 2, 3, 5; Nasik 19, etc.

iii. *Roof of the verandah on the same level as that of the hall.*
*e.g.* Junnar-Manmodi, 8, 9, 38, 43, 45, etc.

iv. *Roof of the verandah at a lower level than that of the hall.*
*e.g.* Junnar-Manmodi, 9, 14; Sivaneri 2, 36, 37, 42, 43, 66 etc.

Note : Rare examples of doomed roof as in Junnar-Tuljaleṇa 3 and Bedsa 3, and the examples with

partial vault roof in *leṇas* like Bhaja 22, Bedsa 11, and Pitalkhora 4 have not been taken into account in this classification.

## SCREEN WALLS AND VERANDAHS

It has been well-recognised that the replacement of the wooden screen in front of the *Chetiyagharas* by a stone cut one marks an advancement in rock-cut architecture. This too happens to be the result of the process of gradual adjustment to the rock medium. There is evidence to show that all the open facaded type of *chetiyagharas* like Bhaja 12 (Pl. 39), Pitalkhora 3, and Ajanta 10 had wooden screens in front. These *chetiyagharas* are also associated with inscriptions belonging to series Ib.

The next stage is represented by caves like Ajanta 9, Nasik 18, and Junnar-Manmodi 40 where the stone-cut screen appears instead of the wooden one (Pls. 7, 70, 75).

An advancement is seen in Bedsa 7 in providing a verandah in front (Pl. 23). This can be expected as a natural development from the previous stage. In the earlier varieties the finely carved facade screen is exposed to the actions of elements of nature and disfigured. So it appears that the verandah rising on a row of front pillars to a height above the screen was introduced.

But, even this device was not sufficiently useful. As the verandah ceiling was very high, it still exposed the screen to the action of splash of monsoon rain. It was finally warded off by putting a rough screen wall in front of the verandah as in the Karle and Kanheri *chaitya* halls (Pls. 94, 128).

A similar chronological development can be postulated in case of verandahs of the *leṇas* also. The earliest *leṇas* probably had no verandahs (*e.g.* Ajanta 12, 13, etc), then came a stage when verandahs were introduced with two pillars in antis in front (*e.g.* Nasik 19, etc.), and the next stage was the provision of a low screen wall running between the pillars and pilasters (*e.g.* Nasik 3, Kanheri 32, etc.).

## DOOR FRAMES (Fig. 12)

Generally the door frames are rectangular in all the caves and do not display much variation. But some variant types seen in a few caves appear to be of some importance from the chronological point of view.

A few of the caves *e.g.* Ajanta 12, 13, 15A; Bedsa 7, 11; Bhaja 6, 7, 11, 13, 18, 22; Nasik 19; Karle *chaitya* hall and Pitalkhora 4, show a slight inward slant of the door-jambs (Fig. 12 (3-6), Pls. 15, 17, 26, 32, 40, 53, 133, 196. Most of these bear *chaitya* window decoration above the lintel. It is likely that here is a stage in rock-cut architecture which is still copying the features of wooden buildings, where the slanting jambs were technical requirements to counteract the thrust of the bent-wood arches above as in the case of pillars with rake). Hence these could be considered as very early in the series compared to others where the door-frames are regularly rectangular. But whether this criterion is applicable or not in the case of door-frames without the *chaitya* window ornamentation above the door-ways requires further consideration. Some *leṇas* like Junnar-Manmodi 45, where the *chaitya* window decorations exist, do not show the slant of the door frames. Such ones may be considered as of later date compared to the types with slanting door-jambs.

Inscriptions associated with Ajanta 12, Bhaja 6, Nasik 19 and Pitalkhora 4 are all of the early stage palaeographically (Series I B to III). Bedsa 7 and Karle *chaitya* hall with inscriptions of series III and IVA also have these features. But slanting of jambs are not seen in any cave with inscriptions of series IVB and further on.

## WINDOWS (Fig. 13)

There are two varieties of windows, open and grated. True to the fashion of wooden architecture the grated windows appear to have been employed to begin with. However, the realisation of the insufficiency of the windows of this type for admiting light and air, may have prompted the architects to provide open windows instead of the grated ones. There are also instances in which the earlier gratings were cut to provide wider openings.

The following typological analysis may be suggested.

A. OPEN WINDOWS (FIG. 13 (1-2, 5-6))

This appears in two sub-varieties.

i. One or two windows of small size (about 40 cms h × 40 cms b) set at head level on one or either side of the doorway. (Pl. 30)
*e.g.* Bhaja 5, 14; Junnar-Ganesh Pahar 1, 4, 5, 8, 10, 12, 13, 17, 19; Sivaneri 18, 29; Kanheri 47; Mahad 9, 13, 16, 18, 23, 25, 26, 28; Kuda 16, 17, 22.

ii. Large windows (about 180 cms h × 120 cms b) set on either side of the main doorways with their lintel in level with that of the main doorway and threshold at waist level. (only one window too is to be seen occasionally). Pls. 149, 180, 184, 197.
*e.g.* Bhaja 9; Junnar-Ganesh Pahar 7, 9, 21; Sivaneri 36, 42, 49, 52; Kanheri 67, 70, 71, 93, 95, 101; Nasik 1, 3, 10, 17, 20; Kuda 2.

Window Type A i is a very simple architectural form and it is difficult to know whether the occurrence or otherwise of this has any chronological importance. However there are three examples in inscription-bearing caves (Junnar-Ganesh Pahar 5; Sivaneri 8 and Kuḍa 16-17). All these belong to palaeographical series VI and later.

Window Type A ii is seen in larger *leṇas*. Most of these are known from caves assignable to 2nd and 3rd centuries A.D. (Palaeographical series V onwards). The earliest datable instance is in Nasik 10 of Uṣavadata's time.

While it can be generally stated that the open windowtype was in use extensively in the early centuries of the Christian era, the item is of such a nature involving no developmental tendency and hence appears not to be of much value for chronological reconstruction.

B. GRATED WINDOWS (FIG. 13 (3-4))

These occur in many caves. But its prevalence in good numbers is noticeable in the earlier caves mostly, whereas in later caves the open windows occur in profusion.

i. An analysis of the window types reveal that most of the grated windows in caves consisting of inscriptions Series I-IV are well fashioned emulating the *vedikā* pattern. They invariably have square mullions and the cross bars are fashioned with a biconvex cross section and are depicted as though they are passing through holes in the mullions. They are usually larger (about 120 cms l × 90 cms b) and have wide holes. Some attempt to provide a frame around is also seen.
*e.g.* Bhaja 13; Kondivite 9; Nasik 19; and Pitalkhora 4. (Pls. 41, 146, 195)

Bedsa 7 has a fine representation of this type of window. All these are datable to 1st century B.C. and earlier on palaeographical features of associated inscriptions.

ii. This tradition of using windows of *vedikā* pattern appears to have died out after the 1st century B.C. Grated windows occur occasionally in later caves, as in Nasik 4, Kanheri 21, 50, 88 and 94. These are of crude workmanship. It appears the wooden tradition of making *vedikās* with lenticular cross bars had gone out of vogue, atleast as far as the windows are concerned. Nasik 4 and Kanheri 21 (with Śrī Yajña's inscription) have just square holes between mullions and cross bars (Pls. 102a, 181).

iii. The Kanheri examples from caves 50, 88 and 94 are cruder than the previous examples. Here square depressions have been scooped into about 2 cms depth and in the centre of such depressions circular holes have been bored. This can be considered as the latest variety of grated windows (Pls. 113, 124)

# BENCHES

Benches are commonly seen in the *leṇas* in cells, hall and verandah. The occurrence or otherwise of the benches in the above parts of the cave and also the typological varieties provide some hints for chronology.

## A. BENCHES IN CELLS

These, meant for the monks to sleep, are cut along the back or side wall/s and are normally about 75 cm h, 75 to 80 cm w and 160 to 200 cm l. There are two major varieties.

i. *Simple benches*

The edges of the benches are flush with the walls on either end, and the ceiling above the benches is in continuation of the cell ceiling itself.

ii. *Recess benches (Bench-in-recess)*

Here the side walls above the benches are a little forward from the line of the cell walls and the ceiling above too is a little lower than the cell ceiling. The whole thing looks like a long recess.

Typologically the second variety is certainly an advancement from the first, and hence could be considered as of a relatively later variety.

It is interesting to note that the later variety is to be seen in caves containing inscriptions of series V (2nd century A.D.) and onwards. The earliest instance of its occurrence appears to be in cave 3 at Nasik. The earlier variety of simple benches may have continued for a short while after the above date but the second variety became common later.

While most of the caves contain only one bench per cell, there are some instances in Ajanta 12, 13, 15A and Kondane 2, 3, 4, 5 etc., where double benches appear in a cell. Such are very few in number, but the caves with this feature may belong to a date nearer to each other. Some caves like Ajanta 13 and 15A have pillows too cut in the rock. A few have studs cut on the front face of the base (*e.g.* Junnar-Ganesh Pahar 3; Mahad 3; Pitalkhora 6). Some have box niches underneath (Bhaja 7, 13, etc.). But all these are exceptional varieties.

An interesting aspect however is the absence of benches in a few instances. From our analysis from other criteria it is seen that the caves that could be assigned to a very early period as well as the caves belonging to the end stage of rock-cut architecture under present consideration do not have benches. The presence of benches appears to have been a feature that was in vogue from about early 2nd century B.C. to the end of 3rd century A.D., as seen from caves having inscriptions datable on palaeographical and other grounds to this span of five centuries.

## B. BENCHES IN HALLS

These are usually very low benches (about 30 to 40 cm h and 60 cm b) cut along the inner walls of the hall. They can be classified as follows :

i. *Bench along a single wall*

*e.g.* Bhaja 15; Junnar-Manmodi 3, 16; Ganesh Pahar 1, 2; Sivaneri 23, 67; Kanheri 33, 42, 59, 68, 96, 97, 98; Mahad 4, 9, 10, 27.

ii. *Benches along two opposite walls*

*e.g.* Bhaja 13, 16; Junnar-Ganesh Pahar 19.

iii. *Benches along adjacent walls (on L shaped plan)*

*e.g.* Junnar-Manmodi 33; Kanheri 21-22, 32, 49, 50, 53, 56-58, 65-66, 70-71, 73, 75-77, 80-82, 88, 93-94, 99, 101.

iv. *Bench along the three inner walls*

*e.g.* Ambivale 1; Junnar-Manmodi 7; Ganesh Pahar 5, 7, 21; Sivaneri 14, 18, 24, 36, 49, 64; Kanheri 2 f, 67, 78; Mahad 5, 8, 16; Nasik 3, 20; Kuda 4.

Though it is likely that every successive variety is an improvement from the previous, there is no certain proof for that. The availability of space and the existence of need or otherwise may have as well determined their presence and varieties.

If other criteria like pillar types and palaeography are taken into account, it is seen that no epochal dates could be suggested to the first two varieties. They appear to have been in vogue throughout the period.

But the varieties iii and iv are seen extensively in *leṇas* with inscriptions of series V and VI and pillar types D and E. Hence the low benches both L shaped and those along three walls of the hall can be considered probably as features of *leṇas* of 2nd century A.D. and further on.

In the *Maṭapas*, however, the low bench along the three inner walls appears to have been in vogue even in the 2nd century B.C. (Nanaghat 11).

### C. BENCHES IN VERANDAHS

(i) *Narrow benches cut along the side walls. These appear in two varieties.*

(a) Simple benches : *e.g.* Bhaja 5; Junnar-Manmodi 47, Ganesh Pahar 3, 4, 10, 31; Sivaneri 24, 26; Nasik 3 and 19, etc.

(b) Bench-in-recess : *e.g.* Ambivale 1; Junnar-Ganesh Pahar 12-13, Sivaneri 38; Kanheri 16, 21-22, 33, 42, 53, 59, 68, 74-75, 78, 88, 91, 93-94, 97; Mahad 7, 9-12, 16, 22-24, 26; Nasik 11; Kuda 2, 5, 7, 12-14, 25-26, etc.

(ii) *Low benches running between the side pilaster and the central pillars.*

These have a low thin sloping back also. The bench and the back serve as a low screens in front of the verandah. This is a distinctive variety and may be referred to as backed-benches. *e.g.* Ambivale 1; Kanheri 32, 53, 56, 67, 78, 80, 81, 94-97; Mahad 3, 8, 10-13, 16, 18-19, 23, 26; Nasik 3, 14; Kuda 4, 7, etc.

Variety i a appears to have no chronological signifiance. But i b and ii are seen in caves with developed architectural elements like pillars of type E. These are datable to a late period *i.e.*, 2nd century A.D. onwards on palaeographical grounds too.

### D. BENCHES IN FORECOURTS

These are usually cut along the side walls. Examples have been noticed only at Kanheri. Features like the provision of side rests, and inserting a circular tub in the centre can also be seen sometimes.

This variety occurs mostly in caves with inscriptions belonging palaeographically to series VI, VII, *i.e.* in caves datable to post-Śrī-Yajña period and onwards.

## CHAITYA ARCHES

The *chaitya* arch is one of the common architectural members used in Western India and probably the most common of the architectural designs used for decoration.

### A. MAIN CHAITYA ARCHES

The arches appearing as part of the facades of the *chetiyagharas* show several differences in their depiction. Some of the important varieties are illustrated in Pls. 7, 11, 26, 39, 67, 70, 75, 128, 137, 192. It is possible to make out from them that the differences in their forms are more due to technical differences in fashioning originally in wood. The architectural form of the *chaitya* arch itself is of course derived from wooden constructions and the evolutionary stages are to be traced on the basis of gradual

technical advancement in wooden construction and also from changes that were wrought in their form in the rock-cut examples when gradual familiarity was attained in working in the rock medium.

Such Typo-chronological stages may be postulated as follows :

i. The *chaitya* arch appears to be the sectional view of the vault-roofed wooden construction (see discussion under Bhaja 12). The simplest variety then happens to be of the type represented by the *chaitya* halls at Bhaja 12 and Ajanta 10, wherein arches are shown as being supported by slanting pillars to counteract the thrust of the bent-wood vault above (Pl. 39). It can be seen here that suiting to the nature of such constructions the span of the arch is widest at the base. This is a form that is possible to be achieved by bending the wooden planks of the roof and fixing them to large longitudinal beams resting on pillar lines on either side, these being further buttressed by the wall and vault-roof of the aisles. The front of the arch was part of the yawning entrance. Except possibly for a wooden screen in the lower part, there is no evidence of wooden fixtures in the upper part of the arch. It was left open to allow sufficient light into the interior. This could have been so at least in the earliest stage.

ii. A slight improvement is to be noticed in the provison of a grated screen made of curved wooden reapers and cross bars, all supported by two straight wooden posts rising on either side. The grating simulated faithfully the perspective view of the open *chaitya* halls with the arch in front and the vault roof with its series of bent-wood beams ending in smaller semi-circle of the quarter-sphere roof above the apse at the other end. The whole looks like a sun-window. The stage is represented by the arch of the Kondane *chaitya* hall (Pl. 137, see the decorative arches too).

The vertical jambs introduced in the above stage, in wooden architecture, helped in another way too. These could act as further safeguard against the lateral thrust of the tensile bent wood of the roof that could be tied to the jambs with the help of wooden bolts. An indication of the use of this device is seen in the stone cut horizontal bolts in the arch at Kondane itself, as well as in the open arch of the stone screen in the *chaitya* halls at Karle and Bedsa (Pls. 26, 75, 128). A sophisticated employment of the device has been well-copied in the *chaitya* arches in Ajanta 9 and the main cave at Karle. As a result of this effective device against lateral thrust of the bent-wood roof it was possible to make the arms of the arch to bend to a desirable extent to provide a more aesthetic look. At this time the *chaitya* arches, instead of being just large semi-circles as in the previous stage, begin to become more horseshoe shaped. This tendency resulting in the inward bend of the arm can be taken as an indicator of the use of advanced technology, and in turn a chronologically later stage than the previous one.

iii. It has been shown by Le Roy Davidson and Dehejia[23] how a further technical improvement was effected in the wooden arch form by introducing a tie-rod connecting the feet of the *chaitya* arch. This is a more effective device in achieving a form with much incurved sides. An indication of the possible use of this is seen in the incurved arms of the arches in Ajanta 9. The large horizontal beams, often with broad *vedikā* designs on them, below the arches in the *Chaitya* hall at Karle and Bedsa are more sophisticated examples. The arch at this stage becomes more incurved.

When these tie-rods are employed the vertical jambs and the side bolts are not of much use technically. Gradual omission of these items is a natural corollary. This stage is seen in the *chaitya* arch in Junner-Manmodi 26 (Pl. 67). A noticeable peculiarity appearing at this stage is the rise of the paw ends.

iv. The next stage is the one adopting the form to the rock medium where the various items emulating the wooden form like the beams on soffit, the jambs, etc., have been done away with. An example is Kanheri 3.

v. The last stage is the one in which the large *chaitya* arch lost its utilitarian aspect and became just a decorative design. This type of 'blind' arch is to be seen in Junnar-Ganesh Pahar 6 and Manmodi 2 (Pls. 65, 71).

The above relative chrono-typological sequence postulated above is in conformity with the chronological stages that can be built up on other concomitant architectural items like the pillar type, the *stūpa*, etc. These would be considered in Chapter VII.

However for the present, the palaeographical series contemporary to the different main *chaitya* arch types as known from associated inscriptions, may be listed as follows :

| A. MAIN CHAITYA ARCHES | *Associated Palaeographical Series* |
|---|---|
| (*i*) Arches with wide base span, and no interior fixtures *e.g.*, Bhaja 12, Ajanta 10. | I A |
| (*ii*) Arches with somewhat wide span at base, but still displaying a slight tendency towards becoming smaller; the interior tie bolts appear decorated with grated screen in the form of a sun window *e.g.*, Kondane 1. | I B |
| (*iii*) Arches of horse-shoe shape with definite incurve of side arms and reduction of base span; shown as fixed with tie beams and tie bolts inner space of arch continue the decoration of sun window *e.g.*, Karle *Chaitya* hall. | III & IV |
| (*iv*) Arches with incurved arms, but without the wooden features like beams on soffit, jambs etc. *e.g.*, Kanheri 3 | V |
| (*v*) Blind arches | V and VI |

The use of the *chaitya* arch appears to have gone out of vogue some where by the end of the 2nd century A.D. This does not appear in any of the *chaitya* halls after this date upto the end of the period under consideration here, though a few later revivals in Mahāyāna times are known, as in Ajanta cave 19, 26, Ellora cave 10, etc.

## B. DECORATIVE CHAITYA ARCHES

The *chaitya* arch has been used often as a decorative design in the Western Indian caves. It is a popular design next only to the *vedikā* pattern. While in the case of main arches utilitarian necessities and harmony in design with reference to the other architectural components were to be kept in mind by the architect, the decorative designs had no such compulsion. This explains to a certain extent the differences in the designs of the main arch and the decorative arches seen in the same cave often. The decorative arches can be considered as just replicas of the form that was in fashion in the contemporary wooden architecture.

The important stages of technological advancement delineated with reference to the main *chaitya* arches can be used as indicators and the decorative arches may be classified into two main varieties typologically.

i. *Broad-spanned chaitya arches with or without grating inside.* Pls. 15, 31, 39, 40, 196.

*e.g.* Ajanta12 (decoration), 12; Bhaja 6, 12, 13, 15; Jannar-Tuljalena 15, 16, etc.

ii. *Narrow-spanned chaitya arches with recognizable incurving of arms.* Pls. 17, 25, 28, 63, 69, 70, 75, 76, 128, 137, 138.

These are invariably fitted with vertical jambs and tie-bolts.

The smaller semi-circle within the frame is some times decorated with half lotus or grill pattern.

*e.g.* Ajanta 15A, Bedsa 7, 11; Junnar-Tuljaleṇa 12; Manmodi 40, 45; Kondane 1, 2; Karle *chaitya* hall, etc.

While these types fall in a definite chronological sequence (Type ii succeding type i with some possibly representing a transitional stage) it can be seen that the variety is seen in many caves that could be placed to different ages on other grounds discussed above. There are some other minor stylistic indications like the shape of the paw of the arch, the finial variety and the use of *vedikā* band at the base. But on analysis and tabulation of these items, these were not found to be in any logical sequential order. They appear to be more due to the preferences of the artist at work. At best the occurrence of exactly identical sub-varieties may reveal a somewhat proximal dates for them.

However, an interesting fact revealed by the analysis was that the *chaitya* arch ceases to occur as a decorative design in Western Indian rock-cut caves from about the time of Nahapāṇa and Gautamīputra Sātakarni (*i.e.* from the beginning of the 2nd century A.D.). No cave bearing the foundation inscriptions of this or later periods has such a design, so far as the period under present consideration is concerned. (Of course some late revivals are seen in Mahayāna caves and in the *Kūḍu* arch decoration in many temples of the later periods.

## VEDIKĀ

The *vedikā* (rail ornament) is a popular decorative design employed in Western Indian caves almost throughout the period under consideration. This occurs on the facade of the *chetiyagharas* (Pl. 39), drum and *harmikā* of *stūpas* (Pls. 24, 38), on the interior walls, entablature and the basement of caves (Pls. 28, 33, 40, 101, 138, 155, 166, 178, 181, 220), as well as in the grated windows as mentioned above.

The pattern is derived from the wooden rail and display all its features—the base, square banisters, lenticular cross bars passing through the coping and often even the pins on the base-bar meant to affix them to the other members. Almost all these members are seen in the representations throughout the period (except in cases like the grated window where the *uṣṇīṣa*, nails, etc. were not necessitated) and it is difficult to make out distinct typological groupings. But it can be said generally that the representation of the railings is seen faithfully done with all the details in the caves of the earlier group (*i.e.* with inscriptions of Series I-IV), but in caves with Series V onwards (*i.e.* from about 2nd century A.D. onwards) they become cruder and their use too is not so prolific as in the previous stage.

Certain special varieties too may be noted : Fig. 14 (6-8) :

i. *Roll cornices with Vedikā design.* Fig. 14 (7); Pl. 7, 63, 64.
These appear as part of decoration in Ajanta 9; Bhaja 12, 22; Bedsa 7; Nasik 18; Kondane 1, 2 and Tuljaleṇa 15-16.

ii. *Window type panels with vedikā design.* Fig. 14 (8); Pls. 26, 39.
Bhaja 12 ; Bedsa 7 ; Kondane 1 ; Nasik 18.

iii. *Railings with circular lotus panels on banisters and cross bars.* Fig. 14 (6); Pls. 94, 178.
Nasik 3 ; Kanheri 3.

The first two varieties, it may be noted, are seen in caves associated with inscriptions palaeographically datable to the centuries prior to the Christian era. The 3rd variety, as can be made out from one instance of its occurrence in Nasik 3, may have been in vogue around the time of Gautamīputra Sātakarni.

## BRACKETS (FIG. 14 (1))

The quadrantal bracket seen in a few caves is an item copied from wooden architecture directly. So, generally the occurence of this appears to provide an indication to a stage when the hangover from wooden proto-types was still strong. Instances of its occurrence are in Nasik 18; Kondane 1, 2; Pitalkhora 4, 6, 7; Ajanta 9, 12; Bhaja 12, Junnar-Tuljaleṇa 15, 16, etc. (Pl. 7, 64, 207).

It may be seen that the above quoted instances are mostly from caves datable to 2nd-1st century B.C. on palaeographical grounds. Brackets are not noticed in any of the caves of the later period.

STEPPED MERLONS (FIG. 14 (3))

These are usually seen in a row above the upper most *vedikā* on facades of *chetiyagharas* and in interior decoration of *leṇas*. Like the bracket this too appears mostly in caves of the early period and is noticeably absent in the later ones.

The occurrence of merlon has been noticed in Ajanta 9, 12, 15a; Aurangabad 4 (on *stūpa*); Bedsa 7, 11 (front); Bhaja 7; Pitalkhora 6; Kondane 1, 2. etc. (Pl. 15, 33, 137, 207).

Like the brackets, these too belong to the caves assignable to 2nd-1st century B.C.

STEPPED CORNICE (FIG. 14 (2); PLS. 7, 15, 21, 39, 51, 136, 139).

The occurrence of this is similar to that of Bracket and Stepped merlon.

Examples are seen in Kondane 1, 2; Ajanta 9, 12, 15A; Aurangabad 4; Bedsa 7, 11 (front) and Bhaja 22, etc.

It may be seen that most of the caves in which this item occurs are associated with inscriptions of series I-IV assignable to the period before the beginning of the Christian era.

HOURGLASS DECORATION (DOUBLE-CRESCENT) (FIG. 15; PLS. 81, 102, 104, 123, 125, 153,162, 170, 174, 183, 187).

A decorative design consisting of two crescents placed back to back on the upper and lower side of a central knot appears in many caves on the rectangular pilasters of the verandah. They have been noticed in the following instances.

| | |
|---|---|
| Junnar-Sivaneri | 26 |
| Kanheri | 32, 49, 50, 54, 56, 59, 64, 65, 66, 67, 70, 73, 75, 76, 77, 78, 79, 80, 88, 93, 94, 95, 97, 98, 101 |
| Kuḍa | 1, 4, 6, 7, 15 |
| Mahad | 8, 10, 11, 12, 13, 18, 19, 27 |
| Nasik | 6, 8, 9, 14. |

Figure 15 illustrates some of the important varieties. Even though slight differences in their form are noticeable in various examples, it is difficult to make out any typo-chronological succession amongst them. However, certain examples with double lines in the crescent and some with a central line dividing the central rectangle (Fig. 15, n-p) appear to be stylically developed forms. But as there are only four examples of this type, all coming from Kanheri, it is difficult to assert any chronological significance for this variation. At best the caves having this feature may be considered as belonging to a very small time range.

On the basis of such of the instances in which inscriptions occur in hourglass bearing caves, it can be inferred that this decorative design is an item appearing only in late caves of the latter part of the 2nd century A.D. and onwards. To be exact, out of the 22 instances of epigraphically documented caves possessing hourglass decoration, only one cave (75 of Kanheri) has an inscription of Series VC, seven caves (Kanheri 54, 88, 93, 98, 101; Kuḍa 15 ; Nasik 6) have inscription of Series VI, and thirteen others have inscriptions of Series VII. If this number is any indication it can also be suggested that this design which started somewhere in the latter part of the 2nd century A.D. became increasingly popular in later times and was in use till the end of the period under present study.[24]

STUDS (FIG. 14 (4); PLS. 73, 189, 197)

Series of vertical parallel studs are some times seen as part of basement decoration in front of some caves. The examples are seen at Kanheri 74, 78, 79, 80, 81, 94 and Mahad 3, 5, 11, 12, 13, 19 and 27. There are indications suggesting the existence of this decorative motif in some other caves at the above sites and one or two at Kuḍa and Junnar.

It is noticed that the basements of the caves are hardly decorated in the early period under consideration and this stud decoration is the only variety which stands as an exception. This element is normally seen below a stretch of railing decoration on the front face of the backed banches. We have shown above that the backed bench itself is a feature seen in caves of the 2nd (late) and 3rd centuries A.D. All the palaeographical date of inscriptions associated with the caves listed above confirm this chronological position.

It appears the stud decoration went out of vogue in the post-Hīnayāna period.[25]

## CHANDRAŚILĀS (FIG. 16; PLS. 105, 106, 122)

Several caves at Kanheri have *chandraśilās* in front of the steps. The varieties are few, but even in them typological differences are noticeable to a certain extent.

Most of the caves retaining the *chandraśilā* appear to belong to the late 2nd century A.D. and onwards, being associated with inscriptions of palaeographical series VI and VII. There is no cave of the early period either in this place or in any other centre of rock-cut architecture possessing this element. So the very presence of *chandraśilā* in the Hīnāyāna caves appears to be indicative of a late date for them.

The range of types are illustrated on Fig. 16. Typologically it is possible to consider that *chandraśilās* of simple semi-circular type are the simplest varieties and possibly the earliest. The next stage is represented by those with slight rectangular projections on either side at their base. A further improved stage appears to be one in which these side projections begin to curve to the front. Examples of *chandraśilās* of Mahāyāna times in which this curving is prominent appears to substantiate the above contention.[26]

### *Additional Remarks*

The relative chronology of individual monuments and the epochal dates of certain groups can be worked out well only on the basis of a combination of evidences of varied nature. The typological analysis given above happens to be one of the series of data that could be taken into consideration. We have covered herein the major items only, and have just indicated the clues they can provide for the reconstruction of chronology, more as working aids for study than as final conclusions. However, while each individual item could be taken as a pointer towards the general chronological position of the monuments concerned the exact position is to be worked out on the basis of various concomitants. Such considerations with regard to the architectural concomitants, palaeographical, historical and other data have been taken into account in the next chapter while discussing the chronology of monuments in various centres.

## NOTES AND REFERENCES

1. Addington Symmonds, quoted in Fletcher 1956, p. 76.
2. It is possible to a certain extent to make out the details of techniques employed in hewing the caves. The finished caves rarely retain any evidence. But some clues are available in the unfinished caves. In the case of large-scale removal of rock, deep furrows were made first in the rock by using heavy pointed picks marking out blocks (about 50 to 60 cm broad, long and thick). These blocks were removed then by using either heavy picks or large hammers. To facilitate easy removal of such blocks the method of cutting in step like fashion was employed. A good example of this method can be seen in the unfinished cave 1 at Nasik.

   When limited space was available for working, as in the interior of water-cisterns, the cavity was created first by digging deep and then the sides were hacked out with the help of picks of suitable size. Haphazard pick-marks can be seen in the interior of many water-cisterns, as well as in some unfinished cells of caves.

   Wherever the caves and cave-parts were to look well, the wall-surfaces and other parts were first fashioned roughly by

using smaller picks. Then they appear to have been further dressed by chiselling. The fineness of chiselling depended on the texture of the rock and also on the fact whether they were to be smoothened or covered with plaster and paint.

3. An inscription (written in paint) noticed by Burgess on the wall painting opposite the 3rd pillar in the left wall (Ajanta No. 4) provides clue to the date of the introduction of plaster and painting in that cave. That inscription appears to be an explanatory label describing the scene depicted in painting. The letters, as can be made out from the illustration (Burgess and Indraji 1881), belongs to Series III and hence the inscription and in turn the earliest paintings in Western India are possibly datable to late 2nd or early 1st century B.C.

   While those caves displaying smoothening could be generally considered as of early date, the converse may not be true. It is not unlikely that, due to factors like limited funds and/or non-availability of craftsmen proficient in the art of smoothening, some of the caves were just dressed and left as such.

4. *e.g.* Karle No. 6. There was no separate term for stone-workers. They were simply called stone-carpenters (*Selāvaḍhaki*, Kanheri No. 4).

5. This aspect has been discussed in detail below in this chapter as well as in Chapter VII. Many earlier workers too have pointed out the utility of this method of recognition of achievement of familiarity with the rock-medium and consequent emancipation from the hangover from wooden architecture as an important chronological indicator (Fergusson and Burgess 1880, p. 182; Brown, 1941, p. 26, Saraswati in Majumdar and Pusalkar 1953, p. 499). Some have questioned its use altogether (Willetts, 1961 p. 63). Dehejia (1972 p. 77) too opines that 'there is no consistent pattern, however, in the presence or absence of wooden appendages . . . . . ' and she has tried to fix up the chronology on the basis of architectural forms only.

   The very change in architectural plans and forms are very much due to the familiarity gained gradually by the architects with the new medium they had adopted for work. It would be shown in the following pages that the chronological sequence of monuments and architectural members built up with the help of the above feature is confirmed by various other historical and palaeographical evidences too.

6. *e.g.* p. 162-63.

7. The utilisation of this method requires greater caution in a sophisticated culture context, particularly in the field of art. There is a possibility of an earlier type being utilized in a later stage and this posing difficulties in the simple application of the principle. But the architectural monuments being complex art items comprising several members and decorative motifs, the age of the monuments would be indicated by the presence of one or the other items of a later date despite the occurrence of far earlier items (as decided on the principle of evolution). So it is desirable to recognise general concomitances for the successive stages than depending upon one or two items only for determining chronology on stylistic grounds. The necessity of this method may be illustrated by a very broad example. There are some dwelling caves in Jivadan-virar which do not have rock-cut beds The absence of rock-cut beds in cells is a well known feature of the late Mahāyāna vihāras (as in Ajanta I, II, etc.). But just by taking this one item they cannot be equated in age nor the item itself can be overlooked as of no chronological significance. The concomitances in the first group are that they are small, have no verandahs or doors and the walls are smoothened, whereas the Mahāyāna *vihāras* are of a regular type with the cells surrounding a large pillared hall with a pillar-lined verandah and decorated with exquisite sculptural work. The associated items are clearly indicative of their chronological disparity.

   The above example also shows incidentally that the various architectural concomitances are determined by varied factors. The Mahāyāna *vihāras* are of an age when monasticism was well institutionalised, when monks stayed in them well provided with amenities for their living, including possibly wooden cots. The caves in Jivadan-Virar could have been made at a stage when the rigorous ways of life enunciated in the earliest *Vinaya* texts were still in vogue, when erametic monks resorted to caves only in the rainy season and when they were expected to spend nights without much comforts. The religious practices of the monks as existed in different periods had a great say in the types of monuments that were created in the monasteries. Similarly, the availability of patronage, the demands of the laity and such others too have their own inpact. Even though it may be desirable to discuss the concomitances of architectural items as an aid to the study of development of rock-cut architecture, in view of the fact that this requires the consideration of broad spectra of facts and a detailed analysis of the situation in the context of historical development of monastic establishments in different centres, we will be reserving these discussions for further chapters. For the present, however, the first aspect of pure typological classification and analysis only would be taken into consideration here.

8. Fergusson and Burgess, 1880, p. 171.

9. The difficulty was well visualised by Dikshit (1942) and he has proposed a classification which varies slightly from ours.

10. Many scholars have pointed out this. For example Paranavitana (1946, p. 89, fn. 1) has observed rightly with reference to the *chaitya* that "The word used by Fergusson is not correct for the type of structure described. *Chaitya* is actually the *stūpa* inside and the structures should be called *cetiyaghara* or *caitya* hall." Similar opinions have been expressed by T.N. Ramachandran (1953, p. 2, note 3), and P.K. Acharya (1946, p. 176). Fergusson (1880, p. 174) himself was aware of the error and suggested alternate terms *chaitya*-cave or *chaitya*-hall. Some scholars have adopted the terms *chaitya*-hall consistently (*e.g.* Commaraswamy 1965; Smith 1930; Brown 1941). Some scholars, however, have continued to use *chaitya* for the *chaitya*-caves (*e.g.* Zimmer 1960, p. 246; Dehejia 1972, p. 224, etc.). The contemporary

literature and epigraphs too never use the term in the sense of a building housing a *stūpa*. There are references to the making of such shrines in the Buddhist works of Ceylon, where the terms used for them are *chetiyaghara*, *thūpaghara*, *dātughara* and *dhātugeha* (Paranavithana, 1946, p. 86).

The term *Vihāra* too which has become common in modern works on architecture to refer to the residential units in monasteries is not used in the sense in early literature and inscriptions. *Vihāra* is the whole monastic complex and not the individual residential unit (Childers 1875, p. 569; Dutt, S., 1924, p. 99). In the *Mahāvaṁsa* (Geiger, 1912), the *Vihāra* built by the king Duṭṭagāmaṇi (1st century B.C.) is said to have contained an independent *stūpa* also (Chapter XII). The *Mahāvihāra* at Anurādhapura had a great *stūpa*, a *chatussālā* (a hall with cells around), a hall where gifts were distributed to the monks, a branch of the *Bodhi* tree and a tank with a room for warm baths (Chapter XV).

There is only one reference to the *chetiya* in the contemporary inscriptions of western India (Kanheri No. 5). Its context of occurrence is too vague as the inscription is damaged; it appears to refer to a *stūpa* 'constructed' in some Buddhist centre outside Kanheri. The term *Vihāra* is seen in four inscriptions. Kanheri No. 5 refers to the *Abālikā-vihāra* founded at Kaliaṇa; that *vihāra* consisted of a *chetiyaghara*, an *upaṭhansāla* (assembly hall), and *ovarakas* (cells for monks). Kanheri No. 16 also refers to a *vihāra* at Kaliyāṇa, and reference has been made in this inscription to a two-celled structure and a *bhojanachatusāla* that existed in this *vihāra*. Nasik No. 15 mentions the *Triraśmi-parvata-vihāra*; the context indicates that the whole monastic establishment is referred to here than a single residential unit. It is so with reference to Junnar No. 5 wherein *Gedha-vihāra* (on the Manmodi hill) is mentioned.

11. The term occurs with different spellings such as *chetiyaghara*, *chetiāghara* and *chetiāghara*. The following monuments are specifically referred to as *chetiyagharas*: Junnar-Ganesh Pahar caves 6 and 14 (Inscription Nos. 11 and 12); Junnar-Sivaneri caves 43 and 66 (Inscription Nos. 29 and 34); Kanheri cave 3 (Inscription No. 4); Kuda caves 9 and 15 (Inscription Nos. 9 and 16); Nasik cave 18 (Inscription No. 19).

    Mahad cave 8 is referred to as *leṇa-chetieghara* (Inscription No. 2).

12. *Leṇa* is the word consistently used in inscriptions for the dwelling units. They are also referred to sometimes by prefixing a word mentioning the number of cells in the unit as *Bigabha* (two celled), *Pachagabha* (five celled), *Satagabha* (seven celled), *Nāvagabha* (nine celled), etc. The monuments referred to as *leṇas* in the contemporary inscriptions are as follows: Junnar-Ganesh Pahar cave 26 (Inscription No. 25), Sivaneri caves 33 and 48 (Inscription Nos. 28 and 31); Kanheri caves 21, 32, 39, 50, 54, 59, 60, 64, 65, 66, 73, 74, 75, 86, 88, 98, 99 and 101 (Inscription Nos. 14, 16, 18, 20, 21, 22, 23, 25, 26, 27, 28, 29-30, 31, 35, 36, 38, 40, 41); Kol caves 3, 4 and 5 (Inscription Nos. 1, 2 and 3); Kuda caves 1, 5, 6, 10, 12, 13, 14, 16, 17, 18, 23 and 24 (Inscription Nos. 1, 4-5, 6, 10, 12, 13, 14, 17, 20, 21, 23, 24); Mahad cave 27 (Inscription No. 3); Nasik caves 3, 6, 8, 10, 11, 12, 17, 19 and 24 (Inscription Nos. 3-5, 6, 8-9, 10-12, 16, 17, 22 and 25).

    [Mahad cave 8 is described as *leṇa-chetiaghara* (Inscription No. 2), Nasik cave 20 is referred to as *āvāso* (Inscription No. 23].

13. Junnar-Manmodi cave 7 is a monument described in the contemporary inscriptions as *maṭapa* (Inscription No. 3). Junnar-Sivaneri cave 64 is called *bhojana-maṭapa* (Inscription No. 33). A similar monument in the same group, viz. cave 18, is described as *upaṭhāna*.

14. *Poḍhi* is a term of common occurrence in the western Indian cave inscriptions. They have been mentioned in many inscriptions along with *leṇas* and *maṭapas*. The following water-cisterns bear inscriptions specifically naming them as *podhis*: Junnar-Sivaneri 46 and 48 (Inscription Nos. 30, 31); Ganesh Pahar 20a, 20c (Inscription Nos. 23, 24); Manmodi 5, 19a and 39r (Inscription Nos. 2, 17, 18); Kanheri 6 (Inscription Nos. 8-9); cisterns outside caves 16 and 21 at Kuda (Inscription Nos. 19, 22); A cistern near cave 24 at Nasik (Inscription No. 26).

    '*Pāniyapoḍhis*' are mentioned in Kanheri Inscription Nos. 16, 20, 21, 25, 26 and 36. *Sanāna poḍhi* has been used for a large cistern (14x) at Kuda (Inscription No. 15). The term occurs in Kanheri No. 31 also.

    The cistern-in-recess variety appears to have been called *Poḍhi-koḍhi* also. There is only one instance of such a usage in Kanheri inscription No. 22 in cave 59. No other part of the cave than this recess could be associated with the word *koḍhi* mentioned in this inscription. See note 15a below.

15. The term occurs in Kanheri No. 16. It is interpreted by Burgess as a bench for sitting.

16. This term occurs in four inscriptions of the area—viz. Kanheri Nos. 5, 14 and 22; Mahad No. 3. The term has been taken to mean a hall in all these instances. But the etymology of the word and the context of its occurrence in the inscriptions do not permit such an interpretation. *Koḍhi* appears to be the Prakrit form of the Sanskrit word *Koṣṭa* meaning a room, niche or recess. Mahad No. 3 makes the position clear. There a *chetiākoḍhi* is mentioned as being donated and it evidently refers to the recess in a side wall of the verandah of cave 27, wherein a *stūpa* is cut in relief (Pl. 172). The context of occurrence of the word in other inscriptions is not clear. Additional evidence is available in Kanheri No. 22 (Note 14 above).

17. It may be noted that such *stūpas* occur generally in small low-roofed *chetiyagharas*.

18. The situation in the *chaitya* hall at Kanheri is slightly different.

19. Various views on the origin of this type of pillar are available in *Indian Historical quarterly*, III, p. 541, VI p. 373, VIII p. 213, p. 827, X p. 125 and XI p. 135.

20. The rounded pot-base is a form which can be easily achieved in brick and mortar than any other material used in structural architecture. Though it is possible to achieve the same form in stone, there is no indication of the early stages of evolution of this pillar type in any of the rock-cut examples. The idea appears to have been borrowed to rock-cut architecture at a time when the base-shape had become standardised.

21. See illustration in Fergusson and Burgess 1880, Pl. XCVII. This pillar is no more existing.
22. Burgess (1883a, p. 31) considered that the pillars with simple bas-relief animal sculptures (as in Junnar-Ganesh Pahar 6) are earlier than those represented boldly (as in Bedsa *chaitya* hall).
23. Davidson 1971, p. 31.
24. The idea of the hourglass decoration appears to have been derived from the simplification of the form of pillars of Type C. The chamfered arrises in the middle of square pillars cause the crescentic forms at their top and bottom. In the hourglass design the two crescents are just very close. Probably one of the attempts which gives indication towards this contention is to be seen in the pillars of Kanheri cave 55 (Fig. 15, f). But that cave having undergone much change, the date of this stage can not be made out easily. (A still earlier attempt is to be seen in the crude chamfering of rectangular pilasters in the interior of *leṇa* 11 at Bedsa. But those are nearer to pillars of Type C in appearance).

    A somewhat sophisticated form of the design is the one in which instead of the simple plain crescents half-lotuses are fashioned in them (Pl. 115—The pilaster decoration in Nasik 3 is slightly different). A further typological elaboration is seen in the pillars of the Mahāyāna caves at Kanheri wherein a few petals are added at the waist (Pl. 220). The pilasters with hourglass decoration and the pillars with decorated waist indicate typological succession and consequently hint at the possibility of continuity of architectural designs from the Hīnayāna to the Mahāyāna architectural tradition. The hourglass decoration appears to have survived in its essential form too till a late date. A pair of this design occurs on a pillar in the upper floor of Don Thal at Ellora (Burgess 1883 b, Pl. XVI).
25. The caves of the Mahāyāna period generally show horizontal cornices on the basement. An interesting example comes from Karle cave 4 where the use of studs as well as horizontal basement cornices is seen together (Pl. 218). Probably this monument provides a typological link betwern the Hīnayāna and the Mahāyāna architectural works thus disproving the idea of break in architectural activity between the two stages.
26. *Chandraśilā* is another architectural element which shows the continuation of the rock-cut tradition without break from the Hīnayāna to the Mahāyāna and further on to Hindu and Jaina rock-cut architecture of the 6th century A.D. and onwards. It is possible to locate continuous evolutionary stages of the *chandraśilā* starting from the earliest representations in the Western Indian caves down to the temples of the medieval period.

PART THREE

# Architectural Development

*Chapter VII*

# *Descriptive Inventory and Analysis of Monuments and Architectural Development in Different Centres*

The present chapter is intended to reconstruct the chronology and history of rock-cut architecture in different centres, as could be made out from internal data and with the help of the ideas and aids developed in the previous chapters. For this purpose each site has been treated seperately as an individual entity, and this method, in contrast to the general practice of viewing the rock-cut monuments of the region together, has been adopted here with a two-fold reasoning. Firstly, it is with the contention that detailed studies in the micro-level would contribute for a better understanding of the matter at a macro-level; the treatment of the sites, and the monuments within them individually, would provide a reasonable scope to muster and analyse the data as much comprehensively as possible. Secondly, this method would be in fitness of things in the context, as in ancient times each monastery could have been an independent organic entity by itself as it is to be in accordance with the *Vinaya* concept of *sīmā*. If not in general purpose and practices, each one of them may have differed from the other, in its geo-economic *milieu* depending on its location, in its outlook depending on its sectarian affiliation or at least in its general temperament in being either progressive or conservative, and, of course, in the quantum of influence of its inmates on the laity in generating patronage. All these are factors which influence the course and quantum of architectural activity in those places and thus each site demands a seperate treatment for a proper understanding of its architectural history.

In the following pages dealing with the sites, the matter relating to each has been arranged in three sections generally; geographical details about the site, description and analysis of the individual monuments, and general discussion. Most of the basic data, both architectural and epigraphical, have been included in the description part of each of the monuments and have also been analysed there to decide the functional and chronological aspects of concerned monuments wherever necessary and possible.

In the general discussion, generally, the above data have been consolidated and interpreted to provide a picture of the nature and chronology of the monuments and a short history of architectural activity of the site. Wherever possible, attempt has also been made to provide an idea of social, economic, religious and various other aspects relating to the site under consideration, to the extent that could be deduced from the architectural and epigraphical data available therein and useful in the context of the present study.

NOTE : Seperate series of numbers have been used for each site for referring to the 'Notes and References'.

# AJANTA

The world famous Ajanta caves are located in the Aurangabad district, about 96 km north of the district head-quarters. This group happens to be the northern most of the early rock-cut centres of Deccan. The caves are located at the head of a pass that links the plateau with the vast stretch of the Tapti plain below. Possibly one of the ancient highways connecting Ujjayinī in the north with Pratiṣṭāna, the Satavahana capital in Deccan, ran along this pass. The hilly tract here is of good amygdaloid trap. The river Waghora has cut a deep ravine amidst this, forming a large horseshoe shaped glen at its head, with the scarp rising to a height of more than 100 m on either side. Part of this vertical scrap has been selected for hewing the caves (Pl. 1). The scarp feature must have come handy for the early architects to cut in caves with minimum labour, without any necessity to prepare the facades.

Out of the 30 caves of the Ajanta complex, only six—8, 9, 10, 12, 13 and 15a—belong to the period under consideration. All these are located in a single group in close proximity to each other at the shoulder of the left arm of the horseshoe glen, and face south.

## CAVE 8

This is a small *leṇa*, situated at the eastern end of the early group and is in the lowest level. This consists of a hall (9.85 m b, 5.18 m d, 3 m h) surrounded by seven cells, two on each side and three on the back wall. The central cell in the back wall is large and much recedes into the inner side and gives the impression of a deep central shrine of the later Mahāyāna *leṇas*. But even in this cell is a simple bench as in the other cells.

The whole of the front is broken, the interior is much damaged, and the cave is almost bereft of any architectural element useful for stylistic comparison. The absence of verandah and the pillars in the hall in contrast to the Mahāyāna *leṇas* where they are common, the presence of simple benches in the cells (see p. 86) and its location in close proximity to cave 9 of the early group probably indicate that this too might have been one of the architectural works of Ajanta belonging to the early period.

## CAVE 9 (FIGS. 17, 7(1), 9(2-3); PLS. 7, 8, 9, 10)

This is a *chetiyaghara* consisting of a rectangular hall (13. 72 m l, 6.93 m w) divided by a colonnade of 21 pillars arranged in two parallel lines, both bending at the back to meet in a semi-circle. This colonnade divides the hall into a central nave, two side aisles and the apse at the back. A circular *stūpa* is at the back of the nave. The front is covered with a screen wall, with a doorway in the centre and a window on either side, the doorway leading to the nave and the windows lighting the aisles.

The *stūpa* inside is raised on a cylindrical drum with a low socle, and the *aṇḍa* is almost hemispherical. It is surmonunted by a *harmikā* with an invered stepped pyramidal square capital over it. The top of this member has two holes which were meant to receive probably the wooden umbrella and the flag staff, which, however, are no more extant.

The pillars are octagonal and rise to a height of 3. 15 m. They have neither base nor capital but simply taper upwards. They also display a slight inward slant (about 5 cm), the degree of slant being much less than what is noticed in the columns of cave 10 at this place and in the *chetiyagharas* of Bhaja and Kondane. The frontmost pillars among these are somewhat different. These, one on either side of the nave, are also octagonal shafts as the other pillars, but the face towards the nave is projected forward through out the height (pillar type B). Between these two pillars, are two more pillars, one on either side of the passage leading to the nave. These are slender shafts with square cross-section, and have the arrises cut in the middle part (pillar type C). These four pillars carry the roof over the transverse aisle and are below the rood over which the open *chaitya* window is seen.

The walls are plain and straight. While the surface of the walls are rough (not smooth as described by Burgess),[1] the *stūpa* has a somewhat smoothened body. The roof above the aisles is flat, and is at a level about 2 cm higher than the top of the columns, but the nave has the vaulted roof raised over the

triforium (2 m h) which rests on the head of the pillars over a slightly projecting ledge. The vault (1.78 m h) had been fitted with curved wooden beams. These are no more extant, but their positions can be made out from the small mortises remaining on the triforium.

The front screen wall is divided in its elevation into two parts, the lower part consisting of a rectangular doorway (1.52 m w, 1.90 m h) in the centre leading to the nave and a window (0.76 m w, 1.02 m h) on either side at mid-height lighting the two side aisles. There are six pilasters about 2.5 m high, projecting from the screen-wall, one on either side of the central door and the two windows, giving the impression of a frame around them, or looking almost like mini-*mukhamaṇṭapas*. The pilasters are of the shape of the two frontmost pillars in the interior of the hall (Type C). These have arc brackets at the top supporting the cave above.[2] The projecting cave is rectangular and its front face is ornamented with *vedikā* design. The spaces between the doorway and the two windows have been treated at the cave level with a stepped cornice carrying merlons. The whole eave line is surmounted by ornamental *chaitya* windows. These windows are of medium-spanned variety, well shown with vertical jambs, tenons and concentric arched beams above lotus design.

The upper portion of the facade has a large open *chaitya* arch (3.50 m h) with an inner arch (2.97 m h), the whole thing cut deeply to cover a rectangular area above the doorway. In the inner arch there are the vertical jambs and the tie-rod. The soffit is decorated with beam-ends. A few holes seen on the inner face of the vertical jambs and the soffit of the inner arch disclose that the *chaitya* window had been covered with some wooden fixtures. They might have been the usual curved rafters intersected by radial rafters (sun window) as seen in relief in the decorative arches. Projecting further out from the inner arch is the soffit of the bigger arch which is also decorated with stone beams. The front profile of this arch is somewhat of a developed form differing in design from the other arches used for decoration on the facade. Whereas the paws of the decorative arches are flat and project outwards as rectangular slabs, the paws of the bigger arch have the toe-ends raised in a curved profile. The profile of the interior side of the big arch is also much incurved. The crest of the arch is a bit splayed.

On either side of the crest of the arch, there are two decorative *chaitya* arches of the type found on the eave above the doorways. These are flanked by two similar but smaller arches placed over inverted stepped mouldings. Below the end-most arch on either side, by the side of open arch at its shoulder level, is a large rectangular roll-*vedikā* pattern.

The whole of this facade is sunk into the rock surface to a depth of about 1.2 m. At the top of the sunken surface, at the level of the crests of the bigger arch and the smaller decorative arches, a stepped cornice runs all along over this, the underside of the rock projection is carved with projecting rafter beams which are delineated in such a way as carrying an entablature decorated successively with a frieze of railing pattern, a row of arches, and ultimately a row of merlons. The smaller arches in this series are all open without any indication of vertical jambs or curved beams, but have rafter ends shown on the soffit.[3]

The measurements of the *chetiyaghara* show a certain organised plan. Barring minor variations likely to occur in rock-cutting, it seems that the hall-width, including the two aisles and the space occupied by the pillars, is half the length of the nave. The *stūpa* is located in such a position and is of such dimension that its periphery is equidistant to the back wall and the two side walls, and the distance between the doorway and the front of the *stūpa* is 2/3rd of the total length of the hall. The rest 1/3rd is occupied by the *stūpa* and the space behind upto to back wall. The height of the aisles is again exactly half the total height from the floor to the crest of the vault-roof, and this itself is equal to the width of the hall. The height of the pillars too, if the ledge on the entablature is taken into account as forming part of the support to the same, is again half of the total height. The length-breadth proportion of doorway is 5 : 4, and its length itself is 1/9th of the total length of the hall. Further it has been located in such a height and position that the visitor standing just at the entrance of the doorway, and not anywhere behind, would have the full view of the *stūpa* The proportion between the height and breadth of the facade is also 5 : 4, and the height itself is 18.29 m, *i.e.* bigger by 1/3rd of the total lenght of the inner hall.

Ajanta 9 happens to be the result of a single well-thought out design. The measurement pattern and the execution display sufficient proficiency on the part of the architects. As it has been pointed out already, the introduction of the stone screen wall is an advanced idea compared to the *chetiyagharas* at Bhaja, Pitalkhora, Kondane, etc. In contrast to the high rake of the pillars in those, the pillars of the present *chetiyaghara* show much less rake. The *stūpa* too is of an advanced variety. The relative position of this with reference to the above is obvious. But it can also be seen that the continued use of the octagonal pillars, the polish seen on the *stūpa* show that this *chetiyaghara* may not have been very much removed in time from the open front *chetiyagharas*. But in the absence of any inscription in the present *chetiyaghara* we are unable to provide an exact idea of the distance of time between these. It can just be suggested for the present that this *chetiyaghara* may have been made somewhere in the 2nd century B.C., the basis of this contention is the use of pillars and pilasters of Type C, an item well associated with a cave (Nasik 19) belonging to the time of Kanha, the second ruler of the Sātavāhana dynasty. The use of the rectangular *vedikā* panel, the roll-*vedikā* moulding, the stepped cornice, merlon and the arches with broad span in the facade decoration is also indicative of the approximate epochal position of this *chetiyaghara*. An interesting feature, however, is the shape of the main open *chaitya* window. The incurve of its arms is prominent, and the paws are slightly raised up, thus going nearer to the features of the *chaitya* arch in Junnar-Manmodi 26, etc. This advanced feature indicates probably that the *chetiyaghara* will have to be placed to a slightly later date but within the period when the other features listed above were still in vogue.[4]

CAVE 10 (FIGS. 18, 6(3), 9(1); PLS. 11, 12, 13, 16)

This is one of the largest *chetiyagharas* in the Deccan series, and is also one of the few displaying very early features, stylistically falling in line with the *chaitya* halls at Bhaja and Kondane. This has an apsidal hall measuring 12.5 m wide, 29.1 m deep (also see below) and nearly 17.10 m high. The hall is divided into a wide nave, two narrow side aisles (1.78 m w) and a semi-circular apse at the back, by a colonnade of 39 pillars. A huge circular *stūpa* with a two-stepped cylindrical drum and a hemispherical dome surmounted by a *harmikā* carrying a three-stepped square capital stands in the centre of the back end of the nave. It is 5.03 m in diameter and is about 6.4 m high. The pillars are arranged in such a way that the aisle width, is uniform throughout including that of the apsidal portion. The pillars are all simple octagonal shafts without base or capital and are about 4.2 m in height. They taper a bit towards top and rake inwards to about 8 to 10 cm from their base line.

The walls are straight and smoothened. The aisle ceiling is quadrantal but has ribs in stone fashioned in the model of the curved wooden ribs. The nave has a high vaulted roof rising on a vertically flying triforium about 2.9 m high. The apex of the vaulted roof is about 3.8 m high above the top line of the triforium. The facade is completely open, allowing entry directly throughout the width of the cave including the aisles. It is very plain except for the ornamentation of any open *chaitya* arch, springing from a height of about 3.2 m from the floor level. Its soffit is decorated with stone rafter-ends in imitation of wooden ones. The front has no provision for a barge board (as seen in Bhaja 12) and is simple and bereft of any other decoration. But just below the foot of the arch, towards the front and in continuation to the quadrantal roof of the aisles, there are remnants of a quadrantal *pavāḍa* (overhanging canopy)[5] fashioned with curved stone beams. The arch is wide spanned and semi-circular. Its paws are straight and project at both the ends. The apex is raised at the top to the shape of a *Kalaśa*. The whole of the facade is enclosed within a square frame (13.4 m h, 13.4 m w, 93 cm d) cut in the vertical rock scarp.

Though the cave now looks to be very simple, plain and open, there is sufficient evidence to show that this had a number of wooden fixtures, which must have given a different look originally. The vault roof had been fixed with bent wooden beams, like those still extant in the *chaitya* hall Bhaja. Though all of them are lost here, the vertical chases which received them are seen at the base of the vault above the ledge on the top of the triforium. On the vault surface itself, there are remnants of chequered pattern, being the impressions left on the rock by the curved ribs and crossing reapers. But a peculiarity

noticeable in this cave is that there is no indication of such curved beams to have continued over the triforium; it does not have the projecting ledge at the foot of the triforium, which could have supported the beams.[8]

The front of the nave had a screen, probably in wood, at a line just abutting the front part of the front most pillars. An indication of this is available on the underside of the front arch whence the stone rafters of the *pavaḍa* are drawn out horizontally forward. At that height, there are two huge mortises (18 × 18 cm), one on either wall opposite each other. These may have received a large cross beam. There are similar but smaller holes on the frontmost pillars too, which could have been meant for fixing additional supports. However, a close look at the position of the mortises shows that they are the results of afterthought. The mortises on the walls have damaged the stone beams partly. Even if a horizontal beam had been laid across, its position in relation to the slanting stone pillars would have looked ugly. It appears, that there may not have been any intention to put the screen originally and there was necessity for a beam only to support the front part of the canopy which was necessarily to be in wood. Observers of the 19th century have clearly stated that during the clearence of the lower part of this facade bricks of large size were uncovered, and they have also suggested that these could have been used for building the base for the front screen.[8]

The existence of the remnants of a quadrantal frontal canopy projecting to about 1.5 m in front of the front most pillar line, is an item seen in this *chetiyaghara* alone and this calls for special attention. If the run of the profile of this canopy is continued (which may have been in wood originally in the front part) the whole plan of the cave at that level, would be elliptical in shape with apsidal ends on either side of the central rectangle and it looks as though the cave had a quadrantal ceiling above the aisle, which ran all round the cave in an oval plan.[9] Structures of elliptical plan of early date were common in Buddhist architecture elsewhere. A rock-cut monument of that plan having barrel-vault roof, the Nagarjuni cave in Barabar hills, is well-known. Excavations have revealed the remains of such brick structures, as for example the Jetavana Vihāra at Śrāvasti and Ghoṣitārāma at Kauśāmbī.[10] Ajanta 10 appears to follow the tradition of such structures. But, architecturally there is an innovation here in arranging the entrance at an end of the longer axis. This gives the impression of an elliptical structure, with one of its longitudinal ends cut open. The pillars supporting the vault roof of such elliptical enclosures are to be necessarily slanting inwards; the wooden roof cut across would be the face of the arch and the ornamented finial at the crest of the roof would be the finial of the *chaitya* arch. This provides incidentally a new vista to the problem of origin of the *chaitya* arches. From this example it is possible to surmise that the *chaitya* arch is nothing but the view of the cross section of the vaulted roof that is invariably associated with elliptical structures.

It is extremely difficult to make out the exact mathematical formula utilized in the design of this cave. It could be due to lack of definite ideas on the part of the designers, use of rough eye-measurements only, or the carelessness of the stone cutters. But allowing some divergences in exactness in dimensions, it can be said that the whole length of the hall from the back of the apse to the front line of the arch compared to its width is in the proportion of 5 : 2. The interior height is roughly 1/3 of the total length of the hall. The central nave, however, is exactly 2/3rd part of the total width of the hall, the rest 1/3rd being shared equally by the width of the aisles including the pillars. The width of the nave itself is in the proportion of 2 : 5 to the length of the hall from the front of the *stūpa* to the line of the front most pillars. The diameter of the *stūpa* is roughly 3/4th of the nave width. Its height in proportion to its base diameter is 4 : 3. In the facade, the total height from the base line to the apex of the arch is equal to the width of the cave. The deeply cut frame in the scarp enclosing the facade is a square and is exactly double the width of the nave.

As it has been pointed out in the chapter on architectural analysis, the assemblage of architectural members of this cave like the *stūpa* with simple drum and the capital of just three *steps*, the simple octagonal pillars with high rake, the open facade and the broad-spanned arch display an early date stylistically. The technical immaturity in rock cutting with its lack of good design and execution as noted above and the extensive recourse to wood for the roof beams and screen (though all wooden items are now lost), are in agreement with the above contention.

Ajanta 10, which appears to be in the tradition of north Indian early elliptical buildings may be considered to be a work of the early phase of rock-cut architecture in Western India.[11] This northern tradition is retained in the polish displayed by the walls too. The only advanced feature is the introduction of stone beams in the aisle ceiling and the *pavāḍa*.[12]

These features are very well in conformity with the epigraphical evidence from the cave. There are three early inscriptions here. The one carved on the facade (Ajanta No. 1) records the gift of that part by one Vāsithīputa Kaṭahādi. Another (No. 2) carved on the wall of the left aisle of the hall just below the space between the 1st and the 3rd ribs, mentions the gift of the wall by Kanhaka of Bāhaḍa. This Bāhaḍa is identified as Bahal a place of high antiquity situated about 50 miles west of Ajanta on the trade route leading to Ujjain.[12] Another inscription (No. 3) is seen painted in white colour on the greyish rock surface of the 3rd rafter between the facade arch and the first rib, which records probably the gift of that part of the cave. All these belong palaeographically to series IA (Chart III).[13]

CAVE 12 (FIG. 19: PLS. 14, 15)

This is a simple *leṇa* of Type B ii and consists of a large hall (10.8 m sq, 2.4 m h) with four cells (2.7 m sq, 2.4 m h) in each of the three inner sides. The facade has fallen and there is no indication of the existence of any verandah. But it is likely that there was no verandah at all, at least in stone, as the roof and base remnants of the front screen wall indicate a very wide opening, at least about 5.5 m originally. This may have been covered by a wooden screen, which had been affixed to thick uprights set in the floor equidistant from side walls and themselves dividing the entrance to three equal parts. The square (20 cm) mortises in the floor meant to receive the uprights are still seen. But even the wooden screen, if it existed appears to be a later fixture. The location of an inscription on the back wall of the hall, suggests that the front might have been open allowing sufficient light facilitating its easy reading.

All the cells, except one, are provided with double beds, one opposite the other lengthwise along either of the side walls. The one on the right side towards the back end has a bed running lengthwise to the left of the doorway, and another on the back widthwise, which looks as though it is in continuation of the previous one but set at right angles to that. All the cells are reached by a small step. The doorways are about 55 cm wide and 1.5m high. The cell doorways are simple without any distinct jamb or threshold or lintel. The sides slightly slant inwards as they go up. All the cell doorways are provided in the interior with a latching arrangement consisting of simple semi-circular stone with a central circular hole, jetting out from a jamb at mid-height.[14] There are three niches (91 cm h, 84 cm b, 46 cm d) carved in the wall between the cell doors at waist level in each of the two side walls. Similar niches are there between the 1st and 2nd, and 3rd and 4th cells on the back wall also.[15]

The roof of the hall as well as of the cells is flat.

While the finish of walls in the cells is rough, that of the hall is excellent and perfect. There is also the sculptural decoration of high quality workmanship on the upper portions of the three inner walls, where somewhat large *chaitya* arches are placed above the cell doors. Two smaller arches are set at the same level between each pair of bigger arches. There are *vedikā* carvings and quadrantal *vedikā* rolls below these smaller arches, and these are shown as resting over two vertical pilasters rising from a belt of square cornice carved with rail pattern. The upper portions of the arches have a background of stepped cornice running throughout the length of the walls, and above them is a continuous chain of merlons which reaches the level of the roof. The decorative arches are all of the early variety similar to the big arch in cave 10, with wide span and flat paws, and are decorated with tenons of rafters, and the sunken surfaces inside the arch have half lotus decoration from which radiate straight reapers crossed by concentric curved reapers. In some cases the half lotus is replaced by a semi-circle with arabesque pattern. The cell at the front end of the right wall (the cell front itself recedes by 30 cms from the line of the right wall) has the decoration somewhat different from the other in that the central arch on the doorway is also small and rests on a rectangular belt with railing pattern, itself resting on the head of the doorway looking like a projected lintel.

The decorative arches on the cells are identical in their broad span with the *chaitya* arch shape of cave 10 rather than of cave 9. So it is possible that Ajanta 10 and 12 are probably works nearer in date. The existence of the decorative designs like the stepped cornice, the curved vedikā moulding, and the merlons, similar to what is seen on the facade of cave 9, however, suggest that this is not far removed from that cave also. Further it can be seen that the arch over the first cell in the right wall is closer in design to those seen in the facade of cave 9. So it is likely that this cell was added somewhat later. Hence it can be suggested, on stylistic grounds, that cave 12 came into existence sometime between the making of the *chetiyagharas* 10 and 9.

An inscription (Ajanta No. 5) carved on the side of the door of the cell at right end of the back wall, informs that this excavation consisting of cells and hall (*upasatho*)[16] was a gift of a merchant Ghanāmadaḍa a native of Thāṇa.

The palaeographical comparison of this inscription with inscriptions in Ajanta 10 as well as Kanha's record at Nasik (No. 22) show that this is later than the others. This belongs to series IIA.

## CAVE 13 (FIG. 19)

This is a small *leṇa* with a hall (4.1 m w, 4.7 m d, 2.1 m h) and seven cells (1.8 m sq, 2 m h) around it, three on the left and two each on the back and right sides. The doorways of these cells are narrow measuring about 53 × 168 cm, and all open into the central hall. Each has a step in front of the doorway. The doorjambs rake inwards slightly, but there is no indication of doors. All the cells are provided with simple beds (60 cm w, 75 cm l), one each on opposite sides along the door-back axis, except one in the left corner where two beds are at right angles. All beds have a raised rock-cut pillow at one end. The roof of the cells, as well as the hall, is flat. The front has fallen away and at present no indication remains of the existence or otherwise of a verandah. It is likely that this too is a *leṇa* of Type B ii like cave 12.

The cave is bereft of any decoration, but the walls display slight smoothening.

The absence of pillars, the sloping door jambs, and the existence of polish on the walls and absence of decoration, indicate possibly its early date. With these features it appears to be the earliest of the Ajanta *leṇas*. This is possibly earlier than cave 12 which has wall decoration instead of polish. The polished surface is probably an indication of its antiquity, wherein is seen the continuation of a tradition found in the early caves in Bihar. In this respect, stylistically this goes with and probably a contemporary of *chetiyaghara* 10 where too an attempt of polishing the walls has been noted.

## CAVE 15A (FIG. 19; PL. 16)

This cave which accidentally came to light in 1956, is at a lower level just below a flight of steps between caves 14 and 15. This consists of a hall (3.6 m sq) with three cells, one on each of the inner sides. The cells are small and have narrow doorways as in cave 12. Each cell has two beds (60 cm w, 60 cm h) one opposite the other, except the left one where the beds are connected with a platform running along the back wall which rises to a height about 5 cm higher than the beds. The walls of the hall have decorations similar to cave 12. Here too the tops of the door frames are canopied by *chaitya* arches, with similar smaller *chaitya* arches set between them. The latter are placed over a string course of railing pattern. The upper part of the *chaitya* windows overlap the stepped cornice running all round. Above this is a stretch of merlons reaching the roof. The interior of the *chaitya* arches are decorated with half lotus patterns and the concentric curved ribs and radiating reapers. The facade is ruined, but enough remains to show that similar ornamentation was there on the external wall also. If the decoration is to appear here, it is likely that this had a verandah too. If so the *leṇa* belongs to type B iii.

The pattern of general design and decorations of this cave, being similar to cave 12 this can be considered as nearer in date with that. But where as the decorative *chaitya* arches in cave 12 have broader span, those in the present cave show distinct incurving at the bottom, a feature indicating the posteriority of this to cave 12. The possible introduction of the verandah too is an advanced feature compared to cave 12.

## GENERAL DISCUSSION

The above account shows that during the period under review Ajanta was a small monastic establishment with only six caves—four residential units and two halls of worship.

With the help of various architectural items discussed above, a resume of the relative chronology of the excavations at this place may be given.

Among the two *chetiyagharas* several evidences show that Ajanta 10 is earlier than 9. The higher degree of rake of pillars, the simplicity in workmanship, the simple form of the *stūpa*, the high degree of imitation of wooden structures and also probably the degree of wood work now lost in it and the polished finish of the walls, indicate the high antiquity of cave 10. In contrast, cave 9 shows developed ideas of plan and design in the lesser rake of pillars, the appearence of the stone screen wall, the incurved variety of *chaitya* arch, the wealth of decoration of the facade, the improvements in *stūpa* form, more logical mathematical proportions in design and a bold attempt in introducing the square plan for the hall. With these can also be included the existence of the square pillars with chamfered middle part. Ajanta 9 has less of the hangover from the wooden tradition.

Among the three *leṇas*, cave 13 appears to be the earliest. It is the only one with polished (smoothened) walls and shares this feature with *chetiyaghara* 10. Both of them, it may be noted, do not have decorative *vedikā* or *chaitya* arches. So it is likely this is coeval with *chetiyaghara* 10, and happens to be earlier than the other *leṇas* which have decorations on the interior walls. Between 12 and 15A, it has been shown that the decorative arches of 15A display a tendency of incurving of the arms, whereas those in cave 12 are generally broad spanned. With this feature 15A can be considered as slightly later in date compared to cave 12, but nearer to cave 9. Hence a relative sequence for these caves may be given as follows :

(i) *Chetiyaghara* 10, *Leṇa* 13,
(ii) *Leṇa* 12,
(iii) *Chetiyaghara* 9, *Leṇa* 15A.

By utilizing the palaeographical evidence, *chetiyaghara* 10 (and hence *leṇa* 13) with its inscriptions of Series IA could be placed to a time before the time of Kanha (205-187 B.C.), *i.e.* to the latter part of the 3rd century B.C. The inscription in cave 12 belongs to Series IIA, *i.e.* around 175 B.C.

The use of merlons, roll-*vedikā* moulding, stepped cornice, etc., shows that *Leṇa* 12, 15A and *chetiyaghara* 9 are all nearer to each other. Further the use of pillars of Type B and C as subsidiary ones along with pillar Type A ii in cave 9 indicates that this is to be placed chronologically at not too far a distance from the time of Kanha. Hence, collating this information with the relative position of cave 9 made out with reference to cave 12, it may be suggested that *chetiyaghara* 9 of Ajanta (and consequently *leṇa* 15A) could be placed to the middle of the 2nd century A.D.

Cave 8 does not retain any architectural feature of comparative value. But the presence of benches and absence of pillars in the front varandah would indicate that this belongs to the Hinayana phase of rock-cut architecture. However, the benches seen here are of a simple type and are not of the 'bench in recess' variety which began to be used widely from about the 2nd century A.D. (p. 86). Hence this too will have to be placed before that date. (See Chart V).

Leaving cave 8 out of consideration, it can be generally stated that early rock cut activity at Ajanta started some where around the latter part of the 3rd century B.C. and continued for about five to six decades. Ajanta being located possibly on one of main trade routes linking Uttarāpatha with Deccan, there was a great possibility of ideas prevalent in northern India to have percolated early into this place through people travelling to and fro along this route. For many of them this place situated near the head of the ghats could have been a place of halt (note 15). There could have been several monks too travelling along the same route and it appears cave 13 was hewn for their use. At that time it could have served for about hardly 14 monks at a time (on the basis of number of beds). To serve the spiritual needs of the monks and possibly also the people frequenting the place *chaitya* hall 10 was made. Interestingly this is in the fashion of elliptical *chaitya* halls seen contemporaneously in northern India. This is indicative of the flow of ideas through people from different regions, a person from

Bāhaḍa (Bahal) being one of them. Then gradually necessity for more accommodation may have been felt and a bigger cave (12) which could have accommodated about 24 souls was made. It is likely that there was still greater demand for more accommodation. The niches made in the walls in this cave probably indicate an arrangement to keep the belongings of the visitors, while they could rest in the hall itself. However, a little later another *chetiyaghara* (9) and a small cave 15A which could have accommodated about 6 persons were added. (Cave 8 probably had a capacity for about 7 persons at that time). In all, the monastic establishment at Ajanta in the 2nd century B.C. could have provided accommodation for about 50 (at the most) monks at a time.[17]

This statistics leads to an enigmatic question. What could have been the necessity of having two *chetiyagharas* for a mere monk-strength of about 50 ? It is possible that sectarian differences had necessitated seperate *chetiyagharas* for the followers of different branches of Buddhist faith. A more likely possibility is that one more *chetiyaghara* became necessary to meet the demands of the laity who may have increasingly frequented this place.[18]

However, shortly after the 2nd century B.C. Ajanta ceased to receive any patronage for atleast another 4 or 5 centuries to come by. There is absolutely no architectural activity after the making of cave 15A, till Mahāyāna times. The reason for the break in patronage is not known.

## AMBIVALE

There is only one cave at this place, which is a *leṇa*. The cave is situated at the northern foot of the hill fort of Kotaligad, about a kilometre away from the village Ambivale near Jamburg, about 25 km north-west of Karjat. This is on the bank of a small branch of the river Ulhas. Ambivale is also on a trade route leading from Kalyan-Thana ports to the plateau above, just on the hilly terrain of the Kusur ghat. The cave overlooks the beautiful valley of the river below. Access to the cave being from a sloping rock rising from the river edge, is a bit difficult. What town supported this monastery is not known definitely. But it is likely that a small settlement might have been there near the present village Ambivale itself, where sherds of red-polished ware are available.[1]

### CAVE 1 (FIG. 20A; PLS. 18, 19, 20)

The *leṇa* here is of B iii type. It consists of a rectangular hall (12.8 m d, 11.9 m w, 3 m h) surrounded by twelve cells and a verandah in front (9.4 m l, 1.8 m d). The rectangular hall has a bench (about 60 cm w, 45 cm h) running along the three inner sides. Above this are the doorways (76 cm w, 1.67 m h) of the cells which are arranged to be four on each of the three inner sides. The cells vary from 1.8 to 2.1 m in length and 1.5 to 2 m in width. They do not have benches. There are two doorways leading from the verandah to the hall, one at the centre (about 90 cm b, 180 cm h) and another to the right (about 60 cm b, 1.5 m h). The verandah has benches at the two ends and its roof is supported in front by a row of four pillars, two pilasters and two return walls (1.14 m b), on either side of the row of pillars.

On either side of the central entrance facing the inner side is a low seat with sloping back running between the pair of pillars and the pilasters. On the outer side of the backed bench there were decorations of festoons and rosettes. They are much effaced now. The pillars have octagonal shaft, pot capitals, and grooved neck surmounted by inverted stepped pyramidal plates of successively increasing dimensions. The pillars rise from the low stone bench and do not have any base. The centre pillars are eight sided, but the side ones are sixteen sided.

The Ambivale cave resembles in many respects, Nasik 3, 10, etc., and this is one of the very neatly designed *leṇas* of Type B iii b. But this *leṇa* does not have benches in cells. The absence of benches is a feature normally seen in Mahāyāna caves of the later period. The presence of the backed bench, decorated with festoons and the pillars with pot capital of Type D vi b indicate sufficiently a late date for the cave. It can also be seen that the pillars here are somewhat of a peculiar shape though belonging generally to Type D vi b; the pots are almost of the same thickness as the shaft itself; the sixteen sided variety is also seen. In these features, the pillars appear to represent a stylistically transitional stage

from the pillar type of D vi b towards types that became common in the monuments of the Mahāyāna period, as at Ajanta cave 11, 16, etc.[2]

There are five inscriptions at the place carved on the front pillars. All these belong to Series VII, but show advanced developmental tendencies palaeographically. This too leads towards the contention of a late date for the cave.

So both architectural style and palaeography indicate that this *leṇa* belongs to the transitional phase between the Hīnayāna and Mahāyāna architectural traditions. The cave may be assigned to about the early part of the 4th century A.D.

The importance of the Ambivale *leṇa* lies in the fact that this provides evidence regarding the continuation of architectural tradition in the so called 'gap' period postulated between the Hīnayāna and Mahāyāna phases of rock-cut architecture.[3]

## AURANGABAD

Out of the three groups of caves at Aurangabad, the western one has a unique excavation which appears to belong to the early period, while all others are assignable to the period of Mahāyāna ascendency. The Archaeological Survey numbers it as 4. It is a *chetiyaghara* with open front looking like the one at Kondane.

The front portion of the *chetiyaghara* (Pl. 21) has collapsed, and as it stands today the cave has a rectangular hall (about 8.5 m l, 6.9 m w). 17 pillars, of which the stumps or traces only survive today, were arranged in an apsidal pattern dividing the hall into a nave, two aisles and the back apse. A *stūpa* (about 2 m dia) stands at the inner end of the nave. The pillars are octagonal with each of the faces measuring 24 cm in width and rise to a height of about 3.20 m. They disclose slight taper and rake. These carry a triforium (about 1.5 m h) decorated with vertical stone ribs rising on a thin flat ledge at the bottom. At the top level of these members is a string of stepped moulding in the background and the whole is surmounted by a string course of railing decoration. Above this is a decorative arcade of *chaitya* wondows. These are of the type with medium base span, pointed apex, and the soffit decorated with beam ends. Above this is the vaulted roof (1.5 m h) which is carved with curved stone beams, each beam running along the line of a corresponding vertical stud on the triforium. The aisles (90 cm w) have flat roof.

The *stūpa* (Fig. 6-4) has a high drum with socle and carries a dome roughly a 4/5th sphere. The sides of the dome, however, incline inwards slightly. The *harmikā* is small compared to the height of the *stūpa* and has the usual railing decoration. Above this is another member (as in the case of the *stūpa* Bedsa *chaitya* hall) with vertical props only being delineated. This carries a stepped pyramid with plates of increasing dimensions, but this member is again very small. The top most of the slab carries on its outer face a series of triangles which appear to be the degenerated form of the stepped merlon decoration. On the flat top of the top most plate, there are nine holes, the central one about 8 cm in diameter, and the others along the line of the periphery about 2.5 cm in diameter. It is likely that the central hole carried a wooden umbrella, where as the others might have been meant to receive shafts for small banners.

Stylistically Aurangabad 4 has many items in common with cave 9 of Ajanta. Along with Ajanta this happens to be another example of a vault rooted *chaitya* hall with oblong plan but having the pillar line ending in a semi-circle at the back. In both, the aisle ceilings are flat and do not display any evidence of wooden or stone rafters there. The decorative *chaitya* arches on the triforium show somewhat medium base span. Both have octagonal pillars with the slight rake. However, the rock-cut rafters on the vault roof of the nave is a progressive element. The some what tall *stūpa* with small *harmikā* and 4/5th globular dome is also a type witnessed in some later examples. With these elements of mixed nature Aurangabad can be considered as a progressive experimental example in rock-cut vault roofed *chaitya* halls. There is no doubt this is later than the *chaitya* halls like Ajanta 10, as no more hangover of the wooden element is to be seen. So possibly this can be placed to a period proximate to the time of Ajanta 9, but slightly in the later part. (Also see Chart V).

It looks problemetic to explain the open facade which is a feature of the early *chaitya* halls, as at Bhaja, Kondane and Ajanta. But a close observation reveals that the front portion of the cave has considerably fallen. The present continuation of the scarp by its side has on the same line the back wall of the inner hall of a *leṇa*. If the plan of the *leṇa* is completed it could be guessed that the rock scarp must have been originally atleast 3.5 m more to the front than what it is today. If so, this *chaitya* hall too must have had a considerably longer front portion in which the screen walls in stone may have once stood (the disintigration of the scarp may have started very early as there is indication that structural additions were attempted in the front portion of the *chaitya* hall, as revealed from some remnants there).

Another problem that faces us is the absence of any other excavation in the group, which could be dated to the period of this *chaitya* hall. It is likely that some of the earlier ones were enlarged during Mahāyāna times, destroying the original forms of the *leṇas*. It is also possible that the early *leṇas* are destroyed due to the collapse of the scarp near the *chaitya* hall.

## BEDSA

The Bedsa caves are situated on the eastern side of the same range of hills consisting of the Bhaja group, but overlook the broad valley of the river Pavnā, at about a hundred metres above the plain or about 661 metres above MSL. The caves are approached from the village by travelling west and climbing a steep flight of steps which leads to a wide flat ledge of the trap hill. The ledge serves as the front open yard to the caves which are cut in the second deposit of lava flow rising as a scarp above this. The caves face east and they are numbered here from south to north.

An inscription at this place (No. 1) provides its ancient name as Mārakuḍa.

### CAVE 1

The first cave to the south is an unfinished circular *chetiyaghara* of type B ii. It is 3.04 m in diameter and rises to a height of 1.75 m with a flat roof.[1] In the centre of this circular room is the *stūpa* with a plinth (1.8 m dia, 0.9 m h) and a rectangular piece above rising up to reach the flat roof. The doorway in front (1.37 m b) rises from the floor to the roof with no indication of having been fixed with any wooden door. In front of the doorway is an open court (1.52 m w, 1.82 m d).

The cave is bereft of decoration or finish. The surfaces are still left rough. It is likely that the excavation was left unfinished, perhaps due to the peculiar form the *stūpa* took in the hands of an unskilled worker. The *stūpa* if it had been finished may not have conformed to the tradition of the day because in the little space available above the plinth it was not possible to cut the *aṇḍa* and the *harmikā*. It is likely that cave 3 further down, which follows the same plan, is the one which was done later on to serve the same purpose as this one.

### EXCAVATION 2

This is a cistern with a square mouth (60 cm sq) cut in the floor of a rectangular recess.

### CAVE 3 (FIG. 5 (5); PL. 22)

This is a *chetiyaghara* of Type B ii. The top and front portion have fallen. The circular chamber (2.4 m dia) has a *stūpa* in its centre. The front porch was about 2.3 m wide projecting forward to about a metre in front of the *stūpa*. Despite the fallen top it can be made out that the circular cell had a domical roof which may have risen to a height of 2.6 m when complete. There is no indication of the existence of any door-frame, and it is likely that this had open front. The floor of the circular cell is about 7 cm higher than that at the entrance, and is also well finished.

The *stūpa* inside is about 1.4 m in diameter at the base. The cylindrical base is 1.06 m high with a band of railing ornament (20 cm h) running round at the rim. Above this is the dome (91 cm h). This has four holes on its top and these were probably meant to receive the *harmikā*, which was probably made of wood. The cylindrical base has the sides slightly slanting inwards and the dome has straight

sides up to half of its length, and thence it is hemispherical. On the back wall of the circular *stūpa* is an inscription (Bedsa No. 1) belonging to palaeographical series IV A. This records that this *stūpa* was made in honour of Gobhuti, a monk living at Mārakuḍa.

EXCAVATION 4

This is a cistern just by the side of the above. This has a square mouth cut in the floor of a rectangular recess (90 × 210 cm) and is similar to Excavation 2.

EXCAVATION 5

Close to the above is another cistern of the same type and it bears an inscription (Bedsa No. 2) on its back wall. Palaeographically the inscription belongs to series IV B and records that the cistern is a gift of a Mahārāṭhiṇi.

EXCAVATION 6

This is a broken recess.

CAVE 7 (FIG. 21, 7(3), 10 (2); PLS. 23, 24, 25, 26, 27)

This is the great *chetiyaghara*, the best and the biggest of the rock excavations at Bedsa. This is hewn in gently sloping rock, and hence, in order to obtain the necessary height for the facade which is nearly 9 m high, a passage about 12 m long and 2.5 m wide has been cut through to lead to an open court lying transversely to the passage. Behind this rises the facade with two majestic columns and two half columns consisting of pot base, octagonal shaft, inverted bell capital and animal figures on the bracket. These columns form the front of the verandah which is nearly 3.7 m deep and 9.19 m broad. There are two cells, one on each back corner. These project a little to front from the side walls. The cell to the left has a simple bench at the back wall and the cell to the right has a bench running along three walls. In the right side just between the front end and the cell there is another cell with a bench. An attempt to make a similar cell on the left side correspondingly is seen, but it is left unfinished. The hall behind the verandah has two doorways. The one in the centre, which is the main doorway, measures about 90 cm by 180 cm. The other doorway is smaller and is to the left side and is only 68 cm × 167 cm. In the corresponding place to the right there is a pierced screen. The inner hall is 13.54 m long and 6.25 m wide. It is rectangular in the front and semi-circular in the back. The whole is divided into a central nave and two aisles on either side divided by a colonnade of 24 pillars laid parallel to the wall and meeting semi-circularly at the back. The nave is 3.12 m broad and the aisles are 1.06m wide. The columns are about 40 cm thick. These columns are all octagonal (type A ii) and rise to a height of 3.12 m carrying the triforium. They slant inwards slightly by one degree, but do not taper. There are two more pillars of the same height but somewhat thicker, and of a design with five faces at the back, and from the other single face a rectangular projection is there which turns towards the nave (pillar type B). These pillars are placed right near the doorway, as the first ones in the line of pillars on either side and are similar in general design to those in the same position at Ajanta 9, Karle *chaitya* hall and Kanheri 3.

The roof on the aisles is quadrantal, the curvature commencing at about 2.75 m above the straight wall. The roof on the nave is barrel-vaulted. This rises on the vertical triforium about 1.52 m high, with a thin fillet (10 cm h) at the bottom just above the pillars. On the top of the triforium which forms a ledge about 2.5 cm wide, the vault roof springs upto a heignt of 1.61 m. Thus the total height of the interior is 6.25 m. The triforium and the quadrantal roof of the aisles have some vertical chases and holes which once received wooden fixtures.[2]

At the farther end of the nave about 9.34 m away from the doorway stands a rock cut *stūpa*. Its diameter at the base is 2.08 m. The plinth rises in two tiers, the lower to a height of 1.55 m and the upper to 99 cm. The *aṇḍa* is 91 cm in height, and thus the crest of the *aṇḍa* is in the same level as the base of the triforium. There are *vedikā* decorations both at the base and the rim of the lower plinth

and again at the rim of the upper. The *aṇḍa* is almost hemispherical. The *harmikā* is in two tiers and is surmounted by the capital consisting of five horizontal plates of increasing dimensions and the upper most of this has the *vedikā* decoration. The total height of these members is 1.04 m. From a circular hole in the centre of the top of the uppermost horizontal plate rises the *yaṣṭi*, of wood, with a hump of calyx design on the top. This part is about 1m h. Probably this is part of the wooden umbrella of the type found in Karle.

The front screen wall is cut by the central doorway 91 × 182 cm. The most importat feature in its elevation, however, is the rake of door jambs by which the breadth at the top is reduced by about 5 cm. The soffit of the lintel of this doorway slants inwards by 45°. The roof of the area between the front screen wall and the first pillars is again quadrantal. The upper part of the screen wall cut into the shape of a *chaitya* arch is directly in front of the barrel roof of the nave. This sheds light on the *stūpa*, the object of worship, and the effect of this 'spot-lighting' in heightened by the barrel roof itself which slopes inwards by about 6°. The *chaitya* arch is deep and covers a large rectangular gallery above the doorway extending from the front screen wall to the first two pillars. At the inner end of this '*chaitya* window' two vertical jambs, one on either side, has been carved simulating the uprights which originally would have placed the arch in position in wooden constructions. There are vertical rows of holes on their inner sides. These were probably meant for wooden fixtures of the same design as seen in the decorative arches outside. The soffit of the arch is cut with dentils copying wooden rafter ends. The smaller doorway to left leading into the nave is 68 cm w and 178 cm h. This has straight sides.[3]

The outer face of the screen wall is a singular piece of art adorned with high quality decorative work. The base of the screen wall as well as the upper portion above the lintel level of the doorways are carved with *vedikā* pattern. Above the upper part of these are three mouldings, the lower and the upper rectangular and the central one rolled. The plain bands in between are curved with guttae at regular intervals. Three such series rise one above the other on the back and side walls of the verandah. The *vedikā* bands on the top are relieved at regular intervals by decorative *chaitya* windows. The carved front arch of the central window is very big and reaches the top of the verandah roof. There are similar but smaller false ones above the doorways and the pierced screen to right. All these arches are decorated with the dentils to indicate rafter-ends and concentric circular bands intersected by radiating jambs simulating the perspective view of barrel roofs with bent wood rafters. The innermost circles, rather the semi-circles above the door lintel, are carved with diaper design (on the central doorway) or with lotus design (the others) with calyx and radiating petals. Similar ornamentation is seen on the side walls of the verandah also which copy and continue the same patterns and divisions as the front of the screen. The decorative design covering the inner walls of the verandah give the impression of a four storeyed structure each decorated in front with series of *vedikā* designs and ornamental *chaitya* arches.

The first cells on either side nearer the screen wall have doors with sloping jambs. These deorways (70 cm b, 1.5 m h) are also decorated with arches above the lintel. The doorway of the cells at the outer part of the verandah sides, however, have vertical jambs. These cells appear to be due to after thought. But still the symmetry of decorative work is continued here too, which appears to be due to the original design, the only later aspect being the cutting of the doorway and cells further in. This contention of posteriority of this cell work is also proved by the way in which the run of the dado *vedikā* is abruptly cut by the door jambs which are straight.

The verandah pillars and pilasters too contain fine decorative work on the top, with beautiful carvings of addorsed animals. These pillars (7.6 m h) support a heavy architrave. They rise on pot bases placed on three thin horizontal plates set in pyramidal pattern with the dimensions of each plate reducing successively. The capital is bell shaped, with vertical groves around and supports a square frame over which lie again four thick plates each projecting over the one below. On the faces of the abacus above the uppermost plate there are graceful carvings of crouched elephants, horses or bulls with a man and a women riding over them.[4]

The Bedsa *chaitya* hall is remarkably perfect in architectural design. The proportion between the various parts is so mathematically arranged and meticulously executed to be an achievement laudable in

rock excavations. It can be noted from the measurements that the interior of the *chaitya* hall has a breadth of 6.25 m and its height from floor to the apex of the barrel roof is exactly the same. The width of the nave between the pillars (3.12 m) is half of this. The aisles are 1/4th of the total width on each side. The height of the pillar is also 1/2 the total height of the hall, the other half being the height of the triforium and the barrel roof. The length of the hall is arranged in such a way as to accommodate the *stūpa* in an organised position. The length from the inner wall of the screen to the front of the *stūpa* is exactly one and a half times the breadth (6.25+3.12), the *stūpa* itself is exactly 1/3rd of the total width of the hall and is placed in the centre equidistant from the sides and the back. Thus, the total length of the hall happens to be 13.54 m. (x being taken as the width, x + 1/2 x + 1/3 x + 1/3 x). The pillars are of a thickness exacty 1/5th of their total height (about 60 cm) and the intercolumnal space is about 38 cm, which is 5/8th the thickness of the pillars.[5] The central doorway is 1/3rd the total height of the nave. Similarly the *stūpa*, which has a diameter equal to 1/3rd of the total width (*i.e.* equal to the height of the doorway) has the same height upto the brim of the second plinth. The *aṇḍa* is half of this. The total height of *vedikā* and capital is equal to that of the *aṇḍa*. Thus the rock part of the *stūpa* is divided into two halves in height, the plinth, and *aṇḍa* and capital. The wooden *yaṣṭi* is a little less than 1/5th of the total height of the rock part, probably the shortage was being made up originally by the thickness of the canopy of the umbrella which once surmounted this.

The measurements of the front verandah also display regular mathematical proportions. The total width across is exactly 1½ times the width of the inner hall. The length from the front of the screen to the front row of pillars is again 1/3rd of the total width of the verandah. Its height is about five times the above length. The base of the verandah pillars, *i.e.* the thickness of the flat base of the pillars (1.65 m) is 1/10th its total height. All these measurements reveal that the architectural planning is perfect and is based on considerable thought and possibly long standing tradition.[6]

The Bedsa *chaitya* hall is immaculatly perfect in design and excellent in decorative sculptural work. The whole thing is a result of single-phase planning, except for slight alteration in cutting the left doorway leading to the left aisle and the two front cells in the side walls of the verandah. No other *chaitya* hall of this time has such dwelling cells as seen in the back corners of the verandah but it is likely that even the cutting of these is not far removed in time from the making of the cave itself, as adduced by a short inscription (No. 3) seen on the lintel of a cell to the right in the verandah. Palaeographically this belongs to series III, and hence is assignable to about the 1st century B.C.

This *chetiyaghara* contains important architectural elements of interest like the stone-screen wall in front of the hall, the verandah and the pillars with pot base and pot and animal capital type. In these features, this belongs to the same class as the *chaitya* halls at Karle and Kanheri and these are certainly the features far developed from the primitive *chetiyagharas* Bhaja 12, Kondane 1, Pitalkhora 3, etc., which have open front and which follow very faithfully the earlier structural traditions of wooden buildings. However, the stone screen wall before the hall is met with in Ajanta 9 and Nasik 18 also. It can be seen from the occurrence in Ajanta 9 and Bedsa 7 of common elements-like the use of octagonal pillars with slight rake, the *chaitya* arches with slightly incurved arms, the large railings, the rolled moulding with railing, the stepped cornice and also the general treatment of the front face of the stone screen that the two may not have been far removed in age. On the contrary, Ajanta 9 lacks the verandah whereas it is seen in Bedsa 7, and Bedsa 7 does not have the subsidiary pillar of Type C. The pot base—pot and animal capital pillar in Bedsa 7 is a feature unknown in early caves, and is wanting in Ajanta 9 also. Hence it may not be unreasonable to suggest that Bedsa 7 is later in date than Ajanta 9, but still not completely isolated from its tradition. (The relative position of this *chetiyaghara*, with reference to those at Karle, Nasik, etc. will be discussed below).[7]

EXCAVATION 8

A small cistern in a recess, situated about 3 m north of the entrance of the *chetiyaghara.*

EXCAVATION 9

Another cistern of the same type as Excavation 8, about 10 m north of the previous one. The right side of the recess is broken and opens to the next excavation.

CAVE 10

An unfinished *leṇa* intended to have a front cell and another inner cell. This is somewhat at a higher level in the series.

CAVE 11 (FIG. 22; PLS. 28, 29)

This is the main *leṇa* (dwelling cave) of Bedsa, and the most singular type in the whole of Western Indian series. This has an apsidal pillarless hall, with the cells hewn in the inner wall on the three sides. The hall originally was 5.5 m wide and 9.9 m deep to the back of the apse and had nine flat roofed cells with an average dimension of $1.8 \times 2.0$ m, all with two benches, one each on opposite sides, except the 1st cell of the left wall and the 2nd cell of the right wall which have single beds only. The three cells at the back have a slightly curving profile in plan at the front and the back inside. The roof of the apsidal hall is barrel shaped, but there is no indication of any wood work as seen in the similar roofs found in the *chetiyagharas*.

The walls are relieved by doorways leading to the cells which have prominent jambs slightly raking inwards and canopied by the *chaitya* window decoration. These *chaitya* arches are connected by two rail friezes, one at the level of the springing of the arches and the other touching and including the apex of these. Below the lower *vedikā* guttae have been shown in a row. The *chaitya* arches are similar in design to those depicted in the *chaitya* hall of the place with incurved arms, slightly projecting out paws and pointed finials. The soffit of the arches is treated with dentils representing rafter-ends and the space above the lintel of the door and within the frame of the arch has half lotus design, and concentric arch pattern cut by rediating beams, again as in the arches of the *chetiyaghara*.

The wall surfaces in between the doorways have rectangular pilasters near the door jambs. These are thin, and about 15 cm broad at the bottom and slightly taper at the top. The arrises are cut in the middle portion.[8] Between these, at shoulder height are some panels with diaper and basket-weave designs (Pl. 28), representing grated windows.

The entrance to the cave is now through a large opening about 5.25 m wide, marked by two vertical jambs, one on either wall, about 90 cm broad and 17 cms thick. A 10 cm wide chase on this, and in the roof in the same alignment, suggests that a wooden screen might have stood here once.

In front of this, were four more cells, two on each side. Only two of these are intact now. The other two have lost their roof and front. The one remaining at the left has two beds, one at the back and the other along a side, and the right cell has only one bench on the left side. The ruined cells retain one bench each. The doorways of the extant cells have straight jambs and are again surmounted by *chaitya* arches of the type in the interior cells, but with only a single band of *vedikā* decoration near the roof. This *vēdikā* band is surmounted by stepped merlons. This is of some interest; in one and the same cave two varities of decoration of *vedikā*, with merlon top and without them, are seen. The entrance to this whole complex is much ruined.

The variation in decoration and the fact that the front cells are a bit receded from the alignment of the inner cells and also separated from the inner hall by the wide jambs, show that this *leṇa* was made in two stages.

The age of the hind part of this cave which has neat design and workmanship must be the same as that of the *chaitya* hall (7). These two have the same type of decorative designs (*chaitya* windows, diapers, *vedika* with a line of guttae below). The delineation of the door frames in front of the cells is similar to the door frames of the main *chaitya* hall. Further it can be noted that the dimensions of the inner hall too are well organised as in cave 7. The width and height of the hall are equal and the length is exactly double the width.[9]

It is likely that the front parts with four cells was existing prior to the above extension.[10] Merlons and stepped cornice were common designs in Ajanta 9, 12, etc. Those caves are datable to a period earlier than the Bedsa *chaitya* hall (to which date the hind part belongs). While this extension with apsidal hall was made, the *leṇa* existing in front could have been fashioned as the verandah, by which the general plan of this whole complex became almost similar to the *chaitya* hall itself.

EXCAVATION 12

About 6 m north, beyond the above *leṇa* and under the steps that lead up to left is a small cell 1.8×1.2 m. The front of this cell is open.

EXCAVATION 13

A cistern, just by the side of the above, in a recess (2.1×1 m) with sockets in front probably for some wooden door or some break of a simple type meant to obstruct the entrance of animals.

Beyond this a small footpath leads to the nallah.

EXCAVATION 14

A small open tank (1.05×2.1 m) with sokets around. This may be a bathing tank.

EXCAVATION 15

About 12 m beyond the above is a small flat roofed hall (4.4 m square) with a doorway 2.1 m wide. This is bereft of any decoration. This could be an open rest hall (*maṭapa*) for pilgrims.

GENERAL DISSCUSSION

Bedsa is a small monastic establishment with only fifteen excavations in all. Only two of them, the great *chaitya* hall 7, and *leṇa* 11 are architecturally noteworthy. The others include two small *chetiyagharas* of Type B ii (caves 1 and 3, the former unfinished), two single-celled *leṇas* (caves 10 and 12, the former unfinished), a *maṭapa* (cave 15), a recess (Exc. 6), six *pāniya pōḍhis* of Type A ii (Excs. 2, 4, 5, 8, 9, 13) and one *sanāna poḍhi* (Exc. 14).

The caves being removed from one another by sufficient distance not much information can be gathered from their location as to the relative chronological positions. However, the cisterns 2 and 4 have their walls oriented in such a way as not to damage cave 3 situated between them. So these two could be considered as creations later in date than cave 3.

On the basis of stylistic aspects of caves narrated above cave 7 and 11 (interior) are seen to share common features in the delineation of decorative *chaitya* arches, *vedikā* and the form of the doorways. Hence the two may be considered as coeval. It has also been shown above that the front part of cave 11 consisting of doorways without rake of jambs, but decorated near the roof level with *vedikā* and merlons was already existing prior to the making of the back portion consisting of the apsidal hall and a different decorative design (p. 111).

The small *chetiyaghara* 3 has the *stūpa* of Type A iii.

Cave 7 has an inscription (No. 3) belonging to Series III, cave 3 has the inscription (No. 1) of Series IV A and cave 4 has the inscription (No. 2) of Series IV B.

Collating all these data a relative sequence for some of the caves at Bedsa can be built up. Successively they would be :

Cave 11 (front part)
Cave 11 (back part) and Cave 7
Cave 3
Cave 4 and Cave 2.

Nothing can be said about the dates of other caves, in the absence of data for reconstruction of chronology. But most of these being accessory items like *maṭapa* and cisterns these could have been made only after the main *leṇa* and *chetiyaghara* came into existence.

The inscription of cave 7 being of Series III it can be considered that cave was made somewhere in the early part of the 1st century B.C. and this would be the date for the interior part of cave 11 too. So the architectural activity at Bedsa appears to commence slightly earlier than the above, around 100 B.C., with a small *leṇa*, viz. the front part of present cave 11. At that time the capacity of the monastic

establishment was restricted to only 4 monks or at the most 6 if one or two cells existed at the back of this cave originally. Bedsa being located in a strategic place nearer the trade routes linking the Konkan ports and inland towns, it began to gain importance gradually and shortly afterwards in the early part of the 1st century B.C. the beautiful *chaitya* hall 7 and *leṇa* 11 were made. Probably the demand for accommodation was so much that cells were made even in the *chetiyaghara*, a feature not usually met with in the early Western Indian architectural tradition. It is interesting to note that a merchant from a distant place like Nasik was responsible for a donation towards this (Bedsa No. 3). It is also noteworthy that both Bedsa 7 and 11 are bold and creditable achievements in rock-cut architecture due to a number of innovations like the apsidal hall for a *leṇa*, the introduction (possibly for the first time) of a high verandah with pillars of Type D, new features of *stūpa* and such other items, in the *chaitya* hall mentioned above. If our contention of the use of the Greek foot as the unit of measurement (note 6) is correct this gains added significance.

After the making of these caves the monastery could have accommodated about 30 monks. For the increased number of monks and also for the visitors coming to this beautiful temple, provision had to be made for the supply of water. A number of water cisterns were made. A rest hall (*maṭapa*, cave 15) and a bathing tank (cave 14) were also added.

Probably by the end of 1st century B.C., *i.e.* in the course of about a century since the beginning of this monastic establishment, it may have become a holy place too. A desciple of a *thera* created here a *chaitya* shrine (cave 3) in honour of his teacher, who by himself had preferred to remain a forest dweller (*āraṇaka*), as stated in the associated inscription. It could gain the donation of a *mahāraṭhinī* too (Bedsa No. 2) in the 1st century A.D.

The monastic establishment at Bedsa, the ancient Mārakuḍa, appears to have enjoyed patronage hardly for about a century and a half. While the monastery could have continued to be in use in later times,[11] there is no evidence of architectural activity at the place after about the 1st century A.D.[12]

## BHAJA

Bhaja in the Maval taluk of Pune district is located about 5 km south of Malavli, a railway station on the Pune-Bombay line, about 10 km south of Lonavala. It was one of the important monastic establishments on the trade route passing *via* Bhorghat; and is in the transitional strip between the Sahyadris and the Desh plain. Bhaja is probably one of the oldest Buddhist religious centres in the Deccan and its importance is further enhanced by the fact that it is one centre which flourished only in the early (Hīnayāna) period. All the excavations belong to this period and due to some cause or the other this centre appears not have attracted any patronage during Mahāyāna times. This very fact of restriction of architectural activity to the early times provides a matter of importance for the historian as herein can be studied the phases of development of architecture of the early period in its purer form untampered by later works. Indeed, it can be seen from the following account that Bhaja provides valuable evidence regarding the development of a religious centre from its foundation to its heyday.

There are altogether 29 excavations at the site (including minor ones), at a height of about 120 m higher up from the plain below and all facing west, on a spur of a hill branching nothwards from the chain of hills with Isapur and Lohagad forts. The caves are numbered from north to south.

At the time Fergusson and Burgess (1880) wrote, it appears that the Bhaja group of caves had not been completely cleared of debris as a result of which they have missed many items of interest, and this has also led them to skip over the description of a few caves, and has caused some inaccurate statements and deductions. The site plan on Plate IX in their work is incomplete. Bhaja deserves a fresh and detailed treatment.[1]

### CAVE 1

This is a natural cavern.[2]

CAVE 2 (FIG. 23)

This is a plain hall (about 7.5 m sq, 2.1 m h). The back side however, is some what oblique. A recess (90 cm w, 1.5 m h, and 2.1 m d) carved in the left wall has on its floor the square mouth of a large cistern. The front portion of the cave has fallen down, but sufficient remnants are there to show that this had a return wall, and also a verandah. There are no cells or benches. This is a *maṭapa* of Type A i and may have been meant for the visitors to rest.

CAVE 3 (FIG. 23)

Adjacent to cave 2 is this cave which is again another plain hall (7.5 m sq, 2.1 m h). A bench (40 cm h, 40 cm b) runs along the three inner sides. The walls are well finished. Here too the front part is ruined. The cave could be a rest hall for visitors. Possibly the caves 2 and 3 are results of a single effort. The wall between them is thin. There is only one cistern for the two caves and it is likely the benched hall was meant for sitting or eating and the other for rest.

EXCAVATION 4 (FIG. 23)

This is a small plain recess (1.5 m sq, 1.5 m h) right in the face of the scarp.

CAVE 5 (FIG. 23; PL. 30)

This small *leṇa* consisting of a rectangular hall (6.4 m d, 4.26 m l) with three cells to the right and two to the left. An attempt has been made to carve another cell on the left wall. The cells have been provided with a bench each except the first one to the right which has no bench. The front wall is cut by a central doorway. On either side of the doorway, is an open window (left about 45 cm sq, right about 53 × 68 cm). The top of the window as well as the doorway is on the roof level itself. On the inner side of the window there are vertical chases meant for insertion of wooden members, probably grating. On the innerside of the lintel of the doorway there are mortises to receive the wooden fixtures. Outside on either side of the doorway is a low bench. The cave is bereft of any decoration and practically is a piece of very rough execution and is partly unfinished. It is likely that this cave belongs to the stage when open windows were common (p. 84).

CAVE 6 (FIG. 23; PL. 31)

This is a *leṇa* on somewhat irregular plan and is very much ruined. This consisted of a square hall (4.26 m sq) with two cells on either side and three at the back. The cells (1.82 m sq) have doors (76 × 167 cm) opening to the hall. The door jambs are a little raised from the wall surface and these slant inwards at the top. The roof is flat. The front portion is completely broken. There is an inner cell in the left corner cell. The cells are provided with one simple bench each, but are very much ruined. The importance of the cave lies in the fact that it has got some datable evidence in the decorations above the cell doors. A large *chaitya* arch covers the top of the doorways of the central cell on the back wall and one on the right side. The tops of these doorways are curved. Just below the flat roof all along the head of the doorways on the back and right walls runs a course of railing pattern interspersed with small *chaitya* arches. These arches have wide span and the paws are flat and apex pointed, and their soffits are shown with dentils representing the extension of vertical reapers.

The facade is now ruined. Some cells including the one in the left wall (now broken) have the socket arrangement cut in a projecting stone, which was meant to receive the pivot of the door. On the back wall of this is an inscription of Series I B recording that this was a gift by one Bādha wife of a ploughman (Bhaja No. 1). The occurrence of the inscription on the back wall of the hall suggests that there was no front screen wall to the hall. Sufficient light facilitating the reading of the inscription would have been there. It may be remembered that an inscription is located in a similar position in Ajanta 12. So this *leṇa* too, like Ajanta 12 may have had no front wall and verandah and hence would belong to *Leṇa* Type B ii. The extra care taken in providing arrangement to fix doors to the cells

would probably indicate the same contention. This would not have been necessary had there been a front door.

The interior decoration with the *vedikā* band relieved by small *chaitya* arches, and the arches themselves with broad span and bereft of jamb or tie rods seen in this cave are nearer in form to those in Ajanta 12. It shall be shown below that in cave 22 also prominent jambs are seen on the doorways. But it has some advanced elements too and hence stylistically the present cave could be placed to a stage nearer to Ajanta 12 and earlier than Bhaja 22. The inscription of Series I B is in conformity with this.

CAVE 7 (FIG. 23; PLS. 32, 33)

This is a small *leṇa* with a hall (about 1.8 m deep and 3.6 m broad) having a cell on each side and two in the back. The cells (about 2.14 × 1.5 m) are provided with a simple bench in each along one of their longer walls. A special feature of these benches is that all have rectangular niches (45 cm sq, 20 cm d) at the bottom which might have been meant for the monks to keep their belongings. The cell doorways (about 75 cm w, 1.7 m h) show slightly sloping jambs. A single raised *Śakhā* is seen on the doorways of front cells.

The door jambs in all the cells are polished, but not the walls. One of the cell doors has two sockets (2.5 × 7.5 × 5 cm) on the interior face of the lintel to receive the wooden fixture. Similarly sockets may have existed at the bottom level also, but in recent restoration the floor has been paved with cement concrete and nothing can be made out. The hall (2.3 m h) is entered by a doorway (1.7 m w, 2 m h).

There is some ornamental work in this *leṇa* also. In the hall, above the cells all along the three inner sides runs a band of railing pattern. Here the vertical uprights as well as the cross beams are shown in a simple and naturalistic way. No where the *chaitya* windows are shown. This feature of broad and simple railing form is probably an indication of a unsophisticated decorative work of the early period. On the back wall of the verandah near the cell to the right, at roof level, there is, in addition to the railing pattern of the above type, a course of merlons. This appears only to a width of about 50 cm and probably it had continued on the front top of the right cell also. We may note that, here probably is an early attempt to introduce the merlon design in decoration. While the existence of the slightly out-projecting jambs and the rake in them suggest the stylistic proximity of this cave with 6, the polish on the jambs and the simple type of *vedikā* decoration here in contrast to the *vedikā* with *chaitya* arches in cave 6 would indicate a slightly earlier date. So it may be inferred that cave 7 is earlier in date than 6.

CAVE 8 (FIG. 23)

This is a *leṇa* just between the great *chaitya* hall and cave 7. This has a pillarless hall with four cells at the back and four to the left. To the right is a simple plain wall screening it away from the great *chaitya* hall. The front of the cave has collapsed completely. All cell (about 1.8 m l, 1.5 m b, 2.1 m h) have a single bench each along a side, except the frontmost on the left wall which has no bench. The doorways of these are somewhat higher than usual, rising from the floor to the ceiling and they are about 75 cm. wide. The top sides of all the doorways are notched to receive wooden lintels. The jambs do not show any rake. There is no decoration or other architectural items for stylistic comparison, but the absence of any attempt to carve cells in the right wall is probably indication of the existence of the *chaitya* hall before this excavation was commenced.

CAVES 9, 10, 11

These caves are on an upper level. Originally these were approached by a ledge-path in the scarp, the continuation of which still exists further northwards. As the front portion of these caves including the ledge-path has fallen, these are now approached through a recently built staircase in front of cave 8.

CAVE 9 (FIG. 23)

This cave, the northern most in the upper level, is a *leṇa* with a hall (about 7.3 m sq) having four

cells at the back and two to the left. The right wall is plain and thin and divides this *leṇa* from the next to its south (Cave 10).

The cells (about 1.8 m l, 1.2 m w) in the back wall have stone beds, but not those on the left wall. The doorways (about 1.8 m h, 60 cm w) are roughly hewn.

The front wall of the hall appears to have had a doorway in the centre cutting the screen wall throughout its height of about 2.2 m, with a width of about 1m, and with holes on the floor to receive the wooden frame. On either side of the doorway there was a rectangular window (1.5 m w, 1.2 m h). Though all these are ruined, the original feature of the screen wall could be made out from its remants still hanging from the roof. Again a verandah about 2.1 m wide runs throughout the length of the cave. This further projects northwards for another 4.6 m. There is a cell (1.5 × 1.5 m) at the northern most end of this verandah. Two cells (2.1 × 1.5 m) are also cut in the back wall of this projection. On the front wall of this projected portion of the verandah two windows (90 × 105 cm, now broken) existed and had been provided with notches for wooden fixtures. The cells do not have benches and their doorways are plain without any indication of any device for fixing doors.

This cave is very plain and bereft of any decorative work. The only element that helps in fixing its age is the bare thin right wall where no attempt is made to carve the cells. But, similarly no attempt is made to cut cells in this wall in cave 10 also. It is likely that the two are nearer in date. The projected portion of the verandah with its associated cells, however, appears to be a later annexe made to provide more accommodation. The rectangular cell doors rising from floor to roof is a feature seen in common with cave 8. The absence of benches in some cells is also noteworthy.

## CAVE 10 (FIG. 23; PLS. 34, 35, 36)

This is an irregular *leṇa* with a rectangular hall (about 6.7 m l, 3.7 m w and 2.4 m h) with its larger axis going deeper inside and with two cells in the back and three cells in the right wall. The cells (about 2.1 × 1.2 m) are provided with a bench along the side walls. All the cells are approached by low steps about 30 cm high. The doorways are narrow (about 1.8 × 75 cm). They are unfinished and crude and do not show uniformity in their placing, nor do they have clear indications of door fixtures. The form and position of the cells hewn in the right wall, particularly the first one from the entrance, which is an irregular trapezoid in plan, show that sufficient care was taken by architects not to damage the neighbouring wall, which happens to be the wall dividing this from cave 11. This is an indication of the fact that this cave was wrought after cave 11.

On the back wall above the lintel of the door and just below the roof is a projected portion. On the face of this is a frieze of railing decoration with *chaitya* arches at regular intervals. The arms of these arches are somewhat incurved showing an advanced style. This is further in consonance with the possible date of the cave. There are further indications of the later date of this hewing in the two pillar fragments still surviving in front of the much ruined verandah of this cave.[3] On the overhanging roof, the top portion of the capital of a pillar is still hanging. On the floor also there is a similar remnant in which the stepped base can be recognised. The form of these pillars can be better made out from a fragment of a capital (Pl. 35) which is lying in front of cave 7 which is directly down below. It must have been part of a pillar of this cave only as no other cave in this group had such pillars. That fragment has the carving of addorsed lions, elephants and winged horses resting over a stepped pyramidal member. It could be reconstructed from this pillar style that Bhaja 10 is one of the later excavations among those just to the north of the *chaitya* hall.[4]

## CAVE 11 (FIG. 23; PL. 37)

This is the *leṇa* on the upper series abutting the big *chaitya* hall. It is a neatly executed composition with well-dressed walls and perfect right angles for corners, but much of it has now collapsed. It consisted of a hall (4.8 m w, 2.7 m h, 3 m d) with three cells (1.8 m l, 1.5 m b) at the back and one on each side. The door jamb of the cells slant inwards a bit. A cut-in ledge runs all round along the side edge of the jambs, lintel and threshold. One of the cells has two square holes on the inner side of the lintel

to receive the wooden frame and another retains an L shaped projection with a rectangular cut, at the middle level of a jamb, made for latching. There are stone beds, one each, in all the cells arranged on the side wall lengthwise. On the inner three walls of the hall between the lintels of cells and the roof-line runs a projected band, the face of which is decorated with the railing pattern and small *chaitya* windows at intervals. The delineation of railing is bold and naturalistic which is an early feature and the *chaitya* arches too are somewhat broad spanned. Nothing can be said about the existence of the verandah as the front has completely collapsed.[5]

The back wall of one of the cells to the left is damaged due to the cutting of a cell in cave 10. This is indicative of the fact, that cave 11 is earlier than cave 10, which is substantiated by the existence of the frieze in which difference in the delineation of the railing pattern could be seen. Another indication however in the slanting of jambs of cell doors in cave 11 and the absence of the same in cave 10. There is one element of similarity in the two caves, in the fact the railing decoration is carved on a raised band. It is likely that the artists of cave 10 may have copied this from the neighbouring cave. This feature, however, is not seen anywhere else wherein the pot-base—pot-capital type of pillars exist. The arrangmement for fixing the wooden frame seen here in the two holes on the inner side of the lintel, and the rake of the jambs are seen again in Ajanta cave 12. Further this shares the rake of door jambs with cave 6 of this place itself, but differs from both Ajanta 12 and Bhaja 6, in the absence of large *chaitya* arches capping the cell doorways. This feature of the doorways became common in the caves of a date nearer to the Bedsa *chaitya* hall. Hence it is likely that Bhaja 11 is earlier in date than cave 6 of this place and even cave 12 of Ajanta.

CAVE 12 (FIGS. 24, 6 (1); PLS. 38, 39)

This is the famous Great *chaitya* hall of Bhaja a monument of singular importance for the study of the development of rock architecture.

This *chetiyaghara* consists of a large rectangular hall with open front and semi-circular back. It is 8.13 m broad and the length from apse-end to the front is 17.08 m. Twenty-seven pillars, in two straight rows meeting in a semi-circle at the back and arranged in such a way as to run parallel to the walls, divide the hall into a nave and an aisle running on the three inner sides. The pillars are simple octagonal shafts rising to a height of 3.45 m. They taper a little towards top and also rake inwards to about 12 cm, so that the distance between the pillar lines at their head level is 4.72 m, and at the base 4.95 m. The latter also happens to be the width of the nave. The aisles between the pillar line and the side walls measure 1.04 m in breadth. A *stūpa* with a cylindrical drum, 3.45 m diameter, carrying a raised hemispherical dome and a square *harmikā* is placed at the inner end of the nave. One of the interesting features of the cave is that the walls too rake inwards slightly. This is seen prominently in the back than in the front. The roof above the nave is quadrantal and that above the nave is barrel-vaulted. This barrel-vault rests longitudinally along the bigger axis above the nave ending with an arch in front and a semi-dome at the back. The under surface of the vault is covered by arched wooden beams and horizontal parallel reapers intersecting them at right angles. At the semi-dome, however, the curved reapers are set in such a way as to meet at its apex right above the *stūpa*. The vault is 2.26 m deep and rests on a ledge above the triforium. The triforium itself is 2.34 m. high rising straight above the head of the pillars. The quadrantal roof above the aisles does not retain the wooden beams, but it is likely that this too had such wooden fixtures, as can be guessed from a line of square holes (5 cm sq, 5 cm deep) all along the wall of the aisle at a height of 3 m from the floor, which could have been intended for fixing a wooden cornice to support the arc braces.

The entrance to the cave is completely open, but enough data remain in the form of mortises cut in the floor and side walls to show that this cave had a front screen, probably in wood which, however, has perished completely. There are two mortises just in front of and in the same line as the pillar rows. These are about 25 cm broad and 45 cm wide, and are rectangular with a wedge shaped projection towards the nave. In the same line between these two, are two more mortises, about 18 cm square cut in front of the nave equidistant from the walls, and 1. 37 m apart from each other. On the walls, on either side at the level of the springing of the arch, is a huge mortise about 25 cm square and 25 cm

deep. Again in the same plane as these near the 3rd, 4th and 5th projecting beams on the soffit of the arch, there are holes. From these holes, on the analogy of the stone screen walls seen in Ajanta 9, Bedsa 7 etc., it can be surmised that the front wooden screen in this cave had a doorway with jambs rising from the central pair of mortises. In the huge mortises on either side of these, bigger square pillars with a projection on one side (Type B) may have stood. These pillars and a large architrave resting on them (and also inserted into the wall mortises) may have carried the load of woodwork above. The square mortises in the soffit of the stone arch were probably meant for receiving the arched reapers set above the doorway to cover the front of the vault roof, as seen in the extant wooden portions at Kondane and in the decorative stone *chaitya* arches in this cave and elsewhere.

The facade of the *chetiyaghara* is an imposing piece of art. Its lower part is now ruined, but the upper part remains in good condition. The large arch which commands the greater portion of the facade has a very wide span. It has the usual rafter-end decoration on the soffit and the paws are of the projecting type. It is crowned at the top with a rising pointed pinnacle. Its front face is covered with three rows of tiny pin holes which run on the rising apex too, 170 in all, which "indicate beyond doubt that some wooden and probably ornamental facing covered the whole of it in the manner shown in all the faces of similar arches at Udayagiri and at Bharhut".[6] The facade is rectangular 8 m wide and 9.7 m high. Its upper part on either side of the upper half of the main *chaitya* arch is adorned with beautiful sculptural decoration. Along the actual width of the cave spreading on either side of the *chaitya* arch the carving is seen at a level a little behind the plane of the front face of the arch. Then it continues to front for about a metre on the side walls and extends further sidewards for about another metre to end up, with another right angular turn, near the scarp face of the rock (Pl. 39) At the topmost level is a double-course of railing pattern and a little below that is a thick stepped-cornice, with its topmost band having stepped-merlon design, and it is these only which run along the whole width of the facade in the fashion described above. Between these, stretching on either side of the main arch upto the side walls, are rectangular panels, two on each side, consisting of a small *mithuna* figure in each and flanked by rectangular uprights. In the same level on the right side wall there are curved brackets. These rise from the stepped cornice to support the railing above, which looks here like a projecting gallery. It is difficult to say whether there were brackets correspondingly on the other side also. On the front face of the further extension on either side is a *chaitya* arch which stands on the stepped cornice and rise up to cover part of the stretch of railing pattern above. Actually the finials of these shoot up a little beyond the top line of the railing like the finial of the main arch itself. These decorative arches are exactly of the pattern of the main arch, but the interiors are adorned with semi-circular and radiating beams. It is rather strange that there is no symmetry in the decorations done on the facade on either side further below the stretch of the stepped-cornice. On the right side below the stepped-cornice is a square niche consisting of a *mithuna* panel. This is flanked by rectangular pilasters and is shown as rising above a stretch of railing. But, on the left side there is a tall rectangular panel consisting of a simple *vedikā* design. This too is shown as rising from a stretch of railing, but this railing is not at the same level as the one on the right side. Further below this railing is a sculpture of a *yakṣi* which is partially broken. A small inscription in early characters on the base of the lower railing here reads '*Vaḍha*'.

The mathematical formula adopted in the architectural design of the Bhaja *chaitya* hall is very simple, but the result is aesthetically elegant. Overlooking workmen's minor errors to a margin of about 8 to 10 cm it can be seen from the measurements given above and from the plan, lateral and transverse sections, that the width of the cave is equal to its height (base to soffit of the front arch). The hall, measured from the front original wooden screen to the front of the *stūpa*, is 1½ times the total width. The diameter of the *stūpa* is again 1½ times the distance between the edge of the *stūpa* and side walls. Again the distance between the *stūpa* and the back wall is equal to the distance between the side wall and the *stūpa*. The height of the interior roof is less than the width by about 5 cm only. Again the aisles are 1/8th the total width. The nave is about 3/5th of the total width. The height of the pillar is 2/5th the total height of the arch. The height of the triforium and the height of the vault from the ledge of the triforium, are equal.

The width of the doorway, that was there between the wooden jambs (as can be made out now from the mortises on floor) is 1/8th total width of the cave. It is also of interest to note that the total height of the facade from the base up to the apex is higher by 1/8th the height from the base to the soffit of the arch. The architectural proportion would be as follows, taking W *i.e.* the width of the hall, as the unit :

| Width | Height | Hall | Stūpa | Stūpa to Back | Stūpa To Side Wall |
|---|---|---|---|---|---|
| W | W | 1½ W | 3/7 W | 2/7 W | 2/7 W |
| Aisle | Main Doorway | | Pillars | Triforium = Vault | Height To Facade |
| 1/8 W | 1/8 W | | 2/5 W | $\frac{W-2/5W=8 \text{ cms}}{2}$ | $1^1/_8$ W |

The most interesting aspect of the *chaitya* hall at Bhaja is its faithfulness in copying the wooden architecture. The wooden members in the making of this are more in number compared to any other of the *chaitya* halls of Deccan, they being the roof ribs in the nave as well as the aisle and a full screen in wood (no longer extant). The retainment of quadrantal shape even on the aisle (they became flat in some later examples as in Ajanta 9) the barge-board of wood (now lost) affixed on the face of the arch, the prominent rake of pillars, the rake of the walls too, and faithful copying of wooden architectural motifs, as the *chaitya* arch and the railing with uprights, cross-bars and copings with all details including the shape of the curved cross-bars, the delineation of the projected upper storey supported by brackets are other prominent items displaying the heavy reliance of the present architects on structural wooden tradition, though they had selected a different medium for execution of this work. Duly recognizing the copious use of wooden elements in this, Fergusson and Burgess have rightly remarked that, "it seems impossible that any one can look at these and not see that we have reached the incunabula of stone architecture in India. It is a building of a people accustomed to wooden buildings, and those only, but here petrified into the more durable material."[7] It is this consideration that justifies the contention of many scholars that here in Bhaja 12 is the earliest of rock-cut *chetiyagharas* of Western Deccan. Reasons being adduced elsewhere,[8] it will suffice to observe here that this contention is to be modified slightly and restated that this is the earliest of the rock-cut *chetiyagharas* of the apsidal-vault-roofed type.

This heavy dependence on wooden tradition is sufficient to establish the greater antiquity of this cave over the *chetiyagharas* like Ajanta 9, Bedsa 7 and their stylistic analogues and successors, wherein is to be seen the gradual adjustment to the new medium in replacing the wooden elements in stone like the stone screen wall and also certain elaboration of the plan in the introduction of the verandah, etc. But there are *chetiyagharas* like Kondane 1, Pitalkhora 3, and Ajanta 10 which share several features similar to Bhaja 12.

Bhaja 12 and Ajanta 10 are very close architecturally as suggested by the occurrence of the arch of wide span, the high rake of pillars and the open front (probably covered with the wooden screen). The replacement in stone of quadrantal beams in the aisle roof seen in Ajanta 10 is an advanced future. The *stūpa* forms however are definite indications, and it had already been shown, how the *stūpa* in the Bhaja cave could be considered as earlier than that in Ajanta 10, where the stepped pyramidal capital has appeared over the *harmikā*, whereas it is absent in Bhaja 12 (p. 72). Again while the walls in Bhaja 12 slant slightly, those in Ajanta 10 are straight, which is rather clear indication of the commencement of a trend towards the gradual adjustment to the new medium of stone, slowly departing from the hangover of wooden tradition. However, an early feature, the polish of the stone surface, is seen on the wall of Ajanta 10 but is noticeable in Bhaja on the *stūpa* only. Another point in which Ajanta 10 retains the earlier architectural tradition is the quadrantal cave in the front, but whether such a thing was present in Bhaja 12 or not cannot be ascertained now. Again, while the facade of Ajanta 10 is very simple, and remarkably plain, the facade of Bhaja 12 is carved with beautiful sculptural decoration, a feature which is seen extensively in the later caves with stone screen as in the *chetiyagharas* at Nasik, Karle, Bedsa, etc. So inferring from stylistic grounds, this occurrence of the decoration which becomes regular in later caves should place Bhaja 12 to a date a little later than Ajanta 10 where it does not occur. This is in contradiction to the indications available in architectural elements set above.

But a conspicuous feature noticed in the facade of the Bhaja *Chaitya* hall is the absence of symmetry in the decoration on the right and left sides of the *chaitya* arch. It could not have been so, had the whole decoration of the facade was part of a single scheme of work done at one stretch. It can be seen that the run of the lower railing pattern on the right side is in continuation to a similar design on the facade of cave 15, on the upper series to the right of the *chaitya* hall, whereas the railing decoration at the bottom on the left side of the facade is in a lower level and has been adjusted probably to a similar decoration which was running on the facade of cave 11 on the left side. So it is likely that the facade decoration on the sides was done at the date when the two *leṇas*, cave 11 to left and cave 15 to right were made and right in continuation to these the central portion of the facade was also filled with decoration. This would mean that to begin with the facade of cave 12 was plain, like Ajanta 10, and the sculptural decoration is the result of after thought. It has been shown above that cave 11 is earlier in date than Ajanta 12, which however has been placed on stylistic grounds to a period later than Ajanta 10 and earlier than Ajanta 9. So it is likely that this is the age of the facade decoration on the *chaitya* hall at Bhaja, an inference which is well in order with the evidence presented by the broad spanned arches seen on this facade. That would mean that the facade decoration of this cave is later than the cave itself, but not far removed in time. This contention of later date for facade decoration is further substantiated by the fact that, whereas in various other places the decoration is seen almost flush with the same plane as the *chaitya* arch, here it is somewhat set behind, which could be due to the fact that the original flat surface was cut backwards for decoration in later times. Another indication is the occurrence of the *yakṣi* figure on the left side of the facade of the present *chaitya* hall. This *yakṣi* with longish body and peculiar type of head dress looks nearer in style to the female figures above pillars in the Bedsa cave, a monument definitely assignable to a period later than Bhaja 12 architecturally.[9]

There are three newly discovered inscriptions (Nos. 2, 3, 4) from this *chetiyaghara*. Two are carved on the curved wooden beams in the ceiling and record the donation of possibly those parts by two persons. On the basis of the letter types, these inscriptions have been assigned to Series IA (Charts II, III). This is quite in conformity with the architectural evidence. The other one is seen on the left side of the facade below the lower railing, a little above the yakshi figure, and reads '*Vaḍa*'. The meaning or purpose of this inscription cannot be made out, but the characters are also of the early stage, but any finer palaeographical comparison of this inscription with the wooden rib inscriptions cannot be attempted as there are only two letters in this inscription, and they are not regular 'test letters'.

In continuation to the series four excavations run to south on the same level as the *chaitya* cave, and there are two more on the upper level which are approached by a stone staircase cut between caves 14 and 17.

## CAVE 13 (FIG. 23; PLS. 39, 40, 41)

This is the lower *leṇa* to the right of the *chaitya* hall. Its front is ruined, but what remains consists of a large rectangular hall (9.1 m w, 4.4 m d) with benches (about 75 cm h, 60 cm w) cut along the side walls. On the back corner of this hall are two cells, one on each side, with their walls projecting into the hall. On the back wall again are three cells in a row. The hall is about 2.7 m high, and flat roofed. The cells are about 2.1 m by 1.7 m. The cell on the left corner does not have any bench while that on the right corner has one running along the side wall. Both these cells are provided with a grated window (60 cm sq.) on their outer walls. The grated windows consist of uprights and cross-bars of square cross section delineated in such a way that the cross bars look like piercing through the vertical uprights, and between them are square holes (Type i). The window of the left cell has some *śakhās* also cut on three sides and above the top line is a series of semicircles. But this attempt towards decorating the windows has not been completed. There is no such decorative work on the window of the right cell. All the three cells on the back wall have a bench each along a side wall. There is a small niche cut on the front face of the stone bed in all the cells. The doorways of all these cells are narrow (about 60 cm w, 180 cm h), and their jambs rake inwards. While the doorframes of the side cells are decorated each with one sunken śakhā that of the central cell has the engaged jamb along with

this type of *śakhā*. Its upper part is covered by the *chaitya* arch. The soffit of this shows the usual beam-ends and the interior face has the curved ribs and the radiating reapers. Similar decoration is seen on the door-frame of the corner cells also. But these doorways are smaller, about 45 cm wide and 1.5 m high, and their lintels are semi-circular. The door jambs of these have on the interior an arrangement for latching the doors with a circular hole in a projecting bar, as seen in cave 6. The top of the side cells of the back wall has a stretch of railing decoration with arches cut in them at either end. The base of the railing has the projecting pins represented in stone. The railing decoration is simple and naturalistic. The arches, here, however, have narrow span compared to the others. The facade of the cave which is half ruined shows a double row of railing pattern running all along its width. This stretch of decoration is relieved by two *chaitya* arches of the type seen in the back corner cells in the interior. These arches are wide-spanned but, still the span is a little shorter than that of the great arch of the *chaitya* hall.

These decorative features of a somewhat developed variety, specially the form of the *chaitya* arch, are indicative of the fact that this cave is of a date later than the *chaitya* hall, but not very much removed from it.

It can be noted that this cave has the same plan as *leṇa* 11 (and to a certain extant cave 6) of this place in having a hall, wherein the seperate verandah is absent and the side cells are a bit projecting inwards, and hence belong to the same class. In this plan and the presence of the sunken *śakhā* of door jambs and also the rake and bolting arrangement, this cave is again similar to cave 11, but that lacks the extensive decoration, particularly the arches hanging over the doorways, a feature that became common in later caves like Bedsa 7, 11, etc. So here is possibly an indication to consider cave 13 as a later work than cave 11.

The pattern of the doorways, with their arch-top enclosed by a *chaitya* arch flanked by a stretch of railing pattern on either side, the rake of door jambs and the introduction of cut ledge in the *śakhā* and the shape of the decorative *chaitya* arches are items which are identical with cave 6 of the same place and hence the two are to be considered as nearer in age. But the *chaitya* arches in cave 6 are somewhat broad spanned compared to those in cave 13 and hence cave 6 may be considered as belonging to a slightly earlier date than cave 13.

## CAVE 14 (FIG. 23)

To the south of and adjacent to cave 13 is this excavation, with its orientation tilted forward by about 120° from the previous one. This is also a *leṇa* with a rectangular hall (2.03 m w, 7.77 m d) with three cells on each side and one at the back. The front cells are about 3 m wide and 1.8 m deep while the others are about 1.8 m square. These are provided with two benches each along opposite walls. The other cells, except the 2nd on the left and the 3rd on the right, have single beds on a side. The 2nd cell on the left has no bench but there is a niche (1.2 × 0.9 m) on the back wall. This also has an open square window by the side of the front doorway. The 3rd cell on the right side too does not have the bench but it has another cell at its back which has one. There is a small window cut at a low level in the front wall of the inner cell, which cuts partly the stone bench also. The doors are all plain and do not have any latching arrangement. The front part of the cave is broken.

The cave is very plain bereft of any decoration and is roughly hewn. The wall surfaces are all rough but there are traces of plaster in some places.

There was a cistern in the front to the left, but this is much ruined now. The only indication for dating is the existence of a square open window. This, the plan with a deep hall, and probably the rough way of execution are seen again in cave 5 of Bhaja and it can be suggested, without much emphasis, that these two are nearer in date.

A staircase cut in the rock by the side of the above cave leads to two caves on the upper level located directly above caves 13 and 14. This staircase is modern. Originally, however, the caves could have been approached from a ledge path at a higher level.

CAVE 15 (FIG. 23; PL. 39)

This is a *leṇa* adjacent to the great *chaitya* hall at the level of the front arch. It consists of a hall (3.8 m w, 3 m d) with a bench along the right wall and two semi-circular niches (80 cm w, 30 cm d), with arched top, cut in the left wall. There are two cells (left 2.1 m sq, right 2.1 m l, 1.2 m w) in the back wall with a bench (60 cm w, 75 cm h) each. The doorways (2.1 m h, 60 cm w) have straight jambs. The front part of the hall is now broken. The semi-circular niches are of the pattern to be seen generally in later caves at Kanheri, etc., which usually house a Buddha image and these niches too should be considered as later cuttings.

The facade decoration of this cave continues on the neighbouring cave 16 also and consists of three *chaitya* arches connected by the rail pattern at the bottom and a course of single stepped cornice at the top level. These two *i.e.* the rail pattern and the stepped cornice are arranged in such a way as to run in continuation to similar ornamental work on the facade of the great *chaitya* hall. Further the decorative *chaitya* arches here are wide spanned and have dentils in the soffit and radiating sun window decoration in the centre. In design they are identical in shape with the decorative arches on the facade of the *chaitya* hall. It can be deduced from these that this *leṇa* is not far removed in date from the sculptural work on the *chaitya* hall. The absence of a seperate verandah indicates the similarity of this in plan with cave 13 and others mentioned along with those. But the absence of any decoration on the doorway of the cells and the walls of the hall is a feature in contrast to what is seen in cave 13. It is likely that this cave is a little earlier in date than cave 13. This contention is substantiated by the difference in sculptural design of facade decoration. While the decorative arches on the facade of cave 15 are wide spanned, those on the lower cave display slight incurving of the arms. And, as stated already with reference to the facade sculptures of the *chaitya* hall, this cave with its decoration is to be placed to a date nearer but slightly earlier than the date of the sculptural decoration of the *chaitya* hall.

CAVE 16 (FIG. 23)

The cave, located adjacent to the previous one and at the same level, consists of a hall (about 6 m w, 7.5 m d, 2.4 m h) with long benches on either side. In the back wall are two cells with a bench in each, along the side walls. The doorways are rectangular and have no arrangement for doors.

The general features of plan—the absence of verandah, provision of bench in hall and setting cells at back—shows that this cave is similar to its neighbour, cave 15. Further as both these share the same stretch of decorated facade, it can be construed that they are contemporary.

EXCAVATION 16a AND 16b

About 4 metres further south were two open cisterns on a somewhat higher level than the floor level of cave 16. These are now filled with mud and their tops broken, but the evidence is sufficient to contend that once these stood beside an ancient path leading to the upper caves.

EXCAVATION 17 AND 17a

Down below, by the side of the staircase and along the line of the lower caves 13 and 14, there are two more cisterns. Their mouths are square and are cut in the floor of a rectangular recess (2.4 m w, 1.2 m d, 2.1 m h). This type of cistern (A ii), as noted above (p. 71), is a later feature in Deccan excavations associated mostly with the inscriptions of 2nd century A.D. and subsequent periods.

CAVE 18 (FIG. 25)

A little to the south of the above water cistern is this *leṇa* with a hall (5.6 m l, 3.7 m d) and five cells (*c.* 2.1 m sq—3 at the back and 2 to right). One of the cells on the right side consists of a bench along the side wall. The back cells do not have benches. On the left side of the hall is a bench which might have been originally at the back of an irregular recess or cell. There is no verandah. On the left side of the forecourt is a broken cistern.

The doorways of cells are without any decoration, but their jambs show rake. They are provided with mortises on the top of the lintel. One of the cells (the central one at the back) has a hole made in the jamb for fastening the door. An inscription (No. 5) recording the donation of that cell by one Nādasava Nāya of Bhogavata is on its front wall. The inscription belongs to Series IA. Though the cave is not well-executed the rake in jambs and the simplicity of plan (Type B ii) and the inscription itself, would support that this is one of the earliest caves in the group. The rake of the door jambs (but without projection or decoration) and the method of fixing the wooden frame with square mortises would go to show that this is nearer to cave 11.

## EXCAVATION 19 (FIG. 25)

A little to the south of the above is a very well cut cistern (Type A ii) in a recess. In the floor are two square openings for the cistern cut underground. There is an inscription (Bhaja No. 6) on the back wall of the recess, which records that this was a donation of one Mahāraṭhi Kosikīputa Viṇhudata. The inscription belongs palaeographically to Series V B and hence is datable to the 2nd century A.D.

## EXCAVATION 20 (FIG. 25; PLS. 42, 43, 44, 45, 46, 47, 48, 49)

About 10 metres south of this cistern is an excavation containing a group of 14 *stūpas* of various sizes sculpt in round in the rock of the scarp. The top rock above the front line of *stūpas* is broken.

All the *stūpas* vary in their base diameters from 1.6 to 2.5 m and in height from 1.8 to 3 m. The surface of all the *stūpas* particularly those in the front line are very much disintegrated and pitted. Still their general characteristics can be easily made out.

*Stūpas* 1 and 2 are very simple types consisting of almost straight drum with *vedikā* pattern on the brim and a roughly hemispherical dome. These belong to Type A ii.

*Stūpa* 3 is also of the same Type, A ii, but the dome is slightly incurved. The drum too tapers slightly.

*Stūpas* 4 and 5 betray the same characteristics as the above, but have small flat square additions on the top of the dome. (In this feature these resemble the *stūpa* in Kondivite 9).

*Stūpa* 6 is of Type B ii consisting of cylindrical drum with *vedikā* design on the brim, the dome with slightly incurved sides and the *harmikā*. This has an inscription (Bhaja No. 7) recording that it is one made for *Thera Bhayaṁta* Saṁghadina. *Stūpas* 7 and 8 too are of the type of 6. But it is interesting to note that the *harmikā* has the *vedikā* decoration in two stages like that of the main *stūpa* in cave 12.

But these display in addition the *vedikā* band on the drum. Further *stūpa* 7 has its drum sides slanted slightly. Both these bear inscriptions (Bhaja No. 8 and 9). *Stūpa* 7 was one dedicated in honour of *Thera Bhayaṁta* Aṁpikiṇaka, and *stūpa* 8 was for *Thera Bhayaṁta* Dhamagiri.

*Stūpa* 9 at the left end of the front row is finely designed. Its base does not show any socle and drum has straight sides and its brim is ornamented with railing pattern. The drum is 2/3rd sphere and is mounted by a square *harmikā* with double railing, and above this is another square member ornamented with single *chaitya* arch on each face. The *chaitya* arch has a smaller span like those in cave 13 at this place, and at 7 and 11 of Bedsa. Over this rises a capital of five square plates each succeeding one being bigger than the previous, giving it an inverted stepped pyramidal form. Over this is a thin moulding of qudrantal profile and ribbed in the fashion of the *vedikā*. Above this again is a square member with a stretch of railing decoration on all sides, each side being relieved by two *chaitya* arches placed symmetrically on either side of the central line.

The capital of this *stūpa* happens to be the most elaborately ornamented of all the *stūpas* in western Indian caves. The inscription on this (Bhaja No. 11) is much effaced.

*Stūpa* 10 is a small one having a cylindrical drum with straight sides and decorated with railing pattern. The dome whose sides are somewhat straight carries a *harmikā* with single band of railing pattern, but no other crowning member.

*Stūpa* 11 has a high drum with the usual railing decorating the brim. Its dome is about 3/4th of a sphere with prominent incurved sides. The *harmikā* has single railing and over that is the stepped

pyramidal capital like that of *stūpa* 9, but not so well wrought. There is a much damaged inscription (No. 12) on this.

*Stūpa* 12 is the smallest of the whole group. The drum is slightly sloping and has the *vedikā* decoration. The dome is somewhat hemispherical. The *vedikā* decorated *harmikā* carries the capital. The topmost of the plate has merlon decoration and below that is *vedikā* pattern. There is a circular umbrella representation cut in the roof directly above the capital. But the *yaṣṭī* is not carved. (It is likely a wooden stave had been inserted).

*Stūpas* 13 and 14 are also of the same type as 12, but are bigger. *Stūpa* 13 has a short incomplete inscription (No. 10).

The positions of these *stūpas*, at least in some cases, are indicative of their relative ages. It is obvious that in rock excavation the *stūpas* is the front line are to be cut first and then only the others in the back could be wrought. This gives some scope for recognising the development of the *stūpa* types.

In can be seen from the plan that 12th, 13th and 14th *stūpās* are latest in the series. Chronologically these are preceeded by *stūpas* 10 and 11. *Stūpas* 10 and 11 should be later than 7 and 8. And *stūpa* 7 must have been cut later than the cutting of *stūpa* 6. (*Stūpas* 9 and 1-5 could have been made at any time, so far as the evidence of their position is concerned.)

This sequence very well corroborates the typo-chronological scheme made out in Chapter VI. The latest ones (12, 13, 14) have the umbrella too carved on the roof whereas they are absent in the *stūpas* in the middle lines (Nos. 10, 11). It is so with reference to the position of the stepped pyramidal capital too. Their presence is indicative of a later stage than those without them. Further indication is also available to show that *stūpas* with *vedikā* decoration in two stages, like 7, (as seen in the main *chaitya* hall at this place) are earlier than those having only a single stage *vedikā* decoration on that member and that the sloping of the drum is no indication of age by itself.

Again on typological grounds the *stūpas* 5 and 6 having only a square flat member instead of the *harmikā* can be considered as earlier than those with *harmikā*. The *stūpas* 1-3 consisting of drum and dome only would be the earliest naturally. *Stūpa* 9 with elaborately carved capital can be placed on stylistic grounds nearer to *stūpa* 11 in the middle row. But the double *vedikā* decoration (as in Bhaja 12) on *stūpa* 9 probably indicates a slightly early date compared to *stūpa* 11. Thus both the relative positions and typology go consistently as chronological indicators. The sequence of *stūpa* cutting in this group appears to be in the very order of their numbers.

All the six inscriptions found on the *stūpas* are very much mutilated. It is extremely difficult to make out the exact features of the letters. But on the basis of the eye copies of these given by Burgess (1883 a), these appear to belong to series III and IV. These inscriptions are to be seen on *stūpas* 6, 7, 8, 9 and 11. All the *stūpas* are commemorative in character made in honour of individual *thera Bhadaṁtas* (also, see below).

## CAVE 21 (FIG. 25)

About 18.24 m to the south of this is an unfinished single-celled type 1 b *leṇa* (3 m w, 1.8 m d, 2.1 m h) with an unfinished bench on either side. Its doorway (2.1 m h, 75 cm b) is simple with straight jambs. In front of the cell is an open court.

## CAVE 22 (FIG. 25; PLS. 50, 51, 52, 53, 54, 56)

Along the scarp about 20 m further down from the previous cave is this excavation which has attracted greater attention than any other of the Western Indian caves. Impressed by the wealth and character of the sculptures carved on the walls Fergusson and Burgess[10] considered this (the New Vihara) to be the earliest *leṇa* in the whole of Western India. The sculptures in this excavation, however, are no doubt of singular interest for the study of Western Indian cave art. This excavation is unique from the architectural point of view also and represents a unique type in design in the whole gamut of Western Indian caves.

This is a small *leṇa* consisting of somewhat an irregular rectangular hall (4.9 m w, 5.05 m d, 3.28 m h) and two cells in the back wall and two in the right. The cells too are rectangular, but irregular, and they are not exactly at right angles to the main hall. The cells, except the first one to right, have a stone bed each cut along the side wall. There are no cells in the left wall of the hall, but a bench (5.3 cm b, 51 cm h) stretches along it, and three large niches (90 cm w, 1.5 m h, 60 cm d) are cut in that wall probadly to provide space for storing things. The front wall is very thin. There were two doorways in this wall connecting the hall and the verandah. A grated window is also cut in this wall.[11] The verandah (5.3 m w, 2.1 m d) is again irregular in plan. To the right of this verandah is another neatly cut cell (2.4 m b, 1.5 m d) with a stone bed along the left side wall. The front of the verandah was much ruined but (as restored by the Archaeological survey of India recently) has six pillars in front. (The form of the original pillars appears to have been faithfully reconstructed on the basis of the pilaster to the right which is well presented). These pillars are square in cross-section but their middle 1/3rd part has been made octagonal by chamferring the arrises (Type C).

There is a small passage to left now opening into a large cell with a stone bench. Within this cell two more cells are cut, one in the back wall and another in the right wall. These appear to be later additions, and their proper entrance was from the path outside. At the start of the passage in the left side of the verandah, was a pillar with pot base raised on a stepped pyramidal pedestal, octagonal shaft, and pot capital surmounted by the inverted stepped pyramid and human and semi-human sculptures (This is no more extant. An illustration of this, however, is available in Fergusson and Burgess 1880, Pl. XCVII). Opposite this in the wall is an engaged pillar surmounted by an inverted bell capital supporting the inverted stepped pyramid and the sculptures of the type seen on the pillar described above.

A small platform (90 cm w, 45 cm h) cut in stone rising on moulded legs is attached to the back wall of the verandah to the right of the central doorway.

While the roof of the inner hall and the cells are flat, the ceiling of the verandah is peculiar in shape. It is roughly quadrantal and is covered with vertical and horizontal beams carved along the same profile. The lower part of this is decorated with a stretch of *stūpas* and standing caryatid dwarfs supporting a four stepped cornice. The decorative *stūpas* have the cylindrical drum, hemispherical dome *harmikā* and the stepped inverted pyramid.

The doorways of the cell and the hall are rectangular and somewhat broken on the sides and featureless. The way in which the sculptures[12] on the right wall abruptly end near the door frame probably indicates that the cell here itself could be an after thought, and similar is the case with the right doorway leading to the hall, where the jambs have been cut carefully so as not to damage the sculptures proper. The central doorway appears to have been the only original one and it is featureless.

The decoration on the cells (Pl. 53) in the interior is of greater interest. Here all the doorways have jambs distinctly projecting like struts from the wall surface and they rake inwards. The heads of doorways are adorned by *chaitya* arches and into these the vertical struts of the jambs project. The span of the arches is somewhat narrowed by the incurving of the arms. They have the sun-window pattern and their soffits have the usual dentils. All the arches above the doorways are connected by a thin railing pattern at the level of their bases. At their shoulder level too are small arches of the same design as the bigger ones, but these are without interior decoration. Their paws connect the two bigger arches on either side. At a lower level, connecting the doorways, runs a dado of railing pattern all round the three inner walls of the hall. On the left wall, however, where the niches exist, the jambs of the niches rise from this dado itself. In the plain surface on the wall, framed in the sides by door or niche jambs, the dado at bottom and the rail on the upper side, there are again big *chaitya* arches, but without interior decoration.

This cave considered by Fergusson as 'one of the oldest if not the oldest' among the Western Indian excavations, can be placed securely in a relative position into a certain definite period on the basis of architectural style. The doorway pattern with jambs projecting from the wall surface and covered by *chaitya* arches is a feature noticed in caves 6 and 13 of this place. The decoration is no doubt very

much profuse in this cave, but the *chaitya* arches are of the pattern found again in 6 and 13 and further are similar to the arches of cave 9 at Ajanta. The pillars of square section with partially chamfered arrises is another item which brings this cave with cave 9 of Ajanta. Again the decorative *stūpas* here and the Ajanta 9 *stūpa* are similar. All these items are so much of a comparable type by which this *leṇa* could be placed in the same age bracket as those of Ajanta 9 and Bhaja 6 and 13. The roof of the verandah of this cave however is of peculiar form. (The only other cave in Western India which has a comparable feature is *leṇa* 4 of Pitalkhora, near which again this has to be placed).

There are two more members *i.e.*, the pillar and pilaster cut to the left of the verandah, which are of interest. The fact that these pillars and pilasters do not fit into any symmetrical plan of the *leṇa* would indicate that this again may be the result of an afterthought and wrought at a time when need for more accommodation in the *leṇa* was felt. So these pillars and pilasters and the adjoinig annexe with three cells can be considered as later work than the original *leṇa*. The older portion of the *leṇa* with hall, cells, verandah and pillars in front can be assigned to a period very near to Bedsa 7 where the similar interior decoration, with doorways having prominent raking jambs and the crowning arches of almost indentical design are to be seen, and with Ajanta 9, and Nasik 19 (Kanha's cave), where the pillars with square cross-section with chamfered arrises in the middle part occur. So this cave possessing architectural elements occurring in common in Ajanta 9 of an early data and Bedsa 7 of a subsequent data can be placed stylistically between these two. The form of the pilaster in the passage leading to the annexe shows a hybrid pillar type, wherein the shaft is of square cross-section with octagonal middle part (Type C), but the capital is of the bell-stepped pyramid type (Type D). This again is indicative of the trasitional stage between Ajanta 9 and Bedsa 7.

Taking all these into consideration this *leṇa* can be placed stylistically to a date later than caves 6 and 13. This position is applicable to the main *leṇa* as well as the annexe, even though there is slight difference in age between the two stages.

## CAVE 23 (FIG. 25)

Abous 40 metres further down is a cell (1. 8 m sq, 2.1 m h) with a bench along the right wall. In front of this is an open court (2.1 m d and 1.8 m w). The doorway is broken and the cave is featureless.

## CAVE 24 (FIG. 25)

Further south of this excavation the scarp becomes steeper and there is a series of three water falls.

About 15 metres to the south-west of cave 23 near the 1st water fall is an empty flat roofed circular cell (2.4 m dia). Its doorway is rectangular (1. 5 m h, 60 cm w) and featureless. This might have been a *chetiyaghara* of Type B ii which may have housed a structural *stūpa*.

## CAVE 25 (FIG. 25)

This is a large unfinished *leṇa* right under the 2nd water fall.[13] Its front is now broken and the interior has a large irregular rectangular hall (4.3 m w, 6 m d, 2.4 m h) with three cells in the left wall, a naturally formed cavern in the back and two cells in the right. In the left wall the first two cells are finished, but the third is unfinished. The cells are about 2.1 m deep and 1.5 m wide. The first cell to the right has no bench. The second is unfinished. There is indication of the commencement of the 3rd also. The cell doors are broken and featureless.

The position of this cave is problematic. This being situated right under the waterfall, is exposed to the action of water. Further if at all this cave was in use, this could have been used only during summer, as in the rainy season the entry into the cave is impossible due to the heavy cascade of water falling right at the entrance. What is more likely is that the excavation was commenced without much forethought and left unfinished when the excavators realised the difficulty for its use.[14]

CAVE 26 (FIG. 25, 5 (1); PL. 56)

This is the southernmost of the Bhaja series situated about 40 m south of cave 25. It is a circular *chetiyaghara* (2.4 m dia, 1.8 m h) with flat roof and a rectangular entrance (1.2 m w, 1.8m h). In the centre of the cell is a small *stūpa* about 1.2 m in diameter and height. The *stūpa* is of a very simple type with only a cylindrical drum and a hemispherical dome (Type A i). The whole thing is absolutely bereft of any decoration. It does not even have the *harmikā* but the existence of the same once probably in wood, is suggested by a central circular socket (5 cm dia).

The features displayed by this *stūpa* are clearly early, being of Type A i and comparable in shape and proportions to the other oldest *stūpas* in Western India (chapt. VI). This is stylistically earlier than even the *stūpa* in Bhaja 12. This *stūpa* form and the simplicity of the cave are suggestive of the high antiquity of this amongst the caves in the Bhaja group.

GENERAL DISCUSSION

The Bhaja monastery consists of two *chetiyagharas* 12 and 26 (and probably 24 also). There are 13 *leṇas* (5-11, 13-16, 18, 25) out of which three are partly finished (5, 21 and 25), two *maṭapas* (2-3) and five independent *pāniyapoḍhis* (16a, 16b, 17, 17a, 19). Three more *pāniyapoḍhis* are to be seen in caves 2, 5 and 18. Besides, there is a recess (4) and a group of rock cut *stūpas* (20).

Collating the results arrived at above in connection with different caves as to their relative chronological position, those may be placed in the following sequence :

*Chetiyaghara* 26, *leṇa* 18, *chetiyaghara* 12 (but without decoration), *leṇa* 7, *leṇa* 11, *leṇas* 15-16, decoration on *chetiyaghara* 12, *leṇas* 6, *leṇa* 13, *leṇa* 22 main and annexe, *leṇa* 10, *leṇas* 8 and 9, *leṇas* 5 and 14 and *poḍhi* 19.

The location of the caves show that caves 2 to 18 are all clustered together with the large *chaitya* hall 12 at the centre, whereas the rest are isolated excavations. As most of the architectural activity of successive periods are restricted to the cluster aroud the *chaitya* hall, the simple excavations *i.e.* cave 24, and two single celled *leṇas* of A i b type, *i.e.* 21 and 23 may also belong to the same age as cave 26 of that group. Cave 24 is a circular cell. Nowhere else in the Western Indian series of rock-excavations there is evidence of such a cell having been used as a *leṇa*. So it is likely that, like 26, this could have been a *chetiyaghara* of Type B ii, and there was a structural *stūpa* inside. If so it can also be contended that this may have been one of the earliest attempts to make a rock-cut *cheṭiyaghara* where even the *stūpa* too was not cut out of the living rock yet.

The palaeographical evidence indicates that the inscriptions of *chaitya* hall 12 and *leṇa* 18 belong to Series I A and the one in cave 6 is of Series I B. If so all these caves are to be placed to a period between 250 B.C. and 175 B.C. (p. 63), caves 12 and 18 in an early stage and 6 in the later stage within this time bracket. The only other inscription of importance is the one recording the donation of cistern 19. This belongs to Series V B, roughly to the time of Gautamīputra Sātakarṇi in the 2nd century A.D.

These chronological details facilitate to visualise the history and architectural development in the Bhaja monastery. The earliest architectural activity at Bhaja is to be seen in the last four caves of the group, viz. caves 23-26. It is interesting to note that these isolated excavations are located near the natural water falls and do not have any water cisterns near them. The monks may have depended on the streams for water. But as there will be no water flow during summer here and it is likely that these excavations belong to a time when the monks used to stay in caves during the rainy season only as ordained by the earliest *vinaya* texts (p. 36). Before any artificial excavation was wrought, eremitic monks may have preferred to stay in huts or natural caverns. Probably it is to this stage that the small circular *chetiyagharas* 24 and 26 belong.

The volume of patronage bestowed on the monastic complex successively from now on suggests that Bhaja was growing to be an important centre for the spread of Buddhism. Either due to the idea of holiness that may have been associated with the place or more possibly due to the commanding influence of a venerable monk or a line of monks, lay devotees appear to have been attracted. Their zealous patronage began with the making of very small and simple *chetiyagharas* (24, 26) dedicated in honour

of such monks. Probably not much later, the excavation of 21, 23 and 25 may have been undertaken. 21 and 23 were meant for single monks, and are very simple. Cave 25 might be the one attempted to facilitate the accommodation of a group of monks representing a stage in the history of this religious centre when more monks began to throng this holy place, and patronage from the lay community too increased. The architectural works of this stage are to be assigned to the beginning stages of spread of Buddhism in Deccan somewhere in the early part of the latter half of 3rd century B.C. a chronological position substantiated by the dates of the caves that followed them as will be shown below. Like Buddhism, Buddhist architecture and specially rock-cut architecture was new to the area. Hence, nothing more than the small and simple architectural works as seen in caves 23-26 can be expected here. The inadvertant location of cave 25 may also be due to initial inexperience.

The period of prosperity marked by extensive architectural activity followed, in which ambitious projects were undertaken, first with the great *chetiyaghara*, an excavation of unprecendented dimension in the whole of Western India at that time. It is likely that Bhaja played a great role in the dissemination of the Buddhist creed from early times, and such a centre needed an impressive temple. The simple *leṇa* 18 may have also been created during this time as shown by the associated inscription which belongs to palaeographical series IA. The Bhaja *chetiyaghara* 12, covering an area of nearly 60 square metres in the nave in front of the *stūpa* can easily accommodate more than 80 worshippers at a time. The simple *leṇas* 18 and other single celled ones which appear to have been in existence in this period could have housed only about ten monks. This situation indicates that the *chetiyagharas* even when they are located in the monastic units were meant for the benefit of lay devotees than the monks (p. 32, 105). The *chaitya* hall 12 of Bhaja being one of the earliest works of the type in the area naturally followed faithfully the wooden proto-types. Even in this, this happens to be an adventurours experiment in rock-cut architecture of Western India. It became a trend-setter. This stage is datable to around 200 B.C. on grounds of palaeographical characteristics of the iscriptions in Bhaja 12.

A new wave of enthusiasm of the laymen towards this newly introduced creed helped the rise of a community of specialised sculptors and architects who began to bestow their energy in bringing out new innovations in architectural work. The new excavations did not remain to be purely utilitarian, but began to be adorned with simple decorations too.

At this site this stage is marked initially by cave 7 consisting of simple but boldly executed railing ornamentation copying the wooden features faithfully. The cave is probably one of the earliest *leṇas* to be adorned with sculptural work, even though in a simple way. But remarkable achievement is to be seen in the introduction of decoration on the facade of the great chaitya hall. Probably it is the first attempt in the whole of Deccan to cover such a wide area with sculptural work. The initial inexperience of the designers and craftsmen working here on a new architectural form and new medium can be witnessed in the lack of symmetry in facade decoration. Caves similarly adorned, but with less details, were created along with (15, 16). These were shortly followed by *leṇas* 6 and then 13 which display a little more elaboration in decoration. All these belong to the early half of the 2nd century B.C. By this time the monastery had grown to a capacity to accommodate nearly twentyfive monks at a time.[15]

Patronage continued to flow, even from people coming from distant places. Newer experiments were being made in designing rock-cut monuments. Cave 22 (New Vihara of Burgess and Fergusson) has a tinge of foreign look and an attempt towards novelty. Many early workers in the field have indicated that the sculptures of Sūrya and representation of foreigners here indicate the hand of the foreign artists, or that the cave itself could have been the donation of a foreigner or a group of foreigners.[16] Whatever be the source the architecture of Western Deccan began to imbibe some alien elements from this stage onwards. The annexe to this *leṇa* probably introduces for the first time a new pillar type which became a common feature of the architecture in later times *i.e.* the pillar with bell/pot capital (Type D). On grounds of stylistic comparisons detailed above the main *leṇa* is assignable to about the second quarter of 2nd century B.C. and the annexe to about two or three decades hence.

A regular pillar type of D began to be introduced in the verandah, in a monument created a little later, *i.e.* in *leṇa* 10. This is the only example at Bhaja of a *leṇa* using such a pillar type and this is possibly one of the earliest to introduce the same regularly in *leṇas* of Western India. On circumstantial

grounds described above this belongs to a date somewhere around 100 B.C. This may have been followed by caves 8 and 9, to accommodate more monks, almost as annexe to cave 10.

Upto this time *i.e.* for about a century and a half commencing from about the middle of 3rd century B.C. there was continuous creative architectural activity. Henceforward Bhaja ceased to remain in importance. The number of monuments that came up later is hardly 4 or 5 and these too are very simple ones. After a lull of activity for about a century or so, somewhere in the 1st century A.D. or early 2nd century A.D. two more *leṇas* 5 and 14 were made. Probably the accessory items like the *maṭapas* 2, 3 also belong to this period.

The last of the excavations in Bhaja, however, is the double cistern donated by Kosikīputa Agimitaṇaka which on palaeographical grounds of the associated inscription could be placed to Series V B—early 2nd century A.D. (Two more cisterns Exc. 17 and 17a may also belong to the same period).

To summarise, the chronological position of the caves at Bhaja may be set as follows :

| | |
|---|---|
| 24 | (middle of 3rd century B.C.) |
| 26, 21, 23 | |
| 25 | |
| 18 | |
| 12 (main) | |
| 7, 11 | *C.* 200 B.C. |
| 12 (decoration), 15, 16 | |
| 6, 13 | |
| 22 (main) | *C.* 150 B.C. |
| 22 (annexe) | *C.* 140 B.C. |
| 10 | *C.* 100 B.C. |
| 9, 8 | |
| ——— | |
| gap | |
| ——— | |
| 5, 14 | |
| (2, 3) | *C.* A.D. 100 |
| 19, (17, 17a) | |

(The *stūpas* in cave 20 belong to different dates ranging from late 3rd century B.C. to about the end of the 2nd century A.D.).

The cause for the cessation of architectural activity here in such an early period is a matter of some interest. Is it due to some internal weakness of the monk community of this religious centre and the dwindling of their influence ? Could it be due to the opening of new trade routes as a result of which this Bhorghat route might have fallen into disuse ? Judging from the number of stone beds in the cells in different *leṇas*, this religious centre at its height had grown enormously in monk strength; the total being 58 resident monks. At least some more may have frequented this place often. The fact that the monks lived in these caves even in non-rainy seasons can be made out by the occurrence of good number of cisterns which were meant to provide water for them in dry seasons, and the occurrence of a number of cells without beds, almost invariably at least one in each *leṇa*, where the things necessary for their use may have been stored.[19] Can it be that this economically non-productive monk-community had outgrown the patronizing capacity of the neighbouring laity ? It is possible that all these factors may have contributed their bit in stalling the growth of this religious establishment.

A more plausible explanation is that the hewing of caves any more in that already crowded monastery may have been intentionally discouraged after about 1st century B.C. Continuation of patronage to a certain extent is seen in the creation of caves 5, 14 and the water cistern 19. Further the commemorative *stūpas* in cave 20 show that the monastery was active till about the 3rd century A.D.[18] It is likely that the monk-community here diverted the patronage available to that monastery

to raise institutions nearby at Bedsa and Karle which are located just within a redius of about 10 km. All the three monastic units may have been under the control of this monastery itself.[19] It may be noted that almost immediately after the cessation of major architectural activity at Bhaja, very fine monuments came up first at Bedsa and that was followed by Karle[20]. Taking the three together the growth of Buddhism and rock-cut architecture can be visualised from the earliest times to the end of the period under our consideration and a little afterwards even.

The group of *stūpas* in cave 20 probably indicates the importance the Bhaja monastery enjoyed. Bhaja may have been an important pontifical seat[21], playing a prominent role in the dissemination of Buddhism in Western India. It is one of the earliest Buddhist centres of the area wherein evidence is available not only for the existence of Buddhist monks in about the 3rd century B.C. itself but also for the influence it wielded on the local people by which it could attract so much of patronage as to create a number of rock-cut monuments. Such an influence may have been due more to a line of resident monks who could establish continuous contact with the laiety than itinerary monks who just visited the place now and then. It is not unlikely that Buddhist monasteries of the time, as the one at Bhaja, had developed an organisational set up of the type seen commonly in Buddhist, Hindu and Jaina monasteries of the later historical period. It is the practice in these monasteries to have a chief or a pontiff who is normally considered as the head of a particular sect, and he is held in highest reverence. There would be continuous succession of pontiffs. Usually a cemetery is set apart exclusively for these pontiffs and monuments are raised in their memory (as for example at Sringeri, Nanjangud, Hampi, Mudabidri). The group of *stūpas* in Bhaja 19 also is probably such an area where commemorative *stūpas* have been made in honour of the pontiffs. The stylistic difference of these *stūpas* show that they belong to various periods stretching in date from about the 2nd century B.C. to about the 3rd century A.D. (*Cf.* 78).

## JIVADAN—VIRAR

Jivadan is a small hill situated about 3 kilometres east of Virar, a railway station on the Bombay-Baroda line, about 56 Kilometres north of Bombay city.

The caves are located about 100 metres above the plain on the western scarp of the hill. A beautiful view of the vast stretch of green fields and the Arabian Sea beyond is presented from here. The remains of Sopara are about 5 km away from the foot of the hill.

The caves are in two groups, cut in the second and third scarps from the top respectively. They are reached by a flight of steps leading to the temple of Jīvadānimātā on the hill.

### FIRST GROUP

This consists of 7 excavations done in a line and almost adjacent to one another. The caves are numbered here from north to south.

### CAVES 1 AND 2 (FIG. 26; PL. 57)

Both these are small cells measuring about 1.60 m square and 1.60 m high. They are placed adjacently, but the dividing wall between the two which is about 8 cms thick is partly broken. Both these have no front wall and are completely open. The cutting of the caves is neatly done with perfect right angles for corners and the walls had also been finely smoothened.[1]

### EXCAVATION 3 (FIG. 26; PL. 57)

Next to cave 2 is this unfinished excavation, about 1.50 m deep and 1.50 m high. But the right and back parts have been left uncut.

### CAVE 4 (FIG. 26)

This cave, now serving as the shrine of Jivadanimata, also appears to have been one of the caves

like 1 and 2 with cubical dimensions each side measuring about 1.70 m. But the walls are now covered with paint and roof and front part is now provided with a doorway.

CAVE 5 (FIG. 26; PL. 58)

This is a small cell measuring about 1.70 m l; 1.20 m b and 1.00 m h. The walls are roughly hewn.

EXCAVATION 6

This is a small tunnel about 90 cm h and 90 cm wide going up in about 45° incline and reaching slightly a broader, space, where now an image is kept worshipped. The hewing is irregular and probably of recent date.

CAVE 7 (FIG. 27)

About 6 m beyond to the south of the above is a large cell about 6 m wide, 5.5 m deep and 2.1 m high. It appears there was a front wall to this but only part of it is now preserved to a length about 1.2 m on the right side. It is difficult to make out how long this wall projected and where the doorway was, as this portion has been built up in recent years. The interior however is remarkably well-cut with perfect right angles at corners and the walls are also finely dressed, almost looking like smoothened or polished surface.[1]

S ECOND GROUP

There are five excavations in this group, all cut in a lower scarp about 8 m below the first group. These are reached by a narrow footpath from the top of the hill (The numbering, from north to south, is continued from the above).

EXCAVATION 8

This is a small water cistern (about 1.1 m l; 0.90 m b, 0.90 m d) with its top open.

CAVE 9 (FIG. 26; PL. 59)

This cave, situated about 6 m to the south of the above, is a large cell about 2.7 m long 3.8 m wide and 1.7 m high. There is a rectangular doorway in front about 1.5 m h and 0.5 m w. The whole of the interior is well made; the planes of the walls, floor and ceiling meet in exact right angels and it is so with the corners of the doorframe also (the lower part of the door frame, however, is partly broken). The wall surfaces too had been well smoothened and this is visible wherever the surface rock has not peeled off due to weathering. The facade of this cave is cut deeper into the scarp by about 15 cm, and is rectangular again about 3.8 m wide and 1.7 m high and is made in such a way that the doorframe of the cell is equidistant from either side. The surface of this facade is also finely dressed.

CAVE 10 (FIG. 26; PL. 60)

Adjacent to the above, seperated only by a 25 cm wall, is this cell, a smaller one measuring 2.10 m l, 1.9 m b and about 1.5 to 1.6 m h (The floor is much disintegrated). Now the front is open but there is indication to show that there was a wall with a doorway in the centre. This cave too had been executed neatly with perfection in making the corners and wall-ceiling joints. The fine smoothing of the walls too is noticeable wherever the surface has not peeled off due to weathering.

EXCAVATION 11

This is an unfinished hewing showing an attempt to make a cell. The cutting done in different steps is still visible.

## EXCAVATION 12

In front of the above is this excavation an open water cistern, with its top about 1.20 m wide 0.90 m long and 1.2 m deep, and the area below slightly wider. The cistern is partly ruined now.

## GENERAL DISCUSSION

Omitting cave 8 which appears to be a modern hewing and caves 3 and 11 which are unfinished, there are seven simple single celled *leṇas* and two *poḍhis* in this place. The single celled *leṇas* too fall into two distinct categories. Four are of *Leṇa* Type A i a, *i.e.* with open front, and three are of type A i b *i.e.* with a front doorway. The *poḍhis* are also of simple open top types (Type A i a). The excellent dressing, nearing polish, of the walls of the *leṇas* is a noteworthy feature.

However, the architecturally unsophisticated nature of the caves in the group make it difficult to consider this as a monastic establishment. Amongst these caves too the typologically simpler and possibly earlier variety of caves of A ia type appear to have come up fisrt followed a little later by the caves of A i b type. This contention is possibly proved by the fact that whereas the caves of A i a type are all situated adjacently to one another as a single cluster, indicating that they may have been done together, the *leṇas* of the latter type are removed from the former. If so, to start with in this place there appears to have been only four *leṇas* of simple A i a type. These *leṇas* are odd in size. Some of them are comparatively narrow or low to be used for comfortable living. They are not provided with stone beds. Despite the fact that the caves face west and are directly open to the hot sun and the gushing monsoon rain, they had not been provided with a door or any other arrangement to close the front. Another point of interest is the fact that even though this cave group is located nearby a hundred metre above the hill, no cistern needed for storing water is to be seen near the caves of A i a type.

We feel that here are caves of a very early stage in which Buddhist monastic rock-cut architecture had not yet been systematised. The very simplicity of this group with A i a *leṇas* is possibly indicative of its high antiquity. These could be the simplest form of rock-excavation which could be attempted in an area where the tradition was to begin afresh. The existence of the tradition of smoothening the walls to a degree nearing polish, an item not seen in the majority of rock-cut caves of later date, is a strong point in favour of linking these technologically with the Mauryan caves elsewhere. Though, of course, the perfection in polish reached on sandstone by the Mauryan craftsmen can never be achieved on coarse grained trap of this area, the attempt to use the technique itself is of interest. Probably indicating the flow of that idea along with that of creating shelters for the Buddhist monks. Further these small caves with no provision for personal comfort, with not even the common stone beds, appear to belong to that early stage in the history of Buddhist monkhood, when the monks still followed the rigorous eremetic practices of *ārañakas* and *paribbājakas* according to which they were to resort to the caves during the *vassa* months only and were not to aspire for any comfort in living. (See note 180 to Chapter III). These small and simple creations could have certainly sufficed their needs. When the monks were to stay in *vassa* months only there would not be any need for water cisterns too, in a region like this where the rainfall is quite generous in that season.[2]

This contention of a very early date for this group of caves at Jivadan-Virar looks quite plausible as the nearby Sopara is known, according to tradition, to have been one of the earliest cities in Western India to which Buddhism was first introduced; the Aśokan inscriptions from Sopara are well known. (Could these caves be of Mauryan times ?)

Typo-technologically these early caves at Jivadan-Virar can be considered as preceeding or coeval with the single-celled *leṇas* with open front found in Junnar-Tuljalena, where too the caves are generally cubical in measurements and display good dressing nearing polish. There again, comparing those caves with a large number of others found in the same place, we have considered these as the earliest rock-cut architectural works of Western India.

However, shortly afterwards when the craftsmen of the region were gradually becoming familiar with the rock medium, slightly better caves with a front doorway (*leṇa* type A i b) were also made. These *leṇas* at Jivadan-Virar (Caves 7, 9 and 10) could not have been far removed in date from the

early series of A i a type. Except for the insertion of the front wall with a doorway, both retain the other features of making the corners perfectly at right angles and smoothening of the walls which we may note, are items absent in caves of later date. At this stage people could have realised the necessity of having some water-source near the caves themselves and two water cisterns have been made. It is interesting to note that these are also of very early type (type A i a) with open top. Their storage capacity too is much less and these could have served only for a few days in a year, perhaps during the dry intervals in the rainy season itself.[3]

## JUNNAR

Junnar, in Pune district, is the chief town of the taluk of the same name and lies about 96 km north of Pune. Geographically it is located in the transitional belt between the chain of the Sahyadris, about 25 km to the west and the broad plains further east. The town is in a cup-shaped valley surrounded by the Sivaner and the Tulja hills to the west, the Sulaiman to the north and east, and the Manmodi hill to the south. It is on the southern bank of the river Kukdi. River Mina too flows to the west of it about 5 km away.

Junnar has the largest number of rock excavations, about 252 in all.[1] This great number of excavations indicates the existence of a large and prosperous city supporting the monastic community residing in the caves. The location of Junnar, however, has all the geo-economic aspects favourable for the growth of such a city. It is just on the plain not far from Nanaghat, a pass which was a vital link between the ports of Sopara, Kalyan and Thana and the big inland cities like Nasik, Tagara, and Paithan. Trade routes from these big cities might have converged on this town before passing through the Nana pass towards the ports. This strategic position, coupled with the natural protection provided by the hills around this cup shaped valley, and also the salubrious climate and availability of plenty of water in the perennial rivers Kukdi and Mina appear to have contributed to the growth of the city and its prosperity and the consequent rise of the large monastic complex around. An ancient site, yielding sprinklers and red-polished-ware, stretching along the right bank of Kukdi has also been noticed[2] and this gives some idea of the location and extent of this ancient town. Realising the enormous economic potential on the part of the settlement that supported the monks that lived in the large number of caves, Fergusson thought that this might have been the ancient Tagara which was famous as a great inland mart as known from the accounts of Ptolemy, the *Periplus*, etc.[3] Now, however, Tagara has been identified on surer grounds with Ter in Osmanabad district. What else could have been the ancient name of this big city, is yet to be established. It is known that this area is called Minner, *i.e.*, 'the vale of Mina river'.[4] Basing on this Joglekar has suggested that Minnagara mentioned as the capital of Nahapāṇa in some historical sources may be Junnar itself.[5]

The importance of Junnar for the study of architecture is enhanced not only by the fact that it has the largest number of excavations compared to any other centre in western India, but also that it has good number of inscriptions, which provide useful palaeographical data for the relative dating of the caves. Further it is one group where all excavations belong only to the Hīnayāna period of Western Indian excavations, as revealed by the absence of Buddha sculptures and by the architectural fetures to be described below. Its importance has aptly been recognized long back by Fergusson who has remarked that the Junnar caves are 'full of interest to the student of cave architecture.[6]

The excavations at Junnar are in four groups located seperately on four hills around the town, viz. Tuljalena, Manmodi, Ganesh Pahar (Sulaiman) and Sivaneri.

## TULJALENA

This group of caves is in the Tuljabai hill, about 5 kilometres west of Junnar.[7] It is approached by a small path from the Junnar-Nanaghat road by a deviation near the northern tip of the Sivaneri hill. All the caves are together in a row over the head of a valley and face roughly east-north east. From

the caves, a pictursque view presents itself with the stretch of the Hatkeshwar hills to the east and north, the rising scarp of the Sivaneri to the south-east and the green valley of the Kukdi right in front.[8]

*All caves are shown on site plan, Fig.* 27.

CAVE 1

This is a simple cell (1.82 m d, 1.75 m w, 2.34 m h). Its front portion is broken almost diagonally but the extant parts display that it was a neatly executed excavation with perfect corners and straight sides. The walls are finely dressed.

EXCAVATION ix

A cistern with a square mouth (broken).

CAVE 2

This *leṇa* lying closely to the north of Cave 1 consists of a hall (5.44 m sq. 2.2 m h) and five cells cut in the three inner walls, two in the left wall, two in the back and one in the right. The left cell of the left wall is roughly cubical (about 210 $cm^3$) and others are also of almost the same size except for some minor variations. In the left side, the front wall of the right cell and the partition wall between the cells are broken. The floor and roof of the cells are in the same level as those of the hall. The floor and ceiling of the back cells are about 8 and 10 cm higher than that of the hall.

No cell has any bench. Except the right one, all others have holes in opposite walls to receive wooden poles for hanging clothes of the monks (*valagni*). The cell doors (78 cm w, 2.28 m h) are plain. The jambs are straight. All cell doorways have cut grooves at the lintel level to receive wooden frames for doors.

The front of the cave is now broken but there is indication to suggest that a doorway (1.37 m b, 2.2 m h) with its bottom and top flush with the floor and roof of the hall existed. In front, there is the projection of the roof beyond the line of the doorway on the same level as the roof of the hall.

The cave is devoid of any ornamentation and even benches. But a noteworthy feature is that all the walls, the floor and roof are well-dressed and retain at places traces of slight polish. If this polish is taken as indication, and considered with the simplicity and neatness of the cave it may be suggested that this is one of the earliest experiments of making *leṇas* of this plan, *i.e.* the hall surrounded by cells.

The dimensions of the various parts of the cave are arranged with a very simple mathematical formula. The cells are almost cubical with equal height, width and length except the one in the right wall. The hall is square. The front doorway has a width measuring 1/4th the width of the hall. This simplicity in design too may be an indication of the early date.

However, the cell in the right wall has been reduced in length. This appears to have been dictated by the fact that cave 3 was already present at the time of making this; any attempt to make it cubical like others would have damaged the wall of cave 3. So it is likely that cave 2 is later than cave 3.

CAVE 3 (FIGS. 5(3), 20B; PL. 61)

Just to the north and adjacent to cave 2 is this *chetiyaghara* of Type A iii. This attracted the attention of historians as an important specimen of rock architecture in which can be seen the earliest attempts to copy simple wooden structures in stone, and in which could be recognized a type of *chaityaghara* from which later apsidal *chetiyagharas* with vaulted roof were evolved.

This has a circular hall (7.77 m dia.) having in its centre a *stūpa* (2.48 m dia.) surrounded by twelve octagonal columns, (3.35 m h, 48 cm b). Between the pillars and the wall running all around, is an aisle 1 m wide. The *stūpa* is very plain and of early type and has only two parts extant, the drum and the dome. The dome is much damaged now, but the head of the dome still retains its flat surface (40 cm sq) in the centre of which is a hole (15 cm sq, 25 cm d). It is likely that a *harmikā*, either structural or made of wood, stood on the flat surface and the square hole was meant to receive the staff of probably a wooden umbrella.

The pillars rake inwards by about 5 cm. They are arranged equidistant from the *stūpa* and from each other. The intercolumniation, measured from centre to centre of the pillars is about 1.45 m. The walls are slightly smoothened. The roof above the central *stūpa* is domical like a hemisphere placed over a cylinder (triforium). The base span of this is about 4.9 m. The height from the floor to the apex of the dome is 6.7 m, and the height of the dome itself is 3.35 m. The triforium (1.12 m h) rises from a cornice (13 cm h, 5 cm b) at the base and ends in a set back ledge. The dome rises above this. The hemispherical dome had been fitted originally with arched wooden rafters. The impressions of these still remain. At the junction of the dome and triforium, there are eight notches located equidistant from each other which were problably meant to carry the wooden refters and it can be made out from this that there were eight curved beams meeting at the apex of the dome. The aisle has quadrantal roof rising from the wall to meet the upper side of an architrave (18 cm thick) running over the pillars.

The cave front is now broken. There is, however, a 3.95 m wide opening. This appears to have been fitted with a wooden screen, in the centre of which was the doorway 1.98 m h) rising from the threshold which was about 48 cm higher than the floor, as indicated by the mortises still seen in the floor and the side walls. One of the side walls has an 'L' shaped cut running vertically upwards and this looks like a *śākhā*. There are rectangular mortises at the top and bottom of this which were meant to receive the wooden fixtures.

In front of this doorway was a huge open rectangular gallery extending further for about 3.95 m on either side of the wooden fixtures. Thus its total width is 11.85 m. How far the rock roof projected to the front cannot be made out as the roof, the floor, as well as the side walls are broken. The facade is devoid of any ornamentation.

The mathematical proportions of different parts of this *chetiyaghara* reveal a simple design. It can be seen from the plan and elevation that the prominent member of the whole composition, *i.e.* the *stūpa*, has a diameter exactly 1/3rd the total width of the hall. The area around the *stūpa* is finely bifurcated by the circular collonnade. The pillars themselves are located in such a way that their intercolumniation (measured from centre to centre) is three times the diameter, of the pillars and their height is seven times the diameter, and exactly half of the total height of the cave measured from the floor to the apex of the central dome.

The occurrence of simple octagonal pillars displaying rake, the domical roof, and the quadrantal aisle roof indicate that the cave belongs to an early period sharing similar architectural features seen in the *chetiyagharas* Bhaja 12, Ajanta 10, etc. The form of the *stūpa*, with a simple drum and a raised hemisphere, bereft of any decoration including the railing pattern on the brim, shows that it is stylistically closer to the *stūpa* in Bhaja 12 than any other. But, the absence of even the *hermikā* in the present *stūpa* would suggest a date still earlier than the *stūpa* in Bhaja 12, where this member has been made in stone, and in this feature this can be bracketted stylistically with the *stūpa* in Bhaja 26 (and Kanheri 2e), which has been noted elsewhere as anterior in date to Bhaja 12 (p. 129). The introduction of pillars in the present cave is the only advanced feature compared to Bhaja 26 and if this is any indication, it can be suggested that this cave 3 of Tuljaleṇa group is stylistically later than Bhaja 26 and anterior to Bhaja 12.

The front open gallery of this cave has been cut by the side wall of cave 2, and this is indicative of the fact that cave 2 was made after the present cave. The polish of the walls of cave 2 and simplicity of design of that cave show that the two caves may not have been far removed in date from each other.

It has rightly been pointed out by Fergusson and Burgess (1880, p. 252) that a close analogue of this cave is to be seen in a sculptural representation from Bharhut (the *Dēvadhamma sabhā*) and as such this is an earliest attempt on the part of Deccan architects to copy wooden structures in rock.

## CAVE 4 (PL. 62)

This cave, which serves now as the temple of Tulajā Bhavāni, is a *leṇa* of irregular plan. From the open verandah (1.2 m w, 1.8 m d, 2.1 m h) in front a doorway (90 cm w) on the left side leads to the

hall (2.1 m d, 2.4 m w), at the back wall of which are two cells (2.1 m sq) placed somewhat obliquely to each other. Their doorways (60 cm w, 2.1 cm h) are cut from floor to roof. Now the front walls of these cells, as well as their partition wall, are broken and the two form a single hall. Originally there were stone beds but they are much ruined.[9]

From the location of this *leṇa* (Fig. 27) it can be seen that it has actually cut the original broad verandah wall of the *chetiyaghara* which must have extended to the right as in the left side. The left wall of the *leṇa* is very thin, exposed to the danger of caving into *chetiyaghara* 3. This definitely indicates that this *leṇa* is of a later date than *chetiyaghara* 3. But due to the absence of any other indication its exact date is impossible to be made out.

CAVE 5 (PL. 62)

A simple rectangular recess (90 cm w, 1.20 m d, 1. 8m h) with its front and right wall broken.

CAVE 6 AND 7 (PL. 62)

These are two neatly carved cells adjacent to one another. The fronts of both the cells are broken, as well as the partition between them, but enough indication remains on the roof and back wall to show that they had been seperated by a thin wall. Both appear to be about 1.98 m square and of the same height. The cells do not have benches but their walls were once polished.

In their simplicity in execution, the cubical form, neatness and polish these resemble cave 1, and are probably of the same period. The location of these *leṇas* (1, 6, 7) just on either side of the original extent of the verandah wall of the *chetiyaghara* and the common element of polish seen in all would suggest probably that caves 1, 3, 6 and 7 might have been very near in date. (The caves 4 and 5 are later innovations.) These plain cubicles with polished walls and without benches cut in a line show a genetic similarity with simple hewings at Jivadan-Virar (above) and it could be considered that all these fall within a short time bracket.

CAVE 8 (PL. 62)

This is a simple cell (1.06 m w, 2.1 m d, 1.8 m h) cut at an angle of about 15° from the previous cave. The partition wall between this and cave 7 is also broken partially. Its front is now broken but on the roof there is indication of the existence of the doorway with its lintel cut at ends for the wooden door. The cave is roughly hewn and does not have any polish. The rough execution and oblique orientation from 6 and 7 suggest that this was excavated much later than 6 and 7.

CAVE 9 (PL. 62)

This single-celled *leṇa* to the right and adjacent to cave 8 is approached by a covered passage (2.1 m d, 1.04 m w, 2.13 m h) having a doorway in front (2.13 m d, 74 cm h). The cell inside (2.1 ms sq, 2.1 m h) is bereft of any decoration and devoid of bench. The cell here is also cubical and this is the only feature in which this goes with the others in the series like 6 and 7. But the existence of a passage leading to it provided by a doorway is a new item. Nothing can be said about its date. But the form of the cave with atleast one early feature may indicate that it is not far removed in date from caves 6 and 7.

About 60 cm inside from the doorway in the passage there are huge mortises cut in the floor and in the side walls, probably to fix a heavy door. This appears to be a later work.

CAVE 10 AND 11 (PL. 62)

Adjacent to the above is cave 10, a single room (2.1 m sq, 2.1 m h). Its front wall is still preserved. A doorway (90 cm w, 2.1 cm h) cuts the front wall. The lintel of this is cut on the sides and on the floor is a groove in which the wooden threshold had been fixed. On the side walls of the cell, at a height about 75 cm from the ground level there are three holes facing one another. The holes at this low height may have been meant for fixing a wooden bench.

Cave 11 is a single cell (2.1 m sq, 2.1 m h). Its front is broken. The walls are smoothened.

Caves 10 and 11 share a common, plainly cut rectangular facade. This facade is a little wider than the breadth of the cave. This innovation of the facade probably provides an indication that these caves with facade are later than others without them. Caves 10 and 11 with the same facade may be contemporary. The possible introdnction of the wooden cot is of much interest.

