

**CULTURAL PROFILE OF BALOCHISTAN:  
AN ARCHAEOLOGICAL REVIEW**



**By  
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**TAXILA INSTITUTE OF ASIAN CIVILIZATIONS  
QUAID-I-AZAM UNIVERSITY, ISLAMABAD  
2019**

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I, **Zahir Hussain**, declare that this work which is named “**Cultural Profile of Balochistan: An Archaeological Review**” is a result of my individual efforts and endeavors. It has not been submitted to any other university for any kind of degree.



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I hereby declare this research work as the outcome of Mr. **Zahir Hussain's** efforts and endeavors under my supervision which is titled, "**Cultural Profile of Balochistan: An Archaeological Review**" is submitted for the fulfillment of the degree of M.Phil in Asian Studies.



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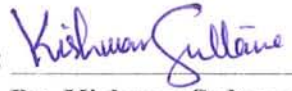
## FINAL APPROVAL

This is to certify that we have read the thesis submitted by **Mr. Zahir Hussain** 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 Philosophy in Asian Studies**.


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### Abstract

*This study concerns the compilation of Balochistan Archaeological Cultures (including ceramic cultures) starting from Neolithic to Iron Age including some new data. Moreover, it also consists the discovery of few new sites in prehistoric and protohistoric sites in Khuzdar. The main methodology applied is based on the analysis of the secondary data and their comparisons to achieve the target; it also includes personal observations. Some of the prominent cultures are Aceramic, Ceramic, Kili Gul Mohammad/Togau, Kechi Beg, Mian Ghundai/Damb Sadaat, Quetta, Naal, Kulli, Mehrgarh VIII-Sibri, Early and Late Pirak, etc. Cultures. These cultures present an unbreakable cultural sequence. However, most of the cultures present a hazy picture of ancient life because of lack of extensive researches. The literature review proved the presence of more than 24 major cultures until now and more than 500 prehistoric and protohistoric sites; Balochistan can be called a cultural civilization. These archaeological or pottery cultures have shown diversity and similarities at the same time. However, pottery is ubiquitously found on these Balochi sites and archaeological cultures are mostly recognized through them. The inhabitants of Balochistan throughout time often had an advance, beautiful and diverse culture according to their time frame. Interestingly, the study shows that there could be more than thousand prehistoric and protohistoric sites in Balochistan with great material potential in them. Also, each site is occupied for a long span of time often portraying different cultural periods/cultures. Moreover, settled life began in Balochistan around 7250 BCE; the early settlers were followed by others with different cultures that lived here in different climates and environments which was mostly harsh everywhere in Balochistan. However, they learnt to create ways out of such harsh weather and lived creating prosperous life of their time. They developed or borrowed the ideas and they were spread throughout Balochistan in a long span of time. These cultures portray amazing architecture, technology, craft and art which could be observed in their detected remains. This rich cultural heritage which is still patchy gives a rich cultural-historical background of how they lived and what they did for their survival in this harsh territory.*

*The new sites, from the pot sherds and other collections, prove to be of multi-cultural sites. Particularly one site, Miri Sarhap which possessed Harappan seals (?), Kulli figurines, and*

*pottery of Kili Gul Mohammad, Togau, Naal and Mehrgarh VIII-Sibri Culture. Moreover, the recent visit on Londo site has further changed chronology of the site.*

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## List of Abbreviations

DOAM	Department of Archaeology and Museums, Islamabad
DoAM,B	Directorate of Archaeology and Museums, Balochistan
DS	Damb Sadaat
EPC	Early Pirak Culture
ESTW	Early Shahi Tump Ware
Fig./Figs	Figure/Figures
FMW	Faiz Mohammad Ware
J	Jatthi
KB	Kechi Beg
KGM	Kili Gul Mohammad
KGM/T	Kili Gul Mohammad/Togau
KP	Khyber Pakhtunkhwa
LPC	Late Pirak Culture
LSTW	Late Shahi Tump Ware
MQ	Miri Qalat
MR.	Mehrgarh
PG	Periano Ghundai
QW	Quetta Ware
Pl./Pls.	Plate/Plates
RG	Rana Ghundai
RZ	Rehmanzai
SD	Sutkagen Dor
SD	Siah Damb
SD	Sivah Damb
SD/N	Sohr Damb/Naal
SK	Suthkagen Kuh/Suthkagen Koh
SK	Sevah Kalat
SJ	Sur Jangal
Shahi	Tump
STW	Shahi Tump Ware
TW	Togau Ware

## Chapter 1: Introduction

Geographically, Balochistan is in South Asia and is the largest province of Pakistan covering an area of 347, 188 km (43.6% of Pakistan's total area) (Franke 2015e: 11). The almost rectangular land is between 24°54 and 32° 40 Latitude from the North, 60° 56 and 70° 15, Longitude to the East (Field 1959: 7). It borders with Arabian Sea on the south, Afghanistan and Khyber Pakhtunkhwa (hereafter KP) on the north, Iran on the west and Punjab and Sindh on the east (Ali 1991: 51). Furthermore, it enjoys different climatic conditions i.e. tropical, sub-tropical and temperate. It is also on a distinct geographic location. Moreover, mountainous terrain, harsh weather conditions (Nadiem 2007: 11), arid to semi-arid regions (Faggi 1982/83: 22), and dearth of rain are some of its basic natural characteristics (Field 1959: 17). Because of its ancient and vital geographic position and archaeological cultures, it is called the 'Nuclear Zone' in the vast region (Asthana 1985: 46).

The nomenclature of Baloch and Balochistan are yet debated among scholars. However, some stances have been put forward. For instance, according to one view, the Baloch nation has been named after the Babylonian king Belus; it is also the name of one of their gods. Etymologically, it is a blend of two Sanskrit words *Bal* and *Och*. The former means power or strength whereas the later means magnificent or high; in this sense, it means powerful and magnificent people. There, though, are other versions of the meaning of the name which means nomad or wanderer (Janmahmad 1982: 1). Further, it must have been derived from Persian '*Balooch*' (the desert fighter) or *Barlooch* (the desert inhabitant). Hence, Balochistan is the land or country where the Baloch nation used to live and still live today (Hussain 2015: 1-2).

Even though the roots of the Baloch are dubious and not concurred with among scholars, yet they have endeavored to form different theories from their perspective. Some say that they might have come here from areas north of *Elburz* in Iran, now the land of Ashkanis. To some historians, the Baloch might have reached here from *Allepo* or *Halab*, the land of Semites presently. Additionally, some others claim them to be one of the old groups from Mesopotamia; whereas, some others go with the indigenous theory of the Baloch people. Thus, none of these theories are conclusive yet (Janmahmad 1982: xviii).

The Greeks, who trespassed and encroached on this territory, named it as *Gedrosia*<sup>1</sup> which is the earliest name known in the annals of history on Balochistan (Hussain 2015: 2). Nonetheless, historically, the region has been called the 'Buffer Zone' of South Asia due to its use by emperors and invaders like Alexander of Macedon, Muhammad Bin Qasim, etc. to annex other lands. Several empires and rulers have ruled the area at different times throughout history which kept changing with the dominant masters. For the time immemorial, it was under the rule of Achaemenid Empire in 521 to 428 BCE. After the advent of Alexander of Macedon, it came under the Macedonian Empire for a short period of time from 326 to 305 BCE; then the Mauriyan Empire took its control and replaced them from 305 to 232 BCE; later, Bactrians and Parthians succeeded them in 3<sup>rd</sup> century BCE and ruled till 2<sup>nd</sup> century BCE; they were over shadowed by Sythians (Sakas) around 130 BCE and their rule ended in 200 CE when Sassanid Empire overthrew them in 3<sup>rd</sup> century CE and remained masters till 7<sup>th</sup> century CE; afterwards, Rai Dynasty showed up in 635 CE till 712 CE; however, the Arabs (644 CE) conquered some of the western parts of Balochistan while other parts were still under the rule of Rai Dynasty at some point. Later, nevertheless, those were also conquered in 712 CE until 990s<sup>2</sup> CE. Lamentably, its history now becomes hazy and vague. The following are the other ruling empires and dynasties: the Gaznavids—990s- till 1150 CE, the Ghorids—1150 till 1215 CE, the Mongols—1223 till 1281 CE, Herat Rule—1281 till 1389 CE, the Timurids—1389 till 1480 CE, the Baloch chieftains—15<sup>th</sup> to 16<sup>th</sup> century CE, the Arghuns—(?), the Mughals—1522 till 1556 CE, the Safavids—1556 till 1595 CE, the Mughals recaptured it again in 1595 and the Safavids in 1622 CE annexed the region and ruled until 1638 CE; furthermore, in 1638, Ahmadzais (the Khans of Kalat) begin ruling it until 1839 CE, the British Empire—1839 till 1947 which distributed Balochistan among three countries (Pakistan, Iran and Afghanistan), and however, today the largest area is with Pakistan; it remained a colony in the British period. Lastly, it has been a part of Pakistan since 1947 CE. Hence, all the above-mentioned emperors/kings or rulers faced hardships ruling and maintaining the law and order of the region (Hussain 2015: 2).

