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# Analytical Study Of Badalpur Monastic

## Complex In Taxila



By

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Quaid-e-Azam University

Islamabad

2016





## Candidate's Declaration

I hereby declare that this MSc. Thesis submitted bearing the name "Analytical Study of Badalpur Monastic Complex In Taxila", is a result of my individual research and has not been submitted concurrently to any other institution or university or for any other degree.

**Sabaina Younas**

MSc. Candidate





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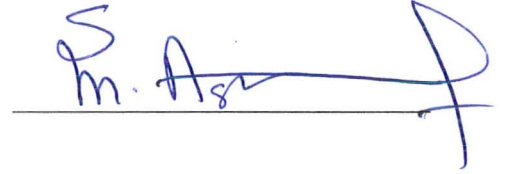
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## Supervisor's Declaration

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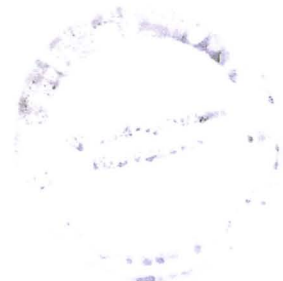
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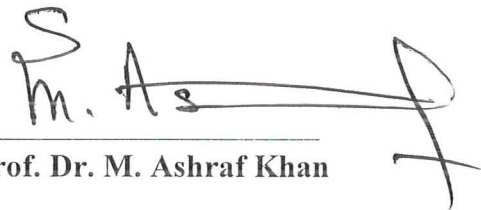
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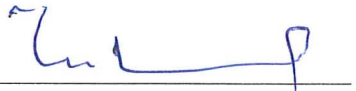
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## FINAL APPROVAL

This is to certify that we have read the thesis submitted by **Ms. Sabaina Younas** and it is our judgment that this thesis is of sufficient standard to warrant its acceptance by Quaid-i-Azam University, Islamabad, for the award of degree of **Master of Science in Archaeology**.

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## PREFACE

I started of my professional career at the site of Badalpur, Buddhist monastery where currently excavations are being conducted under the supervision of Dr. Ashraf Khan. I could have never developed passion for archaeology if it wasn't for my parents. They gave me the confidence for me to get involved in the field work and I learned a lot from that. They were with me during my stay at Taxila museum rest house.

The stay at Taxila has been fruitful because I got the chance to have a closer study of the architecture of Badalpur monastery and nearby other Buddhist sanctuaries and also to know the present condition of the structure. The study has been conducted keeping in view the empirical and structural terms.

The Dissertation in your hand is the result of my investigation and research. The source of information for the preparation of this thesis includes research conducted at the Buddhist monastery of Badalpur and other sites located in Taxila valley, and through some reference books.

Through desired results this Thesis will INSAHALLAH prove to be useful in the field of archaeology and reach out to the scholars of Pakistan as well as abroad for then to benefit from the knowledge, and only then this research will fulfill its prime purpose.

As Dr. Lubna always says "research for the sake of research is meaningless".

## **Acknowledgements**

All the acclamation and appreciation is for Almighty Allah the most merciful, gracious and beneficent who is entire source of all the knowledge and wisdom endowed to mankind. All the thanks to Almighty Allah, who helped me in setting goals and objectives, and blessed me to reach to my destination. Without His assistance, none is capable of accomplishment. We all are given some responsibilities towards the society that we live in, no matter what our profession is we all should contribute towards our society through the power vested in us by the all mighty Allah.

Above all the people in this world my parents have always been my strength my motivation and my perfect world. Without them both I am nothing to stand in this world and my dedication and respect are for those who don't have parents and still do the things none of us can do.

Dr. Ashraf Khan and his vast spectrum of knowledge and proficiency in archaeology has served me in great number in order to give life to my potential thoughts. Moreover, he has also tailored and polished me a lot in the past and as consequence to that I am quite clear in my minds and certainly heading towards the right direction. I also like to dedicate my work to Dr. Sadeed Arif, Dr. Rafiullah, Dr. Ghani ur Rahman and Dr. Habibullah.

## **Abstract**

A student of archaeology has to fall back upon structural remains for information on the historical and religious environment. It is of course the architectural output of this resurgence that we are concerned with. A study of monastic complex at Badalpur in Taxila valley has been the focal point of this research.

## Contents

Candidate's Declaration.....	I
Supervisor's Declaration.....	II
FINAL APPROVAL.....	III
PREFACE.....	IV
Acknowledgements.....	V
Abstract.....	VI
INTRODUCTION.....	1
Concept and the Case.....	1
Research Questions.....	2
Statement of the Problem.....	2
Objectives of the Study.....	3
Literature Review.....	4
Hypothesis.....	10
Research Methodology.....	10
Theoretical Framework.....	10
Research Approach.....	11
Research Strategy.....	11
Time Horizon.....	11
Audience.....	12
1.8.9 Limitations:.....	12

Chapter 1 .....	13
History and Geography .....	13
1.1 Location of Taxila.....	13
1.2 Origin of Name .....	13
1.3 Topography.....	15
1.4 The Ancient City Sites and Major Monuments of Taxila.....	16
1.4.1 Sarai Khola .....	16
1.4.2 Hathial .....	17
1.4.3 Bhir Mound.....	17
1.4.4 Sirkap.....	18
1.4.5 The Apsidal Temple .....	19
1.4.6 Sirsukh.....	20
1.4.7 Jundial Temple .....	20
1.4.8 Dharmarajika .....	21
1.4.9 Jaulian.....	22
1.4.10 Kunala.....	23
1.4.11 Ghai .....	24
1.4.12 Mohra Moradu.....	24
1.4.13 Kalawan.....	24
1.4.14 Jinnan Wali Dheri.....	24
1.4.15 Pipplan.....	25

1.4.16	Lalchak .....	25
1.4.17	Badalpur.....	25
1.4.18	Giri.....	26
1.4.19	Bhalar.....	26
1.4.20	Bhamala .....	27
1.4.21	Hindu Temple .....	27
1.4.22	Taxila Museum .....	27
1.5	History.....	28
1.5.1	The Achaemenians .....	28
1.5.2	Alexander the Great .....	29
1.5.3	Mauryans .....	29
1.5.4	Bactrian Greeks .....	30
1.5.5	Scythians and Parthians.....	30
1.5.6	Kushans .....	30
1.5.7	White Huns.....	31
1.5.8	Muslims .....	31
1.6	Previous Researches.....	31
Chapter 2	.....	34
Architectural Analysis of Badalpur Monasteries	.....	34
2.1. Introduction	.....	34
2.1.2 Definition of Monestry	.....	34



2.2. The stupa.....	40
2.3. The Main monastery.....	41
2.3.1 Structure of the cells of the Main monastery.....	41
2.4. The Sub monastery.....	49
2.4.1 Cells of Sub monastery.....	49
2.4.2 Water Tank of Sub monastery.....	52
2.5. Assembly Hall, Kitchen and Store .....	56
Chapter 3 .....	58
Badalpur monastic complex, a state monastery.....	58
3.1 Concept of State Monastery.....	58
3.2 Badalpur Monastic Complex viewed as a State Monastery.....	59
3.2.1. Textural evidence .....	59
3.2.2. Archaeological evidence .....	60
Supposition .....	62
Chapter 4 .....	63
Comparative Study and Conclusion.....	63
4.1 Analysis of Badalpur monastery with regard to other monasteries of Taxila.....	63
4.2 Conclusion .....	89
Bibliography .....	91



## List of Figures

Figure 1: Digital Map of Badalpur Monestic Complex .....	36
Figure 2: Survey Plan of Badalpur Monestic Complex .....	37
Figure 3: Digital Map of Main Monastery Complex, Redrawn and Extnded .....	38
Figure 4: Sketch Map of Sub Monastery, View from the North Side .....	39
Figure 5: Over Head View of Badalpur Monastic Complex Adopted from Google Earth.....	39
Figure 6: Niche of the Cell no: 22 Image taken from the east side of the cell, main monastery.....	45
Figure 7: Image of the Niche of Cell No: 22 Image taken from the east side of the cell, main monastery.....	46
Figure 8: Niche of Cell No: 22 Image taken from the north side of the cell, main monastery .....	46
Figure 9: Niche of Cell No: 22 Image taken from the north side of the cell, main monastery .....	47
Figure 10: Image of the Opening of Cell No 22 Main Monastery .....	47
Figure 11: mud plaster, main monastery.....	48
Figure 12: Masnary of the main monastery, image taken from the north .....	48
Figure 13: masonry of the sub monastery.....	50
Figure 14: cell of sub monastery, image taken from west .....	51
Figure 15: Cells of sub monastery, image taken from the north.....	51
Figure 16: Water tank from north-western side .....	53

Figure 17: Water tank from south-eastern side. Inside the water tank there are terracotta tiles.....	53
Figure 18: plinth of water tank and boulders of plinth on all four sides of the water tank, image taken from south-eastern corner.....	54
Figure 19: pillar base parallel to water tank, image taken from the eastern side.....	54
Figure 20: view of the terracotta tiles in water tank from the west side of the sub monastery.....	55
Figure 21: view of the terracotta tiles, image taken from the north side of the sub monastery.....	55
Figure 22: slabs of kitchen, image taken from west.....	57
Figure 23: kitchen area, image taken from north-west.....	57
Figure 24: Sketch plan of the <i>Yungang Monastery</i> .....	61
Figure 25: Digitized plan of Kunala Monastery.....	64
Figure 26: <i>Digitized plan of Kunala Stupa</i> .....	65
Figure 27: View of Kunala Stupa base and plinth.....	66
Figure 28: View of Kunala Monastery from Stupa.....	66
Figure 29: View of Monastery Interior.....	67
Figure 30: Mohra Moradu Stupa and Monastery.....	68
Figure 31: Digitized plan of Mohra Moradu Monastery.....	69
Figure 32: Digitized plan of Mohra Moradu stupa.....	70
Figure 33: Mohra Moradu monaster exterior walls.....	71
Figure 34: View of assembly hall with column bases.....	72
Figure 35: View of kitchen area.....	73
Figure 36: Fig 24. Details of wall construction.....	74

Figure 37: Panorama of monastery interior .....	75
Figure 38: Front of Mohra Moradu Stupa.....	76
Figure 39: Rear side of stupa from entrance to site Jaulian Stupa and Monastery .....	76
Figure 40: Jaulian Monastery and Stupa.....	77
Figure 41: Digitized plan of Jaulian monastery .....	78
Figure 42: Digitized plan of Jaulian stupa courts .....	79
Figure 43: interior from second floor height.....	80
Figure 44: Monastery interior Fig 32. Monastery.....	80
Figure 45: Main stupa base with surrounding votive stupas.....	81
Figure 46: Another view of stupa base and votive stupas. Damaged buddha statues visible on base.....	81
Figure 47: Google Earth View of Dharmarajika.....	82
Figure 48: Digitized plan of Dharmarajika moansteries.....	83
Figure 49: Digitized plan of Dharmarajika Stupa court.....	84
Figure 50: Court H Interior view .....	85
Figure 51: Court H Interior view .....	85
Figure 52: Stupa view from main entrance.....	86
Figure 53: Stupa view from East with votive stupas and chapels visible .....	86
Figure 54: Stupa view from south.....	87
Figure 55: Chapels around pradakshina patha around main stupa .....	87

## **INTRODUCTION**

Badalpur, the Buddhist Sacred area, a Stupa complex and two monasteries, is situated in the village of Bhera, District Haripur, Khyber Pakhtunkhwa, Pakistan. Condition of monasteries though ruined confirms the glory of its heyday. Fresh study of Badalpur monasteries develops many theoretical questions in the mind of the present researcher and hence gives reason to research further.

Fertile and flat land of Badalpur is situated 10 km north-east of Taxila museum and 2.5 km north-west of Julian Village on the left Bank of the Haro River near village Bhera in District Haripur

### **Concept and the Case**

An attempt is being made to show how the Buddhist adopted different types of building plan and why they do so? In order to have a sound research every nook and corner of structural remains of Taxila's monasteries should be known. Taxila still famous for its art was once a center of fusion of art. Architecture an uninterrupted reflection of art can contribute towards the history of Taxila. Architecture not only shows the elements of craftsmanship and masonry techniques but also the economic stability of the state, the dominance of the rulers over their people and the amount of wealth, taste, style and inspiration is all imitated in the proud structures of ancient times.

Kushans Empire was larger than that of Mauryan is no theory but a concrete evidence. However, both the empires contributed ingeniously towards the establishment of

Buddhist architecture. The concept is to assess the architectural elements of Badalpur monasteries.

### **Research Questions**

- What is the purpose of having two Monasteries at Badalpur?
- There is a concept of state Monasteries features of which are defined in records of dynasties of 6<sup>th</sup> century CE of china, can that concept be found in Gandhara?
- What kind of monastic education was established within these sanctuaries and is there any similarity of the educational system among these sanctuaries?
- What was the mode of rapid communication?
- Was there a concept of green strategies involved in building structures in Kushan dynasty?
- And what thoughts do Ascetics have for architecture?

### **Statement of the Problem**

In the present state of archaeological research, however, it is hardly possible to reconstruct any clear picture of ideological background. Most of the information known now is from the epigraphical records and previous researches.

There had been unscientific digging at the site of Badalpur and stratigraphic evidence along with some artifacts which could have been vital for this research has been removed. This site has been the victim of natural disaster, human vandalism and what



not and on top of it this sanctuary has been of little concern to eminent archaeologist such as Sir John Marshal.

Yet, the architectural remains interlocked with walls and buildings of successive phase gives some representation of the original establishment belonging to a particular period.

As no attempt has been made in previous researches to explain and correlate the structural remains of Badalpur with that of other sites of Gandhara. The conclusion drawn from scientific analysis of other artifacts found at Badalpur can be misleading. It is of vital concern for the researcher to have analytical study of structural remains not only to remove the obstacles of misleading hypothesis and conclusions but also to document the site as it is.

### **Objectives of the Study**

The aims and objectives of this research is to establish proper understanding of monastic life keeping in view the work already done and to find a new dimension.

1. The ambition of the researcher is to document the structural remain of the monastery in detail.
2. To establish the purpose of having two monasteries at Badalpur.
3. To find out the ways of monastic life at Badalpur.
4. To devise the strategy of preservation and conservation of the monastic complex of Badalpur and to attract foreign investment for the preservation of this site.
5. To mark another milestone in the history of monasteries.

## Literature Review

From 1863 to 2015 Badalpur has not been oblivious to the researchers but not much attention has been given to her structural remain. History and location of the site has long been discovered and much data has been retrieved by the recent Archaeologists. Analysis on pottery has been completed of the previous excavations, forensic research has been done and continued on fragile bones found at Badalpur, study of numismatics has also drawn some results even digital reconstruction of Badalpur Stupa has also been done but the division of architecture though not completely oblivious has been overlooked. The core buildings and walls have only been briefly described. More research should be conducted in this area and is of foremost priority to the researcher.

From the point of view of Hiuan Tsang a guide along with some myths and legends have been given in this printed notebook of Alfred Foucher (1915) translated by H. Hargreaves, "Notes on the ANCIENT GEOGRAPHY of GANDHARA". A useful information with regard to geography of ancient Gandhara for the expertise of the longitudinal and latitudinal Buddhist sites is provided.

Sir John Marshall's contribution is most valued in terms of the Monuments of Taxila Valley. All the Buddhist Monasteries which were Excavated by him and his team of Archaeologists are mentioned in his books "**A Guide to Taxila**" (1918) and "**Taxila: An Illustrative Account of Archaeological Excavations**" (1951), in three volumes gives us detailed description of the structural remains and all the findings with images

and maps. There are hand drawn maps of the sites and images of pottery and iron objects that can be related to that of the finds of Badalpur monastic complex.

From the birthplace of Buddhist architecture to the stages of evolution Percy Brown has sketched a complete account of Indian architecture in his book “**INDIAN ARCHITECTURE**” with respect to monastic structure. A detail description is provided of the beginning of wooden, stone architecture and masonry technique in Gandhara region. The most important element useful for the research is the clarification of the difference and chronology between stone masonry and rock-cut architecture.

“**The Historic city of Taxila**” (1986) provides with a proper historical background of the olden times of Taxila from early microlithic age to post-Kushana period. A comprehensive study of the name, model and geography of Taxila is provided along with the descriptions of urban cities and Buddhist monasteries is given. This book has a twofold purpose to the researcher’s investigation. One is the establishment of history of Badalpur monastery as compared by the chronology given in the book and the other is knowing the fact that some of the theories of Sir John Marshal has been nullified and it will be helpful in establishing the theory about Badalpur monastery with that of the views of Sir John Marshal as well as Prof. Ahmed Hasan Dani. Along with this book “**Taxila, An Ancient Metropolis of Gandhara**” (2000) serves as a pictorial guide. The site and location map has been the most resourceful.

“**THE BUDDHIST SACRED AREA THE MONASTERY, SAIDU SHARIF 1**” (1989) is amalgamated as an aid for researching on an architectural monastic life of



Buddhists in Pakistan. It also provides complete assistance in order to follow a pattern and layout. The plan of the monastery is discussed in detail, constructive features have been discussed in details, and stratigraphy and masonry techniques have been helpful in arbitrating as that of Badalpur. The comparative examination especially with the monasteries of Taxila had been proved most useful for relating different Buddhist monasteries of Pakistan.

**“Five thousand years of Pakistan”** (1992) is a great contribution in the literately world of for Pakistan’s history. From the early beginning to the Islamic period this book has a place for Taxila in the middle. The important events of Taxila along with the important monuments are explained in easy terminology. This book has been helpful for understanding the early history of Pakistan.

**“Buddhist Gandhara: History Art and Architecture”** (2003) besides history and art the most relevant chapter of this book is Gandhara Architecture in which choice of location and masonry of the monuments of Gandhara is explained.

Surendra Sahai (2006) makes a great distinction between Hindu, Buddhist and Jain architecture but only the history of Indian architecture with respect to earliest Buddhist phase is studied in the book **“INDINA ARCHITECTURE”**. The most helpful element of the book for the researcher has been the detailed study of earliest Chaityas and Viharas of ancient India. **“Buddhist and Hindu Architecture in India”** written by Satish Grover (2003) gives somewhat the same information on Buddhist Architecture as has been provided by earlier researches but with more detail on the background of Aryans, Persians, Asoka and Kushanas. This information has been

helpful in assigning the characters of several architectural elements to their respective origins and hence concluded that most of the techniques of Buddhist architecture in Gandhara has been borrowed from Persian masons. Architecturally speaking some Viharas especially Sanchi and Takht-E-Bahi has been discussed which are imperative to this research.

There must have been some ornamentation on the Buddhist monasteries and those ornamentations must have been religious in character. In search of representation of art of these sanctuaries the book “**Origins and Development of Buddhist images**” written by Srivastava (2007) has been read. The Monuments of Asoka dates back to 250 B.C.E Mathura School under the Kushana Dynasty dates back to C.E. 50-200. These evidences can help for the establishment of chronology of Badalpur site as the Mathura style sculpture and some coins have been found.

A complete provenance of Gandhara architecture of Pakistan is provided in an instance. Shaikh Khurshid Hasan (2013) is of the view that the attribution of a lot of architectural elements of Gandhara are unknown and hence gives the reason to research more on the art and Architecture of Gandhara. It is also established by a thorough reading of his book” **Religious Architecture of Gandhara-Pakistan**” that the architectural plan of Badalpur can be compared with other religious sites of Pashawar valley, Swat valley and Buddhist sites of Taxila valley.

In an ongoing research Journals, articles and research papers relating to the topic are most resourceful. Such articles from Journal of Asian Civilizations and Ancient Pakistan have been studied.

A sequential pattern of Gandharan monasteries have been described in the Lahore Museum Bulletin, Vol II, No.1 Jan-June 1989. *CHRONOLOGY AND TOPOLOGY OF BUDDHIST MONASTERIES OF GANDHARA (PAKISTAN)* By Dr. Saifur Rahman Dar explains thoroughly from the inception to the end of Buddhist era the evolution of Sangharamas.

*DISCOVERY OF MURAL PAINTINGS FROM JINAN WALI DEHRI, TAXILA VALLEY* in the journal of Asian civilizations (2004) has discussed a very special aspect of monastic life. In it detail explanation of the mural paintings with material used in it as well as the images of Budhisattva are discussed in detail. Since Jinan Wali Dehri is near to Badalpur this research paper will be helpful for analytical study for cross-cultural reference.

*FASANATING DISCOVERIES FROM BUDDHIST SANCTUARY of BADALPUR, DISTRICT HARIPUR, TAXILA VALLRY* in Ancient Pakistan no. 17 (2006) has been studied in order to have a knowhow about the location of the site, geography of the site, and the present condition of the site is mentioned. The measurements of Monastery are given along with photograph.

*Gandhara Monastic Establishments- A Mark of Power and Authority (1th- 3th Century AD)* by Alia Jawad highlights the role of Gandhara monastic establishment. The mention of Uniformity of monastic robe provides insights on Philosophical contents on monasteries to the researcher.

The history, location map, present excavation, previous investigations, masonry techniques and details of the measurement of the cells with the latest finds are

mentioned briefly in the journal of Asian Civilization, *Excavation at Badalpur Monastery, District Haripur (Khyber Pakhtunkhwa), Pakistan: A preliminary Report of Season 2014* by M. Ashraf Khan et al. And *Excavation at Badalpur Monastery, District Haripur (Khyber Pakhtunkhwa), Pakistan: A preliminary Report of Season 2014* by M. Ashraf Khan et al.

Not many students have worked on Badalpur from academic point of view, two of the remarkable thesis have served as a primary resource of this research suggested and provided by the Supervisor.

The research conducted by Sehrish Shehzadi under the supervision of Prof. Sadeed Arif on Pottery of Badalpur, Taxila Valley District Haripur, Khyber Pakhtunkhwa, season 2012-2013, its Technique and Topology (unpublished) has been thoroughly studied. A Resourceful bibliography along with introductory chapter of Badalpur. A brief account of location, structural remains, monastery, assembly hall, kitchen and store room had been provided.

Another thesis of Mohammad bin Naveed has also been studied. This thesis is about **An Approach to Virtual Archaeology Digital Reconstruction of Badalpur Monastery Complex in Taxila** (unpublished, 2015) supervised by Prof. Ashraf Khan. It is an advanced research that brings the Stupa of Badalpur to a holographic level. However, this research is the digital reconstruction of Stupa and monastery on the basis of empirical research and Stupa has been the main focus of this dissertation and digital maps and pictures of the main monastery have been explained. Through a careful reading the topic of my research has been selected, albeit digital reconstruction is important for all archaeological sites in the world but the Monastery of Badalpur needs first an analytical study, a purpose and a conclusion.



## Hypothesis

What architectural strategies have been developed and deployed by ascetics with the goal of extending their residences is the main research question as Badalpur monastic complex is the largest and has two monasteries.

A varied and diverse collection of strategies for designing spaces of minimal consumption can be found embedded in the built environment of monastery.

Each religious tradition, and the different orders, sects and schools therein have their own thoughts for architecture, which often shift over time. Regarding my question, the complexity and variation of monastic architecture suggests that a wealth of possible answers could exist.

## Research Methodology

The technique of investigation as well as historico-comparative examination of the structural remains of Buddhist monasteries is preferred to answer all the questions. And to compare and contrast the architecture of monasteries of Badalpur, Taxila valley with that of Swat, Peshawar and Mardan regions, one has to bridge from one center of archaeological activity in one corner of Gandhara to another.

## Theoretical Framework

Architecture of Badalpur in relation with Architectural comparison with Gandharan sites



## **INDEPENDENT VARIABLE**

## **DEPENDENT VARIABLE**

### **Research Approach**

I have used positivistic research philosophy and used deductive approach of research. Deductive research approach or study is which a conceptual structure is already developed and research is done to fill any gap. I have done some extensive research and collected a wide variety of information.

### **Research Strategy**

The topic is very rare although it is known to archaeologists but much work has been done on the site of Badalpur in the past couple of years. So I will collect the required information through review of the literature and questionnaire.

Furthermore, I will dig more secondary data through the published materials already available and restructuring my personal experience that I have gained during the field survey to my research.

### **Time Horizon**

The time horizon is of two types

1. Longitudinal
2. And cross sectional.

In this research both the strategies are used it is longitudinal because the evidence that has been used is time consuming and had been proven by different authors through decades.

It is cross sectional because the topic is generalized that one area and time zone may not draw the desired result. So this research will be based on both the methods.

### **Audience**

Firstly, the audiences are the scholars of archaeology within Pakistan and ancient architecture and also the students who would further like to do research on it.

Secondly are the eminent scholars and archaeologists of the world who needs to be aware of the fact that the Buddhist Sacred areas are not only being preserved in Pakistan but also are researched on.

Thirdly the audiences are all the Buddhist monks and followers of Buddhism.