## CAVE 12 (PLS. 62 AND 63)

Cave 12 is close to 11. The thin partition wall which separated them is now broken. The two caves look like one. But it can be easily made out that 11 and 12 are caves of different ages due to the fact that 12 alone has decorated front (see below), while 11 is bereft of that.

Cave 12 too has a single cell (2.28 m sq, 2.28 m h) with neatly carved walls and corners. Its right and front walls are broken. On the face of the scarp above the entrance is a stretch of beautiful decoration, 1.5 m and as broad as the cave. Right in the centre of this decorated area is a huge *chaitya* arch, with its lower part broken. On either side of this arch, at its shoulder level, is a small arch and a *stūpa*, all cut in half relief. These *stūpas* have a male devotee, bowing down to the right and a man and a woman to the left. At a higher level a flying gandharva is shown as approaching the *stūpa*. The *stūpa* on the right side has near it a sculpture of a *Nāga* also. Above this series is a band of railing pattern running along the entire width of the facade of this cave.[10] The arches are somewhat narrow spanned and have concentric beams and radial ribs emitting out from a semi-circular flower design resting on a band of railing design. The decorative *stūpas* are also of developed variety with somewhat a longer drum ornamented with railing pattern at the brim, slightly hemispherical dome surmounted by a single *harmikā*, and a dosseret of inverted five stepped pyramid and a circular umbrella over a staff rising above that. Even though this cubical cell is in the same level and almost of the same form as the neighbouring cave 11, this is certainly much removed in date from the other, due to the adoption of a developed decorative pattern on the facade. Further indication for later date is also available in the absence of polish on the walls of this. Instead, traces of plaster exist.

## CAVES 13 AND 14 (PL. 62)

Closeby to the north of 12 are two cells cut side by side. Their front, partition, the roof as well as the floor are broken, but enough remains to indicate that these were two seperate cells.

Judging from the width and height and the smooth surface of the walls, these could be considered as cubical bench-less cells (each side 1.8 m) close in pattern and age to caves 1, 6 and 7 of this group.

## CAVES 15 AND 16 (PLS. 62, 64)

Situated further north of 14 are these two much damaged single celled *leṇas*. Their front walls and lower parts are broken. One is about 2.35 m and the other about 2.4 m in height. But both these appear to be part of a single plan, as a common stretch of decoration spans the width of both the cells, on the facade above the roof level. This decorative panel has two prominent *chaitya* arches sunk symmetrically, probably just above the original doorways of these cells. The lower part of this decoration is broken, but there was a stretch of railing connecting the two arches, and extending further along the same line beyond these arches on either side. One either side of these arches again are railing patterns at their shoulder level, above which rise single smaller *chaitya* arches. The two smaller *chaitya* arches between the bigger ones are placed above railing bases which are shown as carried by brackets of the type found on the facade of the *chaitya* hall at Bhaja. Further between all these *chaitya* arches, in a line, at the shoulder level of the smaller ones and the apex of the bigger ones, there are quadrantal rolls with railing pattern. At the top level above the line of these runs a band of railing pattern. The decorative arches here have somewhat wider span and their soffits have rafter-ends in stone.

The use of this type of *chaitya* arch in decoration here, coupled with the common pattern in facade decoration and the existence of brackets and the roll moulding show that this decoration is similar to

the decoration on the facade of the *chaitya* cave at Bhaja; the only difference being the absence of stepped cornice in the present one. It is likely that this excavation is nearer in date to the decoration stage of *chaitya* hall at Bhaja. In the Tulja series, this decorative pattern appears to be of an earlier type than that of cave 12 in which the arches have bent-in arms, and *stūpas* and human (or semi-divine) sculptures appear.

## EXCAVATION 16a

To the right of 16 is a large open water cistern (about 1.8 m w, 90 cm d) but now its front part is completely broken.

## EXCAVATION 17

Closeby to the north of the above, is a large hall (7.06 m b, 9.14 m d, 2.57 m h) with a low bench (30 cm h, 45 cm b) running along the three inner sides. In the right wall is a plain cell (3.07 m b, 2.39 m d, 2.57 m h).

The existence of a cell, either meant to keep the provisions or cooked food, and the water cistern nearby probably indicate that this could have been used as a dining hall.

## EXCAVATION 17a-e

Beyond this cave to the north are traces of five water cisterns which are now filled up.

## CAVE 18

About 15 m beyond cave 17 is a *leṇa* with a passage and a cell behind, almost like cave 9. But there is a bench and recess along the side wall of the passage. Nothing more can be made out of its architectural features or date, as the cave is very much in a ruined condition. However, the cell and recess type (*Leṇa* Type A iv b), it will be seen below, is a feature common in caves of 2nd-3rd century A.D.

## GENERAL DISCUSSION

Though many of the excavations of the Tuljalena group are much damaged by the undercutting of the scarp ruining their fronts, there is so much of indication to make out that here are the earliest Buddhist excavations among the inland group of caves in Western Deccan. The nature of *chetiyaghara* 3 with its primitive simplicity and faithfulness in copying the wooden structures has been discussed. Its unique design itself is sufficient to show that it is of an age when standardisation of the form, in plan, elevation and decoration of the vault-roofed *chetiyagharas* had not yet been achieved. It was still of the age of experiment and emulation. It is interesting to note further that the majority of the *leṇas* are single celled (Nos. 1, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16) and are placed in a row, and are all without stone benches. *Leṇas* are generally provided with stone benches in the rock-cut architectural tradition as seen from various such instances from Bhaja, Bedsa, Ajanta, etc., but these do not appear again in very late excavations of the age of the Mahāyāna period, as seen in the later *leṇas* at Ajanta and Ellora. But by that time a typical standardized form had been evolved for such *leṇas* which are much different from what is seen in the Tulja group. It is likely, as it has been pointed out in the case of Jivadan-Virar, that these *leṇas* were meant for monks who were still rigorously following or were expected to follow the rules prescribed by early Vinaya texts (p. 132). Secondly it could be seen from the form of these *leṇas* that they are all cubical cells, with the height, length and breadth equal, a form which is not seen with such regularity in later caves. Thirdly many of these have their walls polished (smoothened), suggesting the continuation of a tradition seen in the Bihar caves of Mauryan times. So it is likely that these cubical caves arranged in a line are of the earliest period in the *leṇa* series. Circumstantial evidence from Jivadan-Virar has already been put forward to suggest that such *leṇas* could be the earliest rock-excavation on the coast. It is likely that this inland group of single cells too are near to them in date. Both groups, share the common features in the presence of polish (smoothening) and the absence of

bench inside. The application of polish to the wall surfaces is seen in *chetiyaghara* 3 and the *leṇas* 1, 2, 3, 6, 7, 13 and 14. Out of these from the location and elaboration of plan of *leṇa* 2, it has been placed to a date later than caves 1 and 3. All these belong to an age when cave making was purely the work of the stone-cutter than that of the sculptor. These caves are absolutely devoid of any decoration. From the illustrations (Fig. 27; Pl. 62), it can be seen that these early caves are hewn with sufficient intervening rock space between them, probably wherever easily workable space was available readily in the vertical face of the scarp obviating the necessity of preparing the facade.

The Tuljalena group of caves is of extraordinary interest as it provides an idea of the gradual development of *leṇas* of the early stage. With the increase of patronage by laymen to the monastic community various amenities began to be provided for their living, and the monastic community too began to compromise its principles of conduct diverging gradually from the code enunciated in the earliest *Vinayas* and adopting an easier life.

An important architectural stage here resulting from this tendency is the one in which a new plan of making the *leṇas* was arrived at by hewing the cells around an interior hall. Such *leṇas* not only provided good places for them to sleep, but also security and warmth, compared to single open cells. There are only two such *leṇas* 2 and 4 in the present series. Two intermediate stages marking architectural development between the open single-cells and hall-with-cells can be made out here. The first is represented by *leṇas* of Types A i b where the single cell type continues but is now provided with a front wall and door. Examples for this are available in this group in caves 10 and 11. The next is the one in which the cells are sufficiently set back behind a gallery as in cave 9. Possibly the earliest stage of providing a bench inside the cell is seen in cave 10, where it appears to have been in wood.

The development in monastic rock-architecture took another trend too, in which the caves began to be decorated and made more attractive. In the present group of caves such instances of sculptural decoration are seen in caves 12 and 15-16. The undecorated but dressed facade of caves 10 and 11 is probably the earliest attempt to make the cave fronts appear neat, and then the introduction of sculptures may have begun. Elsewhere it has been shown that the pattern of decoration of 12 is later than that of 15-16 (p. 137). However an interesting feature is that even these decorations have been added to caves which still continue to follow the simple plans of the early *leṇas*. Could this be due to the fact that *leṇas* of such type only were possible to be done in the limited space available amidst the already existing *leṇas* ?

Further increase of patronage in later ages was responsible for the making of various accessories like the dining hall (*bhojāna maṭapa*). One such was also attached to the monastic establishment at Tuljaleṇa in cave 17. Probably cave 18 away from the cluster of the above caves may belong to a late date.

With these considerations, the sequence of monuments in the Tuljaleṇa group emerges as follows :

| | | |
|---|---|---|
| I | 1, 6, 7, 13 and 14 | Simple single cubical cells with open front. |
| II | 10, 11 and 3[1] | Similar single cubical cells but with front wall and door. Incidentally the two examples in the group have plainly cut facade, an item present in *chetiyaghara* 3 also. (Possibly provision of a wooden bench is seen in *leṇa* 10). |
| III | 2 and 9 | Cubical cell/s set behind a recess or around a hall. |
| IV a. | 15-16, | Cell/s having the facade adorned with sculptural work. |
| b. | 12 and 4 | Cells behind recess and provided with stone-cut bench. |
| V | 17 and 18 | *Maṭapa* and a cell with a recess. |

As it has been stated already that I stage represents the earliest attempts in making rock-cut *leṇas* in Deccan.

The II stage has near examples at Bhaja; the *stūpa* in *chetiyaghara* here has a near analogous type in Bhaja 26; the plain cut facade was there in Bhaja 12 (pre-decoratiom stage; also in Jivadan Virar 9, Ajanta 10). So on typological grounds the II stage of Tulja may be placed to a stage between Bhaja 26 and Bhaja 12a contemporary to Jivadan-Virar 9.

The III stage appears not to have parallels elsewhere. However, these may still be a little earlier that the *leṇas* like Ajanta 13 (which too has polished wall) due to the fact that these are without benches still.

Stage IV with its two subdivisions has some vagueness with regard to the exact chronological position. Both sub-stages are in advancement of stage III, with regard to decoration and plan. In what relation the two stand together cannot be guessed easily. Between the examples in IV a, caves 15-16 should be assigned to an earlier date than 12. The decoration of 15-16 is closer to Bhaja 12 (decoration); that of 12 appears to be in the tradition of *chaitya* halls at Nasik, and Manmodi 40 and 45 at this place (below).

Stage V has parallels in Sivaneri and Ganesh Pahar to be described below.

With reference to these stylistic comparisons from other sites[10] stage I may be assigned to the middle of 3rd century B.C., stage II to a date very near that but with a difference of a decade or two and III following it immediately. In fact, even though evolutionary typological trends are noticeable in these, they all appear to have been results of a period of experiments and emulation. Caves 15-16 of IV a is to be assigned to a date near Bhaja 12 *i.e.* around 200 B.C., and cave 12 of Tuljaleṇa to a period near Nasik 18, *i.e.* around 100 B.C., Cave 4 of stage IV b too may belong to about the 1st century B.C.; Cave 17 of stage V may be assigned to 1st or 2nd century A.D.

So, the major part of the architectural activity in the Tuljaleṇa group appears to have been confined to about five or six decades in the latter half of the 3rd century and early decades of 2nd century before the Christian era. Twelve out of the eighteen major excavations were created during that period. Then there were one or two architectural additions done sporadically around the beginning of the first century B.C. An accessory to the monastic unit, *i.e.* the dining hall, and another cave (18) were added probably in the 2nd century A.D.[11]

Possibly due to the non-availability of any more suitable space after hewing about twelve caves (at a period when scarp faces only were being used instead of preparing the front with fore-court) it appears other hills around Junnar began to be preferred for making caves. There may be other causes too.

Tuljaleṇa remained a small monastery throughout. With all its *leṇas*, it could have accommodated only about 20 to 25 monks at a time. It may be noted that the seating capacity of the bench running along the three inner halls of *maṭapa* 17 (possibly dining hall) is also just about 30.

## MANMODI

The Manmodi hill lies to the south of the present town of Junnar. The inscriptions reveal that the ancient name of this hill was Mānamukuḍa[12] and the monastic-complex was called Gidha-vihāra (*Gṛidhra-vihāra*).[13]

The caves stretch to a length of about 1.5 km, half way up the hill to the south and south-west of the town. They are in three sub-groups, each separated from one another by a distence of about 150 to 400 m.

1. Bhimashankar group, situated towards the south-east of the Manmodi hill.
2. Ambika group, along a bend of the hill a little to the north of Bhimashankar.
3. Bhutling group, about 200 m to the west of the previous one.[14]

The cave haves been numbered here starting from the south-east end of the Bhimashankar group and ending in the west end of the Bhutling group.[15]

### 1. Bhimashankar Group

#### CAVE 0

About thirty metres to the south of cave 1 of Bhimashankar series is a ruined *leṇa* of type B i, which originally appears to have had three cells in a row with a common rectangular verandah. At present the cave is so much broken and filled with debris that no details can be made out.

CAVE 1 (FIG. 28; PL. 65)

This is a *leṇa* of type B i, consisting of a verandah (5.74 m b, 2.92 m h, 1.90 m d), with pillared front and 3 rectangular cells (about 2.3-2.4 m d, 2.1 m b, 2-2.3 m h) cut in a line in the back wall. Along the right wall of the right (3rd) cell is a stone bench (60 cm b, 75 cm h). The doorways (66 cm b, 1.98 m h) are rectangular.

The verandah walls are well-finished. In front of this verandah are two pillars in the centre and two engaged ones on the side walls, all placed symmetrically with a distance of 1.2 m from each other. These are of Type D vi a. They have stepped pyramidal base surmounted by a circular ring with a globular pot above from which the octagonal shaft rises. This carries a capital consisting of an inverted globular pot succeded by an *āmalaka* carrying a dosseret of inverted square stepped pyramid. Between the head of these and the roof runs a joist about 8 cm thick. The engaged pillars project much from the wall, with 7 of the eight octagonal sides exposed. The facade does not have any decoration.

CAVE 2 (FIG. 28; PL. 65)

This is an unfinished flat roofed *chetiyaghara* of peculiar design, and consists of an inner hall 10.29 m deep and 3.58 m high. Its breadth varies from 4.11 m in the back to 3.35 m in front. In front of the hall is a neatly made verandah (3 m b, 1.1 m d, 3.9 m h), with its ceiling about 20 cm higher than the ceiling of the hall[16]. Two pillars and two engaged ones are in front of the verandah. In the hall, near the back wall is a mass of rock about 2.4 m high and 1.7 m thick with a rough figure cut on that. It appears that this mass was meant to make a *stūpa* but was left unfinished, probably after noticing a huge slit at ceiling level of the present back wall through which water percolates. Some time later, however, this water source itself appears to have been taken advantage of and a huge cistern was cut in the floor at the back of the hall.

The doorway opening to this hall from the verandah is plain and rectangular (1.8 m w, 3.6 m h).

The pillars in the verandah are of Type D vi b—octagonal shafts rising straight from the podium, but adorned with inverted pot capitals of the same type as those on pillars in the neighbouring cave 1. There is one difference between the two pillar types in the replacement of the *āmalaka* member by a simple round moulding. Here too the engaged pillars look like pillars in round with their 7 faces of octagon jutting out. Between the pillars and the engaged pillars on either side is a bench (60 cm b, 30 cm h) with a low curtain back (30 cm h). On the back of this curtain wall of the bench *i.e.* on the outer side, is a stretch of railing decoration.

The pillars carry a huge rectangular beam. Over this is the roof projecting a little to the front to form a horizontal eave. The facade decoration is peculiar. Along the whole width of the facade just above a horizontal band on which the ends of the projecting beams have been shown there is a stretch of railing decoration (75 cm h). Above this is a broad rectangular recess (5.5 m w, 3.6 m b, 30 cm d) and in the centre of this is an arched recess with one more smaller arch within it. It could be presumed that this is an attempt to depict the *chaitya* window in front of the *chetiyaghara*, but here this cave being a flat roofed one, the arch happens to be a false window. Even other details seen usually in *chaitya* arches, like the rafters in the soffit or decorations on the plain surface framed by the arch or even the projecting finial, have not been shown.

A small rectangular doorway cut in the right wall of the open court leads to the next cave, 3. This shows that this and cave 3 were possibly the result of a single plan. Above this doorway is an inscription referring to the making of the doorway (or the cave itself) by one Virabhūti who belonged to a *negama* and who was an *upāsaka* (Junnar No. 1). The dimensions of the different parts of the cave show that certain regular mathematical proportions have been adopted in designing this *chetiyaghara*.

The pattern of the pillars shows that this cave may not have been far removed in date from the neighbouring *leṇa* 1. However, the facade decoration, the insertion of a bench with the back screen wall are new items in this cave. But the most striking feature happens to be the flat roof of hall of the *chetiyaghara*, and this coupled with the absence of pillars inside shows that this is altogether of a design different from the vault roofed *chetiyagharas*. The blind *chaitya* window in which even the normal features like the

finial, the beams on the soffit are absent, would show that this is a half-hearted degenerated imitation probably of a much later date.

The letters of the inscription referred to above belong to Series VI which suggests that the cave has to be dated to a period around A.D. 200.

## CAVE 3 (FIG. 28; PL. 65)

This is a *maṭapa* of type A i consisting of an irregularly rectangular hall and a verandah in its front. To the right, along the length of the wall is a low seat (23 cm h, 46 cm b). The hall is 2.1 m high. A rectengular doorway (1.5 m b, 2.1 m h), leads out to the verandah which has its floor 15 cm lower and its ceiling 84 cm higher than the floor and roof of the hall. In front of the verandah there were two plain octagonal pillars and two engaged ones of similar type. Both the pillars and one of the engaged pillars are now broken. But the remnants show that they had been raised on a low rectangular podium on the floor, which probably ran along the width of the cave in the line of pillars and that on the top of the pillars in each was a flat square member about 5 cm thick.[17] The engaged pillar has its seven sides seen, with only one face attached to the wall.

The door from the right wall in front of the *chaitya* hall led to the verandah of this cave.

The existence of a simple hall with a low bench indicates that this could be a *bhojana-maṭapa* though the low seat does not run along all the inner walls as in other cases. A look at the relative position of this with *chetiyaghara* 2 would show their close connection. The engaged pillar with only one of the faces attached to the wall suggests that this may be a contemporary of cave 2.

## EXCAVATION 3a, 3b, 3c AND 3d

To the right of 3 is a water cistern with open top and further beyond about 6 m to the north there were probably 3 more similar cisterns which are now filled up with debris.

## CAVE 4

About 20 m below the level of the above there is this unfinished excavation with a hall and a pillared verandah. A crack in the wall of the verandah from which water percolates could be the reason for leaving the cave unfinished. A cell (1.9 m sq, 1.8 m h) has been partially cut, and this has a doorway (1 m 90 cm w, 1.8 m h). The verandah (6.3 m b, 1.9 m d) has its roof 30 cm higher than that of the hall. In front of the verandah were two pillars and two engaged ones. Now only the left ones are extant, but these are of simple square cross section. Nothing can be said of the date of the cave, particularly in view of its unfinished state.

## EXCAVATION 5

About 100 m north-west of the above at a much higher level is this, a cistern in a recess. This is very much broken now, but it can be made out that this was 6.5 m broad and 3.9 m deep. In the recess is an inscription mentioning it as the donation of Sivabhūti son of Sivasama (Junnar No. 2). The inscription belongs to Series VI.

## EXCAVATION 5a

To the left of this is another cistern, now filled up with earth; this too had an inscription, but it is much effaced.

## EXCAVATION 6 AND 6a

These two excavations now look like small recesses. These were also originally cisterns at the same level as 5 and 5a, but their roof and front walls are broken.

CAVE 7 (FIG. 28)

This excavation is again on a level lower than 1, 2 and 3 but is cut along the same ledge with cave 4. This consists of a simple hall (4.5 m b, 4.5 m w, 2 m h) with a low bench (30 cm b, 30 cm h) running along the three sides. Its front is broken. There is a cistern to the left of the cave.

An inscription carved on the right wall of this excavation refers to this as '*Maṭapa*'. The inscription is of Ayama, a minister of *Mahākshatrapa* Nahapāṇa and is dated year 46. It records that the cave and the cistern were made by him for the accrual of religious merit. This cave though of a simple type and devoid of any decoration is useful in establishing the existence, during the time of Nahapāṇa, of a tradition of making *maṭapas* with bench along the three inner walls.

CAVE 8 (FIG. 28)

About 30 metres along the same ledge with cave 7, towards north, is this excavation which consists of a simple cubical cell (2.1 m sq, 2.1 m h), opening into a front verandah (2.2 m b, 48 cm d) through a rectangular doorway (75 cm w, 2.1 m h). The verandah is rather an open space without any front pillars or wall. Its roof and floor are almost on the same level as those of the cell.

This simple excavation is without bench or decoration and in this feature and in its cubical form, the cell resembles to a certain extent the early excavations in the Tuljalena series. This excavation too, in such a case, would be of the early period, and would naturally be the earliest of the Manmodi group. But this shows, when compared to the single cells of Tuljalena, the addition of a rudimentary verandah, still pillarless and primitive. Rather this can be compared more with Bhaja 23.

EXCAVATION 8a

At a higher level above 8, and along the ledge with 5 and 6 is a cistern, broken and filled up with earth.

CAVE 9

Next to cave 8 is this *leṇa* of B i type having a line of seven cells sharing a common verandah. The cells (2.1 m b, h and d) do not have benches, but possess a small circular hole opposite each other on the front and back walls inside, for the pole (*valagni*) on which the monks could have hung their cloth. The doorways (w, h, 75, 210 cm) are plain.

The verandah is now broken in front and has no pillars and the overlying roof has an uneven front line with the greatest breadth of about 1.5 m.

The position of the cells indicates that the first two which are not exactly in line with the others and which are also of cruder workmanship were cut at a later date than the others. In the centre of the walls, between the doorways, at roof level there are holes (10 cm sq, 10 cm d) which might have been meant for keeping the lamps. This cave, at least the 5 cells, in a line enjoying the common verandah, appears to be an extension of the idea of having cells at the back of an open verandah, as seen in cave 8. The cubical measurement of the cells and the pattern of placing them in a line probably indicate the survival of an early tradition noticed in Tuljaleṇa group. Because of the introduction of the new item, the verandah, this can be considered to be somewhat a developed type, and probably of later date too, but still not far removed in time from the above groups.

EXCAVATION 10, 11, 12

About 30 m north-west of cave 9 the scarp gently dips into a ravine. At this place three cisterns have been cut in a row to catch a spring flowing there from the hill top. The first two, 10 and 11 look like recesses and as their partition wall is broken they give an impression of a *leṇa* with two cells. Traces in 10 show that its mouth was near the left end. The front and top of 11 are completely gone. A little further from this is 12, which is cut in a recess. Its front too is ruined.

EXCAVATION 13

Next to the above is an open seat, now broken.

EXCAVATION 14

Next to 13 is another cistern, now featureless and entirely filled up with earth.

EXCAVATION 14a

About 5 m beyond 14 is a large mouthed open cistern (3.7 m l, 1.8 m b) of Type B.

EXCAVATION 15

At a lower level, along the ledge with cave 16 and about 4 m to the left of that is another cistern. now broken and featureless.

CAVE 16

This is on the lower scarp about 10 m below the line of 8 and 9 along the same ledge with Cave 4.

This consists of a hall looking like an irregular quadralateral. The right wall narrows towards the front to avoid a defective rock surface. All along the length of the left wall runs a low bench.

There are two doorways cut in the front wall of the hall, one in the centre (b 1.5, h 2.1 m) and the other (60 cm b, 1.5 m h) to the right. In front, the projection of the over hanging roof is now broken. Whether there was a verandah or not can not be decided, but in front of the hall is an area with finished side walls. This may be a *maṭapa*.

CAVE 17

At the bend of the hill to north-west about 80 m away from Excavation 10-14, but along the same ledge, is this cave, an unfinished excavation with an open verandah and a cell. The cell is half-hewn but the verandah is finished.

GENERAL DISCUSSION

The excavations of the Bhimashankar group are located on three ledge paths. Out of these 1-2-3, 3a, b, c, d, 5-6 and 8a are on the upper most ledge path, 7, 8-9, 10-14a and 14b are on the middle ledge, where as 4 and 15-16 are on the lowest. These ledges themselves must have served (and still do so) as the approach roads to these caves.

It is interesting to note that in this group there are only three *leṇas* with a maximum capacity to accommodate hardly a dozen monks (at the most a score) if each cell is taken as meant for one monk. There are fifteen cisterns and three *maṭapas*, at least two of these being *bhojanamaṭapas*. These accessories are more in number than the need. There is practically no *chetiyaghara*, the one attempted being unfinished. The best that can be thought of under reasonable limits of logic in these circumstances is that the Bhimashankar group might not have been an independent group by itself, and that this could have been the annexe to the other groups even though they are a little removed from the present one.

Within the group, however, it can be made out that the earliest excavations are those on the 2nd ledge. It has already been pointed out above how caves 8 and 9, the *leṇas* with cubical cells and pillarless verandahs, could be considered as of an early age close to a tradition found in the earliest rock excavations as exemplified in the Tuljalena group of caves. Another indication for this is the way of locating the cisterns, particularly Excavations 10 and 11. They are on the bed of the stream itself. Here are probably the earliest, simple efforts to pool running water from the natural sources by digging rectangular depressions along their path, so that water would be available at the very same source even during summer, though there would not be any flow. However a cistern of later type under a recess has also been

made at a later time and also a bench, now ruined, which provided a beautiful vista of the large flat land in the foreground and the hills beyond.

Cave 7 of Nahapāṇa's time on the same ledge path may have been made for the people visiting these caves. Probably the excavations on the third or the lower most ledge path, a cistern and a *bhojana maṭapa* may have again been meant for visitors or for the monks living in the above *leṇas* (8·9). The excavations on the uppermost ledge path appear to be the latest in date. These three (1, 2, 3) which are farthest in the group, were probably intended to be a single unit[18] and it has already been described how their architectural features display late characteristics. This is substantiated by the palaeographical features of the associated inscription by which the group can be dated to a period around A.D. 200. All other excavations along that ledge are simple cisterns, probably meant for use by the visitors to these caves.

Thus the relative sequence of caves in the Bhimashankar group would be as follows :

| | |
|---|---|
| I stage | 8, 9, 10, 11 |
| II stage | 7, (16) |
| III stage | 1, 2, 3, 5, (0) |
| IV stage | 4 ? |

The excavations not included here do not have sufficient typo-chronological data.

## 2. Ambika Group

About 500 m to the north-west of the above series is the present group of excavations, which stretches along the scarp of another hillock of the same Manmodi range in an ESE-WNW direction. The caves generally face E-NE. These start with a group of seven cisterns at a level about 10 m above the first cave of the series, but these cisterns are very much ruined and hence unnumbered. The cave numbers are continued from the Bhimashankar group.

The first three caves, 18, 19 and 20, are all adjacent to one another and their fronts are completely broken now.

### CAVE 18

This is a cell (2.5 m l, 2.3 m w, 2.1 m h) with an open verandah. The front wall of the cell, right and left sides and the roof of the verandah are all broken.

### CAVE 19

This is an unfinished *leṇa* with two cells placed adjacent to each other to share a common verandah. The cells have been left incomplete. The verandah is finished, but both its sides and front are broken.

### EXCAVATION 19a

A square-mouthed cistern under a low recess in front of cave 19. An inscription on the recess records that this cistern is a gift of Sulasa daughter of Kumi. The inscription belongs to palaeographical series V B.[19]

### CAVE 20

Further west of cave 19 is this excavation with a cell (4.7 m b, 2.3 m w, 2.1 m h) and a verandah (2.4 m b, 85 cm d, 2.1 m h). The sides and a little of the front of the verandah and the front wall of the cell are broken. There were two pilasters of rectangular cross section in front of the verandah.

### CAVE 21 (FIG. 29)

Next to cave 20 is this much damaged cave consisting of a central hall (5.6 m sq, 2.7 m h) with a cell in the back wall, two cells each on the right and left sides and an open verandah (5m b, 1.7 m d).

A rectangular doorway (1.8 m b, 2.1 m h) leads to the hall. The right wall of the verandah is broken but the roof is intact.

There is a fragmentary inscription No. 4 on the left wall which mentions the making of a five celled cave (*Pachagabha*) by a person, son of a *gahapati* (name lost). The inscription belongs to palaeographical series VI.

### CAVE 22

Next to the above cave is this excavation. This consists of a large cell (3.9 m d, 3.6 m b, 2.4 m h) with a doorway (1.3 m b, 2.4 m h). There are holes in the side walls for the *valagni*. The cell has the overhanging roof in front, but nothing can be said of the existence or otherwise of the verandah.

### CAVE 23

A ruined cell (2.1 m d, 2.6 m b, 2.2 m h). Holes meant for the *valagni* exist.

### CAVE 23a, 23b

These were two cells set side by side. In there nothing remains, except the back wall and some indications of the original plan. Their side walls being broken, these, along with 22, look like a large cavern.

### CAVE 24

To the right of 23 is this excavation which consists of a cell (2.2 m d, 2.4 m b, 2.4 m h) and a verandah. The verandah and front wall of the cell are broken. Probably a door in the left wall of this verandah led to cave 23 b.

### CISTERNS AND UPPER CAVE

Above the level of these caves 22-24 which are in a single line, is again a row of cells (cave 30 below) which looks like the upper storey of these excavations. Burgess treats this whole group and the upper series as a single excavation but close observation reveals that they are different. The fronts of the excavations 22-24 are broken, as well as those of 18-21. But it appears that once all these excavations had overhanging rock-roofs projecting forward, at least to another 1.2 m than the present line. On the floor, vertically down the original rock projection, is now a row of cisterns, almost along a line. All these have square openings, though tops of some of these are broken. It is likely that once these cisterns existed at the entrance of the caves just in front of the verandah (as seen in many excavations in Kanheri). There are six cisterns in all. It appears caves 19, 21, 23a and 23b had one each before them and cave 22 and two.

### CAVE 25 (FIG. 29; PL. 66—bottom left)

This is a flat roofed *chetiyaghara stūpa* of Type A ii a consisting of a simple rectangular room (2.7 m b, 3.6 m l, 2.9 m h). There are indications to show, that the side walls extended to the front at least for another 60 cm. The front is broken. A *stūpa* (1.6 m dia). is at the back side of this rectangular room removed by about 15 cm from the back wall and by 53 cms from the side walls. The *stūpa* is of a very developed type with its drum having tapering sides and with tenon and railing decoration at the brim. The dome is somewhat bulged like an inverted *ghaṭa*, or 3/4 circle. There is a single *harmikā* on the top, and from this rose a stone shaft (now broken) which reached an umbrella cut in stone in the roof.

This *stūpa* is of Type D and this is indicative of the fact that it belongs to about the 3rd century A.D. (p. 78)

### EXCAVATION 25a AND 25b

Two featureless cisterns in front of cave 25.

CAVE 26 (PLS. 66, 67, 68)

Next to 25 is the largest excavation of the group. This was intended to be a large *chetiyaghara*, but has been left unfinished due to the occurrence of bands of soft rock inside from which water percolates. Now, this consists of an apsidal hall with a verandah in front.

The hall is 11.55 m deep and 4.87 m broad but the dimensions vary from point to point due to the unfinished nature of the walls. The aisles and pillars have not been formed, but attempts to make the pillars can be recognised. The barrel vault roof, almost ogee shaped rises over a 5 cm deep ledge above the present side walls. The total height to the apex of the roof from the floor level is about 6.7 m. Attempt has also been made to fashion a *stūpa* at the back end of the hall. But even this has only tiers of rough square masses, intended for the different members of the *stūpa* which was never finished.

More progress is seen in the making of the verandah. It is 6 m b, 2.7 m d, 7.6 m h. The screen wall between the verandah and the hall is divided in front elevation into two parts by a thick quadrantal moulding running across the width at the head of the doorway about 3 m high up from the floor level. The plain lower division is pierced into by a rectangular doorway (3 m h, 60 cm b) leading into the inner hall. The quadrantal moulding itself acts as the architrave above this. The upper part of the screen wall has a huge square recess (4.5 m h, 4.5 m b, 60 cm d) and its plain face is decorated with a large *chaitya* arch in relief framing a horse-shoe shaped window pierced through the screen wall.

The *chaitya* arch is of a developed type with incurving sides. There are two straight jambs, with slight inward rake, shown as flanking the inner open window. Peculiarly the soffit of the decorative arch does not have the dentils. There are the projecting paws on either side. The left paw curls up slightly and the right one is unfinished. The arch has a small ribbon band projecting all along its outer edge. The pinnacle of the arch widens as it rises and its top is flanged.

The verandah has two pillars and two engaged pillars in front. The pillars [0] are of the pot-capital and pot-base variety (Type D vi) comparable to the pillars in Manmodi 1. The engaged pillars on either side are placed in such way that it looks as though half of a full pillar is made to jut out from the wall surface. There is no decoration on the facade. The worked area in the facade happens simply to be the area covered by the pillars and the beam. These being cut right in the front face of the scarp, there was no scope for the projecting *chajjā* or side walls, which would have facilitated the insertion of decorative work. In these features this *chetiyaghara* appear to be a piece of bad workmanship.

The unfinished state of this *chetiyaghara* hinders detailed comparison of the architectural features. However, the pillars of the verandah show that these are of a type advanced from the pillars of Bedsa 7 type, as herein the capital had achieved the form of an inverted *ghaṭa*, and in this feature these are similar to those in caves 1 and 2 of the Bhimashankar group. In essential features of its plan (with the inclusion of verandah and pillars) this is closer to the *chaitya* hall at Bedsa than the one in Bhimashankar. It can be seen that both Bedsa and the present one are vault roofed ones and have the true *chaitya* window in the screen wall, where as the Bhimashankar *chaitya* hall is flat roofed and has only the blind *chaitya* window on the facade. Secondly the engaged pillars in the present cave jut out from the side walls showing half of the full pillar, while those in Manmodi 1 and 2 have 7/8th part of the pillar showing out. Thirdly while the architrave rests directly on the pillars of 1 and 2, in the present example a short rectangular stud intervenes between the top flat member of the dosseret and the architrave above. This feature is seen again in Bedsa, but the front and back sides of this rectangular stud are carved with human and animal figures there. Fourthly, while the Bedsa screen wall is well decorated with all details of the arch and has sloping jambs in the doorways, the present one has straight jambs of doorways and the *chaitya* window has a different shape. But this shape is more comparable to the shape of the blind *chaitya* window in cave 2 of Bhimashankar group. So it is likely that the age of this *chetiyaghara* falls somewhere between those of Bedsa 7 and Manmodi 2, possibly very near the latter.

This cave has been used in later times for carving a number of inscriptions (Junnar Nos. 5-13) recording various land and money donations made to the monastic establishment of this place. The earliest of this (No. 6) belongs to Series V B.

CAVE 27 (FIG. 29)

Next to the *chaitya* hall is this *leṇa* of Type B i having two cells (2.3 m sq, 2 m h) sharing a common verandah (4.4 m b, 1.8 m d). The front of the verandah is broken. Holes on opposite walls for the pole (*valagni*) are seen inside the cells. The cell doorways are rectangular and are flanked by pilasters with square cross section with their arrises on their middle third part chamfered and fluted. The wall surfaces between these jambs, and the jambs and the return walls are slightly sunken in to form rectangular panels. The pilasters are comparable to the pillars in Ajanta 9, Bhaja 22, etc. But fluting of the chamferred faces is an interestingly new item.

An inscription is carved on the back wall on the upper part of the sunken panel between the doorways. The inscription records that this two called *leṇa* (*digabha*) was the gift of two *Lankuḍiyas* named Budhamita and Budharakhita, sons of Asasama who hailed from Bharukachha. The letters are of Series V A and hence the cave is datable to early 2nd century A.D.

CAVE 28 (FIG. 29)

This cave adjacent to the above is an exact replica of 27 in plan. The dimensions however vary a little. The cells at the back are 2.1 m square and are nearly of the same height. They have no benches but holes for *valagni* exist. Their doors are plain and rectangular (70 cm b, 2 m h). The verandah is about 8.2 m broad and 1.8 m deep. There is some indication in the front line of the verandah to show that there existed two pillars and two pilasters. But all are lost now.

On the back wall of the verandah, at head level, between the two doorways is an incomplete inscription (Junnar No. 15) which mentions the name of a *gahapati* Sivadāsa, son of a *gahapati* and his wife (unnamed). The characters of the inscription are similar to those in inscription No. 14 in the neighbouring cave, and this is well in accordance with the architectural features too. Caves 27 and 28 appear to be contemporay.

EXCAVATION 28a

To the right of 28 between that and the wall of cave 29, a *stūpa* had been cut in relief. But now only the lower part of that remains. This has the socle in three steps and the drum with sloping sides.

CAVE 29

Next to 28, on the same level is this excavation which is unfinished. At present this consists of a verandah (5.5 m b, 1.9 m d) only. It appears to have had in front two pillars and two engaged ones. The pillars are broken and the pilasters are unfinished. From what remains of a pillar, it appears to be of the usual pot—capital with inverted stepped pyramid type (D vi a).[1]

Outside the verandah, to the left, is an inscription (Junnar No. 17) which mentions a disciple of a monk Sulasa, the *tevija*, *thera* and *gaṇāchāriya*. The characters of the inscription belong to Series V B.

All the caves in the Ambika group described above are contiguous to each other, and stretch along the scarp with a stretch of flat ledge in front. Just about 1 to 2 m higher than the roof of these caves is another series. One of them has been treated as the upper storey of the lower cave by Burgess (1883a). But on close examination it can be seen that these excavations were hewn seperately and their age too differs from the excavations below them. Now these caves are approached from the lower ledge by a staircase, recently built, between caves 21 and 22. Originally, however, it appears that these were approached by a separate ledge path running at the floor level of the upper caves. Now this ledge path and the front portions of many of the lower caves which were directly under this ledge have all collapsed.

CAVE 30x

About 2 m above the top of cave 21 is this ruined and inaccessible excavation which appears to be part of a cistern. It was along the ledge, now broken, which once provided the approach to *leṇa* 30 and others in the same line.

CAVE 30

About 3 m west of 30x is this excavation which is almost directly above the caves 22, 23, 24 of the lower series. This is a *leṇa* of Type B i with a row of five cells opening into a common verandah (15.2 m b, 2.2 m d, 2.3 m h). The front portion of this is broken and nothing can be said about the possibility of the existence of any pillars. The cell doorways (75 cm b, 2.3 m h) are rectangular. The cells very in size (around 2.1 m d, 2.4 m b and 2.1 m h). There is a recess (2 m d, 90 cm w, 2.1 m h) between the 2nd and the 3rd cell. It appears once, in medieval times probably, this recess housed some image, as a pedestal and drain to lead out water are seen. Now the 1st and 2nd cells have been joined together by breaking the partition wall between the two and some crude Jaina images (of Ambikā, Kṣetrapāla and Chakreśvarī) have been placed there. The cells do not have benches. There are catch holes in some cells at a higher level. These indicate that they might have been made to tie scaffolding for plastering or painting. The cave itself is a piece of crude workmanship.

CAVE 31

This is an unfinished excavation on the same level as cave 30, but about 50 m further westwards. This consists of only a verandah (4.6 m w, 1.2 m d, 1.5 m h) with three square pillars in front. The pillars too are unfinished. Above the pillars, in front of the ceiling, there are imitations of wooden beam projections and the entabuture has a stretch of railing decoration. The decoration in much effaced.

Almost 9 m above the first ledge is a stretch of another ledge which has four more excavations. Access to these is difficult.

CAVE 32

Almost in a line vertically above the big *chaitya* hall 26 is this *leṇa* (Type B i) which has two cells (each 3.4 m d, 3.2 m w, 2.3 m h) adjacently placed, with their doorways opening to a common verandah (7.6 m w, 90 cm d, 2.3 m h). Holes for cloth-poles (*valagni*) are cut in the front and back walls in both the cells. The doorways (1 m b, 2.3 m h) are plain. The front part of the cave is broken.

CAVE 33

This again is an unfinished excavation with a hall (3.6 m sq) and a verandah in front. There are three openings in front of the hall.

But the back wall is well finished and there are two seats, one each running along the side walls. This may have been meant for a *maṭapa*.

The excavations 32-33 are at a high level and from this a very fine panoramic view of the city and the hills beyond can be had. Bhagavanlal suggests (BG. p. 174) that these excavations were meant only as view seats.

EXCAVATION 34a AND 34b

Further up, about 6 m from the above, to the right, are two cisterns which are much broken and featureless.

GENERAL DISCUSSION

Out of the twenty-four excavations (including smaller ones) in the Ambika group, six are cisterns, and five, including the *chaitya* hall 26 are unfinished. Among the rest eight are practically ruined and are devoid of sufficient architectural details. From what remains a history of excavations can be worked out to a certain extent.

There are two *chetiyagharas* in the group, 25 and 26. It has been mentioned above that *chetiya-ghara* 26 follows Bedsa 7 in plan in the inclusion of verandah, and in the delineation of the pillars, though there are significant differences due to the absence of sculptural work in the present *chetiyaghara* both on the verandah walls and the pillars. The capitals of the pillars too have achieved regular *ghaṭa* shape and are removed from the bell-capitals of Bedsa. In this respect the pillars are somewhat closer to

those in Karle 8, but again with the difference in the absence of animal sculptures above the capital. So it appears this *chaïtya* hall has to be placed to a date later than Bedsa and Karle *chaitya* halls, and, again due to reasons adduced elsewhere, to a date earlier than the flat roofed *chaitya* hall Manmodi 2. The earliest inscription carved in this *chaitya* hall, but not connected with its making, being of series V a, it can be said that by that time (about the beginning of the 2nd century A.D.) this *chaitya* hall was already existing. So, if this is to be later than Bedsa and Karle *chaitya* halls also, this should have been done somewhere in the 1st centruy A.D.

This *chetiyaghara* is unfinished, and thus it appears that the whole of the Ambika group had no *chaitya* hall for congregational worship. Very late in its history, however, in about the 3rd century A.D. when *stūpas* of D Type had become the fashion, a small *chetiyaghara* (Cave 25) was made.

There are altogether twelve *leṇas* in this group. Most of them have verandahs in front of them (though many are broken now). Seven are single-celled, three double-celled and one has four cells and another five. All are without benches, but are provided with holes for fixing the poles for hanging monks' clothes. The total accommodation in all these can be reckoned to be meant for about 22 monks. Again what is surprising (as in the Bhimashankar group) is the fact that there are more number of cisterns than would have been necessary for the small population in this monastic establishment.

Though the ruined nature of the excavations hinder any evaluation of features, it can still be noted that these are very simple, modest and conservative. There is a preference to single celled *leṇas*, but even when more than one is cut together with a common verandah, they are placed in a row. This probably suggests the continuation of the early architectural tradition exemplified in the Tulja series at Junnar itself and elsewhere. But these excavations of the Ambika group can not certainly belong to that age of the Tulja series, as these are much irregular, and they have an advanced architectural item, the verandah (many with pillars), and lack those distinctive early features as the cubical shape of the cells, and polish on walls. This is brought out clearly from the evidence provided by at least one cave (29) which was to have pot-base pot-capital pillars (Type D vi). Another, cave 33, again some architectural decoration by which it could be placed with Nasik 3, etc. Palaeographical evidence too substantiates this. This further reveals that among the *leṇas* cave 27 (incription of Series V a) is the earliest, then comes *leṇas* 28 and 29 (with inscription of Series V B) followed by *leṇa* 21 (with inscription of Series VI).

With these meagre evidences and on other circumstantial grounds, the chronological sequence of caves in the group may be set as follows :

| | |
|---|---|
| *C.* 1st century A.D. | *Chetiyaghara* 26, (18) |
| 2nd century A.D. | *leṇas* 27-28, 33, 29; cistern 19a, (19-20, 30, 31, 32) |
| 3rd century A.D. | *leṇa* 21, (22-24), *chetiyaghara* 25. |

## 3. Bhutling Group

About 200 m to the west of the Ambika group, but on a higher level is the third series of the Manmodi excavations, locally called Bhutling. This group stretches along the SE-NW scarp of one of the hillocks of the Manmodi chain, and generally faces north-east. The numbering of caves is continued from the last of the Ambika group.

EXCAVATION 35p, 35q, 35r

On the way to Bhutling group about 80 m from the last of the Ambika, there are three cisterns, each on a slightly lower level than the other. These cisterns are now broken and filled with clay.

To the right of the lowest is a path cut in the rock which may belong to the ancient period.

In the Bhutling group also, the caves are cut in two levels. The following are along the lower ledge.

CAVE 35

This is a cell (1.8 m b, 2.1 m d, 2.1 m h) left unfinished due to the percolation of water through a crevice in the ceiling.

EXCAVATION 36, 36a AND 36b

Father along the same level, there are three cisterns at a distance of about a metre away from each other. These are now much broken and look like recesses.

CAVE 37

This is a small crudely cut cell (2.1 m w, 2.4 m d, 2.1 m h) with broken front.

CAVE 38 (FIG. 29)

Further west of the above and along the same level as 37 is this *leṇa* of Type B iii a.

The front is broken, but a hall (5.5 m sq, 2.75 m h) with two cells (2.4 m sq, 2.4 m h) cut in the left wall and two on the back wall remains. The doorways of all the cells too, except that of the 1st cell on the back side, are broken. The still extant doorway is 70 cm broad and as high as the ceiling. The right cell in the back wall contains two recesses in the right and back walls. All the cells have holes at head level on their right and left walls for fixing the *valagni*. On the right wall of the cave is a hole connecting this with the next cave 39.

The cave is bereft of any decoration, but the shape of the hall being square and its height half of the side of the hall and the cubical measurement of the cells are interesting. (The cell to the right in the back wall, however is small). These features remind the tradition of cubical cells of the early caves in Tuljaleṇa. The *leṇa* too may be nearer in date to the above.[22]

CAVE 39

Close to the right of 38, is this *leṇa* which has an elaborate plan but crude and unfinished. It consists of a hall (4.6 m b, 5.2 m d, 2.4 m h) with a cell in the left wall and three cells in the right and a verandah (6 m w, 2 m d, 2.4 m h) with a cell on either side.

The left side of the hall is unfinished with a crude mass of rock left in the front corner, where also an attempt to make a cell is seen.

The cell in the left wall too is unfinished, the extant excavated portion being about 1.2 m wide and 1.5 m deep with all that walls uneven. It appears to have been left at the stage as this excavation had cut into the hall of cave 38. The cell on the right side wall, nearer the back wall (about 1.8 m d, 1.5 m b) too is unfinished. The other two cells in the hall are also 1.8 m deep and 1.5 m wide. All cells are about 2.1 m high, and their their doorways are 75 cm wide and as high as the cells themselves, and are featureless. All the cells are the without benches. The hall is connected with the verandah by a doorway 2.1 m wide and 2.1 m high.

The verandah is irregularly placed, extending on either side of the doorway for a foot towards left and for nearly 3.6 m to the right. The cell on the left side of the verandah is well-finished. The cell to the right of the verandah is unfinished. In front of the verandah there were three pillars and two pilasters. All these are broken, but the pillar to the left retains sufficient features to make out its form. This is of square cross section with its corners chamferred in the middle to 1/3rd of the total length.

This cave though unfinished can be dated to the time when pillars of the variety described above were in vogue in the Deccan caves. In this, the cave goes along with Bhaja 22, Nasik 19, Ajanta 9, etc. Further the hole caused in the back wall of the left cell in the hall, cutting into the hall of 38 indicates that cave 38 had already existed before the cutting of this. This give a clue to the relative age of 38 and 39, and substantiates our contention about 38, that it belongs to an earlier period, nearer to the tradition of Tuljalena series.

EXCAVATION 39p, q, r, s

There are three cisterns in front of cave 39, all with their square mouths still intact. A little beyond to the west of 39r in the same line there is another cistern.

An inscription found on the 3rd cistern (39r) records that it is a donation by one Kumi mother of Sulasā (Junnar No. 18). This belongs palaeographically to series V B.

CAVE 40 (PL. 70)

This excavation adjacent to and to the west of cave 39 is the largest on the Manmodi hill, but is unfinished. This was intended to be a vault roofed *chetiyaghara*, but due to the existence of a band of soft rock inside it has been left incomplete.

In the present state, this consists of an apsidal hall about 9.1 m deep and 3.7 m broad. On the right side wall a few pillars have been shaped roughly and these show they were intended to be of simple octagonal shape. Above the head of the pillars, at the base of the triforium there is a stretch of slightly projecting ledge and this might have been meant for supporting the curved ribs of wood. The roof is barrel-shaped and its profile in section can be described as 1/3rd part of at circle. The height of this is about 60 cm and of the pillars is about 3.3 m. A *stūpa* is cut at the back end of the hall. But this too is unfinished and consists of a drum and dome only and is completely devoid of any ornamentation. The shaping of these two members too is very rough. Though it is unfinished and crude this *stūpa* has three holes on the head of the dome which were meant to receive the *harmikā*, probably of wood or brick.

In front of the hall is a doorway almost as broad as the nave itself and about 3.6 m high. But the architrave above the doorway is now broken. Above this architrave is a semi-circular window allowing light into the hall. But the peculiarity of this window is its position in that this does not open into the whole length and width of the barrel vault, but is much smaller and at a lower level along the line of the triforium.

The facade, is well-decorated. It consists of a large *chaitya* arch springing from the top of the architrave above the doorway, and is set inside a huge rectangular frame. The arch has its exteriors of the arms flush with the side jambs of the square frame, and hence there is no representation of the paws. It is a raised arch with the soffit dentilled by the representation of jutting beams of rectangular cross section. The apex of the arch rises up to a point and is crowned by a *triratna* symbol. Inside the arch on the two sides, two heavy vertical jambs are seen. Above the open window is a semi-circular flat surface framed by the big arch itself. This is carved with half lotus pattern with a central semi-circular knob representing the stigma, surrounded by a smaller semi-circle with radiating lines representing the stamen, and seven leaf-shaped petals emitting from this—all set within a semi-circular border. The petals have carved figures in bas-relief. The central petal has a female figure (Śrī) with one hand held akimbo and the other raised in the *abhaya* pose. The petal on either side of this has elephant on lotus shown as sprinkling water from a pot. The petal on either side next to this has a male figure in the posture of paying obeisance with the hands folded above the head. The bottom most petal on either side has a female figure in a similar posture.

On the spandrels, there are two male figures, one on either side of the finial of the arch. The one to the left has wings (*Garuḍa* ?) and the other has serpent hood above the head (*nāga*) and is shown as offering flowers. On either side of these is a *stupa*. These *stūpas* have high straight undecorated drums. These features of the drum, the dome and the *harmikā* remind us of the *stūpa* inside cave 9 at Ajanta. The upper most part of the facade has the design of a string of *chaitya* arches, rising from the railing pattern carved on the architrave. Between them, at their shoulder level, similar smaller *chaitya* arches are carved. Similarly the side frames too are decorated, the *chaitya* arches here rising one above the other.

Despite the unfinished state of this *chetiyaghara*, the extant architectural features sufficient to arrive at the possible age of the monument. The insertion of the stone screen wall in front of the hall, would show that this is of a date later than those with open fronts like Bhaja 12, Kondane 1 and such, while the lack of the verandah would indicate its anteriority to those like Bedsa 7 and the Karle *chetiyaghara*.

Thus in its intermediate position between the above two series, this can be grouped along with Ajanta 9. However, there are several differences between the present one and Ajanta 9. Ajanta 9 appears to be an experimental work wherein a number of newer ideas, like the square form of the hall, square pillars with chamferred arrises in the middle (Type C pillars) and the pilasters of the same type on the facade are seen. Manmodi 40 however continues the earlier practices of vault roofed *chetiyagharas* except for the fact that the screen wall in stone is introduced here. This shows an advancement over Ajanta 9, in the introduction of human or semi-divine sculptures in the facade decoration. This is an element of great interest because in all the other decorations of the *chetiyaghara* facades the repetition of architectural motifs only is seen. One more feature of the present *chetiyaghara* is the exclusion of Type C pillar, an item seen in Ajanta 9. Probably these would indicate that the present *chetiyaghara* could have been slightly later in date than Ajanta 9. But this is certainly not far removed from that as indicated by the form of the decorative *stūpas* and *chaitya* arches.[23]

This contention is further well supported by a short inscription on the inner semi-circular lotus design above the *chaitya* window. It states that the doorway of this *chaitya* hall is a donation of Chanda a *Yavana*. The characters of this inscription, are closer to those of Nasik No. 19 and belong to Series III.

EXCAVATION 40a, 40b

In front of cave 40, by the side of the rock wall to left inside the open court and again a little to the west of the above along the same line two cisterns are seen. Both are broken and featureless.

About 9 m above and almost parallel to the lower ledge, having a series of excavations (41-49). These are now reached by broken steps between caves 38 and 39.

EXCAVATION 41

This is an unfinished excavation (about 4.7 m b, 90 cm d, 2.1 m h) with irregular walls. There are two unfinished pillars and pilasters. A fine view of the city and hills can be had from this, and it is possible that this might have been used as a view-seat even in ancient times.

EXCAVATION 42 a, b, c, d, e, f

About 150 m farther west of the above there are four excavations, which look like cells. But all these are remnants of simple cisterns, and are featureless. These are in a line just above caves 36 and 37. A little further there are remnants of two more cisterns.

CAVE 43 (FIG. 29)

This cave is reached through broken steps rising from the lower ledge, between caves 38 and 39, and is about 9 m vertically above cave 39.

This is a *leṇa* of Type B i with a row of four cells (2.2 m d, 2.2m b, 2.2 m h) opening into a common verandah (10.5 m b, 1.5 m d). All, except the one at the right most, have provision for the *valagni*.

The front portion of the roof is broken partly. It appears that there were two pillars and two pilasters originally. All are gone now, and even the traces are of doubtful nature. But Burgess writing in the latter part of the 19th century has noted that one of the pilasters had the hour-glass decoration on it. At the right end of the verandah is an irregularly cut open recess.

The hour-glass decoration suggests the contemporaneity of this cave with similar ones at Kanheri and Nasik (p. 90) datable to about the 3rd century A.D.

CAVE 44

This *leṇa* located below cave 43 is of an aberrant type. This consists of an unfinished cell (56 cm sq. 1.8 m h) and a large hall in front. The hall is divided into two parts by a frame of two pilasters on the side walls and an architrave in the ceiling.

The feature of division of hall in this way is noticeable again in Mahad 8 which will be shown as belonging to the 3rd century A.D.[24]

## CAVE 45 (FIG. 29; PL. 69)

Closeby to the west of 44 is this *leṇa* (Type B i) with a row of four cells sharing a common verandah. The cells are rectangular (about 2.1 m d, 2.3 m b, 2.1 m h in average).[25] *Valagni* holes exist inside.

The verandah (8.8 m b, 1.3 m w) has its ceiling about 60 cm higher than the ceiling of the cells. The front portion of the verandah is broken and no indication exists there now for the pillars or pilasters. The back wall of the verandah has some good decorative sculptures.

These consist of *chaitya* arches, above the rectangular doorway (60 cm w, 3 m h), prominently projecting for about 40 cm from the wall surface. The arches have incurved arms and projecting paws and their finials rise higher than usual. Their soffits are dentilled with imitation beams. The extrados of one of the arches is also decorated with creeper design. The interior space within the arches and above the door lintels have bas-relief work, with grating and Buddhist symbols. The arches are connected at the level of their paws by a projecting railing pattern laid over a band decorated with stone imitation of wooden fixing pins. Between the arches are two *stūpas* placed side by side carved in mid-relief and rising from the railing pattern below to the level of the head of the arches. These have the drum shown with the railing pattern on their brims surmounted by hemispherical dome, square *harmikā*, inverted pyramidal five-stepped member and a curving umbrella over a circular boss. There are two more similar *stūpas* one each on the either side of the extreme arches. On either side of the arches, at their shoulder level there is a smaller similar arch resting on railing pattern and treated in a similar way as the bigger arches. A stretch of railing pattern all along the width of this decorated surface runs at the shoulder level of these, and on this the finials of the bigger arches overlap.

The cell at extreme right has no such decoration, and it appears that this cell was added at a later date to provide extra accommodation in this *leṇa*. On the wall to the left of the verandah of the original *leṇa*, there was a beautifully carved *dharmachakra* with a diameter equal to the height of the decorative work on the front of the cells. Now only half of this *chakra* remains.

The shapes of the arches and the *stūpas* and the delineation of the whole sculptural work above the doorway are very much near to the decorative work in Bhaja 22. These again are similar to the decorative work seen on the facade of *chaitya* hall 40, which is just about 10 m away from this. This is at a higher level than that *chaitya* hall, but it can be remembered that this was the feature of *chetiyaghara-leṇa* complexes of early period. This *leṇa* and *chaitya* hall 40, as far as their locations are considered, stand in the same relationship as similar complexes, at Kondane, Bhaja, etc. These two excavations may be due to a single effort and design and hence contemporary. The nature of plan of this *leṇa* with a line of cells arranged to open to a common verandah is a feature common in the Junnar caves, and probably one derived from the pattern of having a line of cells, seen in the earlier excavations of the place on the Tulja hill. The decoration is almost similar to the one seen on the facade of cave 12 of that group.

## CAVE 46

Between *leṇa* 45 and *chaitya* hall 40, on the same level as 45, is this *leṇa* (Type A ii) which consists of a cell (2.6 m b, 2.6 m d, 2.3 m h) with a plain doorway (78 cm b, 2 m h) and a verandah (2.6 m b, 2.1 m h) in front. Its front is broken.

## CAVE 47

To the right of cave 40 (*chaitya* hall) on the same level as of 45 and 46, is this *leṇa* (Type A ii) consisting of a cell (2.1 m sq, 2.1 m h) and a broken verandah (2.3 m b). The *Valagni* holes exist in the cell. The doorway (66 cm w, 1.8 m h) is plain and its lintel has on the inner side two square holes for the wooden frame.

The verandah is broken. To the right of this is a bench. The cave is difficult of access as the ledge-path which led to this is now ruined.

CAVE 48

Further to the right of the above and in the same level is this excavation, a *leṇa* of A ii type with a cell (1.8 m b, 2.1 m d, 1.9 m h) having a featureless doorway (60 cm b, 1.5 m h).

The verandah is broken. Ruined rock-cut steps are there in front.

EXCAVATION 49

A little below 48 is a featureless ruined cistern with open top.

The position of this cistern indicates the level on which the original ledge path leading to caves 48, 47, etc., was running originally.

GENERAL DISCUSSION

From the architectural point of view, the group is of much interest, though many excavations here are in a ruined state or unfinished.

This group has only one *chetiyaghara* (40), but that too is left unfinished, and there is no other in this complex which could have served the same purpose.[26] Out of the other twenty-six excavations of the group there are two caves (38 and 39) which are *leṇas* of B iii a type with cells set around halls and provided with a front verandah. Caves 43 and 45 again are multi-celled *leṇas*, but of B i type with cells ranged in a line behind a common, probably pillared verandah. Five more, 37, 44, 46, 47 and 48 are single-celled *leṇas*, with verandahs (Type A ii). Cave 35 was also intended to be a single celled *leṇa*, but unfinished. There are 15 *pāniyapoḍhis*—all of Type A i. One may be a view-seat.

As a result of the stylistic analysis done in the previous pages the following relative chronological positions may be suggested to some of the caves having typo-chronological indications.

| | |
|---|---|
| *Leṇas* | 38 |
| | 39 |
| *Chetiyaghara* 40, *leṇa* | 45 |
| *Leṇa* | 43 |
| *Leṇa* | 44 |

From the study of the plan of the *leṇas*, it can be seen that all in the group have been provided with verandahs. This itself is a feature representing a stage further than the single cells of cubical shape arranged in a row, but without verandah, as seen in the caves of the Tulja series. It has already been described above how the Bhutling group of caves appear in two levels along the successive ledge paths. The existence of a series of cisterns at the upper level, almost in a row, indicates that these were easily accessable at one time. The caves 35, 37, 44, 46 and 47 which are simple single-celled *leṇas* located along the same ledge could have been the first to come up in the Bhutling complex. It may be noted that contrary to the general practice of making a *leṇa-chetiyaghara* set side by side (as in Kondane), the two caves of the set here *i.e.* 40 and 45 are intervened by *leṇas* 46, 47 and 48. All are of a simple type and it is likely that these existed prior to the making of the *chetiyaghara-leṇa* set (40 and 45). At least one of them, cave 47, betrays an early characteristic of having cubical shape. So it is not unlikely that 47 is of a prior date compared to 46 and 48 and even 38 and 39.

It may also be noted that all the water cisterns in this group are of simple variety (Type A i). This is possibly an indication that architectural activity in the group was mostly restricted to an early period before the tradition of making cistern-in-recess began, *i.e.*, before 2nd century A.D.

The *leṇa* 39 having definite architectural features *i.e.* the use of pillar of Type C would show that it will have to be placed to a period around the early part of 2nd century B.C. Cave 38 which is typologically earlier may belong to a still earlier date and in turn possibly the single celled *leṇas*, at least cave 47 amongst these. Even this, however, belongs to a type later than the earliest cubical *leṇas* with polish and without verandah seen in Tuljaleṇa group. Hence it may be construed that somewhere around the last decade of the 3rd century B.C. a few isolated single celled *leṇas* were made and then came caves 38 and 39 somewhere around 200 B.C. The next important excavations are the *chetiyaghara* 44 and *leṇa*

45, both being beautifully sculptured. These works which are to be placed typologically between Ajanta 9 (of *c.* 150 B.C., p. 100) and Bedsa 7 (of *c.* 80 B.C., p. 112) and nearer to Bhaja 22 (p. 126) may have been made somewhere in the 3rd or 4th quarter of 2nd century B.C. This is in consonance with palaeographical data too. *Leṇa* 43 with its association of the hour-glass decoration (mentioned by Burgess) may have to be placed to early 3rd century A.D. Probably 44, an aberrant single celled *leṇa* having analogues in Mahad, etc. may belong to a slightly later date.

So, it appears that major architectural activity in the Bhutling group was confined to a period of about a century from about the last quarter of the 3rd century B.C. to the last quarter of the 2nd century B.C. The only caves to be made later (43, 44) were done after nearly 200 years.

About 300 m to the north-west of the Bhutling group, where the Manmodi hill ends dipping into a narrow valley, there is a group of six excavations cut on the face of a single rock but at different levels. All these are simple unfinished excavations. These have been numbered here in continuation to the caves of the Bhutling group.

### CAVE 50

A featureless unfinished cell (about 1.2 m d, 1.2 m h) cut at a higher level than the other caves.

### CAVE 51

This excavation located about 6 m below cave 50 and about 6 m to the right of it of a verandah (2.4 m b, 1.5 m d, 2.1 m h) with an unfinished cell (80 cm d, 1.5 m b, 2.1 m h) having a well-finished rectangular doorway (90 cm b, 1.8 m h).

### CAVE 52

About 15 m to the right of 51, is this an unfinished cell (3 m d, 1.5 m b, 1.8 m h) with a doorway (75 cm b) having two holes on the inner side of the lintel for fixing the wooden frame.

### CAVE 53

Below cave 52 is this excavation. This is a *leṇa* of A ii type with a verandah (3.8 m b, 2.1m d) and a cell (2.1 m b, 2 m d, 1.8 m h). The doorway is now broken. The floor of the cell is rugged. There is a plain rectangular pilaster to the right along the front line of the verandah.

### CAVE 54

An unfinished cell on a higher level and about 40 m further than cave 53.

### EXCAVATION 55

A featureless broken cistern located about 20 m further from 54.

It is peculiar that all these excavations are unfinished. The reason for stopping the work abruptly in these caves appears to be the hardness of the rock.

However, here are attempts towards single celled *leṇas* of A i b (50, 52, 54) and A ii (51, 53) types. The only cistern is of simple variety (A i type).

## MANMODI CAVES—GENERAL DISCUSSION

The rock-cut monuments in the Manmodi hill present some interesting characteristics. There is an element of individuality present in the composition of this monastic-complex.

Taking all the monuments from the three groups into consideration there are altogether 88 independent excavations.

| | Finished | Unfinished |
|---|---|---|
| *Chetiyagharas* | 1 | 3 |
| *Leṇas* | 24 | 11 |
| *Maṭapas* | 2 | 3 |
| *Pāniyapodhis* | 40 | 3 |
| *Āsanapedhikā* | 1 | — |

It is peculiar that one *chetiyaghara* of Type B ii (a rectangular cell with *stūpa*) is the only one that is complete in the group. Typologically this too belongs to a late stage in the history of the monastic establishment *i.e.*, to the 3rd century A.D. There are no *chetiyagharas* of hall type practically, all the three attempted being left unfinished.

Still these *chetiyagharas* are of architectural intereet displaying various stages of the development of the *chaitya* halls. *Chetiyaghara* 40 in the Bhutling group is the earliest and probably an ambitious attempt. This *chetiyaghara* which had no provision for a verandah but provided with a stone screen shows an interesting stage in advancement to what had been attempted first in Ajanta 9. Its date is somewhere around the last quarter of the 2nd century B.C. After the lapse of nearly two centuries, in the middle of 1st century A.D., the next venture to make a *chetiyaghara* (26) was undertaken in the Ambika group. Now this was provided with a verandah with pot-base pot-capital pillars in front and inner screen wall with practically no decoration but with a *chhaitya* arch which, however, is very small. This possibly indicates a stage in the history of the *chetiyagharas* in which the utilitarian value of the *chaitya* window was being slowely forgotten. Here the main lighting into the hall is from the central doorway itself. The original characteristics of the vault roofed *chaitya* halls are gradually being discarded. A stage is seen here in which the rock-cut tradition had taken strides to free enough from the trammels of wooden architecture. Further emancipation from the wooden tradition is noticeable in the *chetiyaghara* made nearly a century and a half later (cave 2). Now not even the vault shape of the roof is maintained. The roof is now flat. The apsidal form would naturally be incongruous in such a context. It was well-understood by now that the pillars are unnecessary in the rock medium. So a simple broad rectangular hall is made herein with the provision of some space for the *stūpa* at the back end of the plain hall. Pillars of Type D vi are seen in front more in the nature of ornamentation than as a matter of necessity. Towards the same end, however, a facade with *chaitya* arch has also been carved but here it is just a blind arch. It is no more utilitarian.

What strikes most is the fact that how a monastic-complex could have been there for such a long time without its usual adjunct—the *chetiyaghara*. The very attempts made to fashion the *chetiyagharas* show that they were considered by the community here as requirements, but their unfinished state reveals that they were not absolute necessities.

The *leṇas* too display a peculiarity. Typologically they are very simple unsophisticated varieties. They are :

| | Total No. |
|---|---|
| Single called *leṇas* without verandah, A i | 4 |
| Single called *leṇa* with verandah, A ii | 19 |
| *Leṇas* with cells in a row behind a verandah, B i | 11 |
| *Leṇas* around a hall with verandah in front, B iii a and b | 3 |

It is interesting that the majority consist of single-celled ones only. Even in the second variety most of them are two-celled. Further the single-celled *leṇas* are interspersed distantly from one another in the long stretch of nearly a mile and a half. Probably this is indicative of the fact that what could be described as monasticism or community living was not a much desired or preferred practice in the establishment here.

The chronology of *leṇas* in the group discussed above reveals that the work was spread for nearly 5 centuries (Chart V) and the number of monuments that were created is too meagre for that long span.

A noticeable feature in the *leṇas* of Manmodi is the fact that most of them are provided with verandahs. There is a distinct typologically advanced stage here when compared to the early cuboid *leṇas* without verandahs seen in the Tuljaleṇa series. Further none of the *leṇas* in the present series shows polish, or even attempts towards that. Various *leṇas* of A i type, do not betray the continuation of tradition of cubical dimensions. Many of the cells in this group do not betray any principle in the relative dimensions of the breadth, width and height. This is probably a result of the emphasis on utility that developed gradually, and the realisation of the fact that all these cells set in the interior around a hall or behind a verandah are semi-dark hollows where no decoration or proportion could be appreciated, and as such they would become meaningless. Such items having been realised, even the *leṇas* that follow a simple plan may belong to any date as such. So in this context we are unable to provide any chronological sequence for the *leṇas* of A i type unless there are other clues.

Such clues are available in a few. *Leṇas* 8 of the Ambika group and 47 of the Bhutling group are the only A i variety of *leṇas* that still retain cubical form with their length breadth and height equal. As such they could be considered as the earliest in the group. With reference to the dates adopted for the early *leṇas* of Tuljaleṇa group the present ones are datable to *C.* late 3rd of early 2nd century B.C. In the same period, however the *leṇas* with cells around hall (caves 38, 39) were made in the Bhutling group, in which 38 is earlier than 39 and 38 is to be placed around 200 B.C.

In the period succeeding probably a few double celled *leṇas* particularly those with cubical dimensions of cells and hall but simple ones without decorations may have been made.

Somewhere around the 3rd quarter of the 2nd century B.C. contemporaneous with the *chaitya* hall 40, a *leṇa* (45) of Type B ii with four cells having its verandah hall excellently decorated was made.

Again it was in the beginning of the 2nd century A.D. a *maṭapa* (7) was added by Ayama, the minister of Nahapāṇa. This is in the Bhimashankar group. Even though this happens to be the earliest datable excavation in that group the very fact that an accessory item like *maṭapa* was made shows that there might have been some other excavations nearby. What they are cannot be made out.

In the latter part of the 2nd century A.D. *leṇa* 29, again of B ii type but with the verandah provided with pillars of pot-capital and pot-base were created.

The next stage is represented by *leṇas* 0, 1, 5 and *maṭapa* 3 all in the Bhimashankar group.

Probably around A.D. 250 *leṇas* 4 in the Bhimashankar group and 44 in the Bhutling group came up.

So generally it can be seen that architectural activities were present in almost all the groups together. The major works like *leṇas* and well-decorated *chetiyagharas* appeared first in the Bhutling, then Ambika and lastly in the Bhimashankar groups. The time span involved is nearly five centuries and the few *leṇas* that are interspersed in the period show that there was not any consistent continuity of patronage towards architectural creations here.

The maximum accommodation capacity of the Manmodi establishment when all the *leṇas* were complete was about sixty. In the 2nd century B.C. when the *chaitya* hall in the Bhutling group and even later in 2nd century A.D. when the *chaitya* hall in the Ambika group were made, the number of resident monks must have been still smaller. The dimensions of those *chaitya* halls display, as in Ajanta etc., that they were made for larger number of worshippers than the resident monks.

A similar disproportion between the needs of the resident monks and the number of water cisterns can also be seen in this group. While there are only 23 finished *leṇas*, the number of cisterns is about 40. The cisterns have not always been made in front of the caves themselves. Many are seen on the way to the different groups. In view of the huge number and placing of cisterns, and also in view of the fact that single celled *leṇas* are to be seen mostly, a suggestion may be hazarded that the Manmodi establishment was the one under the control of a more conservative section of the brotherhood (a sect ?), which still preferred the rigorous eremetic practices to a large extent. Many monks living in the hills around may have either stayed here only occassionally while many others used to frequent the place on their way to and from the forest dwellings to the city when they were to go for daily begging. The conservatism on the part of the community here is patently seen in the provisions made in the *leṇas*.

While elsewhere beds cut in stone are to be seen as a general feature, none of the *leṇas* in the Manmodi group has a stone bench.

The ambitious schemes for making large *chaitya* halls but their incomplete nature, preference to single-celled *leṇas*, the absence of benches in the *leṇas*, disproportionately rich number of water cisterns are really enigmatic.

It may be seen from the types and number of monuments listed above that there is again a very high proportion of unfinished ones compared to the finished ones.[27] The flaw in the rock could be an explanation, but probably this may indicate a lesser capacity of the establishment and its patrons to command expertise. It could as well be due to the unsteady flow of patronage available to the monkhood at the Manmodi establishment, at least for sufficiently a good length of time in its history.

The inscriptions in cave 25 in the Ambika group reveal that by the end of 2nd century A.D. and in the early part of 3rd century A.D. the monastic establishment on the Manmodi hill, called Gidhavihāra on the Mānamakuḍa in some of those inscriptions, received sufficiently good number of money and land grants. During this period there were some attempts towards making fine monuments in the Bhimashankar group. But these too (like 2, 3) are unfinished and no alternative work is to be seen done instead. This shows that the Manmodi complex is peculiar in its composition. It stands out as an individualistic group missing many of the regular features seen in other Buddhist establishments. The absence of stone-cut benches in the cells is particularly perplexing. Is it likely that these caves belonged to a Buddhist sect with more conservative ideas and having much less influence in the region or to a non-Buddhist faith even ? We are unable to provide a proper explanation. A likely possibility may be suggested *without much emphasis*. At least two inscriptions from this place mention the donations made to '*tevija*' and '*gaṇāchāriya*'. Both words, particularly the latter, appear to be specifically associated with Jainism. This Gidhavihāra may be a Jaina monastery (See note 148 to chapter III). Probably the memory of its past Jaina association is still preserved there in the Jaina temple consisting of 13th century images of Ambikā, Jvālāmālinī, etc., now located in cave 30 of the Ambikā group.

## GANESH PAHAR

The Ganesh Pahar, also called Sulaiman Pahar but known to the *sthalapurāṇa* as Leṇyādri, is a range of hills across the river Kukdi, about 4 kilometres north of Junnar town. The caves are popularly known in the region as Ganesh Leṇi, because of the sacred temple of Ganesh here (Cave 7). They are located on the southern face of one of the hills in the group. They are about 40 metres above the plain, and can be reached by a flight of steps of recent date. An inscription (Junnar No. 25) provides the ancient name of this hill as Kapichita (Kapichitta). The caves face south and a beautiful view of the green stretch on the bank of the Kukdi and the bare hills beyond can be had from this place. All the caves, except a few to be described later (Eastern group), stretch continuously. These have been numbered from east to west.[27]

### CAVE 1 (FIG. 30)

This is a *leṇa* of Type A iv b with a front verandah (1.1 m d, 4.5 m b, 2.2 m h), a middle hall (1.7 m d, 3.8m b, 2.1 m h), a cell (2.1 m d, 2.7 m b, 2 m h) and a recess (half-cell, 1.1 m b, 2.5 m d, 2 m h). The cell and the half-cell have a bench each along their right walls. Both the cell and the half-cell are provided with doorways.

The middle hall has a bench along its right wall. In the left wall a window (60 cm sq) is cut, and this opens into cave 2. There is an open rectangular window (60 cm sq) near the roof level on the front wall to the left of the doorway.

The verandah has a bench (1m 1, 73 cm b and h) along the right wall. In front of the verandah, there were two pillars and two pilasters. These are not extant, except for a part of the left pilaster, which is rectangular in section. The shape of the pillars can not be made out.[28] These pillars and pilasters supported an architrave carrying the roof projecting to the front for about 60 cm more and adorned with stone imitations of jutting beam ends. Above this, on the entablature was a stretch of

railing decoration along the whole breadth of the facade of the cave, but only part of that survives now. A flight of two steps leads up from the front court to the verandah.

The cutting of this cave has been done in a somewhat sloping face of the rock and hence the height required of the facade has been obtained by cutting a rectangular court in front. In the right wall of the court, is a cistern-in-recess.

## CAVE 2 (FIG. 30)

Adjacent to cave 1 and to the left, is this *leṇa* which has almost similar plan and elevation except for some difference in the location of the inner cells. This is also the better preserved of the two.

The middle rectangular hall (4.6 m b, 2.4 m d, 2.1 m h) has a bench (2.4 m l, 53 cm b, 75 cm h) along the left wall with a simple ledge cut at the brim. On the right wall is the open window (45 cm sq) opening into cave 1. On the back wall, to the left, is a doorway (75 cm b, 2 m h) leading into a cell at the back. The cell (2.4 m d, 1.8 m b, 2.1 m h) has a bench (1.8 m l, 78 cm b, 75 cm h) along the back wall. The recess (60 cm w, 1.2 m d, 2.1 m h) to the right of the cell has no doorway and is unfinished too. The doorway in front of the hall is rectangular (70 cm w, 1.8 m h).

The verandah (3.6 m b, 1.1 m d, 2.1 m h) is lined in front with two pillars and two pilasters rising from a low bench (38 cm h, 32 cm b) with slanting back. The front side is carved with the railing pattern. The back of the right bench, however, is broken. The pillars that stand now are modern reconstructions. The original ones appear to have measured 23 cms in thickness and 1.44 m in height. The pilasters have rectangular cross section with a projection of 8 cm from the walls. One of them has the hour-glass decoration.

The front of the verandah is spanned by a rectangular architrave (8 cm) running on the head of the pillars and pilasters. In front of this architrave at somewhat a higher level there is the projection of the rock roof to about 60 cm to front which serves as the cave. On the underside of the cave imitation rafters jutting out from the architrave have been shown.

Above this, on the entablature, there is the stretch of railing pattern. Above this again the rock further projects to about a foot, serving as a protecting hood to this decorative work. A flight of three steps leads from the front court to the verandah.

The plan of the *leṇa*, the hour-glass decoration on the pilaster, the pattern of the verandah fronted by pillars and pilasters and the existence of the backed bench etc., are all well-known features appearing in a host of monuments at Kanheri and other places and this cave too should belong to the period of those caves, *i.e.* to the 2nd or 3rd century A.D.

The window of cave 1 cutting into the hall of this *leṇa*, and the relation between the stretch of railing decoration on the facade of the two in which the railing of the 1st cave appears to overlap a bit over that of the present one show that this cave is earlier than cave 1. Stylistically the two are so much similar that the distance in time between the two may not have been much, and they could be described almost as contemporary ones.

## EXCAVATION 2a

Between caves 2 and 3, is a recess (90 cm h, 30 cm d, 60 cm b) which can serve as a seat from which a fine vista of the Kukdi valley can be had.

## CAVE 3 (FIG. 30)

About 1.5 m to the left of cave 2 but on the same level is this *leṇa* of type A ii consisting of a cell (2.4 m d, 2.5 m b, 1.8 m h) behind on open verandah (4.9 m b, 1.7 m d, 2.1 m h). In the left wall of the cell is a bench (75 cm h) cut in a recess (2.2 m l, 75 cm b, 1.2 m h). The front portion of the bench is panelled with projecting cornices 5 cm broad, one at the brim and two of the same width placed vertically below that, thus dividing the plain front face of the bench into three panels. The doorway (75 cm w, 1.8 m h) is rectangular. A bench (45 cm h, 60 cm b) runs along the whole length of the back wall of the verandah. The threshold of the doorway to the cell is at this level and in front of that a step

is cut to give access to the doorway. The verandah roof projects forward to about 2 m from the back wall. There are no pillars or decoration.

The presence of the recessed bench, however, is noteworthy.

CAVE 4 (FIG. 30)

This cave has several features similar to cave 3, but is a *maṭapa* consisting of a hall and a verandah. The hall (5 m l, 3.3 m w, 2.4 m h) has a bench (60 cm b, 65 cm h) running along the entire length of its right wall. There is also a bench (60 cm b, 45 cm h) along the entire width of the verandah wall, as in cave 3 above. On the bench near the doorway is a basin like depression (40 cm dia, 17 cm d).[29] The only new element in this cave, compared to cave 3, is an open window (60 cm sq) to the left of the doorway letting light into the hall. Here too the flat roof over the verandah juts out, and is bereft of decoration or supporting pillars or pilasters.

In view of the presence of common traits in plan *i.e.*, projecting roof and verandah bench, caves 3 and 4 may be considered as contemporary ones. Probably the additonal item in cave 4, the open window, was necessary to provide enough light into the hall which is bigger in dimension compared to the cell in cave 3.

CAVE 5 (FIG. 30)

About 4.5 m below the level of cave 4 is this *leṇa* of cells-around-hall type (Type B iii b). The hall (7.6 m w, 8.8 m d, 2.5 m h) has three cells in the back wall and two each in the side walls. The cells are very large varying from 2.7 to 3 m in depth, 2.1 to 2.4 m in width and 1.8 to 2.1 m in height and all have a bench each on the back wall. There is a stretch of a long low bench (53 cm b, 30 cm h) along the three inner sides of the hall. The doorways of the cells are narrow (60 cm w, 1.7 m h) and are at the level of the bench.

There is a broad doorway (1.6 m b, 2.6 m h) in front opening into the verandah and an open window (50 cm sq) on either side of the doorway at shoulder level. The verandah (6 m b, 1.8 m d, 2.8 m h) has its flat roof higher by about 8 cm than that of the hall. The roof, however, is much broken. Originally there were two pillars in antis in front of the verandah, but all these are gone, but indications remain to show that these pillars were octagonal shafts with pot and animal capitals. The verandah is approached by a flight of two steps from the front court. To the right, in the court, there is a cistern.

There is an inscription (Junnar No. 20) on the back wall of the verandah which mentions that this seven-celled cave (*satagabha*) along with the cistern, is a donation of the guild of corn-dealers. The characters of the inscription are of Series V A. This is well in accordance with the architectural features in which this cave compares well with Nasik 3 and 10, where again the pillars of the present variety occur. The cave can be assigned to the early part of 2nd century A.D.

EXCAVATION 5a (FIG. 30)

Between caves 5 and 6 there is a cistern of irregular shape cut in a recess with a bench to the left. It appears this was intended to be a seat-recess or cell originally, but that work was given up, and it was converted to a cistern.

CAVE 6 (FIGS. 31, 10(5); PLS. 71, 72)

This is the main *chetiyaghara* of the Leṇyādri-complex. Compared to the well-known vault roofed *chaitya* halls like, Bhaja, Bedsa, Kondane, Kanheri, etc., this is very small in dimentions, but happens to be a fine piece of architectural work with agreeable proportions and neat delineation, with its beauty heightened by simple but well-arranged sculptural work.

This consists of a hall (13.30 m d, 6.7 m w, 7.36 m h) with semi-circular back, divided into a nave (3.76 m b, 7.47 m d) and two aisles (1.06 m b) by two rows of pillars, running parallel to the wall. A *stūpa* is placed in the back of the nave a little in front of the semi-circular end. This hall is opened into and lighted by a plain but large doorway (1.80 m b, 2.79 m h). The doorway is rectangular, and has its jambs and lintel slightly sunk in the corners, to the form of a śākhā. The threshold has some rough

carvings. In front of the hall is the verandah (6.3 m b, 2.03 m d, 3.76 m h) which is at a higher level than the open court in front and is approached by two steps.

In the hall there are altogether 16 pillars (3.33 m h). There are two engaged pillars also jutting out from the front walls in the same alignment. The engaged pillars and five pillars on each line are of the pot-capital-pot-base type (Type D v a) and the six pillars in the apsidal portion are simple straight octagonal shafts without base or capital (Type A iii). The pillars and pilasters of the first type have, as usual, the base with five square plates raised one above the other in pyramidal fashion supporting a circular ring on which is the globular pot with rim. The octagonal shaft rising from this carries the capital having an inverted pot with neck and rim, another circular plate and an *āmalaka*-shaped thin member, and over this lies the inverted pyramidal square member as in the base. This is surmounted by a dossert decorated in relief on the front and back sides with addorsed elephants, tigers or lions.

The pillars carry a joist running all through. From this the vault roof of the nave rises. This is braced with curved rafters in stone, 13 on each side and 6 at the back. Between each pair of stone rib is a hole possibly for some ornamental wooden fixtures.[30]

The walls of the aisle rise straight to the level of the top flat plates of the pillars and from that springs up the quadrantal roof to meet the pillars at a line above the animal sculptures. This quadrantal roof too is fashioned with curved stone rafters.

The *stūpa* in the nave occupies a central position. It has a drum raised on a low socle and its brim ornamented with the railing pattern. Over this is the dome of 2/3rd sphere type, surmounted by a square *harmikā* supporting an inverted stepped pyramidal member with five plates and a top coping, one of bigger dimension which is decorated on its side with a series of merlons. On the top of this flat member is a circular hole in the centre and four small holes at the corners, the central one meant for the *yaṣṭi* of the umbrella,[31] and the smaller ones probably for banners. The doorway was originally fitted with wooden frame and doors, as seen from the sockets made in the floor and the lintel.

The verandah with flat roof has two pillars and two pilasters exactly of the type of the pillars in the interior, except that these outside pillars are taller and thicker, and there is a box-like decoration covering the *āmalaka*-shaped thin member in the capital. These pillars and pilasters too have the sculptures of elephants and tigers carved in front and back sides above the abacus.

On the facade above the verandah is a stretch of railing pattern and above this is a semi-circular area and over this a rectangular area sunk in the face of the rock. This bears no relationship with the vault roof of the hall. The surface of this sunken area is made smooth and it is extremely doubtful whether any intention was there on the part of the architects to fashion the whole to the form of a *chaitya* arch with all details. In this respect this resembles, partly, the delineation of a similar blind *chaitya* window on the unfinished *chaitya* hall of the Manmodi-Bhimashankar group (cave 2).

This *chaitya* hall is unique in many respects and marks an important step in the evolution of the form of the vault-roofed *chaitya* halls. Many of the elements introduced and developed in the Manmodi-Bhutling, Bedsa and Karle *chaitya* halls have been adopted here but with certain alterations. The first thing noticed prominently is the introduction of stone ribs in the vault roof of the nave. This is nearer to Karle 8 with the similarity of disposition and delineation of the ornamental pillars with animal capitals, but departs from that substantially in reducing the height of the verandah and doing away with the major element, the *chaitya* arch leading light into the nave, the lighting being restricted now to what best could be obtained from a single lofty doorway. The elaborate front screen has also been omitted here and instead the verandah is reduced in height considerably and provided with two pillars in antis as in the Bedsa *chaitya* hall. The *chaitya* window fashioned on the facade has become functionless, and is treated carelessly. Seeing from the architectural point of view, a point in progress is the lowering of the height of the verandah. The architects had realised the effect of heavy rain and hot sun on an open front *chaitya* hall as those at Bhaja, Kondane, etc., and a solution was partially sought at Bedsa by introducing a verandah deeper in the rock. Tradition, however, persisted in retaining the large *chaitya* window above the doorway, which necessarily makes the verandah to be very high, thus reducing its effectiveness in warding off sun and rain. The next solution sought was crude and ugly; it is the intro-

duction of a screen wall in front of the verandah retaining a large mass in the screen wall with rectangular spaces cut in them to allow light, as seen in the partly collapsed front of the Karle *chaitya* hall and the well preserved front of the *chaitya* hail at Kanheri. It is probably in this *chaitya* hall in Leṇyadri that a better solution has been sought out, by reducing the height of the verandah, in which the practical need of protection from sun and rain is served and the aesthetic appeal and majesty of the Pillared front is retained. But now the casualty is the *chaitya* window, with attendent delinquencies in the treatment of the interior. As the doorway became the only source of light to the interior hall, however lofty it could be, it could shed light to a limited area only. One can see easily in this *chaitya* hall that even the capital of the *stūpa* is ill-seen and the vault roof is plunged in semi-darkness. The elevating effect that a devotee could feel by a shed of light from the *chaitya* window falling directly on the holy object of worship—the *stūpa*—bringing it out prominently from the abyss of the aisles behind pillars, can not any more be experienced here. In this the architectural delineation of this *chaitya* hall suffers a set back. However, the general treatment of the facade and the interior, particularly the well-proportioned pillars in line are appealing. The sculptural work is poor in details, but good in total effect, well in harmony with architectural members. But somehow or the other the same care and interest has not been taken in the treatment of the blind-*chatiya* arch, and this mars to a great extent the good impression that this *chaitya* hall has the potential to create, particularly when viewed from a distance.

The nature of plan, the shapes of pillars and the introduction of stone-beams, indicate that this cave stylistically falls into a later stage than the Karle-Bedsa-complex, and with the retention of the vaulted-roof and the adoption of a low verandah this stands between the vault and flat-roofed *chaitya* halls. It can be construed that the Manmodi *chetiyaghara* 2 (of Bhimashankar group) which has the same frontal features as this with the pillared verandah and the blind *chaitya* arch continues the tradition of the present *chetiyaghara*. But in the delineation of the interior Manmodi 2 marks an advancement, wherein the vault roof and nave-aisle divisions, which had become functionless and redundant due to the omission of the large true *chaitya* arch, have been done away with completely, making the interior into a simple rectangular flat roofed hall, placing a low *stūpa* directly opposite the front doorway.

An inscription carved on the back wall of the verandah states that this *chetiyaghara* is the donation of a single man (*ekapurisa*), Sulasadata son of Heraṇika of Kalyāṇa. The characters are of Series V A and hence datable to the first half of the 2nd century A.D.

## CAVE 7 (FIG. 32; PL. 73)

This is the largest excavation among the whole of Junnar monuments and probably one of the well-wrought of the whole of Deccan excavations of the period.[31] This is a *leṇa* of Type B iii b consisting of a hall surrounded by cells and a pillared verandah in front. It is located by the side of the *chaitya* hall, but is about 4.5 m higher up. The approach is now by cut-steps starting from the floor in front of the *chaitya* hall 6 and leading into the court in front of the *leṇa*. Originally, however, there must have been a separate approach a little to the front, as there is sufficient indication to show that much of the front court has now collapsed.

The hall is large (17.37 m l, 15.54 m d, 3.38 m h), and its walls have traces of plaster and painting. A bench (53 cm b, 45 cm h) runs all round the hall along the three inner sides. At the level of this bench the doorway to the cells open. There were 20 cells in all, seven in each of the side walls and six at the back. These cells vary in size from 2.4 to 2.7 m in depth and 2.1 and 2.4 m in breadth. They are about 2.1 m high and all, except the 2nd of the left and 2nd and 7th on the right which are smaller cells, have a bench (about 80 cm h, 70 cm b) cut along the back wall. The doorways (45 cm w, 1.8 m h) of the cells are rectangular. There are three doors to enter into the hall from the verandah, a larger one at the centre and two smaller ones on the sides, and two large open rectangular windows are cut in the plain wall between the doors. The central doorway (2.24 m b, 3.4 m h) has a flat *Śakhā* all round. The side doorways (about 80 cm b, 2.1 m h) are plain. The left window (1.8 m b, 1.2 m h) midway between the left side door and the main door is at head level. The right window (1.8 m l, 1.17 m h) is also similarly placed.

The verandah has six pillars and two attached ones rising from a low bench (48 cm b, 40 cm h) in front. The bench runs as usual in two parts on either side up to the side walls from the central pair of pillars, with a gap in between them, from which a step leads down to the open court. These benches have a low screen of sloping back. The pillars are of the pot-and-animal-capital type. They do not have any base (D V b) The octagonal shaft rises straight from the bench and carries the capital with the inverted pot with neck and rim and then a square plate and then the *āmalaka* member surmounted by the inverted stepped pyramidal dosseret consisting of five concentric square plates of increasing dimensions. These pillars carry a huge architrave. Above the abacus, in front of the architrave are animal sculptures of lions, bulls, tigers, and elephants with riders. On the inner side of the abacus also similar sculptures were intended to be carved; uncut blocks exist there. The verandah ceiling is marked with stone beams and the ends of these are shown as projecting to the front of the architrave forming the eave. The face of the eave is carved with series of knobs on a plain member looking like the barge board fitted with nails, and above this is a string course of railing pattern. The overhanging rock projects further to about a metre from this.

The basement is also sculptured. The back of the seat above the benches has the railing pattern. Below this, the basement has parallel vertical studs in relief. It appears this basement ran below the present ground level, which is now paved. In the open court there were five cisterns in a line.

In the treatment and disposition of the different architectural members, particularly the pillarless hall with a low bench around and cells, and the way in which the verandah is made with pillars rising from backed-benches and the shape of the pillars and animal sculptures and even other minor details of the facade, this *leṇa* resembles *leṇa* 3 at Nasik. Stylistically these two are very close, and would probably belong to the same age. Further the *chaitya* hall by its side (6) has exactly similar decoration and pillar types by which these can be securely considered as contemporary works. The relative location of this *leṇa* and *chetiyaghara* again follows the pattern found at Kondane, etc. As it is in the case of Kondane and many other *chetiyaghara-leṇa*, complexes, these too might have been the result of a single design and thus belong to the same age. Then this cave too belongs to the first half of the 2nd century A.D.

### EXCAVATION 7x

Next to 7 at a lower level is this open cistern.

### EXCAVATION 7y

By the side of 7x is a wide recess (2.7 m b, 1.2 m d, 1.8 m h) with a bench at the back. This is a view seat.

### CAVE 8 (FIG. 32)

This is a *leṇa* of probably Type A iv b, and has a cell and a recess at the back of a hall. Half of the hall is ruined, as well as probably the verandah which could have existed once. There is a small open window to the right of the cell door. The door too is broken. Both the cell and the recess have a bench-in-recess. There are two holes on opposite walls of the cell, meant for the *valaṇi*.

### CAVE 9 (FIG. 32)

Next to cave 8, and entered through a door cut in the right wall of the hall of cave 8, the original entrance being ruined due to the collapse of the front rock, is this cave which appears to be a *maṭapa* of type A i.

This has a large benchless hall (9.5 m b, 7 m d, 2.7 m h) led into by a doorway (1.8 m b, 2.7 m h) in the middle and a small door (2.7 m b, 2.6 m h) to left. There are two large open windows, one on either side of the central doorway. The windows, which are at waist level measure about 1.2× 1.5 metres. The verandah (9.6 m b, 1.6 m d, 28 cm h) has its floor about 60 cm lower than the level of the hall floor and the doors are approached by steps. There were four pillars in front of the verandah, but all are ruined. A few remnants sticking to the floor and roof, indicate that they had stepped pyramidal

base and capital. This does not have the benches seen usually in *bhojana-maṭapas*, but this could not have been a *leṇa* for dwelling due to the absence of cells. Further, the large open windows at waist level without any covering would indicate that this might not have been used for living purposes. This could be a *maṭapa*, serving as a rest-hall for travellers.

The low height of the verandah and the pillar type probably indicates the cave to be of a later date.

CAVE 10

This cave to the left of 9, is at a higher level and is difficult of access. This is a *leṇa* of type A iv similar in plan to caves 1 and 2 with some minor additional features. The verandah in front is broken, but it appears that it was 6.7 m wide, with a low bench along the back wall to the right of doorway returning along the right wall. The back wall is pierced into by a central doorway (1.35 m b, 1.93 m h), now broken, with an open window (63 cm sq) on each side at head level. The doorway leads into a narrow hall (6 m w, 1.5 m d) with a bench (75 cm h) in a recess (68 cm b, 1.2 m h). The cell to the right has a bench-in-recess (68 cm b, 2.1 m l, 1.2 m h). The recess (68 cm b, 2.1 m d and h) to the left on the back of the hall has a seat (83 cm h) at its back.[33]

CAVES 10a AND 10b

A little further from 10 is a featureless cistern and a small recess provided with a bench. The latter is a view seat.

CAVE 11 (FIG. 33)

Moving west along a difficult ledge from the above is this cave with a large plain hall and a cell consisting of a bench-in-recess.

The cell appears to be an after thought, and it is likely that originally this cave served as a simple rest hall (*maṭapa*, Type A iii).

CAVE 12 (FIG. 33)

This cave, is adjacent to cave 11 but difficult of access.

This is a *leṇa* of hall-cell-recess-verandah type (Type A iv b) as seen in caves 1, 2 and 10, but posses-ses some extra features in inserting more bench recesses and a window.

The front part of the verandah (5.8 m w, 2.4 m h) is broken. In the back wall of this near the right corner is a bench (90 cm h) in a recess (1.7 m l, 75 cm b, 1.2 m h). In the centre of the back wall is the plain doorway (90 cm w, 2.1 m h) leading into the hall. To the left of the doorway is a small open window (45 cm sq) at head level. The hall (3.9 m b, 1.7 m d, 2.2 m h) has a bench-in-recess (1.6 m l, 78 cm b, 1.4 m h) 75 cm above the floor in the right wall.

In the back wall of the hall to the right is a cell (almost 2.1 m cube) without any bench. To the left is the recess (2.6 m d, 95 cm b, 2.1 m h) with a bench-in-recess (1.8 m l, 75 cm b, 1.2 m h) 70 cm high up the floor.[34]

CAVE 13 (FIG. 33)

A little to the west of 12 is this *leṇa* with its plan same as above, but is larger and better preserved with all the members of the architectural design extant in a recognizable form.

As usual this has an inner cell and recess at the back of the hall, a front verandah with two pillars in antis, behind and open court. The hall (3.8 m b, 2.3 m d, 2.1 m h) has a long recessed-bench on either of the side walls about 60 cm above the ground level. In the back wall to right is a benchless cell (1.9 m b, 2.1 m d and h) with a rectangular doorway. To the left is the recess (3.1 m d, 1.7 m b, 2.1 m h) with an 'L' shaped bench-in-recess running along the right and back walls. To the left of the central doorway of the hall is an open window (60 cm sq) cut at head level, almost near the ceiling.

The verandah (5 m b, 1.2 m d, 2.1 m h) has along its right wall a bench-in-recess (1.2 m l, 75 cm b, 67 cm h) about 90 cm above the ground level. In front of the verandah there were two pillars and two pilasters, disposed in such a way to have a pillar and pilaster on either side of the entrance, raised on a

low bench (40 cm b and h) with a sloping back. The pillars and the left pilaster are lost. But there is enough indication to show that the pillars were octagonal shafts. The right pilaster is rectangular in section and still retains the hour-glass decoration. However, with these extant features the original shape of these members can be reconstructed on the analogy of cave 2 described above. A little of railing decoration which once adorned the back of the bench is still seen near the right pilaster. The front open court was about 45 cm lower than the verandah and is reached by a flight of two steps. The slabs are thin and slope down to the 1st raiser and end up with rectangular humps jutting out to front. The hour-glass pattern on the pilaster is of interest; this and many others features remind us of those present in cave 2.

To the right of the front court is a ruined cistern-in-recess.

## CAVE 14 (FIGS. 33, 8 (4) )

By the side of 13 is this neatly executed architectural work.

This is a flat roofed *chetiyaghara* of type A ii, consisting of a hall and a pillared verandah. The hall is rectangular (6.75 m d, 3.93 m w, 4.16 m h).[35] The *stūpa* (base diameter about 2.6 m) is placed about 3.3 m back from the doorway, thus leaving a space of about 80 cm at the back and 50 cm on the sides. The *stūpa* (Pl. 74) is an excellent piece of workmanship. The cylindrical drum is raised on a socle of 3 steps and its brim is decorated with railing pattern. The *aṇḍa* is a low 3/5 sphere. Above this is the square *harmikā*, decorated with railing pattern, carrying an inverted stepped pyramidal abacus. Above, rising from the centre of the top flat plate is the umbrella carved completely in stone, consisting of a low circular staff carrying the large circular canopy which is cut in the flat roof.

The doorway in front of the hall is large (1.5 m w, 3.6 m h). This is the only source of light into the hall. It is plain but cuts have been made in the threshold and jambs for fixing the door frame. The verandah in front is 6 m broad and 80 cm deep. The flat roof above this is at a lower level than the roof of the hall, the roof being only 3.9 m high. In front of the verandah were two pillars in antis. The pillars are ruined but part of the base of the left engaged pillar extant now has square pyramidal base with four steps, and one of the pillar stumps hanging down from the roof has a similar member below which is part of the pot-capital but without animal sculptures. From these indications it can be made out that the pillars of the present cave were of Type D vi a, similar to the pillars in 1, 2, etc., in the Manmodi group at Junnar. The pillars carried a very heavy architrave. In the projection of the verandah roof, jutting out to the front from this architrave, stone beam ends are carved. The projecting *chajjā* is parlty ruined, and the original delineation of the front can not be made out. The front of the verandah basement which is also ruined retains in some portions part of the decoration consisting of vertical struts set parallel to each other as seen in *leṇa* 7 of this group.

The front court is about 90 cm below the level of the verandah floor, and is approached by a staircase with four steps. On either side of the steps is a side slab of the usual sloping type with projections to front and sides.

Any mathematical formula, if at all adopted in the making of the cave, might have been followed only to a certain extent, without being meticulous as to the correctness, but satisfied more by visual proportions of different members then actual measurements. The dimensions given above do not reveal any cogent relationship with each other. However, the depth of the hall is more than the width. Leaving the area occupied by the *stūpa*, the area meant for the congregation is almost square. The height of the hall is a little more than its width, say by 1/10th part. The verandah roof is lower than the hall roof by about a foot. The width of the verandah is arranged in such a way as to be divided into three equal parts, the central one occupying the passage, and the two benches occupying the same width on each side of that. This dimension is again $2\frac{1}{2}$ times the depth. The height of the verandah is again about 5 times its depth or 2/3rd of the length. The door of the hall occupying the central 1/3rd is again fashioned in such a way that its width is half the height.

Architectural evidences help to fix the relative age of this *chaitya* hall. It has already been shown elsewhere how the *stūpa* form in this marks a stylistically successive stage to the *stūpa* in cave 6, in casting

off finally the only wooden appendage which used to remain with the *stūpa*, the umbrella, now replacing even that in stone. However, the fact that this *chaitya* hall, even though of later type, is not far removed in date from cave 6 and its contemporary *leṇa* cave 7, is seen in the form of the verandah, with the pot-base pot-capitalled pillars and the retention of the decoration of the front of the projecting cave. The difference due to the age, however, is marked in the omission of the decorative *chaitya* window and the animal sculptures on the capital of the pillars. In these respects this *chaitya* hall is nearer to *chaitya* hall 2 in Manmodi-Bhimashankar.

It appears that this *chetiyaghara* and the neighbouring *leṇa* 13 are contemporary works. Both of them have verandahs of same type including the common details in the disposition of pillars (2 in antis), the decoration in front, the railing on top, and the vertical struts on the basement. The common pattern of the side slabs of the staircase again brings these two excavations to proximity in style and age. From the clue of the use of hour-glass pattern seen on a pilaster of the *leṇa*, etc., it can be made out that this *chetiyaghara-leṇa* set (caves 14, 13) belongs to *c.* late 2nd century A.D.

An inscription carved on the back wall of the verandah of this *chaitya* hall records, that this *chetiyaghara* was a donation by one Tāpasa-upāsaka son of Kapila-upāsaka. The characters of this inscription are of developed type compared to what has been used in the inscription in *chetiyaghara* 6. The present inscription belongs to Series V B, and provides further substantiation to the date inferred from architectural grounds.

CAVE 15 (FIG. 33)

Next to 14, but at a higher level, is this *leṇa* of Type A iii with a single cell, a hall and a broken verandah.[36]

All the caves after 15 are along the precipitous ledge and are difficult to approach. The front portions of all these have collapsed.

CAVE 16 (FIG. 34)

This is at a higher level than 15 and consists of a cell with a bench to right, and a verandah or hall (3.6 m b, 2 m w) in front. The front is broken.

CAVES 17, 18 AND 19 (FIG. 34)

These three were once separate excavations, but share a common verandah now being connected by cutting off the partition walls of the verandahs and chiselling their back wall evenly. It is likely that sometime when these caves were still in use, the front portions of these collapsed and some structural additions to the verandah were made. There is a row of sockets 35 cm square and 30 cm deep at about 1.8 m in front of the back wall of the verandah and these might have received wooden posts which carried the roof in thatch. Some holes on the upper portion of the roof are also seen. It may be at this stage that the rough surfaces were chiselled and the three caves were brought together.

Cave 17 was originally a *leṇa* of A iv b type, with a hall, a cell and a recess. There are two rectangular windows one on either side of the hall doorway. A small window was also there to the left of the cell door to allow light and air to the cell. All these windows are at the head level. There is no bench in the cell, but the recess has one at the back wall.

Cave 18 is similar in contents to cave 17, but a bit longer. The recess, however, is deeper and the cell door opens from the recess and not from the back wall of the hall. Both the cell and the recess have a bench-in-recess along the back wall. There are no windows in this.

Cave 19 is the largest of the three of this group and is somewhat different in its plan. It consisted of a large hall (7.6 m b, 4.8 m d, 2.2 m h) with a low bench (60 cm b, 55 cm h) along the right and left walls. There are two cells, both cut in the back wall, side by side. Both the cells have a bench along their back walls. The doorways are narrow, rectangular and featureless. There is a small square open

window at head level on the front wall of the cells to the left of the doorway. A small bench-recess (1.1 m l, 80 cm b) is cut at either end of the back wall of the hall.

The doorway of the hall (1.7 m b, 2.2 m h) is now broken. The floor and roof of the hall and verandah are on the same level throughout, being about 2.3 m high. The cells are low being only about 2 m in height.

EXCAVATION 20a (FIG. 34)

To the left of cave 19 is a large water cistern with a square mouth in a recess.

EXCAVATION 20b

This is just the beginning of an excavation next to the cistern.

EXCAVATION 20c

This is another cistern with its mouth in a recess. It is interesting to note that the recesses (20a and 20c) are cut in the present vertical face of the rock, which suggest that the collapse of the rock and cave fronts referred to above in connection with caves 17-18-19 must have occurred before the making of these cisterns.

Excavation 20a and 20c have inscriptions on the back wall of the recess. Palaeographically these inscriptions belong to Series V B. One of the cisterns is a donation by the guild of goldsmiths of Kalyāṇa.

EXCAVATION 20d

This is a large featureless cistern.

CAVES 21, 21a, 22 AND 23 (FIG. 34)

All these share a common front projecting roof.

Cave 21 is a large hall (about 9 m d, 7.4 m w, 2.1 m h). There are no cells but a low bench (48 cm b, 35 cm h) runs along the three inner walls. The front wall is pierced into by a central doorway (1.7 m w, 2.1 m h) and two windows (1m b, 85 cm h), one on either side at head level. The doorway was approached from the front by a flight of four steps, and on either side of this along the walls was a low bench. The benches as well as the steps are broken.

This is probably a dining hall (*bhojana maṭapa*) with long seats provided for monks to sit. It is interesting to note that a large cistern of A ii type, 21a, with a capacity to hold abundant water is cut to the left of 21. The mouth of this cistern is rectangular and is in a recess.

Next to this under the same front roof are two more excavations 22 and 23.

22 is a cell (1.8 m l, 2.4 m d, 2 m h) with a bench-in-recess in the right side and a small cistern with its opening in the left corner inside the cell near the front wall. The making of a cistern within the cell is peculiar (see below).

Next to this is 23 which is a hall (4.9 m w, 3.6 m d, 3 m h) with its front completely open. There is a low bench (2 m l, 35 cm b, 32 cm h) starting from the back wall, and covering only a short distance along the left wall. There is a large groove in the ceiling running from the right to the left wall at a line just to the front of the bench. This however, is a peculiar arrangement not seen in any other caves.

EXCAVATIONS 23a AND 23b

These are two more cisterns-in-recess situated side by side a little to the west of cave 23.

CAVE 24 (FIG. 35)

This cave with broken front appears to be the back part of a *leṇa* of the type of A iv a or b. Now a recess and a cell remaim. The cell opens from the left wall of the recess and has a bench along its right wall.

CAVE 25 (FIG. 35)

This too is broken, but a cell at the back and an open verandah in front still remains. In the verandah, to the right, is a bench-in-recess. There is a similar bench in the cell also.

CAVE 26 (FIG. 35)

This is an excavation with a very large verandah with its back wall having recess benches at either end. In the centre are a deep recess and a cell with bench at back, in the middle. The verandah is usually large (10.2 m l, 1.2 m d). The front is broken.

An inscription (No. 25) on the right wall near the bench records that this was the donation made to the *saṁgha* at Kapichita by a person named Sivabhūti.

Ordinarily this cave could have been considered to be of A iv b type, with part of the hall and verandah broken. But the presence of the inscription on the front wall indicates that this itself was the front portion of this cave. No where in Deccan excavations inscriptions are seen carved inside the hall. They would have served no purpose in such a dimly lit place. There are many instances of incising inscriptions in the verandah, where sufficient light is available and the writing could be easily read. Here also such could have been the case; the present hall itself must have been open in front, which means that there was no verandah. Hence this can be considered as a representative of *leṇa* Type A iv a.

The inscription belongs to Series V B.

CAVE 27 (FIG. 35)

The essential components of this *leṇa* are the same as its neighbour 26. But there are a few changes, and hence could be considered as a variant. The front portion of this is also broken, but the open area in front of the back cells is wide about 5.9 m. It is at present 1.1 m deep and 2.4 m high. There are two cells cut in the back wall of this hall, and in the broad wall space between the two cells, under the ceiling, a smoothened space (about 60 cm l, 30 cm h) has been prepared probably for an inscription. There is, however, no inscription but the very intention for such an inscription to be in that place suggests that this too had an open hall like the one in cave 26 described above.

The cell to the left (2.4 m sq, 2.1 m h) has a bench-recess at the back. The cell to the right (2.4 m sq) has a recess (2.4 m d, 90 cm b) to right cut in the back wall with a recessed-bench along its left wall. To the left of this *leṇa* is a small recess.

After walking along a narrow ledge further west from the above, a few more excavations in a line are met with. These are very difficult of access.

EXCAVATION 27x

The first among these is a large broken cistern.

EXCAVATIONS 27y AND 27z

About 3 metres further are two recess-benches probably meant as open seats.

CAVE 28 (FIG. 35)

A broken door cut in the left wall of the open space in front of 27 leads to the open verandah of this cave. This cave is identical in plan with 26, except for the fact that there are three recessed benches, one along the left wall of the verandah (8.2 m b, 1.7 m d, 2.1 m h), one along the right wall of the cell and another in the back wall of the deep rectangular recess.

There are old paintings on the walls of this cave.

CAVE 29 (FIG. 35)

About 5 m further west is this unfinished excavation which is almost inaccessible.

This has an open verandah with a cell at the back. In the left wall of this is a natural cavity caused due to the erosion of a weak rock band running here.

CAVES 30 AND 30a

About 12 metres below cave 6 is a simple cell and further to its east is a large featureless cistern.

## *EASTERN GROUP*

CAVE 31

Along the eastern face of the spur of hill about 500 metres away from the above group is a solitary excavation.

This consists of a cell with an open verandah in front (Type A ii). A bench is cut along the left wall of the verandah. There is a cistern to the left of the cave.

Moving further for about 500 metres from the above, the steep south face of another spur of hills is reached. Here are some excavations cut into the vertical scarp facing S-SW. The following numbers are given from west to east.

CAVES 32a, 32b, 32c AND 32d (FIG. 35)

All these shared a common open court, which is now almost collapsed. The first one 32a is on the left wall of this open court and is a simple cell (1.8 m d, 1.5 m w, 2.1 m h) without any bench. 32b, 32c and 32d are cut in the back wall of the open court.

32b is another simple cell of the same dimension as 32a. This has a simple bench along the left wall.

32 c adjacent to the above, is also a simple cell about 2.6 m square and is benchless.

32d is next to this and is a *leṇa* with a large hall and three cells. The hall is irregularly cut and can be described as rhomboid in plan (about $3.6 \times 3.6$ m).[37] The hall roof is about 2.4 m above floor level. There are two cells in the back wall and one in the right wall. All the cells are about 1.8 m d and 1.5 m w. The left cell is without a bench, where as the other two have simple benches along their right walls. All the doorways of the cells are narrow (53 cm w, 2.1 m h).

On either side of the doorway there is a small open window (53 cm b, 75 cm h) cut almost near the roof level.

There are no definite architectural features of comparable value in these excavations except the presence of simple benches.

CAVES 33a AND 33b

Both these are simple cells situated side by side, each having a small open verandah in front and a simple bench along the left wall.

CAVE 34 (PLS. 75, 76, 77, 78, 79)

About 40 metres further east of cave 33a and b, at somewhat a lower level is this excavation. This is a *chetiyaghara*[38], of the vault-roofed type, but unfortunately unfinished. This is 2.51 m w, 6.8 m l, 5.53 m h. The *stūpa* is 1.17 m in diameter and 2.84 m high and is placed about 4.67 m inside the doorway.[39] The walls and floor are unfinished and uneven. The aisles have not been begun at all and so there are no signs of pillars too. However the top portion is well-finished and has the triforium about 1.2 m high and the vault roof is further deep by about 60 cm. This vault is very shallow compared to the span and looks like 1/4th arc of a whole circle. The vault surface is smooth and does not have stone ribs and there is no indication that any provision for the wooden ribs had been made. The facade too is unfinished, except for the *chaitya* arch above the large architrave. The soffit of the *chaitya* arch is decorated with stone beams. There are two vertical jambs rising straight from the architrave on either

side of the interior of the arch. The front of the arch is finely decorated throughout with six petalled flowers.

The cave front looks like a rectangular alcove, the screen wall above described forming the back wall of this. On the side walls of the alcove, at a higher level, there are some good carvings.

(*a*) The left wall has on the top, a *chaitya* arch. This houses a *stūpa* with single *harmikā* and stone umbrella, and stands on a stretch of railing pattern. On either side at shoulder level of the arch again is the railing pattern.

(*b*) Below this are two *chaitya* arches side by side rising from another stretch of railing pattern.

(*c*) Below that is another *chaitya* arch rising from a stretch of railing pattern. This arch houses a tree in railing.

(*d*) On the right wall, the top decorations are similar to *a* and *b* of the left wall.

(*e*) Below this is the *chaitya* arch, but inside the *chaitya* arch is a sacred wheel with 24 spokes.

The outer face of the *chaitya* arch is decorated with an arabesque of triskelions.

This *chaitya* hall, though unfinished, deserves some special attention due to the sculptural work in which probably the earliest use of the arabesque pattern is to be seen and it is here that the tree-in-railing appears probably as a lone instance of this motif in Deccan art. It is difficult to make out the date of this cave but the profile of the main arch and the decorative arches, and the *stūpa* types in relief, are comparable to the decorative work in the Bedsa caves. Another point in similarity between the two is the existence of the front screen wall.

The decoration on the front face of the *chaitya* arch and the *stūpa* forms, however, bear closer resemblance to a cave at Junnar itself, viz. *leṇa* 12 of Tuljaleṇa group, with this are to be mentioned its near contemporary caves the *chetiyaghara* 40 and *leṇa* 45 of Manmodi, wherein again decoration of comparable style occur. It may be noted further that the present *chetiyaghara*, is also one that follows the same plan as Manmodi 40, in the inclusion of the stone screen wall but the absence of the verandah. So architecturally this *chetiyaghara* can be bracketed with Manmodi 40. This makes the present cave to be the earliest architectural attempt in Ganesh Pahar. But the cave is left unfinished.

## GENERAL DISCUSSION

The stages of development of the monastic establishment on the Kapichitta hill can best be understood if the caves in the major group (1-30) and the Eastern group (31-34) are taken seperately for consideration.

Among the isolated ones the possible place of cave 34 in the sequence of the evolution of *chetiyagharas* has already been described as near Manmodi 40. With the occurrence of such motifs as the *chaitya* arch and *stūpa*, in decoration this has the tradition of Bedsa-Karle *chetiyagharas*, but precedes those and fall nearer to Manmodi 40 in the feature of the plan where the verandah is still wanting. The *leṇas* 31-33 do not have any specific architectural features of comparable value except for the occurrence of simple benches. But these can be generally said to belong to the time of *chetiyaghara* 34 itself. But all these are simple *leṇas*.

The excavations of the main group fall into five categories.

| | | |
|---|---|---|
| *Chetiyagharas*—Two | : | 6 and 14 |
| *Leṇas*—Twenty-two | : | 1, 2, 3, 4, 5, 7, 8, 10, 12, 13, 15, 16, 17, 18, 19, 24, 25, 26, 27, 28, 29, 30. |
| *Maṭapas*—Three | : | 9, 11 (21-23). |
| *Pāniyapoḍhis*--Ninteen | : | one each associated with caves 1 and 5a, five associated with cave 7, 7x, 10a, one associated with cave 13, 20 a-c-d, 21a, one inside cave 22, 23 a-b, 27x, 30 a. |

View-seats (recesses)—Seven : 2a, 5a, 7y, 10b, 20b, 27y-z.

Among these the view-seats can not be dated to any period definitely, except that generally they fall within the time bracket to which the caves of this group belong, and it is so with the cisterns also. However, among the cisterns, leaving thirteen featureless ones, five others belong to a single variety falling

under the 'mouth-in-recess' type and most of these would probably go with the major caves with which they are associated.

It has been described above how *chetiyaghara* 6 occupies an important position in the evolutionary sequence, marking the last stage of the early vault-roofed ones and paving way to the development of the simple flat roofed ones. The palaeographical evidence clearly sets the age of this to the 2nd century A.D. which is quite in accordance with the architectural data. The simple flat-roofed rectangular *chaitya* hall 14 probably represents the most perfect architectural form suited to the medium of live rock, a form that has been achieved ultimately after a long process of experimentation.

The Ganesh Pahar *leṇas* fall into three main groups ·

(*i*) Single celled *leṇas* (Type A)

(*ii*) Cells-around-hall type (Type B iii)

(*iii*) Cell-recess behind hall/verandah type (Type A iv)

Six *leṇas* (3, 4, 15, 25, 29) are of the first type. All these have a verandah in front of the dwelling cell, and are entered by simple rectangular doorways, which usually have cut lintel and threshold ends for wooden frame. Except cave 29 which is unfinished all the others have a monk's bed of the bench-in-recess type. This bench-type indicates that they belong to a much later period. Minor elements like the panelled decoration on the bench in 3, the stone-cut basin on the bench 4, further points towards the same chronological position, as such things are noticed only in caves of 2nd-3rd century A.D. as in Mahad and Kanheri.

Caves 5 and 7 are of the well-known 'cells-around-hall' type. These *leṇas* generally have some regular architectural features like verandah with pillared front, the pillars of the pot-base pot-capital variety, the backed benches decorated with railing pattern on the outer side, the vertical struts on the basement and railing decoration on the entablature.

The relative position of 6 and 5 shows that 5 is earlier than 6, if 6 and 7 are contemporary 7 too would be later than 5. But due to the common pattern of the two caves these may not be far removed in date from one another.

The third group has thirteen *leṇas*, further divisible into two sub-types. The *leṇas* of first sub-group (1, 2, 8, 10, 12, 13, 17, 18) display uniform plan, their essential parts being a cell and a recess at the back, a hall in the centre and a verandah in front. This is a new plan not met with anywhere hitherto in any of the groups of Junnar described above. The date of this *leṇa* type could, however, be decided on the basis of the pillars used in some, of the pot-base pot-capital variety without animal sculptures, and hence are probably coeval or only a little later than the 2nd type described above. This position could be postulated with some degree of certainty with regard to only one cave in which the pillar type could be made out, *i.e.* with reference to cave 13. But there is one more item on the basis of which the same corralation could be extended. The pilasters in cave 13 just have rectangular cross section and one of them bears the hour-glass decoration. This type of pilaster exists in 1 and 2 also and cave 2 further has the same type of hour-glass decoration and these should be considered again falling within the general type group. Caves 15 and 19 are different from the above but they are the only examples of their type and are devoid of comparable architectural features, except the presence of the bench-in-recess in them. However, 19 could be considered as a variant of Type 2 of Ganesh Pahar and cave 15 as that of Type 1.

Four *leṇas* (24, 26, 27, 28) have the same elements, the cell with a deep rectangular recess by its side, cut in the back wall. Here the verandah is absent but the hall itself would be spacious. These can be considered as a sub-group of the 3rd type. These are bereft of any clear architectural item of comparable value, and hence their relative position as to the age cannot be fixed on this ground. However, the inscription in cave 26 belong to Series V B a. Further comparison shows that this particular inscription falls in somewhat a later stage within the series. This sub-group may have been of later date than the first.

Nothing definite can be said of the date of the *maṭapas* 9 and 11, but these being accessories to the major caves must necessarily be of a date most probably contemporary to the later ones by which time the need for these may have grown.

Basing on deductions from stylistic analysis done above and on relative locations, the architectural activity in Ganesh Pahar main group may be put in a sequence as follows :

5

6, 7

8, 9, 10, 11, 12

16, 17, 18, 19, 20, 21-23, 24, 25

26, 27, 28, 29

13, 14

1, 2, (3-4)

Palaeographical evidence suggests that the earliest excavation of 5 and 6 (and 7) could be dated the early part of 2nd century A.D. and that most of the excavations were done within that century. Except the inscriptions in caves 5 and 6, which are of Series V A, all others belong to palaeographical series V B. On architectural data caves 13 and 14 and 1-2, and probably 3-4 too, are to be placed to about the latter part of the 2nd century A.D. So it appears that Ganesh Pahar displays almost a continuous activity of hewing of caves throughout the 2nd century A.D.

It is of interest to note that the *chaitya* hall 6 which served the monks living in *leṇas* 5 and 7, is a very small one with a capacity for accommodating about 20 to 25 persons only. The *leṇas* judging from the benches in them, could have housed 27 monks. It is likely that this *chaitya* hall which was donated by a single person (See p. 163) was meant more for the monks who lived in this distant settlement. When the establishment grew with the *leṇas*, with an additional capacity to accommodate more monks, another *chetiyaghara* was made.

The monastic establishment in Ganesh Pahar has its own peculiarities. Like the Manmodi, this too has certain individuality. Probably, to start with, the establishment was just meant to accommodate monks. But gradually it appears to have attracted special attention and developed in a distinctive way; the course of development being the result of the attitude of the monks to compromise their rigorous codes of living by responding to the pious care bestowed on them by the laity.

Though epigraphical records, which are the most articulate of the sources do not mention much, the architectural development itself reveals such tendencies. In Ganesh Pahar such tendencies are easily recognisable in the monuments that were created in the latter part of the 2nd century A.D. and later.

Caves 21, 21a, 22 and 23, are of some interest in this regard. In their plan and arrangement they are peculiar and do not conform to the well-known types but they provide some clues. All these four caves share a common projecting roof and hence may have been made to serve a common purpose. On the basis of plan and seating arrangement cave 21 has already been described as a *bhojana-maṭapa*. It has the capacity to seat about 40 persons. To serve this huge number of diners much water is needed and that has been provided in the large cistern 20a. This is probably the largest water-cistern in the whole of Ganesh Pahar group. The next one, 22, which is a small room with a doorway and a recessed bench was probably the store room, and to facilitate servers a water-cistern is also dug within the hall of the cave. The next open hall with a low bench covering only part of the hall has neither the features of dwelling cave, nor of a dining hall. This might have served as the kitchen. The whole set of this cave group can not be explained in any other way. If our explanation is correct, here in Ganesh Pahar is seen for the first time an attempt to meet the complex needs of the monastic community by hewing separate caves for different purposes. It may be noted that even though *bhojana-maṭapas* have been made in many places, no where else is clear indication of any associated kitchen. This would naturally indicate that the food must have been brought from elsewhere and served in the *bhojana-maṭapas*. But in the present monastery, it appears, complete arrangements had been made even for cooking. Probably this happens to be the only rock-cut monastery of the period which had this

facility of a refectory with all necessary accessories. The hall is large enough to accommodate all the monks residing in the monastery to dine together, a feature not noticed normally in other examples.

The difference in architectural types of the earlier and later periods probably indicates that the life in the monastic establishment was becoming easier. The large number of simple recesses with bench (view-seats) overlooking the beautiful valley in front is probably another attempt made here to facilitate monks to relax themselves.

The *leṇa* types are all the more revealing. While earlier many monks used to be crowded in the *leṇas* of cells around hall type (caves 5, 7), later it appears each individual monk was provided with a cave for himself. These caves of A iii a and A iii b types (caves 8, 10, 11, 12, 13, 15, 17, 18, 19, 24, 26, 27, 28) possess a cell each with a stone bench for the resident monks. But along with this they also have a large hall and a deep recess (half-cell). What could have been the need for such extra accommodation for one monk ? These should have been made certainly with a purpose. Ganesh Pahar is the only group having such a special architectural variety in such number together, and this monastic establishment may have had some function in addition to serve as simple residences for mendicants. If permitted to make a guess, it can be suggested that each one of these units was meant for a monk who lived in the cell and met persons in the hall and had his own possession to be preserved in the recess—may be for a teacher having a good number of books, etc., meeting a body of students. It is known that many monasteries of later times served as educational institutions too, and this feature may have begun in the stage represented in architecture here in the caves of cell-recess-hall type. But unless and until this contention could be substantiated by other positive evidences, it is better to treat this opinion with reserve.

Architectural activity in Ganesh Pahar ceased by the first half of 3rd century A.D. There is no evidence to show whether this monastery in Kapichita was in use in later times or not.

## SIVANERI

The Sivaneri hill is about 3 kilometres west of Junnar town. This is a huge flat toped rocky mass with steep sides rising for about 100 metres above the plain. The remains of the famous fort of Sivaneri, the birth place of Sivaji, is on this hill. The caves are clustered in six seperate groups (i-vi) hewn all round the hill in different heights.

### *GROUP 1*

This group which is the one approached first along the path leading from the town to the Sivaneri fort is near the base of the eastern scarp of the hill. The caves face east and are numbered from south to north.[40]

#### CAVE 1x

High up on the scrap is that appears to be a cell with no means of access now, as the steps and path are broken.

#### CAVE 1

A little to the north of 1x is this *leṇa* of Type A if which has a cell (2.3 m sq, 1.8 m h) and an open verandah (3.6 m w, 1.5 m d, 2.1 m h). The cell doorway (75 cm b, 2.1 m h) has vertical chases cut on the jambs. There are a number of catch-holes in various places on the wall probably meant to afford plastering and painting.

#### EXCAVATIONS 1a, 1b

These are two broken cisterns between caves 1 and 2.

CAVE 2 (FIG. 36; PLS. 82, 84)

This is a simple flat roofed *chetiyaghara* of type A ii b, with a hall (5.9 m sq, 3.3 m h) opening through a broad doorway (1.7 m b, 2.36 m h) into a front verandah (5.1 m b, 1.2 m d, 3 m h) which has two pillars in antis in front. The floor and roof of the verandah are about 40 and 70 cm lower than those of the hall respectively. The *stūpa* is placed about 3 m behind the doorway. It retains only the drum (1.5 m dia, 1 m h) raised on a socle of two steps. The sides of the drum slope inwards. On the flat top of the drum are three holes, a round one in the centre and two square ones on the sides, and some cuts at the edges. These might have been meant to keep in position the upper part, which was probably in brick. There are catch-holes on the walls and small round holes in the floor of both the hall and the verandah.

The pillars and engaged pillars are of the pot-based-pot-capital type, but without animal sculptures (Type D vi a). These have only 4 plates in the stepped pyramidal member both at the top and bottom. In the engaged pillars only one face of the octagonal shaft is attached to the wall and the rest jut out in full. An architrave carrying the roof runs on the head of the pillars.

In the form and disposition of these pillars, this *chetiyaghara* resembles exactly the *chetiyaghara* 2 on the Manmodi hill. But there is no intention seen here to carve the false *chaitya* window, which, however, occurs in Manmodi 2. This shows an architecturally advanced stage, wherein the useless member has been dropped out ot the scheme. Further, however, this can be comparad with Ganesh Pahar 14, with which there is a greater similarity. These may be very much near in date. In the present monument, however, it can be seen that the floor and the roof levels of the verandah are placed at a lower level than those of the hall, which appears to be an ingenious device to protect the interior hall from the effect of rain and sun, an exigency for which the Deccan cave cutters were trying to find a solution continuously.[41] This solution for the problem might have been all the more necessary in this cave, as this faces east, and the architects had to avoid the glare of the morning sun at the time of services in the chapel. Another point of difference between Ganesh Pahar 14 and the present one is that even the facade decoration is completely avoided here. It can be seen that the conflict between tradition and utility in architectural design seen throughout the architectural history of the *chetiyaghara* from the earliest times since its introduction with its vault-roof design came to an end finally; utility and economy of work have broken the traditional shackles. This psychological change on the part of the artists appears to have tempted them to avoid, even the hangover of the traditional but useless decorative motifs on the facade, the railing pattern, the projection of rafters under cave etc. The architecture has become more need oriented, except, of course, in the case of the still surviving pot-base-pot-capital pillars.

The proportions of the different part of the *chaitya* hall have also undergone change. The earlier rectangular shape of the hall has been given up in preference to the square. The *stūpa* too has become small, its diameter being almost 1/4th of the length of the hall and occupies the central position in the 3rd quarter lengthwise. The doorway is almost 1/3rd of the total breadth of the hall and 2/3rd of its height, thus allowing plenty of light into the hall, the shed of light covering a wider area, than the old fashion of spot-lighting the *stūpa* only. The breadth-length-height proportions of the hall is about 2 : 2 : 1. The proportion of the same in the verandah is roughly 8 : 2 : 5. The intercolumnation between the pillar and pilaster (centre to centre) is double the base-breadth of the pillars and that between the central pillars is three times the base-breadths. The base-breadth (*i.e.* the breadth of the lower most square plate) is double the diameter of the octagonal shaft.

CAVE 3 (FIG. 37)

Next to cave 2 is this cell (2.9 m l, 2.6 m b, 2.3 m h) with an open verandah (1.2 m b, 2.1 m h). The doorway (73 cm b, 2.1 m h) has vertical chases on jambs.

CAVE 4

This *leṇa* (Type B i) had two cells side by side sharing a common verandah. They are plain and without benches. The front and partition walls of these are broken.

A fragmentary inscription (Junnar No. 26) seen on the left wall of the verandah belongs palaeographically to series III.

CAVE 5

This *leṇa* located at a higher level had a cell (2.6 m d, 2.4 m b, 2.7 m h) and a verandah (3.2 m b, 1.8 m d, 2.7 m h). The doorway (71 cm b, 2.6 m h) has vertical chases on the jambs. There are catch-holes on the walls.

The cave has been much altered in recent years. The front is broken.

CAVE 6

An unfinished simple hall (4.5 m b, 3 m d) with a cistern to its right. This might have been intended for a *maṭapa*.

CAVE 7

A cell (2.1 m sq, 2 m h) with a plain rectangular doorway (71 cm b, 2 m h) opening into an open court (1 m b, 1 m l, 1 m d).

The doorway has vertical chases for wooden frame. There are some round holes in the cell floor.

CAVE 8

This is a *maṭapa* with a simple hall (4.9 m b, 5.1 m d, 2.4 m h) of trapezoid plan.[42] This opens into the front open court (4.3 m b, 2.1 m d) by a doorway (1.6 m b, 2.6 m h). There are vartical chases on the jambs and huge sockets at the ends of lintel and threshold suggesting the existence of a heavy wooden door. Catch-holes exist on the walls of the hall.

EXCAVATIONS 8a AND 8b

About 30 m beyond, to the north of the above, there are two broken cisterns.

EXCAVATIONS 9 AND 9a

Further beyond in a huge cistern (3.3 m l, 2.1 m w, 1.6 m d), wrongly described as a cell by Burgess, with its front and sides now broken. At the right end there were steps leading down to the water. This may have been a bathing cistern.

To the left at a higher level, there is a recess (9a) for shelter.

CAVE 10

This is a *leṇa* (B i type) with three cells in a line sharing a common open verandah (5 m b, 1.2 m d). There are traces of painting.

CAVE 11

This cave at a higher level is reached with much difficulty from a ruined staircase by the side of 8b. This is a cell with an open verandah. The cave is unfinished.

CAVE 12

On the same level as cave 10 is this excavation which is a single cell (2.1 m cube). The doorway and the front side are broken.

The cubical form of the cell is of interest reminding the single cells of early period, but the walls here are rough.

EXCAVATIONS 13a, b, c, d, e, f, g, h, i, j AND k

Towards north, along the same path and steps leading up to the fort from cave 12, there are 11 excavations at irregular intervals. All these are broken *pāniyapoḍhis* except 13 i and 13k which are unfinished recesses.

This huge number of cisterns along the path probably indicates that right in early times too the present, the path was being used to go up to the upper series of caves. The recesses in this position suggest that they may have been meant for travellers to sit and take rest.

CAVE 14

This is an open hall (2.97 m b, 2.74 m b, 1.8 m h) with a low bench (40 cm b, 22 cm h) running along the enrire length of the left wall (*maṭapa* of type B). This too might have been intended for the travellers to rest, before attempting the steep climb further up.

GENERAL DISCUSSION

The caves in group I at Shivaneri are bereft of any definite architectural element which is useful for fixing their age at least relatively with others or between themselves. In the making of these, it appears, the idea of utility and economy played a dominant role. However, *leṇa* 4 of B i type may be dated to the latter part of the first century B.C. on the basis of the inscription present there. *Leṇa* 10 too belongs to the same class typologically. *Leṇa* 12 with its cubical form is probably the earliest but of a later date than similar caves in Tuljaleṇa as the present one lacks the polish on the walls. *Chetiyaghara* 2 of the group, shows that this is later than Manmodi 2 and Ganesh Pahar 14. As the pot-capital-pot-base is still seen it is likely that this belongs to about the later part of 2nd century A.D. If the method of fixing doorway is any clue, caves 2, 5 and 8 having vertical chases cut in the jambs which is a speciality noticed in these only, may be contemporary works. The others might have come up later on.

There are altogether 8 *leṇas* in the group out of which one is unfinished. Seven are single-celled and two have 5 cells together, thus suggesting the strength of the group to a minimum number of 12 monks. All are without sleeping benches. For this small number the *chetiyaghara* is quite spacious, and even so are the *maṭapas* 8 and 14. Both these might have served as resting halls for travellers. The number of cisterns in the group is 24, which far exceeds the need of the resident monks and thus these also could have been meant more for travellers.

## *GROUP II*

This group of excavations is on the same eastern side of the hill as group I, but at a higher level.

CAVE 15

This is at a high level, impossible of access now, and appears to be just an attempt for a cave, but unfinished.

CAVE 16

This is a single cell (1.8 m w, 2.4 m d, 1.8 m h) located at the southern end of the eastern scarp of the hill. It has a bench running along the back and right walls. The front is broken.

EXCAVATIONS 17a, b, c, d, e, f, g, h

After cave 16 is a series of a cisterns, cut at indefinite intervals along a path running northwards up to cave 18 about 100 m away. All these cisterns are featureless and mosty ruined. The first five in a cluster appear to have been used probably in medieval times by breaking their sides and converting them to cell like shelters. 17f is a large open pond, probably a *Sananāpoḍhi*.

CAVE 18 (FIG. 36)

This is a double-storeyed cave.

The lower storey has a hall (7.4 m b, 7.1 m d, 2.7 m h) surrounded by cells and a verandah in front. There are ten cells, three each in the side walls and four in the back wall. All the the three cells of the left wall, the first of the back wall and two of the right wall are unfinished. The other cells are rectangular

with their measurements varying from 1.8 to 2.3 m in breadth and length and 1.4 to 2.1 m in height. The doorways of these cells are 73 cm broad and their height varies from 1.7 to 2 m. The floors of the cells are somewhat at a higher level than the floor of the hall. The hall opens into the verandah by a huge doorway (1.7 m b, 2.7 m h). There are two windows (1.2 m w, 1m h), one on either side of the doorway at head level with their upper side meeting the roof. The verandah (7 2 m w, 1.5 m d) is open and partly broken.

The upper storey is reached by a stairway opening from the right wall inside the hall of the lower *leṇa*.

This is a simple hall (6.3 m b, 3.2 m d, 2.1 m h) with an open verandah (7.2 m b, 1.6 m d, 2.1 m h) in front. There is no partition between the hall and the verandah, but a pilaster on the left side in front of the hall marks the division, and the front of the hall appears to have had a wooden screen, as mortises to receive the posts still survive in the floor along the line of the pilaster. This pilaster is rectangular in section and is decorated with the hour-glass design (Pl. 81).

An inscription (No. 27) carved on the upper part of the right front corner records that this is an *upaṭhāṇa*, a donation by two persons, Mudhakiya Mala and Golikiya Ānada of the *beṇajanas*. The use of the term *upaṭhāṇa* for the hall is interesting and would indicate its purpose as a sitting hall. The characters of the inscription belong to Series VI.

The palaeographical evidence is quite in consonance with the existence of the hour-glass decoration on the pillaster and may be grouped with similar sitting halls elsewhere and dated to about the first half of the 3rd century A.D.

## EXCAVATION 18a

To the right of 18 is this featureless cistern.

## CAVE 19 (FIG. 37; PL. 80)

This is an irregular open hall (4 m b, 2.7 m d, 2 m h). The back and side walls are not finished, but the front appears to have had a wooden screen as a row of three square mortises is there in the front. On the left wall near the roof level is a square niche with a relief representation of *stūpa* inside that. This *stūpa* is of an aberrant form and has a cut between the drum and dome and is bereft of the *harmikā*. This peculiarity may be due to either the unfinished nature or the ruined state of the *stūpa*.

## EXCAVATIONS 20 AND 21

These are two unfinished excavations both intended for a cell behind a verandah. In both, the verandahs are finished, but the cells are just begun.

## EXCAVATION 21x

About 50 metres further to the north is a broken cistern.

## GENERAL DISCUSSION

This small group II is not of much interest except for cave 18. It appears that this is the only double storeyed cave amongst the whole series of early Deccan caves.[43]

Out of the 16 excavations in this group three (15, 20, 21) are unfinished and nine are cisterns of no interest. Among the remaining four, one is a plain hall (19) probably meant for visitors to rest and the cave 18 also has a similar hall, and there are only two excavations *i.e.*, caves 16 and 18 (Lower storey) which were used for residence accommodating not more than 5 to 6 persons. There is no *chetiyaghara* in the complex. This group is on the way up the hills and naturally has a good number of cisterns and at least two rest halls. All these excavations may belong to about the 3rd century A.D. as suggested by the palaeograghy of the inscription and the hour-glass decoration in cave 18. It should also be noted, however, that cave 16 has the 'L' shaped bed arrangement which is noticed only in earlier caves in Bhaja. Whether this has any chronological implication can not be decided.

## *GROUP III*

A little further to the right of 21x, on the same eastern scarp, a flight of steps leads up to a higher level and at the end of this the present group of caves is located.

### EXCAVATION 22a

The first one to be reached is a featureless recess.

### EXCAVATIONS 22b, c

Next to that are two cisterns side by side, with well-cut square mounts with a rectangular recess on the back behind the space between their mouths. The cisterns are now ruined. The mouths of the cisterns have around them small holes in which probably the uprights of a railing or some covering over them may have been there, to protect the animals or men from falling into the cistern, whose mouths are flush with the surface. Here is probably to be seen the beginning of an idea for the making of cistern with their mouths in recesses.

### CAVE 23

This is reached after moving for another 10 m northwards from 22, after crossing the place from which steps leading to the fort start. This is a small *maṭapa* with open front (type B ii). The hall (2.6 m b, 2.2 m d, 1.9 m h) has a low bench (40 cm b, 30 cm h) along the right wall. There are two recesses (45 cm sq, 1.2 m d) in the right and back walls.

### CAVE 24 (FIG. 37)

About 6 metres beyond the above is this cave which is a large hall (6 m b, 6.8 m d, 2.7 m h) with a bench (48 cm b, 50 cm h) running along the three inner walls, and a wide front verandah (5.1 m b, 73 cm d). There are two plain rectangular pilasters in front which have some holes on them and there are also a few holes in the floor along the same line. These indicate that this hall had a wooden screen. The verandah, is open in front. The ceiling of this is about 30 cm lower than that of the hall.

At the middle portion of the bench along the back wall there is a frontal projection 1.8 m wide and jutting forward to about 1.2 m. This is a peculiar feature and cannot be easily explained. This may be just a device for providing accommodation for more people to sit.

The age of this cannot be made out in the absence of definite architectural items or inscriptions. Its purpose, however, could be guessed, on analogy, as a rest or a dining hall. This is one of the well executed caves on the Sivaneri hill, with perfectly cut sides and smoothly dressed walls, floor and roof.

To serve the need of the monks or travellers there is a cistern with its mouth in a recess just to the left of the cave. This recess-cistern associated with the above hall probably indicate that the hall too may not be earlier than the 2nd century A.D.

### CAVE 25

This is another *maṭapa* having only a large hall (4.5 m w, 45 cm d, 2.5 m h) with a low bench (45 cm b, 30 cm h) along the left wall and returning to run along the back wall, only to half its length. There is also a water cistern to its right. The walls of the cave as wall as the cistern are much ruined.

### CAVE 26

This is a large *leṇa* of cells around-hall type, but with a significant difference.

The hall at present is 9.45 m wide 7.46 m deep and 2.92 m high. The front floor of this hall to the extent of 2.1 m is lower by an inch than the back. In the line of the difference in floor level there are mortises for wooden fixtures. This feature clearly points out that the front portion divided by a wooden screen, served as the verandah. Further there are benches along the side walls of this verandah, and in the hall proper six cells have been cut, two in the left and four in the back. The cells are roughly cubical. The 4th cell on the back wall, however, is unusally large (3 m b, 3.9 m d) and has a bench

near the end of the right wall. Holes for *valagni* exist in other cells. There was probably a lean-to roof in thatch in front, as mortises are seen on the facade above the eave level.

At present, this cave has been very much altered by putting various additions in ashlar masonry and used as a temple of Ganeṣa. So all the features seen now may not be of early date.

There is an inscription on the right wall of the verandah but it is too much effaced to be helpful for dating.

CAVES 27, 28

These are two excavations next to 26. Cave 27 has two cells one above the other and the lower cell opens through a doorway to 28. Cave 28 is a large hall with a number of benches placed along the walls irregularly. These may be ancient caves but have lost all their original features due to alterations done probably in medieval times.

GENERAL DISCUSSION

The small group of 8 excavations is of some interest due to their peculiar, rather primitive nature. Out of these four (22a, b, c, d) are only cisterns. The next three (23, 24, 25) are all *maṭapas* with simple halls, but all had wooden screens. Cave 26 is the only *leṇa* with an accommodation for five at least (leaving the large one with bench which appears to be of later date). It is likely that in this group we have either early caves or caves still reatining some early characteristics. But the existence of three *maṭapas* suggest that these may have been made at a time when there was much movement of people up the hill, *i.e.* probably after many of the excavations on the hill had already come into existence.

## *GROUP IV*

About a hundred metres away from the above group, moving along a path which takes alomost half way down the hill, this group of caves locally called Bārāgadaḍ is reached. All the caves are in a cluster located almost adjacent to each other along a south-north scarp. The caves face east.

CAVE 29

The first excavation of the group is somewhat at a higher level than the rest and is reached by a flight of steps cut in the rock.

This is an unfinished *leṇa*, and now consists of an open verandah (10.1 m b, 2.4 m d, 2.3 m h) with its floor broken, and behind it a partly cut hall (5.5 m b, 1.9 m d, 2.3 m h). To the left of the verandah is a small cell (1.6 m b, 1 m d, 1.9 m h) with a rectangular doorway (50 cm b, 1.9 cm h). Inside the cell in the back wall is a small simple bench (86 cm l, 66 cm h, 30 cm b).

On the back wall of the verandah near the cell described above there is another unfinished cell with a narrow featureless doorway. (The way in which this is situated suggests that this was originally intended to be a small doorway leading into the hall).

On either side of the central doorway (96 cm w, 2.2 m h) of the hall there are two open windows cut at head level. Catch-holes exist in the verandah.

There is evidence for this cave having been used with some arrangements made for fixing wooden doors.

There is a broken cistern to the right of this excavation. It appears the cave was originally intended to be a *maṭapa*, probably a dining hall of the type of Manmodi 1, to have a large hall, with two doorways and a cell in the side wall of the verandah.

CAVE 30

About 10 m to the right of the above at a lower level is this excavation which is a simple *maṭapa* (Type A ii) with a plain open hall, and a cistern in front to the right.

The hall (4.9 m w, 3.9 m d, 2.7 m h) appears to have had wooden screen or a barricade in front; there are a few mortises in the side walls and the floor.

CAVE 31

This is a cell (2.7 m b. 2.1 m d and h) with a bench-in-recess in the left wall (76 cm b and h). The front of the cave is ruined.

There are traces of painting in this cave.

EXCAVATION 32

This is a bench in a recess, a view-seat.

EXCAVATION 33

Next to 32 is this *leṇa* consisting of a single cell behind a verandah. The cell (2.3 m b, 2.2 m d, 2 m h) has a bench-in-recess (1.9 m l, 78 cm h, 68 cm b) in the right wall, and a doorway (75 cm w, 2 m h) in front. The verandah (4.1 m b, 1.8 m d) has its ceiling 22 cm higher than that of the hall.

In the left wall of the verandah is a recess (1.5 m h, 1.2 m b) with a *stūpa* in half relief (Pl. 83). Its lower part is broken. What remains shows the brim of the drum with railing pattern, a dome somewhat higher than usual but with the sides having convex profile. There is the square *harmikā* with railing pattern surmounted by an inverted three-stepped pyramid. Above this is the stone shaft carrying the circular umbrella.

An inscription (Junnar No. 28) is cut on the back wall of the verandah, high up on the wall to the left of the doorway. This records the donation of this *leṇa* by one Giribhūti of the Apaguriyas. There is also the mention of some permanent endowment of money made by him from the interest accruing from which, a robe was arranged to be provided for the monk staying in this cave.

The inscription is written in ornamental characters but may be assigned to Series VI.

CAVES 34 AND 35 (FIG. 36)

These caves lying adjacently next to 33 give an impression that they belong to one unit. But on closer examination it can be made out that they are two different caves with the dividing wall now broken. Both are of similar design, the arrangement being two cells behind an open verandah (*leṇa* Type B i). The middle wall in the verandah is broken. It appears it was so in early times itself and had been replaced by a wooden screen. Only a few mortises remain at present.

Cave 34 has the open verandah (6.8 m b, 1.6 m d, 2.8 m h) with two cells at the back (about 2.7 to 3 m b, 2.6 to 2.9 m d, 2.3 to 2.4 m h). There is also an open window (75 cm sq) at shoulder level to the left of the doorway of the 1st cell. It has vertical chases on jambs for the wooden fixture. The cells have no benches. Peculiarly, the floor levels of the cells are about 10 cm lower than that of the verandah.

These two cells jut forward a little into the verandah from the line of the cells of cave 35 and the verandah ceiling of this is about 5 cm higher than that of cave 35.

There are traces of painting on the ceiling of the cells.

Cave 35 is almost of the same dimensions as cave 34. The left cell and its doorway are broader than the right. The right cell has a recessed-bench in the left wall. There are holes for the *valagni* in both the cells.

Traces of painting exist in this cave also.

CAVES 35x, y, z

These are three water cisterns, located further to the right of 35

CAVE 36 (FIG. 36)

Next to the above cisterns is this excavation, the largest in the group. This is *leṇa* (Type B iii b) with a hall surrounded by twelve cells and a verandah in front. The hall (9.8 m b, 10.2 m d, 3 m h) has a low bench running along the inner walls. The cells are arranged to be four on each side. They vary in dimensions from 1.7 to 2.3 m in depth and 1.6 to 2.4 m in breadth and are about 2.4 m in height. The third cell in the left wall is unfinished.

The sills of the cell doorways are about 22 cms above the level of the bench. All the doorways are plain and rectangular and have vertical chases on the inner side of jambs. There are two doorways cut in the front wall of the hall, one in the centre (1.8 m b, 2.6 m h) and the other (90 cm b, 2.1 m h) very near the left side wall. There are two huge rectangular windows one each on either side of the main doorway. They are at chest level.

The verandah (10.4 m b, 1.7 m d, 2.6 m h) is partly ruined in front and any possible existence or otherwise of the pillars and pilasters cannot be made out. An interesting feature is that the roof and floor levels of the verandah are about 30 cm lower than those of the hall. Traces of painting exist here. A stairway cut in the left wall of the verandah leads to cave 37 at a higher level.

This cave is a typical example of *leṇa* Type B iii b. However, it should be noted here that the cells do not have benches and the verandah roof is at a lower level than that of the hall. These two features are commonly seen in caves of a later date and hence this cave too may be surmised to be later than Nasik 3, 10, Ganesh Pahar 7, etc.

## CAVE 37

This is a *maṭapa* of Type A i consisting of a simple hall with a front verandah. The hall (4.8 m b, 4.5 m d, 2.1 m h) is plain and has a rectangular doorway (1 m w, 2.1 m h) in the centre of the front wall. The verandah (5.7 m b, 1 m d, 2.6 m h) has its floor about 60 cm lower than that of the hall, and obviously the roof too is about 10 cm lower. In front of the verandah there were two pillars in antis. The pillars are now broken, but were unfinished even originally. However, steps hanging from the roof show that these pillars had inverted stepped pyramidal member on the top of the capital lying over an *āmalaka* shaped moulding. The pilasters too are unfinished, but appear to have been intended to be plain and rectangular in cross-section.

The fact that the only approach to this cave is through cave 36 clearly shows that this could have been made later than 36. But these may be almost contemporary also, this simple hall being meant as an annexe to the large *leṇa* 36, to serve as a *bhojana maṭapa* or *upaṭhāna* for the monks residing there. The two are probably in the same relation as the upper and lower storeys of cave 18 in the same hill.

If so, it is likely that *leṇa* 36 too, could have had pillars of the type of 37 once (now ruined), and these would become sufficient indicators to fix their age. The pillars in antis arrangement, the shape of the pillars, etc., very much resemble the features seen in cave 13 of Ganesh Pahar, and the window on either side goes with cave 7. But this *leṇa* lacks the decoration of facade seen in both. Hence it is likely that these caves 36 and 37 are later in date than Ganesh Pahar 7 and 13 and nearer to Sivaneri 18. The placing of the roof and the floor of the verandah at a lower level than those of the hall is a notable technically advanced feature.

## CAVE 38

The next one is a *leṇa* (Type A ii) with a single cell (2.3 m b, 2.28 m d and h) and a front verandah (4.87 m b, 1.3 m d, 2.28 m h)

The cell has no bench. The doorway is 86 cm broad and as high as the cell. The verandah is partly broken. There is a recess-bench (76 cm h, 1.1 cm b, 71 cm d) in the right wall of the verandah. Traces of painting exist.

## EXCAVATIONS 38x, y

These are two featureless cisterns beyond cave 38.

## CAVE 39

This is a ruined cell with a bench on the left side and a cistern to its right. Catch holes exist on the walls and bench.

## EXCAVATION 40

A small recess (1.2 m sq, 1.8 m h) with a recess-bench on the back wall. This is a view-seat.

EXCAVATION 41

An unfinished recess.

CAVE 42 (FIG. 37)

This is a neatly made *leṇa* of Type B iii a. The hall (5.66 m b, 5.48 m d, 2.2 m h) has five cells in all, three in the left and two in the back wall. All cells are about 2.1 m in height. They have no benches. The cell doorways are narrow (70 cm b, 2.1 m h). The front doorway is 1.77 m w, 2.18 m h. A broad open window (1.47 m w, 66 cm h) stretches at chest level from the doorway up to the end of the left wall. Originally there was a thin block dividing the doorway and the window.

The verandah in front is broad and is shared by this *leṇa* and the next cave *chetiyaghara* 43. The verandah floor is broken. It was about 4.7 m wide. The front roof projects forward to about 4 m and there is no evidence of any pillars of pilasters.

An interesting aspect of this small *leṇa* is the presence of a *stūpa* in bas-relief in a niche between the two cells in the back wall of the hall (Pl. 86). Its position reminds of the later Mahāyāna *vihāras* with a shrine, and it is likely that simple representations like this were the precursors of the idea of introducing a shrine within the dwelling cave.

CAVE 43 (FIG. 37)

Adjacent to and sharing the verandah of *leṇa* 42 is this cave, a *chetiyaghara* with some interesting features. This belongs to the type of flat roofed *chetiyagharas* with rectangular hall, verandah and flat roof, but retains some pillars inside the hall also.

As it is in the case of its neighbouring *leṇa* 42, the floor of the verandah is broken, the roof, however, projects to nearly 4 metres to the edge of the scarp. A bench (75 cm h, 60 cm w) runs along the right wall of the verandah for about 2.4 metres and further on it too is broken. There is no evidence of any pillars or pilasters. From what remains of the verandah, it appears that it was intended to be about 9.9 metres wide. But probably some time after the making of this *chetiyaghara* the partition wall in the verandah between this and 42 was broken to join the two. Consequently the roof level of the *leṇa* which was about 20 cm lower than that of the *chetiyaghara* was further chiselled and brought to a common level. The evidence for this work still exists on the upper part of the walls in the verandah before the *leṇa*.

There are two doorways leading into the hall. The central one (1.9 m b, 3.4 m h) has its sill about 45 cm higher than the present level of the verandah and is approached by five steps. Its lintel is flush with the ceiling of the verandah. The other door (1.1 m b, 2.1 m h) to the left was originally intended to be a window only and appears to have been cut down further to form a subsidiary entrance. To the right of the main doorway is a large rectangular window (1.8 m b, 1 m h) cut from the level of the verandah ceiling.

A row of four pillars, two engaged ones and two in the middle, lying across the large hall divides it into a front transverse aisle (6.2 m w, 1.4 m d, 5.5 m h) and the hall proper at the back. The pillars rise from a low podium (about 12 cm h, 90 cm b) and are of the usual pot-base-pot-capital variety (type D vi). The octagonal shaft slightly tapers. Above the flat top of the uppermost square plate in each rises a square jamb. On this the roof rests directly without any architrave. The two central pillars are 1.6 m apart from each other just on either side of the line of the jambs of the entrance doorway. The engaged pillars on the side walls are 70 cm away from the central pillars. These have 5/8th part of their body jutting out so that 5 faces of the octagonal shaft are seen outside (Pl. 85). The hall behind is 9.4 m deep and 6.2 m wide and about 5.5 m high.[44]

A little in front of the back wall of this hall is a *stūpa* (3.1 m dia) occupying a central position just opposite the doorway. This *stūpa* (Pl. 89) is a piece of excellent workmanship. It has a drum, rising on a socle of three steps, with its brim ornamented with rail pattern. The dome above is a hemisphere with its lower part much inclined inwards. Above this is the square *harmikā* decorated with rail pattern

and surmounted by the five-stepped inverted pyramid. From the flat top of the upper most plate a thick stave in stone rises to carry a circular umbrella with a heavy central boss, cut in the ceiling.

The measurements of this *chetiyaghara* display some coherent mathematical basis. It can be made out from the drawings and the measurements described above that the hall behind the transverse aisle has its length roughly 1½ times the breadth and its height is 3/5th of the length. The diameter of the *stūpa* is exactly half of the width of the hall and is placed in such a position that the distances between the edge of the *stūpa* and the hind and side walls in every case is one quarter of the width of the hall. A line drawn across the hall in front of the *stūpa* cuts the length of the hall proper into two equal parts. The transverse aisle is as wide as the hall itself. Its depth is 1/4th of the width roughly. The central doorway is roughly in 1 : 2 proportion in its width and height and the height itself is 2/3rd the total height of the hall. The side window too shows the 2 : 3 proportion in height and width.

Despite the neat execution in measurements and finish, this *chetiyaghara* is peculiar in design, without precedence or following, and will have to be considered as an aberrant type. However, the circumstances which led the architect to choose this design may be suggested by comparing this with other flat roofed *chaitya* halls. This appears in logical succession to many others wherein can be seen the process of continued attempts on the part of the local architects to evolve a plan for the *chetiyaghara*, which well-suited to the rock medium and the local climatic conditions. It has already been described above how, the *chetiyagharas* 14 of Ganesh Pahar and 2 of Sivaneri have become progressively simple and utilitarian. In the present example the verandah has been arranged in such a way, with its roof much below that of the hall to provide complete protection from sun and rain to the doorway and the interior. And the usual decorative work seen in the facade, *i.e.*, the ornamented backed bench, the pillars in antis, the railing on the fronton of the cave, which were all still exposed to the elements of nature have been done away with. It is likely that the architects had realised how these elements of nature affect adversly the carvings on the facade, wrought with the bestowal of much money and labour, almost disfiguring them slowly by erosion or by the growth of moss and lichen. So even the pillars have been taken inside the hall by the architect who designed the present *chetiyaghara*. This served a double purpose. Beside preserving the pillars, the invariable associates of the *chetiyaghara*, they have been disposed in such a way as to give the impression of nave and aisles, as seen in many other places of worship. At the sametime, probably unconsciously, the monotonous vacuum of the pillarless flat-roofed *chaitya* halls has been removed by the introduction of the two pillars inside; these pillars act as a beautiful carved frame to the neatly done *stūpa* behind, and the aesthetic effect produced by this can be appreciated only on the spot.

These new architectural innovations indicate that this *chetiyaghara* may be later than Ganesh Pahar 14 and Sivaneri 2. This is substantiated further by the form of the *stūpa* also.

A more conclusive evidence is in the inscription carved in the verandah (Junnar No. 29). It records that this *chetiyaghara* is a donation of one Vīrasena the chief of the *gahapatis*, made for 'the good and pleasure of the whole world.' This phrase '*Sava-loka-hita sukhāya*' is a statement appearing in later inscriptions only and as one probably associated with the changing ideas and ideals in the Buddhist creed itself, when the good of others was considered to be more important than achieving personal salvation, an idea which plays an important role in Mahāyānism. The characters employed in writing the inscription are much developed and go with palaeographical series VII. The cave may belong to the latter part of the 3rd century A.D.

These considerations would show that here in *chetiyaghara* 43 the forms of one of the latest type of the flat roofed *chetiyagharas* is to be seen. Herein is an ingenious architectural work where both utilitarian and aesthetic needs have been well-harmonized.

## EXCAVATION 43a

This is a cistern to the right of the verandah of the above *chetiyaghara* and probably this was associated with that excavation itself. The cistern is much ruined.

EXCAVATIONS 44, 45 AND 46

Next to the above are three cisterns-in-recess. An inscription in the recess of 46 (Junnar No. 30) records that two cisterns were donated by one Irila a *Yavana* of the Gatā country. The characters are of Series VI.

CAVE 47

Next to the above is a simple cell (2.3 m sq, 1.9 m h) with a doorway (75 cm b, 1.9 m h) and an open verandah (1.9 m b and h, 1.3 m d).

EXCAVATION 48

Next to the above and last of this series is a broken cistern-in-recess. There is an inscription (Junnar No. 31) on its back wall, written in characters of Series VI. This records the donation of a cistern and a *leṇa* by one Siva-pālanikā, wife of Giribūti of the *Apaguriyas*. Some permanent endowment (*akhayanivi*) was also given by her.

The cistern referred to is obviously the one in which the inscription is seen and the cave referred must be cave 47 by the side of this cistern. This inscription is important, as it establishes the continuation of the practice of cutting cisterns with mouths in recess (Type A ii), and the single celled *leṇas* with verandah (Type A ii) even in the 3rd century A.D. It may also be noted that *leṇa* 33 of Type A ii too is contemporary to this being donated by the husband of the lady who was responsible for the present donation.

GENERAL DISCUSSION

The Bārāgadad is the biggest among the groups in the Sivaneri hill with a total of 26 excavations (including the minor ones). Out of these there is one flat-roofed *chetiyaghara* with a capacity in the hall in front of the *stūpa* for a congregation of at least 40 persons. There are two big *leṇas* of the hall surrounded by cells type (B iii b) accommodating at least 16 monks, two *leṇas* of cells behind verandah type (B i) accommodating at least 4, and five single-celled *leṇas* (A ii type) accommodating 5 monks. The total monk-capacity in the group would be about 25. For these there are two open halls (30, 37) to sit and deliberate or to dine, and three long seats in recess, probably as view-seats, and 11 water cisterns. In all, this appears to have been a group well-provided with all the architectural necessities for the monastery.

The caves of this group appear to have been made in a short span of time. All the four inscriptions in this group, three of Series VI and one of Series VII, are to be dated to the 3rd century A.D. However, the earliest excavations here appear to be caves 34 and 35 which follow the pattern of many in Manmodi. Then came probably caves with single cells and cells arround hall (36 and 42) and along with this the *chetiyaghara*. It is difficult to fix the age of the others. The *chetiyaghara* (43) is the most important of the excavations in this group marking an important stage in the evolution of the *chaitya* halls, and, possibly, this is the last of the *chetiyagharas* in the Sivaneri group and for that matter in Junnar itself.

## *GROUP V*

This group of caves is on the west face of the hill and can be reached either by a path from the town by climbing the hill from the northern end, or by crossing the pointed northern end of the hill from the upper cave group III on the east face. These caves are at a higher level than those on the east face. Though there are only 12 excavations (including cisterns) in this group, the whole length of about 500 metres of the west face of the hill has to be traversed to reach all of them as these caves stand isolated at considerable distances from one another. All the caves face west. The numbering of caves in the present account is from north to south.

CAVE 49 (FIG. 38)

This is the northern most excavation on the west face. This consists of a simple hall and a verandah. The hall (9.3 m w, 8.4 m d, 2.6 m h) has a run of low bench all along the inner sides. The front wall of the hall is pierced into by a central doorway (1.5 m b, 2.4 m h) and an open window on either side of the doorway. These windows (58 cm h) are cut at chest level. The verandah (9.75 m b, 1.06 m d) had 4 pillars in antis in front. No pillar is preserved but there are four stepped inverted pyramidal abaci still attached to the architrave under the roof (Pl. 87). These abaci are finely finished and have square holes in the centre of the bottom most plate, probably to receive the tennons of wooden shafts.[45] On analogy it can be surmised that the pillars were of the pot-base-pot-capital type. The pilasters are of plain rectangular cross section. In front of the verandah there is still some flat place, in which a line of holes can be seen. The rock above forming the roof projects in front of the architrave for about 1.2 m. The holes in the floor are also just at that line. It is possible that these holes were intended for some sort of a balustrade or fencing. The plan of this cave clearly shows this to be a benched *maṭapa*, probably a dining hall.

There are fine paintings still preserved on the ceiling of both the hall and the verandah.

EXCAVATION 49a

A broken cistern to the right of the above cave.

CAVE 50

About 9 m to the south of 49 is this single celled *leṇa* (2.2 m d, 2.1 m b and h) with an open verandah. The front and side walls are broken, but traces of plaster and painting exist on the ceiling.

EXCAVATIONS 51a, b, c, d, e

These are cisterns, now broken and filled up, situated at irregular intervals between caves 50 and 52.

CAVE 52 (FIG. 38)

About 100 meters south of 50 is a *leṇa* (Type B iii b) with four cells around a hall and a front verandah. The hall (4.7 m b, 4.4 m d, 2.4 m h) has two cells in the back wall and one each in the side walls. Except the left cell the others have a simple bench each, and also holes for the *valagni*. The benchless left cell, however, is a little smaller than the others. The doorways of the cells are narrow (about 65 cm) and they are plain and as high as the cells.

In the front wall of the hall is the central doorway (1.3 m b, 2.2 m h) and two windows (about 1.4 m b, 75 cm h), one on each side of the doorway, set at chest level.

The verandah (5.9 m b, 1.8 m d, 2.2 m h) has its ceiling in the same level as that of the hall. The floor and front are broken.

This *leṇa*, on the basis of ground plan can be classed along with caves 18 and 46 of Sivaneri. Whether pillars existed here also or otherwise cannot be ascertained. But the fact that the verandah ceiling is in the same level as that of the hall, even though this cave is facing west and is open to the gushing monsoonal wind and rain, probably shows that this *leṇa* is of an earlier date, when architectural solution for this climatic nuisance had not yet been well-evolved. Though nothing can be said in the absence of any other substantiating evidence, the presence of benches in cells in contrast to their absence in most of the definitely later *leṇas* in Sivaneri is probably a feature indicating that this is anterior to the others of the 'cells-around-hall' type of *leṇas* on the Sivaneri hill.

The use of simple benches in the cells of this *leṇa* is also noteworthy. Another interesting feature is that while most of the *leṇas* of this class which are definitely assignable to the 2nd century A.D. and later like Nasik 3, Ganesh Pahar 7, etc., have the low bench running along the three inner walls, the present cave does not possess that feature. This may indicate a somewhat earlier date in which the tradition of having only a simple hall in *leṇas* of B ii b variety was there. But the presence of large open windows on either side connects this with Nasik 3, etc. So stylistically, it appears, this *leṇa*

represents an intermediate position in the evolutionary stages of the *leṇas* of B ii b type and hence could be placed possibly in the 1st century A.D.

CAVE 53

About 8 m further south of the above is a ruined single-celled *leṇa* (3.1 m b, 2.2 m d, 1.9 m h) with a simple bench along the left wall.

CAVE 54

Is an unfinished excavation, now having only an irregular hall (1.8 m b, 2.1 m d, 1.6 m h). The front is broken. This is located at about 20 meters south of cave 53, at a higher level.

CAVE 55

About 6 m further from the above is this cave, a simple hall (4.7 m b, 5.3 m d, 2.3 m h). The front wall is broken, but the side walls and ceiling have some holes indicating that a wooden screen was there dividing this cave into a hall and a verandah. Traces of painting also exist.

To the left of the cave is a broken cistern.

GENERAL DISCUSSION

These caves on the western flank of the Sivaneri hill are all simple excavations without any architectural pretensions. Out of the twelve excavations there is not even a single *Chetiyaghara.* There is one *leṇa* of cells-around-hall type with accommodation for 4 monks and two single-celled ones meant for two monks. At the most there might not have been more than 5 or 6 monks permanently residing here, and this may be the cause for the absence of *chetiyaghara* also. But peculiarly enough there are three halls (49, 54 and 55) in this group serving as dining or rest halls. The rest are water cisterns, 8 in all. The cisterns (50a, b, c, d, e) strewn along a distance probably suggest that here was a path. Further south of the last excavation described above, there appears to be few more cisterns along the same ledge path, not accessible now. If these too are taken into consideration, it can be inferred that this path led towards the cave group on the south side of the hill (to be described below). These excavations on the west face of the hill show in the very nature of their location that they were never intended to be a compact monastic unit.

In this series, however, on grounds of typological analysis *leṇa* 52 can be considered as the earliest and datable to about the 1st century A.D. Cave 49, by virtue of its pillar type would belong to late 2nd or early 3rd century A.D. As far as the other *maṭapas* and cisterns it may just be stated that they were meant more for the travellers going up the hill, possibly to group VI on the southern side and hence could have been made after the major excavations in that group had come into existence (see below).

## *GROUP VI*

The caves of this group are situated at a high level up the southern scarp and are within the second line of fortification on the hill. It appears many of these excavations were in use for some purpose or the other in medieaval times, and hence the caves are slightly altered or damaged. The caves range in an east-west direction and face south. The numbers here are from east to west.

CAVE 56

This cave, the easternmost of the series, was once a flat-roofed *c'hetiyaghara.* Now this serves as the temple for the Hindu goddess Sivābāi. The cave is much altered, but the ancient rectangular hall is still there. The *stūpa* which once existed in the hall has been chiselled off to give room for the idol of the goddess. The umbrella cut in the roof still remains. The front of the hall is also broken.

CAVE 57 (FIG. 37)

At a lower level, to the left of 56, is this *leṇa* (A ii) with a single cell (1.8 m d, 2.1 m b and h ), and an open verandah (3.1 m b, 1.6 m d, 2.3 m h). The verandah had plain pilasters in front but they are

partly broken. The verandah roof is at a higher level than that of the cell. It is likely that this *leṇa* is somewhat of an early date.

CAVE 58

An unfinished cell to the left of the above.

CAVE 59 (FIG. 38)

Further west of the above is this *leṇa* (Type A iv a) with a cell and a recess behind a verandah.

The cell (3 m b, 2.3 m d, 2.1 m h) has in its back wall towards right a recess (1 m b, 1.8 m d, 2.1 m h) and in the left wall a bench-in-recess (68 cm b, 1.8 m l, 75 cm h). The front wall of the cell is broken, but traces of a doorway (68 cm w) still remain. The verandah (7.3 m b, 1.5 m d, 2.3 m h) has its ceiling at a little higher level than that of the cell.

An inscription (Junnar 32) on the back wall of the verandah records that this cave is a donation of one Isipālita son of Ugāha. The letters are assignable palaeographically to Series V c and hence the cave is datable to the latter part of the 2nd century A.D.

CAVE 60 (FIG. 38)

This is a *leṇa* of cell-recess-hall type (A iv) like caves 8, 10, 12 etc of Ganesh Pahar. This and the previous one are the only caves of the kind on the Sivaneri hill. The hall (4.4 m b, 2.5 m d, 2.3 m h) has its floor and ceiling broken in front, and the verandah, if there was one, has completely disappeared. There is a recess in the left wall of the hall (1.5 m b, 62 cm d, 77 cm h), cut about 60 cm above the floor level. The cell (2.4 m b, 2.1 m d and h), is towards right in the back wall. This has a bench-in-recess (2.3 m b, 60 cm d, 70 cm h). The doorway of the cell is 78 cm wide and as high as the cell. An open window (30 cm b, 45 cm h) is cut to the right of the doorway.

The deep recess (90 cm b, 1.5 m d, 2.1 m h) is to the left in the back wall.

EXCAVATION 61

Next to 60 is this recess (1.4 m b, 1.5 m d, 2.1 m h) which appears to have been part of a cell with a bench at the back. It is now much ruined and opens partly to the verandah of 60.

EXCAVATION 62

A broken water cistern.

EXCAVATION 63

An unfinished open seat in recess (view-seat—90 cm w, 2.7 m l, 1.5 m h).

CAVE 64 (FIG. 38)

About 10 metres further west is an open hall (5.8 m b, 4.4 m d, 2.4 m h) with a low bench running along the three inner walls. The front is open, but two pilasters, which were probably rectangular in section are at either end in front of the hall. Along the line of these pilasters and also a little further to the front many mortises cut in the floor are seen. There are corresponding mortises in the roof also. It is likely that the front portion of this hall had been covered by a wooden screen.

There is a cistern a little to the west of the above.

An inscription (No. 33) cut on the left side wall, mentions this cave as *Bhojana maṭapa*. The characters of the record belong to palaeographical Series VII and the cave is datable to the latter part of 3rd century A.D. The cave was a donation of one *Yavana* Chita of the Gatā country.

CAVE 65

This is an unfinished single cell with a verandah.

CAVE 66 (FIG. 38)

Next to the above, beyond three huge water cisterns (which may be the works of mediaeval times) is this cave, a small flat roofed *chetiyaghara* consisting of a cell and a verandah.

The hall (3 m b, 6.2 m l, 3.8 m h) has a *stūpa* placed about 3.6 m behind and directly opposite the front doorway, with a distance of 56 cm to the side and back walls. The doorway (1.6 m b, 3.1 m h) in the front wall is the only source of light for the hall. The verandah (6.8 m b, 93 cm d) in front is on the same level as the hall but its ceiling is low being at a height of 3.1 m above from the floor. On either side of the passage leading to the central doorway in the front part of the verandah, there was once a low bench from which rose a pillar at the inner end and an engaged one at the wall end. Now both the pillars and the left pilaster and also the benches are ruined. But there is indication in the floor that the low podium was about 45 cm thick and the pillars and pilasters were of the pot-capital-pot-base type (D vi). The engaged pillar on the right wall (Pl. 88) is partly preserved and shows that 1/8th of the pillar only had been attached to the wall, while 7/8th of it jutted out.

A door cut in the right wall leads to a *leṇa* (cave 67) next to this.

The *chetiyaghara* 66 is another simple but elegantly executed cave favoured with high quality workmanship and agreeable mathematical proportions in architectural design. Unfortunately, however, the front portion of the verandah is broken, but this does not preclude the onlooker from visualizing the quality of the work.

It can be seen from the plan, sectional elevation and the measurements given above that the hall is almost in 2 : 1 proportion as far as the length and breadth are concerned and is 4 : 5 with reference to the width and height. The *stūpa* diameter is 2/3rd of the width and is placed in such a way as to leave equal spaces between that and the side and the back walls. The doorway is roughly half the width and its height is almost double its own width. The verandah roof in front is at a low level almost flush with the lintel of the hall door. The verandah is again almost 1 : 4 : 2 proportion with reference to the depth (including the podium) width and height respectively.

This *chetiyaghara*—with its pillar type, the 7/8th part jutting attached pillar and the lowered level of the verandah ceiling—is homogeneous with cave 2 of Sivaneri, and the date of this too may be somewhere near that. The cave can be placed stylistically to a stage nearer to Manmodi 2 also with the use of similar type and disposition of pillars and pilasters. But the present one is certainly later than Manmodi 2 as here probably for the first time in flat-roofed *chetiyagharas* the verandah ceiling appears at a lower level than that of the hall. The shape of the *stūpa* (Pl. 90) would indicate that this should be considered as one of the earliest of the flat roofed type; there is no umbrella cut in the roof,[46] which is a feature in other flat roofed *chaitya* halls and hence may probably be earlier than even Ganesh Pahar 14.

This cave is a donation of Isipālita son of Ugāha, the man who has donated cave 59 of the same group. The letters of this inscription belong to Series V C and hence the cave is datable to the latter part of the 2nd century A.D.

CAVE 67

Is adjacent to 66, led into by a door cut in the left wall of the latter.

This is a simple hall (7.5 m l, 6.8 m w, 2.5 m h) with a bench (2.1 m b and h) running all along the entire length of the right wall. The doorway to this is in the centre of the front wall. The front portion is broken. This cave is of a later date than its neighbour 66, as unhewn surfaces on the left wall of this cave indicate that these had been left as such with the fear of damaging the thin wall dividing this from 66. The door cut in this wall leading to the verandah of 66 may be a later addition.

EXCAVATIONS 67x, y

Two broken cisterns beyond 67.

CAVE 68 (FIG. 38)

This is a simple cell (1.8 m d, 2.1 m b and h) with a doorway (90 cm b, 2.1 m h) and a verandah in front which is of the same dimension as the cell, but with its front part broken. There is a bench along the left wall.

EXCAVATION 68x

To the right of this cell is a deep recess. Probably this is an excavation of mediaeval times.

GENERAL DISCUSSION

The south face excavations (group VI) of the Sivaneri hill are all of simple type. There were two *chetiyagharas* 56 and 66 of which the latter is earlier than 56 as indicated by the absence of stone cut umbrella in the former but presence of the same in the latter. But in contrast to the existence of two halls of worship with a capacity to accommodate at least 40 devotees at a time together, there are only three single celled *leṇa* in which hardly 3 monks could have stayed. This probably suggests that these *chetiyagharas* were serving the needs of a floating population. The two halls, *maṭapas*, 64 and 67 would also indicate such a use not by the three monks living in the place but by people resorting to these *chetiyagharas*. It is likely that path leading from the Nanaghat pass to the Junnar town might have been along the bank of the Mina, which flows just to the south of the Sivaneri hill. If so these caves would be the first to be reached by travellers moving from Nanaghat to Junnar, and the *chetiyagharas* would have served their religious needs and the halls were there for them to rest or dine. Cave 64 is clearly referred to in the inscription as a dining hall. It is, however intriguing that there are only two cisterns assignable to that period, but there is every likelyhood that there were several more, which have been converted for different uses in mediaeval times. In this group of caves, the inscriptions betray that the *chaitya hall* 66 and the *leṇa* 59 belong to the same date, and with these also go the *maṭapa* 67. The *bhojana maṭapas* 64 is somewhat of a later date. The dates of other excavations cannot be fixed. But cave 60 of the hall-cell-recess type would, however, go with similar excaxations in Ganesh Pahar.[47]

## KANHERI

Kanheri, situated just to north of Bombay, is one of the biggest Buddhist centres on the Konkan coast. The beginning of its history is almost coeval with the introduction of Buddhism to southern India, and this religion and its monastic establishment flourished uninterruptedly for a greater length of time here than in any other place south of the Vindhyas. In the course of about 1500 years of its life, like Buddhism itself, Kanheri too had its chequered career, starting unpretentiously on a small scale, growing stronger with great patronage and activity and running through times when it began to languish with internal indolence and external apathy, until it petered out from the religious scene around the 13th century A.D. Here, however, only the earliest phase of architectural activities at Kanheri is covered.

The caves are cut in a huge trappean outcrop, 'a bubble of rock' as described aptly by Fergusson, raising from the plain coastal strip, which actually forms part of a small chain of hills in the northern part of the Salsette islands. Most on the caves are located in small clusters between 60 and 90 m above the surrounding plain.

Ancient inscriptions provide the name of Kanheri as Kanhasela.[1]

There are about 120 excavations at this place and 87 of them (75 out of 101 numbered caves) belong to the period of our interest. The numbers of caves used are here mostly those given by the Archaeological Survey of India recently.[2]

CAVE 2 (FIG. 39; PL. 91)

This cave, which is much broken in the front and looks like one simple unit actually consisted of six separate excavations, wrought in different times. These have been subdivided here as 2*a*, 2*b* etc.

CAVE 2a

This is the southernmost of 2. It is a simple cell (1.2 m sq, 1.5 m h). Its front is broken.

CAVE 2b

This is adjacent to the above. Its left and front walls are broken and its original plan can not be made out easily.

Now a transverse middle wall divides a hall into a back cell (1.8 m b, 1.6 m d, 2.3 m h) and an open area in front. The cell has a bench (68 cm b, 50 cm h) along the right wall. The doorway (81 cm w, 2.3 m h) is completely broken except for an indication on the floor.

On the right side of the area in front of the cell is a bench (75 cm h, 1.8 m l, 53 cm b) of recess type, the recess itself being 1.1 m high. What remains of this cave suggests that this may have been a *leṇa* of type A iii.

CAVE 2c (FIG. 8(2))

This is a flat roofed rectangular *chetiyaghara* (3.6 m b, 2.9 m h and a little more than 6.7 m d). But its walls are not well-cut and the measurements vary a little as a result of some later attempts to cut Buddhist sculptures on the walls. Now there is a clear difference of about a metre in the width between the front and back. A *stūpa* (Pl. 92) is placed at the inner end of the rectangular hall, about 75 cm in front of the back wall, and with almost the same distance from the side walls.

This *stūpa* (about 2m dia) has a tapering drum raised over a socle and is ornamented with railing pattern at the brim. The dome is 3/4th sphere with incurved bottom. The *harmikā* and the capital are roughly carved. An umbrella is carved in the roof above. The *stūpa* belongs to Type D.

CAVE 2d

This too is a flat roofed *chetiyaghara*, but is smaller than 2c (2.9 m b, 3.1 m h). The side walls are broken in front. But the position of the original doorway can be inferred from two steps which still survive in front, and from this the original length of this *chaitya* hall can be estimated to be about 3.7 m. A *stūpa* (2.1 m dia) was at the back of the hall, 60 cm away from each of the three inner walls. Only the drum of the *stūpa* remains now to a height of about 90 cm. Its sides taper a little bit.

CAVE 2e (FIG. 5 (2))

This is the most interesting of the group and probably the earliest of the extant Kanheri excavations.

This too is a flat roofed rectangular *chetiyaghara* with a broken front.

The rectangular hall is 4.57 m broad and 4.11 m high. The length cannot be made out easily as the front wall is completely broken. The side walls too are ruined to a great extent. An indication, however, exists in front on the floor, in a small flight of steps with two huge rectangular mortises (about 60 cm b, 32 cm l, 20 cm d) on either side. It is possible that this marks the position of the original doorway. If so the length of the hall would have been about 9 m.

The *stūpa* is placed as usual at the inner end of the hall about 1.1 m away from the back and side walls. It is small and simple (Pl. 93). The dimensions of this *stūpa* with the low drum and high dome, its polished surface and the absence of even the *harmikā* are all indicative of its high antiquity. It has been shown above how in these features this *stūpa* represents a stage earlier than the *stūpa* in the great *chaitya* hall at Bhaja (see p. 72) and belongs probably to the early part of the latter half of the 3rd century B.C.

It is no wonder that Kanheri being very near Sopara, to which town Buddhism was to arrive first in the Konkan area according to tradition (see note 152 to chapter III), is to be the one to experiment first with the rock-cut *chaitya* halls. The present *chetiyaghara* being the earliest so far known in this area, it is also the simplest, bereft of any attempt towards high architectural pretensions and forms. It is, however, a problem to explain the absence of any other cave at Kanheri itself which could be dated

along with this *chaitya* hall. But it is likely that very small hewings as cave 2a described above may have existed here on either side of this *chetiyaghara*, which, however, were enlarged in later times. It is also possible that this *chetiyaghara* was serving the religious needs of the Buddhist anchorites who preferred to stay in secluded natural caverns or small huts, in accordance with the prescriptions of the early *Vinaya* texts (p. 36).

CAVE 2f

Intervening between the above *chetiyaghara* 2e and the great *chaitya* hall 3, is this excavation of irregular plan and crude workmanship, consisting of a large hall with a bench running along the three inner sides and two cells cut adjacently in the back wall. The hall is 16.5 m wide in the back and about 1.2 m less in the front. The roof and the floor in the front are now broken, but the extant indications reveal that the cave was about 10.3 m deep. The bench running in the hall along the three inner walls is 60 cm high and 70 cm broad. It is well-preserved along the north and back wall, but the southern bench is at present only about 2.1 m long, and it is likely that it was not more than that even originally.

The two cells in the back wall are at a higher level with their door sills 30 cm above the level of the bench. Their doorways are plain and rectangular (80 cm b, 2.1 m h). Both the cells are of equal size (about 2.65 m d and b, 2.6 m h) and each has a bench (60 cm h and b) along the right wall. The hall roof is about 3.8 m high in the northern end and this slopes down gradually to about 3 m height at the southern end. There are three large rectangular water cisterns with open top (about 1.2 m b, 2.1 m l) cut in a row just in front of the facade.

This cave is hardly a *vihāra* (*leṇa*), as contended by earlier scholars. The expenditure of much labour and money for making such a large hall (16.5 m b, 10.3 m d) with only two cells cut in the back indicates that the hall was more important than the cells, for the purpose for which the cave was intended.[4]

The large hall with the seat running along the three inner sides indicate that it is a *maṭapa*. The pair of cells at the back which is an additional element in the present cave can be suggested as meant for casual itinerary monks or as store rooms in which the food to be distributed may have been kept.

However, a proper interpretation of the inscriptions engraved here provides welcome evidence for a better understanding of the purpose of this cave. There are three inscriptions here (Kanheri Nos. 1, 2, 3).[5]

The first inscription is on the back wall of the hall, to the left of the doorway of the right cell and reads :

1. *Nāsikasa Nāka*
2. *ṇakasa sats deyadhama*

This has been translated as 'A seat, the meritorious gift of Nāganaka (Nākaṇaka) of Nasik'.

The second inscription stated by Burgess to be "in cave No. II, near a tank" is actually again on the back wall to the left of the doorway of the left cell. This reads :

1. *Kaliyaña suvaṇa-kārass Sāmida*
2. *tasa saha saghena pāṇiyāka deyadhaṁma*

It is translated as "A cistern (?), the meritorious gift of the goldsmith Sāmidata of Kalyana, associated with the community of ascetics and lay brethern".

The third inscription which is a new discovery is carved on the top of an open cistern in front of the cave, and reads :

1. *Kaliañasa negamasa Chita .....*
2. *Kiyasa [putasa] Vasuyatasa poḍhi deyadha [ma]*

It means, 'The cistern, the meritorious gift of Vasuyata son of Chita..... kiya of the guild of Kalyāṇa.'

Burgess contended that the first inscription refers to the stone bench in the hall taking the word '*sata*' to be a corruption of Skt. '*Sadah*', and his approach for such an interpretation is guided by the wrong notion that the inscription is 'on the back wall of cave II, above a bench.' Rather the word '*Sata*' (Skt. *satra*) is commonplace in Prakrit language meaning among other things, 'an alms house'.

A Prakrit dictionary clearly describes this word as 'the place where cooked rice, etc., are given'[6] and the word *satra* is used in the same sense in many of the Indian languages. This leads us to infer that the cell by the side of which this inscription is seen was meant to distribute food.

The second inscription carved by the side of another cell records the donation of a *'pāniyaka.'* By virtue of the very location of the inscription,[7] it can be contended that it refers to the cell and not to the water cisterns which are all cut at a distance in front of the cave. The word commonly used for water cistern in the Prakrit inscriptions of the age of *poḍhi*, and it is unimaginable why a rare word like *'pāṇiyaka'* (to mean cistern) had to be used instead.[8] The third inscription at the very cave records the gift of a *poḍhi*. So this *'pāṇiyaka'* may be something else.

The distribution of food and beverages (usually sweetened water) to people visiting holy places is a practice widespread in India. In the present context, while the first cell, *'sata'*, was the place where food was distributed, the second cell, *'pāṇiyaka'*, could be the place where the beverages were distributed (*Pāṇiyaka=Pānīyaka*).

These contentions explain the architectural composition of the present cave that the two cells in the back wall were rooms in which the food and drink used to be kept and the large hall with seats around was meant for the persons who received the same; the huge open cisterns in front were to serve an important need in eating places, to provide water for washing. The fact that they are broader, have open top, and are three in a line also suggests that these could not have been *pāniya-poḍhis*.

So, cave 2f is an almonry. Whether this was meant for the resident monks, or wandering monks or the lay devotees who used to come to this place cannot be made out. However, it should be noted that even the *saṁgha* was associated with this charitable act, which means that the *saṁgha* by this time had begun to own money or property, a fact to be taken note of for the history of Buddhist monachism.

On palaeographical grounds, all these inscriptions belong to Series V B and are hence datable to the latter part of the 2nd century A.D.

## CAVE 3x AND 3y

Just in front of the cistern to the left of cave 2f and partly in front of the right parapet wall of cave 3 is a long seat with back. By its side are two steps leading up to a large flat area cut in front of the right parapet of cave 3. The purpose of the latter is not known.

## CAVE 3 (FIGS. 39, 6 (2); PLS. 94-99)

This is the largest excavation at Kanheri, and one of the largest of the *chetiyagharas* in the whole of Konkan and Western Deccan. This is next only in dimensions to that at Karle, but if the amount of labour involved to cut the whole complex is taken into consideration this happens to be the costliest rock-cut architectural work undertaken in this area in the period under consideration. But it will become clear as we proceed with the discriptions that this work is not the result of one man's donation nor was it wrought in one period.

The *chetiyaghara* resembles closely the *chaitya* hall at Karle. This too consists of a large rectangular hall with semi-circular back (apsidal), a verandah and a spacious open court in front. The interior hall is 26.36 m long and 13.66 m wide. A colonnade of 34 pillars (4.27 m h) has been arranged in a way so as to run parallel to all the inner walls, thus dividing the hall into a central nave (6.7 m l, 1.8 m w) aisles (1.5 m w) along sides and back and a rectangular transverse aisle in front. A huge *stūpa* is placed at the back end of the nave. The pillar types used in this, however, are not identical, nor is there symmetry in the arrangement of different type of pillars. The central two pillars in the front line parallel to the front wall are simple octagonal shafts with no base or capital. The extreme pillars in the same line are also of the same type but are provided with a rectangular projection running along the whole length of the pillar on one of its faces (Type B). This pillar, however, is similar to those in such positions in the *chetiyagharas* at Bedsa, Ajānta 9, etc.