Moving forward, Balochistan is rich in cultural heritage. Archaeologists, geographers, travelers, explorers, British Officers, etc. have long affirmed this fact with their explorations

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<sup>1</sup> It was the old name of lower and western Balochistan.

<sup>2</sup> Some dates are uncertain

and observations (Hussain 2015: 14-17). The earliest to indulge in such activities were H. Pottinger (1816), C. Masson (1844), E. Mockler in 1875-76 (1877), T. H. Holdich in 1892 (1892), F. Noetling in 1897 and 1898 (1898a; 1898b; 1899). Later, archaeologists using cultural-historical method of study showed up who are A. Stein in 1904-05 and 1927-28 and later in 1943 (1905; 1929; 1931; 1934; 1943), H. Hargreaves in 1925 (1929), E. J. Ross between 1935 to 1940 (1946), S. Piggott (1947; 1950) were the true pioneers of Balochistan Archaeology. Further works were carried out by B. de Cardi mostly under the shadow of British Expedition to Kalat in 1948 and 1957 (1951; 1959; 1965; 1983), W. A. Fairervis mostly with support of The Expedition of American Museum of Natural History to West Pakistan led by Walter Fairervis in 1949-51, 1959-60, 1961-62 and 1964 (1952a; 1952b; 1956; 1959; 1967), D. H. Gordon (1954-55), H. Field supervising the Expedition of Peabody Museum Harvard University, USA (1959), G. F. Dales in 1960 in the coastal region and in 1973-1976 excavations at Bala Kot (1962; 1966; 1974; 1979; 1981; Dales and Lipo 1992), R. L. Raikes in 1955-57 and 1960-61 (1963a; 1963b; 1965a; 1965b; 1968), the French Archaeological Mission in northern Balochistan led first led by J. Casal and then J.-F. Jarrige which started working from 1961 till 2002 (Casal 1966; 1968; 1973; Enault and J. Jarrige 1973: 189-90; C. Jarrige *et al.* 1995; J. Jarrige *et al.* 2013; J. Jarrige 1991a), S. A. Matheson (1967), M. R. Mughal in 1972 (1972; 1974), the Italian Historical, Ecological, and Archaeological Mission under the direction of V. F. Piacentini (2011; Fiorani 2003), French Archaeological Mission to Makuran under the supervision of R. Besenval from 1987 to 2007 (Besenval and Sanlaville 1990; Besenval 1992; 1994; 1997; 2005), and lastly the Joint German-Pakistani Archaeological Mission to central and southeastern Balochistan led by U. Franke indulged themselves in archaeological activities including the survey of the region and excavations at Sohr Damb/Naal from 1997 to 2007 (Franke-Vogt 1999; Franke 2000; 2008; 2015h; 2015i; Cortesi 2015c). Most of them have tried their best to form a logical picture of ancient lifestyle of Balochistan starting from Palaeolithic to historic times; however, lacunae remain.

About 2.6 million years ago, ancient Balochistan was fostering the largest mammal (named *Baluchitherium*) that ever lived. Unfortunately, it has become extinct now (Science News Letter 1935: 231). Witnessed all phases of life, Balochistan today possesses a rich archaeological heritage (Ali 1991: 51). They can be dated to Palaeolithic (Old Stone Age)



around 100,000 to 10,000 BCE; Mesolithic (Middle Stone Age) around 10,000 to 8000 BCE; Neolithic (New Stone Age) around 8000 to 4000 BCE, and other periods up to historic one is well documented in Balochistan. As a result, we find Balochistan has an uninterrupted history from Neolithic period leading to Islamic period (Baloch *et al.* 2013: 4-10).

Balochistan, which is crowded with hundreds of prehistoric, protohistoric and historic sites (Possehl 1999: 727-835), is blessed with many diverse archaeological cultures because of its different geographical and geological settings (Ali 1991: 51). Notwithstanding, U. Frank has claimed that the region is an unexplored zone' and there is lot to come (taken from Salman 2013). To discern the beginnings of these cultures<sup>3</sup>, they started with Neolithic Revolution in the region in Kacchi-Bolan<sup>4</sup> at Mehrgarh [c.7250 BCE] site that led them to form a great deal of sophistication in the field of material culture later. The trends from Mehrgarh were copied and refined in their own geographical setting (J. Jarrige 1991a: 34-50). These cultures, nonetheless, evolved in slightly different regions and environments of Balochistan. Interestingly, the amazing quality and crafts of these cultures speak for themselves (Franke 2015f: 5). Although they were born and died out yet leaving a great influence on the present cultures of Balochistan. Namely and chronologically, some of the cultures of Balochistan are Aceramic Culture, Ceramic Culture, Kili Gul Mohammad/Togau Culture, Kechi Beg Culture, Miri Culture, Shahi Tump Culture, Dasht/Emir Culture, Quetta Ware/Culture, Kot Diji Culture, Naal Culture, Mian Ghundai/Damb Sadaat Culture, Anjira Ware/Culture, etc. are Pre and Early Harappan; Mature Harappan Culture and Kulli Culture are contemporary while Early and Late Pirak Cultures, Londo Culture or Horizon, etc. are post Harappan cultures in Balochistan. To add more, they have distinct characteristics that set them apart from each other; nevertheless, connected with each other at some point and at certain periods of time. According to M. R. Mughal, all these cultures evolved indigenously suiting their environment; these cultures offered great help in the building of Indus Valley Civilization (1970: 10-12). Observing the present pattern of the Balochi societies. The inhabitants of Balochistan are still living in primitive lifeways like the ancient inhabitants of Balochistan. For instance, similar structures, same migration patterns, similar grinders and pestles for grinding, use palm-tree

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<sup>3</sup> The word culture in this work includes proper archaeological and ceramic cultures of Balochistan.

<sup>4</sup> Currently, the name of the district in the region is Kacchi but it usually changes from in between two names i.e. either Kacchi or else Bolan. The present researcher has used them as one word to avoid any confusion.

branch leaves to make baskets, mats, etc. and stones as hammer, and many more (Personal Observations).

### **1.1 Statement of the Problem**

Though Balochistan is claimed to be rich in archaeology where many cultures took birth and died, and the terrain has been archaeologically investigated somewhat, yet there is no book or article collectively on the subject. These cultures evolved indigenously dating back beyond c.7250 BCE to 200 CE. It, in addition, can be called one of the homes of Neolithic archaeological cultures because it gave birth to several archaeological cultures in and at its surroundings. Presently, data about them are scattered in different reports, books, journals, etc. Also, most of the cultures, lamentably, are not well defined and scholars do not agree on a set of terminology which confuses the beginners in the field of Archaeology. There is problem in understanding these Balochi cultures since almost all the people have not included any Baloch scholar; they were not able to completely understand the psychology of them since they have been living in the region for ages and following their ancestors. The researcher has included some newly discovered sites in Khuzdar having prehistoric and protohistoric nature. The researcher studied the materials in Islamabad Museum, Islamabad and has studied some private collections from Khuzdar, Balochistan and in Sind. The artifacts collection in Islamabad Museum from Balochistan sites has not yet been well studied. All the materials were studied and somewhat compared with these cultures.

### **1.2 Scope of the Study**

This study forms a complete study and analysis of the archaeological cultures of Balochistan and will help the future researchers in finding lacuna in the research department easily. In short, it brings all the scattered work (old and recent) on Balochistan archaeology together in this work. It clarifies the differences and similarities between these cultures and their influences on each other focusing almost every known aspect of them as known from the archaeological data. It helps the researcher to understand 'the archaeological cultures' which are organized and easy to read. It helps in differentiating the archaeological cultures since few of them were confusing. In addition, it further explores the cultural foundations of Indus Valley Civilization from these cultures and how they helped it thrive. The discovery of some new sites and their pottery certainly adds in the field of archaeological data of Balochistan.

However, the study of new material on Balochistan stored in Islamabad Museum, Islamabad and some private collections from Balochistan with people certainly adds to the archaeological knowledge of Balochistan. It presents the chronology of Balochistan based on old and recent studies. Hence, it proves the archaeological richness of Balochistan.