### **1.8.9 Limitations:**

Limitations are an essential part of any environment. During the project I faced following limitations:

- As this research is essential for master's level degree, time allocated to this research is limited.
- There is a need of densitometer as it is very difficult to take all the measurement by hand it requires physical effort as well as an extra labor for help.
- This research methodology is only concentrated on selective bases, to draw a proper conclusion regarding this issue the research must be conducted on a bigger scale.

## Chapter 1

### History and Geography

#### 1.1 Location of Taxila

Though Taxila valley is situated outside the geographical boundaries of the Gandhara region, it has been a very important component of the Gandhara civilization. On the world map, Taxila Valley is situated between north latitudes 33° 42' 30" and 33° 50' and east longitudes 72° 53' 45" and 72° 59'. Average height of the valley from sea level is 530 meter and total area is about 375 square kilometers.

#### 1.2 Origin of Name

The valley derives its name from the historic city of *Takshasila* or Taxila. In the Puranic verses "the name is spelt as *Takhasila* or *Takshasila* in the Prakrit epigraphs, but in the Besnagar inscription of the Greek ambassador Heliodorus it is spelt *Takkhasila*" (Dani 1999:1). The present spelling Taxila was the abbreviated form used by Greeks and Romans and from them was commonly adopted by European writers (Marshall 1951:1). The correct Sanskrit spelling is *Takshasila*. Al-Beruni is the only scholar who gives the Persian equivalent of Takshasila as Mar-i-Kala (Sachu 1910: 302). The name in its corrupt form still survives in the name of the southern hills of Margalla.

The literal meaning of the word *Taksha* in Sanskrit is to cut or to split and *sila* means stone, rock or hill. It is because of this literal meaning of the two composite



words that Marshall suggested: “It is not unlikely that Takshasila signified *the city of cut stone*” (Dani 1999:1).” The faithful Chinese pilgrims, attributed the name *Takshasila* with *Tathagata*, according to the Hiuen-Tsang’s accounts: “This is the spot where *Tathagata* formerly dwelt when he was practising the discipline of a Bodhisattva; he was then the king of a great country and was called Chen-ta-lo-po-la-po (Chandraprabha); he cut off his head, earnestly seeking the acquirement of *Bodhi*”(Beal 1884: 138).

Taxila is one of the historic places and a prominent representation of the great Gandhara civilization. This was one of the most civilized cities of the civilization which was once the great center of learning. People from far and wide came to this place for education. This city is outside the geographical boundaries of the then popular civilization. Murree hills located at its eastern border, while Margalla hills on its south. This region is at the short distance of about 30 kilometers from the capital of Islamabad and lies 33 and 33 degree north latitude and 72 and 72 degree on east on world map. This region expanded over the area of almost 375 kilometers with 530 meters from average sea level (Jansen 2010: 27).

Taxila is the ancient city located at the southeast of Gandhara, situated transversely at Indus River. This city has been witnessed of huge amount of buried archeological treasures which disclosed the history and culture of that civilization. This city remains the core of importance for being the part of the great civilization in Indo-Pak subcontinent (Marshall 1960: 10).

This city has got its importance in historical literature of the mentioned civilization. Its name first appeared in the sources of ancient history of the city. Mahabharata and Ramayana are the two most authentic sources along with three others which used its name in relation to the different rulers who possibly ruled this area. The history of this region extends back millions of years (Khan et al. 2002: 13).

### **1.3 Topography**

Pakistan is famous for its archeological regions. These include Harappa, Mohenjodaro and Gandhara civilization. Almost all of them are thousands of years old which represent the depiction of livelihood style of them. All of them share a common point; located adjacent or nearby to the famous Indus river and its decedents. Gandhara is the important one among them. Gandhara is located at the north-western sides of Islamabad region and located just at the distance of 30 kilometers. Most of the parts of Taxila are surrounded by Murree hills all through from northern belt to the southern one. The average height from sea level is ranging in between 1700ft and 1800ft. The southern part is relatively less fertile because of the broken and stony mounds where several monasteries are located. The northern part is fertile. Haro River is the source of watering in this region. Haro River is the joint junction of two small rivers called Tamra nala and the Lundi nala. Tamra runs from the southern part of the valley while the latter from the northern side. The valley was at the crossroads of the three trade routes. All of these routes come from India, western Asia and central Asia for different kinds of business purposes. The studies showed it was one of the great

centers of business along with the center of learning as well (Tanabe 1984: 212; Marshall 1960:1-3).

## **1.4 The Ancient City Sites and Major Monuments of Taxila**

With the advent and arrival of the British Raj, the importance of this area was revealed for the first time. Major excavations and surveys were done during that period. Explorations revealed during different studies archaeological monuments. Such monuments are listed below.

### **1.4.1 Sarai Khola**

The earliest known settlement of the Taxila valley is Sarai Khola. The site was excavated by the Federal Taxila Institute of Asian Civilizations and Museums in 1968, which yielded a cultural sequence from late Neolithic to the Iron Age i.e. Neolithic period (4000 to 2800 BC.) to Bronze Age Culture (2800 - 1500 B.C.) and Late Bronze and Early Iron Age Culture (1000 B.C.) (Halim M.A: 1-112). This discovery pushed back the history of the region from 6<sup>th</sup> century BC to the 4<sup>th</sup> millennium BC. It was the time when Man had started the art of growing agricultural products and domestication of animals. The ceramic was in the embryonic stage and they used handmade pottery for their daily use. The evidence of Kot Dijian Culture was also found at Sarai Khola. Another important site in the Taxila Valley is the Hathial, lying hardly half a kilometre east of the Taxila Museum and rendering very valuable information (Khan G.M 1983: ), by revealing three occupational levels i.e.

1. Kot Dijian level (2600-2400 B.C.).
2. Gandhara Grave Culture (1000 B.C.).

### 3. Early Historic period (6th/5th century B.C.).

#### 1.4.2 Hathial

In 1980, the excavations unearthed the first and only settlement site of the Gandhara Grave culture known as Hathial, situated about 0.5 kilometer west of the Sirkap city of Taxila. The excavation done here revealed three occupational levels here. Such as:

- Kot Dijian (2600-2400 B.C.E)
- Gandhara Grave Culture (1000 B.C.E)
- Early Historic Period (500 B.C.E) (Ibid: 71).

Hathial is the only settlement site of the Gandhara Grave Culture (early Aryan) throughout the region has so far been recorded. Prior to that, only the burial sites of these people were excavated in different parts of the North West Frontier Province and at Sarai Khala in Taxila Valley (Khan G.M: 1-95).

#### 1.4.3 Bhir Mound

The excavation of this site reveals different periods and settlements. The studies showed that this site belongs to 6th to 2nd B.C.E. It was the first fortified city with irregular shape of Taxila. This site is located at the Taxila railway junction on the east and to the Tamra River on the west. Sir Marshall's efforts to excavate parts of this site brought about some exposure of this site in which four different periods were reported. The earliest level of the site belongs to 6th and 5th century BC when Taxila was the part of the Achaeminid Empire of Persia. It further reveals that one of the site was built in 4th century B.C.E during the visit of the Great Alexander to this area. Another site was built in the 3rd century when this was one of the part of the Mauryan



Dynasty. The last site in Bhir mound dated in 2nd century when the Greeks invaded this region and established first court here (Tanabe 1984: 212).

#### **1.4.4 Sirkap**

The second city site of ancient Taxila known as “Sirkap” after the name of a wicked character of a folk legend, “Raja Rasalu and seven demons”, who lived and ruled here. H. Hargreaves excavated the ancient city remains during 1912-30 under the direction of Sir John Marshall and in 1944-45 by Sir Mortimer Wheeler and his colleagues.

The remains belong to four distinct super-imposed periods of Pre-Greek, Greeks, Scythians and Parthians. The city founded approximately in the first quarter of the second century B.C. by the Bactrian Greek King Menander. The city was well planned and fortified. The builders introduced their Ionic and Corinthian orders of architecture at Sirkap. The Greek influence enhanced further under their successors Scythians and Parthians. The Parthian king Gondophares following the Greek pattern rebuilt the city with its main street in the middle studded with shops and places of worship like Apsidal Temple, Sun Temple and Double- Headed Eagle Stupa and king’s palace close to the eastern gate. Christian Apostle Saint Thomas came to Sirkap in 40 A.D. and was received by the king in his Royal Palace. The famous traveler Apollonius of Tyana who visited Taxila in 44 A.D. mentions “Taxila about the size of Nineveh and walled like Greek city. The narrow streets arranged well like that of Athens”. It was under Parthian that “Gandhara Art”, gradually emerged out of the classical forms and local iconographic traditions. A third century B.C. Aramaic

inscription of Asoka and other objects like coins and household objects all indicate more indebtedness to the western contacts (Marshall 1918:65; Raza 1996: 14).

#### **1.4.5 The Apsidal Temple**

One of the most imposing buildings on the eastern side of the main street of the Sirkap City is the Great Apsidal Temple of the Buddhists. This temple, faces to the west. It stands in a spacious rectangular courtyard with two raised platforms to right and left of the entrance of the temple and rows of chapels for the monks against the west compound wall. The temple was built on the ruins of earlier buildings of the Scytho-Parthian period, and with a view to providing a level court and at the same time adding to the impressiveness of the building, these earlier structures were filled in with debris and a raised terrace was thus created, access to which was provided by two flights of steps on the street front. The platforms to the right and left are the foundations of two small stupas, amid the fallen masonry of which were found numerous stucco and terracotta heads and other decorative objects which had once served to adorn the edifices. The value of these terracottas and stuccos is all the greater because their date can be fixed with approximate certainty. In the debris of the courtyard both here and at other spots numerous coins were unearthed belonging mainly to Kujula-Kadphises and Hermasus, with a few of earlier date mingled with them. From these it may be inferred that the building was already falling to decay in the latter part of the 1st century A.D. In the middle of the court stands the great Apsidal Temple, and just as the court is raised above the level of the street, so the temple itself is raised on a plinth well above the level of the court. It consists of a spacious nave with a porch in front and a circular apse behind, the whole surrounded

by an ambulatory passage, to which access was gained from the front porch. In the middle of the apse, which measures 29 feet in diameter, there must originally have been a stupa, but treasure-seekers of some bygone age had utterly destroyed it (Marshall 1918:81-83; Jansen 2010: 285).

#### **1.4.6 Sirsukh**

The third capital city of Taxila is known as Sirsukh, situated still further to the north-east, on the opposite side of the Lundi nala. This city appears to have been built by the Kushans, probably during the reign of Kanishka in about 60 A.D. Its plan is roughly a parallelogram, and the circuit of the walls is not far short of five kilometers. The walls, which are relatively well-preserved along part of the southern and eastern sides, are of massive construction, some 18 feet or more in thickness and protected by circular bastions on their outer side. The facing of the walls is of the large diaper masonry which came into vogue in the early Kushan period; the bastions are circular and the intervals between them measure 90 feet. Inside the city are three modern villages, Mirpur, Tofkiafn, and Pind Gakhra, placed on the remains of ancient buildings, which are still peeping out from the debris among the houses (Marshall 1918: 94; Tanabe 1984: 214).

#### **1.4.7 Jundial Temple**

From Sirkap due northwards through the suburbs known as "Kachcha kot" to the two lofty mounds in Jandial, between which the ancient road to Hasan Abdal and Peshawar probably ran, the mound to the east of the road, which then rose to a height of some 45 feet above the surrounding fields, was superficially examined by Gen. Cunningham in 1863-64, and at a depth of 7 or 8 feet below the surface he discovered

some walls of a large building which he surmised to be an ancient temple. The ancient temple which has now been laid bare was found at a depth of 8 or 9 feet still lower down. The position of this temple is a very commanding one, standing as it does on an artificial mound some 25 feet above the surrounding country and facing the north gate of the city of Sirkap (Marshall 1918: 86). The style used in this building belongs to the Greeks architecture. This temple is resided at the opposite of the northern entrance of Sirkap. Sirsukh is situated at half a mile from this temple (Bhatti 2006: 101).

#### **1.4.8 Dharmarajika**

Dharmarajika, the earliest and largest Buddhist religious complex at Taxila, stands on the bank of Dharma rivulet. It was built to enshrine the redistributed holy relics of the Buddha by the famous Mauryan King Asoka the Great who was also known as “Dharmaraja” for his services to Buddhism. Thus, the name, “DHARMARAJIKA” was given.

Mr. Ghulam Qadir excavated Dharmarajika in 1912-16 under the directions of Sir John Marshall and Mr.A.D. Siddiqui in 1934-36. The circular stupa has a diameter of 131 feet and 45 feet high drum, constructed in solid stone masonry. Ambulatory passage, paved with stone slabs, runs around the stupa. The stupa suffered a great deal from a devastating earthquake of 40 A.D. and re-built twice under Kushana rulers. The courtyard around the stupa has a series of circular votive stupas, rectangular or square chapels and chambers dating from 1<sup>st</sup> century B.C to 5<sup>th</sup> century A.D. The votive stupas yielded relic caskets of gold, ivory, stone and some coins of Maues and Azes-I. A large number of clay seals inscribed with Buddhist creed have been recovered from these Chapels during excavation. From chapel G-5, a silver scroll;



inscribed in Kharoshthi, confirms the name of the stupa as Dharmarajika (Marshall 1918: 35-58).

#### **1.4.9 Jaulian**

Jaulian, perching 300 feet above surrounding field level, represents a Buddhist Stupa and Vihara of late Kushana era. Mr. Natesa Aiyar excavated this site in 1916-17 under the direction of Sir John Marshall.

This site dates back to the 2<sup>nd</sup> to 5<sup>th</sup> century. The site contains in its surroundings the remains of monasteries, courts, stupas and chapels. It is located 4 kilometers away from the main museum of Taxila (Raza 1996: 18)

The main stupa, provided with a tall square plinth and an offset projection for the steps, on the northern side, leads to the circular drum, which had entirely collapsed. Stupa plinth, divided in bays with pilasters, adorned with colossal seated figures of the Buddha in meditation. On the eastern side, a Buddha image, inscribed in Kharoshthi with the name of monk donor, Budhamitra Dharmanadin. Around the main stupa in the upper court, twenty- one square votive stupas are constructed. Five other votive stupas occupy the lower court.

The monastery on the east is located on a slightly higher level, measures 97 feet by 106 feet with an open low quadrangular court in the middle and a line of cells all around with a covered verandah in front. On the Buddha and another one accommodated the staircases for the upper part. Assembly hall is with four pillar bases. Other structural remains south of the assembly hall are of kitchen, storeroom, dining hall and a guard's room close to the eastern entrance.

Some of the finest stucco sculptures have been shifted to Taxila Museum for preservation. Other finds included fragments of a Buddhist manuscript, written in Sanskrit language and Brahmi characters of 5<sup>th</sup> century and copper coins of late Kushana and Indo-Sassanian rulers (Marshall 1918: 110-115).

Although, Jaulian had its own charm but perhaps due to economic constrain, which followed the ruthless invasion of White Huns towards the end of 5<sup>th</sup> century, it was deserted and was left to share the decay and end with other Buddhist establishments in Taxila valley.

#### **1.4.10 Kunala**

At the time when Hsuan Tsang visited Taxila, the Identification city of Sirkap had been deserted for more than five centuries and its ramparts and buildings must long have been in ruins. However, he narrates about a stupa said to have been built by Asoka to commemorate the spot where his son Kunala had had his eyes put out. It is probable that the memorial of Kunala's misfortune is the stupa which occupies a hardly inferior position on the northern slopes of Hathial, commanding a splendid view of the lower city of Sirkap and of the whole of the Haro valley. Hsuan Tsang describes this stupa as being above 100ft. high, and situated to the south east of the city of Takshasila on the north side of the south hill. The blind, he says, came here to pray, and many had their prayers answered by the restoration of their sight. The stupa had undergone many changes from 3<sup>rd</sup> century BCE to 5<sup>th</sup> century CE. Present remains of Kunala stupa belongs to the Kushan period (Marshall 1918: 61-62).

#### **1.4.11 Ghai**

This building is situated on the eastern side of Sirkap. It is considered the extension of the Kunala monastery. The site is from 2<sup>nd</sup> to 5<sup>th</sup> century C.E. This is the location of the Ghai monastery and the stupa (Ibid)

#### **1.4.12 Mohra Moradu**

This site possesses some sacred portions of the Muslim era between monastery and the stupa. It dates back to 2<sup>nd</sup> and 5<sup>th</sup> century. The site is divided into the monastery which containing 27 cells and the stupa. It was the Buddhist establishment and is situated at 6 kilometers from the main Taxila Museum (Raza 1996: 20).

#### **1.4.13 Kalawan**

This site is the host of monasteries and the stupas. It belongs to the 2<sup>nd</sup> and the 5<sup>th</sup> century C.E. it is situated at 3 km in the south-east of Dharmarajika site and at the north of Margalla spur. The name Kalawan has been kept because of the beautiful stucco sculpture used in sites and caves in this region (H.Nadiem 2008: 69).

#### **1.4.14 Jinnan Wali Dheri**

This site belongs to the 3<sup>rd</sup> and the 5<sup>th</sup> century A.D. it is located at 10 km north-east from the main Taxila museum. It possesses the remnants of Buddhists, their monasteries and stupas. It also contains the remains of Buddha's fresco paintings (Bhatti 2006: 95).

#### **1.4.15 Pipplan**

The site is witness for two periods of the late Parthians and the Early Kushans during the 2<sup>nd</sup> and the 5<sup>th</sup> century C.E. This site is located between two early sites of Julian and Mohra Moradu at the foot hills. There is a beautiful circular votive in one of the monastery cells which is still in its shape and preserved (Marshall 2006: 365).

#### **1.4.16 Lalchak**

This site was the combination of monastery and stupa in which only monastery is in good shape and preserved. It is belonging from the 2<sup>nd</sup> and the 5<sup>th</sup> century C.E. The north-eastern corner of the sites of ancient Sirsukh is located from Lalchak at about half a kilometer. There are Buddhist remains of stupas, chapels and monasteries which are covered by four mounds in a groups form. (Ibid: 388).

#### **1.4.17 Badalpur**

Of the great stupa of Badalpur, near the village of Bhera, there is little that need be said. In its construction, and doubtless also in its design, it resembled the Bhallar and Kunala stupas and must have been one of the most imposing monuments at Taxila; but it has suffered much from the spoliation wrought by treasure seekers in the past, and apart from its massive plinth, which measures over 80 ft. in length and by 20 in. height, there is little enough left of its former grandeur. On the north and south sides of the stupa are two rows of chambers with narrow verandahs in front, which served as chapels for images. On eastern side of the stupa, there are the buried remains of a spacious monastery.

The style of the masonry coupled with the finds of coins, which belonged almost exclusively to the Kushan Kings Kanishka, Huvishka and Vasudeva. Betoken the latter half of the third century A.D. as the probable date when these structures were erected (Marshall 1918: 101-102).

#### **1.4.18 Giri**

The site situated about 8 kilometers southeast of the Taxila Museum, near village Khuram Pracha, in the foot of Margala hills. It consists of Buddhist stupas and monasteries. The site was excavated by Sir John Marshall in early 20<sup>th</sup> century. During excavation, pottery, coins, beads and the stucco sculptures were recovered. It dates back to the 2nd and the 5th century C.E (Marshall 2006: 342).

#### **1.4.19 Bhalar**

This site is located at the distance of 8 kilometers from northwest of the main Taxila museum. It occupies a commanding position on the last spur of the Sarda hill. The stupa was excavated and conserved by Sir John Marshall while large monastery situated on north eastern side of stupa has yet not been excavated.

According to Hsuan Tsang the Bhallar Stupa was originally built by the Emperor Asoka to commemorate the spot where Buddha in a previous existence had made an offering of his head, but if ever Asoka erected a monument here, no trace of it is now discoverable. The existing stupa dates back no further than the third or fourth century A.D (Marshall 1918: 115-116; Bhatti 2006: 100).



#### **1.4.20 Bhamala**

It is considered to be the safest site among all Buddhist stupa and monasteries. This site belongs to 4<sup>th</sup> to 5<sup>th</sup> century C.E. It is situated near Village Bhamala, on the right bank of river Haro in Taxila Valley and 20 kilometers away from Taxila museum towards the north. This site includes monasteries and imposing Stupas (Ibid 2006: 97).

#### **1.4.21 Hindu Temple**

This site was first explored by the Taxila Institute of Asian Civilization (TIAC) in 2010 during their survey which they conducted in the area under the auspices of some other stakeholders. It was named as Taxila temple later on. It is situated in the west of Taxila museum, in the middle of town Taxila, tehsil Taxila Rawalpindi district of Punjab. 12.4 meter and 12.7 meters is the length and wide of the temple respectively. It is dedicated to Shiva and Hanuman in the form of three monumental domes. The architecture of the temple is simple and not enriched with decoration. It was constructed in memory of Sorgia Bhagat Lal Chand ji of Rawalpindi by her wife Rimati Ram Rakhi. (Kalhoro 2010: 99).

#### **1.4.22 Taxila Museum**

The museum is located 40 kilometers north-west of Islamabad and north-east of Taxila railway station. The plan of the building was given by Sir John Marshall but it was left incomplete; because he was retired from the seat of Director General of Archaeology in 1928. The foundation stone was placed by Chelmsford, viceroy of India. The museum was open for the public by Sir Habibullah after the construction


was completed in 1928. The museum is surrounded by two gardens. The museum is divided into three galleries. This museum is considered one of the well maintained museums of the country and it has at least 38 clerestory windows which give natural light. The curator's office is attached to the central hall. The museum provides a great knowledge of the cultural heritage of the country. About seven thousands of the artifacts from the excavations of the Taxila are placed in the museum, classified as Gandharan sculptures in stone, coins, jewelry, terracotta, gold and silver objects, some writing materials, pottery, tools, house hold objects, weapons, personal ornaments etc (Bhatti 2006:105-106).

## **1.5 History**

It is mentioned in Ramayana that Taxila was founded Bharata; younger brother of Rama. He makes his son Taksha the ruler of Taxila. Mahabharata and Jataka tales tell us that Taxila was an educational institute for secular and religious studies. The age of Taxila in Jain literature dates back a million years to the Rishaba, the first of Tirhamkaras and his footsteps were preserved by Bahubali for holy purpose and he placed a throne along with "wheel of law" (Dharma Chakara) (Marshall 1960:10).

### **1.5.1 The Achaemenians**

During the time of Darius I; Taxila become part of Achaemenian Empire (521-486 B.C). When the local ruler Pukkusati was removed from the power, Taxila become seat of Achaemenian, province of Gandhara, in the tomb battle of Gaugmeta (331 B.C). The soldiers were enlisted by the Achaemenians and against the Alexander the Great they fought by the side of King Darius III. The Asoka rock edicts were the copy



of Achaemenian; also columns with bulls back to back and pillared halls. They used same employment system; clerks and Aramaic writing was used which developed a new language Kharoshti. Same currency was in use as local bent bars and circular discs and they followed the same academic structure of the Achaemenians (Dani 2007:7).

### **1.5.2 Alexander the Great**

The last ruler of Achaemenians was defeated by Alexander the Great in 330 BC. In spring, 326 B.C; Alexander the Great occupied Taxila. After a long campaign in Bactria Alexander the Great crossed Hindu Kush and occupied the district of Kabul. After descending Kabul, he reached Indus. Omphis, the king of Taksasila (Taxila) left his kingdom without any fight and handed it over to Alexander the Great. Alexander attacked the brave king Porus who lived beyond Jehlum (Marshall 1918: 9-11; Basham 1954:48-49).

### **1.5.3 Mauryans**

Chandragupta was the founder of the Mauryan Empire. All the Macedonian provinces, as far as Hindu Kush, were territory of the Mauryan Empire. The power of Chandragupta was stronger than the Greeks. When his son Bindusara succeeded to the throne of Magadha; Taxila was independent and didn't accept the submission of the empire until Asoka become king. Asoka maintained his power to the north-west effectively, little harsh than his grandfather Chandragupta. Because of Asoka; Buddhism spread with strength in some parts of India. (Marshall 1918:11)

#### **1.5.4 Bactrian Greeks**

In 321 B.C; after the death of Asoka, Taxila was once again independent (Marshall 1918:11).

But after three generations of Mauryan rule, it was once again conquered by Indo-Greek Kingdom of Bactria and remained its part till 1<sup>st</sup> cent B.C (Nadiem 2008:45).

#### **1.5.5 Scythians and Parthians**

Greeks were followed by Scythians and Parthians. Mauryan rule came to an end because of Greeks, who were settled in Bactria because of Alexander. After his death, they announced their independence in 225 B.C. The first Greek coin was found from Bhir Mound which belongs to the third ruler Demetrius I, son of Euthydemus. His descendants created a new city of Hathial known as Sirkap and a branch of Greeks which came from Herat and Kandahar; they were the descendants of Eucratides I, the coins of their reign were found from Sirkap. Platoi, Heliocles, Appolodotus and Antialcidas followed Eucratides in 140-130 B.C. Menander, well known in Buddhist literature, his son Strato along with the queen mother Agatholeia ruled over Taxila until he got old (Dani 2000: 19).