The first six pillars, counted from the front line, on either of the side rows, are of the type found in the *chaitya* hall at Karle and consist of the stepped pyramid and pot, both at the base and capital, and

further have sculptured abaci (Type D v a). The next five pillars of the northern line are also of the same type but peculiarly the base members are absent there (Type D v b).[9] The corresponding pillars in the southern row, however, are much too simple, and lack the pot and stepped pyramidal members, both at the base and the capital. They are slender octagonal shafts with only a simple rectangular plate on the head. The pillars further behind, which run along the apsidal portion of the nave are again simple octagonal shafts. The roof over the apsidal part and the aisles (side as wall as transverse) is flat, but that on the nave is barrel vaulted. The triforium rises straight over the head of the pillars to a height of about 3.6 m and above this is the curved roof, its apex being 12.9 m above the level of the floor. The curved wooden rafters which once braced this vault roof are no more extant, but enough indications remain to show the original positions of these, in the form of impressions on the roof, and mortises hewn on the triforium.

A huge *stūpa* (4.9 m dia, 6.7 m h) is placed in the middle of the nave at back end equidistant from the back and side walls. Its drum rises in two steps and is bereft of any ornamentation. A row of mortises (about 18 cm sq and d) are cut at mid-height of the lower steps of the drum. The dome is almost hemispherical. The *harmikā* is small and is decorated with *vedikā* pattern. Its top is broken.

The verandah is about 3.8 m deep, 11.4 m wide and 11.1 m high and its roof is flat. The wall screening the inner hall from the verandah is almost plain and is divided into two parts in front elevation. The lower part is pierced by three doorways, big central one leading to the nave and a small one on either side leading to the aisles. The upper part has a deep cut semi-circular window shedding light on to the *stūpa*, but there is no decorative work either on the soffit or on its outer face. A few mortises, however, are present on the soffit and in the plain face over the apex of the semi-circular window. It is likely that any decoration, if present, could have been done with wood work fixed into these mortises. The wall surfaces between the central doorway and the side doorways on either side are carved with huge rectangular panels consisting of two pairs of *mithuna* figures in each. These are framed by decorative sill and lintel at the bottom and top and finely carved pilasters of the pot-base-pot-capital variety on either side. There are also a number of sculptures of Buddha on all the walls of the verandah. These are of a date far later than the making of the cave itself. The front of the verandah is again screened by a thick rock-cut wall. This consists of the return walls extending from either side for a distance of 2.7 m and end with two massive square pillars on either side of the entrance passage. The pillars rise from the end of a low parapet connecting these with the side walls. Large open windows have been cut above the parapet between the pillars and the side return walls. The entrance passage is about 3 m wide and 7.5 m high and its head and heads of the windows are set in the same level. The rock mass above this is further pierced into by five rectangular windows arranged in a line, and these look like doorways, flanked by square pillars, meant for rooms in an upper, but practically they serve as windows allowing light into the verandah.

In front of this screen wall is the huge open court, cut mainly to provide the height needed for the facade and interior work. This is an irregular quadrilateral on plan and is about 9 m deep. The width varies from 8.5 to 11 m.

In the open court, to the left is a cell entered into through a verandah. The walls of this are adorned with Mahāyāna sculptures. Two gigantic engaged pillars, about 9 m high, have been cut, one each on either of the side walls. These are of Type D v a, with pot-base-pot-capital variety and look almost like freestanding pillars, but for the single face of the octagonal shaft attached to the walls. Four huge mortises cut in the floor in the line of the pillars possibly suggest the existence of heavy wooden posts which may have supported a lean-to-roof in thatch resting on the front screen wall at the other end.

The front portion of the open court has a low parapet running on either side of the entrance. They have square posts at the entrance ends and similar ones at the wall ends. All these are carved with sculptures of *Yakṣas* or *Pūrṇaghaṭas* and the screen itself has on the outerside railing decoration in relief, with lotus design carved on both uprights and cross bars. The court is approached by a flight of six steps from the plain ground in front.

All the architectural parts of the cave described above appear at first glance to be part of a coherent plan. But it is otherwise.

A close observation of the positions and method of delineation of the different members of this *chaitya* hall reveals that the whole thing is not a piece of single design; there are at least four stages in the making of this cave. The Buddha figures cut on the walls of the verandah and the open court and in the small *leṇa* hewn in the north wall of the open court are the latest and of Mahāyāna times, and hence do not fall under the purview of present discussion.

So far as the remaining parts are concerned, the stages of work can be recognized with the help of stylistic variations of different members. It is known from Junnar-Manmodi 26, 40 and other unfinished *chetiyagharas*, that the nave, the vaulted roof, the *stūpa*, the central doorway and the *chaitya* window used to be cut first. Here all these reveal early features. The *stūpa*, has a huge cylindrical base rising in two stages and surmounted by hemispherical dome and a small square *harmikā* (now broken). The shape of the dome and the absence of decoration on the cylindrical base, and the proportion of its different parts reveal that this *stūpa* stands stylistically between *stūpas* in Bhāja 12 and the Karle *chaitya* hall. With this, however, the very fact that there was already the intention of having the verandah is also to be taken note of which indicates that this has to be placed to a stage later than that of Ajanta 9 and even Junnar-Manmodi 40.

It is interesting to note that the pillar arrangement in the hall is not symmetrical. In the row of pillars dividing the hall into nave and the aisles, four pillar types have been employed; the pot-base-pot-and-animal capital variety has been used for six pillars from the front on each line. Similar pillars but without pot-base have been employed for the next five in the north row,[9] but opposite these in the south row there are simple octagonal shafts having just a flat square plate at the head. The back pillars are simple octagonal shafts without base or capital. This probably indicates that the work in this cave stopped after octagonal pillars to right had been cut. Then after a lapse of time, at a time when the pot-base animal-capital pillar types had become the fashion of the day, the cutting work in this cave was renewed and all the other pillars in the hall were cut in that fashion, but nothing could be done for the pillars that had already been made, and they were left as such. This explanation for the lack of symmetry in pillar arrangement is also substantiated by the fact, that the *stūpas* represented in sculpture on the capitals of the later pillars[10] have their drums decorated with railings, the dome with incurved sides and the *harmikā* surmounted by inverted stepped pyramidal members, in contrast to the simple form of the main *stūpa* described above. This is indicative of the distance in time between these two types. It is known from the *chaitya* hall at Karle that this stage, in which the use of pot-base animal-capital pillars is seen, is also the one in which the high-roofed varandah, the carving of *mithuna* sculptures on the inner screen, and the plain front screen wall were also in vogue. All these features repeat themselves again in the present cave too. But the stocky pillars of this *chaitya* hall and the mode of sculptural work found in the capitals are far inferior in workmanship compared to those in the Karle *chetiyaghara*; these appear more to be specimens of imitative craftsmanship, and lack the care and freshness of novel experiment as seen in Karle. The inner screen wall too is crude enough. The door frame is no more adorned and lacks the rake in the jambs, which is a feature of the early period. Even in the delineation of the *mithuna* sculptures, the natural postures and expressions found in those at Karle are replaced by a stoic rigidity. Further, the Karle *mithnuas* appear to be pieces of after thought, introduced quite later than the finishing of the screen wall itself, and these being possibly earliest experiments in the introduction of such sculptures in the *chetiyaghara*, these lack any framework or a definite position in the scheme (see below). In Kanheri 3 the sculptures give an impression of these being part of the original design itself. They are neatly inserted between the two doorways and are also framed by railing design at the top and bottom and by pilasters of the type of the inner columns on each side. These points of difference are sufficient enough to show that the second stage of work at the Kanheri *chaitya* hall must have been after a sufficient lapse of time from the date of the Karle *chaitya* hall.

Comparing the pillars of Type D V employed in this cave with those in Nasik 3 it can be seen that

they are practically nearer in design. Hence this stage of work may have been done somewhere near that of Nasik 3, of the time of Gautamīputra Śātakarṇi.

Another feature copied in this cave from the Kārle *chetiyaghara* is the pair of pillars in the court. But significantly the two pillars here are of different types. The pillar to the north has all the essential elements of the pillars in the interior of the hall and hence can be considered as a piece wrought along with them. The southern pillar apart from the stepped pyramidal base and octagonal shaft has a roll moulding at its middle and looks almost like two pillars set one above the other. Further, there is a figure of Buddha carved at the base of the shaft, on one of its octagonal faces. These items of difference reveal that the two pillars are not contemporary works. The Buddha sculpture here appears to mark the earliest instance of introduction of Buddha figure in human form in this region. While the majority of Buddha figures known from Kanheri are, stylistically local redactions of the Gupta idiom, the present Buddha figure is different and definitely earlier. So it is possible that the pillar itself, along with the associated Buddha figure was wrought somewhere between the time of making of the north pillars and the time of later Buddha sculptures usually assigned to *c.* 5th century A.D. The stylistic features of the sculptures on the podium of this pillar indicate that they are of an earlier period. The drapery and head wear of these are similar to those employed in the *mithuna* figures in the verandah. Further these sculptures show in their way of delineation of the human form and the *nāga*, and the use of the *vedikā* pattern, the cotinuation of the Hīnayāna sculptural tradition and betray their relationship with the sculptures from Amaravati. So it is likely that this pillar was made at not far a distance in time than the north pillar and the *mithuna* sculptures.

The parapet in front of the open court too has similar sculptures of *nāga*, etc., and these can be due to their contemporaneity. The comparisan can be drawn with regard to the rosette decoration on the studs of the outer railing pattern and also the depiction of series of animals below the railing with such a frieze seen in Nasik 3. The continuation of tradition is indicated herein.

It can be further seen that in the cutting of the open court and the front parapet, care has been taken not to damage cave 4. The orientation of the court itself has been shifted from its normal position by about 20° to right. Actually cave 4 juts partly into this court itself and hence there is a clear proof that the large open court is a piece of after thought and was made after the time of cave 4 (see below). It is again with this fact that the presence of the rectangular decorated stump at the right end of the front parapet and the lack of the same in the corresponding place to the left, *i.e.* near cave No. 4, could be explained. It is possible that originally there was only a narrow passage leading into the cave, as in Bedsa, but later this was further extended along with the cutting of the low parapet wall and probably the right pillars too.

With these considerations the stages of making of this cave can be set as follows :

I. Hewing of the nave with vault roof, the *stūpa* and the fashioning of the 13 plain octagonal pillars. (The work was stopped abruptly at a stage in which the hewing was looking roughly like the present unfinished cave in Manmodi 40). This phase belongs to post-Bhaja pre-Karle stage, to a time when making of verandah had become part of the tradition.

II. After a lapse of some time, in accordance with the fashion of the age, the main cave was completed by introducing the pot-base and pot-and-animal-capital pillars in the hall. Finishing touches were given to the verandah also finally trimming the doorways and the *chaitya* arch and sculpting the *mithuna* panels. Probably the north pillar in the forecourt too belongs to this stage.

III. The forecourt was enlarged, the front parapet was cut, and probably the south pillar in the forecourt was also made. (It is likely that at this stage provision for a wood and thatch lean-to-roof was made. Huge mortises are seen in the forecourt and on the front screen. Possibly between stages II and III, cave 4 had been made and hence the spread of the forecourt had to be tilted slightly southwards.)

IV. The sculptures of Buddha in the verandah were made. A shrine with Mahāyāna sculptures was cut in the north wall of the forecourt.

This contention based on stylistic grounds is strengthened by the statements of an inscription (Kanheri No. 4) carved on the huge square pillar of the front screen wall. The inscription is of the time of Gautamīputra Śrī Yajña Sātakarṇi. This mentions that the *chaitya* hall was installed (*patiṭhāpita* l.10) by two persons Gajamita and Gajasena and was completed (*samāpita* l.19) by a group of persons. The use of the words '*patiṭhāpita*' and '*samāpita*', instead of *Kārita* or *devadhaṁma* found usually in other inscriptions, is significant. It can be inferred from this also that some stages, at least two, are involved in the making of this cave. To what stages narrated above the words '*patiṭhāpita*' and '*Samāpita*' are to be applied is difficult to decide. But a clue provided by the inscrption on the *stūpa* in cave 4 (which came into existence between stages II and III) makes the point clear. The inscription is in characters belonging to palaeographical series V A. The person in whose memory the *stūpa* in cave 4 is erected is one *thera Bhadaṁta* Dhammapāla. The same *thera* appears to have been one of the persons responsible for the completion (*samāpita*) of the *chaitya* hall; the fact that a *thera Bhadaṁta* Dhaṁmapāla is mentioned in that context in the inscription in the *chaitya* hall, couled with the fact that a *stūpa* dedicated to the *thēra* of the same name has been made just by the side of the same monument may be considered as a strong circumstantial evidence for this. If so, the inscription (Kanheri 6) being of Series V A the completion of the *chaitya* hall may have to be assigned to the life time of this *thēra* Dhammapāla, to about *c.* A.D. 120-130. The architectural evidence of the use of pillars of D v type is well in consonance with this date. The date of the inscription (Sri Yajña's time) recording the details of the stages of making of this *chetiyaghara* hardly goes against this contention. There is sufficiently a long passage after the mention of '*samāpita*' though its contents cannot be made out due to its fragmentary nature, and it is not unlikely that a further stage of work may have been referred to in that part. The location of this inscription is also of interest. This is on a front pillar and it is quite likely that the work relating to the forecourt (near which the inscription is carved) may have been mentioned herein; the place selected for this against the tradition of carving the foundation inscription on the verandah as seen in a large number of monuments of the period is to be taken note of.

In view of the above epigraphical evidences two stages of work in the Kanheri *chaitya* hall made out from architectural analysis may be dated to *c.* A.D. 120-130 (II stage) and *c.* A.D. 200 (III stage).

It has been averred already that the initial attempt to make the *chetiyaghara* was during the pre-Karle post-Ajanta 9 stage when the use of octagonal pillars inside the hall and the making of the verandah, were in vogue. Such a stage would be near that of the Bedsa *chaitya* hall and, if the *stūpa* shape is taken into consideration, this should be placed a little earlier than that. Hence the date of commencement of the work of the *chaitya* hall may have to be placed around 100 B.C.

Thus the *chaitya* hall at Kanheri shows different stages of work spanned through a range of about three centuries.

To recount it, the stages would be as follows :

| | | |
|---|---|---|
| I. | Initial attempt to hew the *chetiyaghara* : a passage in front, the nave, 13 octagonal pillars of Type A iii and the *stūpa* were made ('*patiṭhāpita*'). | *c.* 100 B.C. |
| II. | The pot-base animal-capital pillars were fashioned, the aisle formed, the verandah, doorways and the front screen with windows, etc. were trimmed to shape; *i.e.* the *chetiyaghara* proper was completed ('*Samāpita*'). | *c.* A.D. 120-130[11] |
| III. | The forecourt was enlarged, the front parapet and the south pillar were fashioned and the inscription dated in Yajña Sri's reign was put up. | *c.* A.D. 200 |
| IV. | Buddha figures were cut in the verandah, an additional cave adorned with Buddha figures was also made in the north wall of the fore court. | *c.* A.D. 5th century |

CAVE 4

To the north of the open court of the big *chaitya* hall is this cave, a small flat roofed circular *chetiyaghara*. The circular cell is about 3.5 m in diameter and 2.3 m high, with a front doorway about

1.2 m wide and of the same height as the cell. This cell is at a little higher level and is approached by a flight of 8 steps from the open space in front (Pl. 94). The *stūpa* is about 2 m in diameter and rises up to the roof of the cell (Pl. 100). It has the usual cylindrical drum, with a thin belt at the bottom, the socle and the railing decoration at the brim. The dome is a compressed sphere with prominent side bulges and almost flattened top and bottom. Above this is the square *harmikā* slightly battered, with the usual railing. Over this is a four-stepped inverted square pyramid. From the top of this member a *yaṣṭi* rises and connects a circular umbrella carved in the roof.[12] An inscription (No. 6) carved on the *harmikā* records that this is the *stūpa* of *thēra* Dhammapāla and was made by a lady Sivapālataṇikā. The characters of this inscription can be assigned to Series V A. Stylistically too this *chetiyaghara* can be dated to the same time, *i.e.* early 2nd century A.D. It has already been pointed out above (p. 196) that this *chetiyaghara* is earlier than the open court of cave 3.

EXCAVATION 5

About 20 m to the north of the above, reached after a bend in the path, is a water cistern (Type A ii) with two square mouths cut under a rectangular recess. There is a Saṁskṛt inscription on the back wall of the recess in characters of Series V B. This records that this water cistern is the meritorious donation of one Sāteraka, the confidential minister of Vāsiṣṭhīputra Sātakarṇi's queen who is a descendent of the Kārddāmaka royal house and daughter of a *Mahākṣatrapa* (Kanheri No. 7). The inscription is very much damaged.

EXCAVATION 6

This is another water cistern of Type A ii with two square mouths cut in the floor of a rectangular recess. This is situated a little further off from 5. Two inscriptions (Nos. 8 and 9) carved in the recess record the donation of the tank by (1) a merchant of Sopāra and (2) certain Sulasadata of Chemūlaka. These are in characters of Series V B. It appears this cistern was a common donation of the two, and both had their names mentioned separately in two inscriptions engraved above the mouths of the cisterns.

CAVE 7 (FIG. 40)

This is a much ruined excavation with practically the whole of the front part vanished. At present this consists of a large hall (9.1 m b, 3.6 m d, 2.1 m h) with a low bench running along the three sides. There is a cell each on either side. Both the cells have a bench each.

It is difficult to make out the original plan of this cave completely. This could have been a *leṇa* with cells around the hall type or just a *maṭapa*, with a cell on either side. If the latter contention is correct this may be another architectural version of the almonry as seen in cave 2f. The floor of the cave is much pitted.

The following excavations are on the northern side of a ravine opposite caves 5, 6, 7, 8.

EXCAVATION 7x

This is a long bench located just on the north bank of the ravine. It has a sloping back, and on that is an inscription (No. 10) which is much effaced. The remnant letters indicate that they are of Series V C.

EXCAVATION 7y

A little to the NE of 7x is a path with steps cut in the rock. By the side of this is an inscription (No. 11, Series V A) which records that it is a donation of one Rohiṇimita.

By the side of the above path nearer its commencement a group of six excavations, cut in a semi-circular scarp. All these are very much ruined, due to the fragile nature of the rock.

CAVE 13

This, in the westernmost of the group, is a *leṇa* of Type A iii consisting of a broken verandah, a room and an inner room. The inner room has a stone bed running along two adjacent sides. The outer room has a bench at the back. There is a grated window about 45 cm square lighting the inner room.

CAVE 14

This was a large hall (*maṭapa*) with stone benches on two adjacent sides. The bench is cut in a recess, 3.6 m long on each side and 1 m high. The front is broken.

CAVE 15

This is very much dilapidated and now featureless.

CAVE 16

This is an improved version of the *leṇa* of cell-hall-verandah type (A iii). There are two sets of cell-halls placed side by side to share a common verandah. The cells at the back have recess-benches along the back wall. The halls in front do not have benches. In the verandah there is a recessed-bench on the sides. The pillars, if there were any, have not survived. There are grated windows, one each at head level on the right side of cell as well as hall doorways. The window to the right in the verandah, and those in the inner hall are very roughly carved, with simple rectangular piercings, but the one on the left hall door shows some attempt made to give the *vedikā* shape, but even this is unfinished.

An inscription (No. 12) carved on the left wall of this cave, records the donation of (probably) this *leṇa* and some permanent endowment of money made by a member of the *negama* of Supāraka. Palaeographically this belongs to Series VI.

There are two cisterns with square mouth, one on each side of the fore court.

CAVE 17

A very much dilapidated cave. A bench-in-recess exists in each of the two partly surviving cells.

EXCAVATION 18

On the path from 17 to 19, a little up the hillock is a small dressed surface containing a much effaced inscription. This place, it appears, was intended for a cistern.

About 72 m further east of 18, reached after crossing the stepped path leading up the knoll, is the next group of caves (caves 19 to 30) hewn along the north bank of the stream. These are numbered from west to east. In this group the caves belonging to the period under consideration are only two, viz. 21 and 22.

CAVE 21 (FIG. 40; PL. 102a)

This is a *leṇa* of cell-hall-verandah type (A iii). The hall (6 m sq, 2.7 m h) has a bench (75 cm h, 60 cm b) running along the right and back walls. At the farther end of the left wall a rectangular doorway (75 cm w, 1.8 m h) leads into a cell (2.1 m. sq, 2.4 m h), with a bench-in-recess along its back wall.

The front wall of the hall is pierced into by a central rectangular doorway (90 cm w, 2 m h) and a lattice window at head level on each side. The verandah is narrow (1.2 m d, 7.6 m w) and has a bench in-recess along the left wall. The front portion of the verandah is broken.

There is an open court in front of this, and on the left wall is a recess (1.2 m d, 1.5 m b, 2.1 m h) with a square mouthed cistern underneath.

On the back wall of the recess is an inscription (No. 14). It informs that the cave was donated by one Apareṇu of Kalyana. in association with many of his relatives on the 5th day of the first fortnight of

the *Grīṣma* season in the 16th year of the reign of Gautamīputra Svāmī Srī Yajña Sātakarṇi. The date would be A.D. 188. The donation was given to the *saṁgha* of the four quarters. A permanent money donation was also made, so that robes be distributed to the monks from the interest gained on that.

CAVE 22 (FIG. 40)

Adjacent to 21 is this cave. This too has a cell with a bench-in-recess at the back, the hall with the run of benches along the right and back walls, the central doorway and the grated windows on the sides, the verandah with the recessed bench to left, and the open court with cistern under recess cut in the left wall. In size this is smaller than cave 21. Another slight difference, however, is in the placing of the inner cell. In the present cave the run of the bench at the back wall has been shortened a little, and, in the mass of rock retained in that corner, a doorway has been cut in the projected side parallel to the front wall.

There is an inscription (No. 15) on the right wall of the front court, just opposite the recess-cistern. The characters of this inscription are similar to those used in Srī Yajña's inscription in cave 21. This record mentions the making of this cave by a nun. Caves 21 and 22 are contemporary works.

Opposite the above caves on the southern bank of the ravine is a group of ten caves arranged in a row (caves 32-41). These face north or north-east. Numbering is from west to east.

CAVE 32 (FIG. 40; PLS. 100, 101, 102)

A well-preserved *leṇa* of the cell-hall-verandah type (A iii). The hall (4.6 m sq, 2.3 m h) has a low bench running along the left and back walls. In the right wall, nearer the front corner, a doorway (76 cm w, 2.3 m h) has been cut to lead into a cell (1.8 m d, 2.3 m w and h). There is a bench-in-recess along the back wall of the cell. A doorway (1.2 m w, 2.1 m h) leads into the front verandah. There are two grated windows of simple type, one on each side of the front door at head level. These have just three rows of four square holes. The left grated window, however, has a depressed frame looking like a *śākhā*. The verandah (1.2 m d, 5.5 m l, 2.3 m h) has two pillars in antis in front. The pillars have square base and octagonal shaft and are placed on either side of the entrance to stand on low benches which run up to the side walls. At the other end of each bench is a pilaster of simple rectangular cross-section. These bear hour-glass decoration. The pillars and pilasters carry a low architrave. The benches have raised back towards their outer edge and the back faces of these are decorated with railing pattern. Below this railing design, the basement of the cave has a sunken rectangular moulding with a row of knobs. Further below this is the decoration of a line of vertical studs (Pl. 100). There is an open court in front about 90 cm lower than the level of the verandah floor. A flight of four steps leads up to the verandah from the court. These have low plain sloping side slabs. The sloping part ends near the first step and then becomes thick and flat to extend a little beyond the line of the side stone as well as the front of the first step. A semi-circular *Candraśilā* is cut in front of the first step.

The eave projects forward to about 90 cm from the line of the architrave and acts as the drip ledge. This carries two rectangular humps one each above the line of the pillars, and smaller square ones above the line of the pilasters.[13] There are rectangular mortises cut in the architrave and a double curved groove on either of the court walls at cave level. These show that some thatched canopy was provided in front to protect the verandah from sun and rain. Its shape indicated by the grooves on the side walls is interesting (Pl. 101).

There are two cisterns-in-recess in the open court cut opposite to each other in either of the walls.

An inscription (No. 16) carved above the left cistern-recess and below the drip-ledge informs us that (this *leṇa*) along with the cisterns, the sitting bench, and the seat, was donated by a man from Kalyāṇa. He made some permanent investment of money also, from (the interest of) which, shoes and clothes were to be given to the monk, residing in this cave. The characters of this inscription resemble those of Series VII, displaying slightly developed characteristics. It is likely that this belongs to the latter part of the 3rd or early 4th century A.D.

This being a very well-preserved cave displaying all the architectural features can be considered as the standard example of *leṇas* of A iii type.[14]

CAVE 33

This cave situated to the left of 32 is almost similar in plan with that, except for the fact that this is much ruined. However, in this case the cell was at the back of the hall and both had benches along a single wall. Here too, there are small grated windows on either side of the central doorway. The verandah was roughly cut and has a bench to left. The front portion of the cave is damaged.

The destruction of the cave appears to have happened long back as the court in front is known to have been used as a cemetery. A number of structural *stūpas* that once stood here had survived till the last century.[15]

EXCAVATION 34x

After passing cave 34, a later cave, there is a flight of steps leading to the upper series of caves. An inscription (No. 17) carved on the rock by the side of the above path records that this path was donated by a blacksmith Nāda, a resident of Kalyāṇa. The record belongs palaeographical to Series VI.

CAVE 35

This is another *leṇa* of Type A iii, but now this is very much ruined.

CAVE 36 (FIG. 40; PL. 103)

This is a small circular flat roofed *chetiyaghara* of Type B ii. The circular cell is about 3 m in diameter and about 2 m high. The *stūpa* cut in the centre of this is about 1.45 m in diameter at the base. The drum of the *stūpa* has slightly tapering sides and is ornamented at the brim with the rail pattern. Above this is the compressed 3/4th spherical dome with much incurved sides and flattened top. Over this rises the square *harmikā* ornamented with railing design, and this carries an inverted stepped pyramidal capital. The stone stave rises from the centre of the flat top of the above and connects this to the circular knob at the centre of a large circular canopy carved on the roof. The features of the *stūpa* are similar to those in the *stūpa* of cave 2c.

To the right, inside the circular hall, is a small rectangular cell (2.3 m d, 1.9 m w). Its roof is at a lower level than that of the circular cell; being only about 1.7 m high. A bench is cut in the left wall of the cell. The position and shape of the bench suggests that the cutting of the cell is a piece of later activity.[16] The doorway of the circular hall is roughly cut. It is rectangular (1.7 m w, 2 m h). The interior faces of the jambs are bevelled, so that the external width of the doorway is more than the internal span.[17] The floor of the cell is at a higher level than the front ledge-path, and hence is reached by a flight of steps which is roughly cut.

This *chetiyaghara* with its later type of *stūpa* clearly shows that the circular plan had survived to a much later date. This may have been dedicated to some monk of high status, as it is in the case of cave 4. The making of the cell with a bed inside this is an interesting item. The *stūpa* type probably suggests this to be a work of about the 3rd century A.D.

EXCAVATION 38

A cistern with its square mouth under a recess.

CAVE 39

A simple single celled *leṇa* (Type A i b) with a bench at the back. There is a grated window at head level to the left of the doorway. The cave is small and unimpressive.

In the open court in front, on the left wall, there is an inscription (No. 18) in characters of Series VI. It records that the *leṇa* is a gift of Ānada, a monk.

CAVE 40

This is very much ruined. As it survives today it looks like a huge cavern with some low benches. This might have been a *leṇa* of Type A iii, having a verandah with a bench to left, a hall with a bench in the back and a cell to left with a bench in the back wall.

Further east of the above is a later cave 41 and then the rock scarp takes a turn and runs towards south. On this face are a few more excavations (42-48). A small foot-path on the ledge between the scarp to right and the valley to left leads to these excavations. These face east. (Between 41 and 42 is a rock bearing inscription No. 42).

CAVE 42 (FIG. 40)

This is a neatly cut *leṇa*, a variant of Type A iii. This consists, as usual, of an open court and a verandah, the floor of which is about 60 cm higher than that of the court floor. The front portion is broken and the existence of pillars or otherwise and the nature of pilasters are unascertainable. The verandah has a bench along the left side wall. A central doorway leads into the hall. There is also a grated window of a simple type with three lines of four square holes pierced at head level to the left of the doorway. The hall has a bench at the back. A cell has been cut in the right wall of the hall near the front wall. This too has a bench at the back.

CAVE 43

A ruined cave. Only the back portion with a recess and part of a small cell remains. The complete plan cannot be made out.

CAVE 44

This too is ruined, but appears to have been only a small cell with a bench to right (*leṇa* Type A i b). To the left of the doorway at head level is a simple grated window consisting of only 4 square holes, like that of cave 42.

EXCAVATION 45

Just an attempt to cut a Cave. This is about 30 m south of cave 44.

CAVE 46

About 10 m further south of 45 is this ruined *leṇa* (Type A i b) having a small cell with a bench at the back. Its front is broken.

CAVE 47

This too is very much ruined. Its front part is completely gone. Behind is a cell with a bench along the back wall. This had a rectangular doorway. There is a small open square window to left at head level. This might have been a simple cell with a verandah.

About 15 m higher up from the lower ledge with the caves described above, there is another ledge path. At the eastern extremity of this are three caves facing north. These caves are numbered from east to west (Nos. 49-51).

CAVE 49 (PLS. 104, 105, 106)

This is a *leṇa* of Type A iii consisting of a hall with a bench running along the right and back walls, a cell cut in the left wall having a bench along its back wall, and a verandah in front with a bench along the left wall. There is central doorway in the front wall of the hall, but no windows. In front of the verandah there are two simple octagonal pillars in antis, and also the low benches with screen wall connecting the set of pilaster and pillar on either side. The hour-glass decoration is seen on one of

the pilasters. There is a flight of three steps with sloping side stones leading down from the verandah to the front court. In front of the steps is the semi-circular *candraśilā*.

On the left wall of the open court, there is a much effaced inscription.

The rock being fragile, the ormentation on the back of the low screen wall in front of the bench is not preserved. The steps, the bench as well as the pillars are also damaged. The eave is just of simple rectangular cornice type. The *candraśilā* is similar to that of cave 32. The cave may be a little earlier than 32 and hence may belong to about mid 3rd century A.D.

CAVE 50 (FIG. 41; PL. 107)

This cave though looks unimpressive from the front is an interesting monument in many ways. This is similar to cave 49 in its essential components, but larger than that. As usual, this too consists of a hall with a bench at the back and right side walls. Two cells are cut in the left wall each with a bench at its back. A central doorway, leads to the verandah. There is a grated window (Pl. 113) at head level to the left of the doorway. There is a bench along the left wall in the verandah also. The front floor of the verandah is broken, and there is no indication of any pillars. But the pilasters on either end have rectangular cross section, and the left one still retains the hour-glass decoration. The steps are broken. The roof projects to about a metre in front of the architrave over the pilasters. There is no indication of any decoration on the front. The *candraśilā* in front of the steps is well preserved. There is a niche, with the mouth of a cistern, to the right cut in the wall of the open court, below the projecting *chajjā*. (There is also a later excavation in the left wall).

While the above are the usual features of *leṇas* of Type A iii there are two noteworthy additional elements. Unusually the door-frame of the hall has a sunken ledge all round giving the impression of the *Śākhā* decoration. Directly opposite this on the back wall of the hall, there is a rectangular niche with arched top.

These and several other features indicate a stylistic advancement and possibly a later date to this cave compared to its neighbour, 49. The plan as well as the existence of the hour-glass decoration on the pilaster suggest, however, their common genetic connection. But the *candraśilā* is no more a simple circle here. This looks like a segment of a circle placed on a flat base with vertical projections at either end, a development which appears to lead towards the *candraśilās* of later ages.

It is also of interest to note that Buddha figures have been carved on the side walls of the verandah. This may, however, be of later date. But the presence of an empty arched niche in the centre of the back wall of the hall is a significant item, particularly when viewed from the historical context, and with the background of advanced stylistic features narrated above.

It is likely that at a certain time in the history of the religion in the area, Buddha's sculpture in human form may have begun to be introduced. It is a separate problem worthy of consideration, which falls beyond the scope of the present architectural study. However, it can be simply suggested here, without emphasis, that here in the cave of this type falling in the last stage of early Hīnayāna excavations a transformation could have set in and here could be recognized the beginning of the well-known form of *leṇa-cum-chaitya* hall of the later period wherein the sanctum at the back and dwelling cells around the hall are seen. The niche in the present instance may have housed an object of worship. There are rectangular holes on either side cut parallel to the jambs of the niche which appear to have been meant for receiving lamps. This simple arrangement for a cult object in the dwelling cave may have ultimately given rise to the provision of a seperate cell in them.

On the left wall of the court of this cave there is an inscription (No. 20) which on palaeographical (Series VII) and orthographical grounds could be placed to the late 3rd or early 4th century A.D. The points of particular interest are the use of later forms of *na* and *sa*, which resemble those of the inscriptions of 4th century A.D. Secondly, even though the language of the inscription is Prākṛit, there is a good admixture of Saṁskṛit. This hybrid language is again a feature of the inscriptions of the period assigned to this inscription, and the analogies, though distant, may be mentioned in the Malavalli inscription of Kadaṁba Mayūraśarman, the late Ikṣvāku inscriptions of the Andhra country and the

early copper plates of the Pallavas.[18] The inscription mentions that this cave was donated collectively by members of some family to the *saṁgha* of the *Bhadrāyaniyas*. Statements such as '*Sarvva satvānam cha hita sukhārthāya bhavatu*' used in this inscription resonate Mahāyāna concepts, and are similar to such phrases used in the later Sanskrit inscriptions of the same area.

These suggest that this cave could be considered as an architectural piece of the transitional phase from the Hīnayāna to the Mahāyāna.

CAVE 51

This is a small *leṇa* much ruined and somewhat altered too. The extant remains of the main *leṇa*, leaving the cells cut in the right wall of the forecourt which may be of later date, reveal that this is of Type A iii. The *candraśilā* preserved here is identical in shape with that of cave 50. The two caves may be contemporary.

About 30 m west of the above are two caves 53 and 54. These are at a lower level than the previous one and face north-west.

CAVE 53 (FIG. 41; PLS. 108, 115)

This is a *maṭapa*, rather a double *maṭapa*, displaying uncommon features.

This consists of two square halls (4.6 m sq) placed side by side to open into a common verandah (11.4 m l, 1.9 m d). Both the halls have low stone benches running along two adjacent walls, and there is also a bench along the left wall of the verandah. There are long benches along the walls of the open court also.

The verandah is approached by a flight of 5 steps from a large open front court which is about 1 m lower in level than the floor of the verandah. There is the *candraśilā* in front of the steps.

There is some discrepency with regard to the other components in the cave. A comparison of the description of the cave given by Bhagawanlal Indraji in 1882 (BG), an illustration of a pilaster available in Burgess and Indraji, 1881, pl. XXVIII fig. 5, and what is seen at present shows that the original look of the cave has been much altered by modern restoration work. At present the front part of the verandah has a low bench, stretching on either side of the entrance passage upto the wall. These benches have a thin parapet rising from their outer edges to form the back of the seats. Two pillars and a pilaster rise from these benches to support an architrave spanning the whole width of the verandah. The roof of the verandah projects over this and further on to front for about a metre, but this projection is well-dressed at the end to form a flat eave.[19] At present the pillars are simple rectangular masses supporting a thin capital of the same width, but decorated with the sculpture of a man seated behind a couchant lion. Possibly these were originally pillars having the usual octagonal shaft, pot-capital and inverted stepped pyramidal dosseret and that the sculptural work was above the top most plate of the stepped pyramid.

The pilasters are of the usual rectangular cross-section. The decoration over them have been partially obliterated by recent restoration, but it can be made out that this consisted of a line of small rosettes at the top, just below the architrave, and a half lotus below that and a full lotus further below, seperated from the previous by two adjacently placed diamond shaped reliefs. The verandah basement, including the backed bench has two horizontal series of vertical studs in relief seperated by a thin horizontal band consisting of a line of small knobs.

While the decoration on the basement shows some similarity with that seen in cave 32, a difference in the two is easily noticeable in the replacement of the railing pattern by simple vertical studs on the backed bench. Whether this is due to the work of the modern restorers are actually one displaying the change due to chronological differences cannot be made out. However, the flat eave and the *candraśilā* which are identical in shape with those in cave 50 show that these two are nearer in date, and further the presence of an archtopped niche in the back wall of the left hall in this cave is a copy of a similar feature seen in cave 50. The pot-capital, the stepped pyramidal dosseret and the animal sculptures above them are well-known in various excavations of the area. But it can

be noticed that the animal figures are crudely executed, in half-hearted fashion. This can be easily explained in the present context, as this cave is nearer in date to cave 50 which has been placed on other grounds to the Hīnayāna-Mahāyāna transitional phase. It is quite likely that by this time, the tradition of carving pillars of Type D had ceased, and that the present examples were just due to some imitatory attempts by unaccustomed hands. The decoration on the pilasters also subscribes to the theory of a late date for the present cave. A close examination of the decoration reveals that the basic form used here is that of the hour-glass seen in many caves at Kanheri itself.[20] But in the present example instead of being satisfied with simple lines, the interspaces have been filled up with rosette designs. It may be further noted that this advanced feature in decoration ultimately gave rise to certain pillar types seen in Deccan architecture of later times, as those in some Mahāyāna caves at Kanheri itself.[21]

So cave 53 can be considered as a significant architectural document for the reconstruction of the art history of Deccan as this work preserves evidence in its pilaster type, for an important transitional link between the Hīnayāna and Mahāyanā pillar types. Along with cave 50, this too may be assigned to the late 3rd or early 4th century A.D.[22]

CAVE 54 (FIG. 41)

This is a *leṇa* of Type A iii, consisting of a hall with a bench running on two sides, a side cell with a bench to the left, and a verahndah in front. But the *leṇa* is much altered now in recent renovation. There is a small grated window with circular holes bored in sunken squares (Type B iii). It has a *śākhā* frame around. The verandah has two octagonal pillars (Type E) and two rectangular pilasters rising from a low backed-bench. The door jambs are straight. The steps leading down to the court have sloping side plates and the *candraśilā* in front is a simple semi-circle like the one seen in cave 49. The projecting eave is flat and plain.

In the front open gallery, in the left wall, there is a rectangular recess with a water cistern on its floor. On the back wall of this recess is an inscription (No. 21) in characters of Series VI. It records that a nun, associated herself with her sister and others, donated the cave and the water cistern. She made some investment of money also for providing clothes and shoes for the monk residing in this cave. The characters of the inscription and the architectural features indicate that this is to be dated to the first half of 3rd century A.D.

About 20 m to the south-west of the above, at a slightly higher level, is another group of caves (56-60) running from east to west. These caves face north.

CAVE 56 (FIG. 41)

This is an old cave which appears to have been remodelled subsequently. Now it has a large rectangular court in front and a verandah at a higher level. The verandah has four pillars and two pilasters. The steps leading from the front court to the verandah is between 1st and 2nd pillar from right. The pillars rise above a low bench. They are square but the corners are chamferred in the middle for a height of about 22 cm. The rectangular pilasters bear hour-glass decoration. There are two doorways in the back wall of the verandah. The right doorway leads into a large hall with a bench running along the back and side walls.[23] A doorway on the left wall leads to a cell, which is also approachable from the left doorway in the verandah. Behind the cell, to right, in another cell with a bench at the back and a recess with an 'L' shaped bench running along the back and right walls. It can be made out from the plan that originally this cave was also a *leṇa* of Type A iii with a hall, a side-cell and verandah. Later, however, it appears the verandah was extended to left, two more pillars and the left pilaster were provided and a door was cut in the verandah to lead, to the left cell and further the small cell and recess were carved (*Leṇas* Type A iv).

The cave is too much remodelled. The pillar type though comes nearer to Type C is extremely crude (Fig. 15-1). It appears to be an attempt to copy some old form than that itself being old. This could be one of the attempts in pillar form which ultimately led towards the pilaster decoration. In the

context of varied architectural items like pillar of Type C, pilaster with hour-glass, a combination of A iii and A iv *leṇa* plans, etc., its date cannot be fixed easily. Middle of 3rd century A.D. would not be a far date of the final stage.

CAVE 57 (FIG. 41)

Adjacent to 56 is this small *leṇa*, a variant of Type A iii. The hall has 'L' shaped bench running along the back and left walls. The cell is cut in the right wall and this has a bench. A small doorway leads to the verandah. There is a grated window on either side of the doorway. This is at head level and is of a simple type with rectangular holes (Type B ii). The front portion of the verandah has two simple octagonal pillars, and two plain pilasters. There is no bench or screen wall in the verandah. A flight of steps leads down to the open court. The *candraśilā* is effaced. Though in essential features this resembles A iii *leṇa* like 32, the absence of the backed bench cannot be explained. This may be considered as a variant of A iii. The cave with its general features will have to be dated to the 3rd century A.D.

EXCAVATION 57a

To the left of the front court, between cave 57 and 58 is a cistern-in-recess.

CAVE 58 (FIG. 41)

This is a *leṇa* of Type A iii exactly similar in plan to 57 but larger. The type and disposition of the grated windows are the same as in 57 but in addition there is another one cut in the left wall of the inner cell which has only 4 square holes. Here too, the *candraśilā* is gone. A cistern-in-recess is cut in the right wall of the open court.

CAVE 59 (FIG. 41)

A *leṇa* of Type A iii but the arrangement and form of different parts are slightly irregular. The left wall in the hall is not straight but bends at an angle and then proceeds along a different line, thus making the front portion of the hall broader than the back. The bench runs only along the back wall. The verandah is larger to right than to left and a bench is along the left wall. There is a grated window to the right of the doorway at head level and this is of the type seen in cave 57. The inner cell too has been provided with a similar grated window. There are no low benches, or screen wall or pillars in front of the verandah. The pilasters, however, bear the usual hour-glass ornamentation. Two crudely cut steps lead down to the open court. A cistern in recess is cut into the right wall of the open court. The bend in the left wall of the hall is probably due to the prior existence of the cell of cave 58 and this gives a clue to the posteriority of the present cave to 58.

There is an inscription (No. 22) engraved on the right wall below the projecting eave. This belongs to Series VII, and records the donation of the cave, the cistern and the recess (probably the cistern-recess) by a monk hailing from Kalyāṇa.

The architectural and palaegraphical features reveal the date of this to be around A.D. 300.

EXCAVATION 59a

On the scarp face between cave 59 and the next 60, a long bench is cut. The place for the bench has been well-selected; a beautiful view, of the plain ground down the hill and the sea and the Bassein Creek beyond, can be had from this place.

CAVE 60 (FIG. 41)

This is a simple cell with a verandah (*leṇa* Type A ii). The cell has a bench along the left wall. It appears there were two octagonal pillars in front of the verandah, but they have disappeared now. The pilasters are rectangular and bear the hour-glass decoration of the type seen in cave 61. There are steps leading to the court and the *candraśilā* in front of these is semi-circular. This cave has a special

feature in the delineation of the eave in the fact that below the projecting flat rock in front, a smaller beaked ledge has been made in continuation of the roof in front of the architrave.

In the right wall of the open court below the projecting *chajjā* is a cistern-in-recess and along the left wall of the court towards the front side is a long bench. A circular bowl sort of thing is cut by the side of this bench.

There is an inscription (No. 23) cut on the right wall of the court, but it is much effaced. The characters are of Series VII. The inscription appears to record the donation of the *leṇa* by an *Upāsaka*.

CAVE 61

This ruined cave, standing isolated about 20 m left of cave 53, is a *leṇa* of Type A iii. An inscription (No. 21) of Series VII, though much effaced, appears to record the donation of the *leṇa*.

CAVE 62

A little to the west of the above is this *leṇa* of Type A iii. This is a very much ruined hardly preserving any typical feature. The eave pattern, however, is similar to that of cave 60 above.

CAVE 63

This too was a *leṇa* of Type A iii, but is renovated to such an extent as to obliterate the old features.

CAVE 64 (FIG. 42)

A little further west of the above is this *leṇa* of Type A iii, with the usual benched hall, cell and verandah (ruined). There is a grated window (Type iii) to the right of the hall door.[24] The pilasters are rectangular and bear the hour-glass decoration. The eave is similar to that of cave 60. The inscription (No. 25) in this cave belongs to Series VII and records the donation of the *leṇa* and a water cistern for the benefit of *Chātudisa-bikhusaṁgha*.

CAVE 65 (FIG. 42)

This is similar in plan to cave 64 (*leṇa* A iii), with the usual hall-cell-and-verandah. The octagonal pillars (Type E) and rectangular pilasters with hour-glass decoration are also present, as well as the steps with side slabs and the semi-circular *candraśilā* of the type of the one in cave 32.

In the left wall of the open court, another set of verandah, hall and cell has been cut. This is smaller than the main suit and bereft of pillars and decorative elements. The bench is seen only in the back wall of the hall.

An open bench is provided along the left wall in the open court. In the right wall of the court there are two cisterns-in-recess.

On the right wall outside the verandah there is an inscription (No. 26) of Series VII. It records the donation of the cave and the cistern by a nun hailing from Dhenukākaṭa. The sect of the Aparaseliyas has been mentioned in this inscription.

The form of the hour-glass decoration and the *candraśilā* as well as the inscription of Series VII suggest this cave to be a work of late 3rd century A.D. The small suit cut in the side wall of the court may have been added a little later.

CAVE 66

This is identical in plan with cave 65, including the presence of a sub-unit, but all are in reversed position here. The *candraśilā* of the type seen in 65 is well preserved. Cave 65 and 66 appear to be contemporary works. In this cave too there is an inscription (No. 27), in characters of Series VII. It records that this cave is a donation of a one Nāgamūlanikā, daughter of a *mahārāja* and wife of a *mahāraṭhi*.

Further west of 66, at a higher level are three caves in a line (67-69). These face north-west.

CAVE 67 (FIG. 42; PL. 109)

This is a large cave with a rectangular hall having a low bench running along the three inner sides and two cells cut on each of the side walls. The cell doorways are rectangular and have cut lintels and threshold and are placed at a slightly higher level than the bench in the hall. All the four cells have a sleeping bench along their back walls.[25] The front wall of the hall is pierced by a large plain rectangular doorway, and two smaller doorways one on each side. The verandah has a bench each along the side walls. The roof of the verandah is supported by four octagonal pillars with square base, and two rectangular pilasters. The pilasters have the hour-glass decoration. These pillars and pilasters rise from low backed benches, which extend on either side from the pilasters up to the pillars flanking the central entrance passage. The external sides of the backed benches are decorated with railing design. The verandah is at a higher level than the front court, and a flight of seven steps connect the two. The backside of the backed benches are decorated with studs and below this is a sunken panel with guttae. The basement further down is decorated wtih a series of vertical studs. The steps have sloping side slabs with broadened ends, and a semi-circular *candrāśilā* emerges from this. The verandah roof projects a little to the front and has a cut drip ledge and sloping eave similar to the one in cave 60.

Just in front of the verandah is a cistern-in-recess in the right wall of the open court. There are long benches cut along either of the side walls of the open court from which one can enjoy a panoramic view of the Salsette coast and the sea beyond.

This cave (67) happens to be the only representative of the cells around hall type (B iii) at Kanheri. The pillars of Type E discloses the period to which this cave belongs. The *candraśilā*, the type of hour-glass decoration and the decoration on the backed bench are exactly identical in design with those found in cave 32. The only difference in the facade designs of the two caves is to be seen in the cave in the presence of rectangular and square blocks (proto-*Śālā,-Kūṭa* ) above that member in cave 32 and the absence of the same in the present cave. But, in view of the closeness in other features the two caves appear to be contemporary works.

CAVE 68

This is a *leṇa* of Type A iii having the usual components, verandah, cell and inner cell. The hall has a bench along one of the side walls only. Most of the other features useful for dating are lost. A grated window (Type iii) is seen to the left of the cell door, and hence the cave may be dated to 3rd century A.D.

CAVE 69

This is an old cave but has been much altered during modern restoration work. All old features have been lost and recent restoration work has introduced items unfamiliar to the contemporary architecture.

A path, partly with a flight of steps leads down from cave 69 to the side of cave 5 on the bank of the ravine. At mid-height on this path, not far from the top of cave 3, there are 4 caves hewn haphazardly (70-73).

CAVE 70 (FIG. 42)

This is a cave with a peculiar plan.

This consists of a large hall with a low bench in 'L' plan running along the right and back walls. In the left wall is a doorway leading into another hall with a recess to its left side, and another opposite that with a bench at the back. To the right of this hall nearer the wall dividing the two halls is a cell with a banch at the back. In the front wall of the larger hall is a large doorway leading into a long verandah with 4 pillars and two pilasters. The doorway leading into the hall is not centrally located but is just opposite the right extreme pair of pillars. In front of the passage between these pillars is a flight of steps leading down to the front open court.

Two huge open windows (1 m sq) one on either side of the doorway have been hewn in the back wall of the verandah at waist level. These admit light into the large hall. Another similar window (1.5 m b; 1 m h) cut on the back wall of the verandah is meant for the smaller hall and actually the light is thrown from this right into the cell at back. A small window at roof level is carved in the front wall in the line of the pillars to allow light into the recess of the inner hall. The pillars in the verandah are simple octagonal shafts, but the pilasters have rectangular cross section and are ornamented with deeply incised hour-glass design. It is difficult to say whether there was the low backed bench, or whether the pillars had square bases as in 69, etc., as the lower portion of the pillars and the verandah are broken.[26]

There is a cistern-in-recess in the left wall of the open court. A number of square mortises in the floor of the court indicates the existence of some wooden fixtures.

Even though the hall and inner cell are present, this appears not to be a *leṇa*. The large open windows at chest level meant to admit copious light even into the cell show that safety and privacy, the items essentially required for a dwelling place, were not in view of the designer. This cave does not have the compactness of the *leṇas* seen elsewhere, and further if this was meant for dwelling the purpose of the inner hall and recess cannot be explained. It is possible that this cave was a *bhojana-maṭapa*. The smaller hall and cell with benches could have been meant for keeping the cooked food intended for distribution to men sitting in the larger hall. The shape of the pillars and the pilaster decoration indicate that this cave too may belong to the age of caves 67, 68, etc.

CAVE 71 (PL. 110)

This is a small *leṇa* of Type A iii with a verandah, a rectangular hall with a bench on two sides and a cell to right. There is a large open window for the hall and a small grated window for the room. The hour-glass decoration is seen on the pilasters. The *candraśilā* is not well-preserved. The pillars and the low screen behind the backed bench had been lost and what are seen are recent reconstructions.

CAVE 72 (PL. 111)

The cave is very small and simple, but lacks clear architectural elements of comparable value. The recent renovation appears to be not faithful to the original.

CAVE 73 (FIG. 42; PL. 112)

This is another *leṇa* of Type A iii consisting of a benched hall, a cell and a verandah. But here large open windows are cut in the front wall of the hall instead of small grated ones. However, originally the left window which admits light into the hall was the only one of the open type. The window to right which is meant for the cell was a grated window. Sufficient indications remain on the inner side of this window for the existence of grating and subsequent breaking of the same probably to admit more light.

The verandah has a recessed bench at one end, and in front are two pillars with square bases flanking the entrance passage. There are two rectangular pilasters one on each of the side walls. The pilasters have the hour-glass decoration. The backed bench contained the usual railing decoration. (The lower portion of the verandah had been damaged but now reconstructed in concrete. The backed benches have been left out in reconstruction. But indications of their existence are seen in the rough surface of the pillars and pilasters.) A flight of four steps with sloping side slabs leads down to the open court from the verandah. The *candraśilā* is obliterated. The rock projection in front of the architrave is cut to the shape of a flat ledge and this serves as the eave. Its face is partially broken, but traces of primitive *Śalā* and *Kūta* members of the type seen in 32, are still extant.

There is a cistern-in-recess cut in the left wall of the verandah.

An inscription (No. 28) engraved on the inner wall of the verandah records that the cistern and the cave were donated by one Isipāla of Kalyāṇa, for the accrual of merit for his parents. He also invested some money from the interest of which the monk residing in the cave was to be provided with clothes. It is also stated that the amount remaining after meeting the above expenditure has to be utilized for the repairs of the *pavāda* and *maṭapa*.

The inscription is undated, but palaeographically this belongs to Series VII. This and the architectural features reveal the similarity of this cave with cave 32. Hence this too may be of late 3rd or early 4th century A.D.

CAVE 74 (FIG. 42; PL. 114)

This is located in isolation and is higher up the slope in the same vertical line of cave 3 to the right of the path leading from the side of cave 5 to the series of caves 56-60. This is a *leṇa* of the hall-cell-and-verandah type (A iii), but with a difference that two units of hall and cell are placed adjacently to share a common verandah. Neither the cells nor the halls have benches, but the verandah has a seat-recess each on both the side walls. There are two pillars in antis in front of the verandah and these carry a plain architrave. The pillars are thick octagonal shafts. The pilasters are rectangular but have no decoration. It appears there was a bench with back supporting a pillar and pilaster on either side of the central passage, but this part is now broken. A flight of 4 low steps leads down to the open court. They have sloping enclosing slabs and the *candraśilā* in front. The latter is semi-circular and resembles that in cave 53 above. The flat roof of the verandah projects far to the front beyond the architrave. The outer portion of this projections is cut to form a drip ledge looking like a beaked moulding.

There is no cistern but long benches have been cut along the walls of the open court.

There are two inscriptions, one each on either wall of the open court. Both record the same matter, that the cave was donated by a person from Kalyāṇa during the 8th year of the reign of Māḍharīputra Svāmī Sakasena.

According to Bhagavanlal Indraji the peculiarity of the cave in the absence of benches in the hall and cell, is an indication of a later date and this of course may belong to about early 4th century A.D.

CAVE 74a

A broken featureless cistern situated between caves 74 and 75.

CAVE 75 (PL. 116)

This is another isolated cave located about 10 m south of 74, but is at a little higher level than the previous one. This is a much ruined *leṇa* of the hall-cell-verandah type (A iii), but good lot of restoration has been done. The hall has the bench in 'L' plan along the right and back walls. In the left wall is the doorway leading to the cell which has a bench at the back. There are two grated windows of simple type, one on either side of the central doorway. The verandah has a recessed bench along the right wall. The plain rectangular pilasters bear the hour-glass decoration. It is difficult to make out the existence of the pillars, bench and low screen wall as there are no proper indications at present. These members seen now are modern reconstructions. There are steps leading to the open court but the *candraśilā* is partly ruined.

In the left wall of the open court is a cistern in recess.

Along the same wall is a long bench from which a picturesque view of the Arabian Sea can be had. There is a circular basin sort of thing cut in stone near the bench (Pl. 126).

The projecting eave has railing decoration on its face. There are sloping grooves cut on the side walls of the open court. These were intended for wooden fixtures to carry a thatched canopy to protect the cave from the rains (This was a necessity as the cave faces west).

The general plan of the cave, and the grated window and pilaster decoration display that this cave too belongs to the class of A iii *leṇas* like 49, 56, etc. There is, however, an additional element in the present cave in the decoration of the entablature. A tradition seen in the 2nd century *leṇas* like Nasik 3 of Gautamīputra Sātakarṇi's time is continued here in incorporating a stretch of railing design here. It is likely that here is a cave which links up stylistically the *leṇas* of the 3rd century A.D. with those of the 2nd century A.D. seen elsewhere.[27]

It may also be noted that the inscription in this cave (No. 31) belongs to Series V C. The inscription records that the wife of a *gahapati seṭhi* of Kalyāṇa caused this cave, a water cistern, a bathing cistern and instituted a permanent endowment.

This cave may have been wrought in the last quarter of 2nd century A.D.

CAVE 76

This is another *leṇa* of Type A iii but is very much ruined. The pillars are lost. One of the pilasters retains the hour-glass decoration. This and the *candraśilā* in front are of the type seen in cave 75. There are cisterns-in-recess cut in both the walls of the open court.

CAVE 77

This *leṇa* is also of Type A iii having the benched hall, benched cell and a verandah, but is very much ruined, including the pilasters and pillars. There is a cistern-in-recess in the left wall. The steps, leading from the verandah down to the open court, do not have side slabs but the *candraśilā* has the usual semi-circular profile of the type seen in 75, 76.

Caves 78 to 83 are on the highest level on the top of the Kanheri hillock.

CAVE 78 (FIG. 42; PL. 117)

High up above cave 60 is this *leṇa*, a variant of Type A iii.

The hall (6.1 m sq) has the bench along the three inner walls. To the left is the cell with a bench at the back. The verandah (3 m d, 6.1 m w) has a recessed bench in its back wall to the left. Just in the middle part of the side walls of the verandah is a square pilaster on each side decorated with hour-glass design and carrying a plain architrave. The front portion of the verandah has again two pilasters in side walls and two pillars in the centre, all rising from the usual type of backed benches. These pilasters too have the hourglass decoration. The outer side of the backed bench has the usual railing decoration and below this on the basement is a sunken cornice with double row of beam ends and below this further is a line of vertical studs. The pillars are octagonal shafts with square base (Type E).

The peculiarity in the arrangement of the verandah is probably due to the fact that this is on the top most part of the hillock where the rock surface has a very gentle slope. The usual feature of the roof to project in front beyond the line of the front pillars could not have been made here as the top rock would have been so thin as to collapse by its own weight. So the normal position of the pillars and pilasters is taken here by the two inner pilasters from which, however, the roof further projects, but the end of this projection is supported now by front pillars and pilasters which act as utilitarian roof supports. The eave, which is just a flat cornice, is almost flush with the front architrave. The entrance passage between the two central pillars is some what wider than in other cases. The front court is at a lower level than the floor of the verandah and is reached by a low staircase with wide steps. The side stones here are different from the simple sloping side stones usually seen in the monuments of this class. These are flat slabs projecting horizontally to a certain distance and having a profile of the curled trunk of an elephant. The outer sides are actually carved in such a way in very low relief as to give the impression of the head and proboscis of an elephant. The *candraśilā* in front has a flat rectangular strip at the back and the semicircular profile in front (Fig. 16).

A long low bench runs along the right wall of the open court and from this an excellent view of the western sea is offered. At the end of the bench is a circular basin cut in stone.

There are several holes in the side walls of the open court, which indicate the existence of some wooden covering here.

There is a cistern in recess in the left wall of the open court.

Though this cave is somewhat different than others, the presence of the hour-glass decoration, the octagonal shafts with square base and the backed bench with ornamentation and basement with studs and such components suggest that this belongs to the same age as cave 32 etc.

CAVE 79

This cave is again a *leṇa* of A iii type. In plan the usual cell-hall-verandah are present. But there are two cells in this. The front is nicely carved.

The rectangular hall has as usual the bench in 'L' plan along the right and back walls. The two cells are carved side by side in the left wall, but have no benches. The hall doorway shows a single *śākhā* around it.

The verandah is well-preserved with its front having two pillars in antis with the usual backed bench. The pillars are octagonal shafts with square bases. The pilasters are rectangular and have the deeply incised hour-glass decoration.

A flight of steps with sloping side stones leads down from the verandah to the open court. The *candraśilā* is present.

The roof of the verandah projects to front from the architrave and its face is cut as a drip ledge with a simple horizontal moulding.

The interesting feature in this is the decoration on the front of the low screen wall (the backed bench) and the basement below.

As usual the basement has the studs. The front face of the backed bench has the railing pattern and there is a sunken horizontal panel between the two having a series of imitation beam ends. The railing and the studs have fine lotus and half-lotus medallions on its vertical members. The spaces dividing these have three sunken holes, and the whole thing gives the impression of decorated hour-glass design. The combination of the idea of hour-glass and lotus in this is interesting. In the presence of the lotus medallions, this cave resembles cave 67. The plan of the cave and other architectural details show that this is not far removed in age from 32 and others of its class, but, the new idea in decoration may indicate an evolutionary step, and hence this may be a little later than the cave of the class of 32. The absence of benches in the cells may also suggest the some later date, *c.* early 4th century A.D.

There is a cistern in recess in the right wall of the open court. In the left wall again is a doorway leading to a verandah with a cell at the back. This appears to be a piece of later work, done to facilitate more accommodation. It is also likely that another peculiarity of this cave, the double cell inside the hall, could also be due to the same cause, and all these may indicate a growth in resident population in the monastic establishment at Kanheri at this age.

## CAVE 80

A little to the south of 79 and facing west is this *leṇa* of Type A iii with all its essential features. This is neatly hewn, but smaller in size. The hall with 'L' shaped bench and the cell with a bench are there. The doorway is in the centre of the front wall of the hall. and on either side of this is a square grated window at head level, one admitting light into the hall and another into the cell. These are simple windows with square perforations.

The verandah has the usual pillars with octagonal shaft and square base and rectangular pilasters with hour-glass decoration all rising from the low backed bench. The open court in front is at a lower level. The front face of the backed bench and the basement have the usual decoration with railing pattern above and a series of studs below, divided by a horizontal sunken panel with a line of knobs.

The steps and *candraśilā* are of the type of 67. The projecting roof has drip ledge, formed by a single horizontal rectangular cornice.

In the proper left wall of the open court is a cistern with its mouth on the floor of a rectangular recess. A bench runs along the other wall of this court.

The types of *candraśilā* and cave employed here, apart from the general features of plan, pillar and pilaster forms facilitate the grouping of this cave in type and age with caves 32 and 67, to a period around A.D. 300.

A damaged inscription (No. 32) seen in the left wall of the open court appears to record the donation of the cistern, (probably *leṇa* too), and *akhayanīvi*. The characters employed here are of Series VII.

## CAVE 81

This is an exact replica of cave 80, including its size. The inscription (No. 33) in this cave is much damaged. The characters are of Series VII.

EXCAVATION 81a (PL. 118)

About 10 metres to the north of cave 81, a narrow flight of steps leads to a neatly cut open bench. The bench has a flattened area in front. The seat of the bench has a roll moulding at its top ledge and the back of the bench is smoothly carved and on either side is a quadrantal cushion rest cut in the rock. The front faces of these side rests are decorated with volutes.

The bench, though simple, is a excellent piece of workmanship and is located at such height and position that no better place could be found for enjoying the cool breeze and an exciting vista of the green fields down below and the blue sea farther.[28]

CAVE 82

This is a small *leṇa* of A iii type with hall-cell-and-verandah, but is much ruined.

The hall has benches on two sides, and the cell at the back. The verandah including the pillars and pilasters is practically ruined. The doorway is also broken, but a grated window with simple square holes in two rows of four each exists at head level to the left of the doorway.

In the open gallery, there is a frame sort of thing cut in the left wall. This may have been intended for a proposed cistern-in-recess.

CAVE 83

Next to 82 is this cave a *maṭapa* with a hall and a verandah.

The hall has only one large bench along the back wall. The verandah had two pillars in antis, but the pillars and the floor of the verandah are broken. The pilasters have no decoration. The *candraśilā* is not seen. The eave is broken. There is no cistern, but a recess exists in the right wall of the open court. An inscription (No. 34) carved above the recess is very much damaged. The characters are of Series VII.

CAVES 84-87

About 600 m south of cave 3 there are some caverns facing south-west and consisting of a number or structural *stūpas*. Many of these *stūpas* appear to be of a date later than the period under consideration. They are more than 100 in number, and it is likely that these caverns were used to raise memorial *stūpas* for the pontiffs (or all monks ?) who died at this religious establishment.[29]

It appears that once these caverns were regular caves. In one of them numbered 86, there is an inscription (No. 35) by the side of a ruined cell. This is in characters of Śrī Yajña's time and states that the dwelling caves (*leṇa*) was a donation of Nāgapālita a bead-maker of Sopāra. This probably indicates that the cave here was originally an ordinary dwelling cave like others in the major group, but when this disintegrated due to the fragile nature of the rock, it could not be used any more. Thence the area may have begun to be used as a cemetery.

High up on the north face of the hill is the uppermost series consisting of seven caves (88-94).

CAVE 88 (FIG. 42; PLS. 119, 122, 123)

This is a *leṇa* of Type A iii consisting of a cell, a hall and a verandah.

The hall is square and has the bench in 'L' plan along the right and back walls. In the left wall is the doorway leading to a square cell with a bench along the right wall.

There is a grated window at shoulder level on either side of the doorway. These have three parallel vertical chases with a square sunken surfaces at the ends and the middle, and circular holes are bored in the centre of these. There is a similar grated window at head level admitting light into the cell. This has only six holes in two rows of three each.

The verandah has a bench-in-recess along the left wall. The front part of the verandah has two pillars of type E and two pilasters with hour-glass decoration, all rising from the backed bench decorated with railing pattern. The besement below is eroded, A flight of four steps leads down from the verandah to the court. The steps too are partly broken, but it can be made out that there were sloping side slabs. *The candraśilā* in front is semi-circular. The roof projects considerably in front of the

architrave above pillars. The front part of the roof has a narrow sunken rectangular band ornamented with rail pattern between a beaked cornice below and a rectangular cornice above. This too is partly damaged.

On the left wall of the open cour cistern-in-recess.

An inscription (No. 36) engraved above the recess is in characters of Series VI and records the donation of merit for his parents and for the welfare of all the sentient beings (*savasatāna-hita-sukhatha*).

The architectural details reveal that this is of the general class of *leṇas* of A iii type. But the presence of the stretch of railing pattern set between two projecting cornices on the entablature is noteworthy. Stylistically this is a step in advancement to cave 75. The cave may be of a date around A.D. 200 Palaeography also supports this.

CAVE 91 (FIG. 42)

This is a much ruined *leṇa* of Type A iii. However, instead of the usual low bench in the hall there is a bench in recess towards right in the back wall. In the same wall to the left is the cell which has the bench along its back wall. The verandah has a bench-in-recess along the left wall. The pillars and pilasters are lost. There is another bench in recess in the left wall of the open court.

EXCAVATION 92 (FIG. 43)

A cistern-in-recess.

CAVES 93 (FIG. 43)

This is another *leṇa* of Type A iii having a large hall with a low bench in 'L' plan along the left and back walls. The cell is cut in the right wall. There are two large oblong open windows on either side of the doorway. The verandah is also large, but the pillars are no more extant. One of the rectangular pilasters retains the hour-glass decoration (Fig. 15, k).

In the open court there are steps with side slabs. The *candraśilā* is lost. There is a recess to right and by its side a cistern-in-recess. Along the left wall is a long bench. There is a unpublished inscription (No. 37) in this cave, written in characters of Series VI.

Caves 91-93 appear to belong to the same date, possibly to the early part of 3rd century A.D. (The Buddha figures carved in the verandah are of later date).

CAVE 94 (FIG. 43; PLS. 120, 124, 125)

This is one of the well-preserved *leṇa* of Type A iii, but the inner cell is unfinished.

The hall has the usual 'L' shaped bench. An attempt to cut the cell is seen on the left wall. There is a grated window (Type iii) on either side of the doorway admitting light into the hall.

The verandah has a bench-in-recess in the right wall.

There is the backed bench from which rise, on each side, a pillar of type E and a rectangular pilaster with deeply incised hour-glass design (Fig. 15, e). In front is a flight of steps with sloping side stones. The staircase here shows a rectangular projection from the line of the basement and thence the steps start. The side stones are carved with a sloping moulding and a thin stud at the end of the projection. The *candraśilā* is semi-circular. The outer face of the low parapet wall and the basement have the usual decorative patterns, railing pattern on the front face of the bench, with a sunken panel having the line of beam ends and studs below. The studs, however, are ruined, but indications exist. The cave has a simple drip-ledge.

In the right wall of the open court is a doorway leading to a verandah and further into a cell. Both the verandah and the cell have a bench along the left wall.

The cave belongs to the early part of 3rd century A.D.

A little to the west of 94, along another ledge path are five caves in a line, 95-99.

CAVE 95 (FIG. 43; PL. 121)

This is an A iii *leṇa* of the early period, but is much altered by the Mahāyānists, and recent restorations too have obliterated some of the early features.

The front wall of the hall is pierced by a large doorway in the centre and an open square windows on either side.

The verandah has two octagonal pillars. There is no indication of its square base, but the bench appears without back. It is likely however that these features are lost and even the indications have been obliterated in modern restoration, as most of the lower part of the pillars and the benches are of concrete. The rectangular pilasters retain the usual hour-glass decoration. There are steps in front of the verandah. The eave is broken.

The pillar type and the hour-glass decoration show the original similarity of this cave with cave 94.

CAVE 96 (FIG. 43)

Is another *leṇa* of the cell-hall verandah type (A iii). The hall, however, has the low bench only along the right wall and the cell is carved at the back, and has no bench. There is a small grated window at shoulder level to the right of the cell doorway. There is a similar grated window to the left of the hall doorway in the back wall of the verandah.

There were two octagonal pillars rising from the backed-bench which has the railing decoration on the outer side. There is a similar decoration of railing on the front of the projecting eave also. In this feature it resembles cave 88.

There is a cistern-in-recess in the left wall of the open court and a small bench along the right wall.

CAVE 97 (FIG. 43)

This is a *maṭapa* of Type B i, with a hall and a verandah. There is a bench along the left wall of the verandah, and a low bench runs along the right wall of the hall.

There are the usual backed bench with railing decoration, the octagonal pillars with square base and the rectangular pilasters with hour-glass decoration. The steps do not have side slabs or *candraśilā*. There is no cistern in the open court. The cave appears to be either unfinished or a piece of half-hearted workmanship.

CAVE 98 (FIG. 43)

This is also a *leṇa* of cell-hall-verandah type. The hall has a bench along the back wall and at the left end of that is a quadrantal pillow, resembling the one in 81x. The cell is cut in the right wall and has a bench at the back.

The verandah has a bench-recess to the left. There is a small grated window on either side of the doorway, one admitting light into the hall and another into the cell. The verandah is very narrow, about 2.3 m wide, and hence it appears the pillars have been omitted, and consequently the bench also. The pilasters of the rectangular type, however, have the usual hour-glass design. There is a flight of two steps with sloping side slabs, but there is no *candraśilā*. A cistern-in-recess is cut in the left wall of the open court. In the front part of the same wall is a bench with a circular tub at an end.

There are two inscriptions (Nos. 38, 39) one above the cistern-recess and the other on the back wall of the verandah. Both record the same matter that the cave and the cistern were the gifts of a nun, Damiḷā of Kalyāṇa. The inscriptions belong to Series VI.

CAVE 99 (FIG. 43)

This is a very small cave with a cell and a verandah. This cell has the bench in recess cut in the right wall, with a further run along greater part of the back wall. The doorway is small and there is a small grated window at shoulder level to the left of the doorway. The verandah has a bench-recess along the right wall.

There are no pillars, as the span of the entrance is small, hardly 1.8 m wide. But the pilasters are there with the hourglass decoration.

There is a bench cut along either side wall of the open court. The bench to right has a circular tub at one end.

An inscription (No. 40) carved on the back wall of the verandah records that this cave was a gift by a monk Mitabhūti. The cave is rightly called 'sea-view' (*Sāgarapalaganānaṁ*) as an excellent view of the Arabian sea and the Bassein Creek could be had from this. The characters of the inscription are of Series VC.

A little to the south west of 99, along the same ledge are two more caves (100 and 101) placed adjacently. Both face north.

CAVE 100

This is a *leṇa* of A iii type, but very much decayed.

CAVE 101

This is a neatly made *maṭapa* with a verandah (Type B i). The hall inside is about 5.8 m square and has the low bench running along the right and back walls. [A niche however has been cut in the back wall to house an image, but this is a work of about the 10th century A.D.].

The hall has the doorway in the centre of the front wall and an open window at waist level to the left.

The front verandah has four octagonal pillars with square base and the rectangular pilasters rising from the bench. This bench appears to have had sloping back, but now the whole thing is broken. (A part of this is now reconstructed in concrete). The entrance passage is between 1st and 2nd pillars to left, and the benches naturally run between the left pilaster and the 1st pillar and again from the 2nd pillar to the right pilaster. Thus the right bench supports three pillars while the left only one. The pilasters have hour-glass decoration (Fig. 15, 1). There are vertical chases cut on the sides of pillars and pilasters for a screen of wood. This appears to be a later work.

Steps lead down to the open court, but there is no *candraśila*.

On either side of the gallery there is a bench approached by a step. The sides of the bench have sloping rests. In the middle of the lower step there is a circular tub cut in the rock (Pl. 127). Several square mortises cut in the floor of the open court indicate that the benches had been covered by a light wooden roof raised on vertical pillars.

An inscription (No. 41) in characters of Series VI records that this was a gift of a lay devotee of Kalyana.

GENERAL DISCUSSION

Kanheri or Kanhasela as two inscriptions from the place have named it, is the biggest Buddhist monastic establishment on the Konkan coast. For a casual visitor, the huge number of Buddha images, carved in every four out of five caves at least, gives an impression that it is mainly the work of Mahāyāna times. But a careful examination of the caves shows that out of the 101 numbered monuments at Kanheri, 75 belong to the period under consideration, which means to say that 75 per cent of the Kanheri monuments were created during the early or '*Hinayana phase*' of Buddhist rock-cut architecture. We have actually enumerated 88 independent excavations (13 not separately numbered by Archaeological Survey of India) of the early period in the descriptive inventory given above.

The type of monuments found in the group are as follows :

| *Sl. No. Particulars* | *Types* | *Cave Nos.* | *Total No.* |
|---|---|---|---|
| 1 2 | 3 | 4 | 5 |
| 1. *Chetiyagharas* | | | |
| A i c | Apisdal hall | 3 | 1 |
| A ii a | Oblong hall | 2c, 2d, 2e | 3 |
| B ii | Circular cell | 4, 36 | 2 |
| | | | 6 |

*Contd.*

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| 2. | *Leṇas* | | | |
| | A i b | Single cell without verandah | 2a, 39, 44, 46 | 4 |
| | A ii | Single cell with verandah | 47, 60, 99 | 3 |
| | A iii | Single cell with hall and verandah (16, 65 and 74 are twin suites. 42 and 79 are variants) | (2b), 13, 16, (17), 21, 22, 32, 33, 35, 40, 42, 49, 50, 51, 54, 56 to 59, 61 to 66, 68, 71, 73 to 82, 88, 91, 93 to 96, 98, 100 | 45 |
| | B iii a | Cells around hall | 67 | 1 |
| | | | | 53 |
| 3. | *Maṭapas* | | | |
| | B i | With verandah | 53, 70, 83, 97, 101 | 5 |
| | B ii | Without verandah | 2f, (7), (14) | 3 |
| | | | | 8 |
| 4. | *Poḍhis* | | | |
| | A ii | *Pāniyapoḍhi* of recess variety | 5, 6, 38 57a, 92 | 5 |
| | | (21 *poḍhis* of recess variety occur as accessories) | | (21) |
| | | (There are three open mouthed cisterns in front of cave 2 f) | | (3) |
| | B | One *sanānapoḍhi* opposite caves 42-45 | | (1) |
| | | | | 30 |
| 5. | *Āsanapoḍhikas* | | | |
| | | Freestanding ones | 7x, 59a, 81a | 3 |
| | | (Seven as accessories to *leṇas*) | | (7) |
| | | | | 10 |

[Amongst others two are paths, two are unfinished and nine are ruined]

The evidence of style and palaeographical indications discussed in the previous pages facilitate the grouping of most of the monuments into successive chronological stages as follows :

| | |
|---|---|
| 2e | Latter half of 3rd century B.C. |
| 3(1st stage) | *C.* 100 B.C. |
| 3(2nd stage), 4, (Path near 7 x) | *C.* A.D. 120 |
| 2f, 5, 6(7), 75 to 77, 88, 96, 99, 100. | |
| 3(3rd stage), 21, 22, 78, 86, (97), 98. | *C.* A.D. 200 |
| 2c, 2d, 49, 54, 56, (90), 91 to 95, 101. | |
| 32, (36), 51, 57, 58, 59, 60 to 83 including (62), (69) and (70). | *C.* A.D. 300 |
| 50, 53, 74. | |

The architectural activity at Kanheri appears to have started very early almost immediately after the introduction of Buddhism to Aparānta. Kanheri is located closeby Sopāra. a town which figures in early northern Indian literature and to which, according to tradition, Buddhism was first introduced (see note 152 to Chapt. III). It is likely that the place was being frequented by the monks of the new religion and one of the first works was wrought here, in cave 2e. Quite consistently with the beginning stage of rock-cutting tradition in the region, the cave is a very simple monument consisting just a rectangular hall—without even the front wall in stone. This resembled closely the early *leṇas* of Jivadan-Virar, a hall very near Sopāra. The *stūpa* made in cave 2e has a very simple form with the drum and dome only cut in stone; the rest of the members were to be of wood probably. In accordance with the practice prevailing in contemporary architecture in northern India, from which the idea of *stūpa* and the stone-cutting tradition are borrowed, the *stūpa* here is finely polished.

The next stage of work at Kanheri is seen in the main *chaitya* hall (first stage). It has been shown above that the earliest attempt to make this *chaitya* hall, commenced around the beginning of 1st century B.C. This was at a stage in which was there in vogue the custom of making vault-roofed *chetiyagharas* having the verandah and the interior adorned with simple octagonal pillars without base or capital. However, the work was left incomplete.

The second stage of work began again in the same *chetiyaghara* when the uncarved areas were finally worked according to the fashion of the day. The pillars which had already been carved were left as such. The others were fashioned afresh with the pillars of pot-base-pot-and-animal-capital type (Type D). The verandah was trimmed and the main part of the *chetiyaghara* was completed (see above). All these may have been done in the first quarter of the 2nd century A.D.

The above contention of sporadic rock-cutting activity at Kanheri, based on style analysis, though appears to be consistent, is not fully substantiated unfortunately by other evidences available at the site. No epigraphical material is extant except for a statement in Kanheri No. 4 which is of a much later date. The interval between the time of cave 2e and the 2nd stage of work in the main *chaitya* hall is nearly three and a half centuries. But what other works were wrought at the site during this long span of time is not known. Strangely there is not a single *leṇa* which could be assigned to the above period. Kanheri caves, however, display much remodelling and tampering of the early caves. It is not unlikely that some of the old ones were enlarged in later times, thus obliterating all evidences of small hewings of the early period. Probably cave 2a which is a small simple cell happens to be a sole remnant of *leṇas* of the earliest phase contemporary with 2e. It is also a fact that Kanheri must have gained popularity and patronage only from about the beginning of the 2nd century A.D. All the water cisterns that are present here are of the recess-variety. This is an item which can hardly be tampered in later times and this situation points out that regular dwelling caves in which the monks stayed even during summer, may have been made only from about the 2nd century A.D. This is also the time in which the main *chetiyaghara* took shape. Before this, Kanheri may have contained just a few small open caves, like those in Jivadan-Virar, and Junnar-Tuljalena.[30]

With the completion of the main *chetiyaghara* there was a fresh wave of enthusiasm on the part of monks and laymen. One of the earliest creations as a result is a small *chetiyaghara* (4) raised in honour of one of the persons (Dhammapāla mentioned in inscription Nos. 4 and 6) responsible for the completion of the big *chaitya* hall 3. At this stage *leṇas* 75, 76, 77 and 99 which still preserve to a certain extent the traditions of Nasik 3, 10, etc. of the early decades of the 2nd centrury A.D. were made. These *leṇas* are smaller ones meant for a monk each. Architecturally the plan of A iii *leṇas* has been adopted in these consisting of a hall (cell) and an inner cell, the hall provided with (usually) a low 'L' shaped bench meant for sitting and the inner cell with a sleeping bench. These have verandahs too. The pillars of Type E begin to appear as well as the hour-glass decoration on the pilasters. But continuing the previous tradition the facade above the cave has the stretch of railing docoration.

The Kanheri monastery may have become famous by now due to the making of a huge *chetiyaghara*, unprecedented in dimension and beauty, the first of its kind, in the Konkan region. Monks and laymen may have been attracted by this new creation. More donations began to be gained by the monastery. In order to satisfy the needs of the resident monks and also those who frequented the place many accessory items were made by laymen. Water cisterns like 5 and 6 (one of them donated by a minister of a princess) and resting halls like cave 7 were made. Even an almonry (cave 2f) was instituted just by the side of the big *chetiyaghara*. The inscriptions of the period show that people coming from the nearby cities like Kalyāṇa and Sopāra, as well as distant places like Nasik, were causal for these works.

This wave of enthusiasm for creating fresh monuments which started with the making of the large *chetiyaghara* in about the early decades of the 2nd century A.D. continued unabated till the end of the period under our consideration. Rather, the successive periods are marked by continuous increase in the quantum of patronage as can be gleaned from the number of monuments and the number of donations.[31]

By the time of Śrī Yajña Sātakarṇi the open court in front of the *chetiyaghara* was extended and was beautified with the finely carved front parapet and huge engaged pillars (at least the southern one) rising high on either side of the open court. At least 6 *leṇas* of A iii type were added (21, 22, etc.) The short octagonal pillars with square base rising from low benches in the verandah (pillar type E) and the hour-glass decoration on the pilasters became common features, to be followed later throughout the period under considerarion. Around the first half of the 3rd century A.D. about a dozen *leṇas* were created (49, 54 etc.). Probably it is during this period that the small *chetiyagharas* of oblong variety (2c, 2d) also came into existence.

The later part of the 3rd century A.D. was the most active period in the architectural history of the Kanheri establishment. More than a score of *leṇas* and three *maṭapas* belong to this period (32, 53, etc.) Probably there was continuous growth of monk strength in the monastery and more and more *leṇas* were needed. A few of the *leṇas* were added with additional accommodation by making slight changes (as seen in *leṇa* 16, 65, etc.). A *leṇa* of cells around hall type (cave 67), the only one of its type here, was also made. The circular *chetiyaghara* 36 too belongs to this period and it is of interest to note that even in this a sleeping bench was added.

Throughout the period of 3rd century A.D. the general architectural patterns continued to be the same. One significant feature, however, is the omission of the railing decoration on the facade; a distinct break in tradition which had flourished right from about 200 B.C. is seen here. Probably this period marks the time of cessation of the use of *vedikā* decoration on the facade once for all. Instead, simple eaves with rectangular or beaked ledges became common. Similarly the *candraśilā* which became almost an invariable component also shows gradual changes in design.

Possibly in the end of the 3rd century or the early part of 4th century A.D. a new tradition in the making of the *leṇas* appears. Three small caves 50, 74 and 79 show an additional item of great significance in the history of rock-cut architecture of Western India. In these caves small rectangular niches with arched top are cut in the back wall of the hall right opposite the hall doorway. While generally the doorways were simple rectangular piercings in the *leṇas*, these examples have a *śākhā* frame around displaying the importance attached to these caves, presumably in view of a cult object placed in the niche

inside the hall. There are several instances at Kanheri itself where *leṇas* consisting of arched niches housing stone-cut Buddha figures are to be seen. But such *leṇas* are also adorned with a different variety of pillar which on circumstantial grounds could be placed to about the 5th or 6th century A.D. But in the three *leṇas* under reference the architectural features including the pillar type employed are regularly of the 3rd century tradition. The addition of arch niche can be considered as an early experiment to introduce the cult objects in the *leṇas*, which, inferring from the other examples of a slightly later period found in this place itself, could be images of Buddha. In this early stage of their introduction here they may have been of wood or stucco.

The importance of Kanheri lies in the fact that here are monuments which display an architectural tradition of the latest stage of the Hīnayāna phase of Buddhist architecture from which a gradual transition towards the earliest Mahāyāna-architectural forms can be traced. Kanheri is one site which has examples to disprove the so called 'gap' in rock-cut architecture between the Hīnayāna and Mahāyāna stages. We may just point out here that the representation of what looks like *Śālā* and *Kūṭa* above the eave in cave 32, the forms of the *candraśilās*, and the hour-glass decoration on pilaster are items of interest to understand this transition. More of this will be detailad elsewhere.[32]

The Kanheri monastery belongs mainly to an age in the history of Buddhist monachism when the monks had taken to somewhat an easier life. The large number of water cisterns in the monastery must have been necessities for the monks staying here in summer than for those spending the *vassa*. There is an inscription in almost every other cave recording not only the making of the *leṇa* and *podhi* but also permanent investments (*akhayanivi*) of money. Even though the figures of such donations cannot be made out exactly in all instances due to the fragmentary nature of some of the inscriptions, it can be estimated roughly that the total of monetary investments made for the benefit of monks in this monastery exceeded sixty thousand *Kārṣāpaṇas*. It may also be noted that a tank too had been built within the precincts of this monastery, the only instance of its kind in Western India, and it is not unlikely that, the monastery, as suggested by Gokhale (1975), had proprietary rights over the lands fed by this tank.

If the number of cells meant to accommodate the monks is taken as any indication, it appears by the end of the period under consideration there were nearly 60 to 70 monks residing at the place. The total capacity of all the *maṭapas*, if they are considered as dining halls would be somewhere around 120 diners at a time.

An interesting feature is that in Kanheri there is an extra expenditure of energy and money bestowed on the creation of the *leṇas*, than it is normally necessary for providing just the accommodation for the monks to reside. Most of the *leṇas* here are of Type A iii, wherein apart from the cell meant for the use of the monk, a hall with a low bench running along the two adjacent walls is provided. The additional hall provided in all the 45 *leṇas* of A iii type calls for an explanation. The bench in the hall, often stretching for 5 to 6 m in length, appears more for the use of a group of persons than for one monk living in the cave. These halls may have been meant for the laity frequenting the place to offer their devotion to the holy monks! A better explanation would be to consider this situation as similar to the one discussed with reference to the caves in the Junnar-Ganesh Pahar group. It is more likely that Kanheri monastery served as an educational institution too (p. 174). The total capacity of the *maṭapas* which could have served as common dining halls is more than what is needed for just 60 or 70 monks. Similarly the water cisterns are sufficiently huge enough to serve drinking water for a greater number of persons, than could have stayed in the cells.[33]

Kanheri's situation is idyllic and it is best suited for the calm life of the cenobites. Despite the location of highly industrialized city of Bombay in the neighbourhood, it is not uncommon for the visitors to Kanheri to feel a spiritual thrill in the freshness of the picturesque surroundings. This should have been all the more so in ancient times, when thick green forests studded the countryside around. It is not without reason that this place has good number of open benches cut in the rock, and that almost all the caves have benches in their verandah or front court. One can realise easily the purpose of these simple pieces of architectural work by spending a little time there; it is refreshing with the evening breeze

from the sea; the individual sitting there feels his infinitesimal self dissolving itself into the infinite nature around, an inexplicable experience highly spiritual and elevating.

Despite the fact that this monastic establishment is situated in isolation it had close links with the neighbouring towns and cities. In fact the extensive architectural activity here depended on the philanthropy of the wealthy laity of the towns. Several inscriptions at this place reveal that most of the architectural works were actually the donations of the residents of nearby towns.

The location of Kanheri closeby, the then metropolitan centres like Sopāra, Kalyāṇa and Thāṇa may have enabled it to develop as a progressive centre. It was probably receiving peoples from different part of the Buddhist world and there may have been good lot of exchange of ideas, which made their impact on the architecture and sculpture. The fact that the sects Bhadrāyanīya and Aparaselīya find mention in the inscriptions of this place, particularly that of the latter which is said to have originated in the Krishna valley, is of interest. It is known that the Aparaselīyas played a prominent role in the Krishna valley specially regarding the introduction of worship of anthropomorphic Buddha figures. At Kanheri too a similar tendency is to be seen, as stated already, in the first appearance of a Buddha figure on a pillar in cave 3 (during the time of Śrī Yajña Sātakarṇi) and in the *leṇas* themselves later (p. 196, 219-20). Attention may also be drawn to the fact that the earliest instance of introducing an object worship in the *leṇas* is to be seen in another metropolitan centre, viz. Nasik. Cave 3 of that place where a *stūpa* seen cut in the back wall of the hall is a donation to the Bhadrāyanīyas. A strain of likeness recognizable in the decorative designs found in parapet of Kanheri 3 and Nasik 3, with decorative sculptures of the Amaravati school of art, appears to be of further significance in this context. Again, in the whole series of Western Indian rock-cut architecture it is at Kanheri where the extensive use of *candraśila* is to be seen. Parallels for the wide use of this element are to be witnessed contemporaneously in the Krishna valley and in Ceylon.[34]

## KARLE

Karle is a small monastic unit consisting of only 16 independent excavations. But this is the most famous of the centres of early rock-cut architecture and possibly among them no other place in Western Deccan has received so much attention by art historians as this one. Its place of pride is due to the existence of the *Great Chaitya Hall*, the biggest and also the most ornate of all the *chetiyagharas* wrought during the period of the Satavahanas—'the best in the whole of Jambu-dvīpa' (Karle No. 1).

Karle is situated in the Maval taluk of Pune district, on the Pune-Bombay highway, about 60 km north-west of Pune.[1] It is just about 8 km north of Bhaja, and this too was on the ancient Bhorghat road that stretched from the seaports of Kalyan and Sopara up the Sahyadris and on to the cities of the interior like Ter.[2]

The caves are located at a height of about a hundred metres above a high spur of the chain of hills on the north flank of the Indrayani valley. The caves face west generally. They are in a line with the *chaitya* hall in the centre and have a sufficiently wide flat area in front of them. As one moves southwards from this major group this area narrows down gradually to a ledge path and turns eastwards running almost at the edge of a high cliff. There are a few isolated excavations along this ledge path too. In the present account we have given our own numbers for the caves commencing the series from the easternmost of the isolated excavations on the southern face of the spur.[3]

### EXCAVATION 1x

A small broken cistern of Type A i, located at about 40 m beyond the southern bend of the hill.

### CAVE 1

About 30 m west of 1x is this single-celled *leṇa* of Type A i b. There is a simple bench along the left wall.

CAVE 2

Further west of cave 1, almost at the bend of the hill, is this single-celled *leṇa* (Type A i b) with a bench, along the back. The front portion of the cave is ruined, but there is a bench on either side of the broken doorway. A magnificent view of the Indrayani valley and the hills beyond is presented from this spot.

An inscription (No. 34) on the front wall records that this is a gift by a monk. The characters belong to Series VII.

CAVE 3

This is an unfinished excavation, at the southern end of the path. Now this consists of a small room with evidence of an attempt to make a cell at the back.

CAVE 4 (FIG. 44; PL. 218)

About 20 m north of the above is this interesting *leṇa* belonging to the class of cells around hall type (B iii). It has some early features like the decoration of studs on the backed bench. But the pillar type and the basement with horizontal mouldings betray its later date, and hence does not come under the purview of the present work. However, its importance lies in the fact that this could be considered on several grounds as representing a stage of transition between the Hīnayāna and Mahāyāna *leṇas*. In the back wall of the hall, there is a niche with the relief figure of a seated Buddha cut right opposite the central doorway.

EXCAVATION 5

About 9 m west of the above is a broken water cistern.

CAVE 6

Close to Excavation 5 is this *leṇa*, a small cell with its front broken. This appears to be a later cave, with a Buddha figure carved on the back wall. The cell looks like a rectangular recess.

CAVE 7 (FIG. 44)

Situated closely to the south of the *chaitya* hall is this unfinished excavation now consisting of a large hall about 9.3 m wide and 4.7 m deep. In the front wall of this towards left is a rectangular doorway flanked by two large open rectangular windows, one on either side, at waist level. Perhaps, this is a *maṭapa*.

CAVE 8 (FIGS. 45, 7(4), 10(Diii); PLS. 128 to 133)

This is the *Great Chaitya Hall*, a neatly executed monument endowed with beauty and majesty.

This is one of the best examples of *chetiyagharas* of Type A i c, consisting of an apsidal hall with a front verandah. The hall is rectangular in front and semi-circular at the back, and is divided into a nave and two aisles by two rows of pillars which meet together in a semi-circle at the back forming the apse. Fifteen pillars on each side running parallel to each other and the side walls are of Type D iii having stepped pyramidal base surmounted by a pot, the octagonal shaft, the capital of inverted flower vase shaped member, a neck of enclosed *āmalaka* and an inverted stepped pyramid over which lies a dosseret decorated with animal sculptures with riders. Seven pillars arranged in the semi-circular fashion parallel to the back apsidal wall are simple octagonal shafts without base or capital. These do not show rake or taper (Type A iii). In front of the first pillars of the two side lines there is a transverse line of four pillars, situated parallel to the front wall. The central two pillars are again simple octagonal shafts of the type seen at the back. The outer pillars are of a variant variety of Type B consisting of semi-octagonal back and rectangular front with another smaller rectangular projection. These four pillars carry a flat roof over the transept aisle running parallel to the front wall. The side aisles, which

continue at the back also, have flat roof. The pillars on either side of the nave carry a simple architrave and over this rises a barrel vault roof which ends in a semi-dome at the back, directly above the *stūpa*. This barrel vault roof is fitted with wooden curved ribs and longitudinal rafters.[4]

The *stūpa* (Fig. 7(4)) placed at the back end of the nave has a cylindrical drum rising in two stages. Above this is the hemispherical dome supporting a cubical *harmikā* on which is a seven stepped inverted square pyramid. On the flat top of this member is a circular hole in the centre of a slightly raised rectangular hump and from this rises a ribbed shaft carrying the canopy of the umbrella. The umbrella including the shaft is of wood.

The front wall of the hall is pierced by three doorways. A large central one opens into the nave. Two narrow side doors, one on each end of the wall, open into the aisels. The top portion of the front wall projects over the transverse aisle also and in this thick mass of rock a *chaitya* arch is carved in to shed light on the *stūpa*. This looks like the rood of the Christian churches where there would be a chamber above the front doorway for the playing of music. The open arch has semi-circular top, and is depicted as springing from two huge rectangular jambs one on either side. The back portion of the soffit of this arch is plain, but in the line of the vertical jambs square mortises have been cut and into these some concentric curved wooden rafters have been inserted. The front portion of the soffit has been further carved with imitation rafter ends. On either side of the vertical jambs, there are five ribbed bolts fashioned in stone as though these are meant to keep the bent arch in position fixing it to the strong jambs. The fronton of this arch is plain but its profile is singularly attractive. It is a 2/3rd circle. The apex projects upwards into a tapering finial, which is slightly flanged at the top end.

The front face of the inner screen wall, and the two side walls of the verandah are filled with extensive carvings. The ornamentation of the front wall is done in two parts. The lower part consisting of the doorways is decorated with a dado of railing pattern and above this are six *mithuna* panels rising up to the level of the lintels. These panels are placed on eitherside of the three doorways. Above each of the doorway there is a decorative *chaitya* arch in relief copying the general features of the large *chaitya* window described above. These arches are connected by a *vedikā* and a roll cornice, which stretched across along the whole width of the screen wall.[5] Above this is a square cornice having decorative beam ends and over this is another string course of railing pattern connecting the apex of the arches.

The upper part is covered by the large *chaitya* window described above. The spandrels are divided into four horizontal sections. The lowermost, has small *mithuna* figures in dancing posture (carved just above the paws of the big arch) and by their side is a small arch rising over two slightly raking jambs, imitating the doorways with arched top. Just above the dancing *mithunas* there are two more smaller arches set between the above described smaller arches and the sides of the bigger central arch. Above this is a roll moulding and over that is a cornice showing pin ends and over this again is a string course of railing design. The same pattern is repeated with slight variation in the upper three panels also, except for the fact that small arches take the place of the *mithunas*. Here all arches are of equal size and are placed adjacently over a uniform string course of stepped moulding. This decorative work is wrought in such a way that the whole thing gives the impression of a five storeyed building with a huge *chaitya* arch in the middle.

The side walls of the verandah continue the same decorative patterns in the same line as seen in the back wall. However, in the lowermost part, on either side in the level of the *mithuna* sculptures of the back wall, the busts of three elephants have been carved in high relief.[6]

The front portion of the verandah is covered by a screen wall raised on two octagonal pillars without base or capital or taper or rake. The thin wall above is plain but its upper part nearer the roof has been split into five divisions by huge rectangular piercings divided by what looks like square pillars. This part of the screen wall is partly broken now.

In the open court in front, to the left, is a huge sixteen sided pillar standing on a platform. This pillar is in the style of Aśokan columns surmounted by a capital with the inverted fluted bell, the

āmalaka enclosed by a box shown with flat bottom and top plates with their corners connected, and the inverted stepped pyramidal plates above. On the flat top of this are four addorsed lions. It is surmised by many that on the top of this was a *Dharamacakra*, but no evidence remains there at present. There is indication in the form of a short stump to suggest that another pillar of the same type once stood on the other side of the open court.

The *chaitya* hall at Karle is the biggest of its type in the whole of India. It is 37.87 m deep from door to back, 13.87 m wide and 14.02 m high from the floor to the apex in the interior. Even though there is a general appearance of a neat plan some variations in measurements are noticeable. The hall is about 14.6 m broad in the front, but near the back it is only 13.7 m wide, the nave width has been kept uniform throughout, but the aisle width is reduced by 30 to 45 cm from front to back. There is a variation in height also with a slight downward slope from front to back, but this is almost not recognizable. Such variations may have been done purposely with an intention to increase the impression of great depth of the hall.

Overlooking these variations and taking the average measurements into consideration a certain formula that may have been adopted by the designer of the cave may be reconstructed as follows :

The width of the hall (x)=the height of the hall, measured from the apex of the outer arch to bottom. (The crown of the vault is about 30 cm lower than this).

The length of the hall is in three parts :

(a) Distance from door to *stūpa*, (b) Diameter of the *stūpa* and (c) Distance from *stūpa* to back wall. They bear the proportion

| a | : | b | : | c |
|---|---|---|---|---|
| 2x | : | 1/2x | : | 1/4x |

The nave itself is 3/5 x in width. The width of the aisle on each side including the pillar is 1/5x. The *stūpa* occupies 2/5th part of hall width. Hence the diameter of the *stūpa* happens to be 2/3rd of the nave, the remaining 1/3rd distance is divided equally on either side and the same distance is kept at the back also. However, it can be seen that except for the diameter of the *stūpa* the mathematical arrangement of its placing in the hall is similar to what is seen in Bedsa.

The height of the interior pillars is 3/4th the height of the vault roof, or the same can be expressed as follows :

| The height of Hall | : | Roof | : | Pillar |
|---|---|---|---|---|
| = 7 | : | 4 | : | 3 |

The height of the verandah is also in a definite relation with the interior height, the two bearing the relation of 6 : 5, the height of the verandah being more by 1/5th the height of the hall. The width of the verandah appears to have been tampered by sculptural work, but roughly it was equal to the height. The depth of the verandah, *i.e.* the interior distance between the inner and outer screen walls, is 1/4th of the total height.

The doorways show the following proportion in height and breadth.

| | h | : | b |
|---|---|---|---|
| Central doorways | 2 | : | 1 |
| Side doorways | 4 | : | 1 |

The height of the central doorway is again 1/6th of height of the verandah.

The large arch has the following relationship in its measurements.

Open portion of the window

Jamb to jamb width=height from base to apex

Base span : Height from base to crown

8 : 7

Outer part of *chaitya* arch

Breadth from one end of paw to other : Base to tip of the pinnacle

11 : 9

The total height of the arch is exactly 2/3 the height of the verandah, the rest 1/3 below is occupied by the doorways, smaller arches and the railing frieze at top and bottom of these.

These show that the mathematical formula adopted here is of a highly complicated form.[7]

The Karle *chaitya* hall has a rich repertoire of palaeographic and architectural elements facilitating the examination of its relative chronological position with reference to the various monuments elsewhere. Some of these have already been touched upon in Chapter 6, but a few of those and some additional points may be recapitulated here.

This *chaitya* hall belongs to the class and stage of *chetiyagharas* of Type A i c, in which the apsidal hall and verandah are regular parts. This very stage illustrates that this *chaitya* hall is far removed from the open front *chetiyagharas* like Bhaja 12 and Ajanta 10 and even those with simple front screen like Ajanta 9 and Junnar-Manmodi 40. It is so of course with regard to the flat roofed *chetiyagharas* like Junnar Manmodi-2, Ganesh Pahar 14 etc.

Amongst the *chetiyagharas* of A i c type Bedsa 7 and Kanheri 3 are the closest in design to the present cave. Bedsa and Karle share many of the common features, in the presence of the *stūpa* of Type C ii b where the umbrella is still in wood, in the use of pillars of pot-base and pot-and-animal-capital type (Type D) and even in the insertion of wooden elements in the vault roof and of course the beautiful multi-storeyed building decoration fashioned on the verandah walls. Except in dimension, the *stūpas* show closeness in decoration with the double stage drum adorned with double belt of *vedikā* design. There are some minor elements too like the slight sloping of the vault roof from front to back.

Conspicuous differences too are noticeable between Bedsa 7 and Karle 8. In Bedsa 7 the pillars of D type occur only in the verandah. Its interior has simple octagonal columns only, as in the earliest *chaitya* halls at Bhaja, Kondane, etc. But here such pillars adorn the interior too. In this Karle 8 displays a specific point in advancement in style from Bedsa 7. Further, the pillars though of the class of Bedsa reveal some change, that here the bell capitals no more retain that fine petalled shape (Type D ii), but are treated more in a conventional way (D iii). The animal protomas too show a deterioration. The grace and naturalness and roundness of the Bedsa sculptures have now degenerated into a form of relief, and are cut more conventionally.

This contention is further substantiated by the fact, that while in Bedsa, the surfaces between the doorways in the back wall of the verandah are plain, here they are decorated with *mithuna* figures. Karle appears to be the place where such sculptural work was first attempted.

Another feature from which the posteriority of the Karle *chaitya* hall to that of Bedsa can be made out is the insertion of the plain screen wall in front of the verandah. It has been mentioned above how a verandah was introduced in the architectural plan of the *chaitya* halls first in Bedsa (p. 110). At Karle, there is no doubt it is copied, but by this time experience may have revealed to the architects that a high verandah is as good as useless in a region where the action of the summer sun and the monsoon rain is severe. In order to protect the interior from these two elements of nature, and more to protect the excellent sculptural work on the inner screen wall and the sides, some solution had to be found out. This was all the more necessary at Karle than Bedsa, as here the cave faces west, more exposed to the gushing south-western monsoon rains. Such a solution has been found out here in inserting a plain wall, which, however, happens to be an ugly appendage to an otherwise a beautiful piece of architecture. It appears even this was found ineffective in course of time, and it can be seen that a number of mortises have been cut in the front screen wall into which wooden rafters may have been fixed to provide some sort of a thatched covering.

The other architectural features that show an advancement from Bedsa are the lack of rake of the door jambs, and the making of the aisle roofs flat instead of a quadrantal roof found in Bedsa.

Despite these features revealing an advancement from Bedsa, it should be noted, that this may not have been far removed in date from that. The extensive decorative work on the verandah is almost akin to that seen in Bedsa. The form and delineation of the *chaitya* arch, the occurrence of stepped cornice and the honeycomb patterned roll mouldings are repeated here also. The employment of a general

design of storeyed arrangement of decoration in the verandhah is so remarkably similar in the two caves as to think they were designed by the same sculptors.

The *chaitya* hall at Kanheri which comes closer to this in plan and delineation, has four stages of work, as it has been pointed out elsewhere (p. 189). The first stage there is nearer to that of Bedsa 7 due to the idea of having Type A iii pillars. The second stage of work at Kanheri belongs to a period later than that of Karle 8. In the pot-base-animal-capital pillars even the ribbings found in the Karle capitals have been done away with in Kanheri 3, and, instead they have been simplified as pot capitals (D v a). This represents a later stage of that pillar type nearer to the pillars seen in caves associated with Nahapāṇa and the rulers that succeded him (p. 80). Secondly, at Kanheri the inner screen wall definitely shows a deterioration in workmanship with the whole surface left blank and omitting even the details of the *chaitya* arch, which were considered to be essential in early *chaitya* arches whether found as real architectural elements or in decoration. Thirdly in the depiction of the *mithuna* figures the grace and simplicity of the Karle figures has been replaced by rigidness in the Kanheri sculptures. Also worthy of note is the fact that while the *mithuna* panels at Karle are just inserted in shallow niches, separate architectural frames around these sculptures have been made at Kanheri, which too incidentally have pilasters of type D v a.

So, it may be generally contended that stylistically Karle 8 occupies an intermediate position between Bedsa 7 and Kanheri 3 (2nd stage). Considering the dates suggested for the above caves (pp. 113, 197) the Karle *chaitya* hall will have to be placed between *c.* 80 B.C. and A.D. 120 possibly at point not far from the date of Bedsa 7 in view of greater stylistic proximity between these two.

Much discussion has transpired relating to the dating of this *chaitya* hall, and opinions have been expressed by various scholars suggesting dates between 2nd century B.C. and 2nd century A.D. (p. 4).

Fortunately enough, there is an inscription (No. 17) of Uṣvadata, son-in-law of Nahapāṇa. The text of the inscription makes the point clear that the cave was already in existence at the time of the donation. Secondly the inscriptions contemporary with the making of the eave, which record the donation of the lion pillar, the interior pillars and various other parts, reveal in their palaeographical character that those are anterior to the inscription of Nahapāṇa. These belong to Series IV a (Charts II, III). On the basis of a statement in Nahapāṇa's inscription that donations were made to the monks from all quarters (*chātudisa bhikhusaghāya*) a suggestion has been made (Khandalawala and Motichandra, 1975) that the cave may not have been made far earlier than the time of Nahapāṇa, as if any particular religious sect had taken hold of this sancturay it would not have been possible for making the donation for monks from all quarters. However, it may be pointed out that the phrase *chātudisa bhikhusaghāya* is of common occurrence in the contemporary Buddhist inscriptions, and we have already made out elsewhere that sharp sectarian distinctions were not much emphasised by the contemporary Buddhist fraternity (p. 35). An instance is seen in inscription No. 33 at Karle itself wherein the *leṇa* is said to have been dedicated to the *Mahāsāṁghikas* but that it was meant for the monk community of the four quarters (*saghe chātudise*). Secondly it is unimaginable to consider the very establishment of a religious unit free of any sectarian association. The holy man for whom or under whose inspiration this cave has been made, must have belonged to one sect or the other and naturally his followers would be having a stronger hold than any other. Even if it is taken that the remains of Buddha or some other holy man respected by all the sects have been interned in the *stūpa*, the person who was the driving force behind the organisation of this community effort, or the chief donor himself would have belonged to one sect or the other. So we feel that the mere mention of *chātudisa bhikhusaghāya* need not be taken into account to infer that the cave could have been very near the time of Nahapāṇa's inscription. The palaeographical character of the early inscriptions militates against this view. It has been shown elsewhere that palaeographically the inscriptions contemporaneous with the making of the cave are sufficiently far removed from the inscription of Nahapāṇa (p. 55, Chart II). So the best that can be said from this evidence about the date of Karle 8 is that it is earlier than *c.* A.D. 120. It may be earlier by any length of time, but at least by more than a century if palaeographical trends of development are to be taken into consideration.

The evidence from the three radiocarbon dates for the wood work in this *chaitya* hall has already been examined (p. 48, 55-56). Taking the span of two standard deviation of the three dates it has been pointed out that none of the upper dates of these shoot beyond A.D. 75 and that there is little possibility of this *chaitya* hall having been made after that date. Rather, the greater possibility would be a date falling within the common span covered by all the three date ranges with two-standard deviation factors. This provides a span extending between 325 B.C. and 40 B.C. (pp. 52ff). Any date in the 4th or 3rd century B.C. is obviously impossible. We have shown above that palaeographical consideration of the earliest inscriptions of Karle would indicate a stage for that after the date of the Nanaghat inscription, and hence somewhere after 150 B.C., and that too sufficiently long after that (p. 55, Chart II). Combining these data from palaeography and radiocarbon dates it can be stated safely that the *chaitya* hall may have been done somewhere between 100-40 B.C., the lower limit suggested by palaeography and the upper by radiocarbon evidence. Further palaeographical comparison between the early Karle inscriptions and the Series III inscription from Bedsa provides hardly any scope for the early Karle inscriptions to be placed nearer 100 B.C. We have already pointed out the stylistic evidence which points to data, the Karle *chaitya* hall after that of Bedsa 7, but not far from that. So, while the radiocarbon data, provide clue to the upper limit of the Karle wood work to be before 40 B.C. but after 325 B.C., the palaeographical and architectural evidences hint towards the possibility of the date of the Karle *chaitya* hall being later than the early part of 1st century B.C. Hence the interior part of the Karle *chaitya* hall with the pillars, *stūpa* and vault roof fitted with wooden beams can be considered as to have come into existence around 60 B.C. This appears to be the only possibility that fits in well with all the lines of chronological evidences viz. historical, radiocarbon, palaeographical and architectural.

A close comparison of the inscriptions on the interior pillars and those in the verandah (as well as the one on the first pillar) show that there is some difference in age between the two sets, the latter showing slightly advanced characteristics (Chart II). It is likely that the decorative work in the verandah was taken up a little later than the making of the essential parts of the *chaitya* hall in the interior. Probably the completion of work in the *chaitya* hall is recorded by Karle No. 1 which says that "this mansion in stone, the best in Jaṁbudvīpe was 'installed' by the merchant Bhūtapāla of Vējayaṁti". It is interesting to note that while all the early inscriptions in the cave record the donation of individual parts like *thabo*, *veyika*, *hathino*, etc., with the specific use of words like *dānaṁ* or *deyadhama*. Karle No. 1 is the only inscription which refers to the whole cave, *selāghara* (house in stone)[8], and mentions its installation or inauguration with the word *pariniṭhapita*. It is likely that *seṭhi* Bhūtapāla was mainly responsible for the making of this *chetiyaghara*, while others just contributed donations for the making of some individual parts, Bhutapala's inscription is in characters closer to the others in the verandah than those in the interior pillars. While the inscriptions in the interior pillars mark the beginning of work in the *chetiyaghara*, Bhūtapāla's inscription marks its completion. The difference in date is however anybody's guess. But a likely possibility is that Bhūtapāla was the person mainly causal for the making of this *chaitya* hall as to claim the credit of installing the *chaityaghara*, and hence the whole work of the *chaitya* hall can be considered as within the span of active years of an individual. If so, it may be contended that the work in the *chaitya* hall commenced in about 60 B.C. may have been completed at the most by about 40 or 30 B.C.

## CAVE 9

Just to the north of the lion pillar in front of the *Chaitya* hall, there is a ruined *leṇa*. Fragments of three cells with simple beds are seen, but they are much ruined and no systematic plan of the original cave could be made out.

## EXCAVATION 10

In front of the above is a large open cistern. A huge stone *stūpa* has fallen into this. Where this *stūpa* stood before cannot be made out.

## EXCAVATION 11 (FIG. 44; PL. 134)

North of the above is what looks like a large cavern nearly 30 m in length, but very irregular. In the middle of this cavern, is a circular umbrella cut in the rock ceiling. This suggest that below this there stood a *stūpa* once. It appears there were some remnants of structural *stūpas* also. All have been cleared now. It is likely as in Kanheri 84-87 this cavern was used for stone-cut and/or structural *stūpas*. There are some indications to show that there could have been *leṇas* here once.

## CAVE 12 (FIG. 44; PL. 134)

This too is now a large open cavern. There are indications, however, to suggest that originally this was a large hall with a low bench running along the three inner side walls, and with at least 4 cells with benches cut in the left wall. All the cells are now in ruins.

In front of this cavern is a cistern with square mouth. A much mutilated inscription (No. 31) on this cistern appears to record the donation of a cave by some nun and this cistern by another nun, in the 5th year (of some king). The characters are of Series VII.

## CAVE 13 (FIG. 44; PL. 134)

This cave described by Burgess as the first floor of Vihara No. 1 is a *leṇa* approached by a staircase from cave 11. But originally there may have been a ledge path which led to this cave.

The *leṇa* consists of a large hall (8.5 m b, 5.2 m l, 2.4 m h) with four cells in each of the three inner side walls. The front portion of the hall is broken and hence the hall looks open. Out of the twelve cells only six cells have stone benches. The cave is bereft of any other architectural features.

## CAVE 14 (FIG. 44; PL. 134)

This is above cave 13 and is reached by a staircase in one of the cells of 13. This too is a *leṇa* of cells-around-hall type, but appears to be of a later date having pillars similar to those in Cave 4. There are two Buddha figures on the walls. This cave too, is a significant architectural piece, probably illustrating a *leṇa* type of the transitional stage form Hīnayāna to the Mahāyāna, but does not fall within the scope of the present work.

## CAVE 15 (FIG. 44; PL. 135)

This too is a *leṇa* at the same level and next to cave 13 and is now reached by a staircase from the cavern below. But this may have had an independent approach by an upper ledge path originally. This *leṇa* consists of a rectangular hall (11.7 m l, 5.3 m w, 2.3 m h) with two cells cut on either side and four at the back. All the cells are reached by a single step. Five of the eight cells have stone benches. These cells are very large, 3.6 m broad and 2.4 m deep. The cell doorways are rectangular and plain. The front wall is pierced into by a central doorway (90 cm b, 2.1 m h) and two small open windows at shoulder level, one on either side of the doorway. The verandah in front is partly broken.

Fortunately an inscription on the east wall of the cave sets the date of this excavation as the 24th year of Vāsiṣṭhīputra Puḷumāvi (A.D. 154). The inscription states that one Harapharana of Abulāma, made the donation of this nine-celled hall (*navagabha maṭapa*) for the benefit of the *Mahāsaṁghikas* of the four quarters.

## GENERAL DISCUSSION

The remains of the Karle monastery as they have survived today present some difficulties to understand the original nature of the establishment. Out of the 16 excavations in the group, the *chetiyaghara* is the only well-executed and well-preserved monument. All others are puny creations before this. Leaving three monuments of the Mahāyāna period, amongst the rest two are unfinished, two are entirely ruined and three are just broken water cisterns. The five others are *leṇas*, caves 1 and 2 are single cells, 12, 13, 15 have cells-around-hall. The fronts of all these are broken and none of them

bears any evidence to go with the *chetiyaghara*, chronologically. Even the ruined *leṇa* 9 which is by the side of the *chetiyaghara* cannot be placed with that monument as their relative positions clearly indicate.

*Leṇa* 2 bears an inscription of Series VII and will have to be dated to the 3rd century A.D. The inscription in cave 15 dated in the 24th year of Vāsiṣṭhīputra Puḷumāvi is of course of A.D. 154. Cave 12 has the stretch of low bench running along the three inner walls of the hall, a feature known to have been associated with the *leṇas* of 2nd century A.D. and later. The relative positions of *leṇas* 15 and 12 probably suggest that 12 is earlier than 15 and hence cave 12 will have to be placed to the early part of 2nd century A.D. (It is not unlikely that it belongs to the time of Nahapāṇa, whose inscription is seen in the *chaitya* hall). Nothing can be said about the date of cave 13. The absence of the run of low bench in hall, and the presence of simple benches (Type i) in cells may suggest that it is of an earlier date than cave 12. In view of the simplicity of this *leṇa* with absolutely no decoration in the interior this too appears not to be contemporary of the *chetiyaghara*. It is not unlikely that one or more *leṇas* existed in the place of present cave 11 which is just a yawning cavern now, but which has a few indications of cells having been cut. Here could have been the *leṇa* (or *leṇas*) serving the monks who stayed here in the 1st century B.C. But these were already in ruins by about the 3rd century A.D., as suggested by the remanent umbrella of a *stūpa* seen in the roof of this cavern.

Thus, the sequence of main excavations at Karle would be as follows :

| | |
|---|---|
| *Chetiyaghara* 8 and one or two *leṇas*, (now disappeared) | *C.* 60-40 B.C |
| *leṇa* 13 | *C.* 1st century A.D. |
| *leṇa* 12 | *C.* A.D. 120 |
| *leṇa* 15 | A.D. 154 |
| *leṇa* 2 | 3rd century A.D. |
| The use of cavern 11 for raising *stūpas* | 3rd century A.D. |

[These were followed by the three *leṇas* of the Mahāyāna period].

In the surviving monuments of the period there are evidences to show that there were at least 30 sleeping benches in the *leṇas*, thus accommodating the same number of monks. There is only one *maṭapa* (cave 7) and that too is partly finished. As most of the surviving *leṇas* belong to a date later than the *chetiyaghara*, it appears, to start with, there could have been only one or two *leṇas* made along with the *chetiyaghara*. As and when the number of monks seeking accommodation in the monastery increased and as and when patronage too was available additional facilities were provided by creating more *leṇas* and other accessories. Still, Karle remained a small monastic establishment till the end of the period under consideration with just one *chetiyaghara* and 4 or 5 *leṇas* of importance.

Thirty-three inscriptions (see Appendix) and other incidental evidences available here and elsewhere are helpful in understanding various other aspects of the Karle monastery.

With reference to the *chetiyaghara* Cousens writes, "In the top of the tee (inverted stepped pyramidal member), under the umbrella, is a deep square hole, which when we opened it, probably for the first time since the cave was abandoned by the priests, was found to be full of saw dust in which, very likely some relic had been deposited secured by the close fitting stone lid."[9] So this *chetiyaghara* could be dedicatory in character and was meant to preserve the relics of some monk. The huge dimensions of the *chetiyaghara*, the amount of care and money spent on its design and execution would suggest that this may have been meant for a highly revered man who exerted a great and lasting influence on the lay devotees. It is unfortunate that our historical sources are reticent about the man in whose honour this wonderful architectural work was dedicated.

The Karle *chaitya* hall is unique in another respect, that though the whole cave is of a single design (except the later Mahāyāna sculptures) its execution was actually financed by a number of persons. These include an assorted group of individuals like a prince of the illustrious Mahāraṭhi family, merchants and merchant guilds, monks and nuns, and lay devotees including men and women, *i.e.* practically persons from various strata of society that had the capacity to make donations. In this list of contributors,

in which atleast 27 names can be easily recognized in inscriptions, there were people coming from Vejayaṁti (Banavasi, in North Kanara district, about 600 km south of Karle) and Sopara (situated about 100 km north-west of Karle) and the unidentified towns of Umehānakaṭa and Dhēnukākaṭa.[10] (Incidentally most of the donors from Dhenukākṭa are *Yavanas*). These are further indicative of the high place Karle held in the contemporary Buddhist world. This may probably again due to the influence of that illustrious, but now unknown personality, in whose honour the cave was made. The result of all this of course is the creation of a great monument of beauty and grandeur. It may also be noted that the importance of the Karle monastery is indicated by the fact that this is the only centre located away from the royal seats but still enjoyed direct royal patronage. The inscriptions of Uṣavadata and Vāsiṣṭhīputra Puḷumāvi (Nos. 17, 18, 19) mentioning the gift of lands to the *saṁgha* here are illustrative of this fact.

The above mentioned inscriptions inform the ancient name of this place as Valūraka and the community of monks of the place is called *Valūraka saṁgha*. Even though the monastery was open for use by the members of Buddhist church coming from all directions (*chātudisa bhikhusaṁgha*) the monastery was under the control of the *Mahāsaṁghikas* (Karle Nos. 19, 33). The very association of this sect with the monastery is of some interest, as we have pointed out elsewhere (p. 34, 37) that the *Mahāsaṁghika* represents a break-away group differing in certain tenets and practices from the *Theravādins* and that this had several ideas which paved way for the development of the Mahāyāna concepts. How far these doctrinal differences are indicated in the architectural works of the place is difficult to assess. However, it may be mentioned that the *chetiyaghara* at this place has certain items which appear to be the result of an attempt to represent some religious ideas symbolically. This is one of the only two *chetiyagharas* (out of about 40) in Konkan and western Deccan which had the huge lion pillars in front, the other being the *chaitya* hall at Kanheri.[11] This is also the first *chaitya* hall in which the *mithuna* panels have been cut so prominently. The way in which the inscriptions refer to these panels as simply '*mithuna*' in the same tone as other donations like *hathino*, *thabo* and *veyikā*, probably shows that this too is a common symbolic representation and certainly not the portrait sculptures of donor couples as contended by some scholars.[12] But the point of interest is the prominent displayal of such couples in a monastic unit, that too within the *chetiyaghara*. The occurrence of such figures in only a few *chetiyagharas* in western India while they are absent in many others is a matter to be taken note of. Karle probably provides a clue relating to the Buddhist sect which permitted such representations.[13]

Another feature noticed in this cave is that there are a number of pillars with small holes bored into one of the faces, often in the centre of a lotus in relief. It has been reported sometime back that a few bone relics were found in these holes. All such pillars have inscriptions and one of them (Karle No. 9) specifically mentions the fact that the pillar was the donation of a *bhāṇaka*, a disciple of a Dhamutarīya teacher from Sopāra, and the gift was made along with body relics (*saśarīro dānam*).[14]

The three *leṇas* consisting of Buddha images are also of interest in this context. Karle is one of the few sites in Western India where there is a continuation of architectural activity from the Hinayāna to the Mahāyāna stages. Cave 4 located to the south of the *chetiyaghara* still preserves features of *leṇas* of Hīnayāna tradition. Here the verandah is provided with backed bench having the railing decoration on the front side and supporting the pot-capital pillars of the type seen in Ambivale, etc. There is no shrine behind but a niche housing a Buddha image is carved on the back wall of the hall directly opposite the doorway. The *leṇa* has definite advanced architectural features tending towards the Mahāyāna tradition in the horizontal basement cornices in front. This transitional architectural work located in a centre of the *Mahāsaṁghikas* is probably indicative of the role of that sect in introducing the Mahāyānic religious practices in Western Deccan. This Karle monument is also one of the important evidences indicating that there was no gap in rock-cut architectural activity between the Hīnayāna and the Mahāyāna stages.

The nearby monastery at Bhāja consisting of a gronp of significant monuments of architectural interest appears to have been an infuential Budhist centre in the 3rd and 2nd centuries B.C. (pp. 127ff)

and important architectural works came up in the early part of the 1st century at Bedsa, a site very near Bhaja (pp. 112ff). Now, in the middle of 1st century B.C. the Kārle *chaitya* hall was made and other architectural works were created through the three centuries that followed—thus entering into the Mahāyāna period of Buddhist architecture. We have already hinted at the significance of shifting of architectural activity from Bhaja to Bedsa and on to Karle—all three sites located closeby to one another (pp. 129-130). The history of these three sites provides a continuous account of the development of Buddhist rock-cut architecture from the puny beginnings in the 3rd century B.C. to the onset of Mahāyānic tradition in about the late 3rd or early 4th century A.D.

The existence of dedicatory *stūpas* in cave 11 shows the continuation of a tradition seen in Bhāja, and it is likely that the three monastic units Bhāja-Bedsa-Karle were part of a great monastery, probably the seat of an important Buddhist sect, which attracted continuous patronage and was responsible for the creation of three huge *chetiyagharas*—each done on a magnificent scale and each representing a significant progressive step in the history of Western Indian rock-cut architecture.

## KOL

Kol is a small village about 3 km south east of Mahad in Kolaba district. The caves are located on a hill, across the river Savitri, in two groups, one to the south-east of the village and another to the north-east.

In the first group to the SE of the village, there are six caves along a single scarp at the head of a ravine, and these face west. The fronts of all the caves are broken.

### CAVE 1

This is the northernmost of the group. This is a simple hall (about 3 m l, 3.6 m b) with no bench or cells.

### CAVE 2

A similar hall as cave 1, but only two walls remain now.

### CAVE 3

This was a *leṇa* of Type B i, with two adjacently placed cells opening into a common verandah. Both the cells are small (about 2.4 m l, 1.8 m b, 2.1 m h). The doorways are rectangular and plain. The floor is partly filled up.

An inscription (Kol No. 1) on that wall states that this is a donation of one Sivadata of the village Āghākāsa.

### CAVE 4

Adjacent to cave 3 is a single cell with a verandah. The verandah is broken except for the left wall.

An inscription (Kol No. 2) on the back wall of the verandah above the door refers to this cave as a donation of one Dhamasirī wife of Sivadata.

### CAVE 5

This is a hall about 4.5 m deep and 3.6 m wide. The front and a side are broken.

On a side wall is an inscription (Kol No. 3) stating the making of the *leṇa* by Sagharakhita, a *gahapati seṭhi*.

In the second group to the NE of the village there are three excavations and all face west.

### CAVE 6

This looks now like a natural cavern, due to the collapsed front. In the back wall, however, remnants of two cells with beds at back can be recognized. Originally this appears to have been a *leṇa* with a hall and two cells at the back and probably at least one more along the right wall.

CAVE 6a

A featureless water cistern to the south of cave 1.

CAVE 7

This is somewhat better preserved, and has a hall (3.6 m sq, 2.7 m h) with two cells on the left wall and, two unfinished cells (rather just attempts) in the right wall.

The front is broken and now looks like an open natural cavern. There is no indication of even the verandah. There is a recess-bench in each of the cells along the back wall. The doorways are plain and rectangular.

The caves at Kol are very much dilapidated and hence are of no architectural value. The inscriptions which are of Series V show that they belong to the first half of the 2nd century A.D. It appears all the caves in the first group are donations made by the members of one family. Nos. 1 and 2 mention donations made individually by a man and his wife. The position of the next cave with inscription 3 which shares one of the walls of cave 2 also may be a donation made probably by a person related to the above.

There are no indications to find the age of caves in the second group, except for the fact that they may have been made when the benches-in-recess were in vogue (*i.e.* 2nd century A.D. and later).

## KONDANE

Kondane in Karjat taluk, Kolaba district, is one of the well-known centres of rock-cut architecture. It is about 6 km south-east of Karjat. The cave group, cut in a cliff on the north bank of the river Ulhas, below the Rajamachi fort, appears to be one of the main religious establishments along the Bhorghat route leading from Kalyan-Sopara ports towards Bhaja, Karle and further on to Ter, etc. The location of Kondane caves probably indicates that the highway between the ports and the inland towns might have been running along the river Ulhas.

This is small group consisting of one *chetiyaghara* and seven *leṇas*, all belonging to the early period under consideration, and are untampered by later activities of the Mahāyāna period. The caves are not well-preserved, but enough remains to testify the grandeur of at least two of the caves in the group. All the caves face west and these are numbered from south to north.

CAVE 1 (FIGS. 46, 6(5); PLS. 136, 137, 138, 141, 142)

This is the well-known *chetiyaghara*, a highly impressive architectural work adorned with exquisite carvings. This belongs to the class of apsidal, vault-roofed *chaitya* halls (Type A i). The measurements can not be accurately made out due to its much deteriorated lower portion, but appears to be 8.1 m wide and 8.6 m high and about 22.2 m long from the back of the apse to the place where once a doorway existed. The hall is divided into three parts, a nave and two side aisles, by two rows of octagonal columns meeting in a semi-circular line at the back. The nave is about 4.9 m wide and the side aisles including the pillars are about 1.6 m wide. The *stūpa* is about 2.9 m in diameter and is placed at the back end of the nave equidistantly from the side and back walls. The walls are straight, but the octagonal pillars rake inwards slightly. The roof over the aisles in curved, the profile being about 1/6th segment of a circle. The roof over the nave is vaulted. This rises straight to a height of about 2.4 m from a thin beam carried by the pillars, and then the actual curvature of the roof begins. This part can be better described as a pointed vault then barrel shaped. There are square mortises cut along a simple ledge at the top of the vertical rise. Similar square mortises are also seen on the aisle walls below the ledge which carried the curved wooden rafters and it is likely that the beams stretched downwards upto a level, about 2.1 m higher up from the ground.

At present the lower part of the front of the cave is very much damaged. The front part of either of the side walls has disintegrated to form deep cavities. The whole thing gives an impression that this cave

too belongs to the type of *chetiyagharas* with open front like Ajanta 10 and Bhaja 12. But closer observation reveals that this had a front screen, partly cut in stone and partly made of wood. Just in front of the left aisle, remnant of a disintegrated return wall still preserved to a height of about 45 cm and stretching for about 60 cm is visible.[1] In the upper part two huge stone jambs supporting the arch are still extant. These are square in cross-section and taper as they go upwards. The broken parts show that these continued down to the floor and divided the front of the cave into three parts, forming a wide doorway in the centre flanked by a window in front of each of the aisles. The upper portion of these jambs still retains two curved wooden reapers connected by a radial reaper, which once adorned the *chaitya* arch in the fashion of a sun-window. The whole facade could, however, be reconstructed on the analogy of the rock facades from Ajanta 9, Bedsa *chaitya* hall, etc., in which case these jambs would have had a heavy wooden architrave below the arch and probably a wooden screen with a wide doorway below. In front of the aisles there may have been windows in the fashion of those seen in Ajanta 9. But here the screen in front of the aisles may have been of wood, the lower part alone being cut in stone.

The *chaitya* arch projects to about 1.5 m in front of this and its soffit is carved with parallel longitudinal reapers. The spandrels on the facade, as well as the side walls, have excellent decoration of railing and *chaitya* arches above, and the whole thing looks like a three storeyed mansion. Above a horizontal railing decoration which stretches along the line of the springing of the arches are beautifully carved square panels alternately carved with chequred pattern and a pair of man and woman. It appears the panels with man and woman depict some story in a sequence (Pl. 138). This is again surmounted by a stretch of stepped cornice with its topmost riser ornamented with triangular merlons and over this is another stretch of *chaitya* arches. There are overhanging balconies, one on either side of the big *chaitya* arch and these are again in two stages—amidst the horizontal decorative bands in succession consisting of the railing pattern, the *chaitya* arches and the stepped cornice—the only difference in the two sets being in the size and number of *chaitya* arches in the middle. The sides of the projecting balconies as well as the spandrels on either side of the big arch are also treated in a similar way as the fronton of the balconies.

The wall surface below the railing band in the line of the paws of the arches is plain, except for the figure of a *Yakṣi* carved in high relief on the left wall (Pl. 142). There is an inscription by the side of the *Yakṣi* figure (Kondane No. 1). This refers to the making of that sculpture by Kanha a disciple of Balaka. The letters belong to series I B.

The mathematical formula adopted in designing Kondane 1 is difficult to make out in the absence of exact measurements of different parts due to the ruined nature of the cave. However, one thing that strikes conspicuously is that the height of the hall is more than the width. In almost all cases (Bhaja, Ajanta 9 and 10, Karle 8, etc.) they are equal or the height is less than the width. The only other *chaitya* hall that shares the feature is Nasik 18. Secondly the nave is very wide and it appears, the width of the nave is 3/5th of the total width of the hall and the aisle including the pillar is 1/5th the width. The diameter of the *stūpa* appears to be 1/3rd the width of the hall, and in this feature it is similar to the Bedsa *chaitya* hall. The nave in front of the *stūpa*, if measured up to the place where the wooden doorway may have stood once appears to be double its own width.

There are several architectural features which reveal the relative chronological possition of this *chetiyaghara* with reference to many others.

Firstly, the absence of the verandah, the open front and the raking of octagonal pillars are features which testify that this belongs to the generic class of Bhaja 12 and Ajanta 10. But there are a few features that show the later date of the present one than the above two. The form of the *stūpa* has the *harmikā* and the stepped capital done more elaborately than in Ajanta 10 and Bhaja 12.

The appearance of huge tapering jambs shown as supporting the front arch is a new feature, and these appear to be the forerunners of similar ones found in the *chaitya* halls Ajanta 9, Bedsa 7 and Karle 8 where the screen walls are completely in stone. The possible form of the facade when completed in wood as conjectured above, shows that the facade was divided into two parts dominated by the big arch above, and below it the central doorway flanked by windows.

However, Bedsa and Karle *chaitya* halls have regular verandahs, but Kondane displays none. So the immediate step subsequent to Kondane 1 but preceding Bedsa 7-Karle 8 can be surmised to be one in which the screen wall is replaced completely by stone, but which still lacks the verandah. Such a stage is well-represented in Ajanta 9. The low stone-cut screen wall, now indicated by a remnant, shows a tendency towards adoption of stone in preference to the wooden parts. In this feature too Kondane 1 stands in a position slightly anterior to Ajanta 9, but ahead of Ajanta 10.

Another architectural element also helps in bringing these two nearer. It is the square pillar with chamferred corners in the middle (Type C), seen in relief on the facade of Ajanta 9. This is not noticeable in the Kondane *chaitya* hall but a very fine representation of this is seen in relief in the neighbouring *leṇa*, and it will be shown below that the interior pillars in this *leṇa* were also of this form and that the *leṇa* is contemporaneous with Kondane 1. Further all the other elements in the facade like the form of the *chaitya* arches, the stepped cornice and merlon decoration also appear in both Kondane 1 and Ajanta 9.

Thus, in stylistic sequence, the *chetiyaghara* at Kondane occupies an intermediate position between Ajanta 10 and 9. It is also of interest to note that the *chaitya* hall at Aurangabad has some features nearer to Kondane 1, particularly in the form of the *stūpa* and the use of triangular merlons, seen on the *stūpa* there and in the facade decoration here. The difference in date between the two may not be much.

The inscription (Kondane 1) belonging to series I B substantiates the relative chronological position of the Kondane *chaitya* hall and this can be roughly placed around *c.* 170-180 B.C.

## CAVE 2 (FIG. 47; PLS. 139, 140, 143, 144)

This is a *leṇa* situated adjacent to cave 1, at the level of the *chaitya* arch. The cave is very much ruined, but still retains sufficient features for a detailed examination.

This belongs to the class of *leṇas* with cells-around-hall and a verandah in front (Type B iii b).

The verandah is about 2.4 m d, and 6.4 m w. It appears to have had a line of five pillars in front. The lower part of the verandah being broken, the form of the pillars can not be ascertained. Square stumps still hanging from the roof are the only indications. A pilaster partly preserved in the right wall is of Type C. The back wall of the verandah was pierced into by a doorway and two large windows on either side. The lower part of this wall is broken. Still it is possible to make out that the central doorway was 1.6 m wide and its lintel was 86 cm below the ceiling. The side openings are 1.7 m wide and their lintels are 1 m below the ceiling, thus these side openings could be considered as windows at waist level.

The interior hall is 8.5 m wide and 11 m deep and 2.5 m high. There were fifteen pillars arranged about 1.2 to 1.3 m apart from one another in a row running parallel to the three inner walls. The bases of all these are gone, and only stumps remain hanging from the roof. From the remnants however, it can be inferred that these were square in cross section both at the bottom and top but were octagonal in the middle (Type C). They were slender pillars, 37 cm square, and rose to a height of 2.5 m. The original shape of these pillars is also revealed by the pilasters set in a row below a decorative *stūpa* on the right wall of the verandah, and also from a remnant part of the pilaster of the front of the verandah, seen by its side. The chamferring of the arrises in the interior pillars started at 50 cm down from the top as seen in the 3rd pillar in the right row. There are eighteen cells in all around the hall, arranged in such a way as to be six on each of the three inner walls. The cells vary in size from 4.8 to 7.2 m in length and breadth. All have stone beds along a side, except the first two cells nearer the front wall which have two benches in each. The doorways of the cells are narrow just about 57 cm broad and 1.7 m high but they have no slanting jambs. In many of the doorframes, a chase runs from top to bottom on one of the jambs. All the lintels and jambs including those of the main doorway have cut corners for the insertion of the wooden frame. A peculiarity seen here is that to make provision for the wooden frame sometimes the decoative sculptures above the doorways too have been cut. This probably shows that originally there may not have been the intention to make all the cells and some may have been inserted

later. The roofs over the hall and the verandah are flat. The hall roof is finely carved with large beams and smaller connecting joints, dividing the whole roof surface into square panels. The pillars in the hall are shown to be carrying heavy beams, but the beams are less in thickness than the pillars. It looks as though the beams themselves are passing through the pillars. (This feature appears to be seen only in caves of very early date). The verandah pillars supported the heavy architrave. The roof in front of the architrave projects forward to about 2.4 m and the under surface of this has parallel beams cut in it. The extensive copying of wooden architectural features in the roof of verandah and hall has been done so faithfully that with the sooted surface of the rock, the whole interior can pass for woodwork itself.

The interior hall has a stretch of decorative work running along the three inner walls, above the level of the doorways. This consists of a band of railing pattern connecting the legs of large *chaitya* arches. The arches used here are of simple type and these too have the delineation of curved wooden reapers on the surface bracketed by the arch, and the soffit of the arches has the dentil decoration, representing projecting parallel beams. The decoration reminds of similar work in Bhaja 12, Nasik 19, etc.

The right wall of the verandah has some fine carving (Pl. 143, 144). The lower part has four square pilasters with the arrises cut in the middle. These support a band of railing pattern. Above this is a *chaitya* arch of the usual design housing a *stūpa*. The *stūpa* has the drum with a fillet of railing decoration and this supports a hemispherical dome which carries a *harmikā* with railing pattern and the square inverted pyramidal capital. A square *yaṣṭi* rises from its top flat member. This appears to have been a dedicatory *stūpa*, as a square hole is seen on the side of the drum which may have been meant to keep the relic.

The facade has a simple decoration in two stages. On the fronton just above the projecting *chajjā* there is a band showing the square pins in a line. Above this is a stepped cornice supporting a string course of railing decoration. Again the roof projects forward from this with its under surface decorated with the parallel beams. The fronton of this projection too has the wooden pins and railing, and above this is a stretch of decorative *chaitya* arches in a line. Above this is a further projection of the overhanging rock. These *chaitya* arches are neatly cut with pointed finials, incurved arms and curved and radiating reapers within. It is interesting to note that the second *chaitya* arch to right has a small *stūpa* cut in it. The decoration though simple has a magnificent effect, and the whole thing has been wrought in such a way as to give the impression of actual woodwork. The facade decoration has been so arranged as to be in continuation of the decorative work seen on the facade of the *chaitya* hall. This suggests that the *chaitya* hall and this *leṇa* are works resulting from a single design.

There are two inscriptions carved on the facade, one each on the lowermost band of the two successive projections. The upper one records that it is a donation by one Kaṁchikaputa (Kondane No. 3). The lower one probably states that that overhanging eave (possibly the decoration) is of (caused to be made by) Kaṁchika's son Dhamayakha of Baraka. The inscriptions are in characters of series I B.[2]

Apart from the position of this *leṇa* and the palaeography of the inscriptions which connect this with the neighbouring *chaitya* hall, the use of square pillars with cut arrises in the middle part shows that this is nearer in date to Bhaja 22, Ajanta 9, Nasik 19 etc. But the doorways of this *leṇa* appear not to show any rake of jambs. Most of the doorways are of course very much damaged. (It is also noticed that the decorative *chaitya* arches are not just above the cell doors. This is probably due to the fact that the decorative work at the higher level, was finished first and then the cells were cut. There might have been demand for more accommodation and hence more cells may have been cut than what was originally planned, by which the doorways were displaced from their originally intended position below the arches.)

The present *leṇa* is peculiar due to the fact that this is the only one of the early period having pillars in the interior hall.[3] This could be due to the fact that this is the first of the *leṇas* of such huge dimension that was attempted by the rock cutters of west Deccan. There was no need for pillars for smaller halls, where, even in wooden architecture, the length and breadth could have been short enough to be spanned by single rafters. It is possible that in this *leṇa* having a large hall the wooden architectural

feature of providing supports when the space to be spanned was more was copied. This appears to us to be a logical explanation. When the stone cutters realized by experience that such pillars were useless in the new rock medium, they may have given up the practice even while cutting large *leṇas* like Nasik 10, or Junnar-Ganesh Pahar 7. But the practice may have risen up again during Mahāyāna times purely for decorative purposes.

CAVE 2a (FIG. 47)

This small *leṇa* with two cells placed adjacently is cut to the left of the verandah of cave 2. One of the cells has two benches while the other has only one. This *leṇa* appears to have been made as an annexe to cave 2 for providing accommodation for the increasing number of monks.

In its full capacity cave 2, along with 2a, could have accommodated 23 monks.

CAVE 3 (PL. 48, 3)

Next to the above is a simple *leṇa*, belonging to the class of cells around hall type (B iii). The hall is about 6 m wide and 6.3 m deep. There are eight cells around the hall, two in the left wall and three each in the back and right walls. All the cells have two beds, one along each side wall. The front wall has a central doorway and an open window on each of its sides. The *leṇa* is very much ruined. Practically all the front walls of the cells and the front wall of the hall and almost the whole of the verandah are broken and not much architectural element of value remains. There are no pillars in the hall probably due to the fact that the hall is small. The cave does not have any decoration too, either on the walls or on the ceiling. This cave appears to have been made more with an eye towards utility, to provide as much accommodation with as minimum expenses as possible and hence there was no scope for decorative work. The fact that the cells here are provided with two beds too indicates the same attitude of the donors; while the bigger *leṇa* 2 could accommodate 20 persons, this *leṇa* which is one third of its size has a capacity to accommodate 16 persons. As there is very little space in the cells for the monks to keep their belongings, additional rectangular niches have been cut in the back wall in all these cells. This resembles cave 12 and 13 of Ajanta so far as providing the double bench and additional niches are concerned.

CAVE 4 (FIG. 47)

This *leṇa* adjacent to the above has two cells, one behind the other. Both have two beds. This cave meant for four monks, is such a simple one that the idea of economy (but greater utility) appears to have been in the minds of the donors even in this case. There is no architectural feature worth recording.

All the caves further on from this are ruined to such an extent that all of them together look like a large single natural cavern. However, different units can be recognized from a careful examination of the extant remains.

CAVE 5 (FIG. 47)

This was a *leṇa* with three cells in a row (Type B i). These probably opened into a common verandah, of which too the traces do not remain. All the cells have a single bench in each.

CAVE 6 (FIG. 47)

This is similar to the above, but had 4 cells. One of the cells however has two beds one along each of the side walls.

CAVE 7 (FIG. 47)

*Leṇa* of Type B i. The verandah is partly preserved. There are two cells, with a bench is each.

EXCAVATION 7a

This is a simple recess. The front is broken.

CAVE 8 (FIG. 47)

Though broken, this is somewhat an interesting cave. This has a peculiar plan and is the only one of its kind at Kondane. This consists of a hall with a low 'L' shaped bench running along the left and the back walls. In the back wall is a doorway leading to a cell with a bench to the left. In the right wall of this cell is another doorway leading to a narrow recess. Though the arrangement of the different parts is aberrant, this cave may be compared in type to several caves with hall, cell and recess (A iv type) seen in the Ganesh Pahar group at Junnar. This may be a *leṇa* meant for a monk of status. Or, more likely, it was a dining hall as the presence of the low bench in the hall indicates. The inner cell with bench and the recess could have served as kitchen or pantry. There is a large cistern by the side of this, and it is of interest to note that this is the only cave in which a cistern is present. Its location at the end of the group is also noteworthy.

GENERAL DISCUSSION

Among the Kondane caves, only 1 and 2 are of interest. All others are simple and much ruined excavations, bereft of useful architectural elements.

This small monastic unit had at least seven dwelling caves, with a capacity to accommodate 54 monks. The *chaitya* hall is big enough to hold this huge number, but the dining hall (cave 8) could have accommodated not more than 15-16 at a time. For a small place like Kondane the number of monks appears to be rather high. It has not been possible yet to locate the city or town which was supporting this monastic establishment. Kondane is situated in a heavy forest area surrounded by rugged hills and it is not possible to expect any town of considerable size to have been there, as for miles around no cultivable land of useful extent exists. So it is more likely that this place was serving as caravanserai along the main trade route in which the people, particularly monks, moving along could have just spent a day or night on their way, up or down the ghats. The trading community frequenting this place could have provided the necessities for the few monks permanently residing there.

Nothing can be said with certainty regarding the sequence of cave cutting at the place. However, Caves 1 and 2 are contemporary. They being placed on the basis of style analysis and palaeographical evidence (above) between Ajanta 10 and Ajanta 9, they are datable to the early part of 2nd century B.C. After the making of these when their usefulness as a suitable place for temporary halts during the long journeys was recognized, more monks may have begun to resort to this place and as a result the highly economical architectural works like Cave 2a and 3 came up shortly afterwards. Later, caves 4 to 8 may have been hewn one after the other in the very same order, but their dates cannot be made out. However, even in these caves simple benches are seen. This indication possibly suggests a slightly earlier date, perhaps not later than 1st century A.D.

Shortly afterwards the importance of Kondane appears to have diminished for some unascertainable reasons. It is possible that the Bhorghat route itself began to be used sparingly, due to some economic or political reasons, and in such a case, bereft of the resources available from the trading community, this place which had little local economic support could hardly have flourished any more.

## KONDIVITE

The Kondivite group of caves in Bombay city is situated on the hump of a small hillock about 6 km east of Andheri railway station.

There are about 20 excavations in the group, but only three belong to the period under consideration.

CAVE 9 (FIGS. 48, 5 (4); PLS. 145, 146)

This cave locally called Anasicha Kamara, is a *chetiyaghara* having a circular cell housing a *stūpa* in its centre and a rectangular hall in front. The hall is 7.6 m long 5.3 m broad and 2.7 m high. The side walls touching the sides of the semi-circular front wall of the cell are 9 m and 9.4 m long. The circular cell cut in the back, has a semi-circular front projecting for about 1.5 m from the back wall of the hall. It has a rectangular doorway 1.14 m broad 2.3 m high and on either side of the doorway is a latticed window 1 m high and 83 cm long. The roof over the hall is flat, but the circular cell has domical roof.

The interior of the circular cell is 4.4 m in diameter and the domical ceiling rises to a height of about 4.6 m. In the centre of this cell is the *stūpa* 2.2 m in diameter. The space between the *stūpa* and the walls all around is 1.1 m wide. The *stūpa* (Fig. 5, 4) has a cylindrical drum with *vedikā* band at the rim, and over this is the hemispherical dome. There is no *harmikā* above, but a flat member with holes in the corners is present and this may have received the *harmikā*, of wood. The total height of the extant part of the *stūpa* is 3 m. The *stūpa* is partly ruined.

The lattice windows (Pl. 146) are finely carved imitating the wooden *vedikā*.

The front of the rectangular hall is now open, but mortises in the floor of the hall suggest that there was a wooden screen. In front of this three low steps have also been cut in the rock.

An inscription is carved above the left grated window in the thin front wall of the circular chamber (Kondivite No. 1).

CAVE 10

A small *leṇa* with a hall and a cell at the back. The cave is much ruined. Its front, however, has completely fallen down. This cave is at a higher level than the *chaitya* hall and the hewing of this has partly broken the right wall of the latter and so this may be considered as later in date than the *chaitya* hall.

CAVE 12 (PL. 147)

This is a much ruined *leṇa* of possibly Type B ii. It consisted of 3 cells in a line all opening into a hall in front. At present all the front and partition walls of the cells are broken. The hall was about 7.6 m long and appears to have had a niche in the left wall. Inside the hall, in a projected portion just under the ceiling, there is a stretch of *vedikā* design.

GENERAL DISCUSSION

The peculiar plan of the *chetiyaghara* at Kondivite, the only one of its kind in Western India, has tempted art historians to attach great importance to this monument.[1] There is a general similarity in plan between this and the Sudhāma cave in Barabar hill, both having a rectangular hall with a circular cell at an end. The Sudhāma cave belongs to the Mauryan period and this is to be considered naturally as one of the early attempts in rock-cut architecture. While in that cave the hall and cell are placed to stretch axially into the rock scarp, Kondivite 9, cut perpendicularly into the scarp, shows an advancement in technique. In the Sudhāma cave the whole hall had to be lit by the only doorway cut in the centre of the front wall; the circular cell is almost dark. The plan adopted in the Kondivite cave has sought a solution for the defect; light is shed from the front opening directly into the hall as well as the cell behind, and for that matter even on the *stūpa* inside. The next step towards having a better hall of worship is to do away with the front wall of the circular cell by which the form of the apsidal *chetiyaghara* is achieved. The introduction of pillars or otherwise may have depended on the dimension of the *chetiyaghara*.

Though this contention looks logical, we have suggested another possibility too regarding the origin of the apsidal *chaitya* halls (p. 101). It is not unlikely that several architectural forms in brick and wood may have been in vogue so far as the *chetiyagharas* are concerned, and Kondivite 9 may

represent one of the experiments to adapt a variety, an example of which is fortunately preserved in the Sudhāma cave. However, just the fact of fortuitous availability of a rock-cut *chetiyaghara* of Mauryan times with which Kondivite 9 has certain similarities need not lead to the conclusion that this is the earliest *chetiyaghara* in Western India. The relative chronological position of this with reference to the other *chetiyagharas* in this region can be made out from the form of the *stūpa* installed here. It has been shown that the Kondivite *stūpa* comes very near the *stūpa* in Junnar-Tuljaleṇa 3. The Kondivite *stūpa* has, however, an advanced feature in introducing the railing and also a square platform to receive the *harmikā* which may have been of wood. Both from style and technique this *stūpa* comes nearer to the great *stūpa* in Bhaja 12. The *stūpas* in Bhaja 12 as well as Kondivite 9 represent, both in their own ways, a slightly advanced technical stage compared to those in Junnar-Tuljaleṇa 3 and Kanheri 2e (p. 72ff). Taking this feature into consideration the *chaitya* hall in Kondivite occupies stylistically a position later than Junnar-Tuljaleṇa 3 and others of its clan and nearer to Bhaja 12 and certainly earlier than Ajanta 10, where the *stūpa* is fashioned with the *harmikā* and the stepped pyramidal capital also in stone. It can also be noted that this *stūpa* at Kondivite is similar in features to *stūpas* 4 and 5 in the group of dedicatory *stūpas* in Excavation 20 at Bhaja, in which connection we have contended that these *stūpas* belong stylistically between those without the *harmikā* in stone and those with that member.

Hence, we feel, the cave could have been made sometime in the latter part of the 3rd century B.C. This is quite in tune with the stylistic relationship this bears with the Sudhāma cave, as delineated above.

Another item which substantiates the contention of the above mentioned date is the set of perforated windows (Type i). These are finely wrought, simulating the *vedikā* pattern and are comparable to the one seen in Kanha's cave as Nasik.

However, the inscription carved above one of the perforated windows is in characters of Series V B and is datable on palaeographical grounds to the middle of the 2nd century A.D. It is not known whether this inscription is contemporaneous with the making of this cave. The record is much damaged. According to the reading provided by Bhagavanlal Indraji (BG), it appears to record the making of a *vihāra* by a brahmin. It is possible that the inscription was carved long after the making of the cave.

It is difficult to make out the exact nature and age of the *leṇas* in their present dilapidated condition. However, the single celled *leṇa* 10, which appears to have been of type A ii or A iii is a work wrought later than the *chetiyaghara*, as its making has damaged partly one of the walls of the latter. The duration of interval between the making of the two is uncertain. *Leṇa* 12 with the railing decoration in the hall, just underneath the ceiling reminds of similar decoration in Bhaja 7. Like the latter the *vedikā* here is also neatly carved faithfully depicting all the details of wooden *vedikās*, and hence has to be dated to an early period, nearer to cave 7 at Bhaja, *i.e.* to around 200 B.C. Thus this *leṇa* appears to be a contemporary of *chetiyaghara* at this place.

## KUDA

A group of caves near the village Kuḍa in Kolaba district is of great interest displaying the nature of rock-cut architecture of an area distant from the focal centres of this tradition. Here can be seen how a number of architectural elements developed elsewhere were simply received and adopted. The wealth of inscriptions in the Kuḍa group enhances its importance.

The caves are situated on a bench of the Mahoba hill at a height of about 50 to 70 m above sea level, and overlook south-wards the great expanse of water of the Rajapuri creek. Situated in picturesque surroundings this monastic establishment could have been one of the favoured retreats of the monks. No town which supported this centre has so far been discovered, but it is likely that such a town could have been a natural port on the Rajapuri creek which provides easy access from the sea and safe shelter to the ships coming thither, this creek being surrounded by high hills all around.[1]

The caves are located almost adjacent to one another, but in two groups, one lower and the other upper. The numbering for these has been done here starting from the western most cave of the lower group and moving eastwards and then along the upper group in the same direction.[2]

CAVE 1 (FIG. 49 ; PL. 148)

This is a flat roofed rectangular *chetiyaghara* (Type C) consisting of a sanctum with a *stūpa* at the back, an inner transverse verandah, a hall, and a front verandah with a cell to the left.

The front verandah (9.7 m w, 2.1 m d) had two simple octagonal pillars on eitherside of the entrance passage but they are now broken. The rectangular pilasters had the hour-glass ornamentation of the type seen in Mahad, Kanheri, etc. The facade is much ruined. To the left of the verandah is a cell (2.1 m) with a bench-recess along the right wall.

A doorway (2.1 m w) leads to the hall (9.7 m sq). Behind this is the transverse verandah (7.6 m w, 2.2 m d) seperated from the hall by two pillars in antis rising from a stretch of low podium. The pillars are again simple octagonal shafts. The pilasters are square and are adorned with the hourglass ornament. A low bench runs all along the side and back walls. A doorway (2.9 m w) provides access to the shrine (about 4.5 m, w, 4.4 m d) having a *stūpa*. The *stūpa* has the usual drum, dome and *harmikā*, but there is no umbrella; the *harmikā* itself is flush with the ceiling.

An inscription (No. 1) carved on the back wall of the verandah, to the left of the doorway, records that this is a donation of one Sivabhūti, son of Sulasadata and Utaradatā, and writer to Mahābhoja Mandava Khandapālita, son of Mahābhojī Saḍagerī Vijayā.[3]

The plan of this cave resembles those of Nasik 17 and Mahad 8, wherein a similar feature of forming a shrine in the back of the hall is to be seen. But there are also some minor differences among the three caves of this class. While Nasik 17 and Mahad 8 have provision for a number of cells on the sides of the hall, here is none, but only one cell has been made in the side wall of the verandah. Secondly, Mahad 8 does not have a transverse verandah, but only a large open chamber behind the back of the hall. Nasik 17 has, however, the pillar fronted transverse verandah in front of the sanctum, but pillars are of the pot-base, and animal-capital vareity there. Other architectural features in the present cave are the presence of the recess-bench in the cell and the occurrence of the hour-glass decoration of the pilasters. With these it can be postulated that this belongs to a date later than Nasik 17 but nearer to Mahad 8 as indicated by the presence of octagonal pillars and rectangular pilasters with hourglass decoration. Further, the characters used in the present inscription (Series VII)—in the squarish form of letters, the extensive voluted flourish of the prongs of *ka*, *ra*, etc, and of the medial '*i*' sign—are very close to the inscription in Mahad 8.

Mahad 8 and Kuḍa 1 appear to be nearer in date. Both architectural and palaeographical features reveal that these caves may be assigned to late 3rd century A.D.

CAVE 2 (FIG. 50)

Adjoining cave 1 is this *leṇa* (Type A ii) having a simple room with a stone bed in its left wall and a verandah in front. On the left side of the verandah is a recessed bench. There is a large open window in front to the left on the front entrance. The cave is cut behind an open forecourt.

The presence of the recessed bench would indicate a later date for this. The position of this cave in relation to cave 1 may suggest that the two are nearer in date.

CAVE 3 (FIG. 50; PL. 149)

This cave situated next to cave 2 is also a *leṇa* (Type A ii) with similar features as the previous, except for the fact that the recess-bench in the verandah is to the right and there is an open window on either side of the front entrance. In the right wall in the open court, a niche with a relief *stūpa* has been made.

A weathered inscription (No. 2) extant on the right wall of the forecourt retains a few letters (Series VII) reading *bhūtisa* and *leṇa*. If the *bhūti* is part of the name of Sivabhūti, mentioned in No. 1 in cave 1, this could also be nearer in date to that. In its other features, however, this goes closely with cave 2 and the two may be contemporary works.

CAVE 4 (FIG. 49)

About 4 m away to the right of, and at a level about 3 m higher than 3, is this cave. This consists of a large rectangular hall and a verandah in front, cut behind an open court.

The hall (16.9 m d, 10.2 m w) has a low bench running along the three inner sides. In the back wall are commencements of three rectangular niches. The front wall of the hall is pierced into by a large rectangular doorway and two large rectangular windows at waist level, one on either side of the doorway.

The front verandah, which is about 45 cm lower in level than the hall floor, has two pillars in antis. The pillars are simple octagonal shafts with square base, and the pilasters have rectangular cross section and are decorated with the hour-glass pattern. The pillars and pilasters rise from the low backed benches running from the entrance passage to the side walls. These benches have rail pattern decoration on their exterior. Two broad steps lead down from the verandah to the front court. Along each of the side walls of the court is a stretch of stone bench.

This is a *maṭapa* (Type B i) meant for dining or to rest, as indicated by the absence of living cells, and the presence of large hall with bench and well lighted by the two open windows and the large doorway. The facade pattern with the octagonal pillars with square base, the pilasters with hour-glass ornamentation and the backed bench decorated with rail pattern clearly suggest that this cave is in the tradition of many such *maṭapas* known from Kanheri and Junnar, and may be dated to about the 3rd century A.D.

CAVE 5 (FIG. 50)

Situated close to 4 is this *leṇa* with an elaborate plan.[4]

There is an open court extending to the front for more than 3 m and its floor is cut in two levels. On the left wall of this is a large cistern-in-recess. The facade is broken, but extent indications reveal that in front of the verandah behind there were two pillars in antis. At the right end of the verandah is a bench-in-recess. In the back wall of the verandah, a doorway has been cut on the right side leading to a rectangular cell behind which another smaller cell with a recess bench has been made. Towards left, at the back of the verandah there is a wide entrance leading to a horizontally laid rectangular hall, which can as well be described as the inner verandah. On the back wall of this is a doorway leading into a square cell with a recess bench on its back wall. In the left wall of this cell again is a doorway leading into a smaller cell with a bench-in-recess in the right wall inside. (Two huge rectangular mortises one on each side, have been cut at the entrance of the inner verandah. There are some big mortar holes in the verandah).

There are three inscriptions in this cave. The first one (No. 3), above the water cistern is much worn, but appears to refer to the making of water cisterns. On the opossite wall is inscription No. 4 which is also worn and it too probably had the same matter. The inscription (No. 5) at the left end of the verandah is somewhat better preserved and records that the cave and the cistern were the gift of a female ascetic Padumaṁnikā and her female disciples Bodhī and Asāḷhamitā.

In its general features, this cave can be considered as a double unit of *leṇa* Type A iii. The occurrence of the recessed bench and cistern-in-recess, are indcative of a later date. The characters of the inscription (Series VII) are closer to those of No. 1; this *leṇa* too may be nearer in date to that.

CAVE 6 (FIG. 49; PLS. 150, 151, 152, 153, 154, 155)

Situated next to cave 5 is this flat roofed *chetiyaghara*, the best and the biggest of the excavations at Kuḍa, having an eloborate but neatly laid out plan and adorned with some sculptural works too.

In front of the cave is an open court. At the back end of this court, just in front of the facade of the cave, is a sculpture of an elephant cut on either side. They are almost life size and rise from the floor of the court upto the rock roof projecting forward from the facade of the cave. Only the head and the front two legs of the elephants are shown, but it looks as though they are standing there face to face, expressing their pride in supporting the heavy projecting roof of this sacred structure.

The facade (Pl. 150) consists of the entrance passage flanked by an octagonal pillar with square base on each side and two pilasters of rectangular cross section at either end, all these rising from a low

backed bench. This bench extends from the entrance passage to the line of the pilaster on either side and its outer side is decorated with rail pattern (Pl. 155). The pilasters bear the usual hour-glass decoration. The verandah (7.5 m w, 3.3 m d) is plain. In the back wall of the verandah is the large rectangular doorway (1.8 m w, 2.7 m h) leading into the hall, and the hall is further brightened by the huge rectangular open windows at shoulder level, one on each side of the doorway. The hall (8.8 m w, 8.9 m d) is provided with a low bench running along the three inner walls. Behind the hall is another transverse verandah divided from the hall by a line of two pillars and pilasters (Pl. 151). Here too the pillars are octagonal shafts with square base and the pilasters are rectangular, and these again rise from the backed bench and carry a thin architrave. These pilasters too have the usual hour-glass decoration. The bench has the raised thin screen wall. A speciality of this, however, in contrast to the facade of the cave is the insertion of some fine sculptures. On either side beyond the pilasters on the back wall of the hall is a panel of *mithuna* sculptures, and the low parapet walls have the carving of animals and herdsmen (Pl. 151, 152, 154).[5]

The transverse verandah inside (7 m w, 2.1 m d) has its floor about 60 cm higher than the floor of the hall, while its roof is in the same level as that of the hall. To the left is a doorway leading into a cell with a simple bench along the right wall, and above the bench in the wall is a large recess (80 cm d, 1.7 m w) possibly meant as storage space. In the back wall of the verandah is a broad rectangular doorway about 3 m wide and as high as the wall leading to the senctum behind (4.7 m w, 6.2 m d, 3.2 m h). In the centre of this sanctum stands the *stūpa* (dia. 2.2 m). This rises from a socle consisting of three thin tiers. The drum has straight sides and its rim is decorated with the *vedikā* band, the dome above is 4/5th sphere and carries the square *harmikā* ornamented with rail pattern on all the four sides. Above this is the stepped pyramidal capital and from the top of this rises the staff of the umbrella. The umbrella, which is circular is cut in the roof.

An inscription (No. 6) carved on the left wall of the verandah, to the left of the doorway, states that this cave was the gift of Sivama, the younger brother of the writer Sivabhūti the son of Sulasadata and Utaradatā. Sivabhūti's sons and daughters also appear to have contributed for making the sculptures and pillars.

The details provided relating to Sivabhūti, as the son of Sulasadata and the writer of Mahābhoja Mandava Khandapālita, clarifies, that Sivabhūti of this inscription is no other than the one mentioned in No. 1, the donor of cave 1. It can be made out from this that this cave made by his younger brother, with independent contributions by his three sons and four daughters, could have been wrought a little time later than cave 1, with atleast a gap of about 10 to 12 years. The palaeographical features of the two inscriptions *i.e.* Nos. 1 and 6 are almost identical.

Architectural features, in the plan in which a shrine with verandah is placed at the back of the wall, shows the continuity of tradition from Kuḍa 1, Mahad 8 and Nasik 17. The existence of the backed bench, the plain octagonal pillars with square base, the pilasters with hour-glass ornamentation reveal that this cave has to be placed to the period of or later than the time of Yajñaśrī Sātakarṇi, as it is during this time that all these features appeared, as it is well revealed in Kanheri and Nasik. So the contention of Burgess and Fergusson that this is very near to the Karle *chaitya* hall, which is based on the apparent similarities of the *mithuna* figures in the two places requires reconsideration. It is true that the two sets of *mithunas* in the present cave display in their bodily delineation, dress and ornamentation some likeness with those in the *chaitya* hall at Karle. But the total effect presented by the present set of *mithuna* figures is of a far inferior order, looking more like unsuccessful copies than the creation of an original artistic talent.[6] Secondly, it has been shown elsewhere that the animals and heardsmen panels appear for the first time in Western Indian caves only during the time of Gautamīputra Sātakarṇi. Apart from the inferiority of sculptural workmanship, the adoption of these two sculptural themes in the present cave, that too at an odd place with insufficient light for its appreciation, probably indicates that this could be the work of a zealous but unimaginative mind attempting to copy certain beautiful items seen elsewhere. The various features of the facade are nearer to cave 32 etc. of Kanheri. Under these circumstances the cave could at best be placed to the late 3rd or early part of 4th century A.D. This contention is supported from the palaeographical evidence too, as described in connection with inscription No. 1 above.

CAVE 7 (FIG. 49; PL. 156)

Close to, but at about 1.5 m higher level than cave 6 is this cave, a single celled *leṇa*. This consists of a verandah fronted by two simple octagonal shafts with square base. The pilasters are rectangular and bear the usual hour-glass decoration. The two pillars and the right pilasters rise from a single stretch of a low bench with back. The front part of this bench is plain but at the lower level on the basement is a projecting ledge and a band showing a line of square knobs. A flight of three steps cut on the left side leads up from the front open court to the verandah, through the entrance passage provided between the left pilaster and the first pillar. The verandah (5.3 m w, 2.2 m d) has a bench-in-recess cut in the right wall. Towards the right of the back wall of the verandah is the doorway leading to the cell at back, which has a bench-in-recess cut along the left wall.

A cistern-in-recess is there at the right in the open court.

An inscription (No. 7) carved on the back wall of the verandah states that the cave is the meritorious gift of the physician Somadeva. The characters of this inscription (Series VII) are identical with those of No. 6. The cave, apart from the evidence of palaeography, can be easily placed with cave 6 due to the similarity of architectural elements like the backed bench with rail decoration, the octagonal pillars with square base and the hour-glass decorations on pilasters.

EXCAVATION 7x

Slightly beyond the above cave is a ruined cistern under a recess. On the back of the recess is an inscription (No. 8) recording that this is the donation of one Kumāra Madava of the Maṁdavas. The use of the term Kumāra for the donor may suggest that he belonged to a royal family, and it is known from other inscriptions that Maṁdavas were Mahābhojas. The characters of this inscription are similar to the other inscriptions Nos. 1-7 in the basic forms of the letters, but do not have the flourish.

CAVE 8

Closely beyond 7x and about a metre lower in level than 7 is this *leṇa*. The front of this is broken, but appears to have had a doorway, with a window to left, leading to an oblong chamber. At the right end of the back wall of the chamber is a rectangular doorway leading into the back cell. This has a bench-in-recess to the left. At one end of this bench is a hollow (55 cm square and 40 cm deep) with a ledge provided at its mouth for a flat lid. This appears to be a case where provision has been made to keep, probably, valuable things. Bench-in-recess is the only chronological indicator here.

CAVE 9 (FIG. 49; PL. 157)

This cave situated next to cave 8, at a slightly higher level, is a flat roofed rectangular *chetiyaghara* with a verandah in front. The verandah had two columns (Type D vi) with octagonal shaft rising from the pot-base on square pyramid, surmounted by the pot-capital, the 'enclosed' *āmalaka* and the dosseret of inverted square pyramid. But one pillar is completely broken. The pilasters are plain and look like crudely carved octagonal shafts with one face attached to the wall. Behind the verandah is the shrine which is irregular in plan being 4.4 m deep and 2.6 m wide in front and 3.4 m at the back. Near the back wall is the *stūpa* 1.3 m in diameter and the abacus of the capital touches the roof. There is a cell cut in the left wall of the verandah. This has a door and a window in the wall. At the back of the cell is a bench.

An inscription (No. 2) on the right wall of the verandah, records that this *chetiyaghara* is a benefaction by Bhāyilā, wife of Ayitilu, a Brahman lay worshipper. The occurrence of the columns of pot-base-and-pot-capital type shows that this cave goes with Junnar-Ganesh Pahar 14. Hence on stylistic analogy this can be assigned to the 2nd century A.D.—probably to a slightly later stage than Manmodi 2, as the feature of having the blind *chaitya* window too has been dropped here. This *chetiyaghara* with its D Type pillars is of course earlier than 1 and 6 and Kuḍa itself as those display pillars of Type E.

The inscription (No. 9) in this cave substantiates this surmise, as herein can be seen the use of much earlier characters (Series V) with simple straight lines of *Ka*, *ra*, the roundish *ma*, etc., compared to the developed characters of the inscriptions in caves 1 and 6. The architectural and palaeographical features indicate generally a date in the 2nd century A.D.

CAVE 10 (FIG. 51)

Next to 9, at about 1.5 m lower in level than that, is this *leṇa*. The front portion of this is broken. At the back of the open court is the wall which had a doorway and a window. Both of these are now broken. Originally there could have been a verandah in front of this. The doorway led to an oblong chamber and at the right end of the back wall of this is a doorway leading to a back cell with a bench at the back.

The inscription (No. 10) written above the window in the front wall states that this *leṇa* is a donation of one Vadhuka, a garland maker. The characters of this inscription are indentical with those of inscription in cave 9 and the two may belong to the same date.

CAVE 11 (FIG. 50)

Originally this cave consisted of a single cell with a bench at the back behind an open verandah. Now the verandah is almost broken, except for the remnant of a recessed bench along the right wall. Above this recessed bench and partly on the back wall is a broken inscription (No. 12) recording the donation of this cave by one Goyamma daughtear of Hāla, the royal physician. The letters of this inscription are similar to those of Nos. 9 and 10 and hence this cave may be of the same age as cave 9 and 10.

CAVES 12a AND 12b (FIG. 50)

Close to 10 are these two caves situated side by side, but with their dividing walls now broken. 12a is a larger room with an open front. On the right wall of this room is a damaged inscription (No. 11) in which the words Mahābhojiya and Mamdaviya can be read. The inscription belongs to Series V. 12b has a verandah and an oblong room behind with a bench along the back wall.

CAVE 13 (FIG. 50; PL. 158)

This *leṇa* consisting of a single cell behind a verandah (Type A iii) is close to cave 12. The verandah is open in front and there is a bench-in-recess in the right wall. The cell is cut towards right in the back wall, and this has a bench along the back wall.

An inscription in this cave (No. 13) states that this is donation of one Vijyaṁnikā daughter of Mahābhoja Sāḍakara Sudaṁsana. The characters of this inscription being similar to those of the inscription in cave 10, this cave too can be placed to the same period.[7]

CAVE 14 (FIG. 50)

This *leṇa* situated adjacently to cave 13 is larger in dimensions than that but is exactly of the same plan in all its details. In the foecourt, a little in front of the right side wall with the bench-in-recess of the verandah a circular depression (about 60 cm dia) with a *liṇga* like boss in the centre has been made. In front of the forecourt slightly at a lower level than the cave, on either side on the face of the rock, face, a rectangular niche has been cut.

An inscription (No. 14), on the back wall of the verandah, displaying similar characters as No. 13, states that this *leṇa* is a donation of one Mahika, an ironmonger of Karahākaḍa.

This cave too is close in date to cave 13.

EXCAVATION 14x (FIG. 50)

This is a cistern under a recess about 6 m away from 14. A very much damaged inscription (No. 15) records that this is a bathing tank donated by a merchant *Gahapati* Vasula.

EXCAVATION 14y

About 8 m further from the above is another similar cistern.

After this the path leads to the upper group of caves.

CAVE 15 (FIG. 49)

About 55 m beyond cave 14 and at a level higher by about 6 m is this cave. This is a flat *chetiya-ghara* with a *stūpa* shrine, a verandah and two cells. The verandah (7.2 m b, 2.2 m d) had in front four octagonal pillars (now some of them are broken) between two rectangular pilasters bearing the hour-glass decoration (Fig. 15, m). The open court in front of this is neatly cut. A cell is hown in each of the side walls of the verandah and these have a bench at the back. The sanctum, cut in the back wall of the verandah and entered into by a plain rectangular doorway measures 3 m in width and 4.1 m in length. Near the back wall of the sanctum is the *stūpa*, 1.9 m in diameter of the base. The *stūpa* is of the type in cave 1 and has its stepped pyramidal member on the *harmikā* flush with the ceiling (Pl. 159).

An inscription (No. 16) carved on the left wall of the verandah states that the *chetiyaghara* and a cell were donated by one Rāmadata, an Adhagachchaka, son of Ahila, when Maṁdava Kochiputa Velidata was the Mahābhoja. Another cell was donated by the wife of the above donor.

The use of octagonal columns and the addition of cells in the *chetiyaghara* and the presence of the hour-glass decoration on the pilasters indicate a date nearer to cave 1 and 6. However, this *chetiyaghara* does not possess such elaboration in plan with the additional hall and front verandah as in caves 1 and 6 but is similar to cave 9 in its simplicity. The feature of the *stūpa* in arranging the abacus to meet the flat roof, but without inserting the umbrella, is shared in common by these two *chaitya* halls. The only other significant difference is however, in pillars. Whereas the pillars in cave 9 are of the pot-base-pot-capital variety, the pillars here are octagonal shafts. So it can be suggested purely on stylistic grounds that cave 15 of Kuḍa falls between cave 9, the earlier one, and caves 1 and 6 the later ones. This contention is also supported by palaeographical evidence. The letters used in the inscription in cave 9 do not have any flourishes but those from the inscriptions in 1 and 6 display extensive flourish. The present inscription in this cave has the flourish in the letters but it is of a more simple type compared to the later ones.

CAVE 16 (FIG. 50)

About 6 m higher up from the previous, in a line vertically above the space between 14 and 15, is this cave. This is a simple *leṇa* of Type A iii. In front of the cave at the back of the open court is a low bench. The front wall of the cave has a door to right and small open window to left, which open into an oblong chamber having a bench-in-recess along the left wall. To the right side of the back wall is a doorway leading to the back cell which has a bench-in-recess in the left wall.

On either side of the forecourt, cut into from the front rock face is a cistern under recess.

On the front wall, between the door and the window is an inscription (No. 17) (Pl. 160) recording that it is a donation of a nun Sapila, made along with some other nuns. There were inscriptions (Nos. 18 and 19) on the back walls of the recesses of the side cisterns, but these are damaged. One of them appears to state that this was a donation of a female desciple of a nun Bodhi, and the other informs that that cistern is a donation of the garland maker Mugudāsa. The characters of all these inscriptions belong to Series VI.

CAVE 17 (FIG. 51)

Next to 16, this *leṇa* with a similar plan to that, except for the fact that the window is a little larger.[8]

On the back wall of the chamber to the left of the cell door is an inscription (No. 20) which is partially effaced. It appears that there was mention of the donation of this cave by a trader (*Sathavāha*) Nāga.

The letters of this inscription are similar to those from the inscriptions in cave 16, and hence this too can be assigned to the same date.

CAVE 18 (FIG. 51)

Adjoining cave 17 is this *leṇa* (Type A iii) having the same plan as the previous one except there is the large open window on either side of the front doorway. An inscription (No. 21) cut on the left side

of the front wall refers this cave as a donation of a trader Vasulaṇaka. The characters of this inscription are similar to those in the inscriptions in caves 16 and 17.

CAVE 19 (FIG. 51)

Closeby to the right of cave 18, but slightly at a higher level is this *leṇa* of Type A iv b.

The door in the front wall is to the right and to left is a large open window. These provide entrance and light to an oblong chamber (4.5 m w, 2 m d). To the left in the back wall is a recess (1.1 m w, 2.5 m d) with a bench-in-recess along its right wall. To the right in the back wall is a doorway leading into a cell (2.1 m sq) with a bench-in-recess at the back wall.

This cave with a hall, cell and recess resembles several caves in Junnar-Ganesh Pahar and hence is datable generally to the 3rd century A.D.

CAVE 20 (FIG. 50)

This is a small single celled *leṇa* (Type A ii). The door and a window in the front wall, as well as the front verandah, are broken.

The cave is situated about 50 m further from 19 and is difficult of access. Next to this is a ruined flight of steps and a broken cistern.

CAVE 21

Nearly 30 m further from 20 is this cave, an unfinished flat roofed *chetiyaghara*. This has a rectangular hall with a square block at one end intended for the *stūpa* but left un-finished. The form of the block indicates that the capital of this was intended to reach the roof, a feature seen in caves 9 and 15. In front of this is a verandah which now has rough square blocks intended for two pillars and pilasters.

A cistern cut in the left wall of the front court has an inscription (No. 22) stating that it is the donation of the merchant Vasulaṇaka, who also happens to be the donor of Cave 18. The inscription belongs palaeographically to Series VI.

This cave, though unfinished, is of interest due to the fact that this provides an idea of the process of hewing caves, in the step like cuttings made inside the hall, the rough block for the *stūpa* and pillars etc. The occurrence of a finished cistern with an inscription is also noteworthy.

CAVE 22 (FIG. 50)

A single cell (*leṇa* Type A i b) close to 21, but at a lower level.

There is an open court in front with a bench along the left wall. There was a door to left and a small open window to right in the front wall of the cell. The cell has a bench-in-recess along the left wall.

EXCAVATION 22x

Between 22 and 23 is this cistern-in-recess. Further down is a flight of steps and a small recess.

CAVE 23 (FIG. 51)

This cave consisting of an oblong chamber and a cell behind is a *leṇa* of Type A iii, similar in plan to caves 17, 18, etc.

The cell has a bench-in-recess along its back wall, and there is a small open window by the side of the doorway in its front wall. The oblong chamber is plain and its front wall has a doorway in the centre flanked by a large open window on either side.

An inscription (No. 23) on the outer wall states that this is a donation of Sivadata wife of Vehamita, a *sathavāha*. The letters of this inscription are of Series VI.

CAVE 24 (FIG. 50)

This cave situated about 4 m further and higher up than 23 is also a *leṇa* of similar plan as cave 23. The inscription from this cave, written in characters similar to those in cave 23 records the donation by Asāḷamita, wife of a *Sathavāha*.

In front of the front wall of the cave a pillar about a metre and a half long is lying. It is square in cross section and its upper end is carved with a raised band around and over that the four faces slope down suddenly to meet in a low crest. It is difficult to make out where this pillar was standing originally.[9]

CAVE 25 (FIG. 51)

A *leṇa* of Type A ii, situated close to 23. The front verandah is gone, but a bench that stood in the left end remains. There is a large open window and a door in the back wall of the verandah leading into a cell with a recess-bench at the back.

CAVE 26 (FIG. 51)

This is next to 25 and is almost identical in plan and features with the previous cave.

GENERAL DISCUSSION

There are altogether 31 independent excavations (including the minor ones) in the Kuḍa group. The following are the varieties seen in them.

| | | |
|---|---|---|
| *Chetiyagharas* : | | Four (caves 1, 6, 9, 15) and one unfinished (21). |
| | | Type A ii b : 9, 12, 21 (unfinished) |
| | | Type C : 1, 6 |
| | | (All these show some variations from the standard forms of the types mentioned) |
| *Leṇas* : | | Twenty-one |
| | *Type* | *Caves* |
| | A i b | 22 |
| | A ii | 2, 3, 7, 8, 11, 12b, 13, 14, 16, 17, 18, 20, 23, 24, 25, 26 |
| | A iii | 5 (v), (10) |
| | A iv b | 19 |
| *Maṭapa* : | | Two |
| | B i | 4 |
| | A ii | 12 a |
| *Poḍhis* : | | Three+Four |
| | Type A ii | Excavation 7x, 22x+four associated with caves 5, 7 and 16. |
| | Type B | Excavation 14x (unfinished) |
| *Koḍhi* : | | Four |
| | | 14 y and three others. |

The Kuḍa caves are highly interesting due to the fact that here almost every cave is bestowed with an inscription. The inscriptions themselves display somewhat an individualistic character in the palaeographical style compared to the palaeographical features of epigraphs discussed elsewhere (Chapt. V) Here is a set of inscriptions belonging to the writing tradition of a town, which had the advantage of maintaining its individuality due to, probably, somewhat an isolated situation. Though the general development tendencies of the region (chart II) are noticeable to a certain extent and the grouping of epigraphs on that score has been done in the descriptive analysis above to series V, VI and VII, it is possible to notice further internal changes in these sets of inscriptions and build up a relative chronological position for them. We feel, that the individualistic character displayed by the Kuḍa set of inscriptions merits such an exercise. It may be noted that the donors of most of the caves are persons associated with the court of a local line of chieftains of the family of Mahābhoyas, and there appears to be a family of scribes attached to them. Probably we are dealing here with the writing tradition cultivated by successive generations of a family of scribes.

The inscriptions generally ascribable to Series V (Nos. 9, 10, 11, 12, 13, 14, 15) are characterised by the use of *ka*, *ra* and *la* with straight vertical lines, and simple type of medial *i* and *u* signs. Amongst

these Nos. 12 and 13 fall into the earliest group with the use of circular knotted *ma*, hook shaped *la* and *ta* with semicircular bottom, and slightly curve-prominent letters, in contrast to the squarish letters of the other inscriptions with the bottom lines almost flat and the verticals of right and left sides almost equal, and preference to straight lines particularly in *ba*, *va*, *ma* etc.

Inscriptions of Series VI (17-24) show the use of squarish type of letters and the bent hooks of verticals, as in *a*, *ka*, *ra* and *la*.

Out of these Nos. 17, 18, 19, 20, 21 have less of bend in hooks and that feature is prominent in others (Nos. 22-24).

The third group (Series VII, Nos. 1-8, 16) betrays the use of squarish letters and preference to straight lines and the employment of curls in the verticals and the medial *i* signs. Amongst these, 7-8 and 16 stand palaeographically between Series VI and the other inscriptions of Series VII.

Thus the palaeographical sequence of inscriptions of Kuḍa would be :

| | |
|---|---|
| V | 12, 13. |
| | 9, 10, 11, 14, 15. |
| VI | 17, 18, 19, 20, 21, 22, 23, 24. |
| VII | 7, 8, 16. |
| | 1, 2, 3, 4, 5, 6. |

This evidence provides the following sequence for caves

| | |
|---|---|
| (a) caves | 12b, 13 |
| (b) | 9, 10, 11b, 14, 14x |
| (c) | 16, 17, 18 |
| (d) | 21, 23, 24 |
| (e) | 15 |
| (f) | 1, 3, 5, 6 |

The sequence obtained from the architectural evidences discussed above is as follows :

9, 10, 12b, 13, 14
16, 17, 18, 21, 23, 24
15, 7
1, 2, 3, 5
6

The two sets of evidences are fairly consistent.

Combining the data from these, the development in the Kuḍa group of caves can be worked out. It can be made out that the architectural activity at Kuḍa started with the making of single celled *leṇas*; 12b and 13 were the first to be made in a line in the lower scarp. At that time Kuḍa provided accommodation hardly for 2 monks. It was not strictly a monastic establishment equipped with varieties of buildings to cater to the various needs of the community. It can be noticed that not a single water cistern is seen near these caves, and hence it can be surmised that these caves were probably being used by eremitical monks as *vassa* retreats. Similar smaller dwelling caves (10, 11, 14) with single cells were added next along the same scarp. It was probably at this time that the first *chaitya* hall 9 came into existence along with a few cisterns in the caves, making it a fulfledged monastic unit. At this time the strength of the resident monastic community was about 8 to 10.

Shortly afterwards came up more single celled dwellings like caves 16, 17, 18 and (19), followed by 20, 22, 23, 24 (and probably 25 and 26). These are in a seperate scarps and provided additional accommodation for 7 to 8 more monks. To this date belongs the unfinished *chaitya* cave 21 wherein for the first time an attempt to introduce simple pillars and square pilasters in the verandah is to be seen, in contrast to the earlier practice of the pot-base-pot-capital piliars and similar engaged columns as seen in cave 9.

Cave 15, the next to be made, is a *chetiyaghara* of the type of 22, and it has been shown that these two share a common feature in having the abacus of the *stūpa* reaching the roof, but without the stone umbrella. *Chetiyaghara* 15 was meant probably to replace 22 which was left unfinished for unknown reasons. While this was done by the side of the first series in continuation to cave 14, a small single-celled *leṇa* (7) was added on the other side of the then exisiting caves in the same line.

Next to be added to the group is *chaitya* hall 1. It belongs to a time when the plan of the flat-roofed *chetiyaghara* was elaborated to include a larger hall and a verandah in addition to shrine and verandah at the back. With the *chaitya* hall 1 were made the single celled *leṇas* 2, 3 and 5 to accommodate about 4 to 5 monks. At this stage when the strength of the monastic establishment was around 20 the dining hall 4 too could have been added. And this happens to be the stage when the use of octagonal pillars with square base and pilasters with hour-glass ornamentation had become common in this place.

The latest cave in the group is the *chaitya* hall 6 which is the result of great philanthropic zeal in which a number of sculptures were also accommodated.

The architectural elements are so meagre in the earliest caves of the period as to give any clue for comparison with other sites, but the palaeographical evidence shows that these could be assigned to the early part of the 2nd century A.D.

*Chaitya* hall 9 with pot-base-pot-capital pillar in the verandah resembles Manmodi 2. This and other caves in the group would belong to the middle of the 2nd century A.D. The succeeding stage of flat-roofed *chaitya* halls, with octagonal pillars and hour-glass decoration on square pilasters go with the types seen in late 2nd and early 3rd century A.D. Afterwards some minor caves were made in the middle of 3rd century A.D. The latest caves with elaborate plan (*chaitya* halls 1 and 6) and their adjuncts came up. These compare themselves in architectural features and palaeographical characteristics of the associated inscriptions with Mahad 8, etc., and are to be placed to late 3rd or early 4th century A.D.

The chronological position of Kuḍa caves can thus be delineated as follows (*chetiyagharas* Italicised).

| | Caves |
|---|---|
| 2nd century A.D. | |
| early | 12b, 13 |
| middle | *9*, 10, 11, 14 |
| late | 16, 17, 18, (19) |
| 3rd century A.D. | |
| early | 20, *21*, 22, 23, 24, 25, 26 |
| middle | *15*, 17, 17x |
| late | *1*, 2, 3, 4, 5 |
| Late 3rd or early 4th century A.D. | *6*, 7, 7x |

Thus a continuous activity in architectural creations is seen in Kuḍa stretching for a period of two centuries from the early part of the 2nd century A.D. to about the early part of the 4th century A.D.

It is remarkable that not a single *leṇa* of cells-around-hall type exists at Kuḍa. There was a preference to single-celled *leṇas* only. Despite the fact that there are 21 *leṇas* not more than 30 monks could have been accommodated. It is likely that this was due to the modest resources of the donors, and the relative poverty of the area compared to the rich establishments near the major trade routes, like Pitalkhora or Kondane or Junnar. Most of the donors are individuals from the lower economic classes like garland makers or iron dealers and even nuns. The richest class is probably that of the royal officials who, however, made beautiful *chaitya* halls 1 and 6, and the dining hall 4. The only donation from the royalty happens to be a single cistern 7x.

# MAHAD

Mahad in Kolaba district is situated about 150 km south—south-east of Bombay at the confluence of the rivers Savitri and Gandhari. Though this is about 30 km inland from the seacoast, it is said that during high tide boats can reach this place. It is likely that this served as an inland port. Several roads lead from Mahad towards the various Sahyadrian passes like Kumbharli and Bhor and these give access to the towns on the plateau.

The caves are located on a hillock near the village Pale which is situated about 3 km north-west of Mahad on the Bombay-Mahad highway. They are about 60 m high up above the surrounding plain and face east, thus providing a beautiful view of the town and the vast stretch of green fields in front. In the rainy season, the lower plain is flooded with river water, and the whole area looks like a cup-shaped lake amidst hills, with the small town and several villages floating on the watersheet.

The ancient township which supported the monastic establishment here has not been identified, but it might have been somewhere near the confluence of the rivers which served as the natural harbour for ships plying from the Arabian sea.[1]

There are 28 main excavations in the group. All caves face east and they are numbered from south to north.

(No. 1 is a late unfinished cave)

## CAVE 2

This is an unfinished cave consisting of an open court, a verandah with two pillars in antis and a cell behind. There is a roughly cut bench along the right wall of the verandah, as well as the cell.

The pillars are just uncut square blocks.

## CAVE 3 (PLS. 161 AND 167)

Close to the north of the above is this *leṇa* (A ii) with a cell and a verandah.