### **1.3 Objectives**

- To compile all the main archaeological and ceramic cultures of Balochistan from Neolithic to Iron Age
- To study materials of the new sites and form their cultural chronology and to relate them with other cultures
- To revise the chronology of Londo site from the new survey
- To prove Balochistan the home of many nuclear cultures
- To prove that geographical conditions were the only hurdle to reach a full-fledged civilization
- To study the pottery of Islamabad Museum and Department of Archaeology and Museums, Islamabad from the sites of Balochistan and some other private collections

### **1.4 Literature Review**

Studying the cultural profile of Balochistan, one can find various reports, books and articles on the ancient archaeological cultures but there is no complete book or article to give information about them at the same time. Most of these often lead to confusion to new students on Balochistan archaeology since they have no specific explanation and they are scattered. Here are some of the reports, books and articles which discuss these archaeological cultures of Balochistan:

E. Mockler (1877) published his report of explorations and excavations in Makuran, particularly around Gawadar district. He has reported one of the most important discoveries i.e. monuments, burial circles, and one important site: Sutkagen Dor. He also conducted some excavations on the site. It was later regarded an Harappan outpost.

F. Noetling (1898a; 1898b; 1899) discovered Periano Ghundai in Zhob and Dabar Kot in Duki and collected material from them. His collection comprised of Zhob and Quetta Valley cultures. The collection, particularly pottery, was studied by F. Pedde (1993).

A. Stein (1905; 1929; 1931; 1934; 1943) undertook a series of surveys and trial excavations in different parts of Balochistan where he discovered many important sites of prehistoric, proto-historic and historic nature. Additionally, his trial trenches at some of the important sites were to establish the cultural chronology of Balochistan which are not much useful now. These sites possessed different archaeological and pottery cultures. For example, Togau, Shahi Tump, Dasht/Emir, Naal, Quetta, Zhob Cultures, etc. were portrayed. Furthermore, Kulli, Harappan, Londo, etc. were the other cultures mentioned in his publications from different parts of Balochistan. He laid the foundations of Balochistan Archaeology for further studies attesting the rich cultural heritage (see Table 30) which attracted more foreign scholars in this area. His works alongside other works of scholars that time were well organized by S. Piggott in his book (1950). Moreover, the great deal of data on is still used but some have been refuted too because of further investigations or excavations.

E. J. Ross (1946) presented a report of his work on Rana Ghundai site where he excavated five cultural periods of the site. From the excavations, he discovered the lifestyle of the Rana Ghundai people and he established the cultural chronology of the site. The site, as he has observed, is a multi-cultural one which were further elaborated by other scholars later.

S. Piggott (1950) attempted to scrutinize the archaeological materials of Balochistan and Indus Valley Civilization presenting a synthesis of previous researches and his new work in the field. He has classified the earliest known cultures of Balochistan into two groups based on basic pottery colors and motifs adopting a classification system already applied for Iran ceramics. The classification is followed as Buff-Ware Cultures: Quetta Culture, Amri-Naal Culture, Kulli Culture; Red-Ware Cultures: Zhob Cultures. Supporting Diffusion Theory for the beginning of Baluchi and Indian cultures, he did all his analysis. Nevertheless, now we know it is not true. Furthermore, according to the author, these cultures interacted and shared ideas with each other when existing side by side. After this book, many other cultures and wares have been discovered. There is no doubt that most of the cultures at that time were known from Balochistan region.

W. Fairservis (1956; 1959; 1971) conducted reconnaissances in different parts of Balochistan. Following the track of A. Stein, he revisited many of his discovered sites and dug soundings for the confirmation of his observations. He discovered many new sites as well. After their

study, he associated them with different archaeological and pottery cultures (Aceramic Neolithic, Ceramic Neolithic, Kili Gul Mohammad, Kechi Beg, Quetta, Kot Diji, Kulli, Harappan, etc. Cultures) of Balochistan. Also, has formed a cultural chronology based on his study. All his study and survey were to affirm the previous works and added more to them. In his book (1971), he covered Palaeolithic to Vedic times in which he included his own new survey and excavations from Las Bela region. He discussed Aceramic Neolithic, Ceramic Neolithic, Kili Gul Mohammad/Togau, Kechi Beg, Naal, Quetta, Kulli, Harappan, etc. Cultures/wares. He also established tentative cultural chronology of Balochistan. Furthermore, his observations have helped in organizing and better understanding of Balochistan archaeology. His works are one of the best available among the scholars.

B. de Cardi (1951; 1964; 1965; 1983) published reports of reconnaissances at different times; she has given the details of each site. She has discovered and established a tentative chronology for region. Many archaeological cultures and ceramic wares which were mostly already known were identified by her. Furthermore, she discovered a new ware which was named 'Togau Ware' which she used to build a time frame for the region after the excavations at Anjira and Siah Damb. However, there were unnamed and unidentified wares too. In the last publication, she has reported the complete number of sites she either surveyed or excavated in which many new ones were included. They ranged from Neolithic to historic time. She takes the credit of the discovery of two new wares i.e. Togau and Londo Wares.

R. L. Raikes (1963a; 1965) produced early papers on Early and Late Pirak Cultures from his study. He has defined the Pirak Ware, its chronology and importance in the region. Also, he has established relations with the neighboring regions. However, the chronology was later modified by other researchers which was claimed to be wrong after him.

R. L. Raikes (1968) published his surveys in Balochistan; he discovered numerous sites and revisited other known sites during his reconnaissances. The sites date back to prehistoric, protohistoric and historic times. He has also tried to establish a tentative chronology. The surface finds mostly were recognizable and are related to famous archaeological cultures of Balochistan.

M. R. Mughal (1970) wrote his PhD dissertation on the available data in the Greater Indus Valley including northern Balochistan. It was basically a restudy of materials. He termed them in three cultural phases: Pre-Early, Early and Mature Harappan. He also defined the traces of formation of Harappan Civilization from Kot Diji and Amri Cultures in particular. He also identified the important contribution of particularly northern ancient Balochistan in building the Harappan Civilization. He proved that Harappan Civilization indigenously developed from different cultures.

M. R. Mughal (1972; 1974) presented the results of his survey which included discoveries and re-visits and excavations of sites of different periods in Balochistan. This was to confirm the old stratigraphy of sites. He has also mentioned cultures of Balochistan and their extent.

J. G. Shaffer (1978) mentioned many early cultures of Balochistan. He, too, attempted to give an alternative to 'Diffusion Theory' where he has claimed that the nomads played a great deal of contribution in building of the Baluchi cultures with their interactions. He related this to many archaeological cultures of Balochistan.

S. Asthana (1985) explored the already known data. She has discussed Pre-Harappan cultures of Balochistan alongside other Indus Age cultures. She gave much information about the archaeological cultures of Balochistan and their characteristics. Some of the cultures that her book mentions are Aceramic Neolithic Culture, ceramic Neolithic Culture, Kili Gul Mohammad/Togau Culture, Kechi Beg Culture, Periano Ware/Culture, Damb Sadaat Culture, Naal Culture, Anjira Ware/Culture, Quetta Ware/Culture including Faiz Muhammad Gray Ware, Kulli Culture, etc. Moreover, the author has given a good description of some of these early cultures. She confirmed that these cultures are regarded as indigenous ones and the diffusionary theory about them has been discarded after the works on Mehrgarh.

J. G. Shaffer (1985) discussed the chronology of Balochistan and established Balochistan sequence. He distributed it in many phases like Mehrgarh Phase, Kacchi Phase, Kili Gul Mohammad Phase, Balakot Phase, Kechi Beg Phase, Damb Sadaat Phase, Periano Phase, Naal Phase, Kulli Phase, Harappan Phase, Sibri Phase, and Pirak Phase. These phases embodied different cultures of Balochistan in different time periods.



G. L. Possehl (1986) studied the already collected artifacts of Kulli Culture and wrote a detailed book on it. He has discussed the advance material culture and its popularity over a vast area of land. He has suggested Kulli Culture as a highland aspect of Harappan Civilization. The author has also suggested a general reciprocity economic system between Iranian sites. Moreover, the book has claimed maritime trade or international trade as the source of Harappan urbanization. Moreover, the Kulli people interacted or bartered with Mesopotamian civilization, Harappan Civilization, Iranian Plateau, etc. to fulfill their needs. He has even tried to prove it a civilization but due to scarcity of the available data it could not be justified.