#### **1.5.6 Kushans**

A branch of nomad people from Kansu province of China are known as Kushans. The most famous king of Kushana was Kanishka, the successor of Vima Kadphises. Under his rule the region was leading on the great path of prosperity and art was on its climax. He was a great benefiter of Buddhism and he portrayed Buddha's image on



coins for the first time. Vasudeva was the last ruler of Kushana dynasty (Bhatti 2006:12).

### **1.5.7 White Huns**

Under the leadership of Toramana, a barbarian tribe of White Huns entered central Asia in 5<sup>th</sup> cent AD. They destroyed everything. They are responsible for the destruction of Buddhism (Ibid: 13).

### **1.5.8 Muslims**

Before the excavations of Taxila it was known as the village of Shah ki Dehri, It is situated on a mountain. The name of the area is drawn from a Turk Shahi ruler, who has built a fort over the hill. Bhir Ziarat, a Muslim shrine, is situated on Bhir Mound, there is another ziarat situated in Mohra Muradu known as Panch pir (five saints). A Muslim mizar is at Jaulian. But a large number of Mughal and post-Mughal Muslim monuments are at the hills of Giri (Dani 2000:29).

## **1.6 Previous Researches**

Sir Alexander Cunningham was the first person who mentioned the site of Badalpur during his archaeological survey in ancient Gandhara region in 1863-64. (Shehzadi, 2013)

Stupa complex was first excavated by V. Natesa Aiyar, the then superintendent, Frontier Circle and Archaeological Survey of India in 1916-17. In the absence of Sir John Marshall the excavations exposed a stupa and a few monk cells in the monastic area. (Shehzadi, 2013)



After 1917 if anything illegal digging and vandalism must have been active on the field. Then in 2005 the Federal Department of Archaeology and Museums launched excavations and worked there for four seasons still 2009 to protect and safeguard an important site. The excavations were headed by Mohammad Arif, Director Exploration and Excavation branch and Mohammad Ashraf Khan. While Gul Rahim worked on the coins. The Director General of Archaeology and Museum, Government of Pakistan, Assigned the task of preserving the site to Exploration and excavation Branch. (Shehzadi, 2013)

Mr. Mohan Lal, the then Director of the Exploration and Excavation Branch and Mr. Shakir Ali, Deputy Director during the period 2006-07 conducted second season of excavation on the same monastery. During this excavation, the remains of southern, northern and western side of the monastery were exposed. A large number of pottery, metal objects and coins were unearthed. (Shehzadi, 2013)

In 2008 the excavation on the site was conducted by Muhammad Ashraf Khan, the then Director Exploration and Excavation Branch, Federal Department of Archaeology and recovered the Mathura red sand sculpture of Buddha in Dhyanamudra, Maitrya, relic casket, terracotta oil lamps and grinding stones.

Young team of Archaeologists under the supervision of Dr. Ashraf Khan head of department of Archaeology, Taxila institute of Asian Civilization, Quaid-i-Azam University and Dr. Sadeed Arif field archaeologist, Taxila institute of Asian Civilization, Quaid-i-Azam University. Currently the fall season 2015 is ending and

water tank of monastery 2 has been exposed. Coins of Kushan period revealing shiv standing on a bull and some iron objects have been also excavated.

## Chapter 2

### Architectural Analysis of Badalpur Monasteries.

#### 2.1. Introduction

The Buddhist sacred area of Badalpur monastic complex in Taxila is a flat and fertile land. It occupies a broad stretch of a plane area some part of which is being used for the agricultural purposes even today. The monastic complex is divided in two parts stupa and monasteries, assembly hall and kitchen and stores. The different zones of the site are denominated areas A and B proceeding from W to E. Area B represents the principle nucleus and indicate respectively the Main Monastery, the sub monastery, Assembly hall, Kitchen and Store (fig 1-5).

Structural remains of the site composed of a main stupa, votive stupas, chapels of varied sizes for images, Main Monastery comprising of 38 cells and two gateways, a Sub-Monastery comprising of 12 cells and a door opening towards the Main Monastery, Assembly hall, Kitchen and Store. Unless otherwise indicated, measurements are in meters. As regard altitude, the reference datum chosen was the level of the highest point in the southern east corner of the Main monastery wall.

#### 2.1.2 Definition of Monastery

Monastery is a general term indicating a place where Buddhist monks and believers engage in religious activities. The concept was introduced into China from India at the time of the introduction of Buddhism around the first century C.E. In Sanskrit a variety of terms can be used to convey this same meaning, some of which designate

the entire monastery, while others, technically speaking, refer to or emphasize one function or one part of the monastery. The followings are some among the most common Sanskrit terms.

1. Buddha-stūpa, originally indicating the Indian stūpa.
2. Samghārama, refers to a garden for community living and practicing; it became a popular synonym of monastery.
3. Bodhi-maṇḍa, initially designating the location in Buddhagaya where Sakyamuni achieved his full enlightenment under the bodhi-tree. Later, it referred to any place where Buddhist practice was carried out, therefore used as a synonymous for monastery.
4. Caitya, refers to a stūpa without relics.
5. Vihāra, indicates a residence for religious practitioners.
6. Araṇya, refers to a secluded place suitable for monks where to practice Buddhism and reside.
7. Cāturdiśa, means guest-room for wandering monks.

Broadly speaking, the first three terms, used in different periods, indicate a complete Buddhist monastery, whereas the last four do not indicate a monastery in the full sense of the term, although they were used as synonymous for it under certain condition and in some historical periods.<sup>1</sup> In Chinese, the term for monastery, consists of two characters. The character si 寺 referred specifically to a government office.<sup>2</sup> In Buddhist literature it is recorded that the earliest monks arriving in China from India or Central Asia were accommodated in the Honglu si 鴻臚寺, a

government office in charge of foreign affairs. Later, when free-standing Buddhist monasteries were established, the term si was retained and used as a general term to indicate a Buddhist monastery (He, 2013).

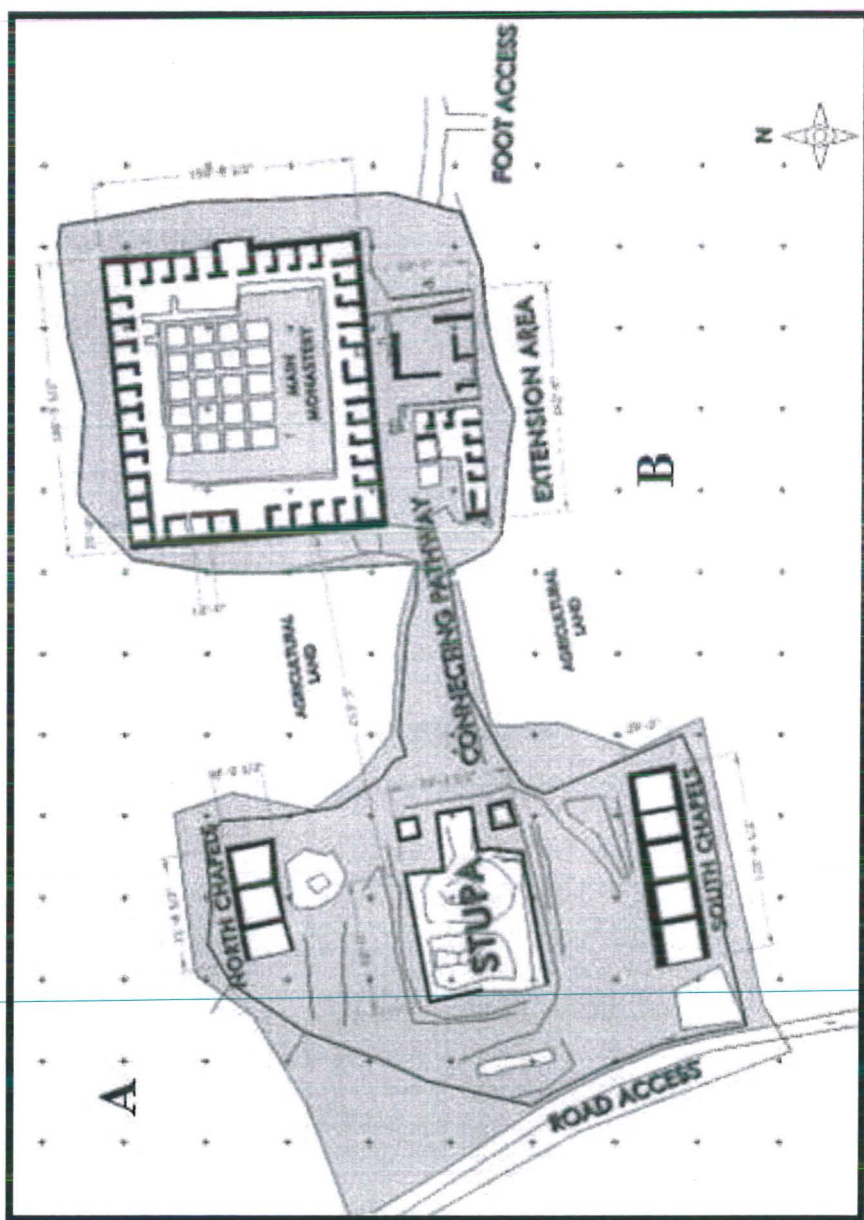


Figure 1: Digital Map of Badalpur Monestic Complex



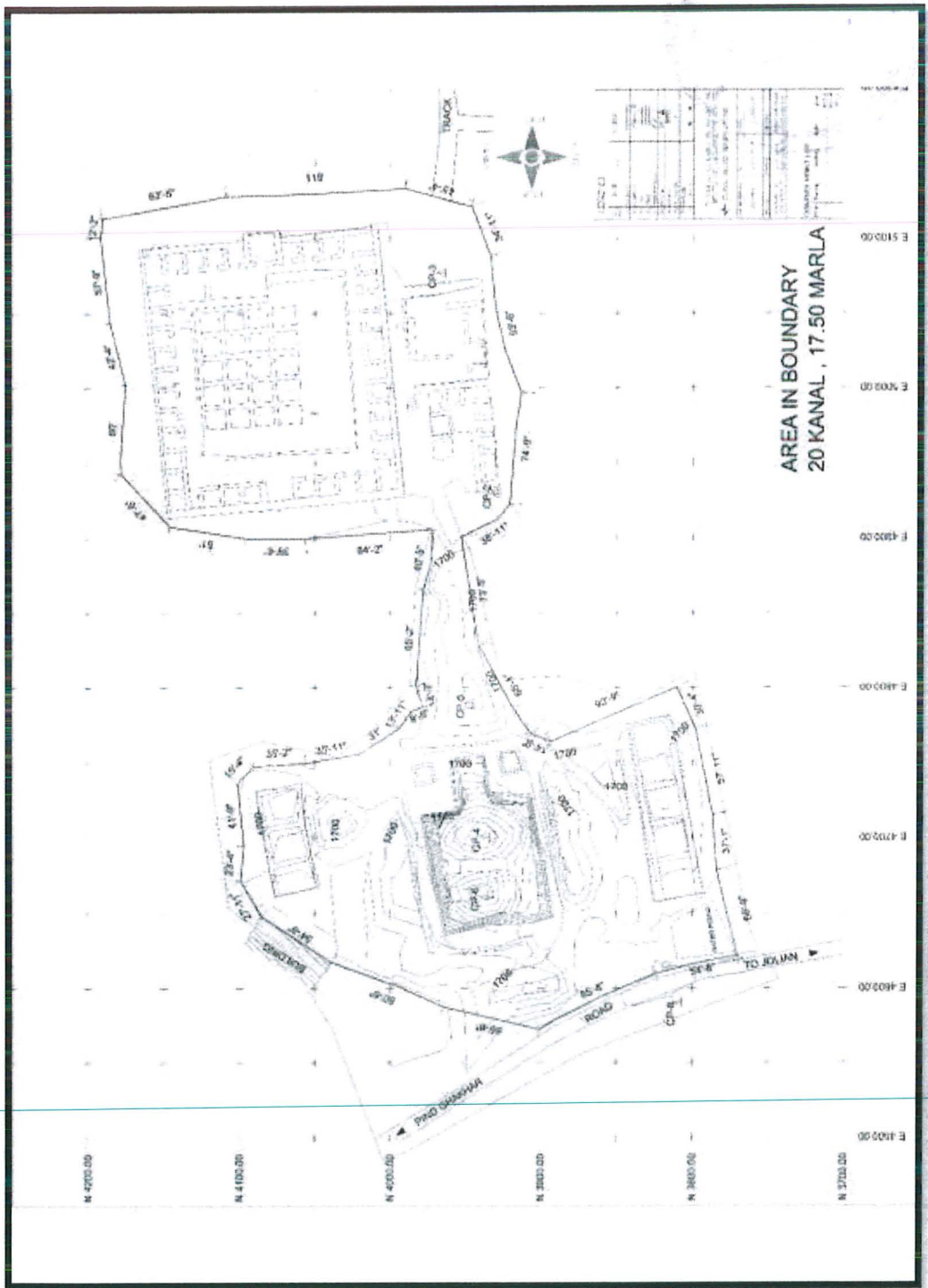


Figure 2: Survey Plan of Badalpur Monestic Complex

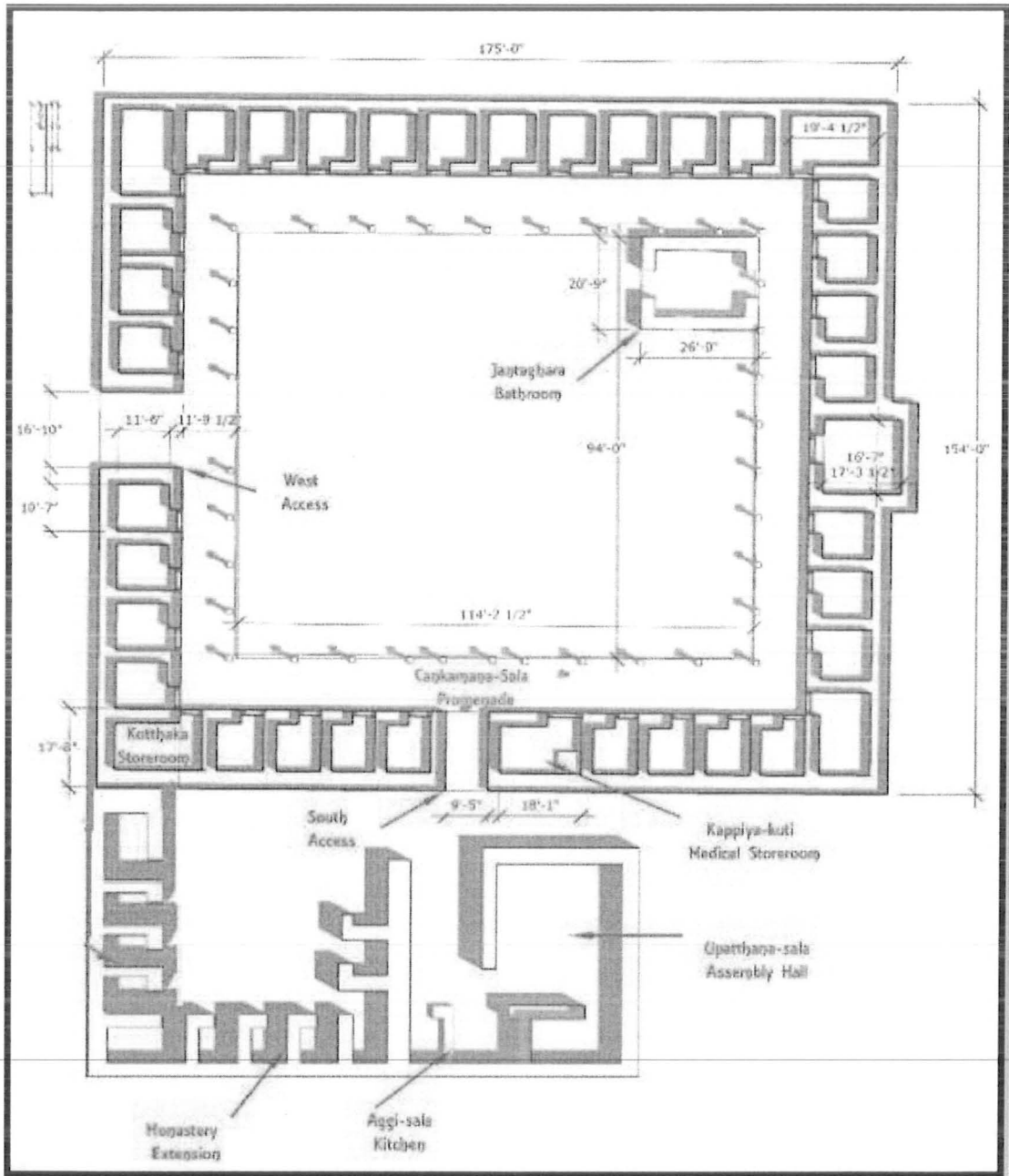


Figure 3: Digital Map of Main Monastery Complex, Redrawn and Extnded

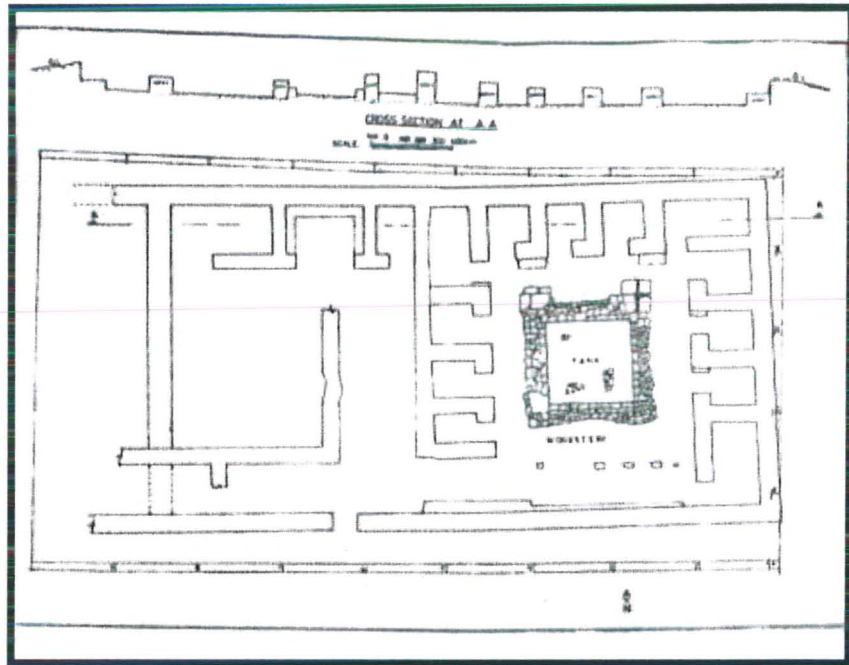


Figure 4: Sketch Map of Sub Monastery, View from the North Side



Figure 5: Over Head View of Badalpur Monastic Complex Adopted from Google Earth

## 2.2. The stupa

The main stupa has been constructed in large semi diaper and semi ashlar of lime stone Kanjur stone let in for molding and pilasters. The stupa is rectangular in plan, measuring 24.96m west to east and 22.64m north to south with an elongated projection toward east for staircase to approach the upper (*prada Kashina Patha*). The remarkable feature of the stupa was the great size of some of the stone block composing the facing of the base. The block at the north-west corner measures 1.2m length and 0.28m in width. The data assigned by the excavator to the monument was late 3rd century B.C.E to 8-9<sup>th</sup> century C.E. the chronology of the site was fixed through C14 dating and numismatic evidence by department of anthropology university of Madison, Wisconsin USA (by prof. Mark Kenoyer and Taxila Institute Asian Civilization, Quaid-i-Azam university Islamabad) (Khan Ashraf et al 2009 p 25-59). A convex shaped molding runs all around the stupa in between the two narrow cavettos. Traces of procession path are also found around the drum paved with lime concrete. The dome is missing.

Two small votive stupas, one on the northern measuring 4×4 m and other on the southern 5×4 m sides of main stupa stairs were exposed by Mr Natesa Aiyar in 1967.

The upper portion of these stupas is completely missing. Six chapels on the southern and northern side of the main stupa were also discovered by the same excavator.

These chapels were constructed to enshrine individual's images (Arif, 2015)



### **2.3. The Main monastery.**

The monastery is square in plan situated to the east of the main stupa area and build of diaper and semi-ashlar masonry and an externally measurement of 81 meters from north to south and 78 meters from east to west with an open low court in the middle and a line of 38 cells all around, fronted by a veranda measuring 3 meters wide (fig 3). The main entrance to the monastery is from the stupa on the west. Cell have window, niches, the doorway have sloping jambs and the walls of the monastery were plastered with mud and reddish colour washed. The floor of the cells is stone bites and mud well rammed. The wall of the monastery is standing to the height of between two meters to 3.5 meters from the various points and have a thickness varying from 01 meters to 1.5 meters on different places. It is constructed in the lime stone blocks and mud mortar and of exceptionally massive construction.

Some of the stone blocks of which they composed measuring as much as 50 centimetres to 1 meter (Ibid).

#### **2.3.1 Structure of the cells of the Main monastery.**

The excavations uncovered a cell No.17 measuring 3.24 cm east –west and 3.30 cm north-south and preserve to height of 2 meters. The cell has a 127-cm wide entrance opening toward the west. On both sides of the doorway 30 to 37 cm projections are found reducing width of the entrance. Inside the cell there were two niches, one in the western wall and other in the southern wall. Both the niches are of different size 40×29 cm width and 47×34 cm depth respectively. The wall still retains mud plaster with reddish powder



Particles and lime stone particles both on interior and exterior surface, which are in very good state of preservation. The masonry of the cell is in diaper. So much evident from the charred timber and clay found on the floor. Large number of iron nails and door bosses indicated that once the cell was provided with heavy wooden doorway. (Arif, 2015)

The walls of cells 18 were constructed of lime stone in mud mortar covered with mud plaster as similar cell No 17. Two niches for lamps are noticed on each in western and southern wall. Large number of charred timber of the roof, door, door frames and pillars were noticed during the course of excavation. A large number of chiselled fallen stone mixed with debris of the roof on the floor, suggest the double storey of the monastery.

The most remarkable discovery of the excavation of the monastery seems to have stood in the cell No.19 which yielded a Mathura sculpture of the Buddha made from reddish sand stone. The sculpture depict a Buddha seated on the throne with cross legged (measuring 13×12 cm) both sole of the feet having dharmachakra symbols dharmachakra mudra or wheel of law on the palm. Pipal tree at his back. Having round and smiling face, open eyes, long ears and hair arranged like a spiral shell depicts ushnisha. Buddha is dressed in Ekanshika Sanghati (drapery) through which his body can be seen. His right shoulder is bare and drapery crosses his left shoulder and arm. To his left is female worshipper with clasped hands wearing long necklace. Front of the throne is decorated with two lions. Only one of these types of Mathura style

sculpture of Buddha (representing first sermon) was discovered from the surface of the Bhari Dheri site in Taxila valley, now on display in the Taxila Museum.

The period of 1<sup>st</sup> century of AD introduced a new era in the Gandhara history when Kushans belonging to the Yuchi tribe of china migrated in to India and Gandhara from central Asia and Afghanistan and finally settled down in the north west of Gandhara (Pakistan) with Peshawar as their imperial capital. From here they expended their empire in the heart land of the country with Mathura their state capital under the rule of the three brilliant kings Kanishka, Huvishka and Vasudeva. Soon the city Mathura developed as a major center of the art and religion along with political power thousands of sculptures were carved out of red stone and were also supplied to the far off places like Sanchi, Sarnath, Kusambi and Sravasti in the east and Sanghol and Taxila in the west. Mathura was the main religious center of central India and had also flourished historical as an important point of communication. Due to this unique discovery, it is very clear that the Mathura image of the Buddha from Badalpur and Baridheri to Taxila valley was originated from the soil of Mathura and was presented to these monasteries by some devotees/monks during their pilgrimage to the holy shrine of the Taxila in the era of 2<sup>nd</sup> century AD, as evidenced from the coin of Kainshka discovered from the same cell. Two niches for lamp were provided on each in western and southern walls. The mud plasters covering most parts of standing walls of the cells.

Cell 20 falls in between square No.AH/7-8 in the eastern side of monastery. The size of the cell is larger and measuring 5, E-W and 5.26 cm N-S. The cell was filled with

heavy fallen boulders, while fragments of copper and iron objects along with large amount of reddish clay and small number of pottery also found. Along with the discovery of Mathura red sand stone sculpture from cell 19, another remarkable discovery is the sculpture of the Bodhisattva Maitrya with a stupa shaped relic casket in schist stone found in front of the door opening of cell 20, toward west, into the veranda area. Fragments of sculpture were spared over around on square meter area. It is supposed that the sculpture was once placed inside the cell but during destruction of the monastery by White Huns, it was thrown out from the cell. (Arif, 2015)

Existing height of the mud plaster walls of the cell is 1.74 cm. cell measures 3.24 cm north to south and 3.30 cm east to west. Thickness of the wall between cell No. 20 and cell No. 21 is 1.28 cm. door opening to west is 1.27 cm. wide.