The cell is very broad (5.2 m w, 2.6 m d, 2.1 m h). There is a stone bench along the right wall. The front of the bench has a rectangular ledge at the top. The verandah in front is screened by two pillars in antis rising from a low stone bench with high back. The backed benches are on either side of the entrance passage and they, as usual, connect the pillar and pilaster on each side. There is no ornamentation on the back of the bench but the front part of the bench has a ledge like that seen in the bench inside the cell. The pillars have square base and the shafts are octagonal (Type E). The pilasters on the side walls are plain and have rectangular cross section. A bench cut along the right wall of the verandah has also the beaded edge and a ledge runs along the bottom line. The sunken surface is flanked by two ornamental pilasters of the pot-base-pot-capital and octagonal shaft type (Type D vi). There are steps leading down from the verandah to the open court below. The rock roof projects considerably from the verandah, but has no decoration.

Though this cave is a *leṇa* with a cell and verandah, it appears that this could have been meant for the residence of a monk of high rank, as the cell inside is spacious and the benches have unusual ornamentation.

The pillar type shows that this belongs to Type E well-seen in Junnar, Kanheri, etc., but the absence of the hour-glass which is common to the pillar types of this class is to be noted. The ornamental pillar motif seen on the bench indicates that this type might have survived as just a decorative element at this time when the pillars with octagonal shaft and square base had been established as the standard form.

A stairway cut in the rock leads down to the next, cave 4.

## CAVE 4 (FIG. 52)

A small *leṇa* of Type A iii with a cell, hall and a verandah. The cell has a bench along the back wall. The hall is larger than the cell and this too has a bench along the right wall. The verandah had two pillars in antis towards the front, but the pillars and pilasters are broken.

There was an inscription cut on the right wall of the verandah, but the letters are effaced except for traces of a few here and there. [In the first line (*ma*) *yanasa* is seen]. The letters are of Series VII and are comparable to those in other inscriptions of the same place.

CAVE 5 (PLS. 162 AND 164)

Closeby to the north of cave 4 is this, a *maṭapa* of Type B i.

The hall has a low bench running along the three inner walls. Its front edge is beaded. The verandah has in front two pillars in antis. The pillars and pilasters rise from a low bench running on either side. The bench has the leaning back but has no decoration on the outer side. The pillars are simple octagonal shafts with square base. The pilasters are rectangular and bear the incised hour-glass ornament. The benches with sloping back, the pilasters and the pillars are smoothly dressed.

In the type of pillars and the backed bench, this resembles cave 3 and the two appear to be near in date. The crudely cut left wall of the cell shows that it has been made with great caution so as not break into the back cell of cave 4. This shows that cave 4 was existing before the making of this cave. However, there is another possibility that originally cave 5 was only a *maṭapa* without a cell, and it is probably at a later date that the cell was attempted either to provide accomodation for a monk or probably to use that as pantry, the hall being used for dining.

CAVE 6

Situated at a lower level than 4 and 5 a simple recess (probably an unfinished *leṇa*) with a cistern-in-recess on either side. Only one of the cisterns is finished.

CAVE 7 (FIG. 52)

Next to cave 6 and almost at the same level is this roughly hewn cave which consists of a cell behind a verandah (*leṇa* Type A ii). A bench-in-recess is cut along the back wall. The verandah too has a bench-in-recess in the left wall. The front portion of the verandah is broken.

CAVE 8 (FIG. 52; PL. 165)

This happens to be the most interesting architectural work at this place. This is a *leṇa* of the cells-around-hall type, but is provided with a *stūpa* shrine behind.

This consists of a large hall with a low bench running along the three inner walls. There are three cells cut in each of the side walls. A large shrine is in the centre of the back wall and on either side of this is a cell. All the cells have a simple bench at the back. The shrine and cells are at a higher level than the floor of the hall. The shrine has a wide doorway. There are several mortises cut in the floor and side walls in the front line of the shrine, which suggest that some sort of a wooden screen might have existed here. There was a *stūpa* in the centre of the shrine, but the whole thing is now lost, except for the indication provided by a rough circular surface on the floor and an umbrella cut in the roof. Even though the shape of the *stūpa* can not be made out, the existence of the stone umbrella cut in the roof suggests that this belongs to the late stage of *chetiyaghara* architecture, corresponding to those from Kanheri, Kuḍa, Junnar, etc.

Peculiarly there is no verandah in this cave, but the front of the hall was supported by two pillars. The pillars are not extant, but stumps hanging from the roof show that these were of the type seen in Nasik, Junnar, etc., with the capital having the inverted stepped pyramid, the *āmalaka* neck and the globular pot (Type D vi). The pilasters are rectangular and bear the hour-glass decoration (Fig. 15, C).

These pillars and pilasters carry a heavy but simple rectangular architrave. There is no carving on the eave or facade, but the roof projects a little more to the front.

An inscription (No. 2) carved by the side of the pilaster on the right wall, just below the projecting roof records that this dwelling cave having eight cells, a *chetiyaghara*, two water cisterns, and the path in front was the donation of one *Kumāra* Kāṇabhoā Vheṇupālita. The inscription is written in characters of Series VII.

This *leṇa-cum-chetiyaghara* plan is of much interest, suggesting a stage leading towards the development of a plan with shrine behind a hall, a feature seen commonly in the succeeding *leṇas* of Mahāyāna times. In this feature this cave is similar to the *chetiyaghara* at Shelarwadi, and Nasik 17 and to a certain extent Kuḍa 1 and 6. Probably the present *chetiyaghara* at Mahad belongs to late 3rd century-early 4th century A.D. as indicated by the well-developed letters of the associated inscription corresponding in its features with those in caves 1 and 6 at Kuḍa. But this may be of slightly earlier than the Kuḍa examples due to the presence of pillars of D vi type. It is likely that the pillar type had survived till a later date. The whole set of evidence leads to indicate that the cave could have been made somewhere in the latter part of the 3rd century A.D.

CAVE 9 (FIG. 52)

This is at a higher level than 8.

The cave (*leṇa* Type A iii) consists of a cell, a hall and a verandah. The cell has no bench. The hall is rectangular and has a low bench along the right wall. The front wall of the hall is pierced into by a central doorway and a small open window on either side at head level. The varandah has a bench-in-recess cut along the right wall. In the front are two pillars in antis in the usual fashion, so that the pillar is connected with the corresponding pilaster on either side by a low backed bench. At present no decoration is seen on the back of the backed bench.

CAVE 10 (PL. 166)

This cave placed adjacently to cave 9 is similar to that except for the fact that there are no open windows here and the backed bench is decorated. The back of the backed bench has the railing decoration, below this is a band with the wooden pins shown in a line. The studs normally seen below this in other caves of this class are absent here.

The pillars are, as usual, octagonal shafts with square base (Type E) and the pilasters are rectangular and have the hour-glass decoration. All these rise from the bench. There were steps originally but these are broken. There is no carving on the facade now, but it appears that the original facade has collapsed. The facade of the cave at present is flush with the scrap face, and nothing can be said of the possible court or the projecting roof, if they existed once.

Even though this is comparable to 32, etc., of Kanheri, one striking difference seen here is the absence of the studs below the railing pattern. The railing decoration on the back of the backed bench, however, is decorated in such a way as to give an impression of the hour-glass decoration. This peculiar decorative element compares itself to Kanheri cave 79, and hence these two caves can be possibly bracketed together in style and date.

CAVES 11 and 12 (FIG. 52; PL. 168)

These, situated to the north of 10 and on the same level, are two identical caves each consisting of a broad cell behind and a verandah in front. The cells and verandahs in both have a recessed bench along their right walls. In front of the verandah there are the usual backed benches and two pillars and two pilasters rising above them. The pillars are octagonal shafts with square base and the pilasters which are rectangular have the hour-glass ornamentation. The pillars and pilasters and the backed bench are finely smoothened. There is no decoration on the back of the backed bench and in this these resemble cave 3 above.

In cave 12, in front of the entrance between the pillars is a projecting platform and steps are cut sidewards to left from this. In both, the open court is ruined but it appears there was a doorway providing access between 11 and 12 in the dividing wall between the courts of the two.

CAVE 13 (FIG. 53; PLS. 168 AND 170)

This cave at a lower level and almost below cave 11, is similar in plan to cave 9 (*leṇa* A iii), consisting of a cell, a hall and a verandah, but without a bench in any of these. The doorway of the hall is rectangular and on either side is a square open window at shoulder level. In front of the verandah there

are the usual two pillars in antis, the pillars being octagonal shafts with square base (Type E) and the pilasters rectangular. The pilasters bear the hour-glass ornamentation. There were backed benches connecting and supporting the pillar-pilaster set in each side of the entrance passage, but these are broken. Traces however remain, and these show that there was no decoration. The pillars carry a thin flat architrave and its front is cut slightly for a drip ledge. There were steps but these are now broken.

In front of this is a cistern with square mouth.

CAVE 14

A simple cell with a verandah (*leṇa* Type A ii) situated next to cave 13. This has no bench or pillars. The doorway to the cell is towards a side and it is rectangular. The court in front is in the same level as the verandah. It is as broad as the verandah itself, but narrows towards the front.

This is a crudely cut cave with no significant architectural features.

CAVE 15 (PLS. 163 AND 168)

Next to 14 is a rectangular recess about 1.2 m deep containing a *stūpa* in high relief cut in the back wall.

The *stūpa* has a socle of three thin tiers. The cylindrical drum rises above, and the brim of this is ornamented with the rail pattern. Above this is a 3/4th spherical dome and from the top of this rises the plain square *harmikā* and on this is the inverted stepped pyramidal member made of five thin plates of increasing dimensions. The top of the top plate is flush with the roof of the recess.

The *stūpa* is of a developed type. The absence of the umbrella decoration on the *harmikā* is interesting. In this feature this resembles the *stūpa* in Kuḍa 9 and 15.

CAVE 16 (FIG. 53)

This is a *maṭapa* of Type B i, consisting of a verandah and a hall, but has a small cell in addition.

The hall has a low seat running along the three inner sides. In the left wall is the doorway leading into the cell. There is no bench in the cell. In the front wall of the hall is the central doorway flanked by an open square window on either side cut at waist level and opening right up to the roof. There is a bench to right in the verandah. The front part of the verandah has the usual two pillars in antis. The pillars are partly preserved. They were of the octagonal shaft and square base type (E). The pilasters, as well as the backed benches, are broken.

The architrave above the pillar is thin and its front face is neatly dressed. From the line of this, the rock-roof is further projected to cover part of the open court.

There is a small benchless cell to the left of the verandah. It has a low doorway opening to the court.

CAVE 17

This is an unfinished excavation. The hall is just commenced, and the pillars of the verandah have been blocked out like a square mass.

CAVES 18 AND 19 (FIG. 52)

These were intended to be like caves 4 and 13. Both have the hall and verandah only finished but not the cell. But attempt to cut the cell can be noticed in both. Cave 18 has two open windows one on either side of the hall doorway but this is not seen in 19. The verandahs have the usual backed bench over which the octagonal pillar and rectangular pilaster on each side are set. These carry a simple rectangular architrave. The back of the backed bench has no decoration. The pilasters have the hour-glass decoration.

CAVE 20

Is just the commencement of a cave.

The next series of caves (21-28) is along a lower ledge, about 10 m below and about 12 m away to the north of the above group. All these are in a line and face east.

CAVE 21 (PLS. 168 AND 169)

This is a small *chetiyaghara* of Type B i. The cell (2.8 m b, 2.6 m d, 2.1 m h) housing the *stūpa* in its centre is open in the front. Except for the fact that the *stūpa* here is in round, in all other features this is identical with the relief *stūpa* in 15. The socle however, is partly ruined here. (A sculpture of a seated Buddha carved on the right wall is of Mahāyāna times).

A peculiarity of thls *chetiyaghara* however is that a cell has been cut in the left wall with a bench-recess at the back. In this feature this resembles cave 36 of Kanheri.

CAVE 22 (FIG. 53)

A *leṇa* of Type A ii. This consists of a cell with a recessed bench at the back and a verandah with a recessed bench to left. The front is broken.

CAVE 23 (FIG. 53)

This too is a *leṇa* of Type A ii, with a large rectangular cell at the back of a verandah. There is an open window at shoulder level on either side of the central doorway. Neither the cell nor the verandah has any bench.

The front line of the verandah has the usual backed benches on which the pillars and pilasters rise. The pillar is an octagonal shaft but has no square base. The pilaster is rectangular but broken.

The back of the backed bench has the usual stretch of railing pattern standing on a sunken panel with the pin ends shown in relief. The railing pattern is very much deteriorated, but appears to resemble in features the decoration in cave 10.

There is a broken cistern to right in the open court.

CAVE 24 (FIG. 53)

A *leṇa* of Type B i, having a verandah and two cells placed adjacently behind that. The cells have a recessed bench each, the left one in the left wall and the right one in the back wall. The doorway opening to the common verandah is roughly rectangular but one of the jambs slope downwards in each. This appears to be due to bad workmanship. The verandah has a recessed bench to left. The front portion of the verandah is broken but small stumps still attached to the roof show that they had octagonal shafts.

While all caves in the Mahad group have just a single cell, this happens to be the only one with two cells.

CAVE 25 (FIG. 53)

This is a simple *leṇa* having a cell opening into a verandah. The doorway which rises from floor to roof has cuts made at the top and bottom of the side jambs. There is a square open window to the left of the doorway at shouldar level.

The front part of the verandah, including the area where the pillars and pilasters may have stood, is broken.

CAVE 26 (FIG. 53)

This is a *leṇa* with a cell, hall and verandah (Type A iii). There is a bench to right in the cell. There is a square open window at shoulder level on either side of the hall doorway. In the front part of the verandah there are the usual backed benches (with partially broken back) on either side of the entrance passage, but the pillars and pilasters are broken.

CAVE 27 (FIG. 53; PLS. 171, 172, 173 AND 174)

A well made *leṇa* of Type A iii. This has a cell at the back, a hall in the middle and a verandah in front. The cell has a bench-recess at the back and the hall has a similar one in the right wall. There is a square open window on either side of the central doorway at shoulder level. The windows have a *śakhā* sort of frame round them. The verandah has two pillars in antis. The pillars and pilasters rise from a bench on either side of the entrance passage. The pillars are simple octagonal shafts without base or capital and they taper slightly towards the top. The pilasters are rectangular and have hour-glass ornamentation. The bench does not have the back nor the ornamentation is there.

There is a niche carved in the right wall of the verandah, and in this a *stūpa* is cut in half relief. The lower portion of the wall below the *stūpa* niche is panelled with a square framing of rised band, and the interior is divided into three portions with two studs placed symmetrically in the middle. The top cornice of the frame has the wooden pins shown in stone in relief. Above this is a stretch of railing ornamentation, and over this is the sunken niche. The *stūpa* is of the type seen in Junnar-Sivaneri 43, and has a socle in three tiers, a cylindrical drum having at the brim a band decorated with square pin-ends and *vedikā* ornamentation. Above this is the dome which looks like 3/4th sphere. Over this is the *harmikā* with *vedikā* decoration and surmounted by the inverted stepped pyramidal member carrying a vertical shaft supporting an umbrella, all cut in relief.

There is an inscription (No. 3) engraved on the left wall of the open court. It records that this cave along with the *stūpa* niche (*Chetiā kōḍhi*) and certain other things were donated by a merchant, Vādisiri. The right portion of the inscription is completely damaged and hence the full contents cannot be made out.

The inscription shows in its palaeographical features, that this is not far removed in date from Mahad No. 2. Hence the present cave and cave 8 can be placed together chronologically.

CAVE 28 (FIG. 53)

This was a *leṇa* with a cell, a hall and a verandah (Type A iii). Now only the cell and the hall survive. The verandah is completely broken. The cell has a simple bench along the left wall, while the hall has a recess-bench along the right wall.

There is a central doorway from the hall to the verandah and a large open rectangular square window at waist level to the left of that.

The cave is very much ruined.

GENERAL DISCUSSION

Among the 28 excavations in the Mahad group 27 belong to the period under consideration. The following varieties are noticed in these.

| | | |
|---|---|---|
| *Chetiyagharas* | : | Three |
| Type B i | | cave 21 |
| ,, (variant) | | 15 |
| *Chetiyaghara-cum-leṇa* | | 8 |
| *Leṇas* | : | Nineteen |
| Type A ii | | caves 2, 3, 7, 11, 12, 14, 22, 23, 25 |
| Type A iii | | 4, 9, 10, 13, (18, 19, uf ) 26, 27, 28 |
| Type B i | | 24 |
| *Maṭapas* | : | Two |
| Type B i | | caves 5, 16 |

(6, 17 and 20 are unfinished excavations).

Like Kuḍa, the Mahād group of caves too, located in the southern part of the Kolaba district in the heartland of Konkan, displays some individuality in architecture and palaeography. The peculiar dimensions of the inner cells of the *leṇa* appear to be a speciality of the place. There is no *chetiyaghara* of the vault roofed varieties nor a *leṇa* of the well known cells-around-hall type (except the *leṇa-cum-chetiyaghara* 8). Despite the fact that there are 19 *leṇas* the monastery could have accommodated hardly 20 monks at a time.

Many of the Mahad caves have the Type E variety of pillars, rectangular pilasters with hour-glass decoration, and the backed bench with its foreside sometimes adorned with the railing decoration. The entablature of the caves is hardly decorated. All these features clearly show that the caves are to be dated to a very late period in the history of early Hīnayāna rock-cut architecture, mostly to the 3rd century A.D. and early 4th century A.D. It appears the whole of architectural activity at Mahad was restricted to about 5 or 6 decades at the most.

While the architectural evidence is strongly suggestive of the general epoch to which these caves belong, it is vague with regard to the reconstruction of internal chronology. The variations in the features from cave to cave are not many. There are instances like the use of simple bench and recessed bench, some varieties of hour-glass, the backed bench with decoration or without it and such other minor items, but these appear not to be of any value here for finding out the relative position of caves within the group as such items do not occur with any uniformity with reference to other concomitances. The feature of the absence of decoration on the front side of the backed bench particularly does not form any stage in evolutionary sequence of that item.

However, it has been mentioned above that the *stūpas* in caves 15 and 21 show some similarities with those in caves 9 and 15 of Kuḍa. It appears in the absence of any associable *leṇas* in the Mahad group assignable to the stage of cave 9 of Kuḍa, these *chetiyagharas* may go nearer in date to cave 15 of Kuḍa *i.e.* to the middle of the 3rd century A.D.

The *leṇa-cum-chetiyaghara* (cave 8) had the *stūpa* with the umbrella too cut in stone. But even this appears to be nearer in date to the above two *chetiyagharas*. The *leṇas* associated with the *chetiyagharas* are all of the same type. It has also been shown that stylistically cave 8 of Mahad may be slightly earlier than Kuḍa 1 and 6. But this *chetiyaghara-cum-leṇa* has preserved still the earlier characteristic of the pillars of Type D (vi ?). It can also be seen from the decorative panel on the verandah bench of cave 3 that this pillar form was still in vogue along with the pillars of E type. The inscription in this cave has certain feature in the letters not easily comparable with the regular concommitant features of various letters discussed in the inscriptions of known date. Generally, however, it can be assigned to Series VII. But the features displayed by the letters of this inscription are definetely earlier than those seen in No. 3 from cave 27. But the *stūpa* depicted in relief in cave 27 looks to be of a slightly earlier type.

The whole set of data is too elusive to provide any clear picture of the relative chronological position of these caves. It appears that Mahad could have been a mofussil area located distantly from the progressive regions; some of the items that were in fashion in earlier date could survive to a slightly later period but are sometimes associated with items that had come to fashion elsewhere contemporaneously. The discripencies in stylistic features, however, do not so much affect the epochal dating of the cave group suggested, that these were created in the 3rd and early 4th centuries A.D.

It can also be generally said that *chetiyagharas* 15 and 21 are probably the earlier ones in the group. The *leṇa-cum-chetiyaghara* belongs to a slightly later date and this was followed by *leṇa* 27 and their neighbours.

## NANAGHAT

Lying about 25 km west of Junnar is a steep narrow pass which served for centuries as an artery of communications between the western littoral and the Deccan plateau, connecting the ports like Kalyan and Sopara and the inland cities like Ter and Paithan. This is famous as the Nanaghat or Nana pass (Pl. 175). It is quite natural that this pass, located at the entrance of the great plateau, was of strategic importance and hence was selected rightly by the Sātavāhana rulers to engrave an inscription recording

the greatness and achievements of the members of that royal dynasty for the benefit of the new comers to their land entering through this pass. It is this inscription, not the architectural work here, that has attracted greater attention of scholars.

The rock excavations are located at the head of the pass. These are in three groups.

CAVES 1-5

The first group, met with while going towards the pass from Junnar, consists of five small excavations. These appear to be the beginnings of some large scale excavations.

EXCAVATIONS 6-10

About 10 m to the south-east and 10 m higher up from the above cells is a line of five cisterns, all with open top.

CAVE 11 (FIG. 51)

About 80 m down from the above, in the cliffs on either side of the path leading down the ghat some more caves are seen.

On the left side of the path is a plain cave consisting of a simple hall. Now the cave is in a much ruined condition, but still preserves the famous Sātavāhana inscriptions (Nanaghat 1-7).

The hall was about 8.7 m square and 2.7 m high. The front end of the cave may be made out from two short stumps with square cross section hanging from the roof. These are remnants of the two pillars which stood in front in a line between a square pilaster on either of the side walls. In the interior there is a low stone bench about 60 cm broad and 33 cm high running along the three inner walls. The back wall above the bench has been cut to form a broad niche in which once the statues of a few members of the Sātāvahana dynasty had been cut in relief. Only their feet portions and the label inscriptions (Nos. 2-7) identifying those figures remain now (Pl. 176).

The longer inscription (No. 1) is on the side walls (Pl. 177).

The components of the cave with simple hall with a low bench running on three sides and the front adorned with a set of two pillars and pilasters suggest this to be a *maṭapa*. This could have been meant as a rest-hall for the travellers going up and down the Nana pass. The location is also suggestive of the same.

The architectural features of the cave are simple. This appears to be the earliest instance of the occurrence of the low bench in hall. The pillars that once existed in front, the stubs of which still retain the square cross section near the roof, can be surmised to be of Type C, that being the only type with square cross section that is seen in the monuments of this period. The front of this cave may have looked like the front of Kanha's cave at Nasik (cave 19).

The date of this cave as well as certain other items have been discussed in Chapter V in connection with the fixing of the date of the Nanaghat inscription (p. 53). On that basis the present cave is datable to *c.* 175 B.C. This is in consonance with the architectural evidence of the use of pillars with square cross section having their arrises cut in the middle level (Type C).

EXCAVATIONS 12-20

To the left of this cave are three cisterns in a row, all with open top. To the right again, almost at the level of the roof of the cave is a row of six large cisterns which are very much ruined now.

CAVE 21

On the cliff wall opposite these excavations, on the other side of the path, there was a hall similar to cave 11. But it is much ruined now and looks almost like a natural cavern.

EXCAVATION 22

By the side of cave 21 is one more cavern, which appears to be part of a cistern.

The only excavation of considerable size in this group is cave 11. This and one more of this type on the opposite side of the path (cave 21) were the big resting halls serving the travellers. The others are their natural adjuncts, viz. cisterns.

Among these excavations at Nanaghat cave 11 alone can be dated, as stated previously, to *c.* 175 B.C. It is interesting to note that all the cisterns here are of the simple open-top type.

The few excavations at Nanaghat reveal that this group was not part of a religious establishment. There is not a single dwelling cave worth the name, nor there is the *chetiyaghara* or other such adjuncts.

## NASIK

The caves, locally called Pāṇḍuleṇa, are situated on a hillock by the side of Nasik-Bombay Road, about 8 km south-west of Nasik town.

The wealth of associated epigraphical evidence and architectural details invests this group of caves with great importance for the reconstruction of the architectural development of Western Indian caves. It is rightly regarded by some that Nasik provides the 'key' for such a study.[1]

The caves are located about 60 to 70 m up the hill on a vast stretch of rock scarp (Pl. 3). The hill was known in ancient times as 'Triraśmi', probably the name being derived from the three independent hilly outcrops marking the end of the Trimbak-Anjaneri range of the Sahyadris. The location of the Nasik group of caves follows the well-known pattern. These command a beautiful view of the green gardens on the bank of the Godavari, the winding river and the hills beyond, and are in such a place not too far or too near the ancient town. The old settlement of Nasik, located near Govardhan, is about 8 km away from these.[2]

The caves are cut along an east-west scarp of the hill and generally face north. They are numbered from west to east.[3]

There are twenty-four main caves altogether. Out of these two are later works of the Mahāyāna period, five are early caves altered later by the Mahāyānists and eight are much ruined or unfinished, some of them being converted to water cisterns.

### CAVE 1

This is an unfinished excavation, but had been intended to be a *leṇa* with a hall and a verandah fronted by four columns in antis. The pillars have just been blocked out as rectangular masses. A cell on each side of the verandah had been attempted.

A middle and two side doorways, seperated by two open square windows pierced the back wall of the verandah to lead into the hall. This wall is much ruined now. There is leakege of water in the hall roof through a crevice in the natural rock. Probably when the excavators noticed this defect, further work of making the *leṇa* was given up and instead the entire floor of the hall was cut deeper by 2 m converting this to a large cistern.

This cave, though unfinished, is of some interest displaying the technique of cave cutting. While the interior and the verandah are still in the beginning stage of making, the entablature is well-finished with decorative sculptures. The carving however, has weathered much, but the excellence of the original can be recognized. The decoration consisted of three horizontal bands, stretching along the width of the cave, the upper most with festoons, the next with the rail pattern and the lower one with animals and creepers. This shows that the cutting of the cave was commenced from top and the decorative work was finished at the stage when the level of the ground was still high enough when the area to be carved was accessible from the ground and that the cutting of the lower levels, accessible easily to workers standing on ground, could have been done afterwards.

The cave, though unfinished, can be bracketed with cave 3 of this place on the basis of similar decorative work seen there also (see below).

CAVES 1x, 1y, 1z

Next to this is a large area quarried in ancient times. Nearby is an open tank, a cistern with two square mouths, and a recess.

CAVE 2

This is a small *leṇa* of Type B i which had a front verandah with two cells placed adjacently at its back. At present the partition walls of these are broken.

The front of the verandah is also open, but on the underside of the architrave are two square mortises to which probably the tenons of wooden pillars were inserted.[4] The front part of the roof has two bands of railing pattern. Another horizontal band below them is adorned in relief with a line of square blocks simulating beam ends.

On the remnant part of the back wall of the verandah is a fragmentary inscription (Nasik No. 1), which mentions a certain date in the 6th year of the reign of Vāsiṭhīputa Puḷumāvi. It is likely that this inscription recorded the making of the cave.

There is a broken cistern to the right of this cave.

CAVE 3 (FIG. 54; PLS. 178, 179 AND 180)

This *leṇa*, called as the 'queens cave' in a contemporary inscription and better known as Gautamī-putra's cave to historians, is one of the largest and finely executed rock monuments in Western India. Also, this is one of the few among the well-preserved monuments of the region endowed with datable royal inscriptions. This is often considered to be a good time-style datum useful for building up the chronology of Western Deccan Caves.

This cave consists of a large hall, surrounded by eighteen cells on the three inner sides, five to left, six to back, and seven to right, and a verandah fronted by six pillars in antis, and two additional cells in the verandah, one in the right wall and another in the left end of the back wall. The hall (12. 5 m w, 14 m d, 3.2 m h) has a low bench running along the three inner sides. The cell doorways (75 cm b, 2 m h) are above the level of the bench. All the cell doorways have cuts made at the ends of lintels and thresholds for fixing the wooden frame. The cells, ignoring minor variations, are about 2 m sq and 2 m h. Except one cell to the left where the bench is in the right wall, all others have benches at the back. The benches in the cells on the right side are simple, while those in the cells of back and left walls are of the recess-bench type. All cells have square mortises on opposite walls for the pole (*Valagni*) meant to hang monks clothes. There are also a few catch holes cut in some benches in the cells and similar ones are also seen in the hall.

A beautiful relief of a *stūpa* (Pl. 179) rising from the bench to the roof has been cut in the back wall of the hall between the doorways of 3rd and 4th cells. This is in low relief and is cut above a rectangular pedestal which projects from the wall a little to the front over the bench. This position indicates that the sculpture of the *stūpa* is part of the original design of the cave and not an afterthought; otherwise it would been flush with the wall surface. The *stūpa* has a socle carved with lotus petals. Above this is the cylindrical drum with two bands of decoration on the brim, the lower one with a series of square bosses looking like ends of wooden pins, and the upper one with railing pattern having full and half lotuses cut on the studs, further surmounted by a thin coping member. Over this is the dome almost egg shaped. This carries the square *harmikā* with simple railing pattern on the face, and above this is the inverted stepped pyramidal member with five thin plates of successively increasing dimensions. The topmost plate has the merlon design of the simple triangular shape. From the centre of the top slab rises the cylindrical shaft carrying an unmbrella, consisting of a circular canopy over a thick circular boss. A set of two umbrellas, one rising from the other is cut on either side. These are shown as being supported by curved shafts originating from the top of the square plate. A female *chauri* bearer is seen on the right side of the *stūpa* and to the left is a lady with folded hands. Above the right one is the wheel with nineteen spokes and to the left is a seated lion. Above these, under the double umbrellas are the flying *gandharvas* carrying garlands.

The verandah is 2.4 m d, 14.2 m b, 4.1 m h. The front line of the verandah a slightly shorter in length than the back. The floor of the verandah is about 6 cm lower than that of the hall and its roof is 86 cm higher than the ceiling. The back wall of the verandah is pierced symmetrically with a huge central doorway, a rectangular window on either side of it, and a small doorway at either end. But the central doorway is not right in the centre of the hall, and the whole arrangement is shifted somewhat to right making the central and the right doorways and the two windows only opening into the hall, and the left doorway into a cell. While this cell entered by the verandah is in the back wall, another cell in the verandah is cut in the side wall to right. These cells to have benches at the back, the one in the left side having a recessed-bench and the other in the right having a simple bench. Along the left wall of the verandah is a simple bench (2.4 m l, 56 cm b, 50 cm h).

The central doorway (3 m h, 1.8 m b) has cut lintel ends, and sockets behind the threshold for fixing a heavy wooden frame for doors. The windows on either side (1 m h, 2 m b) have their top in the same line as the lintel of the central doorway. The side jambs of these windows have groves cut for inserting the wooden frame. The side doorways are small (2.3 m h, 1 1 m b).

The central doorway is finely decorared in the fashion of the *toraṇas* (Pl. 180). The side jambs are adorned with six sculptured panels, each divided by a horizontal *vedikā* pattern. The face of the lintel has a line of half lotuses, with lotus buds inserted between them. On either side of the lintel is a projection fashioned like snail curve and this is shown as carried by rampant lion brackets, which spring from an inverted stepped base projecting from the side of the jambs. Above this is another horizontal band divided into seven panels by decorative circular studs. The panels have sculptures, the central one with a *stūpa* flanked by a devotee and a *chauri*-bearer, the next ones with the holy tree to left and wheel to right, and the 3rd and 4th ones on either side with a standing devotee. This carries the topmost horizontal band consisting of a line of full lotuses each divided by half-bloomed lotuses placed one above the other, the bottom inverted and the top straight. There is again the projecting snail curl on either side supported by slanting ribbed brackets and these spring from the upper ends of the lintel. On either side of the doorway is a life size sculpture of a devotee (or *Yakṣa*) holding a lotus in the right hand and the left hand held akimbo.

The verandah front has six pillars in antis, with three pillars and a corresponding pilaster, all rising from a stretch of low bench running on either side of the entrance passage opposite the main doorway. The pillars are of type D vi b, with octagonal shaft and pot-and-animal capitals. The pots have constricted neck, large flat rim, globular body and flattened base. Leaf patterns are engraved on the body. Over this is a circular band supporting the *āmalaka* encased in a square box-frame adorned with animal or human caryatids at corners. Above this is a dosseret of five-stepped inverted pyramid, and over this is the bracket supporting the architrave running all along the width of the cave. The front and back of the brackets have high relief sculptures of animals with riders. These include elephant, bull, lion or tiger, goat like animal and animal with bird face.

The pilasters are rectangular in cross section. The flat faces towards the pillars are decorated with a full lotus in the centre and half lotuses at bottom and top and half-bloom lillies between them. These are well finished on the right pilaster, but on the left one the work is not complete. On the top level of these pilasters, just below the architrave there is a band of tiny half lotuses.

In front of the entrance passage between the central pair of pillars, is a stairway of five steps set between sloping side slabs. This leads down to the open court. The *chandraśilā*, however, is not seen.

The celing of the verandah projects for about 1 m in front of the architrave and this is adorned with imitation rectangular beams in stone. The front face of the projecting roof is excellently carved in four horizontal parallel bands. The lowermost is almost plain except for a line of rectangular bosses simulating projecting beam ends. Above this is the band with animals, creepers and flowers. Above this is the stretch of a larger panel with railing pattern. The uprights of these are decorated with fine full lotuses, three in each. Above this is a smaller band which look like the coping stone for the railing work and is decorated with a stretch of half lotuses. This decorative work is excellently wrought and in details resembles the decoration on cave 1 of this place. The lower part of the fronton, which forms

the back of the backed bench, is well-carved with railing pattern and below that, after a line of square knobs, is a band consisting of busts of *Yakṣa* figures. The decoration further down is ruined.[6]

In the left wall of the open court in front is a square-mouthed cistern cut on the floor of a rectangular recess. Along the right wall is a bench.

There are four inscriptions engraved in the verandah. The earliest inscription (No. 2) here is on the left (east) wall of the verandah and is of the 18th year of Gautamīputra Sātakarṇi. It states that certain lands in the village Aparakakhaḍi which were formerly being enjoyed by Uṣavadata were donated for the benefit of the Tekirāsi monks (most probably the monks living on the Triraśmi hill), by the orders of king Gautamīputra who was then stationed in the victorious war camp at Benākaṭa.

The next inscription (No. 3), which is written in continuation of the above, is dated in the 24th year of the same ruler, *i.e.* six years hence. This states that the lands formerly granted in the village Kakhaḍi to the monks living in this cave having fallen fallow due to the desertion of the village, 100 *nivartanas* of land within the boundary of the town was given instead of the previous grant. The grant appears to have been made at the instance of the mother of Gautamīputra. The wordings in the inscription 'for the monks living in this cave which is our gift of merit' leaves no doubt to the fact that the cave had been completed and monks were already living there at the time of causing this record (*amha dhamadāne leṇe pativasatāna pavajitāna bhikhuna*, in line 8).

The next one, carved on the back wall of the verandah (Pl. 180), is the famous inscription (No. 4) of Gautamī Balaśrī, mother of Gautamīputra Sātakarṇi. This is dated in the 19th year of Vāsiṣṭhīputra Puḷumāvi, grandson of Balaśrī and states that the '*leṇa*' was caused to be made by Gautami Balaśrī and was donated to the community of *Bhadāyanīyas*. Probably at the wish of the great queen, a village was also granted by the king for adorning the cave with paintings.

The next inscription (No. 5) which is in continuation of the above is dated in the 22nd regnal year of Vāsiṣṭhīputra Puḷumāvi and refers to the grant of a village made for the benefit of the monks living in the 'Queen's cave'. This grant was made in lieu of a village granted earlier in the 19th year. There is a statement in the end of the inscription that the grant will be administered by the monks of Dhanakaṭa, belonging to the school of *Bhadāyanīyas*.

These inscriptions are of great interest and value for the reconstruction of the political history of the times (Chapter III). These are equally valuable for architectural history as one of the finest caves in Western India is datable on the basis of these records. But there are some problems too. While Nasik No. 3 of Gautamiputra's 24th year specifically indicates that monks were already living in that cave at that time, Nasik No. 4 informs that the cave was the meritorious gift of Gautamī Balaśrī and was done during the reign of Vāsiṣṭhīputra Puḷumāvi. If so, during whose reign was this cave made ? Various scholars have offered interesting theories to explain the apparent discrepancy in the statement of these inscriptions.

(*i*) The cutting of the cave was started by Gautamīputra Sātakarṇi but was left unfinished. After its completion by Gautamīputra's mother Balaśrī in the reign of Puḷumāvi the dedicatory inscription was cut.[6]

(*ii*) Gautamīputra's grant refers to the cell which now opens to the verandah. The area in front of that cell, which now forms part of the larger verandah, was originally a hall if front of the cell, and this was later demolished while Gautamī Balaśrī enlarged the cave and redonated.[7]

(*iii*) The *leṇa* originally finished and donated by Gautamīputra Sātakarṇi had the verandah and four cells opening into that, *i.e.* the cell in the right side wall, the cell to the left in the back wall and two cells behind the present doorways. This was later remodelled into the present form during the reign of Puḷumāvi and a fresh dedicatory inscription of the king's grandmother Balaśrī was engraved.[8]

The first theory does not state anything about the stage in which Gautamīputra left the cave unfinished, nor does it take into account the statement of Nasik No. 3 that monks were actually living in that cave at least by the 24th year of the reign of the king.

It is very difficult to accept the second theory as this supposes the excavation of only a small cave during the time of Gautamīputra. Even considering it to be so, as Dehejia has pointed out, one would expect the dedicatory inscription to be carved in front of the verandah rather than on the walls of the dark hall. Granting all this where could have been the entrance to this cave ? Even as it is, the bench-with-back in front of the cell under consideration is nearly 1m higher than the floor of the verandah and it is difficult to expect that the floor was at that level originally, as the inscription then would have been just a little above the floor level and the doorway of the cell would hardly be a metre in height. The whole thing looks absurd and will have to be rejected.

The third contention also, which 'seems to pose less difficulties' according to Dehejia, requires reconsideration. It is not easy to explain why a verandah of that huge dimension, and with such extensive carving, could heve been fashioned, if the original intention was to have a *leṇa* of four cells only. The conjectural plan of the original as given by Dehejia[9] shows how much waste of labour and money would have been there by leaving out much space between the cells. Further, the huge central doorway adorned with such extensive relief sculpture can not be expected to have been carved in front of a dwelling cell. It is however possible to argue that the decoration on the central doorway was done later during the time of Puḷumāvi. But this too is not acceptable. If so, originally the plain wall surface must have been atleast about eight inches forward, in which the sculptural work could have been cut into. This involves the chiselling out of the rest of the surface throughout the back wall of the verandah to achieve the present form. In that case there must have been that much of blank space between the back wall and the inscribed area on the east wall having Gautamīputra's inscription. But the lines of that inscription are almost touching the back wall.

These considerations demand the acceptance of the fact that the whole verandah and atleast the central doorway were in existence at the time of the carving of Gautamīputra's inscription. Secondly, his inscription of the 24th year clearly states the fact that monks were also living in the cave by that time. Thirdly, the well carved central doorway with the holy figure of the *stūpa* on the lintel and the flanking devotees (or *Yakṣas*) could have been meant for a shrine rather than a monk's cell[10] and would suggest that the relief *stūpa* carved on the back wall of the hall had already been done, or at least that it was part of the original design.

A look at the plan of the cave reveals the whole thing to be due to single well-thought out design. The discrepancy of re-donation of the cave by Balaśrī in the 19th year of Puḷumāvi will have to be explained otherwise.

By probing further the into architectural and other details of the cave the following sequence in the stages of making the cave could be reconstructed :

Stage I : The cave was started with the present design during the time of Gautamīputra Sātakarṇi and the facade and verandah were first finished. This was in the 18th regnal year of that king (A.D. 124) and the inscription No. 2 was carved.[11]
(It is significant that the donation of the village recorded in this inscription is not specifically to the monks living in this cave but was intended to the monastic community living on the Triraśmi hill.)

Stage II : By the 24th regnal year (A.D. 130), *i.e.* six years later, a few cells and hence atleast a part of the hall had also been finished and the monks had begun to be accommodated in this cave, and inscription No. 3 recording the donation made to the 'monks residing in this cave' was carved.[12]

Stage III : The hewing of the rest of the cells was finished only by the 19th year of Puḷumāvi (A.D. 149). In the inscription carved at this time, Gautamīputra, who was the person responsible for the making of the cave originally, has been praised appropriately by his mother. She established the 'bridge of merit' (*dharmasetu*) by donating the finally completed cave to the community of *Bhadrāyanīyas*. It was at this time that action was also taken to adorn the caves with paintings. In the 22nd year of Puḷumavi (Inscription No. 5)

more grants were made to the resident monks here, but no additional work was taken up.

The cause of lapse of nearly two decades between the II and III stages cannot be known from the available data. It may be due to death of Gautamīputra himself that the work was suspended. And further, the mention of the desolation of a village originally granted to the monks by which another was to be given in lieu of that (Inscription No. 3) probably suggests some sort of calamity to have struck the region at this time (invasion ? flood ? famine ?) which may have also been causal for the suspension of work in the cave. However, in the meanwhile, the monks had begun to use the finished cells in the unfinished cave.

A minor difference in the nature of sleeping beds cut in the cells on the right wall of the hall, and the cells in the back and left walls probably indicates what those two stages of work are. While the benches in the former are all simple beds, those of the latter group are benches-in-recess. The peculiar position of the cell cut in the left side of the back wall of the verandah, in which position a doorway leading to the hall is to be expected in a symmetrical plan, shows that originally only the central and the right doorways to the hall had been finished as also possibly only the right half of the hall. There was still enough rock mass in the left side of the hall in which the left cell now entered from the verandah could have been cut later. This was done to bring in symmetry in the openings cut in the back wall of the verandah so that there is a smaller doorway on either side of the central one.

Further, it can be seen from the plan, that the architects have not only dropped the idea of providing a smaller doorway on the left side to lead into the hall but also have avoided the cutting of the cell in the left wall of the verandah. In the interior too, they have shifted the line of left side cells slightly to the right. Hence the *stūpa* cut during this time, though located well in the centre of the back wall, its position to be right opposite the main doorway could not be maintained.

The cause for all these deviations could be an attempt on the part of those who financed the third stage of work to exercise some economy in expenditure or an intention to finish the work quickly. If we see the neatness in execution of this stage and the status of the patron, viz. the then king Vasiṣṭhīputra Puḷumāvi, the first of the above contention does not appeal. Is it likely that the aged Balaśrī wished to see the completion of this cave within her own life-time ? It is also possible that the making of cave 4 immediately to the left of the present cave sometime between the 2nd and 3rd stages of work here was responsible for these changes. It is located so closely that there might have been the danger of one or the other cells of the present cave, had they been fashioned according to the original plan, caving into the hall of cave 4. Further, the run of a fissure in rock had been noticed in the hall of cave 4 (see below) and the architects who worked later to extend the left side of the present cave took care to avoid the extension of that fissure, by limiting the excavation of cells to be within a safe distance away from that.

The *stūpa* cut in the back wall is unlike the *stūpas* known hitherto from Western Deccan caves and it can be seen that it belongs to the tradition of Āndhradeśa. This influx of art tradition from the Āndhra country is indicated in inscription No. 4 itself wherein the monks are said to have come from Dhanakaṭa (Dhānyakaṭaka on the bank of the river Krishna in Andhra Pradesh). It is possible that, along with monks, craftsmen were also brought to this area from Āndhra by either Gautamīputra Sātakarṇi or Vāsiṣṭhīputra Puḷumāvi. Or, the local craftsmen may have worked here according to the specifications provided by the Dhanakaṭa monks. There is definite historical evidence for the extension of Sātavāhana rule to the Andhra country during this period. Apart from the new type of *stūpa*, the very tradition of installation of a cult object in the dwelling caves (*leṇa*) appears to have been introduced first in Western Deccan due to this contact with the Āndhra country, wherein new ideas in the Buddhist creed had begun to take roots. Cave 3 at Nasik heralds the beginning of an architectural type which was to become an established tradition in the Mahāyāna times. (For other new innovations see discussion under cave 10).[13]

CAVE 4 (PL. 181)

Adjacent to cave 3 is this excavation, which is much destroyed and unfinished. Originally this might have been intended for a small *maṭapa* with a hall or for a *leṇa* with cells around the hall, set behind a verandah. But when the hall was cut a large fissure in the rock roof appears to have been noticed and

further excavation was avoided. But the floor was dug up considerably converting this into a large water-cistern.

The hall (6 m sq, 2.7 m h) has traces to show that a low bench ran along the three inner walls. The front wall of the hall had been pierced into by a central doorway and a plain lattice window, with two lines of three square holes, on either side of the doorway at head level. The verandah (6 m b, 1.6 m d, 2.1 m h) had irregular recesses at either end. These may have been remnants of the discarded attempts towards cutting cells.

In front of the verandah, there are two pillars in the middle and two engaged pillars at the sides. Unfortunately the lower portions of the pillars are modern reconstructions and the floor is also completely made up in cement, and hence it is not easy to make out the original features definitely. The capitals of the pillars at least were of the same type as those seen in the pillars of Cave 3 and these carried a heavy architrave. Right above the pillars there are animal sculptures with riders carved on the front and backsides of the architrave. At present the engaged pillar on the left side alone retains the original form to a certain extent, but even here the usual stepped pyramidal podium below the pot base in not seen. However, the significant difference in the delineation of the facade of this and the neighbouring 3 is the absence of the backed bench in the verandah, as also the high basement with decoration on either side of the steps.

The roof projects to about 30 cm forward from the architrave and the underside of this is cut in imitation of wooden rafters. These rafters are further shown in front to project slightly beyond a plain plate, and the ends of the alternate rafters have been carved with women's faces. In some cases where this projection appears to have been broken, square mortises have been cut into which either wood or stone replacements used to be inserted. Above this band of decorative projected rafters is a high panel consisting of the railing pattern stretching along the width of the cave. Above this the rough rock has been cut to project to another metre to front.

There is much similarity between this cave and cave 2 in the delineation of the decoration of the entablature and it is likely that the two are almost contemporary. Cave 2 is dated in the 6th year of Vāsiṣṭhiputra Puḷumāvi and this date of the cave, falling within the 2nd and 3rd stages of work in cave 3, supports the suggestion made above to explain the changes done in the 3rd stage of work in that cave.

## CAVE 5

This is very much ruined now and serves as a big water cistern, its floor having been dug to about 3 m below the original level.

From the indications available it appears that it had a verandah and two cells at the back (*leṇa* Type B i). The cells were about 1.8 m sq and 1.8 m h. There is no trace of bench. There were holes for monk's pole in the cells. The doorway now are completely broken. The verandah (3 m b, 1.2 m d) had two pillars. The pillars are pilasters have gone, but a stump hanging from the roof shows that they had simple octagonal shafts without capital (Type E). The pilasters were rectangular.

In front of the roof projecting forward from the architrave there was decoration of the type seen in cave 6 to be described below.

In several features, this cave resembles cave 6.

## CAVE 6 (PL. 187)

Close to cave 5, is this *leṇa* of Type B i, which consisted of a verandah, three cells at the back and another cell in the left wall. Now much of the cave is ruined and its floor has been hollowed out, converting it into a cistern.

The verandah had two pillars between two pilasters. The lower portions of the pillars and pilasters are broken out from the remnants it can be made out that the pillars were simple octagonal shafts and the pilasters were rectangular in cross section. The pilasters have hour-glass decoration deeply incised on them.

There is no trace of the bench supporting the pillars and pilasters. The architrave, plain and rectangular in cross section, rests on the heads of pillars and pilasters. From this four large beam ends have been shown as jutting out to front just above the pillars and pilasters, and the projecting roof rests over this. The front faces of these beams are carved with the *nandipāda* symbol. The soffit of the projecting roof is carved with simple rafters emitting from the architrave and piercing out of a plain barge plate. Above this is a roll moulding and over this there is the stretch of railing pattern. Above this rail decoration the rock overhangs to about three feet. This cave is removed in style and details from all the others considered above except cave 5. Here for the first time at Nasik the capitalless pillars (Type E) are seen, as well as the hour-glass decoration. The decoration on the face of the projecting beam and the insertion of a roll moulding between the rail pattern and the barge board in the delineation of the entablature is again a deviation from others.

An inscription (No. 6) carved on the back wall of the verandah informs that this four celled *leṇa* (*chatugabha*) was donated by one Vīragehapati along with his near relatives. The letters of the inscription are in the Kṣatrapa or northern tradition but display definite advanced characteristics. Hence, this could be ascribed to Series VI.

This cave with its architectural features of the pillars of Type E and the rectangular pilasters with hour-glass decoration and the advanced feature of the script show a date within the late 2nd and 3rd century A.D. But the decoration on the entablature still preserves the tradition seen in the caves of Vāsiṣṭhīputra Puḷumāvi at Nasik (like cave 2) and hence will have to be placed to a time not far removed from him. The cave, hence, can be considered to belong to a time around A.D. 200.

## CAVE 7 (FIG. 55)

Close to the left of cave 6 is this simple *leṇa* (Type A i b) with a single cell and an open court. The cell has a bench-in-recess in the right wall inside.

A much defaced inscription engraved on the front wall informs that the cave was the gift of a nun made for the benefit of the monastic community from the four quarters. The characters of the record belong to Series VI.

## CAVE 8 (FIG. 55)

This is next to cave 7 at a somewhat higher level, nearly 3 m above the ledge path. This is also a single-celled *leṇa*, but has a verandah in front (Type A ii). There is a bench-in-recess cut in the right wall of the cell, and holes for the *valagni* exist on the wall. The verandah had two octagonal pillars, but only small stumps hanging down from the architrave remain at present. The right pilaster is almost gone, but the left pilaster which is rectangular in cross section bears the hour-glass ornament. The front wall of the cell and the floor of the verandah have been blasted away and the cave is in a bad state of preservation. A water cistern cut in later times now occupies part of the verandah itself.

There are two inscriptions on the back wall of the verandah. The one (No. 8) on the left side states that *dāsaka* Mugudāsa and his relatives caused this cave to be made. The inscription (No. 9) to the right mentions the same matter, but refers to Mugudāsa as a *chetika-upāsaka*.[12] In the latter part, however, the donation of land by another person is mentioned, and it is stated that the income from this land has to be used for providing robe for the monk who lives in this cave.

The form of the pillars and pilasters and the presence of the hour-glass decoration show that this cave probably belongs to the same class as 5 and 6. But it is likely that this cave is somewhat later in date than the other two. The absence of railing decoration in the present cave is a noticeable difference from 5 and 6. The inscriptions here are also of Series VII. Hence, the cave may be dated to late 3rd century A.D.

## CAVE 9 (FIG. 55; PLS. 182 AND 183)

Close to cave 8 is this *leṇa* with a peculiar plan. Originally this was a simple *leṇa* with two cells, one behind the other, and a verandah (*leṇa* Type A iii). Later however the left wall in the verandah was cut further and a cell in the side wall and another in the back wall were added in the extended portion. All

the cells have recess-benches. The cells have the holes on opposite walls at head level for the monk's pole and there are some catch holes too. The doorways of the cells are narrow simple rectangular openings with notched corners for the wooden frame. The front portion of the original verandah has two pillars in antis. The pillars are octagonal shafts without base, but have pot-capitals and inverted stepped pyramidal dosseret (Type D vi b). The pilasters are plain and rectangular in cross section and bear the hour-glass decoration. The architrave above these is heavy and in its front face above each of the pillars and pilasters there is the carving of a sculpture with addorsed animals carrying riders. These, however, appear not to be part of the original design; there are no sculptures on the inner side of the architrave and in front they are seen just on the surface and not as a bracket carrying the architrave as in most of the other cases in Nasik. Further a rectangular projection in the centre of the architrave with dressed front face is still left out and this indicates that originally the architrave was just a thick beam and sculptures were added at a later date to bring this cave decoratively in tune with its neighbour cave 10. There is no backed bench (at present), but some decoration appears to have existed on the face of the basement.

The presence of pot-capitals of a simple type suggests that, stylistically this is later than cave 10, etc., where the pots are of somewhat different type and where they appear at the base also, and earlier than caves 5, 6 and 8, where the pillars with pot-capitals are no more to be seen. The presence of the hour-glass decoration however, indicates that this is not far removed in time from caves 5, 6, 8, etc.

## CAVE 10 (FIGS. 54 AND 10(4); PLS. 184, 185 AND 186)

This excavation, well-known as Nahapāṇa's cave, is one of the well preserved *leṇas* of Nasik, and is of pivotal importance in building up the chronology of rock architecture in Deccan, as this is one cave where the incriptions provide definite information about its making and where good many architectural elements of comparable value exist.

This *leṇa* (Type B iii) consists of a hall with cells around and a verandah in front.

The hall is 13.9 m d and 3 m h. Its breadth is 13.6 m in the back end and 12.2 m in front, the right wall being somewhat irregular. There is no bench running along the inner walls and the cell floors are in the same level as the hall floor. There are sixteen cells around the hall, five in each of the side walls and six in the back wall. The irregularity of the hall is due to the ambitious inclusion of a cell to right in the back wall, the result of an after thought deviating from the original design. Had it not been there, the cave would have been a perfect piece of architectural work with symmetrical arrangement of five cells in each of the inner sides around a neat rectangular hall. A large *stūpa* panel had been cut in relief at the centre of the back wall. (Now the *stūpa* has been reshaped into the form of a Śaiva deity).

The cells are about 2.1 to 2.4 m d, 1.8 to 2.1 m b and about 2.3 m h. All have simple-benches cut along their back walls. In some cells, holes are seen on opposite wall for the *valagni*. All the cells have small rectangular doorways, about 83 cm w, and 2.1 m h, with cut lintel and threshold ends for inserting the wooden frames. In the front wall of the hall there are three doorways connecting the hall and the verandah and two large open windows shedding additional light into the interior. The central doorway is large (1.9 m b, and 2.9 m h) and the two other doorways (84 cm w, 2.3 m h) are small and are placed at either end of the walls. The rectangular windows (1.6 m b, 1.2 m h) are cut at head level, one each placed symmetrically between the central and side doors. They are ararnged in such a way as to have their lintels in the same line as the lintel of the central doorway.

The verandah in front is 11.4 m b, 2.8 m d, and 3.6 m h. Its floor is in the same level as the floor of the hall, but the roof is about 60 cm higher than that of the hall. There is a cell cut in each of the side walls of the verandah. These too have same measurements and features as the inner cells except for the fact that the bench in the right cell is along a side wall.

There are four pillars and two attached ones lining the front of the verandah. These are of type D iv with the base having the stepped pyramidal base supporting the pot and octagonal shaft. The capital consists of the inverted bell carrying a circular moulding and a box of two rectangular plates enclosing an *āmalaka*, and a dossert of inverted stepped pyramid. Above this are the animal sculptures cut

partly in relief both in the front and the back sides of the architrave. The basal pot has bulged body, flat bottom, short neck and beaded rim. The one at the top however is almost bell shaped. The animal sculptures above are all seated facing opposite directions with their bodies overlapping. They include tigers, sphinxes, horned and hornless goats, bulls, elephants and lions and a few fanciful animals with the body of a tiger and the beak of a bird. The animal sculptures on the front side have riders but not those on the back side. The engaged pillars look almost like complete pillars, with only one face of the octagonal shaft being flush with the wall. The architrave runs on the head of these pillars at a level a little above the top flat plates. From this the verandah roof projects to about 60 cm. The under surface here is shown with wooden beams. The front face of this projection is decorated in two horizontal bands, the lower showing the ends of the rafters described above. Above this is a simple roll moulding stretching along the width. Over this is the broad belt of rail pattern. The rock above this projects for about 1.7 m forward and is roughly dressed.[14]

The open forecourt is 75 cm lower than the floor level of the verandah and is approached by a flight of four steps. The steps are badly ruined and it is difficult to make out the nature of the side slabs as also the *candraśilā*, if they existed. On either of the side walls of the court, just in front of the pilasters, there is a recess with its facade carved with a band of rail pattern. Probably these were meant for water cisterns, but the pits of the cisterns have not been cut.

There are six inscriptions in this cave (Nasik Nos. 10-15). Three of these are of Uṣavadata, son-in-law of Nahapāṇa, two are of Uṣavadata's wife, and one is of the Ābhīra king Īsvarasena. Nos. 10, 12 and 14 mention that Uṣavadata made and gifted this cave on the Triraśmi hill to the monks of the four quarters. Nos. 11 and 13 record that his wife made the cells in the varandah. Ābhīra Iśvarasena's inscription (No. 15) says that he made some money investment, from the income of which the monks were to be provided with medicines. The second inscription of Uṣavadata alone (No. 12) is of much importance for our purpose, as herein is the information that the cave was made and gifted in the 42nd regnal year of Nahapāṇa.

Nahapāṇa's cave at Nasik is one of the largest caves in Western India. Even though the hall is very large, the pillars have been completely avoided here. Contrasted with Kondane 2, this is probably indicative of the maturity achieved in rock-cut architectural tradition. It has been shown above how the Kondane *leṇa* (cave 2) copies the wooden models faithfully and the large hali there has been provided with pillars in the pattern of wooden buildings, where the spanning of such a large area with single beams would be impossible. But that hangover of wooden tradition is not seen any more. Further, by this time pot-base-pot-capital pillars had come into vogue, and it is significant to note that this highly ornamental architectural member and all other decorative works have been employed in the facade only. This limiting of decoration to the front only, where it could be appreciated in cave architecture, and avoiding of all such wasteful labour in the dark interior further indicate the achievement of that stage of 'maturity' in rock architecture. Uṣavadata's inscription, being dated in the 42nd regnal year of Nahapāṇa, provides a firm date to this cave as A.D. 120.

The similarity of Cave 3 with the present cave has often been stressed by many scholars. This idea is based mainly on the similarity noticed in the plan with cells around hall fronted by the verandah, the provision of three doorways and two windows and the form of the pillars employed. It may be pointed out, however, that all the above features are part of a long flourishing tradition. Through this cave may have provided the immediate model for Cave 3, it was only partially copied. There are several differences too. They are :

| | *Nāhapāṇa's Cave* (No. 10) | *Gautamīputra's Cave* (No. 3) |
|---|---|---|
| *i.* | Hall is plain | A low bench runs along the three inner walls of the hall. |
| *ii.* | The cells have 'simple benches' for the monks to sleep. | 'Bench-in-recess' appears in some cells. |

| | |
|---|---|
| *iii.* The capitals of pillars are of plain inverted bell type. | There are regularly pot-shaped. |
| *iv.* There are engaged pillars on the side walls in continuation to the line of pillars in front of the verandah. | There are rectangular pilasters in the same position. |
| *v.* The entablature has simple railing decoration. | Facade decoration is more sophisticated. The railing has lotus ornament, with half lotus band above and a band with animal sculptures below. |
| *vi.* Has no backed-bench in the verandah; the pillars with square pyramidal and pot-base are set on the floor. | Has a backed bench on either side of the entrance passage in front of the verandah; the octagonal shafts of the pillars stand on the backed-bench. |
| *vii.* The front basement is plain. | *Gaṇa* figures are seen on the basement. |
| *viii.* The central doorway leading from the verandah to the hall is plain. | The corresponding doorway in this cave is well decorated with sculptured *śākhās* on the sides and the *toraṇa* design above. |

These differences are significant in many respects. Apart from the difference in the form of the pillar capitals, which may be construed as the result of craftsmens' fancy, the introduction of the backed-benches under the pillars in the verandah and the adoption of rectangular pilasters are certainly new ideas, appearing for the first time in Cave 3 in the architectural tradition of the area. These once introduced began to be copied widely in a number of monuments of the succeeding period. The introduction of the cult object (the *stūpa*) inside a *leṇa* should also be considered as appearing for the first time in cave 3 itself, even though cave 10 also had a similar *stūpa* cut on the back wall of the hall. It can be seen by close observation on the spot, that the relief *stūpa* in cave 3 is integral with the original design itself, wherein is also made an ornamental doorway to provide entrance to the holy object. This is absent in cave 10, and the *stūpa* was cut there in a sunken panel in the back wall. It is possible that this *stūpa* was made sometime later, probably copying the one in cave 3. It may be noted that the umbrellas extant now in the *stūpa* relief in cave 10 are identical with those of cave 3. This *stūpa* type seen in cave 3 is one which was widely in vouge in the Āndhra country, and happens to be an aberrant type in Western Deccan. Further the froize of animals as well as the decoration of the railing studs with lotuses and the top frieze of half lotuses are also part of the decorative repertory of the art of the Amaravati school, but rarely seen in Western Deccan.

Gautamīputra Satakarni's political acquisitions included Āndhara dēśa, and probably due to this there might have been a fresh influx of ideas, and possibly craftsmen too, from that region to Deccan; Significantly the very cave (3) had been donated to the monks of Dhanakaṭa (*i.e.* Dhānyakaṭaka). It is likely that apart from the decorative elements, the new architectural features seen in cave 3, viz the backed bench in the verandah and the use of plain pilasters were well in vogue in the Āndhra country. But no structure of this date has survived in that area to verify this conjucture. When once these new things were introduced to Deccan, first in Nasik 3, (and probably in several structural works which have not survived) these elements became part of the Deccan architectural traditions and began to be adopted extensively in a number of monuments of later date. Thus the comparison of architectural elements between the seemingly similar *leṇas* 3 and 10 of Nasik provides clues relating to the new items introduced in Western Deccan Cave architecture during the time of Gautamīputra Sātakarṇi.[15]

## CAVE 11 (PL. 188)

Close to the east of 10 but at a slightly higher level is a small *leṇa* (Type A iv b consisting of a verandah 3.1 m b, 1.2 m d, 2.1 m h), a hall (3.6 m b, 2.1 m d, 2 m h), a cell (2 m l, 2.1 m b) in the left wall of the hall and a small recess. The cell has no bench. The hall has the 'L' shaped bench along the left and back walls. There was an attempt to make a recess to right in the back wall, but

this appears to have been given up as this damaged the back wall of the first cell in the left wall of the hall of Cave 10. A doorway, 79 cm wide and as high as the hall, opens from the hall into the verandah.

The verandah has its floor in the same level as the hall floor, but the roof is about 5 cm higher than that of the hall. In the left wall of the verandah is a bench-in-recess. There is no trace of pillars in front of the verandah, but a heavy architrave rests on the two walls. The roof projecting further in front of this architrave has been carved on its underside, with beams and the face of this has decorations in two bands, in the usual manner the lower with the rafter ends shown and the upper with the *vedikā* pattern. This decoration is similar to the decoration of the same member in Cave 4.

The plan of the cave is similar to many such A iv *leṇas* at Junnar, assignable to the time of Yajñasrī Sātakarṇi and onwards.

An inscription (No. 16) carved on the back wall of the verandah states that this cave is a meritorious gift of one Rāmaṁṇaka son of Sivamita a scribe. The inscription is in characters of Series VI. The cave is possibly datable to late 2nd or early 3rd century A.D.

## CAVE 12

This cave is next to and partly under the verandah of cave 11. The cave is very much ruined but from the extant remains it can be gathered that this was a small *leṇa* consisting of a single cell and a verandah. There is a bench recess in the right wall of the cell. Holes for the *valagni* exist.

An inscription (No. 17) carved on the back wall of the verandah states that the *leṇa* is a gift of one Rāmaṇaka son of Velidata and was made for the benefit of the *chātudisa-bhikhusagha*. He created a permanent investment of money, to be in charge of the *saṁgha*, from the interest of which the monk spending the monsoon (*vassa*) in this cave is to be provided some amount for the robe. The letters of this inscription are of Series VII. The clear knotted *ta* and looped *ra* and *ka* are of a type later than those in the inscription in cave 11. Hence cave 12 is posterior to 11 and can be placed to a date in the latter part of the 3rd century A.D.

## CAVE 13

This is a much dilapidated cave, situated next to and on the same level as 12. This had two cells placed adjacently opening into a common verandah (*leṇa* type B i). The cells have bench recesses along their back walls. The verandah and the facade are broken, but part of a bench in the right wall of the verandah can be traced.

The bench recess may indicate this cave to be probably of the same or of later date than that of Cave 3.

## CAVE 14 (PL. 189)

This is adjacent to Cave 13. The partition wall between the two caves being broken, now this is easily accessible from cave 13 itself.

This is a *leṇa* (Type B i) with three cells placed adjacently opening into a common verandah. There are bench recesses along the back walls of all the cells. Some catch holes exist inside the cells.

The verandah in front is much broken, but remnants of backed benches can still be seen. These had been decorated with railing pattern on the front side and below this is the decoration of studs on the basement. The pillars are not extant. But one pilaster of the rectangular type bears the hour-glass decoration. The roof of the verandah including the entablature is broken.

There are a few broken steps leading down from the verandah to the open court in front.

The existence of the bench recesses in cells, and the pilaster ornament, the studs on basement, and the backed bench show that this belongs to the class of Cave 32 and others at Kanheri and hence may be dated to the latter part of the 3rd century A.D. The relative position of 13 and 14 probably indicates that these are contemporary works.

EXCAVATION 14x

Next to this cave is a cistern with a square mouth cut in a recess.[16]
(Caves 15 and 16 are of the Mahāyāna period)

CAVE 17 (FIG. 55; PLS. 190 AND 191)

About 15 m further east of and at a higher level than Cave 15 is this excavation. This is an unfinished *leṇa* much tampered in later times, but is one of the most interesting of the rock excavations at Nasik.

An inscription (No. 18) on the back wall of the verandah written in characters of the time of Nahapāṇa states that a northerner Yavana Iṁdāgnidata of the town of Daṁtāmiti caused this *leṇa* to be excavated on the Tiraṇhu mountain, and that water cisterns and a *chetiyaghara* inside were also made for the accrual of merit for his parents, and for the purpose of the worship of all the Buddhas and was meant for the monk community of the four quarters.

The interest lies in the fact that here appears to be one of the earliest attempts in western Deccan to insert a *chetiyaghara* within a *leṇa* (though it remained an intention and never accomplished, as the cave itself is unfinished). This gains further significance as this new innovation in architectural tradition is associatad with the benefaction of a *Yavana*, a resident of Daṁtāmiti (Dattāmitri) identified with Demitrias, a town in Arechosia.[17] This indicates probably that there used to be influx of persons from distant regions who may have been followers of religious sects different from those prevailing in this area. The mention of 'All the Buddhas' and the tradition inherent in the belief that merit could be transferred (These were made for the accrual of merit to the donor's parents) are ideas of interest which are met with only in later inscriptions. Thirdly it should also be noted that the cave was made over to the monks of the four quarters and not to any particular religious sect. It may not be far from fact, if a supposition is made that Mahāyānism, which was developing in northern India, had begun to make its impact in the Deccan region at this time, a result of which is the change introduced in the *leṇa* architecture in which a shrine also began to be inserted. There are few examples of this type in rock-architecture which are ascribable to this period with certainty, but it is not unlikely that there were some structural works of this type. The tradition once introduced could have continued till a time when Mahāyānism began to dominate in the area, when such an architectural type became common in rock-architecture too, like Caves 15 and 16 in the present group itself.

This *leṇa* appears to have been planned to have a verandah in front, a large hall in the centre, cells on both sides of the hall, and a shrine at the back, but many parts are unfinished.

The sanctum or *chaityagṛiha* at the back referred to in the inscription is now just a simple cell with a bench along its back wall. In front of that is a transverse aisle with two pillars and two engaged once along its front line.[18] The pillars are just crude square masses, but their upper parts are finished with the inverted pyramidal capitals crowned by animal sculptures in relief which are partly in front of the large beam running on the heads of these pillars. The animal sculptures are exactly in the form of those on the front pillars. The animal sculptures include elephants and addorsed pairs of fanciful beasts, having tiger's body and birds beak, with riders on them.

The hall in front of this has its floor and roof in the same level as those of the transverse aisle. In the right wall of the hall are four cells. Two of them have benches along the back wall. Along the middle part of the left wall is a long bench-recess and on either side of this is a cell. One of these cells has caved into the hall of the neighbouring *chetiyaghara*, and hence it appears the cutting of other cells on this wall was stopped, and these cells were also left incomplete.

The front wall of the hall is pierced by two doorways and two windows. The central doorway is 1.47 m broad and 3 m high and the other doorway to the left is 80 cm broad and 2.5 m high. The windows (1.1 m sq) are on either side of the central doorway. They are at shoulder level, with their top lintel on the same line as the lintel of the central doorway.

The verandah is 1.9 m deep, 9.4 m broad and 3.7 m high. Its floor is in the same level as that of the hall but the roof is slightly higher. There are two pillars and two engaged ones. Peculiarly, the

central doorway is not opposite the space between the central pair of pillars. It appears that originally the cave was intended to be small but, as pointed out by Fergusson, during the course of excavations the plan appears to have been changed extending the verandah further to right and providing another entrance in its front wall by the side of the line of pillars.

A cell has also been cut in the right wall of the verandah. It has no bench, but a small recess in there to the right in this cell. Despite all this clumsiness of the interior (Fig. 55; Pl. 191), the cave presents a beautiful view from the front (Pl. 190) due to the neat excavation of the facade.

The pillars are of the usual pot-base-pot-capital variety and these are identical in shape and details with those of Cave 10 described above. Here too the backed-bench is absent and the engaged pillar has only one of the sides of the octagonal shaft attached to the wall. The delination of the animal sculptures, particularly with their hanging hoofs, and the types of animals depicted here are also similar to those in cave 10. It is so with the so called bell capital also. The entablature in front of the projecting roof has also been carved, as in Cave 10, in two bands, the lower with the beam ends shown and the upper with the railing pattern. This close similarity of this cave with Cave 10 (Nahapāṇa's cave) may indicate that the two caves may be contemporary. It has already been remarked that even the inscriptions of the two caves are in the same type of characters. It is likely that these two architectural works were by the same designer and craftsmen. There is no clear evidence to show which of these caves is earlier. For general purposes however both of them may be considered as belonging to the same date *i.e. c.* A.D. 120.

The steps leading to the open court are broken. There is a cistern to right in the open court.

CAVE 18 (FIGS. 56, 7(2) AND 10(1); PLS. 192, 193 AND 194)

This *chetiyaghara* at the centre of the whole group is next to cave 17, with its floor at a lower level. This is one of the neatly carved of its class, but an enigmatic one if viewed from the intention of locating its place in the evolutionary sequence of the *chaitya* halls.

The *chetiyaghara* consists of an apsidal hall (12 m d, 6.5 m b) and is divided into a central nave and side aisles meeting at the semicircular back by a row of seventeen pillars arranged parallel to the wall. A *stūpa* is placed at the back of the nave.

The five pillars parallel to the semi-circular back wall are simple octagonal shafts without base or capital. Five pillars on either side in front of these have stepped pyramidal base in four tiers and pot with sagger bottom, bulging body constricted neck and beaded rim. The octagonal shafts rise from these. The pillars on the right line have simple square abaci, but these are absent on the pillars to the left. The front two pillars are rectangular in cross section at the top, but the major portion of the shaft has its arrises in the back chamferred, and there is also a smaller rectangular projection on the front side of each of the pillars. (In the latter feature, these pillars resemble the pillars in the same position in the *chaitya* halls at Bedsa, Ajanta 9, etc.)

The roof on the aisles between the walls and pillars is quadrantal and it is so on the transverse aisle to the front inside the hall between the front wall and the front two pillars. There is a thin flat beam sort of thing running on the head of the pillars, and a thick ledge runs along the three interior walls above head level, and, it appears, curved wooden rafters rested on these. But there is no indication whether similar curved rafters could have been placed below the quadrantal roof on the transverse aisle. The triforium of the nave rises straight from the ledge on the pillars to a height of about 1.2 and over that on a receded ledge is the barrel vaulted roof, which is perfectly semi-circular in cross section. A line of square holes runs on the triforium at a height of about 30 cm from the lower ledge. These appear to have been meant for fixing the curved wooden beams which, however, are no more extant.

The *stūpa* (Pl. 193) is placed at the back end of the nave about 7.9 m away from the front doorway. The total height of the *stūpa* is 3.6 m. It consists of a drum, 1.9 m high, with its rim decorated by a band of rail pattern, 22 cm high. The dome, 90 cm high and 3/5th sphere in shape, is above the drum. The *harmikā*, 38 cm broad and 25 cm high, rises in two tiers, each having the rail ornament around. Over this, two upright members, carved in relief in front and back, carry two small horizontal beams and these carry the inverted pyramidal member consisting of 5 thin plates of succes-

sively increasing dimensions. The lowermost of this is carved in its front face with four knobs simulating rafter ends standing out from the face of the band. Above the top flat member there is another of the same size, and the outer face of this all round is covered by the rail pattern.

On the flat top of this member, there is a big circular hole in the centre and there are smaller holes in the corners, obviously the central one was meant to fix the shaft of the wooden umbrella and the smaller ones carried small flag staffs.

A central doorway, 1.2 m broad and 2.2 m high, in the front wall gives access to the nave. The doorway is rectangular, and it appears a wooden door frame was fixed on the inner side of the doorway with the help of a groove running by the side of the threshold. A heavy beam ran between the two walls at the lintel level of the doorway inside.

A thick horizontal rounded moulding running along the width divides the facade into two parts, the lower portion covering roughly 1/3rd of the total height and the upper one the rest. The upper portion is dominated by a large open *chaitya* arch which admits light into the interior. The arch is deep, cutting the whole thickness from the front side of the wall to the interior face of it through the rock above the interior transverse aisle. The soffit of this *chaitya* window is carved with rafters. At the inner end of the arch, a thin jamb rises straight on either side and they have chases on their intrados. It appears some wooden screen, probably of the type seen in decorative arches on the facade had been fixed here.

The large arch is placed in the centre of the facade cutting the stretch of decoration which simulates a two storeyed wooden mansion. The lower of these 'storeys' rests on a rounded moulding and at its base is a horizontal band decorated with beam ends. The faces of the alternate beam-ends are carved with female heads, while the others are plain. Above this is another band of railing pattern. At the level of the springing of the arch again is a horizontal rounded moulding and above this is a stretch of railing design. Over this is a larger horizontal panel with relief pillars of Type D. At the level of the bell capital is a horizontal band of railing pattern and below them in the interspaces between mid-pillars and the end ones are relief *stūpas* of the same type as seen in the interior of this *chaitya* hall. In the similar interspaces above the band their are *chaitya* windows with usual grill decoration. The surfaces around these *stūpas* and arches are decorated with beautifully executed lattice work of many designs. On each side of the main arch between that and the immediately next pillar is a cobra with coiled body and raised and expanded hood. Above the level of the head of the pillars is a stepped cornice consisting of three bands, each of the upper ones projecting a little forward from the others. The central one of these is carved with beam ends. Over this again is a band of rail pattern which marks the base of the upper storey of the mansion in relief. Over this again are four *chaitya* arches, two on either side of the finial of the great arch. These are also carved with lattice design inside and the spandrels have two railing bands divided by a stepped moulding.

There is a slight projection of the flat upper rock above these. The walls on either side of the facade, of which only a little remains, have also been carved in continuation of the decoration seen on the facade itself.

The lower part of the facade has the doorway in the centre having a decorative arch above. This arch springs from the level of the lintel and its upper part cuts the stretch of the lower most horizontal bands described above, so that the partly broken finial is in the level of the base of the large *chaitya* window. The space inside the arch above the flat lintel of the doorway has been carved in half lotus design—with diapers below and Buddhist symbols, creepers and animals further above—almost in the same fashion as that in the Manmodi *chaitya* hall 40 at Junnar. The doorway has the side jambs projecting slightly from the plain back wall. The front face of the left jamb is richly carved with tracery, peacocks, human figures and flowers.[19] To the left of this left jamb is a *Yakṣa* figure. On either side of the doorway is a sloping mass of stone. The left one is cut to form a staircase with a balustrade of railing pattern in relief on either side. The right one is unfinished.

There are three inscriptions in this cave.

The first inscription (Nasik No. 20) is over the entrance door, under the head of the arch, and records that this is 'the gift of (the residents of) Dhambikagāma of Nasika'. The characters used here

have early features and belong to Series II B. The donation referred to here may be the doorway or the facade itself.

The second inscription (Nasik No. 21) is on the rounded moulding above the figure of the *Yakṣa* to the left of the doorway. This informs that a rail pattern and a *Yakṣa* were caused to be made by Nādasiriyā. This inscription is very much damaged, but still it can be made out that this is associable with palaeographical series V A, and is of far later date than the first inscription. The *Yakṣa* mentioned in this inscription should necessarily be the one found below this; the railing pattern may refer to the one carved by the side of the steps than the upper railing pattern, as that forms part of the broader decorative work going along with the doorway, which is an earlier work.

The third inscription (Nasik No. 19) is on the octagonal faces of two pillars inside the hall. This informs that this *chaityagṛiha* on mount Triraśmi was consecrated by one Mahāhakusiri Bhaṭapālikā, daughter of a royal minister. Palaeographically this inscription displays later features compared to No. 20, but is very much earlier than No. 21 and belongs to Series III.

These inscriptions of different dates all recording the making of different parts of the cave reveal that this *chetiyaghara* is not the result of a single design and execution. Architectural features however, help, in reconstructing the various stages of making to a certain extent.

The absence of the verandah[20] but the presence of the front screen wall in stone would show that this is later than the caves with wooden fronts like Bhaja 12, Ajanta 10, Kondane, 1, etc., and is closer to Ajanta 9 where too this feature exists.

The decorative elements on the front of the screen wall, like the decorative *chaitya* arches with slight incurve of arms and the use of decoration simulating storeyed buildings, each storey divided by a broad rail pattern and adorned with lines of *chaitya* arches, would substantiate the contention of the proximity of this with the early caves. A new feature observed here is the presence of Type D pillars with bell and animal capitals in the facade decoration, a feature unknown from the decorative facades of Western Indian *chaitya* halls. However, the nearest example of the type of this pillar is in Bedsa. The facade at least can be considered as earlier than the Bedsa *chaitya* hall due to the absence of the verandah, and thus purely on architectural grounds the first stage of making of this *chaitya* hall which consisted of the finishing of the facade and probably some parts of the interior can be placed chronologically between Ajanta 9 and the Bedsa *chaitya* hall. Another feature substantiating this is the presence of the curved bracket. This went out of vogue in later works right from Bedsa, but is present only in early caves like Kondane 1, 2, Ajanta 9 and Bhaja 12.

The second stage of work is the one in which the interior was finished. The fact that this was not done in one stage is clear from the inconsistency in the capitals of pillars. This *chaitya* hall has the barrel vault roof, rising on a straight triforium, like those at Ajanta 9, Bedsa 7, Karle *chaitya* hall, etc., and this had curved wooden ribs (now gone). The aisles here have quadrantal roof, and this feature is shared by Bedsa 7 and other early *chaitya* halls. The quadrantal roof over the transverse aisle, seen in common in this and the Bedsa cave, is another indication to place this nearer Bedsa 7, as it is known that all later examples including Karle have flat roof above them. A feature indicating the posteriority of the interior of this to the Bedsa *chaitya* hall is the form of pillars, in which pot-bases have been introduced to octagonal shafts here, whereas those in the Bedsa *chaitya* hall continue the tradition of having simple octagonal shafts. But these primitive pot-based pillars are of experimental type compared to the well-carved pillars with pot-base-pot-and-animal capital seen in the Karle *chaitya* hall. This fact reveals that the interior of the Nasik *chaitya* hall is to be placed at a stylistical stage between the *chaitya* hall at Bedsa, and that at Karle. In this connection the shape of the *stūpa* too may be compared. The feature that prominently strikes is the tallness of the *stūpa* seen in common both in Bedsa and Nasik and a close observation of the upper part, particularly the dome, the *harmikā* and the capital reveals that the *stūpas* at both the places are identical in features. The difference, however, lies only in the drum which has been left rough at Nasik.

The third stage of work at the Nasik *chaitya* hall is of course the carving of the *Yakṣa* figure and the stone steps on the left side. This contention is based, however, purely on palaeographical evidence. The introduction of the hour-glass decoration on the uprights of the balustrade of the staircase (Pl. 194) also substantiates the above point.

So the *chaitya* hall at Nasik is not the creation of one age with a single design. The various stages of its making can be detailed as follows :

Stage 1 : The upper part of the facade (upto the level of the lintel of the lower doorway) with all its decoration, the main *chaitya* arch, and further cutting in the interior of the roof of the nave, and probably the rough shape of the upper part of some of the interior pillars.

Stylistically of a stage later than Ajanta 9 and earlier than Bedsa 7 but possibly nearer to the stage of Bhaja 22 in view of similarity in the forms of the *chaitya* arches, decorative *stūpas* and the decorative pillars of D I type.

Associated epigraph is of palaeographical series II B.

Stage 2 : The *chaitya* hall was 'consecrated' by fashioning the *stūpa* inside and finishing the pillars in the hall. The front approach to the *chaitya* hall at this stage was probably a narrow passage leading to the doorway directly.

Architecturally an attempt to introduce the D type pillar inside the *chaitya* hall is seen. Possibly due to the fact that the upper portion of the pillars had aleady been shaped roughly, it was not possible to depict the capitals, but the base-pot was made. The *stūpa* copying the form of the one in Bedsa *chaitya* hall was made.

Series III is the associated palaeographical stage.

Stage 3 : The work was continued to the front rock masses. Staircases were cut on either side of the doorway to lead up towards caves 17 and 21 flanking the *chaitya* hall. The left staircase was finely finished with the depiction of balustrades on either side of the staircase. A *Yakṣa* figure was also cut and the making of these was recorded in the inscription (No. 21) belonging to palaeographical Series V A. (This is substantiated by the fact that the two caves on either side of the *chaitya* hall (caves 20 and 17) were to have been fashioned along with the present work. It has been stated already that cave 17 particularly has architectural features that was in fashion during Nahapāṇa's time and there is also an inscription (of Series V A) of the same period).

On the basis of palaeographical evidence and the dates assigned to various other caves with which stylistic comparisons have been made, the three stages in the making of the Nasik *chaitya* hall can be surmised to be as follows :

| | | |
|---|---|---|
| 1st stage | : | *c.* 120 B.C. |
| 2nd stage | : | *c.* 70 B.C. |
| 3rd stage | : | *c.* A.D. 120 |

CAVE 19 (FIG. 55; PLS. 195 and 196)

This is a small but neatly cut *leṇa* situated a little beyond the *chaitya* hall and at a slightly lower level than that.

The *leṇa* is of Type B iii b and consists of cells around a hall and a verandah in front.

The hall is 4.3 m square and 2.4 m high and there are six cells, two on each of the inner sides. The cells are all rectangular about 2 m deep and 2.2 m broad and about 2.1 m high. All the cells have a simple bench each cut along a side wall except the second one on the right side which has no bench. There are holes for the *valagni* in all the cells. The doorways of the cells are about 2 m high. Their jambs rake inwards slightly thus reducing the width of the doorways from bottom (about 63 cm) to top (about 55 cm). The lintels are bracketed by decorative *chaitya* arches. These arches (Pl. 196) are of early type with wide span and almost semi-circular bend and thin pointed finials. Their soffits are carved

with beam ends. A band of railing design in relief runs at head level all along the three inner walls, connecting the bottom of the arms of the arches on doorways. It is straight throughout, except between the cell doorways on the side walls, where it is wavy.

The main doorway of the hall leading to the verandah is rectangular and is 1.8 m high and 90 cm broad. On either side of this doorway is a lattice window, about 1 m high and 70 cm broad, carved again in the railing pattern. These have a ledge running around, forming a sort of frame.

The verandah in front is 4.6 m wide 1.4 m deep and 2.3 m high, and has a bench along the left side wall. The front line of the verandah has two pillars in the middle and an engaged one at either of the side walls. These are of square cross section, but in the middle part the arrises are cut (Pillar type C). Formerly the roof above projected a little to the front, but it is broken now.

The cave, though small and simple is elegant. All the parts are well-designed and neatly cut. An inscription (No. 22) carved on the back wall of the verandah (Pl. 201) informs that this dwelling cave (*leṇa*) was caused to be made by Samaṇa, the *mahāmātra* of Nasik, while Kṛiṣṇa of the Sātavāhana family was ruling. According to the chronology adopted here, the date of the cave would be somewhere between 205 and 187 B.C., and hence this happens to be the earliest cave of the Pāṇḍuleṇa group, earlier than even the first stage of *Chaitya* hall 18.

CAVE 20 (FIG. 56; PLS. 197 and 198)

This is a *leṇa* situated adjacently to the upper part of the *chaitya* hall in the same relative position as 17 on the other side, and is approached by a flight of steps rising from the front court of the *chaitya* hall.

This is another architectural work at Nasik, which includes various parts wrought in different dates.

The cave at present consists of a hall with cells around, a Buddha shrine at the back and a pillar fronted verandah at the entrance. The Buddha shrine and a considerable part of the back of the hall, including someof the cells, are known to have been made in about the 6th century A.D. by one Mamma, as indicated by a Sanskrit inscription there assignable to that period on palaeographical grounds. Clear indication is also availabţe in the different levels of the roof within the hall that this later excavation of the Mahāyāna period included the back part of the cave to a depth of about 5 m.

Omitting these later hewings, the original hall was roughly rectangular and there was a low bench running along the inner walls.[21] There were six cells originally in each of the side walls above the level of the bench. Only two cells in the left wall have benches, whereas the others are plain. Some of the cells are still unfinished.

The front wall has the main doorway (2.7 m h, 1.7 m b) in the centre, an open window (1.3 m b, 96 cm h) on either side and a smaller doorway (2.3 m h, 1 m b) to left. The windows are placed at shoulder level with their top in the same line as the lintel of the central doorway. The verandah (10.4 m b, 2.4 m d, 3 m h) has a cell in the left wall. This has no bench.

In front of the verandah there are four pillars and two attached pillars. The pillars are of the type seen in cave 10, 17, etc., but differ from them in details. Here the lower pot is small and rounded and the shaft is more slender. The bell capitals too are thin and somewhat taller and they lack corner pieces of the box enclosing the *āmalaka* torus, and there are no animal figures above. The attached pillars are almost complete, only one face of the octagonal shaft being flush with the side wall. A simple architrave runs on the top of these pillars and the rough rock roof projects to front just above this, without providing scope for the animal sculptures or for the entablature. In front of the space between the central pair of pillars opposite the central doorway a flight of four steps led down to the front open court.[22] There is a niche in the right wall of the open court and in the left wall was a rectangular opening leading to the next cave 21.

An inscription (No. 23) carved on the back wall of the verandah, above the left side door and the left window, informs that this cave, 'the intention of making of which was being mentioned for many years,' was finished by one Bopaki, wife of a commander-in-chief, in the 7th year (A.D. 179) of the reign of Gautamīputra Śrī-Yajña-Sātakarṇi.[23]

The features of the verandah pillars described above show clearly that these are of a type and date later than the pillars seen in the caves of Nahapāṇa or Gautamīputra (*i.e.* caves 3, 10). Even though the bell shape has been retained in the capital simulating those in Nahapāṇaś cave, it appears that part has been made to balance to a certain extent with the appearance of the facade of this cave with the one (cave 17) located in a similar position on the other side of the *chetiyaghara*. The similarity of the features of the frontal pillars and the disposition of the architrave seen in this cave and Junnar-Manmodi 1 is striking, and this indicates possibly that the two caves could be nearer to each other in date.

The steps cut in front of the *chaitya* hall to provide an approach to this cave bears an inscription of Series V A, as stated already. It is likely that when cave 17 on the other side of the *chetiyaghara* was made there was the intention to create this cave too,[24] and this was achieved, however, only after about five to six decades in A.D. 179 during the reign of Yajña Śrī Sātakarṇi.

CAVE 21 (FIG. 57; PL. 199)

This cave is now approached through a doorway cut in the left wall of the front court of 20.

This is a simple hall with two pillars and pilasters in front. The hall is irregular about 8 m deep and 3 m high, with its breadth varying from front to back. The pilasters were plain and could have been just described as short return walls. The pillars were possibly like those in cave 19 (Type C). (Whereas the above description is based upon the 19th century accounts of the cave much of these features appear to have been tampered in recent restoration and now the pillars look like those of type E, and it is so with a pilaster too which now looks like an engaged pillar.) In front of this is the open court with a cistern to left.

The cave is small and not well-executed. Still this is an excavation of importance. The use of Type C pillars in front provides an idea that this is of an age nearer to cave 19, *i.e.* around 200 B.C. It appears this is the only excavation that can be placed along with that in date and hence the two are the earliest monuments in Pāṇḍuleṇa. Provision of two pillars directly in front of the hall, without any verandah, looks peculiar. However, it may be recalled that the famous cave Nanaghat 11 bears a similar feature. The only difference between these two caves is in the absence of any bench here in contrast to the presence of a low bench along the three walls in Nanaghat 11.

The approach door from cave 20 appears to have been made after that cave was cut. Originally there may have been a seperate approach to the present cave.

CAVE 22

About 10 m beyond to the east of 21 is this *leṇa* of Type A ii, consisting of a single cell and an open verandah behind a forecourt. The back and the left walls of the cell are unfinished, but still this could have been in use as the holes for the *valagni* and cuts at the ends of threshold and lintel are seen.

CAVE 23

This is a little beyond 22, and can be best described as a mess of several ruined caves than a single cave. The original arrangement of none of the caves can be made out with certainty. There are some Buddha figures too.

However, one of the remnant walls still bears an inscription (No. 24) dated in the 2nd regnal year (A.D. 132) of the reign of Vāsiṣṭhīputra Śrī Puḷumāvi.

CAVE 24 (PL. 200)

This too is a complex of a few independent excavations. The dividing walls are now broken and the whole looks like a large natural cavern. However, the last of this group can be easily isolated from others on the basis of parts of the walls hanging down from the roof behind a finely carved entablature.

This excavation was a two celled cave with a verandah in front. The lower portion is completely broken. The cells are placed side by side and probably had bench-recesses. The pillars and pilasters in front of the verandah are not seen any more, but the heavy architrave still remains partly. Four

large beam ends are shown as projecting from this to carry the entablature. The faces of these ends are carved with the Buddhist trident symbols, but the prongs of these symbols are fashioned in a peculiar way to look like rampant tigers, etc.

The under surface of the projecting portion resting above this is carved with beams and their ends are shown further in front is the bottommost band of the entablature. Above this is another band having a row of small animals each with a boy behind. Over this is a broader band of railing pattern and the coping of this is carved with half-lotuses. At the side walls in front of the entablature there are figures of lion, owl, etc. The carving resembles that in Cave 3 but is more refined. The sculptures of tiger, owl and the tridents of peculiar type are new features.

An inscription (No. 25) on the back wall of the verandah states that this *leṇa* is a gift of a *Śaka*, a resident of Daśapura and that he made two water cisterns also.

There are two water cisterns in front of the cave and one of them bears the inscription of the same person. The characters of these inscriptions belong to Series V A.

## GENERAL DISCUSSION

The above descriptive inventory and analysis of the Pandulena group at Nasik reveals that there are twenty six independent excavations (including minor ones) belonging to the period under study. It is possible that there were three or four more caves in the large caverns now numbered 23 and 24.

This monastic establishment had the following monuments.

| | | |
|---|---|---|
| *Chetiyagharas* | : | One |
| Type A i b | | Cave 18 |
| *Leṇas* | : | Eighteen (including three unfinished) |
| Type A ii | | Caves 8, 12, 22 |
| A iii | | 9 (with additions) |
| A iv b | | 11 |
| B i | | 2, 5 (unfinished), 6, 7, 13, 14 |
| B iii b | | 1 (unfinished), 3, 4 (unfinished), 10, (17), 19, 20, 24 |
| [Caves 23 is indeterminable] | | |
| *Maṭapas* | : | One |
| Type A ii | | Cave 21 |
| Cisterns | : | Three |
| Type A i | | Excavation 1y |
| A ii | | 14x |
| B | | 1x |
| There are 7 more cisterns made as adjuncts to caves. Caves 1, 4, 5 and 6 have also been converted as water cisterns]. | | |
| Recess | : | One (Excavation 1z) |

The sequence of the various monuments in the group as made out in the previous pages is as follows :

| | |
|---|---|
| 19, 21 | Kanha's reign (205-187 B.C.) |
| 18 (1st stage) | *c.* 120 B.C. |
| (2nd stage) | *c.* 70 B.C. |
| 10 | A.D. 120 |
| 17, 18 (3rd stage), (24) | *c.* A.D. 120 |
| 3 (1st stage) | A.D. 124 |
| 1 | *c.* A.D. 124 |

| | |
|---|---|
| 23 | A.D. 132 |
| 2 | A.D. 136 |
| 4 | *c.* A.D. 136 |
| 3 (2nd stage) | A.D. 149 |
| 20 | A.D. 179 |
| 9, 11 | Around A.D. 200 |
| 5, 6, 7 | First half of 3rd century A.D. |
| 8, 12, 13, 14, (22) | Latter part of 3rd century A.D. |

Nasik was a great metropolitan centre in ancient times. This is one of the few cities of Deccan that find mention in the northern Indian literary works of the pre-Christian era. The antiquity of the place is also attested to by the excavation conducted at the habitation site which has shown that the town had begun to grow at least from about the 5th century B.C. if not earlier. Thence onwards this place maintained contacts with northern India, as indicated by the discovery of Northern Black Polished Ware in the lower levels of the Early Historical Period.[25] This was an inland trading centre, probably well-connected by routes linking ports and other cities of the sub-continent. Inscriptions found at this place and elsewhere inform that people from distant places visited this city (for example an *otarāha*, a man from Dattāmitri) and that the residents of this place too went to many places around.[26] The main purpose of this movement was of course trade, but these traders and others not only caused many meritorious works to be made but also acted as important carriers of ideas and traditions from one region to another.

This place had gained political importance too. The epigraphs indicate that it was the headquarters of a district called Govardhana (*Govardhanāhāra*). It is quite natural to infer from these that this city enjoyed high status in the eyes of the people of that time and obviously this motivated the various kings of the area to make donations to the religious establishement nearby and also to carve inscriptions extolling their greatness and achievements. They were acts of both merit and expediency. Nasik happens to be the only place which contains inscriptions of a succession of kings, of Kṛiṣṇa, Nahapāṇa, Gautamīputra Sātakarṇi, Vāsiṣṭhīputra Puḷumāvi, Śri Yajña Sātakarṇi and Ābhīra Īśvarasena.

The number of monuments in a monestery located near such a town of wealth and fame is, however, small. But these monuments occupy a place of great importance in the study of development of rock-cut architecture of the region as many of these are dated or datable and hence provide definite chronological points in stylistic evolution. Nasik, being a metropolitan centre, is naturally endowed with an open temperament to receive ideas from elsewhere, and a capacity to bring in changes and innovations in the traditions. In the field of architecture atleast, this phenomenon is well visible. *Leṇa* 19 of Kanha's time, the *chetiyaghara* 18, *leṇa* 10 and *leṇa* (*-cum-chetiyaghara*) 17 of the time of Nahapāṇa, *leṇa* 3 of the time of Gataumīputra Sātakarṇi and Vāsiṣṭhīputra Puḷumāvi and *leṇa* 20 of the time of Śrī Yajña Sātakarṇi are all monuments which are either first of their kind in the whole of Deccan series or the first to introduce a few new features atleast.

Though the city of Nasik had maintained contact with northern India from about the 5th century B.C. (as indicated by finds from the excavations at the habitation site) there is no clear evidence for the early introduction of Buddhism. Architectural works of this early phase of Buddhism are completely absent, and a plausible explanation for this is to consider that either Buddhism was yet to become popular or in that age when eremeticism may have been the way of monks they hardly needed any permanent place for dwelling; they could have preferred natural caverns or temporary structures for the *vassa* months. However, by the time of Kanha the Buddhist monastic community appears to have become in influential group in the socio-religious sphere, and it could be due to this reason that a royal official, the *mahāmātra* of Nasik, caused a cave (19) to be made for the benefit of the monks on the Triraśmi hill near this city.

Cave 19 inaugurates the history of the monastic establishment of Pāṇḍuleṇa. This, being a creation of a royal official, happens to be one of the most neatly executed of the whole group, though it is small in size. This *leṇa* is probably the earliest example of B iii type where the verandah occurs in front of

a hall surrounded by cells. This *leṇa* provides clue to the understanding of the nature of various architectural items that were in vogue during the period, like the use of pillars of C type and the decorative patterns in the interior. On the basis of epigraphical evidence this is datable to the beginning of 2nd century B.C., to the reign of Kanha the second ruler of the Sātavāhana dynasty. This is likely to have been followed by *maṭapa* 21, which was meant for the monks to rest or to assemble for the *uposatha* or *pravāaṇa*. While at Ajanta such a hall was provided in front of the cells (*upaṭhāna* of Ajanta 12, inscription No. 4), here a seperate cave has been made. This could as well be the earliest of the independent *matapas* of Western India. *Leṇa* 19 provided accommodation for only six monks at a time. It is not known whether at this time these caves on the Triraśmi hill served as a monastery with all the associated amenities. At present nowhere near the two caves in question any water cistern that can be assigned to this period is seen. Possibly both *leṇa* 19 and *maṭapa* 21 served the monks during the *vassa* months only. Pāṇḍuleṇa was to achieve the status of a full-fledged monastery far later by the beginning of the 2nd century A.D. when the *leṇas* 10 and 17 were created.

In the meantime, there was an ambitious project by private effort, of excavating a *chetiyaghara* (18). This was undertaken around 120 B.C., but the work stopped with the completion of the facade, due to unknown reasons. This phase of work in the *chetiyaghara* belongs to a time when innovations were being made in the form of the wooden fronted vault-roofed *chaitya* halls, wherein is seen a tendency to replace wooden elements by stone itself. From the extant specimens Nasik 18 happens to be the third in the series of such an experimental stage of replacing the wooden front by a stone screen wall, the first two being Ajanta 9 and Junnar-Manmodi 40. The screen in Nasik 18 happens to be the best carved of the three. Probably this provided the model for the *chaitya* hall at Bedsa, where, however, an innovation in the insertion of a verandah to protect such fine sculptural work is seen. The facade decoration of the Nasik *chaitya* hall is unique in many ways. For the first time various decorative designs and sculptural themes are employed here. A combination of railings, *chaitya* motifs, brackets and stepped merlons is seen. This is further augmented by series of *stūpas*, the *triratna* motif and a few animals and *nāgas*. The whole of the repertoire of decorative elements known at the time appear to have been employed here. Though the result looks fine generally, some amount of crowding of the elements is also noticeable. This marks an ambitious experiment towards decorating the front screen more elaborately than what is seen in Ajanta 9 and Manmodi 40, but falls short of the neatness and maturity achieved in the *chaitya* halls at Bedsa and Karle. An innovation seen in decoration in the facade of Nasik 18 is the introduction of pillars of Type D, and this is probably the only instance of its occurrence in that fashion. After suspension of work for sometime, this *chetiyaghara* was finished by hewing the interior completely. This stage provides a stylistic link between Bedsa 7 and Karle 8. While the *stūpa* inside closely resembles the one in the Bedsa *chaitya* hall, there is a new element in the introduction of a new pillar type with pot-base in the interior, a feature well followed up in the *chaitya* hall at Karle wherein full-fledged pillars of Type D have been employed. So this phase of work at Nasik could have been done sometime after the Bedsa *chaitya* hall and before the one at Karle, and hence, say around 70 B.C.

After a lull of about two centuries, a fresh wave of rock-cutting activity started again at Nasik. This was during the reign of Nahapāṇa. A peculiarity noticeable in the text of one of his inscriptions recording the donation of cave 10 is indicative of the situation that prompted the activities of the time. There is much praise of the meritorious benefactions of Uṣavadata done for the benefit of the brāhmaṇas. When this is to appear in an inscription of a Buddhist establishment, it is not unlikely that equally beneficial works were done or planned to be done for the Buddhists too. In fact, Cave 10 is one such and probably the first to be made. This happens to be one of the largest *leṇas* at Nasik, and probably the first of such a dimension and beauty to be made in the whole of Western India. Architecturally the hall in this *leṇa* is very large compared to any other created in the period preceeding this. Probably this is the first *leṇa* to have its front adorned with a line of Type D v pillars.

*Leṇa* 24, now much ruined but which still retains a number of interesting elements in the remnant decoration, was also made possibly during this period. This happens to be a donation of a Śaka and the newer items seen in the sculptural work are to be ascribed to the donor's foreign affiliation.

Other works were also planned during the time of Nahapāṇa's rule. It was intended to hew two more caves, one on either side of the *chetiyaghara*. The rock mass in front of this was to be cut with steps to provide approaches to these caves. The staircase to left was completed. The cave to right had also been begun. The Cave (17) to the right of the *chetiyāghara* was to be an ambitious project. The inscription in this cave, written in the same characters as those of Uṣavadata's inscriptions, indicates that this was to be a new experiment wherein a shrine was planned to be introduced within the dwelling cave, an idea appearing for the first time in the architectural history of this area. The mention of a 'northener' as the donor of this cave gains importance in this context, as indicating the flow of new ideas to the region. But unfortunately the project was never completed; when the verandah and a few cells had been finished and the *chaityaghara* part and the staircases leading to the cave were yet to be completed the work came to a halt. It is quite lekely that this situation is the result of sudden transfer of political power from the Kṣaharātas to the Sātavāhanas eflected by Gautamīputra Sātakarṇi in 124 A.D. The donors who financed these schemes had no more foothold here after their masters were ousted from the area. So far as the cave planned to be made on the other side of the *chetiyaghara* is concerned possibly nothing had been done by that time except cutting the left staricase in front of the *chaitya* hall, which was to lead to the intended cave.

Due to the benefactions of Uṣavadata, his wife and probably some others associated with him, the Buddhist community at Nasik gained a full-fledged monastery on the Triraśmi hill. The mention in the inscriptions of donations of permanent monetary endowment and lands made to the community of monks shows clearly that by this time the nature of the Buddhist monasteries had changed sufficiently. Probably monks stayed throughout the year in these caves and food and clothing were provided for them at the very monastery.

The monastic establishment at this time appears to have provided accommodation for at least forty monks.[27]

Gautamīputra Sātakarṇi who acquired the territory from Nahapāṇa did not lag behind in extending patronage to fthe monastic community here. Lands, previously enjoyed by Uṣavadata the Kṣaharāta governor of the place in the previous regime, were generously made over to the community residing here. More architectural works were undertaken. Cave 3 was planned. Quite understandably this was to be on par with, rather to excel, the one made before by his political rival. The front verandah and part of the hall and cells to right were done during his reign. The rest of the work, however, was completed by A.D. 149, in the 19th year of Puḷumāvi. The inscriptions in the cave reveal that the monks of the *Bhadāyanīya* sect were placed in charge of the monastery. It is also mentioned that these monks were from Dhanakaṭa (in the Andhra country). What motive prompted the rulers to patronise monks from a distant region is not known. But this brought fresh ideas, and probably craftsmen too, from Andhradeśa. The new architectural features introduced to Western Indian rock-cut architecture at this time are displayed in Cave 3 in the inclusion of the relief *stūpa* in the hall, the introduction of bench with back in the verandah, and the rows of animals and full and half lotus panels in the decorative work of the entablature. At a later stage the bench in recess type also makes its first appearance. The reoccurrence of the new facade elements in Cave 1 shows that it followed Cave 3 closely, most probably within a few years from the first stage of work in that cave. Almost immediately following this, Cave 23 was done at the other extremity of this group. This was in the 2nd regnal year of Vāsiṣṭhīputra Puḷumāvi, in A.D. 132. Within four years by A.D. 136, *i.e.* in the 6th regnal year of Vāsiṣṭhīputra Puḷumāvi, Cave 2 was hewn to the right of Cave 3 and, probably for maintaining the symmetry in appearance, Cave 4 was dug on the other side of Cave 3. The two caves are small and unfinished but their facades display the artistic tradition of the period. The latest work of the time of Vāsiṣṭhīputra Puḷumāvi is of course the completion of the hall and left line of cells in Cave 3. This was in A.D. 149.

Practically the span of about 30 years from *c.* A.D. 120-150, is the active period in the architectural history of Nasik caves, when more than eight excavations were achieved. Rather, it is the time when all the major caves of the monastery on the Triraśmi hill were made. The monastery gained more

monetary and land donations and there was sufficient provision for the residence of at least sixty to sixtyfive monks.

During the time of Śrī Yajña Sātakarṇi, in his 7th regnal year (A.D. 179), cave 20 was completed. This cave shows in its pillar patterns the changes that had slowly set in the architectural fashion of the day. The pillars are no more of the types adorned with animals. They retain the pot-base and pot-capital but are plain above. This is the last important monument to be created on the Triraśmi monastery. This provided accommodation for about 12 or 13 monks.

All the other ten caves are small and unimpressive monuments, compared to those that were created earlier. There is actually no cave of the dimension of cave 3 or 10 or even 20. The ten caves of this period provided accommodation for another 15 to 20 monks only; five of them are single celled and five others are of B i type consisting of two or three cells. The *leṇas* of this time are generally of the standardised variety having one or two cells behind a verandah, the verandah itself being adorned sometimes with two pillars of Type E and the pilasters with hour-glass ornamentation. Some are too simple creations to be of any interest from the architectural point of view. These small *leṇas* range in date from about A.D. 200 to the end of the 3rd century A.D. Probably Nasik is illustrative of the fact that during the 3rd century A.D. such modest architectural works, mostly done for single monks, were in preference.

(Architectural activity in Nasik continued in the succeding Mahāyāna period also, in the creation of two more caves and altering af a few existing ones.)

## PAWALA

Pawala (locally called Pohāḷa) is situated about five miles north-west of Kolhapur. The caves are at the foot of the Jotiba hill, and are approachable from the village Pawala by walking north-west for about 3 km or by descending down the Jotiba hill, which however is approachable by road.

It is in the Kolhapur district that the solid stretch of the trappean rocks of the Deccan plateau end and give place to the lateritic formations. This geological feature has its say on architecture also. In this district, no where the trap rock is suitable enough to attempt ambitious projects of hewing large caves. Even if some attempt has been made, the coarseness of the rock dissuades finer work. Hence the rock-cut monuments of the area are usually crude and small. The number of such monuments is also very small, the present one being the only group datable to the period under consideration. At Pawala, there is no regular escarpment of the rock into which the caves could have been cut into. So a sloping side of the hill has been trenched down to a depth of about 5 m to provide an open fore-court about 15 m long and 14 m wide. At the back of this a *chaitya* hall and a *leṇa* have been hewn, and in the two sides, small irregular rooms and a cistern have been made. The rock being of poor quality, many parts of the caves have collapsed or disintegrated. Nowhere, any indication of finer ornamentation is to be seen.

### CAVE 1 (FIG. 57; PL. 215)

This consisted of a large pillared hall surrounded by rooms on three sides and a verandah in front.

The large hall proper (about 7.3 m l, 7.6 m w) is divided into a central hall and a corridor around by a colonnade of fourteen pillars running along the three sides except the front. There were altogether 18 rooms, 6 on each side. The front wall of those on the left side has entirely gone, but for a few traces here and there. The front walls of the rooms to the right and the back sides too have been damaged but enough remains to make out the position of the rooms and the doorways. The dividing walls of the left row of cells have collapsed almost completly, but at the back end a few pieces are still seen attached to the back wall and the roof to indicate their original positions. The dividing walls of the back and the right row of cells, however, are somewhat better preserved.

The cells are small. They are about 1.5 m b, and 1.8 m d in average. The walls dividing the rooms as well as the front walls are thin, often not more than 12 cm in thickness. The rooms are plain without any stone beds. The doorways of the cells are not preserved well, except in one cell. From

this and from some remnants of other doorways it can be made out that the doorways of cells were perfectly rectangular. Only two pillars on the right side still remain in position in the interior. But these too are much disintegrated. However, from the stump of othter pillars sticking still either to the roof or the floor it can be surmised that they were of the octagonal type without base or capital. The pillars are shown as carrying a beam (75 cm wide and 8 cm thick) running under the flat roof, which is about 2.7 m above the floor.

On three of the pillars there were small triangular niches (about 7 cm w, 5 cm d, 7 cm h). All these opened towards the central hall. These might have been meant for keeping the lamps.

The hall is led into by a doorway (1.5 m w, 2.7 m h) at the centre of the front wall and on either side of that there was a large window (4.8 m w, 1 m h) cut at a height of about a meter above the floor.

Originally, there was an open verandah in front of the doorway. It ran all along the length of the *leṇa*, and was about 10.6 m b and 1.2 m d. There were six octagonal pillars in front. All are ruined. Towards the right end, however, stumps of three pillars hanging down from the roof are still extant.

## CAVE 2 (FIG. 57; PL. 215)

This is a *chaitya* cave and consists of a rectangular hall (9.7 m l, 3 m w, 3.6 m h) which is led into by a doorway (2.1 m w, 2.3 m h). The back of the hall is irregular. There are no pillars and the roof is flat.

Towards the back of the hall stands a *stūpa* which is about 2.4 m in diameter at the base. At the top fringe of the cylindrical base is a small area about 9 cm by 7 cm, where the original railing decoration is still preserved. Its drum is about 1 m high and over it rises an *aṇḍa* which can be described as 3/4 sphere. The *aṇḍa* is much ruined and the *harmikā* is completely lost. However, there is a platter shaped umbrella (1.5 m dia) carved on the roof directly above the *stūpa*. From the centre of the umbrella hangs down a circular stump which was once reaching the top of the *aṇḍa*.

The front door is rectangular and very plain. There is an open verandah in front of the door. The natural rock above the roof of the verandah is only about a metre thick and there was no scope for decoration on the entablature.

## CAVES 3 AND 4

In the left wall of the open court, there are four irregularly cut cells. The dividing walls of these cells as well as the front walls have fallen down and no systematic plan of these can be made out. The cells do not have benches.

Correspondingly in the right wall of the open court too there are a few cells. They are small and low, without any systematic plan; these cells too do not have benches.

## EXCAVATION 5 AND 6

At the edge of the sloping side wall to the right of the fore-court two cisterns have been dug below the ground level. One is about 2.1 m square. The opening however is 2.1 m long and 1.6 m wide. The second cistern is about 2.4 m long and 1.3 m wide and is provided with openings at either end, each measuring about 1.2 m by 75 cm.

## GENERAL DISCUSSION

The whole complex, except the irregular cells on the sides, appear to have been evcavated at the same time. Both the *chetiyaghara* and the *leṇa* appear to be part of a single plan as both share a common forecourt. The form of the *stūpa* with its umbrella cut in the roof suggests that this may belong to about the 3rd century A.D. or later. Though the pillar arrangement in the *leṇa* reminds of Cave 2 at Kondane, there are many differences between the two *leṇas*. The pillars used here are octagonal, a type not known to occur in any of the early *leṇas* in Western India, but which appears only in the Mahāyāna *vihāras* like Ajanta Cave 11. The Pawala *leṇa* is also characterised by the long pillar fronted verandah and the absence of benches in cells. All these appear to show a *leṇa* pattern which became

common in Mahāyāna times. Both the *leṇa* and the *chetiyaghara* may belong to late 3rd or early 4th century A.D. For that matter, this *leṇa* appears to provide an important evolutionary link between the Hīnayāna and the Mahāyana *vihāras*. The smaller cells on the sides may have been made at a slightly later date.

The Pawala caves are just about 6 km away from the ancient site of Brahmapuri. That site has yielded a host of antiquities of the Early Historical Period, including some Roman objects like coins and bronzes, and it must have been a flourishing town once. The location of the caves near this town is of interest. However, while Brahmapuri is on the right bank of the river Panchaganga, the caves are nearly 5 km away from the left bank. Such a location may have been chosen deliberately. Quite appropriate to the nature of the monastery it is located at a considerable distance away from the town, thus avoiding frequent interference from the town folk, but it is not so far away as to dissuade the monks from going to the town daily for begging food.

## PITALKHORA

Like Ajanta, Pitalkhora is an isolated monastic complex situated away from the Sahyadrian clusters. It is in the Satmala range, in the north-western part of Aurangabad district, about 70 km west of Ajanta. Like Ajanta, this too is at the head of a *ghat* marking off the edge of the Deccan plateau from the vast plain of the Tapti valley northwards. Possibly this place was near or along an ancient trade route that connected the Deccan tableland with the port of Broach on the west coast and the great city of Ujjain to the north.[1] On the basis of similarity of names suggestions have been put forward to identify this with Petrigala of Ptolemy, and Pītaṅgalya mentioned in a Buddhist text *Mahāmāyūrī* as the seat of a *Yakṣa* called Sankārin.[2]

The caves are located at the head of a ravine, wherein a picturesque view of the gushing water and the green trees is presented in the rainy season. The situation of these caves is closely comparable to that of Ajanta and Kondane, where the approach is easier from the plateau higher up than from the plain below, which is at a considerable distance.

All the caves at Pitalkhora are cut on the vertical scarp on either side of the ravine. The caves are generally large in size compared to many in various other sites. This feature is possibly due to the comparative softness of the rock formation here, and also the presence of large scarps, in which only a little preparation is sufficient for making the facade. Unfortunately, little thought appears to have been given when such ambitious projects of cutting huge caves were taken up to the fact that the very softness of the rock would prove deterimental to the work in course of time. Due to the fast deterioration of the rock, most of the caves are so much ruined that often times it becomes difficult to make out even the plan of these, let alone the details. Many conservation measures like structural replacements of architectural members and sculptures done in very early times itself are seen here. Deterioration had started, it appears, almost immediately after the hewing of caves was completed.[3]

Pitalkhora is one of the earliest of the centres of rock-cut architecture. All the caves belong to the Hīnayāna period and practically no architectural activity of the later period is recognizable, even though the caves were in use during Mahāyāna times as indicated by a few paintings of Buddha seen on the pillars in the *chaitya* hall at this place.

The clearance work done in recent years by the Archaeological Survey of India has brought to light a few new caves, inscriptions and many fresh features in the previously known caves as well as a large number of sculptures.[4]

The caves are in two groups one to the right of the ravine (Group I) and another to the left (Group II), opposite the above group. (The cave numbers used here follow, with slight modifications, those given in Deshpande 1959.)

*(All the caves have been shown on Site Plan, Fig. 58)*

## *FIRST GROUP*

Group I, to the right of the ravine, is reached by a flight of steps leading down from the upper plateau.

### CAVE 1 (1a, 1b, 1c)

This cave is located very near the head of the ravine and faces west. The cave is very much ruined, and now looks like a natural cavern. But remains of some cells, beds and doorways are still extant to show that there were three seperate excavations. These are numbered here for convenience as 1a, 1b and 1c.

*1a* : This had a rectangular hall with at least three cells along the right wall and two at the back. There appears not to have been any cell along the left wall. The cells had a simple bench each.

Remnants of rectangular doorways are seen in some. Two of the cells at least had a small niche in the back wall, meant probably for keeping the belongings of the monk residing in these.

*1b* : Adjacently to the left is this *leṇa* similar in plan and features. This consisted of atleast six cells, three along the back and three along the right walls. They display in their remnant parts, simple beds, niches and doorways as in 1a.

*1c* : Adjacent to the above is this cave which too has some remnants of cells and benches, but their number or nature can not be made out.

The *leṇas* 1a, 1b and 1c probably belong to Type B ii or iii. The facades are completely broken. The architectural elements extant in these are too scanty to be of use for purposes of dating. It can only be said that these *leṇas* belong to a time when simple benches were in vogue. In the feature of providing niches in walls inside the cells, this resembles cave 2 of this place and Ajanta 12, Kondane 3 etc.

The relative positions of caves 1a, 1b and 1c show that they have been cut in such a way as to be adjuncts to each other. 1c is probably the earliest in this set. It appears this had cells on the three sides of the hall. 1b is the next in which no attempt has been made to cut cells in the left wall, *i.e.* on the wall forming the back of the right row of cells of 1c. Similar precaution has been taken in 1a where again cells are made in the back and right walls only thus avoiding any possible damage to 1b. It can be inferred from this arrangement that 1c is earlier than 1b which itself is earlier than 1a. All these, however, share common features and it is likely that the three *leṇas* are not very much removed in date from one another. They are to be placed closely in date with Ajanta and Kondane *leṇas* mentioned above.

### CAVE 2

About 12 metres further is this cave which is also much ruined. The entire wall which divided this from cave 3 is completely broken, as well as many parts of the cells. From what remains now, this can be reconstructed to have had a long narrow hall, with at least four cells along the right wall and three cells along the left. The cells had simple single benches along the back or side walls, except one in the right wall which has two. There is a long bench along the back wall with a little return along the side walls too extending up to the walls of the cells. Many cells are provided with a niche in one of the walls as in cave 1. The front is completely broken and now open, and nothing can be said of the existence of a verandah or otherwise. A flight of eleven steps leads to this cave from the open court in front which stretches in front of caves 1, 3 and 4 also.

The architectural features are too meagre for dating. The fact that this cave shares the forecourt along with caves 1, 3 and 4 may suggest a proximal date with those.

This *leṇa* varies from all others known from Deccan, in the presence of a long bench along the back wall. It is very difficult to say whether this is part of the original plan itself or was added later. It is known from this and many other caves at Pitalkhora that due to the extremely fragile nature of the rock, many parts needed repairs or reconstruction right from very early times. One such is seen in a covered drain in this cave which led water off from a leakage in cave 3. It is likely that cells existed once in the back wall also. These may have been destroyed in very early times due to the soft band of rock running here, and hence the broken parts were demolished and a simple bench was cut all along the back wall.

Another explanation that can be offered is that there could have been a time when the number of monks exceeded the room capacity in this monastic establishment. Simple provisions like this may have been made. But nothing can be said definitely with the meagre data available here.

CAVE 3 (PLS. 202, 203)

Next to 2 is this main *chetiyaghara* of the place. This is in a lamentable state of preservation due to the heavy deterioration of the soft rock, and it is seen that in very early times structural replacements had been made to the walls and a few pillars. These too have given way sufficiently. Still, enough remains to give a rough idea of the nature of the cave.

This is an apsidal, vault roofed *chetiyaghara* of Type A i a. It is (was) 9 m high 10.7 m wide and 26.2 m long and is divided into a nave and back and side aisles by a row of 37 pillars running parallel to the walls. A few of the original pillars remain complete. Of others, there are a few stumps on the ground. (Many are just masonry reconstructions, probably raised at the very place where the original pillars stood once.) The pillars are simple octagonal shafts, about 75 cm thick and 4.3 m high. All of them taper upwards and have a slight inward rake. The ceiling over the aisles is quadrantal and is cut with curved stone beams.

The pillars carry the edge of the quadrantal roof on the aisle side, and the straight wall of the triforium on the nave side. The nave has barrel vault roof rising above the triforium. It had curved wooden rafters like those at Bhaja and Karle *chaitya* halls. None of them survives now, but a line of mortises on the triforium and vertical chases above them indicate their original position. It appears the square spaces formed between the curved rafters and the horizontal reapers on the roof, had been covered with plaster and painted. A few remnants of these are still to be seen sticking to the rock roof.

The *stūpa* was near the semicircular end of the nave. It was partly structural and partly rock-cut. Of this, part of the rock-cut drum only remains now. It is about 4.2 m in diameter and the extant part is about 1.4 m high. There are five oblong sockets, four on the back side and one on the left side, on this drum. These, which had been plugged by tight fitting stones originally, have yielded crystal reliqueries. On the top of the drum is a sunken chamber (56 cm l, 38 cm b, 40 cm d) with an interior flange to receive a covering slab. It is surmised that this chamber may have contained the principal relics.[5] (Whatever be the purpose, this is a clear indication of the fact that even originally there was only a structural upper portion for this *stūpa*).

The facade is plain and open. A line of mortises (60 cm sq, 30 d) near the entrance marks the place where once a wooden screen existed. Further in front of the above, remnants of a few beams in stone which once adorned the soffit of the front arch are seen. Above the level of the arch, in a small patch, there are faint traces of what appears to be part of some decorative work, possibly of *chaitya* window and railing decoration, as seen in the Bhaja chaitya hall etc.

A flight of eleven steps leads down from the *chaitya* hall to the forecourt below. The lower five steps are broader than the upper ones. The upper stairway has enclosing side stones which slope downwards, and their inner faces are decorated with sculptures, of a winged horse and two caryatid *gaṇas*. On either end of the top step of the lower course, there is a circular hole, in which either some image or a carved newel post stood. The loweer steps are generally plain except for probably the newel posts which stood at the entrance.

The presence of tapering and raking octagonal pillars (Type A i) in the hall, the quadrantal aisle roof with curved beams in stone, and the open front show the close resemblance of this with the *chaitya* hall 10 at Ajanta (except for structural additions made here). It may be noted further that this resemblance is closer even in other details, as the greater width of the nave, the profile of the vault roof, and the absence of the ledge at the bottom of the triforium. These would indicate that the two *chaitya* halls are almost contemporary. If the facade decoration existed in this cave, this would be an advanced feature compared to the plain facade of Ajanta 10.

There are two inscriptions (Nos. 1 and 2) on the 10th and 11th pillars (from front) of the right row. One records that, that pillar was a gift of Mitadeva of the Gādhika family. The other says that it was a

gift of the sons of Saṁghaka. All these donors hailed from Pratiṣṭhāna. These inscriptions are written in characters of Series I A, which resemble closely the inscriptions in Ajanta 10. Both the palaeographical and architectural features are indicative of propinquity of Ajanta 10 and Pitalkhora 3.

CAVE 4 (PLS. 203, 204, 205, 206)

Situated next to cave 3 is this *leṇa* noted for its sculptural work and many peculiarities in architectural design. This too is now in a highly ruined state, but at the time of its making this must have been a magnificent edifice in the whole of India.

This *leṇa* consists of a large hall with seven cells along the back wall. There are some indications that 5 or 6 cells were also there along the right wall. At present, however, the row of cells in the back is intact and in front of that is a bay looking like a verandah with a line of pillars along its front line (Pl. 205). A closer examination of the surviving clues available in the form of square depressions in the floor indicates that there were at least two more rows of pillars parallel to the one standing, each row having corresponding pillasters on the side walls. All the pillars are now lost. Those that stand today are modern masonary reconstructions.

It appears a hundred years back the picture was somewhat better than what can be made out now. Fergusson and Burgess write that "the Vihara...apears to have been divided, like the Dāś Avatara (sic) and Tin Thal caves at Elura, into corridors by rows of pillars parallel to the front wall, the pillars being square above and below, with corners chamferred off in the middle, about 6′ from centre to centre, and supporting an architrave as in the Vihara at Kondane. Crossing the corridors are thin flat rafters supporting the ceiling."

From the above description and from the surviving pilasters, the form of pillars in the hall could be made out as belonging to Type C like those found in Kanha's cave at Nasik (19), Kondane 2, Bhaja 22, etc.

The cells of this *leṇa* show the faithful copying of wooden-roofed houses in their barrel vaulted-roof in contrast to the simple plain roof normally seen in western Indian caves. Their roofs are not only decorated with the curved beams and crossing rafters, but their fronts too have the *chaitya* arches in the same alignment as the barrel vault inside. These *chaitya* arches project in relief over the doorway and are further decorated with dentils marking the ends of beams and also the lattice work over half lotus in the semicircular portion within them. They are further shown as springing from octagonal pilasters in front of the doorways. The heads of these pilasters only are extant in original, whereas the lower portions are built up in masonry. All these pilasters have bell shaped capitals, surmounted by the inverted stepped pyramidal member and crowned by addorsed animals. The 'bells' of the capitals look mostly like inverted flat based cups with slightly incurved sides and widely everting rim. Just at the constricted part of the bells there are various geometrical and floral decorations in horizontal panels. The whole thing gives an idea of bundles of soft reeds, tied with one or more horizontal fillets. The top most plate of the inverted stepped pyramidal member has the *vedikā* decoration. The addorsed animals include horses, lions, elephants and bulls. Except the bulls, all others are shown with curved wings rising from their forelegs. Three of the cells have two beds inside, one along a side wall and the other along the back wall, the bench at the back rising by a few inches higher than the one on the sides. One cell has three benches, two along the two sides and one at the back, one has only one bench at the back, and one has no bench at all. All the cells have grated windows of the simple *vedikā* pattern in their front walls.[6]

The facade of this cave had been highly ornamented. At present, a few relief *chaitya* arches in a row and what appears to be the remnants of a *Yakṣi* figure can still be traced on the much destroyed rock face. It appears, the decorated area of the facade extended along the whole width of the cave and rose to a height of nearly 15 m above the roof line.

In front of this cave at a low level is a wide court, which is also shared by Cave 3. A flight of elevan steps leads from this court to the cave proper. The doorway of this entrance has fine decorative work, the jambs carved with flower designs as in the front of Nasik 18. Above the lintel was a figure of a Gajalakshmi flanked by an elephant on either side. There are also life size doorkeepers carved in relief one on either side of this doorway (Pl. 206). The doorway is towards the left end of the plinth, and at

the right end there is the sculpture of a horse with a man standing by its side, which probably depicted the story of the 'Great Departure of the Buddha.' In between, the plinth has a row of busts of elephants each shown with a '*mahout*'.[7] The cave when complete with its facade sculptures and fore court, must have been a magnificent architectural work, probably unique in the whole of contemporary India. It should have been so atleast so far as rock-cut architectural works are concerned.

This *leṇa* does not conform in plan and design to any known ones elsewhere in Deccan. This happens to be the only *leṇa* where the cells have barrel vault roof. However, to a certain extent this feature is shared by Bhaja 22 and Bedsa 11, in that these *leṇas* too have vault roofs in the hall or verandah, if not in the cells. The inclusion of pillars in the large hall is again a peculiarity, but can be explained as due to the high fidelity of contemporary rock workers in copying wooden constructions, wherein a large hall of the dimension of the present cave could not have been spanned by single wooden beams, and the roof had to be raised on pillar supports. The pillars used for this purpose here were similar to those in Kondane 2, where also the feature of introduction of pillars in the large hall is to be seen. Further, this *leṇa* shares with Kondane 2 several other common features, as the carving of wooden beams and reapers on the flat surface of the hall roof, the decoration of the upper part of the wall surface with *chaitya* arches connected with rail pattern, the irregularity of the location of *chaitya* arch above and the doorways below, the occurrence of simple benches, etc. So it would not be off the mark to suggest that these two *leṇas* are closer in date. The occurence of finely carved grated windows and the existence of Type D pilasters along with the pillars of Type C found here are to be seen again in Bhaja 22. The bell and animal capital seen here is of the same variety as the one in Bhaja 22 ('New Vihāra'). Here is a distinctly new feature different from and advanced to those seen in Kondane 2 and Nasik 19.

From these, Pitalkhora 4 can be placed stylistically to a period later than Kondane 2 and Nasik 19 and nearer to Bhaja 22.

There are five inscriptions carved on the walls of the cells in this *leṇa* and one on a pilaster on the left wall, but all appear to record the making of the gift of these by the royal physician Vachchīputa Magila, and his near relatives. It may be noted however that the characters used in these inscriptions show slightly developed features compared to those found in the *chatiya* hall and also to the inscription of Kanha at Nasik. The squarish *sa* and *ha*, and the longer medial *i* signs are to be particularly noted in this context. The characters are assignable to Series II A. There are three more detached inscriptions found during the clearence of debris in the forecourt. These too belong to the same palaeographical series.

Both the architectural and palaeographical indications suggest that this *leṇa*, or at least the cells at the back and the sculptures in the fore-court, are posterior to the *Chaitya* hall. But the two are located in such a position sharing a common front court, suggesting that they are possibly the result of a single plan. The length of time involved in finishing the work in this cave and the fore-court could be the cause for difference in palaeographical features. The fact that the whole work in cave 4 may have involved a sufficiently long time is also indicated by the form of *Chaitya* arches used for decoration. It can be seen that the arches on the top most line of the facade are simple ones with broad base-spans, whereas those cut on the front of the cells have already gained an incurved profile for the arms.

Collecting all these evidences it may be suggested that *leṇa* 4 of Pitalkhora was planned to be hewn along with the *chaitya* hall. The work started with the carving of the facade. The final form of the cave was achieved nearly after five to six decades, by which time there was change in fashion both in script and the form of the *chaitya* arch. By this time new trends too were setting in, as displayed in the occurrence of 'bell' and anlmal capitals on pilasters. It may also be noted that this pillar Type D appears suddenly in the rock-cut architecture of this area and is to be seen probably for the first time here.

## CAVE 5

This is a very much ruined *leṇa* and looks almost like a natural cavern. Traces, however, show that there were five cells on either side of a rectangular hall, and four at the back. The central two cells of the back walls had an inner cell. All the cells have a simple-bench at the back. It appears that there

was a small transverse open verandah in front which was approached by two steps. A few square holes above this indicate that structural pillars may have existed here.

It is difficult to make out the age of this cave in the absence of any definite stylistic clue.

## CAVE 5A

Adjacent to this on the left side is an apsidal room, which was partly structural. This may have housed a structural *stūpa*. In front of this is a bench to a side and two approach steps. The lower one of this is semicircular, looking like a *chandraśilā*. If the bench is any indication this may be a cave of somewhat later date, as such are normally seen in the late *leṇas* of Kanheri. But it is difficult to be certain.

A fragment of an inscription (No. 10) found on a loose rock in front of cave 5 reads *dāya aṭhisēniyā*. The letters are of Series II.

## CAVE 6

Next to 5a is this much ruined *leṇa* which consisted of a hall surrounded by cells and a small verandah. Remnants of four cells in the back, six in the left and at least five in the right walls of the hall can be traced.

Most of the cells have two simple benches, one at the back and another along the side walls. The benches in the cells at the back wall are decorated with relief panel work, on their front side, each panel being framed by a horizontal ledge at the rim and simple vertical studs below. The back wall of the back cells further have a projecting cornice supported by quadrantal brackets at either end. Over the cornice are rows of stepped merlons (Pl. 207). A small oblong niche is seen in some of the walls of cells. Each cell is approached by a step from the hall.

It is difficult to say whether the verandah, the floor of which is slightly at a lower level than the floor of the hall, was divided from the hall by a screen wall or not.

There are traces of plaster and painting in the cave.

The use of curved brackets and the frieze elsewhere as stated before suggests a date in the 2nd century B.C. Noteworthy also is the lay out of the benches which shows similarity with what is seen in Ajanta 12, 15A, Kondane 2A etc. which belong to the period around the middle of 2nd century B.C.

## CAVE 6A

This appears to consist of four seperate excavations (6A i, 6A ii, 6A iii, 6A iv). The partition walls of these caves as well as the cells are broken and the whole looks like a single excavation. Still, the differences in levels and alignments indicate that they were seperate excavations.

The first one, 6A i, is a simple cell with a small verandah (*Leṇa* Type A ii). 6A ii and A iii have two cells each behind an open verandah (*Leṇa* Type B i). 6A iv has three cells behind the open verandah (*Leṇa* Type B i). All the cells in the group have a simple bench each along a side wall. Many of the cells have a niche in their back walls.

The uniformity of the cell sizes and the adjacent location of the caves probably indicate that all these belong to the same date. It is difficult to suggest the exact age of these excavations, but these appear to stand in the same relation with cave 6, as cave 2A to cave 2 at Kondane, meant as an annexe to provide more accommodation with minimum expenditure. The provision of niches too is a feature seen there. It is likely that this is nearer in date to cave 6.

## CAVE 7

This *leṇa* of B iii b type has a plain hall with cells around it and once had a verandah in front. The cave, though ruined, is somewhat better preserved than the others. There are fifteen cells distributed along the three inner walls, each with five cells. Each cell has a step in front. The cells have plain single benches. One cell in the back wall is specially decorated with a cornice supported by quadrantal brackets and surmounted by a row of stepped merlons. The ceiling of this cell is vaulted, in which grooves for wooden ribs can also be seen. There are traces of plaster in some places.

The wall dividing the hall from the verandah is broken, as well as the front part of that.

The existence of the merlon, cornice and brackets in one cell only would probably suggest that it was meant for a monk of high status. The above features connect the cave stylistically with cave 6 in this place. The vault roof in the cell is a feature seen again in cave 4. The brackets and merlons are to be found in Bhaja 22 also. All these indicate a proximal date for these caves. The location of caves 6 and 7 a little away from the earliest excavation (*i.e.*, cave 3) may suggest a slightly later date than cave 4, which is very near that.

CAVE 7x

Next to the above is an unfinished water cistern.

CAVE 8 (8a, 8b, 8c)

This consists of three seperate cells in a row, each having a bench running along a side and the back wall.

CAVE 9

This too is a *leṇa* of Type B iii b consisting of a hall surrounded by cells on the three inner sides, and a verandah in front. There are fifteen cells, five on each side; all with a bench in them. The partition walls of the cells are broken. A notable feature of this *leṇa* is the run of a rail pattern all along the three inner walls of the hall, above the lintel level of the cells (Pl. 208). The verandah was seperated from the hall by a thin wall with a central doorway, but this is now completely broken, but for some indication in the roof. The verandah had a cell on either side. There were four pillars and two pilasters, in front but their form can not be made out.

There are traces of plaster and pain tings.

Though the form of the pillars cannot be made out now, the presence of the *vedikā* band inside the hall, its form and location reminds us of Kondivite 12 and also a small cave at Bhaja, *i.e.*, cave 10, which incidentally has a similar layout as the present cave with a pillar fronted verandah. It is likely that these caves are nearer in and hence, like Bhaja 10, this too can be placed to *c.* 100 B.C.

CAVE 9a

Adjacent to cave 9, to its left, is this cave. It consists of a deep corridor with a cell cut at the left corner in the back wall and three cells in the right wall towards front, all with a single bench each. It is likely such cells existed throughout the right and back walls, but are now completely lost. The position of this cave indicates that this was a later attempt than cave 9, meant for providing additional accommodation.

CAVE 9b

This is to the left of 9, and this too appears to be an annexe to that. In this three cells are seen placed in a row sharing a common verandah (*Leṇa* Type B i). The cells had a bench each. The cave is very much ruined.

## *Second Group*

The next group of four caves is removed from the above group. These are cut in the scarp to the left of the ravine, about a hundred m away from cave 1. All the four caves in this group are *chetiya-gharas*, probably made to commemorate some holy monks of high status. Their position in being away from the dwelling caves indicates their character, as similar to the groups of *stūpas* found in Bhaja and Kanheri.

CAVE 10 (PLS. 209 AND 211)

This is an unfinished apsidal *chetiyaghara* of an aberrant type. The apsidal hall is 5.4 m deep and 2.5 m wide and 3.8 m high. The side walls of the hall rake inwards slightly and the roof is barrel

shaped. But there is good indication to show that the cave is unfinished. A *stūpa* (Pl. 211) is placed at the apsidal end. Its *harmikā* is broken. The drum is 1.7 m diameter at the base and 2.3 m high. The sides of the drum taper upwards prominently and at the brim all round is a band of *vedikā* pattern. Above this is the dome about 83 cm high with its greatest diameter, about 1.2 m, at 1/3rd height from the base. In front of the hall is a screen wall about 1.2 m thick pierced by a roughly hewn rectangular doorway (1.7 m h, 80 cm b) and a window (about 1 m b, 1.1 m h) admitting light into the hall (Pl. 209). This window was set at the back of a large roughly hewn semi-circular arch 2.7 m wide at the base and 2.1 m high and 80 cm deep. There are traces of stone ribs cut on the soffit of this arch. In front of the screen wall is a small open court (3.6 m b, 2.4 m d).

This *chetiyaghara* presents a number of peculiarities in delineation, particularly in the absence of aisles and pillars inside. However, in view of its unfinished state, nothing can be said definitely. One element that strikes foremost, however, is the front screen in stone. In the features presented, with the rectangular doorways surmounted by an arch niche pierced by a smaller window, this is closely comparable to Manmodi 26. The absence of the verandah indicates a slightly earlier stage. The *stūpa* inside is very peculiar in its form with its steeply tapering sides, and this feature is noticed only in the later caves. The shape of the dome too is indicative of the same. A date nearer to Manmodi 26, *i.e.* in the middle of the 2nd century A.D. can be suggested for this cave.

## CAVE 11 (PL. 210)

Adjacent to cave 10 is 11.

This consists of three flat roofed chambers, each with a *stūpa*. The first *stūpa* located opposite the front doorway is much dilapidated. It had a drum with slightly inclining sides and a dome above carrying the square *harmikā*. The chamber to left (3 m l, 2.2 m d) has the *stūpa* in the centre which too is much damaged. But the umbrella carved in the ceiling above this is extant. To the back of the first chamber is another chamber (2.4 m d, 3.6 m b). The *stūpa* in the centre of this chamber is the best preserved of the group. It has a drum with slightly inclining sides adorned with a decorative rim of *vedikā* design. The dome above this is about 3/5th sphere. The *harmikā* rises in two stages, the lower one with the *vedikā* pattern and the upper with four rectangular studs in corners. This carries the capital with five square plates of successively increasing dimensions. In the roof, a circular *chhatra* is carved, but its shaft is lost. Two holes are carved on the back of the dome, and these appear to have been meant to receive the relics.

The lay out of the cave and the *stūpa* forms indicate that these were made in different times, the sequence being the front *stūpa* succeeded by the *stūpa* to left and lastly by the *stūpa* in the back chamber. The difference in time is also revealed by the form of these *stūpas*. While the later two *stūpas* have the umbrella cut in the roof, the earlier one does not have such a one. All however, display the sloping sides of the drum. These may have been made in the late 2nd and 3rd centuries A.D.

## CAVE 12 (PLS. 212 AND 213)

This is a *chaitya* hall situated a little away to the west from 11. This consists of an apsidal hall (6.6 m d, 2.3 m h, 4.6 m b) but has no pillars. The roof is barrel vaulted and is decorated with ribs crossed by rafters, all cut in stone. The ribs are shaped like inverted 'U' with slightly incurving sides, and jut out from the walls by about 17 cm. At the back, the roof is fashioned as a quarter sphere with the curved ribs meeting at a point at the top. Just below this on the floor stood a *stūpa* which is now much dilapidated. On the head of the dome, is an oblong mortise which was meant to receive the *harmikā*. In the hall was a *harmikā* lying on the floor, which must have been the one crowning this *stūpa*, but dislodged now after the disintegration of its support. This *harmikā* (Pl. 212) is a piece of fine carving made in a seperate block of stone, and consists of the *vedikā* pattern in two tiers cut on all the four faces of the square block at the bottom. Above this is a rectangular member carved on all the four sides with a simple lattice design in convex profile. On either side of these is a sculptural panel consisting of a set of male and female heads. At each of the corners of this is a bracket

supporting another square block, which has its faces carved with the *chaitya* arches with dentils on the soffit. Over this is a four stepped inverted pyramidal member. Over this rests another square member carved with *vedikā* pattern on all the four sides.

The facade of this *chetiyaghara* is broken, but appears to have had a screen wall crowned by an open *chaitya* arch. In front is a narrow verandah (about 53 cm deep) and a front court.

The plan of this *chaitya* hall is peculiar; it is apsidal but does not have the usual nave and aisle divisions. The existence of the vaulted roof with stone-cut rafters of unusual design too is noteworthy. But these features are not helpful in determining the age of the cave. However, the form of the *stūpa* reveals early features. The double tiered *vedikā* pattern of the *harmikā* and the broad span of the decorative *chaitya* arches indicate that this *stūpa* is nearer to *stūpa* No. 9 in Bhaja 19. With this indication and the clue provided by the remnants of the screen wall and verandah, it could be inferred that this *chetiyaghara* may be earlier in date than the *chaitya* halls at Bedsa and Karle. There is also some indication to the existence of some sculptures on the front wall which could have been something like the *mithunas* on the screen wall of the Karle *chaitya* hall. Though the features are not decisive in their indication, it can be suggested that this may belong to a date in the last part of the 2nd or early part of 1st century B.C.

CAVE 13 (PL. 214)

Next to 12 is this *chetiyaghara*. The apsidal hall is 8.5 m deep, 4.5 m wide and 4.5 m high. Two rows of pillars in the hall meet in a semi-circular back dividing the hall into a central nave and side aisles. The back part is slightly enlarged and the cave appears like a circular cell provided with an oblong hall in front. The pillars are ruined except for some stumps. One of them reveals that these pillars were octagonal and displayed slight rake and tapered towards the top.

The vaulted roof over the nave has stone ribs and rafters as in 12, but the nave roof which is quadrantal does not have any. The *stūpa* that stood at the apsidal end of the nave is almost ruined.

The facade is broken, but it appears that there was a screen wall with an entrance about 1.2 m wide. There is a forecourt in front of this. It is difficult to say much about the chronological stage of this *chaitya* hall, but may be suggested with the help of the octagonal pillars with rake that this is nearer to Kondane 1, Bhaja 12, etc., but the screen wall in front suggests a slightly later date. This cave may belong to a stage between the open front *chaitya* halls and the *chaitya* halls with front screen in stone. Hence, this cave too may be ascribed roughly to about the middle of 2nd century B.C.

GENERAL DISCUSSION

It can be made out from the descriptive inventory given above that there were 24 seperate excavations at Pitalkhora. These fall into the following categories.

| | | |
|---|---|---|
| *Chetiyagharas* | : | Six |
| Type A i a | | cave 3 |
| Aberrant types | | 5a, 10, 11, 12, 13 |
| *Leṇas* | : | Seventeen |
| Type A (i or ii) | | caves 8a, 8b, 8c |
| Type A ii | | 6 A i |
| Type B i | | Caves 6 A ii, 6 A iii, 6 A iv 9b |
| Type B (ii or iii) | | 1a, 1b, (1c), 2, 4 |
| Type B iii a | | 9 a |
| Type B iii b | | (5), 7, 9 |
| Cistern | : | One (excavation 7 x) |

The analysis of various architectural elements and palaeographical data available in caves, as discussed above, leads to the following relative chronological position of the caves.

| *Group I* | *Group II* |
|---|---|
| 3, 4 (beginning) | |
| 4 (completion), 6, 6A, 7, (8) | 13 |
| 9 | 12 |
| | 10 |
| 5A ? | 11 |

*Chetiyaghara* 3 appears to be the earliest of the whole group and was done around the beginning of the 2nd century B.C. Quite regular to the fashion of the age, this *chaitya* hall is of the open (wooden screen) front type and displays the use of octagonal pillars with rake. Though this happens to be one of the biggest *chetiyagharas* of the region, rather too big to consider this as marking the beginnings of activity in the region, it is strange that at this place not a single *leṇa* which could be placed to a period earlier than this *chaitya* hall is to be noticed. However, *Leṇa* 4 was also planned along with this; its facade was fashioned with a series of *chaitya* windows of the broad base-span variety which was then in fashion. But the *leṇa* proper was to be completed much later. A peculiarity noticeable in the relative position of the *Chetiyaghara* 3 and *Leṇa* 4 provides the initial clue for this. In most of the instances where a *chetiyaghara-leṇa* set is planned, the *leṇa* is normally cut by the side of the *chetiyaghara* at the level of the upper arch. Examples of such a practice are known in Ajanta 10-13, Bhaja 12-11 and Kondane 1-2 of the early period, and Junnar—Manmodi 40-45 and Junnar—Ganesh Pahar 6-7 of somewhat later times. But here, the floors of both the *chetiyaghara* and the *leṇa* are almost in the same level. It can be seen that the uppermost line of decorative *chaitya* arches on the facade of *Leṇa* 4 is at a level nearly 12 m higher up the level of ceiling. Nowhere else in Western Indian caves such a high facade is seen. Probably it could not have been the intention of the architects to carve a 15 m high entablature for a cave which is just about 4.5 m high. It is likely that here too the cave was originally intended to be hewn at a higher level. The reason for the deviation from the original arrangement can be sought in the *chetiyaghara*. There is a layer of soft rock running in *Chetiyaghara* 3 (and extending on the otherside in caves 2 and 1 also). On noticing this defective layer there, which is not only fragile but also lends to water leakage, the excavators may have tried to avoid its run in *leṇa* 4 which was yet to be hewn by lowering its position. This may indicate that Cave 4 proper was cut at a slightly later date than the *chetiyaghara*. This contention is also substantiated by the stylistic difference between the decorative *chaitya* arches on the facade and those on the cells inside the hall. The distance in time between the two stages is probably suggested by the use of pillars with bell and animal capitals seen in Cave 4. These are stylistically nearer, but slightly earlier, to such a capital seen in Bhaja 22 (annexe). We have ascribed Bhaja 22 (annexe) to about 140 B.C. and hence Cave 4 (interior) may be placed to about 160 B.C.

But in the meanwhile repairs had to be done to conserve Cave 3 from the effects of water leakage in the roof and a drain was cut through to a side to lead the seeping water to a channel which incidentally passes through Cave 2. So the digging of Cave 2 may have been done partly to facilitate the conservation measure for Cave 3, and when once a certain area was dug that may have been further enlarged and cells were cut to provide accommodation to the monks. It was also a necessity as Cave 4 was yet to be commenced.

Reverting to the observations on Cave 4, it may be noticed that the position and the way of carving of the staircase leading from the forecourt to the hall are peculiar. While in caves 2 and 3 the staircase is cut regularly in the centre, here in cave 4 it is placed at a side, cutting through part of the hall. This peculiarity suggests that the forecourt in front of these caves is an afterthought, that followed the making of the whole cave. With the addition of the forecourt and high basement sculptures Cave 4 gained a better look. The abnormal height of the facade decoration above the mouth of the cave was well balanced below by the addition of the high basement. It is likely that this forecourt originally meant for Cave 4 was extended to cover the front area of the other then existing caves (Caves 1-3). This contention, if correct, provides a date for the much ruined Cave 1 also.

Further activities of hewing caves were done probably in the same order as they stand now (except possibly cave 5 A). It has been shown that 6 and 7 are nearer in date to the later stage of 4. This was probably followed by caves 8a, b, c and caves 9, 9a and 9b. We have conjectured above that Cave 3, the first one to be hewn in Pitalkhora, belongs to a time around 200 B.C., the last one *i.e.* 9, was done somewhere around 100 B.C. Thus the chronology of architectural activity in the 1st group may be roughly arranged as follows :

| | |
|---|---|
| *C.* 200 B.C. | *Chetiyaghara* 3, and upper part of facade decoration of *leṇa* 4 |
| | *leṇa* 2 |
| | (*leṇa* 1) |
| *C.* 160 B.C. | *leṇa* 4 (interior) |
| | forecourt of caves 1-4 |
| | (*leṇa* 5) |
| | *leṇas* 6, 7 |
| | (*leṇas* 6 A i-iv) |
| | (*leṇa* 8) |
| *C.* 100 B.C. | *leṇa* 9 |
| | *leṇa* 9a |
| | *leṇa* 9b |

All the caves in the second group are, in a way, aberrant varieties of *chetiyagharas* and their chronological positions have been mentioned already. The result therefrom may be re-stated as follows :

| | |
|---|---|
| *C.* 150 B.C. | *Chetiyaghara* 13 |
| *C.* 100 B.C. | ,, 12 |
| *C.* A.D. 120 | ,, 10 |
| 2nd-3rd century A.D. | cave 11 |

Pitalkhora appears to have enjoyed greater patronage and popularity compared to many other sites in the region. Between Pitalkhora and Ajanta, the two sites which connected the Deccan plateau and the Tapti plain and cities in northern India, Pitalkhora is the bigger monastic establishment consisting of 24 independent excavations compared to only six monuments of the period at Ajanta. While Ajanta had a capacity to accommodate about 50 monks at a time, the Pitalkhora monastery could have housed more than 120 monks.[8] The architectural activity at Ajanta, however, started slightly earlier than at Pitalkhora, but the later tempo of activity at this site was certainly more vigorous and continuous.

Pitalkhora's popularity may have been due to two factors. It is likely that this site was located along a busier trade-route than the one passing near Ajanta. Unlike Ajanta, Pitalkhora appears to have developed a pontifical seat too, as can be inferred from the existence of a group of *stūpas*.[9]

So far as architectural development is concerned, Pitalkhora appears to have played a progressive role as an innovator. In fact comparative chronological positions of the various rock-cut *chaitya* halls in Western India indicate that it is probably at Pitalkhora that a first attempt to adorn the facade with sculptural decoration was made, though unfortunately, not much have remained there now. It is also here that the earliest attempt to introduce the bell and animal capital pillars is to be seen. The sculptural decoration seen on the basement of *leṇa* 4 and also the wealth of loose sculptures found in the forecourt indicate the progressive achievements of this centre. It is probably due to this spirit of experiment and innovation that the *chetiyagharas* 10, 11, 12 and 13 are to be ascribed. Each one of that forms a variety by itself. The way in which the economic resources have been utilized to achieve utmost advantage at this site is really remarkable. By hewing just 17 *leṇas* accommodation for more than 120 monks has been provided.

Pitalkhora happens to be the only monastic unit with provision for such a huge number of monks. The economic strength of the monastery may have been due to the flourishing trade that was carried on through this route. But why there was sudden end of architectural activity by the beginning of 1st century B.C. cannot be explained convincingly at present.

# SHELARWADI

This group of caves is on the Garodi hill about 3 km south-west of Talegaon, a railway station on the Pune-Bombay line. Shelarwadi was probably located near the trade route from Kalyan to Ter passing *via* the Bhorghat along Kondane and Bhaja-Karle. No ancient town that supported the monks that lived here has so far been discovered nearby.

The monastery here consisted of about 11 caves in two groups, cut on the hill, at a height of about 60 m above the plain. One group with just 2 or 3 cells overlooks the Indrayani valley on the north-west and the other with 8 caves faces the valley of the Pavna to the south-west. It is, however, difficult to explain the simplicity of the caves and their meagreness in number, despite the ideal location in which they are amidst the fertile valleys of the two rivers, and possibly along a major trade route of the day.

Caves 1-8 are in the group facing south west.

## CAVE 1 (FIG. 59)

This is an irregular single cell cut behind a forecourt. Its front is broken. There is no bench in the cell.

## EXCAVATION 2

A large partly open broken cistern.

## CAVE 3 (FIG. 59; PL. 217)

This is a well-preserved *leṇa* consisting of an oblong hall with four cells opening into it from the back wall.

The hall (9.4 m w, 2.1 m d, 2.7 m h) has a low bench about 33 cm wide running along the three interior walls. The cells are roughly square (about 2.1 m; 2.6 m h) and have plain rectangular doorways (about 75 to 85 cm w, 1.6 to 1.7 m h). None of the cells has any bench. The doorways have cut lintel and threshold ends for fixing the wooden door.

On the back wall of the hall between each pair of doors are two engaged pillars of Type D iii. These have octagonal shaft with the base consisting of the stepped pyramid and globular pot and the capital with the inverted bell marked with ridges and surmounted by elephants, lions or tigers standing on an inverted square pyramidal member. These pillars rise above the bench, and carry a frieze of railing decoration above. The rock roof above the front walls projects to about 2 m, but this has no decoration. The front door is approached by a flight of seven steps.

The cave is slightly peculiar in plan. Even though this has the hall with a bench along three inner sides as in the caves in Nasik, there is no verandah. The decoration on the front wall of the cells is unique. The pillars resemble those in the Karle *chaitya* hall in their essential components but not in proportion or fineness in execution. The location of these engaged pillars too is peculiar, as well as the position of the *vedika* decoration. These peculiarities may be due to an attempt to copy the elements of an earlier monument at a time when the tradition was no more in vogue and the normal locations, forms and purpose of different elements used in such an architectural scheme had already been forgotton. Th Shelarwadi architects appear to have attempted to copy items from the beautiful *chaitya* hall at Karle, a place just about 20 km away. The cave may belong to a later date, probably somewhere in the late 3rd or early 4th century A.D. The absence of benches in the cells is a further indication to this.

## EXCAVATION 4

A small ruined cistern.

## EXCAVATION 5 (FIG. 59)

This is a peculiar excavation with steps leading down from a doorway through a gallery to a rectangular hall. This appears to be a water-cistern.

CAVE 6 (FIG. 59)

This is a single-celled *leṇa* with a verandah. The verandah had four upright posts, of probably wood, but only sockets in the rock above are visible. There is a recess-bench to the right end. The cell is cut in the back wall does not have any bench. Much of the facade is broken.

EXCAVATION 7

An open water cistern.

CAVE 8 (FIG. 59)

This cave is a *chetiyaghara-cum-leṇa*, with cells around a hall and a shrine at the back. The facade is completely gone. Now the front part of the cave is much altered with several structural additions, but originally the cave appears to have had a large hall with four cells in the right wall and three in the left. In the left wall, opposite the frontmost cell to right, the hall had been enlarged to accommodate two more cells. In the back wall are two cells, one on either side of the central shrine. The shrine is very large compared to the size of the cells. At its back end was a *stūpa*. Now it is completely gone, but the profile of its base remains on the floor and the remnants of the stepped square pyramidal member of the *stūpa* are still seen attached to the roof.

This *chetiyaghara* is similar to Mahad 8 in plan. However, the absence of stone beds in the cells here is a noteworthy feature. The delineation of the *stūpa* without the umbrella but with its stepped pyramidal member reaching the roof is a feature seen elsewhere in Kuḍa 1, 15, Mahad 21, etc.

There are two inscriptions (Nos. 1 and 2) in this cave. One refers to the making of the *leṇa* and the other to the *chetiyaghara*. But both belong to the same age and to series VII (Pl. 216).

The stylistic similarity with Mahad 8, Kuḍa 15, etc., and the palaeographical evidence suggest that this cave is to be assigned to the latter part of 3rd century A.D.

About 70 metres further are three excavations facing northwest.

EXCAVATION 9

A rectangular cistern with open square mouth.

CAVE 10 (FIG. 59)

This is a *leṇa* of Type B i, with two cells opening into a common verandah. On either of the side walls of the verandah is a bench-in-recess. The front is open and much damaged. The cells do not have benches.

CAVE 11 (FIG. 59)

A *leṇa* of Type A iv b with a verandah, hall, cell and recess. The verandah has bench-recesses on either of the side walls as in 10. The front is open. In the back wall is a hall with a bench at the back. In the right wall of this is a cell without bench and a narrow recess provided with a bench-in-recess.

These simple excavations at Shelarwadi show that this is a small monastic establishment with a *chetiyaghara-cum-leṇa* and five *leṇas* and 4 water cisterns. Among the *leṇas* two are probably of A ii type, one is of Type A iv b and two are of Type B i (one aberrant). The monastic establishment had a capacity to accommodate about 18 to 20 monks.

Caves 3 and 8, *i.e.* the *leṇa* and *chetiyaghara-cum-leṇa* are the only important ones in the group. Based on stylistic grounds and the palaeographical evidence both these are assignable to the latter part of the 3rd century A.D. The others too may have been made about ths time.

It appears that architectural activity at Shelarwadi was confined to a very short span of time, say 25 to 30 years around A.D. 300.

A peculiarity of the caves of the group is the absence of stone beds. This feature of cells without benches appears to be an architectural practice which was followed in the Mahāyāna *leṇas* as in Ajanta, Ellora, etc. This as well as the inclusion of the sanctum within the dwelling *leṇe*, marks the transitional stage from the Hīnayāna to Mahāyāna architectural tradition.

## NOTES AND REFERENCES

*[In this section seperate series of numbers have been used for each site. The sites are arranged in alphabetical order]*

### AJANTA

1. Burgess 1883a, p. 44.
2. These pilasters and brackets had been damaged much, as seen from the illustrations published in the last century. Now the Archaeological Survey of India has reconstructed them faithfully to the originals.
3. There are some Buddha figures and *stūpas* adorning the facade. These belong to Mahāyāna times.
4. The type of *chaitya* arch with upturned paws is a very late feature. It is not unlikely that some refashioning of the arch was done during Mahāyāna times when the *stūpas* were carved just by the side of the paws. However, the stylistic difference between the broad spanned decorative arches and the incurved shape of the main arch is noteworthy. It is possible that there could have been a slight gap in time between the making of the facade and the carving of the main arch (and the interior), the latter being obviously later.

   The relative chronological position of this *chetiyaghara* with reference to various other has been discussed further on pp. 104, 110, 153, etc.
5. *Pavāḍa* has been interpreted as canopy, on the basis of the context of its use in three inscriptions.
6. In the Bhaja *chaitya* hall, the curved ribs extend down to the base of the triforium.
7. The floor is now completely relaid with cement and hence no indication is available to note the mortises on the floor, which could have given indication of the existence of the vertical wooden posts.
8. Burgess 1883a, p. 45.
9. This brick wall in front referred to above could have been laid there to give the impression of the brick base of the elliptical structures.
10. Sarkar 1966, p. 18, Figs. 3, 4 and 5.
11. An interesting fact comes out by the comparison of length : breadth proportion of this with those of some other elliptical monuments as can be seen from the following :

| | Length : Breadth |
|---|---|
| Jetavana Vihāra | 7 : 4 |
| Ghoṣitārāma | 5 : 2 |
| Nāgarjuni cave | 5 : 2 |
| Ajanta 10 | 5 : 2 |

   Except Jetavana Vihāra where the proportion is 7 : 4 and which also happens to be a very early structure, the next two assignable to the 3rd century B.C. have length : breadth proportion at 5 : 2. Ajanta 10 too is in the tradition of the latter two.
12. Dhavalikar 1968, p. 148.
13. There is one more inscription (No. 4) which too belongs to this period. But it is painted on the plastered surface containing ancient paintings, and is assignable to a much later date than the making of the cave. Palaeographically the characters are of Series III. The relative chronological position of this *chaitya* hall with others has been discussed on pp. 104, 118, 119, 233, etc.
14. The provision of a good arrangement for setting the cell doors and bolting them is probably another indication to show that there may not have been any screen and the hall appears to have been open in front. The monks residing in the cells, however, could close the cell doors and bolt them.
15. It is not unlikely that these caves served as temporary shelters for lay travellers too. The niches may have been meant for such people to keep their belongings.

16. '*Upasatha*' is the reading suggested by Burgess, Only '*Upa*' is clearly visible. The word, whatever its complete form be, could refer to the hall only, as the cells have been mentioned separately as '*Ovarako*'. It may be pointed out, however, that the word *upasatha* does not bear any meaning. Rather the word could be *upāsaya* (*upāśraya*, house or cell in which monks or nuns live) or *upaṭhāna* (a place of assembly).
17. *Leṇa* 8, 7 cells and 7 beds; *leṇa* 12, 12 cells and 24 beds; *leṇa* 13, 7 cells and 13 beds; *leṇa* 15A, 3 cells and 7 beds. It is interesting to note that all these *leṇas* have a cell in which the stone beds have been arranged in a different way than the others. These appear to have been used for a different purpose, probably for keeping the utensils, etc. These may be, to use the term for such seen in the *Vinaya* texts, *Kappiyakuṭis*. If we omit these the total number of stone beds in all the *leṇas* together will be 44 only.
18. We feel that this is a more plausible explanation than that of sectarian differences. It can be seen that Ajanta 10 is of such huge a dimension as to be capable of accommodating about eighty worshippers at a time. When it was made the only *leṇa* that may have existed, viz. cave 13, could have housed only 14 monks. As it has been pointed out elsewhere, in that early period the worship of the *stūpa* was not an essential item in the monastic code. So the *chetiyaghara* 10 itself could have been made more for the use of the laymen than for the monks (see pp. 32, 37). The same cause may have been responsible for the making of *chetiyaghara* 9 also.

## AMBIVALE

1. Information from Sri M.N. Deshpande.
2. Fergusson and Burgess 1880, Pl. III; Burgess 1883a, PL. XXXVI.
3. The idea of a break in the Western Indian rock-cut architectural activity for a period of two to three centuries persists widely (*e.g.* Brown 1956, p. 24, 68; Dehejia 1972, p. 9). But we are at a loss to understand how a well-spread tradition could die out suddenly and, even be it so, how it could be revived with all its maturity after a long lapse of time. The problem of technical know-how and craftsmanship is to be specially considered in this context.

## BEDSA

1. The roof is completely broken. However, indications remain to show that it was flat.
2. Westergaard, in 1844, described the *Chaitya* hall as 'ribbed', and another, in 1861, found fragments of timber lying on the floor (Fergusson and Burgess 1880, p. 230). All the wood work on the roof has vanished now.
3. This appears to be a piece of later work, as it has ruined the symmetry in design. There is no corresponding doorway on the other side, but there is an excellently carved pierced window. A similar one might have existed here also, but when utility overrided aesthetic sense, it was cut to form this doorway.
4. Detailed description of the sculptures is available in BG XVIII (iii), p. 106.
5. Regrettably there is a slight error with regard to the thickness of pillars in the plan (FIG. 21).
6. Among the various contemporary units of measurements the Indian unit of *hasta* measured about 23 cm (9''), the Attic foot was 33 cm (13''), and the Greek foot about 25.6cm (10.8''). The various dimensions of the Bedsa *Chaitya* hall appear to give some meaningful proportions in whole numbers if the unit of measurment used is considered to be the Greek foot. In this connection it may be noted that Coomaraswamy (1965, p. 12) has remarked that the *stūpa* here is similar in general design to a tomb in North Syria. It is likely that when so many *Yavanas* were present in this part of the country patronizing the Buddhist creed and causing rock-cut monuments, a few craftsmen of Greek origin or training may have been commissioned for this work.
7. See. pp. 119, 147, 225, 273 etc.
8. The irregular chamfering seen here reveals that work to be the result of afterthought.
9. The neatness of execution in this cave too is remarkable.
10. I am thankful to Sri M.N. Deshpande for hinting at this possibility.
11. The Bedsa caves appear to have been in use even in Mahāyāna times. Fergusson and Burgess (1880, p. 230) record the existence of a few paintings of Buddha figures of the Mahāyāna period, on the pillars of the *chaitya* hall.
12. Also see pp. 129, 230-231.

## BHAJA

1. The numbers adopted for caves by Fergusson and Burgess (1880) and those now used by the Archaeological Survey of India (ASI) differ. A fresh examination of the caves revealed that in both cases some caves have not been given any number and sometimes two different (but neighbouring) caves have been allotted one number only or different parts of one cave have been given two uumbers. So, a different system of numbering had to be adopted in this work. The

concordance of cave numbers is as follows :

| *Present Nos.* | *Fergusson and Burgess 1880* | *ASI.* | *Present Nos.* | *Fergusson and Burgess 1880* | *ASI.* |
|---|---|---|---|---|---|
| 1 | 1 | — | 16 | 16 | 14 |
| 2 | 2 | 1 | 16a | — | — |
| 3 | 3 | 2 | 16b | — | — |
| 4 | 4 | — | 17 | — | — |
| 5 | 5 | 3 | 17a | — | — |
| 6 | 6 | 4 | 18 | 17 | 16 |
| 7 | 7? | 5 | 19 | — | — |
| 8 | 11? | 6 | 20 | dagoba group | 17 |
| 9 | 8 | 9-10 | 21 | — | 18 |
| 10 | 9 | 8 | 22 | New Vihara | 19-20 |
| 11 | 10 | 7 | — | — | 21? |
| 12 | 12 | 11 | 23 | — | 22 |
| 13 | 13 | 12 | 24 | — | — |
| 14 | 14 | 13 | 25 | — | — |
| 15 | 15 | 15 | 26 | — | — |

2. The rock-cut monuments actually start from cave 2. Cave 1 is described by Fergusson and Burgess (1880, p. 223) as a natural cavern slightly enlarged and about 30′ (10 m) long. But no enlargement of the cave can be recognised there now. It looks to be just a natural cavern. There are many others of this type a little beyond this.
3. It appears there were four pillars in front of the verandah.
4. The late date is indicated by the use of pillars of Type D. It is difficult to make out to what exact sub-variety of D Type these pillars belong. The animal sculptures, particularly the winged horse, remind us of the sculptures on the capitals of the pilasters in Pitalkhora 4. The pilasters there are probably the earliest varieties with animal capitals. Hence this cave may not be very far from Pitalkhora 4. The cave may be dated purely on stylistic grounds to a stage between Pitalkhora 4 and Bedsa 7. It is further noteworthy that in the whole series of Western Indian caves this is perhaps the only instance where a cave in which Type D pillars have been used contains *vedikā* decoration in the inner hall also.
5. Even in this cave, the care bestowed to arrange fixing of doors of cells may indicate the absence of the front door and verandah. Like cave 6 of this place, this too may have been a *leṇa* of B ii type with open front. There was a cistern of Type A i to the left of this, with its mouth at the level of the floor of this cave itself. But it appears in later times the storage space of this cistern was enlarged and converted to serve as a cell in cave 8 below.
6. Fergusson and Burgess 1880, Pl. I and Fig. 10.
7. *Ibid.*, p. 224.
8. P. 191, etc.
9. The relative chronology of Bhaja 12 and Kondane 1 has been discussed below on p. 233 ff.
10. 1880, p. 513.
11. Burgess records that the wall is so ratted that part of it fell soon after excavation, but it has been repaired and a stone and lime one built to preserve it. Now, the Archaeological Survey of India has reconstructed a major part of this wall in cement concrete.
12. Detailed description of this and other sculptures in this cave is available in Fergusson and Burgess 1880, p. 513 ; Burgess 1883a, p. 4 ; Coomaraswamy 1965, p. 223, 249 ; Dehejia 1972, p. 114 ; Johnston 1939, p. 1 ; Gyani 1951, p. 15.
13. This and the next excavation were full of debris and hence have been simply mentioned without description by Fergusson and Burgess (1880, p. 228). These were cleared later but described as new discoveries (IAR 1955-56, p. 7).
14. Can this suggest the quantum of excavation work that could have been done in the course of about 6 to 8 months, between the end of one rainy season and the commencement of the next ?
15. This number of resident monks is based on the number of beds in *leṇas* 6, 7, 11, 13, 15, 16 and 18.
16. See note 12.
17. The existence of a cell without any stone bench in *leṇas* generally containing stone benches is a feature noticed in a good number of caves at Bhaja and elsewhere. The present explanation that such cells could have been used as store rooms is only a surmise. However, early Buddhist literature provides evidence to the existence of such rooms named *kappiyakuṭi*.
18. Stūpas 13 and 14 in the *stūpa* group in Excavation 20 having the umbrellas too cut in stone clearly indicate this.
19. The practice of encouraging such sub-units is common in Hindu monasteries of later date.
20. See pp. 112-13, 230-31.
21. I am thankful to Sri M.N. Deshpande for suggesting me to inquire into this possibility.

## JIVADAN-VIRAR

1. In a recent visit to the place, it was observed that caves 1-2, and 7 have been completely painted and are being used as residence by the priests of the Jivadānimātā Temple. The other caves of this group have been white-washed and the open area in front of these has been covered with cement flooring and a cement-concrete roof has been raised above.
2. The rain fall in the Konkan coast is about 500 cm during the rainy season. At this time water is available in plenty in several streamlets.
3. It is strange that there are only a few simple caves, all of early date only, near such a flourishing city as Sopara. It is likely that the distance of about 5 km from the city to this hill the (nearest to that place) and a climb of about 100 m up the hill may not have been considered arduous by the monks who still followed a rigourous eremetic life. They could have made their way to the city once a day for begging food. But in later times when the monastic practices became easy and when it was the practice of the laity to provide many facilities and comforts to the monks, these may have preferred to have their monasteries near the city itself. Literary and epigraphical evidences for the construction of several *vihāras* at Sopara in subsequent centuries are available. These may be structural ones.

## JUNNAR

*Tuljaleṇa*

1. This number includes the minor ones too.
2. IAR 1957-58, p. 67.
3. Fergusson and Burgess 1880, p. 248.
4. ASWI, Annual Report, 1908, p. 42.
5. This identification deserves consideration. It may be mentioned that there is also an inscription at Junnar (No. 3) referring to Nahapāṇa. It is a donatory record of one of his ministers.
6. Fergusson and Burgess, 1880, p. 249.
7. The name of the hill is derived from the name of the goddess Tulajā-Bhavāni, whose image is carved in later times in cave 4.
8. The numbers given for the caves in earlier publications and recently by the Archaeological Survey of India differ. There is also some inconsistency in the numbers used. The caves have been numbered afresh here to facilitate easy description. The concordance of the various numbers given for caves is as follows :

| Present Nos. | Burgess 1883a | BG | ASI | Present Nos. | Burgess 1883a | BG | ASI |
|---|---|---|---|---|---|---|---|
| 1 | — | — | 1 | 10 | — | 6 | 7 |
| 1x | — | — | — | 11 | — | | 8 |
| 2 | 2 | 1 | 2 | 12 | — | 7 | |
| 3 | 3 | 2 | 3 | 13 | — | 8 | 9 |
| 4 | — | 4 | | 14 | — | | 10 |
| 5 | — | | 4 | 15 | — | 9 | 11 |
| 6 | — | | | 16 | — | | 12 |
| 7 | — | 5 | | 17 | — | 10 | 13 |
| 8 | — | | 5 | 17a | — | — | — |
| 9 | — | | 6 | 17b-f | — | — | — |
| | | | | 18 | — | 11 | — |

9. A structural bench of brick is seen at the place of the original bench of the left cell, and above the bench of the right cell an image of Tulajā-Bhavāni is now cut. The whole cave has been altered suitably for the new use for which it has been adopted, by inserting some wooden fixtures. The floor has been made to slope outwards, with grooves, to let the water (used in the bathing ceremony of the goddess) flow out.
10. At the time of Bhagavanlal Indraji's visit (*c.* 1885, as recorded in BG XVIII (iii) p. 203) a stretch of railing pattern still existed at the base of the decorative frieze. Above this 'lattice work' there was 'a small pentagonal symbol'. These are not extant now.
11. It appears that the Tuljalena group of caves was still in use in Mahāyāna times. Traces of paintings of that period are seen on the pillars of *chetiyaghara* 3. A description of these is available in Mishra 1960, p. 189.

*Manmodi*

12. *Mānamukuḍa sela*, Junnar inscription No. 10.
13. Junnar inscription No. 5.
14. Now a days the local guides sometimes refer to this group as Buddhaleṇa. The last cave of this group towards west is very near the Pune-Junnar road.
15. The system of numbering the caves by previous workers varies. While Fergusson and Burgess (1883) do not mention numbers, Burgess (1883a) gives numbers to the caves from the last of the third group backwards to the first of the first group, *i.e.* starting from the western most cave of the Bhutling group he ends with the south-easternmost cave of the

Bhimashankar group. Bhagavanlal Indraji (BG) has adopted the reverse order. Recently the Archaeological Survey of India has allotted numbers to the caves in the same order as that of Indraji, but the numbering of the individual caves differs. In the present account the Archaeological Survey numbers have been retained mostly. The concordance of various numbers relating to the caves on the Manmodi hill is as follows :

| Present Nos. | ASI | BG | Burgess 1883a |
|---|---|---|---|
| **Bhimashankar group :** | | | |
| 0 | — | — | — |
| 1 | 1 | 1 | 32 |
| 2 | 2 | 2 | 31 |
| 3 | 3 | 3 | 30 |
| 3a, b, c, d | — | — | — |
| 4 | 4 | 4 | 29 |
| 5 | 5 | 5 | 28 |
| 6 | 6 | — | 27 |
| 6a | | | |
| 7 | 7 | 6 | 26 |
| 8 | 8 | 7 | 25 |
| 9 | 9-15 | 8 | 24 |
| 10 | | — | — |
| 11 | | — | — |
| 12 | | — | — |
| 13 | | — | — |
| 14 | | — | — |
| 14a | | — | — |
| 15 | — | — | — |
| 16 | 16 | 9 | 23 |
| 17 | 17 (?) | 10 | — |
| **Ambika group :** | | | |
| 18 | 18 | 11 | — |
| 19 | 19 | 12 | — |
| 20 | 20 | 13 | — |
| 21 | 21 | 14 | 21 |
| 22 | 22 | 22 | |
| 23 | 23 | 17 | 20 |
| 23a | | 18 | (lower storey) |
| 23b | | | |
| 24 | 24 | 19 | |
| 25 | 25 | 20 | 19 |
| 25a | — | — | — |
| 25b | — | — | — |
| 26 | 26 | 21 | 18 |
| 27 | 27 | 22 | 16 |
| 28 | 28 | 23 | 15 |
| 28a | — | — | — |
| 29 | 29 | — | — |

| *Present Nos.* | *ASI* | *BG* | *Burgess 1883a* |
|---|---|---|---|
| 30x | — | — | — |
| 30 | 30 | 16 | 20 (upper storey) |
| 31 | 31 | 25 | 11 |
| 32 | 32-33 | 27-28 | 14 |
| 33 | 34 | 26 | 13 |
| 34a & b | — | | 17 |
| **Bhutling group :** | | | |
| 35p | — | (29) | — |
| 35q | — | | — |
| 35r | — | | — |
| 35 | 35 | 30 | — |
| 36 | | | |
| 36a | 36 | (30) | 10 |
| 36b | | | |
| 37 | 37 | 31 (?) | 9 |
| 38 | 38 | 32 | 5 |
| 39 | 39 | 33 | 4 |
| 40 | 40 | 38 | 2 |
| 40a | — | — | — |
| 40b | — | — | — |
| 41 | — | 29 | — |
| 42a | — | (29) | — |
| 42b | — | | — |
| 42c | — | | — |
| 42d | — | | — |
| 42e | — | — | — |
| 42f | — | — | — |
| 44 | 44 | 35 | 6 |
| 45 | 45-46 | 36 | 3 |
| 46 | 47 | 37 | — |
| 47 | — | 39 | — |
| 48 | — | 40 | 1 |
| 49 | — | | |
| 50 | — | 41 | — |
| 51 | — | 42 | — |
| 52 | — | 43 | — |
| 53 | — | 44 | — |
| 54 | — | 45 | — |
| 55 | — | (41) | — |

16. Traces of plaster and painting are still seen on the ceiling of the verandah.
17. The pillar type here is peculiar. The only analogue of this is seen inside the *chaitya* hall 3 at Kanheri.
18. *Chetiyaghara-leṇa-maṭapa* complexes might belong to a time when the monastic codes allowed an easier way of life for monks, and food, shelter and clothing were provided in the monasteries themselves.
19. Junnar inscription No. 17. This is a newly discovered inscription.
20. The upper parts of the two central pillars are modern restorations. In these the stepped pyramidal dosserets have been left out. But the original shape can be made out from the engaged pillars.
21. An interesting item is the nature of the unfinished pillars. The tops of the pillars have been finished completely providing the form of the capitals of Type D vi'; the part intended for the shaft is just fashioned round, ultimately to make it an octagon by chamferring at the correct angles. The lower part is a square mass. This mass, however, is equal in size to the biggest member of the inverted pyramid on top. This shows that first they cut the rock mass to the size of the biggest member of the pillars and then the details were wrought starting from the top.
22. The cell with recess here may have served the same purpose as the benchless cell in the Bhaja *leṇas* (i.e. *Kappiyakuṭi*, see Bhaja note 17).
23. While the architectural features clearly indicate the relative chronological position of this *chetiyaghara* as later than the open front *chettyagharas* like Bhaja 12, Kondane 1 and Pitalkhore 3 and as earlier than *chetiyagharas* with front verandah like Bedsa 7, the form of the *stūpa* in the interior of this cave does not fit into this scheme stylistically. The *stūpa* is of a very simple type consisting of the drum and the dome only (Type A i). But the fact whether it was acctually intended

to be so originally can not be made out in view of its unfinished stage. It may be noted that at the level just above the head of the *stūpa* dome softer rock bands run. This may be the reason for the shape of the *stūpa*, as it was impossible to carve the *harmikā* and the capital in that rock.

Fergusson and Burgess (1880, p. 258) have recognised the importance of this monument in the history of Western Indian architecture. They considered that here is a piece of excellent workmanship where the sculptor has introduced a number of new ideas and themes, and hence this represents the daring effort of the sculptor-architects to free themselves from the trammels of wooden art. They also contend a stylistic similarity of the sculptures here with those from Bharhut. A contrary opinion is held by Dehejia (1972, p. 127).

24. See p. 251. The floor of the 4th cell has caved in to cave 44 below. This is accidental.
25. The walls between 2nd, 3rd and 4th cells are partly broken and some later attempts to break the other walls to make the whole into a hall is also visible.
26. The presence of sockets on the head of the dome of the unfinished *stūpa* and the existence of mortises high up on the jambs of the doorway suggest possibly that this *chetiyaghara* could have been in use at sometime or the other despite its unfinished state. But nothing can be said definitely about this.
27. About 17 excavations are unfinished. These unfinished excavations too are of interest as they display well the methods of work adopted by stone cutters. The way in which the front and upper parts were carved first, including the facade decoration, is seen well from caves 25, 40 etc. There is one instance where the inscription too is carved before finishing the whole cave (cave 29). Caves 26, 29 and 40 show that the interior was gradually extended in all directions starting from the centre. Even in the interior, when the height is more, needing scaffold, the top was carved first and the cutting proceded downwards later. Items like *stūpas* and pillars were roughly shaped first and finer carving was undertaken later.

*Ganesh Pahar*

27a. The numbers currently used by the Archaeological Survey of India have been adopted here mostly. The concordance of cave numbers used in the present work and other earlier publications and the ASI is as follows :

| *Present Nos.* | *ASI* | *BG* | *Burgess 1883a* | *Present Nos.* | *ASI* | *BG* | *Burgess 1883a* |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 1 | 1 | 21 | 21 | 18 | 22 |
| 2 | 2 | 2 | 2 | 22 | 22 | 19 | 23 |
| 2a | — | — | — | 23 | 23 | | 24 |
| 3 | 3 | 3 | 3 | 24 | 24 | 20 | 25 |
| 4 | 4 | 4 | 4 | 25 | 25 | 21 | 26 |
| 5 | 5 | 5 | 5 | 26 | 26 | 22 | 27 |
| 5a | — | — | — | 27 | 27 | 23 | 28 |
| 6 | 6 | 6 | 6 | 27x | — | 24 | 29 |
| 7 | 7 | 7 | 7 | 27y | — | | |
| 7x | — | — | — | 28 | 28 | | 30 |
| 7y | — | — | 8 | 29 | — | 25 | 31 |
| 8 | 7-8 | 8 | 9 | 30 | — | 26 | — |
| 9 | 9 | 9 | 10 | 31 | — | — | — |
| 10 | 10 | 10 | 11 | 32a | — | (P. 216) | — |
| 10a | — | — | — | 32b | — | | — |
| 10b | — | — | — | 32c | — | | — |
| 11 | 11 | 11 | 12 | 32d | — | | — |
| 11a | — | — | — | 33a | — | | — |
| 12 | 12 | 12 | 13 | 33b | — | | — |
| 13 | 13 | 13 | 14 | 34 | — | | — |
| 14 | 14 | 14 | 15 | | | | |
| 15 | 15 | 15 | 16 | | | | |
| 17 | 17 | | 18 | | | | |
| 18 | 18 | | 19 | | | | |
| 19 | 19 | 17 | 20 | | | | |
| 19a | | | | | | | |
| 20a | | | | | | | |
| 20b | 20 | | 21 | | | | |
| 20c | | | | | | | |

28. The visitors of the 18th century give different accounts regarding the shape of the pillars. According to Fergusson and Burgess (1880, p. 253) they were rectangular. Indraji (BG, p. 200) says that they were square.
29. Can this be a spittoon ? Or is it *salāka pātra* in which the visitors deposited alms for the benefit of the monks ?
30. It is interesting to note that part of the 7th stone-rib had been broken, and so a few holes are drilled into that to complete it in wood. Now the wooden replacement too is lost.
31. According to Wilson, who visited this cave around 1840, there was an umbrella on the *stūpa* (see JBBRAS, iii, pt. ii, p. 62).
32. This *leṇa* is now the famous temple of Ganesh, which gives the name for the whole group. The cave appears to have been converted to Hindu usage in medieval times.
33. Traces of painting are extant on the ceiling of this cave.

34. The whole arrangement of the benches, two in the hall, one in the verandah and one in the recess, but the absence of any bench in the cell, is peculier.
35. The breadth of the hall in front is slightly less than that at the backside.
36. Fergusson and Burgess (1880) do not mention the hall in their description of this cave.
37. The front and back walls are not exactly equal in length.
38. At the time of my visit, this cave had been stacked with hay bundles upto the level of the head of the *stūpa*. Hence the lower portion of the cave could not be examined. The present account owes much to the old Bombay Gazetteer (Poona district).
39. The form of the *stūpa* could not be made out and this is not described too elsewhere. But taking out a few hay bundles, the top of the *stūpa* could be noticed to have been a flat square with a central square hole. This may be the surface of the inverted stepped pyramidal capital. If so the *stūpa* is of Type C.

*Sivaneri*

40. The caves in the Sivaneri hill have been numbered variously by the previous workers and the Archaeological Survey of India. The concordance of cave numbers used in the present work with others is as follows : (The numbers painted by ASI in many caves have obliterated, and hence all of them could not be referred to in this concordance).

| *Present Nos.* | *ASI* | *BG* | *Burgess 1883 a* |
|---|---|---|---|
| *Group i* | | | |
| 1x | — | — | 1 |
| 1 | 1 | | 2 |
| 1a | — | 1 | — |
| 1b | — | | — |
| 2 | 2 | 2 | 3 |
| 3 | 3 | 3 | 4 |
| 4 | 4 | 4 | 5 |
| 5 | 5 | 5 | 6 |
| 6 | 6 | 6 | 7 |
| 7 | 7 | 7 | 8 |
| 8 | 8 | 8 | 9 |
| 8a | — | — | 10 |
| 8b | — | — | — |
| 9 | — | — | 11 |
| 9a | — | — | — |
| 10 | 14 | 10 | 12 |
| 11 | | 9 | 13 |
| 12 | 12 | 11 | 14 |
| 13 a-k | — | — | 15-21 |
| 14 | ? | 12 | 22 |
| *Group ii* | | | |
| 15 | — | — | 23 |
| 16 | — | 13 | 24 |
| 17 a-h | — | — | 25 |
| 18 | — | 14 | 26 |
| 18a | — | — | — |
| 19 | 18 | 15 | 27 |
| 20 | — | 16 | |
| 21 | — | 17 | 28 |
| 21x | — | — | |
| *Group iii* | | | |
| 22 a-d | — | 18 | 29-31 |
| 23 | — | 19 | 32 |
| 24 | — | 20-21 | 33-34 |
| 25 | — | — | 35 |
| 26 | — | 22 | 36 |
| 27 | — | | 37 |
| 28 | — | 23 | 38 |
| *Group iv* | | | |
| 29 | 32-33 | 24 | 39 |
| 30 | | 25 | 40 |
| 31 | | 26 | 41 |
| 32 | | | |

| *Present Nos.* | *ASI* | *BG* | *Burgess 1883 b* |
|---|---|---|---|
| 33 | 42 ? | 27 | 42 |
| 34 | | 28 | |
| 35 | | 29 | 43 |
| 35 x, y, z | | | |
| 36 | | 30 | 45 |
| 37 | | 31 | 44 |
| 38 | 43 | 32 | 46 |
| 38 x, y | — | — | — |
| 39 | — | 33 | 47 |
| 40 | 45 | | 48 |
| 41 | — | 34 | 49 |
| 42 | — | 35 | 50 |
| 43 | 48 | | 51 |
| 43a | — | | — |
| 44 | | 36 | 52 |
| 45 | 49 | | 53 |
| 46 | | | 54 |
| 47 | | 37 | 55 |
| 48 | (old No. 43) | | 56c |
| *Group v* | | | |
| 49 | (old No. 43) | 43 | 56 |
| 49a | — | — | — |
| 50 | — | 42 | — |
| 51 a-c | | | |
| 52 | — | 41 | 57 |
| 53 | — | 40 | |
| 54 | — | 39 | 58 |
| 55 | — | 38 | |
| *Group vi* | | | |
| 56 | | 44 | 59 |
| 57 | 54 | 45 | 60 |
| 58 | | | 61 |
| 59 | | 46 | 62 |
| 60 | | 47 | 63 |
| 61 | | — | 64 |
| 62 | | 48 | 65 |
| 63 | | | 66 |
| 64 | 57 | | 67 |
| 65 | | 49 | 68 |
| 66 | | 50 | 69 |
| 67 | | | 70 |
| 67x-y | | — | — |
| 68 | 60 | — | 71 |

41. See discussions under Bedsa 7, Karle 8, Junnar-Manmodi 40 and 2 and Junnar-Ganesh Pahar 6 etc. Also chapter VIII.
42. Some alterations have been effected in the cave recently.
43. Even though some caves at Bhaja and Junnar-Manmodi look like double storeyed, they are excavations wrought in different times. The present cave may be considered as a pigmy precursor of the gigantic excavations like Dothal and Tinthal at Ellora.
44. The hall and verandah ceilings retain good paintings still.
45. Why separate shafts were to be attached instead of cutting the whole pillar in rock can not be easily explained.
46. This *stūpa* has the drum and the dome only now. But, the absence of the *harmikā* and the stepped pyramid appears more due to some mistake on the part of the workers than chrono-stylistic factors. The presence of the socle, the slant of the drum and the shape of the dome are all similar to the features seen regularly with the *stūpas* of 2nd 3rd centuries A.D. It can also be seen that instead of the *vedikā* decoration on the brim there is a slanting ledge (with a rough surface). A square plate has been made on the top of the dome. These appear to have been deviced to accommodate the insertion of the other usual members possibly in mortar. The workmen may have chipped off inadvertantly some portion of the rock in which these members were to have been cut and thus these adjustments became necessary. Such adjusments are not uncommon in Western Indian caves (e.g. *stūpa* in Nasik 18, Junnar-Manmodi 40, etc.)
47. The relative chronological positions of all the excavations from Junnar are given in Chart V.