J. Jarrige (1991a) described the nature of Mehrgarh site and its importance in contributing in other cultures in Balochistan and nearby regions. He has discussed the all the cultural periods of Mehrgarh and their relationship with other cultures because this site forms the basis for the cultures. Further, the author has claimed that the pottery, belief system, administrative system, storage system, domestication, probably irrigation, technology, etc. of Mehrgarh have been copied by many cultures. In other words, it was the sole source of their encouragement towards advancement and a better life.

G. F. Dales and C. P. Lipo (1992) is the report of the former author's survey and excavations on the coastal regions of Balochistan. However, the main purpose of the survey was to spot ancient ports. The book mentions a detail note of the author's journey in region and their team efforts which included adventures and discoveries like Sutka Kuh. The authors have called Sutkagen Dor and Sutka Kuh important Harappan sites situated in southern Balochistan. The typology for the study of pottery of these sites were adopted from Dales and Kenoyer from the site of Mohenjo Daro. The authors have also claimed that the two sites were not the border outposts of Indus Valley Civilization.

J. G. Shaffer (1992b) presented overview of the vital archaeological cultures of Pre and Early Harappan period. He has presented the chronology of Indus Valley, Balochistan and Helmand regions from their Neolithic periods to form archaeological phases providing scientific discussions. He named them as Indus Valley Tradition, Balochistan Tradition and Helmand Tradition. The author has further elaborated the article (1985) of his own. Moreover, he not

only focused ceramics but other artifacts too. This chronology is still largely used among scholars.

C. Jarrige, J. Jarrige, R. Meadow and G. Quivron (1995) published the report of 11 seasons of excavations from 1974 to 1985 at Mehrgarh in Kacchi-Bolan. These excavations proved Mehrgarh to be the earliest Neolithic site of South Asia. Furthermore, the authors wrote the beautiful tale of Mehrgarh which marked the beginning of agriculture and animal domestication and a lot of other innovations that for the first time occurred in South Asia and in the world. They were the earliest dentists and cotton producers of the world. The inhabitants of Mehrgarh produced the first decorated ceramics in the region i.e. Kili Gul Mohammad and Togau Wares. Furthermore, Mehrgarh not only marks the beginning of Neolithic period in South Asia but also clarifies the origins of Indus Valley Civilization. The authors claimed that many aspects of Neolithic Mehrgarh culture were the prototype for many cultures in Balochistan and nearby regions. In other words, it was here that almost everything related to culture started and then later refined with the passage of time. When people dispersed in Balochistan, they adopted and copied many patterns, characteristics and styles from Mehrgarh site. And, they were then mixed and followed by the Indus Valley people. Hence, they were the antecedents, predecessors and precursor of Indus Valley Civilization.

G. L. Possehl (1999) claimed his book to be an encyclopedia on the beginnings of Indus Valley Civilization which are mostly traced from Balochistan. The book has greatly discussed the sites of Balochistan and their nature. To step ahead, he, nevertheless, classified the study into regional research for a greater understanding. He distributed Balochistan into two regions and further into sub-regions; and sites were discussed within them in a good way. Moreover, Indus archaeology along with Balochistan archaeology has been dealt with phases rather than principally focusing on only cultures: Kili Gul Mohammad, Burj Basket-Marked, Togau, Kechi Beg, Amri-Naal, Damb Sadaat, Kulli Harappan, Quetta, Early Pirak and Late Pirak Phases from Balochistan are named. However, he has presented a Gazetteer of Indus Age sites at the end of the book.

The French Archaeological Mission in Makuran under the leadership of R. Besenval (Besenval and Sanlaville 1990; Besenval and Marquis 1993; Besenval 1992; 1994; 1997; 2005; Besenval and Didier 2004, Didier and Mutin 2013; 2015) published a host of literature



of their surveys and excavations. They present the cultural and ancient history and developing the cultural chronology of the region including the distribution of ceramics and their contacts with their neighbors. They have recorded Aceramic Neolithic Culture of the region, Miri Culture, Early and Late Shahi Tump Cultures, Dasht/Emir Culture, and other later cultures. Their works have helped in understanding the cultures of Indo-Iranian borderlands and their relations with other major cultures and civilizations.

U. Franke-Vogt (1999; 2000; 2001; 2003/2004; 2005b; Franke-Vogt and Ibraheem 2005) headed the German-Pakistani Archaeological Mission which surveyed central and southeastern Balochistan and conducted excavations at Sohr Damb/Naal, Balakot, etc. This has resulted in discovery of some sites, removing some confusions and creating more questions. For example, the chronology of Togau Ware is questioned in some of her papers.

U Franke (2008; 2016) chronologically presented the available data on Balochistan in the light of new researches starting Neolithic till Bronze Age forming a cultural developmental. For instance, Aceramic Neolithic, Ceramic Neolithic, Kili Gul Mohammad/Togau, Kechi Beg, Miri, Shahi Tump, Naal, Quetta, Dasht/Emir, Kulli, Harappan, etc. Cultures were described in these papers.

H. Shudai, A. Konasukawa, H. Endo and S. Kimura (2009) analyzed the Naal pottery (total 87) which preserved in Aichi Prefectural Museum in Japan. It is basically a documentation report of the ceramics in the museum. Beautifully defining the pottery and its characteristics alongside the nature of the Naal Culture, they, further, defined the making technique and painted designs of Naal ceramics as well.

J. Jarrige, C. Jarrige and G. Quivron (2011) published the excavation report of Nindowari site (Khuzdar). The excavations were conducted by J. Casal from 1962-65. According to them, it has four periods assigned with different cultures Naal, Kulli, and Londo Cultures. This report is more concerned with Kulli Culture and its characteristics. The Kulli Ware was classified into Kulli A (Nindowari II) and Kulli B (Nindowari III). According to them, Kulli Culture is contemporary with Harappan Culture.

A. Konasukawa, H. Shudai, S. Kimura, T. Ueno and H. Endo (2011) conducted a study on the available ceramics of Balochistan associated with important archaeological cultures of

Balochistan preserved in Aichi Prefectural Museum, Japan. For instance, Emir Gray and Quetta style wares were discussed. These are the illegally transported ceramics from Balochistan; this paper gives a great deal of information about them. It presented the catalogue of these ceramics. These ceramics showed great aesthetic and quality sense of the artisans.

A. Uesugi (2012; 2013; 2017) studied and published two articles and a book on the preserved pottery of Balochistan in Kotalec Collection which is certainly from Balochistan sites. However, the book also has consisted a discussion on figurines of Balochistan. The author has catalogued and discussed the ceramics mainly Naal-like and Kulli-like wares. Moreover, he has related the human and animal terracotta figurines to many cultures of Balochistan. Focusing on many aspects, this book contributes to the study and understanding of particularly Naal and Kulli Cultures. This book also has attested the demand of Balochistan archeological artifacts in the illegal market and the nature of illegal trafficking from here which has terribly damaging the culture.

A. Konasukawa, H. Shudai, H. Endo and S. Kimura (2012) examined the ceramics of Togau, Kechi Beg and other prehistoric wares preserved in Aichi Prefectural Museum in Japan. It is completely a documentation report on the preserved ceramics in the museum. They also elaborate these cultures with their geography and characteristics. To add more, they have discussed their importance and influences on each other in space and time. The authors have also presented the chronology of Balochistan.

J. Jarrige, C. Jarrige and G. Quivron (2013) excavated Mehrgarh site for three more seasons and wrote a report on the Neolithic site of Mehrgarh which was fruitful since it cleared the chronology and some confusions regarding Balochistan and Harappan Archaeology. The authors stated that Period I completely pre-ceramic. However, in the earliest reports Period IB had mentioned pottery. Apart from new material discoveries, its chronology was pushed back to more than 7000 BCE. They still believed that many ideas were adopted in and around the region after they started them.

H. Shudai, A. Konasukawa, S. Kimuru, H. Endo (2013) studied the preserved pottery of Balochistan in Aichi Prefectural Ceramic Museum in Japan that were subjected to illicit trafficking. The authors have done a great research on the important Pre and Proto-historic

archaeological cultural wares (i.e. Kili Gul Mohammad, Togau, Kechi Beg, Shahi Tump, Dasht/Emir, Quetta, Faiz Mohammad Ware, Kulli, etc.) and they were compared. Nevertheless, the focus of the authors was on the pottery and their characteristics found in Balochistan which are important from an archaeological view. They have traced the cultural links of these potteries from this study. According to the authors, the prehistoric ceramics of Balochistan were classified based on pottery painted color, applied designs, surface treatment and their ages as the scholars had assigned them. Also, they argued that the pottery and its nature were not enough to define an archaeological culture.