Mud plastered walls of the cell no.22 are maximum 1.72 cm in height and vary in different directions. Measurements of the cell are 3.30 cm from east to west while 3.24 cm from north to south. Niches have been demolished due to the destruction of the walls. Door opening is 1.27 cm. wide opens in veranda towards west. From inside the cell iron clamps, doors bosses and nails found in good numbers.

The maximum height of the walls of the cell no.23 is 1.85cm having mud plaster, two niches, one is 48 cm wide in western walls and other is 50 cm wide in southern wall have been provided. Cell measures 3.20 cm east west and 3.24 cm north west-south while door is same in width as others, measuring 1.27 cm. Potsherds, fragments of iron clamps, door bosses, nails and broken iron rims found from inside the cell.

The excavation also exposed the cell no.24 measuring 3.24 m north-south and 3.30m east-west having 1.35m height. The cell has 1.27m wide opening toward west. Mud plaster can be seen on the walls with same material as in other cells.



Figure 6: Niche of the Cell no: 22 Image taken from the east side of the cell, main monastery.

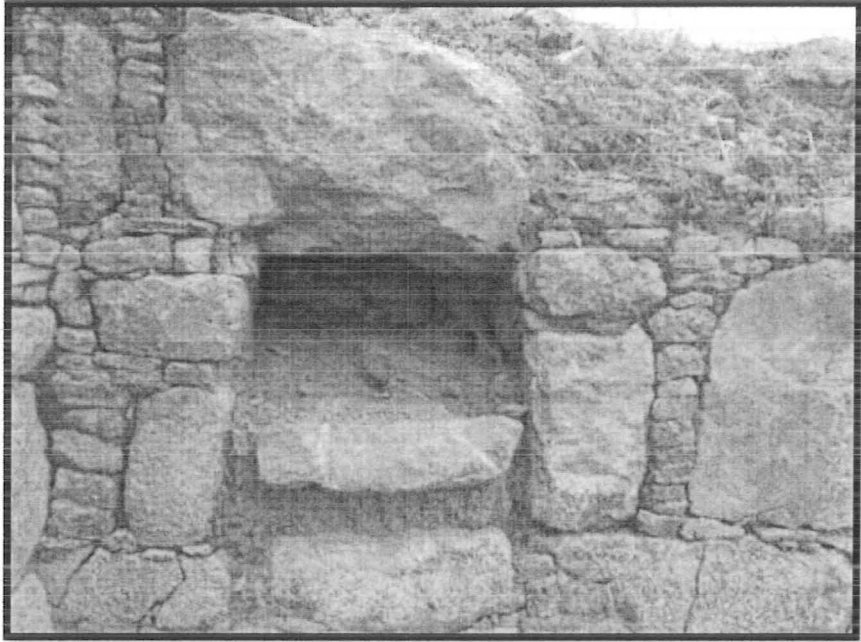


Figure 7: Image of the Niche of Cell No: 22 Image taken from the east side of the cell, main monastery.



Figure 8: Niche of Cell No: 22 Image taken from the north side of the cell, main monastery



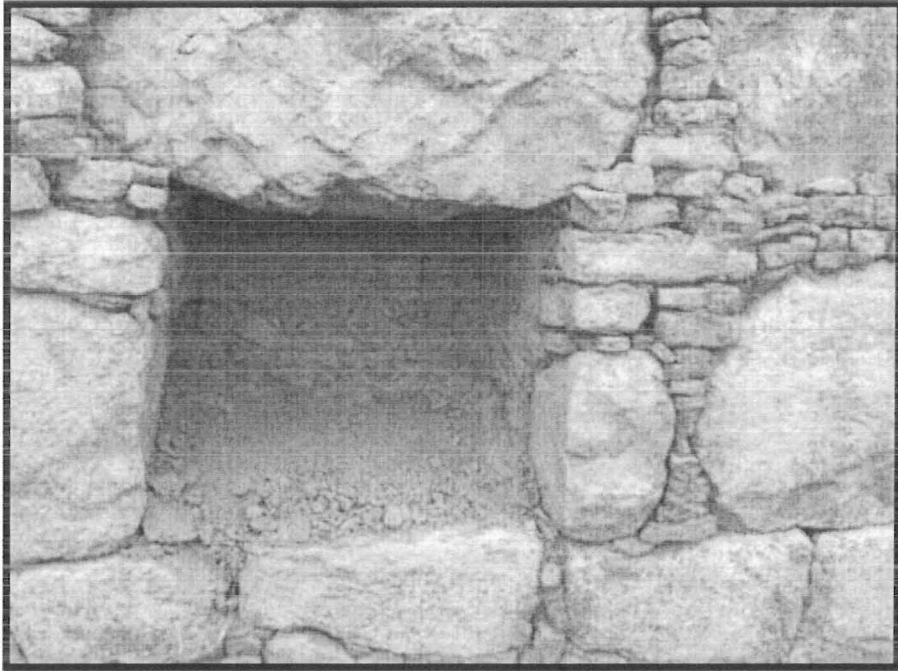


Figure 9: Niche of Cell No: 22 Image taken from the north side of the cell, main monastery



Figure 10: Image of the Opening of Cell No 22 Main Monastery

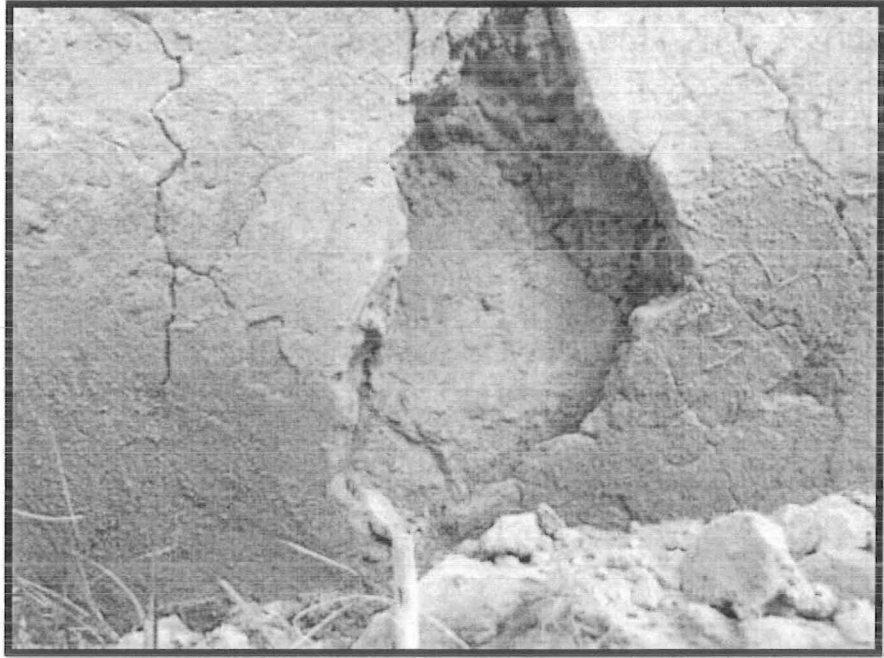


Figure 11: mud plaster, main monastery

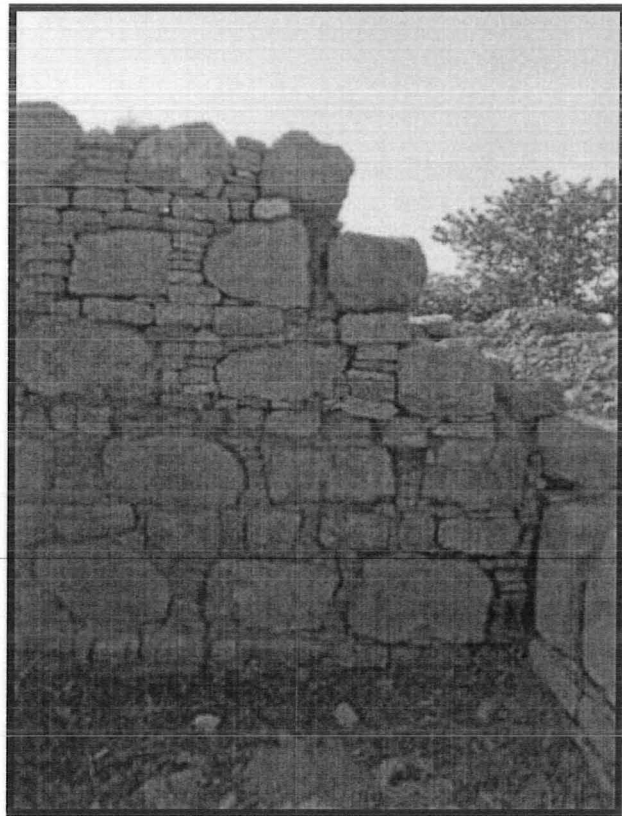


Figure 12: Masonry of the main monastery,  
image taken from the north

## **2.4. The Sub monastery**

The most important and rare phenomenon of the Badalpur site is discovery of another small monastery along the main monastery with 12 cells in total. It is situated on the south of main monastery and west of assembly hall, covering the area of 2000 cm east-west and 1500 cm north-south (fig 4). The height of this complex is preserved in the range of 75 to 173 cm. this monastery seems to be square in plan and the masonry of the sub monastery is comparable to the main monastery but the size of the boulders is reduced a bit, built up with lime stones. On some of the inner sides, the mud plaster still survives and is in good state of preservation. There were also remains of later period temporary occupation in the form of rubble masonry in superficial layers of this complex. (Arif, 2015)

### **2.4.1 Cells of Sub monastery.**

The cells are continued towards the north and west side. From north-eastern corner, cells seem to be turned towards west leaving a passage way from southern exit of main monastery towards west up to main stupa courtyard.

Cell no.0 is located on extreme south of monastery, east of assembly hall and west of main stupa. This cell measures 245 cm east-west interiorly and 340 cm north-south and preserved to the height of 75 cm. the cell has 152 cm wide entrance opening towards the north. On east side of the doorway, 65 cm wide projection has been exposed and is decreasing in width at the entrance. This cell was dug up to 90 cm deep.

The cell no.1 is located east of cell no.0, which measures 240 cm from east-west and 233 cm north-south interiorly and preserved up to the height of 74cm. the cell has 143 cm wide opening towards north. This cell was dug up to 90 cm. (Arif, 2015)

Cell no.3 is located in the south-eastern corner of the complex, south of main monastery, the largest cell exposed. It measures 260 cm from east-west and 530 cm north-south interiorly and preserved up to the height of 102 cm. This cell has 154 cm wide opening towards north. This cell has minute remains of mud pilaster at its eastern and southern wall in vulnerable form and also large number of fragments of mud pilaster recovered from the lower strata of this cell.

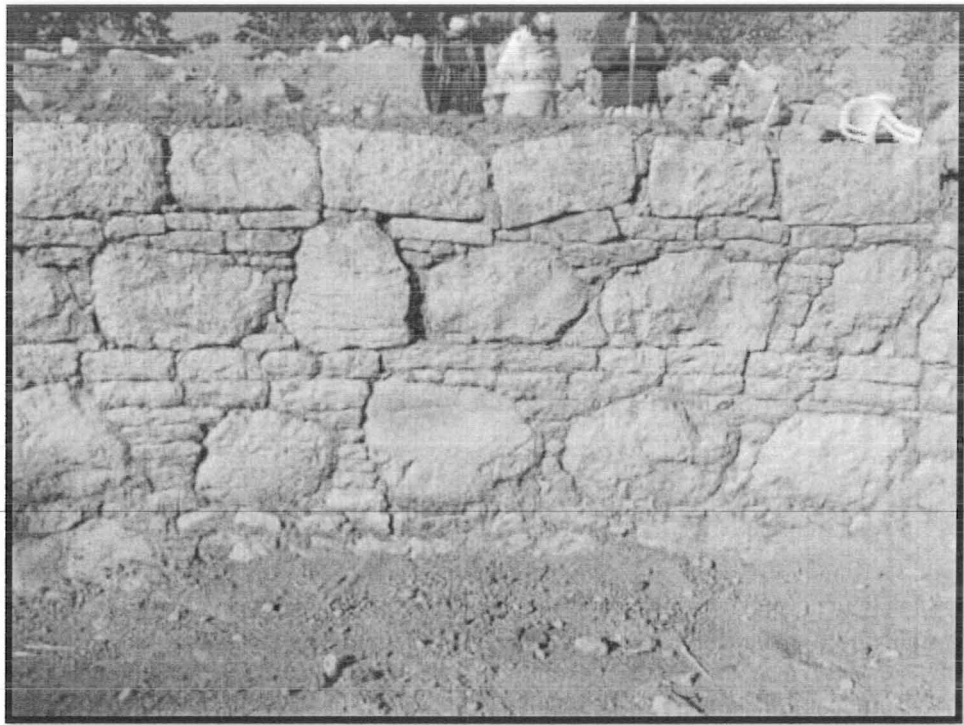


Figure 13: masonry of the sub monastery



Figure 14: cell of sub monastery, image taken from west

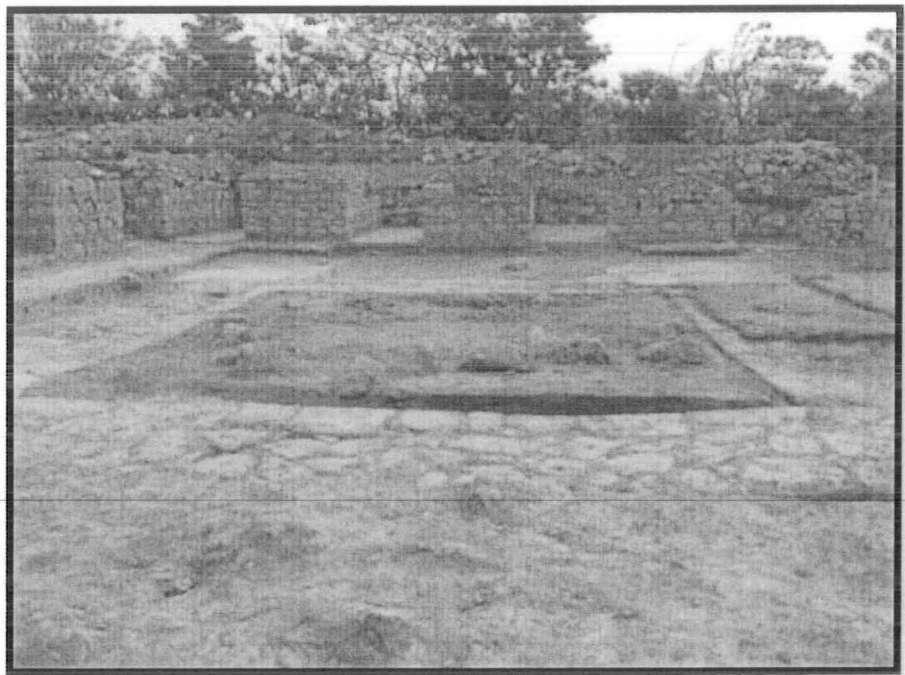


Figure 15: Cells of sub monastery, image taken from the north.



#### **2.4.2 Water Tank of Sub monastery.**

Along these monk cells of the sub monastery, water tank in the courtyard has been discovered and excavated in the excavation season of fall 2015/16 by Taxila Institute of Asian Civilizations Quaid-i-Azam University Islamabad. The water tank measures approximately 5×5 m from the interior and there is a plinth measuring 1.6 m on all four sides of the water tank. On the all four corners of the plinth of water tank large boulders are placed as part of the plinth probably used for the purpose intended for bathing of the monks. It is a unique feature of the water tank because usually one boulder on one side of the water tank is placed in most of the monasteries in Taxila.

Along the north wall of the water tank four pillar base have been found measuring the distance of approximately 2 m from the south of water tank and 2.4 m from the north wall of the sub monastery. All four-pillar base are of irregular shape.

A few terracotta tiles have been discovered from excavating water tank 91.44 cm down. Terracotta tiles are in good shape of preservation.

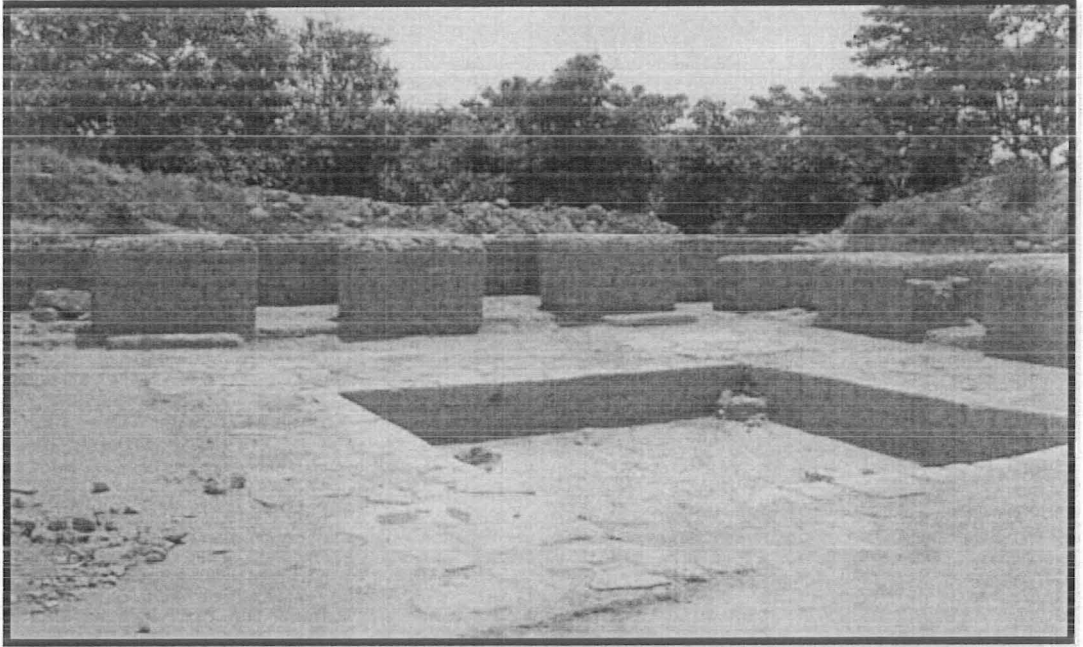


Figure 16: Water tank from north-western side



Figure 17: Water tank from south-eastern side. Inside the water tank there are terracotta tiles



Figure 18: plinth of water tank and boulders of plinth on all four sides of the water tank, image taken from south-eastern corner.

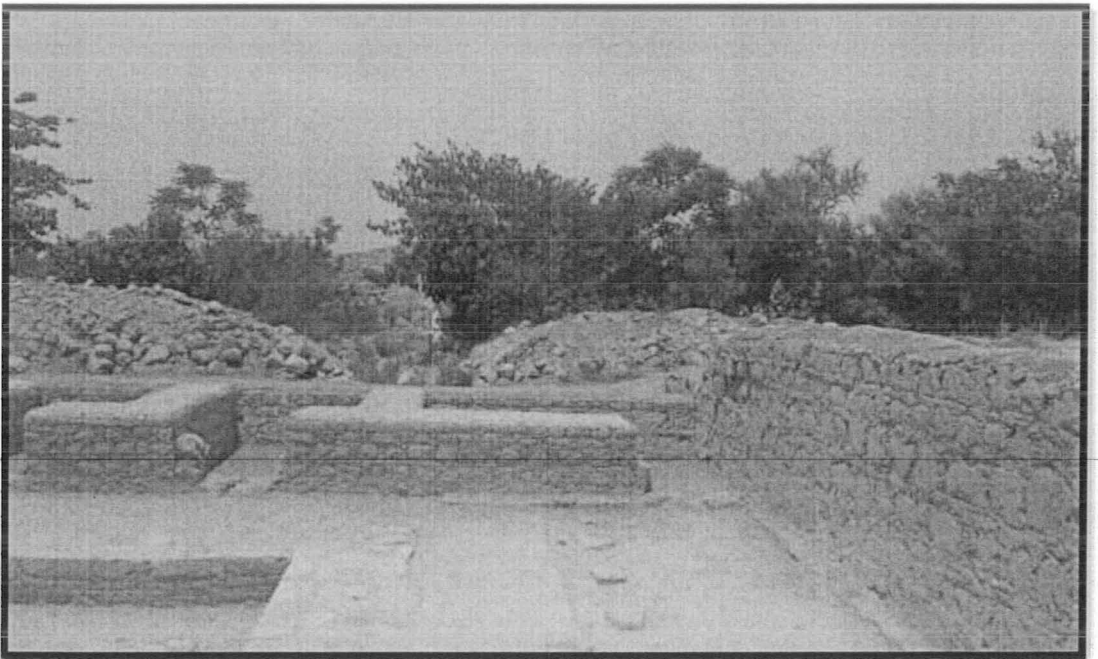


Figure 19: pillar base parallel to water tank, image taken from the eastern side

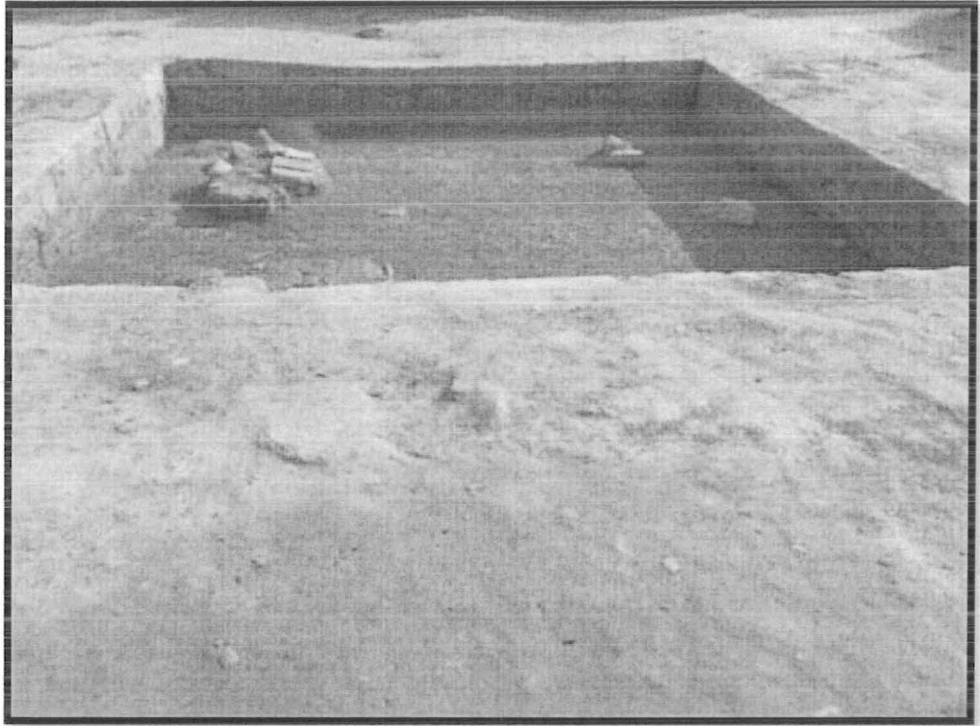


Figure 20: view of the terracotta tiles in water tank from the west side of the sub monastery

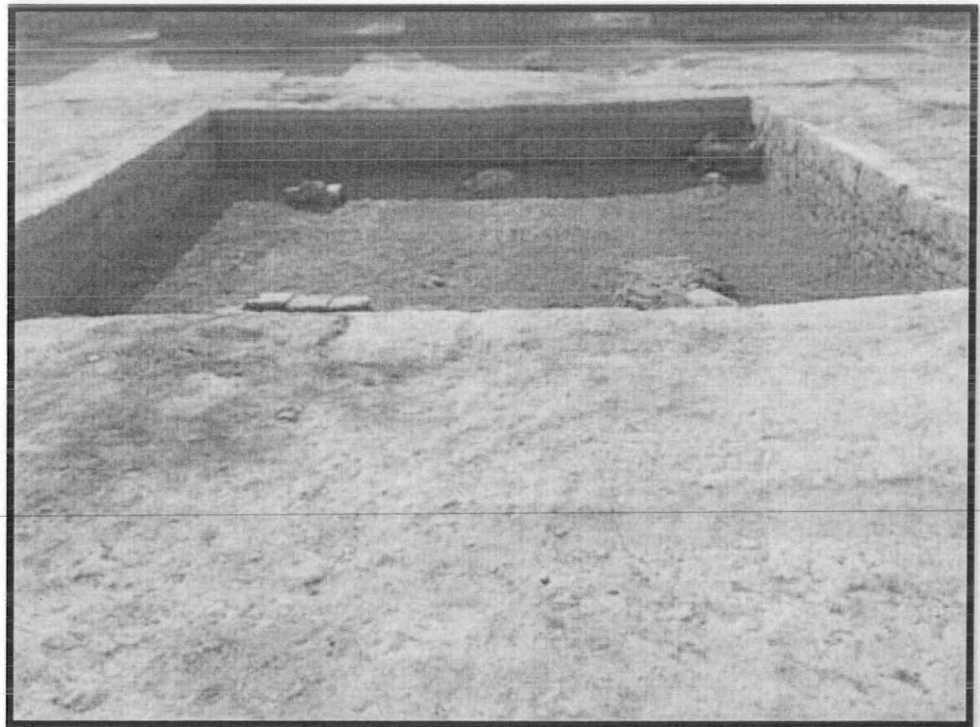


Figure 21: view of the terracotta tiles, image taken from the north side of the sub monastery

## **2.5. Assembly Hall, Kitchen and Store**

Assembly hall, Kitchen and Store are located on the south of the main monastery beside the boundary wall. This area is roughly measures 22.5 m north-south and 22.5 m east-west. Cell used as kitchen is and located at extreme west which is 5 m east-west and 5 m north-south. On the east of the kitchen, cell is marked as store due to the presence of shelves. The store measures 6 m east-west and 5 m north-south. After this, there is one more room which is 9 m east-west and 5 m north-south. There is also a wall on the east side running from south to north, slightly damaged from junction with exterior of southern wall of the monastery. The southern boundary wall of this complex continues towards east.