## KANHERI

1. Kanheri Nos. 13, 24.
2. The Kanheri caves often carry two numbers, both given by the Archaeological Survey of India itself. One belongs to the older series and the other to the numbers given in recent years. These numbers further differ from the numbers used in different publications. A concordance of these is given here. Only the early caves coming under the purview of the present work are included. All missing numbers in the list indicate that they are caves of the Mahāyāna period.

| *Nos. used in this work* | *ASI (present)* | *ASI (old)* | *BG* — | *Burgess 1883 a* | *Nos. used in this work* | *ASI (present)* | *ASI (old)* | *BG* | *Burgess 1883 a* |
|---|---|---|---|---|---|---|---|---|---|
| 2a | 2 | 2 | 2 | 2 | 56 | 56 | 45 | 45 | 45 |
| 2b | | | | | 57 | 57 | 46 | 46 | |
| 2c | | | | | 57a | — | — | — | |
| 2d | | | | | 58 | 58 | 47 | 47 | |
| 2e | | | | | 59 | 59 | 48 | 48 | |
| 2f | | | | | 59a | — | — | — | |
| 3x | — | — | — | — | 60 | 60 | 49 | 49 | |
| 3y | — | — | — | — | 61 | 61 | 99 | 99 | |
| 3 | 3 | 3 | 3 | 3 | 62 | 62 | 73 | 73 | |
| 4 | 4 | 4 | 4 | 4 | 63 | 63 | 74 | 74 | |
| 5 | 5 | 5 | 5 | 5 | 64 | 64 | 75 | 75 | 75 |
| 6 | 6 | 6 | 6 | 6 | 65 | 65 | 76 | 76 | 76 |
| 7x | — | — | with 94 | — | 66 | 66 | 77 | 77 | 77 |
| 7y | — | — | with 95 | — | 67 | 67 | 35 | 35 | |
| 13 | 13 | 98 | 98 | | 68 | 68 | 34 | 34 | |
| 14 | 14 | 97 | 97 | | 69 | 69 | 33 | 33 | |
| | | | | | 70 | 70 | 32 | 32 | |
| 15 | 15 | | | | 71 | 71 | 31 | 31 | |
| 16 | 16 | 96 | 96 | | 72 | 72 | 30 | 30 | |
| 17 | 17 | 95 | 95 | | 73 | 73 | 29 | 29 | 29 |
| 18 | 18 | 94 | 94 | | 74 | 74 | 36 | 36 | 36 |
| 21 | 21 | 81 | 81 | | 74a | — | — | — | — |
| 22 | 22 | 82 | 82 | | 75 | 75 | 37 | 37 | 37 |
| 32 | 32 | 12 | 12 | 12 | 76 | 76 | 91 | 91 | |
| 33 | 33 | 13 | 13 | 13 | 77 | 77 | 90 | 90 | |
| 35 | 35 | 15 | 15 | | 78 | 78 | 50 | 50 | |
| 36 | 36 | 16 | 16 | 16 | 79 | 79 | 51 | 51 | |
| 38 | 38 | 18 | 18 | | 80 | 80 | 52 | 52 | |
| 39 | 39 | 19 | 19 | | 81 | 81 | 53 | 53 | |
| 40 | 40 | 20 | 20 | | 81x | — | — | — | |
| 42 | 42 | 22 | 22 | | 82 | 82 | 54 | 54 | |
| 43 | 43 | 23 | 23 | | 83 | 83 | 55 | 55 | |
| 44 | 44 | 24 | 24 | | 84 | 84 | 38 | 38 | |
| 45 | 45 | 25 | 25 | | 85 | 85 | 39 | 39 | |
| 46 | 46 | — | — | | 86 | 86 | 40 | 40 | |
| 47 | 47 | 26 | 26 | | 87 | 87 | 41 | 41 | |
| 49 | 49 | 69 | 69 | 69 | 88 | 88 | 68 | 68 | 68 |
| 50 | 50 | 70 | 70 | | (89) | 89 | 67 | 67 | 67 |
| 51 | 51 | 71 | 71 | | (90) | 90 | 69 | 66 | |
| 53 | 53 | 42 | 42 | | 91 | 91 | 65 | 65 | |
| 54 | 54 | 43 | 43 | | 92 | 92 | — | — | |

*Contd.*

| *Nos. used in this work* | *ASI (present)* | *ASI (old)* | *BG* — | *Burgess 1883 a* | *Nos. used in this work* | *ASI (present)* | *ASI (old)* | *BG* | *Burgees 1883 a* |
|---|---|---|---|---|---|---|---|---|---|
| 93 | 93 | 64 | 64 | 64 | 98 | 98 | 59 | 59 | 59 |
| 94 | 94 | 63 | 63 | 63 | 99 | 99 | 58 | 58 | |
| 95 | 95 | 62 | 62 | 62 | 100 | 100 | 57 | 57 | 57 |
| 96 | 96 | 61 | 61 | 61 | 101 | 101 | 56 | 56 | 56 |
| 97 | 97 | 60 | 60 | 60 | | | | | |

3. The caves numbered 1 to 4 are cut in the western scarp of the Kanheri hill and face west. In front of these caves is a plain ground in which a number of brick structures stood once. Leaving cave 1 which is a later excavation not coming under the purview of the present work, cave 2 is to be considered first.
4. Had it been meant for dwelling purposes more accommodation for monks by cutting cells around a smaller hall could have been provided with the same effort and investment. In fact, it can also be made out that there was no intention to cut more cells, since only a thin wall divides this from the earlier cave 2e to the right, and to the left also the dividing wall between this and the court of the large *chaitya* hall is not thick enough to accommodate cells.
5. Two of these (No. 1 and 2) are published in Burgess 1883b p. 75 (also Lüders' List 985-86). The third one is a new discovery.
6. Seth, H.T., *Pāiā Sadda Mahāṇṇavo* (Calcutta, sam 1985). *Sattu* (*satra*) : *sadāvrat, jahā hameśā ann=ādi kā dān diyā jātā ho vah sthān* (*Ku, Pra* 172).
7. The address given by Burgess that it is near a tank is incorrect.
8. Burgess in his translation has put an interrogation mark after that word. However, Lüders lists this as a word meaning positively water cistern.
9. The plan of the cave given in Fergusson and Burgess 1880 (Pl. LIII) shows these pillars wrongly as having the stepped square pedestal.
10. Burgess 1883 a, Pl. XLI. Description of sculptures on the pillars in BG (Thana District).
11. Kanheri inscription No. 4 mentions the sect of the *Bhadāyanīyas*, which must have been associated with this *chetiya-ghara*. It is of interest to note that around the date suggested for this second stage of work at Kanheri, *Bhadāyanīyas* were patronised at Nasik too. Cave 3 there was donated by Gautamī Balasiri, mother of Gautamīputra Sātakarṇi, to the monks of this sect (Nasik inscription No. 4).
12. This is a *stūpa* of Type D.
    There are some Buddha figures of the Mahāyāna period carved on the drum of the *stūpa* and the inner wall of the cell. It appears, the shape of the *stūpa* has also been altered slightly during this period.
13. This treatment of the upper part of the facade reminds one of *kūṭas* and *sālās* in the *hāras* of later temples. It is likely that for the first time in the history of Indian architecture the proto-types of these elements are being met with in the present instance.
14. Probably *leṇas* 13 and 16 too had all the features displayed by this cave. But they are much ruined.
15. All these were excavated and cleared in the latter part of the 19th century. The excavations yielded antiquities of the 10th century A.D. (Burgess 1883, p. 356).
16. It can be seen from the plan that the front corner of the bench is in the line of the original run of the circular wall, where as at the back it is away from that.
17. There are a few square holes on the front face of the jambs. These may have been used for fixing a door.
18. Epigraphia Carnatica, VII, Shikarpur 264; Sircar, 1942, 219 ff., 433 ff.
19. There are some square holes in the rock above the cave. It appears these were meant to fix a lean-to-roof in thatch.
20. A faint resemblance of this plaster decoration with that in Nasik 3 is noticeable. But closer comparison reveals that there are significant differences.
21. *e.g.* Kanheri cave 26, 29, 31, 34, 52.
22. There are several Buddha figures carved on the wall of the verandah. These appear to be of a later date. A cult object, possibly a Buddha figure (in stucco ?), may have been kept in the arched niche in the back wall of the left wall.
23. On the back wall is an arched niche housing a seated Buddha figure. But this appears to be a later work.
24. The front wall of the hall is modern reconstructtion. But the grated window is old. The octagonal pillars now seen in front are also modern restorations.
25. There are many sculptures of Buddha carved on the walls of the inner hall and verandah. These are of a later date.
26. These have been reconstructed now in concrete as simple octagonal pillars without base or capital.
27. Kanheri cave 75 appears to be the earliest monument where the pillar Type E with square base and octagonal shaft and the hour-glass decoration have been employed.
28. An evening spent here would be an unforgettable experience.
29. Memorial *stūpas* in groups are seen at Bhaja, Nadsur and Pitalkhora.
30. The making of the big *chetiyaghara* (cave 3) and hewing of several dwelling caves at Kanheri from about the early decades of the 2nd century A.D. is of some interest. This new activity may have been the indirect consequence of the extension of Gautamīputra Śatakarṇi's hegemony over this area. During this period the Konkan coast became par

of a vest empire which extended from the western to the eastern sea. This political situation could have been favourable naturally to the growth of commercial contacts between Konkan on the one hand and the Deccan table land and the Krishna valley on the other. The two latter regions had already begun to patronize the Buddhist creed and there was well developed artistic traditions too. This socio-economic environment may have encouraged sudden spurt in art activity in this region.

31. The inscriptions of palaeographical Series VII are more in number than those of Series VI, and these in turn than those of Series V (Chart III).
32. p. 324.
33. It is interesting to note that till recently the ancient rock-cut water cisterns which fill themselves during the rainy season continued to serve as major water source for the large number of tourists who frequented this place.
34. Longhurst 1928; Ramachandran 1953; Annual Reports of the Archaeological Survey of Ceylon 1895-1902; Devendra 1958; Wijesekera 1962; Paranvitana 1954.

## KARLE

1. The caves are located within the revenue limits of the village Vihārgaon (a significant name).
2. P. 12; Fig 1.
3. Fergusson and Burgess do not mention any numbers for the caves. Though the Archaeological Survey of India appear to have given numbers to these, it was not easy to make out those for all the caves.
4. Some of the squares formed in the roof by the intersection of these rafters have faint traces of painting.
5. There are Mahāyāna Buddhist figures between the *mithuna* panels below. Similar figures have been made by cutting into the vedikā band. The upper cornice is covered with inscriptions.
6. Above these a few more Mahāyāna Buddhist sculptures have been introduced by chiselling off the earlier decoration.
7. It appears a unit of 11'' (28 cms) has been used, in which case the width and height of the hall would be 50 units and the verandah height 60 units.
8. Kosambi (1955) opines that '*selāghara*' refers to the sculptural decoration of the verandah which looks like a five storeyed mansion. Dehejia (1972, note 8 to Chapter 3) approves the same. But it may be noted that there are other inscriptions also in the verandah which refer to the different parts of the same decoration to have been donated by different persons. Bhūtopāla can not claim tne honour solely. The use of the word *parinithāpita* in the inscription in this context, instead of the common words *dāna* or *deyadhama*, appears to be of significance, and points otherwise. The use of the eulogistic epithet *Jambudīpamhi utamam* is applicable more aptly to the whole monument than to the decoration only.
9. Cousens, 1926, p. 6.
10. See note 72 to Chapter III.
11. There are relief representations of such pillars at Kuda, Karad and Shelarwadi also.
12. Cf. Zimmer, 1960, p. 250. Also see Dehejia, 1972, p. 128.
13. The relations between the spread of the *Mahāsaṁghikas* and the occurrence of *mithuna* sculptures in early Indian schools of sculpture may be a subject of interest.
14. The custom of depositing bodily relics of ordinary persons in a holy sanctuary appears to be alien to Indian tradition. This reminds of the prevalence of such custom in the West, as in the catacombs below the holy sanctuaries. The occurrence of such a practice at Karle and the mention of a number of Yavanas in the inscriptions of the place may be of some significance.

## KONDANE

1. Fergurson and Burgess (1880, p, 221) mention that there were 'doorways' in the front screen wall. But the size and position of the remnants of side openings make it difficult to consider them as parts of doorways. Large windows flanking the central doorway is a common feature and here such could be the case. Brown (1941, p. 34), however, has noted that the front wall is pierced by three openings, the central doorway and a window on each side.
2. Both the inscriptions are unpublished. They are in such height that it is not possible to obtain estampages of them. However, the letters are fairly clear in the photograph taken from below (Pl. 139).
3. However, see Pitalkhora 4 also. Probably in view of the presence of pillars in the hall Burgess has remarked that this '*Vihāra*' appears to be modern compared to the neighbouring *chaitya* hall (Fergusson and Burgess, 1880, p. 220).

## KONDIVITE

1. *E.g.* Fergusson and Burgess, 1880, p. 41. Dehejia (1972, p. 83) holds the view that this is the earliest of the *chetiyagharas* in Western India.

## KUDA

1. During my recent field work in the region, a site yielding black-and-red ware and red-polished ware of the Early Historical Period was noticed at the edge of the Mandad branch of the Rajapuri creek near the village Mandad, about 3 km north of Kuda. It is an extensive site and there are some brick remains too. This might have been an ancient port-town which possibly supported the monastic establishment at Kuda. It may be noted that many inscriptions from Kuda refer to Mandava, which may be interpreted as the place from which a number of donors to this monastery hailed (Kuda Nos. 1, 6, 8, 11, 16). Mandad, near which the site is located, appears to be the current form of the name of that ancient place.
2. The numbering of the caves here follows Burgess 1883 a. The Archeological Survey of India has given numbers for these caves from the reverse direction. The concordance of the two series is as follows :—

| *Present Nos.* | *ASI Nos.* | *Present Nos.* | *ASI Nos.* | *Present Nos.* | *ASI Nos.* | *Present Nos.* | *ASI Nos.* |
|---|---|---|---|---|---|---|---|
| 1 | 29 | 8 | 21 | 14x | — | 19 | 8 |
| 2 | 28 | 9 | 19-20 | 14y | — | 20 | 7 |
| 3 | 27 | 10 | 18 | 15 | 14 | 21 | 6 |
| 4 | 26 | 11 | | 16x | 13 | 22 | 5 |
| 5 | 25 | 12a | 17 | 16 | 12 | 23 | 4 |
| 6 | 24 | 12b | | 17x | 11 | 24 | 3 |
| 7 | 23 | 13 | 16 | 17 | 10 | 25 | 2 |
| 7x | 22 | 14 | 15 | 18 | 9 | 26 | 1 |

3. The editor of this inscription has suggested that there may have been the word *leṇam* at the end of the record. But there is no indication in the lithograph provided by him, and even in the context of the cave the word *leṇam* is unlikely to occur.
4. The description given under cave 5 in Fergusson and Burgess 1880, pertains to cave 4. This appears to be due to oversight.
5. Some sculptures of the Mahāyāna period have also been cut in different parts of this cave, including the right and left walls of the hall near the *mithuna* figures as seen in Pl. 152.
6. Dehejia (1972, p. 178) too considers the Kuda sculptures as later in date than those in Karle. However, she assigns these to *c.* 138-150 A.D.
7. The suggestion made by Burgess (1883 a, p. 15) regarding the identification of Vijayaṇikā of the present inscription with Vijayā of inscription Nos. 1 and 6 is not acceptable because of the palaeographical differences in these. The characters used in the present inscription are of an earlier type than those in Nos. 1 and 6.
8. Further, the recess-bench is made in the back cell here, and it is somewhat of a different type being cut deeper inside on either side. Notches have been made at the front corners of the recess-bench in the hall. There are two huge square mortises in the forecourt and these were probably meant to receive wooden posts to support a thatched roof to cover the forecourt.
9. Short pillars of almost similar design were noticed in the village cematery at Mandad. These appear to be of somewhat an ancient period.

## MAHAD

1. This place has been identified with Palaipatmai mentioned in the Periplus and by Ptolemy and Baleyapaṭaṇa mentioned in medieval records (BG 1883, XI, p. 344).

## NASIK

1. BG Nasik District (1883), p. 607.
2. Sankalia and Deo, 1955.
3. The numbers given for these caves by the Archaeological Survey of India recently have been adopted here with some minor additions. The ASI numbers are the same as given by Indraji in BG. But these vary from the numbers used by others. The concordance is as follows :

| *Present work, ASI, BG.* | *Fergusson and Burgess, 1880 and Burgess 1883 a* | *Present work, ASI BG.* | *Fergusson and Burgess, 1880 and Burgess 1883a* |
|---|---|---|---|
| 1 | 1 | (15-16 are later caves) | |
| (1 x, y, z) | | 17 | 12 |
| 2 | 2 | 18 | 13 (wrongly given as 12 in Burgess 1883 a) |
| 3 | — | | |
| 4 | — | | |
| 5 | — | 19 | 14 |
| 6 | — | 20 ) | |
| 7 | — | 21 ) | 15 |
| 8 | — | 22 | — |
| 9 | — | 23 ) | |
| 10 | 8 | 24 ) | 17 |
| 11 | 9 | | |
| 12 ) | | | |
| 13 ) | 10 | | |
| 14 ) | | | |

4. Otherwise, these mortises may have been meant to fix a wooden screen.
5. Detailed descriptions of all the sculptures in the cave including those on the door frame, the pillars, the entablature and the basement are available in the Bombay Gazetteer (Nasik District).
6. Nilakanta Sastri 1926, p. 665.
7. Gopalachari 1941, p. 65 ff.
8. Dehejia 1972, pp. 95-96.
9. Dehejia, p. 94, Fig. 3g.
10. The whole thing reminds of the tradition of having the *lalāṭabimba* and *dvārapālas* in the shrines of later periods.
11. The practice of carving of the inscription even before the whole work of hewing the cave is over is not uncommon. There are several instances, as in Junnar-Manmodi 29.
12. Instances of using the semi finished caves are known. In some caves in Junnar-Manmodi Bhutling group crude sockets for door frames and holes for *valagni* have been made even on the unfinished surfaces. A good instance is seen at Nasik itself in cave 22.
13. Also see, Nagaraju "Cave 3 at Nasik—a restudy", M.N. Deshpande felicitation volume (to be published).
14. A drip ledge has been made at the front end of this portion. But it could not be ascertained whether that is a part of the original cutting or the result of recent conservation work.
15. Even amongst the new features noticed in cave 3, the bench-in-recess appears only in the work wrought during the time of Vāsiṣṭhīputra Pulumāvi (p. 263). Also see above note 13.
16. There is a sculpture of later date cut on the left wall of the recess.
17. Burgess 1883a, p. 38.
18. There is a sculpture and a recess in the back wall of this transverse aisle. These appear to be of later date.
19. This is somewhat similar to the carvings in Ranigumpha at Udayagiri, Orissa.
20. There is no possibility of the verandah being present even originally and to have been destroyed now. The mass of rock on either side of the doorway, in which the staircases leading to the neighbouring caves are cut (Pl. 192), clearly indicates that part had been left unhewn earlier. The profile of the face of the cliff above would also show that there was no room for cutting a verandah in front.
21. The bench at the back wall has been cut away partially while extending the cave in Mahāyāna times. The floor of the hall too appears to have been lowered in later times to make a square platform in the middle and some circular pedestals on a side (Pl. 198).
22. However, in the course of recent conservation work this part of the cave appears to have been tampered, and it was difficult to decide what are original and what are the results of restoration.
23. The present interpretation of this inscription differs slightly from Burgess 1883a. There the words *bahukāni varisāṇi ukute* have been taken to mean 'what had been left unfinished for many years'. This interpretation suggests that some part of the cave had already been hewn. But there is no indication of different stages of work so far as the early phase of cutting of this cave is concerned. The word *ukute* which is considered to be equivalent of Sanskrit *utkṛite* (Burgess 1883 a, p. 114, note 3) is just conjectural. The word appears to be the Prakrit form of Sanskrit *ukte*—'told, mentioned'. (Bopaki—yatisujamaṇasā has been left untranslated by Burgess. We have understood it as Bopakiya triśuddha-manasā).
24. This is the idea adumbrated in the words *bahukāni varisāṇi ukute* in Bopaki's inscription (note 23).
25. Sankalia and Deo, 1955.
26. Table 4 (p. 28-29).
27. Based on the number of cells and stone beds that are to be seen in the *leṇas* that had come into existence by that time.

## PITALKHORA

1. Deshpande 1959, p. 69.
2. *Ibid.*
3. Some of the structural replacements of deteriorated parts done in ancient times bear stylistic characteristics of 1st, 2nd century B.C.
4. Deshpande 1959.
5. This reminds of the relic chambers seen in Ceylonese *stūpas*.
6. See Fergusson and Burgess Pl. XVII.
7. For illustrations of these sculptures see Deshpande 1959.
8. Inspite of the ruined condition of the caves 101 cells can be counted from differeent *eṇas*. It is possible to guess that there may have been 15-20 cells more. Many cells in caves 1, 2, 4, 6 etc. contain two stone beds. But the extra number of these benches have not been taken into account because in most of the cases the benches are in 'L' shaped plan and it is not easy to consider these to have been used by two persons.
9. The significance of this item is noted on p. 128 etc.

## SHELARWADI

1. The circular and square pedestals now seen in the 3rd cell are of recent date.
2. The location of an inscription on the back wall of the hall reveals incidentally that even originally there must have been sufficient light available to read it, which means to say that the cave had a broad open front, like Mahad 8.

*Chapter VIII*

# *Summary and Conclusions*

## THE SETTING

The Indian rock-cut architectural tradition is no where better displayed, both in number and variety, than in Konkan and Western Deccan. More than a thousand monuments were created in about sixty centres. About seventy percent of these belong to the period under present discussion—*C.* 250 B.C. to 300 A.D. These occupy a place of great importance in Indian art history as here is a series of monuments of the early stages of Indian architectural tradition. Architectural works in wood which appear to have been common during this period, have perished everywhere. Hence, while in other regions the spade of the archaeologist has to bring to light a few remnants of the contemporary architectural works occasionally built in stone or brick, here in Western India the pick of the ancient architects has left a treasure of examples. Many monuments have survived almost completely in the imperishable rocks of the trappean hills. They are also bestowed with a number of inscriptions and many other internal evidences which help us in reconstructing a fairly consistent history of the architectural development in the area for a period of about five to six centuries. No other region in the Indian sub-continent has this facility for a similar approach. This unique position of the early rock-out monuments in the study of Indian art history invests them with special interest and attracts the art historian for a detailed in-depth study aided by proper methodological approach.[1]

The centres of early rock-cut architecture are mostly clustered in the Konkan strip, the adjoining Sahyadrian belt, and the Maval strip which forms the gently sloping transitional belt between the Sahyadris and the plateau eastwards. The impact of the geological and geo-ecological factors is evident. While the presence of the suitable rock material for hewing the caves is a desideratum, and that is seen in the trappean formations of the areas under discussion, the monuments could be created and utilized in such of the areas only where the community causing their making could have gained the needed economic strength, and where the monk community using them could depend on the economic resources of the laity for their living and for the effective propagation of their creed. The centres are to be seen along the trade routes and near some cities or towns.[2]

The latter aspects mentioned above bring to the fore the historical situation which was very much responsible for the growth of rock-cut architecture. Apart from the availability of suitable rocks, two developments in the history of the region were responsible for the beginning and growth of this architectural variety. They are the rise of the urban socio-economic situation and the introduction of Buddhism.

Various historical factors operated conjointly towards the creation of such a situation. The Deccan region which was flourishing with an agricultural village economy in the first half of the 1st millennium B.C. appears to have been triggered towards an urbanised socio-economic structure in the latter half of the same millennium. Side by side with the growth of urbanisation in northern India and attendant rise af Magadhan imperialism, probably due to the imperialistic efforts of the Nandas and Mauryas, Deccan and Konkan were also brought under a large political domain. The political necessity on the part of the Magadhan rulers to control this land must have brought in a train of administrators and soldiers from northern India to settle here, followed by probably members of other professions like priests and artisans. In the salubrious climate of peace and security under these regimes, trade contacts between this region and northern India increased. As a result of all these the urban socio-economic structure of the type seen in northern India began to take shape here also. It was also probably during this period that Buddhism too began to spread in this region. The energetic activities of Aśoka for spreading that creed are well known.[3] Aśoka had also introduced for the first time the tradition of rock-cut architecture in India. The socio-economic environment, the religious need and the technological know-how necessary for the inauguration of rock-cut architecture were all present in Western India by the middle of the 3rd century B.C.

Shortly after the waning of the Mauryan empire, Deccan and Konkan came under the suzerainty of the Sātavāhanas. Their rule flourished for a period of four and a half centuries except for a short interlude when the Kṣatrapas had occupied the territory. They were succeeded by the Ābhīras.

The whole period of the rule of the Sātavāhanas and their successors is the very time in which most of the rock-cut monuments under discussion came into existence. This was the period in which enormous progress was achieved both in the economic and cultural fronts. In this environment, various social groups of well-to-do classes which could afford to patronise such a sophisticated cultural activity as the creation of rock-cut monuments emerged and prospered. While agriculture and industry which were already the mainstay of economy continued, and probably progressed quantitatively and were responsible for the increase in wealth, the people engaged in these appear not to have achieved a status so much useful for patronizing the artistic activities. It is the increase in trade which provided the necessary economic backing. Ample evidences in Deccan sites in the discovery of archaeological antiquities which originally came from different parts of the Indian subcontinent (N.B.P. Red-polished ware, beads, iron implements etc.), the literary data for the existence of trade between various regions, and more so the mention in contemporary inscriptions of traders hailing from various places visiting different towns provide evidence regarding the rise of internal trade. Similarly, the Konkan ports began to play an important role in Indo-Mediterranean commerce. Several politico-economic changes in the West and the discovery of the utility of the trade-winds for navigation from the Red Sea to the Indian ocean gave impetus to this trade. The net result of the increase of trade, both internal and external, is a general increase of wealth and the rise of the class of traders. Similarly the elaborate administrative system needed for the maintenance of a large state like that of the Sātavāhanas threw up another well-to-do class, that of the state officials. The contemporary inscriptions reveal that rock-cut architecture is primarily the result of exertion of such classes which had acquired wealth and status in the present world and which further wanted to ensure happiness in the world beyond by acquiring religious merit through munificent acts of charity (p. 26 ff.).

The religious inspiration to back this was provided by Buddhism, which appears to have been the most dominant religion of the time—at least among the economically higher classes of the population. Most of the centres of rock-cut architecture are monastic establishments of the Buddhists.[4] Buddhism had entrenched itself in Western India already by the middle of the 3rd century B.C. Probably various sects of the *Theravādins* and the *Mahāsaṁghikas* may have spread here at that time. Inscriptions show that atleast in the early centuries of the Christian era sects belonging to both the above major groups were flourishing here. These were the *Bhadrāyanīya*, *Dharmuttarīya*, *Chetika*, *Mahāsaṁghika* and the *Aparaśailiya*.

The rock-cut monuments being part of monasteries, their general forms and particular details were determined by the needs and preferences of the monastic community. How far the sectarian differences

operated in causing variations in the architectural productions cannot be made out with certainty, though some indications appear to be present.[5] But it is known that in the course of the history of Buddhism in the period under consideration the nature of Buddhist monasticism itself was undergoing change. *Vinaya* texts which prescribe the rules of conduct for the monks have several layers in their making, which have been added on from time to time in order to accommodate many a fresh monastic custom that became part of the order due to socio-historical reasons. It appears, in the earliest period the monks were expected to lead a rigorous life by the practice of the four *nissayas* and the leaning then was more towards eremiticism than monasticism. Some liberalisation allowing the monks to stay in five kinds of *āvāsas* during rainy season (*Vassa*) is also seen. But the pious care bestowed by the laity on the wandering monks gradually brought in change, and their practice of residing in monasteries for a longer duration was established (pp. 36 ff). From about the beginning of the 1st century A.D. at least in this area, the monasteries appear to have been in occupation through out the year. The monks were provided there not only with cells having stone benches to sleep, but also with food, robes and shoes. Necessarily the monasteries began to contain along with the dwelling units, various accessories like the refectory, large number of cisterns for providing water for drinking and sometimes even for bathing. Similarly though the *Vinaya* does not prescribe the worship of the *stūpas* or *chaityas* as an 'essential' part of the duty of monks, the *chaitya* halls too became part of the monastic establishments. Buddhist monasteries being the zealous creations of the laity their religious sentiments too had to be satisfied; *chaitya* halls were the places where the laity too could participate in the religious services.[6]

Thus the nature and growth of rock-cut architecture is very much the result of interaction of a combination of historical factors—economic, religious and social.[7]

In the period of present study nearly 800 monuments were made and 128 of them bear inscriptions. The reconstruction of chronology of various monuments in different sites depends on the use of data from these. Though none of the associated inscriptions is dated in any known era, twelve monuments can be dated on the evidence of the presence of royal inscriptions in them (on the basis of the chronology of the Sātavāhanas, p. 23 above). The radio-carbon dates available for the wood work in the Karle *chaitya* hall too provide some clues to the date of that monument. These monuments can be taken as fixed points in the evolutionary sequence of architectural types against which stylistic comparisons of the undated monuments can be made (supra p. 47 ff).

The undated inscriptions can also be utilized for the reconstruction of relative chronology on the basis of palaeographical evolution. The inscriptions can be grouped into some major epochal series with approximate date range for each group, by utilizing the criteria of palaeographical similarities and evolutionary stages represented by the letter-forms of the datable inscriptions (supra pp. 57-64).

Various other criteria like the relative position of monuments when they appear in clusters and similarities and variations in technological and typological features are also helpful in reconstructing the relative chronology of monuments. The fact that rock-cut architecture follows the northern Indian tradition of wooden architecture to start with provides an important clue, against which various stages of development can be compared and located in an evolutionary squence. The changes that appeared gradually are due to two causes : the material used here is rock instead of wood, and the geo-climatic situation of this region is different from that of northern India. There is a gradual tendency of emancipation from the hangover of wooden architecture as and when the architects of this area grew familiar with the nature of the new rock medium, and as and when they sought solutions to various problems in architectural creations caused by the hot and humid environment of the monsoon-dominated region (p. 65-68 etc.). The stylistic variations due to chrono-historical factors like changes in religious and social demands and tastes and the occasional introduction of new forms and ideas from other art schools are also factors to be taken note of in tracing the developmeet of rock-cut architecture. Adopting the well-known method of typological analysis of monuments, members and motifs a consistent sequence of such items[8] can be worked out. The evolutionary stages of monuments built up on the evidence of the various criteria mentioned above can also be fixed in an epochal sequence on the basis of stylistic comparisons with monuments datable on historical and palaeographical grounds.[9]

## DEVELOPMENT OF ROCK-CUT ARCHITECTURE

The net result of architectural analysis with reference to the typological classification, architectural concomitances and chronological positions of the monuments in the nineteen sites discussed in Chapter VII has been tabulated in charts 4 and 5. With the aid of the new vista provided by the chronological frame work built up for different centres, the history of development of rock-cut architecture can be viewed afresh. This has been done with reference to the individual sites in the discussion section at the end of the account of each one of those in Chapter VII. An attempt can now be made to coordinate these results and to delineate an overall picture of architectural development in the region in general.

## THE RISE AND DECLINE OF ARCHITECTURAL ACTIVITY IN DIFFERENT CENTRES

The first thing that strikes most while reviewing the chronology of rock-cut monuments is the variation in the tempo of architectural activity in different centres in different times. Out of the 19 centres[10] of rock-cut architecture taken up in the present work for consideration it is seen that the earliest architectural activity, around *C.* 250 B.C., is noticeable in four sites only viz. Bhaja, Jivadan-Virar, Junnar-Tuljaleṇa and Kanheri. Slightly later, by the latter part of the same century, architectural works began to appear at Ajanta, Kondivite and Pitalkhora. These were followed by works at Junnar-Manmodi, Kondane, Nanaghat and Nasik in the first half of the 2nd century B.C. The latter half of the 2nd century B.C. saw the rise of Aurangabad and Bedsa. It was in about the middle of the 1st century B.C. that Karle begins its history.

A few decades on either side of the beginning of the Christian era mark a period of lull in rock-cut architectural activity. It does not mean that the sites were deserted or that there was complete cessation of architectural work in the whole region. But this period certainly marks an important point of change in the fortunes of various centres and a point of departure in the architectural tradition. This is a period in which architectural activity ceased in all the sites in the Satmala range viz. Ajanta, Aurangabad and Pitalkhora. Bhaja, Bedsa, Kondane, Kondivite and Nanaghat too witnessed the same fate.[11] Practically there was a sudden change in the geo-economic or socio-economic structure of the region in this period, but we are unable to provide any convincing explanation to this phenomenon.[12] The only sites that lingered on with the making of a few monuments are Junnar, Kanheri and Karle.[13]

Somewhere around the end of the 1st century A.D. there was again a sudden spurt in architectural activity. Monuments were created in greater number and frequency. The tempo of work accelerated at Junnar, Kanheri and Nasik. While the earlier centres like Ajanta, Bhaja, Bedsa, Pitalkhora etc. were no more to be heard of, new centres of rock-cut architecture started their career at this period. Kuda and Kol were the first in this series. These were followed at a slightly later date by more sites at Ambivale, Mahad, Pawala and Shelarwadi. All these new sites flourished till the end of the period and some of them even beyond.[14]

## ARCHITECTURAL TYPES AND THEIR EVOLUTION

The rock-cut monuments seen in the western Indian centres of rock-cut architecture belong to six major types, viz. *Chetiyaghara, Leṇa, Maṭapa, Poḍhi, Koḍhi* and *Āsanapedhikā.* Each type often displays many sub-varieties.[15] Geographical and historical causes are mainly responsible for the development of these architectural varieties and sub-varieties.

## CHETIYAGHARAS

In the 19 sites taken up in the present work for consideration there are 45 *chetiyagharas.* These are sanctuaries having a *stūpa* as the object of worship. There are two major varieties—A. Hall type, and B. Cell type. While the first variety consists of a hall at the back of which the *stūpa* is placed leaving the front space for the congregation of worshippers, the second variety consists of a simple cell only, in the centre of which stands the *stūpa* with very little space around. Further sub-varieties occur in both which can be classified on the form of ground plan as circular, apsidal and rectangular.[15]

The earliest *chetiyagharas* in western India are very simple creations wherein *stūpas* of a very primitive type consisting of a simple undecorated cylindrical drum and slightly high dome are to be seen. This was a stage in which the *harmikā* and other elements of the *stūpa* were still being made of wood and fixed on them. There are two examples belonging to this series, Bhaja 26 and Kanheri 2e. Both do not display any elaboration in architectural details. Kanheri 2e is a small rectangular hall and Bhaja 26 is only a circular cell. The *stūpa* in Kanheri 2e has finely polished surface reminding the tradition of stone polishing of Mauryan times, and that in Bhaja 26 is also of the same form but does not display polish. It is of course in the fitness of things that one of the earliest *chetiyagharas* is to be seen at Kanheri, a place not far from Sopara, an ancient port in which an inscription of Aśoka himself is present, and which, according to tradition, was the first township in Western India to receive Buddhism. We do not know what was the special importance Bhaja had gained at that time, but it is known from other monuments present in the same site that it was a progressive centre of rock-cut architecture which introduced a number of new items and forms in very early times. Purely on the basis of style and other circumstantial evidences the *chetiyagharas*, Kanheri 2e and Bhaja 26 can be dated to *c.* 250 B.C., *i.e.* to Mauryan times.

Probably when once Buddhism had been established in Deccan as a strong religious force and when ideas were freely flowing from northern India, the home of early Buddhism, the wooden architectural tradition associated with that creed there began to be emulated here in rock. The circular *chetiyaghara* (Cave 3) in the Tuljaleṇa group at Junnar is one of the earliest examples of this class. Herein can be seen the *stūpa* form which is still essentially of the type seen in Kanheri 2e. In addition, the slightly raking walls and the simple octagonal pillars with taper and rake which surround the *stūpa* and carry the hemispherical dome above the central nave, and the quadrantal roof over aisles, are suggestive of the fact of emulation of wooden buildings of the same class. This *chetiyaghara*, being one of the earliest experiments in transforming a wooden form to rock, is small and simple too without any sculptural work or any other decoration.

The earliest bold experiment in rock-cut architecture to make a large *chetiyaghara* is the great *chaitya* hall at Bhaja (Cave 12). This is also the first monument with an apsidal plan, having a rectangular front part and semi-circular back, and the whole divided into nave and aisle by a colonnade of pillars running parallel to the wall. The emulation of the wooden architectural forms is very much visible here. The slight rake of the side and hind walls, the high rake of the simple octagonal pillars and the free use of wood for the curved wooden beams set in the vault roof are all suggestive of this. The front which is completely open now appears to have had a screen in wood. Besides being a remarkable architectural adventure in that early phase of rock-cutting activity, this *chetiyaghara* shows some stylistically advanced features in its *stūpa* form compared to the one in cave 26 of the same place and also those in Kanheri 2e and Junnar-Tuljaleṇa 3. Here the first attempt to introduce a stone *harmikā* for the *stūpa* is to be seen.[16]

Datable to a stage closely with the Bhaja *chetiyaghara* is cave 10 at Ajanta. This too retains the essential characteristics of the Bhaja *chaitya* hall with all the elements of wooden architecture reproduced in stone. But this shows an advancement in its *stūpa* form as herein the *stūpa* is now provided with the *harmikā* and the stepped pyramid too cut in rock itself along with the drum and the dome. Ajanta 10 retains a portion of the quadrantal *pavāḍa* (canopy) also in front at the level of the springing of the facade arch. If the profile of the run of this *pavāda* is continued, it looks as though the whole plan at that level would be that of an elliptical structure. This element is of some interest and it can be surmised from this that the apsidal *chetiyagharas* are nothing but copies of elliptical structures which are known to have been in vogue contemporaneously and in early times in northern India.

Like Tuljaleṇa 3, Bhaja 12 and Ajanta 10, there were other experiments too to adopt northern architectural forms into the rock-cut architectural tradition of this region. *Chetiyaghara* 9 at Kondivite is possibly another experiment in that direction. This cave looks aberrant compared to the other productions of the region. Though there is a degree of similarity between the present cave and the Sudama cave in Barabar hllis belonging to the Mauryan period, several stylistically advanced features are noticeable here.

The *stūpa* form particularly betrays its later date compared to the early caves at Bhaja 26, Kanheri 2e and Junnar-Tuljaleṇa 3.

All the above mentioned *chetiyagharas* including Kondivite 9 are datable to a period in the latter half of the 3rd century B.C. Even among these while Bhaja 26 and Kanheri 2e stand as independent varieties where the introduction of the *stūpa* alone is to be seen as the main concern, housed as they are in simple enclosures like a small rectangular hall or a circular cell, in others distinct and intentional effort on the part of the Deccan architects is to be seen in emulating complex architectural forms contemporaneously current in wood in northern India. Such attempts could come up naturally at a time when architects may have gained some confidence in working in the rock medium. Such monuments exemplifying a definite leaning towards emulation of wooden architecture—Ajanta 10, Bhaja 12, Junnar-Tuljaleṇa 3 and Kondivite 9—thus belong to a slightly later date in the series but still to a period before the commencement of the 2nd century B.C.

Pitalkhora 3 (*c.* 200 B.C.) is also in the same pattern in plan and delineation as Bhaja 12 and Ajanta 10. But this monument marks an important step in advancement. While all the caves mentioned above were severely plain with practically no sculptural decoration[18], Pitalkhora 3 appears to be the first to have its facade decorated with series of small *chaitya* arches and *vedikā* pattern.[19] It is also noteworthy that the decorative *chaitya* arches here have broad base-span similar to the feature displayed by the main *chaitya* arches in Ajanta 10 and Bhaja 12. An important innovation like the facade decoration to appear first in Pitalkhora is very well understandable, as this is the site easily exposed to the cultural influences from the north, being located at the northern extremity of Deccan along the trade route that linked this with the culturally advanced areas in northern India.[20] Bhaja, which is located further south in Deccan, but which was already in the fore-front in receiving and experimenting with new ideas, followed the cue. The large *chetiyaghara* there which was the first of its kind to be made in the whole of Deccan, also became the first to employ sculpture to further decorate its elegant facade. This part of work in the Bhaja *chaitya* hall was accomplished around *c.* 190 B.C.

By the early part of the 2nd century B.C., rock-cut architecture had grown up to maturity. The architects had become familiar with the nature of the new medium they had selected. The understanding of the various limitations and possibilities that the rock medium presents, in contrast to work in wood, may have encouraged the rock-architects of the Deccan to embark upon fresh ventures to shed away the hangover from the wooden architectural tradition and to create such new forms that could go harmoniously with the rock medium and obviate unnecessary expenditure of labour just in simulating the wooden forms.[21] But the process of change was to be slow and gradual. The new architectural forms were still to be of a type not too much deviating from the conventional taste and fashion. Such changes were to be as much unobtrusive as possible, particularly in the case of traditionally sanctioned forms of religious structures. Thus it is seen that the course adopted by the architects was to replace various members which were originally in wood by cutting them in rock itself.[22] Six *chaitya* halls, all datable to the 2nd century B.C., are illustrative of this stage. They are Kondane 1, Ajanta 9, Aurangabad 4, Junnar-Manmodi 40, Junnar-Ganesh Pahar 34 and Nasik 18.

The *chaitya* hall at Kondane (*c.* 175 B.C.) looks more like the open front *chetiyagharas* of the previous stage (Bhaja 12, Ajanta 10, etc.). But a step in advancement is visible here. The front screen which used to be completely in wood in the above examples is partly replaced by stone here. It can be seen that the pair of huge pillars, now partly hanging down from the roof and to which the wooden arch rafters are fixed, is a new element. Though the other parts of the front screen are ruined it can be reconstructed from the extant evidences that there was a low wall in stone at the bottom and that the front screen wall had a central door leading to the nave and two wide windows shedding light into the aisles on either side. This arrangement of front, the screen wall finds complete expression in stone in *chetiyaghara* 9 (*c.* 150 B.C.) at Ajanta. Apart from the whole front screen wall being in stone, Ajanta 9 marks a slightly advanced stage in the development of the vault-roofed *chatiya* halls, in the fact that the octagonal pillars in the colonnade inside the *chaitya* hall become almost straight and are fairly free from the element of tapering; that hangover from the wooden tradition which was surviving despite its uselessness in rock-cut architecture has been discarded here. Further, a pair of thin square pillars with the arrises chamferred in the middle have been introduced in the front of the pillar lines. Engaged

pillars of similar variety, possibly an item that had come into vogue contemporaneously, are to be seen on either side of the doorways and windows on the front side of the front screen wall. There appears to have been some technical progress in making of the *chaitya* arches in wood also by this time, which may have been emulated here; the decorative *chaitya* arches displayed on the facade of this *chetiyaghara* show that stage in which the arches display definite incurving of the arms which is possibly the result of introduction of tie-beams and tie-rods in wooden *chaitya* arches. A bold experiment was also made in this *chetiyaghara* to have a rectangular hall instead of the one with semi-circular back, though the 'U' shaped plan of the colonnade is retained. Aurangabad 4 (*c.* 130 B.C.) too has the rectangular hall and the 'U' plan colonnade, and here the curved wooden beams on the vault roof are also cut in stone. The triforium is also well designed with a series of studs and small arches.[23]

The first stage of work (*c.* 120 B.C.) in the *chaitya* hall at Nasik too belongs to the stage in which the front screen wall is elaborately carved. Here, for the first time, is to be seen the introduction of the facade decoration rising in several stages to look like the depiction of a storeyed building, an item better displayed later at Bedsa and Karle.[24]

All the above *chetiyagharas*, viz. Kondane 1, Ajanta 9, Nasik 18, etc., still preserve generally the nave and aisle divisions in the halls and the vault roof on the nave, as well as *stūpas* which still have the cylindrical base, hemispherical dome, square *harmikā* and the inverted stepped pyramidal capital. While in this respect these continue the tradition of Ajanta 10 of the earlier stage, the distinct advancement is the introduction of the stone screen wall.

But the architects had realised by the above experiments done in the course of a century or so, that such facades, however finely they are decorated with sculpture, can hardly have an aesthetic appeal as they are exposed to the direct action of sun and rain. Rock-splitting and the growth of moss and lichen endangered their safety as well as beauty. The action of these, though present everywhere, is all the more severe in a tropical monsoonal climatic region as Western India. There are some examples in the Western Indian monuments where the facades were sought to be protected by simple lean-to roof in thatch. But the architects of the area began to evolve better solutions, and the adoption of them brought in more changes in the frontal appearance of the *chetiyagharas*.[25]

Further experiments in this direction are to be seen in two caves at Junnar, Manmodi 40 (*c.* 130 B.C.) and the isolatedly situated cave 34 (*c.* 120 B.C.) in Ganesh Pahar. In both these *chetiyagharas* the facades have been set a little deeper inside from the scarp face of the rock, in order to protect the sculptural decoration from the direct action of sun and rain. Ganesh Pahar 34 particularly has its decorated stone screen so much behind that it looks as though set inside an alcove. The side walls too are finely carved here.

Further progress in seeking a better solution to ward off the deleterious effects of sun and rain on the ornamental front screen is to be seen in the *Chaitya* hall 7 at Bedsa (*c.* 80 B.C.). This monument of immaculate design and workmanship introduces, for the first time in the history of *chetiyagharas*, a high verandah in front. It is also here for the first time the pillars of pot-base and pot-and-animal capital variety have been made use of in the *chetiyagharas*. Their employment in the front part of the verandah to carry the roof has given this monument a unique beauty and magnificence of its own, and it is equally so with regard to the excellent carving on the walls of the verandah wherein the view of a five storeyed mansion is emulated.[26]

But even the solution offered here by raising a high verandah to protect the finely decorated front screen was not very much effective for the purpose in the climatic environment of western Deccan. The tropical sun is sufficiently severe even in mornings and evenings when most of the verandah may remain exposed to its effect; the angular splash of the monsoonal rain in the gushing wind of the season is sufficiently forceful. So the next step sought to avoid these is to be seen in an arrangement made in the *chaitya* hall at Karle. Instead of the pillars in front carrying the roof of the verandah, a plain screen wall is raised.[27] Apart from this novel innovation the great *chaitya* hall at Karle is a towering landmark in the history of rock-cut architecture in India. Though it follows the tradition of Bedsa in the arrangement of the verandah decoration, there are three other important innovations—that of the introduction of elephant busts on the bottom course on the side walls of the verandah, the *mithuna* figures by the side

of the doorways in the middle screen, and all the more an adventurous innovation is the introduction of the pillars of pot-base and pot-and-animal capital veriety for the colonnade inside the hall. All these features well set with thoughtful design and careful workmanship invest the monument with an aesthetically superb appearance unsurpassed by any other monument of its class in the whole of India. But unfortunately the fore screen—wall which was added on to protect the high quality sculptural work in the verandah has become an ugly appendage to otherwise a magnificent piece of art. The uncouth front wall, though serving as a protective screen has destroyed the very elegance of the facade that had become a tradition in the *chaitya* halls before. There was also another deleterious effect. In all the earlier *chatiya* halls the open *chaitya* arch above the doorway provided an effective aesthetic effect by shedding a beam of light directly on the object of worship, *i.e.*, the *stūpa*. The *stūpa* thus brightened and standing within 'a frame' of half lit side pillars and the quarter-dome above had the capacity to spread a highly aesthetic and spiritual effect, attracting the direct attention of the devotee standing in front so that his concentration towards the object of worship would be undiverted. But the screen in front of the verandah affected this excellent light effect, partially atleast if not completely. (This result is better visible in *Chaitya* hall 3 at Kanheri than in the Karle *Chiatya* hall).

The later stages of development is to be seen in a proccss of changing designs wherein various parts which had lost their significance or effect began to be discarded. Kanheri 3 (2nd stage, *c.* A.D. 120) marks the beginning of this process. Even though many of the architectural elements seen in the interior of the *chiatya* hall at Karle and the frontmost screen wall are retained here, the elaborate sculptural decoratian in the verandah has been done away with. After all, even when they were present spread through out the length and breadth of the verandah walls as in the Karle *chaitya* hall, they could hardly be appreciated in a situation where the distance required to view them in their entirety is lacking. The *mithuna* panels only have been retained here. The *chaitya* arch too has just become a simple semi-circular opening. The ultimate result is a haphazardly made *Chetiyaghara* with neither good architectural design nor fine sculptural decoration. It is quite natural that this marks the end of the tradition of vault-roofed apsidal *chaitya* halls in the Konkan region.

In Deccan proper slightly different experiments are to be seen in the making of the vault-roofed *chetiyagharas* obviously with an intention to avoid the defects noticed in Bedsa 7 and Karle 8. The *chetiyaghara* 26 on the Manmodi hill at Junnar (A.D. 75)[28] retains the pillar-fronted verandah. But the pillars in that position, the architects had realised, would hardly justify such elaboration of treatment as in Bedsa 7. Further, the facade of the screen too is too simple a creation with just the outline of the arch marked. The facade does not contain any other decoration.

The next important work in the history of rock-cut *chetiyagharas* of Deccan is Junnar-Ganesh Pahar 6. Like all the previous examples, here also the interior is treated with the usual details in having the *stūpa* at the back end of the apsidal hall which is divided by a colonnade of pillars of the pot-base and pot-and-animal capital variety. But several changes have been introduced in the exterior. The height of the verandah got reduced sufficiently to ward off the splash of rain getting into the hall. Though the pot-base and pot-and-animal capital type pillars have been retained, they are very short. Instead of decorating the front screen wall the entablature is fashioned here with a *vedikā* band. Above this is a simple *chiatya* arch of semi-circular profile sunk into the rock face, but it is a blind one without opening into the vault inside. Though in this ingenious way this essential component of the traditional *chaitya* halls has been retained, the interior hall has become somewhat dark and the vault-roof with curved beams, now all cut in stone itself, has become almost a useless work bereft of its beautiful effect in the architectural scheme. The vault-roof rising from the colonnade on either side of the nave used to provide a spacious appearance to the hall and an ornamental frame to the *stūpa*—the object of worship. All that effect is lost now due to want of proper light.

The next step is to do away with these items too which have become useless. The facade features as seen in Ganesh-Pahar 6 are retained in the next *chetiyaghra* to be made (*c.* A.D. 150) *i.e. chetiyaghara* 2 on the Manmodi hill at the same place.[29] But here the interior of the *chetiyaghara* is a simple rectangular hall with flat roof.

These two *chetiyagharas* with blind *chaitya* windows mark an important transitional phase in the history of development of *chaitya* halls. While Junnar-Ganesh Pahar 6 is the last of the *chetiyagharas* to be adorned with the vault roof,[30] Junnar-Manmodi 2 inaugurates the series of flat-roofed rectangular *chetiyagharas* with front verandah.

Further steps are easy to follow. Somewhere by the end of the 2nd century A. D. the form of the *chetiyaghara* began to be standardised. Even that additional element, the *chatiya* arch, which had become a useless item was omitted. Now the *chetiyaghara* would have only a simple flat roofed rectangular hall with a verandah fronted by two pillars. Quite consistently with the new form of the interior hall, the *stūpa*—which used to have the drum, dome, *harmikā* and stepped pyramidal capital only—began to be added with the umbrella also cut in stone, the circular canopy of the umbrella being fashioned on the flat roof itself.[31] Probably the earliest examples of this stage are to be seen at Junnar itself in the Sivaneri *chetiyaghara* 66, where, however, the *stūpa* is still without the stone umbrella, and in Ganesh Pahar *chetiyaghara* 14 (*c.* A.D. 175) which displays all the above stated features completely, along with the use of central pillars and engaged pillars of D vi type, which establishes its stylistic proximity to the immediately proceeding *chetiyagharas* like Junnar-Manmodi 2. This variety of *chetiyaghara* was standardised further on and was followed by many monuments of the type at Junnar and other places like caves 2 (*c.* A.D. 190), 43 (*c.* A.D. 280) etc. in the Sivaneri group at Junnar and caves 9 (*c.* A.D. 180 ?), 21 (*uf*) (*c.* A.D. 220) and 15; (*c.* A.D. 240) at Kuda. Junnar Sivaneri 43, however, is a unique example deserving special mention. Even in its ruined condition the arrangement of the plan is interesting. The floor and roof of the verandah are sufficiently at a lower level than those of the hall—the verandah roof projecting to front just about a foot higher than the lintel of the hall doorway. By this method the interior of the hall has been very well protected from the effects of sun and rain. In the interior too, two central pillars and two engaged ones are placed transversly in a line in the front part of the hall giving that effect of the 'frame' around the *stūpa*.

The latest stage in the development of the *chetiyaghara* is the one in which a large hall is inserted between the *chaitya* shrine and the verandah. *Chetiyagharas* 1 and the slightly variant 6 (*c.* A.D. 280) at Kuda are probably the earliest examples of its type. Corresponding but slightly different types too appear during this period and in these the large walls of the hall have been utilized to cut cells and provide accommodation to the monks. Mahad 8 and Shelarwadi 8 are such attempts. These two *leṇa-chetiyagharas*[32], datable to a period around A.D. 300, mark the transitional stage from the Hīnayāna *chaitya* halls towards the standardised '*Viharās*' of Mahāyāna times in which a Buddha shrine becomes an essential item to be located along with cells meant for the accommodation of monks.[33]

## LEṆAS

As most of the centres of rock-cut architecture are monastic establishments,[34] the *leṇas* which are dwelling units for monks, form the largest group in the types of monuments made therein. Further, these display a large number of varieties in their general plan. The *leṇas* can be classified into two major types—Single-celled (Type A) and Multiple-celled (Type B). In the former group there are simple square or rectangular cells with open front (A i), similar cells with a front wall and doorway (A ii), and those with a verandah in addition (A iii). Better developed varieties in the same group are those with an open hall but having a narrow deep recess in the verandah (A iv). The multiple celled *leṇas* include those with a line of cells behind a long verandah (B i). those with cells around an open hall (B ii), and those of B ii variety but with a verandah in front (B iii).

*Beginnings* : The most unsophisticated single cells cut directly into the scarp face of the rock as found at Jivadan-Virar appear to be the earliest *leṇas* in Western India. These are just small open cells, with practically no other item useful for the monks to have a comfortable stay. For that matter they do not appear to have had even the front wall, and the stone bench, which occurs almost invariably in most of the *leṇas*, is also absent. These appear to belong to a stage when rock-cut architecture had just begun in Western India and when the rigorous prescriptions of the earliest stage of Buddhist monasticism, like the four *nissayas*, were still being followed by monks faithfully. Probably these are temporary or *vassa* retreats only. There is no substantial provision for storing water anywhere nearby even though they are

located at a high level on the hills where water is not available after the rainy season. It is of interest to note that these puny creations at the place still retain sufficiently well dressed surfaces, nearing polish, reminding the tradition seen in the earliest rock-cut examples of Mauryan times elsewhere. It is also noteworthy that the Jivadan caves are located very near Sopara, which according to tradition is one of the earliest towns in Deccan to receive Buddhism.[35] The open cells (Cave 1-5) in Jivadan-Virar, we feel, may well be of Mauryan age.

Almost similar caves are there in the Tuljaleṇa group at Junnar also. Here too the cells (Caves 1, 6, 7, 13, 14) are simple single ones with open front and they are neatly cut with almost polished surfaces. They further share a few other features seen in some caves in Jivadan-Virar (*e g.* Caves 1.2) like the cubical dimensions and the excellent finish of the corners at perfect right angles.

Gradually, despite the rigourous codes prescribed in the *Vinaya* in the earliest stages, the pious care bestowed by the laity for providing some comforts to the wandering venerable monks began to bring in changes in monastic architecture. First of all, what used to be simple open cells in the beginning began to be covered with a front wall provided with a doorway (*e.g.* Jivadan-Virar 7, 9, 10; Tuljaleṇa 10 etc.): the monks too needed security and warmth.[36] While in the above stages, conforming to the simplicity of life to be led by the monks, the *leṇas* had not been provided with any bench, a first attempt to make the bench inside the cell is to be seen probably in the one fabricated in wood by just setting two poles horizontally into the side walls, as seen in cave 10 at Tuljaleṇa. Further on, however, the cutting of the stone-beds inside the cells became an accepted practice even though occasionally some, as in Tuljalena and Manmodi, do not have benches even in the caves which belong to some what a later date.

The caves of the above types, which were meant to be just *vassa* retreats only, did not have any water-cisterns nearby; there was no need for them in the rainy months in this region. However, a few caves were located near water streams themselves. The small group of 3 or 4 caves near the water falls at Bhaja is interesting in this regard. All the caves of the above stages are generally datable to the latter half of 3rd century B.C.

Succeeding developments in the *leṇa* forms took several courses. It appears by this time there was generally an increase in the number of monks. Many centres of rock-cut architecture began to be provided with clusters of simlpe cells and other forms of dwelling units. At Junnar-Tuljaleṇa itself, the beginning of this tendency is to be seen where several single cells begin to be placed adjacently in a line. Two or more cells set in a line behind a common verandah give rise to the *leṇas* of B i type. One example in which the cells still retain the cubical form, but are made behind the back wall of the verandah (Type B i) is to be seen in Junnar-Manmodi 9. This monument which is datable to the end of the 3rd century B.C. is probably the earliest of this type. Another variety which could provide accommodation for more monks, but with the expenditure of less energy is to be seen in *leṇas* of type B ii, where the cells are cut in the walls around a large hall. Probably the earliest work of this type is to be seen in Bhaja 25 (unfinished) which, curiously, is made just behind a water fall.

*From arouud 200 B.C. to c. A.D. 100* : More sophisticated ones following the above design were created shortly at Ajanta (13) and Bhaja (11). These examples still retain the tradition of polishing (or good dressing). They do not show any sculptural decorations too. These initial examples in the making of the *leṇas* are datable to the end of the 3rd century B.C. A peculiarity in the *leṇas* of this class, is that there was no verandah in front of the hall. The halls opened directly to front; at the most some of them may have had simple wooden screens.

Somewhere around the beginning of the 2nd century B.C. the practice of polishing went out of vogue and a new tradition of decorating the interior halls of the wall commenced. The decorative designs used are simple and are drawn from the wooden traditions. They include simple *vedikā* bands interspersed sometimes with small decorative *chaitya* arches; Ajanta 12, Bhaja 6, 7, 13, 15, 16 and 18 are good examples of this stage. While earlier, as in Ajanta 12 and Bhaja 7, the interior alone is decorated, *leṇas* like Bhaja 15 and 16 which are also datable, to the early part of the 2nd century B.C. mark the beginning of the decoration on the facade[5].

All the above monuments of the class with cells around an open-fronted hall are to be seen to begin with in Ajanta and Bhaja only. In these places the making of stone beds too had become an invariable feature in the *leṇas*.

Probably here, with the creation of multiple-celled *leṇas*, we have the earliest evidence in Western India for the community living of monks. Eremeticism appears to have given way to monasticism. The monks were gradually giving up the rigorous codes of the *Vinaya* and were succumbing to the care bestowed on them by the pious laity. A life of better comfort was now available to the monks. So far as architecture is concerned, another tendency that was developing around the beginning of the 2nd century B.C. was to add a verandah in front of the *leṇas* of cells around hall type. In the Tuljaleṇa group at Junnar—a centre which has many excellent examples of the earliest stages of rock-cut architecture in Deccan—*leṇa* 2 shows the beginning of this feature. There is no verandah here, but the front of the hall is closed with a wall pierced by a rectangular doorway. Probably the first and the best example of the earliest of such *leṇas* of Type B iii (*i.e.* cells around hall behind a verandah) is cave 19 at Nasik. This *leṇa*, though small, is one of the very neatly executed monuments. Significantly enough, this is situated in a metropolitan centre of the age and is a donation made by a minister in charge of the district during the reign of the second Sātavāhana ruler Kanha (205-187 B.C.). This monument, apart from being one having simple *vedikā* decoration on the hall walls and *chaitya* arches on the cell doors, also happens to be the first monument where a pillar type (C) of square cross section having the arrises cut in the middle third part appears.

In general, the *leṇas* of the period from about the latter part of the 3rd century B.C. to the middle of the 2nd century B.C. present themselves as important achievements in the history of rock-cut architecture when a number of new items were introduced. It may be remembered that this is the very period when zealous inventiveness is to be seen in the case of the *cheityagharas* also. If certain aspects like the introduction of sculpture with *vedikā* pattern, the *chaitya* arches, merlons etc., and also the introduction of arches canopying the cell doorways are taken into consideration these *leṇa* types appear to copy some established elements in architecture in wood. This happens to be another aspect in which again the rock-cut tradition of the day was very much dependent upon the wooden models as it is in the case of the *chetiyagharas*. This is further substantiated by the occurrence of slanting door jambs in cells to be seen in many *leṇas* of the period.

Speaking purely from the point of view of development of rock-cut architecture this period marks the end of B ii type *leṇas* and the regular commencement of B iii type, a variety which became a well-established form to continue for a sufficiently good length of time to comeby. It is so in the field of decoration too when both interior decoration and decoration on the entablature became established features fairly.

All the *leṇas* of the period upto almost the middle of the 2nd century B.C. are flat roofed. Almost invariably they do not have pillars in the hall. This absence of pillars inside is often considered as a regular trait of the *leṇas* of the Hīnayāna period. But it appears that the use of pillars in halls was only optional. Their presence or absence depended upon the dimensions of the roof to be spanned. Most of the *leṇas* which do not have pillars have small halls and are of a size that could have been spanned by large wooden beams, had they been built in wood. But very large halls had to be supported by beams in wooden structures also. Two examples Kondane 2 and Pitalkhora 4 are of interest in this regard. Kondane 2 (*c.* 180 B.C.) is probably the largest of the *leṇas* to have been planned upto that date and naturally the interior hall had been provided with a line of pillars running parallel to the three inner walls. These pillars carried beams and reapers crossing each other to form several square panels. A similar fashioning of the ceiling is seen in the verandah also. In front of the verandah too there was a line of pillars. These pillars (all broken now) were of Type C, like those in front of Kanha's cave at Nasik. The arrangement of the pillars and the treatment of the ceilings give such an impression now, particularly due to the ceiling being covered with thin soot, that the whole thing is made of wood itself. In *leṇa* 4 at Pitalkhora also, which has a large hall, there were lines of type C pillars carrying the roof.

Side by side there was the influence of contemporary structural architecture on the forms cut in rock and possibly there was influx of some alien ideas too into this tradition. This fact is supported by certain items in *leṇa* 4 at Pitalkhora and another monument at Bhaja, viz. Cave 22 (both of *c.* 150 B.C.). Both are exceptional items in the whole of Western Indian *leṇas*. Both show a significant departure from other *leṇas* in attempting to provide vaulted ceilings—Bhaja 22 in the front verandah and Pitalkhora 4 in the cells.[38] Again in these monuments the pillars with pot-and-animal capital are to be seen introduced for the first time. The fact that this is distinctly an alien item to the tradition of Western Indian rock-cut architecture is indicated by circumstantial evidences. In the beginning there was no uniformity in the use of this element. In Pitalkhora *leṇa* 4 that capital variety has been used on the pilasters of the type of pillars C, where as in Bhaja 22 it is on the pillar with octagonal shaft with pot-base. The distinctly foreign elements displayed by the sculptures in Bhaja 22 (the so called Surya, the figure of the Scythian, etc.) are also noteworthy in this regard.

However, this new item of pot-and-animal capital pillar variety became part of the local tradition and virtually replaced the earlier pillar type of square cross section with cut arrises in the middle. The *leṇas* made from about the latter part of the 2nd century B.C. began to adopt this new pillar type.[39] Probably the earliest use of this pillar type in front of the verandah is to be seen in *leṇa* 10 (*c.* 110 B.C.) at Bhaja.[40] But, *leṇa* 11 at Bedsa which appears to have been remodelled around 80 B.C. and which shows an apsidal hall surrounded by cells having slanting jambs and the hall decorated with a run of beautiful *vedikā* decoration does not show the use of this element. For that matter there is no use of pillar of any type.[41]

It is extremely difficult to say anything about the types of *leṇas* that were made in a span of about a century and a half spread over either side of the beginning of the Christian era. Circumstantial evidences, however, point out the continuation of three types—simple *leṇas* having single cells with verandah (type A iii), cells in line sharing a common verandah (type B i) and cells around a hall with front verandah (type B iii). A few examples like Junnar-Mammodi 19, 27, 28, 30; Bedsa 10 and 12 may be cited here.

By this time, many sites which were flourishing centres lost their importance, as marked by almost a complete cessation of architectural activity at Ajanta, Aurangabad, Bedsa, Kondivite and Nanaghat. Bhaja, Kondane and Pitalkhora appear to have lingered on, though the hectic activity seen there in the earlier period can no more be witnessed in those places. A *leṇa* of a crude type (Cave 5) appears to have been made at Bhaja around A.D. 100. At Kondane too one or two monuments (8 ?) may have come up. At Pitalkhora the evidence is extremely nebulous. But it can be generally said that the creation of *leṇas* had ceased by the beginning of the 2nd century A.D. in these sites too.[42]. Activity, however, continued in three of the ancient centres, viz. Junnar, Kanheri and Nasik. There was no unbroken continuity of work even in these. Nasik was a small establishment before this time with only one *leṇa* (Cave 19). Probably Kanheri had no *leṇa* of importance to boast. At Junnar too, the one site which teamed with activity in early times by presenting a number of experimental and interesting examples, the Tuljaleṇa group fell into background; though the activity continued to a certain extent in the Manmodi group.

*C. A.D. 100 to A.D. 300* : A new wave of sudden increase in patronage to Buddhism and consequently the making of more number of *leṇas* appeared around the beginning of the 2nd century A.D. This also marks an important turning point in the history of Buddhism and the history of rock-cut architecture in Western India. An important phenomenon of the period is the rise of some new centres. In Konkan, apart from the enormous growth of the Kanheri establishment, new centres at Kuḍa, Kol and Mahad came up. At Junnar Ganesh Pahar and Sivaneri rose to prominence.

In architectural design too distinctive differences are noticeable between the creations of the earlier period and those that were made from the beginning of the 2nd century A.D. It has already been noted that *leṇas* of type A i a and B ii had already gone out of vogue. The slanting of door jambs often seen in the earlier period, a useless hangover from wooden tradition, does not occur any more. Rightly in tune with the strength and nature of the rock medium pillars do not form part of the halls, however

large they may be (*e.g.* Nasik 3 and 10, Junnar-Ganesh Pahar 7). The use of the *chaitya* arch as a decorative motif ceases to occur anymore. It is so with merlons and brackets too. For that matter, the caves made from this time onwards do not display any decoration in the interior of the halls. Any sculptural work, if made, is to be seen only on the exterior, particularly on the entablature. It is likely that by this time the architects had realised that the interior decoration is almost useless in the context of *leṇas* with front wall and verandah; they could hardly be appreciated in the semi-darkness of the halls. Circumstantial evidence shows that possibly by this time the caves used to be painted instead.[43] The architectural differences between the *leṇas* of the pre-Christian era and the present series commencing around A.D. 100 are distinctive and emphatic. There are few clear examples in rock cut architectural works of the area to show a gradual transition from the earlier to the later ones. Probably, an ebb in patronage available to the monasteries due to some cause may have been responsible for this position.[44]

By this time, *i.e.* by about the early 2nd century A.D., rock-cut architecture particularly the *leṇa* varieties had shed away much of the elements of wooden tradition and the rock-tradition itself had become standardised. Nasik 10 (*c.* A.D. 120), Nasik 3 (*c.* A.D. 124 with slightly later additions) and Junnar-Ganesh Pahar 7 (*c.* A.D. 120-130) are very good examples of the early works of this stage. All these display many of the new elements mentioned just above. A few more noteworthy elements are that these begin to be adorned with pillars of the pot-base and pot-and-animal capital varieties in front of the verandah (Nasik 3, 10, 17, Junnar-Manmodi 1, Junnar-Ganesh Pahar 7). Nasik 3, inaugurates a new tradition of making a backed bench to run from the pillars flanking the entrance passage upto the pilasters on either side. The low backed benches become supports to the pillars too. The front side of the backed benches are usually decorated with *vedikā* pattern, and the area below with simple vertical studs.[45] In the interior too the stone beds which used to be simple platforms running from wall to wall began to be made in such a way as though they are placed in a recess (bench-in-recess variety). Many of the *leṇas* of cells around hall type are further provided with a low bench running along the three inner walls of the hall.

Contemporaneously with the *leṇas* having the above items, it appears simple *leṇas* with single cell with front verandah (Type A iii) and cells in line sharing a common verandah (Type B i) continued (*e.g.* Nasik 2). Along with these, some *leṇas* with new designs also began to appear sometime in the latter half of the 2nd century A.D. One is a *leṇa* type consisting of a single cell behind or by the side of a small hall. This consists of a pillar fronted verandah too and usually there would be a low bench running along the two adjacent walls of the hall (*Leṇa* type A iii). Another type is again a single celled *leṇa* where the cell is placed behind a hall with open front but provided with a deep narrow recess in the hall (*Leṇa* Type A iv a). A somewhat advanced variety of this is the one in which a verandah too is added to the above (*Leṇa* type A iv b). All these types continued almost till the end of the period under consideration.

Gradually changes appeared in the delineation of the facade too. While in the *leṇas* of 2nd century A.D. pillars of pot-and-animal capital variety generally adorn the front of the *leṇa*, by the latter part of that century the pillars become plainer losing the animal capital. The pot-capital with stepped pyramidal dosseret alone remains. Almost by the beginning of the 3rd century A.D., the pillars became even more simple consisting of octagonal shaft with no capital and usually with a square base rising from the backed bench (pillar of D vi variety).[46] In many sites the pilasters begin to have the hour-glass decoration on the plain rectangular faces. The simple *Vedikā* decoration on the entablature too begins to be dropped in preference to ordinary ledges which form eaves. Many caves, particularly at Kanheri, have steps and *candraśilas* added to these. These latter items appear in greater profusion in the *leṇas* of the 3rd century A.D.

A notable tendency in architectural tradition of the period is the preference in selection of *leṇas* of certain plan over others in various sites. For example, while in Junnar-Sivaneri single celled *leṇas* are more in number at Manmodi it is the *leṇa* of B i type (line of cells behind a verandah) and the single celled *leṇas*; Junnar-Ganesh Pahar has a large number of *leṇas* of cell and recess variety (type A iv). Similarly at Kanheri type A iii with cell, hall and verandah occur extensively.

An overall view of the *leṇas* hewn during 2nd and 3rd centuries of the Christian era shows that rock-cut architecture of the period had developed itself as an independent architectural tradition. There is no more the hang-over or the link with wooden architecture. It is to be expected to be so as by that time more than 400 hundred rock hewn monuments had been created in the region in the course of almost two to three centuries. Groups of architects and workers specialising in this field must have naturally grown, who with the familiarity developed in working with the rock-medium could have developed their own methods and ideas with regard to the technique and form of the monuments. These of course were to be created in such a way as to serve the needs of the monastic community for whose use these were intended. So far as this aspect is concerned it may be safely stated with our knowledge of the contemporary inscriptions that by this time the monks had become used to somewhat easy life; the monasteries were no more *vassa* retreats, and many monks should have stayed throughout the year in such monasteries. Thus the *leṇas* were necessarily to be comfortable places to live and naturally every monk would prefer to live independently in a cave meant for himself. Though some *leṇas* of cells around hall type were created in the beginning of this period (*e.g.* Nasik 3, 10, Junnar-Ganesh Pahar 7) gradually there was a tendency to have seperate *leṇas* for individual monks. Further, it is also possible that the flow of patronage from the laity increased day by day as seen from the record of donation of *akhayanivis*, which may as well be in due regard to the service rendered by the monk community to the society in general. These monasteries, apart from simple residences of monks might have grown to be institutions imparting education, and possibly needs associated with such activity required *leṇas* of slightly a different type. We have shown above that the new types of *leṇas* of A iii and A iv types with eloborate seating arrangements seen in Junnar—Ganesh Pahar, Kanheri and a few other places are the results of such a need. Most of the *leṇas* of this period were also provided with one or two *poḍhis* to serve the requirements of the persons staying there throughout the year and also for those who frequented the place. Similarly these were also often provided with long benches or view seats in the verandahs and fore courts for the use of the residents and visitors. Thus many new varieties of *leṇas* with several accessories came in with the changing pattern of life in the monasteries.

By the last part of the 3rd century A.D., probably continuing even to the early part of the 4th century, a new architectural type appears in addition to the above types, that is the *leṇa-chetiyaghara* in which a *stūpa* shrine is made in the back wall of the hall of *leṇas* of B iii type, along with the cells for monks around. This is the very type which has been described above in the development of *chetiya-gharas* as the one that inaugurates the tradition that became well established in the '*Vihāras*' of the Mahāyāna period.[47]

*Maṭapas*

There are 37 examples of *maṭapas* (simple halls) in the sites discussed in the present work. Typologically these can be classified into two main varieties, viz. halls with bench (A), and halls without bench (B). The *maṭapas* are primarily adjuncts to the monastic units. These appear to have been used mostly as halls of assembly, rest halls for pilgrims or travellers, and as dining halls. It is not easy to make out as to what exact purpose particular *maṭapas* were being used, unless there is specific mention in the inscriptions; there is no clear architectural difference in the *maṭapa* types meant for different purposes.

Simple *maṭapas* without the verandah are the only varieties that are seen made in the pre-Christian era. Nasik 21 which consists of two square pillars with chamferred arrises in the middle (Type C) shares the pillar feature with *leṇas* 19 of Kanha's time (205-187 B.C.) and hence is probably the earliest *maṭapa* in Western India. Nanaghat 11 which appears to be a rest hall meant for travellers going up and down the Nana pass is the next one to be made. It is datable to 175 B.C. (p. 257). This too had the pillars of Type C like those in Nasik 21. While Nasik 21 does not have the bench, Nanaghat 11 has a low bench running along the three inner walls. Both have open fronts except for the two pillars supporting the roof.

*Maṭapas* appear to have been made in somewhat greater number probably from about the 1st century A.D. onwards. When the monastic establishments had grown in size and the number of monks too had increased, probably the halls may have become a necessity for holding gatherings for certain ceremonies like the *uposaṭha* Further by this time the character of the monastic establishments had changed sufficiently, and they were now being occupied throughout the year by monks. Inscriptions of the period show that munificent donations of land and money for the distribution of food and robes too were being made. Naturally there was need for halls where food was to be distributed. One inscription from J[illegible]nar specifically mentions a cave as a *bhojana-maṭapa*.[48] The wealth of donations received by the monasteries indicate a close contact, such institutions maintained with the laity and probably some of the *maṭapas* could as well have been meant as rest halls for the lay devotees who frequented the monasteries.[49] Interestingly in several places like Bhaja (Cave 2-3), Bedsa (Cave 15) and Kondane (Cave 8) the *maṭapas* are placed at the end of the cave groups.

Even in the 2nd-3rd century A.D. *maṭapas* of both A and B types continued. However, while there are a few examples of the A type, without verandah, (Junnar-Manmodi 7 of Nahapāṇa's 46th year etc.) *maṭapas* with verandah (Type B) are more in number. Some of them (*e.g.* Nasik 20) had pillars too of the type used contemporaneously. It can also be said generally that the *maṭapas* and *leṇas* of 2nd and 3rd century A.D. look alike so far as the facade delineation is concerned and thus they follow the same course of stylistic development. The difference is only in the interior, that the *maṭapas* have only a hall while the *leṇas* have cells too.

*Poḍhis, Koḍhis and Āsanapeḍhikas*

All these are small architectural works, usually appearing as minor adjuncts to the monastic complex. Some of the *poḍhis* (water cisterns), *koḍhis* (small niches) and *āsanapeḍhikas* (long benches) occur as part of the caves often, even though there are independent ones too.

As long as the caves were being used by monks as retreats during the rainy season there was little necessity to store water. Hence it is seen that some of the, cave groups like those at Ajanta, Jivadan-Virar, Junnar-Tuljaleṇa, Kondane and Bhaja had no cisterns in the very early period. But when the practice of using the monasteries almost throughout the year started, *poḍhis* became essential items in the monastic complex. Probably to begin with a few monasteries only may have been utilized in such a way, and the practice of continuous occupation of them appears to have grown gradually; the number and sizes of the *poḍhis* too varied correspondingly. By about the 2nd century A.D. when the monasteries became regular abodes for monks with provision for food and other necessities too made therein, *poḍhis* increased in number as well as size. It may be noted that while there are only a few *poḍhis* in sites like Bedsa and Bhaja—they are also small in size—the later monastic centres at Junnar (Sivaneri, Ganesh Pahar) Kanheri and Kuḍa have a large number of *poḍhis*. Some of the Kanheri *poḍhis* are very large, with their capacity ranging from 30 to 300 cubic metres.

Typologically the *poḍhis* are of two verieties—*pāniya-poḍhi* and *sanānapoḍhi*. *Sanānapoḍhis*, which are possibly water cisterns meant for bathing as the name indicates, are usually large ponds varying in length and breadth from 5 to 10 metres and in depth from 1 to 2 metres. One or two clear examples of this type are to be seen at Kanheri. At Bedsa and Junnar-Sivaneri there are some small ones.[50]

The *paniyapoḍhis*, meant for storing drinking water, are seen in two types—(1) with simple square mouth on the flat surface of the rock, and (2) similar ones, but with the mouth made in the floor of a rectangular recess (*poḍhi*-in-recess). Possibly the earliest *pāniyapoḍhis* could have been just square or rectangular depressions made at some place right in the natural course of small streamlets coming down the hill. There are two examples of this type in Junnar-Manmodi.[51] From the palaeographical and other associated evidences it is seen that some time from the early 2nd century B.C. upto the end of the 1st century A.D., the practice was to make *poḍhis* of the first variety, to make a small square mouth at ground level and to hew the huge storage space underneath it. Rain water coming down the hills was led into these through small channels. But subsequently, probably realising that such open mouthed cisterns present at ground level are somewhat dangerous to men and animals moving around, small

railing enclosures in wood may have been set up around. Indications of examples of such work remain in the mortises seen around some cisterns in the Sivaneri group at Junnar.[52]

The *poḍhis*-in-recess type is a natural development from the above. This variety appears to begin in the early part of the 2nd century A.D. and continues till the end of the period under consideration. The earliest datable example of this *poḍhi*-type is in Nasik cave 3 of the time of Gautamīputra Sātakarṇi.

*Koḍhis* (niches) are such featureless items that nothing can be said about the typological varieties or their chronological positions. However, in the Sivaneri, Ganesh-Pahar and Manmodi groups at Junnar, and at Mahad, Kanheri etc.,[53] niches about 0.6 to 1 metre broad and high and about 30 to 50 centimetres deep are cut at a height of about 60 to 70 centimetres above the ground level. For what purpose these were used cannot be guessed at easily. It is not unlikely, as some scholars have suggested, that some of these are just view-seats meant for the monks to sit there and enjoy the beautiful vista of the natural surroundings. But, such niches appear sometimes within the caves too. One example in Mahad cave 27 has a *stūpa* cut in relief and an inscription describes it as *cheitya-koḍhi*. Many more instances of *stūpas* cut in niches either small or big (*e.g.* Mahad 15) may also be cited. It is probable that some of the *Koḍhis* at least, though now empty, may have had housed some objects of worship.[54]

The *Āsanapeḍhikas* (sitting benches) are also of the nature of amenities provided for the monks to sit and relax. Quite consistently with the idea of comfort that is associated with them they belong to that stage in the history of Buddhist monasticism in which easy ways of life had come into existence in the monasteries. Such seats are known from Junnar and Kanheri only and they are in or near *leṇas* of the 3rd century A.D. The only remarkable thing about them is that they are made in such places from which a beautiful view of nature around could be enjoyed.

## TRANSITION FROM THE HĪNAYĀNA TO THE MAHĀYĀNA ARCHITECTURAL FORMS

As a by product of our analysis of the monuments of the so called 'Hinayāna' stage covered in the above pages, some new light is also thrown on the emergence of the Mahāyāna architectural tradition. We have narrated already the various epigraphical and other evidences establishing that the Mahāyāna religious ideas had begun to spread in Western India right within the period of our study (p. 37). While Mahāyānism had made its impact in the neighbouring territories in Āndhradeśa and northern India from about the 2nd century A.D. at least, there is no reason to think that Western India remained isolated from its influence at this time.

Mahāyānism is after all the result of certain ideological changes brought in within the fold of Buddism and its growth is of course gradual. In architecture too such gradual changes are noticeable. In fact an important difference between the 'Hināyāna' and 'Mahāyāna' rock-cut architectural forms is in the introduction of a shrine inside the dwelling units of the monks. In the Mahāyāna monuments the cult object housed in the shrine is the image of Buddha in human form. The idea of placing a cult object, though not the Buddha image, within the dwelling units is not alien to the early Hīnayāna tradition. *Stūpas* cut in niches in the verandah walls are known in such an early monument as cave 2 at Kondane datable to the early part of 2nd century B.C. There are evidences for similar practices in many *leṇas* of 2nd and 3rd centuries A.D. as in Junnar-Sivaneri 19, 33, Mahad 27, etc. The practice, however, may not have been widespread. The idea of inserting a 'shrine' itself prominently within a dwelling unit is seen in the beginning of the 2nd century A.D. *Leṇas* 3 and 10 at Nasik, made during the times of Gautamīputra Sātakarni and Nahapāṇa have relief *stūpas* cut at the centre of the back wall of the hall right opposite the main doorway. Nasik 3 is of much interest due to the fact that the central doorway in the front wall is beautifully decorated with elaborate sculptural work, befitting the importance of the holy object to which it leads. Nasik 17, which too belongs to the same date, is a *leṇa*, but the inscription there specifically informs that a *chetiyaghara* was also intended to be made within that (the cave, however, is unfinished). It is very well in continuation of this tradition that the *leṇa-chetiyaghara* types appeared (Kuḍa 1 and 6, Mahad 8 and Shelarwadi 8). In all these monuments, however, the enshrined cult object is the *stūpa*. When exactly the Buddha figures began to appear in Western

India is an important matter to be probed into in this context. Though this falls outside the purview of the present study, a few points may be mentioned. It has been stated already that the Buddha image cut on the base of the lion pillar in the southern side of the front court of *chaitya* hall 3 at Kanheri is possibly an image datable to the 3rd century A.D. It is not unlikely that Buddha images may have begun to be made from that time at least.[55] There are indications that some of the earliest images may have been in stucco. In some *leṇas* of late 3rd century A.D. like 50, 74, 79 at Kanheri, rectangular niches with arched top have been cut in the back wall of the hall just opposite the central doorway. They are empty niches now, but in caves like Kanheri 31 and Karle 4 of slightly later date Buddha images have been cut in similar niches in a similar position. Karle 4 and Kanheri 31 are of further interest showing the gradual transition from the Hīnayāna to the Mahāyāna architectural forms. In these, and in many others too, the continuation of the architectural elements current in the late 3rd century *leṇas* can be seen, though they contain Buddha images. In Karle 4 (PL. 218) there is the use of the pillar of the pot-capital variety which resembles very much the pillar seen in the cave at Ambivale. The backed bench too is present here and that is again decorated with studs in the fashion of the 'Hīnayāna' monuments at Kanheri. The distinctly new element here is in the treatment of the basement where horizontal cornices have been made. Kanheri 31 (PL. 219), which contains the Buddha image in a niche in the back wall, has a pillar type in front having a design (PL. 220) which appears to have been derived from the hour-glass decoration that was in vogue in the Hīnayāna *leṇas* at Kanheri, etc. Further the *candraśilā* in front shows that it is distinctly of a form representing a slightly evolved type from the *candraśilas* found in many caves at Kanheri.

We feel that these items reveal that the Mahāyāna architectural tradition is just in continuation of a natural process of architectural development that was all along there in the Hīnayāna phase. There appears not to be any stylistic or chronological gap between the Hīnayāna and Mahāyāna traditions.[56]

## REFERENCES AND NOTES

1. Cf. Chapter I.
2. Cf. Chapter II. It has been well-recognised that most of the centres, being monastic establishments, are usually made at such places not too near nor too distant from the towns. They are at such a distance as to dissuade the town folk from frequenting the monasteries often, but at not too great a distance to dissuade the monks from going for daily begging. The monastic establishments are also located in selected places having a serene and picturesque view around.
3. It is not unlikely that Buddhism may have begun to spread in Deccan at a slightly earlier period than the time of Aśoka. There is some hint towards such a possibility in the legendary account of Puṇaka who is described as responsible to bring Buddha himself to Sopāra and establish Buddhist temples there. It is further noteworthy that while Aśoka favoured the *Vaibhajyavādins* of the *Theravada* school, Deccan was a stronghold of the *Mahāsaṁghikas*, which in the Buddhist council convened by Aśoka was discredited as a schismatic sect. (See P. 33 and note 152 of Chapt. III).
4. The possibility of some of the centres being of Jaina affiliation has been discussed in note 148 of Chapt. III.
5. See p. 35, 230 etc.
6. It has been shown in various instances that the area available in the *chetiyagharas* for the congregation of worshippers was sufficiently larger than that needed by the number of monks living in the concerned monasteries e.g. pp. 105, 128.
7. Other factors like the spread of newer ideas due to economic and political contacts with various culturally progressive regions (*e.g.* Mathura, Amaravati) and due to persons hailing from distant regions (*e.g.* Śaka, *Yavana*) have also been toucheed upon in Chapter III p. 31, also see p. 280 and Bedsa note 6.
8. The rock-cut monuments have been classified into six major types viz. *Chetiyaghara, Leṇa, Maṭapa, Poḍhi, Koḍhi* and *Āsanapeḍhikā*. Several sub-varieties of these are mentioned on p. 68-71. The architectural members and motifs subjected to typological analysis are *stūpas* (p. 72), pillars (p. 78), roof-types (p. 80), screen walls and verandah (p. 83), door frames (p. 83), windows (p. 83), benches (p. 85), *chaitya* arches (p. 86), *vedikā* (p. 89), brackets, (p. 89), stepped merlon (p. 90), hour-glass (p. 90), studs (p. 90) and *chandrśilā* (p. 91).
9. The important results of various approaches have been displayed succintly as follows. Sātavāhana chronology in Table 2 on p. 23, palaeographical evolution in Chart II. Inscription series in epochal sequence Chart III. For typological classification of architectural elements see note 8.

10. These cover most of the major ones pertaining to this period. Karad and Nadsur are the only notable exceptions. The others left out are very minor sites.
11. However, there is evidence to show that the monastic establishments continued to be occupied, though patronage was not forth coming any more for the creation of more monuments. At Bhaja and Pitalkhora some minor monumeuts were made in a slightly later period. But these are such peony creations as uncomparable in any way to the magnificent monuments that were produced in the early period.
12. Could this be due to sudden political change, and consequent cessation of commercial activities or diversion of the same to some other region by which the old towns along the ancient trade routes had to witness economic depression ?
13. Both Kanheri and Nasik had no architectural creations of considerable size and beauty so far as the period before the Christian era is concerned. Junnar, however, was an important centre. But here too that early venue of activity viz. Tuljaleṇa lost its importance. Substantial creations continued, however, on the Manmodi hill. Ganesh Pahar and Sivaneri rose to prominence slightly later.
14. The time span of architectural activity in individual sites can be made out from Chart V.
15. Further sub-classification within these are also noticeble. See p. 68 ff for a datailed discussion.
16. The contention that this could have been the first experiment to make the *harmikā* also in stone is indicated by the fact that here the *harmikā* is made of a separate stone and set in position on the head of the dome—as it would have been done had the *harmikā* been in wood.
17. Like those unearthed at Sravasti, Kausamsi, etc. Incidentally this element further gives an indication that the form of the *chaitya* arch is nothing but a transverse sectional view of elliptical structures with vault roof. See p. 101.
18. Bhaja has a decorated facade, but we have shown elsewhere that that decoration is a work wrought a little later than the making of the cave proper (p. 101). Ajanta 10 and Tuljaleṇa 3 had simple dressed rectangular surfaces only in front.
19. Much of it is now ruined, but traces remain (see. pl. XLVIII B in Ancient India No. 15)
20. Another item which may have facilitated this new venture is the comparative softness of the rockformation there; it was easy to cut and shape and, in a way, wood workers themselves could have achieved this as though they are working on wood.
21. See Chapt. VI For a detailed discussion of this aspect.
22. Of course, this is a natural step in the process. The rock-cut architectural tradition itself had begun by emulating wooden architectural forms in stone; while the general forms were adopted in the beginning allowing free use of wood for the minor parts, now even these began to be cut in stone.
23. Such a decoration may have been in wood or paint in other *Chetiyagharas*. But it is fashioned in stone itself here.
24. Nasik 18 is unique in one respect that this happens to be the only *chaitya* hall where the pot-and-animal pillar variety is introduced in the facade decoration.

    The interior and lower part of Nasik 18 belong to later stage of work there.
25. Whether such a development was already there in structural architecture cannot be ascertained at present.
26. This, we may recall, is a more sophisticated expression of the decoration that was attempted earlier on the facade of the Nasik *chetiyaghara*.
27. Such a solution was very much necessary at Karle as here the monument faces west. Probably the first experiment in this direction was made in Kanheri *Chaitya* hall 3 (1st stage of work) but this *chetiyaghara* was left incomplete for some more time to come by.
28. This is an unfinished *chetiyaghara*.
29. This *chetiyaghara* too is unfinished.
30. So far as the Hīnayāna period is concerned there is no *chetiyaghara* of the vault roofed type which can be placed to a later date than this. However, some late revivals are seen in the *chaitya* halls 16 and 29 at Ajanta and the Viśvakarma cave at Ellora which are datable to nearly four centuries after the date of this cave.
31. The umbrella of course is an essential part of the *stūpa*. Formerly they were made of wood. The Karle and Bedsa *chaitya* halls have clear indications in the surviving wooden umbrella or staff. Many others have a hole on the top to which the stave of the umbrella was introduced. Many decorative *stūpas* of the earlier period also testify to the fact that even the early *stūpas* had umbrellas. Probably the earliest example in which that too is cut in stone itself is in the small low circular *chaitya* cave 4 at Kanheri. But the cutting of the umbrella in stone in the *stūpas* inside larger *chaitya* halls became an established practice from the time when the flat roofed *chaitya* hall became the standard variety.
32. The inscription in Mahad 8 specifically names that monument as *leṇa-cum-Chetiyaghara*.
33. For the beginnings of the idea of introducing the object of worship within the dwelling units see p. 324 The position of caves with minor or aberrant variations, like Pitalkhora 10, 12, 13, 14, Kanheri 36, etc., have been mentioned in the respective sections.
34. Nanaghat alone appears to be an exception.
35. See note 152 to chapter III.
36. Stylistically the addition of a verandah in front of the cell is the next step. As far as the single cell variety with verandah is concerned, certain palaeographical and other indications show that this type appears to commence only in about the 1st century A.D. No clear evidence for the existence of such a *leṇa* could be obtained for the earlier period. But we feel that too much importance need not be attached to the absence of evidence, as there are umpteen examples with

simple open verandahs with little architectural features or other chronological indicators, and these may have been made at any time.

37. At Pitalkhora also, in cave 4, such a beginning of decorating the facade appears to have been made almost contemporaneously with these. But that monument had to wait for a few more decades to be completed.
38. Another monument with a similar new experiment is *leṇa* 11 at Bedsa. But this is of a slightly later date, *C.* 80 B.C.
39. The use of pot-and-animal capital variety of pillars in the *chaitya* halls has been noted already (p. 78, 109, 193, 222, 271).
40. The pillars are completely ruined, but the remants of base and capital survive.
41. But thin square pilasters with crude attempts to chamfer the arrises in the middle are to be seen on the walls. Probably this situation is indicative of the transitional stage between the use of pillars of Type C (square) and Type D (pot-and-animal capital).
42. This does not mean that all these sites were completely deserted. In the groups of *stūpas* in Bhaja 19 and Pitalkhora 10, there is evidence of some of them being made in much later period. A water cistern (14) in the Bhaja complex is datable to the later part of the 2nd century A.D.
43. Even though these too would not land themselves to carry appreciation in the dimly lit interior, possibly intelligent use of colour schemes, may have brought in the desired effect.
44. The reason for such a situation is difficult to make out. Could this be due to the power struggle that was going on between the Sātavāhanas on the one hand and Śakas or Kuṣāṇas on the other? This could have brought in a bad effect on the economy of the region too. Such a possibility is indicated by the *Periplus* wherein is a mention of the Greek ships sailing for the port of Kalyāṇ being diverted to Barygaza when the Konkan region came under the control of one Sandanes (Nilakanta Sastri, p. 309, etc.).
45. Nasik 3 alone is an exception to this. Dwarf *Yakṣas* have been carved here instead of vertical studs.
46. There are some rare exceptions, in which the pot capital continues, as in the Ambivale *leṇa*.
47. There are many other features too which show a gradual transition from the Hīnayāna to the Mahāyāna architectural forms (p. 324).
48. Basing on the evidence from inscriptions in Kanheri cave 2b we have shown that it was an almonry. Similarly Junnar-Ganesh Pahar 21-23 could have been used as a refectory.
49. Like the modern choultries in centres of pilgrimage ;
50. An inscription from Kuḍa refers to a *sanānpoḍhī*, but it is unfinished. A peculiar *poḍhi* (5) reached through an underground passage is seen at Shelarwadi.
51. Exc. 10-12. Whether these examples themselves are the earliest in date or otherwise cannot be made out. (See also p. 144).
52. Exc. 26c.
53. There are one or two examples at Bhaja and Bedsa also.
54. Like *stūpa*, *chaitya-vrikṣa* or *Buddha-pāda* made of stucco or painted.
55. We feel that there is need for a fresh study of the Mahāyāna Buddhist sculptures in rock-cut caves of Western India, from the point of view of style and chronology.
56. The evidences that have been presented here (also see p. 221) though few, call for a detailed study of chronology and development of rock-cut architecture of the Mahāyāna period. While the Mahāyāna monuments at Ajanta and Ellora are certainly of a far developed variety compared to the Hīnayāna monuments covered in the present work, there appears to be examples linking the two series. We feel that Kanheri, particularly has several examples styltiiscally falling in-between. Several other items that have been postulated from the present study have been indicated elsewhere : *e.g.* caves made for monastic purposes, (pp. 144-145, 237 and 256-257) : some caves being of Jaina affiliation, (pp. 159, 42 (note 148) ); sectarian differences in architecture, (pp. 35, 230); Kanheri and Junnar-Ganesh Pahar groups as educational institutions, (pp. 174, 220); Bhaja, Kanheri and Piṭalkhora as pontifical seats, (pp. 130, 226, 231, 293); etc.

*Appendix*

# *List of Brahmi Inscriptions from the Rock-cut monuments of Western India*

This list is intended to include all the known inscriptions associated with the rock-cut monuments of the region and belonging to the period under present study (*c.* 250 B.C.—A.D. 300).

The texts of the inscriptions are based mostly on previous publications. Twenty-two inscriptions which were known but unread and two newly discovered ones have also been copied from the originals and transcribed. Corrections have been inserted in the texts of a few inscriptions after verification with the originals on stone.

The inscriptions have been numbered in separate series for each site. The sites are arranged in alphabetical order.

## AJANTA

1. CAVE 10, on the right foot of the barge board of the arch.
   Reads : *Vāsiṭhiputasa Kaṭahādino gharamukha dānāṁ*
   LL 1197; BCT p. 116.
2. In the same cave, on the wall of the left aisle, towards front.
   Reads : *Kanhakasa Bāhaḍasa dāna*[*ṁ**] *bhiti*
   Ghosh, 1968, p. 241; Dhavalikar, 1968, p. 147.
3. In the same cave, in the left aisle, painted on the 3rd rafter between the facade arch and the first rib.
   Reads : *Dhamadevasa*[*ma*] *..nasa pasādā d*[*ā*]*naṁ pavajitasa*
   Ghosh, 1968, p. 241; Dhavalikar, 1968, p. 147.
4. In the same cave, on the left wall, painted over the old paintings opposite the 3rd column.
   Reads : *...Bhagavasa . Yati Puvade*[*va*]*.....ta yati patisa yasa.....*
   (Very much damaged)
   Burgess and Indraji, 1881, p. 84.
5. CAVE 12, on the side of the door way of the cell at the right end of the back wall.
   Reads : *Ṭhānako deyadhamaṁ Ghanāmadaḍasa vanijasa sauvarako sa upā*[*satho*]
   LL 1198; BCT p. 116.

## AMBIVALE

1. In the *leṇa*, on one of the pillars of the verandah.
   Reads : *Ghanapramātha Chapakapramātha*
   LL 1069; Dikshit, 1946, p. 72.
2. In the same cave, on the same pillar.
   Probable reading : *Chetyaveṇa pa? ra? ya kahā(paṇa ?)*
   LL 1069; Dikshit, 1946, p. 72.
3. In the same cave, on another pillar.
   Reads : *Jīvaśiva.*
   LL 1070; Dikshit, 1946, p. 72.
4. In the same cave, on another pillar.
   Reads : *Puśyaśiva*
   Dikshit, 1946, p. 72.
5. In the same cave, on another pillar.
   Reads : *Gri(tri?)ṣuśiva*
   Dikshit, 1946, p. 72.

## BEDSA

1. CAVE 3, on the wall behind the *stūpa*.
   Reads : *...ya Gobhūtinaṁ āraṇakāna peḍapātikānaṁ*
   *Mārakuḍāvāsinā thupo. ...āṁtevāsinā bhatāsāḷhamitena kārita*
   LL 1110; BCT p. 89.
2. CAVE 5, over the cistern.
   Reads : *Mahābhoya bālikāya ma [hā*]deviya mahāraṭhiṇiya*
   *Sāmaḍinikāya [de]yadhama Āpadevaṇakasa bitiyikāya*
   LL 1111; BCT p. 90.
3. CAVE 7, over the door of the cell at the right end of the verandah of the *chaitya* hall.
   Reads : *Nāsikato Ānadasa seṭhisa putasa Pusaṇakasa dānaṁ*
   LL 1109; BCT p. 89.

## BHAJA

1. CAVE 6, on the door of one of the back cells.
   Reads : *Bādhayā hālikajayāyā dānaṁ*
   LL 1084; BCT p. 83.
2. CAVE 12, *chaitya* hall, on one of the wooden ribs in the ceiling.
   Reads : *Dhamabhāgasa pasādo*
   Deshpande, 1959.
3. In the same cave, on another wooden rib.
   Reads : *Śrī Dharasē[na]*
   Deshpande, 1959.
4. Same cave, above the *Yakṣi* image on the facade.
   Reads : *Veḍa*
   Deshpande, 1959.
5. CAVE 18, over a cell door in the right side.
   Reads : *Nādasavasa Nāyasa Bhōgavatasa gābho dānaṁ*
   LL 1078; BCT 82.

6. CAVE 19, cistern, on the back wall of the recess.
   Reads : *Mahārathisa Kosikīputasa Viṇhudatasa deyadhama poḍhi*
   LL 1079; BCT 83.
7. CAVE 20, *stūpa* group, on the base of the 6th *stūpa*.
   Reads : *Therānaṁ bhayaṁta Saṁghadinānaṁ.*
   LL 1082; BCT 82.
8. In the same cave, on the base of the 7th *stūpa*.
   Reads : *Therānaṁ bhayaṁta Aṁpikiṇakānaṁ thūpo*
   LL 1081; BCT p. 82.
9. In the same cave, on the dome of the 8th *stūpa*.
   Seems to read : *Therāṇaṁ bhaṅaṁta Dhamagirināṁ thūpa*
   LL 1080; BCT p. 83.
10. In the same cave, on the capital of the 13th *stūpa*.
    Reads : *Thērānam bhayaṁta*
    (Incomplete)
    LL 1083; BCT p. 83;
11. In the same cave, on the 9th *stūpa*.
    Seems to read : *Pacha.navasi bhuta satānaṁ thūpa*
    ARIE 1969-70, No. C 2875.
12. In the same cave, on the 11th *stūpa*.
    Reads : '*Thērānaṁ [bhayaṁta]...ri[ṇā]ṁ thūpa*'
    ARIE 1969-70, No. C 2876.

## JUNNAR—MANMODI

1. CAVE 2, on the right wall outside the verandah.
   Reads : *Sidhaṁ upāsakasa negama(sa) Satamala-putasa...*
   *...puto Virabhuti(na)*
   LL 1172; BCT p. 98.
2. CAVE 5, cistern, on the back wall of the recess.
   Reads : *Sivasama-putasa Sivabhūtino deyadhama poḍhi*
   LL 1173; BCT p. 98.
3. CAVE 7, on the right wall.
   Reads : [*Raño*] *Māhakhatapasa sāmi-Nahapāṇasa* [*ā*]*mātyasa Vachchasagōtasa Ayamasa* [*de*]*yadhama cha*
   [*po*]*ḍhi maṭapo cha puñathaya vase 46 kato*
   LL 1174; BCT p. 103.
4. CAVE 21, outside the hall.
   Appears to record the donation of a five-celled cave.
   (Much damaged)
   LL 1157; BCT p. 98.
5. CAVE 26, unfinished *chaitya* hall, on a quadrantal moulding over the door.
   Records several land grants made by the members of the *suvaṇṇakāraseṇi* to the monastic community living in Gidhavihāra.
   (Text is available only in B.G. This too requires revision)
   BG—Poona (1885); p. 184, No. 8
6. In the same cave, on the back of the recess to the right of the window.
   Records some land grants
   (Fragmentary)
   LL 1167; BCT p. 17.

7. In the same cave, to the left of the above.
   Records some land grants in the village Valāhaka and Seüraka.
   (Incomplete)
   LL 1166; BCT p. 97.
8. In the same cave, along the right side of the front arch.
   Records some grants by the guild of bamboo-workers and braziers.
   (Incomplete)
   LL 1165; BCT p. 97.
9. In the same cave, on the left side of the front arch.
   Reads : *Koṇāchike seṇiya uvasako Āḍuthuma Sako //*
   *Vaḍālikāyaṁ Karajamula nivataṇāni visa //*
   *Kaṭaputake vaḍamule nivataṇāni [na]va*
   LL 1162; BCT p. 96.
10. In the same cave, in the same place.
    Reads : *Mahāveje gāme Jālabhati udeseṇa nivataṇāni ṣaṇuvisa Sidhagaṇe Aparājitesu satāni selasa Mānamukaḍasa purato talakavāḍake nivataṇāni tiṇi //*
    *nagarasa.....ka.....sela udeseṇa nivataṇāni ve*
    LL 1163; BCT p. 96.
11. In the same cave, in the same place.
    Reads : *Ābikābhati nivataṇāni dve Vāhata Vacheḍukasa esa*
    LL 1164; BCT p. 97.
12. In the same cave, on the left end of the back wall of the verandah.
    Reads : *Game Puvānadesu nivatanāni panarasa 15 Palapasa deyadhama Apajitesu gaṇe payoga ka(ā)hāpaṇanā(ṇāna)*
    LL 1158; BCT p. 96.
13. In the same cave, on the octagonal faces of the pillars in front.
    (Appears to be fragmentary and nothing could be made out of this. Burgess says that they are in some unknown language. Now the writing is completely covered by plaster).
    LL 1159; 1160, 1161; BCT p. 96.
14. CAVE 27, on the back wall of the verandah.
    Reads : *Bhārukachhakānaṁ Laṁkuḍiyānam bhātūṇam Asasamasa putāṇa Budhamitasa Budharakhitasa cha bigabhaṁ deyadhammaṁ*
    LL 1169; BCT p. 96.
15. CAVE 28, on the back wall of the verandah.
    Reads : *Saṇiti-gahapati putasa gahapatisa Sivadāsasa bitiyikāya cha sahā parivā...*
    LL 1170; BCT p. 95.
16. CAVE 29, on the left wall in the verandah.
    Reads : *Gaṇāchāriyānaṁ therāna bhayaṁta Sulasānaṁ tevijānaṁ aṁtevāsinaṁ thērāna bhayaṁta Chetiyasānaṁ tevijānam Naṁdaṇakanavaka....aṁ Kothalikīyānaṁ...cha gahapati....natuno Nadaṇaka ayasa saparivārisa deyadhama*
    (Improved text)
    LL 1171; BCT p. 95.
17. In Excavation 19a, on the recess of a cistern.
    Reads : *Kumiyā duhituya Sulasāya deyadhaṁma poḍhi*
    (Text not published)
    IAR 1962-63.
18. On the recess of cistern 39r.
    Reads : *Kumiya Sulasā-mātuya poḍhi deyadhama.*
    (Newly discovered. Unpublished.)
19. CAVE 40, The Large *chaitya* hall, on the central semi-circle over the front arch.
    Reads : '*Yavanasa Chaṁdānaṁ deyadhama gabhadā(ra)*'
    LL 1156; BCT p. 95.

## JUNNAR—GANESH PAHAR

20. CAVE 5, over the left window outside.
    Reads : *Dhaṁñikaseṇiya satagabhaṁ poḍhi cha deyadhamaṁ*
    LL 1180; BCT p. 94.
21. CAVE 6, *chaitya* hall, on the back wall of the verandah.
    Reads : *Kaliañasa heraṇika-putasa Sulasadatasa ekapurisasa chetiyagharo niyuto deyadhama*
    LL 1179; BCT p. 94.
22. CAVE 14, *chaitya* hall, on the back wall of the verandah.
    Reads : *Kapila-upāsakasa natuno Tāpasa upāsakasa putasa Ānadasa deyadhaṁmaṁ chetiyaghahro niyuto*
    LL 1178; BCT p. 94.
23. CAVE 20a, cistern, on the back wall of the recess.
    Reads : *Kaliañakasa Kulira-putasa suvaṇakārasa Saghakasa poḍhi deyadhaṁmaṁ*
    LL 1177; BCT p. 94.
24. CAVE 20c, cistern, on the back wall of the recess.
    Reads : *Isimulasamino bhaya Naḍabālikāya Nāḍika Torikasa Lachhiṇika(kā)ya deyadhama poḍhi*
    (Improved Text)
    LL 1176; BCT p. 95.
25. CAVE 26, on the wall to the right of the left bench in the verandah.
    Reads : *Sāmarupāsakasa putasa Sivabhūtisa deyadhama leṇaṁ Kapichite saṁghasa niyutaṁ ka*(?)
    LL 1175; BCT p. 95.

## JUNNAR—SIVANERI

26. CAVE 4, on the left wall of the verandah.
    Appears to record the donation of a cistern and something else.
    (Fragmentary)
    LL 1150; BCT p. 92.
27. CAVE 18, on the right front corner of the verandah, before the stairs leading to the upper hall.
    Reads : *Mudhakiyasa Malasa Golikiyasa Ānadasa beṇajaṇāna deyadhama upaṭhāṇa*
    LL 1151; BCT p. 92.
28. CAVE 33, on the left of the cell door.
    Records the donation of the cave and a cistern by one Giribhūti of the Apaguriyas. For these and the nunnery of the Dhammuttarīyas in the town, a perpetual endowment of some *karṣāpaṇas* was made.
    LL 1152; BCT p. 93.
29. CAVE 43, in the verandah.
    Reads : *Viraseṇaka(sa) gahapati pamughasa dhaṁmanigamasa deyadhaṁmaṁ chetiyagharo niyuto savalokahitasukhāya*
    LL 1153; BCT p. 93.
30. EXC. 46, cistern, on the back wall of the recess.
    Reads : *Yavanasa Irilasa Gatāna deyadhama be poḍhiyo*
    LL 1154; BCT p. 93.
31. CAVE 48, cistern, on the back wall of the recess,
    Reads : *Apaguriyāna Savagiriyāsa-putasa patibadhakasa Giribhūtisa [saha] bhayāya Sivapālanikāya deyadhama poḍhi leṇa cha etasa akhayaniyi.....*
    (Not legible completely)
    LL 1155; BCT p. 93.

32. CAVE 59, in a slightly sunk panel on the back wall of the open verandah.
    Reads : *Ugāha upāsakasa putasa Isipālitasa Sapa (pu)takasa dānaṁ*
    LL 1181; BCT p. 94.
33. CAVE 64, on the left wall.
    Reads : *Yavanasa Chiṭasa Gatānaṁ bhojanamaṭapo deyadhama saghe*
    LL 1182; BCT p. 94.
34. CAVE 66, over the door way.
    Reads : *Ugāha-putasa Isipālitasa saparivārasa chetiyagharo dānaṁ*
    LL 1183; BCT p. 94.

## KANHERI

1. CAVE 2f, on the back wall of the hall to the left.
    Reads : *Nāsikāsa Nākaṇakasa sata deyadhama*
    LL 985; ECT p. 75.
2. In the same cave on the back wall of the hall to the right.
    Reads : *Kaliyaṇa suvaṇako(kā)rasa Sāmidatasa saha sagha(e)na Paṇi(ya)ka deyadhaṁma.*
    LL 986; BCT p. 75.
3. In front of the same cave, on a large open cistern.
    Reads : *Kaliyañasa negamasa chita ..kiyasa [putasa] Vasuyatasa podhi deyadha[ma]'*
    (Newly discovered; unpublished)
4. CAVE 3, big *chaitya* hall, on the right jamb of entrance to verandah.
    Appears to record that in the reign of Gautamīputra (Śrī-Yajña) Śātakarṇi, two Khatiya brothers Gajasena and Gajamita erected the *chaitya* hall in honour of their deceased parents and for the accrual of merit to the various members of their family (mentioned by relation), and the *theras* Achala, Gahala, Dhamapāla and others (named) completed this. The work was executed by *bhadata* Bodhika, with the help of stone cutters, polisher (*khadaraki*) and other craftsmen.
    (Partially damaged)
    LL 987; ECT p. 75.
5. In the same cave, on the left jamb of the entrance to the verandah.
    The inscription is very much damaged and its contents cannot be made out easily. But it appears to record the making of some additions to the *chaitya* hall at Kanheri, grant of *akhayanivi*, and some gifts bestowed by the donor at Supāraka, Kaliyaṇa and Paiṭhaṇa.
    LL 988; ECT p. 76.
6. CAVE 4, on the *harmikā* of the *stūpa*.
    Reads : *Siddhaṁ heranikasa Dhamanakasa bhayāa Sivapālitanikāya deyadhaṁma therāna bhayata Dhaṁmapālānaṁ thuba*
    LL 993; ECT p. 78.
7. CAVE 5, on the back wall of the recess over the cistern.
    Reads : *Vasiṣṭhīputrasya śrī Pu[lumāv]isya Sāta[karṇeḥ] mahādevyāḥ Kārddamaka rājavaṁśa pra[bha]v [ā]ya [Ma] hākṣatrapa [rājap]utry [ā].....śya.....v[i] śvasyasya amātya-Śatārakasya pāniyabhājanah deyadharm[m]a.*
    (Text verified with the original inscription and slightly improved)
    LL 994; ECT p. 78.
8. CAVE 6, on the back wall of the recess over the twin cisterns.
    Reads : *Sopāragā negamasa Samikupāsakasa poḍhi deyadhama*
    LL 995; ECT p. 78.
9. In the same place, another inscription.
    Reads : *Chemulakasa heranikasa Rohiṇimitasa putasa Sulasadatasa poḍhi deyadhaṁma*
    LL 996; ECT p. 78.

10. Excavation 7x, on the back rest of rock-cut bench.
    Probably records the donation of the bench. (Unpublished. Very much damaged)
    LL 1030 ?
11. By the side of the stone path leading upwards from 7x.
    Reads : *Chemulikasa heraṇikasa [Seṭhini]mitasa putasa Dhamaṇakasa patho deyadhama*
    (Unpublished)
    LL 1033.
12. CAVE 16, on the left wall of the verandah.
    Reads : *Sidhaṁ upāsaka.. mita putasa negamasa Muḍapālasa Sūpārakasa saha.....saha bālakehi deyadhama kheta akhayaniyi*
    (Unpublished)
    LL 1027.
13. By the side of the path between caves 18 and 19.
    Much damaged
    (Unpublished)
    LL 1034 ?
14. CAVE 21, on the left hand side wall outside the verandah.
    Records that in the 16th year of the king Srī Yajña Sātakarṇi, one Apareṇu of Kaliyaṇa donated this cave to the *saṁgha* of the four quarters.
    LL 1024; ECT p. 79.
15. CAVE 22, on the right wall outside the verandah.
    Appears to record the making of this cave and a cistern by a nun.
    (Damaged. Unpublished)
    LL 1025.
16. CAVE 32, on the wall above the left cistern.
    Records that a person from Kaliyaṇa and belonging to the *negama* donated the cave, cisterns, a sitting bench and a seat. He made a permanent investment of money also for disbursing shoes and cloth to the monk residing here in the rainy season. Some grants made to a *vihāra* in Kalyāṇa by the same person have also been mentioned further.
    (Slightly damaged)
    LL 998; BCT p. 80.
17. Between caves 34 and 35, on a rock by the side of a flight of steps.
    Reads : *Kaliya[ṇa]to Nadasa Kamārasa patho deyadhama*
    LL 1032; ECT p. 86.
18. CAVE 39, on the left hand side wall of the porch.
    Records the donation of the cave and a permanent monetary investment for distribution of robes, by Ānada a *pavājita*.
    LL 999; ECT p. 81.
19. CAVE 49, on the left wall of the front open court.
    (Unpublished. Much damaged)
20. CAVE 50, on the left wall of the front open court.
    Records the donation of a cave and a cistern tho the *Bhadrāyanīyas*. Further it mentions the various relatives of the donor for whom the merit thus gained has to go.
    (Slightly damaged)
    LL 1018; ECT p. 85.
21. CAVE 54, on the left wall of the front open court.
    Records that a nun Poṇakīāsaṇā disciple of *thera* Ghosāṇa associated herself with her sister to institute a permanent endowment for offering sixteen robes to the monks during the rainy season. The donation is said to have been made for the accrual of merit to their parents.
    LL 1006; ECT p. 83.

22. CAVE 59, on the front right wall below the cave.
    Records that one Kaṇha of Kalyāṇa made the cave, the cistern and a niche. He created a permanent endowment to arrange for the distribution of robes to the monks.
    LL 1007; ECT, p. 83.
23. CAVE 60, on the right wall of the court.
    Appears to mention the donation of the cave by an *upāsaka*.
    (Unpublished. Faintly written and much damaged)
    LL 1008.
24. CAVE 61, front court.
    Appears to mention the donation of the *leṇa*.
    (Unpublished. Much effaced)
    LL 1017.
25. CAVE 64, in the front court.
    Mentions that a female disciple made the cave and a water cistern for the benefit of the *chātudisabikhusagha*.
    (Unpublished. Damaged)
    LL 1019.
26. CAVE 65, on the right wall outside the verandah.
    Records that a nun from Dhenukākaṭa, associating herself with her sister and other relations and connections, donated a *leṇa* and a cistern. *Akhayanivi* was also created, so that (from the interest accruing from it) robes be distributed to the monks. [Dikshit (1942 b) informs that there is mention of *Aparaselīya* sect in this inscription].
    LL 1020; ECT p. 85.
27. Cave 66, on the right side wall outside the verandah.
    Records that Nāgamulanikā daughter of the great king and daughter of the Mahābhojī, wife of Mahāraṭhi, mother of Khandanāgasātaka and sister of Mahābhoja Ahija (?) Dheṇasena excavated a cave, as a gift to the ascetics.....for the benefit of her parents.
    LL 1021; ECT p. 86.
28. CAVE 73, on the inner wall of the verandah.
    Records that Isipāla of the *negama* of Kalyāṇa made the cave and the cistern for the accrual of merit to his parents. He instituted an *akhayanivi* for arranging the distribution of twelve robes and footwear to the monks. It is further stipulated that the amount remaining after meeting the expenditure for the above be used for repairs to the *maṭapa* and *pavāḍa*.
    LL 1000; ECT p. 81.
29. CAVE 74, outside the verandah, on the right wall.
    Records that in the 8th year of the reign of Māḍharīputa Sakasena a person of the *negama* of Kalyāṇa, associated with his relatives (mentioned), donated the cave.
    LL 1001; ECT p. 79.
30. In the same cave on the left wall.
    Has the same details as the above.
    (Damaged)
    LL 1002; ECT p. 82.
31. CAVE 75, outside the verandah, on the right wall.
    Records that the wife of a *gahapati seṭhi* Ayala of Kalyāṇa caused the cave, a water cistern and a bathing cistern and instituted a permanent endowment.
    (Unpublished)
    LL 1003.
32. CAVE 80, outside the verandah, on the left wall.
    Appears to record the donation of the cistern (and probably *leṇa* too) and *akhayanivi*.
    (Unpublished. Damaged)
    LL 1009.

33. CAVE 81, in the front court.
    Appears to record the donation of the *leṇa*.
    (Unpublished. Damaged)
    LL 1010.
34. CAVE 83, above the recess of the cistern in the right wall of the open court.
    (Text could not be made out. Damaged)
    LL 1022 ?
35. CAVE 86, by the side of a ruined cell.
    Reads : *[Sidhaṁ Sop]ārayakasa maṇikarasa Nāgapālitasa saparivārasa leṇa deyadhama*
    LL 1005; ECT p. 82.
36. CAVE 88, above the recess of the cistern on the left wall.
    Records the donation of the cave and the cistern by a monk. States that it was done for the accrual of merit for his parents and the welfare of all the sentient beings.
    LL 1016; ECT, p. 84.
37. CAVE 93, in the recess over the tank in the front court.
    Reads : *Suvaṇakāra. Sivatanasa bālikā...ma...ka pava[itikā] jamatasa...cha pāniyapoḍhi...ma... saha parivāra...mayasa...sukhata*
    (Unpublished. Damaged)
    LL 1015.
38. CAVE 98, in the cistern-recess in the front court.
    Reads : *[Sidhaṁ Kali]ānikāya Bhoigiya pavajitikāya Dāmilāya leṇam [po]ḍhi cha Kaṇhasele deyadhamaṁ*
    (Improved reading)
    LL 1013; ECT p. 84.
39. In the same cave, on the back wall of the verandah.
    Reads : *Sidhaṁ Kaliyinikiya bhikhuṇiya Dāmilāya leṇa deyadhamaṁ poḍhi cha*
    LL 1014; ECT p. 84.
40. CAVE 99, on the back wall of the verandah.
    Reads : *Sidhaṁ therānaṁ bhayata Mitabhūtinaṁ leṇaṁ sāgarapaloganānaṁ deyadhamaṁ*
    LL 1012; ECT p. 83.
41. CAVE 101, on the back wall of the verandah.
    Appears to record the donation of the *leṇa*, cistern and *akhayanivi*, by a person from Kalyāṇa.
    (Unpublished. Damaged)
    LL 1011.
42. On a rock between caves 41 and 42, by the side of the large tank.
    Reads : ..... *patisa seṭhisa Puṇakasa talāka deyadhama*
    LL 1031; Ghokhale, 1975, p. 21.

## KARAD

1. CAVE 47, to the left of the cell in the left side.
    Reads : *Gopālaputasa Saṁghamitarasa leṇa deyadhama*
    BCT p. 89.

## KARLE

1. In the large *chaitya* hall, in the left end of the verandah.
    Reads : *Vejayaṁtito seṭhinā Bhutapālenā selagharaṁ pariniṭhāpitaṁ Jaṁbudipamhi Ūtamaṁ*
    LL 1087; Senart 1903, No. 1.

2. In the same, on the lion pillar in the front court.
   Reads : *Mahāraṭhisa Gotiputasa Agnimitraṇakasa sihathabho dānaṁ*
   LL 1088; Senart 1903, No. 2.
3. In the same, in the verandah, under the feet of the elephant to the right.
   Reads : *Therānaṁ bhayaṁta I[ṁ]dadevasa hathi cha puvā do hathinaṁ cha uparimā hethimā cha veyikā dānam*
   LL 1089; Senart, 1903, No. 3.
4. In the same, on the right hand door.
   Reads : *Dhenukākaṭā gaṁdhikasa Sihadatasa dānaṁ gharamugha*
   LL 1090; Senart, 1903, No. 4.
5. In the same, on a pillar of the open screen in front of the verandah.
   Reads : *Gahatasa Mahādevaṇakasa mātu Bhāyilāyā dānaṁ*
   LL 1091; Senart, 1903, No. 5.
6. In the same, below No. 5.
   Reads : *Dhenukākaṭakena va[dha]kinā Sāmileṇa Veṇuvāsa-puteṇa gharasa mughaṁ kataṁ dāre... mu...dhuka*
   (Now this inscription is mostly covered by mortar. Only a few letters are visible.)
   LL 1092; Senart, 1903, No. 6.
7. In the same, on the 4th pillar of the left row inside the hall.
   Reads : *Dhenukākāṭā Yavanasa Sihadhayāna thaṁbo dānaṁ*
   LL 1093; Senart, 1903, No. 7.
8. In the same, inside, on the 5th pillar of the left row.
   Reads : *Sopārakā bhayatāna Dhamutarīyāna sa[mā]nathasa therasa [A] tulasa [aṁ]tevāsisa bhāṇakasa Nadipatisa Sātimitasa[1]saha ... tiya thabo dānaṁmu*
   LL 1094; Senart, 1903, No. 8.
9. In the same, inside, on the same 5th pillar below No. 8.
   Reads : *Sopārakā bhayaṁtānaṁ Dhamutarīyānaṁ bhāṇakasa Sātimitasa sasarīro thabo dānaṁ*
   (Improved version of No. 8)
   LL 1095; Senart, 1903, No. 9.
10. In the same, inside, on the 3rd pillar of the left row.
    Reads : *Dhenukākaṭā Dhaṁmayavanasa*
    LL 1096; Senart, 1903, No. 10.
11. In the Same, inside, on the 7th pillar of the left row.
    Reads : *'Dhenukākaṭā Usabhadata putasa Mitadevaṇakasa thabo dānaṁ*
    LL 1097; Senart, 1903, No. 11.
12. In the same, on a belt of rail pattern on the inner face of the sill of the great window.
    Reads : *Asāḍhamitāye bhikhuṇi [ye]...*
    LL 1098; Senart, 1903, No. 12.
13. In the same, on the pair of figures in the extreme right of the verandah.
    Reads : *Bhadasamasa bhikusa deyadhama mithũna*
    LL 1101; Senart, 1903, No. 15.
14. In the same, on another pair of figures on the front screen.
    Text same as No. 13.
    LL 1102; Senart, 1903, No. 16.
15. In the same, on the base of the *veyika* on the central door.
    Reads : *.....samaṇāya mātuya dānaṁ veyikā*
    LL 1103; Senart, 1903, No. 17.
16. In the same, on the base of the *veyikā* to the left of the central door.
    Reads : *Koḍiya bhikuṇiya Ghuṇika mātu veyikā dāno Nadikena Ka[ta]*
    LL 1104; Senart, 1903, No. 18.

17. In the same, to the right of the central door, under the sill of the great window.
    Reads : *Sidhaṁ Raṇo Khaharātasa Khatapasa Nahapānasa jāma(mā)tara Dinika-putena Usabhadātena tiṇi ga(gō)-sata-sahasa-deṇa nadiyā Baṇāsāyā suvaṇa-ra(ti)tha-kareṇa [devāna] bra(brā)-hmaṇāna cha solasa gāma-dena Pabhāse puṇa-tithe brāhmaṇāna aṭhe(ṭha) bhāryā pa[deṇa] [a]n[tu]vāsaṁ pitu satasāhasi [bho] japayita(tā) Valūrakāsu leṇa-vāsā(si)na pavajitānaṁ chātudisasa saghasa yopaṇatha gāmo Karajiko dato sa[vā]na [va]savasitāna*
    LL 1099; Senart, 1903, No. 13.
18. In the same, to the left of the main door, on the front of the sill of the arch.
    Reads : *Raño Vāsiṭhīputasa sāmi siri[Puḷumāyisa]savachhare satame 7 Gimha-pakhe pachame 5 divase pathame 1 etāya puvāya Okhaḷikiyānaṁ Mahāraṭhisa Kosikiputasa Mitadevasa putena [Ma]hārathinā Vasiṭhīputena Somadevena gāmo dato Valurakā saṁghasa Valūraka leṇāna sakarukarosa deyameyo*
    LL 1100; Senart, 1903, No. 14.
19. In the same, just below inscription No. 18.
    Appears to record that under the command of the king the minister in charge of Māmala gave a bikhuhala in the village Karajaka, for the support of the mendicant friars of the school of Mahāsaṁghikas who live in Valūraka. Various concessions made in addition to the grant have also been recorded, as well as the fact that a (copper ?) plate (recording the above details) was given.
    LL. 1105; Senart, 1903, No. 19.
20. In the same, inside, on the 5th pillar of the right row.
    Reads : *Umēhanākaṭā Yavanasa Viṭasa[ṁ*]gatānaṁ dānaṁ thabo*
    Vats, 1925-26, No. 1.
21. In the same, inside, on the 8th pillar of the right row.
    Reads : *Goṇekākasa Dhamulaüpāsēkasaṁ deyadha(ṁ)ma thaṁvo*
    Vats, 1925-26, No. 2.
22. In the same, inside, on the 11th pillar of the right row.
    Reads : *Dhenukākaṭā Vāniyagāmasa thabo dānaṁ*
    Vats, 1925-26, No. 3.
23. In the same, inside, on the 13th pillar of the right row.
    Reads : *Dhenukākaṭā Ya[va]nasa Dhamadhayānaṁ thabo dānaṁ*
    Vats, 1925-26, No. 4.
24. In the same, inside, on the 14th pillar of the right row.
    Reads : *Dhenukākaṭā Rohamitena Chulapētukaṣa Agilasa athāya thabo kārito*
    Vats, 1925-26, No. 5.
25. In the same, inside, on the 15th pillar of the right row.
    Reads : *Dhenukākaṭa Chulayakhān[āṁ] [Ya]vaṇaṣa thabo dāna*
    Vats, 1925-26, No. 6.
26. In the same, inside, on the 4th pillar of the left row.
    Reads : *Dhenukākaṭā Yavanasa Sihadhayāna(ṁ) thaṁbho dānaṁ*
    (same as No. 7 above)
    Vats, 1925-26, No. 7.
27. In the same, inside, on the 6th pillar of the left row.
    Reads : *Dhenukākaṭā Somilanakasa dāna thabho*
    Vats, 1925-26, No. 8.
28. In the same, inside, on the 8th pillar of the left row.
    Reads : *Dhenukākaṭā Gōla-vāniyasa putāsa Isalakasa[ṁ] thabho [dā]naṁ*
    Vats, 1925-26, No. 9.
29. In the same, inside, on the 9th pillar of the left row.
    Reads : *Dhenukākaṭā Yavanasa Yasavadhanāna[ṁ] thabho dāna[ṁ]*
    Vats, 1925-26, No. 10.

30. In the same, inside, on the 10th pillar of the left row.
    Reads : *[Dhe]nukākaṭā [Ma]ha[ma]tā ghariṇiya*
    Vats, 1925-26, No. 11.
31. In the same, inside, on the 11th pillar of the left row.
    Reads : *Dhenu[kā*]kaṭā gahapatino Āsekasa nātiye Dhāmad[e] vayā dānaṁ*
    Vats, 1925-26, No. 12.
32. CAVE 12, over a cistern.
    Appears to record the donation of a cave by a nun and a cistern by another nun.
    LL 1107; BCT p. 92.
33. CAVE 15, in the east wall.
    Records that in the 24th year of the reign of Vāsiṭhīputa Siri Puḷumāvi, one Harapharaṇa son of Setapharaṇa, a Sovasaka, living in Abulāmā donated a hall to the monks of the Mahāsaṁghika school.
    LL 1106; BCT p. 113.
34. CAVE 2, on the front wall.
    Reads : *Sidha pavaītasa Budharakhitasa deyadhamaṁ*
    LL 1108; BCT p. 92.
35. An inscribed piece of stone found near the caves.
    Reads : .....*khasa Śega putrasa*
    Vats, 1925-26, No. 13.

## KOL

1. CAVE 3 of the southern group.
    Reads : *Āghāsaksā gāmikiyasa Sivadatasa leṇa deyadhama*
    LL 1077; BCT p. 89.
2. CAVE 4 of the same group.
    Reads : ...*upāsakasa duhutuya Dhamasiriya Sivadatasa bitiyakāya leṇa deyadhama*
    LL 1076; BCT p. 59.
3. CAVE 5 of the same group.
    Reads : *Gahapatiputasa seṭhisa Saṁgharakhitasa deydhamaṁ leṇa* [*ṁ*]
    LL 1075; BCT p. 59.

## KONDANE

1. CAVE 1, *chaitya* hall, by the side of a sculptured head on the right side in the front of the *chaitya* hall.
    Reads : *Kanhasa aṁtevāsinā Balakena kataṁ*
    LL 1071; BCT p. 83.
2. CAVE 2, on lowermost cornice of the overhanging cave.
    Appears to read : *Sidha(ṁ) Barakasa (Dhaṁ)mayakhasa Kaṁchika-putasa po(ṭhira?)*
    (The last word may be *pavāḍo*).
    (Unpublished)
3. In the same cave, on the lowermost cornice of the overhanging projection of the facade decorated with *chaitya* arches.
    Reads : *Kaṁchika-putasa deyadhama*
    (Unpublished)

## KONDIVITE

1. CAVE 9, *chetiyaghara*, on the perforated window in the screen wall inside.

Appears to reads: *Pathikāmāye vāthavasa bammanasa Gotamasa-gotasa Pitulasa deyadhama vihāro sa bhātukasa*

(Very much mutilated. Text is available in BG only)

LL 1035; BG XIII (1883), part III.

## KUDA

1. CAVE 1, to the left side of the front door.
   Reads : *Mahābhojīya Saḍageriya Vijayāya putasa Mahābhojasa Maṁdavasa Khaṁdapālitasa lekhakasa Sulasadata putasa Utaradatā putasa cha Sivabhūtisa saha bhayāya Naṁdāya deyadhaṁmaṁ [leṇaṁ]*
   LL 1037; BCT p. 84.
2. Cave 3, in the verandah.
   Reads : *....bhūtisa....leṇaṁ*
   LL 1038; BCT p. 84.
3. CAVE 5, on the wall to the left of the court.
   Reads : *.....podhio be 2 deyadhamaṁ*
   LL 1039; BCT p. 84.
4. In the same cave, on the wall to the right of the court.
   Reads : *Sidhaṁ thērā[ṇaṁ bhadaṁta] S[iva]dataṇa a[tevāsino] pava[ḍa]ta sa. go. ā.....[ḍa]ma leṇaṁ... Sātimitayā...ya*
   LL 1040; BCT p. 84.
5. In the same cave, in the left end of the verandah.
   Reads : *Siddhaṁ thērāṇaṁ bhadata Pā(Sā)timitāna bhadaṁta Āgimita(tā)na cha bhāginēyiya pāvayitikāya Nāganikāya duhutaya pāvayitikāya Padumaṁnikāya deyadhaṁmaṁ leṇaṁ poḍhī cha saha ativāsiniya Bodhiya saha cha ativāsiniya Asālhamitāya*
   LL 1041; BCT p. 85.
6. CAVE 6, on the left wall of the verandah.
   Reads : *Mahābhojiya Sāḍageriya Vijayāya Mahābhōjasa Maṁdavasa Khaṁdapālitasa Upajīvinaṁ Sulasadatasa Utaradatāya cha putānaṁ bhātunaṁ lekhakā Sivabhutiṁhā Kaneṭhasa Sivamasa deyadhaṁmaṁ leṇa[ṁ] saha bhayāya ṁijāyāya putānaṁ cha sa Sulasadatasa Sivapālitasa Sivadatasa Sapilasa cha selārūpakamaṁ duhutūnaṁ sa Sapāya Sivapālitāya Sivadatāya Sulasadatāya cha thaṁbhā*
   LL 1045; BCT p. 85.
7. CAVE 7, on the left wall of the verandah.
   Reads : *Māmakavejiyasa Vejasa Isirakhit=upāsakasa putasa vejasa Somadevasa deyadhaṁmaṁ leṇaṁ putasa cha sa Nāgasa Isirakhitasa Sivaghosasa cha duhutuya cha sa Isipālitāya Pusāya Dha[ṁ]māya Sapāya cha*
   LL 1048; BCT p. 86.
8. EXC. 7 x, on the back of a recess over the cistern.
   Reads : *Maṁdavānaṁ Parusa(si)vamasa pa(pu)tasa kumārasa Madavasa deyadhama*
   LL 1049; BCT p. 86.
9. CAVE 9, on a smooth panel at the right end wall of the verandah.
   Reads : *Ayitilu upāsakasa Baṁmhanasa bhayāya Bhayilāya Baṁmaniya chetiyagharo deyadhaṁmam*
   LL 1050; BCT p. 86.
10. CAVE 10, outside, over the window.
    Reads : *Mālākārasa Vadhukasa putasa mālākārasa Sivapiritasa deyadhaṁma leṇaṁ*
    LL 1051; BCT p. 86.
11. CAVE 12, on the right wall of the verandah.
    Reads : *Mahabhoja-bā[likāya].....Maṁdaviya I.....*
    LL 1052; BCT p. 86.

12. CAVE 12a, on the right wall of the verandah.
    Reads : *Rājamachasa Hālasa (duhu) tāya Goyaṁmāya (leṇaṁ)*
    LL 1053: BCT p. 87.
13. CAVE 13, on the back wall of the verandah.
    Reads : *Mahābhoyasa Sāḍakarasa Sudaṁsaṇasa duhutuya Vijayaṁnikaya deyadhaṁmaṁ leṇa*
    LL 1054; BCT p. 87.
14. CAVE 14, on the left and back walls of the verandah.
    Reads : *Karahākaḍakasa lōhavāṇiyiyasa Mahikasa deyadhaṁmaṁ leṇaṁ*
    LL 1055; BCT p. 87.
15. In 14 x, in the recess of the water cistern.
    Reads : *Gahapatino Vasulasa seṭhina sanā[na poḍhi]*
    LL 1056; BCT p. 87.
16. CAVE 15, on the left and back wall of the verandah.
    Reads : *Mahābhoja Maṁdava Kochipute Velidate Ahilasa putasa Adhagachhakasa Rāmadatasa deyadhama chetiyagharo Uyarako cha bhayāva Velīdatāva deyadhaṁmaṁ vyarako*
    LL 1058; BCT p. 87.
17. CAVE 16, on the back wall of the verandah.
    Reads : *Sidhaṁ therāṇa bhayata Vijayāṇa ātivāsiṇiya pavaītikāya Sapilāya deyadhaṁmaṁ leṇaṁ saha sālohitāhi Veṇhuyāhi sa[ha] cha ātivāsiṇiya Bodhiya*
    LL 1060; BCT p. 87.
18. CAVE 16, on one of the tanks in the open court.
    Mentions a female desciple Bodhi.
    LL 1059; BCT p. 87.
19. CAVE 16, on another tank in the open court.
    Reads : *Mālākārasa Mugudā(sasa) deyadhaṁma poḍhi*
    LL 1061; BCT p. 88.
20. CAVE 17, on the back wall of the chamber to the left of the cell door.
    Mentions that the cave is a meritorious gift of Nāga the Sathavāha.
    LL 1062; BCT p. 88.
21. CAVE 18, on the left portion of the front wall.
    Reads : *Seṭhino Vasulaṇakasa deyadhaṁmaṁ leṇa*
    LL 1063; BCT p. 88.
22. CAVE 21, on a cistern to the left of the court.
    Reads : *Seṭhino Vasulaṇakasa deyadhaṁma poḍhi*
    LL 1064; BCT p. 88.
23. CAVE 23, over the left window of the outer room.
    Reads : *Sathavāhasa Vehamitasa bitiyikaya Sivadatāya Pusaṇaka mātuya deyadhamaṁ leṇaṁ*
    LL 1065; BCT p. 88.
24. CAVE 24, on the back and right wall of the verandah.
    Mentions Sathavāha Acha[la]dāsa and a lady Asāḷamitā. It appears the latter caused the cave and a road to be made.
    LL 1066; BCT p. 88.

## MAHAD

1. CAVE 4, on the right wall of the verandah.
    Only a few letters are seen
    LL 1074;
2. CAVE 8, on the right wall, at the front end just below the projecting eave.
    Reads : *Sidhaṁ Kumārasa Kāṇabhoāsa Vheṇupālitasa[e]sa leṇa chetiẽghara ovarakā chā atha 8 vi*

*[ti*]kamaṁ niyutaṁ leṇa [sa] cha ubhato pasesu poḍhiyo be 2 leṇasa aluganake patho cha dato etasa cha kumārasa deyadhamaṁ*

LL 1072; BCT p. 88.

3. CAVE 27, on the right wall outside the verandah.

Reads : *'Sidhaṁ gahapatisa seṭhisa Saṁgharakhitasa putasa.....Vādasiriya deyadhaṁmaṁ leṇaṁ chetiākoḍhi pā.....chhetāni yāni leṇasa peṭhā gorāva.....naṁ.....ti chhetehi kare tato chetiāsa gadha.....aṭha 8 bhatakaṁmāṇikā aṭha 8 koḍhi pura.....kāraṇa-kāraṇe cha leṇasa saveṇā ka.....*

LL 1073; BCT p. 88.

## NADSUR

1. CAVE 7, on the face of the cell in the north wall.

Reads : *Ganakaputena kata[ka] datena sava.....*

(A slight difference is seen in the reading adopted by Lüders.)

LL 1067; ASWI XII, p. 6.

2. CAVE 8, *chaitya* hall, high up on the south side.

Reads : *.....mitasa sagharak hitasa.....[di]na bhātuno thūpa [sakhasa ?] sa.....*

LL 1068; ASWI XII, p. 6.

## NANAGHAT

1. In the large cave, on the left and back walls.

The inscription starts with the obeisance to various gods, Indra, Agni, Saṁkarshaṇa etc. and mentions prince Kha (Ve) disiri, son of a great king (name lost) and a Mahāraṭhi the increaser of fame of the Aṁgiyakula. Then follows the description of various meritorious acts like the donations of money, cows, etc. to the *brahmaṇas* and the performance of a number of Vedic sacrifices (named). The exact purpose of the inscription or the fact to whom the glorious epithets apply cannot be made out from this inscription proper.

LL 1112; Sircar, 1942, p. 186.

2. Same cave, on the back wall.

Reads : *Rāyā Simuka-Sātavāhano sirimāto*

LL 1113; Sircar, 1942, p. 184.

3. Same cave, on the back wall.

Reads : *Devi Nāyanikāya raño cha Siri-Sātakanino*

LL 1114; Sircar. 1942, p. 185.

4. Same cave, on the back wall.

Reads : *Kumāro Bhāya.....*

LL 1115; Sircar, 1942, p. 185.

5. Same cave, on the back wall.

Reads : *Mahāraṭhi Tranakayiro*

LL 1116; Sircar, 1942, p. 185.

6. Same cave on the back wall.

Reads : *Kumāro Hakusiri*

LL 1117; Sircar, 1942, p. 185.

7. Same cave, on the back wall.

Reads : *Kumāro Sātavāhano*

LL 1118; Sircar, 1942, p. 185.

8. On a cistern near the large cave.

Reads : *Sopārayakasa Goviṁdadāsasa deyadhama poḍhi*

LL 1119; ECT p. 64.

## NASIK

1. CAVE 2, on the remnant of the back wall of the verandah.
   Reads : *Sidha raño Vāsiṭhīputasa Sīri Puḷumāyisa saṁvachhare chhaṭhe 6 Gima pakhe pachame 5 divase.....*
   LL 1122; Senart, 1905, No. 1.
2. CAVE 3, on the left end wall of the verandah.
   Records that Gautamīputra Sātakarṇi, on the 1st day of Hemanta in his 18th regnal year while residing at the victorious camp at Benākaṭa in Govardhana, ordered his minister in (charge of) Govardhana that 200 nivartanas of land in the village Aparakakhaḍi which was previously being enjoyed by Usabhadata be granted to the Tekirasi monks. Certain immunities to be attached to the grant have also been mentioned.
   LL 1125; Senart, 1905, No. 4.
3. In the same cave, in continuation of No. 2 (from line 6).
   Records that in the 24th year of the king Gautamīputra Sātakarṇi, the king's mother informed the minister in (charge of) Govardhana, as follows : Our earlier grant of the lands in the village Kakhaḍi having fallen into disuse, the village having been deserted, a new grant of 100 nivartanas in the jurisdiction of the very city be given instead to the monks living on the Tiraṇhu hill. Other concessions to the monks have also been mentioned.
   LL 1126; Senart, 1905, No. 5.
4. In the same, on the back wall, over the left-hand side door and window and just below the ceiling.
   This is the famous inscription of Gautamī Balaśrī. Records that in the 19th year of Vāṣiṣṭhīputra Puḷumāvi, Gautamī Balaśrī, mother of Gautamīputra Sātakarṇi, made the donation of the excellent *leṇa*, on the Tiranhu hill, of the *saṁgha* of the Bhadrāyanīyas. It also informs that arrangement was made for painting the cave, and a village too was granted to the monks. The various epithets extolling the character and achievements of Gautamīputra Sātakarṇi found in this inscription are of much historical interest.
   LL 1123; Senart, 1905, No. 2.
5. In the same cave, in continuation of No. 4 (from line 11 onwards).
   Dated in the 22nd regnal year of Vāsiṣṭhīputa Puḷumāvi. Records that in lieu of a village granted earlier another village was granted to the Bhadrāyanīya monks living in this cave on the Tiraṇhu hill.
   LL 1124 : Senart 1905, No. 3.
6. CAVE 6, on the back wall of the verandah.
   Reads : *Sidhaṁ Viragahapatisa nyegamasa leṇa deyadhama kuṭubiṇiya cha sa Naṁdasiriya ovarako duhutuya cha sa Purisadatāva ovarako eva leṇaṁ chatugabhaṁ niyuta bhikhusaṁghasa chātudisasa niyāchitaṁ*
   LL 1127; Senart, 1905, No. 6.
7. CAVE 7, on the back wall of the open front.
   Reads : *Bhayaṁta Savasānaṁ aṁtevāsiniya Pavayitāya tāpasiniya cha deyadhama [leṇa] chātudisasa bikhusaghasa dataṁ*
   LL 1128; Senart, 1905, No. 7.
8. CAVE 8, on the back wall of the verandah, to the right of the doorway.
   Reads : *Dāsakasa Mugudāsasa saparivārasa leṇaṁ deyadhaṁma*
   LL 1129; Senart, 1905, No. 8.
9. In the same cave on the back wall of the verandah to the left of the door-way.
   Reads : *Chetika Upāsakiyāsa Mugūdāsasa saparivārasa leṇa deyadhama etasa leṇasa Bodhiguta upāsakasa puteṇa Dhamanadinā data khēta apariliyaṁ Kaṇhahinīya eto khētāto chivarika Pavaïtasa*
   LL 1130; Senart, 1905, No. 9.

10. CAVE 10, on the back wall of the verandah.
    Records that Nahapāṇa's son-in-law Uṣavadata, who had done many meritorious works in many places (details mentioned) caused to make this cave and the cisterns on the Tsiraśmi hill. A supplementary portion informs Uṣavadata's success over the Uttamabhadra chief and some acts of merit he performed, and following this is the mention of the grant of a field from the produce of which the monks living in this cave could obtain their provisions.
    LL 1131; Senart, 1905, No. 10.
11. In the same cave, over the doorway of the left cell in the verandah.
    Reads : *Sidhṁ Rāño Kṣaharātasa Kṣatrapasa Nahapānasa dīhitu Dīnīka-putrasya Uṣavadātasa Kuḍuṁbiniya Dakhamitāya deyadhaṁmaṁ ovarako*
    LL 1132; Senart 1905, No. 11.
12. In the same cave, below No. 11.
    Records that in the 42nd year of Nahapāṇa, his son-in-law Uṣavadata son of Dinīka assigned this cave to the *chātudisabhikhusaṁgha*. A permanent endowment was also created, so that (from its interest) robes and foot-wear are to be distributed to the monks living in this cave. Some more grants of land, including a garden with 8000 coconut trees, have been mentioned.
    LL 1133; Senart, 1905, No. 12.
13. In the same cave, over the doorway of the right verandah cell.
    Same text as in No. 11 above.
    LL 1134, Senart, 1905, No. 13.
14. In the same cave, outside the verandah, on the left hand wall.
    Seems to mention the same matter as in No. 10 above, but incomplete.
    LL 1135; 1136; Senart, 1905, No. 14.
15. In the same cave, outside the verandah, over a plain recess in the right hand wall.
    Records that in the 9th year of the reign of the Ābhīra king Māḍharīputra Īśvarasena son of Śivadata Ābhira, an upāsikā by name Śakānikā (mother of Gaṇāpaka Viśvavarma, wife of Gaṇāpaka Rabhila and daughter of Śakāgnivarmma) made a prepetual endowment, to provide for medicines to the monks of the chāturdiśa bhikshu saṁgha in the *vihāra* on the Triraśmiparvata. The money was invested with the guilds of weavers, workers of water machines and oil pressers. This was done for the accrual of merit to all the sentient beings.
    (The record is written in Sanskrit, though a few Prakrit elements are noticeable here and there.)
    LL 1137; Senart, 1905, No. 15.
16. CAVE 11, on the back wall of the verandah.
    Reads : *Sidhaṁ Śivamita-lekhaka putasa Rāmaṁṇakasa leṇaṁ deyadhaṁmaṁ*
    LL 1138; Senart, 1905, No. 16.
17. CAVE 12, on the back wall of the verandah.
    Reads : *Velidata putasa nekamasa Rāmaṇakasa Chākalepakiyasa leṇaṁ deyadhaṁmaṁ chātudisasa bhikhu saṁghasa niyātitma data cha=anēna akhayanivi kāhāpaṇa sata 100 saghasa haṭhe eto vasavuthasa pavaïtasa chivarikaṁ dātavaṁ bārasakam.*
18. CAVE 17, on the back wall of the verandah.
    Reads : *Sidhaṁ otarāhasa Daṁtāmitiyakasa Yoṇakasa Dhaṁmadeva putasa Idāgnidatasa dhamātmanā ima leṇaṁ pavate Tiraṇhumhi khānitaṁ abhaṁtaraṁ cha leṇasa chetiyagharo poḍhiyo cha mātāpitaro udisa ima leṇa kāritaṁ sava-Buddha pūjāya chātudiśasa bhikhūsaṁghasa niyātitaṁ saha putena Dhaṁmarakhitena*
    LL 1140; Senart, 1905, No. 18.
19. CAVE 18, *chaitya* hall, engraved vertically on two octagonal columns inside.
    Reads : '*Rāyamacha Arahalayasa chalisālaṇakasa duhutuya Mahāhakusiriyāya Bhaṭapālikāya rāyamachasa Agiyataṇakasa Bhaḍākārikayasa bhāriyāya Kapaṇaṇaka mātuya chetiyagharaṁ pavate Tiraṇhumi niṭhapāāpita*
    LL 1141; Senart, 1905, No. 19.

20. In the same cave, on the arch over the entrance.
    Reads : *Nāsikakanaṁ Dhaṁbikagāmasa dānaṁ*
    LL 1142; Senart, 1905, No. 20.
21. In the same cave, on a projecting moulding to the left of the door-head.
    Reads : *Benacha.....ni... ..e.....yāva Nadāsiriyāva cha veïkā yakho cha kāritā*
    LL 1143; Senart, 1905, No. 21.
22. CAVE 19, over the perforated window to the right of the entrance.
    Reads : *'Sādavāhana kula kanhe rājini Nāsikakēna samaṇena mahāmāteṇa leṇa kārita*
    LL 1144; Senart, 1905, No. 22.
23. CAVE 20, on the back wall of the verandah.
    Reads : *Siddhaṁ raño Gōtamiputasa sāmi-Siri-Yaña Sātakaṇisa savachhare sātame 7 Hematāṇa pakhe tatiye 3 divase pathame Kosikasa mahāsenāpatisa Bhavagopasa bhārijāya mahāsēnapatiṇiya Bopakiya ti-sujamāṇasa payavasita-samāne bahukāṇi varisāṇi ukute payavasāne nīte chātudise cha bhikhusaghasa āvasō dato ti*
    LL 1146; Senart, 1905, No. 24.
24. CAVE 23, on a wall.
    Reads : *Sidhaṁ raño Vāsiṭhiputasa sāmi Siri Pulumāïsa saṁvachhare 2 Hēmaṁtā (na pakhe 4 divase 6 etiya puvāya [ku) ṭumbikena Dhaṇamēṇa iṇa kāritaṁ saha [mātā] pituhi saha .....iṇa*
    LL 1147; Senart, 1905, No. 25.
25. CAVE 24, on the remnant of the back wall.
    Reads : *Sidhaṁ Śakasa Dāmachikasa lekhakasa Vudhikasa Viṣnudata putrasa Daśapura-vāthavasa leṇa poḍhiyō cha do 2 ato ekā poḍhiyā apara esa me mātā [pita] ro udisa*
    LL 1148; Senart, 1905, No. 26.
26. CAVE 24, on one of the cisterns in front.
    Reads : *Sidhaṁ Sakaśa Dāmachikasa leghakasa Vudhikasa poḍhi*
    LL 1949; Senart, 1905, No. 27.

## PALE

1. In front of the leṇa.
    Reads : *Namo arahaṁtānaṁ kātuna [ṁ] bhadaṁta Iṁdarakhītena leṇa[ṁ] kārāpita[ṁ] poḍhi cha Sah [ā] kāhi saha*
    Sankalia, 1960.

## PITALKHORA

1. CAVE 3, Chaitya hall, on a pillar.
    Reads : *Patiṭhāṇā Mitadēvasa Gādhikasa kulasa [thab]o dānaṁ*
    LL 1187; BCT p. 83.
2. In the same cave, on another pillar.
    Reads : *Patiṭhānā Saghakasa putāna thabo dānam*
    LL 1188; BCT p. 83.
3. CAVE 4, leṇa, on the front wall of a cell.
    Read : *.....trasa Magilasa dānaṁ*
    LL 1189; BCT p. 84.
4. In the same cave, on another cell.
    Reads : *.....Rājava...sa.....*
    LL 1190; BCT p. 84.
5. In the same cave, on another cell.
    Reads : *Rājavajasa Vachhīputasa Magilasa dā [naṁ]*
    LL 1191; BCT p. 84.

6. In the same cave on another cell.
   Reads : *Rājavejasa Vachhīputasa [Ma] gilasa dahutu Datāya dānaṁ*
   LL 1192; BCT p. 84.
7. In the same cave, on another cell.
   Reads : *Rājavejasa Vachhī [putasa Ma] gilasa putasa Datakasa dā[naṁ]*
   LL 1193; BCT p. 84.
8. In the same cave, on a pilaster in the left wall.
   Reads : .....*ya bhichhuniyā dāna [ṁ] tha [bho]*
   Deshpande, 1959, p. 76.
9. In fornt of the same cave, above the sculpture of a horse.
   Reads : *[Dhe] nuk [āka] ṭasa Samasa-putena kata*
   Deshpande, 1159, p. 76.
10. On a loose boulder in front of cave 5.
    Reads : .....*ya aṭhīseniyā*
    Deshpande, 1959, p. 77.
11. On a Yakṣa image found in the debris in front of cave 3.
    Reads : '*Kaṇhadāsena hiraṁnakārena katā*'
    Deshpande 1959, p. 82.

## SHELARWADI

1. CAVE 8, in front of a cell to right.
   Reads : *Sidhaṁ Dheṅukakaḍe vāthavasa halakiyasa kuḍubikasa Usabhaṇakasa kuḍubiṇiya Siāgutaṇikāya deyadhaṁmu leṇa saha puteṇa Naṁdagahapatiṇā saho*
   LL 1121; BCT p. 92.
2. In the same cave on the back wall of the hall.
   Reads : *Sidha || therāṇaṁ bhayata Sihāṇa ateāsiṇiya Pavaïtikāya Ghapa [rā] ya bālikāä Saghāya Buddha (dhā) ä cha chetiyagharo deyadhama mātāpita udisa saha [cha savehi bhikhā (khu) kulehi sahā cha āchari [ya] hi bhatavirāyehi samāpito*
   Dasgupta, 1950, p. 76.

## VAISARGA

1. In a recess above a cistern.
   Records that in the 13th year of Chaturpana Sātakarṇi the cistern was caused to be cut by Dāmaghaṣa a merchant of Kāmavana.
   (Text not available).
   BG XIV (1883), p. 287.
2. In a recess above a cistern a little below the crest of the pass.
   States that the cistern was made by one Goviṁdadāsa of Sopāra.
   (Text not available).
   BG XIV (1883), p. 287.

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## JOURNALS AND SERIES

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|---|---|
| AA | Artibus Asiae, Ascona |
| AAA | Archives of Asian Art |
| ABI | Annals of the Bhandarkar Oriental Research Institute, Poona |
| AI | Ancient India a bulletin of the Archaeological Survey of India |
| AIOC | Proceedings of the All India Oriental Conference |
| ARASC | Annual Report of the Archaeological Survey of Ceylon |
| ARASI | Annual Report of the Archaeological Survey of India |
| ARIE | Annual Report of India Epigraphy |
| ASWI | Archaeological Survey of Western India (Publication series) |
| BCT | Burgess, J, Report on the Buddhist cave temples and their Inscriptions (ASWI, Vol. IV), London 1883. |
| BDCRI | Bulletin of the Deccan College Research Institute |
| BEFEO | Bulletin De L'Ecole Francaise D'Extreme-Orient |
| BG | Gazetteers of the Bombay Presidency (1877-1891) |
| ECT | Burgess, J. Report on the Elura Cave Temples (ASWI V) |
| EI | Epigraphia Indica |
| IA | Indian Antiquary |
| IAR | Indian Archaeology—A Review |
| IHQ | Indian Historical Quarterly |
| JAHRS | Journal of the Andhra Historical Research Society |
| JASBO | Journal of the Asiatic Society of Bombay |
| JASP | Journal of the Asiatic Society of Pakistan, Dacca |
| JBBRAS | Journal of the Bombay Branch of the Royal Asiatic Society, Bombay |
| JBHS | Journal of the Bombay Historical Society, Bombay |
| JIH | Journal of Indian History |
| JISOA | Journal of the Indian Society of Oriental Art |
| JNS | Journal of the Numismatic Society of India |
| JRAS | Journal of the Royal Asiatic Society, London |
| JUPHS | Journal of the U.P. Historical Society |
| LL | Lüders, H. A List of Brahmi Inscriptions, EI X, Appendix |

| | |
|---|---|
| MAR | Annual Report of the Mysore Archaeological Department |
| MASB | Memoirs of the Asiatic Society of Bengal |
| MASC | Memoirs of the Archaeological Survey of Ceylon |
| MASI | Memoirs of the Archaeological Survey of India |
| PIHC | Proceedings of the Indian History Congress |
| SIE | Studies in Indian Epigraphy, Mysore |

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# *Index*


A

*Abālikāvihāra*, 93
*abhaya*, 152
Ābhīra(s), 15, 22, 23, 25, 39, 310; Īśvarasena, 22, 53, 61, 62, 267, 278; Īśvarasena's inscription & its palaeography, 61, 267
Abulāma, 228
*ācchāriyavāda*, 34
Acharya (P.K.), 43, 92
*Ācārya* Bhadrāyana, 33
*aḍḍhayoga*, 36
Adhagachchaka, 245
Agarwal, 50
*Aggikhandopamasutta*, 33
*Āghākāsa*, 231
Ahila, 245
Ahmadnagar district, 8
Ahraura, 15
Ajanta, 5, 8, 12, 13, 40, 42, 52, 62, 64, 66, 68, 72-74, 76-78, 81, 83, 85, 87-90, 92, 98, 102, 105-08, 110, 111, 114, 117, 119, 120, 138, 279, 283, 293, 296, 312, 319, 320, 323; caves, description, 98-103; caves, general discussion, 104-05; caves, location, 98; Mahāyāna Leṇas, 296; monastic establishment, 105; range, 11; relative sequence of caves, 104
Ajanta Caves : Cave *8*, 70, 98; Cave *9*, 73, 74, 77, 78, 81, 83, 103, 104, 108, 110, 111, 118-120, 126, 148, 151, 153, 156, 157, 193, 195, 225, 233-35, 237, 271, 273, 274, 279, 314, 315; description, 98-100; *stūpa*, 99, 126; Cave *10*, 68, 73, 74, 76, 77, 81-83, 87, 88, 103, 104, 119, 120, 135, 139, 225, 232, 234, 237, 239, 285, 286, 296, 297, 313-15, 326; description, 101-02; inscriptions, 102; *stūpa*, 100; Cave *11*, 106, 282; Cave *12*, 70, 83, 88, 103, 111, 114, 115, 117, 120, 236, 279, 284, 288, 318; description, 102-03; inscription, 103; Cave *13*, 70, 83, 103, 140, 236, 292, 318, description, 103; Cave *15a*, 70, 103; 288; description, 103; Cave *16*, 326; Cave *29*, 326
Ākara, 39
*akhayanivi(s)*, 36, 212, 220, 322
Akola hoard, 19
Akota bronzes, 31
Alagarai, 7
Altekar, 39-41
*amacha* 41
*āmalaka*, 141, 222, 224, 243, 251, 260, 266, 275; member, 164; shaped, 79, 162
Amaravati, 7, 19, 325; school of Art, 39, 221, 268; sculptures, 195
Amaroti district, 40
*amātya*, 41
Ambikā, 149, 159
Ambivale, 5, 8, 12, 86, 105, 297, 312, 325; *leṇa*, 80, 106; location, 105
Ambivale Cave *1*, 86; description 105-06
*Aṁga*, 55
*Aṁgiya*, 55
Amgiyakula, 54
Ānada, 201
Anasicha Kumara, 238
*aṇḍa*, 72, 98, 107-10, 166, 282
*Andhaka*, 34
Andhau inscription, 22
Andheri, 237
Āndhra, 24, 263; country, 268, 280; Deśa, 34, 37, 268, 280, 324; dynasty, 38; kings, 39
*Āndhrabhṛityas*, 21
*Āndhrajāiyas*, 21
Andhra Pradesh, 6, 7, 263
Āndhras, 21, 22
*Aṅguttara nikāya*, 33
Antialcidas, 64
Anūpa, 39
Anurādhapura *Mahāvihāra*, 93
*Apaguriya(s)*, 43, 181, 185
Aparājitā, 42
Aparakakhaḍi, 261
Aparānta, 24, 33, 39, 218
*Aparaselīya(s)*, 33-35, 37, 207, 221, 310
Aparenu of Kalyāṇa, 199
Āpīlaka, 16, 17, 23, 24
Āpīlava, 16, 21
*apratihatachakra*, 54
Apsidal *chaitya* halls, 238
Arabian Sea, 4, 10, 130, 210, 216, 250
Arabic numeral, 60
*ārāmas*, 36
*āraṇaka(s)*, 113, 132
Archaeological Survey of India, 106, 216, 283, 297-303, 305, 306
architectural activity, 112-13
architectural analysis, 65-94; archaeological methods, 65-67; relative positions of caves, 66; technology, 66, 67; typology, 67
architectural and decorative members, typology, 71-91
architectural evidence, 120
architectural forms, influence of geography & geology, 12
architectural remains, Early historical, 7; prehistoric, 7
architectural style, 105; analysis, 64; western Indian, 113
architectural types, 36; influence of geography & geology, 12

architectural works, early, 309
architecture, sectarian, 35; and rituals, 37
Archosia, 40, 270
*arhaṁta*, 42
Arikamedu, 7
Ariṣṭakarmā, 17
art, patronage, 26-28; socio-economic environment, 25
Aṣāḍha, 43
Asālhamitā, 241, 246
*Āsanapeḍhikā*, 68, 71, 157, 217, 312, 323-25
Asasama, 148
Aśoka, 15, 24, 33-35, 42, 56, 62, 63, 310, 313
Aśokan, Brāhmī, 51; column, 223; pillars, 79; pillar capitals, 78
Aśoka's inscriptions, 15, 56; Sopara, 132
associated inscriptions, 88
Aśvabhūti, 41
*aśvamedha*, 24
Aurangabad, 5, 8, 73, 74, 76, 81, 90, 106, 234, 312; caves, description, 106-07; District, 5, 8, 41, 98, 283
Aurangabad Cave *4*, 73, 74, 76, 81, 82, 106-07, 314, 315, 320; compared with Ajanta *9* and *10*, 106,
Avanti, 39
*āvāsas*, 311
*Āvasyakasūtra*, 17
Āvi, 16, 18
Ayama, 158
Ayara, 8

B

backed bench, 105
Bādha, 114
Bāhaḍa 102, 105
Bahal (Bāhaḍa), 12, 40, 102
Balaghat range, 11
Balaka, 233
Bala Śrī, 261
Banavasi, 7, 40, 230; inscription, 19
Banerjee, 43
Banerji, 64
Barabar hills, 67, 101, 238, 313
Bārāgadaḍ, 180, 185
Baraka, 235
Baroda, 130
Barua, 64
Barygaza (Broach), 24, 327
Barrett, Douglas, 5, 7, 8, 39
Bassein Creek, 206, 216
Bauddha, 3
Bawadhan, 8
Bay of Bengal, 5, 15
Beal, 42
Bedsa, 5, 8, 12, 13, 37, 40, 41, 42, 69, 70, 72-74, 76-80, 83, 87, 89, 90, 94, 107, 110, 112, 117, 119, 120, 130, 138, 161, 162, 171, 193, 196, 227, 231, 234, 279, 297, 312, 315, 320, 323, 327; chaitya hall, 8, 94, 106, 109-111, 117, 150, 197, 233, 271, 273, 274, 291, 297; location, 113; monastic establishment, 113; *stūpa*, 8
Bedsa caves, description, 107-13; general discussion, 112-13; location, 107; relative sequence, 112; Cave 1, 107; Cave *3*, 69, 72, 74, 76, 82, 107-08; Cave *7*, 68, 72-74, 76-79, 82, 83, 106, 109, 111, 113, 117-20, 121, 126, 147, 149, 152, 156, 225-27, 233, 234, 273, 274, 279, 298, 300, 303, 315, 316; architectural proportions, 109-10; comparison with other *chaitya* halls, 110; description, 108-10; inscription, 110, 112; Cave *10*, 111, 320; Cave *11*, 70, 83, 113, 121, 287; description, 111; Cave *12*, 320; Cave *15*, 323; Cave *22*, 151; Excavations : *2*, 107; *4* to *6*, 108; *8* & *9*, 110; *12* to *15*, 112
beṇajanas, 178
Benākaṭa, 261
Benākaṭaka, 23, 39
Benā river, 39
Benches, 85-86; in cells, 85; in halls, 85; in verandahs, 86
Besnagar pillar inscription, 64
*Bhadrājanijja* 42
*Bhadrāyanika*, 33
*Bhadrāyanīya(s)*, 33-35, 37, 42, 204, 221, 261, 262, 280, 304, 310
Bhagavanlal Indraji, *see* Indraji
*Bhāgavatam*, 38
*Bhāgavatapurāṇa*, 17, 20
Bhaja, 5, 8, 12, 13, 37, 40-42, 50, 52, 55, 62, 66, 68, 69, 70, 72-74, 76, 77, 79, 81-90, 98, 107, 110, 113-15, 117, 119, 138, 139, 154, 161, 162, 221, 230-33, 285, 289, 297, 300, 304, 312, 318-20, 323, 326; Buddhism, 127-28; *chaitya* hall, 4, 118-20, 137, 138, 285, 296, 313, 314; caves, chronological position, 129; Caves, description, 113-27; caves, discussion, 127-30; caves, location, 113, 127; *chetiyaghara*, 98, 100, 127, 128; concordance of cave numbers, 298; earliest activity, 127, group, 107; *leṇas*, 127; *leṇas*, earliest, 128; *maṭapas*, 127; monastery, 127, 130, 230; palaeographical evidence, 127; *stūpas*, 127; Sūrya, 128
Bhaja Caves : Cave *1*, 113; Cave *2* & *3*, 114, 323; Cave *5*, 86, 114, 121; Cave, *6*, 83, 88, 117, 126, 318; description, 114-15; inscription, 114; Cave *7*, 85, 115, 128, 239, 318; Cave *8*, 70, 115, 129; cave *9*, 115-16, 128; cave *10*, 115-16, 128, 289; cave *11*, 115-17, 292, 318; cave *12*, 68, 69, 73, 74, 76, 77, 81-83, 87, 88, 110, 120, 127, 128, 135, 139, 140, 152, 224, 232, 233, 235, 239, 273, 291, 292, 298, 300, 314; architectural formula, 118-19; description, 117-20; palaeography, 128; relation to wooden architecture, 119; *stūpa* 195, Cave *12a*, 139; cave *13*, 85, 120-22, 126, 318; Cave *14*, 121; Cave *15*, 70, 122, 318; Cave *16*, 70, 72, 122, 318; Cave *18*, 70, 318; description, 122-23; Cave *20*, 129, 239; Cave *21*, 124; Cave *22*, 70, 78, 79, 83, 115, 128, 148, 154, 156, 235, 274, 286, 287, 289, 292; description, 124-26; Cave *23*, 69, 126, 128, 143; Cave *24*, 126, 128; Cave *25*, 126, 128; Cave *26*, 69, 72, 76, 127, 128, 135, 139, 313, 314; Excavations : *4*, 114; *16a*, *16b*, *17*, & *17a*, 122; *19*, 69, 123, 291, 327; *stūpas*, 130; *20*, description, 123-24; *stūpa* sequence, 124; *21* to *23* & *25*, 128
Bhallika, 36
*Bhāṇaka*, 35, 230
Bhandarkar, 4, 20, 38, 64
Bharhut, 3, 118, 135
Bharukachcha (Broach), 12, 42, 148
*Bhavya*, 33, 34
Bhāvaka, 16
*Bhikṣus*, 35
Bhima, river, 11; valley, 11
Bhimshankar group, *see* Junnar
Bhogavata, 123
*Bhojanachatuśala*, 93
*bhojana-maṭapa*, 70, 93, 142, 144, 145, 165, 168, 173, 188, 190, 209, 323; or *upāṭhāna*, 182
Bhor, 250
Bhorghat, 113, 294; route, 129, 232, 237
Bhūtapāla, 305; of Vejayaṁti, 227
*bhūtisa*, 240
Bhutling group, see Junnar
Bihar, 3; caves, 138
Bindusāra, 38
Bird, 42
Bodhgaya, 3
*Bodhi*, 241, 245; tree, 93
Bodhisattava, 5, 42
Bombay, 15, 130, 190, 237, 250; Gazetteer, 302, 307; Mahad high way, 250
Bopaki, 275;-yatisujamanasā, 307
Bopaki's inscription, 307
Borghat pass, 12
Brahmagiri, 7, 15

*Brahmāṇḍa Purāṇa*, 16, 20
Brahmapuri, 7, 39, 40, 283
*Brāhmin*, 239
Brāhmī script, 9, 20, 51
Broach, 40, 283
Brown, Percy, 4, 7, 8, 9, 44, 92, 297, 305
Buddha, 5, 33, 35, 42, 44, 226, 287; deified 37; figure (image), 38, 122, 133, 195-97, 203, 220-22, 228, 230, 276, 296, 297, 304, 324-25; image, worship, 37, 270; *leṇa*, 299; seated, 254; shrine, 275
*Buddha*, *Dharma* and *Saṅgha*, 36, 37
*Buddha-nirvāṇa*, 33, 34, 42
*Buddhapāda*, 37, 44, 327
Buddhism, 6, 25, 33, 36, 42, 132, 190, 191, 218, 278, 309-11, 313, 318, 320, 325; spread in Deccan, 128; spread in Western India, 33
Buddhist, 130; anchorites, 192; architectural forms, 6; architecture, 68, 101, 128, 231, 298; centres, 113, 190; church, 230; creed (faith, sect), 33, 105, 159, 230, 297, 305; establishments, 8, 159; establishments, grant by ladies, 32; inscriptions, 226; literature, 43; monachism, 33, 37, 193, 220; monastic community, 278, 280; monastic establishments, 4, 216, 279; monastic practices and rituals, 7; monasticism, 317, 324; monkhood (fraternity), 132, 226; Order, 36; ritual, 37; temples, 325; Third Council, 33, 34, 42; trident symbols, 227; world, 221
Budhamita, 148
Budharakhita, 148
Bühler, 4, 42, 43, 51, 52, 54, 64
Buldhana-Yeotmal plateau, 11
Burgess, 4, 7, 8, 39, 40, 42-44, 51, 52, 68, 92-94, 98, 113, 119, 124, 128, 135, 146, 156, 176, 192, 204, 228, 242, 286, 296, 297-99, 301-08

C

Calliena (Kalyan), 24
*Candrasila*, 91, 94, 200, 203-12, 214-16, 219-21, 260, 267, 288, 321, 325
Carbon-14 dates ($C_{14}$), 4, 8; standard deviation range, 49; two-standard deviation, 55
Cave-architecture, causes for break, 44; revival, 44
Ceylon, 221
Ceylonese, Buddhist works, 93; chronicles, 5, 33; traditions, 42
Central India, 6
*Chaitya(s)*, 3, 34, 37, 68, 73, 92, 109, 111, 114, 118, 120, 282, 311, 315; arche, 86, 88, 89, 99-104, 106, 109-12, 114-23, 125-26, 137, 147, 152-54, 157, 162, 163, 170, 171, 196, 223-26, 233-35, 272-74, 286, 287, 291, 292, 296, 314, 315, 317-19, 321, 325, 326; arches and palaeography, 88; arches, decorative, 88; arches, types, 86-89; hall, 49, 50, 62, 66-68, 77, 78, 87, 104, 107, 110-13, 115, 116, 120-22, 127, 142, 148, 149, 153, 154, 158, 159, 161, 163, 166, 167, 172-73, 184, 190-92, 195, 197, 221, 222, 226, 227, 229, 232, 235, 237, 245, 249, 271, 273, 275, 276, 279-81, 283, 287, 290, 293, 296, 297, 305, 311, 316, 326, 327; halls, with vault roofs, 77, 314; halls, elliptical, 104; *koṭhis*, 324; motif, 279; window, 83, 98-100, 106, 109, 111, 115, 117, 141, 147, 153, 157, 162, 163, 167, 175, 223, 272, 285, 317; worship, 34
*Chaityagṛha(s)*, 37, 270, 273
*Chaityavṛksha*, 37, 44
Chakora Śātakarṇi, 16, 17
*Chakra*, 154
Chakreśvarī, 149
Chambal river, 40
Chambharlena, 8
Chanda, 253
Chanda hoard, 19
Chandanasāla, 42
Chaṇḍa Śrī Sātakarṇi, 18
Chaṇḍavijña (Chaṇḍa Śrī), 19
Chandod, 8
Chandragupta Maurya, 15, 38
Chandra Śrī, 19
Chandra Śrī Sātakarṇi, 23
Chandravalli inscription, 25
*Charitabrahmachuriyāya*, 54
Charlesworth, 41
Charpentier, 39
Chaṣṭana, 22; -Pulumāvi contemporaneity, 39
*Chātudisabhikhusaṅgha*, 35, 43, 207, 226, 230, 269
Chaturpana Sātakarṇi, 39
*Chatussālā*, 93
Chaul, 8, 12, 40, 44
Chauribearer, 259-60
Chemūlaka, 198
*Chetana-nimittam*, 66
*Chetiya*, 93
*Chetiyākoṭhi*, 93
*Chetika* (Sect), 33-35, 37, 43, 310, *upāsaka*, 265
*Chetikiya*, 34
*Chetikupāsaka*, 34
*Chetiyaghara*, 66, 68, 72, 75, 76, 78, 81-83, 86, 89, 90, 92, 93, 98-101, 103-08, 110-13, 117-20, 126, 127, 134-36, 138, 139, 141, 144, 146, 147, 149, 150, 152, 153, 155, 157, 161, 163, 164, 166, 167, 170-73, 175, 177, 178, 183-85, 187, 189-93, 195, 197, 198, 201, 216, 218, 219, 221, 225, 227-34, 238-41, 243-47, 249, 251, 253-56, 258, 271, 273, 276, 277, 279-81, 283, 285, 289, 290-93, 295-97, 229-301, 304, 312-17, 319, 324-26; cum-*leṇa*, 255, 292, 295; early experiments, 313; evolution, 312-17; *leṇa* complex, 154, 164, 167; -*leṇa*-maṭapa, 300; roof types, 81; vault roofed, 218; with blind *chaitya* windows, 317
*Chetiyaghara* (types), aberrant, 69; cell type, 68-69; cell type, circular, 69; cell type, oblong, 69; cell hall and varandah type, 69; hall type, 68; hall type, apsidal, circular, oblong, 68; single cell type, 69
*Chetiyasa*, 43
*Chetiyavāda*, 34
*Chetyavādins*, 34
*Chhatra*, 73
Chibilaka (Divīlaka), 17
Childers, 93
China, 19
Chiplun, 8, 12
Chismuka, 16
Christian churches, 223
chrono-historical factors, 311
chronology, 47; direct evidences for reconstruction, 47-50; historical dates, 47-48; palaeography, 51; radiocarbon dates, 48-50; of monuments, 311-12
Chuṭus, 25
Classical art, 65
Climate, 11
Corington, 7
Coins, 21, 41; with ship symbol, 31
Communication system, 29
Coomaraswamy, 7, 8, 44, 92, 298
Cousens, 7, 229, 305

D

Dabhol, 8, 12
Dahanuka (=Dahanu), 12
Dakshiṇāpatha, 21, 54
*Dakshiṇā-patha-pati*, 24
Dani, 52, 56, 64
Damanganga river, 4
Damitāmiti, 270
*dāna*, 305
*dānam*, 227

dāsaka Mugudāsa, 265
Daśapura, 277
Dāś Avatāra, 286
Dasgupta, 7
Dattāmitri, 270, 278
*dātughara*, 93
*dātugeha*, 93
Davidson, 94
*daya athiseniya*, 288
Deccan, 4, 6, 7, 15, 22-25, 62, 64, 67, 98, 104, 113, 119, 163, 171, 193, 205, 235, 259, 263, 266, 268, 278, 287, 309, 310, 313, 314, 318, 319, 325; Brāhmī, 62; plateau, 256, 283, 293; table, 305; table land, 283
decoration, influence of geography and geology, 13
Dehejia, 4, 7-9, 20, 38, 39, 41, 42, 52, 64, 72, 87, 92, 262, 297, 298, 301, 305-07
Demetrias, 40, 270
Deo, 40, 42, 306, 307
Desai, 41
Deshpande, 7, 9, 14, 41, 44, 283, 297, 298, 307, 308
Desh, plain, 113; plateau, 11, 14
*Deśināmamāla*, 17
Devadatta, 33
*Devadhamma sabhā*, 135
Devendra, 305
Devī Nāyanikā, 53
*deyadha(ṁ)ma*, 197, 227, 305
Dhak, 8
Dhamasiri, 231
Dhamayakha, 235
Damilā, 215
Dhaṁbikagāma of Nāsika, 272
Dhammapāla, 219
*Dhaṁñakaseṇi*, 40
*Dhamuttarīya*, 34, 42, 230
Dhanakaṭa, 261, 263, 268, 280
Dhanakaṭaka, 34
Dhanyakaṭaka, 263, 268
*dharmachakra*, 154, 224
Dharmaguptaka, 34
*Dharmottara*, 34
*dharmasetu*, 262
*Dharmottarīya* sect, 33, 34, 35, 310
Dhatva, 40
Dhavalikar, 7, 296
Dhenukākaṭa, 35, 40, 207, 230
Dikshit, 7, 8, 34, 40, 42, 43, 92
*Dipavaṁsa*, 33, 42
Don Thal, Ellora, 94
Dothal, 303
door frames, 83
double-crescent, 90. Also *see* hour-glass.
Dutt, 42-44, 93
Duṭṭagāmiṇi, 93
*dvārapālas*, 307

E

Early Historical Period, 278, 283, 306
Eastern Ghats, 5
Ekapurisa, 163
Elephanta, 8
Ellora, 88, 94, 138, 286, 303, 326
Elura, *see* Ellora
eremiticism, 311, 319
Erragudi, 15

F

Fergusson, 4, 7, 8, 44, 68, 92, 94, 113, 119, 124, 125, 128, 133, 135, 190, 242, 271, 286, 297-99, 301, 302, 304-08
Filliozat, 41
Fleet, 51
Fletcher, 91
Francke, 7
Frauwallner, 42, 43

G

*Gadhika*, 40; family, 285
*gahapati*, 40, 146, 148, 184; *seṭhi*, 210, 231; Sivadāsa, 148; Vasula, 244
*gahatāpasāya*, 54
Gajalakshmi, 286
Gajamita, 197
Gajasena, 197
*gaṇa* (figures), 42, 268, 285
*gaṇāchāriya*, 42, 159
Gāndhāra, 34
Gandhāri river, 250
*Gandharvas*, 259
Ganesh leṇi, 159
Ganesh Pahar, *see* Junnar
Ganesh temple, 159, 180, 301
Garodi hill, 294
*Garuḍa*, 152
Gātā, 41; country, 185
*Gāthā Saptaśatī*, 17
Gaurakṛshṇa, 23
Gaur Kamath, 8
Gautamī Balaśrī, 22, 261
Gautamīputra, 16, 17, 22, 262, 263, 276
Gautamīputra's cave, 259, 267; inscription, 262
Gautamīputra Sātakarṇi, 22-25, 34, 39, 41, 47, 52, 53, 59, 63, 71, 80, 89, 127, 196, 210, 242, 261-63, 268, 278, 280, 304, 324
Gautamīputra Srī Yajña Sātakarṇi, 41, 53, 197, 275
Gautamīputra Svāmi Srī Yajña Sātakarṇi, 200
Geiger, 93
geo-climatic situation, 311
geo-ecological factors, 309
geographical features, 10-11
Ghanamadaḍa, 103
*Ghaṭa*, 146, 147, 149
Ghod river, 11
Ghosh, 39
Ghoṣitārāma, Kauśāmbī, 101, 296
Gidha-vihāra, 93, 140, 159
Giribhūti, 181, 185
Girna river, 11
Girnar edicts, 56
Goa, 4, 14
Gobhuti, 108
Godavari, district, 19; river, 11, 258
Goetz, 5, 9
Gokhale, 220
Golikiya Ānanda, 178
Gomashi, 8, 12
Gomatiputra, 17
Gopalachari, 38, 307
Gorakhgad, 8
Gotamīputra Siri Sadakani, 23
Goths, 40
Govardhan, 258
Govardhana, 23, 278
Govardhanāhāra, 278
Goyamma, 244
Greater Bombay, 5, 8
Greek, 113; foot, 113, 297; origin, 297; ships, 327
*Gṛidhra-vihāra*, 140
*Grīṣma*, 200
*guhā*, 36
Gujarat, 3, 8, 22, 40, 64
Gupta, 21; empire, 3; idiom, 196; period, 64
Gurti Venkat Rao, 20
Gururaja Rao, 7
Gyani, 298

H

Hakusiri, 53, 55
Hāla, 16, 17, 23, 244
Hāleya, 17
half-lotus medallions, 212
*Hālika*, 40
Halkhurd, 8
*hammiya*, 36
Hampi, 130
*hāra of śālas & kūtas*, proto-type, 304
Harapharna of Abutāna, 228
Harishandragad complex, 11
Harvard University, 8

Hathigumpha inscription, 17, 24, 51, 52
*hathino*, 227, 230
Hatkeshwar hills, 134
*hasta*, 297
*Heraṇika*, 40; of Kalyāṇa, 163
Hinayāna, 106, 133, 204, 205, 228, 230, 283, 296, 324, 327; architectural forms, traditions, etc., 7, 8, 44, 91, 94, 106, 256; Buddhism, 37; *chaitya* halls, 317; early excavations, 203; *leṇa*, 222; Mahāyāna transitional phase, 205; period, phase, 5, 113, 216, 220, 283, 319, 324, 336; sculptural tradition, 196; to Mahāyāna architectural form, transition, 324-25
Hindu, 3, 130
*Hiraṇṇākara*, 40
Hiuen Tsang, 34, 43
Hoernle, 51
hour-glass decoration, 90, 156, 178, 200, 205, 206, 208, 209, 211, 212, 214-16, 219, 241-43, 245, 250, 252, 253, 256, 265, 269, 325; idea, 94

I

Igatpuri, 12
Ikṣvākus, 25; inscriptions, 203
Inamgaon, 7
Indo-Greek, 64
Indo-Mediterranean commerce, 310
Indragad, 8, 12
Indraji, Bhagavanlal, 4, 7, 54, 64, 92, 149, 204, 210, 239, 299, 300, 306
Indrayani, river, 11; valley, 221, 294
Induri, 8, 12
inscriptions, evolutionary groups, 62-64
Internal trade, 28
Inter-regional movement, 28-29
Irila, 185
Iron-age monuments, 7
Isapur, 113
Isipāla of Kalyāṇa, 209
Isipālita, 188, 189
Iśvarasena, 22; Also *see* Ābhīra

J

Jaina, 3, 130; image, 149; monastery, 159; temple, 159
Jainism, 25, 159
Jains, 142
Jalgaon District, 40
Jamburg, 105
Jaugada, 15
Jayaswal, 64
Jetavana, 43, Vihāra, 101, 296
Jīvadānimātā temple, 130, 299
Jivadan-Virar, 5, 8, 12, 43, 66, 69, 92, 136, 138, 218, 299, 312, 317, 318, 323; caves description, 130-32; discussion, 132-33; first group, 130-31; *leṇas*, 132; location, 130; second group, 131-32
Jivadan-Virar, Caves : Cave *1*, 69, 130; Cave *2*, 69, 130; Cave *3*, 69; Cave *4*, 69, 130-31; Cave *5*, 69, 131; Cave *7*, 131, 318; Cave *9*, 131, 139, 318; Cave *10*, 131, 318; Excavations : *3*, 130; *6*, *8*, & *11*, 131; *12*, 132
Jivadhan, 8, 12, 318
Jogelthambi hoard, 17, 22
Joglekar, 133
Johnston, 40, 298
Jotiba hill, 281
Junagadh inscription, 22
Junnar, 3, 5, 8, 12, 13, 34, 40, 41, 44, 53, 58, 62, 66, 74, 81, 93, 140, 141, 147, 152, 154, 159, 171, 190, 237, 241, 243-51, 256, 257, 269, 299, 315, 317-20, 323, 324; caves, description, 133-190; concordance of cave numbers, 299; inscriptions, 43, 299-300; location, 133
Junnar Ganesh Pahar, 44, 66, 68-70, 73, 74, 76-78, 80-82, 84-87, 93, 94, 133, 140, 159, 171, 173, 174, 190, 220, 237, 301, 320, 324, 326, 327; Caves, location, 159; description, 159-71; sequence, 173; concordance of cave numbers, 301; excavations, dating, 171-72; types, 171; general discusion, 171-74; *leṇas*, 172; *leṇas*, implications, 174; *leṇa* types, 172; monastic establishments, 173; palaeographical evidence, 173
Junnar-Ganesh Pahar, caves : *1*, 69, 159-60; Cave *2*, 69, 160; Cave *3*, 69, 85, 160; cave *4*, 69, 161; cave *5*, 86, 161; cave *6*, 68, 73, 74, 76-82, 87, 161-63, 292, 303, 316-17; compared with other *chaitya* halls, 163; description, 161-63; importance, 162-63; Cave *7*, 182, 186, 236, 292, 321, 322; description, 163-64; Cave *8*, 69, 164, 188; Cave *9*, 70, 164-65; Cave *10*, 69, 165, 188; Caves *10a*, *10b* & *11*, 165; Cave *12*, 69, 188; Cave *13*, 69, 165-66, 182; Cave *14*, 68, 74, 175, 177, 184, 189, 225, 243; description, 166-67; inscription, 167; mathematical formula, 166; Caves *15*, *16*, and *19*, 167; Cave *17*, 69, 167; cave *18*, 69, 167; caves *21*, *21a* *22* and *23*, 168; cave *24*, 69, 168; Cave *25*, 69, 169; Cave *26*, 69, 169; inscription, 169; cave *27*, 169; caves *28* & *29*, 69, 169; caves *30*, *30a*, *32a*, *b*, *c* & *d*, 170; Cave *31*, 69, 173; Caves *33a* & *b*, 69, 170; Cave *34*, 170-71, 314-15; Excavation : *2a*, 160; *5a*, 161; *7x* & *7y*, 164; *20a*, *b*, *c*, *d* & *23a* & *b*, 168; *27x*, *27y*, *27z*, 169
Junnar-Manmodi, 47, 66, 69-71, 74, 79, 80, 82, 83, 85-87, 133, 140; caves, description, 140-59; caves, general discussion, 156-59; caves, types, 157; concordance of cave numbers, 300; establishment, accommodation capacity, 158; groups, 324; hill, 42, 133, 316, 326; *leṇa*-types, 157; *leṇa*, chronology, 157-58; location, 140.
Junnar-manmodi, Ambika group, 140, 150, 157-59, 300; chronological sequence, 150; cisterns and upper cave, 146; description, 145-49; discussion, 149-50; location, 145
Junnar-Manmodi, Ambika group, caves : *18*, *19* & *20*, 145; *21*, 145-46; *22*, *23*, *23a* & *b*, *24*, *25* & *25a* & *b*, 146; *26*, 147; *27*, *28* & *29*, 148; *30*, *30x*, *31*, *32* & *33*, 149; excavations : *19a*, 145; *28a*, 148; *34a* & *34b*, 149
Junnar-Manmodi, Bhimashankar group, 140, 147, 150, 158, 300; caves, description, 140-44; discussion, 144-45; sequence, 145
Junnar-Manmodi, Bhimashankar group, caves : *0*, 140; *1*, 141; *2*, 141-42; *3* & *4*, 142; 7, 143, 145; *8&9*, 143; *16* & *17*, 144; excavations, *3a*, *b*, *c* & *a*, *5* & *5a*, *6* & *6a*, 142; *8a*, *10*, *11* & *12*, 143; *13*, *14*, *14a* & *15*, 144
Junnar-Manmodi, Bhutling group, 140, 150-57, 162, 299, 300, 307; comparison with other caves, 156; discussion, 155-56; relative chronology, 155
Junnar-Manmodi Bhutling group, caves : *35*, *37*, *38* & *39*, 151; *40*, 152-53; *47*, 158; excavations : *35p*, *q* & *r*, 150; *36*, *36a* & *b*, 151; *39p*, *q*, *r* & *s*, 152
Junnar-Manmodi, Caves : *1*, 79, 147, 276, 321, 323; *2*, 47, 68, 79, 82, 87, 150, 225, 243, 249, 303, 317; *3*, 70, 82; *5*, 82; *7*, 70, 86; *8*, 69, 82; *9*, 82, 318; *14a*, 71; *17*, 69; *19*, 320; *20*, & *24*, 69; *25*, 69, 74; *26*, 81, 87, 195, 290; *27* & *28*, 320; *29*, 307; *30*, 320; *38*, 82; *40*, 68, 83, 140, 153, 171, 195, 196, 225, 272, 279, 292, 303, 314, 315; *41 to 45*, 171, 292; *43*, 82, 153, 171, 292; *44*, 69, 153-54, 171, 292;