U. Franke and E. Cortesi (2015) are the editors of the book which contains many articles of scholars (mostly of U. Franke) regarding Balochistan archaeology and its nature. They give a clear and transparent view of the Balochistan archaeology and its nature. Basically, this book has presented a picture of 804 pottery and 15 stone artifacts confiscated in 11<sup>th</sup> of June 2005 from Karachi seaport by a customs officer that were subjected to treasure hunting. The authors studied, catalogued, documented and now have published them. They have also assigned them to different cultures of Balochistan based on their characteristics and nature.

### **1.5 Methodology**

Scientific and systematic methodology is applied to extract results of this study. To be more specific, qualitative approach is used as per the nature of the topic. Moreover, descriptive and explanatory (analytical) methods are applied. The sources are primary and secondary to accomplish the study goals. Descriptive method is used to describe the available and new data to reach a clear understanding about the nature of the data from almost every angle possible. It explains how and why a phenomenon or issue exist or is happening in study. Whereas, the explanatory approach is to target the explanation of the phenomenon or issue and their causal relationship with which affect or influence them; it helps sorting out problems applying many methods. Additionally, apart from analytical and descriptive methods for the new data, comparative study methods are used too.

## Chapter 2: Early and Late Neolithic Cultures of Balochistan

The terms 'Neolithic' and 'culture' require defining before moving ahead. In this work, Neolithic is used as defined by V. D. Childe (Taken from Possehl 2002c: 23), "Neolithic as the period within which humans first domesticated plants and animals for food and settled into villages and pastoral camps". According to G. L. Possehl (2002c: 23), "The mastery of agriculture and management of domesticated animals was one of the great revolutions in human history".

Moreover, R. L. Kelly and D. H. Thomas (2010: 169-70) define archaeological culture in the following words: "working with the prehistory of one of these regions, archaeologists quickly saw "subculture areas"—regions within a culture area whose material culture (such as house styles, settlement patterns, ceramics, or subsistence) differed from one another. These subdivisions of culture areas are called "traditions" or *archaeological cultures*". According to M. R. Mughal (1970: 205), "A "culture" is often named after a pottery group or sometimes [based on] stylistic features taken out of the whole ceramic assemblage". Furthermore, S. J. Kundson (1978: 94) has claimed that archeological "culture is largely based on material items found in a site. More specifically, it is a common practice to refer to identical and similar assemblages<sup>5</sup> from two or more sites close to each other in space and time as evidence for a particular culture" (see Fig. 1 for illustrative understanding). All these definitions have the same meaning. In the beginning in 1920s and 1930s, this approach of G. Kossinna presented, which was thought to support Nazi ideology by then and was opposed largely. Nonetheless, his aim was to find the roots of a nation<sup>6</sup>. Later, many archaeologists used the term in the sense of building blocks for further understanding and analysis of archaeological data. The term was used by British archaeologists like Grahame Clark to get help to reconstruct the unwritten social history (Drewett 2000: 571).

However, Anthropologists define it differently since it is a different discipline as for E. B. Taylor (1871: 1) defined that culture is "that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society". The Webster's Dictionary (1982, taken from Williams 2005: 47) seems

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<sup>5</sup> The total sum of traits of material culture established over an area

<sup>6</sup> However, the present researcher has no such aim and objectives to do so.

to have combined anthropological and archaeological definitions: "The sum total of the attainments and activities of any specific period, race or people, including their implements, handicrafts, agriculture, economics, music, art, religious beliefs, traditions, language and story".

This chapter contains two major Neolithic cultures of Balochistan. However, one needs to understand the formation background of these and other cultures. According to A. H. Dani (2008: 24) regarding the development of human as followed:

The march of humanity towards the goal of civilization is a long process of man's effort to see to free [him] from dependence upon nature and win a position of dominance over the animal world. Physically weak but mentally better equipped, man, with the help of stone tool, first became a hunter, then a cave dweller, next an archer and finally a sower of seeds and mower of harvests—a stage of human life when he became the producer of food, creator of family, i.e. social living, builders of houses and founders of a village. From hunting to village life man marched slowly during the whole period of the Ice Age, stage by stage, towards the achievement of culture. Man rose from being a slave of nature to becoming a master of material forces. From brooding in helplessness to thinking and imagining for [him] and finally smiling with nature he jumped to a new world of vision with his inborn power to control and command.

Aceramic<sup>7</sup> Neolithic and Ceramic Neolithic Cultures were well documented at Neolithic Mehrgarh. They provide information on Neolithic archaeoculture (Neolithic culture of the people) of Balochistan. However, other sites are associated with these cultures too, but they do not provide much data since they have not been extensively excavated (Asthana 1985: 50-9). Moreover, the archaeological data that scholars painstakingly obtain involves historical, anthropological, architectural, economic and sociological [, archaeological and technical] in nature (Murray 2007: 308).

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<sup>7</sup> Without pottery or pre-ceramic

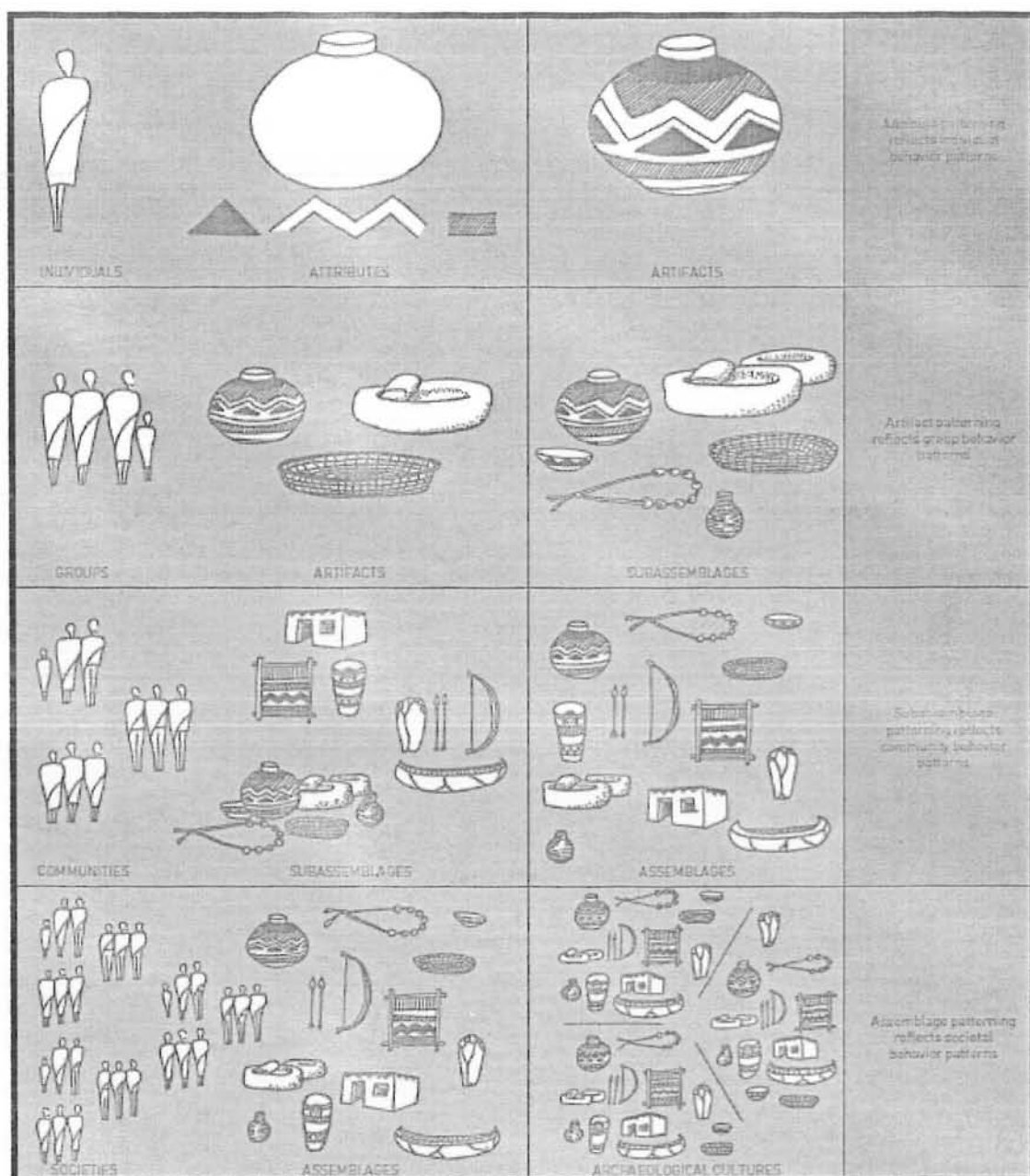


Figure 1. Illustrations for Understanding the Concept of Culture (after Renfrew and Bahn 2012: 118)