The whole complex is made up of lime stone in large semi-ashlar and diaper masonry. The height of the wall is present up to 1 m. Some irregular structure of late period has also been recovered over original walls of assembly hall. These structure remains have been built up in rubble masonry with lime and kanjur stones, parallel to southern monastery wall and one parallel to western wall of assembly hall with a gap of 1.5 m to 2 m in between. (Arif, 2015)



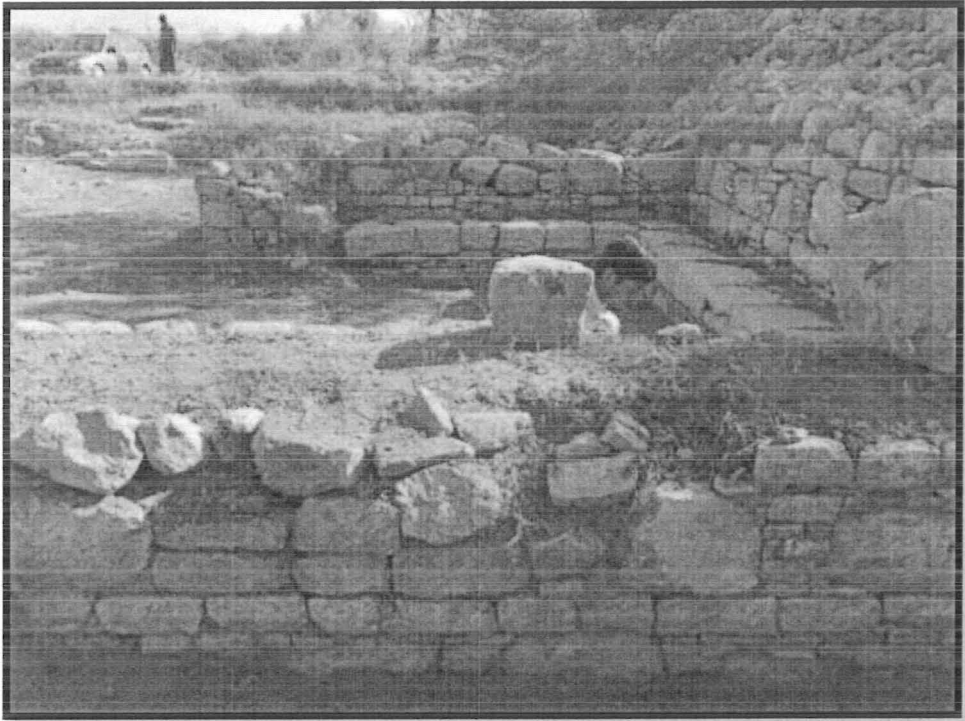


Figure 22: slabs of kitchen, image taken from west

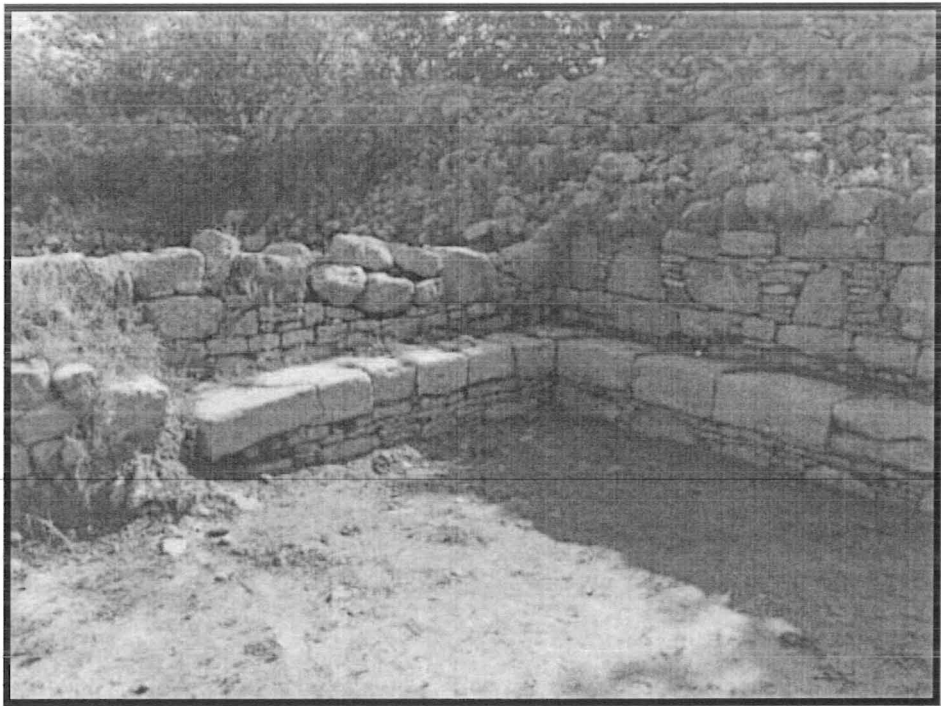


Figure 23: kitchen area, image taken from north-west

## Chapter 3

### Badalpur monastic complex, a state monastery.

#### 3.1 Concept of State Monastery

State Monasteries are said to be the type of monasteries constructed under an emperor's rule by his order and are being taken care of by the state. These types of monasteries were looked after by the emperor himself or by his appointed personal (ministers, chief and nobilities). To revive Buddhism in China the Emperors and Emperresses ordered a reconstruction of the ruined Buddhist monasteries of China and took care of the Maintenance of those monasteries hence the notion of State monastery was offered in China as early as 5<sup>th</sup> century AD (He, 2013).

The concept of State monasteries perhaps has been introduced in to China from Ancient India at the time of Emperor Asoka who became a follower of Buddhism. During his reign, fixed spaces were dedicated to worship and numerous Stupas and Monasteries were constructed.

Liqun He in his dissertation classified Chinese Buddhist Monasteries in to the following words:

“[...] the most representative Buddhist monasteries in China were those sponsored by the emperor, called State Monasteries 國家大寺. Next were the Official Monasteries, which is monasteries built by local governors, sometimes in compliance with imperial edicts or central government decrees. The construction of Official Monasteries could be financed by

eminent Buddhist masters or by donations of prominent officials, aristocrats and magnates.” (He, 2013)

Perhaps a clear description of Buddhist monasteries specifically State monasteries can be implied in the official records of Tang Dynasty and Song Dynasty (He, 2013). By thoroughly viewing these documents one can identify some common features of State monasteries from 5<sup>th</sup> century AD in China.

## **3.2 Badalpur Monastic Complex viewed as a State Monastery**

### **3.2.1. Textural evidence**

“[...] Yungang Monastery might have been one of the 'Ten Monasteries of Yungang' mentioned in the stele. Li Chongfeng carried out a comparison between the Yungang Monastery and the monastery layout of ancient Indian architecture: he suggests that the free-standing Yungang Monastery might be contemporary with the setting up of 'the Five Caves of Tanyao' 曇曜五窟 and completed before the third year of the Heping Era (462 AD) of Northern Wei. As an important place for the translation of Buddhist sutras, its design followed the construction principles of ancient Indian monasteries. Specifically, the layout of this monastery, a combination of the central Pagoda and the surrounding monastic residential cells, seems to derive directly from a prototype from the Greater Gandhāra.” (He, 2013)

On the basis of historical and Buddhist documents we may reasonably assume that an early Buddhist State monastery of China had taken a shape of monastic layout of

Greater Gandhara. In fact, not just the monastic complex of Badalpur but many other monastic centers of Taxila valley come under this category.

### **3.2.2. Archaeological evidence**

According to Liqun He less than ten State Monasteries have been excavated. From his dissertation, the *Yungang Monastery* in Pingcheng has been chosen for a comparative analysis with that of the monastic complex of Badalpur in order to establish a solid basis for the ensuing research.

#### **Monastery layout in the mid-5<sup>th</sup> century: The *Yungang Monastery* in Pingcheng**

“To date, the earliest Buddhist monastery ever excavated in North China is the *Yungang Monastery*, located about 15 km west of Pingcheng, the first capital of Northern Wei” (He, 2013).

The plan of the monastery is rectangular and displays Pagoda and cells (set side by side against perimeter wall). The Pagoda area is marked as(A) and the cell area is marked as (G) (fig 24.).

The rammed earth base was almost a perfect square in plan, the north and south sides measured 14m, while the east and west ones were 14.3m long; it was accessed from the south through a 2.1m wide, 5m long inclined ramp. The whole base displayed a stone masonry facing. Against the four sides of the perimeter wall, rows of small cells (G) were set next to one another. The cells were approximately of the same dimensions, 7.4 - 8.3m long and 3.4 - 4.4m wide on average (He, 2013).

“As an important place for the translation of Buddhist sutras, its design followed the construction principles of ancient Indian monasteries. Specifically, the layout of this monastery, a combination of the central Pagoda and the surrounding monastic residential cells, seems to derive directly from a prototype from the Greater Gandhara” (He, 2013)

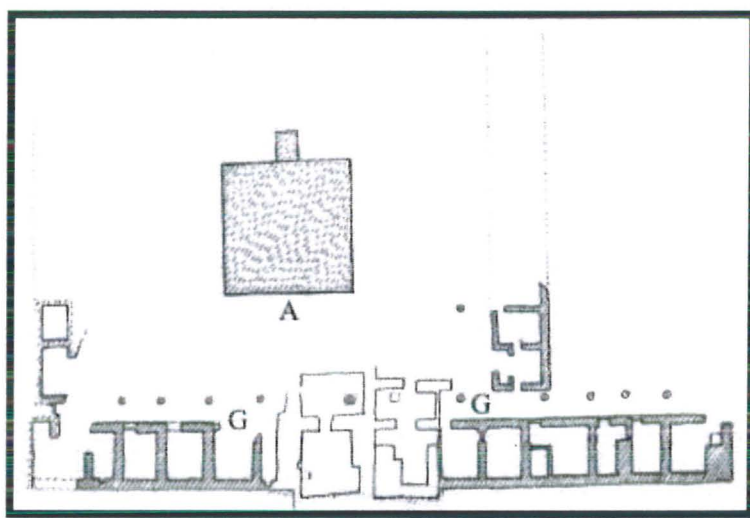


Figure 24: Sketch plan of the *Yungang Monastery*

(Modified from: Li Chongfeng 2013, fig. 2) adopted from: (He, 2013)

**Monastery layout in the 3<sup>th</sup> century BCE to 3<sup>th</sup> century AD: The Badalpur Monastery in Taxila.**

The layout of Buddhist Sacred area of Badalpur monastic complex has been systematically explained in chapter 2 of this dissertation. The presence of monk cells aligned, assembly hall, kitchen, chapels and stupa are all the features of well-equipped and highly advanced monastic complex (fig.1-5). The comparison of these two monasteries can only be understood through basic architectural features such as the presence of monk cells and non-architectural features for example Yungang



monastery was built during the reign of, Emperor Taiwu of Northern Wei and the chronology of Badalpur monastery is allocated to Kushana dynasty.

### **Supposition**

The *Yungang Monastery* in Pingcheng, a simpler form of monastic complex to be assigned as a state monastery. Whereas Badalpur Buddhist sanctuary is not only one of the largest monastic complex in Taxila but also has all the features required for the state monastery. Hence concluding Badalpur monastic complex as highest-ranking State Monastery under imperial patronage.

## Chapter 4

### Comparative Study and Conclusion

This chapter is concerned mainly with comparison with similar monuments of Gandhara, which makes it possible to advance some hypotheses for the reconstruction of certain elements of Badalpur monastery and, above all, to understand its historical and religious and architectural importance.

#### 4.1 Analysis of Badalpur monastery with regard to other monasteries of Taxila.

The overall rectangular layout of the monastic complex of Badalpur is common to other monasteries in Gandhara (Takht-i Bhai) and, above all, to the great majority of the monasteries of Taxila.

The model of the rectangular plan is present there in a wide variety of shapes and sizes. Cells are arranged on two sides of the courtyard (Akhauri, Kalawan), or three (Chir Tope , Giri ), or four (Dharmarajika and , Bhamala, Giri , Kalawan and , Jaulian, Kunala, Mohra Moradu) (fig 25-55). Annexes are inserted within the rectangle of the perimeter (Dharmarijaka, Bhamala, Jaulian, Mohra Moradu, Pippala Later monastery) or added on to it (Dharmarijaka , Giri Kunala) (Marshall ,1951). Whereas the monastery of Badalpur is congregated within the category where annexes are inserted on all four sides of the perimeter. The structure remains of Badalpur is very much similar to the monastery of Jinna wali Dehri located only 500 meters north west of Badalpur site (Khan Ashraf, 2010).

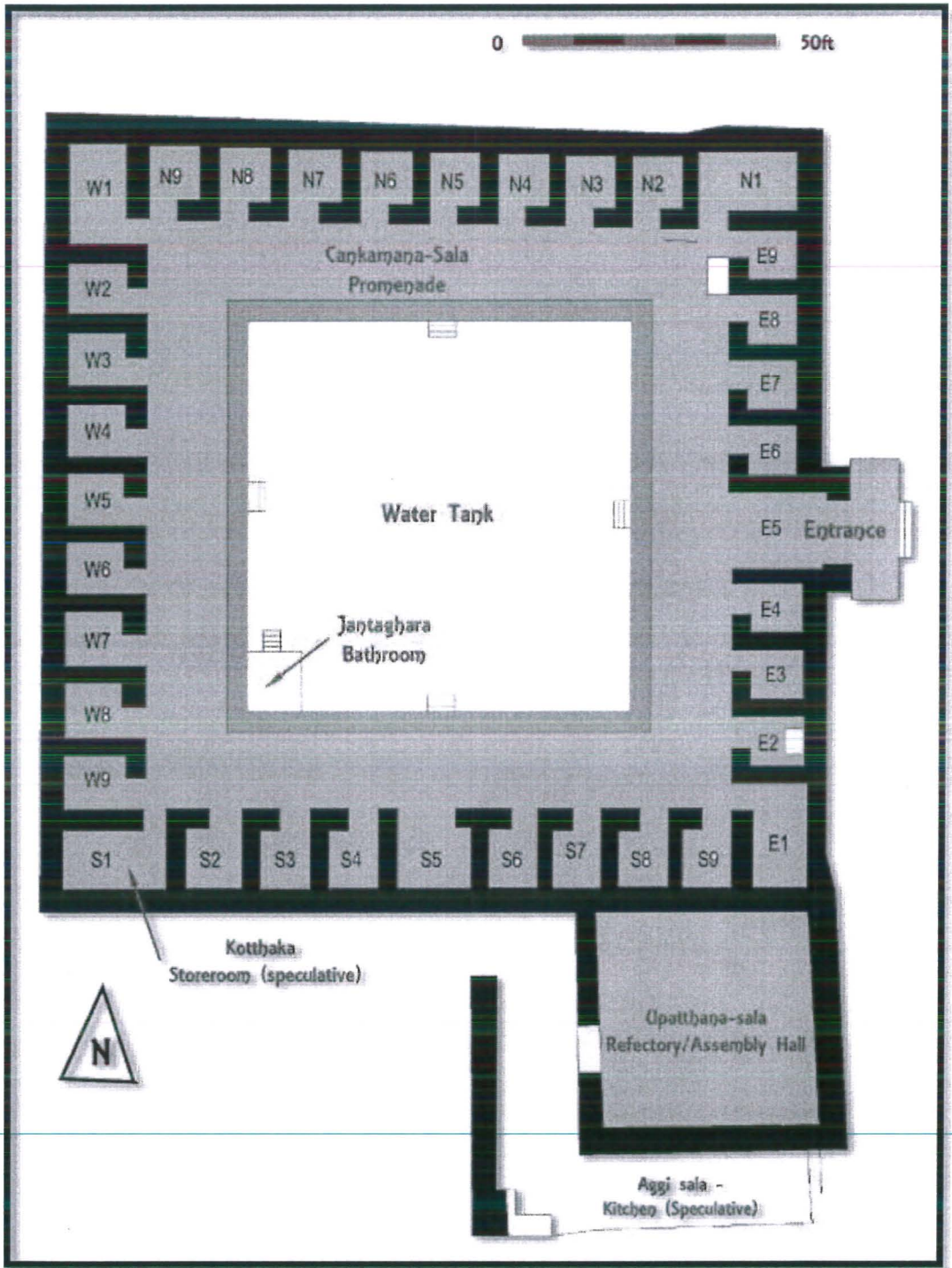


Figure 25: Digitized plan of Kunala Monastery

(Original by Marshall, 1945), adopted from (Naveed, 2015)

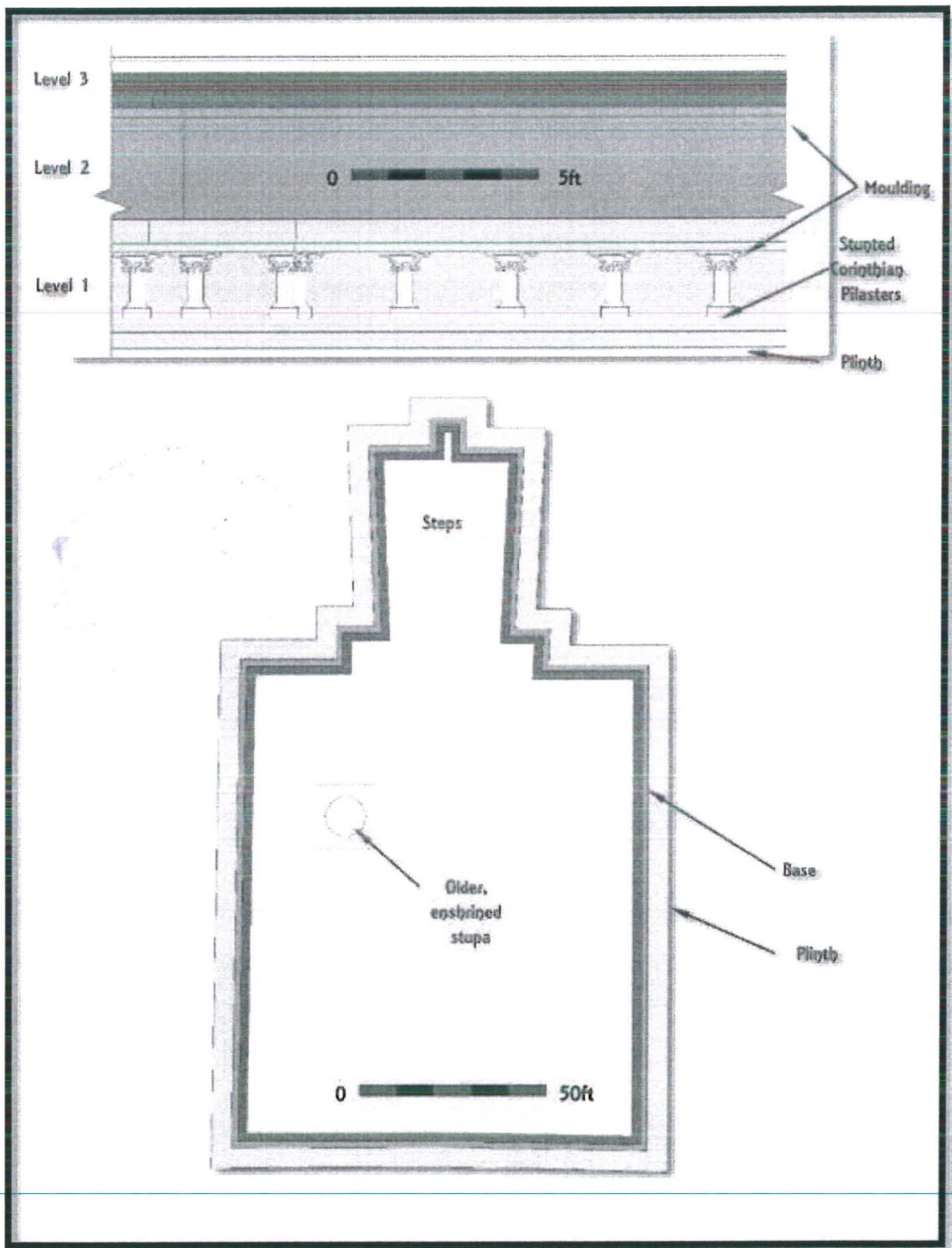


Figure 26: Digitized plan of Kunala Stupa

(Original by Marshall, 1945). Adopted from (Naveed, 2015)





Figure 27: View of Kunala Stupa base and plinth

(source: Prof Zain-ul-Abideen, CIIT) adopted from (Naveed, 2015)

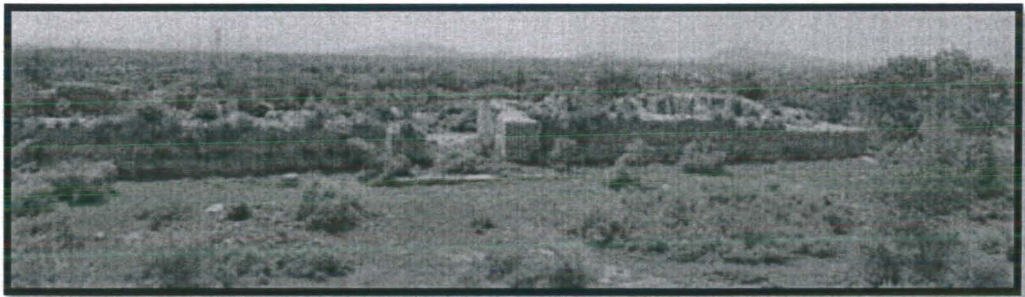


Figure 28: View of Kunala Monastery from Stupa

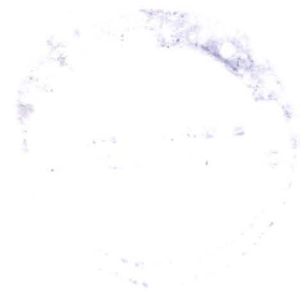
(source: Prof Zain-ul-Abideen CIIT adopted from (Naveed, 2015)





Figure 29: View of Monastery Interior

(source: Prof Zain-ul-Abideen, CIIT) adopted from (Naveed, 2015)