*45*, 82, 83, 140, 154, 171, 292; *46*, 69, 154; *47*, 86, 154; *48*, 155; *50 to 54*, 156; excavations : *40a & b*, *41 & 42*, 153; *49*, 155; *55*, 156
Junnar-Sivaneri, 66, 68-70, 74, 76, 80, 82, 90, 93, 133, 134, 140, 320, 323-24; caves, description, 174-85; *chetiya-ghara*, 66, 317; concordance of cave numbers, 302; hill, 133; group, 323; group I, general discussion, 177; group II, general discussion, 177-78; group III, 179-80; group IV, 180-85; group V, 185-87; group VI, 187-90; location, 174
Junnar-Sivaneri, Caves; *1x & 1*, 174; *2*, 175, 184; proportions, 175; *3*, 175; *4*, 70, 175-76; *5*, 176; *6*, 70, 176; *7*, 69, 176; 8, 176; *9*, 324; *10*, 70, 176; *11*, 176; *12*, 69, 176; *14*, 86, 177; *15 & 16*, 69, 177; *18*, 84, 177-78, 186; *19*, 178; *23*, 70, 179; *24*; 179; *25*, 70, 179; *26*, 179-80; *27 to 30*, 180; *31*, 181; *33*, 324; *34*, 70, 181; *35*, 70, 181; *35x, y, z*, 181; *36*, 162-83; *37*, *38 & 39*, 182; *42*, 183; *43*, 74, 76, 82, 183-84, 317; *46*, 185, 186; *49 & 50*, 186; *52*, 186-87; *53 to 55*, 187; *56*, 69, 187; *57*, 187-88; *58 to 60*, 188; *61*, 74; *64*, 70, 188; *66*, 189; *66*, 189; *67*, 70, 189; *68*, 190; excavations; *1a*, & *1b*, 174; *8a*, *8b*, *9*, *9a*. *13a*, *b*, *c*, *d*, *e*, *f*, *g*, *h*, *i*, *j* & *k*, 176; *17a*, *b*, *c*, *d*, *e*, *f*, *g*, *h*, 177; *18a*, *20*, *21*, *21x*, 178; *22a*, *b*, *c*, 179; *32 & 33*, 181; *38x, y & 40*, 182; *41*, 183; *43a*, 184; *44 to 48*, 185; *49*, *51a*, *b*, *c*, *d*, *e*, 186; *67x & y*, 189; *68x*, 190
Junar, Tulja hill, 133, 154
Junnar-Tuljalena, 42, 68-70, 72-74, 76-77, 82, 88, 89, 132, 133, 138, 143, 150, 158, 218, 299, 312, 313, 318-20; caves, description, 133-38; caves, discussion, 138-40; caves, sequence, 139; *leṇas*, of early stage, 139
Junnar-Tuljaleṇa, Caves : *1*, 69, 134; *2*, 70, 134; *3*, 68, 72, 73, 76, 77, 81, 134-35, 239, 313, 314, 323, 326; *4*, 135-36; *5*, 136; *6 & 7*, 69, 136; *8*, 136; *9*, 69, 136; *10*, 69, 137, 318; *11*, 69, 137; *12*, 137, 140, 171; *13 & 14*, 137; *15 & 16*, 88, 137-38; *17*, 70; *18*, 138; Excavations : *ix*, *134*; *16a*, 138; *17*, *17a to 17e*, 138
Jvālamālini, 159

K

Kadamba(s), 25; Mayūraśarma's inscription, 203
Kakhaḍi, 261
Kalachuri-Chedi era, 22
*Kalaśa*, 100
Kaliaṇa, 93
*Kaliyanatakasanegama*, 40
Kalyan, 12, 133
Kalyāṇa, 192, 200, 201, 206, 210, 215-17, 219, 221, 232, 256, 294, 327; goldsmiths of, 168; -Sopara ports; 232; Thana ports, 105
*Kamāra*, 40
*Kāmasutra*, 17
Kana Sātakarṇi, 39
Kanha, 56, 100, 104, 126, 233, 272, 278, 279, 287, 319, 322
Kanhaka, 102
Kanha's, cave, 239, 257, 31; inscription, 62; *leṇa*, 78; record at Nasik, 103
Kanhasela, 190, 216
Kanheri, 5, 8, 9, 12, 13, 19, 37 40-44, 48, 53, 60, 64, 68-74, 76, 78, 81, 82, 84-94, 108, 110, 122, 146, 153, 160, 161, 163, 172, 190-93, 196, 205, 208, 216, 218, 220, 221, 226, 240, 241, 250-52, 289, 303, 312, 320-24, 326-27; active period, 219; architectural activity, developmental stages, 218-20, *chaitya* hall, 8, 34, 35, 44, 83, 163, 195, 197, 218, 300; *chaitya* hall, stages of work, 197; chronological sequence, 218; concordance of cave numbers, 303-04; general discussion, 216-21; hill, 211, 304; impact of location, 221; importance & interesting features, 220; inscription(s), 61, 304; location, 190; monastery, 219; monastic establishment, 212; monument types, 216-17; sculptures, 226
Kanheri, Caves : *2*, 82, 190; *2a*, *b*, *c*, *d*, 68, 74, 76, 191, 327; *2e*, 68, 72-74, 76, 191-92, 239, 313-14; *2f*, 86, 192; *3*, 68, 73, 76-78, 81, 108, 193-98, 225-26, 316, 326; stages of making, 196; *3x & 3y*, 193; *4*, 69, 74, 76, 197-8; *7*, 198; *13*, 69, 199; *14 & 15*, 199; *16*, 69, 199; *17*, 199; *21*, 69, 199-200; *22*, 69, 200; *26*, 69, 70, 304; *29*, 304; *31*, 304, 325; *32*, 69, 80, 83, 86, 200, 203, 211, 242, 269; *33*, 69, 201; *34*, 304; *35*, 69, 201; *36*, 74, 201, 254; *39*, 201; *40*, 69, 202-04; *42*, 69, 202; *43*, 202; *44*, 202, 325; *46*, 202; *47*, 69, 84, 202; *49*, 69, 80, 202-03; *50*, 203-04, 325; *51*, 204; *52*, 304; *53*, 70, 204-05; *54*, 69, 80, 205; *56*, 69, 205-06; *57 to 59*, 69, 206; *60*, 206-07; *61 to 66*, 69, 207; *67*, 208; *68*, 69, 208; *69*, 208; *70*, 208-09; *71*, 69, 209; *72*, 209; *73*, 69, 209; *74*, 69, 210, 325; *74a*, 210; *75*, 210-11, 304; *76 to 78*, 211; *79*, 211-12, 252; *80 & 81*, 212; *81a to 83*, 213; *84 to 87*, 213, 228; *88*, 69, 80, 213-14; *91*, *93 & 94*, 69, 214; *95 & 96*, 69, 215; *97*, 215; *98*, 69, 215; *99* to *100*, 69, 215-16; *101*, 80, 216; excavations : *5*, *6*, *7x & 7y*, 198; *18*, 199; *34x*, 201; *38*, 201; *45*, 202; *57a & 59a*, 206; *92*, 214
*Kāṇvas*, 21
Kapichita (Kapichitta), 74, 159, 174; hill, 171; *samgha* at, 169
Kapilā-upāsaka, 167
Kappiyakuṭis, 297, 298, 300
Karad, 8, 12, 13, 40, 42, 305, 326
Karahākaḍa, 244
Kārddāmaka, 22, 198
*Kārita*, 197
Karjat, 105; taluk, 232
Karla, 19
Karle, 5, 8, 12, 13, 34, 40, 41-43, 48, 50, 53, 56, 58, 60, 62, 67, 68, 72, 74, 81, 83, 87, 92, 109, 110, 119, 130, 193, 221, 226, 227, 229-32, 279, 305, 306, 315; -Bedsa complex, 163; dates 49; inscriptions, 34, 55-56, 63, 227, 230; location, 221; monastery, 229, 230; relative position of caves, 229; sequence, 229; *stūpa* 8
Karle, Caves, *1*, 221; *2*, 221, 229, *3 to 7*, 222; *8*, 68, 74, 150, 222-27, 230, 233, 234, 279, 316; comparison of inscriptions, 227; dating, 226-27; general discussion, 228-31; inscriptional evidence, 226; measurements & proportions, 224-25; *mithuna* panels, 223; radio-carbon dates, 227; *stūpa*, 223; also see Karle *chaitya* hall; 9, 227; *12 to 15*, 228; Excavations; *1x*, 221; *5*, 222; *10*, 227; *11*, 228
Karle *chaitya* hall, 8, 34, 35, 48-49, 55, 56, 64, 72, 73, 76-83, 87, 88, 108, 110, 162, 193, 195, 196, 221, 224-27, 229, 231, 234, 242, 273, 285, 291, 294, 311, 315, 316; comparison of architectural details, 225-26; dates, 4; date of inscriptions, 55-56; palaeography 57, patrons, 229; radio-carbon dates, 48-49; *stūpa*, 195
Karnataka, 10, 25, 40
Karsamba, 7, 8
Karsamble, 12
Kārṣāpaṇas, 40, 220
Karttika, 43
*Kāsākāra*, 40
Kāśyapa brothers, 36
Kāśyapīya sect, 34, 43
*Kāvyamīmāṁsa*, 17
Kauadanpur, 40
Kauśāmbi, 42, 101, 326

Kennedy, 39
Kern, 34, 42, 43
Ketkar, 8
Khada, 54, 55
Khadasiri (Vedisiri), 54, 55
Khadi, 64
Khan, 7
Khandalawala, 41
Khāravela, 24, 51, 52
Khed, 8
Kodavolu inscription, 19
*Koḍhi*, 68, 71, 93, 247, 312, 323-25
Kol, 5, 8, 231, 232, 312, 320; location, 231
Kol, Caves : *1 to 6*, 231; *6a & 7*, 232
Kolaba district, 5, 8, 10, 11, 40, 231, 232, 239, 250, 256
Kolhapur, 11, 281; district, 5, 8, 10, 14, 281; region, 25
Kolika, 40
Kondane, 5, 8, 12, 13, 67, 68, 70, 73, 74, 76-78, 85, 88-90, 98, 106, 107, 110, 118, 119, 154, 155, 161, 162, 225, 232-34, 237, 249, 282, 283, 294, 305, 312; caves, general discussion, 237; caves, sequence, 237; *chaitya* hall, 8, 87, 98, 100, 234; *leṇa*, 284; location, 232; *vihāra*, 286
Kondane, caves : *1*, 68, 73, 74, 76, 77, 81, 88, 110, 119, 152, 232-34, 273, 291, 292, 298, 300, 314, 315; mathematical formula, 233; position in stylistic sequence, 234; relative chronology, 233-34; *2*, 78, 234-36, 267, 273, 286, 287, 288, 292, 319; facade inscription, 235; measurements, 234; palaeography, 235; peculiarities, 235-36; *2a*, 236, 288; *3*, 236, 284; *4*, 236; *5 to 7*, 70, 236; *7a*, 237; *8*, 237, 323
Kondapur, 39
Kondivite, 8, 12, 42, 44, 69, 72, 74, 76, 84, 237, 238, 305, 312, 320; caves, general discussion, 238-39; *chaitya* hall, 4; location, 237; *stūpa*, 239
Kondivite, caves : *9*, 68, 69, 72, 74, 76, 84, 238, 239, 313, 314; *10 to 11*, 238; *12*, 238, 289
Konkan, 4, 6, 7, 10, 12, 13, 22, 24, 25, 33, 35-37, 67, 190, 193, 230, 256, 305, 309, 310; area, 191; coast, 190, 216, 299, 304; North, 11; ports, 113; region, 219, 327; strip, 309; topography, 10
Kopbal, 15
Kosambi, 40, 305
Kosikīputa, Agimitaṇaka, 129; velidata, 41; viṇhudata, 41
Kotaligad, 8, 105
Kramrisch, 8
Krishna, district, 19; region, 25; monks of, 35; river, 11, 263; valley, 25, 34, 221, 305
Krishna Sastri, 64
Kṛṣṇa, 16, 17, 21, 23, 47, 53, 54, 275, 278
Kṣaharāta, 15, 22, 24, 280
Kṣatrapa(s), 22-24, 39, 59, 63, 265, 310; script, 59
Kṣetrapāla, 149
Kubha Sātakarṇi, 39
Kuda, 5, 13, 40-42, 68-71, 74, 84, 86, 90, 93, 239, 243, 247, 248, 251, 256, 305, 306, 312, 317, 320, 324, 327; caves, general discussion, 247-49; concordance of cave numbers, 306; group, 239; inscriptions, 25, 39; location, 239; sculptures, 306; sequence, 248-49; significance, 247-48; varieties, 247
Kuda, Caves : *1*, 69, 240, 242, 252, 256, 295; *2 & 3*, 240; *4*, 86, 241; *5*, 241; *6*, 74, 241-42, 252, 256; measurements, 242; *7*, 86, 243; *7x & 8*, 243; *9*, 74, 80, 243, 248, 253; *10 to 14*, 244; *14x*, 71, 244; *144*, 244; *15*, 245, 253, 295; *16 & 17*, 84, 245; *17 & 18*, 245; *19 to 20*, 246; *21*, 246, 248; *22 to 24*, 246; *25 & 26*, 247; *29*, 69
*kūḍu* arch, 89
Kukdi, river, 133, 159; valley, 134
Kukura, 39
*Kumāra(s)*, 54, 64; Kānabhoā Vheṇupālita, 251; Madava, 243
Kumbharti, 250; pass, 12
Kumi, 145, 152
Kuntala, Sātakarṇi, 23; Svātikarṇi, 16
Kuras, 25
Kuṣāṇa(s), 24, 34, 64, 327; chronology, 64
Kusumgar, 50
Kusur ghat, 105
*Kuṭa(s)*, 220, 304

L

label inscription, Nanaghat, 54
*Lalāṭabimba*, 307
Lale, 42
Lambodara, 16, 17, 23
*Lankuḍiyas*, 148
Learmonth, 8
*Leṇa(s)*, 34, 35, 47, 48, 50, 68, 69, 71, 72, 80, 82, 83, 85, 86, 90, 93, 98, 102-07, 111-14, 116, 120-22, 124-27, 129, 132, 134-36, 138-40, 143-45, 148-51, 153, 154, 156-61, 163-71, 173, 174, 176-83, 185-90, 195, 198-215, 217, 219, 220, 222, 226-30, 232, 234, 236, 238, 240-41, 244-48, 250-52, 255, 256, 258, 259, 261-63, 265-70, 276-79, 281, 284, 286-89, 291-95, 297, 300, 301, 304, 312, 317, 318, 321, 322, 325; aberrant type, 70; *Bigabha*, *Pancha-gabha*, *Satagabha*, *Navagabha*, 93; beginnings, 317-18; *chatugabha*, 265; *-chetiyaghara*, 93, 155, 322, 324; -cum-*chaitya*, 203; -cum-*chetiyaghara*, 69, 252, 256; *digabha*, 148; during 2nd century B.C —1st century A.D., 318-20; during 1st century A.D.—3rd century A.D., 320-22; evolution, 317-22; flat-roofed, 78; multiple cell type, 70; sinale cell type, 69
*leṇam*, 306
Leṇyādri, 163; complex, 161
Le Roy Davidson, 87
*Lilavai Abhidhāna Chintāmaṇi*, 17
*liṅga*, 244
Lohagad, 8; forts, 113
Lohari, 8
*Lohavāṇīya*, 40
*Lokottaravādins*, 34
Longhurst, 7, 39, 305
Lonavala, 113
Lüders', 7; List, 39, 304

M

Māda, 201
Māḍharīputra, Iśvarasena, 25; Sakasena, 41, 48, 53, 61, 64; Svāmī Sakasena, 210
Madhya Pradesh, 24
Magadha, 21, 67
Magadhan, 23; court, 21; empire, 25, 42; hegemony, 15, 38; imperialism, 310
Mahabaleshwar, peak, 10
Mahābhoja(s), 25, 41, 243, 245, 247; Mandava Khandapālita, 240, 242; Saḍakara Sudaṁsana, 244
Mahābhoji Saḍageri Vijayā, 240
Mahābhojīya, 244
Mahad, 5, 8, 12, 42, 69, 70, 81, 84-86, 90, 93, 172, 231, 240, 242, 250, 255, 256, 298, 308, 312, 320, 324; caves, comparison, 256; caves, general discussion, 255-56; *chetiyaghara*, 252; group, 254; location, 250; relative chronology, 256; varieties of excavations, 255
Mahad caves : *2*, 69, 80, 250; *3*, 69, 80, 85, 86, 250-51; *4*, 250-51; *5 & 6*, 251; *7*, 69, 251; *8*, 86, 251-52, 254, 317; date, 252; *9*, 252; *10 & 11*, 69, 86; *12*, 69, 86; *13*, 86, 252-53; *14*, 69, 353; *15*, 69, 74, 253; *16* to *20*, 253; *21*, 69, 74, 254, 295; *22* to *25*, 69, 254; 25

254; *27*, 255, 324; *28*, 255
Mahadev range, 11
Nahādhammarakkhita, 33
Mahāhakusiri Bhaṭapālikā, 273
*Mahākaśyahariṇa Jātaka*, 33
*Mahākṣatrapa*, 22, 143, 198
Mahāl, 74
Mahalingam, 7
*Mahāmātra* of Nasik, 275, 278
*Mahāmāyūri*, Buddhist text, 283
Mahārāja, 207
Maharashtra, 4, 8, 10, 12, 22, 33, 40
Mahāraṭhi(s), 41, 54, 55, 207, 229; Kosikīputa Viṇhudata, 123; Traṇakayira, 53, 55
Mahāraṭhiṇi, 108, 113
*Mahāsaghiya*, 42
*Māhāsaṇighika* sect, 33-35, 37, 226, 228, 230, 305, 310, 325
*Mahāśāsaka*, 34
*Mahāvagga*, 43
*Mahāvaṁsa*, 5, 33, 43, 93
Mahāyāna, 42, 44, 91, 106, 204, 205, 230; architectural forms, 7, 220, 296, 335, 327; architectural traditions, 106; art, 37; ascendency, 106; Buddist figures, 305; caves, 89, 94, 105, 205; concepts, 204, 230; excavation, 138; *leṇas*, 98, 222; phases, 106; period, 105-07, 113, 195, 216, 228, 229, 231, 236, 254, 258, 263, 270, 275, 281, 296, 297, 299, 303, 304, 306, 307, 317, 327; rock-cut tradition, 44; sculptures, 194, 196, 229, 327; *vihāras*, 92, 183, 282, 283
Mahāyānism, 38, 184, 270, 324; introduction into western India, 37; tradition, 231
Mahāyānist(s), 215, 258
Mahendra Sata, 16
Mahika, 244
Mahishmati, 12
Mahoba hill, 239
Majumdar, 7, 38, 39, 41, 44, 92
Malavalli, 203
Malavli, 113
Malwa, 64
Mandava(s), 243; Kodiputa Velidata, 245
Mandaviya, 244
Mamma, 275
Maṁṭapa, 50
Mānamukuḍa, 140, 159; sela, 299
Mandad, 306
Mandālaka (Puṭṭālakr, Pulumāvi II), 16, 23
Mandava, 306
Manmodi hill, 93, 156, 175, 300; also *see* Junnar-Manmodi
Mārakuḍa, 107, 108, 133
Marshall, 7, 8
Maski, 15, 56
*maṭapa(s)*, 47, 50, 68, 70, 82, 86, 93, 112-14, 129, 139, 140, 142-44, 149, 157, 158, 161, 164, 165, 171, 173, 176, 177, 179, 180, 182, 186, 187, 190, 192, 198, 199, 204, 209, 213, 215-17, 219, 220, 222, 229, 241, 247, 251, 253, 255, 257, 263, 277, 279, 312, 322, 323, 325; evolution, 322-23; types, 70
Mathura, 3, 34, 37, 325
*Matsya Purāṇa*, 16, 20-23, 38, 39
Maurya(s), 15, 23-35, 38, 310
Mauryan, 3, 66, 313, 318; capital, 79; caves, 132, 138; craftsmen, 132; empire, 310; period, 238; Persepolitan, 79; pillared hall, 78
Maval, area, 11, 13; taluk, 113, 221
Mayūraśarman, 25
Meghasvāti, 16, 17, 23, 24
merlon design, 100, 104, 111, 115, 289
*Milindupañha*, 42
Mina, 190; river, 133
Minngara, 133
Minner, 133
Mirashi, 25, 39
Mishra, 299
Mitabhūti, 216
Mitadeva, 285
*mithuna* figures, 118, 194-96, 219, 223, 225, 226, 230, 242, 305, 306, 315, 316
monasteries, 311, 322
monastic, architecture, 318; community, 139; establishment, 112-13, 310, 321; life, 43; practices, 36; unit, 140
monasticism, 311
monks, 113
monuments, climatic, cultural and geographical situation, 6
Mṛigendra Śātakarṇi, 16
Mṛigendrasvāti, 23
Mudabidri, 130
Mudhakiya Mala, 178
Mugudāsa, 245
*mukhamaṇṭapas*, 99
*munis*, 36
Myākaḍoni inscription, 19

N

Nādasava Nāya, 123
Nādasiriyā, 273
Nadsur, 7, 8, 12, 41, 304, 326
*nāga*(s), 37, 152, 196, 245, 279; sculpture, 137; representation, 44
Nāgamūlanikā, 207
Naganaka (Nākaṇaka), 192
Nāgapālita, 213
Nagaraju, 41, 307
Nagarjunakonda, 7, 43; inscription, 19
Nagarjuni cave, 131, 296
Nahapāṇa, 21-24, 40, 47, 48, 52, 53, 55, 56, 58-63, 89, 133, 143, 145, 158, 226, 229, 267, 270, 274, 276, 278-80, 299, 323, 324; -Gautamīputra contemporaneity, 24; -Gautamiputra succession, 22-23
Nahapāṇa's, cave, 266, 271; inscriptions, 62, 226; inscriptions, palaeography, 58
Nambanous, 4
Nanaghat, 5, 8, 12, 17, 41, 42, 47, 52, 55, 56, 57, 62, 63, 86, 190, 256, 312, 320, 326; inscriptions, 18, 24, 51, 52, 54, 227, 257; inscriptions, date, 53-55; location, 256-57; pass, 190, 133; remarks, 258
Nanaghat, Caves : *1* to *5*, 257; *6* to *10*, 257; *11*, 86, 257, 258, 276, 322; *12* to *22*, 257
Nana pass, 12, 256-57
Nandas, 15, 25, 38, 310
Nanjangud, 130
*nandipāda*, 265
Nanoli, 8
Narasimha Murthy, 19
Narmada river, 5, 24
Nasik, 5, 8, 12, 13, 17, 19, 22, 23, 35, 40, 42-44, 47, 48, 52, 53, 56, 58, 60, 62, 63, 66, 68-70, 72, 73, 74, 76 78-86, 89-91, 93, 105, 110, 113, 119, 133, 153, 192, 219, 239, 258, 261, 265-67, 270, 273, 277, 278, 280, 281, 286, 287, 312, 319, 326; antiquity, 278; caves, general discussion, 277-81; cave types, 277-78; *chaitya* hall, 140, 273, 274, 279; concordance of cave numbers, 307; district, 5, 8, 10, 306, 307; during Nahapāṇa's reign, 279-80; excavations, 24; inscription(s), 22 23, 34, 37, 39, 54, 59, 61, 66; introduction of Buddhism, 278; location, 258; monastery, number of monuments, 278; monastic establishment, accommodation, 280; political importance, 278; Uṣavadata's benefactions, 280
Nasik Caves : *1*, 258; *1x*, *y*, *z*, 259; *2*, 80, 259, 321; *3*, 13, 79, 83, 86, 105, 150, 161, 164, 182, 186, 195-96, 210, 219, 221, 259-63, 268, 280, 304, 321, 322, 324, 327; measurements, 259-60; sequence of stages of creation, 262-63; *stūpa*, 263; theories of creation examined, 261-63; *4*, 263-64; *5*, 264; *6*, 265-66; *7*, 265; *8*, 69, 79, 80, 265; *9*, 265-66; *10*, 80, 105, 161, 182, 219, 236, 266-68, 271, 321, 322; measurements, 265; compared with Nasik *3*,

267-68; significance, 268; *11*, 69, 268-69; *12 to 14*, 269, *14x*, 270; *17*, 240, 242, 252, 270-71, 321, 324; *18*, 68, 72-74, 76, 78, 80, 81, 83, 110, 233, 271-74, 275, 279, 286, 303, 315, 326; inscriptions, 272-73; inscriptions, implication, 273; stages of creation, 274; stages of creation, dates, 274; *stūpa*, 271-72; *19*, 78, 83, 84, 151, 235, 257, 274-75, 286, 287; *20*, 275-76, 281; *21*, 70, 276; *21*, 322; *22 & 23*, 276; *24*, 276-77;
*Navagabha maṭapa*, 228
Navdatoli, 7
Nāyanikā, 24, 53-55
Nāyanika's inscriptions, 56
*negama(s)*, 40, 141; of Supāraka, 199
Nemikṛṣṇa, 16
neolithic-chalcolithic, 7
Nevasa, 7, 40; excavations, 24
New Vihāra, 128, 287
Nilakanta Sastri, 7, 18, 38-41, 307, 327
Nira valley, 11
*Niryukti*, 17
*nissayas*, 36, 311, 317
*nivartanas*, 261
Northern Black Polished Ware (NBP), 26, 40, 278, 310
North Kanara district, 40, 230

O

Ojha, 51
Orissa, 6, 307
Osmanabad, 133
*Otarāha*, *40*, *278*
*Ovaraka(s)*, *93*, 297
Overseas trade, 30-31

P

*Pachagabha* cave, 146
Padummanikā, 241
Paintings, of Buddha, 283; earliest in Western India, 92
Paithan, 12, 22, 41, 133, 256
Pakshirajan (Dr.), 50
Palaeographical, analysis, 56-62; comparison, 120; sequences, 52
Palaeography, 51, 106; as chronological indicator, 62
Palaghar, 12
Palaipatmai, 306
Pale, 8, 12, 250
Pāli, chronicles, 34, 35; tradition, 34
Pallavas, 204
Palmer, 39
*Pamchaleṇāni*, 36
Panchaganga, 283
Pandavadara, 8; caves, 14
Pandavgad, 8
Pāṇḍuleṇa, 66, 258, 276-79
Panhala, 14
*Pāniyaka*, 193
*Paṇiyapoḍhis*, 71, 93, 112, 155, 157, 171, 176, 193, 217, 323
Panjim, 14
Panvel, 10
*papañcha sūdani*, 42
Paranavitana, 92, 93, 305
Pargiter, 38, 64
*Paribhājaka (s)*, 36, 132, *stūpa*, 37
*Pariniṭhapiṭa*, 227, 305
*Pāsāda*, 36
Pataliputra, 33, 34, 78; Mauryan pillared hall, 78
Patan (Tamkhane), 8, 12
*Patiṭhāpita*, 197
Paṭumān, 17
Paṭumāvi, 16
*pavāḍā*, 100-02, 209, 296, 313
Pavanā, river, 107; valley, 294
Pawala, 5, 8, 281, 283, 312; caves, description, 281-83; general discussion, 282-83; geology, 281; location, 281; *leṇa*, 282; Roman objects, 283
Pawala, caves : *1*, 281-82; *2 to 6*, 282
Peddabankur, 7
*Periplus of Erythraean Sea*, 5, 24, 133, 306, 327
Persepolitan, 78
Petrigala, 283
Pillar types, 77-80; and palaeography, 81
Pitalkhora, 5, 8, 12, 13, 40-42, 44, 68-70, 77, 78, 81, 83-85, 89, 90, 110, 119, 249, 283, 291, 293, 304, 308, 312, 320, 326, 327; caves : first group, chronology, 293; comparison, 292; description of caves, 283-91; general discussion, 291-93; sequence, 292; types, 291; capacity of monastery, 293; *chetiyaghara*, 100; location, 283; monastery, 293; patronge, 293; role in architectural development, 293; *stūpas*, 37
Pitalkhora caves : *1*, 284; *2*, 284-5; *3*, 68, 77, 81, 110, 119, 285-86, 300, 314; *4*, 70, 78, 83, 84, 126, 286-87, 298, 305, 319, 320; *5*, 287-88; *5a*, 288; *6*, 85, 288; *6a*, 288; *7*, 288-89; *7x*, *8 to 9*, *9a & 9b*, 289; *10*, 69, 81, 289-90; *11*, 69, 290; *12*, 69, 81, 290-91; *13*, 69, 81, 291
Pliny, 5, 24
Plutarch, 38
*Poḍhi*, 68, 71, 93, 132, 193, 217, 220, 247, 312, 322-25, 327; evolution and typology, 323-24; *-koḍhi*, 93
Pohāla, 281
Politico-economic changes, 310
Ports, 12
post-Bhaja pre-Karle stage, 196
Post-Hinayāna period, 91
post-Sātavāhana period, 25
*prādhānyatah pravakṣyāmi*, 21
Prakasha, 12, 40
Prakrit, 9, 203; dictionary, 193
Pratiṣṭhāna, 35, 98, 286
*pravāṇa*, 279
Pravarā river, 11
Pravillasena, 16-17
pre-Karle post Ajanta 9 stages, 197
proto *śalā-kūṭa*, 208
Ptolemy, 5, 19, 22, 133, 283, 306
Ptolemy's *Geography*, 19, 22
*Pubbaseliya*, 34
Pulomā, 18
Puloman, 18
Pulomāvi, 16, 18, 19
Pulovāpi, 18
Pulumāvi, 19, 22, 262, 230; I, 21, 23, 24; III (Vāsiṣṭhīputra), 23; IV, 23
Pulu-Sonala, 8, 12
Punch-marked coins, 40
Pune, 8, 12, 133; -Bombay line, 113, 221, 294; district, 5, 8, 10, 11, 42, 113, 221, 302; -Junnar Road, 299
Punjab, 40
*Purāṇa(s)*, 5, 20-22, 25, 38, 39, 42, 54, 55, 64; compilation, 38
Purandhar range, 11
*Puraṇic*, 55; accounts, 20, 21 64; account of Sātavāhanas, 38; king lists, 16
Puremān, 19
Purīndrasena, 16, 23
Purīṣaboīru, 17
*Pūrṇaghaṭas*, 194
Purṇamāsa, 17, 55
Pūrṇāsaṅga, 55
Pūrṇotsaṅga, 16, 17, 23, 55, 64
Pusalkar, 7, 38, 39, 41, 44, 92
Putrikaṣeṇa, 16
Puṭṭalaka, 7, 16

Q

Queen's cave, 261

R

radio carbon, 50, 56; dates, 227, 311; also *see* carbon 14
Raghunatha Bhat, 19
rain fall, 10, 13
rājāmācha, 41
Rajamachi, fort, 232; hill, 13
Rajapuri Creek, 12, 239, 306
Rajasekhara, 17

Rajasthan, 40
*rājasūya*, 24
Rājavcja Magila, 41
Ramachandraiya, 20, 38
Ramachandran, 92, 305
Ramachandriah, 21, 39
Rāmadata, 245
Rama Rao, 18, 19
Rāmaṁṇaka, 269
Ramdharan, 8, 12
Ramesh, K.V., 38
Ranigumpha, 307
Rao, Gurty Venkata, 38; also *see* Gurty Venkata Rao
Rapson, 48, 39, 41
Ratnagiri, 11; district, 4, 5, 8, 10
Raychaudhuri, 38
Rea, 7
red-polished ware, 105
relative position of monuments, 311
religious inspiration, 310
Rhy Davids, 42, 43
Riktavarṇa (Vikṛishṇa), 16
Ritti, S.H., 40
rock-cut architectural, activity: rise and decline, 312; early stages, 13; tradition, 44; types, evolution, 312
rock-cut architecture, 42, 67, 113; classification, of monuments, 68-71; development, 6, 312; early period, 3, 42, 309; Hinayāna phase, 104; influence of geography and geology, 11-13; influence of geography and geology on distribution of centres, 11-12; problem of chronology and development, 4; nature and growth, 310-311
rock-cut vault, 106
Rohiṇimita, 198
roof-types, 80-83; classification, 82
roll, cornice, 223; vedikā, 104
Roman objects, 41, 283
Rowland, 7, 8
royal inscriptions, dating, 52-53
Ruda Sātakarṇi, 39
Rudradāman, 21, 22, 23, 39

S

Sadah, 192
*Saddharma Saṁgraha*, 42
*Sāgarapalaganānaṁ*, 216
Sagharakhita, 231
*Saghe chātudise*, 226
Sahyadrian, 4, 10, 12, 13; belt, 309; clusters, 283; passes, 250
Sahyadris, 5, 10-12, 113, 133, 221, 258; -Maval region, 13
*Śaila* schools, 35
Śaiva deity, 266
*Śaka(s)*, 25, 277, 279, 325, 327; -Ksatrapa inscription, 64; rulers, 59
*śākhā*, 115, 120, 121, 135, 161, 163, 200, 203, 205, 209, 212, 219, 255, 268, 304
*śālā* and *kūṭa*, 209
Salihundam, 7
Salsatte islands, 190
Samaṇa, 275
Sāmantapāsādikā, 42
*smāpita*, 197
*saṁgha*, 33, 34, 193, 200, 204, 230, 269; conception, 36
Saṁghika, 286
Sāmidata of kalyāṇa, 192
*sanāna poḍhis*, 71, 93, 112, 117, 217, 323; 327
Sanchi, 3, 15, 42, 72; inscription, 17, 24, 52
Sandanes, 327
Sandāsa, 16
Sangli district, 8, 10
Sankalia, 7, 40, 42, 306, 307
Sankārin, 283
Sanskrit-Prakrit dialect, 9
Saptasring-complex, 11; peak, 10
Saraswati, 92
Sāratthappakariṇi, 42
*Śarīraka stūpa*, 37
Sarkar, 43, 44, 296
Sarnath, 42
*Sarvāstivādins*, 34
*saśarīro dānaṁ*, 230
*Sata*, 193
Śāta, 220
*Satagabha*, 161
Śātakarṇi, 16-18, 21, 24, 39, 52, 54, 55; I, 23, 24, 47, 54, 55, 62, 64; II, 23, 24; III, 23; Śivaśrī, 19
Satara district, 5, 8, 10, 40
Sātavāhana(s), 15, 20-22, 24, 25, 38, 39, 53, 56, 59, 63, 100, 221, 256-57, 279, 280, 310, 319, 327; administration, 41; chronology, 15, 21-22, 325; chronology, approach, 20; chronology, Ptolemy's evidence, 22; chronology, reconstruction, 23; genealogy in Nanaghat inscription, 55; history, 24-25; history and chronology, evidence, 16-17; -Kṣatrapa conflicts, 24; period, economic progress, 26; transfer of capital, 35
Sāteraka, 198
*Sāthavāha(s)*, 40, 245, 246
Sāti, 54; (Sātavāhana), 55
Satmala, 13; range, 12, 283
*Satra*, 192, 193
Satrap, 22
Sava pass, 12
Savitri river, 10, 231, 250
screen walls and verandahs, 83
Scythian, 320
*Selāvaḍhaki*, 40, 92
Seldghara, 305
Seletana, 8
Sen, 40
Senart, 7, 23, 40
Seshadri, 7
Seth, H.T., 304
*seṭhi* Bhūtapāla, 227
*seṭhis*, 40
Shastri, 18, 19, 35, 39, 41 42
Shelarwadi, 5, 8, 12, 35, 40, 42, 43, 64, 70, 294, 295, 305, 308, 312; activity, 295; caves, description, 294-96; caves, remarks, 295-96; *chetlyaghara*, 252; inscriptions, 61; location, 294
Shelarwadi Caves : *1* to *7*, 295, *8*, 295, 317; *9* and *10*, 295
Shikarpur, 304
Shoff, 39
Siddhagaṇa, 42
*Sīmā, Vinaya* concept, 97
Simuka, 23, 38, 53, 54
Sinde, 8
Sindewadi, 8
Sindhuka (Bali), 16, 17, 21
Sipraka (Balī), 17
Sircar, 18, 38, 39, 42, 43, 64, 304
Sirimata, 54
Siri Saka Sātakarṇi, 39
Siri Sātakarṇi, 53
Sirwal, 8
Śiśuka (Balī), 16, 21
sites, distribution, 12
Sivābāī temple, 187
Sivabhūti, 142, 240, 242
Sivadata, 231, 246
Sivāji, birth place of, 174
Sivamita, 269
Sivaneri, hill, 185-87, 190; also *see* Junnar
Siva-pālanikā, 185
Sivapālataṇikā, 198
Sivaramamurti, 39
Sivasama, 142
Sivaskanda, 19; Śātakarṇi, 18, 23
Śivaśrī (Sātakarṇi), 18, 23
Sivasvāmī(ti), 16
Sivasvāti, 16, 17, 23, 24
Skanda, 55
Skandastaṁbhi, 16, 23
Skandasvāti, 16, 23
Smith, 7, 8, 38, 92
socio-economic, climate, 32; situation, 309; situation and introduction of Buddhism, factors, 310
Somadeva, 243
Sopara, 7, 12, 15, 34, 56, 130, 132, 133, 191, 198, 213, 218, 219, 221, 230, 256, 299, 313, 318, 325

*Sopāraga-negama*, 40
sources, architecture, inscriptions, literature, 5
Spate, 8
Spink, walter, 8
Śrāvasti, 43, 101, 326
Śrī figure, 152
Śrī Mallakarṇi (Śrī Śātakarṇi), 16
Sringeri, 130
Śrī Sātakarṇi, 16, 17
Srī Yajña 86, 197, 200, 213; inscription, 84
Śrī Yajña Sātakarṇi, 25, 48, 52, 60, 64, 80, 82, 219, 221, 278, 281; coins, 31; inscriptions, palaeography, 60-61
*stambhas*, 68
stepped, cornice, 90, 100, 104, 233; merlons, 90, 111, 288
*Sthala purāṇa*, 159
Studs, 90-91
*Stūpas*, 3, 7, 37, 68, 69, 72-74, 76, 77, 82, 87, 89, 92, 93, 98-100, 106-10, 112, 113, 117-19, 123-25, 127, 129, 134, 135, 139, 141, 146-48, 150, 152-54, 161-63, 166, 167, 170, 171, 175, 178, 181, 183, 184, 191, 193-198, 201, 218, 223-27, 229, 231-33, 235, 239, 240, 242, 243, 245, 246, 251, 253, 254, 256, 259, 260, 262, 263, 268; 271, 272-74, 279, 280, 282, 285, 289, 290, 291, 295-98, 300-04, 311-313, 316, 322, 324; analysis, 74-75; decorative, 72; for pontifs, 213; forms, 171; in bas-relief, 171, 183; inscriptions mentioning *theras*, 37; kinds, 37; niche (*chetia koḍhi*), 255; of *thera* Dhammapāla, 198; panel, 266; structural, 201, 213, 228, 288; types, in relief, 171; types and palaeography, 77; typology, 72-77
style-analysis, influencial factors, 65
Subrahmanyam, 7, 39, 43
Sudāma cave, 239, 313
Sulaiman, 133; Pahar, 159
Sulasā, daughter of Kumi, 145, 148, 152
Sulasadata, 163, 198, 240, 242
Sunandana, 17
Sundara Śātakarṇi, 16, 17, 23
Śuṅgas, 21
Surat district, 11, 40
Suraṭha, 39
Śūrpāraka (sopara), 42; visit of Buddha to, 42
Sūrya, 320
Suśarma, 21
*Suvaṇṇakāra*, 40
*Suvarṣaka*, 43
Suvasa country, 43
Svāti, 16, 23
Svātikarṇa, 16
Svātisena, 16
Symmonds, Addington, 91
Syria, 297

T

Tagara, 133
Telegaon, 294
Tallaka, 17
*tāpasas*, 36
*Tāpasa-upāsaka*, 167
Tapasya, 43
Tapti, 11, plains, 98, 293; valley, 283
Tapussa, 36
Tarhala, 39
Tekirāsi monks, 261
Tekkalakota, 7
Ter, 7, 12, 40, 133, 221, 232, 256, 294
*tevija*, 148, 159
*thabo*, 227, 230
Thana, 12, 103, 133, 221; district, 4, 5, 8, 10, 11
Thapar, 40
*thera*, 34, 32, 113, 148, 197, 198
*thera Bhadaṁta*, 140
*thera Badaṁta* Dhammapāla, 197
*Thera Bhayaṁta* Ampikiṇaka, 123; Dhamagiri, 123
*thera* Dhammapāla's *stūpa*, 198
*Theravāda*, 33, 34
*Theravādins*, 35, 42, 220, 310, 325
*thūpaghara*, 93
*Thūpavaṁsa*, 42
Tibetan tradition, 43
*Tilapisaka*, 40
Thin Thal Caves, 286, 303
Tiraṇhu mountain, 270
Tirukkampuliyur, 7
Tissa Maggaliputta, 33
*toraṇa(s)*, 260, 268
trade routes, 4, 12, 104, 105, 113
trading class, 28
Traikuṭakas, 25
Trayambak, peak, 10
Trimbak-Anjaneri, 258
Tringalwadi, 12
Triraśmi, hill, 258, 261, 267, 273, 278, 279, 280; monastery, 281
*Triraśmi-parvata*, 93
*triratna*, 37, 152, 179
Tulajā Bhavāni temple, 135, 299
Tuljaleṇa, *see* Junnar-Tuljaleṇa
Tungabhadra river, 5

U

Udayagiri, 118, 307
*uddeśikh stūpa*, 37
Ugāha, 181, 189
Ujjain, 12, 22, 98, 102, 283
*ukute*, 307
Ulhas river, 10, 105, 232
Umchānakaṭa, 230
Upasak, 56, 64, 207
*upāsaka*, 35, 141
Upasatha, 292
*upasatho*, 103
*upaṭhāṇa*, 93, 178, 279, 297; *maṭapa*, 70; *śāla*, 93
*uposatha*, 279, 323; *pravāraṇa*, 35
Uraiyur, 7
Uran, 8
Urban, socio-economic structure, 310
urbanisation, 25
Usabhadata, 23
Uṣavadata, 40, 59, 84, 226, 230, 261, 267, 279; inscriptions, 280
*uṣṇiṣa*, 89
Utaradatā, 240, 242
*Utkṛite*, 307
Uttarāpatha, 38, 104

V

Vabhajyavādins, 325
Vachhīputa, 41
Vachhīputa Magila, 287
*Vaḍa*, 120
Vadgaon-Madhowpur, 7
*Vaḍha*, 118
*Vaḍhaki*, 40, 67
Vadhuka, 244
Vādisiri, 255
*Vaibhajya* school, 35
Vaisarga, 40; inscription, 39
Vaitarna river, 10
*Vajjiputtaka*, 34
*Vajjiputtas*, 33
Vākāṭakas, 25
*valagni*, 134, 143, 146, 148, 149, 151, 153, 154, 164, 180, 181, 186, 259, 265, 266, 269, 274, 276, 307
Valūraka, 34; *saṁgha*, 230
Vārāhīputsa, 41
Varandha pass, 12
*Vasakāra*, 40
Vasishti, river, 10
Vasiṣṭhīputra Pulumāvi, 24, 34, 41, 48, 52, 53, 60, 63, 80, 228-30, 259, 261, 263-65, 278, 280, 307; inscriptions, palaeography, 59-60
Uasiṣṭhīputra Sātakarṇi, 42, 198
Vasiṣṭhīputra Śiva Śrī Pulumāvi, 53
Vasiṣṭīputra Śrī Pulumāvi, 276
Vasiṭhīputa Kaṭahādi, 102
*vassa*, 36, 132, 220, 248, 269, 279, 311, 317, 328, 322
*vassavāsa*, 36, 43
Vāsudeva, 34
Vasutṇaka, 246
Vasuyata, 192
Vatsyāyana, 17

*Vāyu Purāṇa*, 16, 20, 21, 24, 38, 31
*vedika(s)*, 72, 73, 75, 76, 84, 87-90, 99, 100, 102, 104, 108-12, 115, 118, 123, 124, 194, 196, 199, 219, 223, 225, 238, 239, 255, 260, 269, 286, 290-91, 294, 291, 303, 305, 314, 319-21
Vedisiri, 64
Vehamita, 246
Vejayaṅ ti, 230
Velidata, 269
Veluvanārāma, 43
Venkatachala Sastri, T.V., 41
Veyika, 227
*Vibhajyavādins*, 33, 42
Vidiśā, 38, 39, 42
*vihāra(s)*, 4, 36, 43, 68, 78, 93, 192, 228, 239, 216, 305, 317, 322
Vihargaon, 305
Vijaya, 18, 19
Vijayaṁnikā, 244
Vijaya Sātakaṛṇi, 23
*Vinaya(s)*, 33, 139, 318, 319; concept of *Sīmā*, 92: *-piṭaka*, 36, 42; rules, 34; text(s), 35-37, 92, 127, 138, 192, 297, 311
Vindhyas, 38
Virabhūti, 141
Vīragehapati, 265
Vīrasena, 184
*Viṣṇu Purāṇ*, 17, 38
Viśvakarma cave, 326
Vyayā, 306
Vyayaṁnikā, 306

W

Wada, 12
Waghora river, 98
Wai, 12
Walaka, 8
Westergard, 42, 292
Wheeler, 7, 41
Wijesekera, 305
Willetts, 92
Windows, 83-84; typology, 84
wooden, architecture, 119, 235, 311, 313, 314, 318, 326; *vedikās*, 239

Y

Yajña Śrī, 19, 24
Yajña Śrī Śātakarṇi, 18, 22, 242, 269, 276
*Yakṣa*, 66, 194, 260-262, 273, 274, 283, 327
*Yakṣi*, 118, 120, 233, 286
Yantramati, 16
*Yaṣṭi*, 109, 110, 124, 162, 198, 235
*Yavana(s)*, 25, 41, 153, 185, 230, 270, 297, 305, 325
Yavanachita of Gātā country, 188
Yavana Iṁdāgnidata, 270
Yazdan, 15, 19, 38-41
Yeleswaram, 7
Yonaka, 41
Yonaka Dammarakkhita, 33

Z

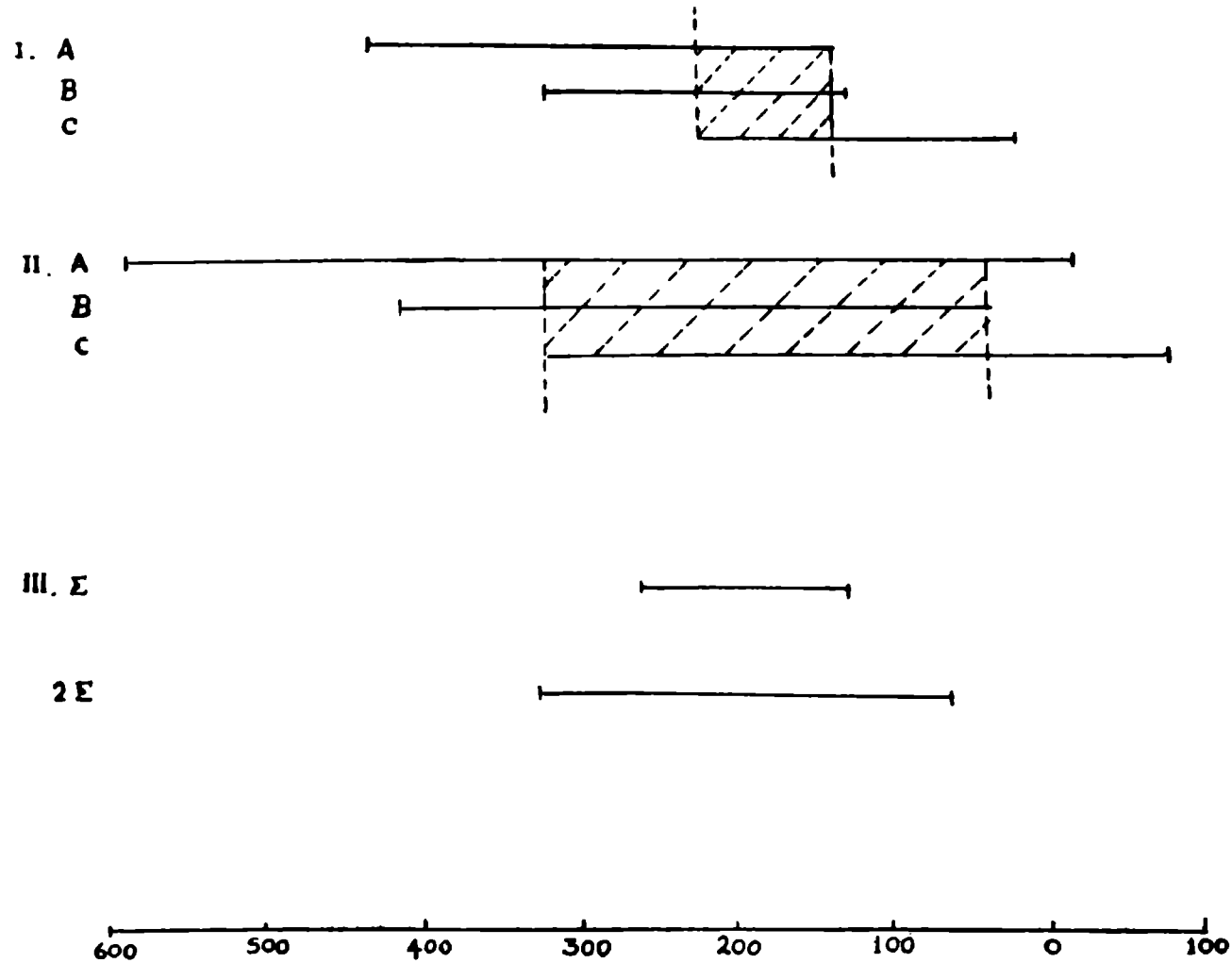
Zimmer, 42, 92, 305

CHART I

# KARLE RADIOCARBON DATES

A=2240±150, B=2180±95, C=2075±100

(*Half life=5568±30 years*)

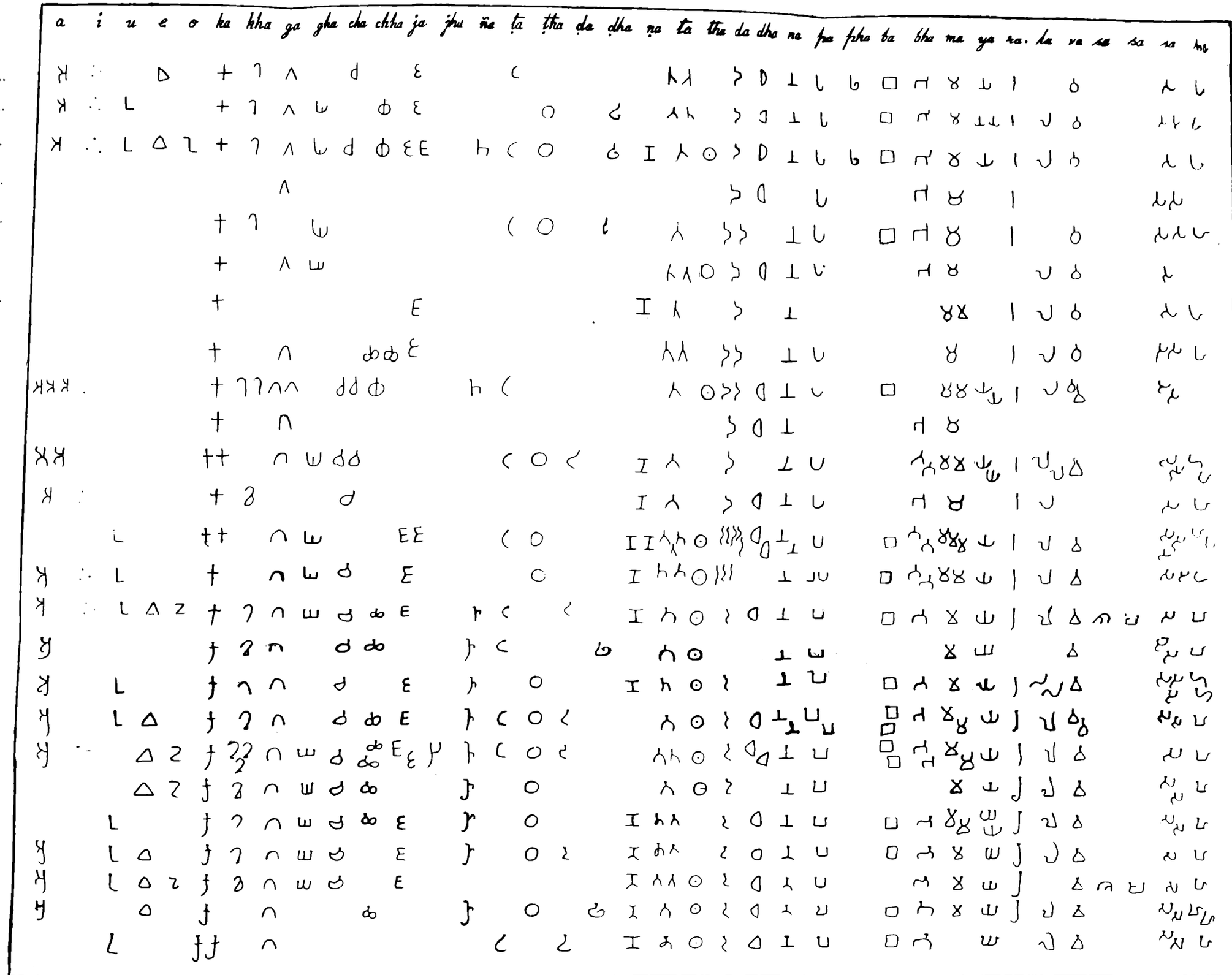



[I. WITH ONE STANDARD DEVIATION (Σ). II, WITH TWO STANDARD DEVIATIONS (2Σ). III, COMPUTED MEAN RANGE.]

# EVOLUTION OF BRAHMI SCRIPT IN WESTERN INDIA

(C. 250 B.C. TO 300 C. A.D.)

CHART II



# CHRONOLOGY OF INSCRIPTIONS IN WESTERN INDIAN CAVES

| Palaeographical Series (*Cf.* Chapter V) | | Ajanta | Ambivale | Bedsa | Bhaja | Junnar | Kanheri | Karle | Kol | Kondane | Kondivite | Kuda | Mahad | Nanaghat | Nasik | Pitalkhora | Shelarwadi | Dates |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| I | A | 1, 2, 3 | | | 2-3, 5, (4) | | | | | | | | | | | 1-2 | | 250 B.C. |
| | B | | | | 1 | | | | | 1-3 | | | | | 22 | | | 175 B.C. |
| II | A | 5 | | | | | | | | | | | | 2-7 | | 3-8 | | |
| | B | | | | | | | | | | | | | 1 | 20 | 11 | | 125 B.C. |
| III | | 4 | | 3 | | 19, 26 | | | | | | | | | 19 | | | 60 B.C. |
| IV | A | | | 1 | | | | 4-11, 20-31, 1-3, 12-16 | | | | | | | | | | |
| | B | | | 2 | | | | | | | | | | | | | | 100 A.D. |
| V | A | | | | | 3, 14-15, 20, 21 | 6, 11 | 17 | 1-3 | | | 9 | | | 10-13, 18, 21 | | | |
| | B | | | | 6 | 22-24, 6, 17-18, 25, 16 | 1-3, 7-9, 42 | 18, 19, 33 | | | 1 | 10-15 | | | 2-3, 25-26 | | | |
| | C | | | | | 32, 34 | 10, 31, 40 | | | | | | | | 1, 4-5, 24 | | | 180 A.D. |
| VI | | | | | | 31, 2, 4, 1, 7-8, 10, 27-28, 30, 12 | 4-5, 12, 14, 15, 17-18, 21, 35-39, 41 | | | | | 16-24 | | | 6-7, 16, 23 | | | 230 A.D. |
| VII | | | 1-5 | | | 9, 13, 33, 29, 11, (5) | 16, 20, 22-30, 32-34 | 34 | | | | 1-8 | 2-3, 1 | | 8-9, 15, 17 | | 1-3 | 300 A.D. |

# TYPOLOGICAL CLASSIFICATION OF ROCK-CUT MONUMENTS OF WESTERN INDIA

CHART IV

| | Chetiyagharas | | | | | | | | | | | Lenas | | | | | | | Mațapas | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Aia | Aib | Aic | Aiia | Aiib | Aiic | Aiii | Bi | B ii | Aberrant types | A i a | A i b | A ii | A iii | A iv a | A iv b | B i | B ii | B iii a | B iii b | B iv | A i | A ii | B i | B ii |
| Ajanta | 10 | 9(v) | | | | | | | | | | | | | | | | 12, 13 | | 15A | | | | | |
| Ambivale | | | | | | | | | | | | | | | | | | | | 1 | | | | | |
| Aurangabad | | 4(v)? | | | | | | | | | | | | | | | | | | | | | | | |
| Bedsa | | | 7 | | | | | | 1(u), 3 | 12 | | | 10(uf) | | | | | | | 11(v) | | | 15 | | |
| Bhaja | 12 | | | | | | | | 24, 26 | | | 19, 21(uf), 23 | | | | | | 5(v), 6, 7, 8, 11, 13, 15, 16, 18, 25 (uf) | 9, 10 | 14(v), 22(v) | | 2 | | | 3 |
| Jivadan-virar | | | | | | | | | | | 1, 2, 3, 4, 5 | 7, 9, 10, 11 (uf) | | | | | | | | | | | | | |
| Junnar-Tuljalena | | | | | | | 3 | | | | 1, 6, 7, 12, 13-14, 15-16 | 8, 10, 11 (?) | 9(?) | | | 18(v) | | 2, (4) | | | | | | | | 17 |
| Junnar-Manmodi | | 40 | 26(uf) | | 2 | | 25 | | | | | 22, (23), (23a), (23b), 35 (uf), 37?, (50 uf), (52 uf), (54 uf) | 8, 17 (uf), 18, 20, 24, 46, 47, 48, (51), 53(uf) | | | | 0, 1, 9, 19, 27, 28, 30, 32, 43, 45 | | 38 | 21, 39(uf) | | 4(?), 44(v) (uf) | | 3, 16, 33 (uf) | | 7 |
| Junnar-Ganesh Pahar | | 34 | 6 | | 14 | | | | | | | 16, 30?, 32a, 32b, 32c | 3, 4, 22, 25, 31 | | 15, 29 (uf) | 24?, 26, 27(v), 28? | 1, 8, 2, 10, 12, 13, 17, 18, 24? | | 19, 32d (v) | 5, 7 | | 9 | 11(v) | 21 | 23(v) |
| Junnar-Sivaneri | | | | | 2, 43, 56, 66 | | | | | | | 3, 11, 12 (uf), 16, 20 (uf), 21 (uf), 31, 39, 50, 53, 65 (uf) | 1, 5, 33, 38, 47?, 68 | | | | 59, 60 | 4, 10, 34, 35 | | 42 | 18(uf) 36, 52 | | 37, 55(v) | 7, 8(v), 18, 19, (uf), 30, 54 (uf) | 24, 29 (uf), 49, 67 | 14, 25 64 |
| Kanheri | 3 | | 2c, 2d, 2e | | | | | | 4, 36 | (2a) | 39, (44), (46), | 47, 60, 99 | | | | | 2b, 13, 16(v), 21, 22, 32, 33, 35, 40, 42(v), (43), 49, 50(v), 51, 54, 56?, 57, 58(v), 59(v), (61), 62, 63, 64, 65, 66, 68, 71, 73, 74, 75, 76, 77, 78(v), 79(v), 80, 81, 82, 88, 91, 93, 94, 95, 96, 98, 100 | | 67 | | | | | 53 [70 matapa of aberrant type] 83, 97 101 | 2f (v), 7(v)? 14 |
| Karle | | 8 | | | | | | | | | 1, 2 | 3 (uf)? | | | | | | | | | | [4], 13?, 15 | 7? (uf) | | | |
| Kondane | 1(v) | | | | | | | | | 2a? | | | | | | | 4(v) | | 5, 6, 7 | | 2, 3 | | | | 8? | |
| Kondivite | | | | | | | | | | 9 | | | | | | | 10 | | | 12 | | | | | |
| Kuda | | | | 5(v), 21 (uf), 15 (v) | 1, 6 (v), 5 (v) | | | | | | 22 | 2, 3, 7, 8, 11, 12b, 13, 14, 16, 17, 18, 20, 23, 24, 25, 26 | | | | | 5(v), 10 | | 19 | | | 15(v) | | 12a(?) | 4 | |
| Mahad | | | | | 8(v) | 21, 15 (v) | | | | | | 2 (uf), 3, 7, 11 12, 14, 18 (uf), 22, 23, 25 | | | | | 4, 9, 10, 13, 19, 26, 27, 28 | | | 24 | | 8 | | 5, 16 | |
| Nasik | | 18 | | | 17(v) | | | | | | | 8, 12, 22 | | | | | 9 (altered) | | 11(v) | 2, 6, 7, 13, 14, 24, (part of) | | 1 (uf), 3, 10, 19, 20, 24, 4 (uf)? | 17(v) | 21 | |
| Pitalkhora | 3 | | | | | | | | | 5A, 10, 11, 12, 13 | | 6Ai | | | | | | | | 6Aii, 6Aiii, 6Aiv, 9b | 4? | 1a, 1b, 1c 2 | 5?, 7, 9 | | |
| Shelarwadi | | | | | 8(v) | | | | | | 1 | 6 | | | | | | | 11(v) | 3, 10 | | | 8(v) | | |

# CHRONOLOGY OF ROCK-CUT MONUMENTS

(approximate positions)

| DATES | AJANTA | AMBIV-ALE | AURANGABAD | BEDSA | BHAJA | JIVADHAN-VIRAR | JUNNAR | | | | KANHERI | KARLE | KOL | KONDANE | KONDIVITE | KUDA | MAHAD | NANA-GHAT | NASIK | PAWALA | PITALKHORA | SHELAR-WADI | DATES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Tulja-lena | Manmodi | Ganesh-pahar | Swaneri | | | | | | | | | | | | | |
| B.C. 250 ↓ | | | | | 24, 26, 21, 23, 25 11, 12 (main) 18 | 1-5 — | 1,6,7,13,14 3,10,11 2,9. | 8,9 (47) 10, 11, 47 38 | | | 20 (20) | | | | 9 12 | | | | | | 3 4 (upper part of facade) | | 250 B.C. ↓ |
| 200 | 10, 13 | | | | | | | | | | | | | | | | | | | | | | 200 |
| | 12 | | | | 15,16,22 (decc) 6-9,13 22 (main) | | 19,16 | 39 (46,48) | | (12) | | | | 1,2 | | | | 11 | 19,21 | | 2, 1 4 (interior) 13 | | |
| 150 | 9, 19a | | | | | | | | | | | | | | | | | | | | | | 150 |
| | | | 4 | | 22 (annexe) | | | | | 4 (10) | | | | (3) | | | | — | | | 8 (for court) | | |
| 100 | 8 ? | — — | — — | 11 (front) | 10 | | 12 | 40,48 | 34 (31-33) | 34,35 | 3 (1st stage) | | | (4) | 10 | | | | 18 (1st stage) | | 5, 5a 6, 7 (6A), 8 9, 18 | | 100 |
| | | | | 7, 11 (back) (1) (5) (6) | | | | 18,20 22 19,27,28 | | | | | | (5) | | | | | | | 9a 9b | | |
| 50 | | | | | | | | | | | | | | | | | | | 18 (2nd stage) | | | | 50 |
| | | | | (8) (9) 3 (10) (11) (12) | | | | 30,32 19a | | | | 8 | | (6) | | | | | | | | | |
| 0 | | | | | | | | | | | | | | | | | | | | | | | 0 |
| A.D. ↓ | | | | (13) (14) (15) | | | | | | | | | | (7) | | | | | | | | | A.D. ↓ |
| 50 | | | | | | | | | | 52 | | 13 | | | | | | | | | | | 50 |
| | | | | | | | | 17, 18, 26 | | | | | | (8) — | | | | | | | | | |
| 100 | | | | 4, 2 | 5, 14 | | | | | | | | | | | | | | | | | | 100 |
| | | | | — | (2) (3) 19, (17, 17a) — | | 17-18 — | 7 (16) 27-29 (30-32) 19, 20, | 5 6, 7 8-12 16-20 | 60 | 3 (II stage) 4 78-77 | 12 | 1-5 (6-7) | | | 12, 13 | | | 10, 17, (34) 18 (3rd stage) 1, 30 (1st stage) 23, 24, 1 3 (2nd stage) | | 10 (11) | | |
| 150 | | | | | | | | | | | | | | | | 8, 10, 11, | | | | | | | 150 |
| | | | | | | | | 28, 29 1, 2, 3, 5, (10) | 13-14 21-25 26-29 | 66 49 | 27, 5-7 99 21-22 3 (III stage) 78, 86, | 15 | — | | | 14 16-18, (19) | | | 20 9, 11 | | | | |
| 200 | | | | | | | | | | | | | | | | | | | | | | | 200 |
| | | | | | | | | 25 24 21 | 1, 2, (3, 4) — | 53, 68 (67) (15, 16) 18, (19-21) | 88, 96-98, 39 26, 2d, 49, 54, 56 91-95, 101 56 | | | | | 20, 21 22-26 18, 17 | 16, 21 | | 5, 6, 7 | | | | |
| 250 | | | | | | | | 4 | | | | | | | | | | | | | | | 250 |
| | | | | | | | | 4 44 42-43 — | | 54, 55, 64 2, (8, 15) (22-28) 36, 42, 43 | 32, 36, 57-62, 64-68, 70, 73 80, 81, 83 | (11) 2 | | | | 1-3 | 2-7 9-14 16-20 22-26 27 | | 8, 12, 13 14, (22) | 1-2 | | 3, 8 (others) | |
| 300 | | | | | | | | | | | | | | | | | | | | | | | 300 |
| | | 1 — | | | | | | | | — | 50, 51, 53, 74, 79 — — — | 4, 14 | | | | 6, 7a | 8 | | | (3-6) — | | — | |

Note : (i) The chronological positions of those shown in the brackets are based more on circumstantial grounds than on palaeographical or architectural evidence.
(ii) Indeterminable caves have been omitted.

FIG. 2

MAIN TYPES OF CHETIYAGHARAS

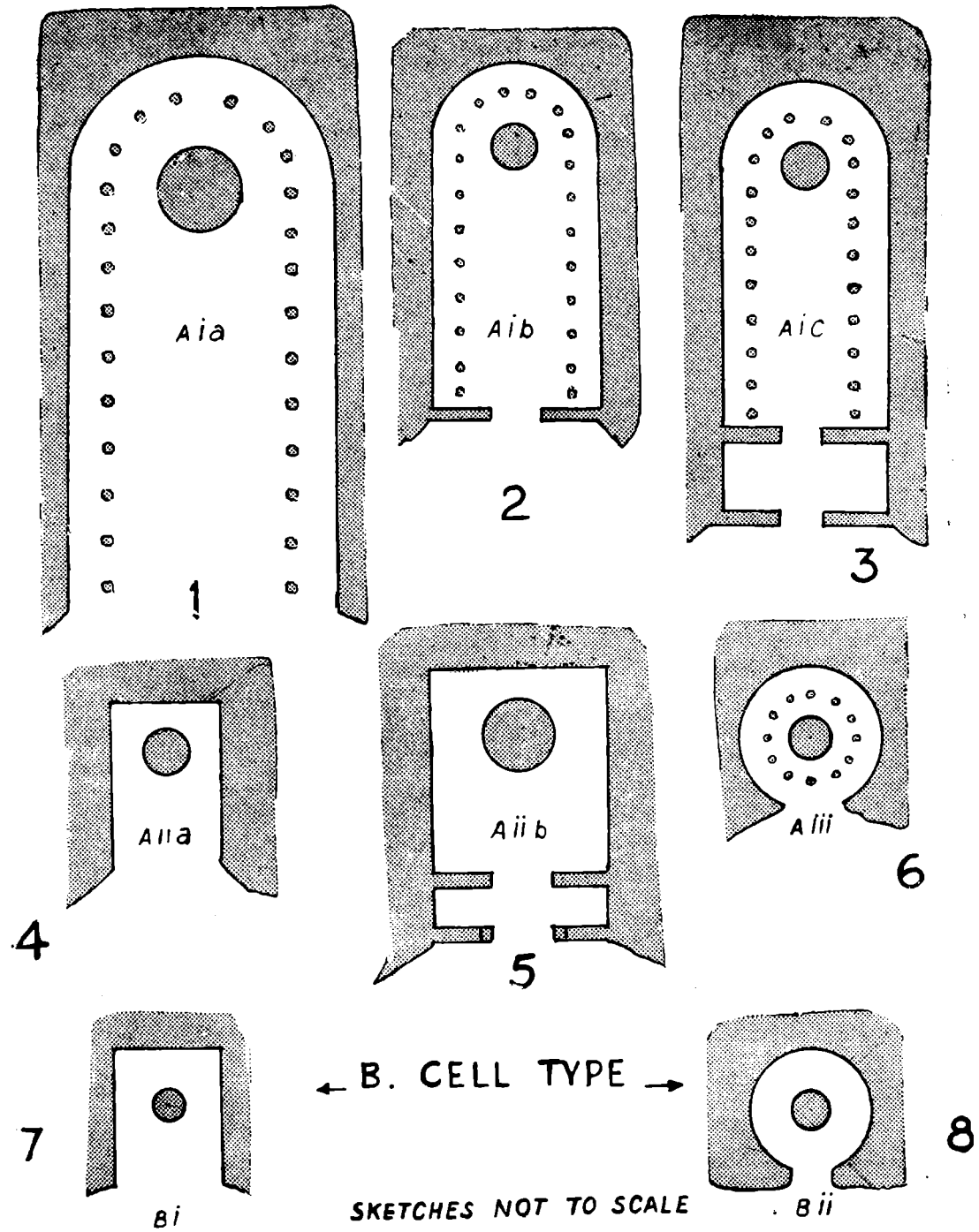
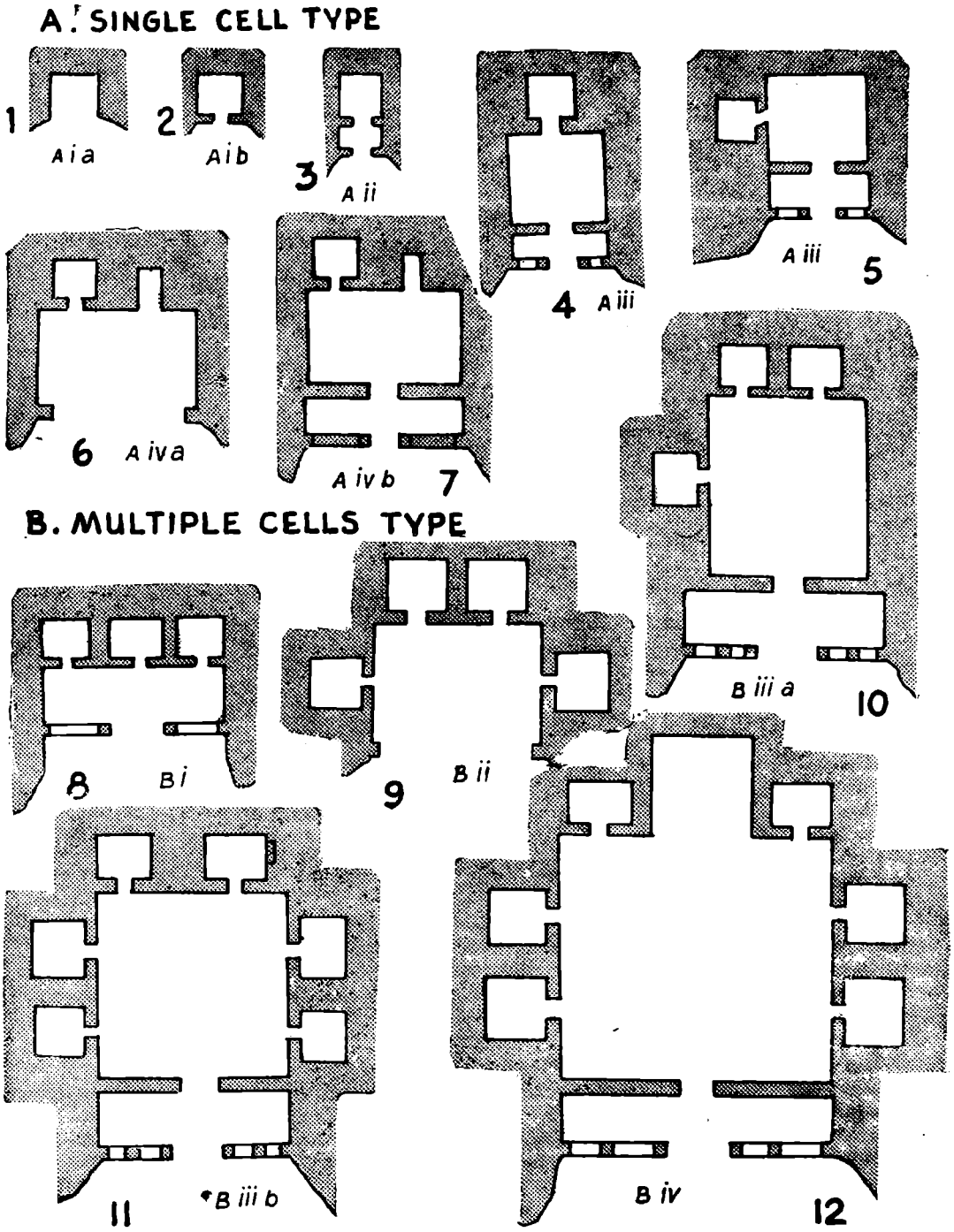


FIG. 3

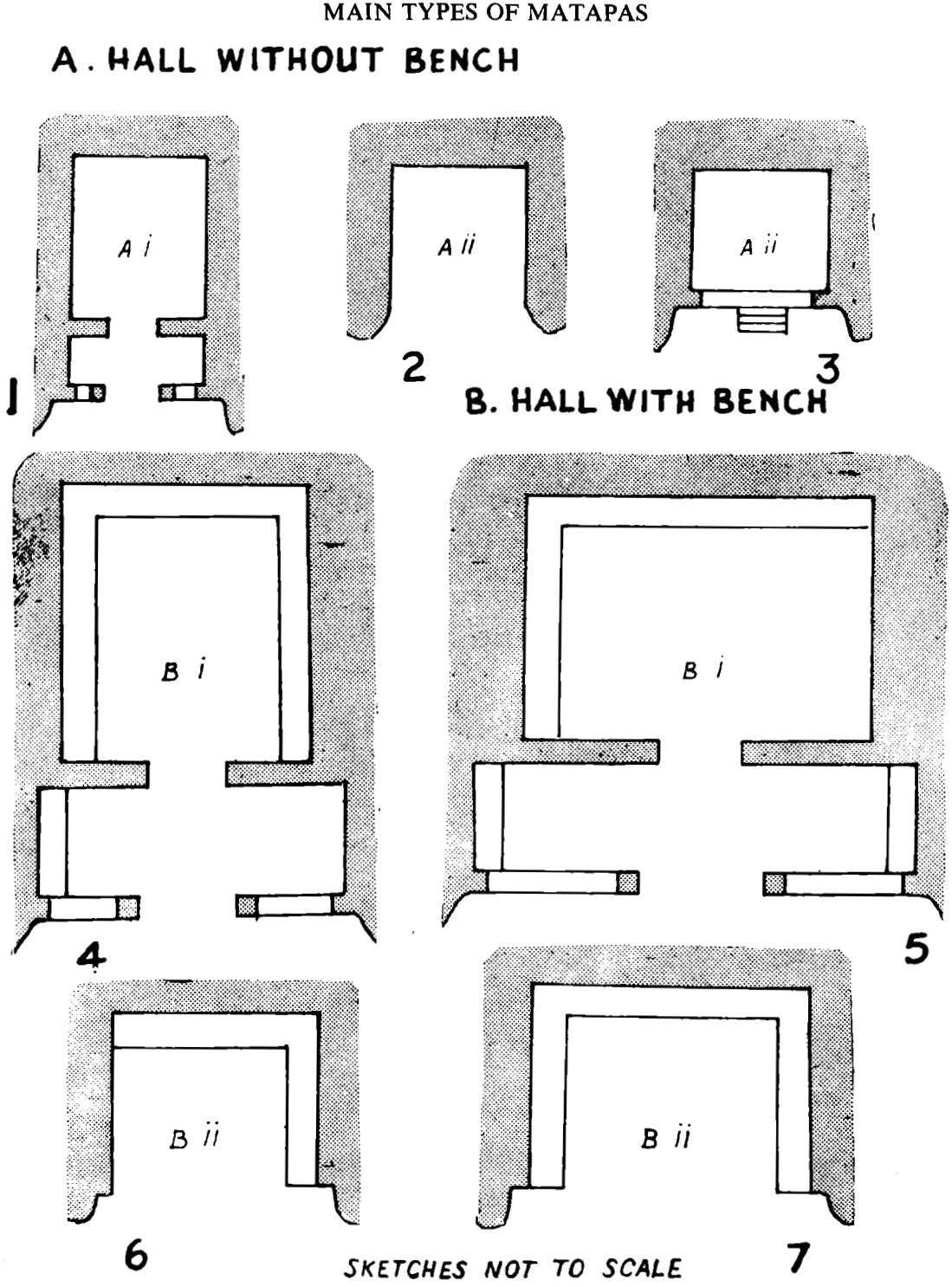
MAIN TYPES OF LENAS



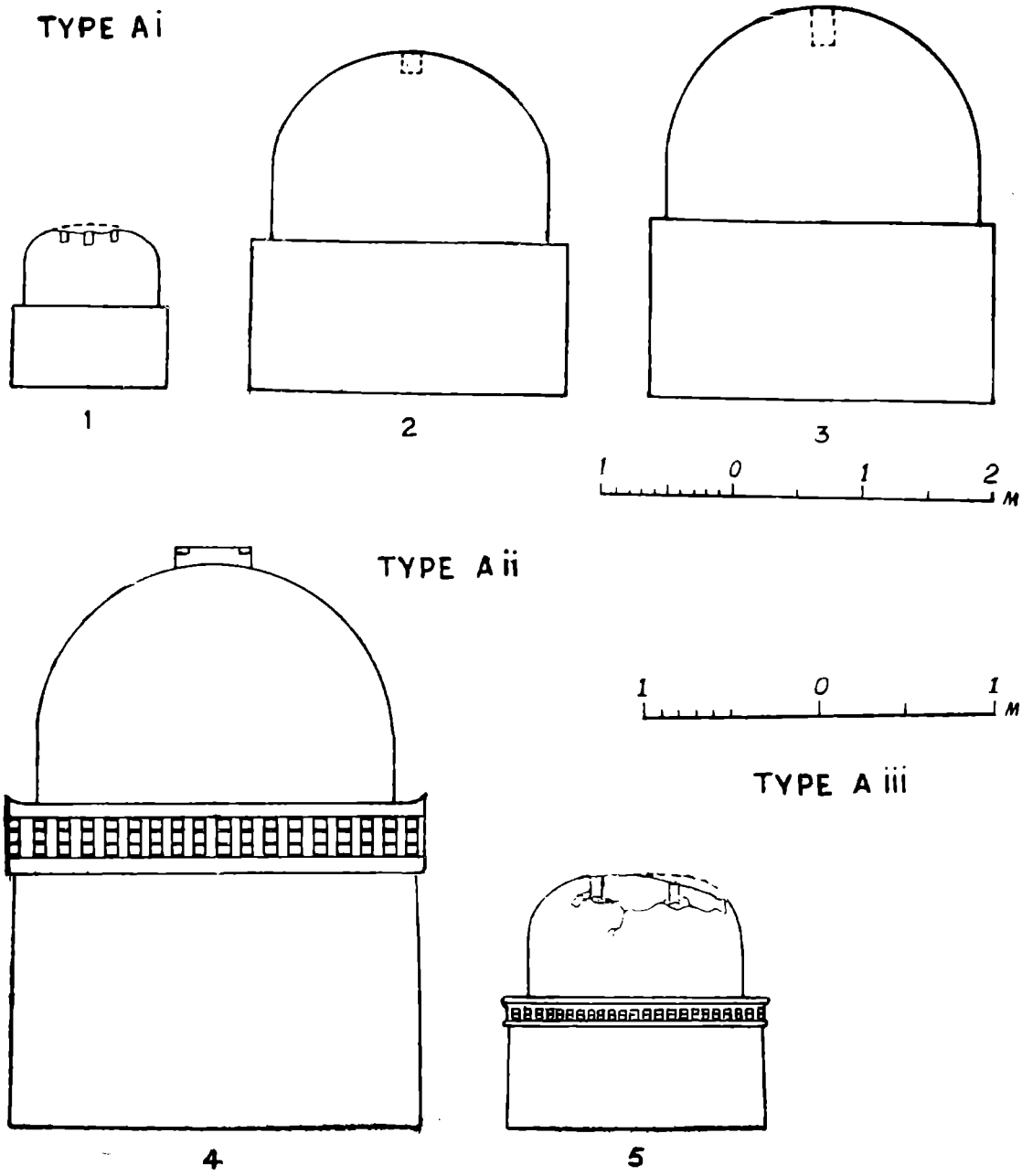

SKETCHES NOT TO SCALE

FIG. 4

MAIN TYPES OF MATAPAS



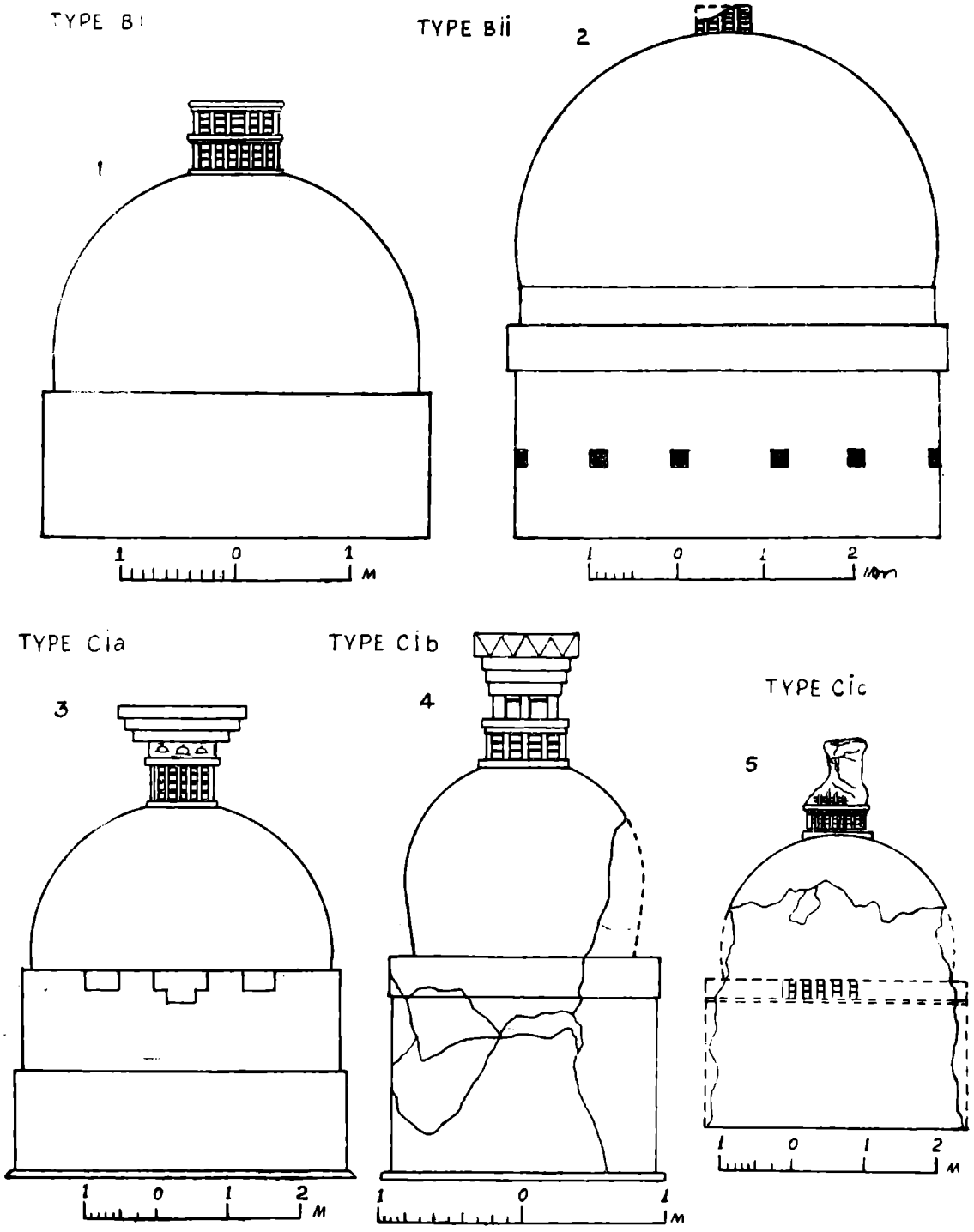
MAIN STUPAS IN CHETIYAGHARAS (1)




1. Bhaja 26; 2. Kanheri 2e; 3. Junnar—Tuljalena 3; 4. Kondivite 9; 5. Bedsa 3.

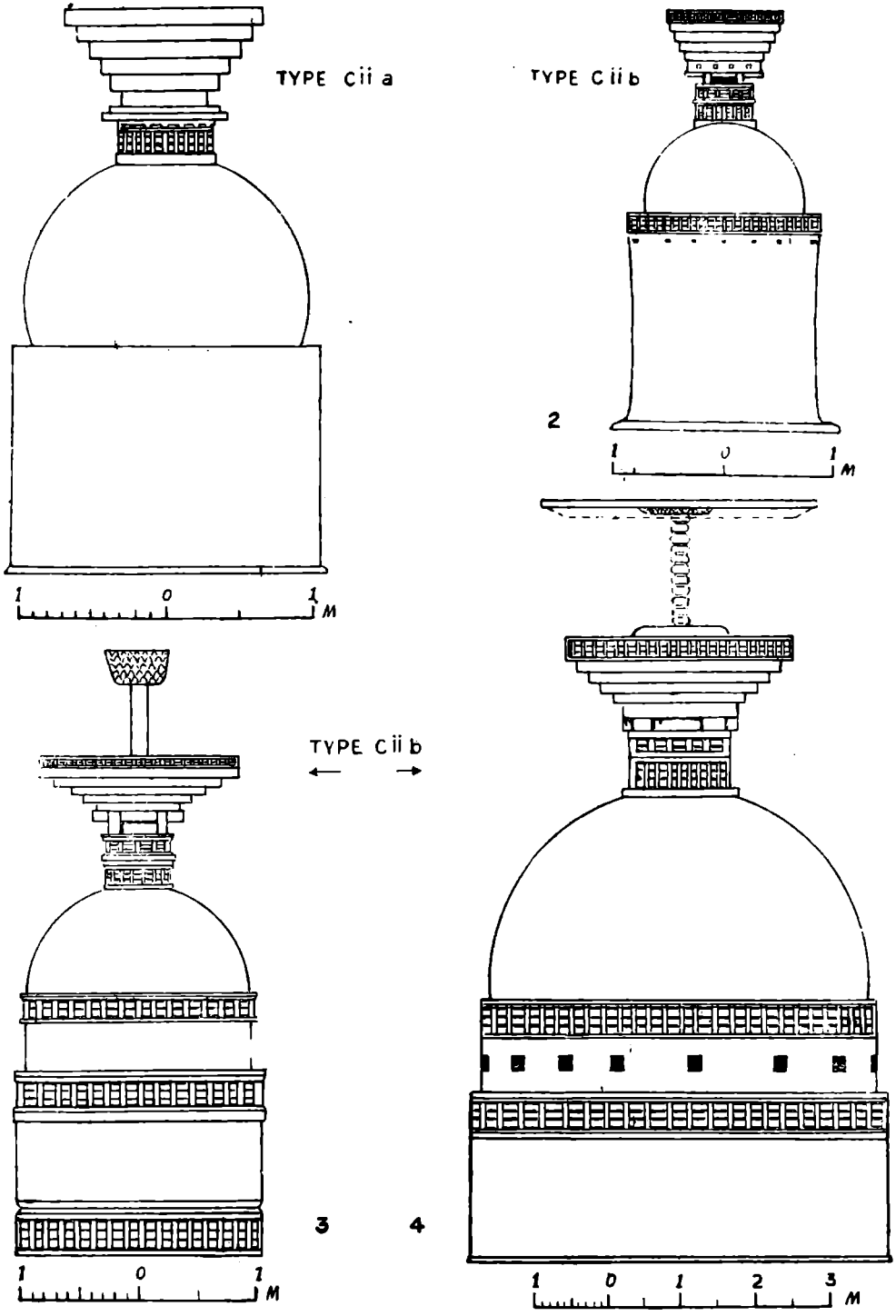
FIG. 6

## MAIN STUPAS IN CHETIYAGHARAS (2)




1. Bhaja 12; 2. Kanheri 2e; 3. Ajanta 10; 4. Aurangabad 4; 5. Kondane 1.

# MAIN STUPAS IN CHETIYAGHARAS (3)

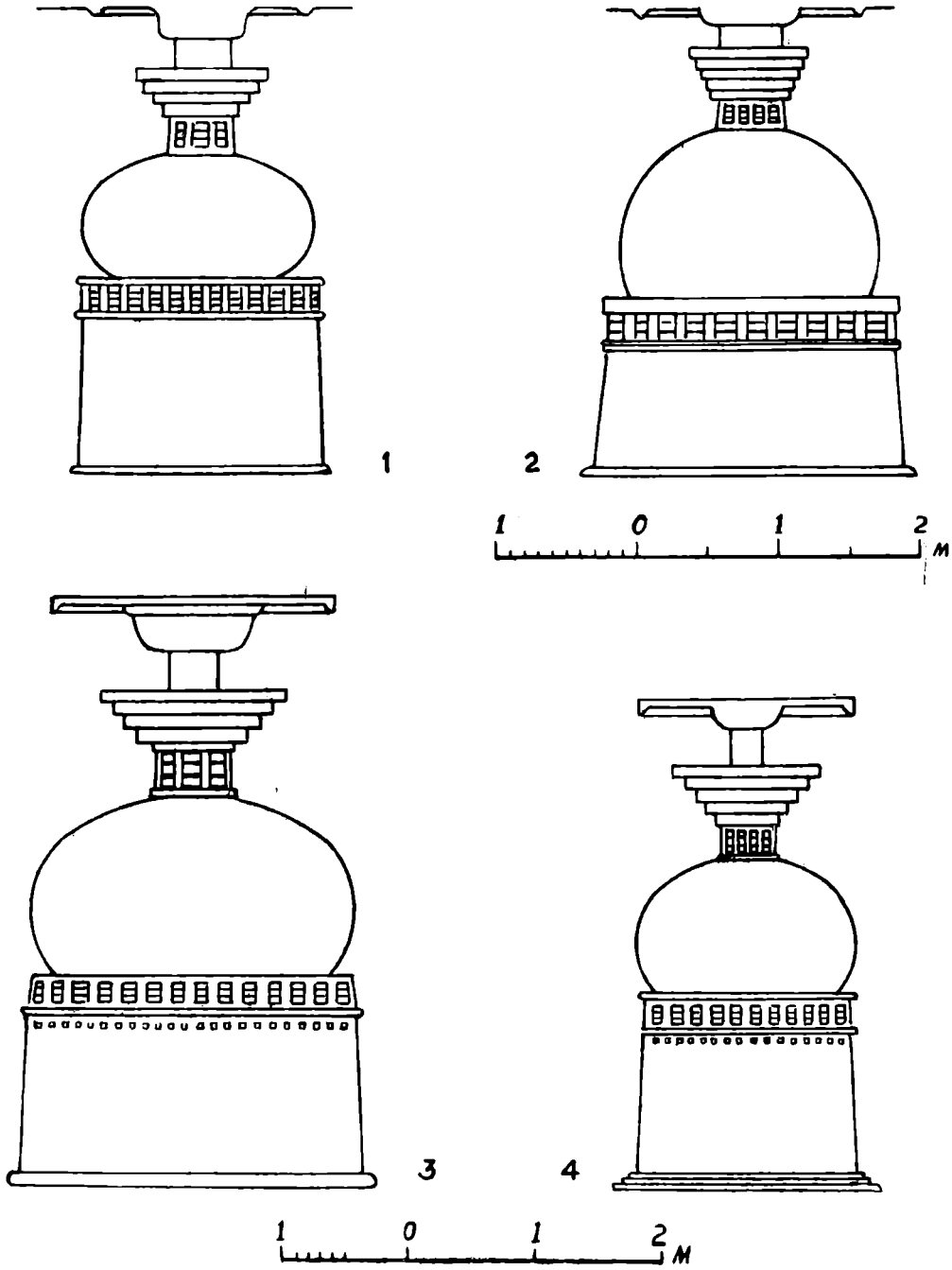



1. Ajanta 9; 2. Nasik 18; 3. Bedsa 7; 4. Karle 8.

FIG. 8

MAIN STUPAS IN CHETIYAGHARAS (4)

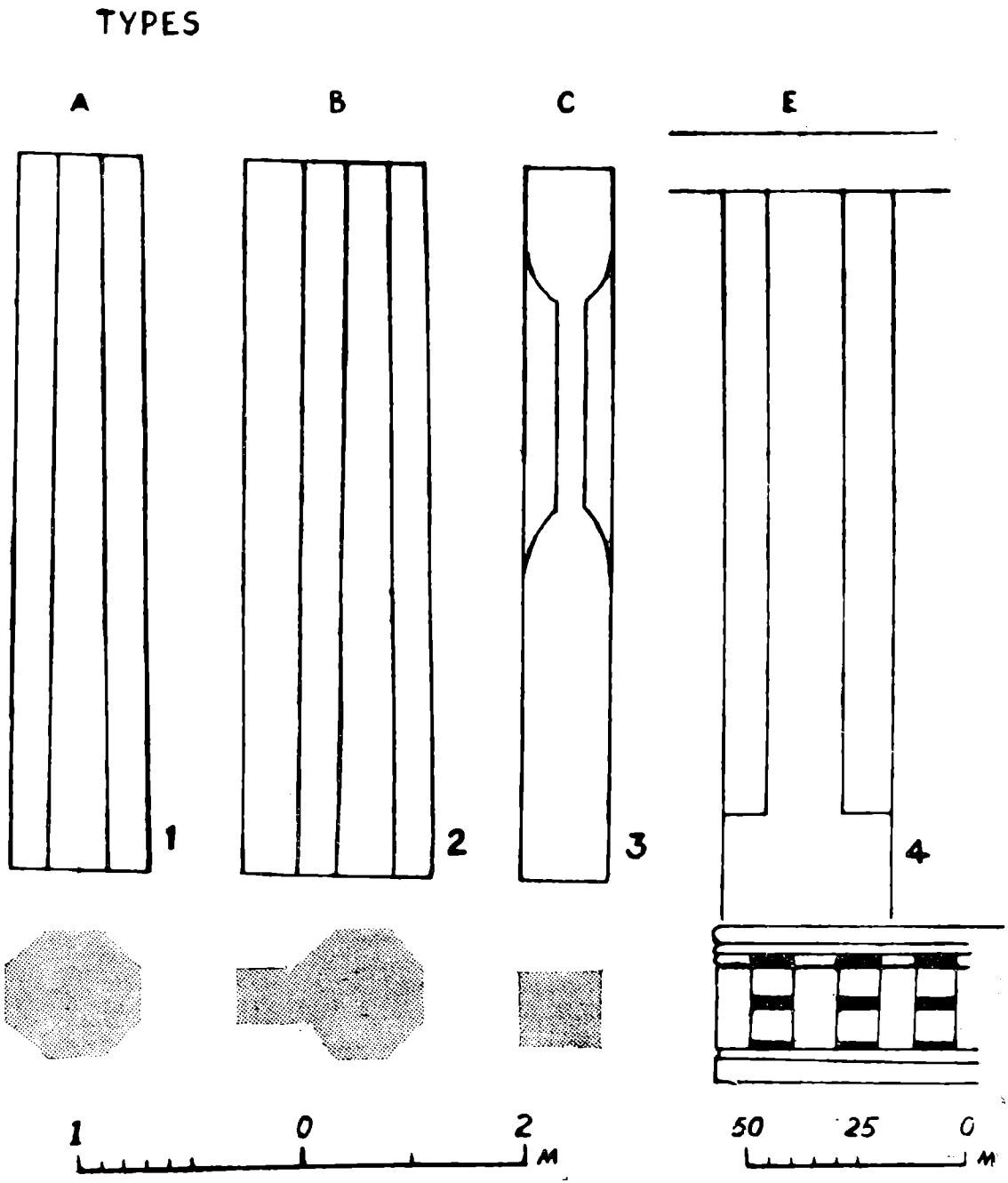
# TYPE-D




1. Kanheri 4; 2. Kanheri 2c; 3. Junnar—Sivaneri 43; 4. Junnar—Ganesh Pahar 14.

FIG. 9

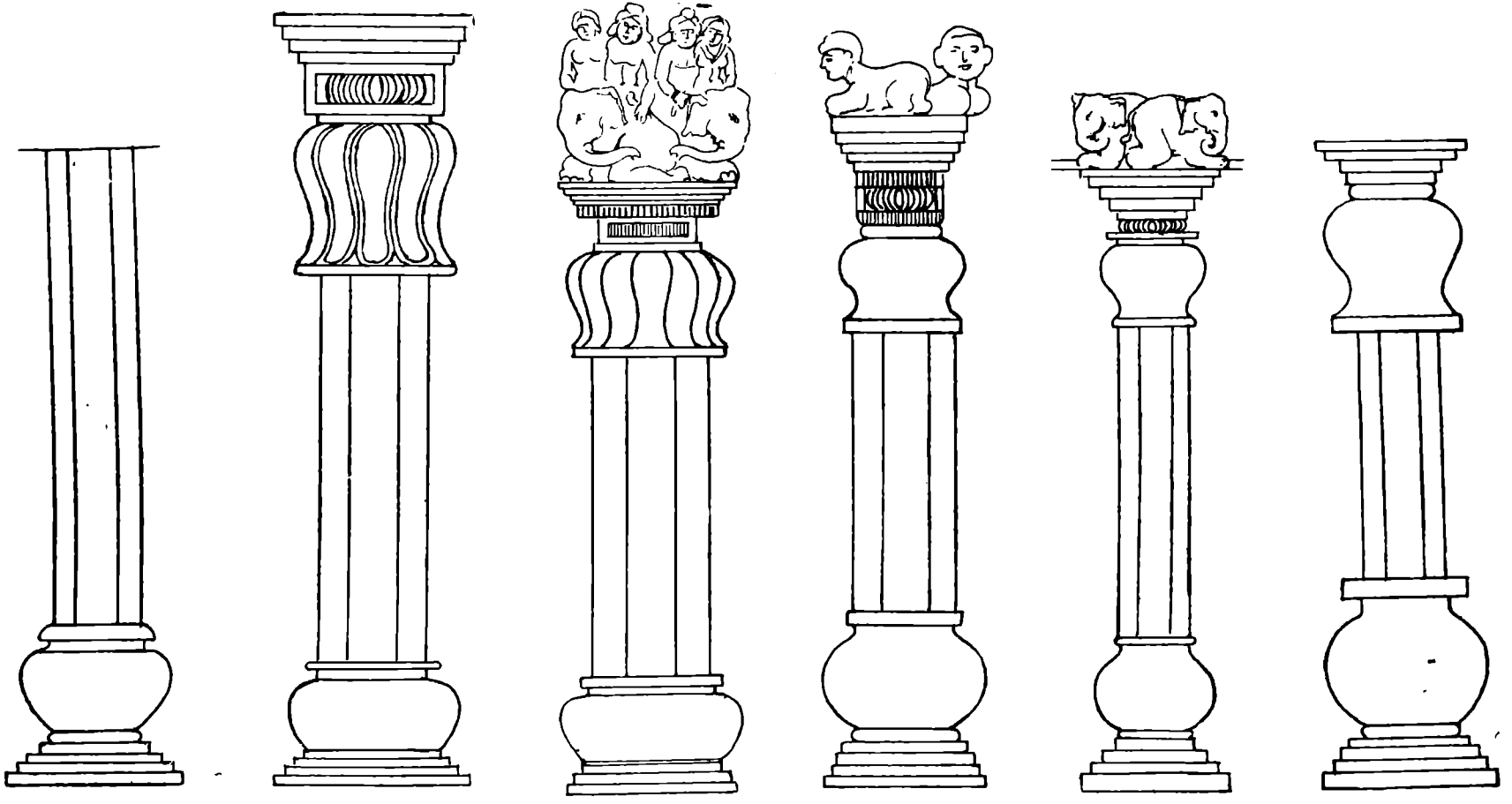
MAIN TYPES OF PILLARS (1)




1. Ajanta 10; 2-3. Ajanta 9;4. Kanheri 32.

FIG. 10

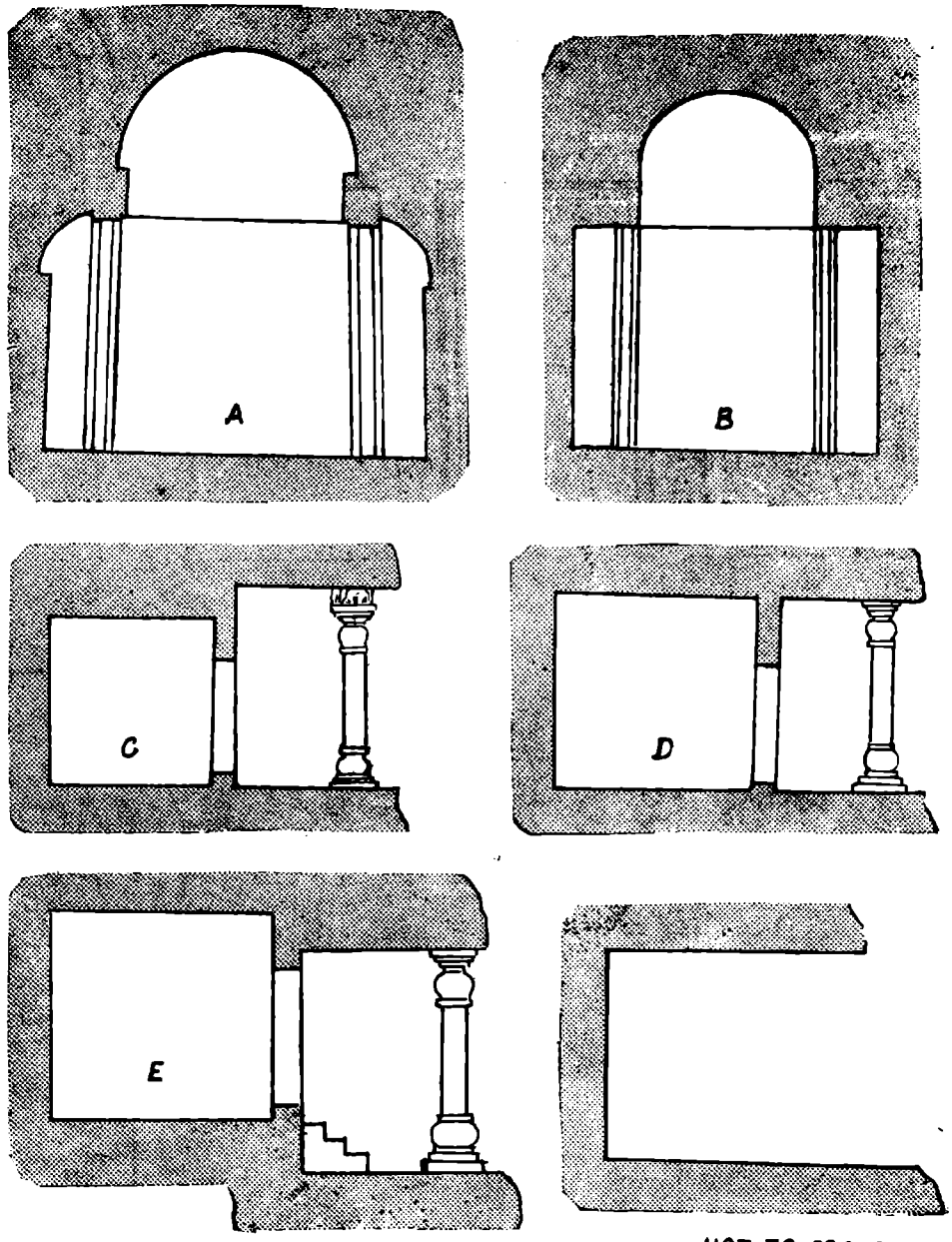
## MAIN TYPES OF PILLARS (2) (TYPE D)




D i. Nasik 18; D ii. Bedsa 7; D iii. Karle 8; D iv. Nasik 10; D v. Junnar—Ganesh Pahar 6; D vi. Junnar—Manmodi 1.

FIG. 11

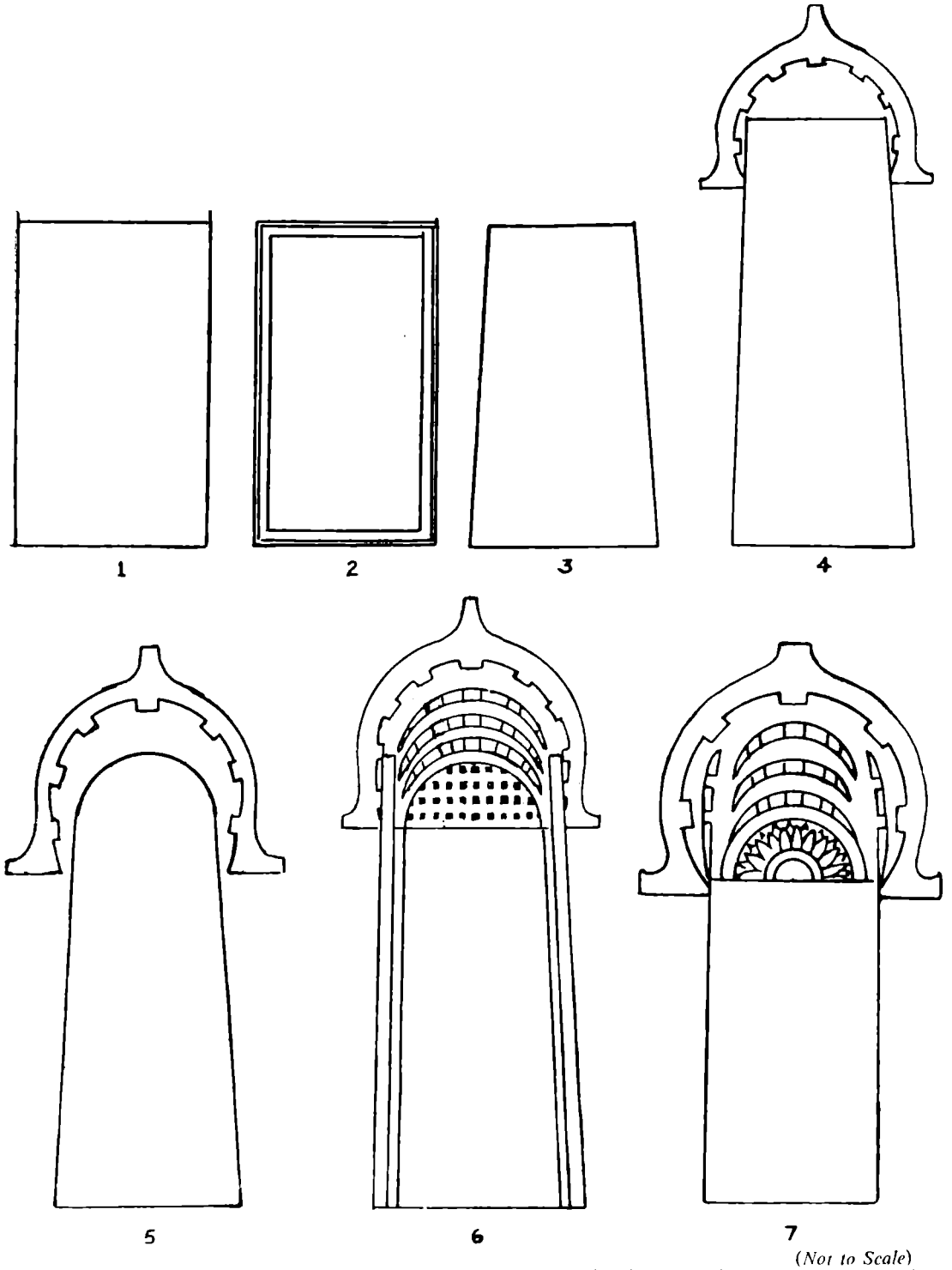
## ROOF TYPES IN CAVES




Sectional views of—A. Vault roof on nave and quadrantal one on aisles; B. Vault roof on nave and flat roof on aisles; C. Flat roofed cave with the ceiling on the verandah at a higher level than that of the hall; D. Flat roofed cave with the verandah and hall ceilings at the same level; E. Flat roofed cave with the ceiling on the verandah at a lower level than that of the hall; F. Simple flat roof in caves without verandah.

FIG. 12

## DOOR FRAMES—MAIN TYPES

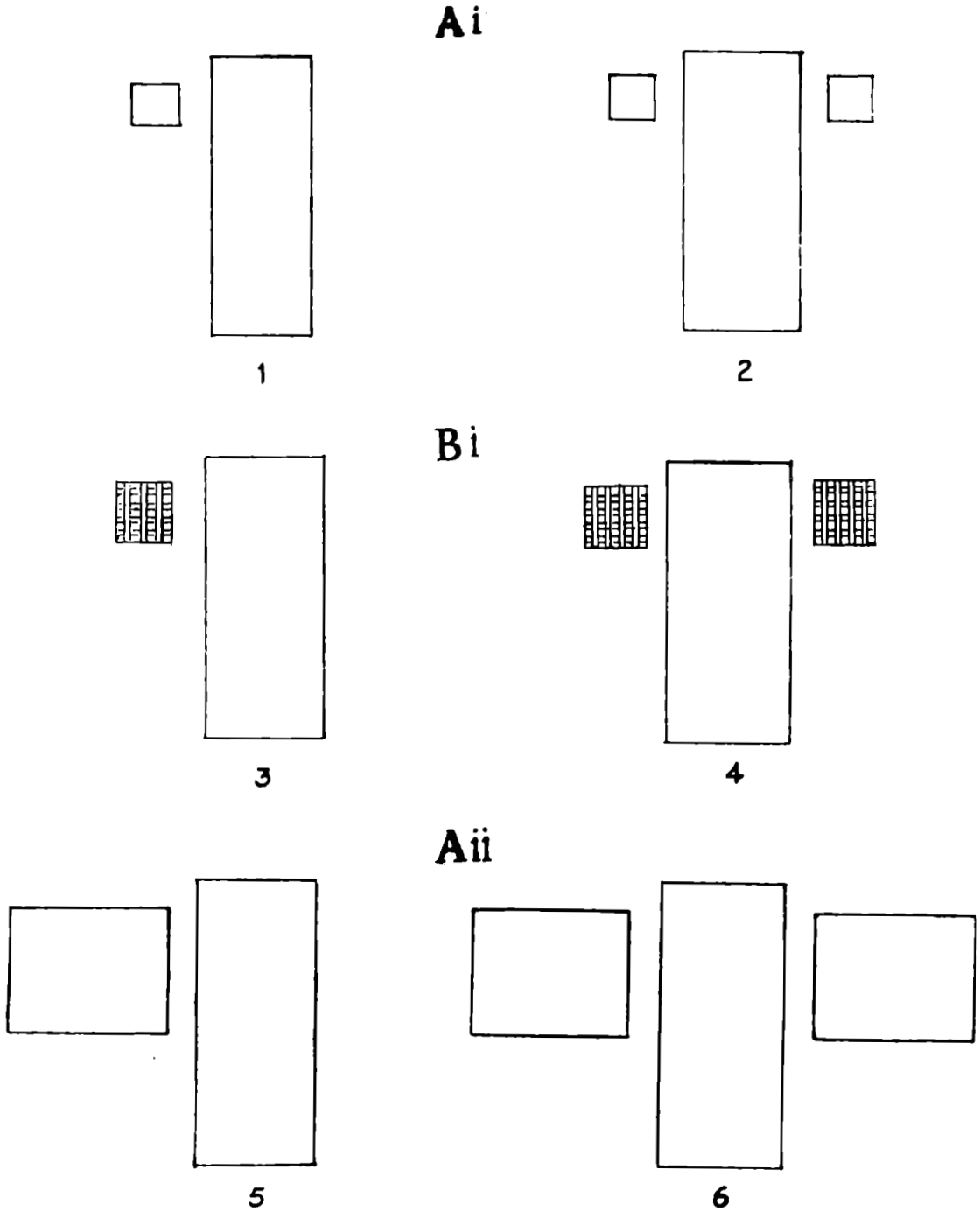



*(Not to Scale)*

1. Simple rectangular door frame: 2. Rectangular door frame with ledge around; 3. Door frame with slanting side-jambs; 4. Door frame with slanting side-jambs and canopied by *chaitya* arch; 5. Door frame with semicircular lintel (from Bhaja 6); 6. Ractangular door frame with *śakhas* on sides and crowned by decorated *chaitya* arch (from Bhaja 22); 7. Simple rectangular door frame with decorated *chaitya* arch on top (from Junnar-Manmodi 45).

FIG. 13

WINDOW TYPES

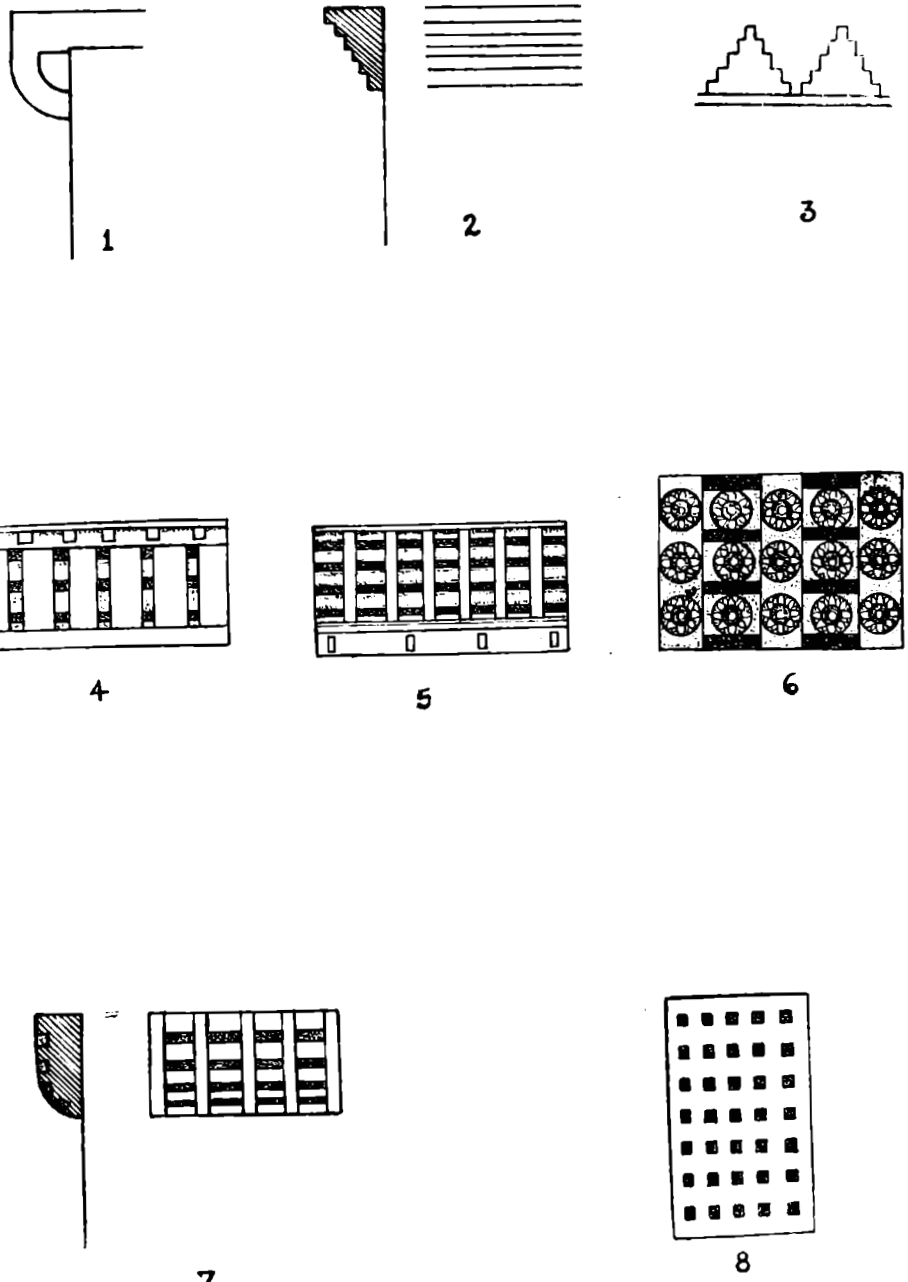



(*Not to Scale*)

1-2. Type A i, Small open windows; 3-4. Type B i, Grated windows; 5-6. Type A ii, Large open windows.

FIG. 14

## MISCELLANEOUS DECORATIVE ITEMS

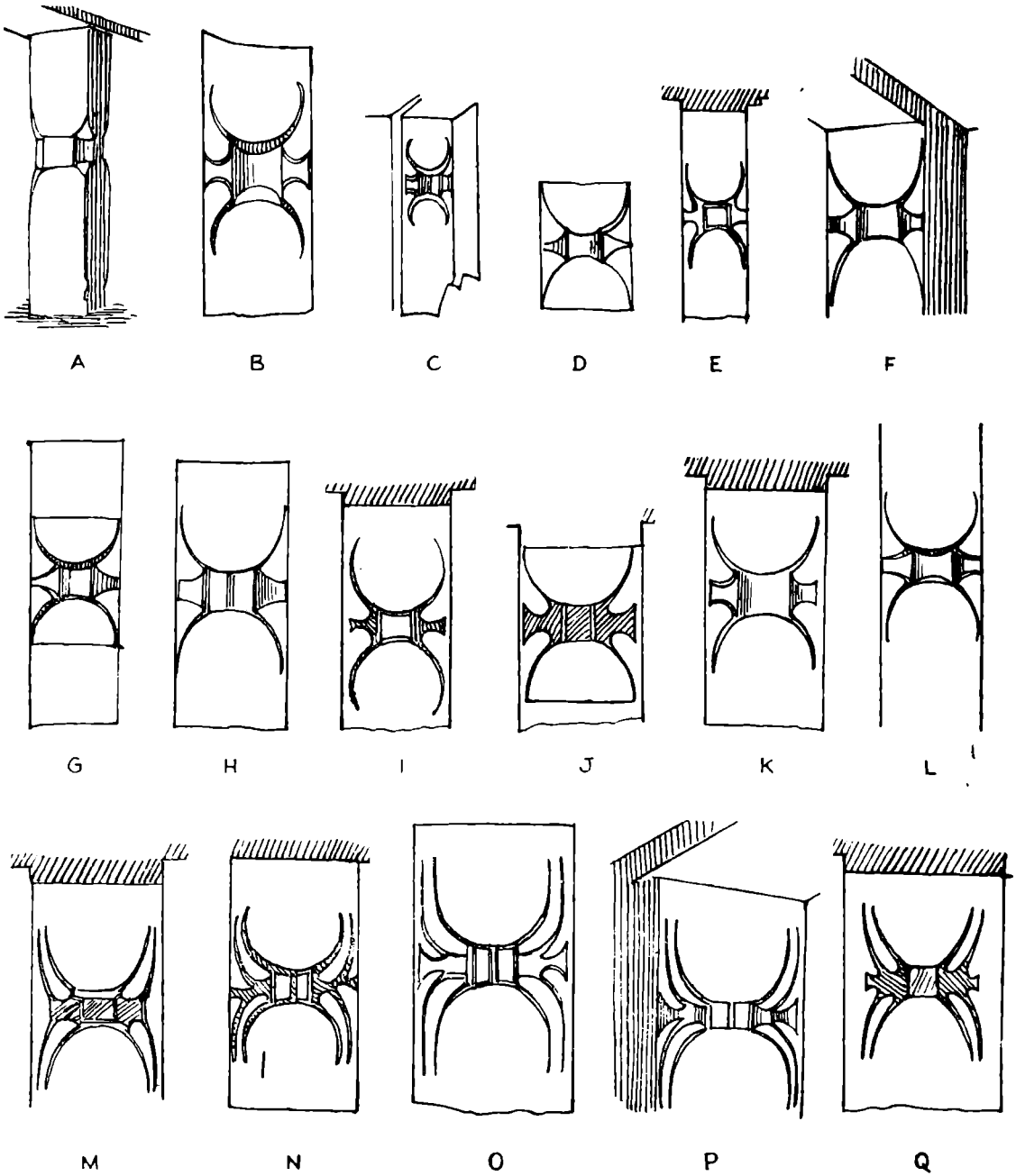



(*Not to Scale*)

1. Bracket; 2. Stepped Cornice; 3. Stepped Merlon; 4. Studs; 5. Vedikā; 6. Vedikā with lotus medallions; 7. Roll-vedikā; 8. Large rectangular window-type panel.

FIG. 15

## TYPES OF HOUR-GLASS DECORATION

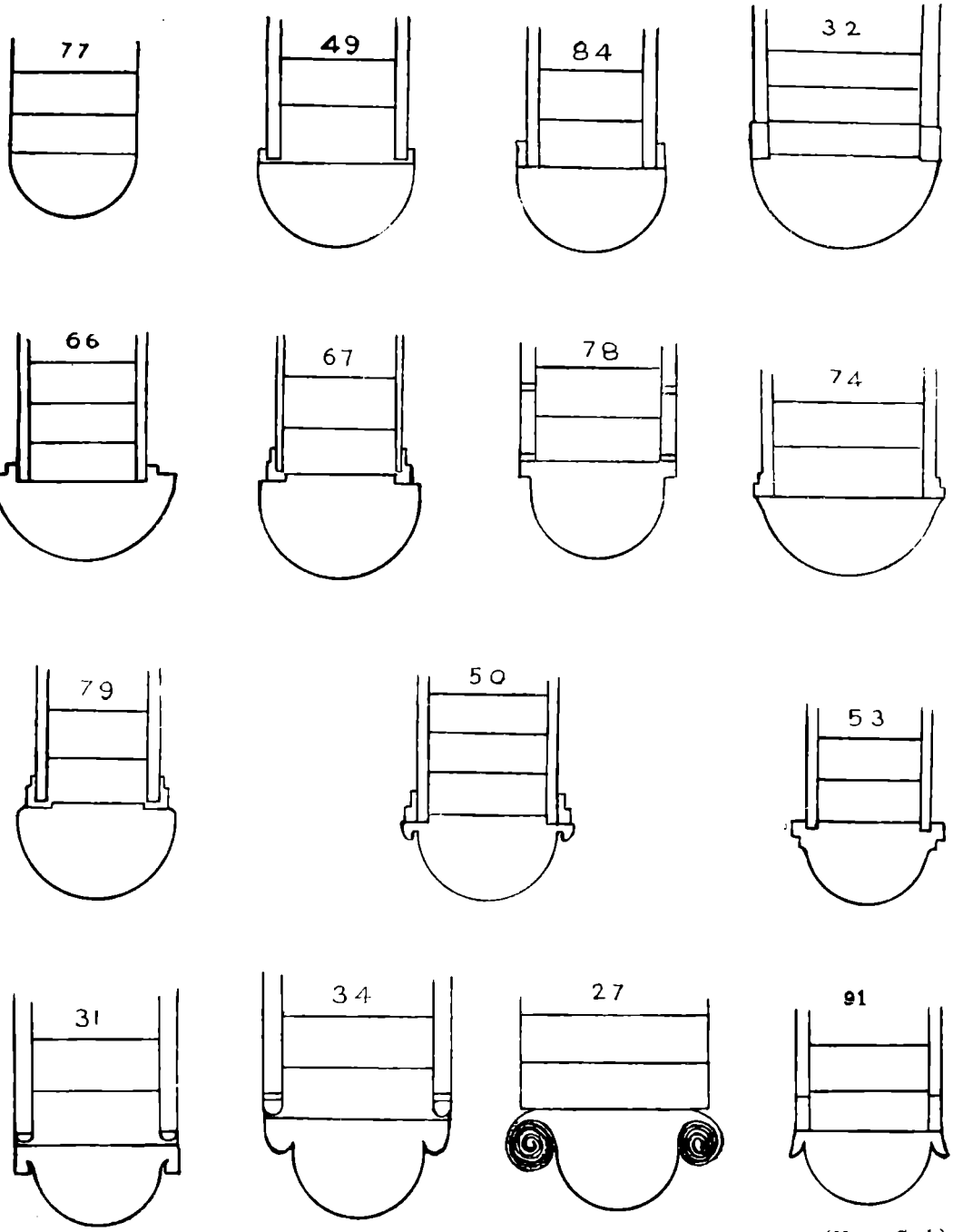



(*Not to Scale*)

A. An example showing the beginning stage, Kanheri 56; B. Mahad 11; C. Mahad 8; D. Kuḍa 15; E. Kanheri 94; F. Kanheri 78; G. Kanheri 70; H. Kanheri 73; I. Kanheri 65; O-P. Kanheri 67; Q. Kanheri 79.

FIG. 16

## CHANDRASILAS FROM KANHERI CAVES




The numbers in the figures refer to the corresponding caves.

*(Not to Scale)*

FIG. 17

AJANTA 9

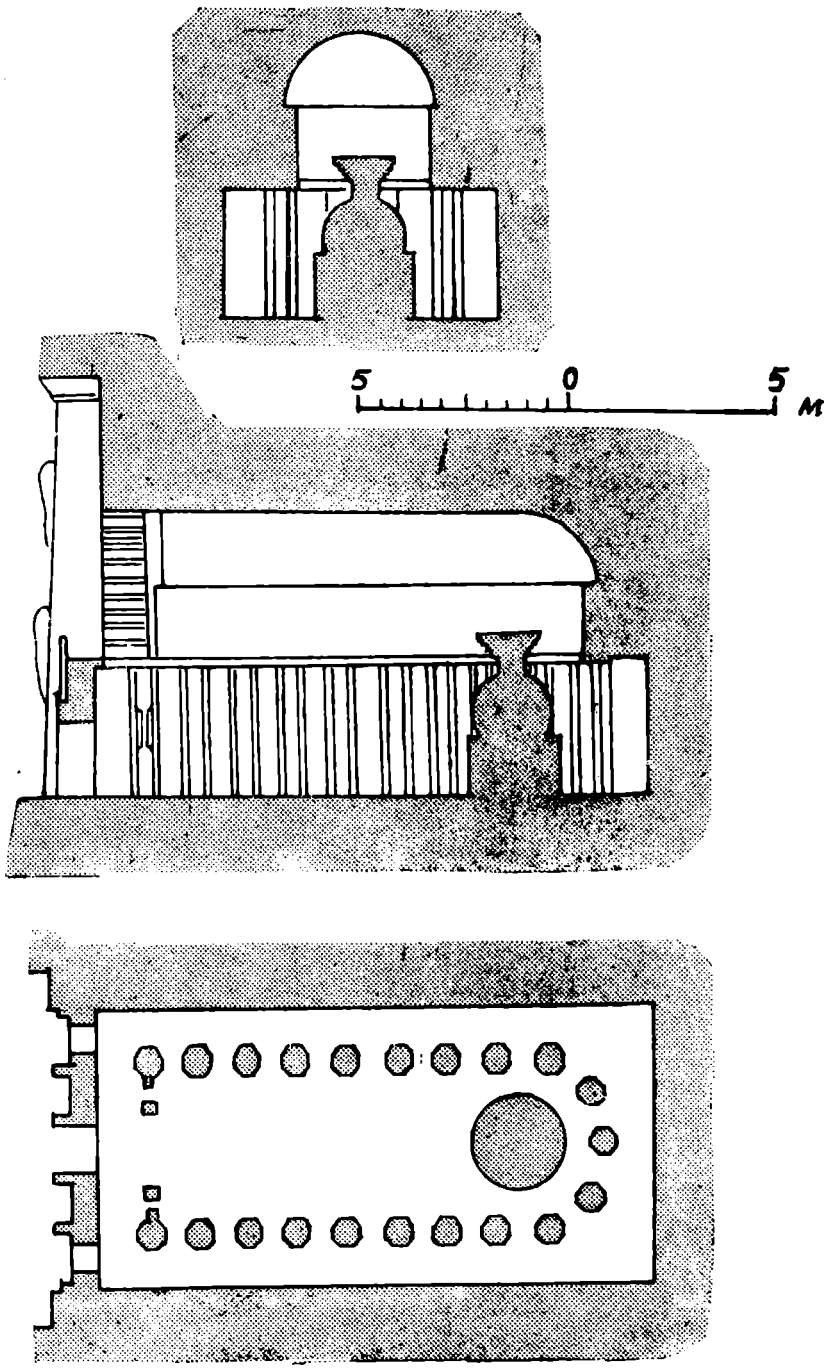
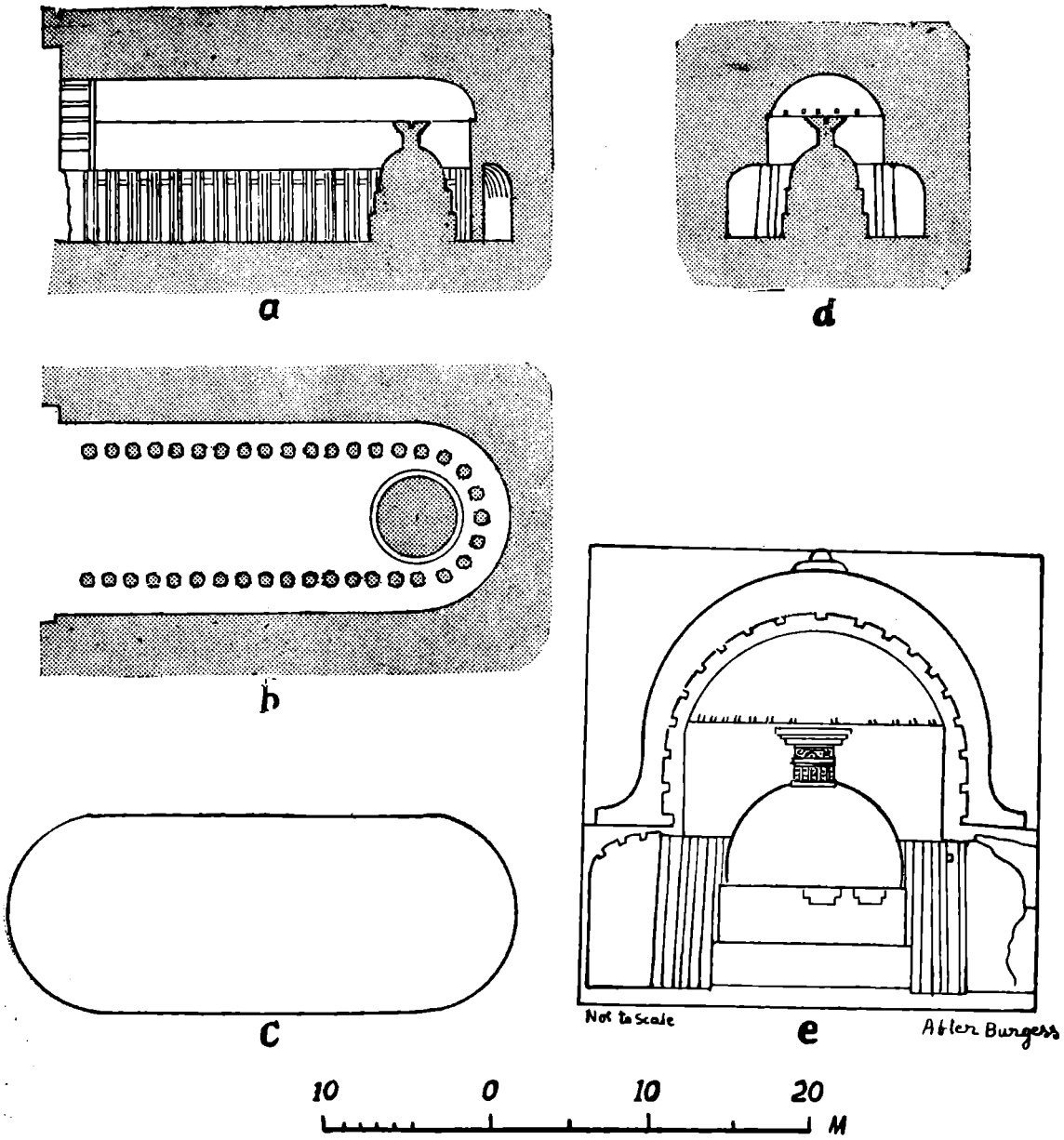


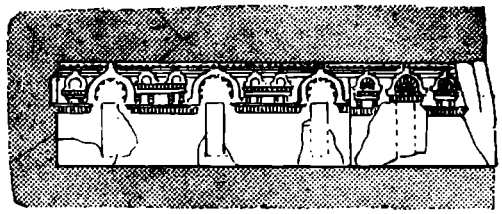
FIG. 18

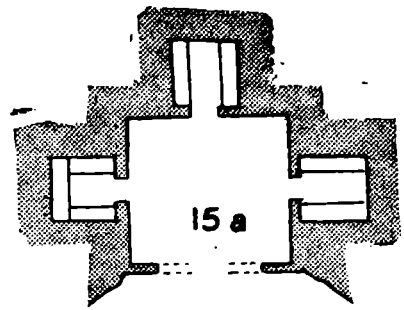
AJANTA 10



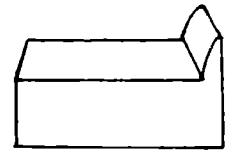

a, b, d longitudinal section, plan and transverse section; c. Suggested reconstruction of eliptical plan at the *pavāḍa* level; e. Front elevation.

# AJANTA

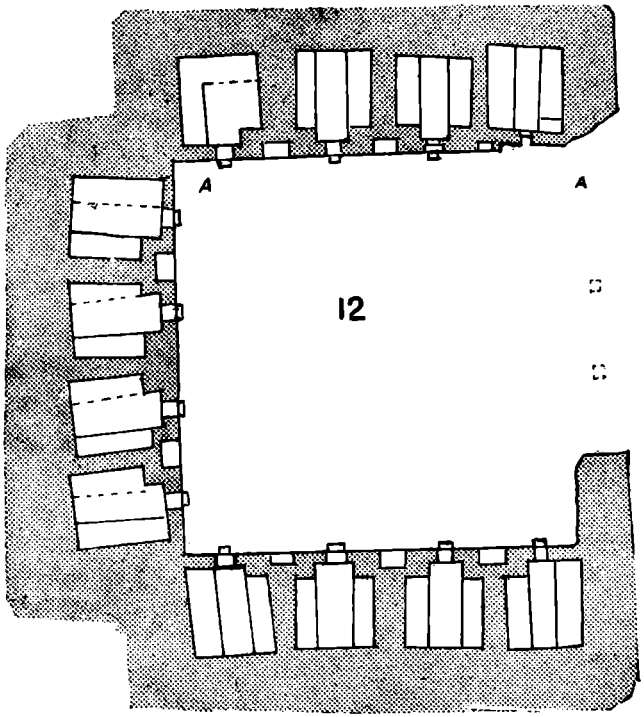



SKETCH



BENCH-CAVE13



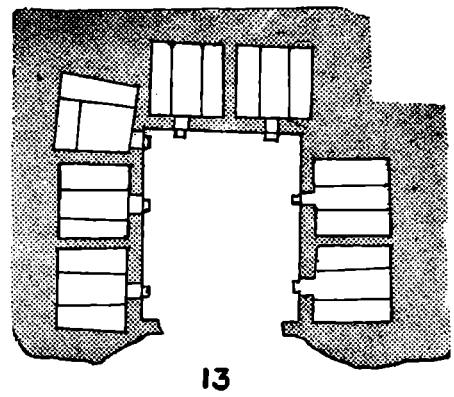
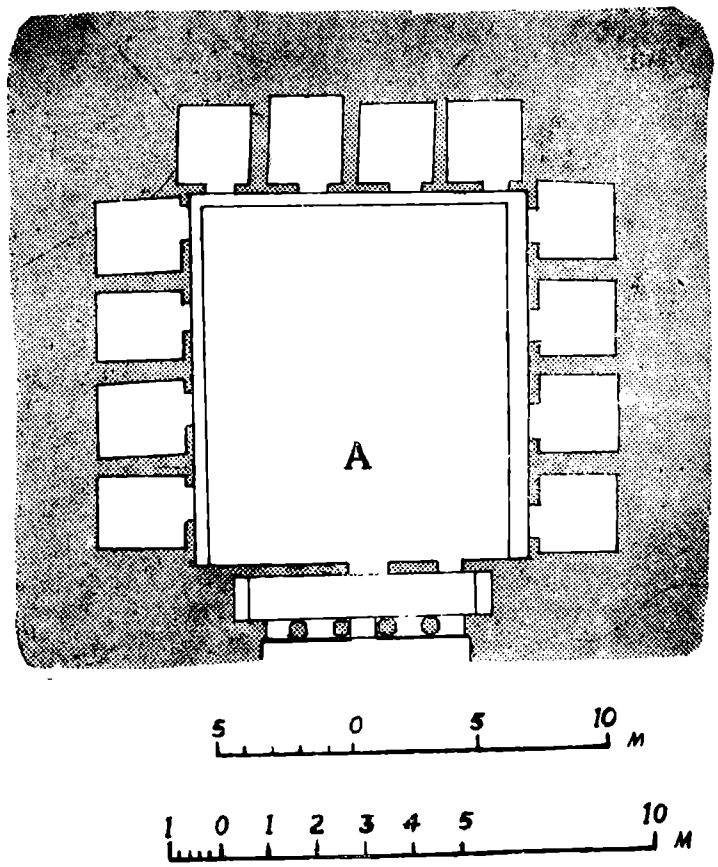






FIG. 20

AMBIVALE AND JUNNAR—TULJALENA




A. Ambivale *leṇa*; B. Junnar—Tuljalena 3, transverse section.

FIG. 21

BEDSA 7

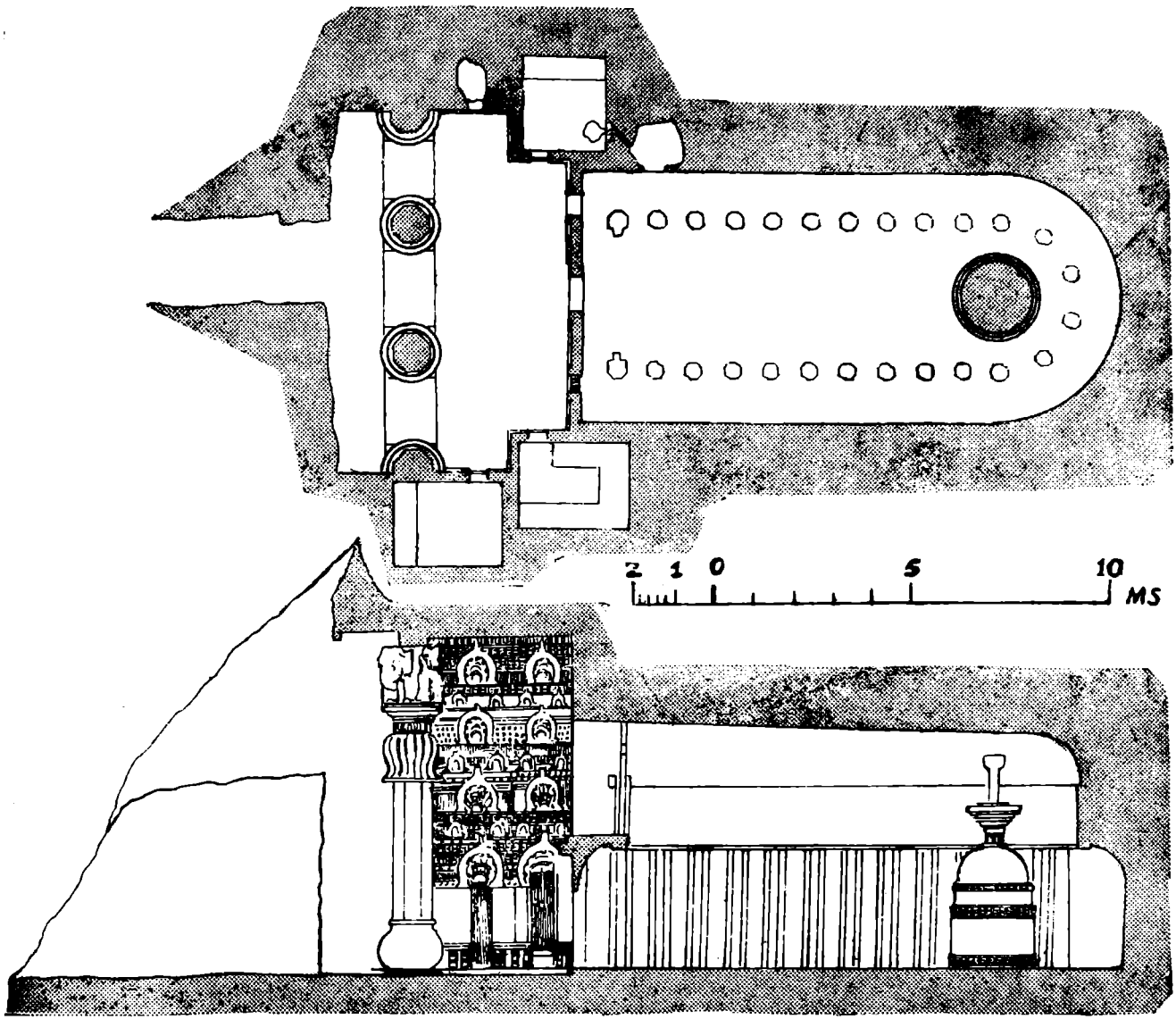


FIG. 22

BEDSA 11

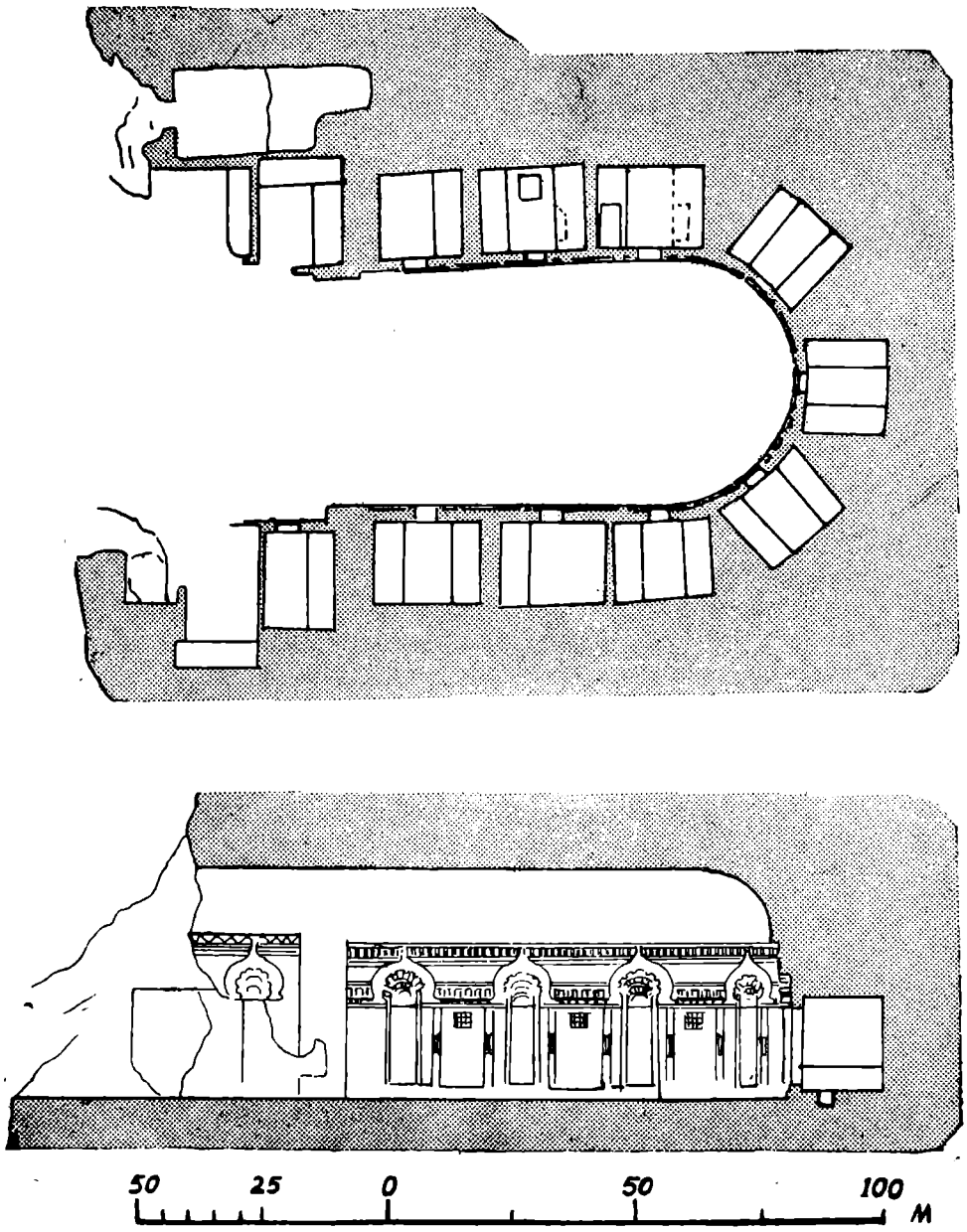


FIG. 23

BHAJA

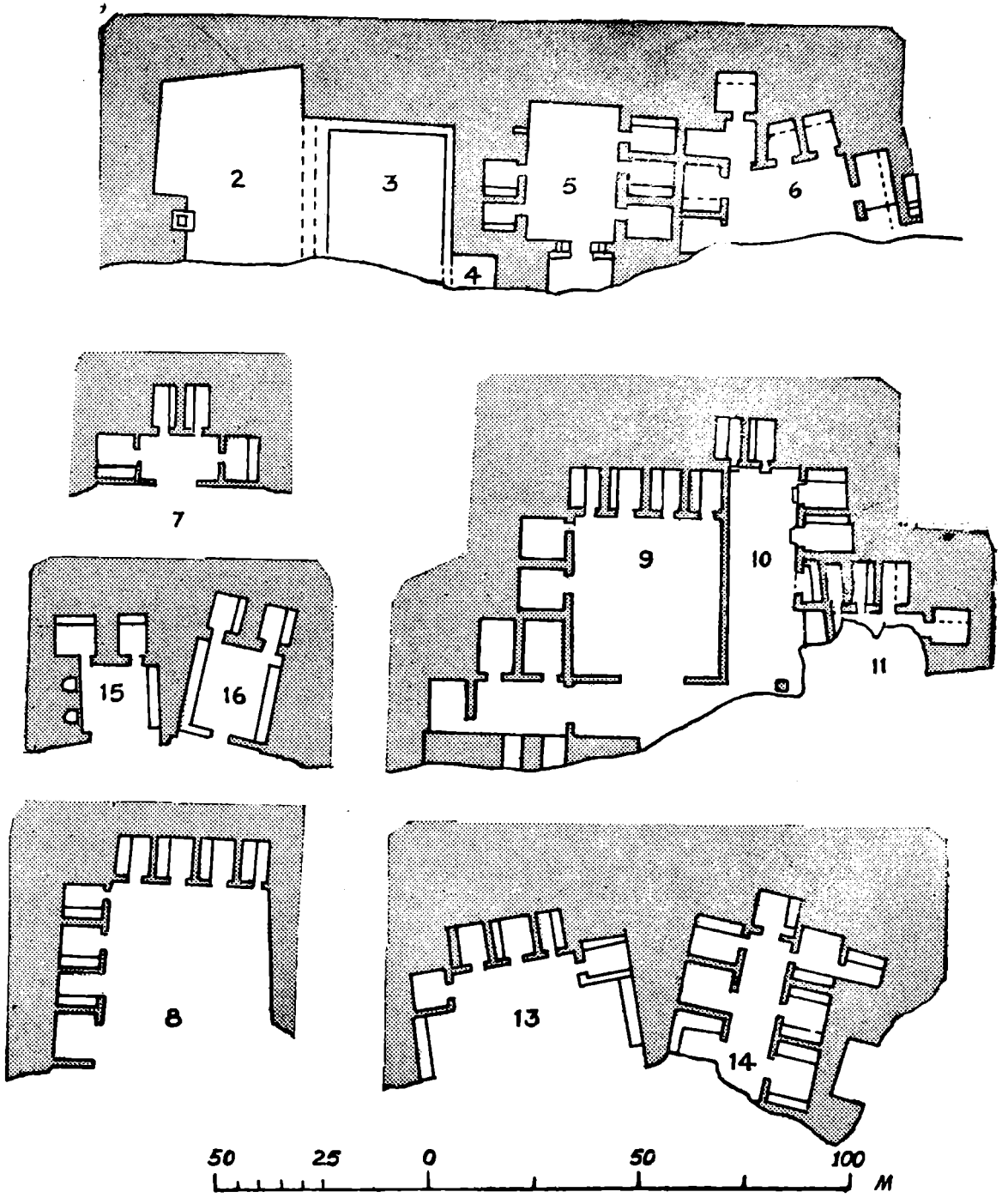
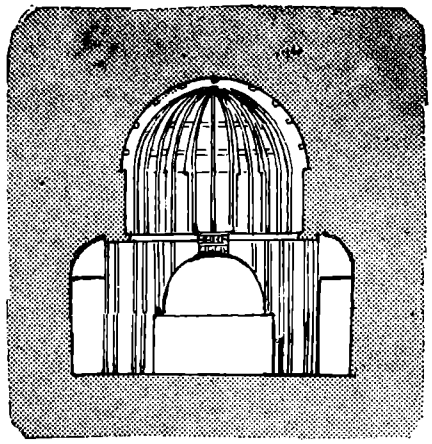
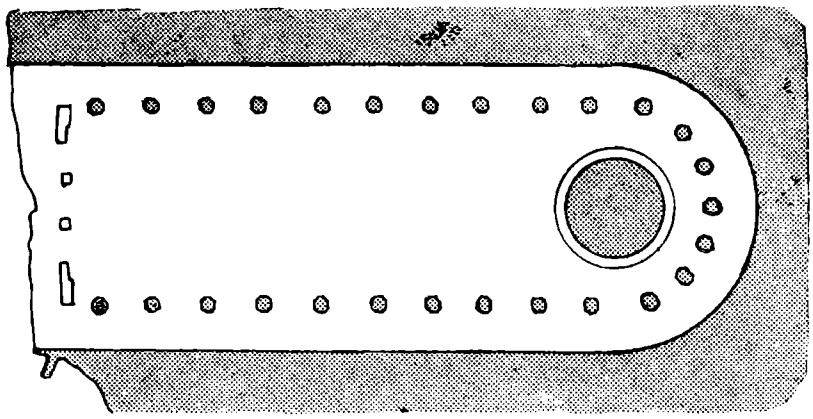
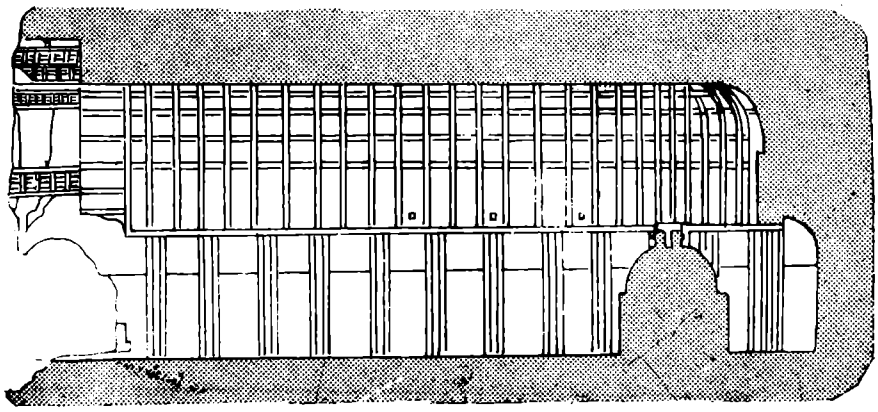


FIG. 24

BHAJA 12









# BHAJA

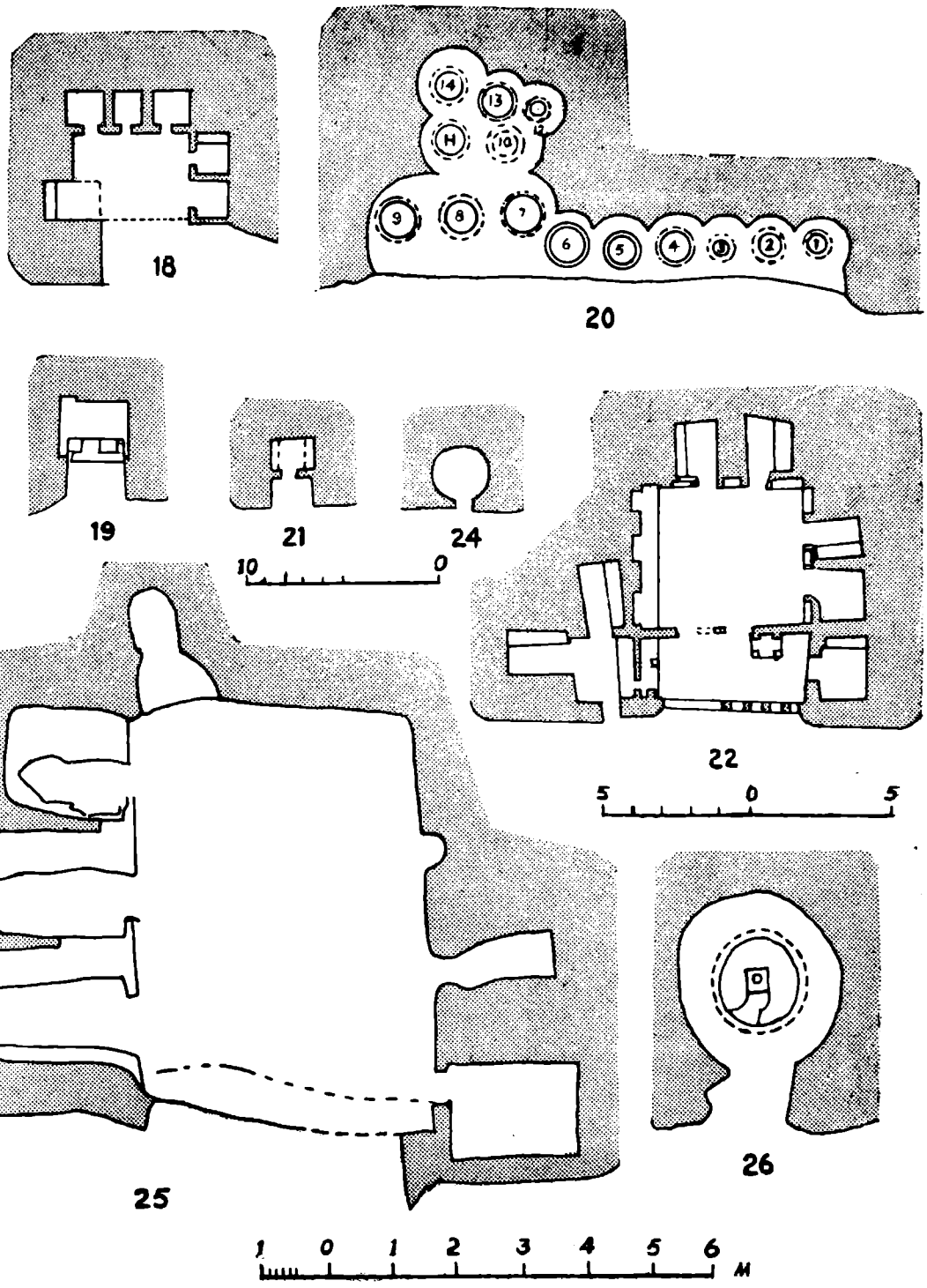
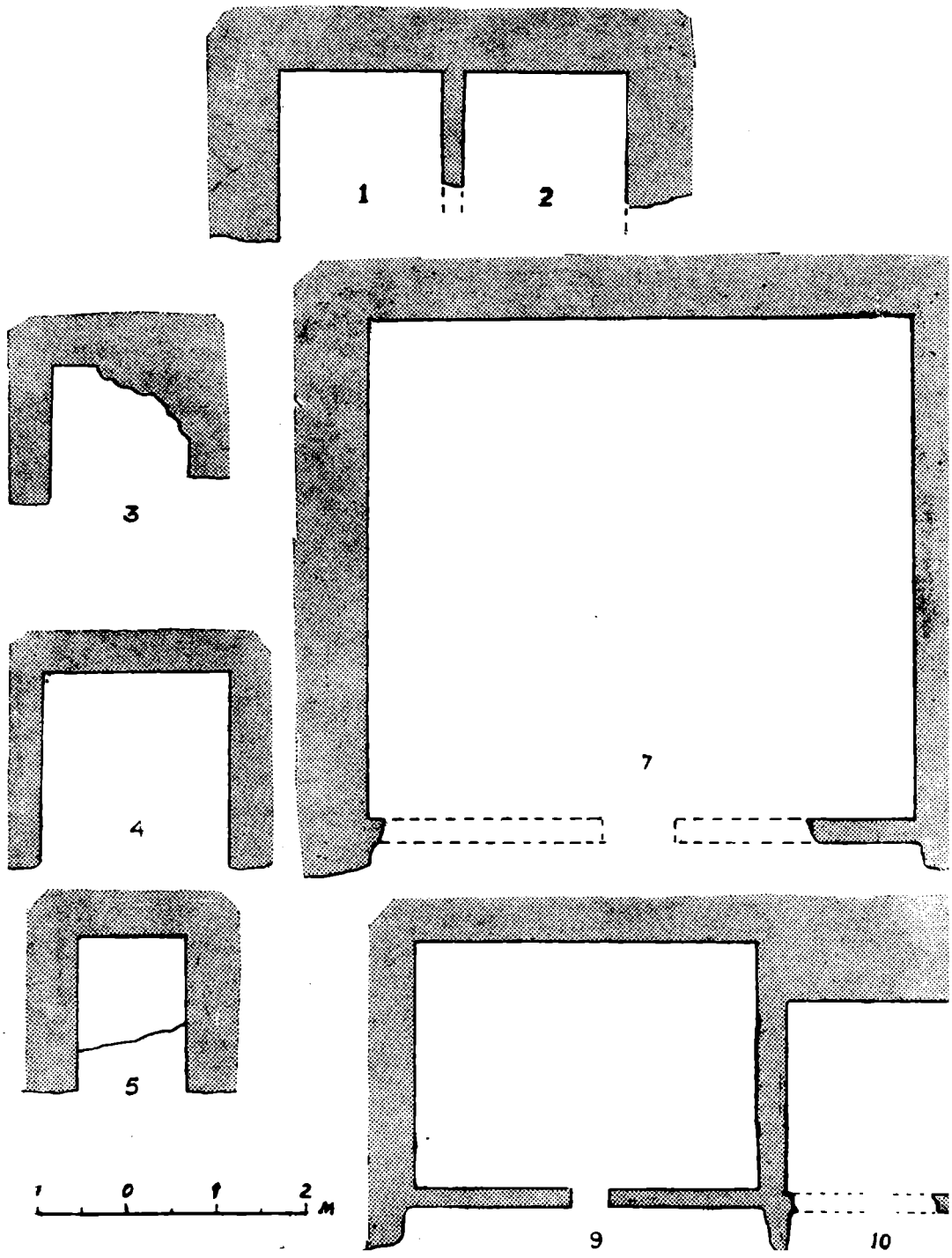


FIG. 26

JIVADAN—VIRAR



JUNNAR—TULJALENA

FIG. 27

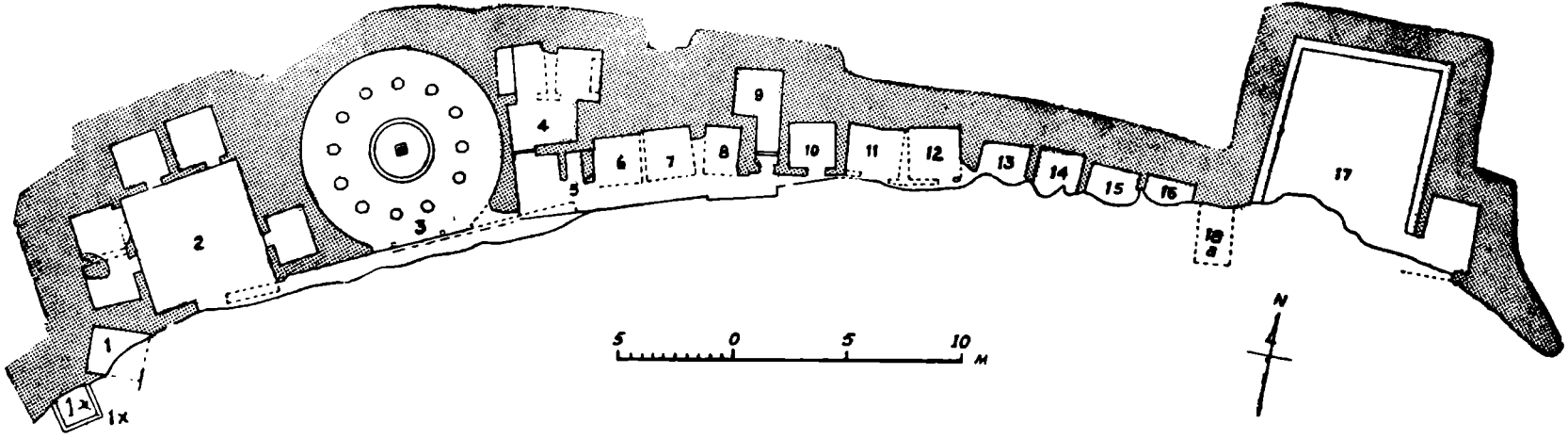
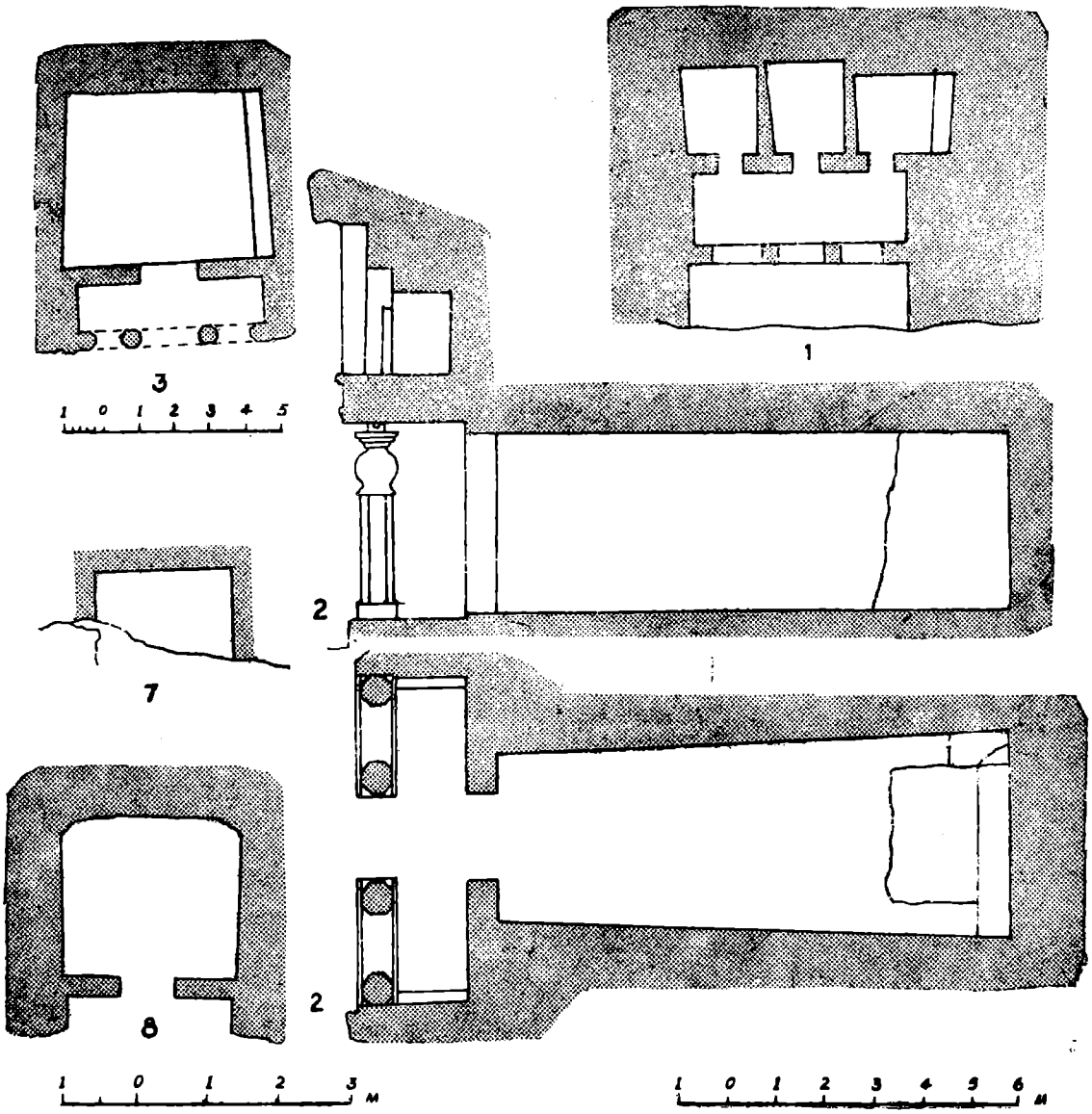


FIG. 28

# JUNNAR–MANMODI



# JUNNAR—MANMODI

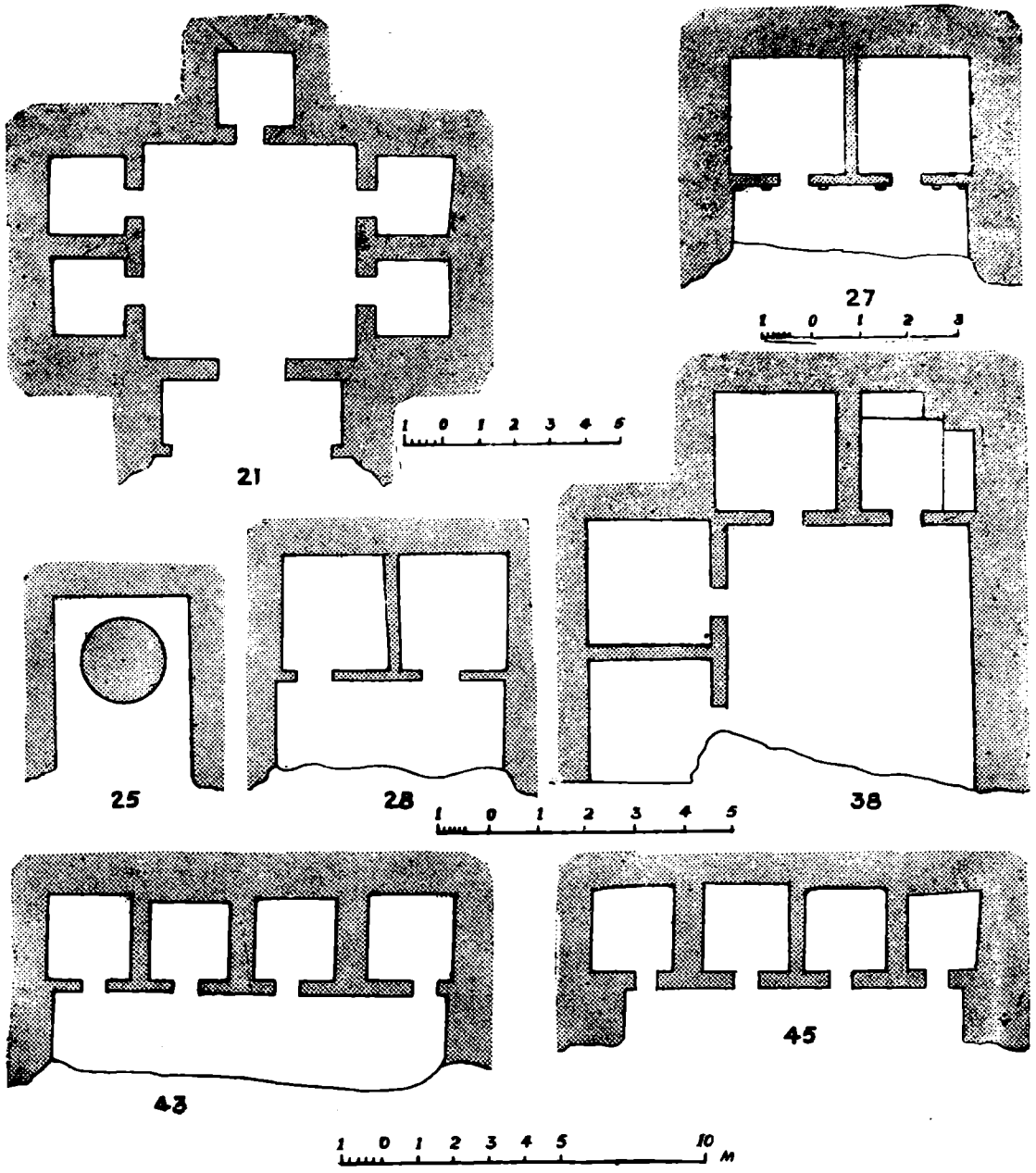
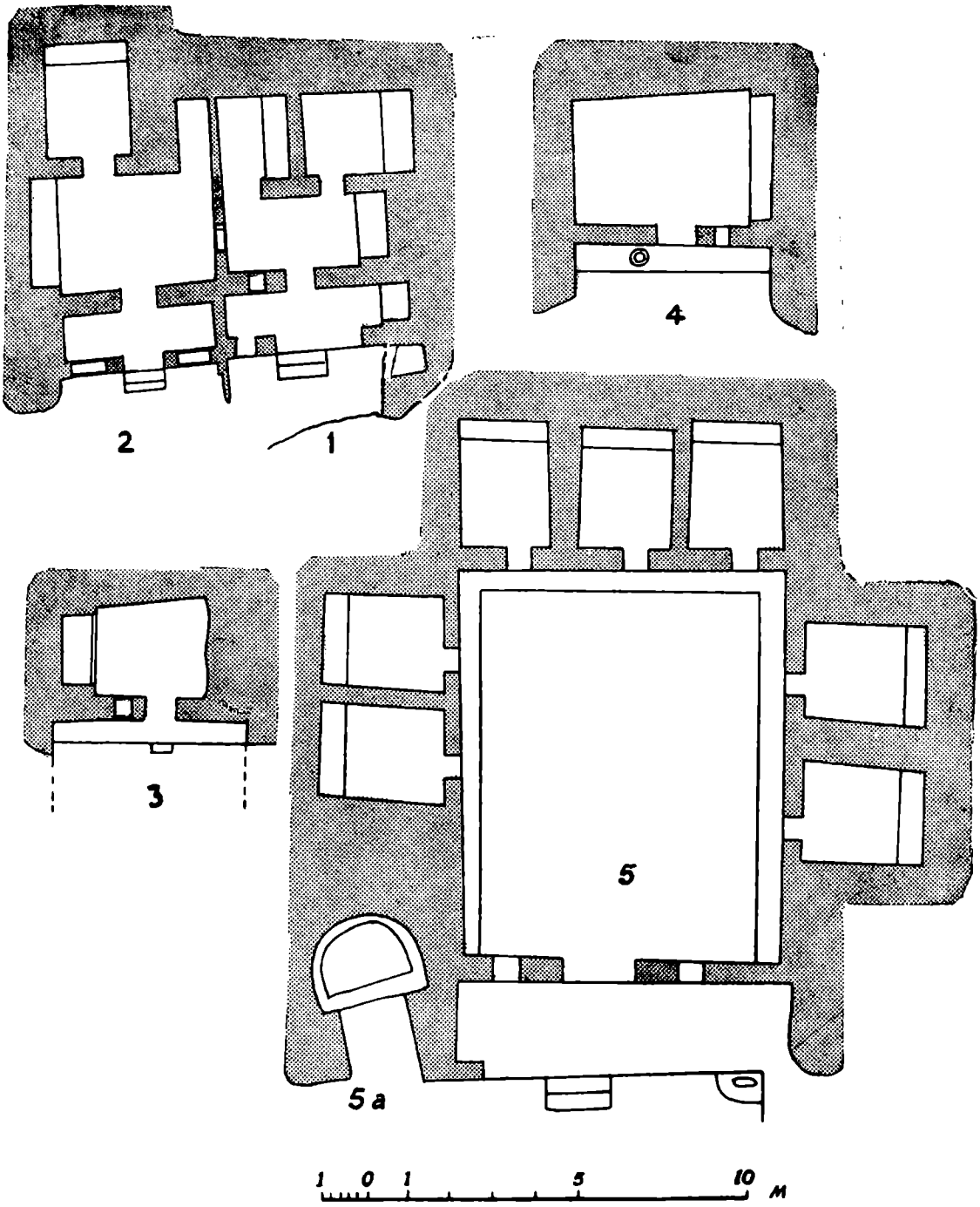
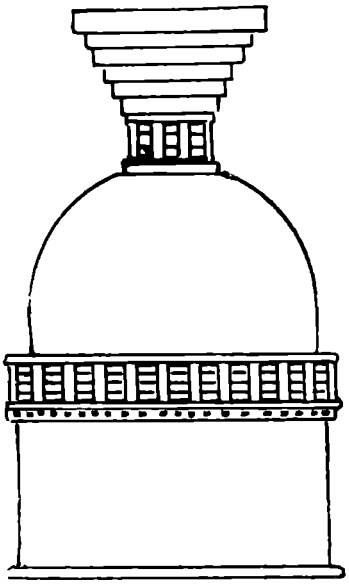


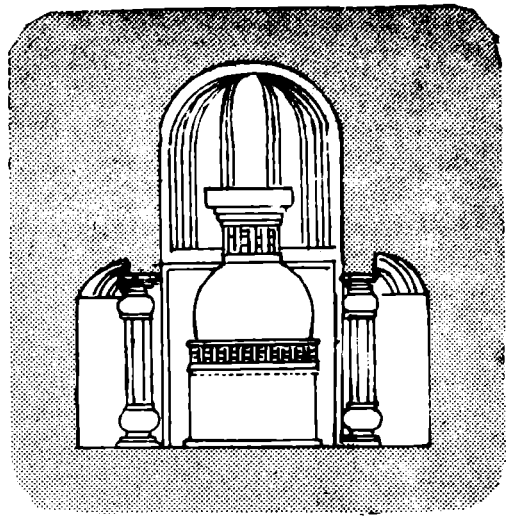
FIG. 30

JUNNAR—GANESH PAHAR



# JUNNAR—GANESH PAHAR 6





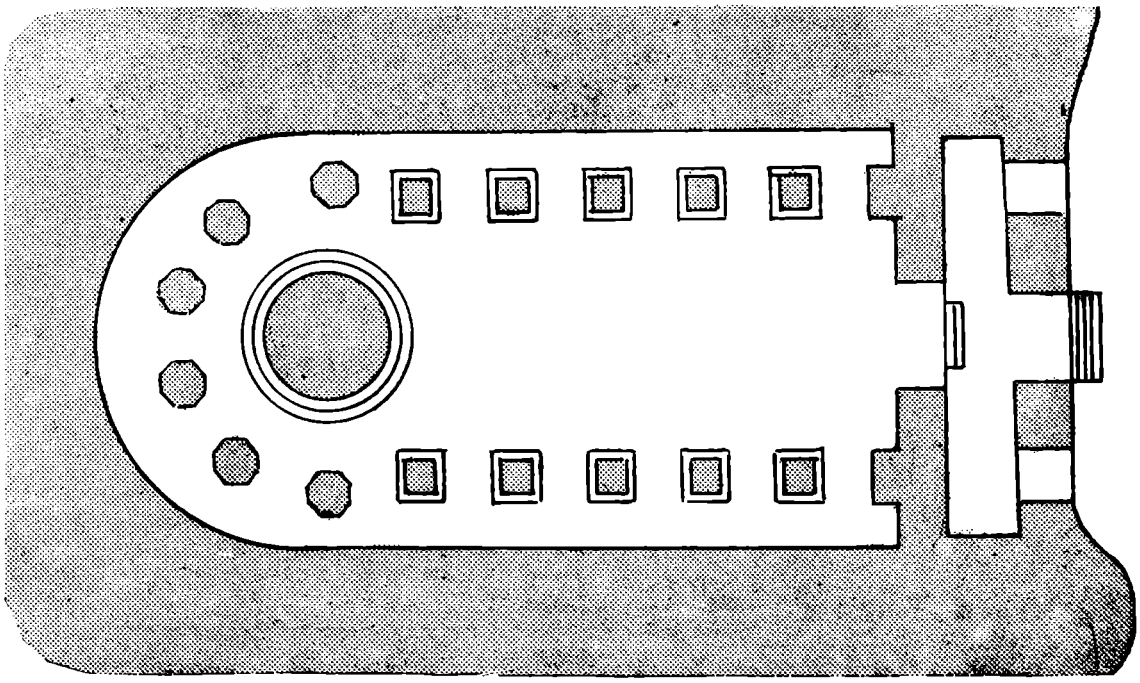


FIG. 32

JUNNAR—GANESH PAHAR

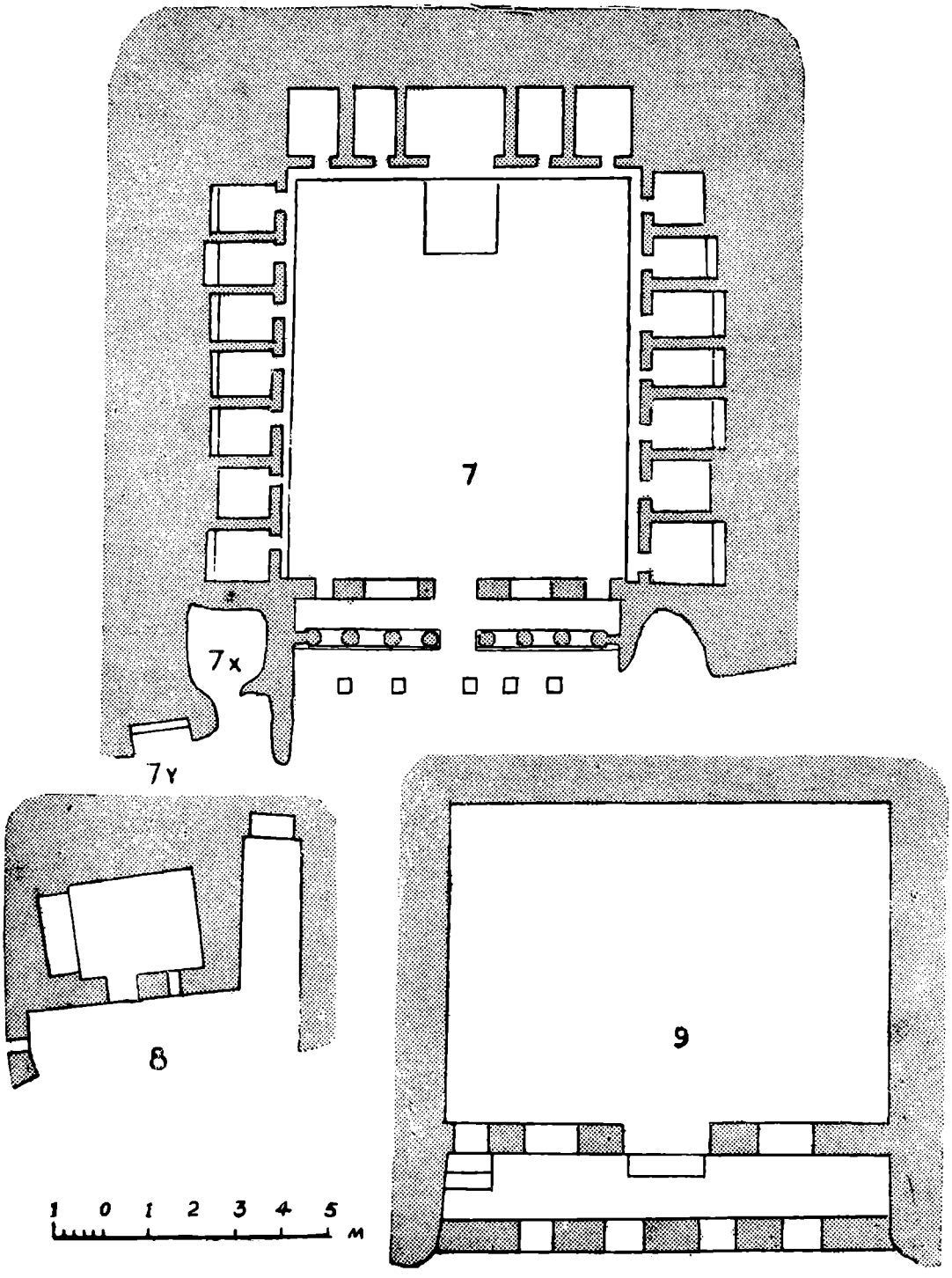


FIG .33

# JUNNAR—GANESH PAHAR

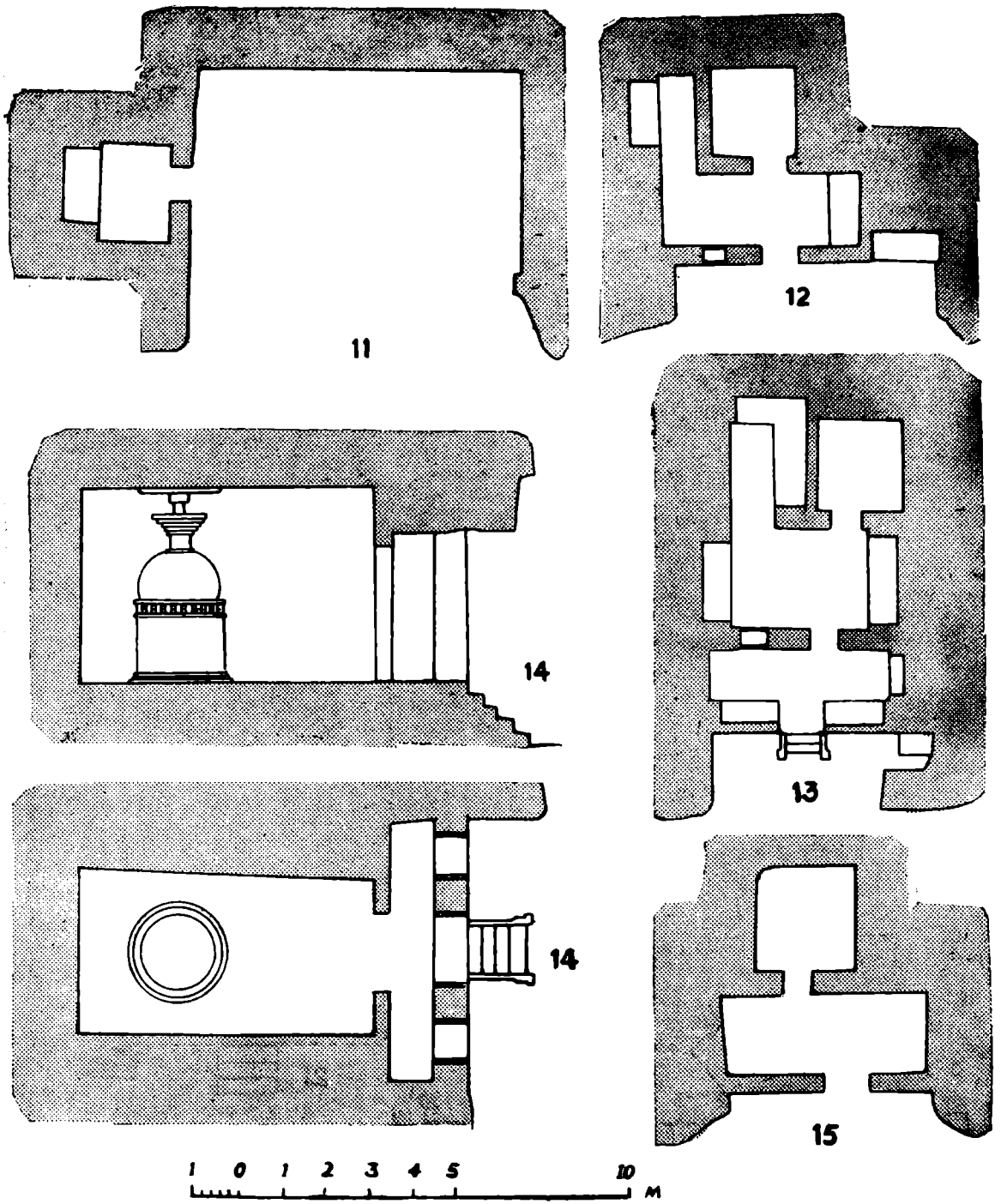
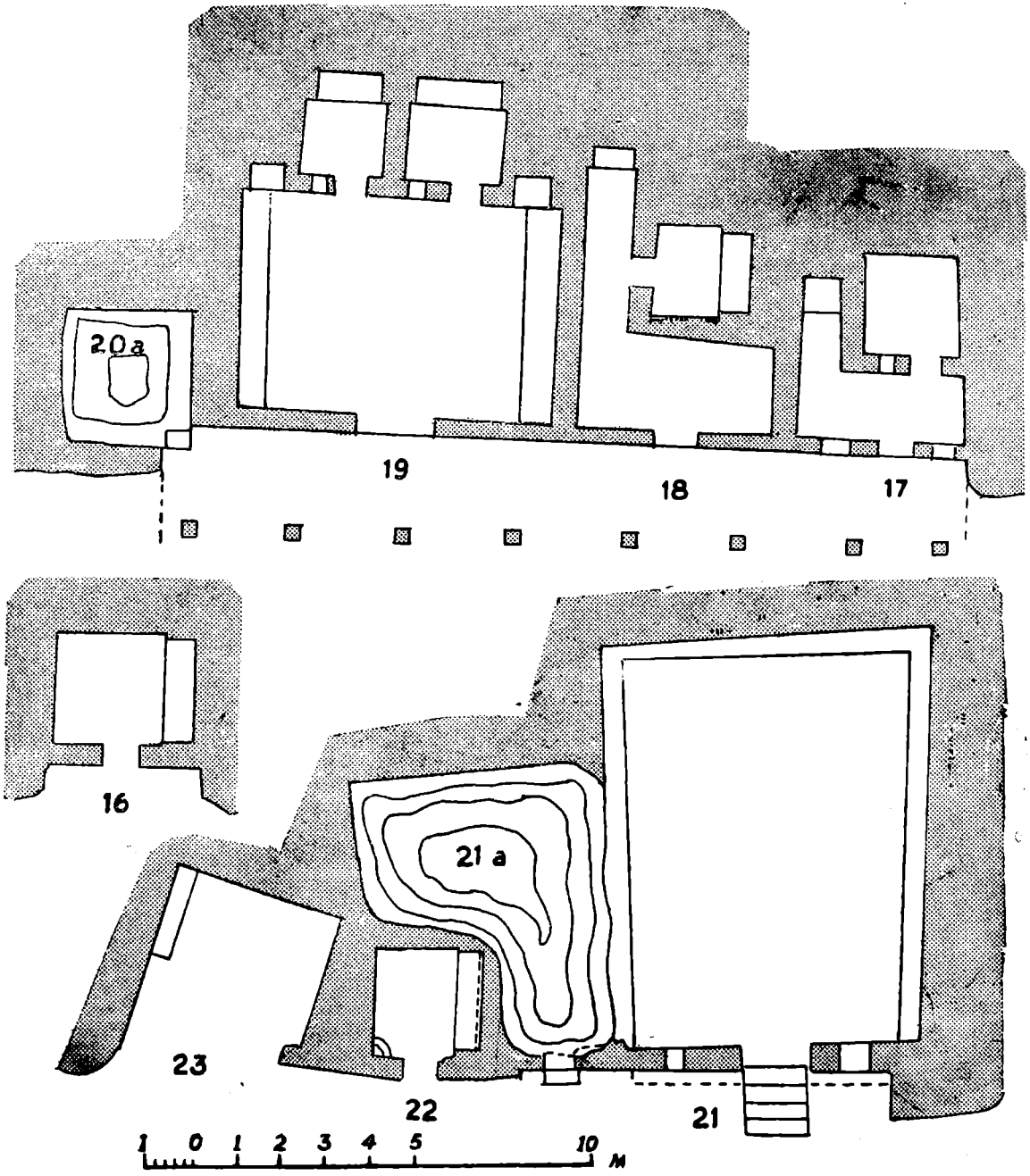
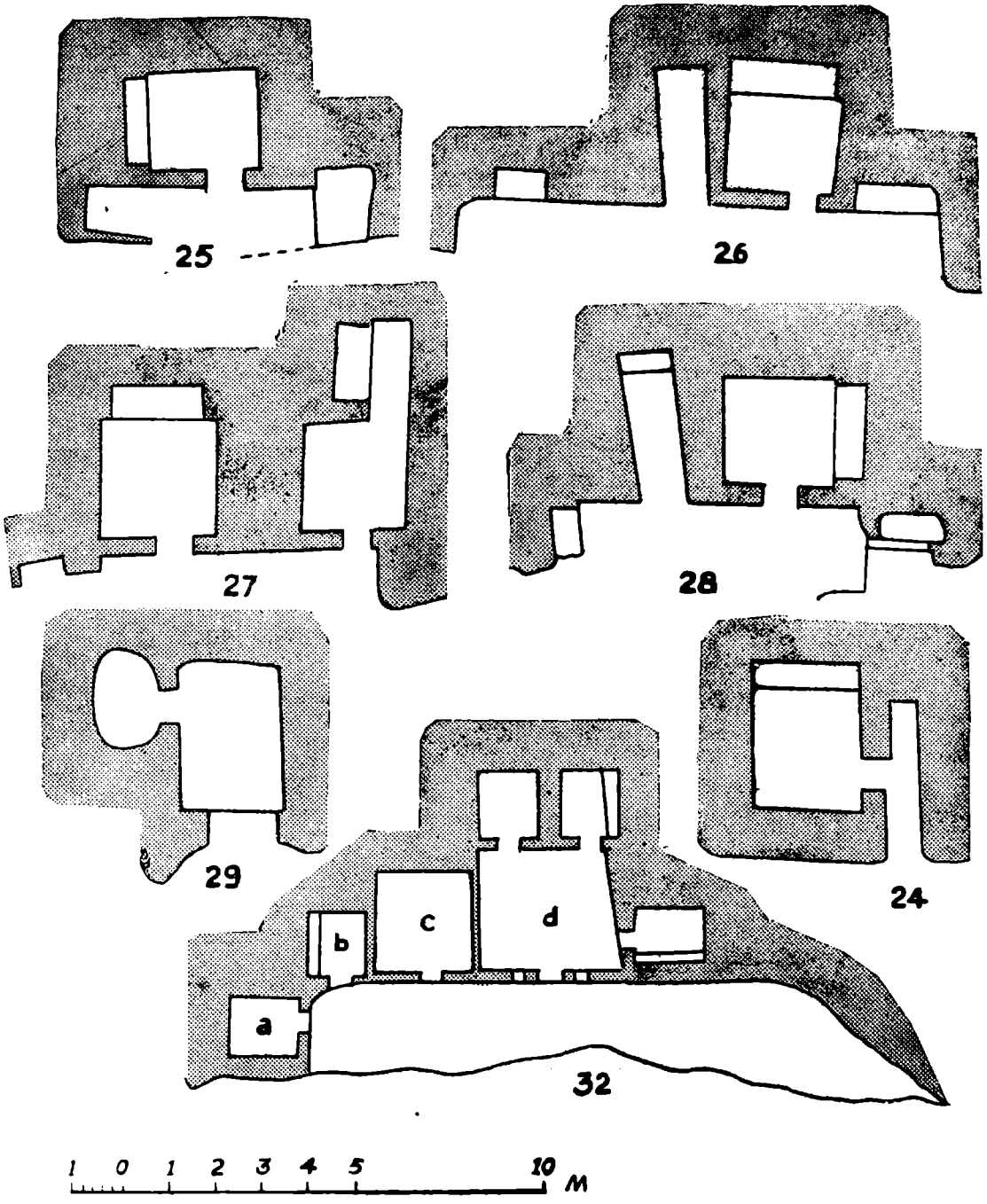