## 2.1 Origins and Development of Neolithic Life in the World and Near Balochistan

At about 10,000 to 8,500 BCE, many settlements using Neolithic techniques emerged in the Near East at Zagros Mountains; they are called the Natufian people living either in Syria or Palestine (Possehl 1999: 421-25; Habib 2004: 50). They are associated with Pre-Pottery



Neolithic A and Pre-Pottery Neolithic B sites. Earlier, these inhabitants were hunter-gatherers and they later began to experiment on the wild stock and succeeded and lived in permanent villages (Possehl 1999: 421-23, 426). They settled in favorable environments with rain fed agricultural fields; afterwards, they mainly domesticated sheep, goats, pigs and cattle and cultivated wheat, barley, rye, and many other pulses (McIntosh 2002: 56-7). In the context of this study, at Mehrgarh Period I in Kacchi-Bolan, Balochistan can be compared with Pre-Pottery Neolith B sites in the Near East (Possehl 1999: 440). Moreover, the evidences at Horse Cave (Aq Kupruk II<sup>8</sup>) in north Afghanistan on the Balkh River show domestication of sheep and goats around 10,000 BCE and at Snake Cave (Aq Kupruk I<sup>9</sup>) sheep and goats were raised around 7500 BCE. Thus, these cave sites prove that domestication was being practiced in South Asia before Mehrgarh. The dogma that Near East is the center for domesticating plants like barley and wheat and animals like goats, sheep and cattle can be refuted; it can now be said that such practices were carried out in South Asia other than Near East (Possehl 2002c: 24-5). It has been claimed that the early Neolithic domestication of animals and plants including food production techniques might have been diffused from the Middle East because of the similarities in the assemblages (Possehl 2002c: 24; Asthana 1985: 48). However, one must not exclude the possibility of further researches in the region which could decline this theory (Asthana 1985: 48). Environment, in use technology and combining their adaptability largely, resulted in the transition from food-gathering to food production in different time periods in different parts of the world (Thapar 1997: 90).

## **2.2 Neolithic Revolution in Middle East and Afghanistan**

In simple words, Neolithic is the art of shifting from hunting-gathering to a settled farming community. This shift is also called 'Neolithic Revolution' in South Asian context (Franke 2015k: 47). According to Braidwood and Home some factors are involved in shifting from hunting gathering to domestication of animals and plants: (1) Demographic pressure, which shows a tendency to settle at a place; (2) A suitable environment; (3) A different type and better technology to use (Taken from Thapar 1997: 82-5). However, as per the available data, the exact reasons leading to a settled life in South Asia are still unknown (Thapar 1997: 82-

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<sup>8</sup> Also known as Ghar-i-Asp

<sup>9</sup> Also called Ghar-i-Maar

5). Moreover, it is of interest to know that Balochistan called is a nuclear zone because of the early Neolithic cultures in South Asia (Asthana 1985: 28-30).

The following have been suggested for domestication by Jarman: “(a) random predation; (b) controlled predation; (c) herd following; (d) loose following; (e) close herding; and (f) factory farming” (Taken from Thapar 1989: 44). He has further added (Taken from Thapar 1989: 44):

The suggested factors for domestication of plants are “like climate, soil and relief exert the greatest influence on farming systems. The ability to exploit the potential resources at site would depend upon the available technology. Soil-working implements of Neolithic assemblages (picks, digging sticks, etc.) restricted the range of effectively workable soils to the light to medium loams. Heavy alluvial soils, with a higher natural fertility than loams, would have been subject to seasonal or permanent flooding. The location of a Neolithic site, especially in respect of soils, is thus conditioned by a combination of two factors: tractability and fertility”.

Thus, generally in Balochistan or broadly in Subcontinent, the transition processes from hunting-gathering to sedentary agro-pastoralism way of life are missing due to lack of detailed researches in the region (Khan *et al.* 2010: 2). “The excavations at Mehrgarh have made spectacular contributions to understanding later developments in food production and domestication, but information from this site does not touch on the earliest experiments which must have preceded it” (Possehl 1999: 442). However, at Mehrgarh I one can note that these inhabitants selected few animals for domestication i.e. cattle, goats and sheep from the wild stock (J. Jarrige and Meadow 1980: 124). Same is the case with cereals (J. Jarrige *et al.* 2013: 111). In other words, the evidences prove that Kacchi-Bolan and its vicinity was the distribution zone for sheep, goats, cattle, barley and wheat which the primitive humans exploited for survival in Neolithic time and in the beginning of Chalcolithic Age (J. Jarrige 1991a: 37-8). However, the pastoralism and agriculture evidences at Mehrgarh site did not start from the very beginning in South Asia (Meadow and Patel 2003).

### **2.3 Old Views on Archaeological Cultures in Balochistan**

Many, D. E. McCown (1942), S. Piggott (1950), M. Wheeler (1968), R. and B. Allchins (1968), W. Fairervis (1971), and Sankalia (1974) had a different theory like the idea of diffusionism; they unanimously have agreed that Balochistan acted as a corridor from which the archaeological cultural influences are known. According to them, the cultural developments were resulted from Mesopotamia, Turkmenia, Iran and finally reaching Indus



Valley (Wright 1987: 61; Asthana 1985: 45). Geographically and ecologically, Balochistan is a lunar landscape which has puzzled the scholars to think of the origins of these cultures from other regions. After the discovery and detailed study of Mehrgarh, now scholars regard Balochistan the home of Neolithic cultures; these cultures grew independently from outside force. Even today, Balochistan presents the same geographic story which could deceive anyone to form such assumptions like the scholars did. The chain of rivers in Balochistan like Bolan, Zhob, Hingol, Hub, etc. traversing among valleys watered these cultures and played vital roles in their origination and development Balochistan (Asthana 1985: 45). Mehrgarh was the starting point for almost all the Balochi cultures (Asthana 1985: 45; Possehl 1999: 507; 2002: 32).

#### **2.4 The Precursors/Antecedents of the Neolithic Inhabitants of Mehrgarh**

Nothing is yet known about the ancestors of the first colonists<sup>10</sup> of Kacchi-Bolan Plain in Balochistan. However, some plausible suggestions were put forward based on available data. For instance, the primitive people of late Palaeolithic usually benefited from suitable area like Kacchi-Bolan Plain where game and wild fruits were in abundance. They certainly came to exploit them (J. Jarrige 1991a: 40). In this area, moreover, L. Wengler found dozens of coarse chalcedony lithic tools from open air sites which he associated with Levallois type of Middle Palaeolithic of the region and they had no relation with the Mehrgarh lithic industry. To add more, at the Gokhurt oasis near Bolan Pass, there are springs of bitumen where stone implements were collected and were dated earlier than Mehrgarh. The people who exploited the resources must have performed some sort of activities near the bitumen Gokhurt springs. It is claimed that Bolan Valley was inhabited before the colonizing of Mehrgarh. Whereas, the people practiced semi-nomadism i.e. in winters. These semi-nomads moved to the pasturages<sup>11</sup> of lowlands of Bolan Valley or Sibi region and in summer they moved to pasturages of highlands in Quetta Valley. It is assumed that this practice in the region may have encouraged the settled life in the region (J. Jarrige *et al.* 2013: 109, 113).

Scientifically, it has been suggested that the ancestor of the earliest inhabitants of this culture must have lived here in the region whose remains are yet to be found. Also, it is claimed, after

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<sup>10</sup> The first settlers of a place

<sup>11</sup> The land full of grass which animals can eat

the morphological research of the teeth of the Neolithic people of Mehrgarh, that they had South Asian genes as studied with the present inhabitants of the region. It is now clear that they were the original inhabitants of South Asia, if not Balochistan (J. Jarrige *et al.* 2013: 153).