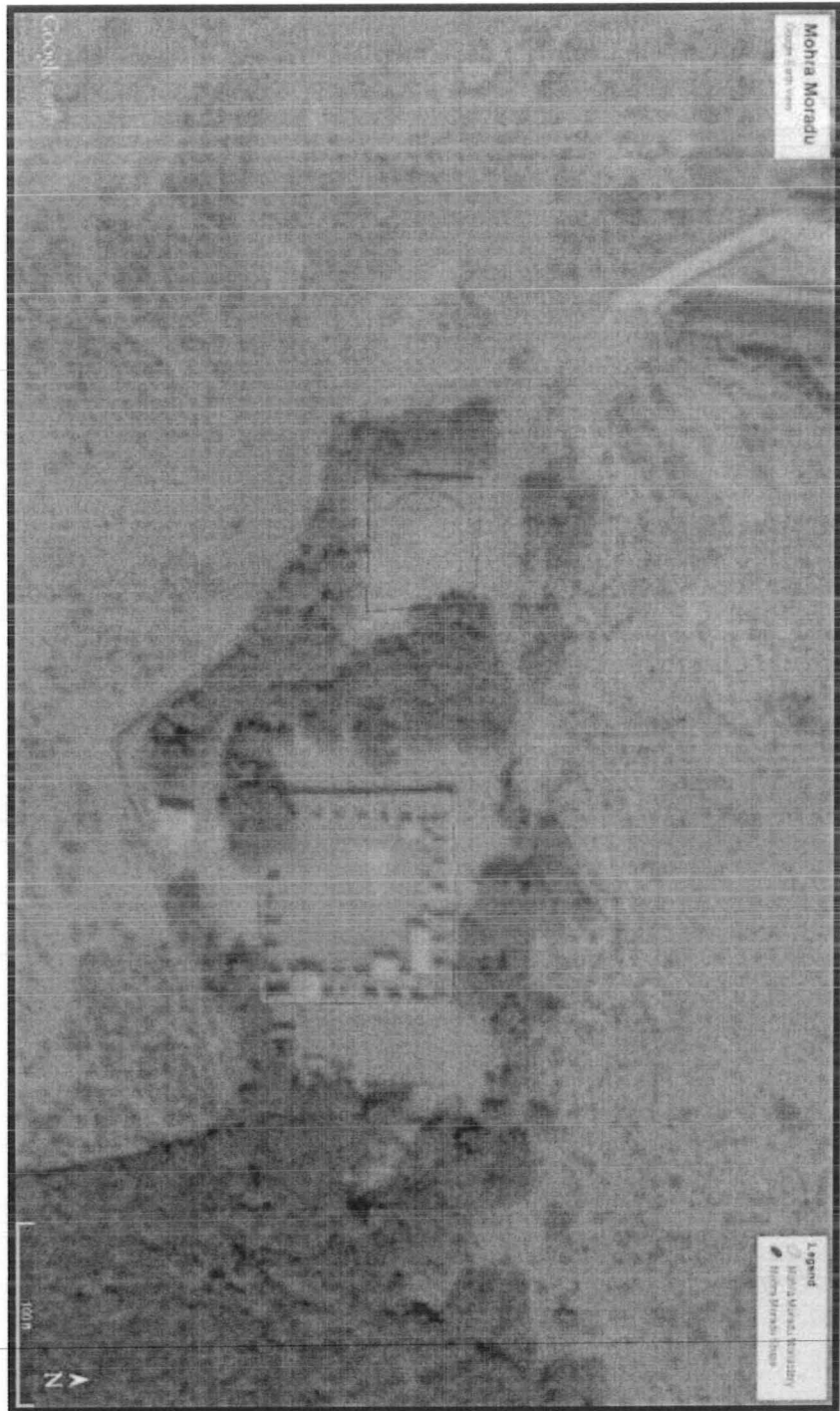


Figure 30: Mohra Moradu Stupa and Monastery

Google Earth View of Mohra Moradu Monastery and Stupa

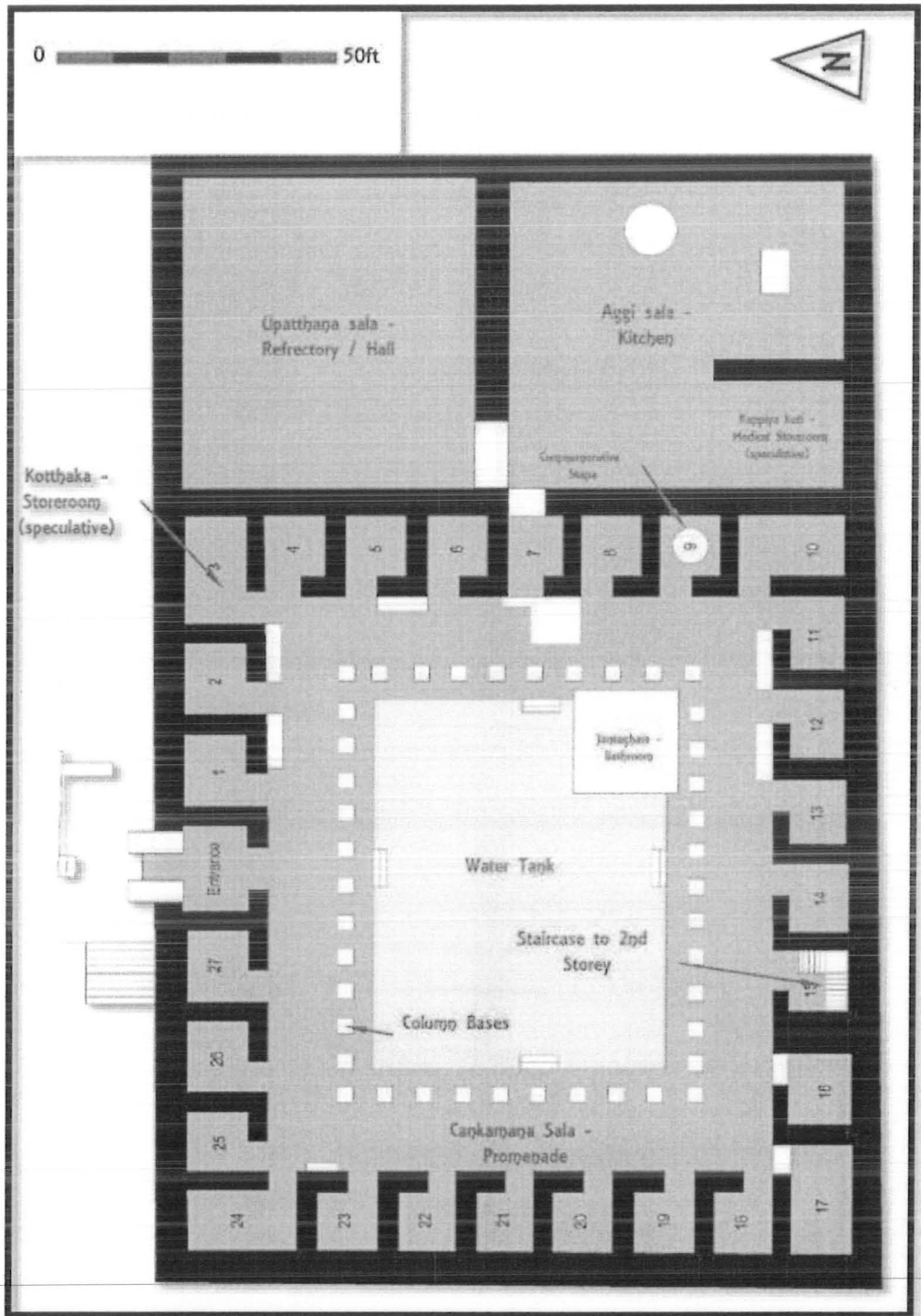


Figure 31: Digitized plan of Mohra Moradu Monastery

(Original by Marshall, 1945) adopted from (Naveed, 2015)

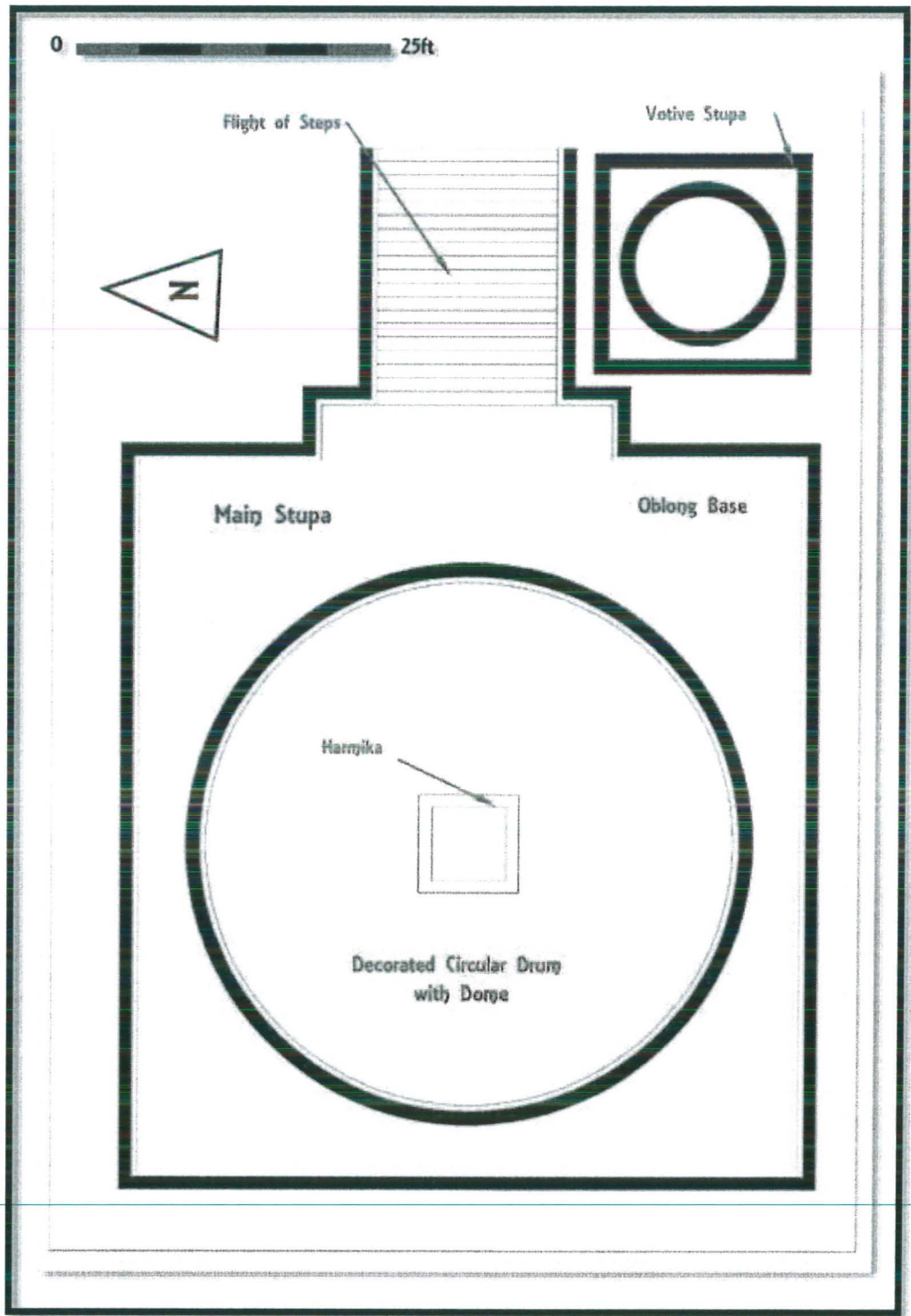


Figure 32: Digitized plan of Mohra Moradu stupa

(Original by Marshall, 1945) adopted from (Naveed, 2015)