FIG. 34

JUNNAR—GANESH PAHAR



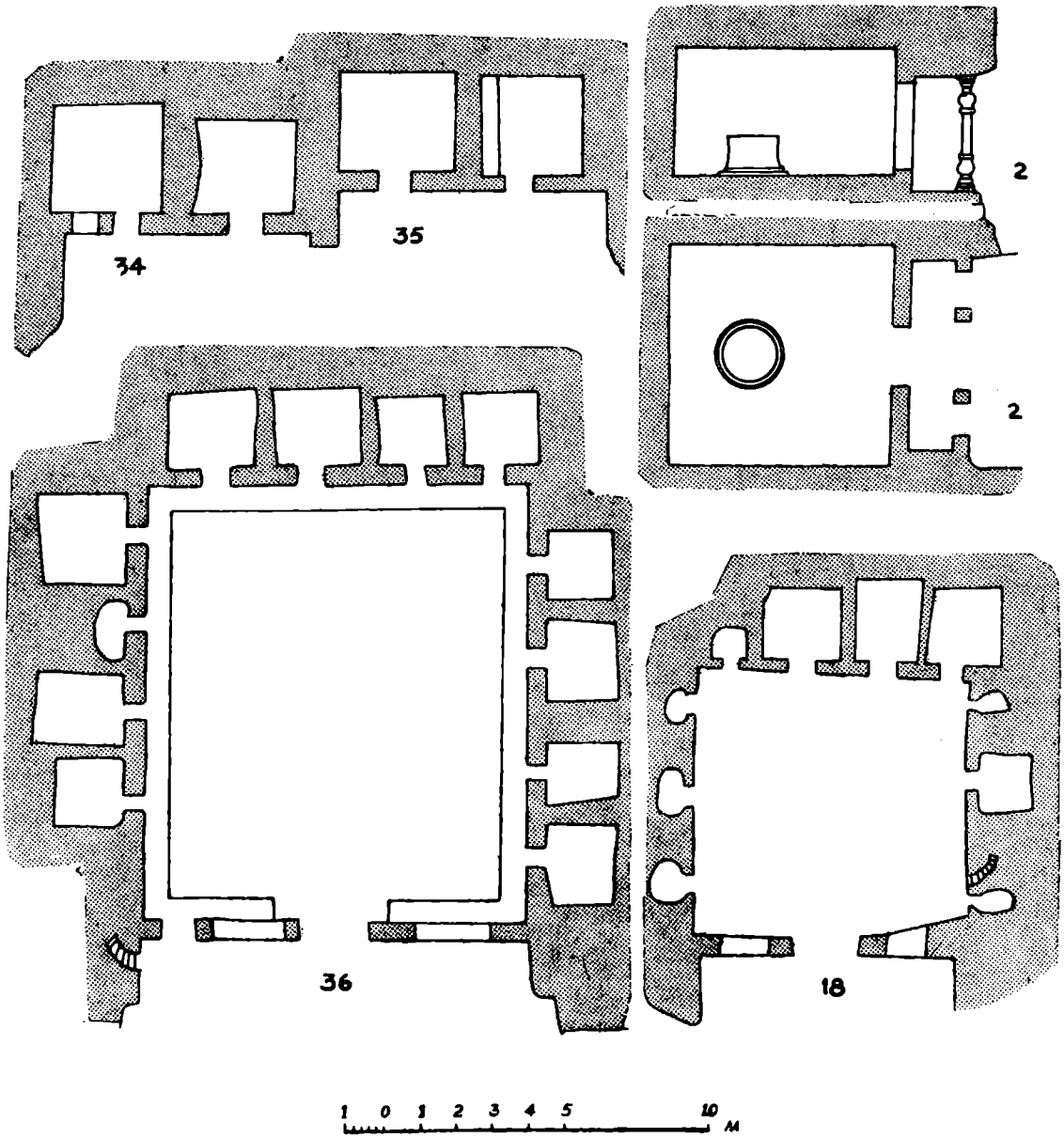
# JUNNAR—GANESH PAHAR




*(No. 32 Not to scale)*

FIG. 36

JUNNAR—SIVANERI



# JUNNAR—SIVANERI

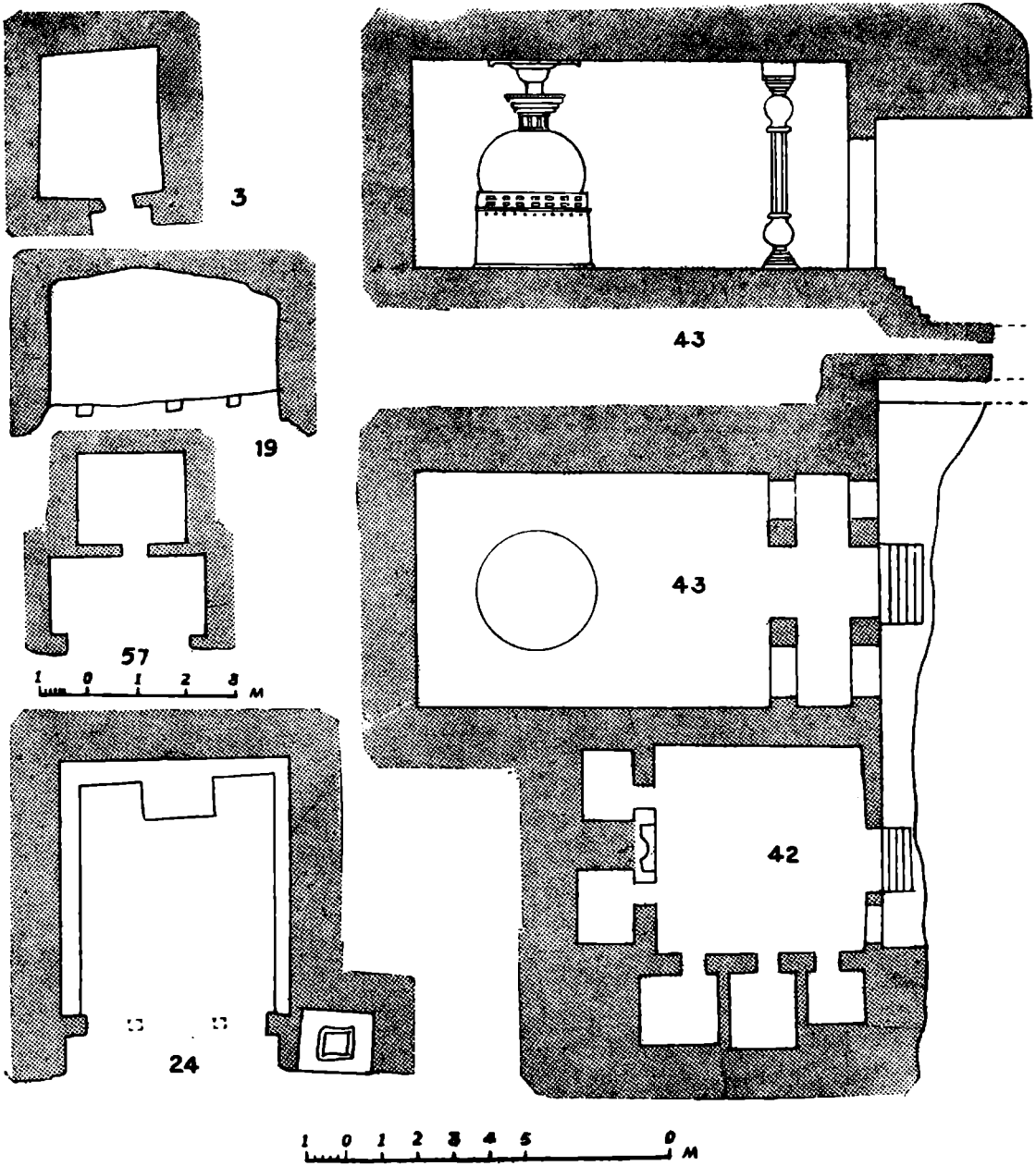
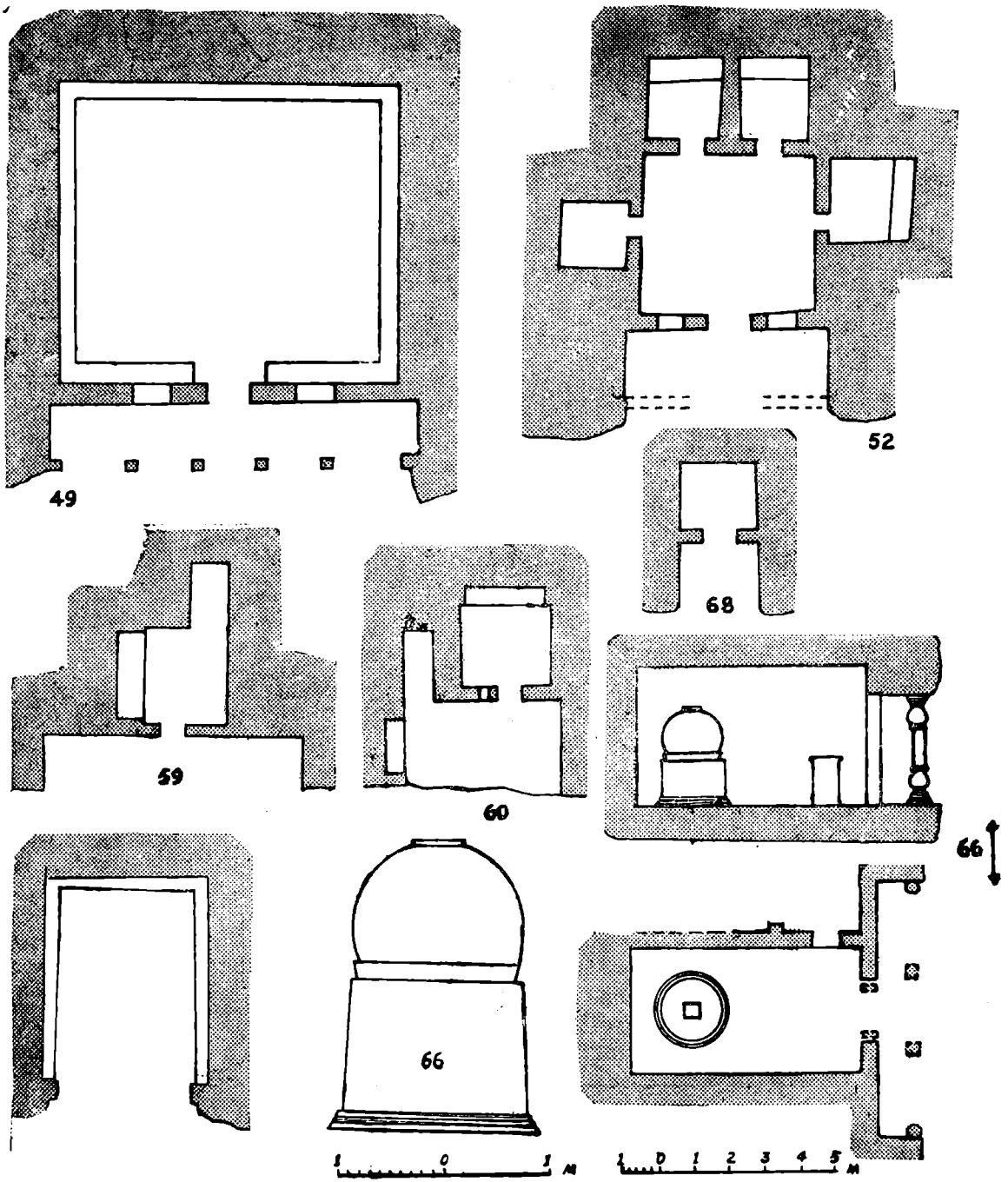


FIG. 38

# JUNNAR—SIVANERI



# KANHERI

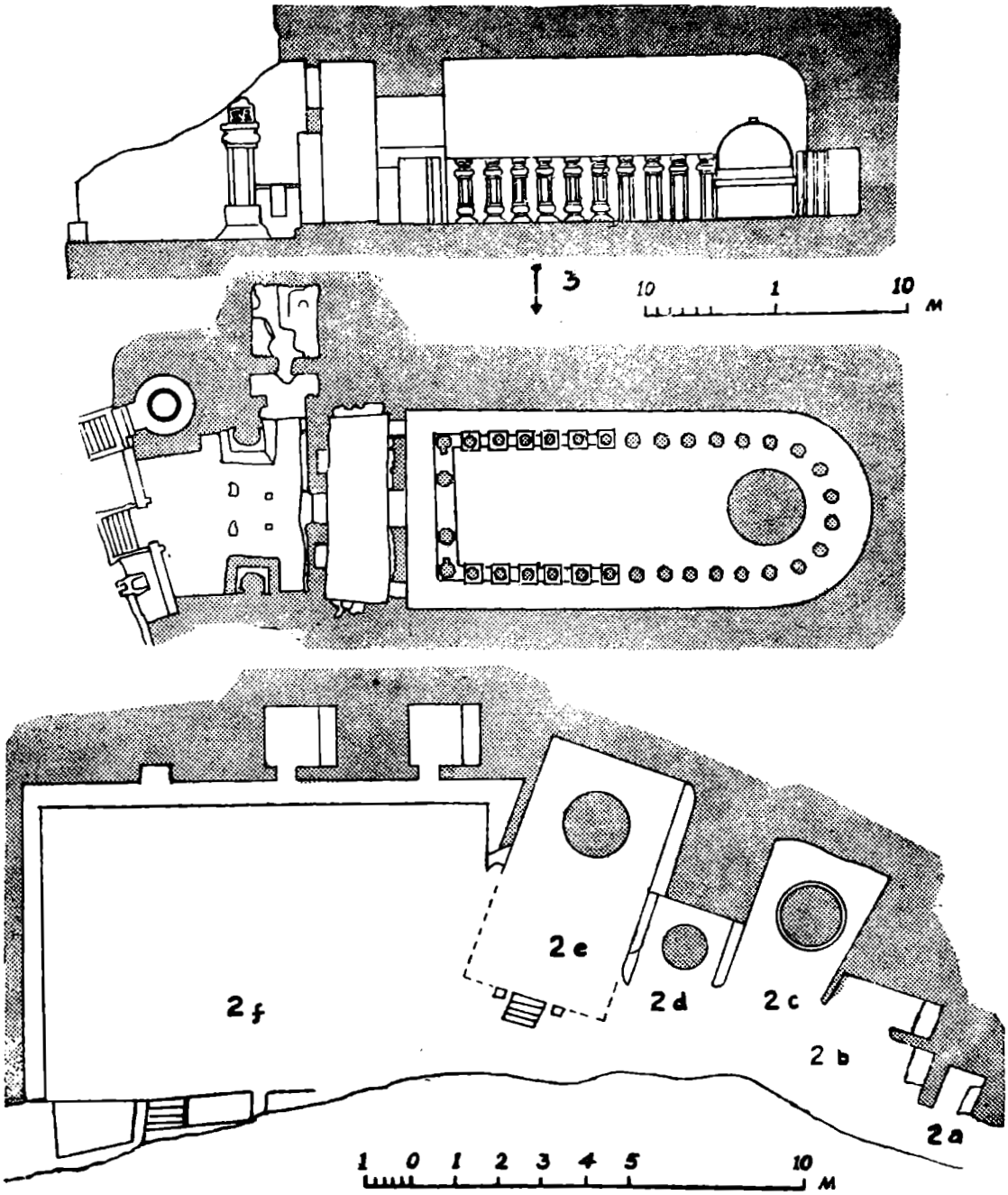
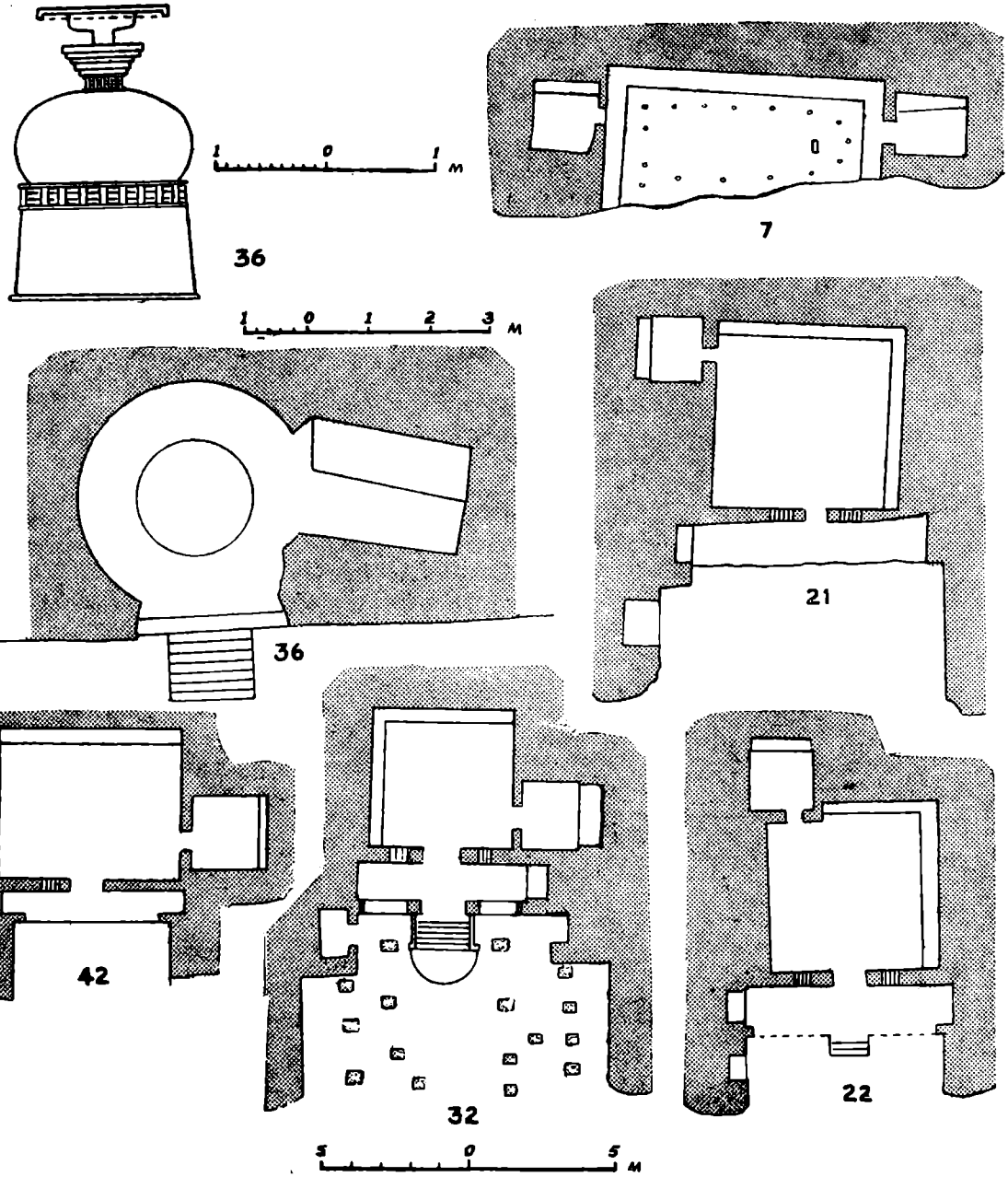


FIG. 40

# KANHERI



# KANHERI

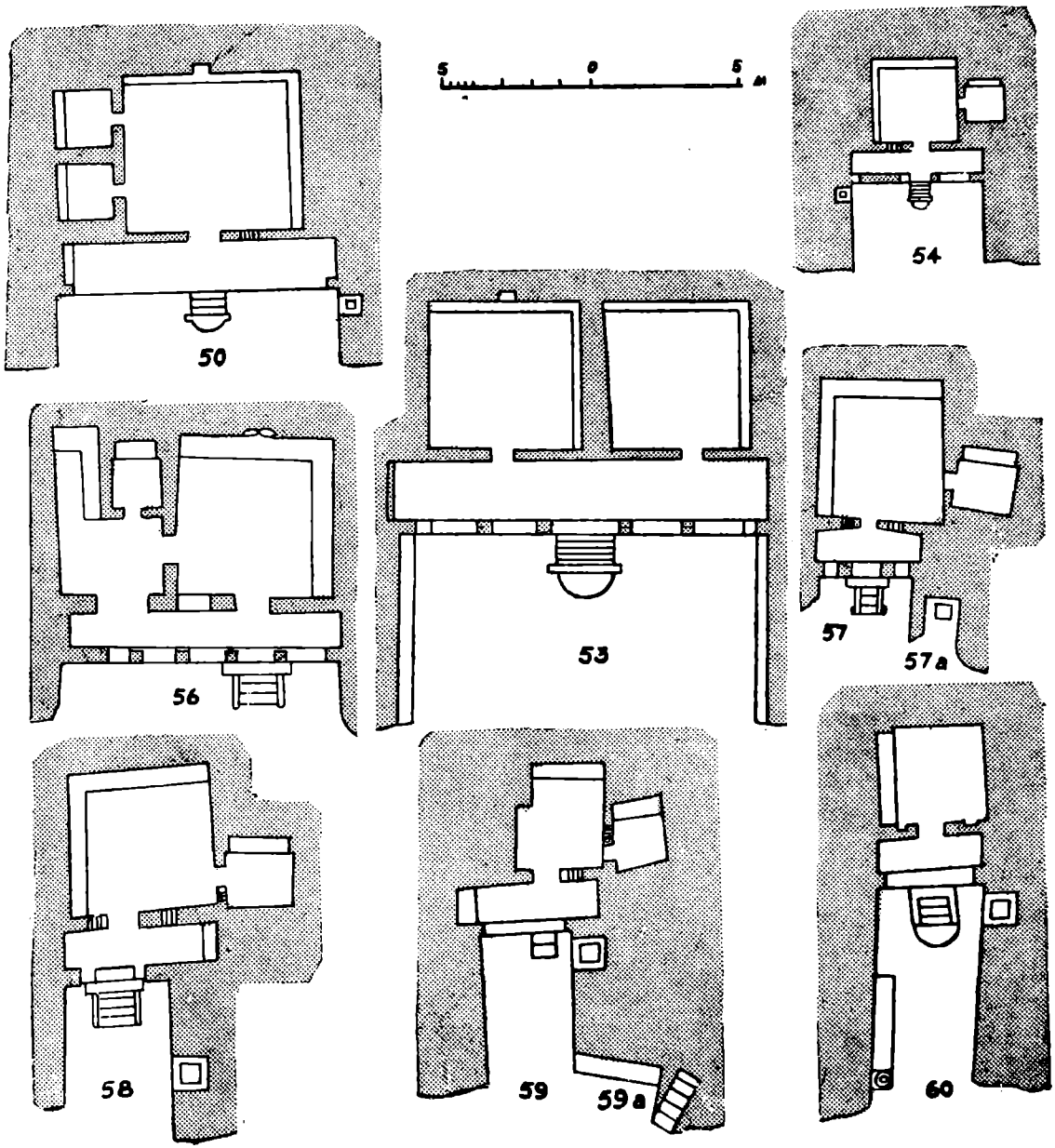
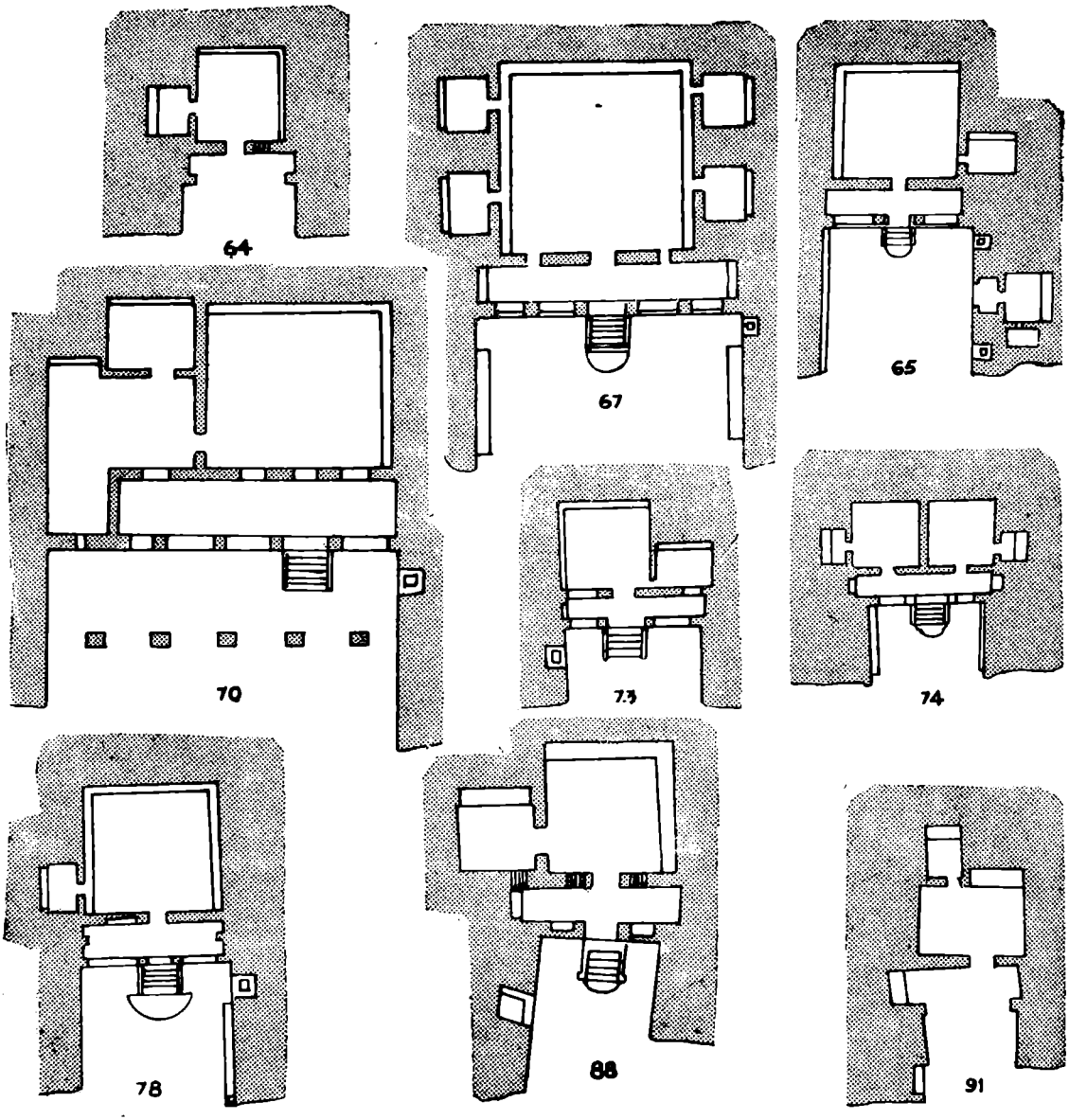


FIG. 42

# KANHERI




NOT TO SCALE

# KANHERI

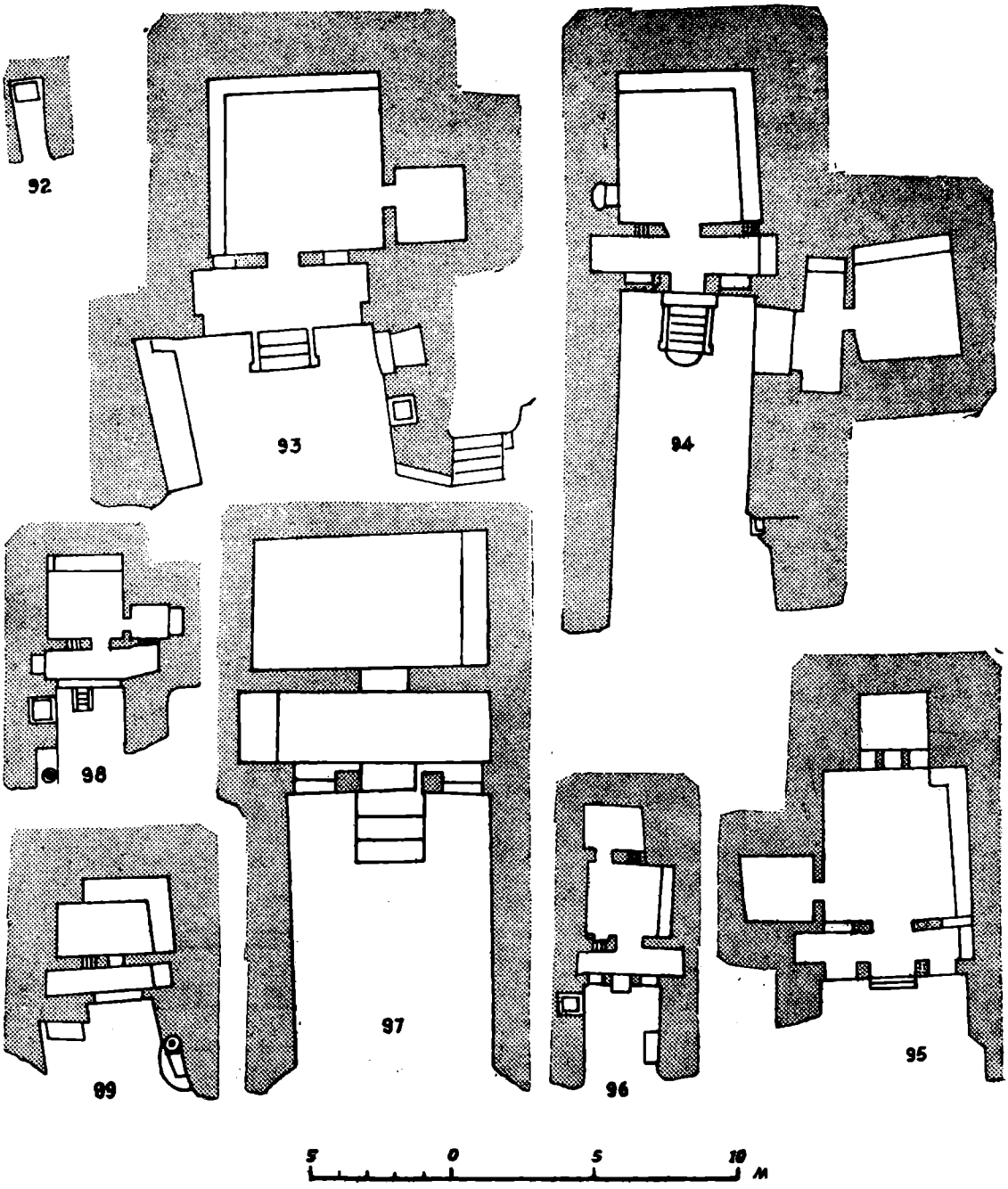


FIG. 44

KARLE

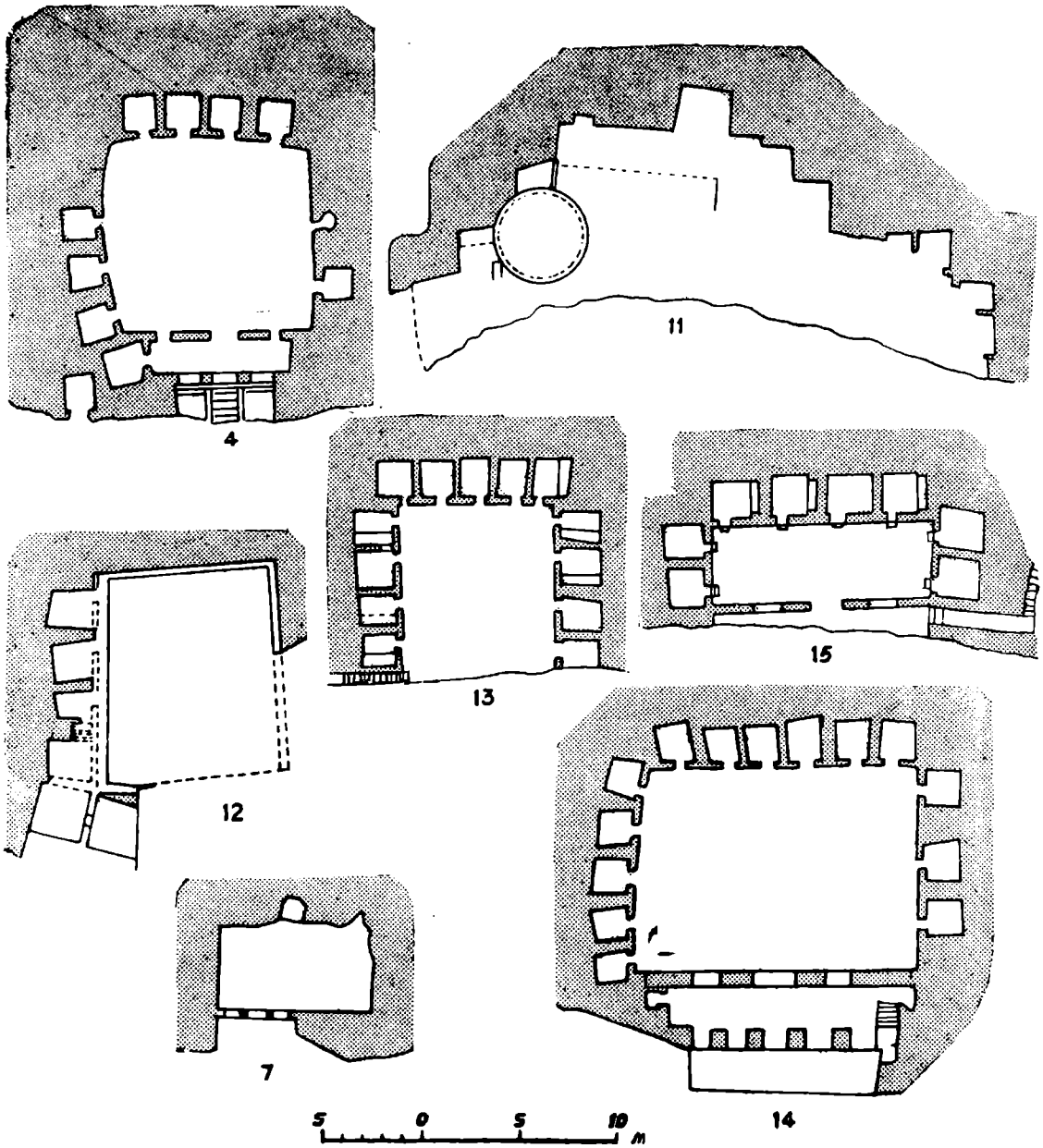


FIG. 45

KARLE 8

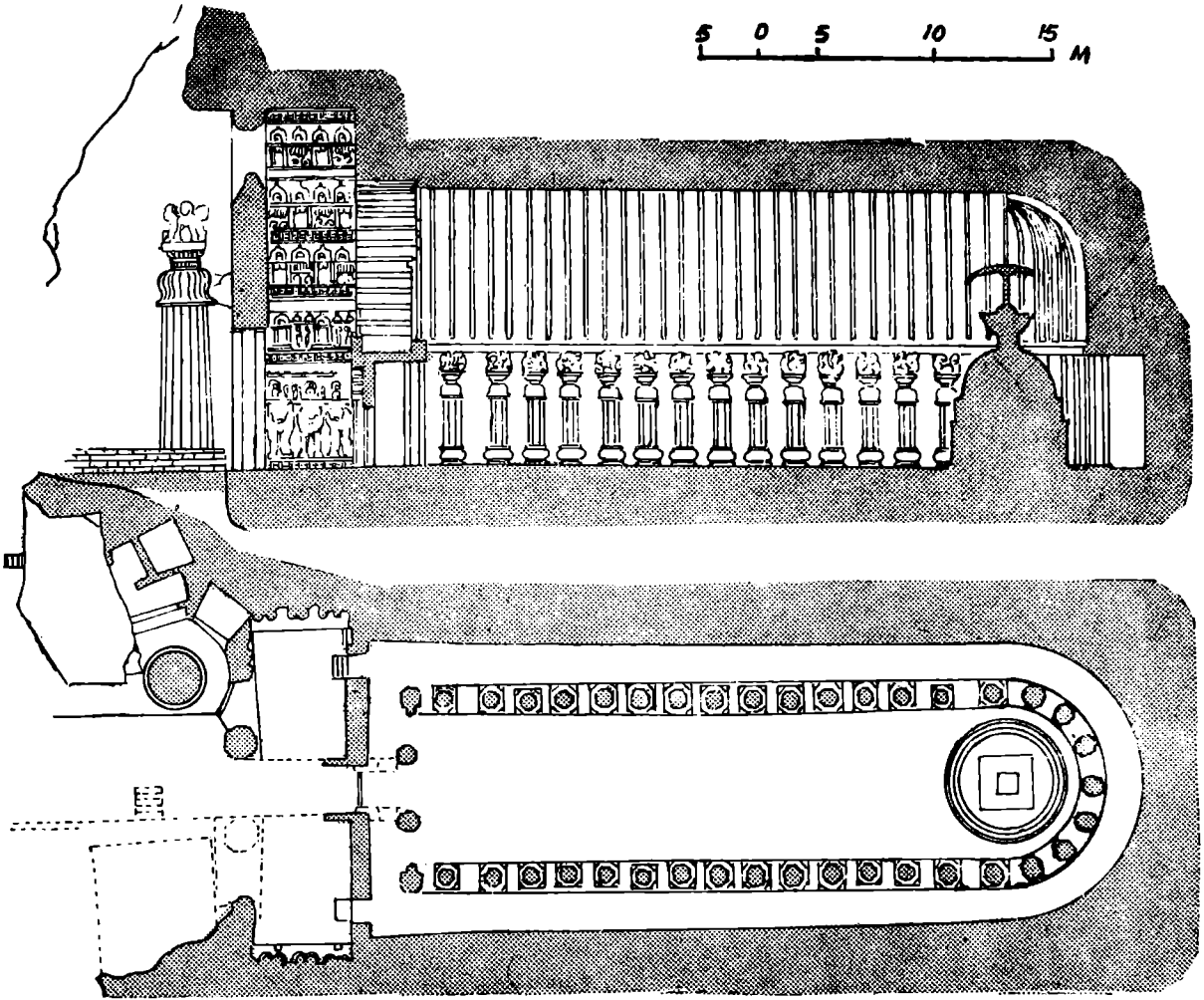


FIG. 46

KONDANE I

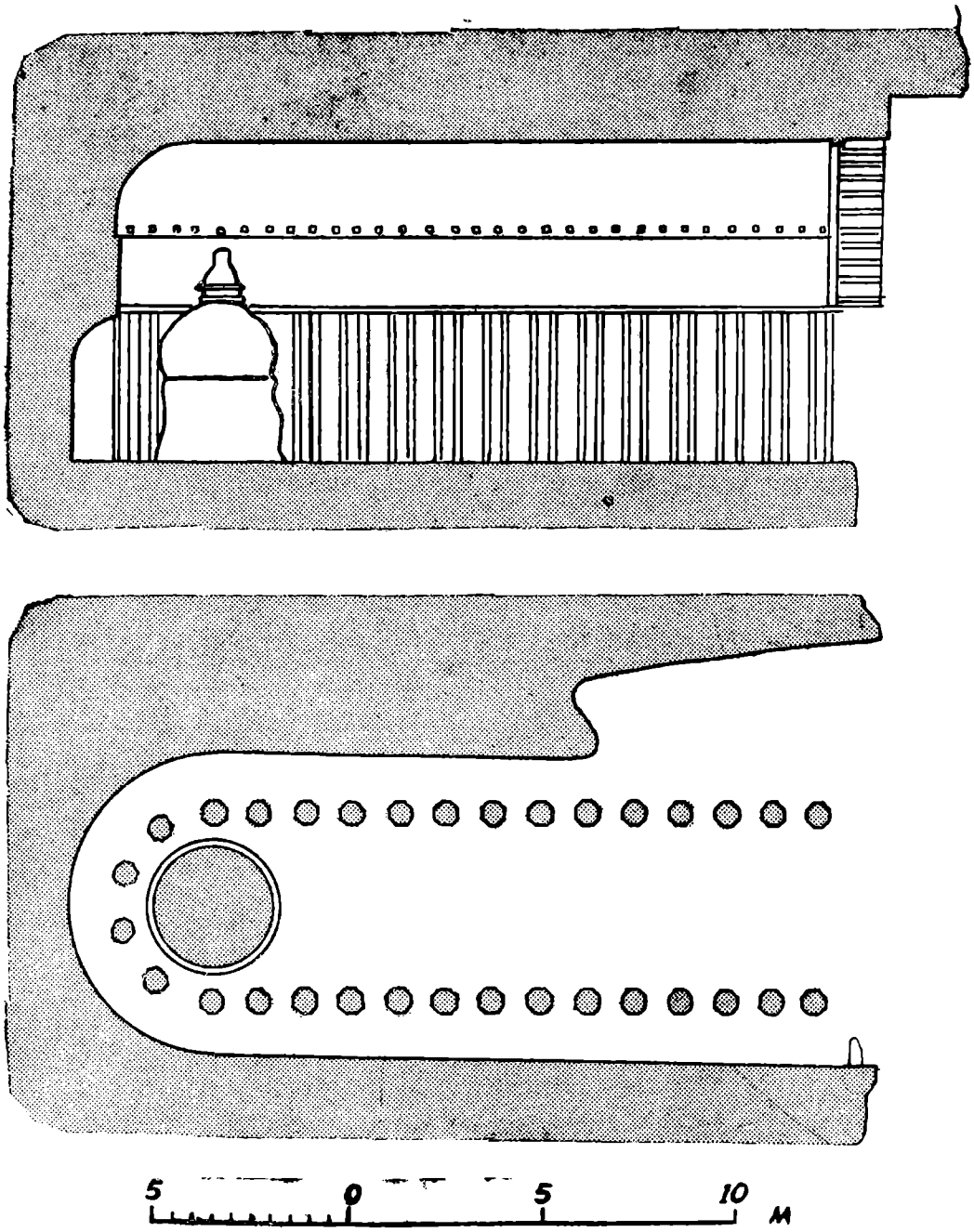


FIG. 47

# KONDANE

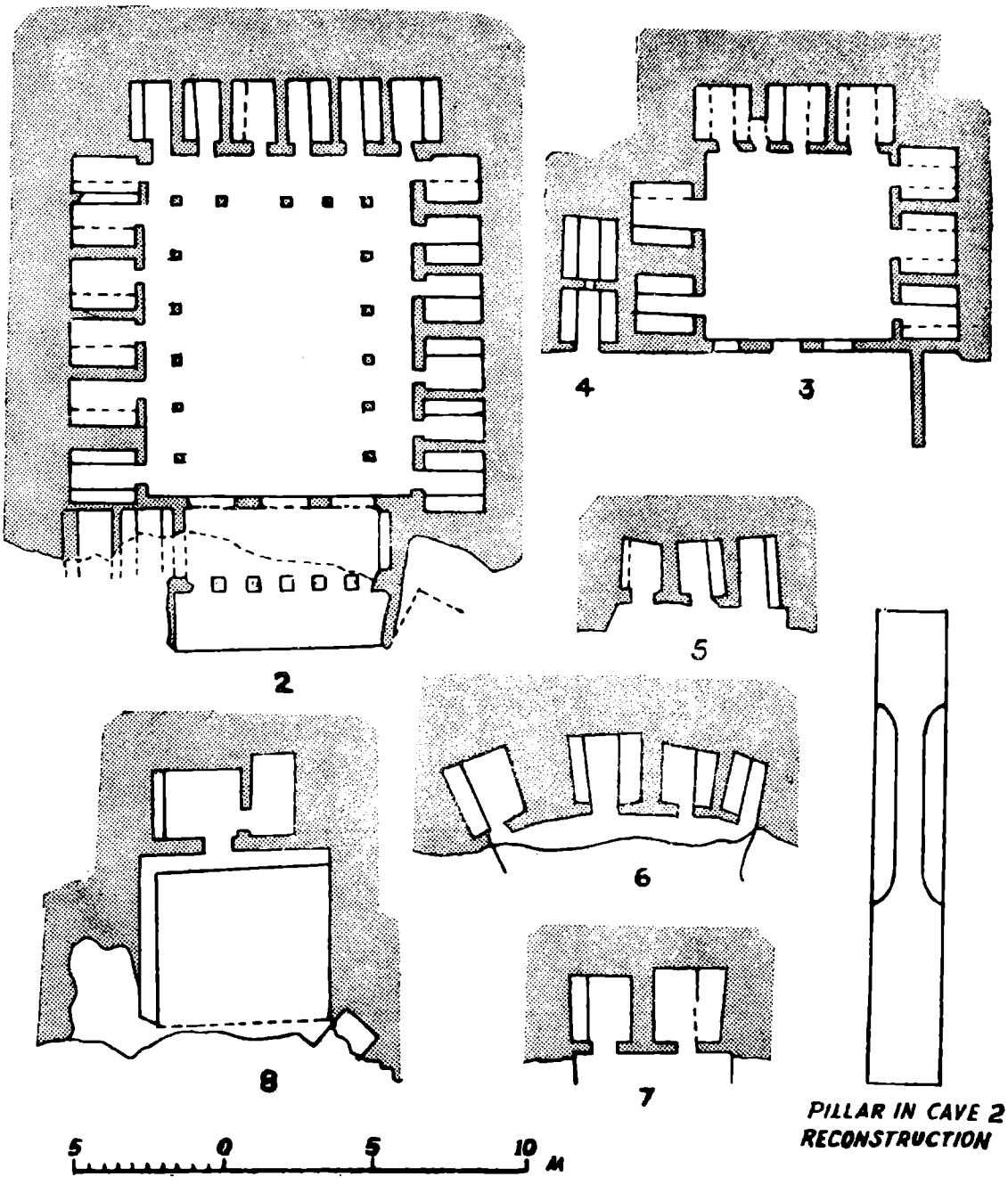
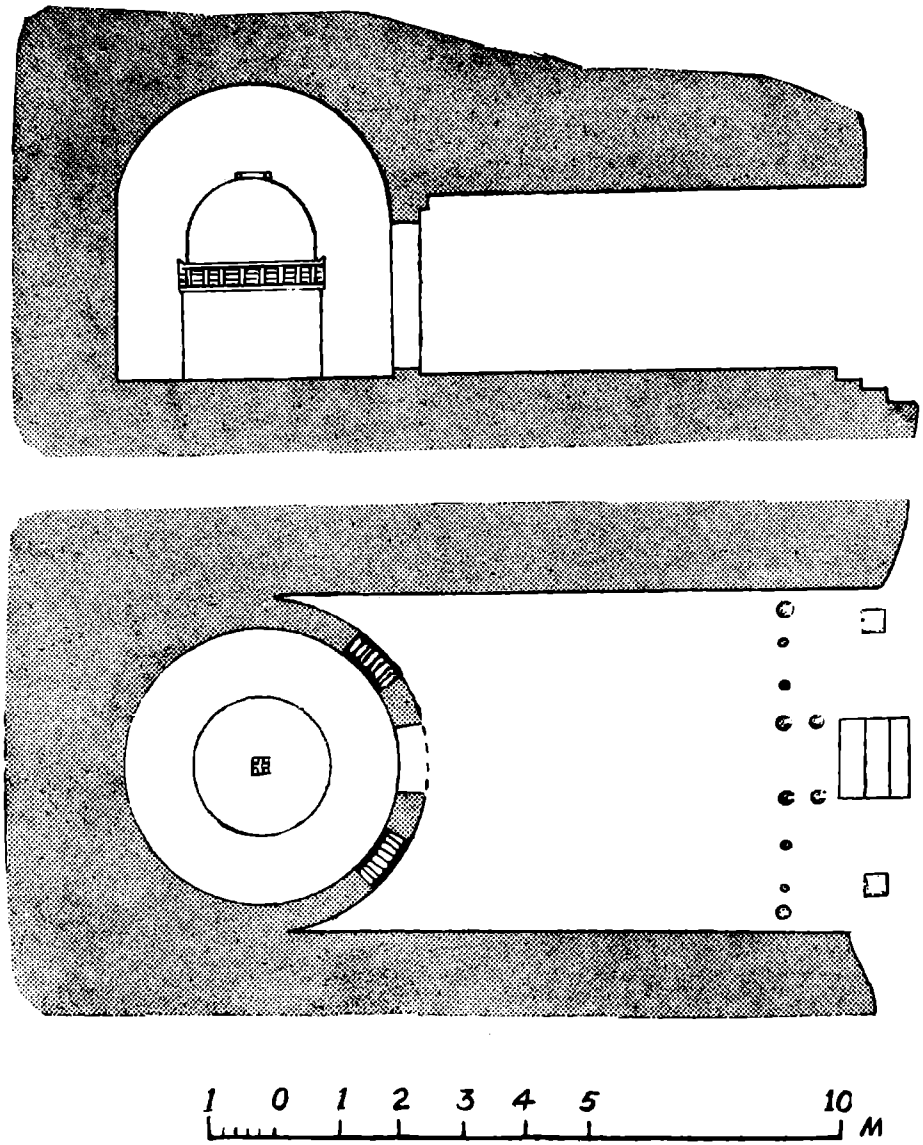


FIG. 48

KONDIVITE



# KUDA

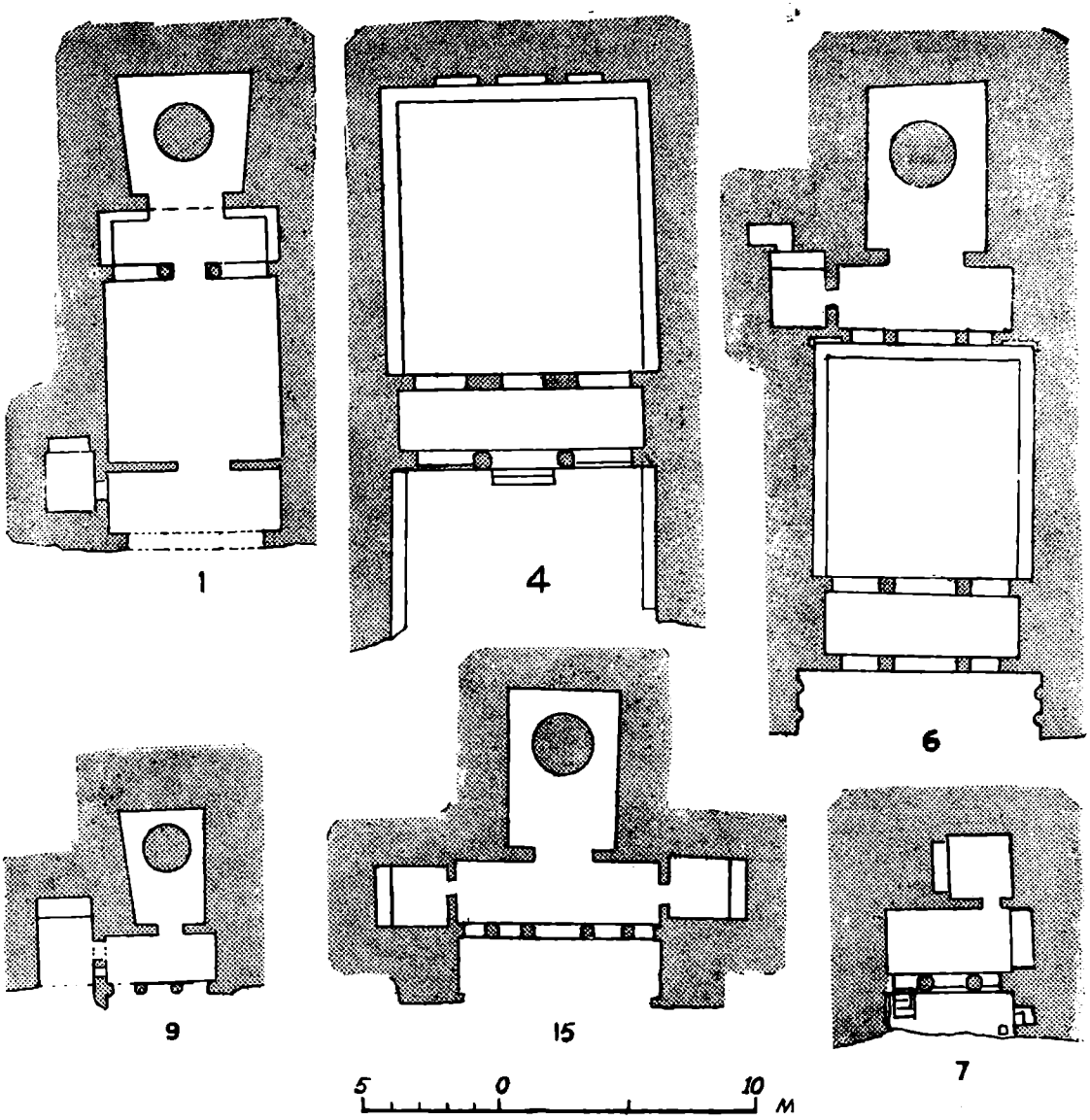
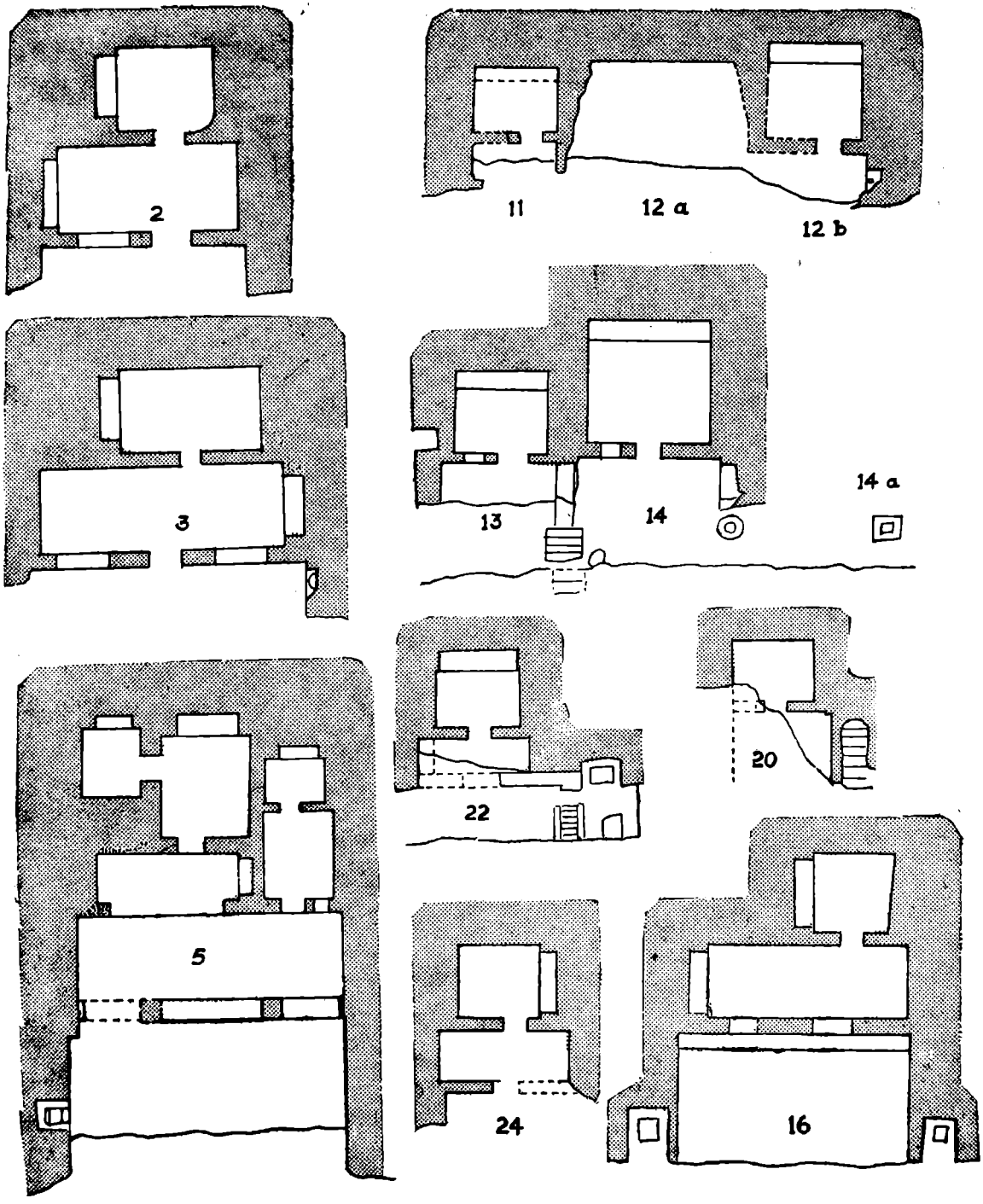


FIG. 50

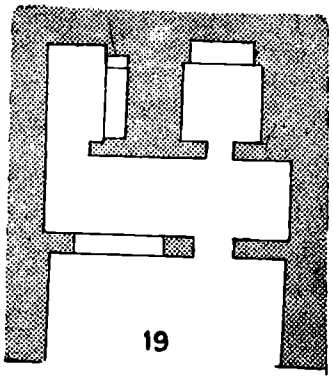
KUDA

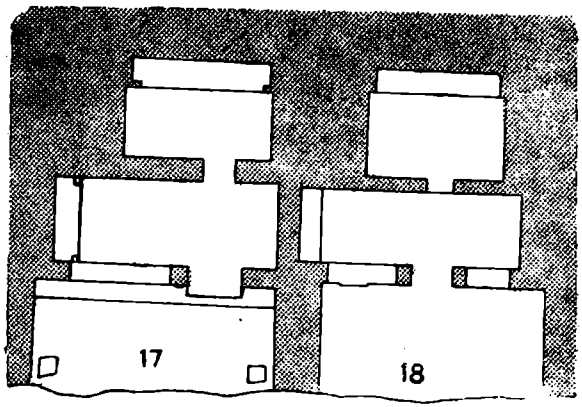


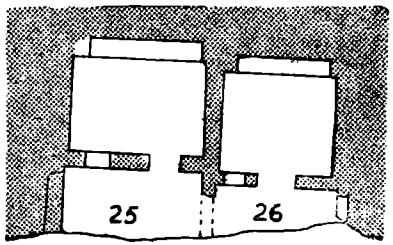

NOT TO SCALE

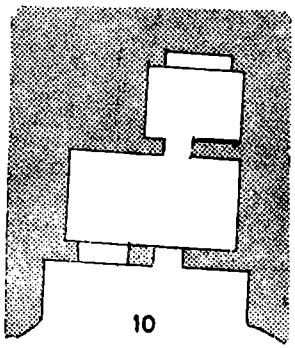
# KUDA AND NANAGHAT

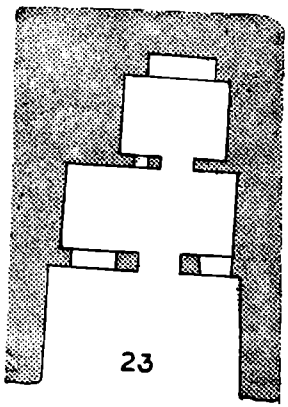
## KUDA




(KUDA DRAWINGS NOT TO SCALE)

## NANAGHAT 11

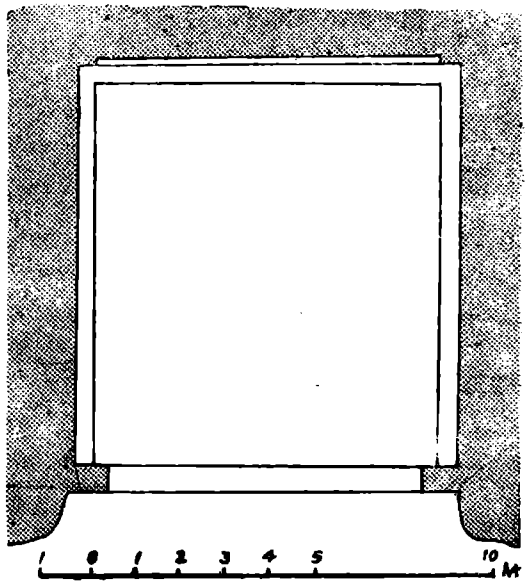


FIG. 52

# MAHAD

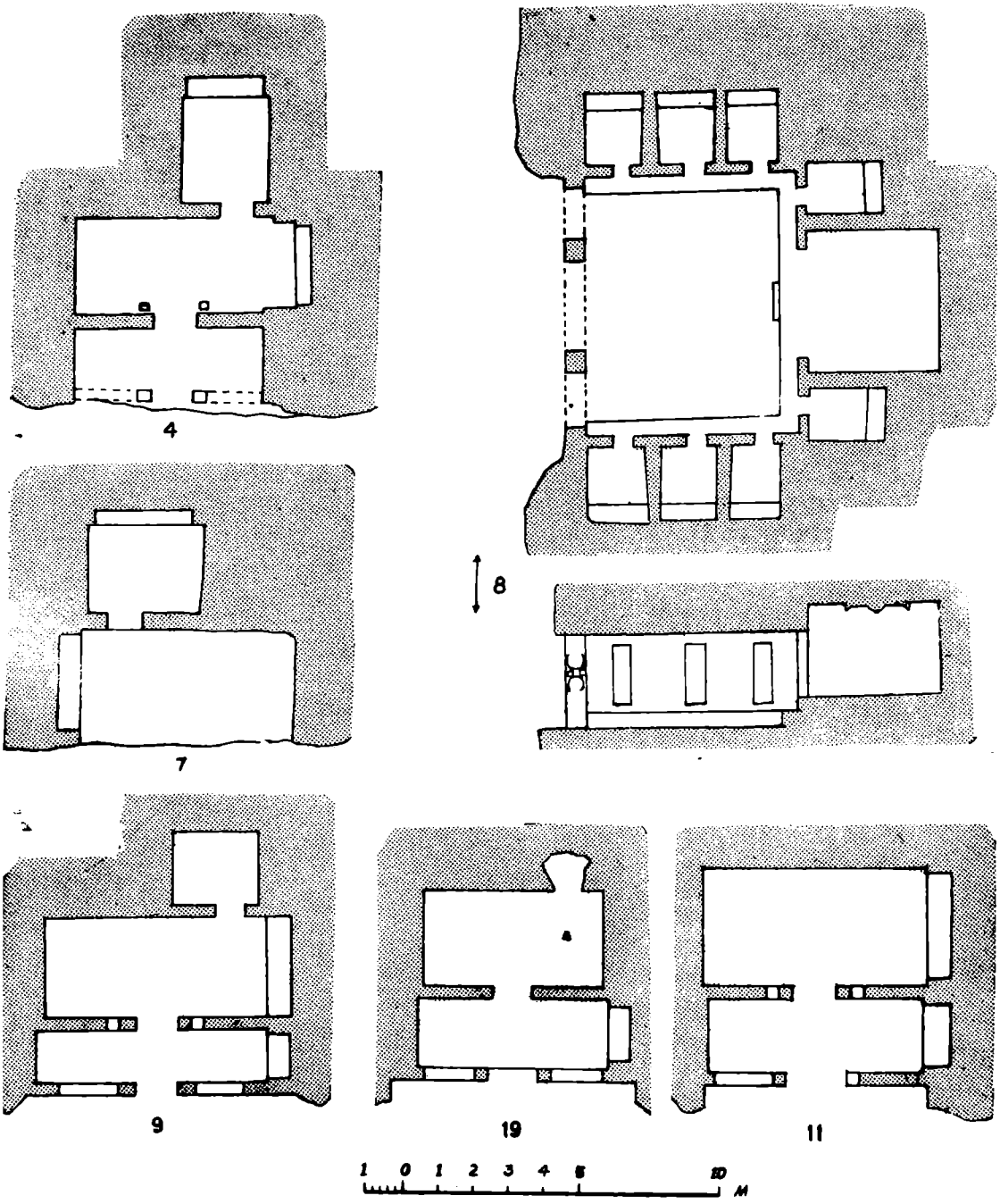


FIG. 53

# MAHAD

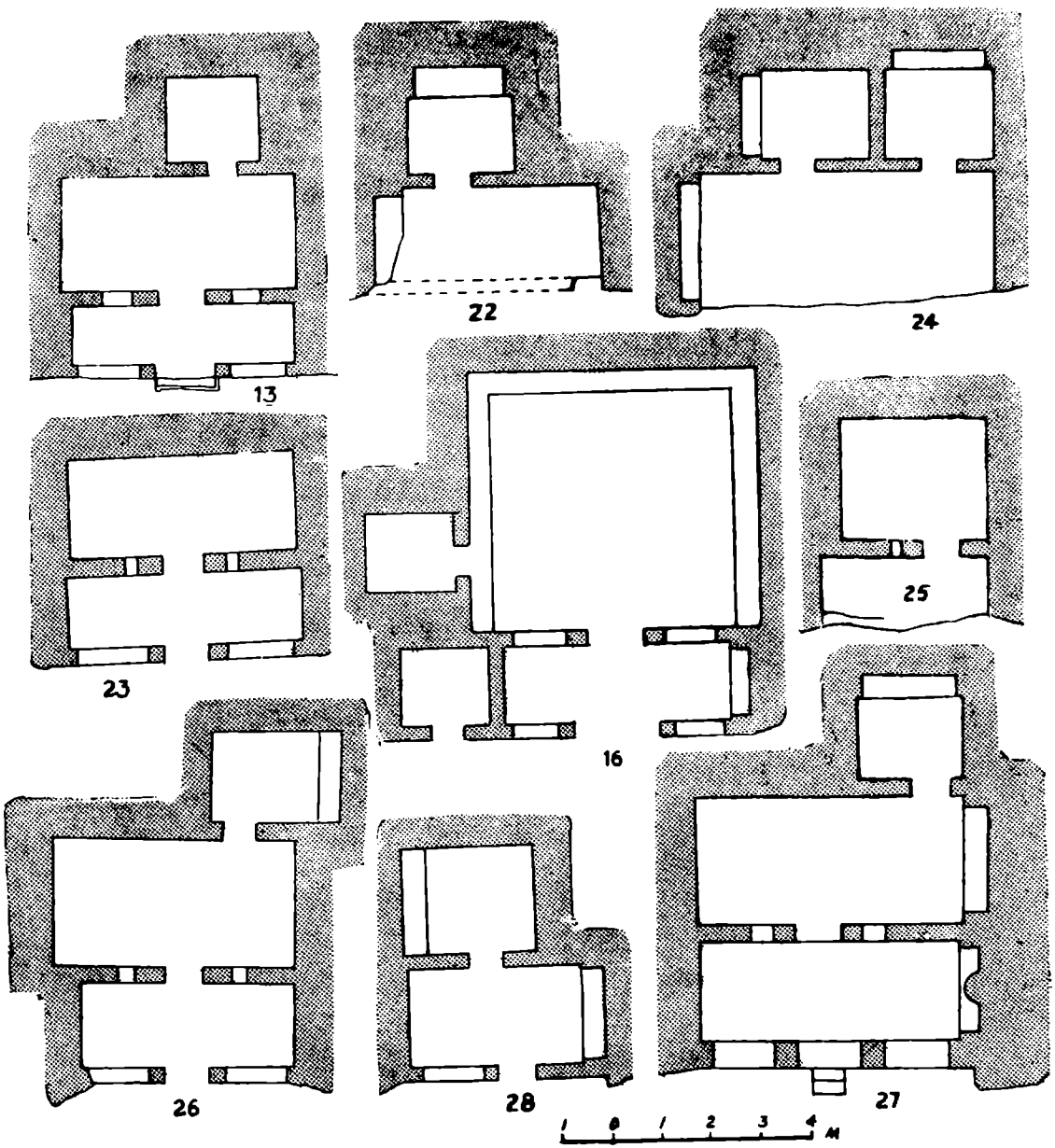
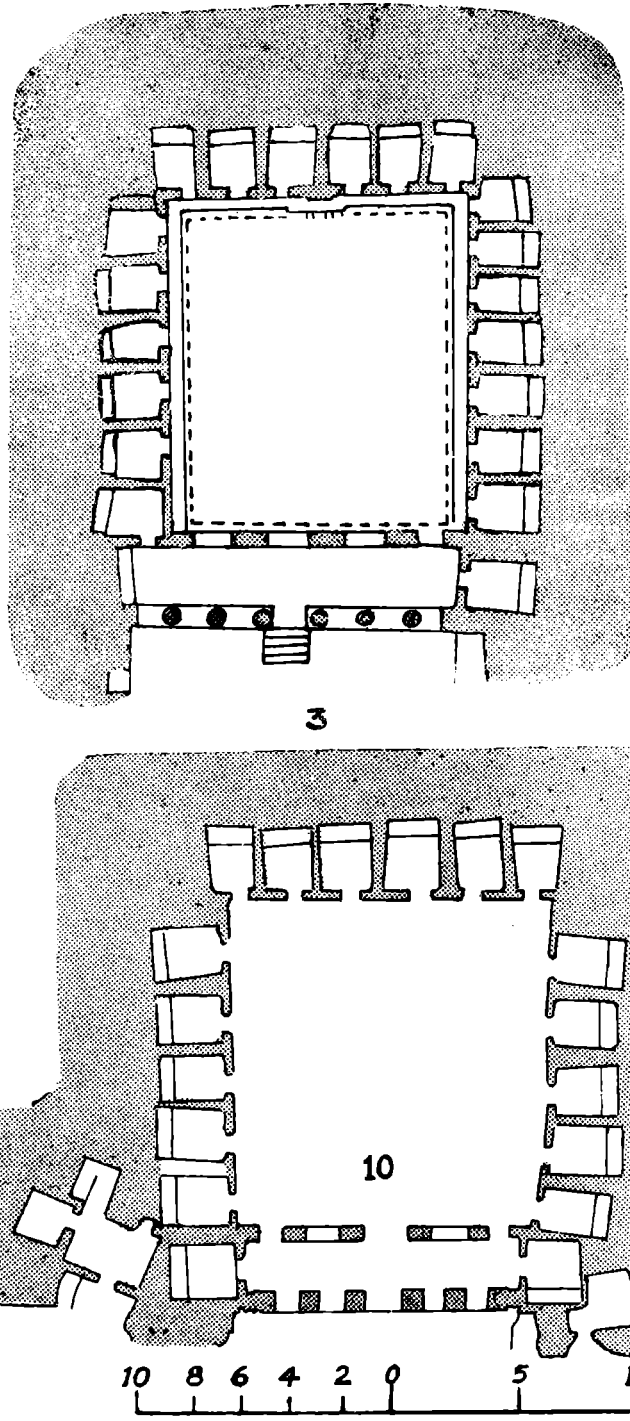
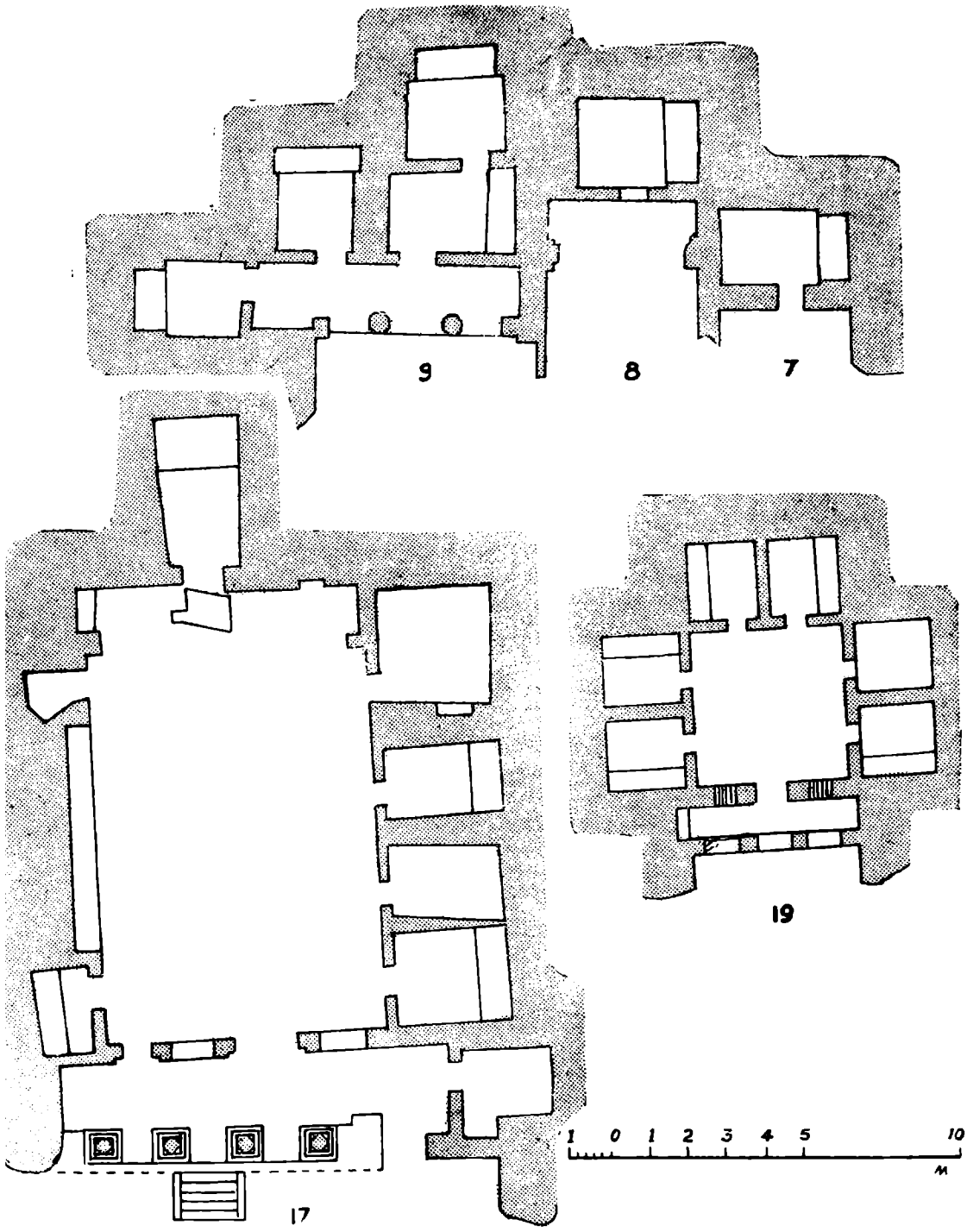


FIG. 54

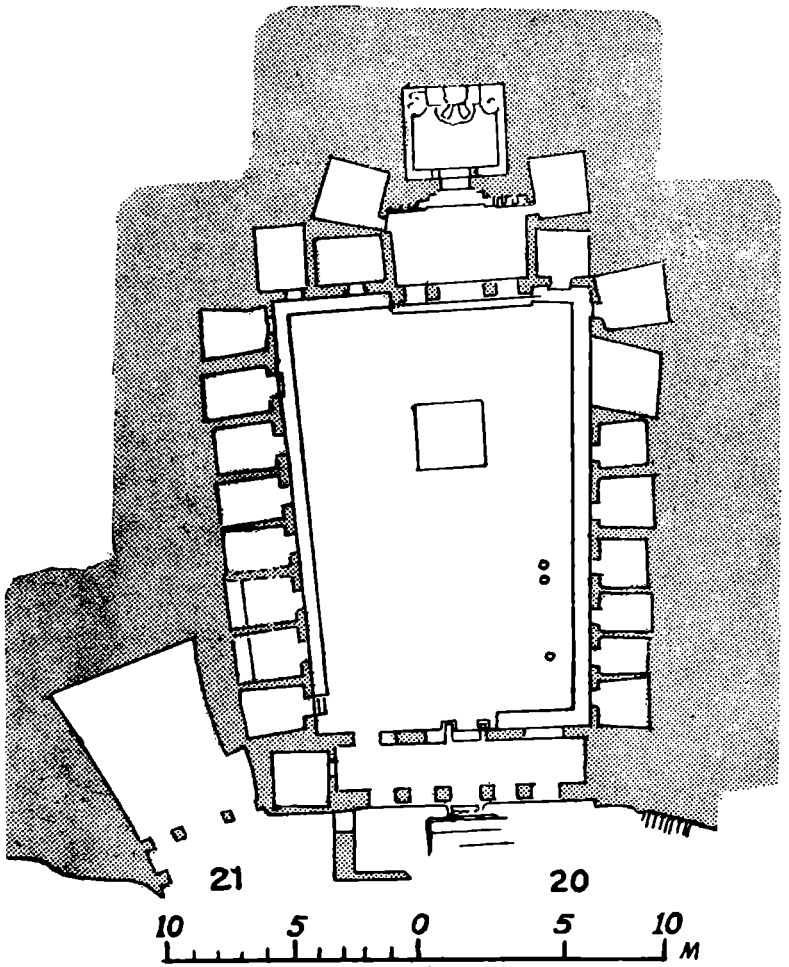
NASIK



NASIK



NASIK



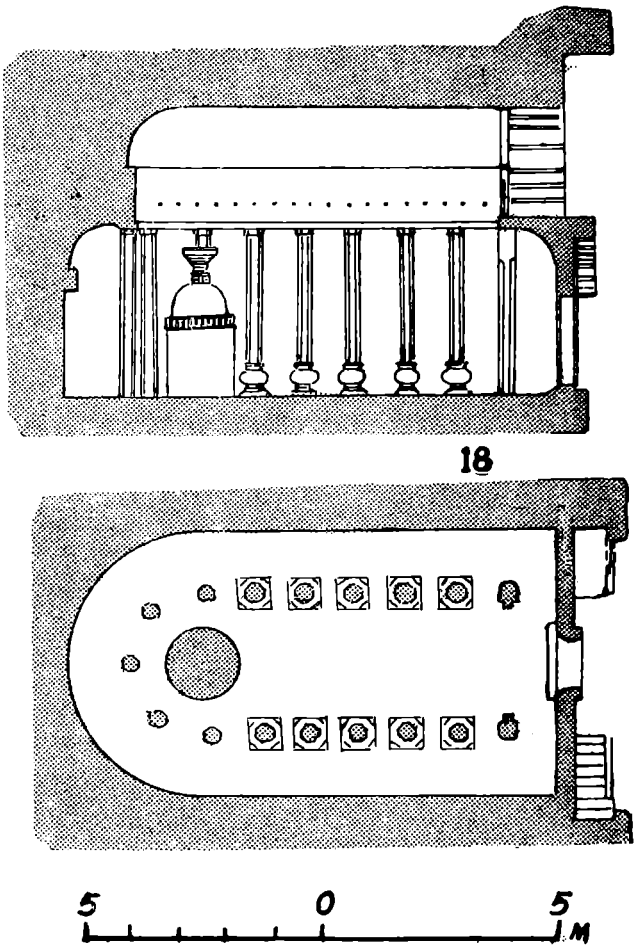



Fig. 57

PAWALA

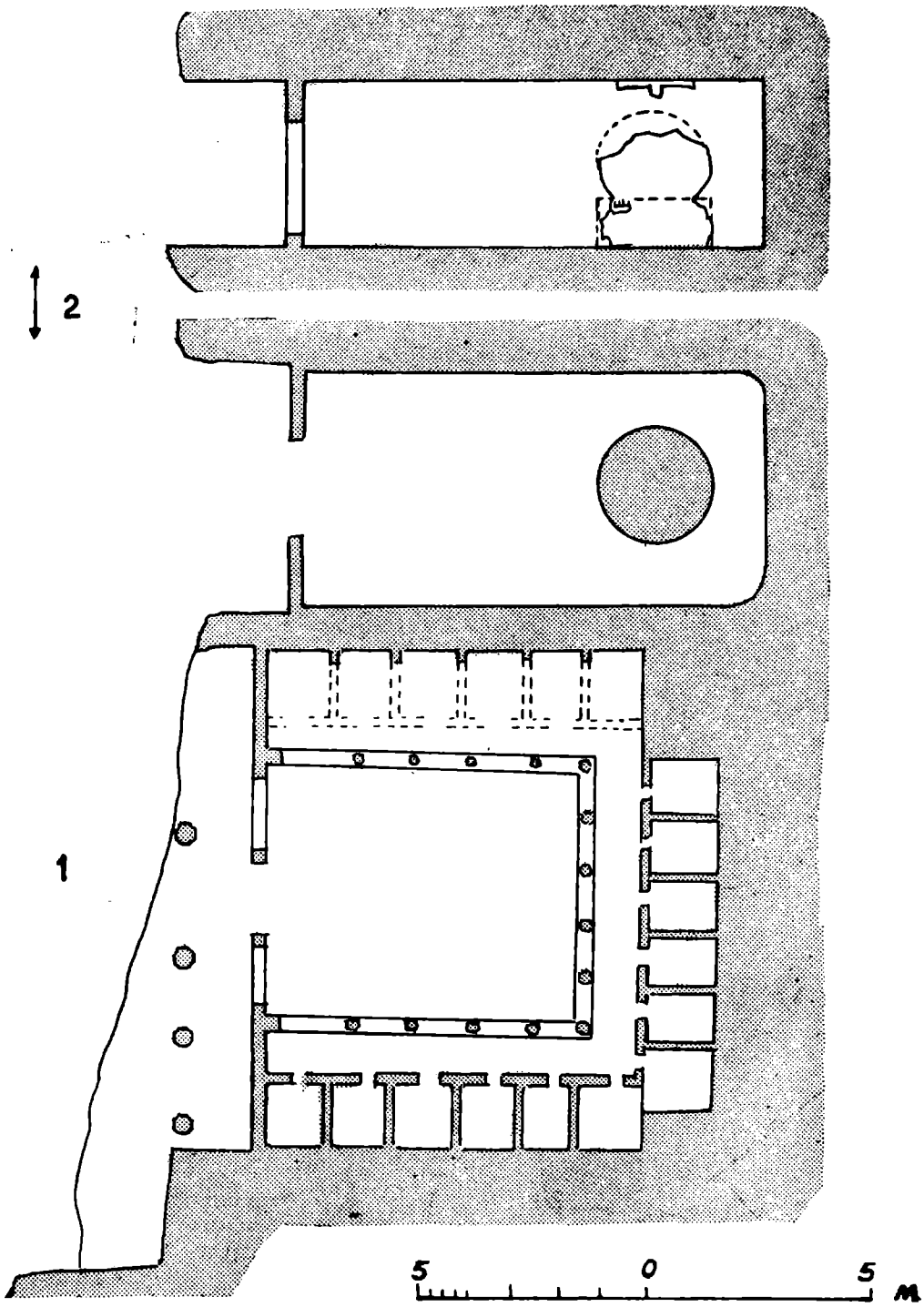
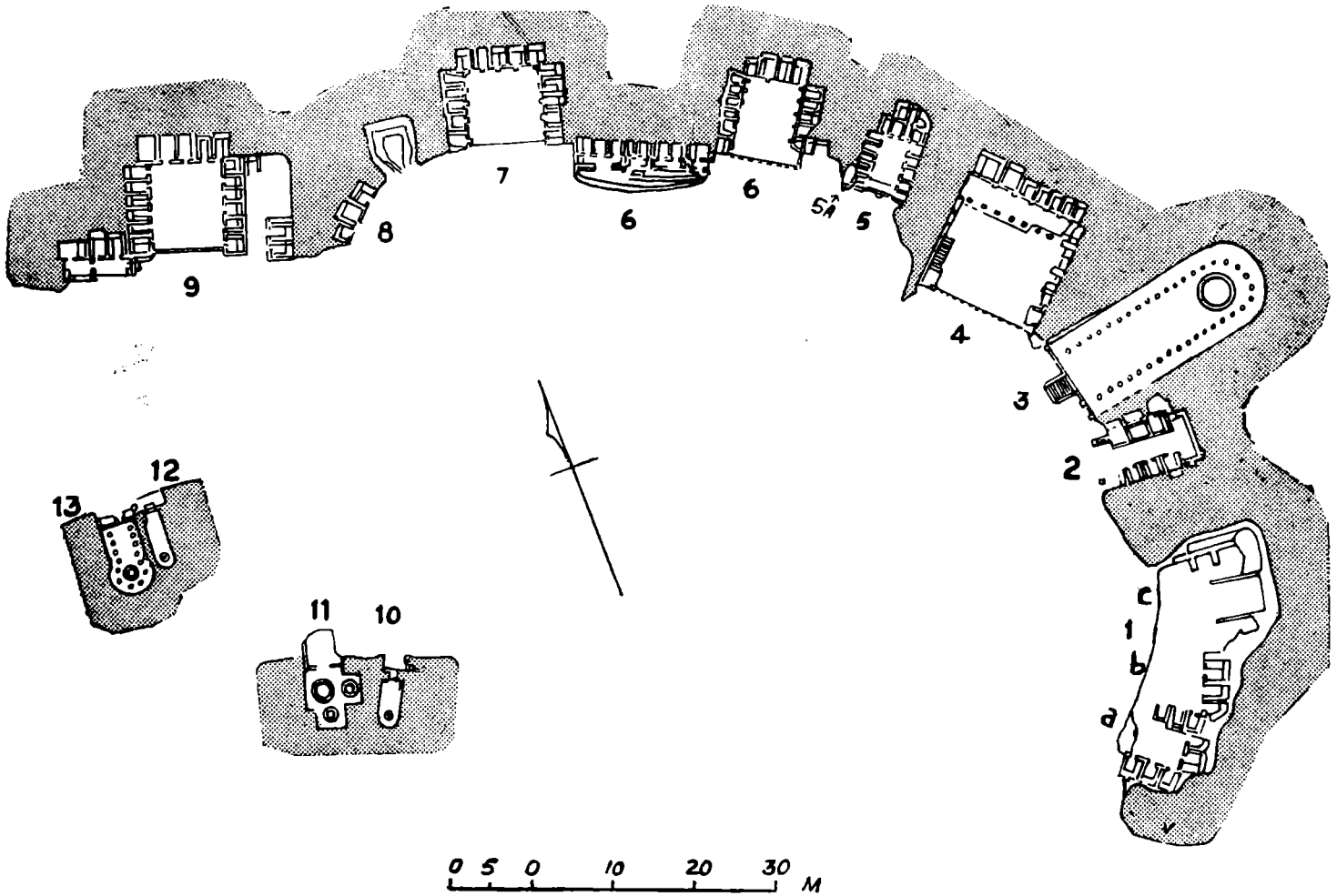
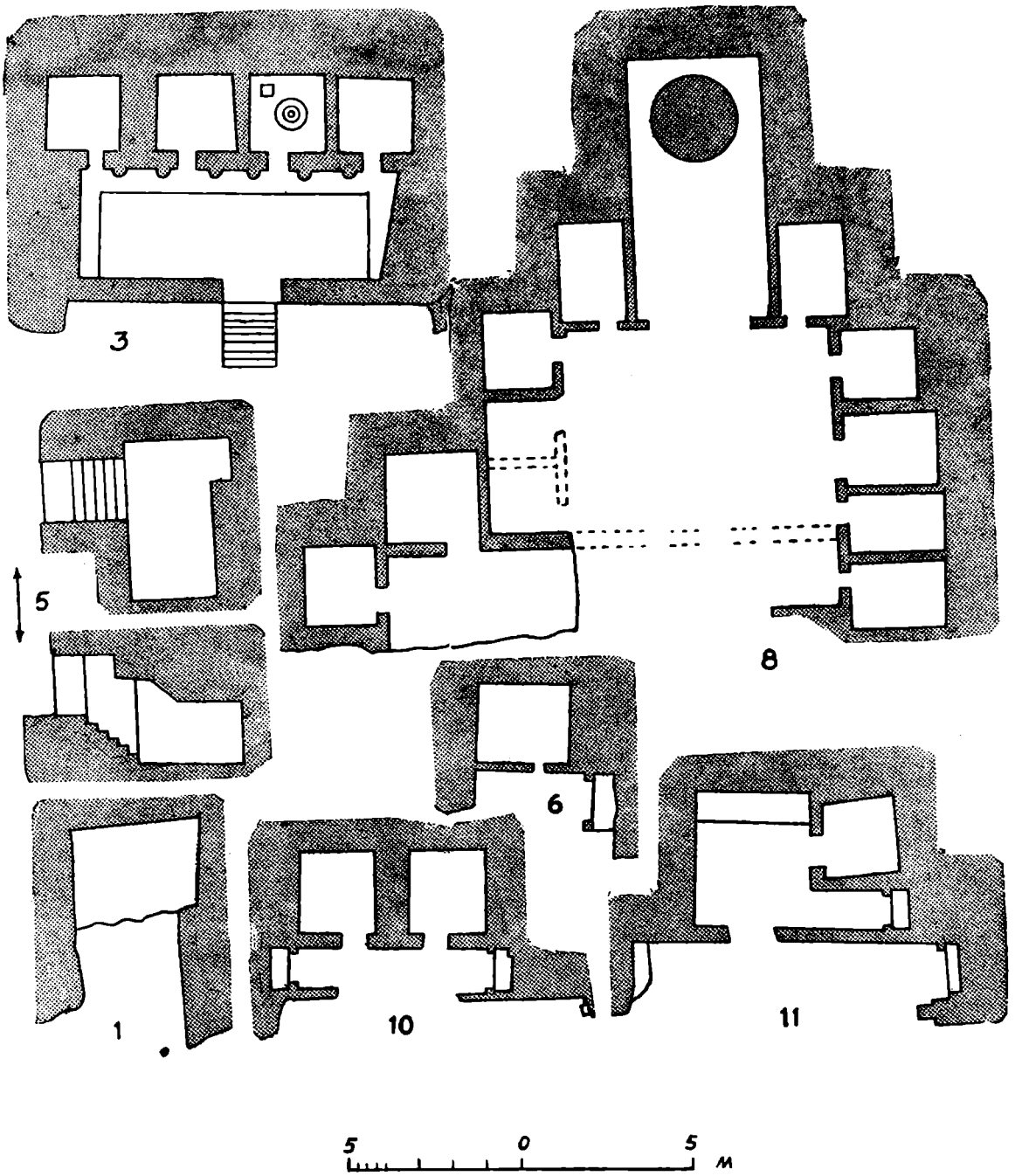


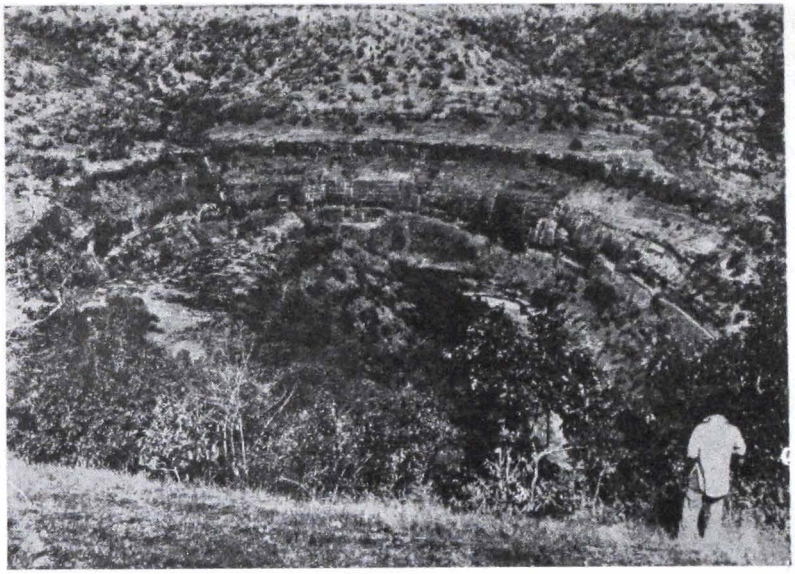
FIG. 58

PITALKHORA

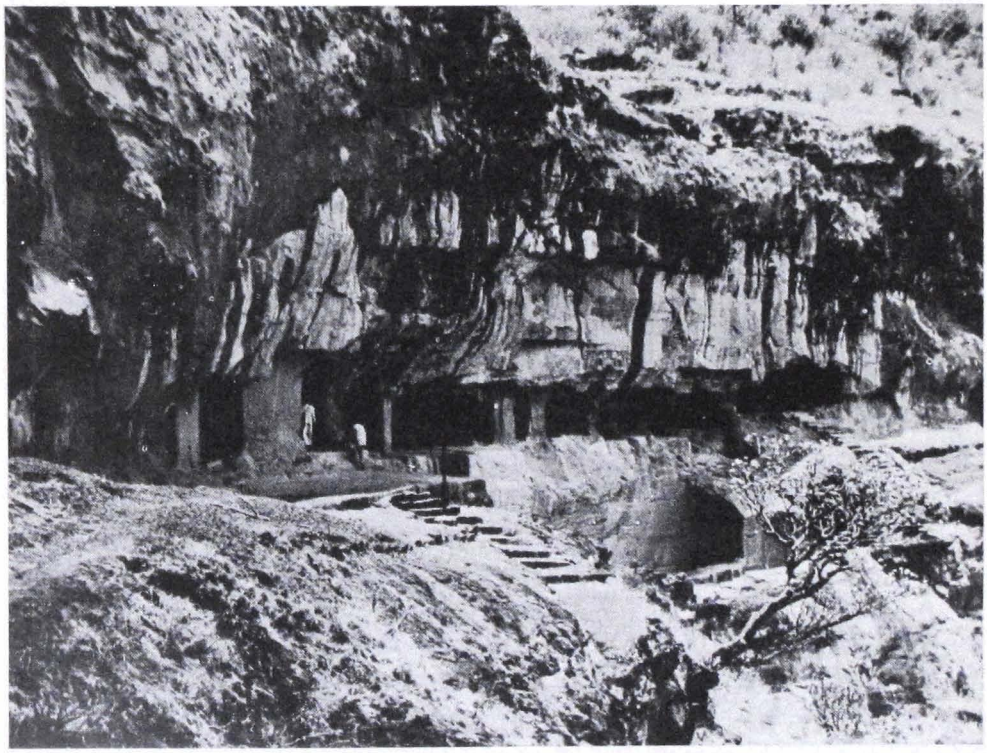


# SHELARWADI

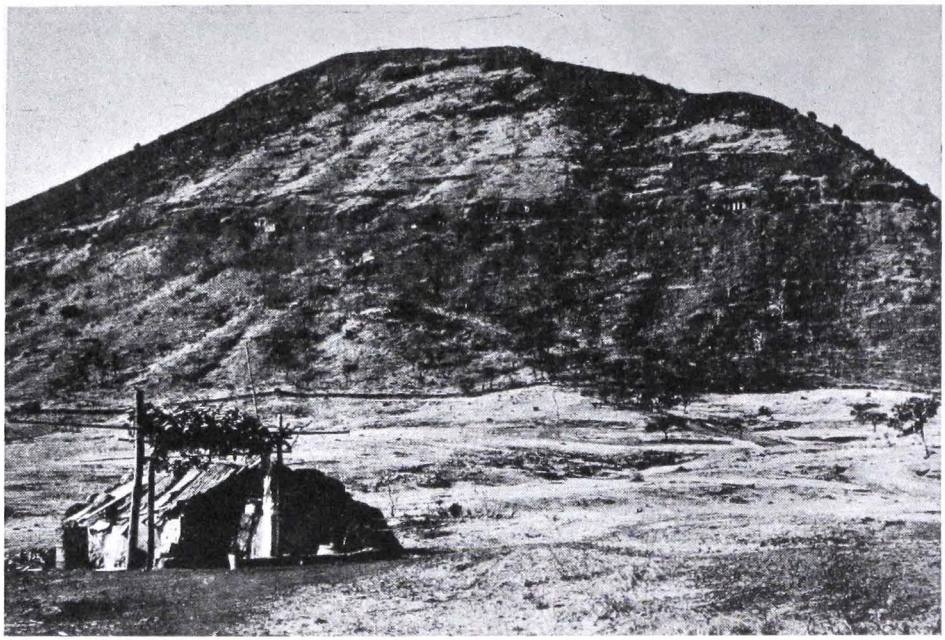




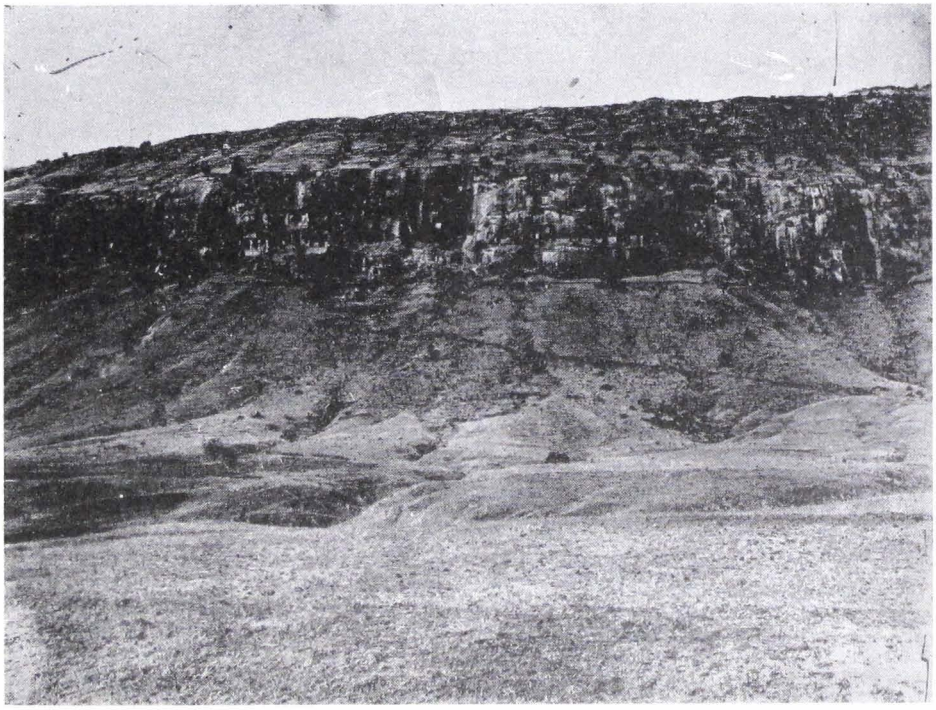
1. Ajanta : General view of caves showing their location in the vertical scarp by the side of the river.



2. Junnar–Tuljalena : General view of caves located at the foot of a hill.



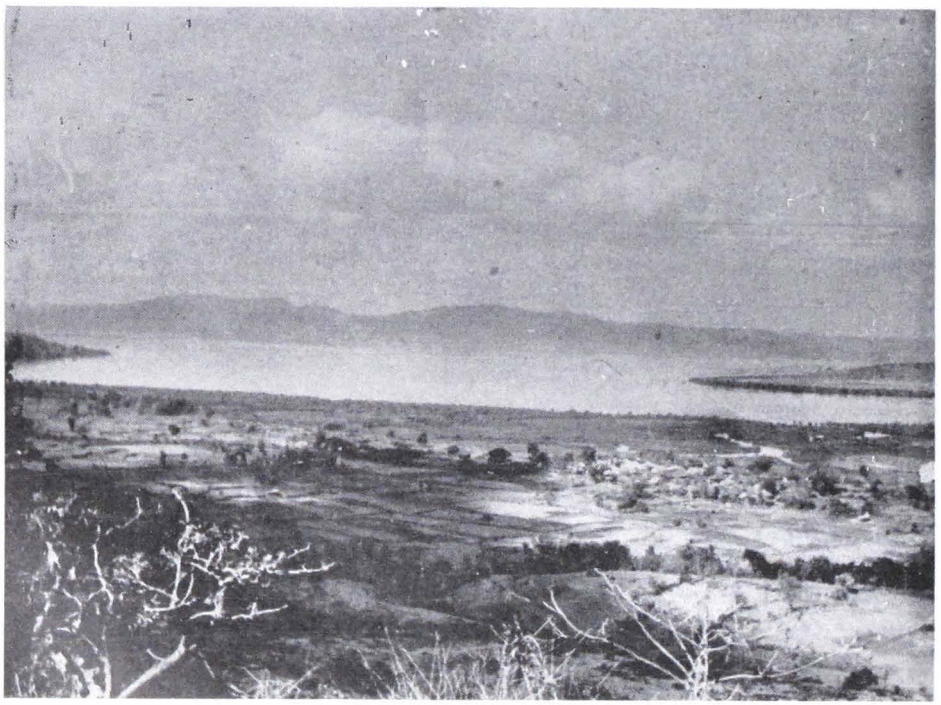
3. Nasik : General view of caves cut at midway up the hill.



4. Junnar-Manmodi : General view of caves cut near the top series of trappean deposits.



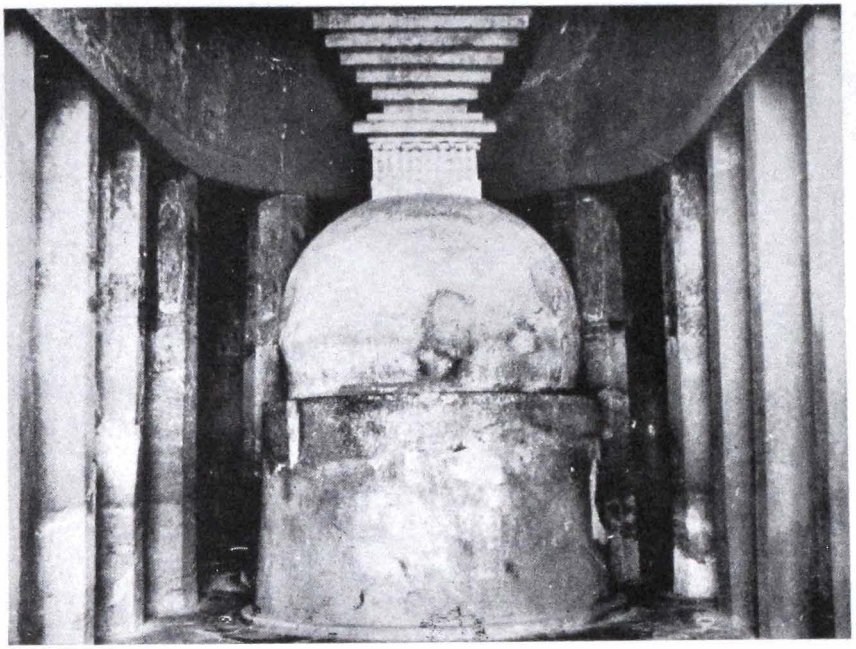
5. Kanheri : Caves with forecourts cut in a gently sloping hill.



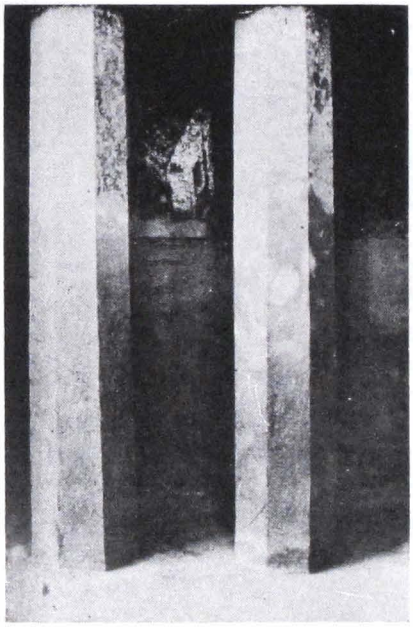
6. Kuda : A panoramic view from the caves.



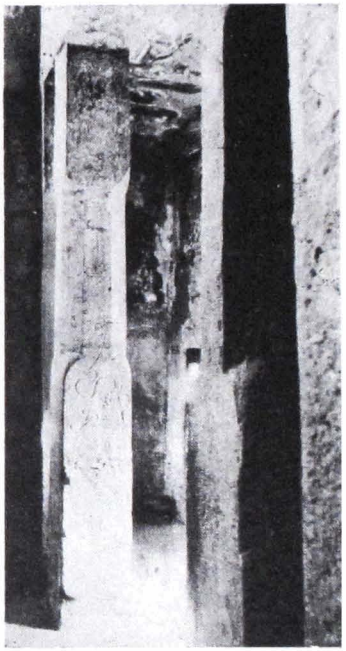
7. Ajanta : Cave 9, Front view.



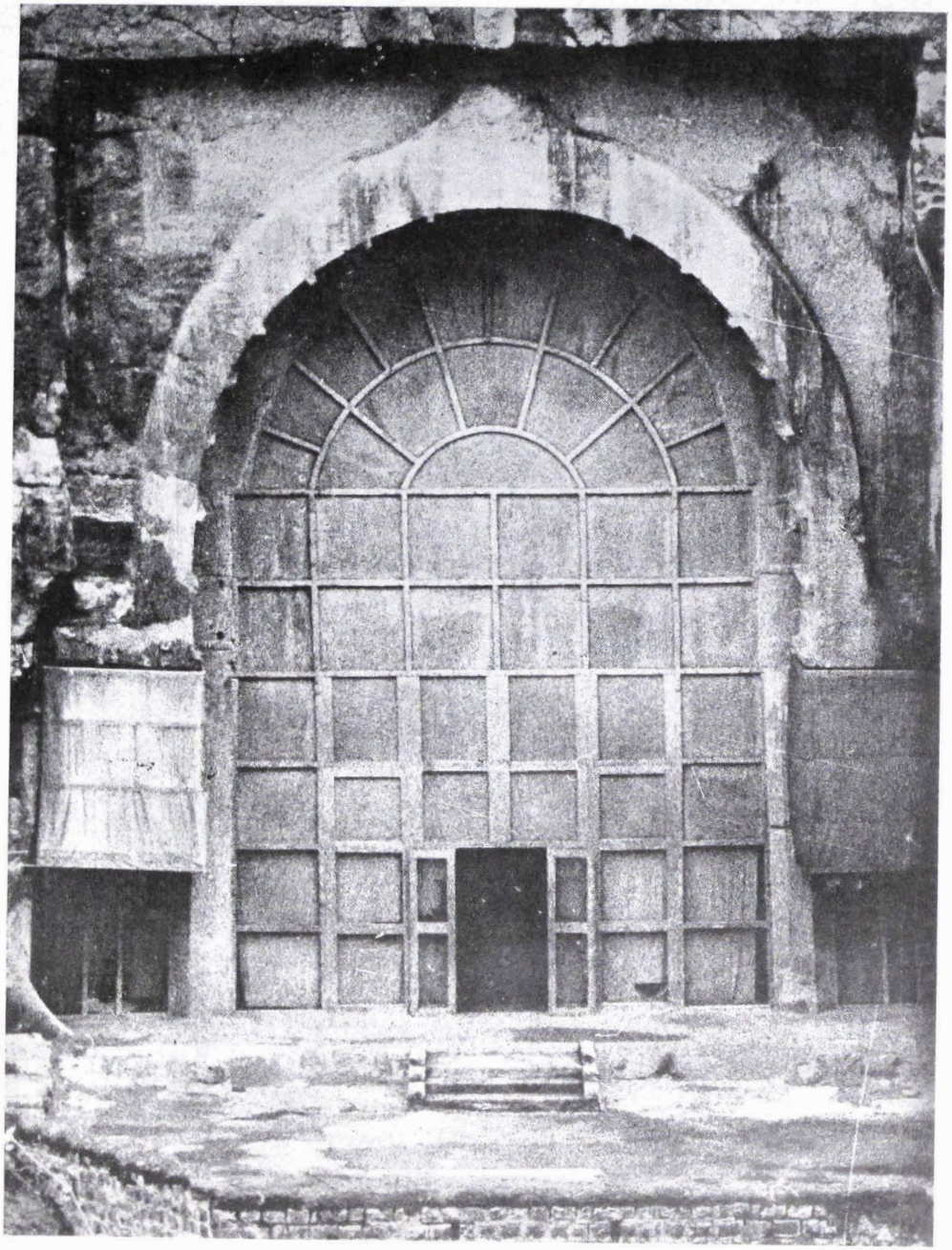
8. Ajanta : Cave 9, Interior view.



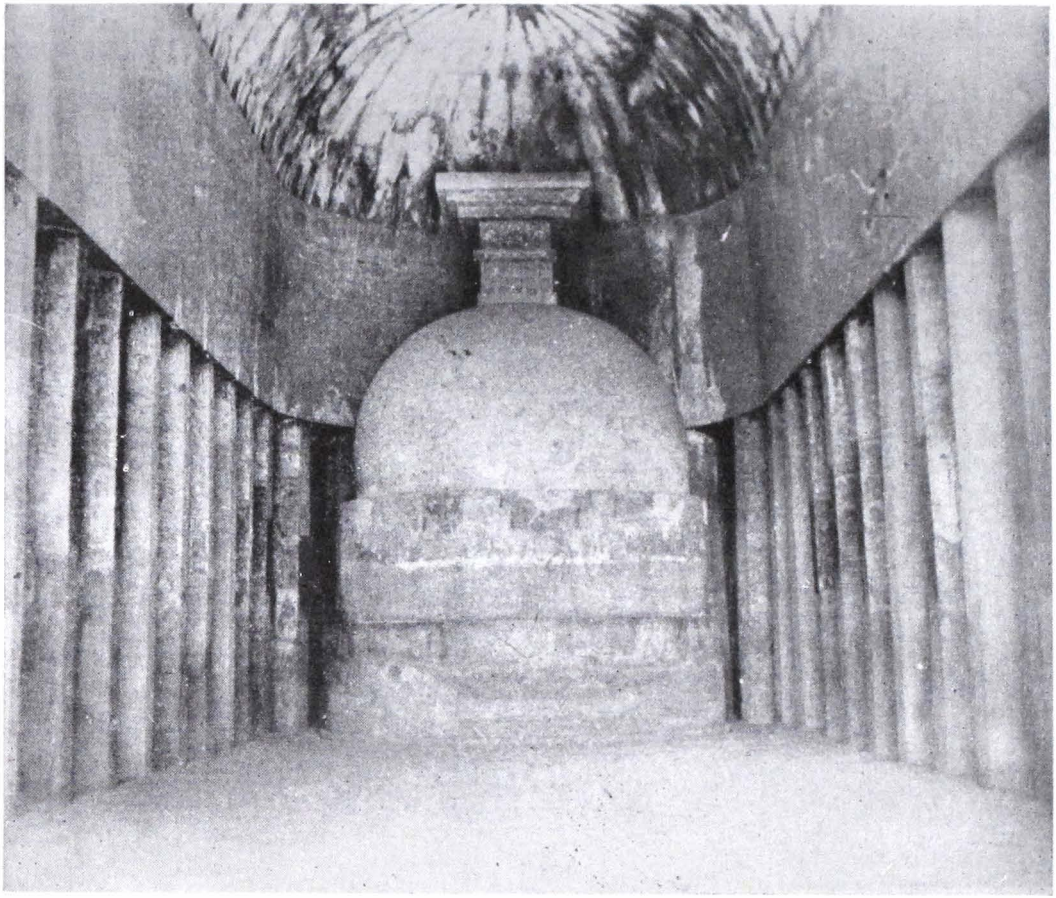
9. Ajanta : Cave 9, The octagonal pillars in the nave.



10. Ajanta : Cave 9, Square pillars in front of the nave.



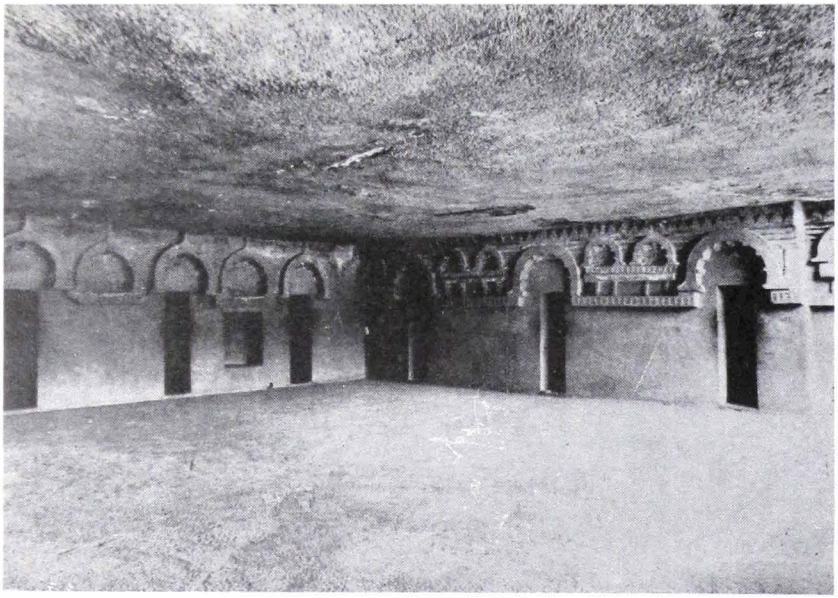
11. Ajanta : Cave 10, Front view.



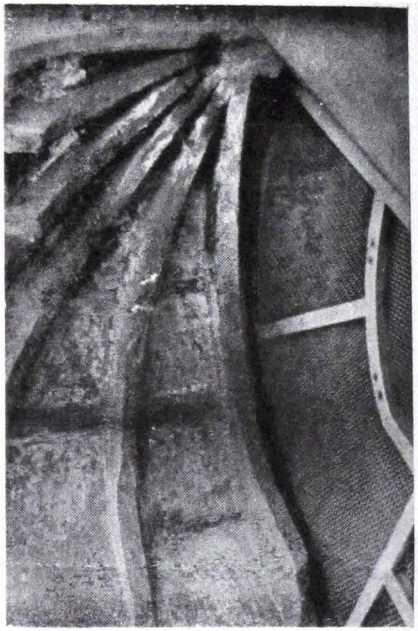
12. Ajanta : Cave 10, Interior view.



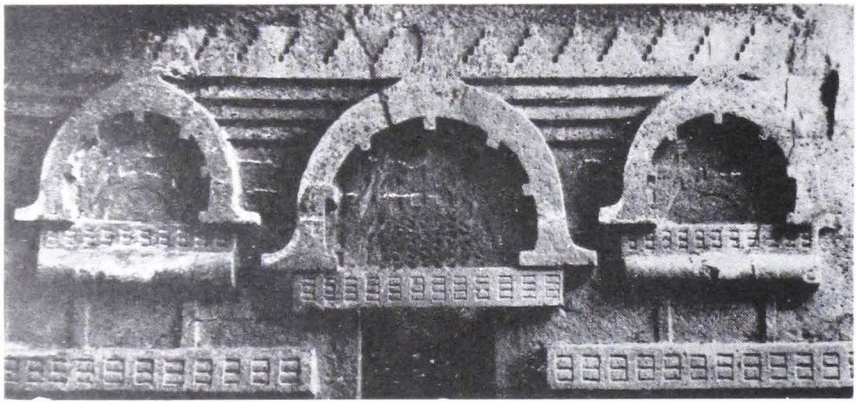
13. Ajanta : Cave 10, Inscription No. 2 on the wall of the left wall of the left Aisle.



14. Ajanta : Cave 12, Interior view.



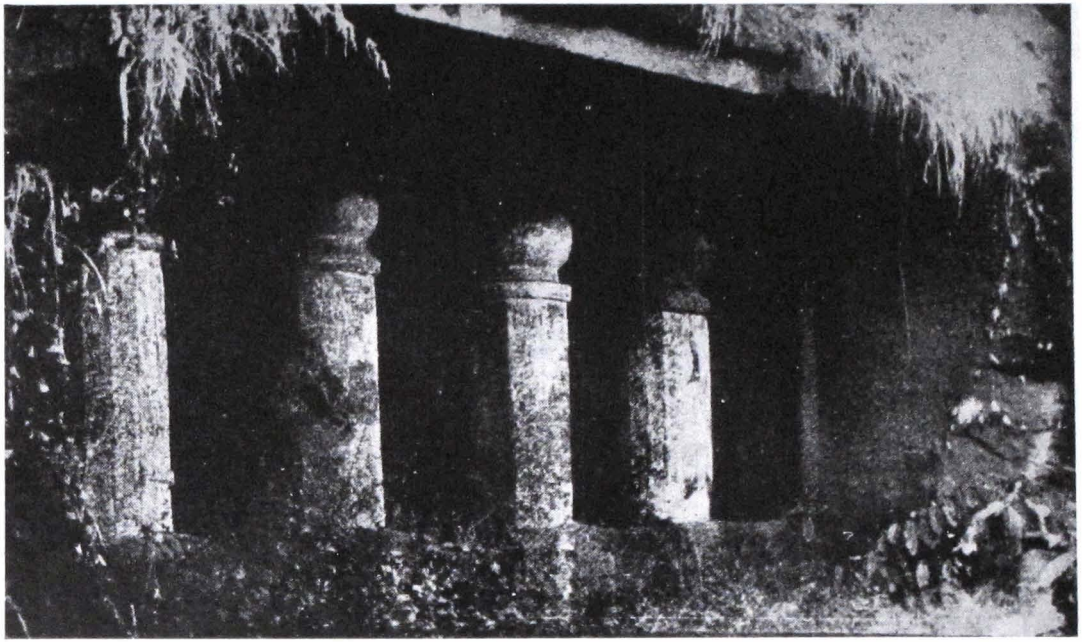
16. Ajanta : Cave 10, Quadrantal beams of the overhanging pavada.



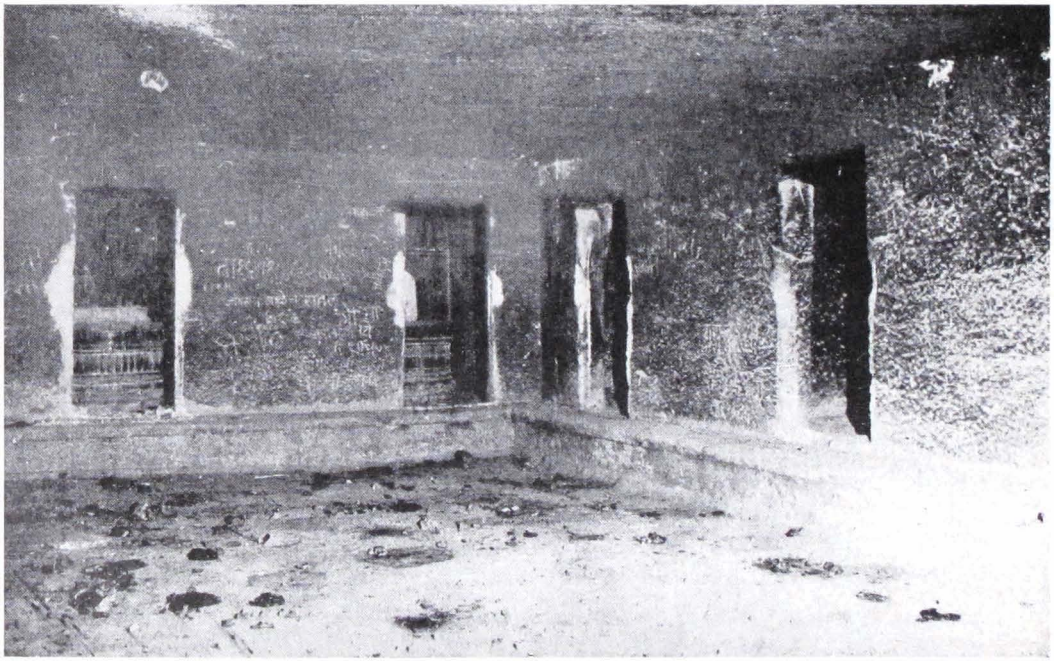
15. Ajanta : Cave 12, Details of wall decoration on the front most cell to right.



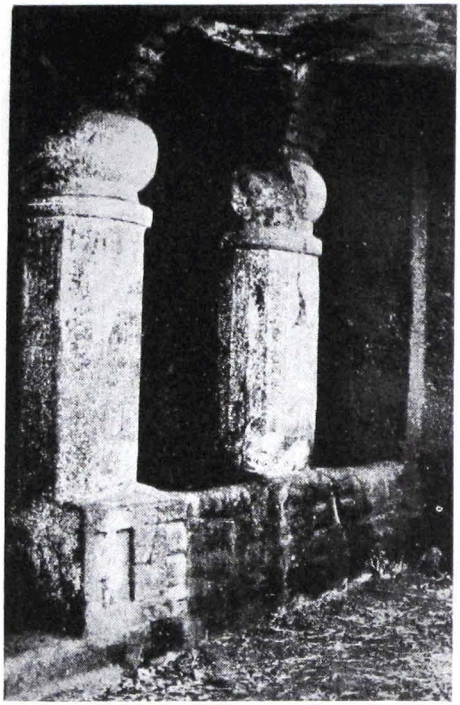
17. Ajanta : Cave 15A, Decoration on a cell doorway.



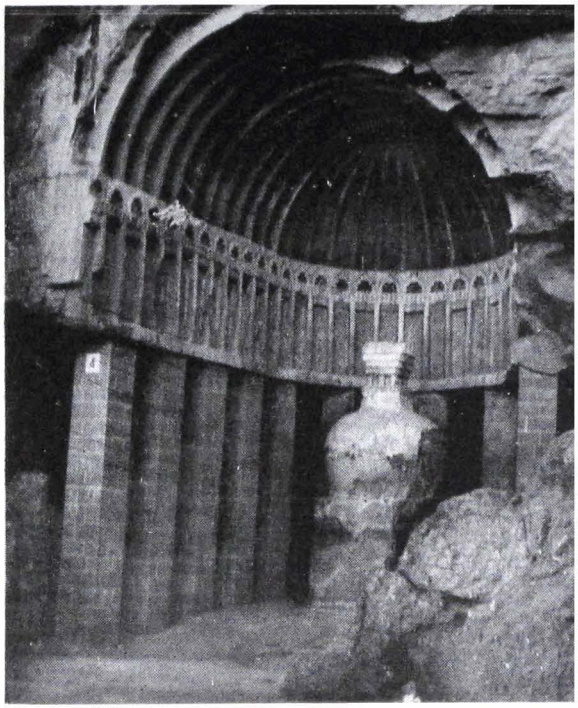
18. Ambivale : Front view of the lena.



19. Ambivale : Interior view of the lena.



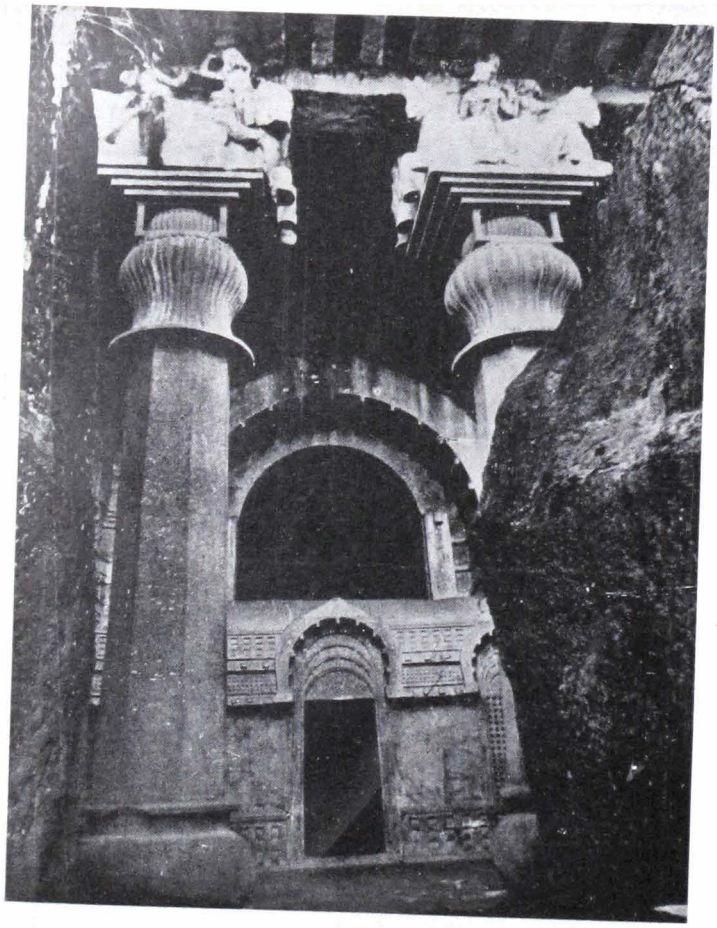
20. Ambivale : The pillars in front of the cave.



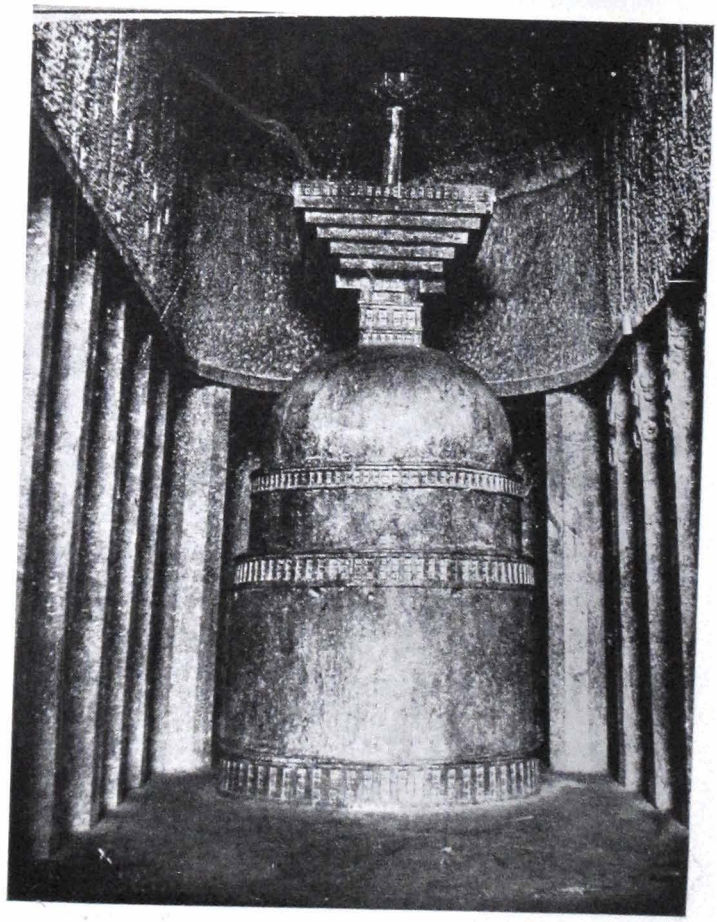
21. Aurangabad : Cave 4, General view.



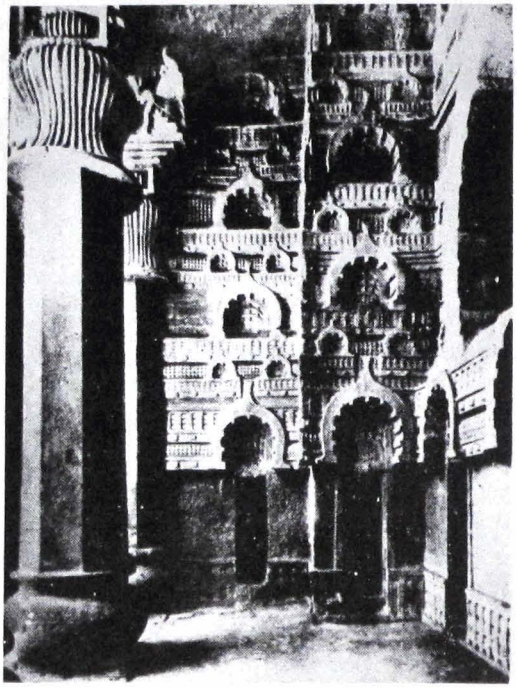
22. Bedsa : Cave 3, General view.



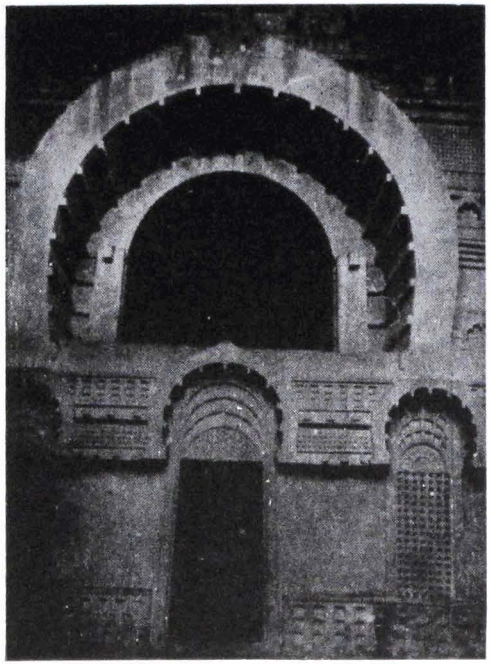
23. Bedsa : Cave 7, Front view.



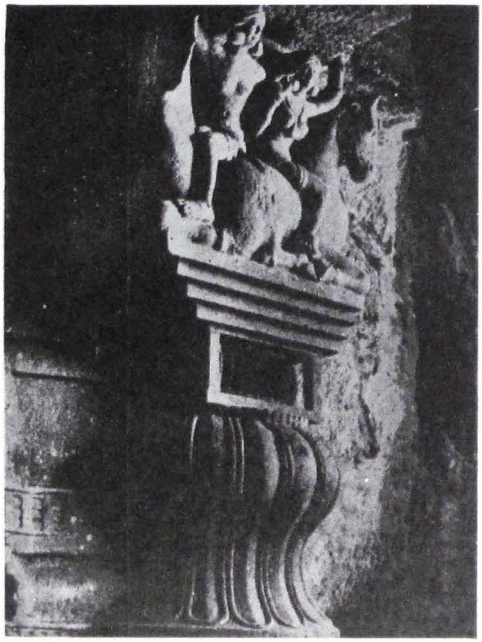
24. Bedsa : Cave 7, View of the interior with the stupa and the pillars.



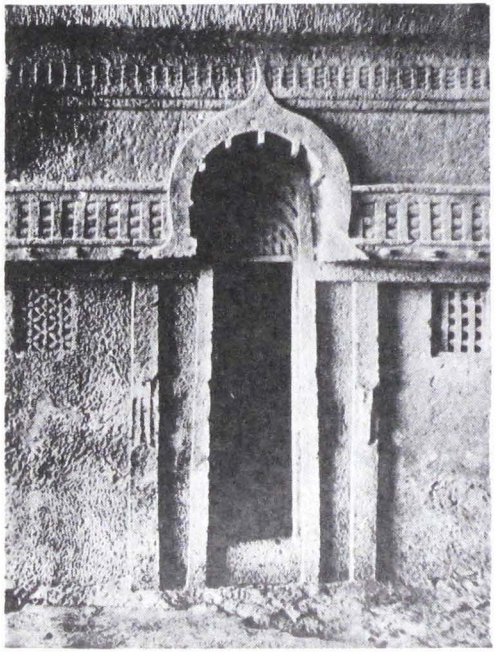
25. Bedsa : Cave 7, Details of decoration on the left wall of the verandah.



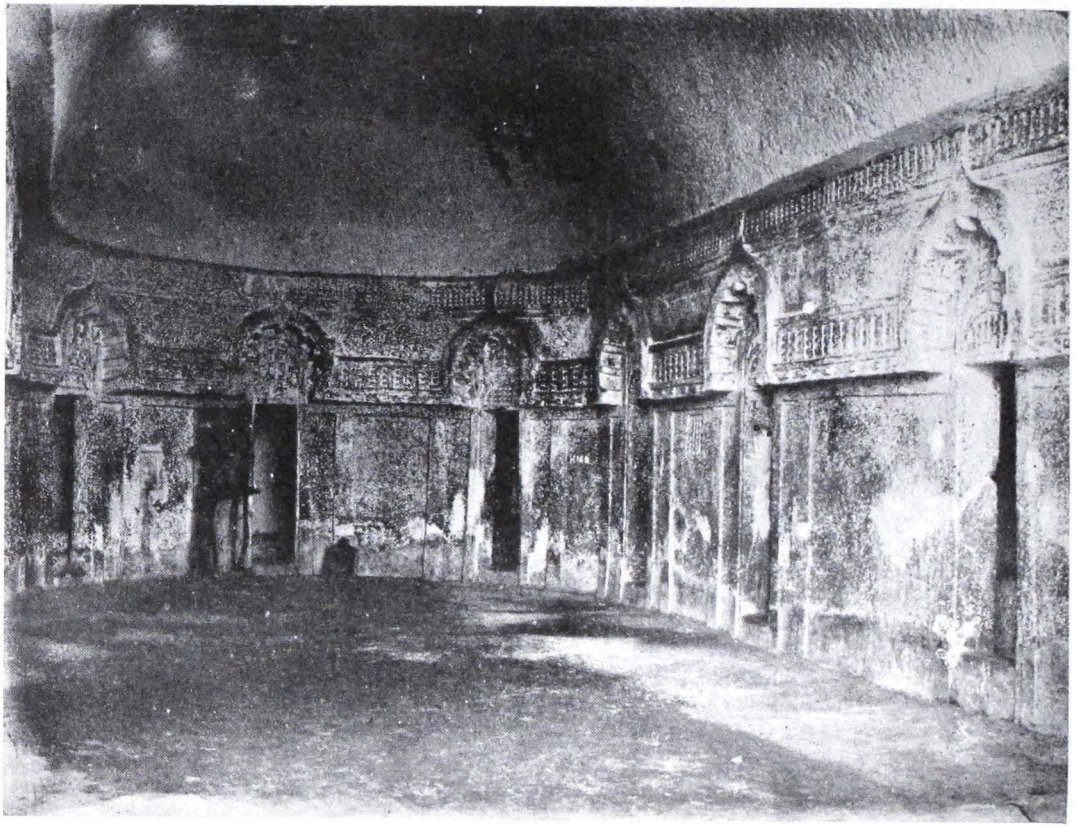
26. Bedsa : Cave 7, The main doorway in the front screen wall.



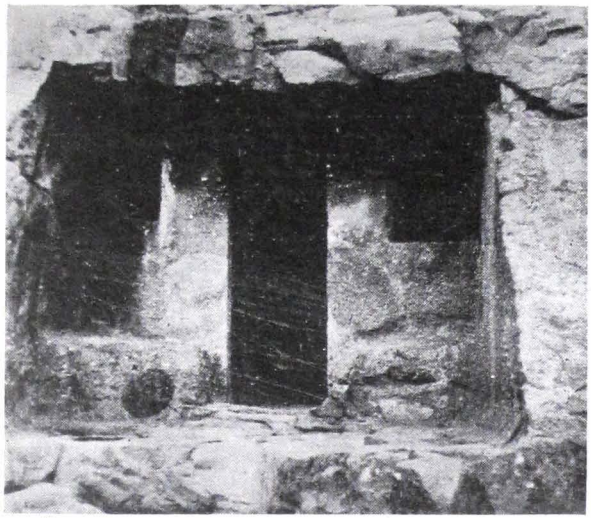
27. Bedsa : Cave 7, The capital of an engaged pillar in the verandah.



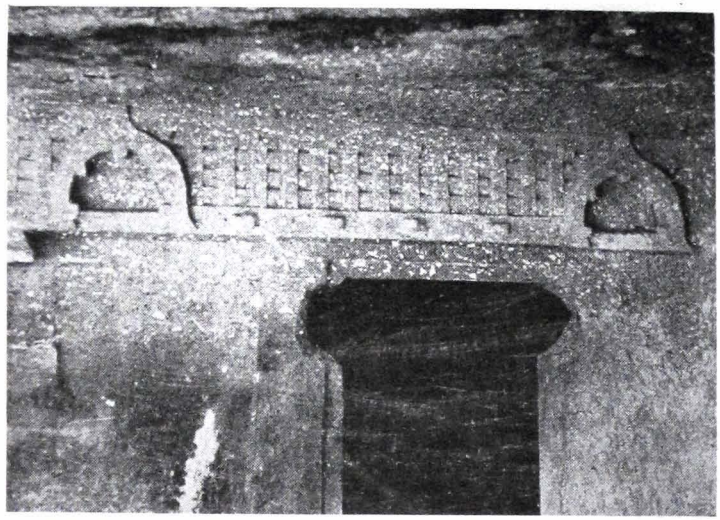
28. Bedsa : Cave 11, Details of wall decoration inside the hall.



29. Bedsa : Cave 11, General view of the hall with cell doorways and wall decoration.



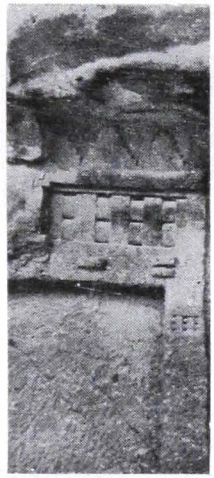
30. Bhaja : Cave 5, Front view.



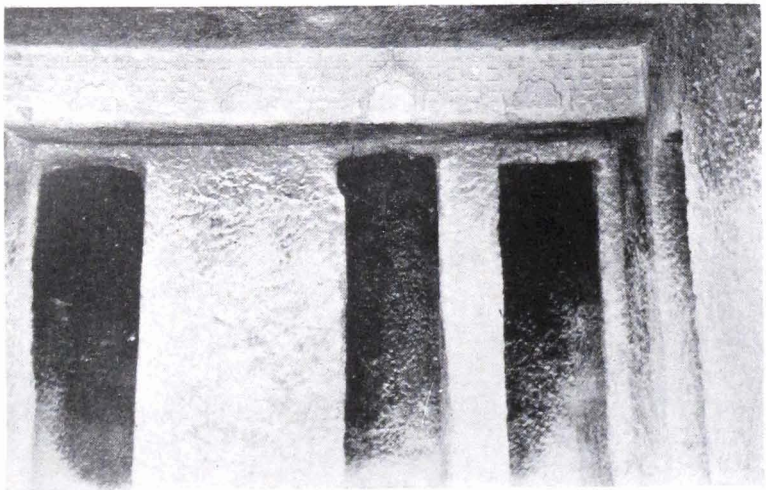
31. Bhaja : Cave 6, The wall decoration in the hall.



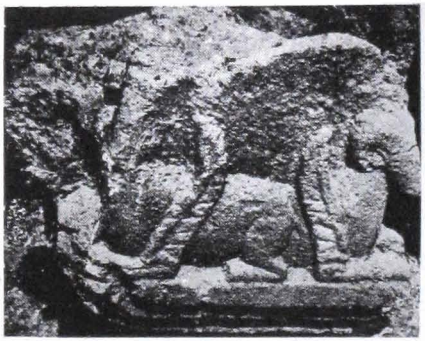
32. Bhaja : Cave 7, The decoration wall in the hall,



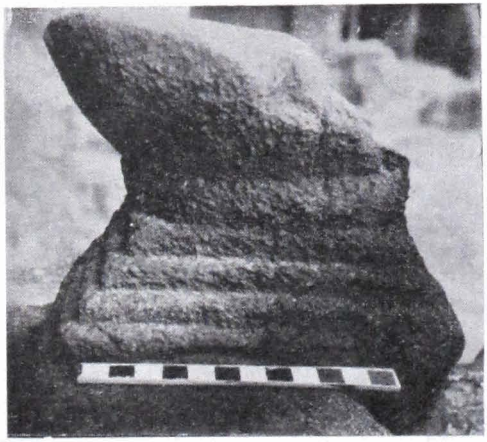
33. Bhaja : Cave 7, Details of Decoration on the right wall.



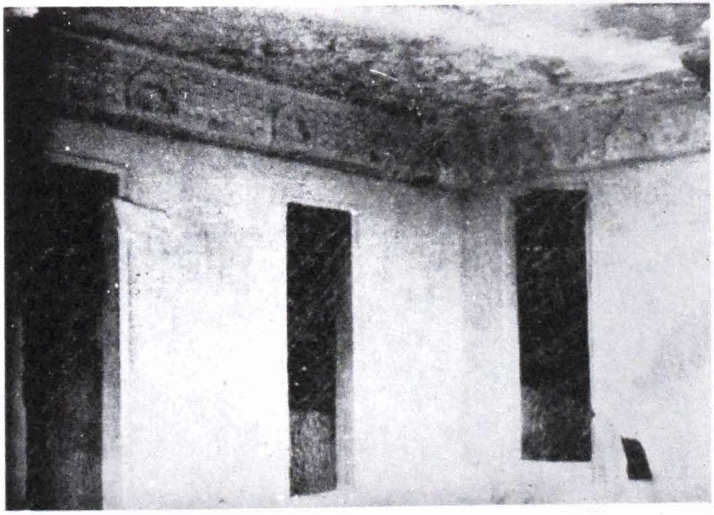
34. Bhaja : Cave 10, Interior view showing the cell doorways.



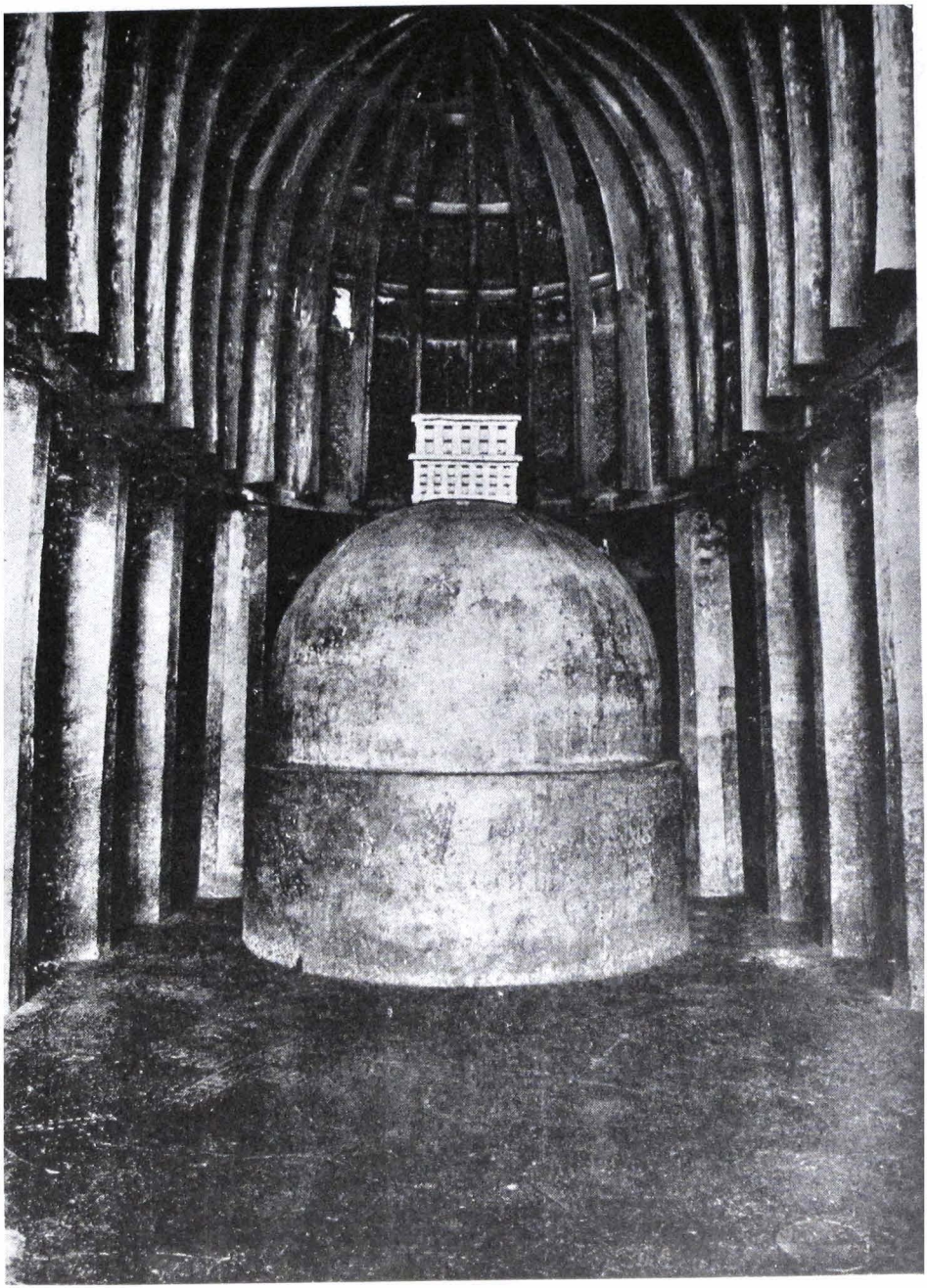
35. Bhaja : Cave 10, A pillar capital with animal sculptures, now lying in front of Cave 7 below.



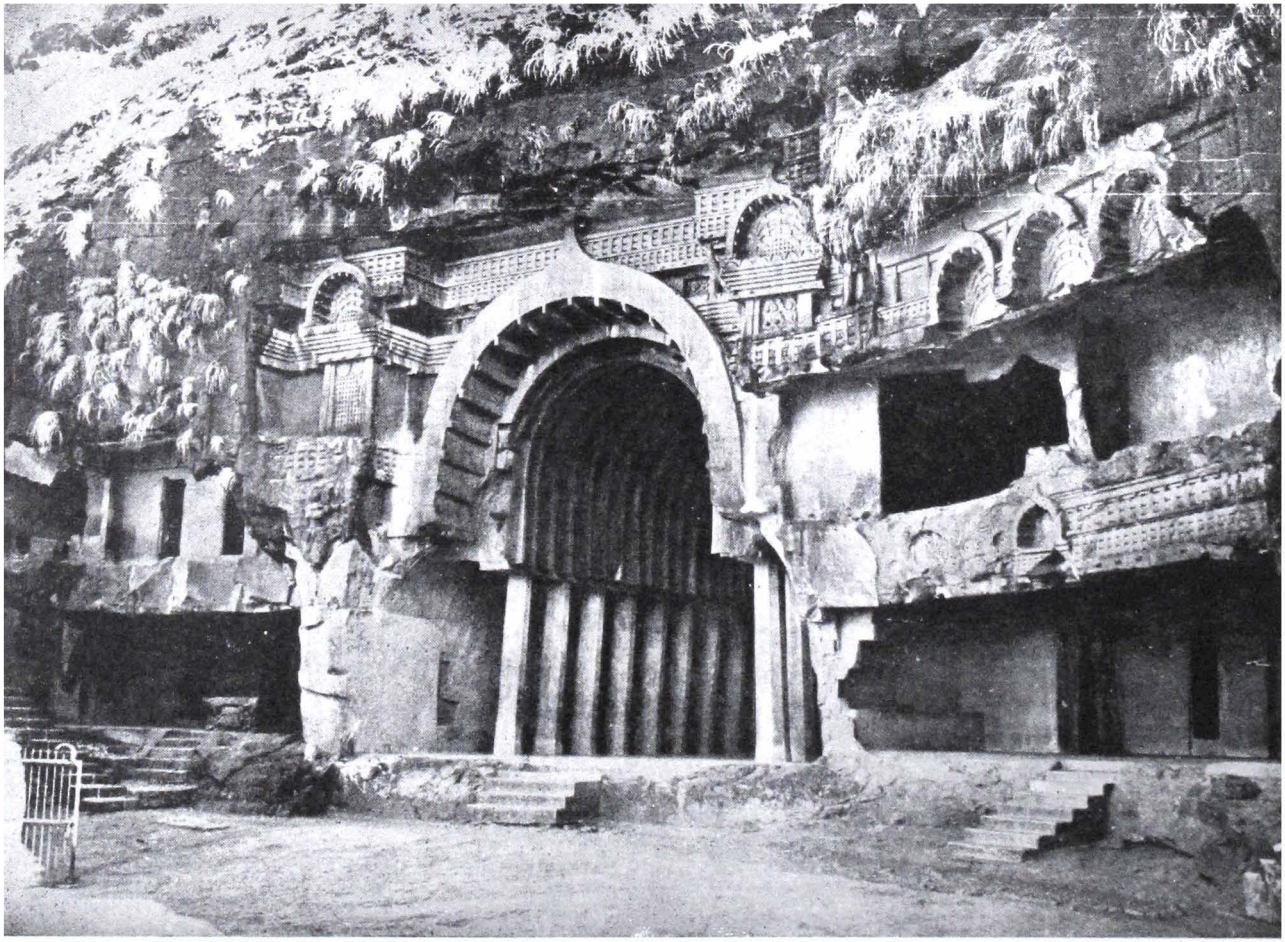
36. Bhaja : Cave 10, Remnant of a step-and-pot base of a pillar in front of the varandah.



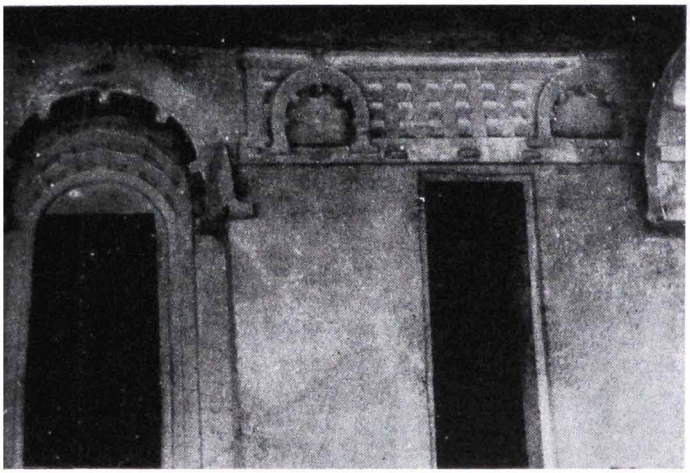
37. Bhaja : Cave 11, A view of the hall with cells and decoration on the wall.



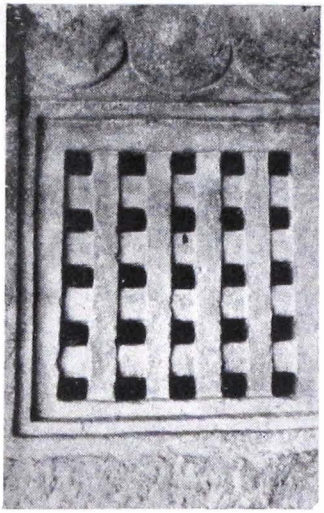
38. Bhaja : Cave 12, Interior view.



39. Bhaja : Cave 12, General view.



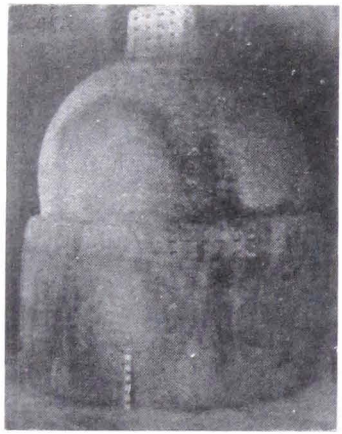
40. Bhaja : Cave 13, Interior view showing cell doorways and decoration.



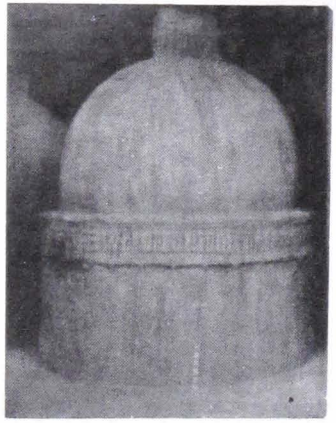
41. Bhaja : Cave 13, A grated window in the wall of the left cell.



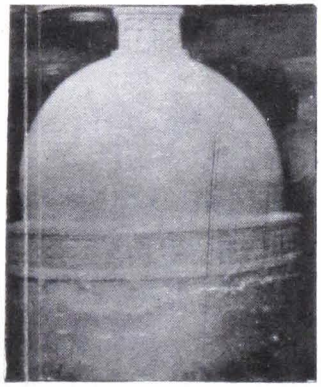
42. Bhaja : Cave 20, Stupas 3 to 6.



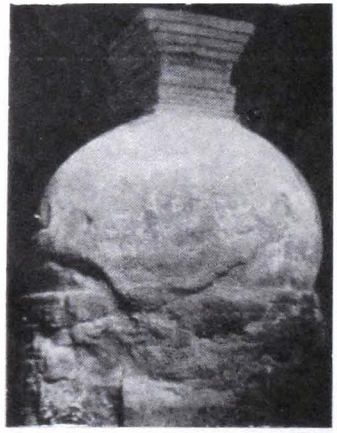
43. Bhaja : Cava 20, Stupa 6.



44. Bhaja : Cave 20, Stupa 7.



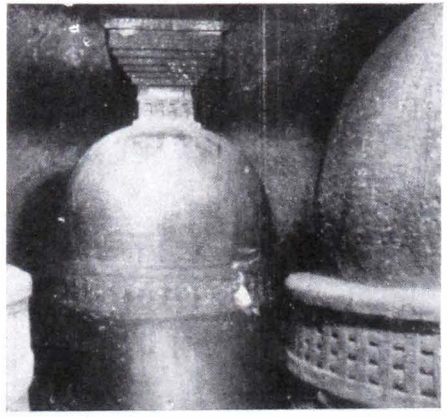
45. Bhaja : Cave 20, Stupa 10.



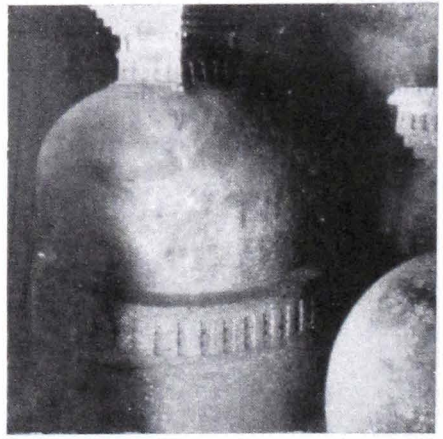
46. Bhaja : Cave 20, Stupa 11.



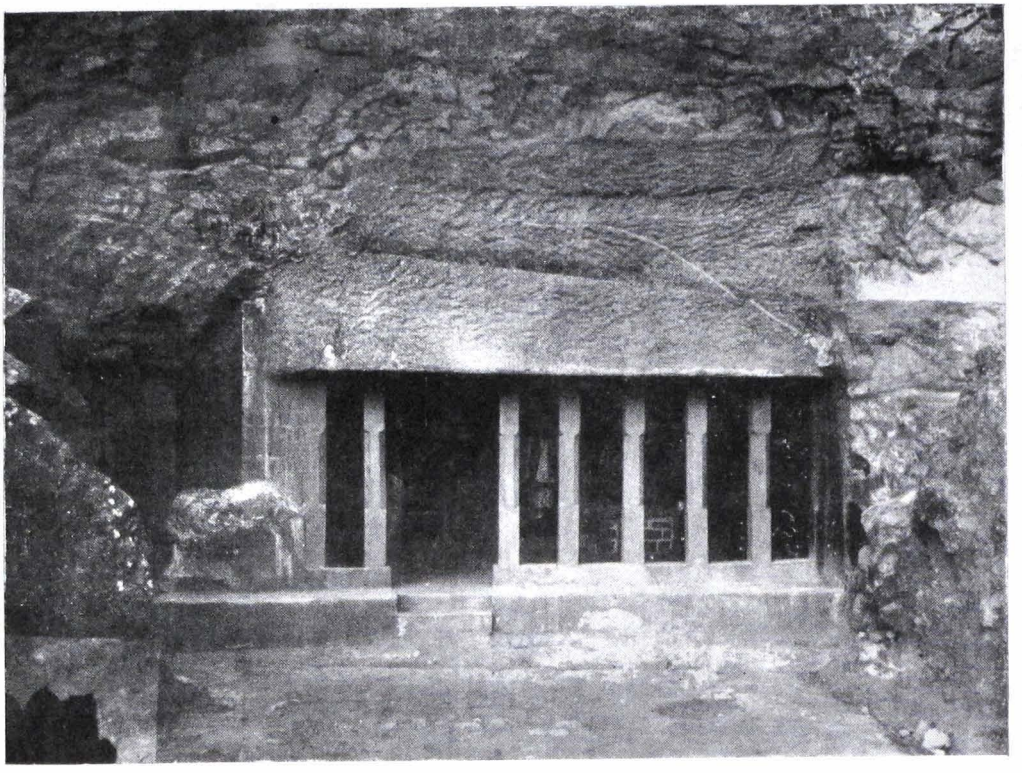
47. Bhaja : Cave 20, Stupa 9.



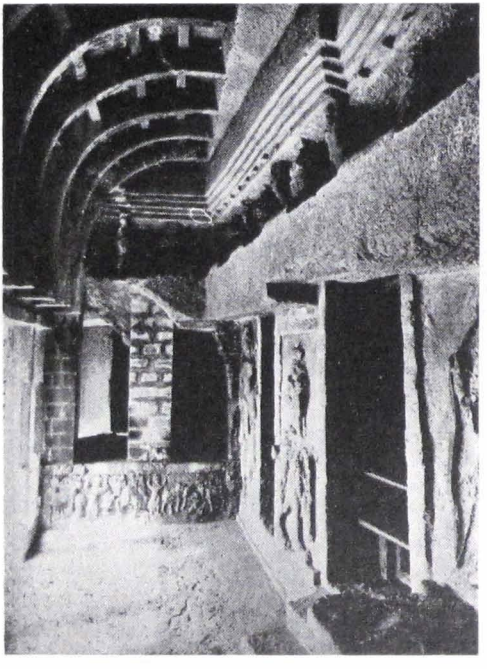
43. Bhaja : Cave 20, Stupa 13.



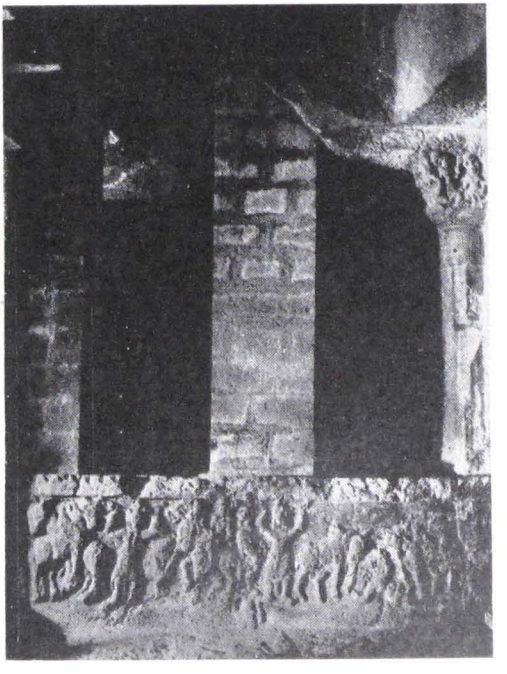
49. Bhaja : Cave 20, Stupa 14.



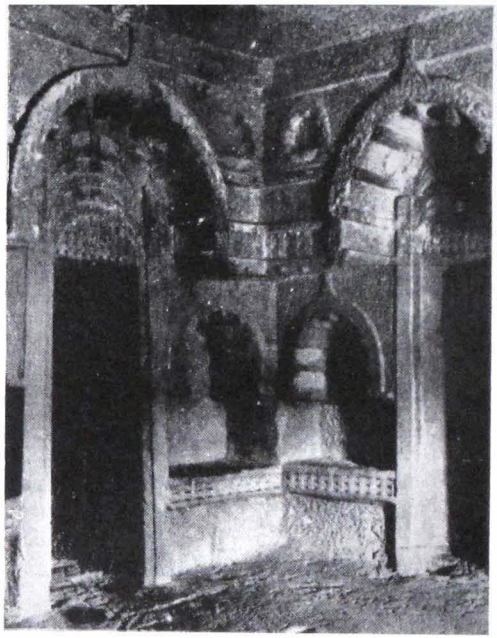
50. Bhaja : Cave 22, Front view.



51. Bhaja : Cave 22, A view of the verandah showing the semi-vault ceiling.



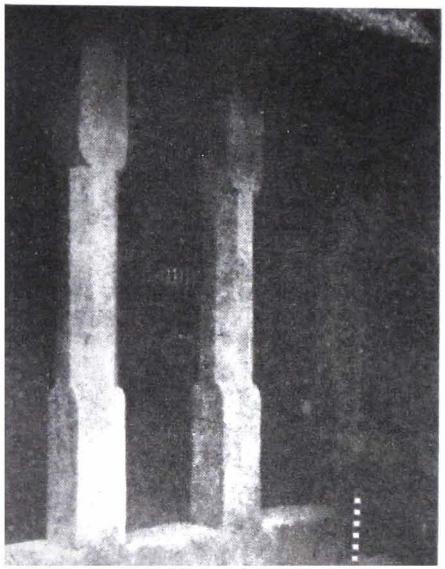
52. Bhaja : Cave 22, Details of sculpture and an attached pillar with animal capital on the left side of the verandah.



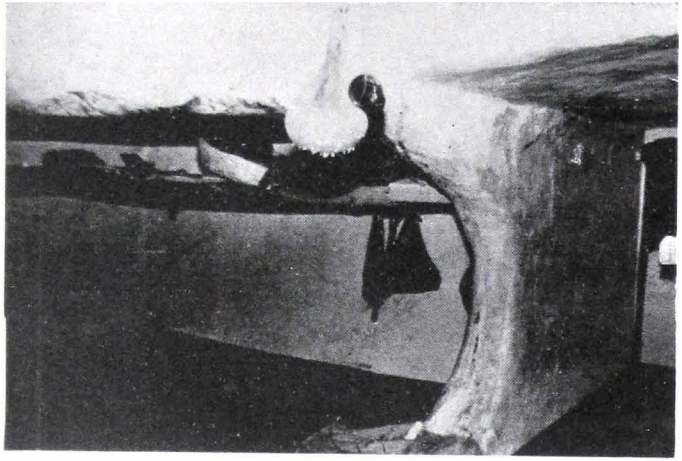
53. Bhaja : Cave 22, Interior view showing cell doorways and wall decoration.



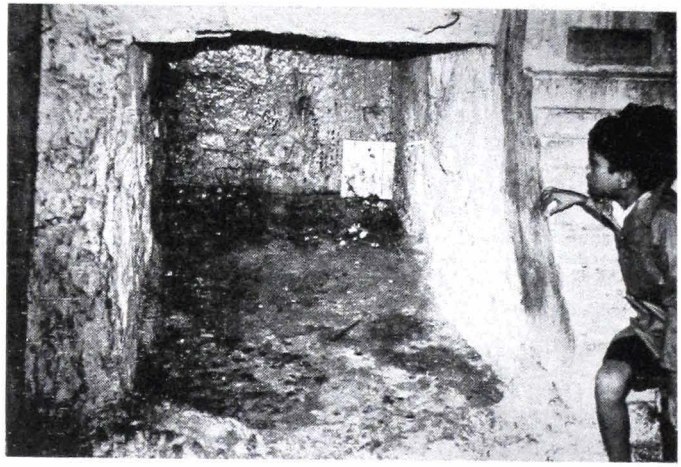
54. Bhaja : Cave 22, Sculpture of a warrior on the wall inside the hall.







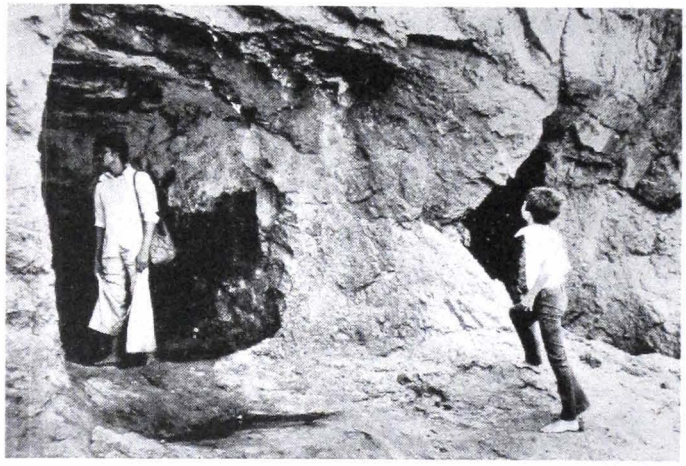
57. Jivadan-Virar : Caves 1 and 2, Interior view.



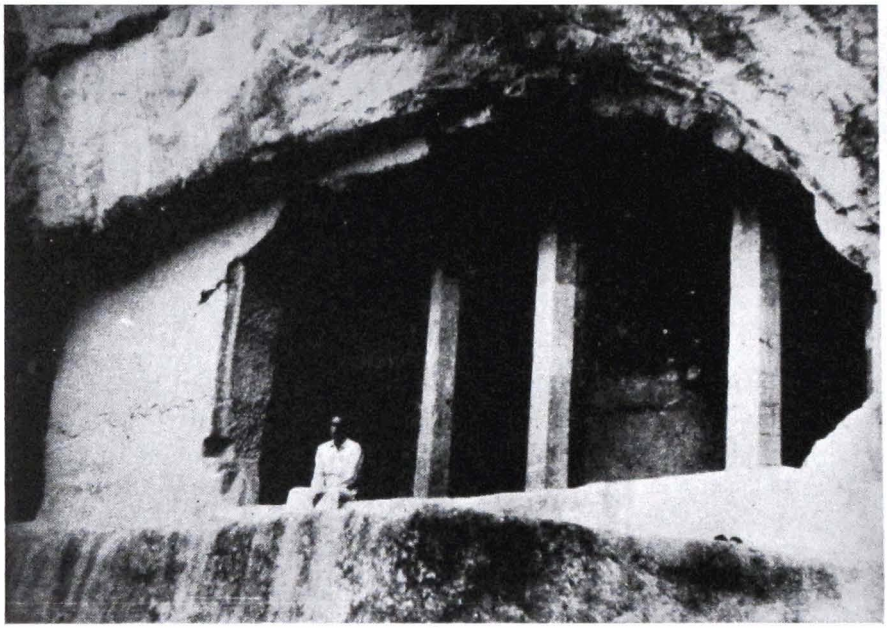
58. Jivadan-Virar : Cave 5.



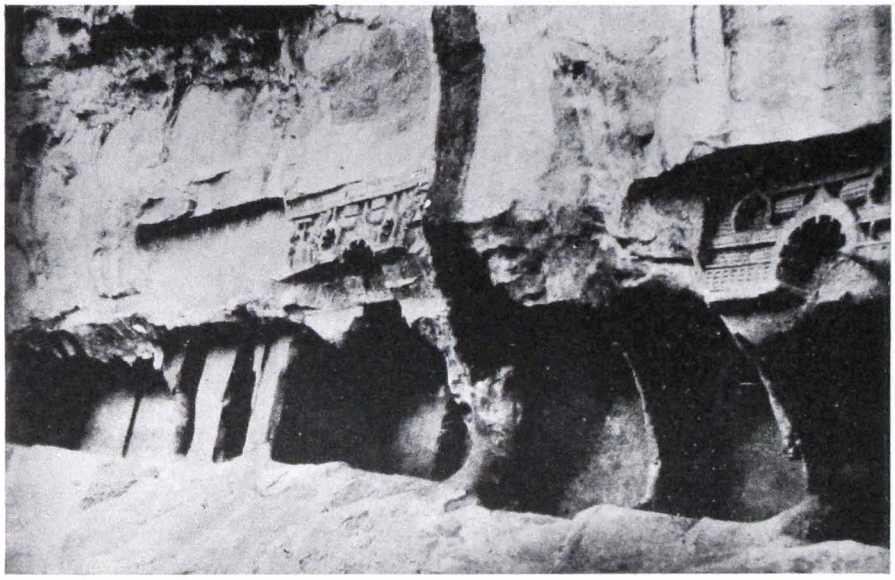
59. Jivadan-Virar : Cave 9, Front view showing the simple plain facade.



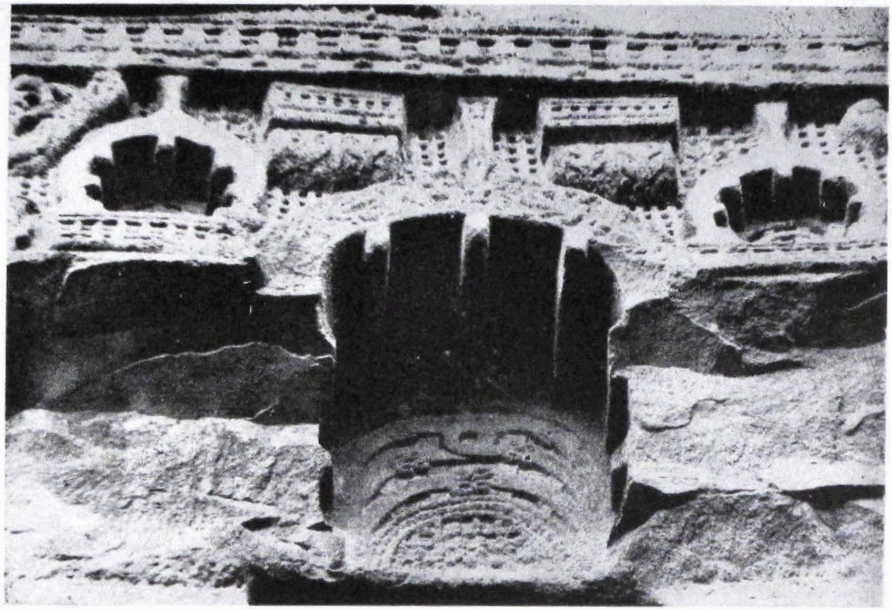
60. Jivadan-Virar : Caves 10 and 11.



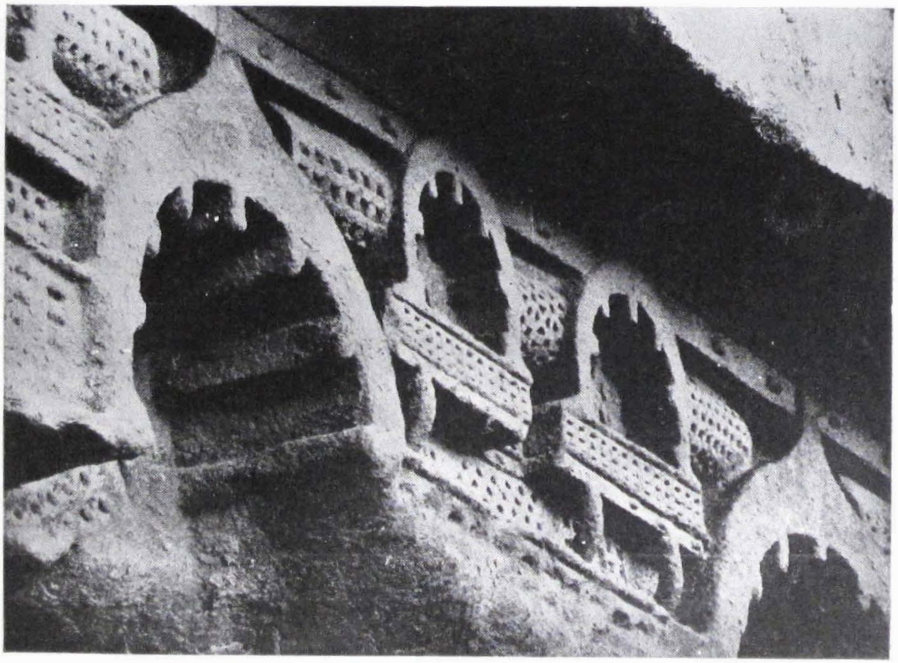
61. Junnar–Tuljalena : Cave 3, General view.



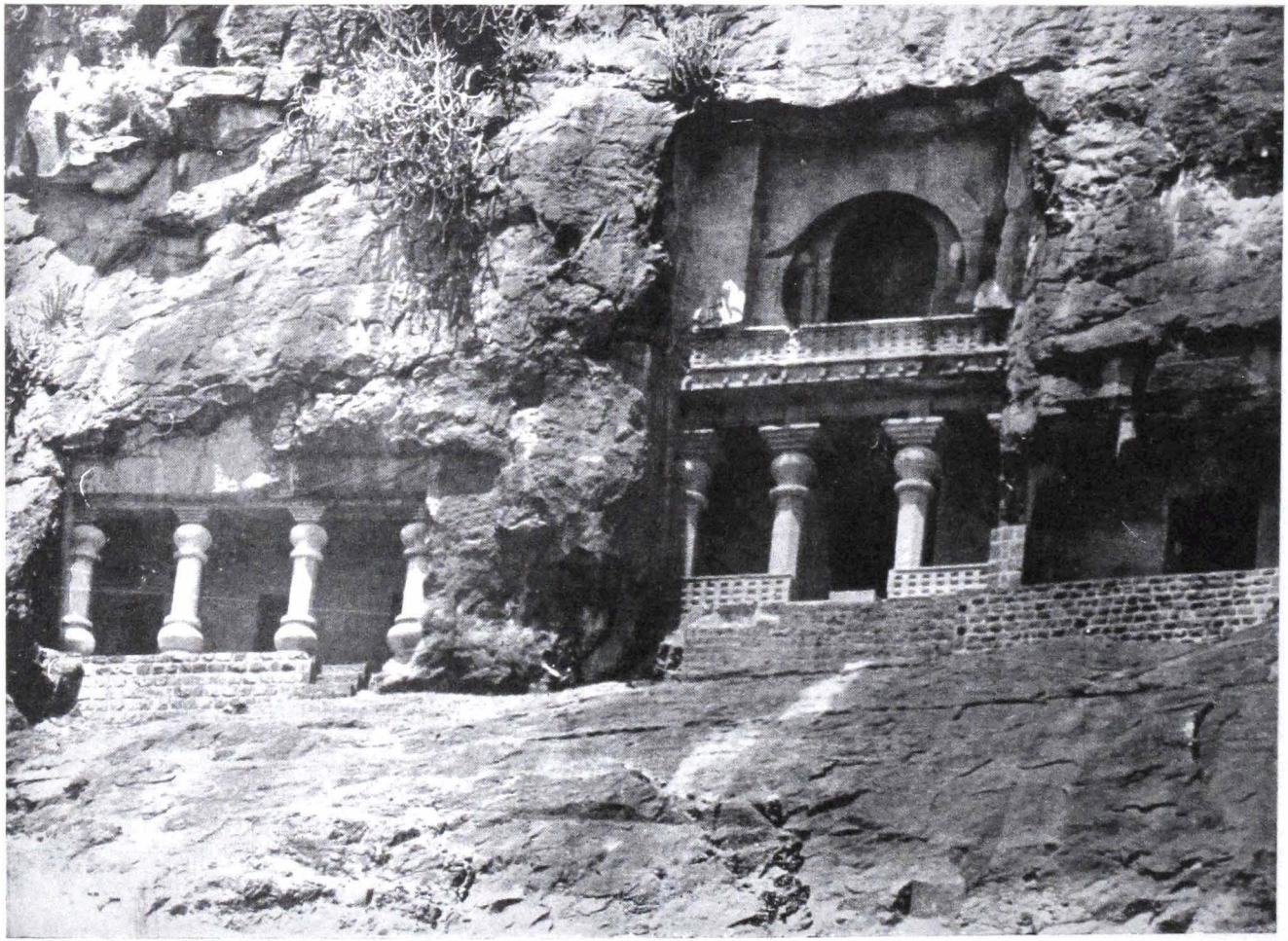
62. Junnar–Tuljalena : Caves 4-16, General view.



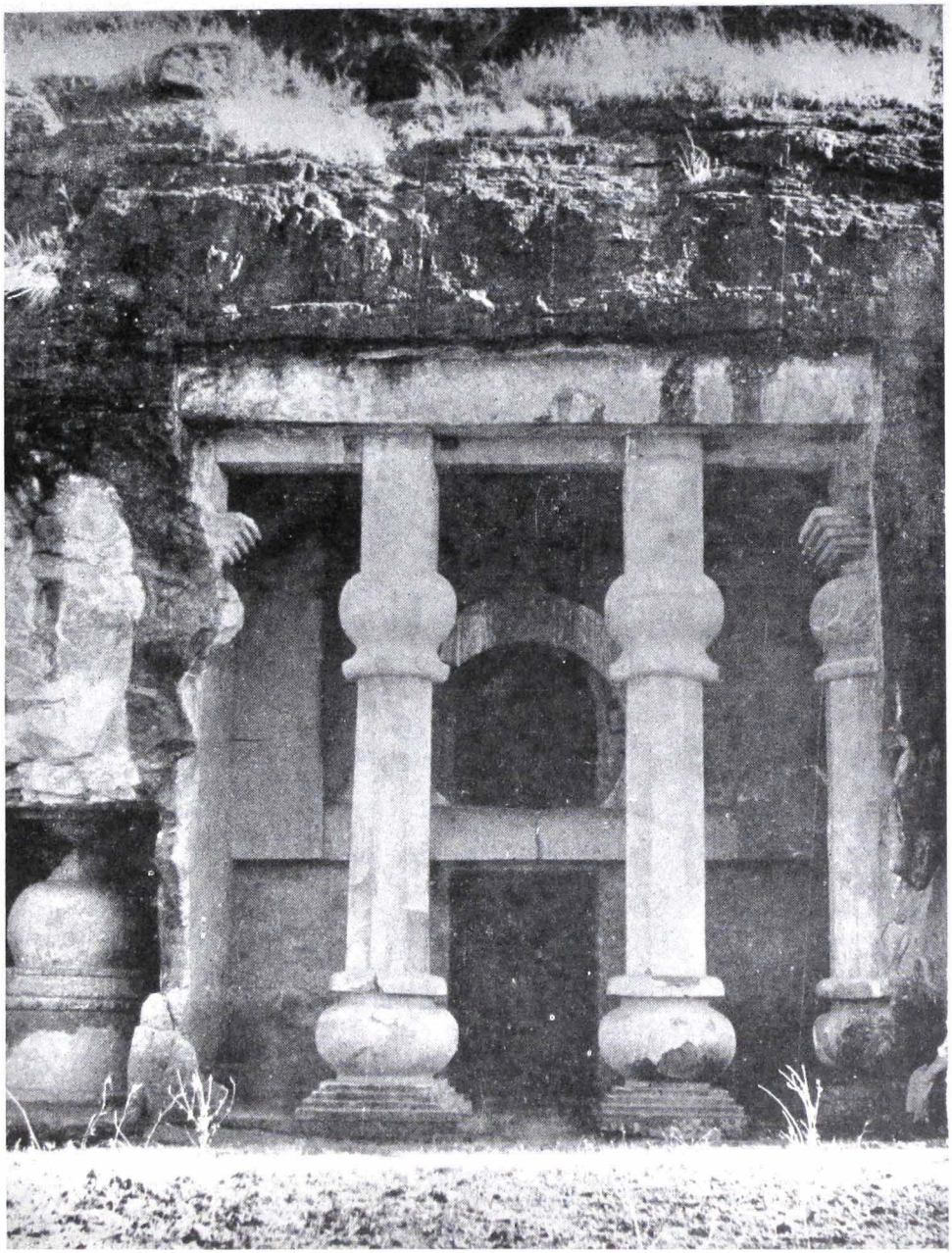
63. Junnar–Tuljalena : Cave 12, The facade decoration.



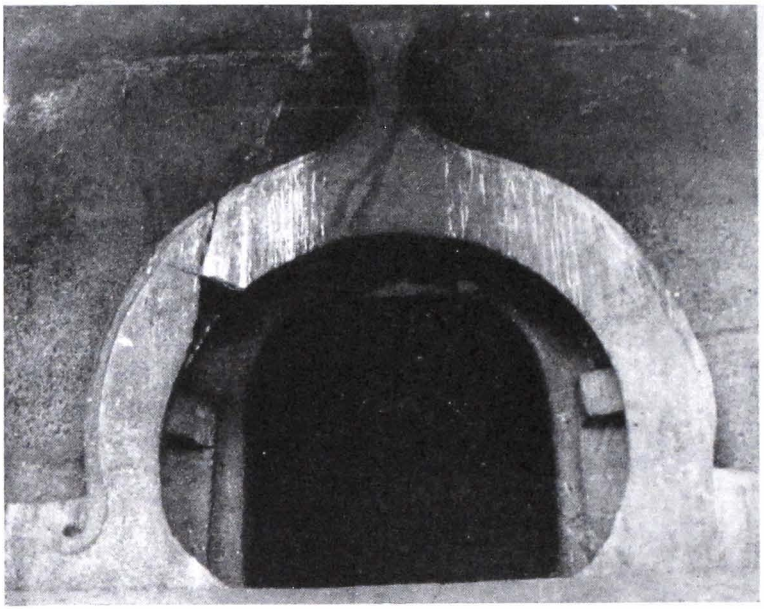
64. Junnar–Tuljalena : Caves 15-16, The facade decoration.



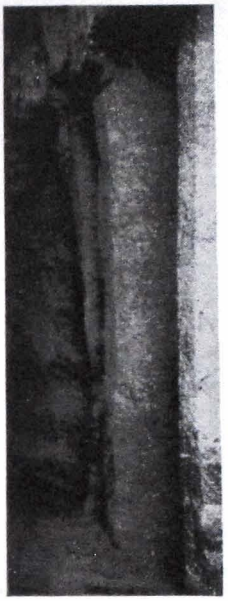
65. Junnar-Manmodi : Caves 1–3, General view.