## **2.5 Aceramic<sup>12</sup> Neolithic Culture (c.7250-5500 BCE)**

In Balochistan, Aceramic Neolithic Culture was discovered by W. Fairservis from his excavations at Kili Gul Mohammad I (hereafter KGM<sup>13</sup>) in Quetta (1956: 170; 1971: 137). To add further, the French Archaeological Mission to Kacchi-Bolan discovered and excavated Aceramic Neolithic Mehrgarh I (IA and IB) in Kacchi-Bolan and it substantiated this phenomenon in late 1970s (J. Jarrige 1995: 59-60; J. Jarrige *et al.* 2013: 17-8; J. Jarrige 1984b: 292). While on the other hand, W. Fairservis has claimed Baleli mound in the Quetta Valley has the same nature. Moreover, Rana Ghundai in Loralai Valley probably has the same character; however, the excavator did not reach its virgin soil (Asthana 1985: 50). Moreover, the traces of Aceramic Culture are said to have been witnessed at Gumla in Gomal Valley in KP which is near Balochistan; however, it of a later date (Dani 1970-71: 39, 41-2; Asthana 1985: 50). Interestingly, R. Besenval has insisted to discover a pre-ceramic culture in Kech-Makuran Valley at Miri Qalat but of a later date (1994: 81; 2005: 1-4). Coming to the point, at Mehrgarh I (MR. 3 area) it was first a small settled community (J. Jarrige *et al.* 2013: 116-17). However, the radiocarbon dates from KGM are troublesome and cannot be trusted in the light of present data (S. Naseer, Personal Communication, October 12, 2018). The Neolithic area of Mehrgarh covers more than 25 hectares (J. Jarrige *et al.* 2013: 118). The Aceramic Neolithic deposition at Mehrgarh I (MR. 3 area) is about 10 m. with 9 m. occupational levels. They were visible from the cut section of Bolan River where flakes, blades, and core assemblages without any manifestation of ceramic assemblage (J. Jarrige and Lechevallier 1997: 95). Furthermore, KGM I revealed a similar cultural assemblage with 5 m. deposits without any pottery remains (Fairservis 1971: 137) that is why most of the field archaeologists have claimed that these two sites were inhabited by one people and KGM perhaps was settled slightly later than Mehrgarh but it is only a matter of centuries rather than millennium (C.

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<sup>12</sup> The period without pottery, also called Pre-ceramic

<sup>13</sup> For Kili Gul Mohammad only

Jarrige *et al.* 1995: 62, 68; Possehl 1999: 465). Furthermore, contemporary sites with Mehrgarh I are still not discovered. They maybe still lying beneath the soil and await discovery and/or natural or humanistic forces must have destroyed them (McIntosh 2008: 58).

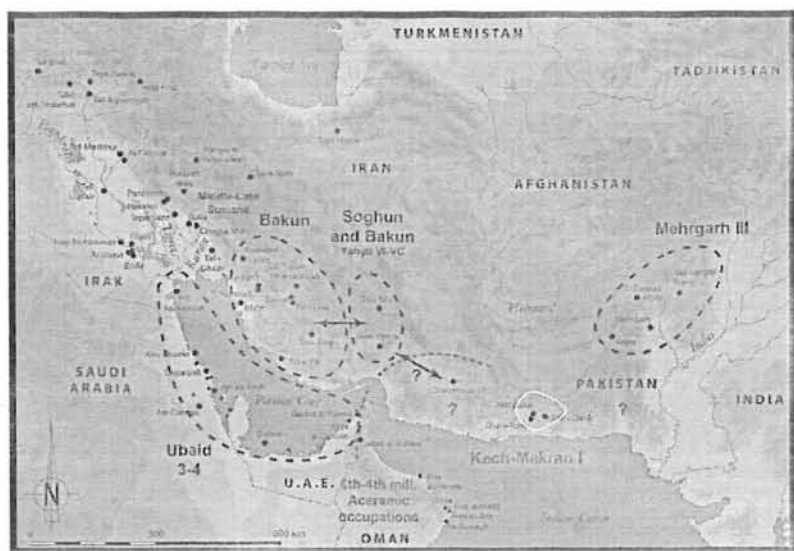


Figure 2. Aceramic Cultures in Balochistan and in the Surroundings (after B. H. David, Modified by Mutin 2012: 175) and Further Modified by the Researcher)

### 2.5.1 Ancient Environment and Climate of the Region

The environment of the region was suitable for domestication of animals and plants since the availability of water and fertile soil for domestication. Moreover, surrounding mountains, foothills, and plains with alluvial deposits provided various types of plants. The climatic conditions were better and humid than that of the existing ones in the region (J. Jarrige *et al.* 2013: 111-12).

### 2.5.2 Structural Remains

The people of this culture primarily built two types of architectural structures: domestic and granaries/store houses (J. Jarrige *et al.* 2013: 118-21).

*Dwelling Houses:* Architecturally, seventy-seven mudbrick buildings were either completely or partially unearthed from this culture at Mehrgarh I. They, at Mehrgarh I, made two kinds of domestic structures: animal hides with wooden pools for them to support and rectangular multi-roomed (5.5 by 3.75 m.), mostly of four rooms but houses of two, six and ten rooms were also unearthed (see Pl. 2) (Wright 2010: 55-7). In upper Balochistan, the inhabitants of

KGM built houses of sun-dried mudbricks or pisé and perhaps with wattle and daub too (Fairservis 1971: 137). Mehrgarh I mudbrick domestic structures had open spaces in between to separate them from one another (see Pl. 1); these open spaces contained graves (Asthana 1985: 51). Earlier, the open spaces were used as passageways (J. Jarrige *et al.* 2013: 123). These rectangular sun-dried mudbricks measured 33 x 14.5 and 28 x 14.5 cm and other sizes were recorded as well, having finger impressions on them. Thin walls with one course of bricks and wider walls with two or three courses of bricks were attested. The floors were mud paved sometimes having reed impressions (Possehl 1999: 453). The houses were mostly built with two rows of bricks. Some covered with red ochre were even discovered. They were sit-in with mud mortar and were 2 cm plastered on the interior and exterior with mud mortar. Sometimes even colored or decorated with red ochre and/or with paintings (see Pl. 3). The roofing was, as assumed, done with beams resting on walls having reed mats over them and plastered with a layer of mud. Almost hardly any traces of doorways found in the houses; it is because, perhaps, they were often rebuilt, and the doors were closed with mudbricks and plasters, so it is difficult to trace them. However, the rooms connected each other with small openings. These houses usually had ovens or hearths at the corners of the rooms having signs of smoke on the plastered walls. Moreover, the finds associated with houses were bones related to butchering activities, stone tools as grinding stones, mortars, pestles, few flints, stone axes, hammer stones, pebbles used as polishers, a sickle framed in bitumen, and many bone tools as awls (see Pl. 4), spatulas, etc. Some of the stone tools suggested that calcite bead making was practiced in these houses (J. Jarrige *et al.* 2013: 117-22).

*Granaries/Storehouses*<sup>14</sup>: Around 6000 BCE, there appeared many small systematically organized multi-celled compartments used for storing and preserving the cereal grains for their future (J. Jarrige 1991a: 40). The size of each cell measures 3 x 1.5 or 1.5 x 1.25 m. The largest is known to be of fifteen cells (Wright 2010: 57). Some had hearth associated with them. They contained burnt pebbles mixed with bones, mulling and grinding stones, flints, bone tools (J. Jarrige *et al.* 2013: 121), and nine clay cylinders outside of the compartmented buildings on a platform. These objects strongly suggest that they were involved in food processing. For

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<sup>14</sup> The buildings to store or preserve cereals for future use

example, as storage structures for storing cereals, there they also parched cereal grains and baked bread (Wright 2010: 57).

*Other Structures:* At the last stage of the period, in the surroundings of structures, many fire-pits, hearths and ovens were witnessed; they were sometimes dug into walls of the ruined part of the site. It seems that they cooked on a collective scale over the ruins of the site (J. Jarrige *et al.* 2013: 122-23). Additionally, at the end of the period, retaining walls and terraces were built along the structures to avoid erosion (Quivron 1991: 61).

#### **2.5.2.1 Planning of the Village**

There is no proper town planning; it is difficult because of small partition walls that were built with the passage of time (see Pl. 1). They were placed in different directions. However, we can say the houses were arranged in a systematic way with open spaces and passageways. This sort of planning is not found in any of the Western and Central Asian Neolithic sites. There houses were clustered tightly having no passageways and open spaces (J. Jarrige *et al.* 2013: 122-23).

#### **2.5.2.2 Cooking Activities**

Mortars and millers were present to process the grains into flour (Wright 2010: 59-60). There were several circular fire pits in the open spaces which were used to heat the pebbles to make bread (J. Jarrige *et al.* 2013: 122). Moreover, at first food was cooked by stone boiling in baskets lined with bitumen or with stone bowls (Wright 2010: 60).

#### **2.5.3 Subsistence<sup>15</sup> Patterns/ Means and Domestication**

The Aceramic Neolithic inhabitants of Mehrgarh experimented with the cereals and animals in the beginning; then they domesticated the ones which were climatically and environmentally suitable (Wright 2010: 47).