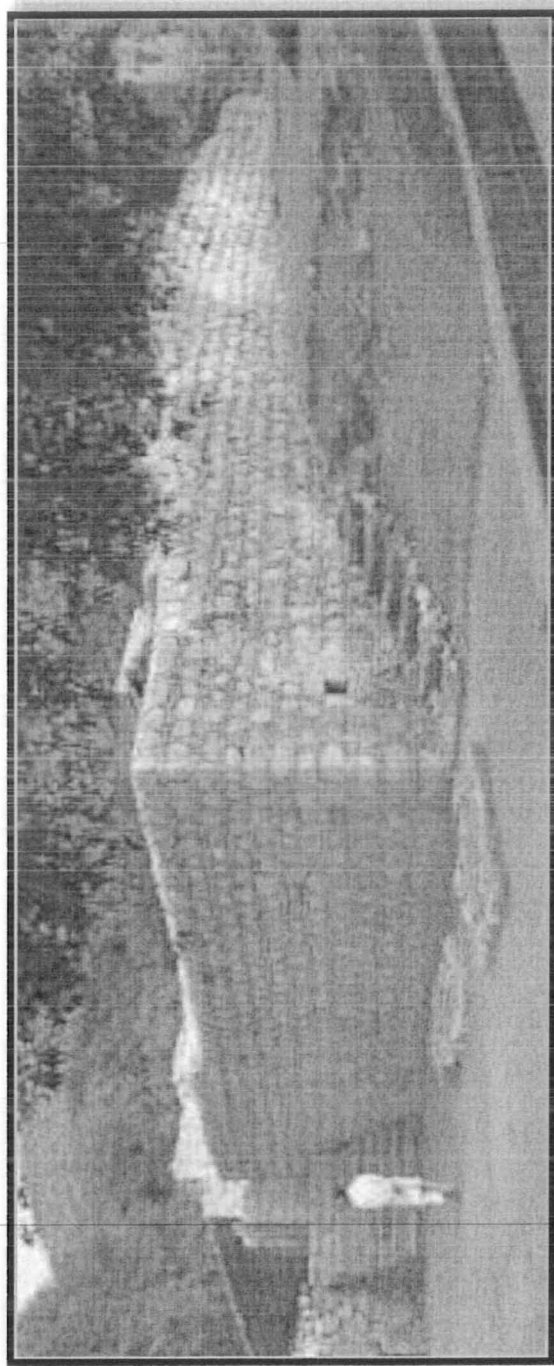


Figure 33: Mohra Moradu monastery exterior walls



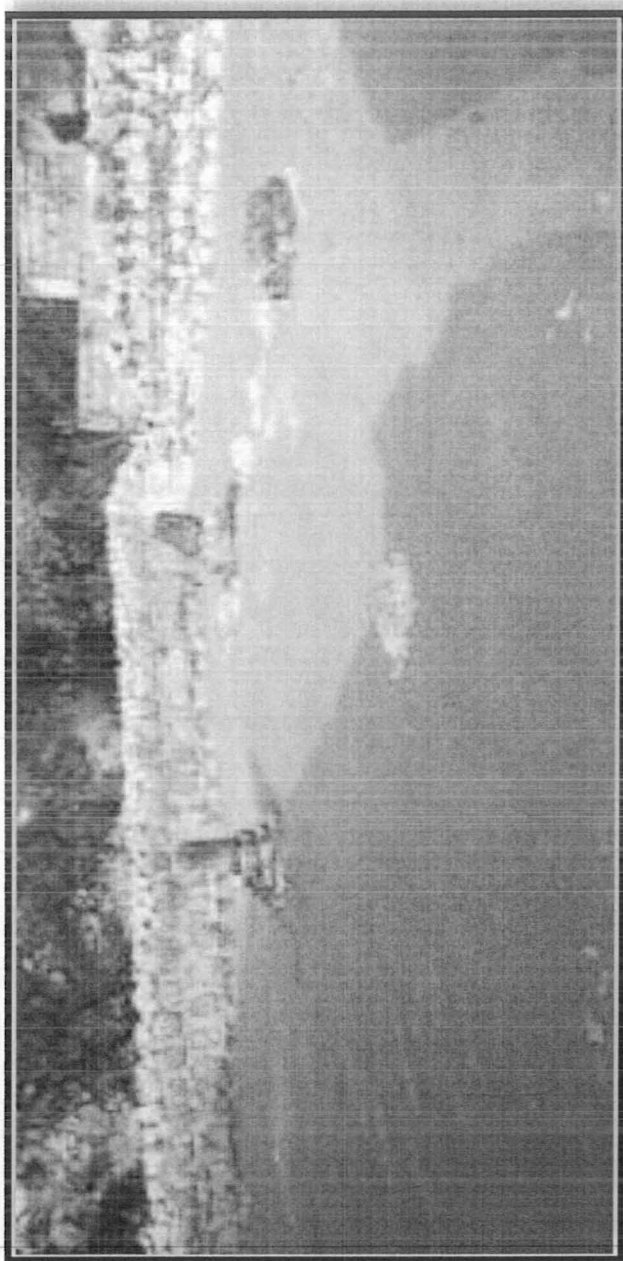


Figure 34: View of assembly hall with column bases

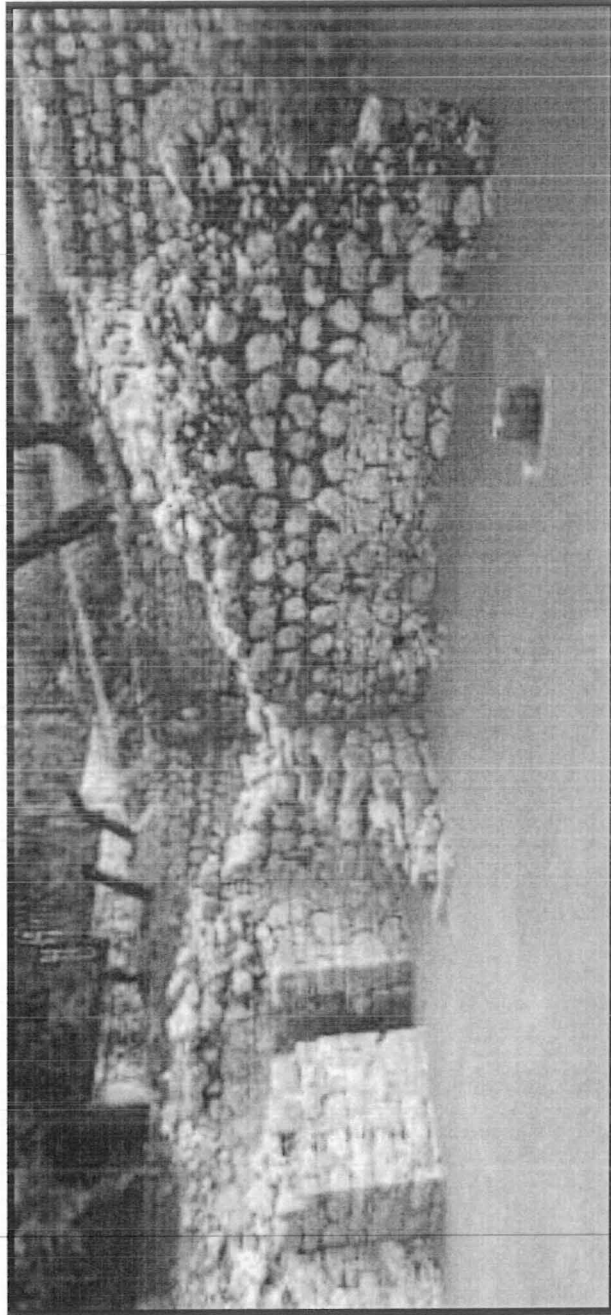


Figure 35: View of kitchen area

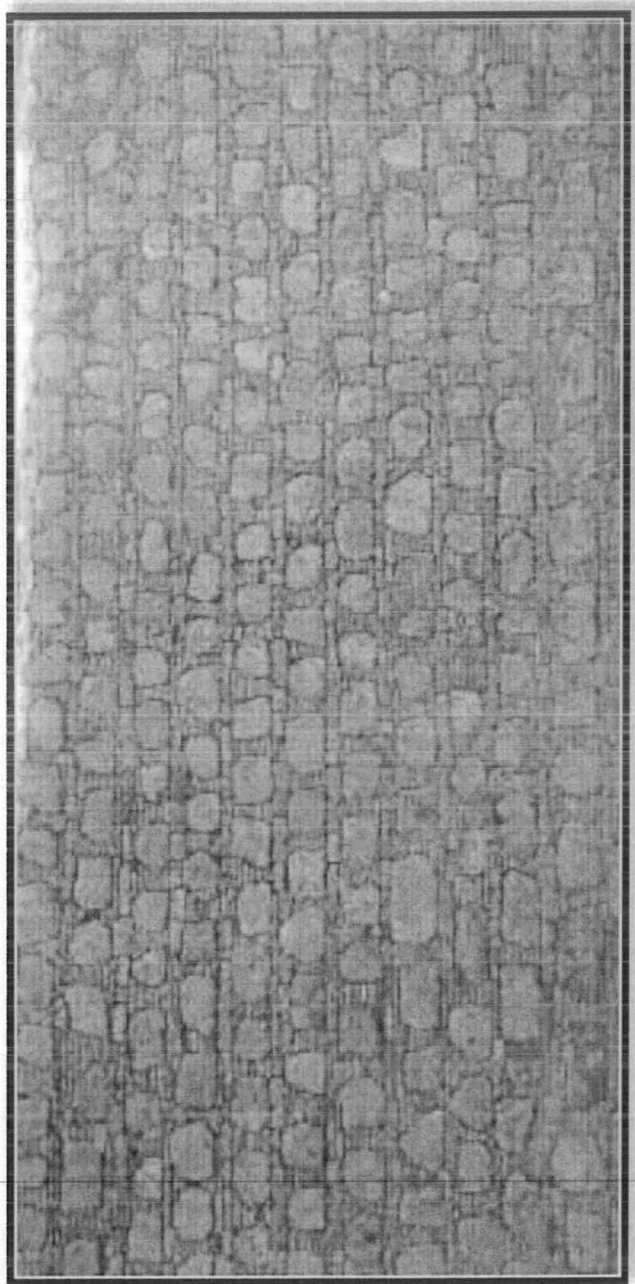


Figure 36: Details of wall construction

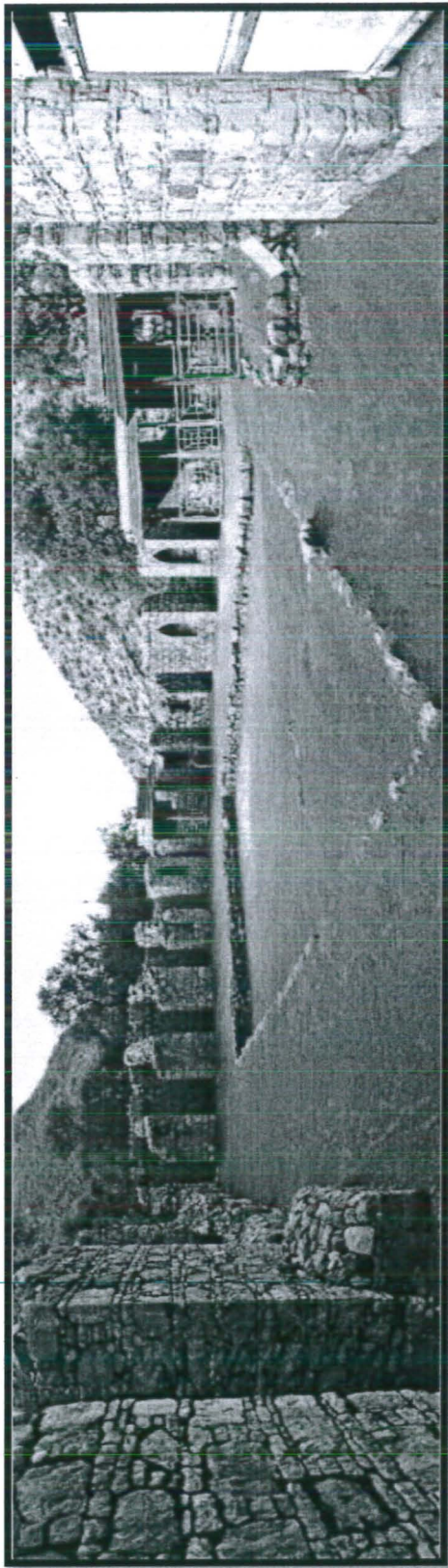


Figure 37: Panorama of monastery interior

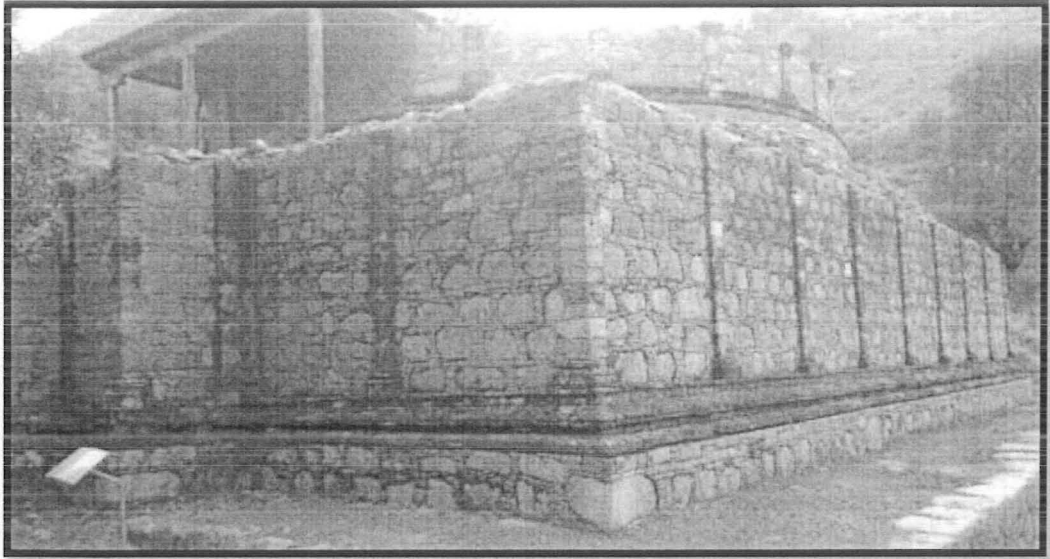


Figure 38: Front of Mohra Moradu Stupa

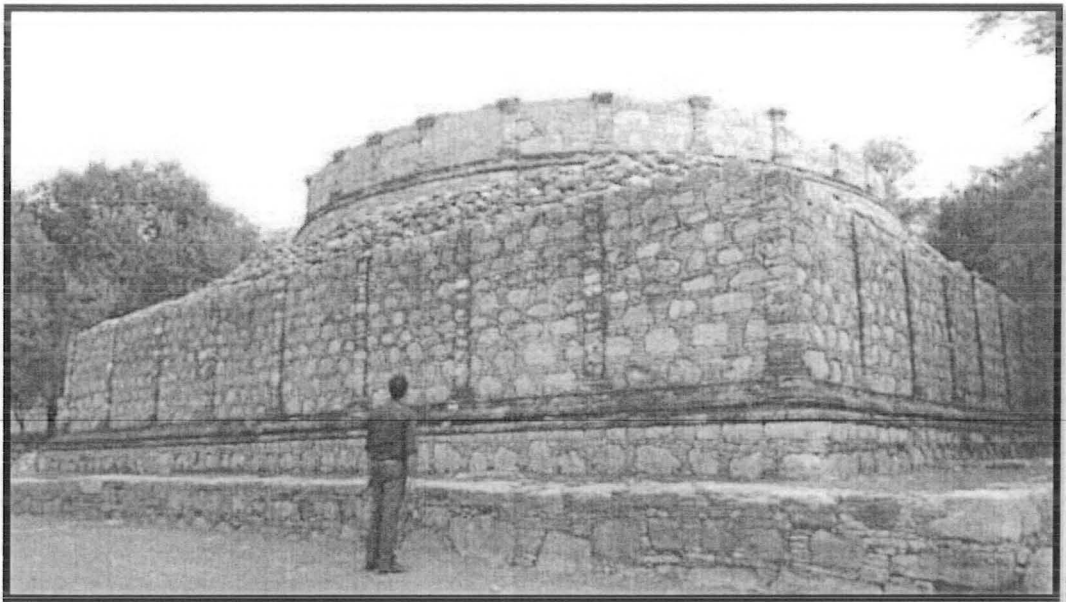


Figure 39: Rear side of stupa from entrance to site Jaulian Stupa and Monastery



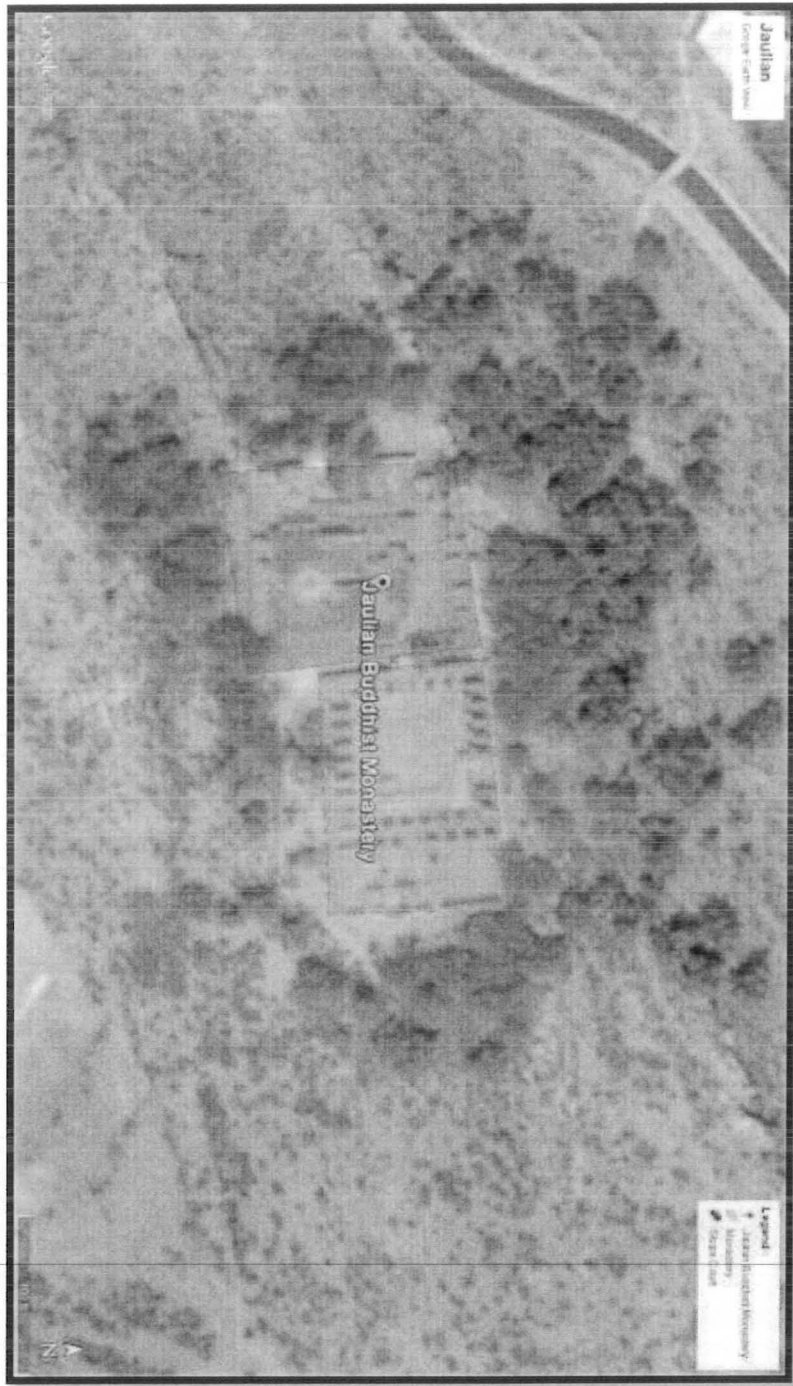


Figure 40: Jaulian Monastery and Stupa

Google Earth view

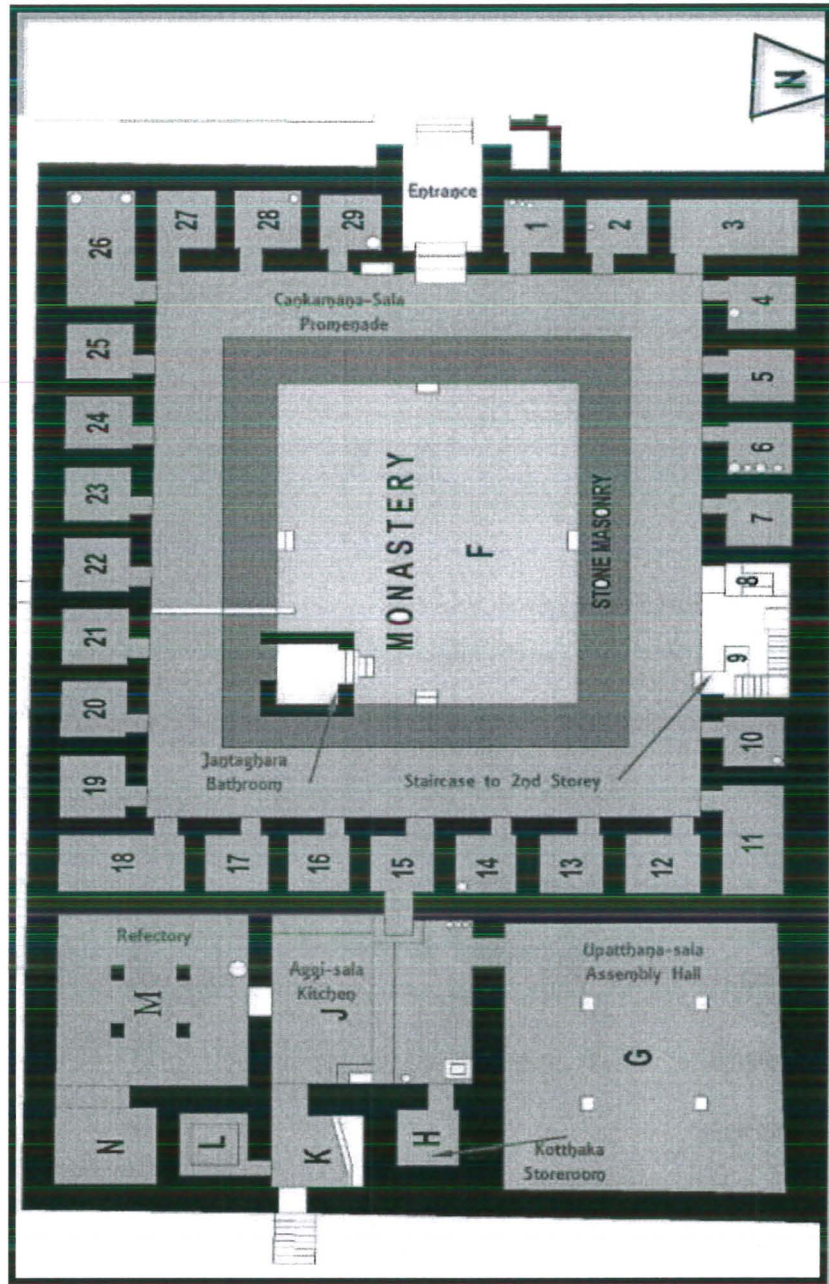


Figure 41: Digitized plan of Jaulian monastery

(Original by Marshall, 1945) adopted from (Naveed, 2015)

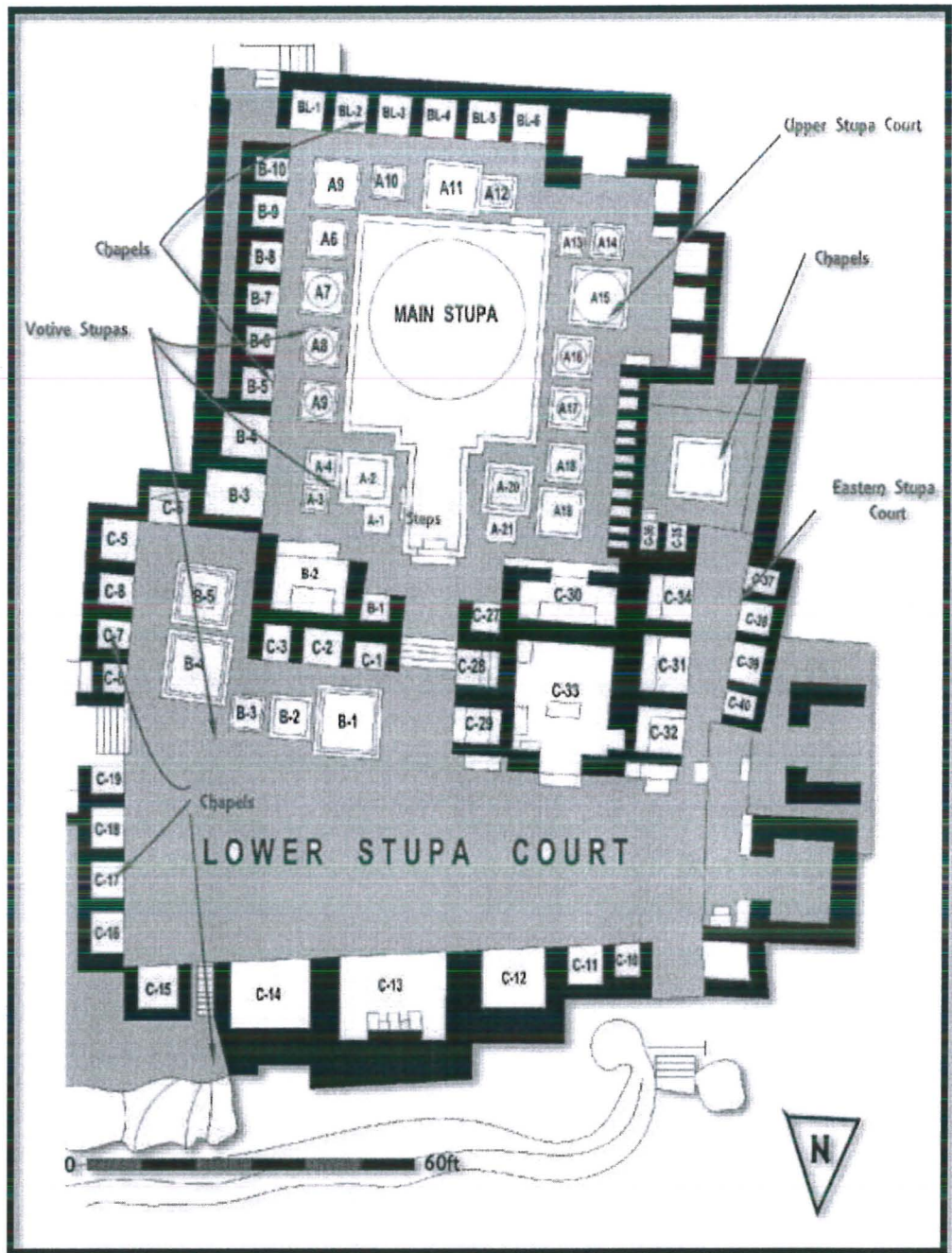


Figure 42: Digitized plan of Jaulian stupa courts

(Original by Marshall, 1945) adopted from (Naveed, 2015)



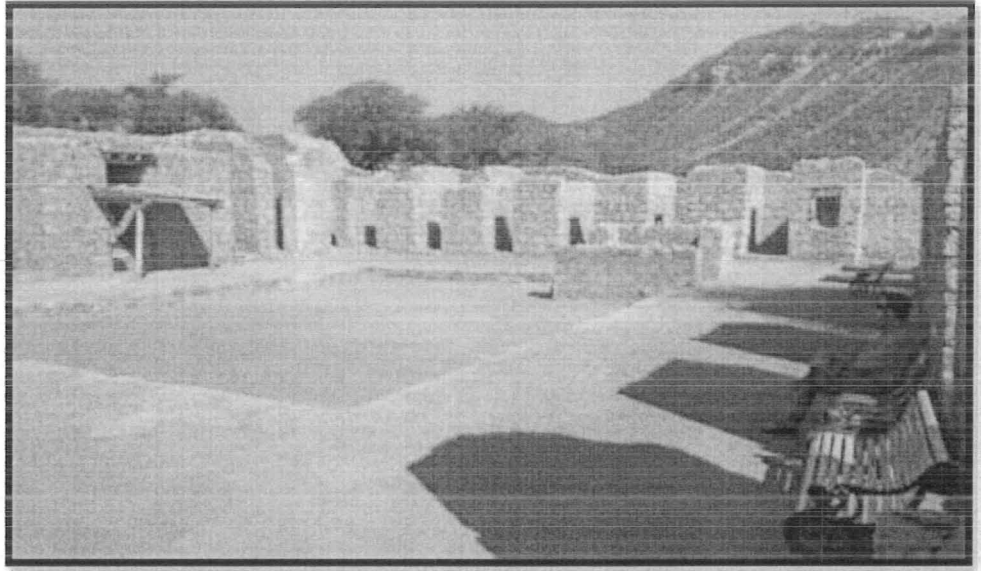


Figure 43: interior from second floor height

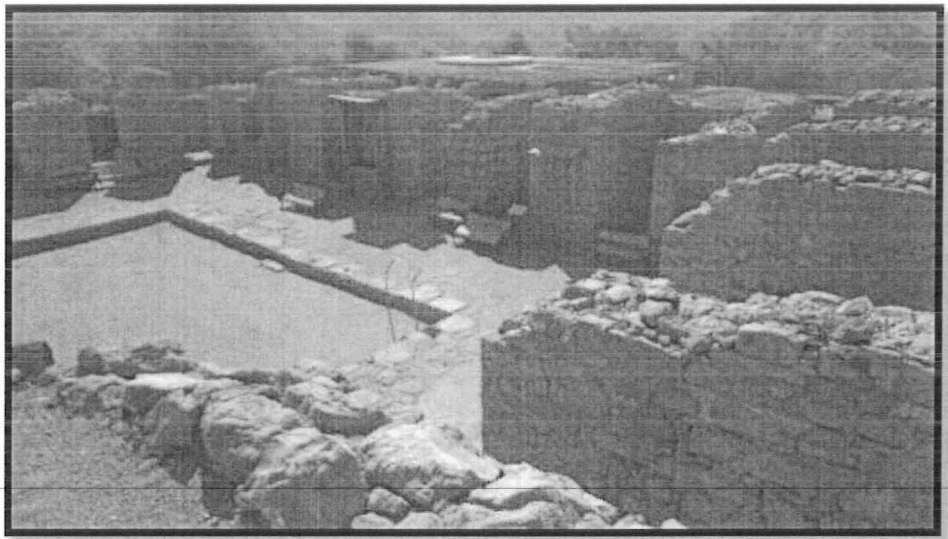


Figure 44: Monastery interior Fig 32. Monastery

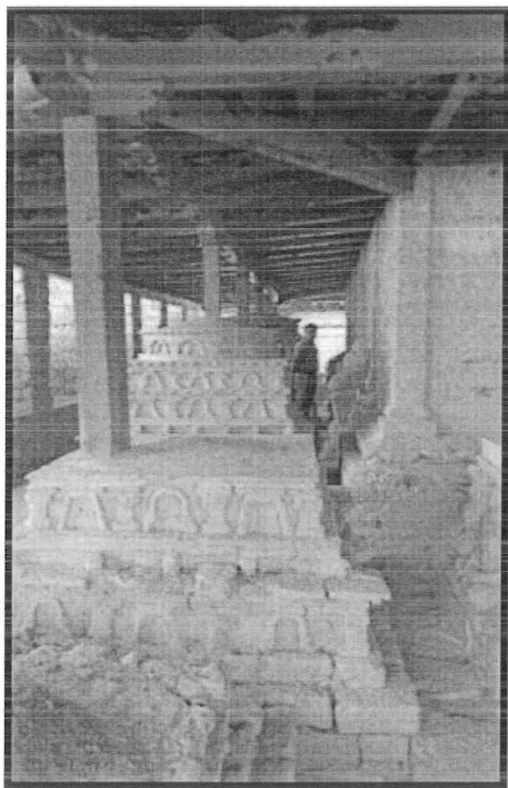


Figure 45: Main stupa base with surrounding votive stupas

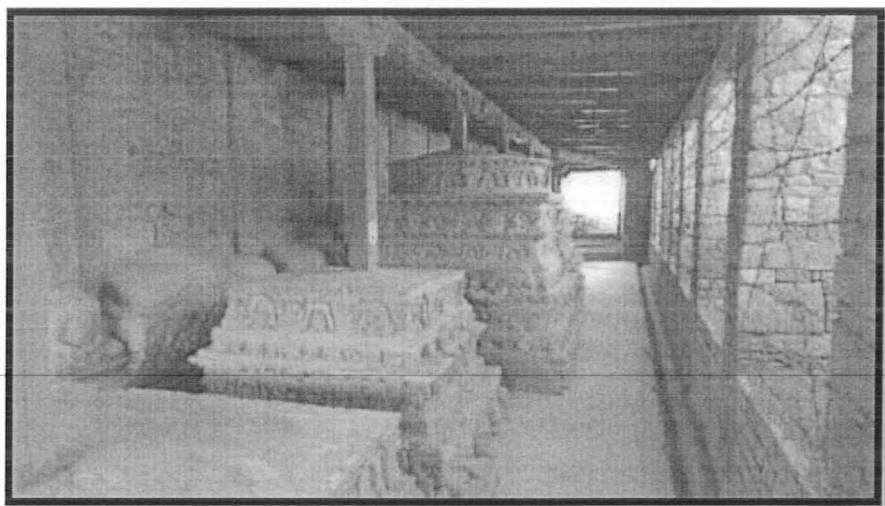


Figure 46: Another view of stupa base and votive stupas. Damaged buddha statues visible on base



## Dharmarajika Stupa and Monastery

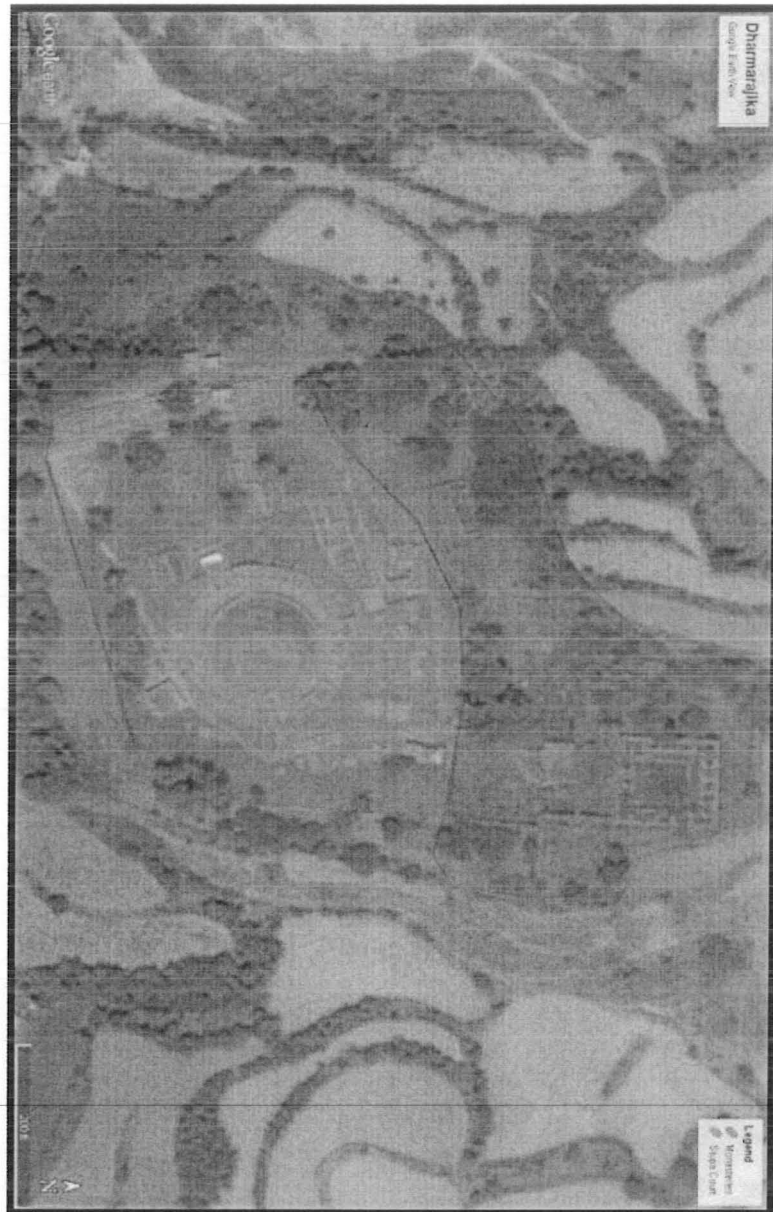


Figure 47: Google Earth View of Dharmarajika

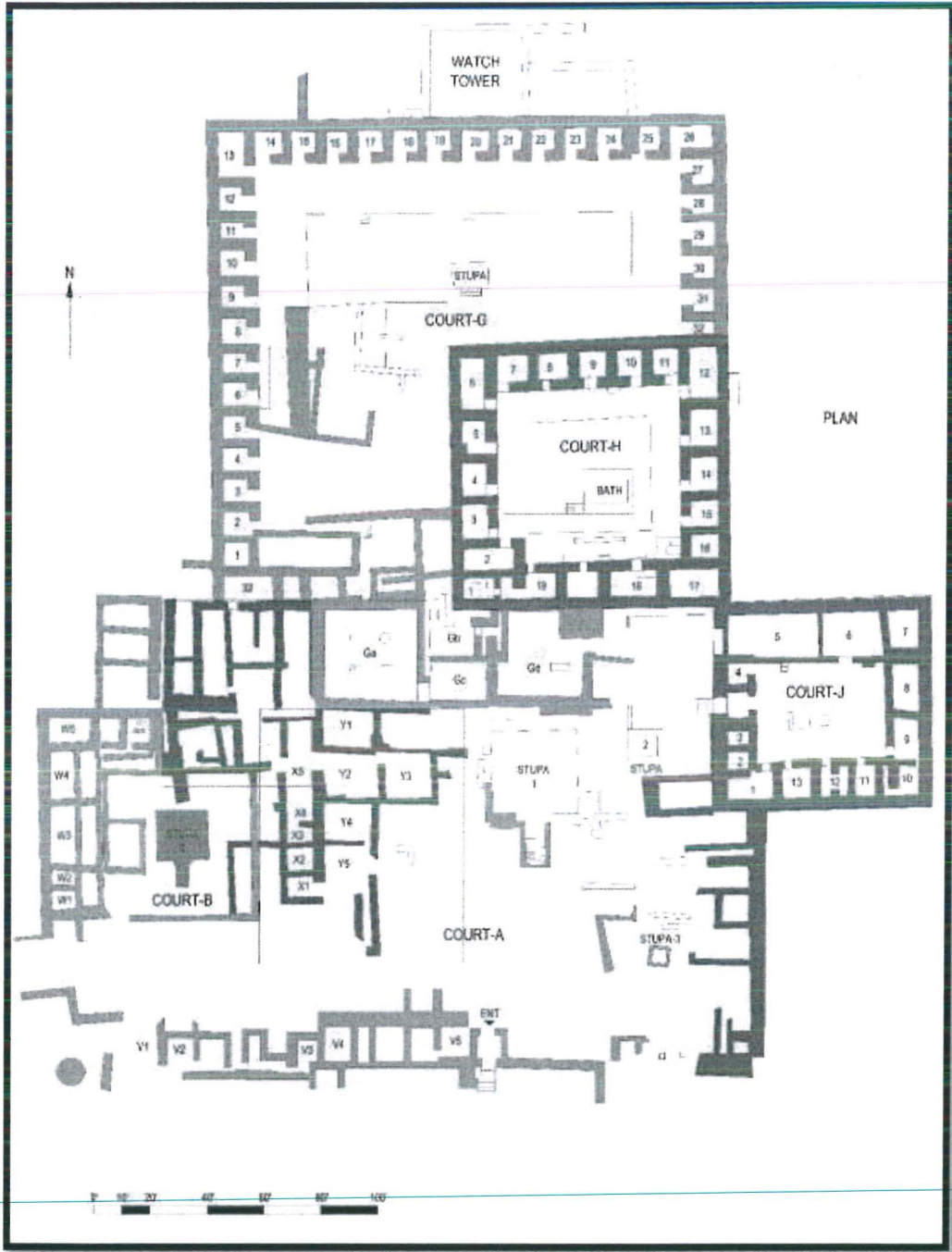


Figure 48: Digitized plan of Dharmarajika moansteries

(Original by Marshall, 1951)