66. Junnar-Manmodi : Cave 26, Front view.



67. Junnar–Manmodi : Cave 26, The chaitya arch above the doorway in the front screen wall.



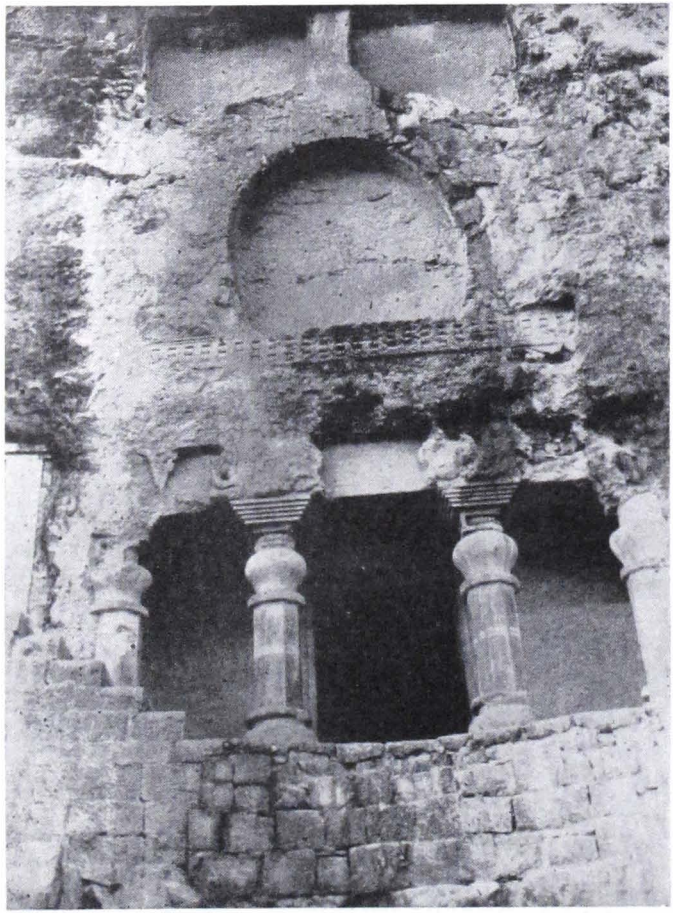
68. Junnar–Manmodi : Cave 26, Unfinished pillars.



69. Junnar–Manmodi : Cave 45, The decoration on the front wall of the line of cells.



70. Junnar-Manmodi : Cave 40, Front view.

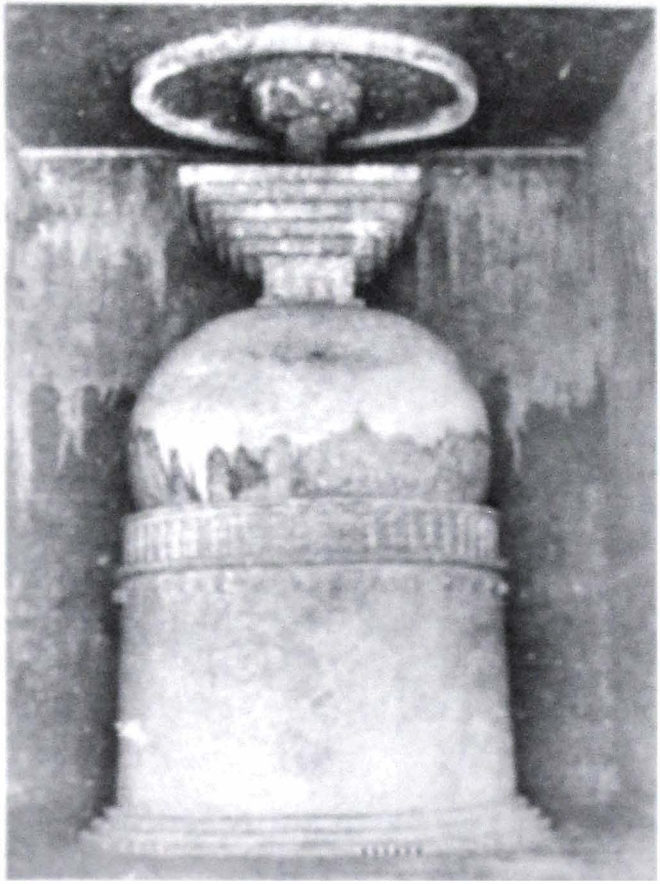


71. Junnar-Ganesh Pahar : Cave 6, Front view.

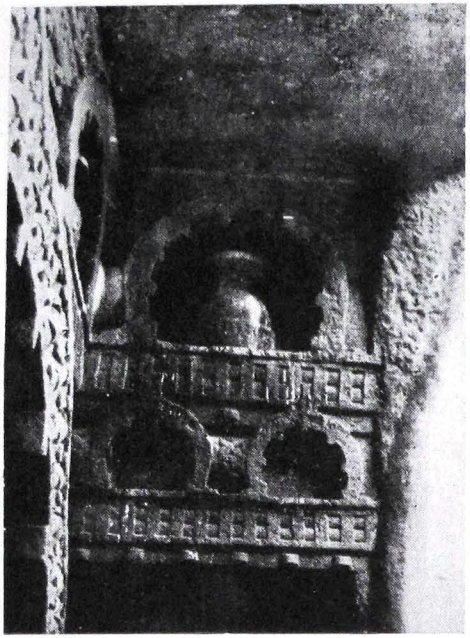


72. Junnar-Ganesh Pahar : Cave 6, Interior view.

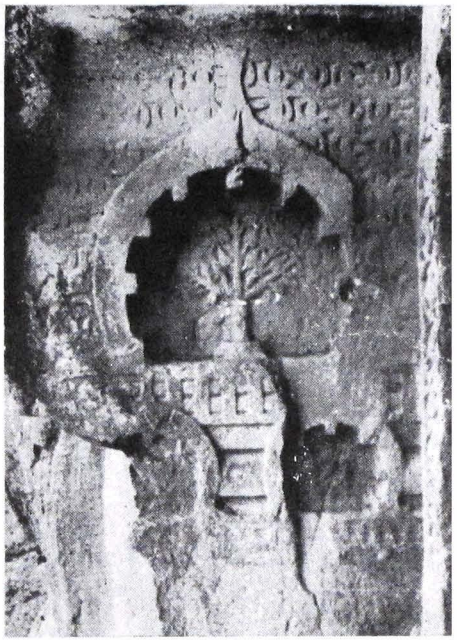




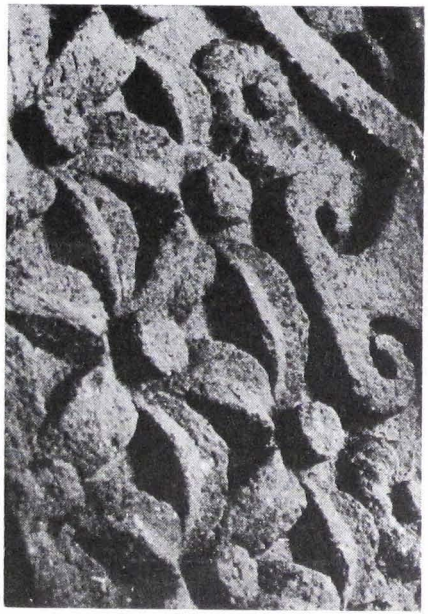




76. Junnar–Ganesh Pahar : Cave 34, Decoration on the right wall of the front alcove.



77. Junnar-Ganesh Pahar : Cave 34, Decoration on the left wall of the front alcove.



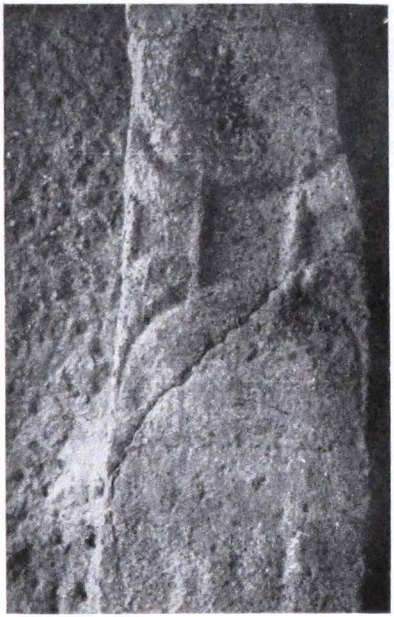
78. Junnar–Ganesh Pahar : Cave 34, Decoration on the main arch of the front screen wall.



79. Junnar–Ganesh Pahar : Cave 34, Triskelis decoration on the main arch of the front screen wall.



80. Junnar–Sivaneri : Cave 19, A stupa in relief in a niche in the left wall of the verandah.



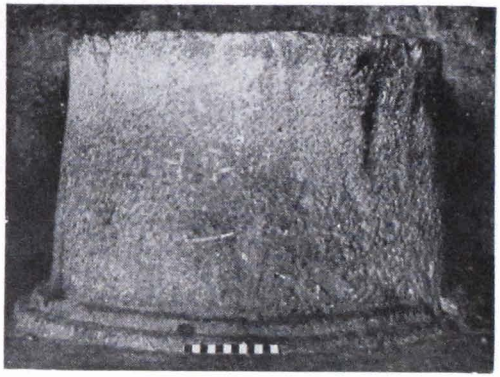
81. Junnar–Sivaneri : Cave 18, The hour-glass decoration on a pilaster at the entrance of the cave.



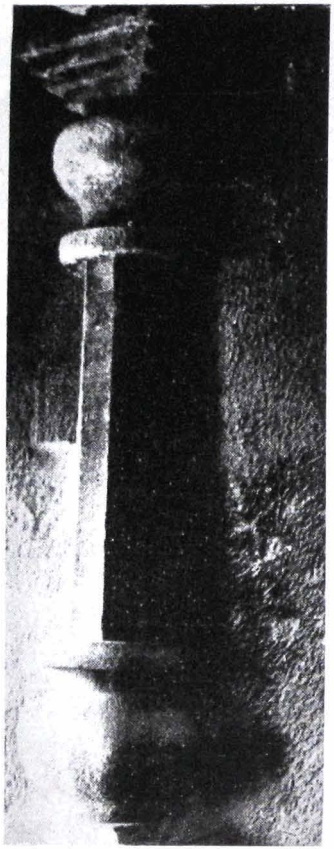
82. Junnar–Sivaneri : Cave 2, The pillars in front of the verandah.



83. Junnar–Sivaneri : Cave 33, A stupa cut in relief in a niche in the left wall of the verandah.



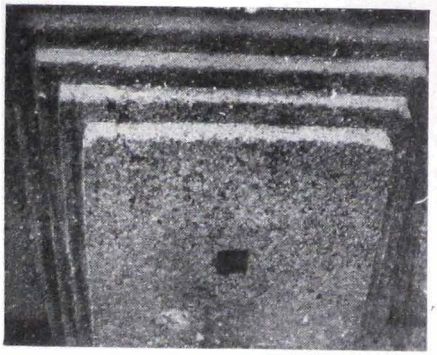
84. Junnar-Sivaneri : Cave 2, The ruined stupa inside the chaitya hall.



85. Junnar–Sivaneri : Cave 43, An attached pillar inside the chaitya hall.



86. Junnar-Sivaneri : Cave 42, A stupa cut in relief in a niche in the back wall of the hall right opposite the front entrance.



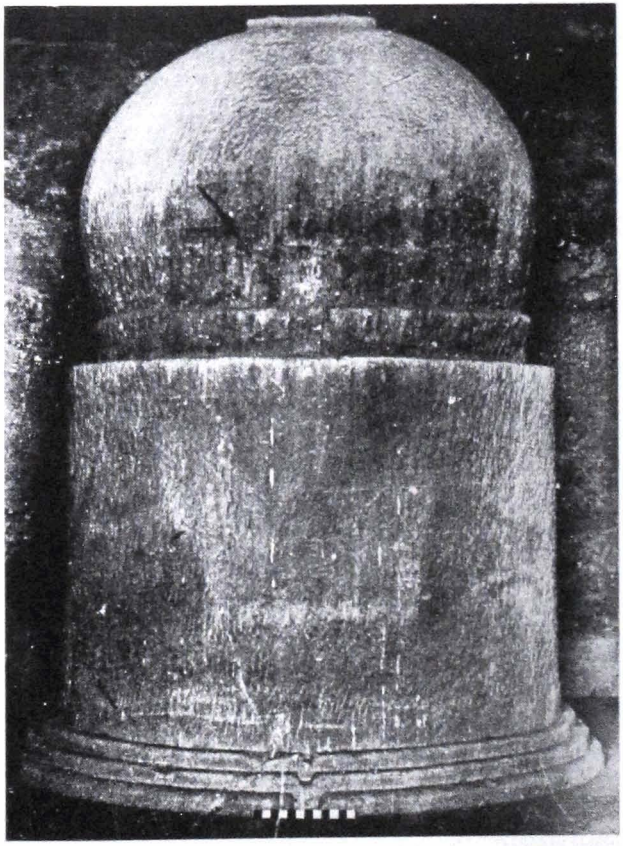
87. Junnar-Sivaneri : Cave 49, A stepped capital of a pillar hanging from the roof in front of the verandah.



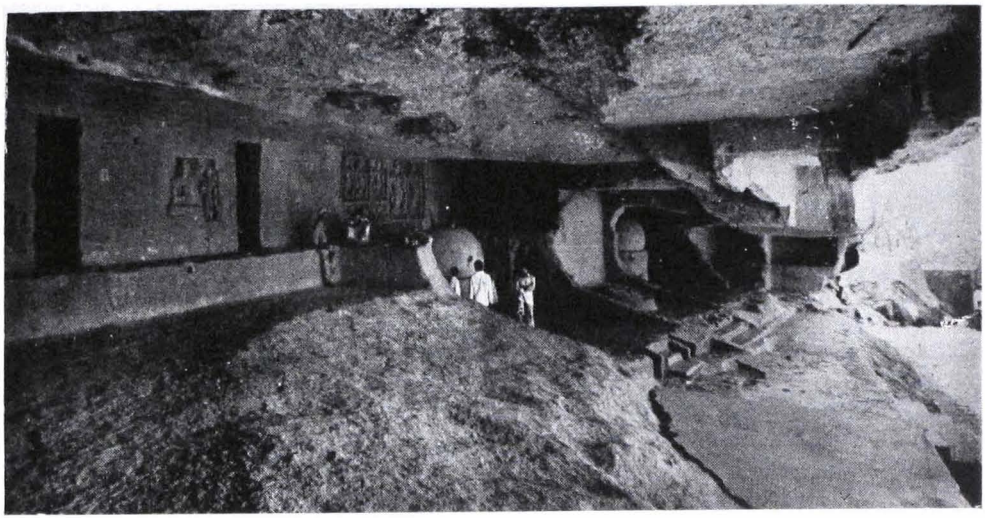
88. Junnar–Sivaneri : Cave 66, Part of a pot-capital of the side pillar in front of the verandah.



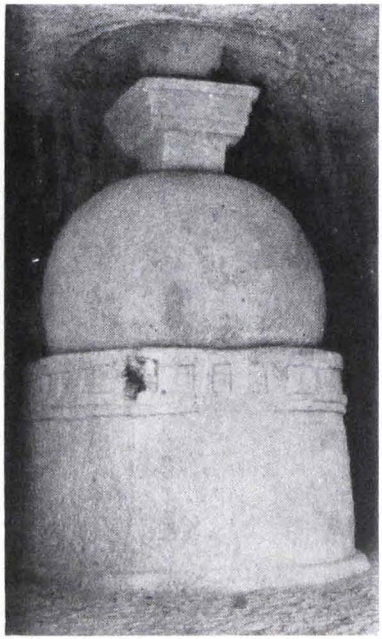
89. Junnar–Sivaneri : Cave 43, The stupa inside the chaitya hall.



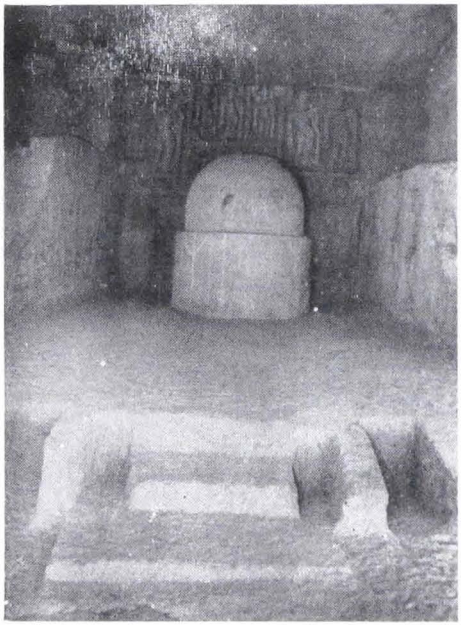
90. Junnar–Sivaneri : Cave 66, The stupa inside the chaitya hall.



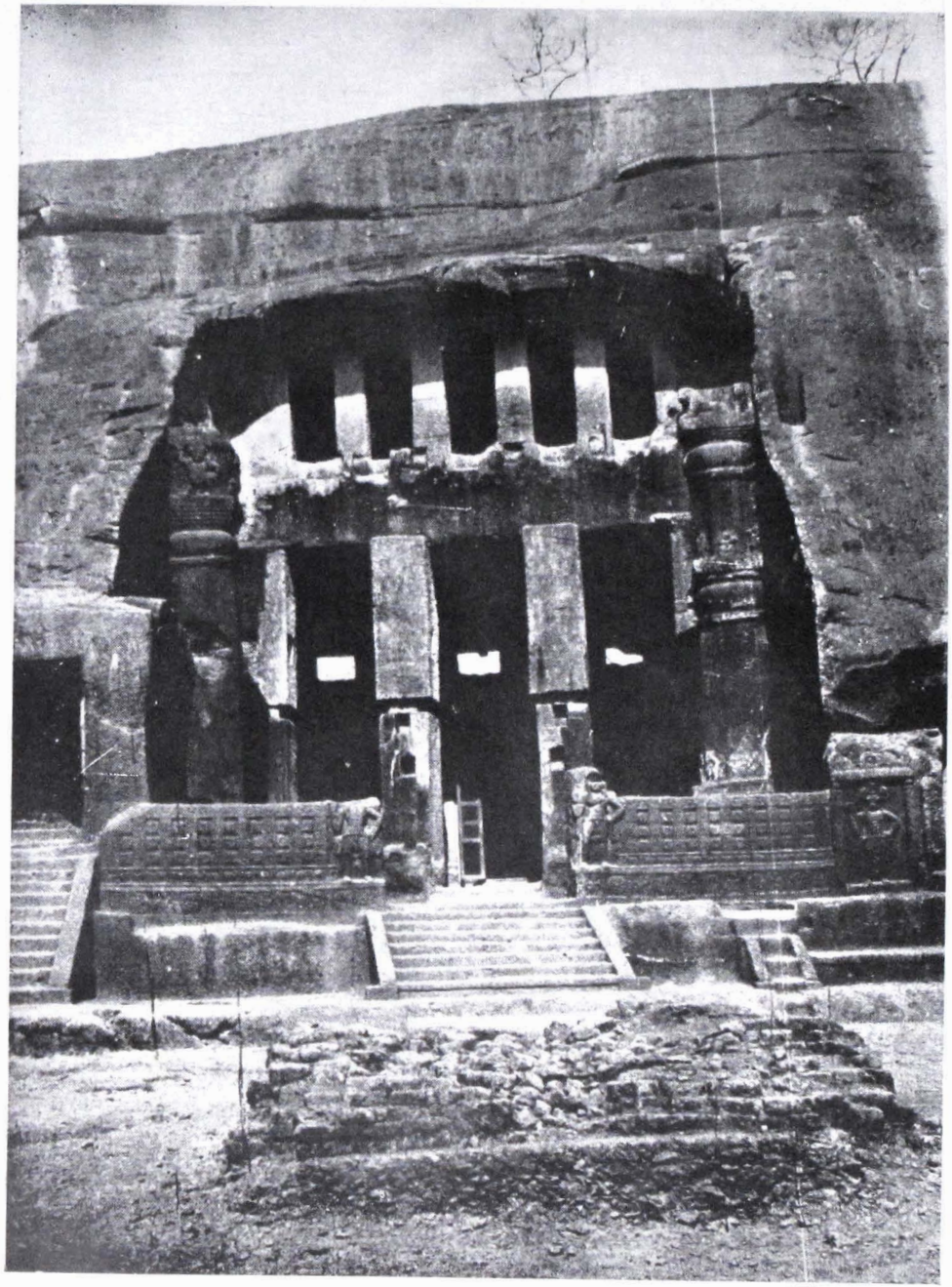
91. Kanheri : Cave 2, General view.



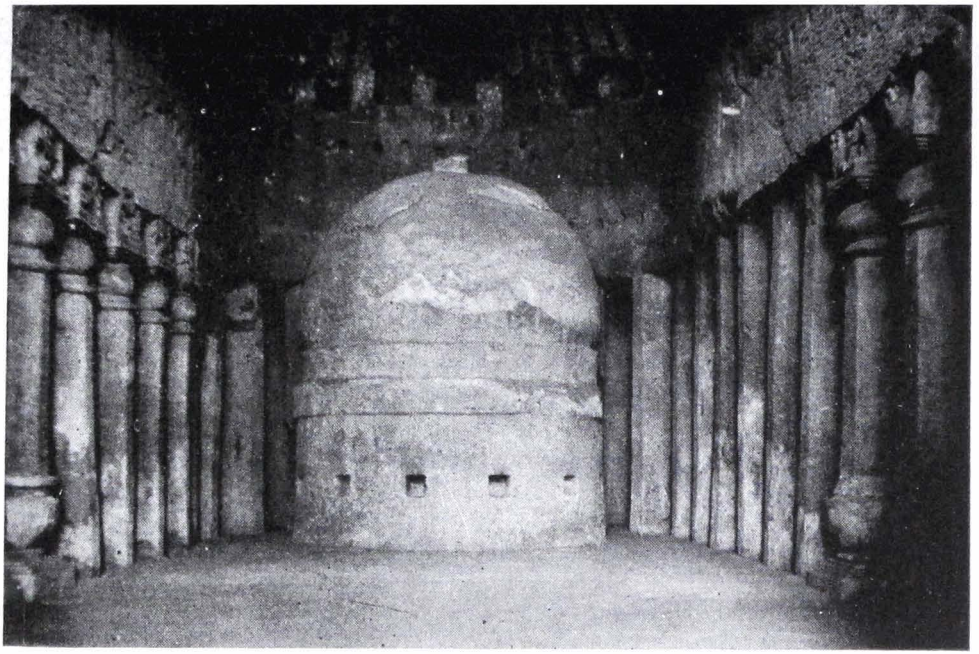
92. Kanheri : Cave 2c, The stupa inside.



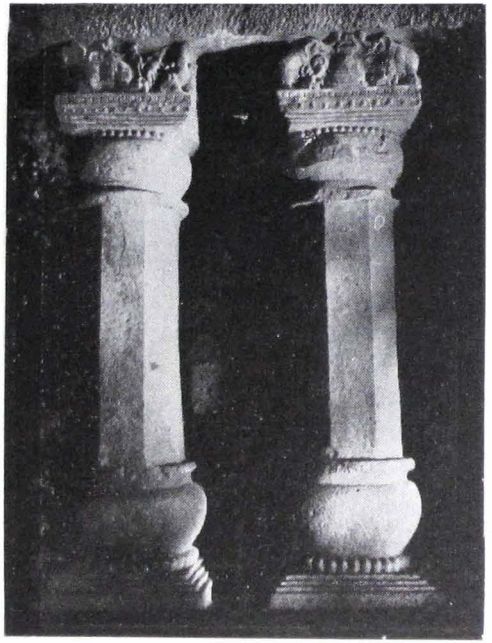
93. Kanheri : Cave 2e, The stupa inside.



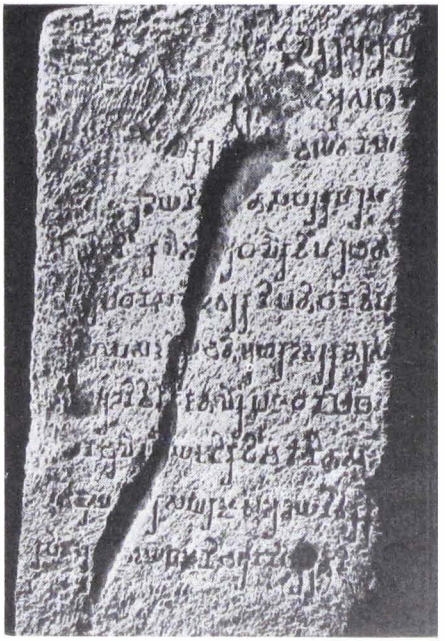
94. Kanheri : Cave 3, General view.



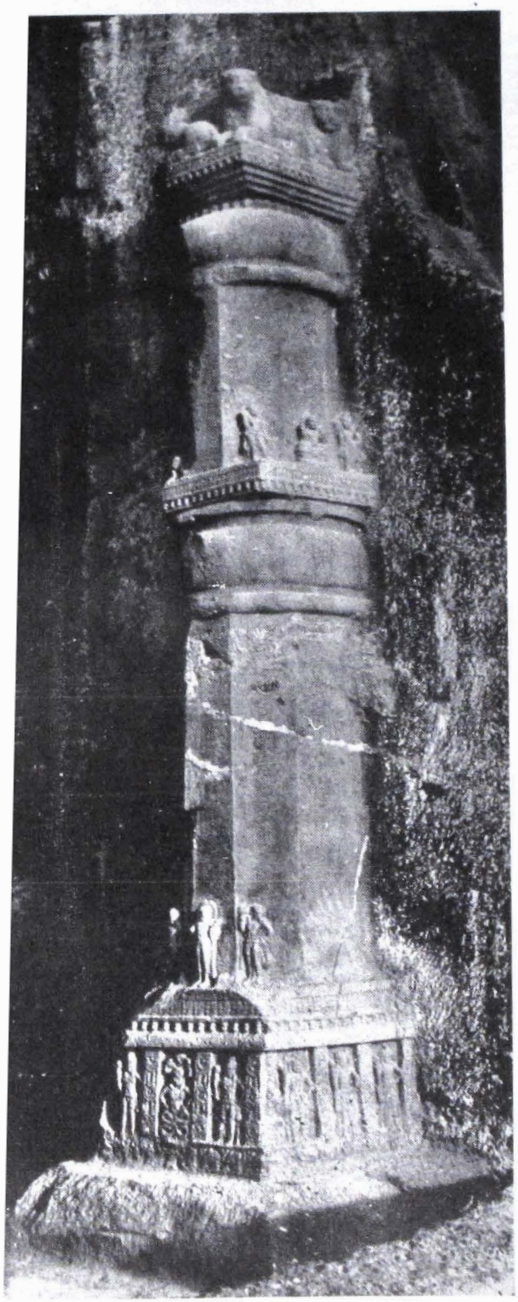
95. Kanheri : Cave 3, Interior view.



96. Kanheri : Cave 3, Details of two of the pillars in the hall (Note the stupa sculpture on one of the pillars.)



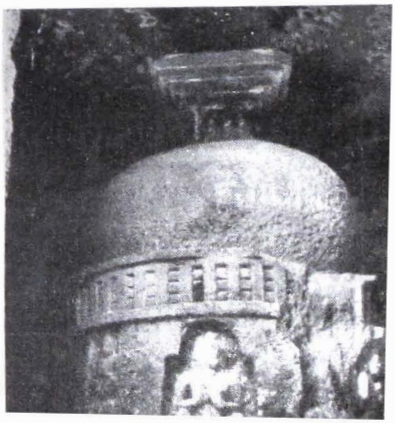
97. Kanheri : Cave 3, Inscription No. 5, on a pillar of the front screen.

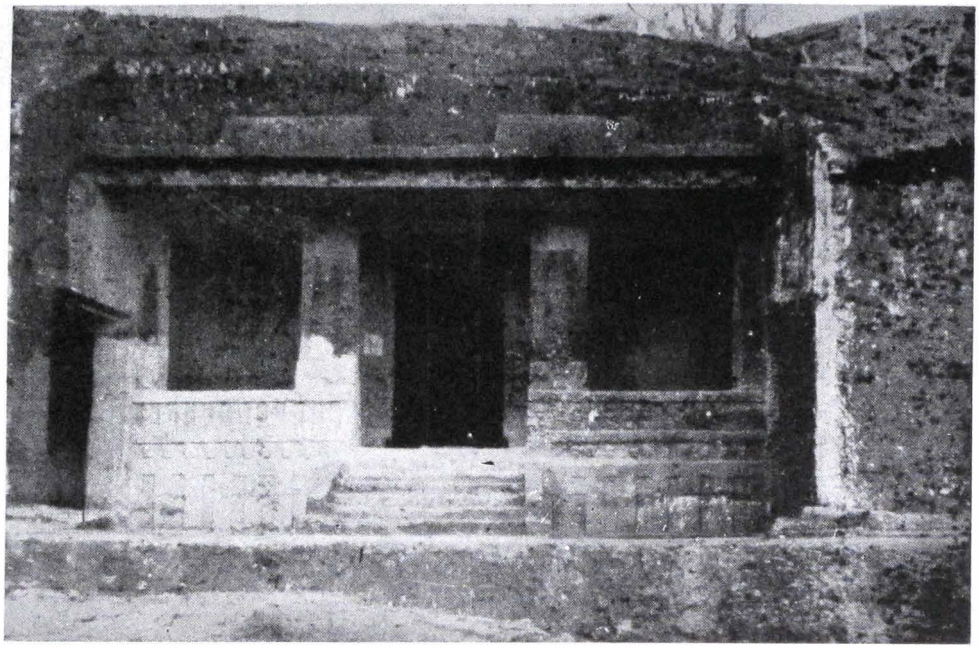


98. Kanheri : Cave 3, Lion pillar at the south wall of the forecourt.

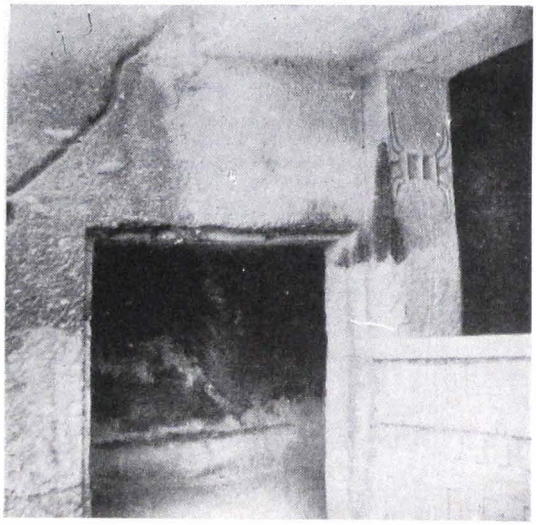


99. Kanheri : Cave 3, Capital of the pillar at the north wall of the forecourt.

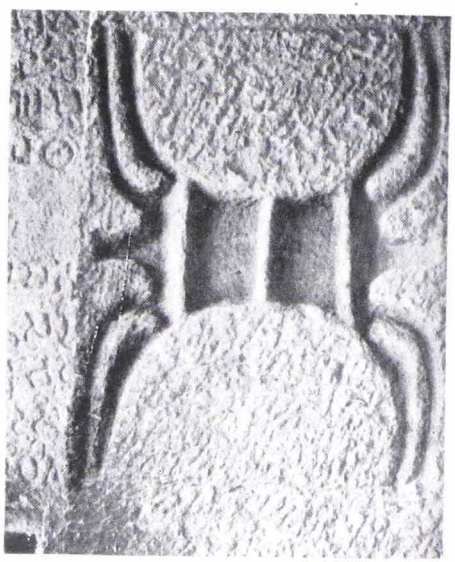




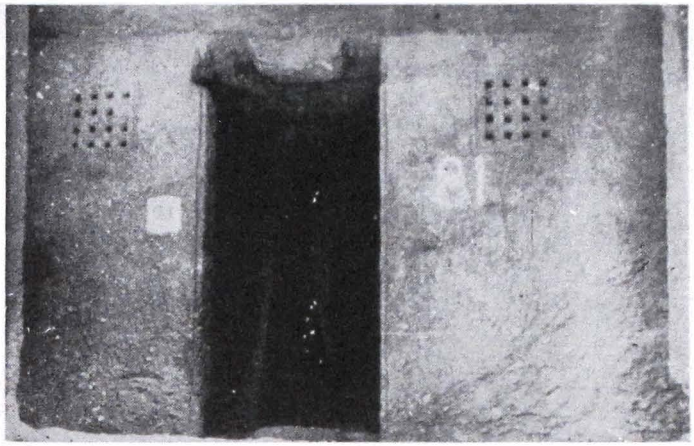
100. Kanheri : Cave 32, General view.



101. Kanheri : Cave 32, Left wall in front showing the hour-glass decoration on the pilaster. (Note the groove on the wall meant for arranging the pavada).



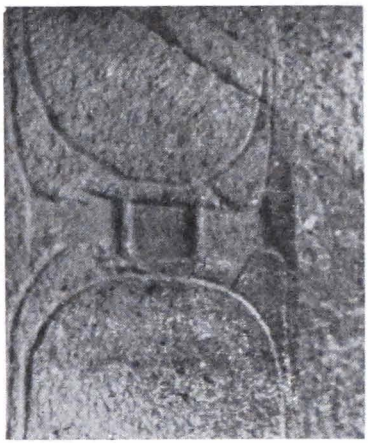
102. Kanheri : Cave 32, The hour-glass decoration on the left pilaster.



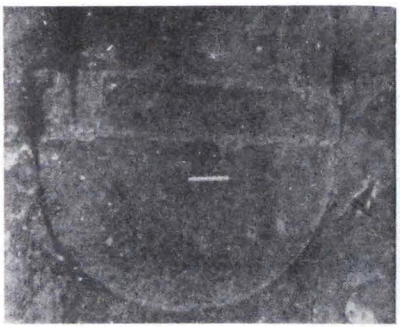
102a. Kanheri : Cave 21, Doorway of the hall and the grated windows.



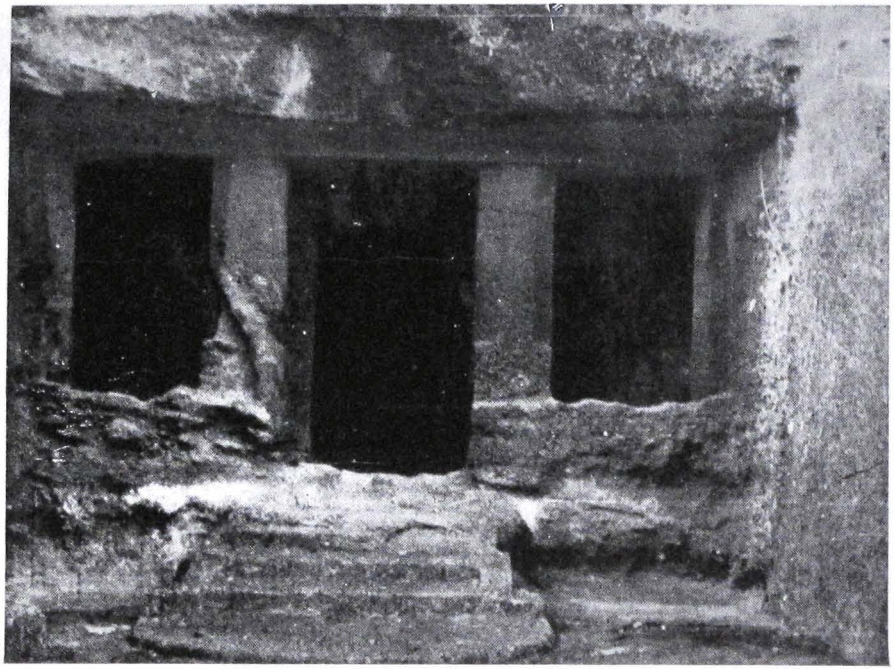
103. Kanheri : Cave 36, The stupa inside.



104. Kanheri : Cave 49, The hour-glass decoration on the pilaster.



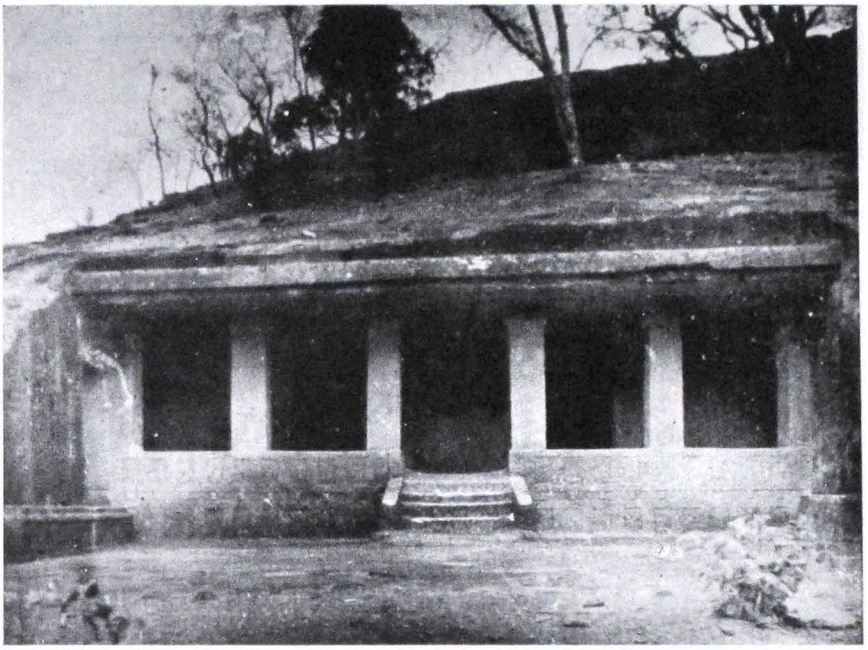
105. Kanheri : Cave 49, The chandrasila in front.



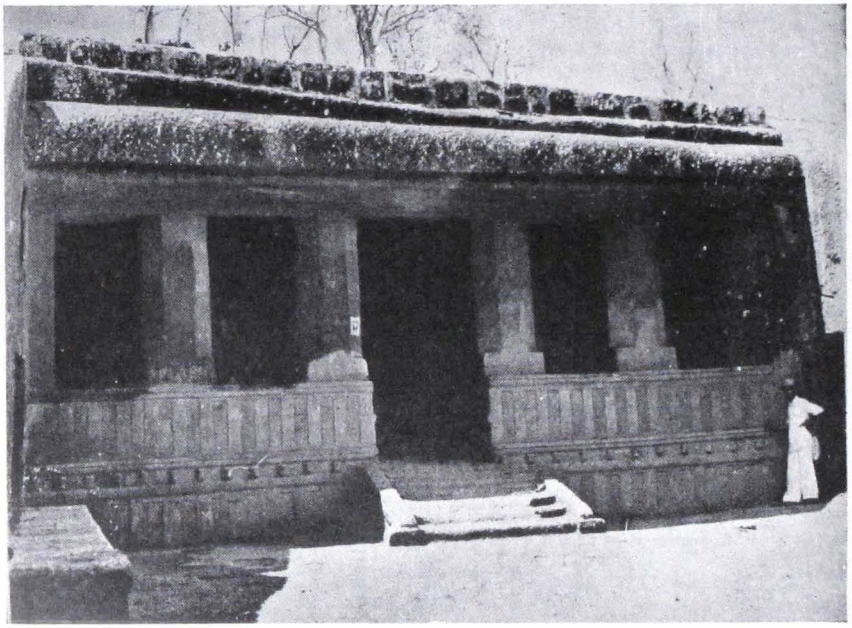
106. Kanheri : Cave 49, General view.



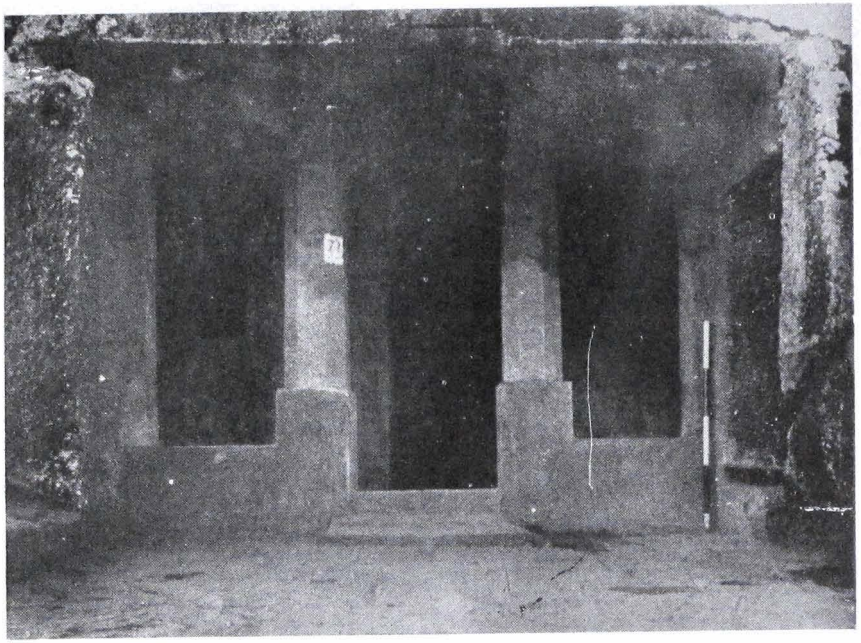
107. Kanheri : Cave 50, General view.



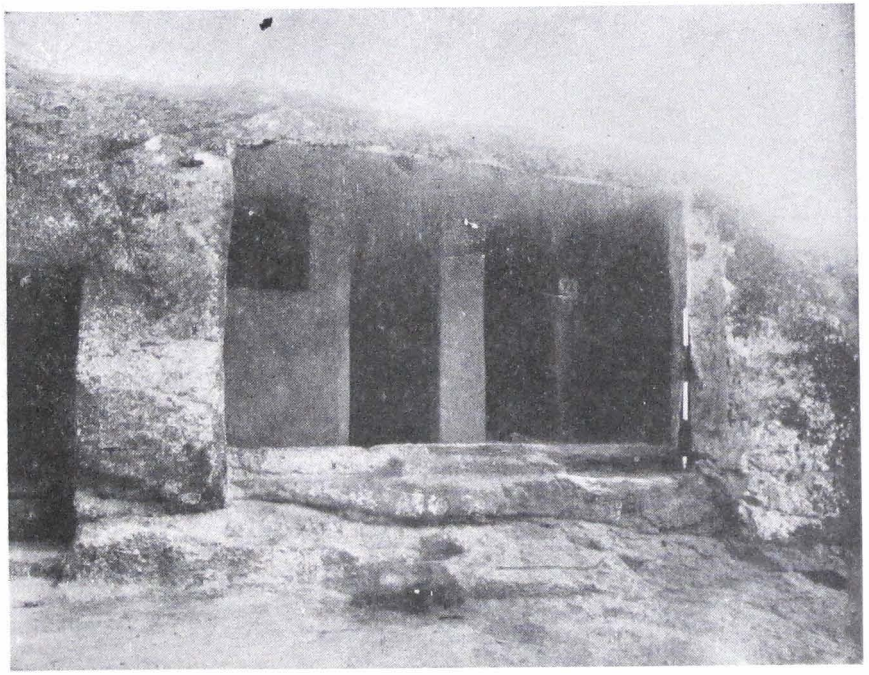
108. Kanheri : Cave 53, General view.



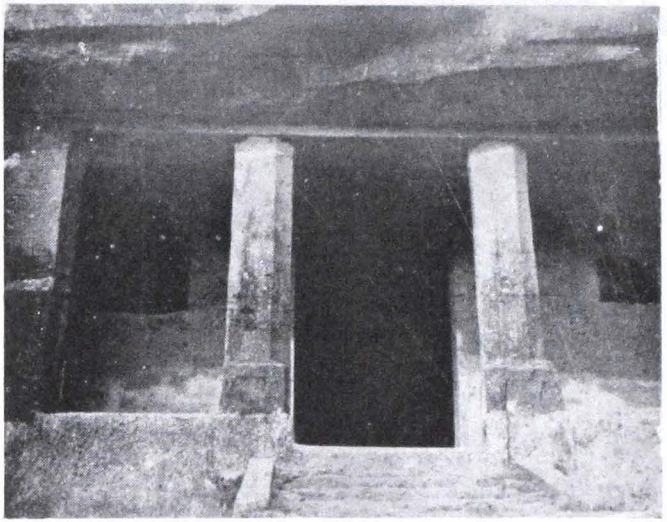
109. Kanheri : Cave 67, General view.



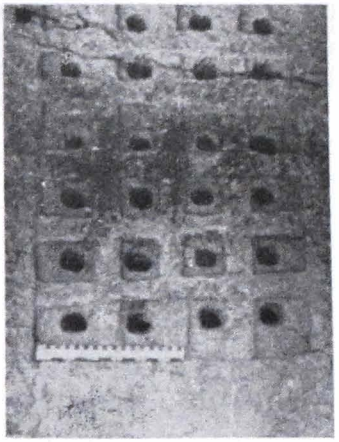
110. Kanheri : Cave 71, General view.



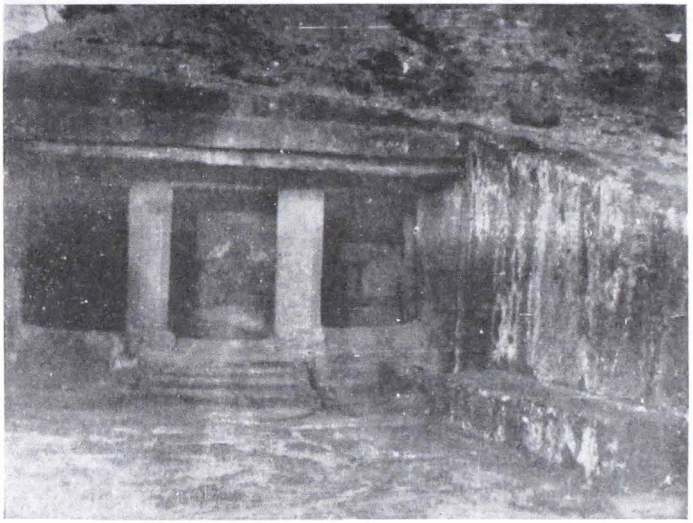
111. Kanheri : Cave 72, General view.



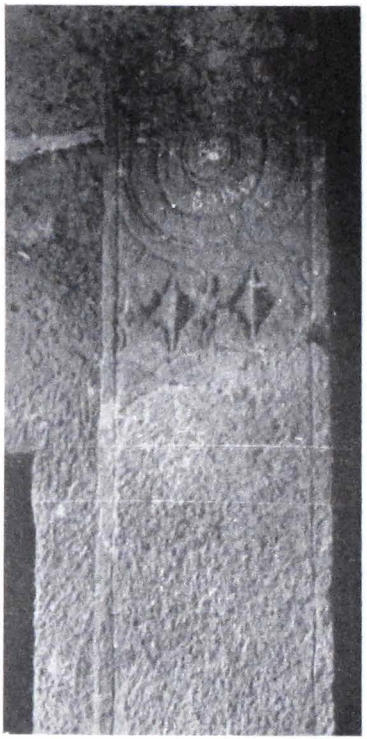
112. Kanheri : Cave 73, General view.



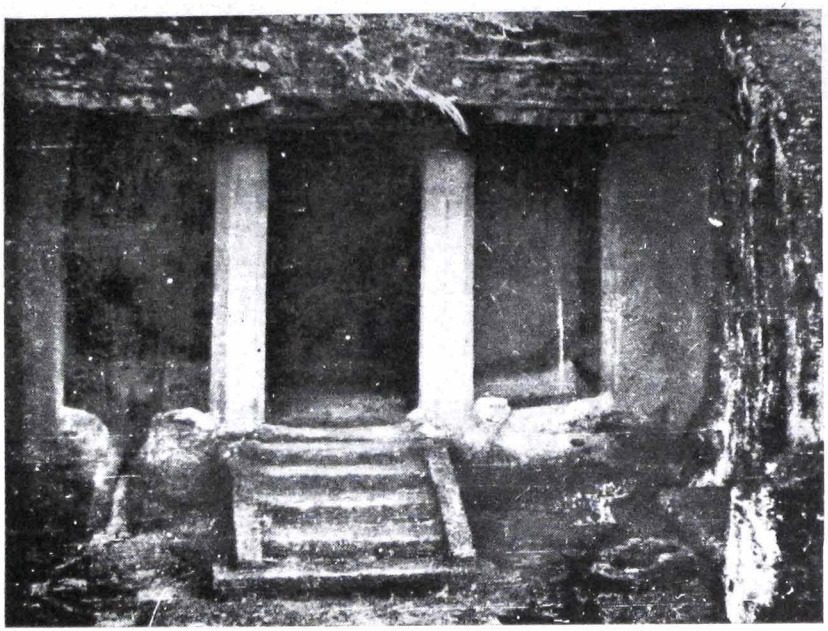
113. Kanheri : Cave 50, A grated window.



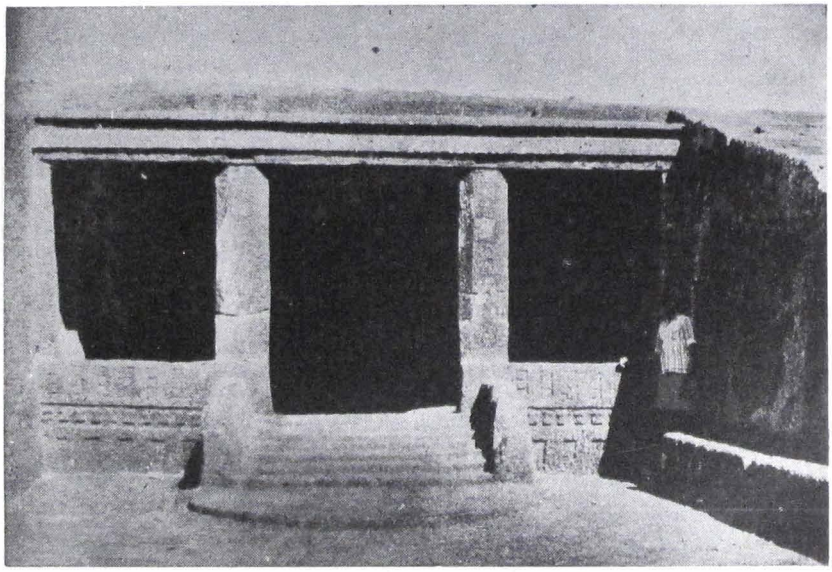
114. Kanheri : Cave 74, General view.



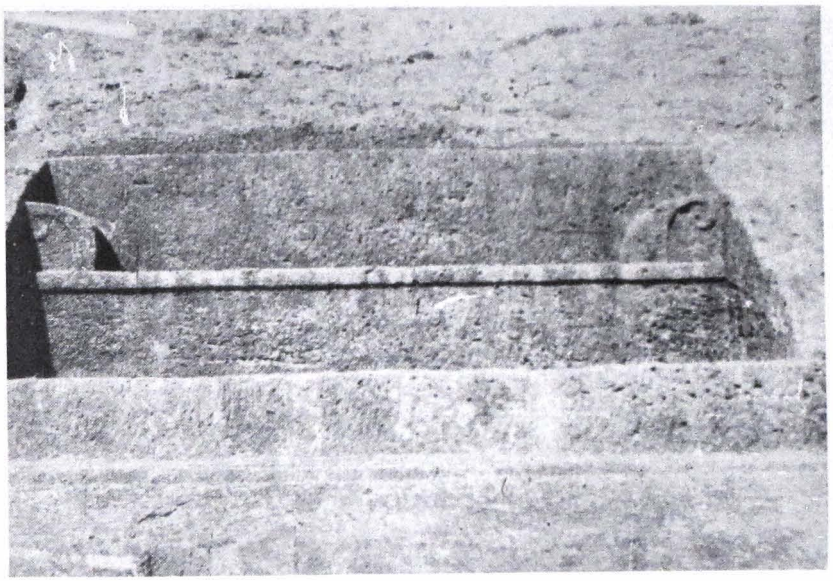
115. Kanheri: Cave 53, Ornamented pilaster in the verandah.



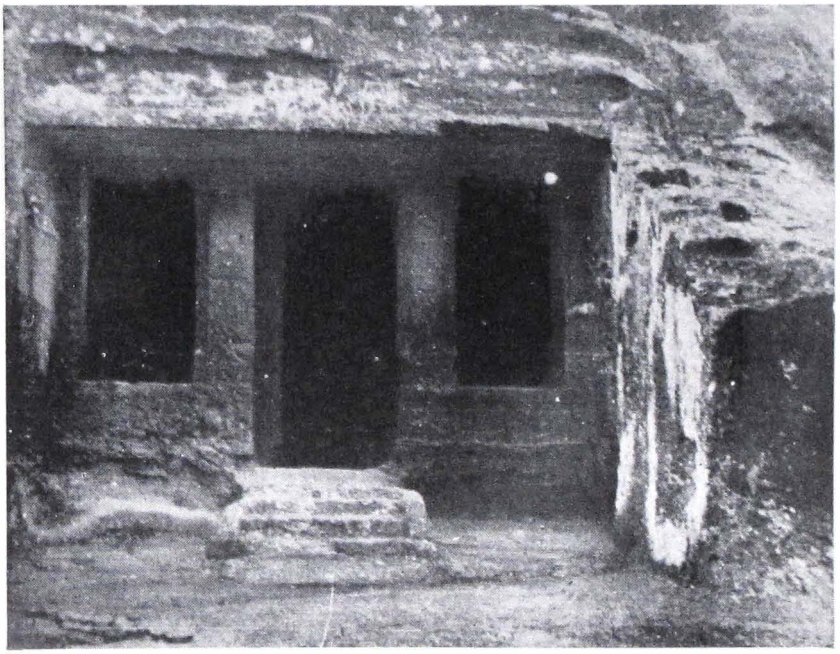
116. Kanheri : Cave 75, General view.



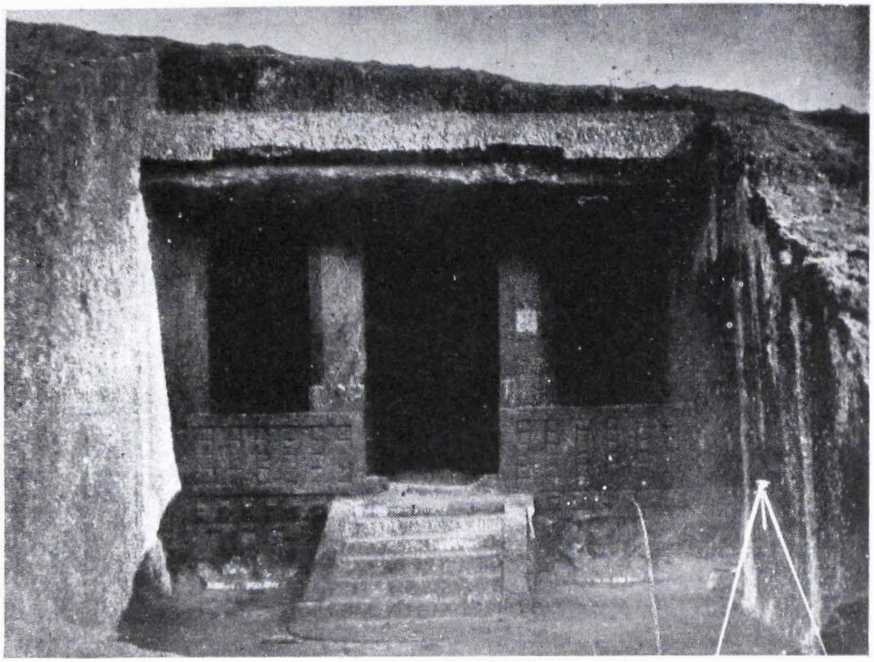
117. Kanheri : Cave 78, General view.



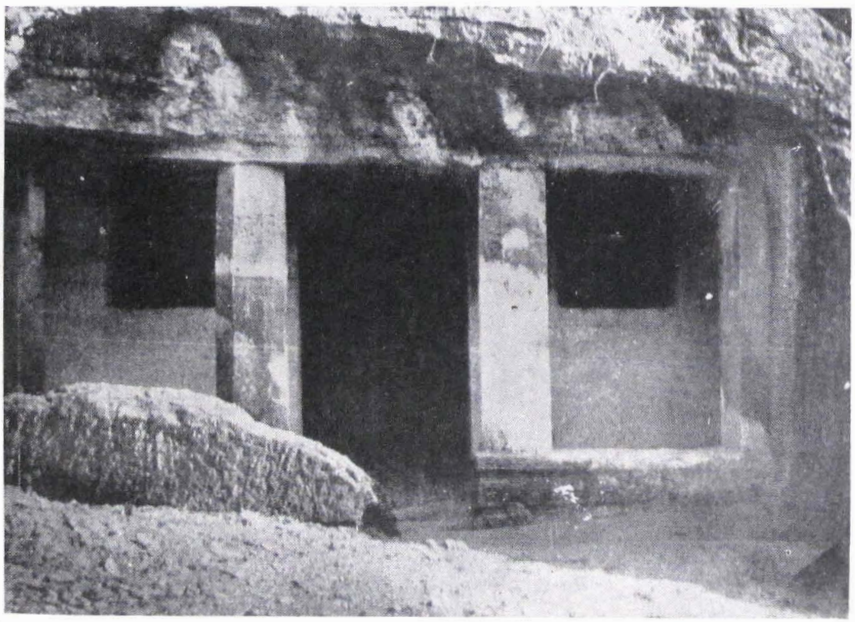
118. Kanheri : Excavation 81a.



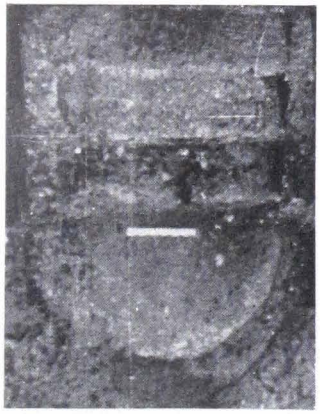
119. Kanheri : Cave 88, Front view.



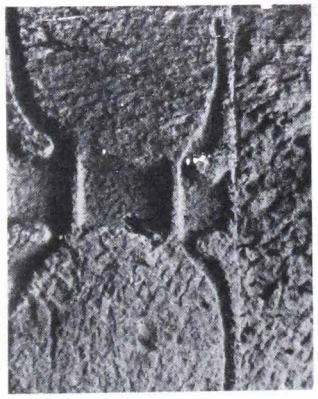
120. Kanheri : Cave 94, General view.



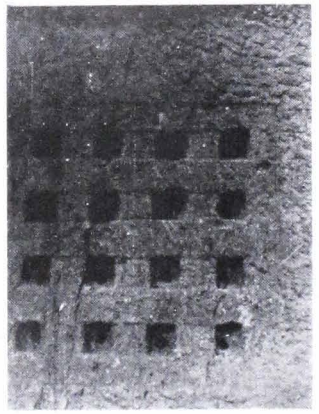
121. Kanheri : Cave 96, General view.



122. Kanheri : Cave 88, Chandrasila.



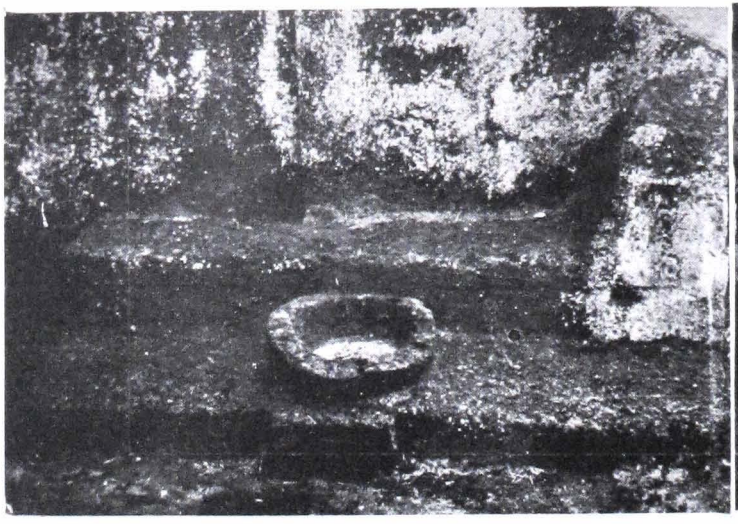
123. Kanheri : Cave 88, Hour-glass decoration on a verandah pilaster.



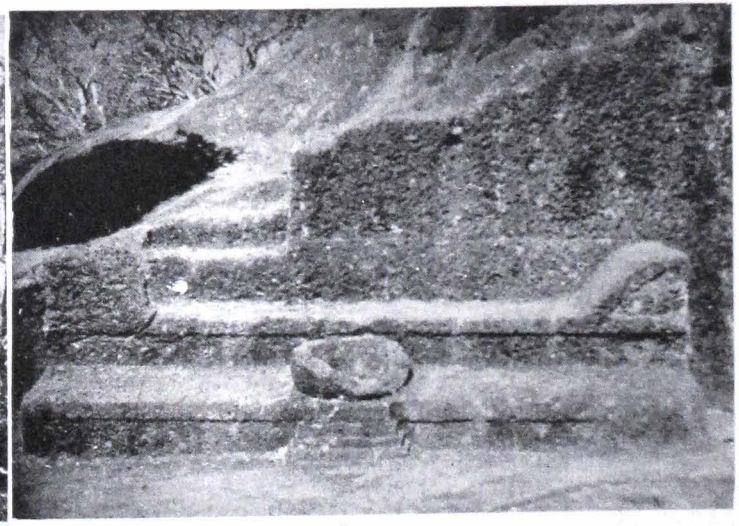
124. Kanheri : Cave 94, A grated window.



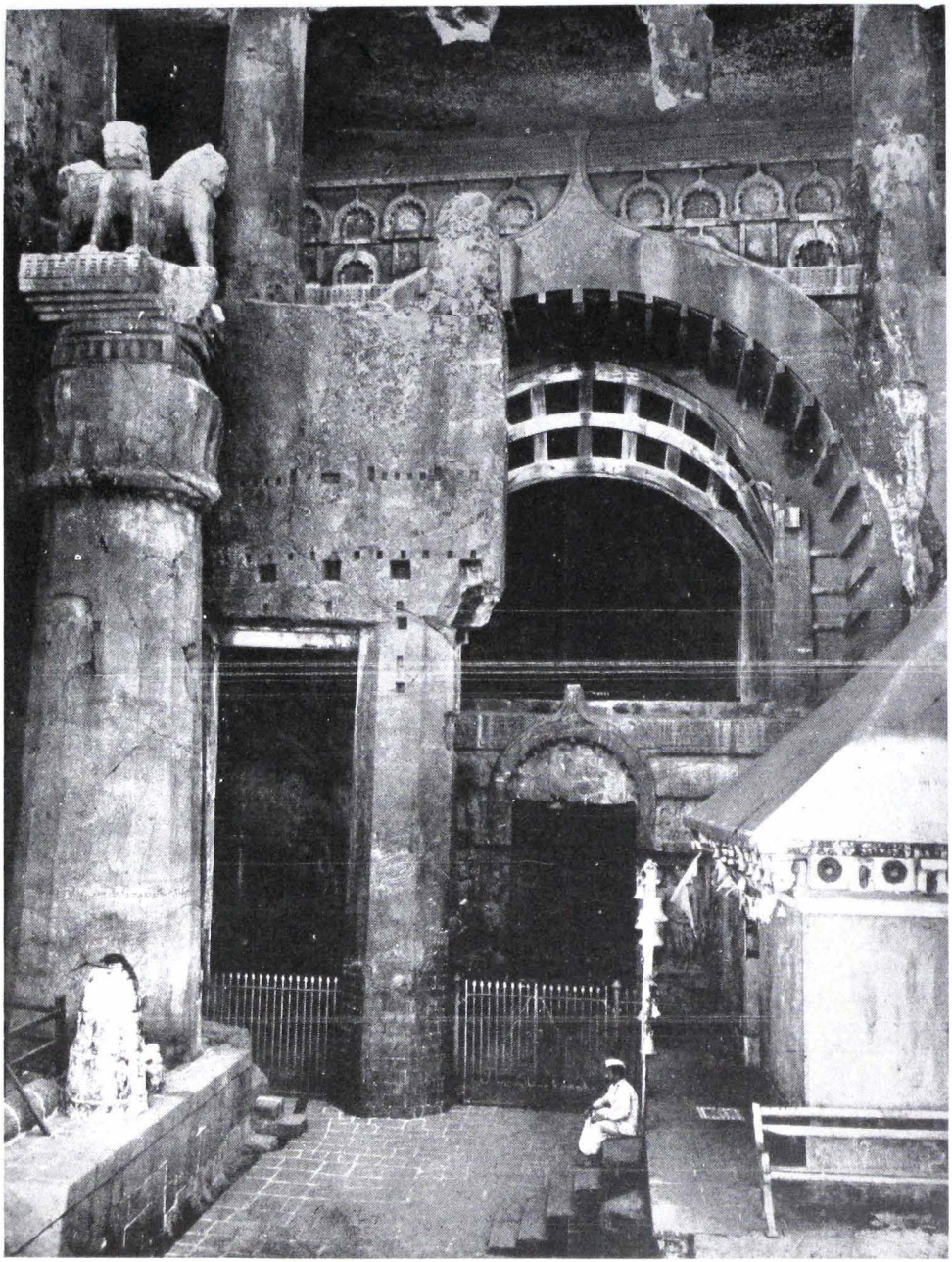
125. Kanheri : Cave 94, Hour-glass decoration on a verandah pilaster.



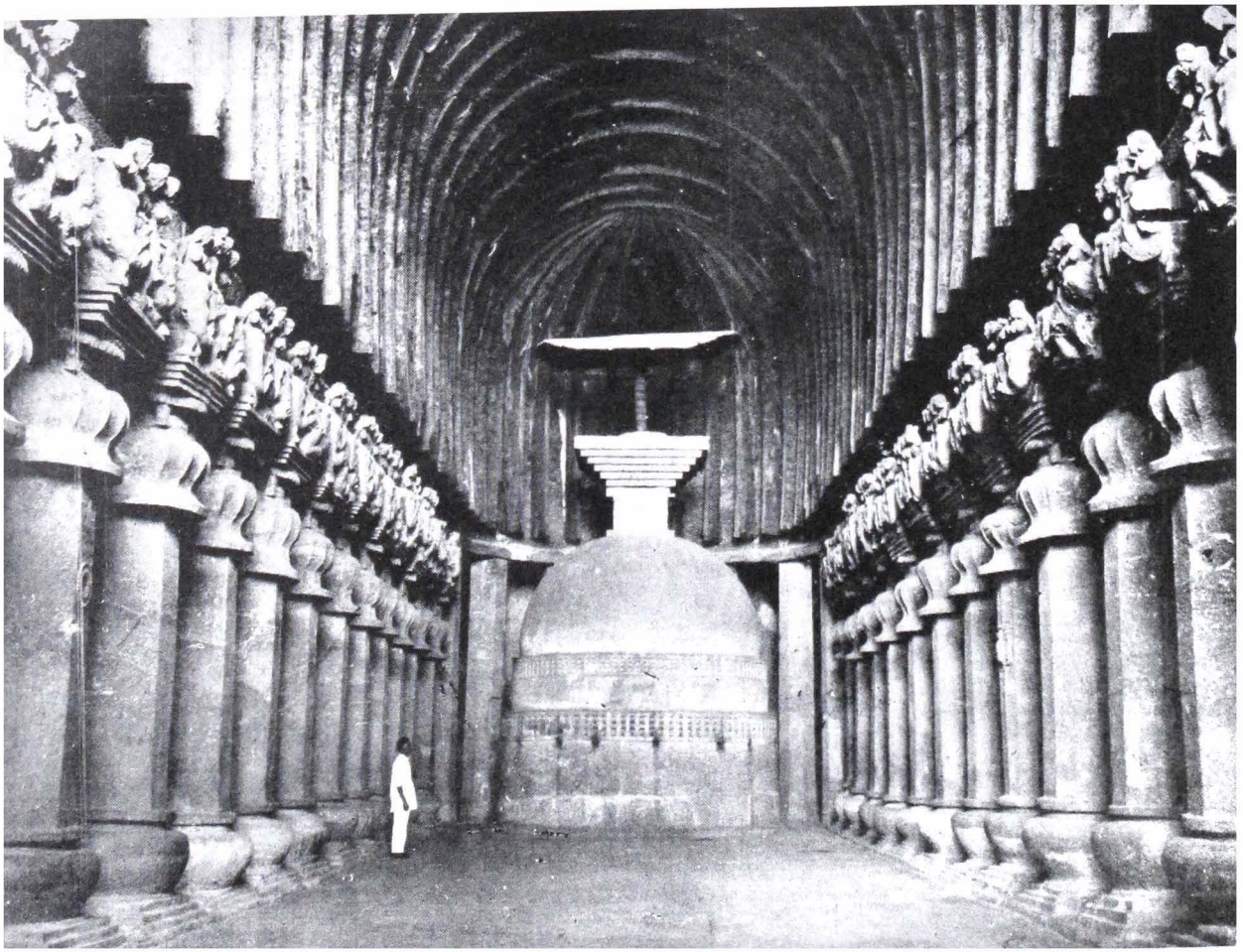
126. Kanheri : Cave 75, A view-seat in the forecourt.

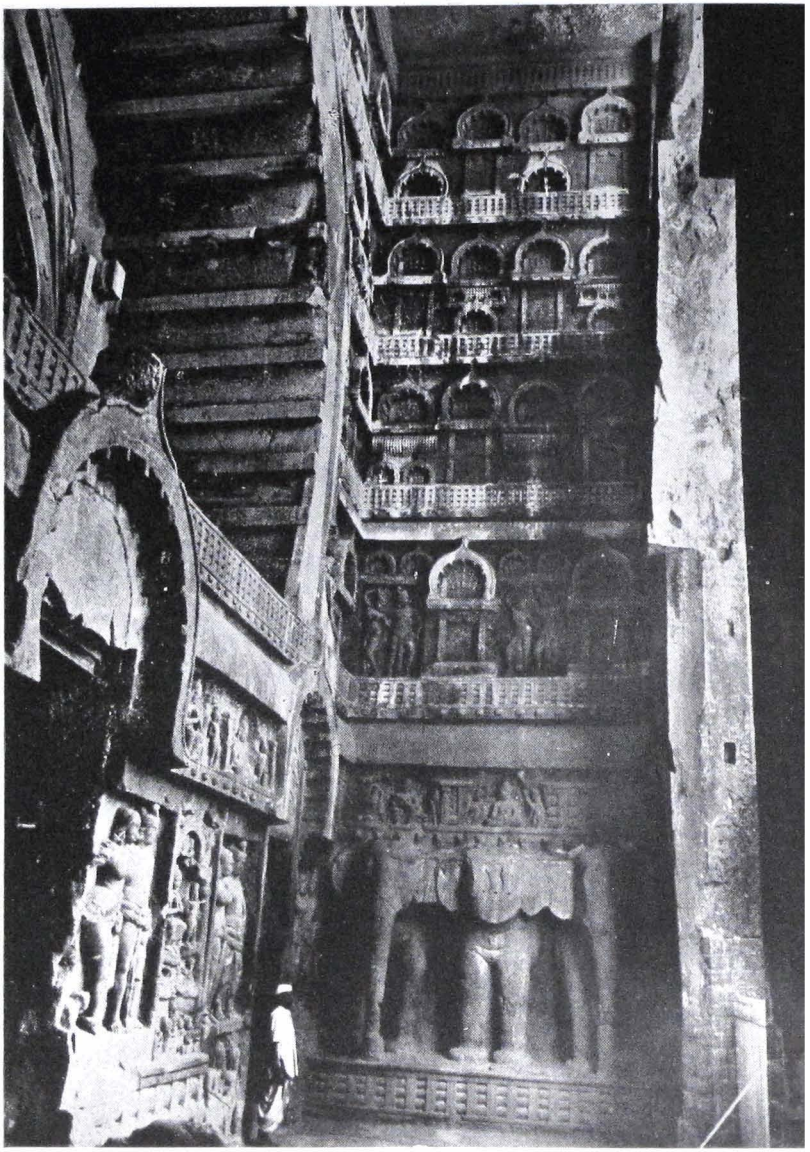


127. Kanheri : Cave 101, A view-seat by the side of the cave.

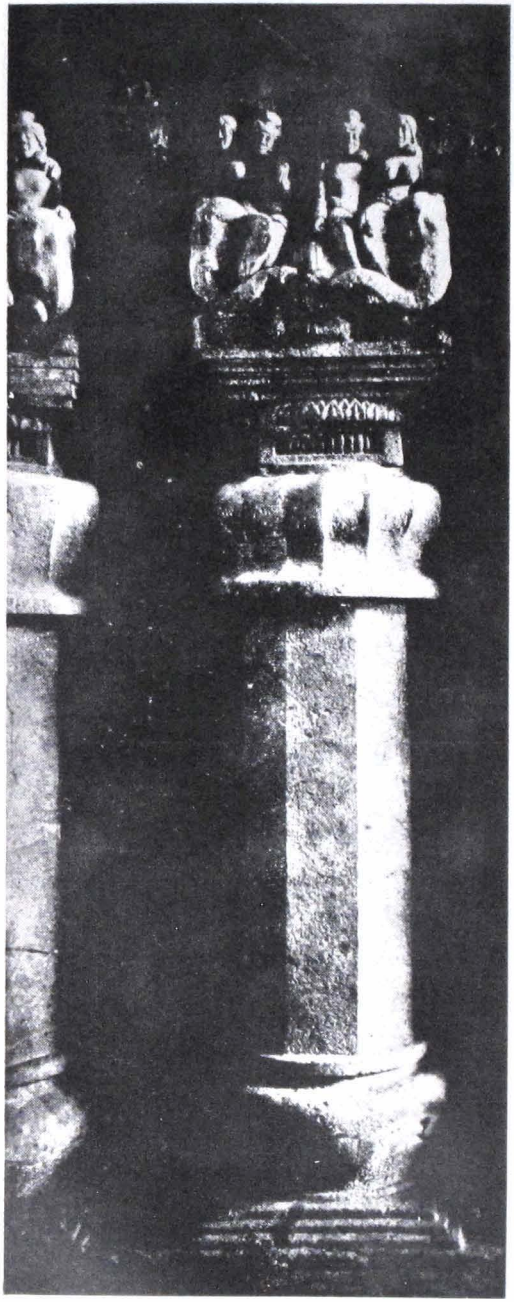


128. Karle : Cave 8, Front view.

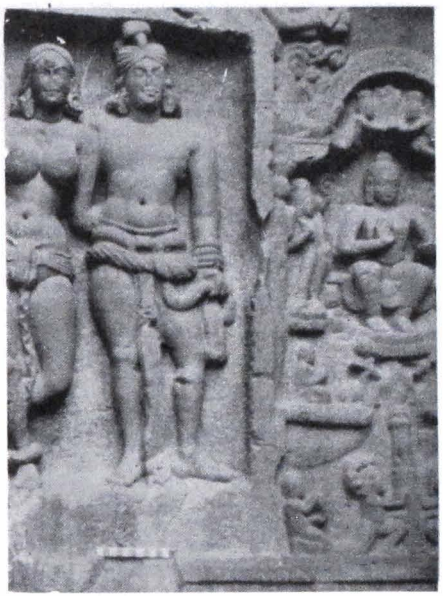




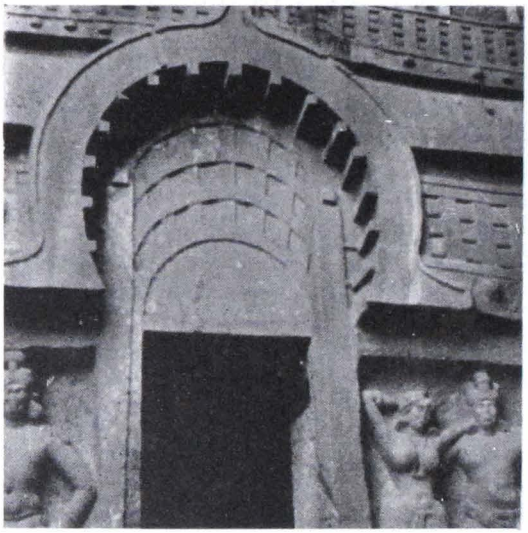
130. Karle : Cave 8, Sculptural decoration on the right wall of the verandah.



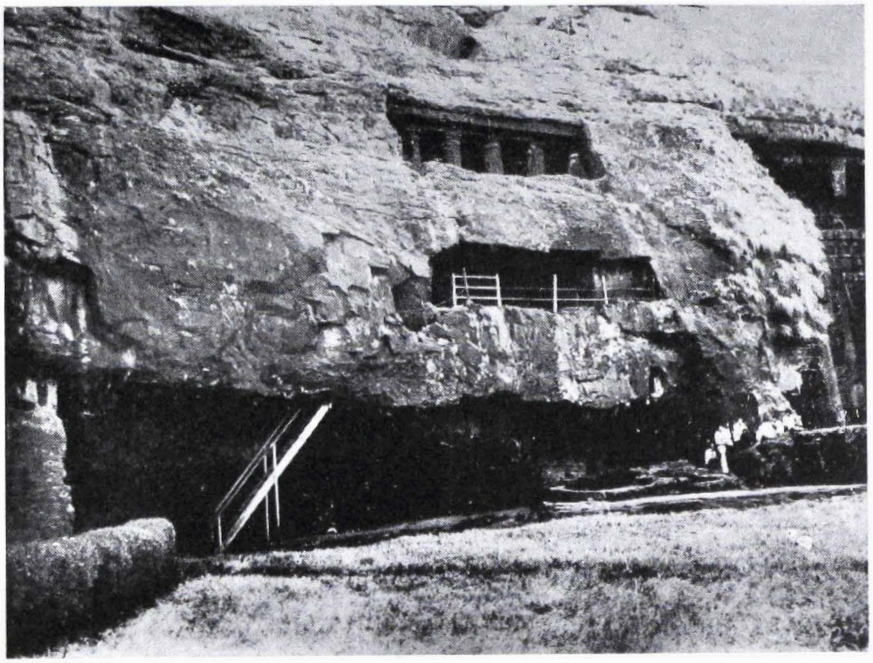
131. Karle : Cave 8, A pillar inside the hall.



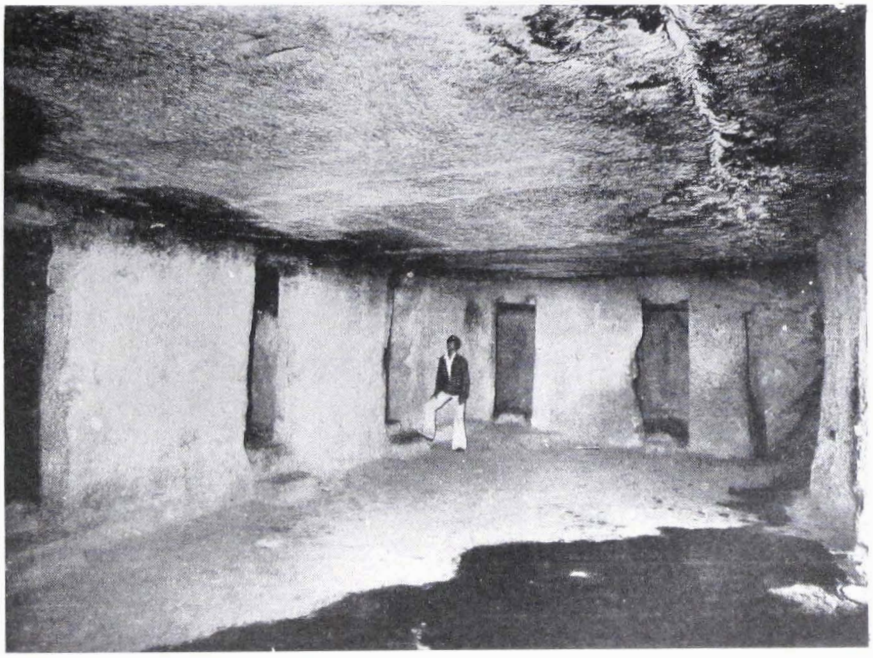
132. Karle : Cave 8, A mithuna panel on the inner screen wall.



133. Karle : Cave 8, The small doorway on the right side of the inner screen wall.



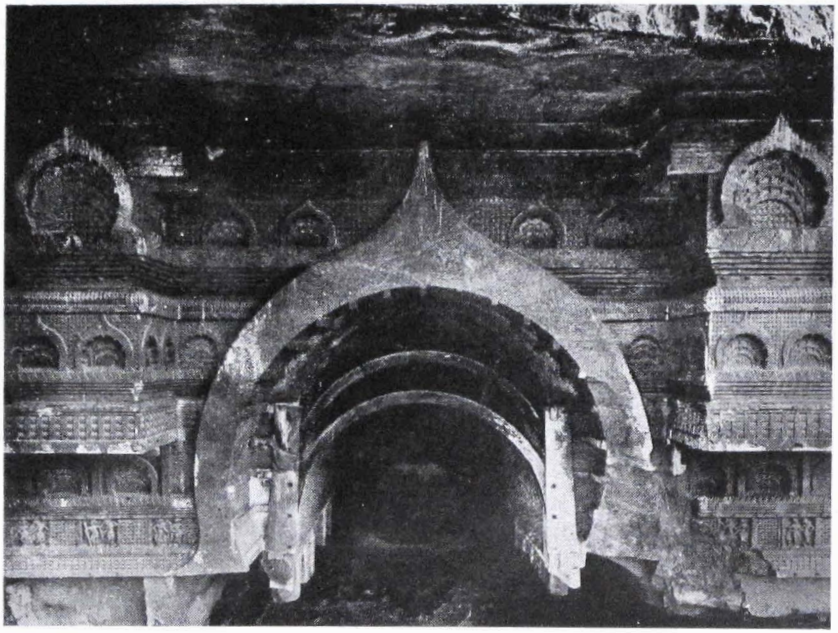
134. Karle : Caves 11–14, General view.



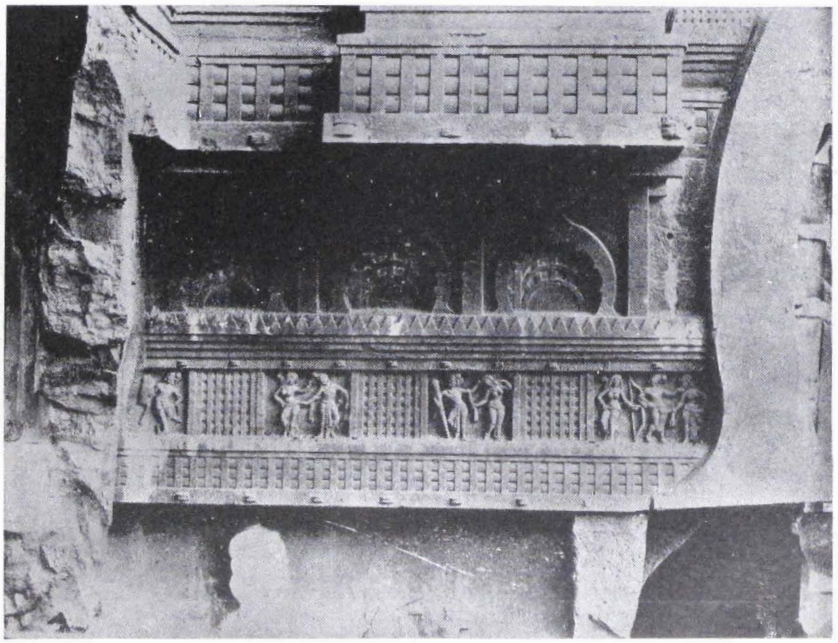
135. Karle : Cave 15, Interior view.



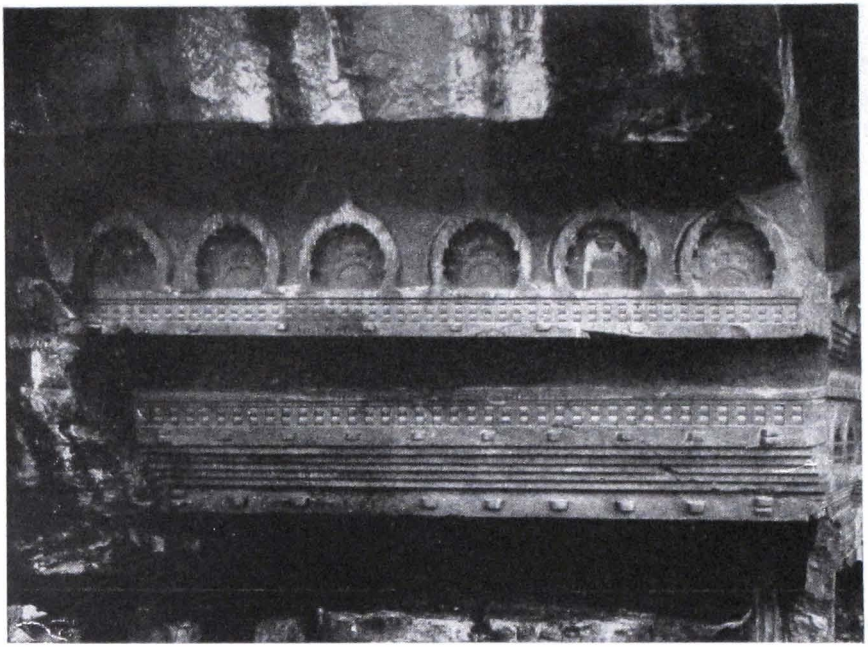
136. Kondane : Cave 1, General view.



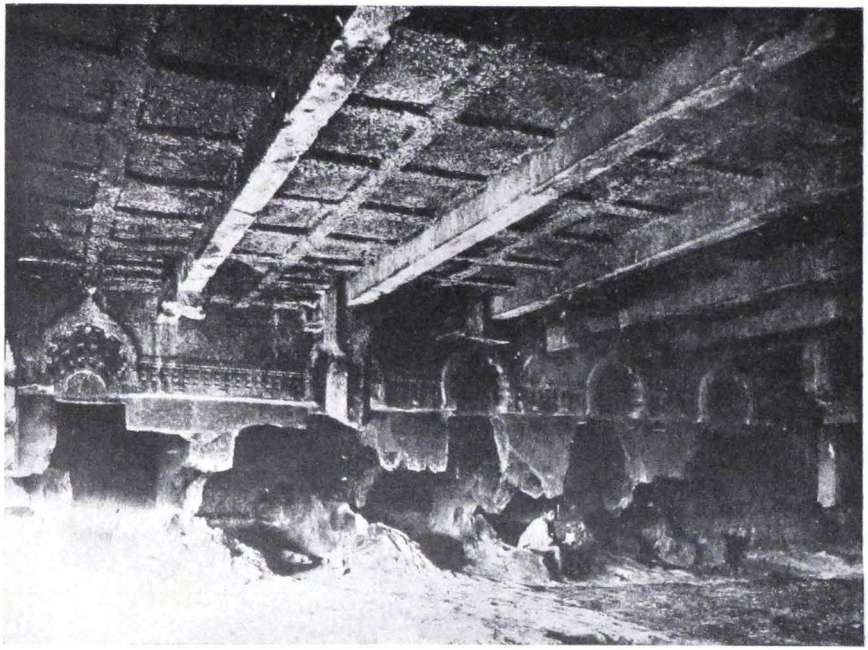
137. Kondane : Cave 1, The facade.



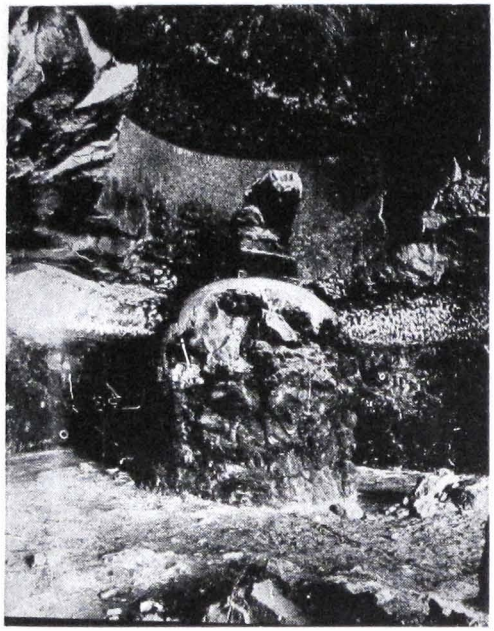
138. Kondane : Cave 1, Details of carving on the left side of the facade.



139. Kondane : Cave 2, Decoration on the upper part of the facade.



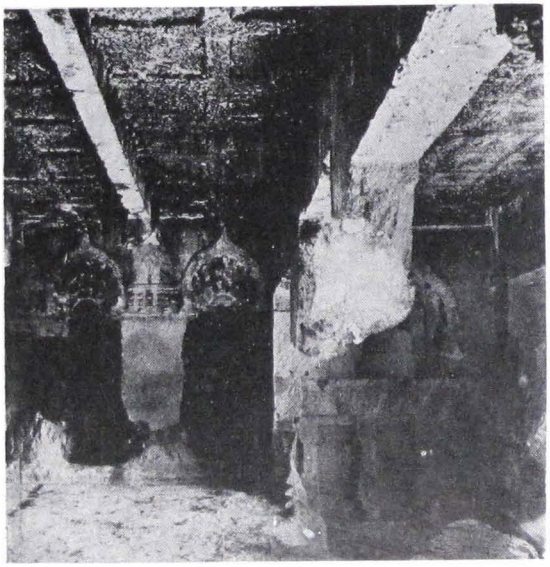
140. Kondane : Cave 2, Interior view.



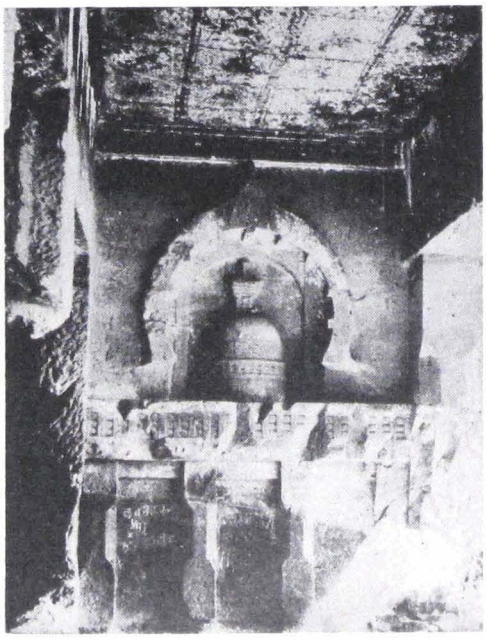
141. Kondane : Cave 1, The stupa inside.



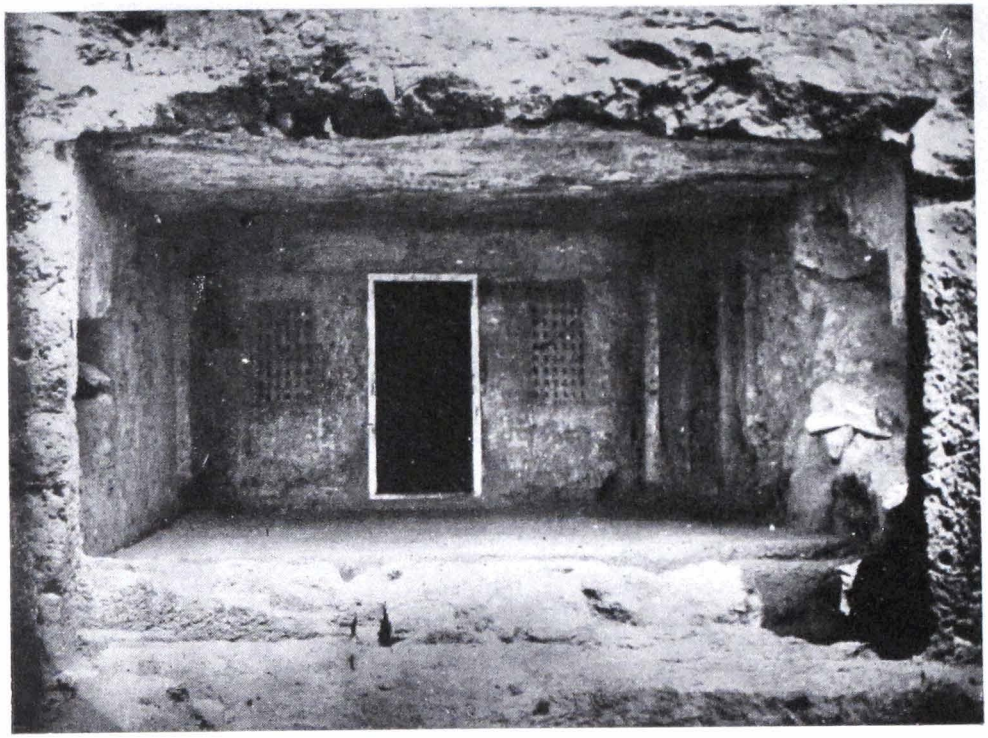
142. Kondane : Cave 1, A yaksi figure carved on the front wall.



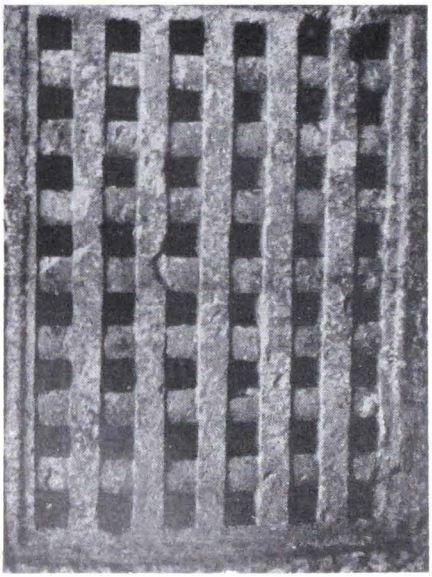
143. Kondane : Cave 2, Interior view showing the ceiling and the stupa on the right wall.



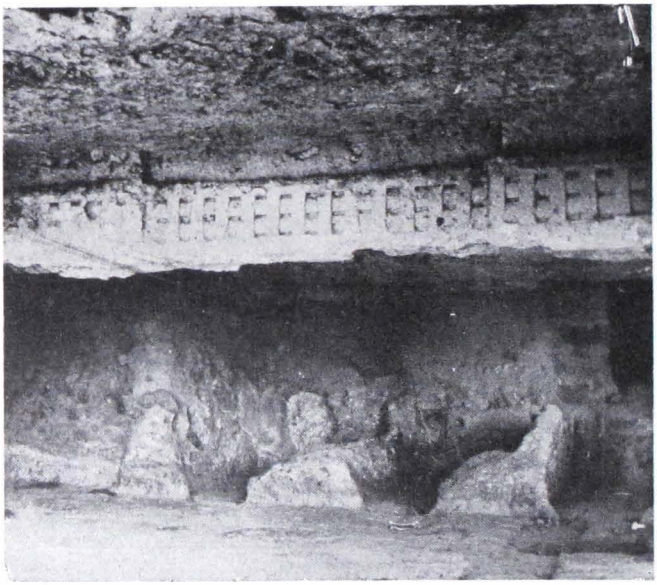
144. Kondane : Cave 2, The stupa cu a niche in the right wall of the veran



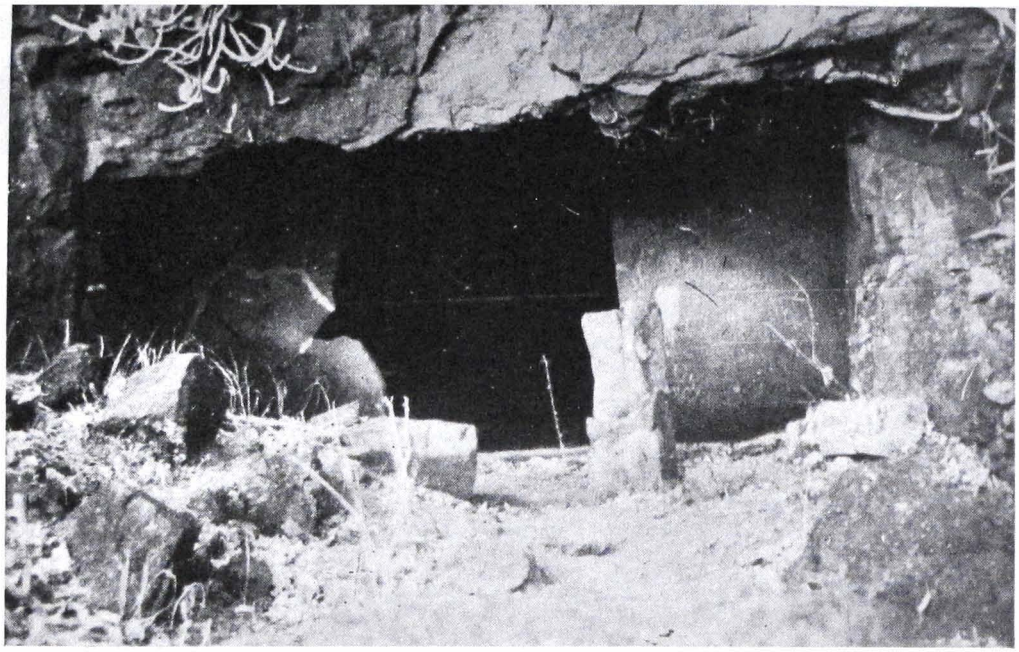
145. Kondivite : Cave 9, Front view.



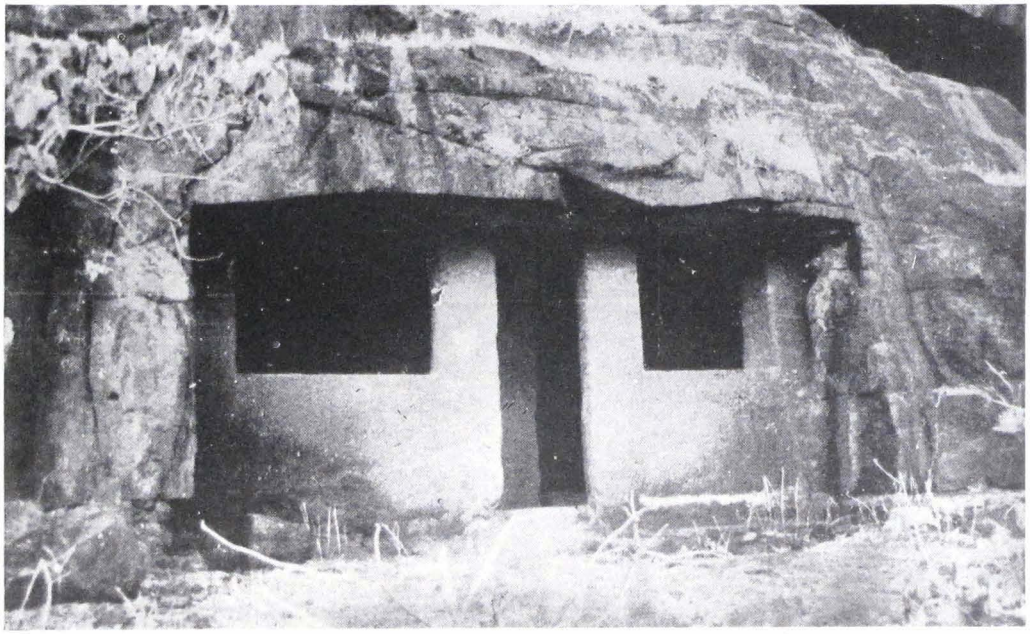
146. Kondivite : Cave 9, A grated window cut in the wall of the circular shrine.



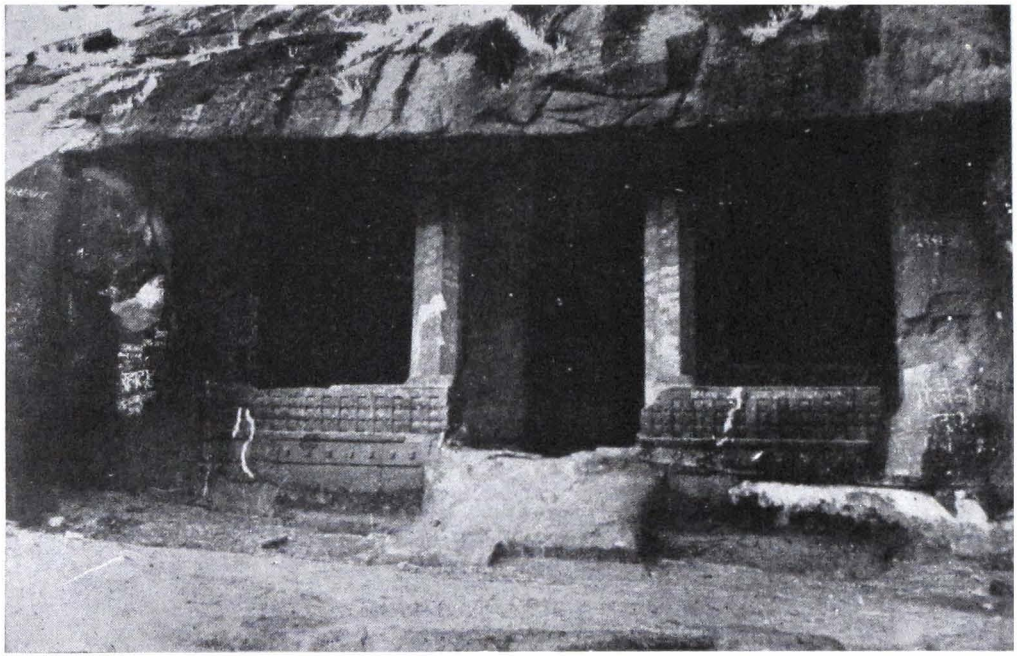
147. Kondivite : Cave 12, Railing decoration in front of the cells.



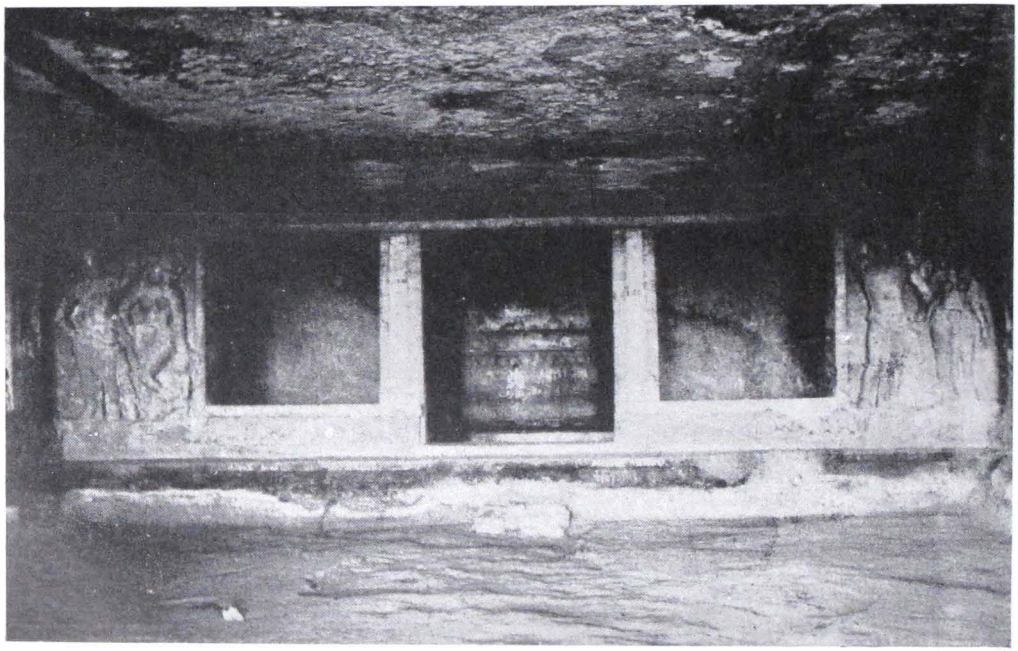
148. Kuda : Cave 1, General view.



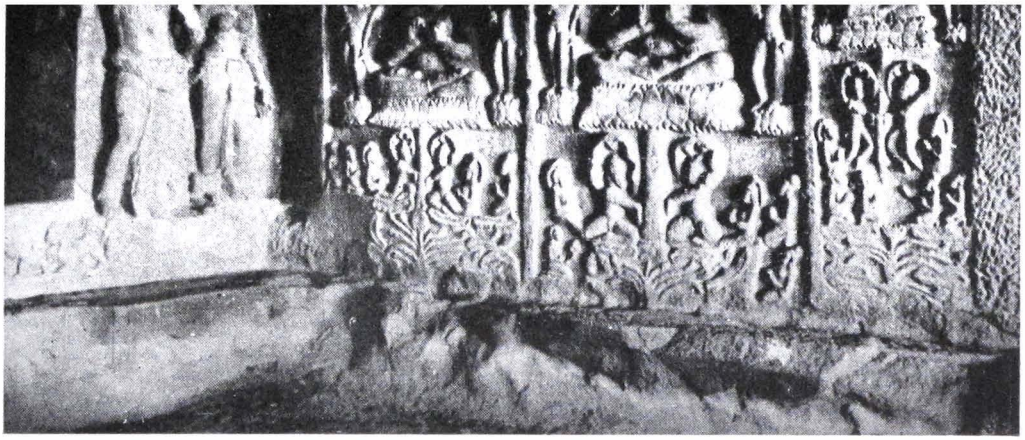
149. Kuda : Cave 3, General view.



150. Kuda : Cave 6, Front view.



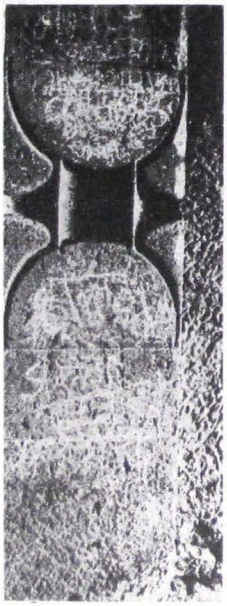
151. Kuda : Cave 6, Interior view.



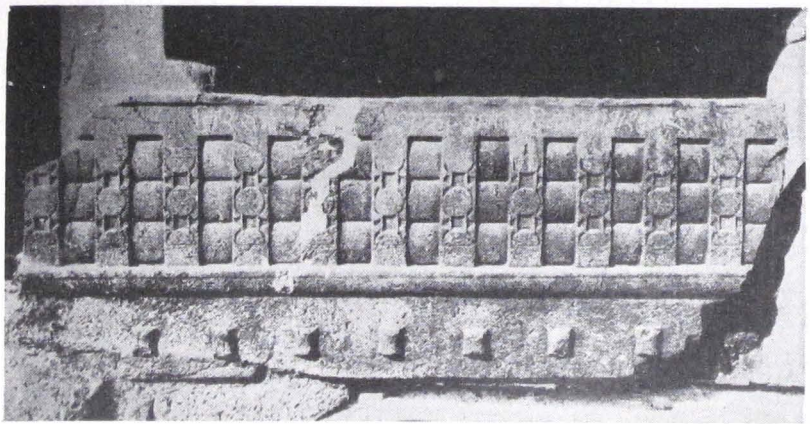
152. Kuda : Cave 6, The mithuna figure to right on the back wall of the hall.



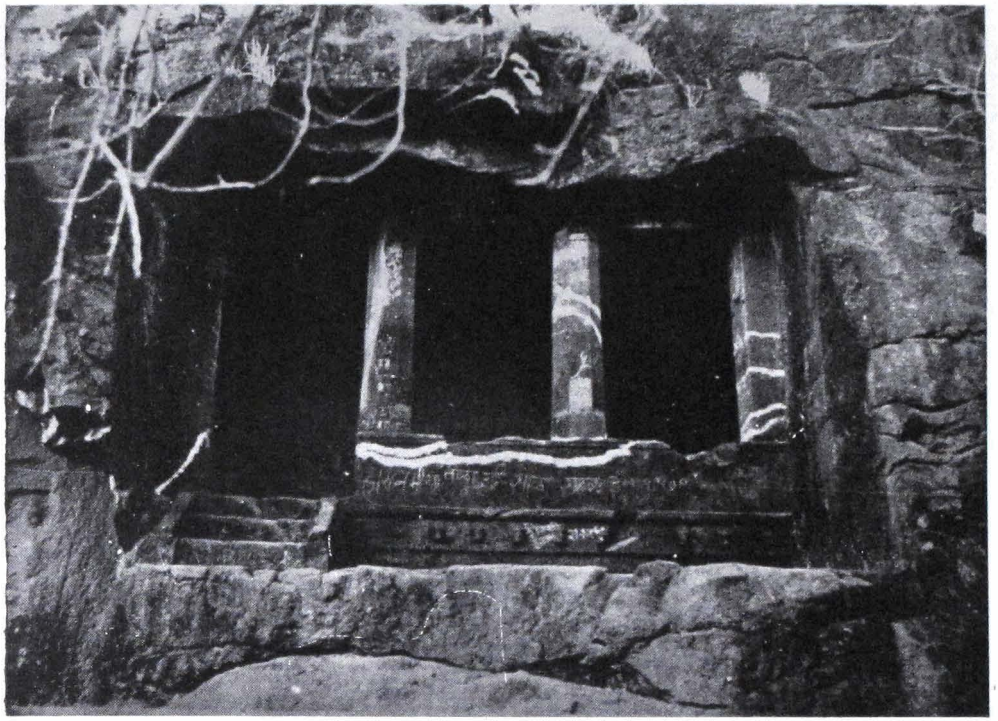
154. Kuda : Cave 6, Decoration on the front side of the backed bench in the transverse verandah inside.



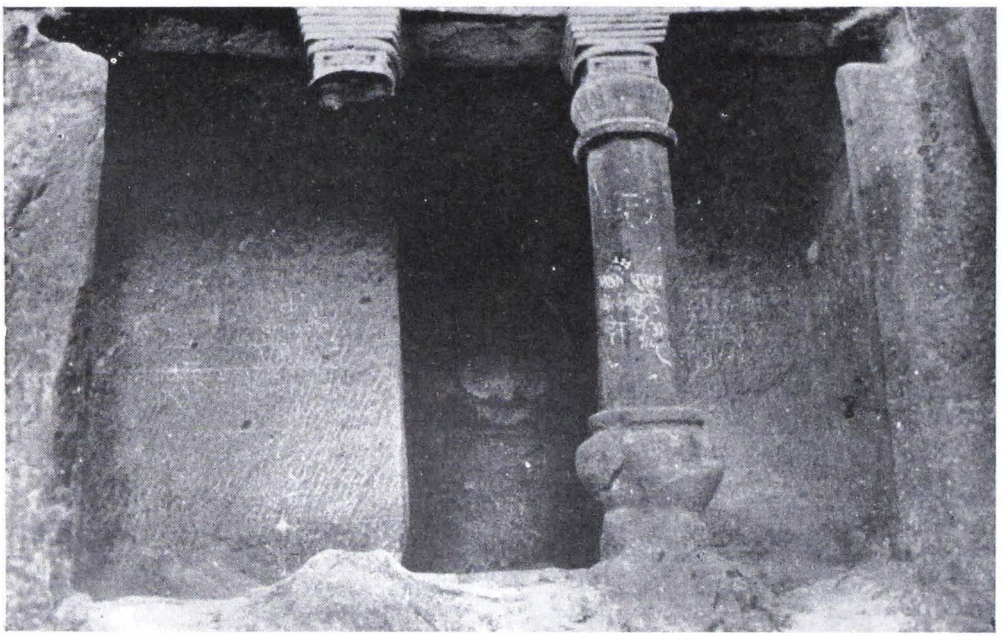
153. Kuda : Cave 6, Hourglass decoration on the left pilaster in the front verandah.



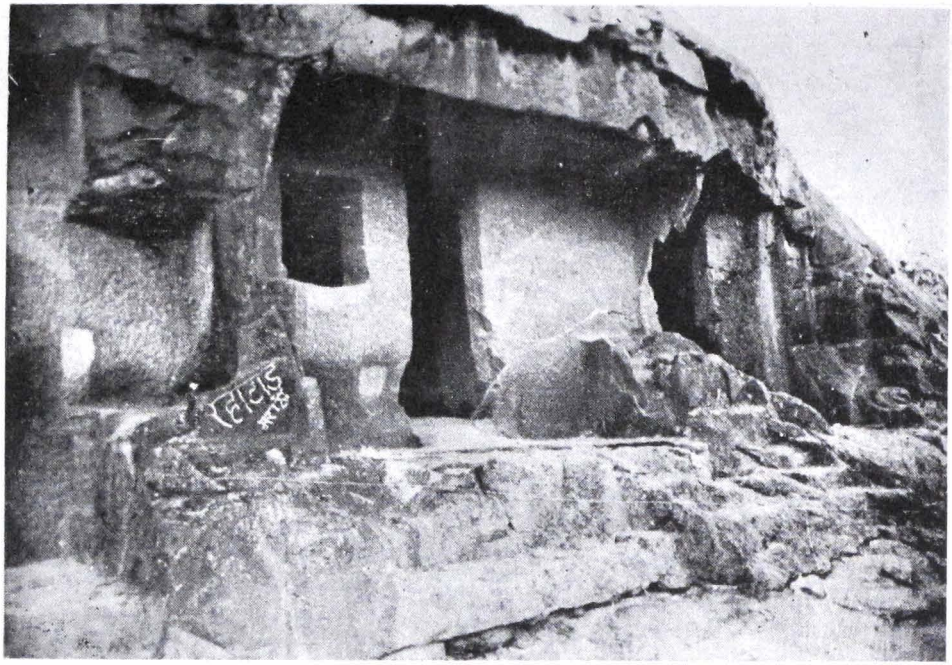
155. Kuda : Cave 6, Decoration on the backed bench in the front verandah.



156. Kuda : Cave 7, Front view.



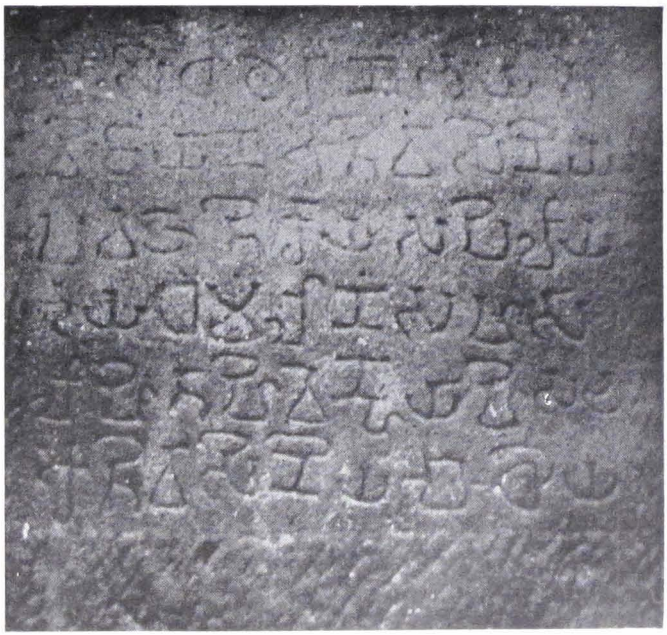
157. Kuda : Cave 9, Front view.



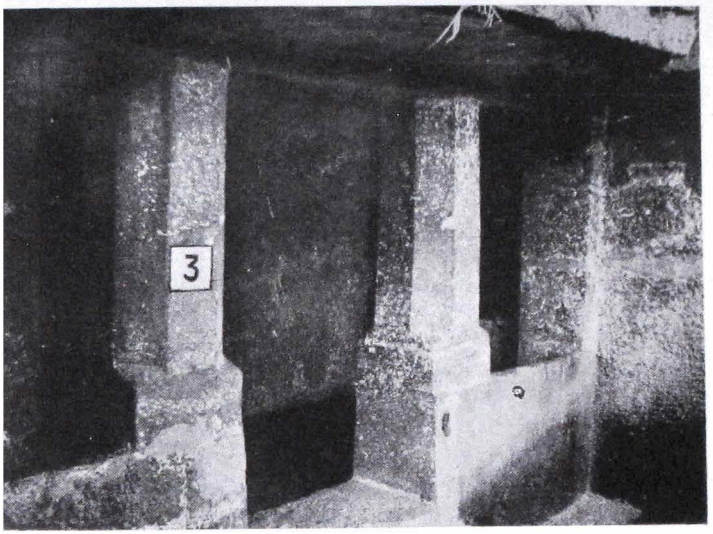
158. Kuda : Caves 13–14, General view.



159. Kuda : Cave 15, The stupa inside.



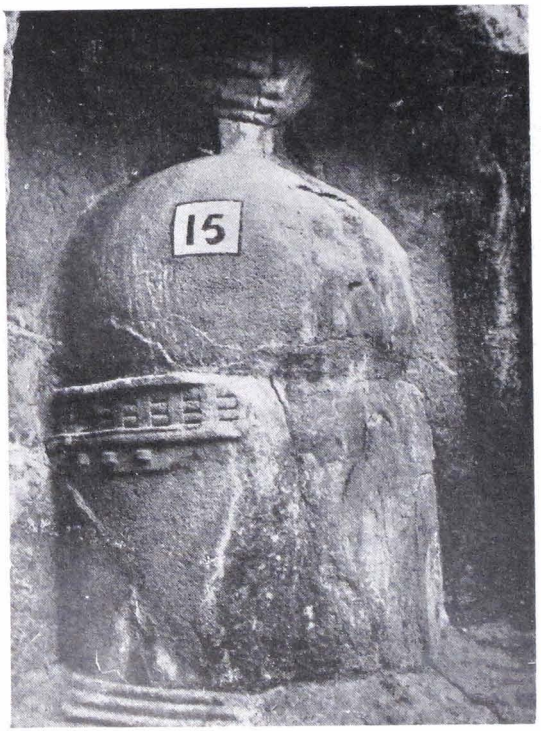
160. Kuda : Cave 16, Inscription No. 17 on the back wall of the verandah.



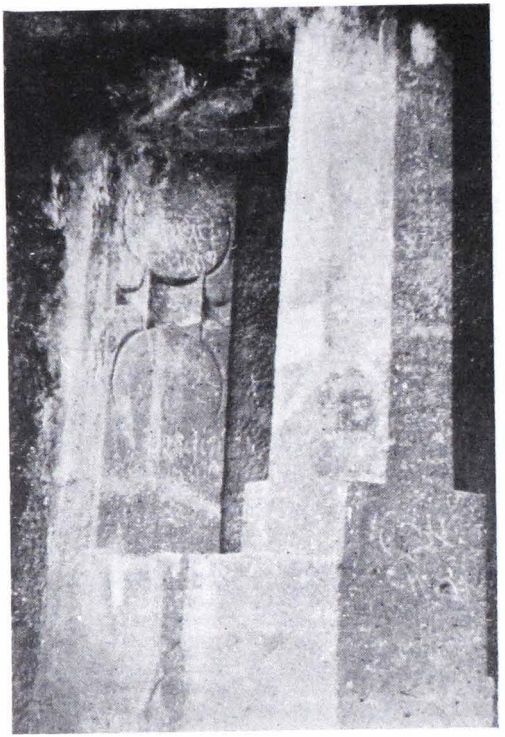

161. Mahad : Cave 3, Front view.



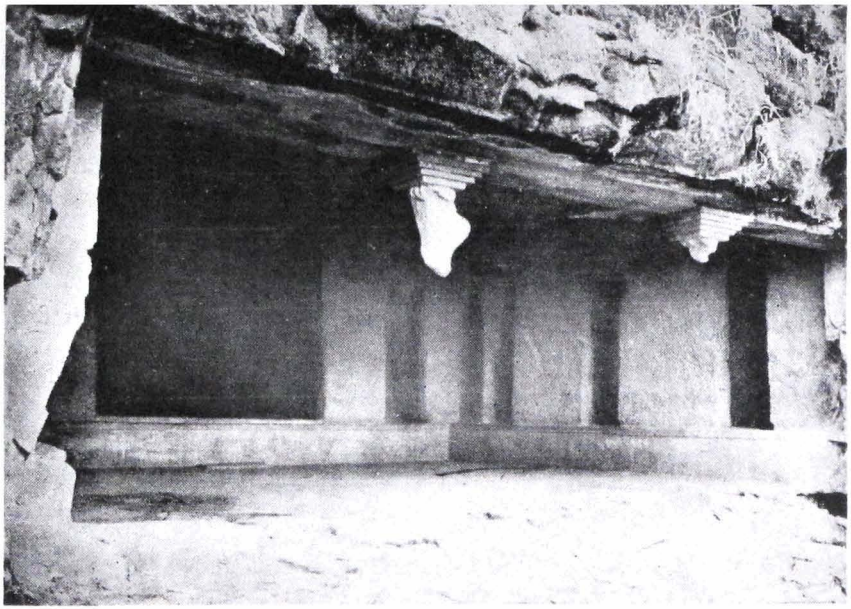
162. Mahad : Cave 5, Hour-glass decoration on the right pilaster in the verandah.



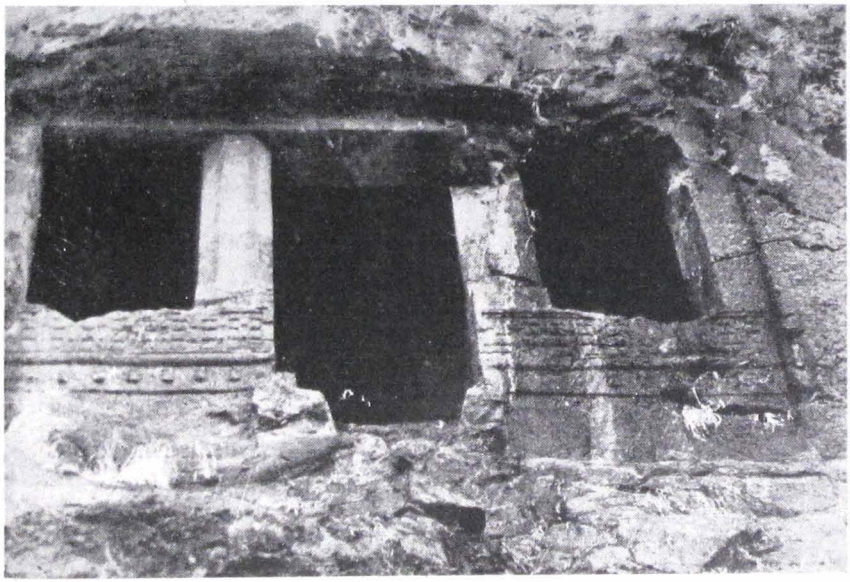

163. Mahad : Cave 15, The stupa.



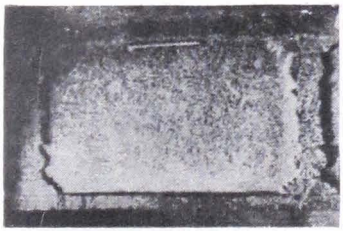
164. Mahad : Cave 5, A pillar and a pilaster in front of the verandah.



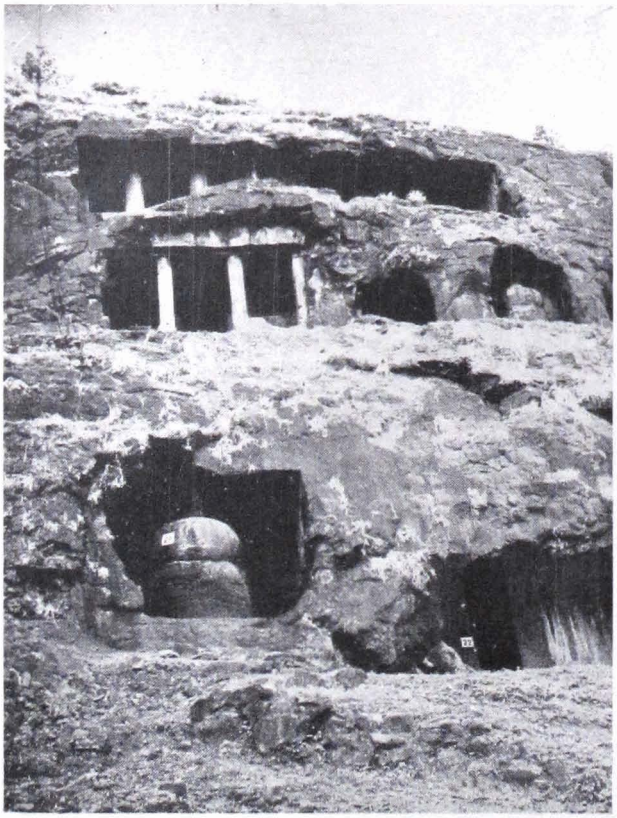
165. Mahad : Cave 8, Front view.



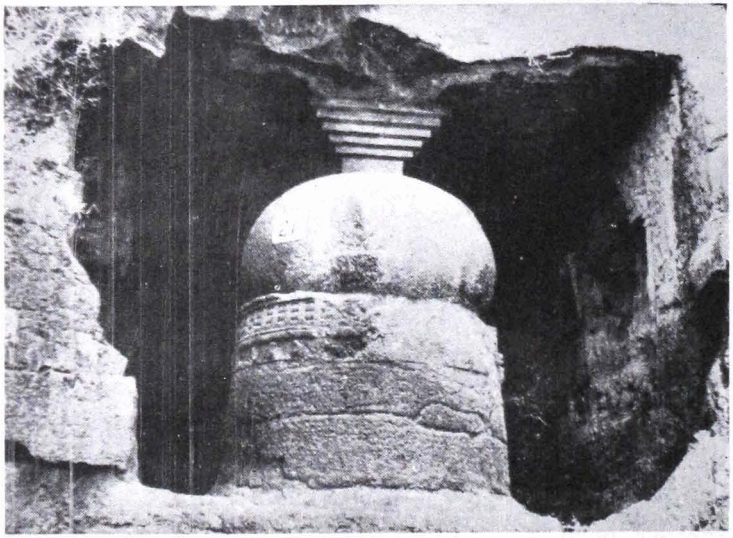
166. Mahad : Cave 10, Front view.



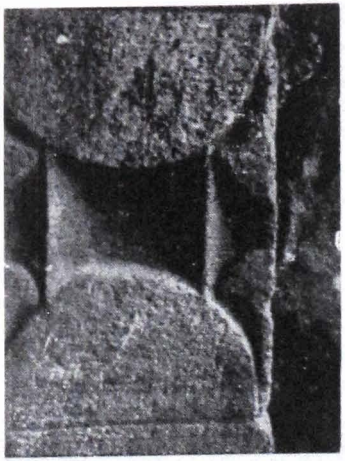
167. Mahad : Cave 3, A bench cut in the right wall of the verandah.



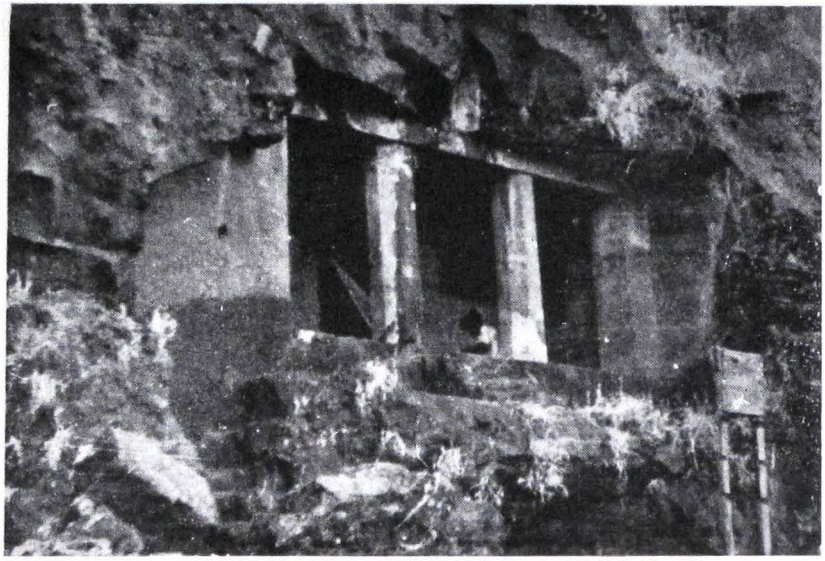
168. Mahad : Caves 11-15 and 21-22, General view.



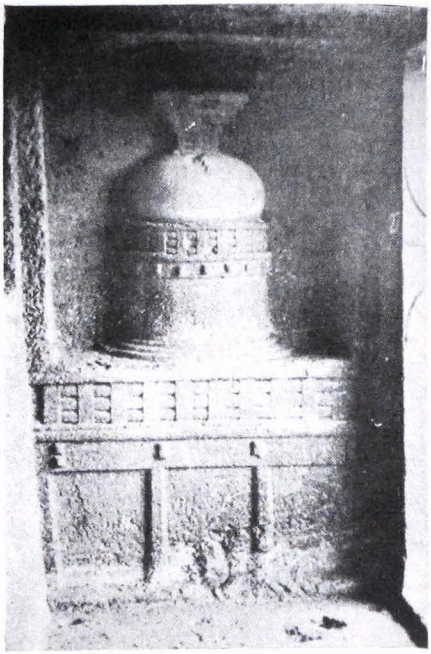
169. Mahad : Cave 21, General view, with the stupa.



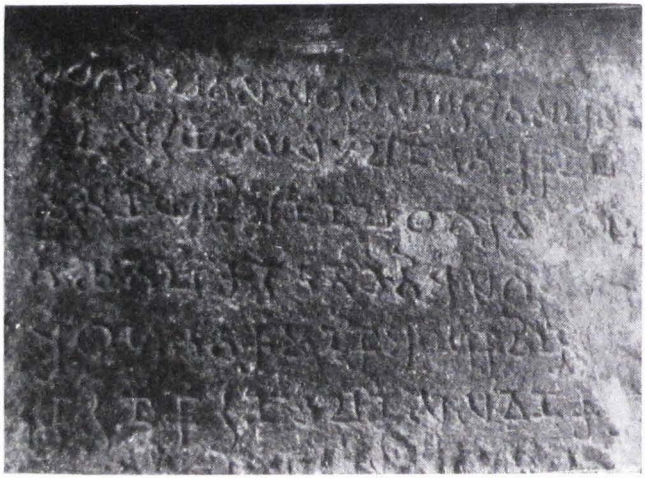
170. Mahad : Cave 13, Hour-glass decoration on a pilaster in the verandah.



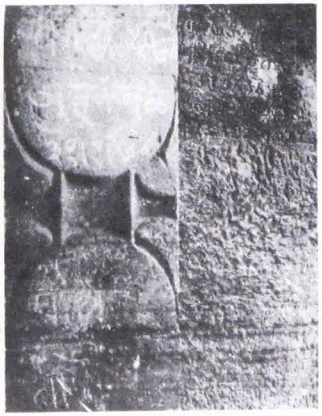
171. Mahad : Cave 27, General view.



172. Mahad : Cave 27, Relief stupa in the kodhi cut in the right wall of the verandah.



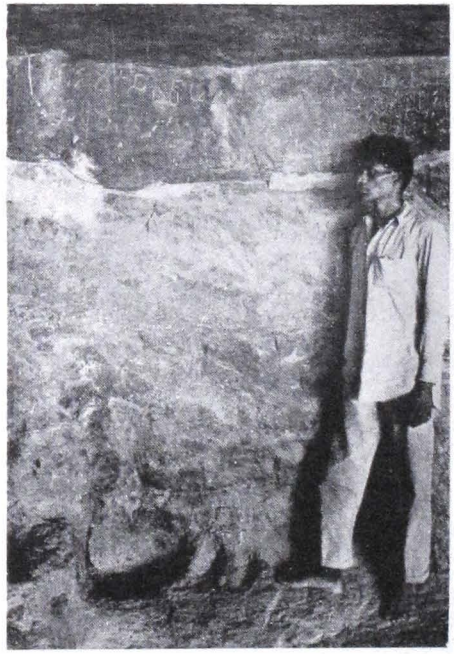
173. Mahad : Cave 27, Inscription No. 3 on the right wall outside the verandah.



174. Mahad : Cave 27, Hour-glass decoration on the right pilaster in the verandah.



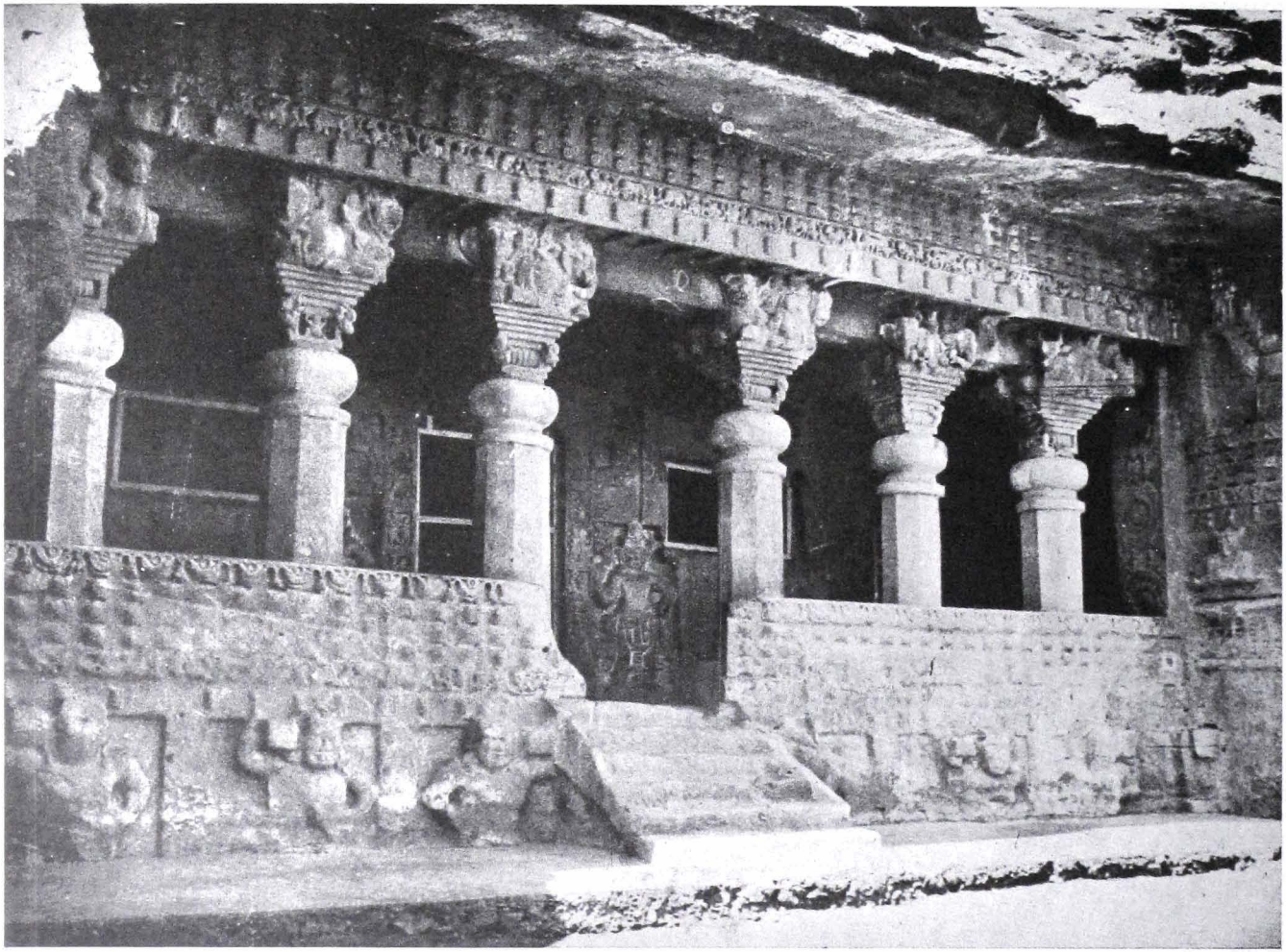
175. Nanaghat : The Nana pass.



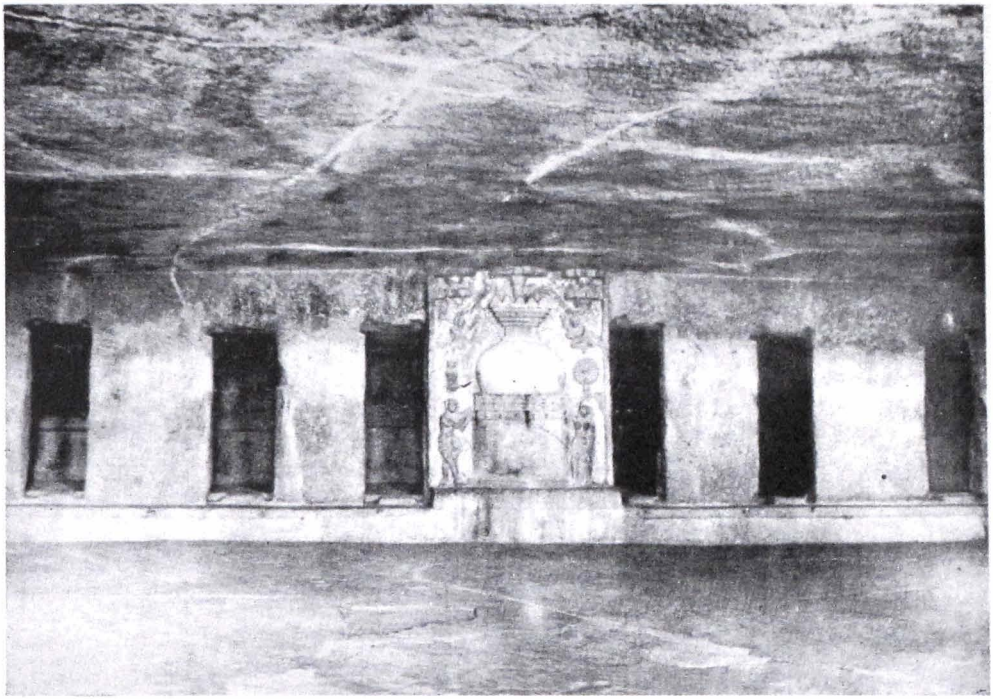
176. Nanaghat : Cave 11, Remnants of the feet of the royal figures cut in relief on the back wall and label inscriptions above.



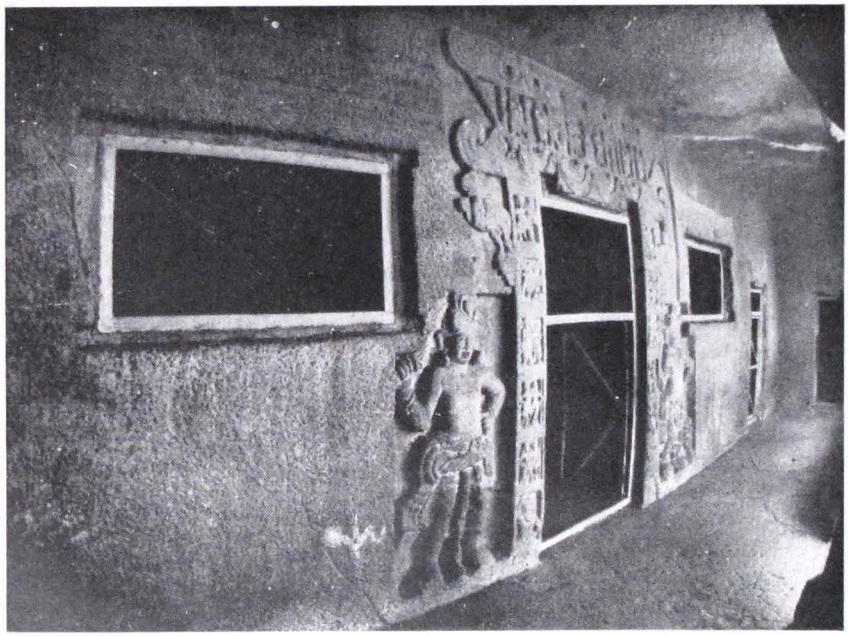
177. Nanaghat : Cave 11, Part of Nayanika's inscription (Inscription No. 1).



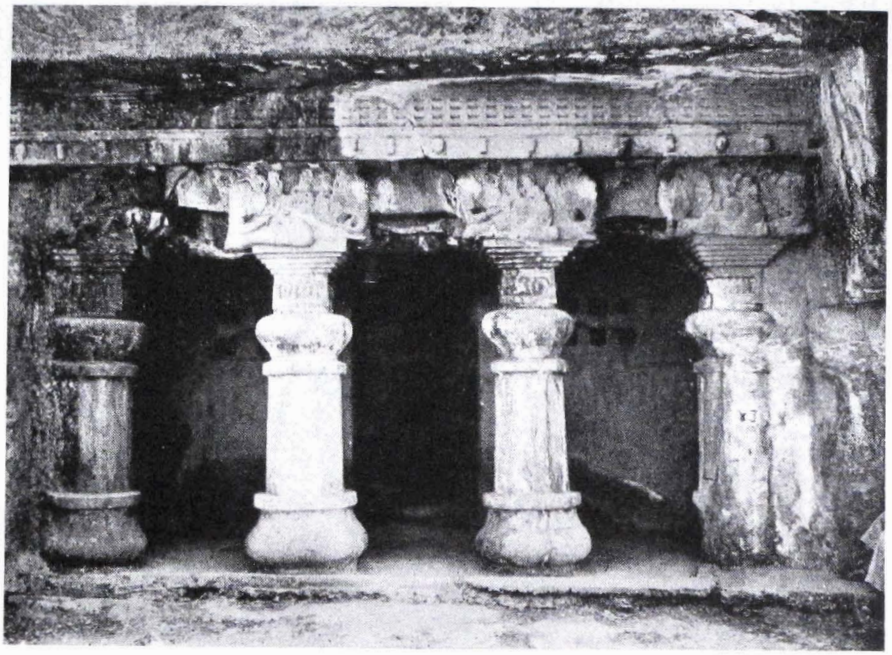
178. Nasik ; Cave 3, General view.



179. Nasik : Cave 3, Interior view showing the relief stupa on the back wall of the hall



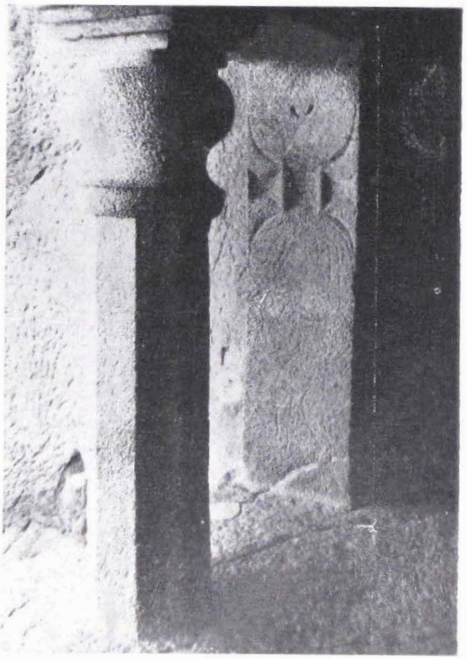
180. Nasik : Cava 3, A view of the verandah showing the central doorway and Vasisthiputra Pulumavi's inscription on top left.



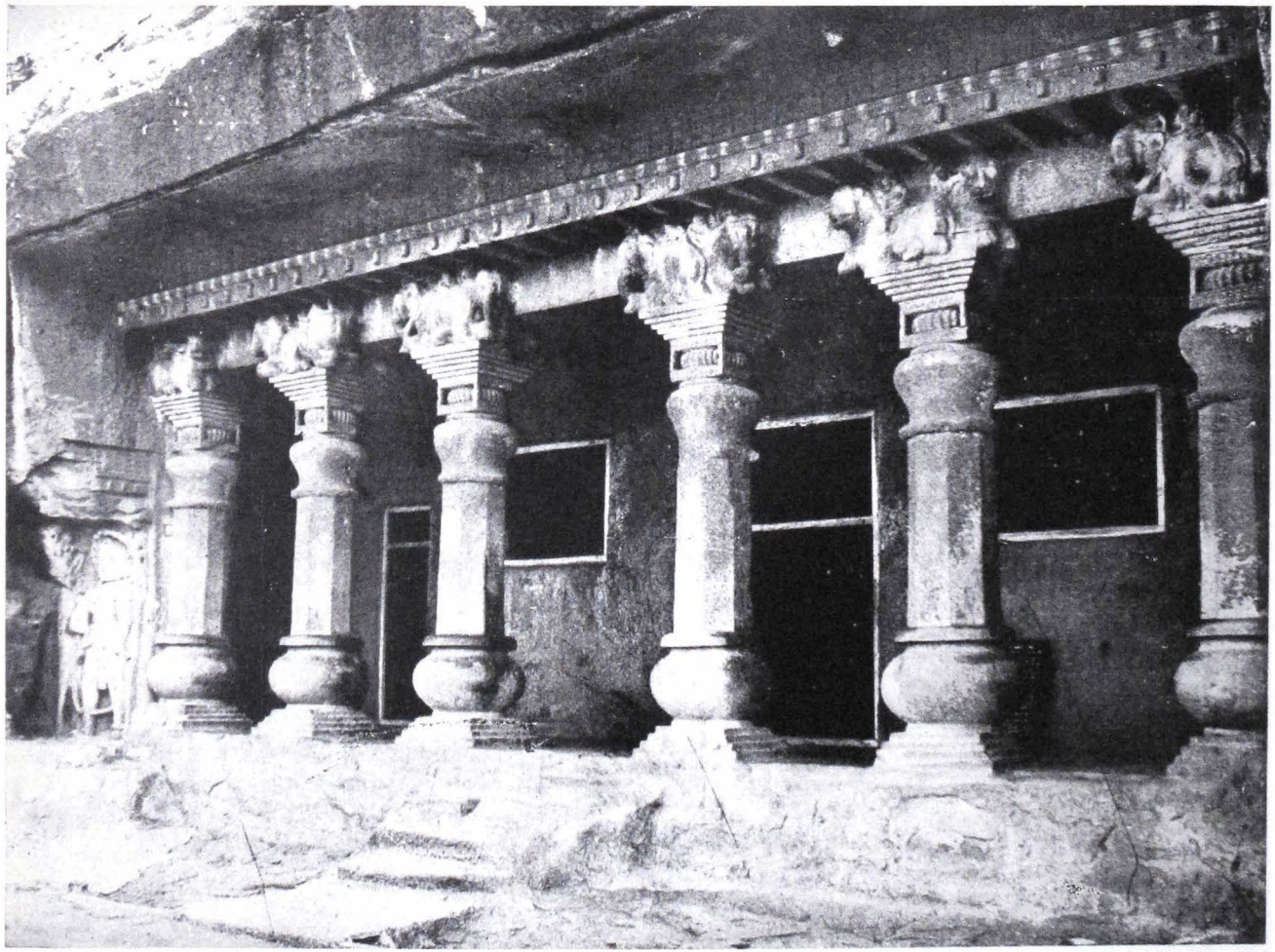
181. Nasik : Cave 4, Front view.



182. Nasik : Cave 9, Front view.



183. Nasik : Cave 9, A pillar and a pilaster in the front verandah.



184. Nasik : Cave 10, Front view.



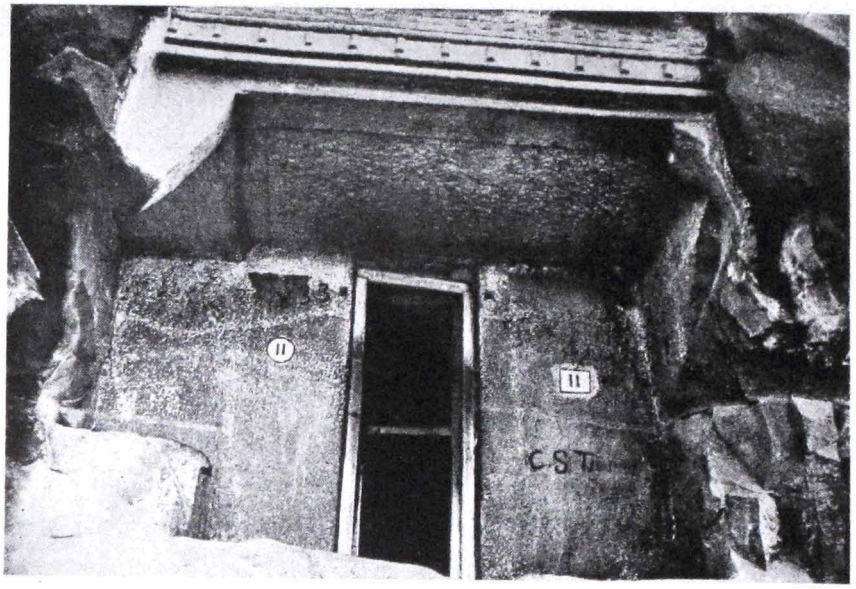
185. Nasik : Cave 10, The verandah.



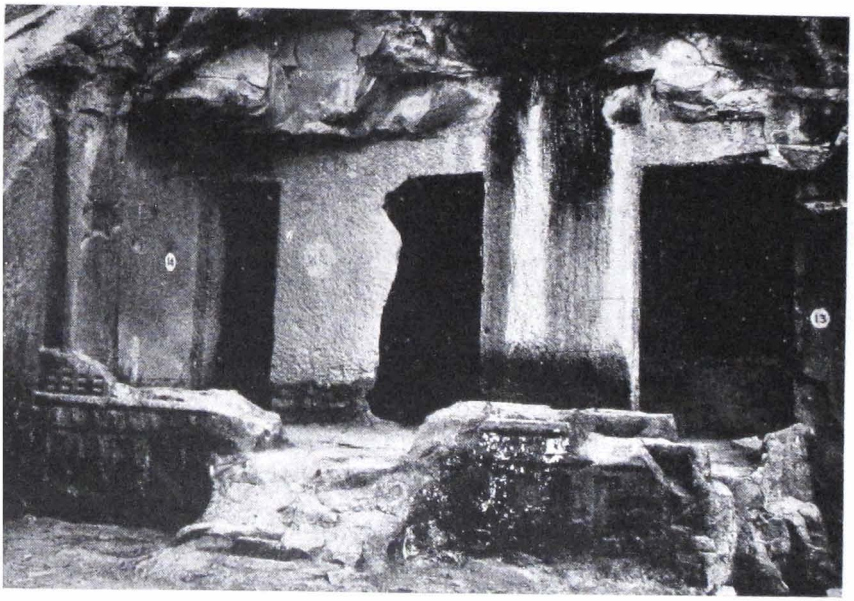
186. Nasik : Cave 10, Remnant of the stupa cut on the back wall of the hall.



187. Nasik : Cave 6, Front view.



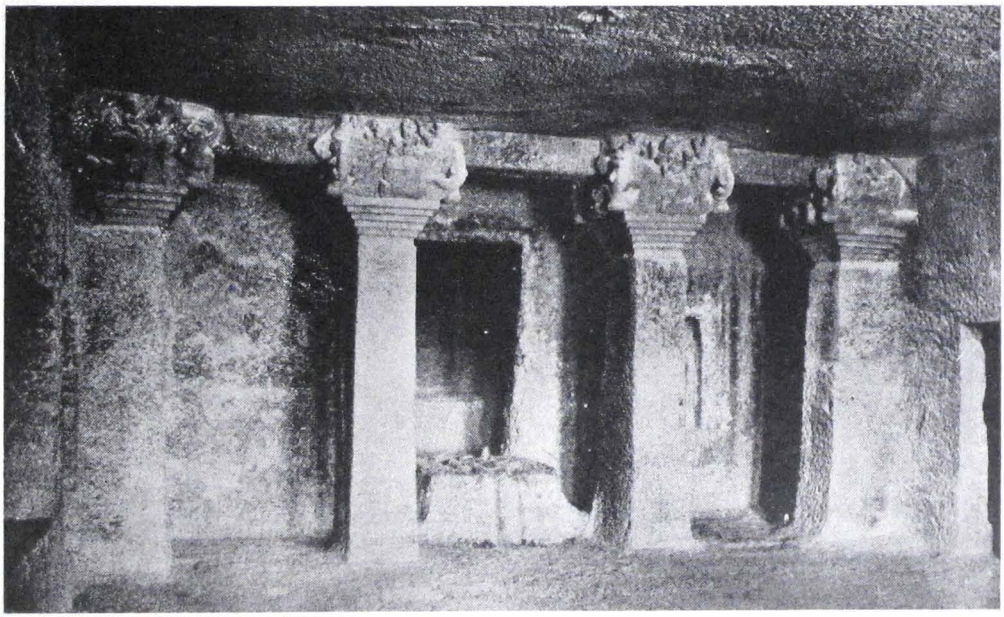

188. Nasik : Cave 11, Front view.



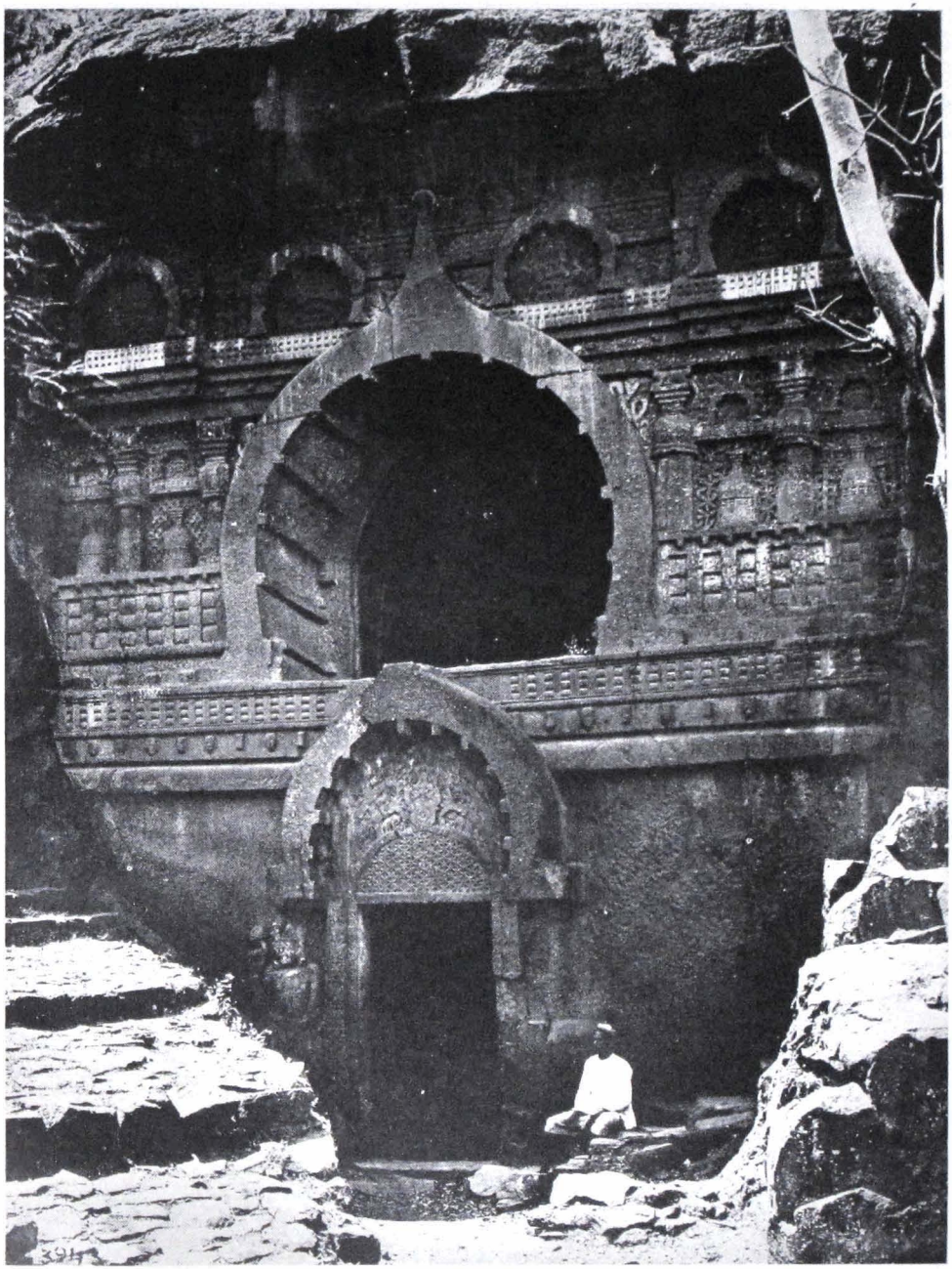
189. Nasik : Cave 14, Front view.



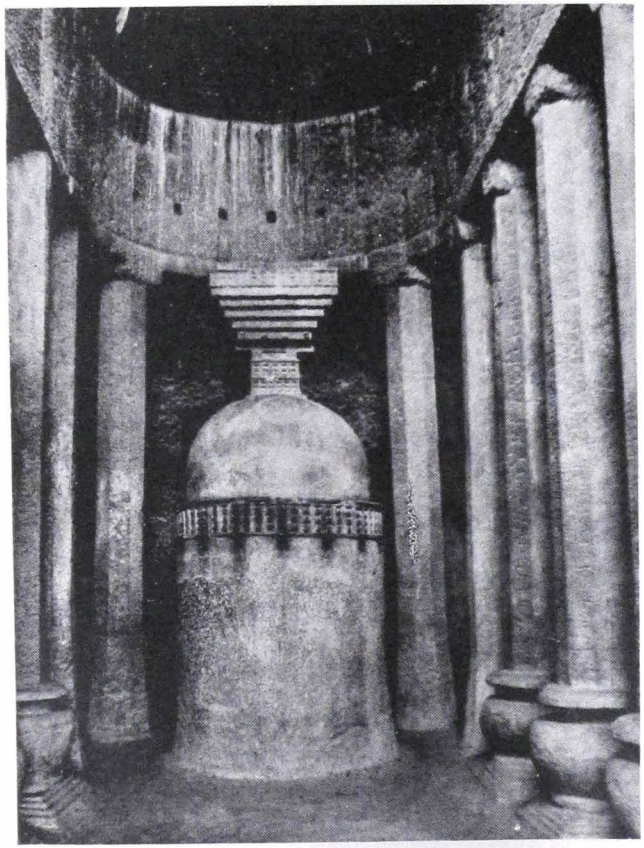
190. Nasik : Cave 17, Front view.



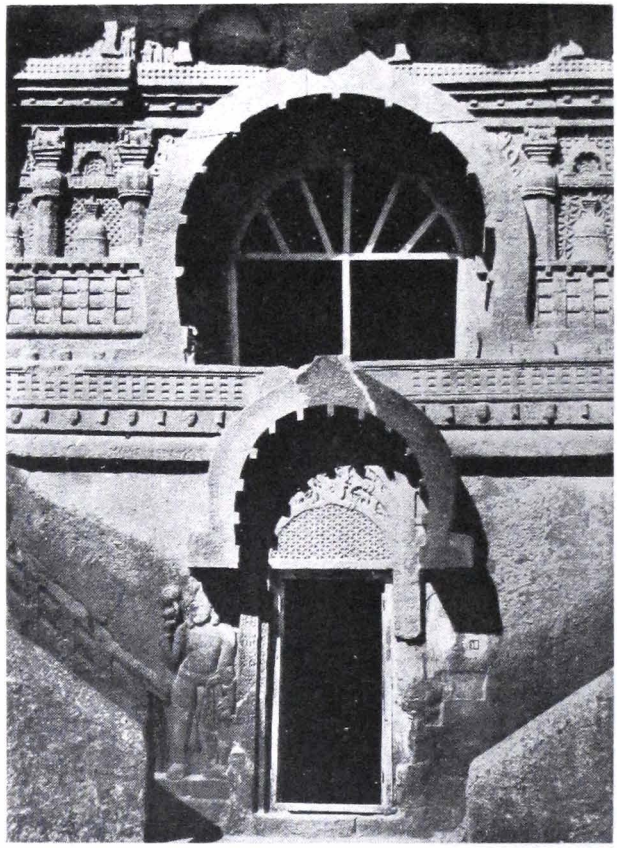
191. Nasik : Cave 17, Interior view showing the unfinished transverse verandah at the back of the hall.



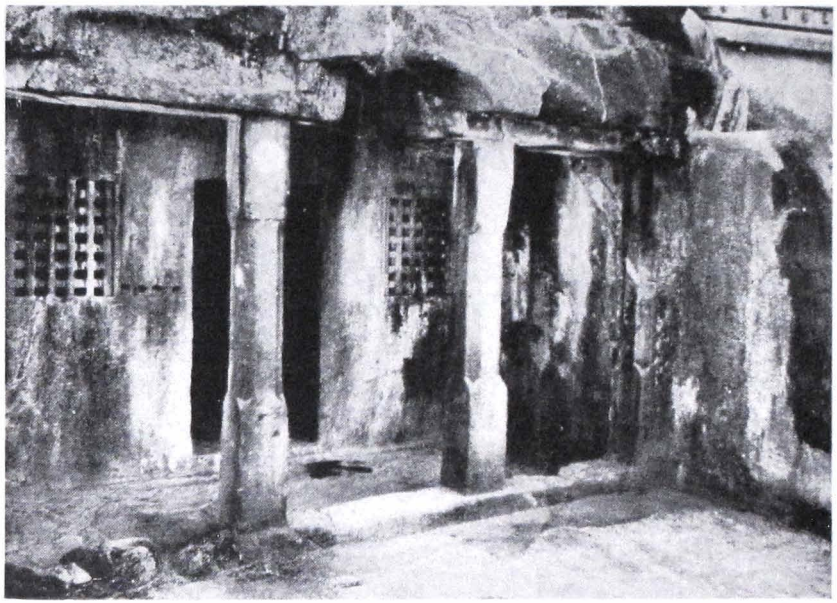
192. Nasik : Cave 18, General view of the facade.



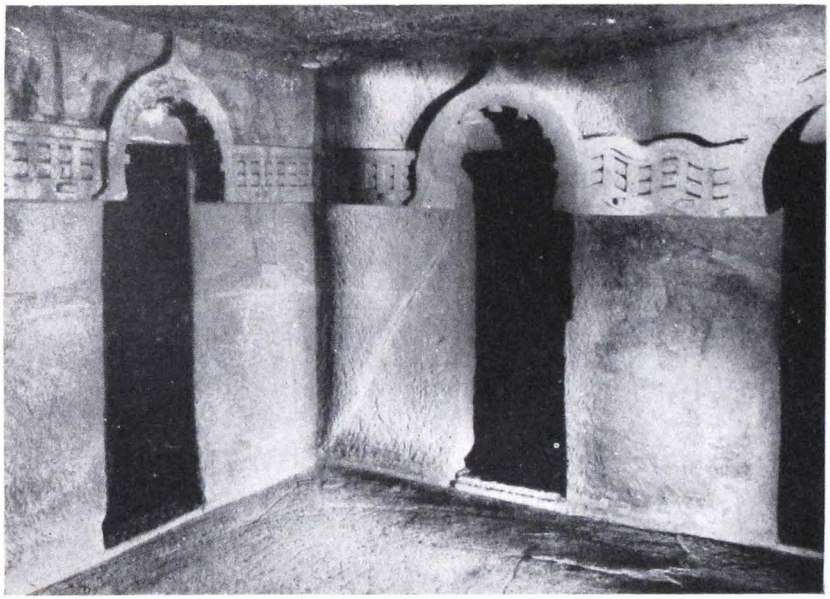
193. Nasik : Cave 18, Interior view.



194. Nasik : Cave 18, A closer view of the facade.



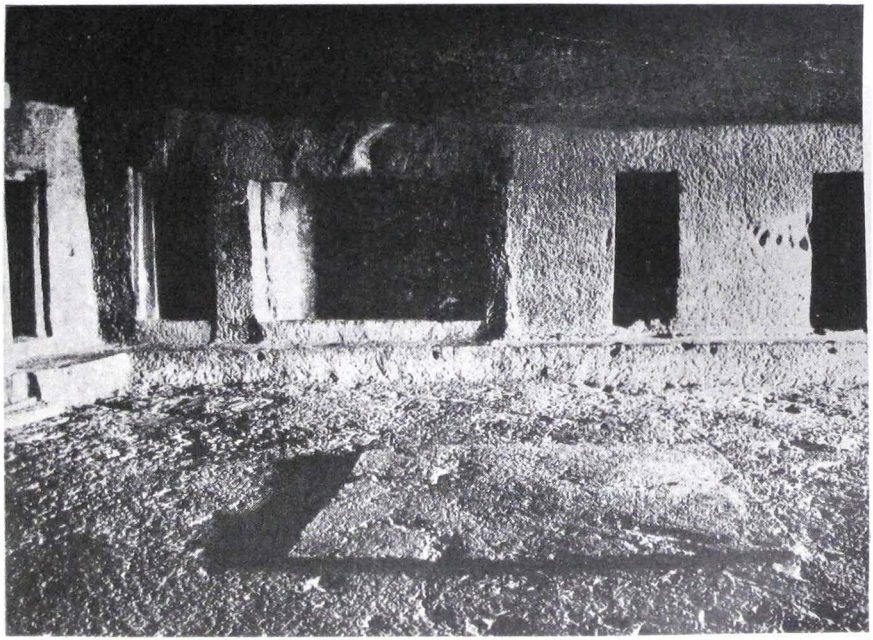
195. Nasik : Cave 19, Front view.



196. Nasik : Cave 19, Interior view showing the cell doorways and the wall decoration.



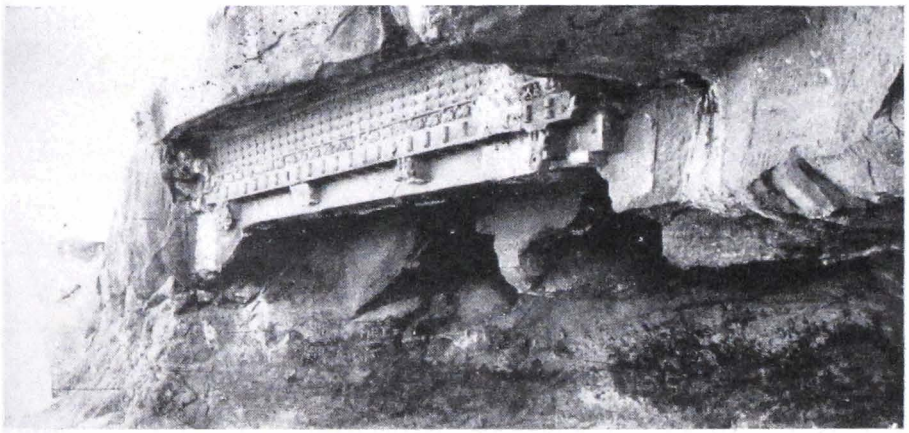
197. Nasik : Cave 20, Front view.



198. Nasik : Cave 20, Interior view.



199. Nasik : Cave 21, Front view.



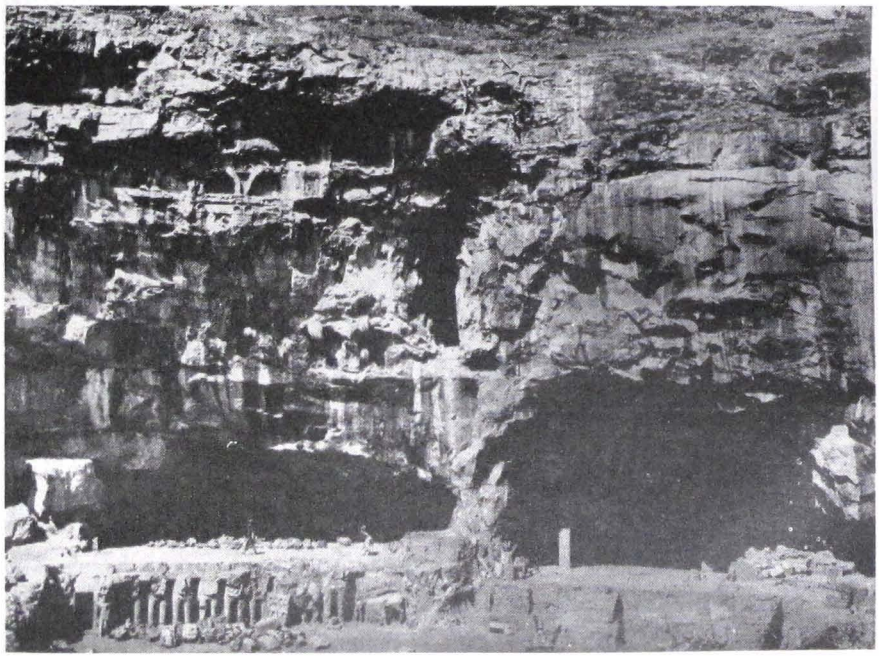
200. Nasik : Cave 24, Decoration on the facade.



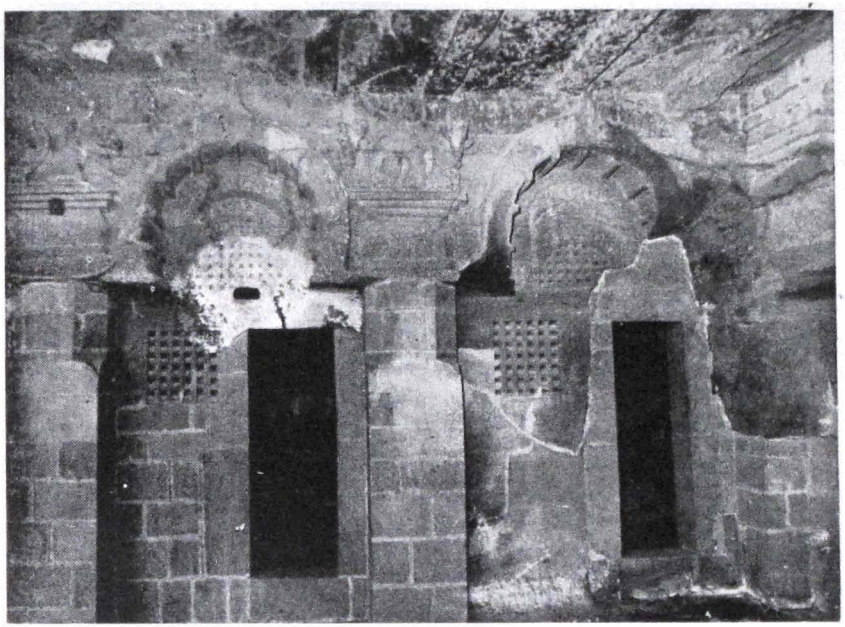
201. Nasik : Cave 19, Inscription (No. 22) of the Satavahana King Kanha.



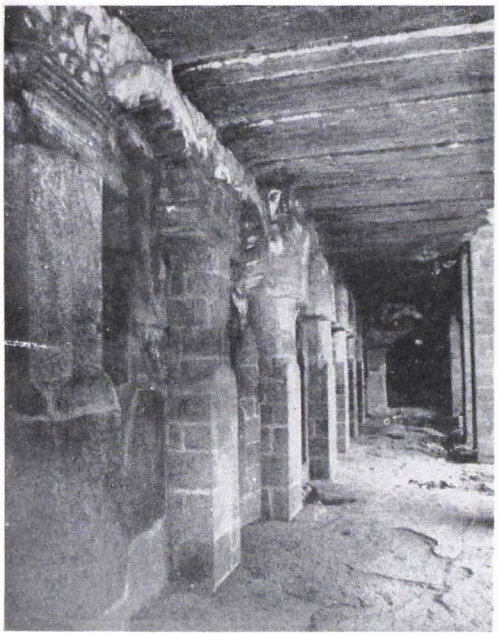
202. Pitalkhora : Cave 3, Interior view.



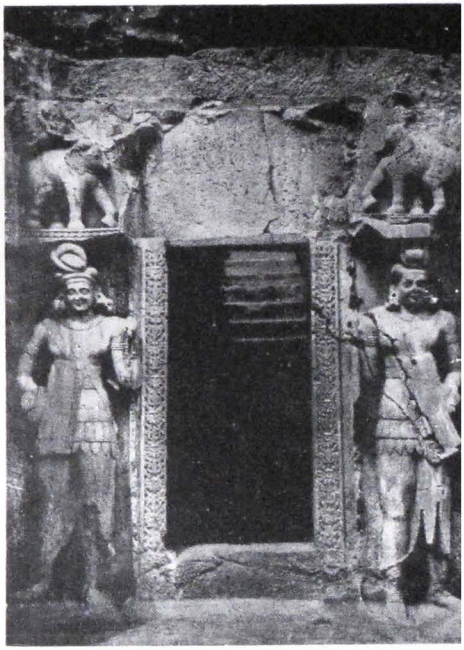
203. Pitalkhora : Caves 3-4, General view.



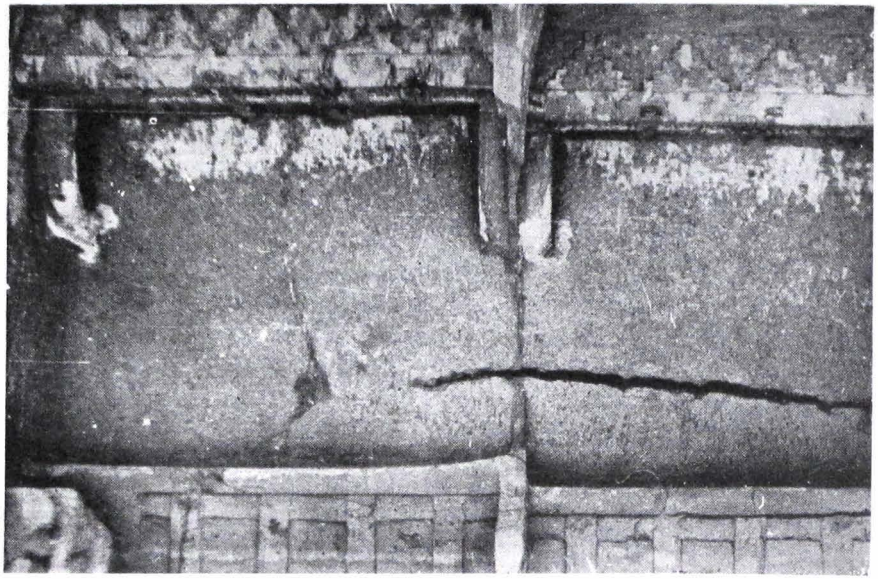
204. Pitalkhora : Cave 4, The cells and the wall decoration at the back of the hall.



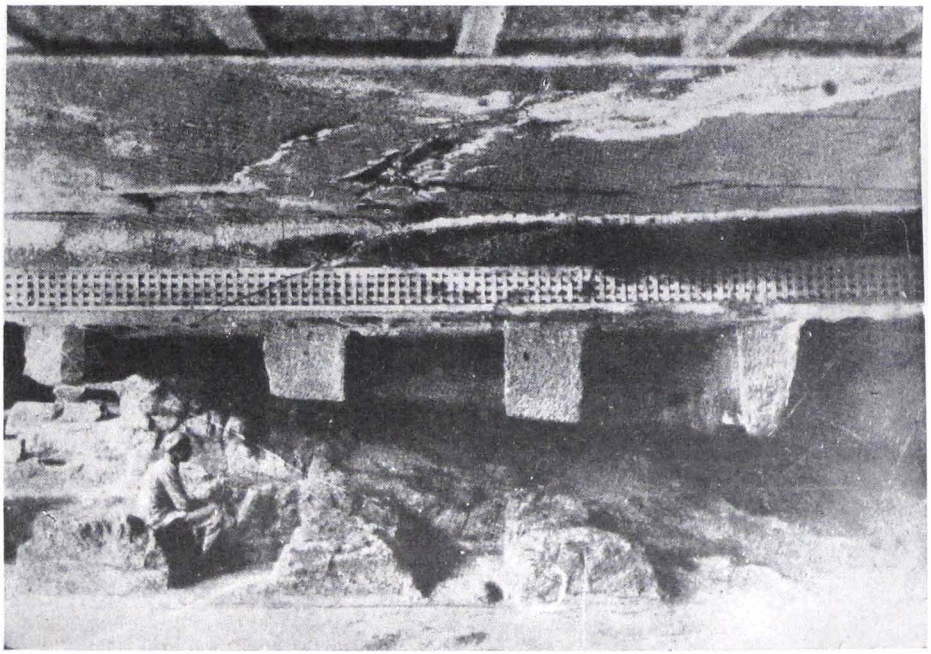
205. Pitalkhora : Cave 4, The corridor in front of the row of cells in the back wall.



206. Pitalkhora : Cave 4, The sculptured doorway leading from the forecourt to the cave.



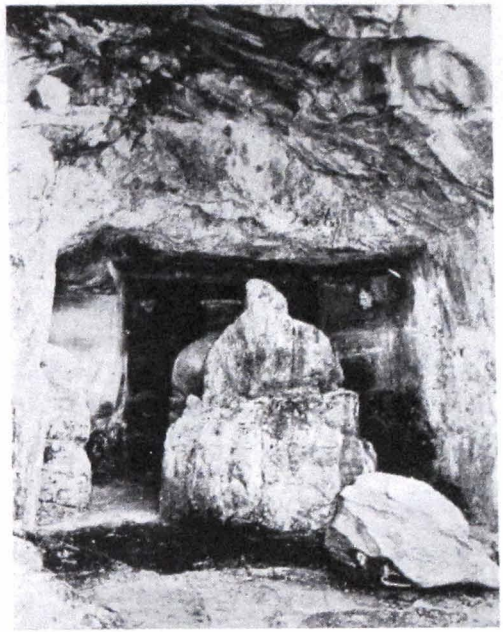
207. Pitalkhora : Cave 7, A stone bed inside a cell.



208. Pitalkhora : Cave 9, Railing decoration inside the hall.



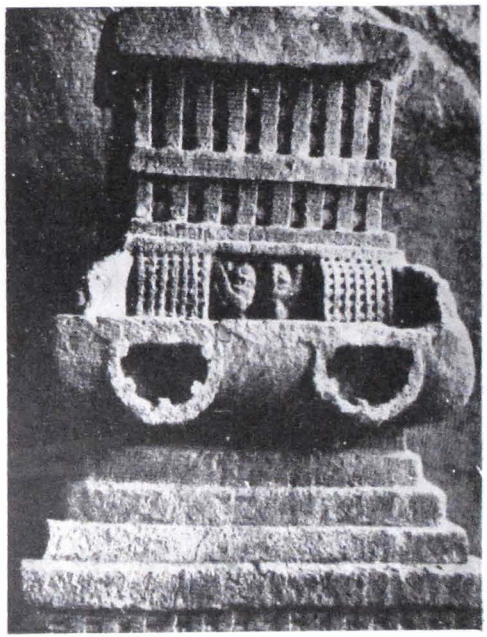
209. Pitalkhora : Cave 10, Front view.



210. Pitalkhora : Cave 11, A view from the front showing the stupas inside.



211. Pitalkhora : Cave 10, The stupa inside.



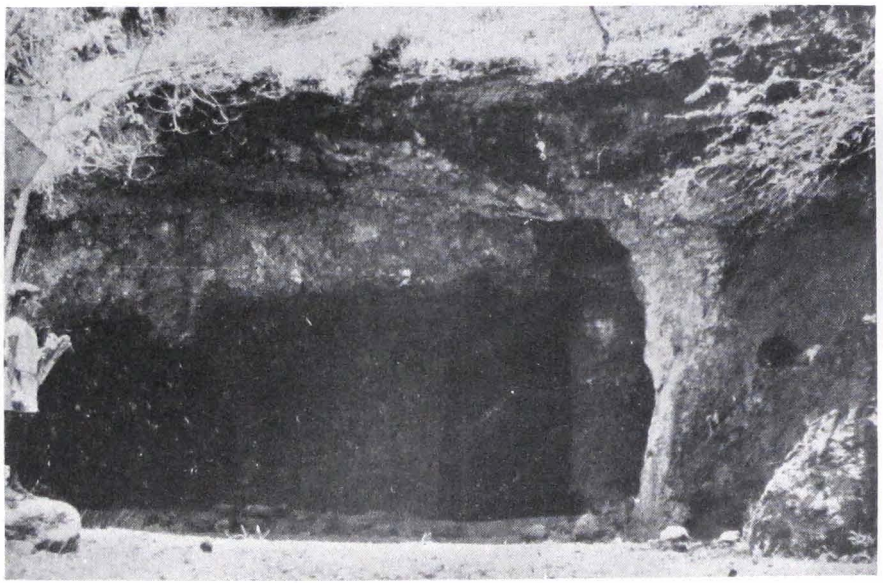
212. Pitalkhora : Cave 12, A loose harmika lying in front of the hall.



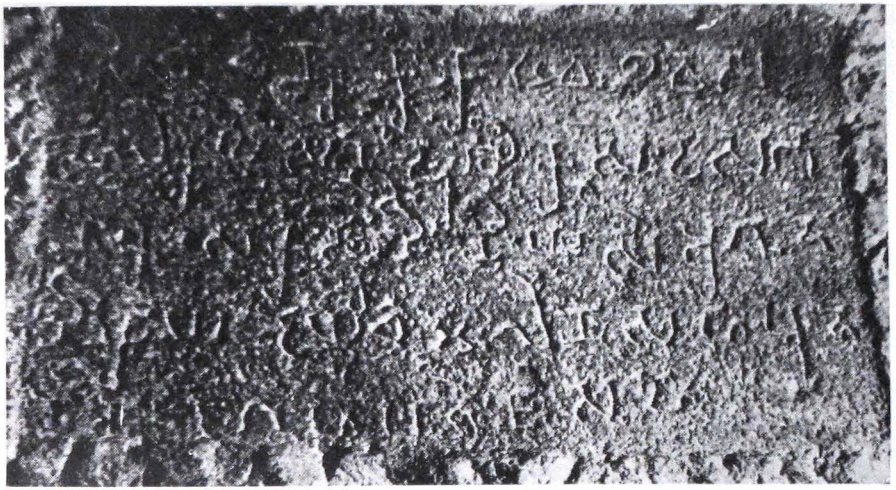
213. Pitalkhora : Cave 12, Front view.



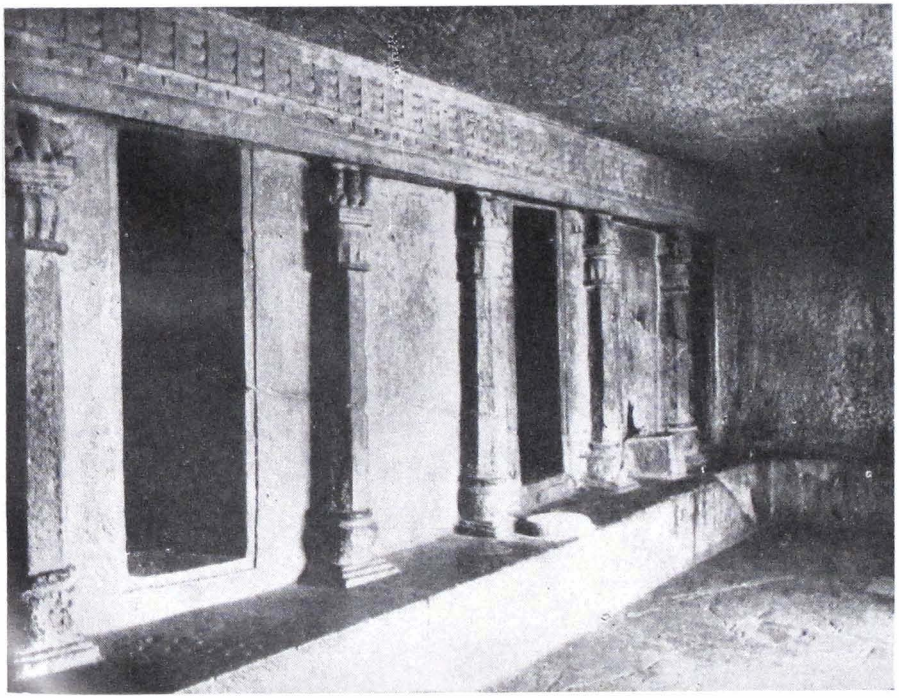
214. Pitalkhora : Cave 13, Interior view.



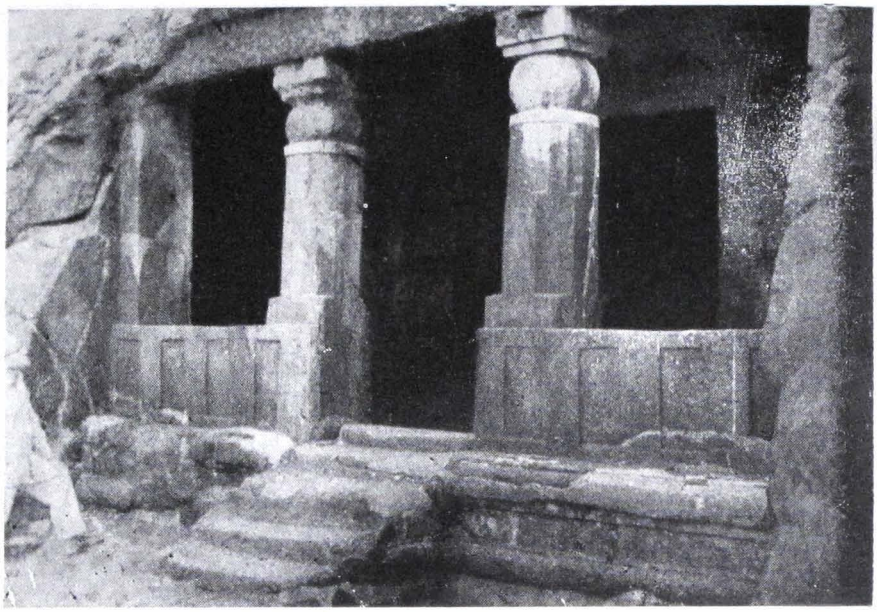
215. Pawala : Caves 1-2, General view.



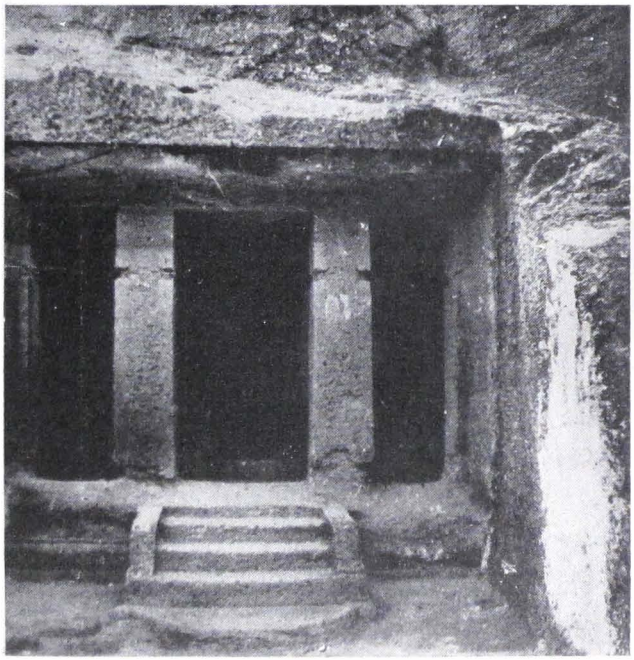
216. Shelarwadi : Cave 8, Inscription on the back wall of the hall.



217. Shelarwadi : Cave 8, Cells and decoration on the back wall of the hall.



218. Karle : Cave 4, Front view.



219. Kanheri : Cave 31, Front view.



220. Kanheri : Cave 31, Details o the developed form of the hour-glas decoration on a pilaster.