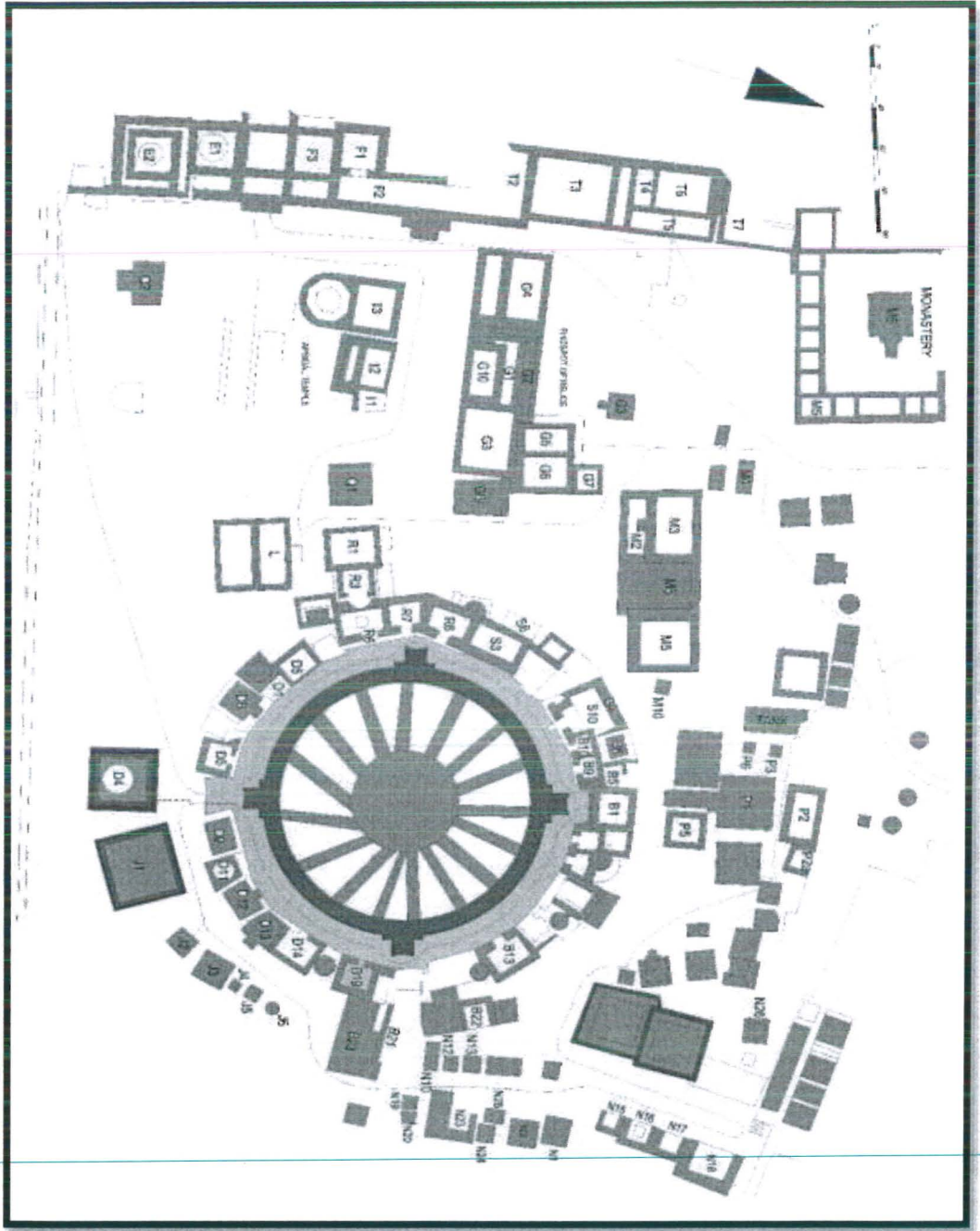


Figure 49: Digitized plan of Dharmarajika Stupa court

(Original by Marshall, 1945)

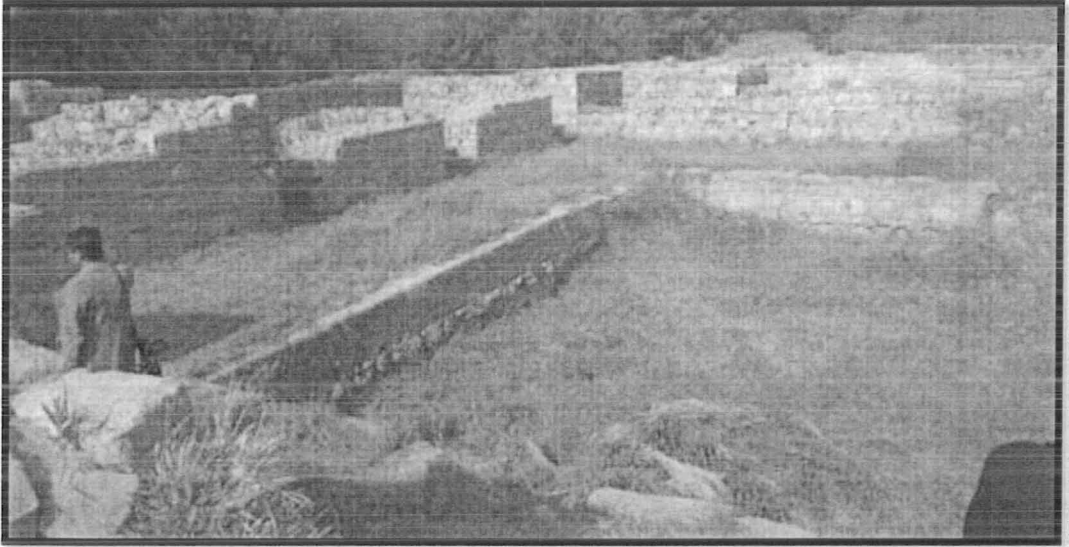


Figure 50: Court H Interior view

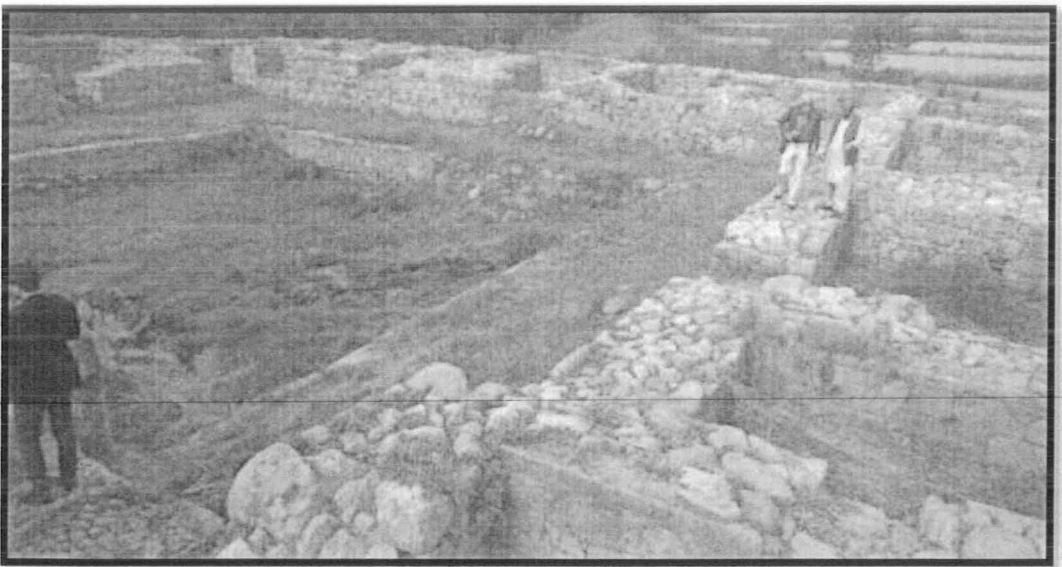


Figure 51: Court H Interior view

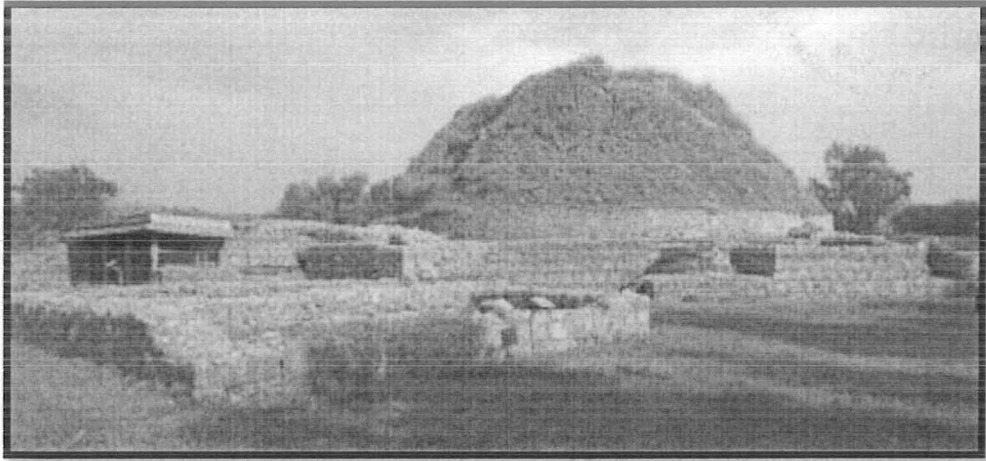


Figure 52: Stupa view from main entrance

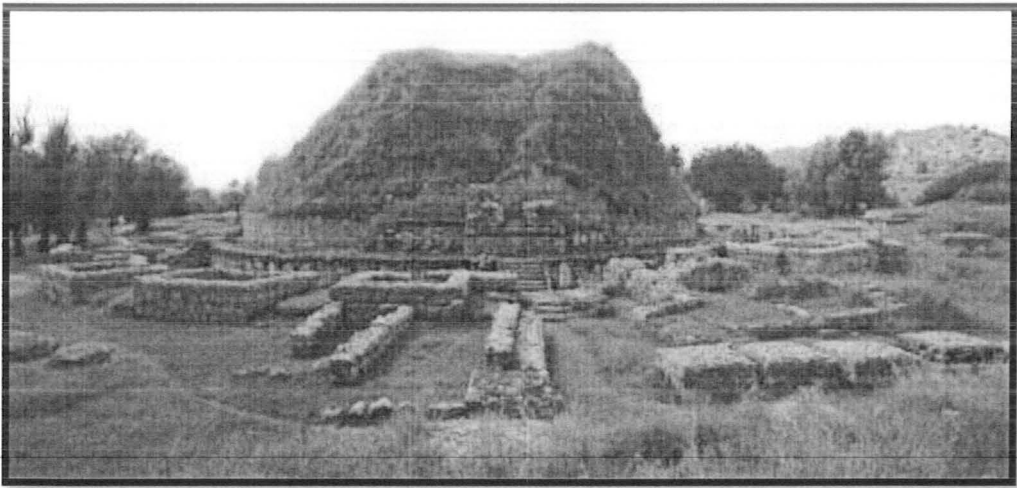


Figure 53: Stupa view from East with votive stupas and chapels visible





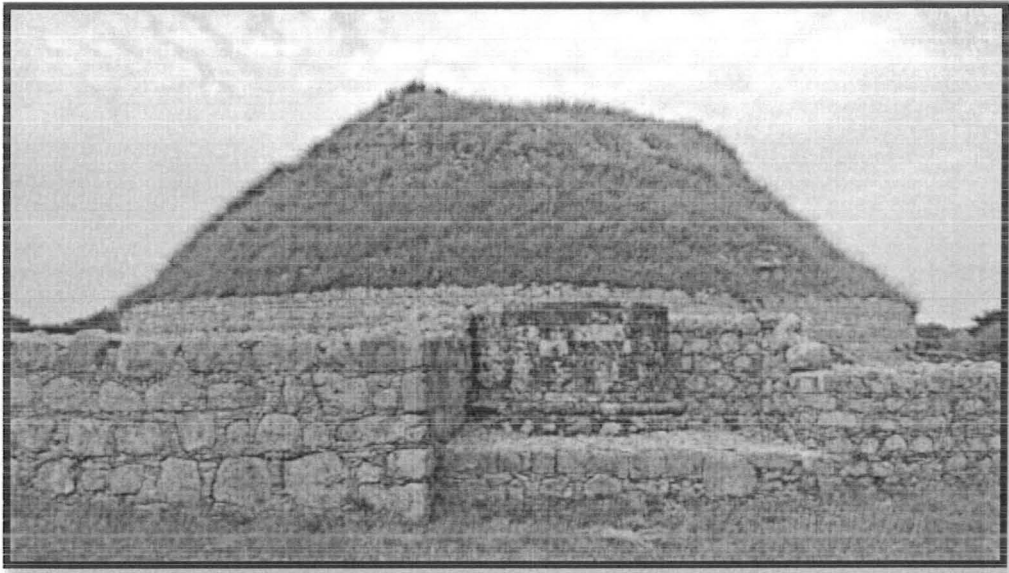


Figure 54: Stupa view from south

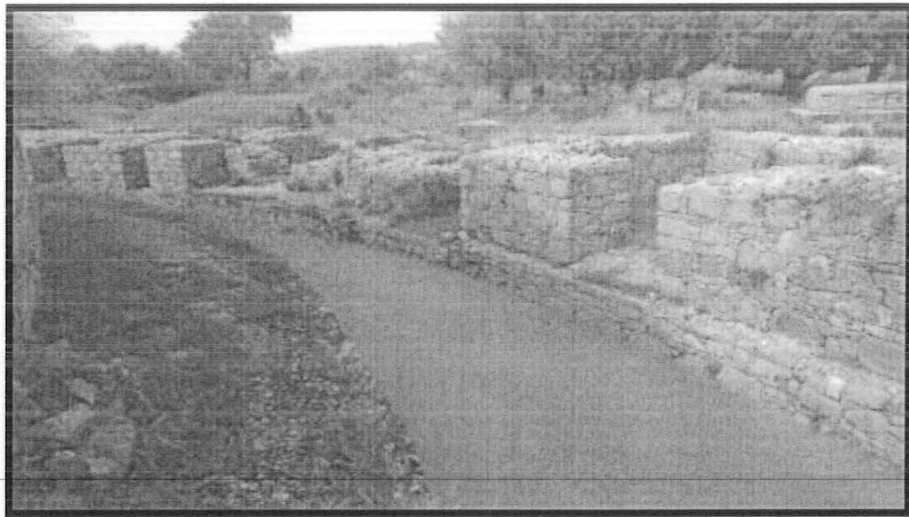
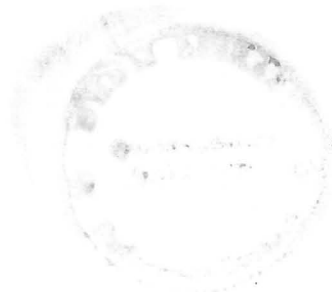



Figure 55: Chapels around pradakshina patha around main stupa





In Taxila, which furnishes the best documented evidence, it is rare to find anything more than a general indication of structures and rooms added subsequently or rebuilt, except in such cases of radical modification of the layout as Dharmarajika or Pippala (Marshall, 1951). Monastery of Badalpur is a fine example of such a case, the presence of additional monastery to the South of Main monastery is viewed as an extension to the main complex. It must, in any case, be constantly born in mind that a plan which has developed over time may also have undergone large-scale modification.

Apart from the basic planimetric model of the layout (the masonry and material for construction), many of the architectonic elements of the monastery of Badalpur also find their counterparts in Taxila. In plain view, it may be observed that the paved platform used for ablutions in a corner in a corner of the courtyard are common to many of the monasteries of Taxila. Other common features are paving of the edge of the courtyard and the use of timber pillars to support the roofing of the courtyard, presence of water tank is one of the major similarities found in all the monasteries of Taxila.

The originality of the monastery of Badalpur is, however, shown in its possession of some features unlike anything to be found either in Taxila or in the whole North-west: the symmetrical Planimetric layout of having two monasteries. As regards to the arrangement and number of cells along the sides, no monastery in Taxila presents two monasteries with two water tank.

The architectonic analysis also represents the best tool of investigation with regard to another feature peculiar to the monastery of Badalpur. In all the monasteries of Taxila, as at takht-i- Bhai, the main entrance to the courtyard of the cells presents no great difference in height and so a few steps at most were sufficient to arrive at the level of monastery. For this reason, the stairway of two flights found at Pippala, that of Chir Tope B, or those found in some sacred buildings at Sirkap, do not represent valid terms of comparison with the monastery of Badalpur as no such stairway is found in this particular monastery.

So far, the comparative study has considered only the exposed area of the monastery of Badalpur from excavations. The water tank of the main monastery needs to be exposed. Apart from a possible extension of excavation, the investigation of these monasteries of Badalpur with regards to their function also calls for overall examination it is the study which is now in progress.

## **4.2 Conclusion**

The intention is not to measure the success or failure of an architectural strategy, or to deal with quantifications of resources consumed or not consumed. In a way, this research is intended to deal with is studying how an architectural proposition may materialize in diverse forms, and in observing how these materializations operate in the world. Through the textural, architectural evidence and with the help of carbon dating much of the conclusion have been drawn regarding the date of the monastery, architectural strategies and importance of the site but some of the questions still need to be answered which will hopefully be researched at in the future excavation seasons.

To sum up, it appears clear that the monastery of Badalpur occupies an important position in the sphere of our knowledge of the development of monastic architecture in the North-West. While connected to Taxila in its basic typology but characterized by some significant peculiarities of construction and planimetry, the monastery of Badalpur is distinguished by the ingenuity of certain architectonic solutions, the striking symmetry of its layout with its abundant evidence of artistic creativity.

## Bibliography

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- Arif, M. A. (2015). Recent Archaeological investigations at Buddhist Monastery of Badalpur, District Haripur, Khyber Pakhtunkhwa. *Frontier Archaeology*, 29-40.
- Basham, A. L. (1954). *The Wonder that was India*. Great Britain, William Clowes and sons, Limited, London and Beccles.
- Beal, (1884). *Sammual, Buddhist Records of the Western World*. London.
- Bhatti, M. I. (2000). *Taxila an ancient metropolis of Gandhara*. Sialkot : Mrs. Munazza Ilyas .
- Bhatti, M. I. (2006). *Taxila an Ancient Metropolis of Gandhara*. Umar Zirgham Publishing, Wazirabad.
- BROWN, P. (n.d.). *INDIAN ARCHITECTURE ( BUDDHIST and HINDU )*. BOMBAY: D.B. TARAPOREVALA SONS & CO. LTD.
- CALLIERI, P. (1989). *SAIDU SHARIF I (SAWAT, PAKISTAN)*. ISTITUTO ITALIANO PER IL MEDIO ED ESTREMO ORIENTE , ROME.
- Dani, A. H. (1986). *The Historic City Of Taxila* . Paris: The United Nations Educational, Scientific and Cultural Organization.
- Dani, A. H. (2000). *A Short Guide to Taxila*. Main attique Ahmed, Executive Director Institute of Heritage Education Pakistan.



Dar, D. S. (1989, Jan-June ). CHRONOLOGY AND TYPOLOGY OF BUDDHIST MONASTERIES OF GANDHARA (PAKISTAN). *Lahore Museum Bulletin, Vol. II, No.1.*

FOUCHER, A. (1915). *notes on the ANCIENT GEOGRAPHY of GANDHARA.* CALCUTTA: Gautama Jetley for ASIAN EDUCATIONAL SERVICES .

Grover, S. (2003). *Buddhist and Hindu Architecture in India.* Delhi: CBS Publishers & Distributors.

H.Nadiem, I. (2008). *Taxila in Budhist Gandhara.* Sang-e-Meel Publishers, Lahore.

Halim, M. A. (1972). *Excavations at Sarai Khola.* Pakistan Archaeology No.8.

Hasan, S. K. (2013). *Religious Architecture of Gandhara-Pakistan.* Islamabad: National Institute of Historical and Cultural Research, Centre of Excellence, Quaid-i-Azam University.

He, L. (2013, December). Buddhist State Monasteries in Early Medieval China. 1-5. Institute of East Asian Art History, Heidelberg University.

Jawad, A. (2010). Gandhara Monastic Establishments-A Mark of Power and Authority (1st-3th Century AD). *PROCEEDING OF THE INTERNATIONAL WORKSHOP ON GANDHARAN CULTURAL HERITAGE 1-3, 85-97.*

Kalhor, Z. A. (2010). *Hindu and sikh Architecture in Islamabad and Rawalpindi.*

Khan , Muhammad Ashraf, and Mahmood-ul-Hassan. (2004). DISCOVERY OF MURAL PAINTINGS FROM JINAN WALI DEHRI TAXILA VALLEY. *Journal of Asian Civilization*, 14- 27.

Khan, G. M. (1983). *Excavations at Hathial*. Journal of Central Asia:.

Khan, M. A., & all, e. (2013). Excavation at Badalpur Monastery, District Haripur (Khyber Pakhtunkhwa), Pakistan: A preliminary Report of Season 2013 . *Journal of Asian Civilization* , 65-80.

Khan, M. A., & all, e. (2014). Excavation at Badalpur Monastery, District Haripur (Khyber Pakhtunkhwa), Pakistan: A preliminary Report of Season 2014. *Journal of Asian Civilization* , 85-116.

Khan, M. B. (2002). *Bhir Mound: The First City of Taxila (Excavation Report 1998-2002)*. (M. H.-u.-R. Muhammad Bahadur Khan, Ed.) Majeed Book deort, 22 Urdu Bazar, Lahore.

Khattak, M. A. (2006). FASANATING DISCOVERIES FROM BUDDHIST SANCTUARY OF BADALPUR, DISTRICT HARIPUR, TAXILA VALLRY. *ancient Pakistan 17*, 119-126.

Ling, T. (1974). *The Buddha: Civilization in India and Ceylon*. London.

Marshall, J. (1960). *A Guide to Taxila*. sani communication Limited.

Marshall, J. (2006). *Taxila: An Illustrated Account of Archaeological Excavations* (Vol. 1). Karachi: Royal Book Company.

Marshall, S. J. (1918). *A Guide to Taxila*. Calcutta: Superintendent Government printing, India .

Marshall, S. J. (1951). *Taxila: An Illustrated Account of Archaeological Excavations* (Vol. 1).  
Cambridge : The Syndics of the cambridge university press .

Marshall, S. J. (1951). *Taxila: An Illustrated Account of Archaeological Excavations* (Vol. 2).  
Cambridge: The Syndics of the Cambridge University Press.

MARshall, S. J. (1951). *Taxila: AN Illustrated Account of Archaeological Excavations* (Vol. 3).  
Cambridge : The Syndics of the Cambridge University Press.

Nadiem, I. H. (2003). *Buddhist Gandhara: History Art and Architecture* . LAHORE: Sang-e-meel Publications.

Naveed, M. b. (2015). *An Approach to Visual Archaeology Digital Reconstruction of Badalpur Monastery Complex in Taxila*. Islamabad : unpublished .

Raza, M. H. (1996). *Taxila Souvenir*. Islamabad: Tariq Associates Islamabad-Pakistan.

Sachau, E. C. (1910). *AlBaruni's India* (Vol. Vol. 1). London,.

Sahai, D. S. (2006). *INDIAN ARCHITECTURE*. New Delhi: Prakash Books.

SARKAR, H. (1993). *Studies in Early BUDDHIST ARCHITECTURE of India* . New Delhi :  
Munshiram Manoharlal Publishers pvt. Ltd.