*Animals and Their Exploitation:* At the earliest stage (Mehrgarh IA), these people hunted 'big game' which consisted of animals like gazelles, wild sheep, wild goats, wild asses, blackbuck, nilgai, large deer, small deer, boar and water buffalo, wild cattle, and perhaps elephants (Meadow 1984: 35; J. Jarrige *et al.* 2013: 112). Since the wild stock was present there at that

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<sup>15</sup> The amount of food needed to stay alive

time, evidences strongly suggest that goats and zebu cattle were selected from the wild stock of the jungle and were domesticated; whereas, sheep were domesticated from the wild stock of the region is in doubt (Wright 2010: 49). However, goats were kept from the earliest time at the settlement of Mehrgarh IA (Possehl 1999: 459). Hence, 90% of the meat was coming from hunting [before c. 7000 BCE] (C. Jarrige 2005: 27). By c. 7000 BCE, nonetheless, hunting was becoming less, and domestication of animals and cereals was growing larger (J. Jarrige 1991a: 40-1). Fish and bird remain were the evidences that Bolan river and the lake/swampy environments provided added to the subsistence repertoire of this culture (Possehl 2002c: 12). The animals and cereals were a total part of their subsistence (Possehl 1999: 459). Further, the domesticated animals were used for threshing, plowing and pack animals for hunting purposes (J. Jarrige and Meadow 1980: 129; Asthana 1985: 55). They must also have been kept for the source of milk (J. Jarrige and Meadow 1980: 129).

*Plants and Irrigation System:* Agricultural evidences are mostly found in and on impressions of mud bricks (see Pl. 11). This culture witnesses 90% of naked six-row barley, less than 10% of six-row barley, two-row barley, emmer/einkorn, emmer and free-threshing wheat<sup>16</sup> were cultivated (J. Jarrige *et al.* 2013: 111). However, there were domesticated and wild barley and domesticated wheat examples at Mehrgarh I (Possehl 1990: 264). Evidences of date and jujube fruits were also found. The people of Mehrgarh used the last two as food resources. They are largely grown around Mehrgarh village till date (J. Jarrige and Meadow 1980: 122, 124; Asthana 1985: 51). Barley is domesticated from the early time which means that its evolution has already occurred; its domestication may have started from another site in the region which awaits discovery (J. Jarrige *et al.* 2013: 111). All the cereals were probably grown in the winter season as seen from the modern practice in the area and by their physical nature. However, Jujube and dates were harvested in winter and summer likewise (Meadow 1991: 56). All of them have nonindigenous origins (Fuller 2011: 358-59). However, there is presence of wild barley in Balochistan and Afghanistan today (Possehl 1999: 460). The amount of data suggests that Balochistan had a diverse and developed agriculture system at this stage (J. Jarrige 1993: 82).

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<sup>16</sup> Bread wheat



According to J.-F. Jarrige (1991a: 40), Bolan River burst out of its banks which deposited fertile silt on both of its sides largely which made it possible for the harvesting of the crop cereals. Whereas, according to R. Meadow (1991: 56), it is safe to assume that fields were irrigated from the water of Bolan River using water diverting methods or maybe grown near the natural moist soils like lakes, springs, marshes, and or water courses.

#### **2.5.4 Technology**

Technologically, this culture was simple (Possehl 2002c: 26). In Period I at Mehrgarh, the “groups of skilled craftsmen, still working at the scale of domestic workshops, but already using technics which represent the background of the future technical achievements of the later periods” (J. Jarrige *et al.* 2013: 145). At this stage, clay objects were hand-made and unfired i.e. clay pots in burials contexts with no clear features, some human and animal figurines, mudbricks for architecture and making circular ovens. Furthermore, woodworking, weaving, spinning, sewing, and hide preparing were assumed. Variety of ornaments were fashioned i.e. necklaces, rings, belts, anklets (see Pl. 9), headbands made of shell, lapis lazuli, turquoise, steatite and copper (Wright 2010: 60). Calcite beads were made at the site (C. Jarrige *et al.* 2013: 277; Possehl 1999: 458). The material culture of quality (especially from the graves) defines that there were craft specialists for shaping certain materials into useful objects (J. Jarrige 1991a: 41). Few of the objects had well-developed and standardized manufacturing traditions and the aesthetic sense is clearly seen in some of the objects (J. Jarrige *et al.* 2013: 131-46). Metal was used like semi-precious stones in this culture (J. Jarrige 1991a: 42). Some of these technological developments are defined separately as followed:

##### **2.5.4.1 Other Cultural Assemblages/ Cultural Repertoire**

This category includes several numbers of different objects as followed:

*Anthropomorphic and Zoomorphic Figurines:* Seventy-nine human figurines were recorded (see Pl. 10). Few figurines were found in their original context while others were discarded except for one which was found in a female grave (C. Jarrige 2005: 33). These figurines appear from the early stage; they were miniature schematic figurines modelled from clay (Asthana 1985: 53). The figurines have been classified as seated (fifty-six) or standing (sixteen) figurines (J. Jarrige *et al.* 2013: 129) made from a single piece of clay, almost having no arms or legs. Few were ornamented with necklaces and belts and some of them were covered with

red ochre<sup>17</sup> on them as a form of decoration (Wright 2010: 63). In terms of size, the sitting figurines are divided into three: small, medium and large, starting from 2 cm to 17 cm. Several holes in many figurines made from weed were visible so it is concluded that they “could either represent an attempt for a magical treatment or pain, be it moral, psychological or physical—or a way to harm someone through an image”. In the same period such a figurine was found in a female grave context; she was holding the figurine in her hands near her face. It may suggest the role she played in the community (C. Jarrige 2005: 31-4). One exceptional find was the standing figurine made from the mother of pearl. Very few were also poorly baked and most of them had no application on them. In few figurines, a coil is attached like wavy snake from the legs up to the body. Also, there were some polished river pebbles identified as seated figurines (J. Jarrige *et al.* 2013: 129-30). Moreover, sometimes these figurines were colored with red ochre (C. Jarrige 1991: 87). They carry either religious or magical purposes behind their use. However, the applied snake, according to C. Jarrige (2005: 34-5), may take the meaning to control the hidden forces of the nature. The pawn shape figurines from this culture in Mehrgarh I, Level 4 have links with West and Central Asian Neolithic settlements. These figurines (human and animal) have some similarities with the Neolithic sites between Zagros Valley and Indus Valley. Only a small number of animal figurines were found which were identified as bulls (C. Jarrige 2005: 34-5).

*Stone Tools:* M. Lechevallier studied about 20,000 lithic<sup>18</sup> pieces from the blade industry from Mehrgarh I (1984: 42; J. Jarrige *et al.* 2013: 125). All the lithics were shaped from the pieces of flint found from Bolan riverbed (Lechevallier 1991: 73). It is assumed that the cores were heated and then blades were taken off. From the Mehrgarh I (nine Levels), in the first four levels trapezes, lunates, scrappers and borers were recorded. From Level 5 to Level 8 at Mehrgarh I, truncated blades, trapezes with a concave back and drills were recovered. Drills<sup>19</sup> replaced borers and truncated blades replaced scrappers in the upper levels which show development from the technological aspect and decrease in hunting activities (J. Jarrige *et al.* 2013: 125). Earlier lunates (crescent shape microliths) dominated but later trapezes replaced them (Lechevallier 1991: 73). Moreover, heavy stone tool industry was witnessed in the shape

<sup>17</sup> It is a mineral pigment in red which is used to tan leather.

<sup>18</sup> Stone

<sup>19</sup> A pointed tool made of flint



of axes, adzes (a bladed tool perhaps used with a handle to cut or shape woods) and celts (tool having a chisel or ax head) on the site (Asthana 1985: 53). For flints and cortical flakes which were found from all the levels, indirect percussion was applied where the cores were picked. The lunates were mostly used to make sickles fixed in bitumen with a wooden handle (see Pl. 6). The trapezes were retouched to give them a concave back which are comparable with north western Afghanistan Mesolithic sites (J. Jarrige *et al.* 2013: 125-26). The microliths like arrowheads etc. were used to hunt and sickles were used to harvest (Lechevallier 1991: 73). At KGM, sickle blades indicate cultivation of some sort of cereal crop. There were also ground stone tools and chipped flints found. Generally, for hunting and butchering meat and to cut soft grass, stone tools were used. The use of sickles was for harvesting grains (Wright 2010: 60). These stone mostly show Mesolithic character (Asthana 1985: 59). It is believed that the lithic industry has resemblance with Epipalaeolithic<sup>20</sup> sites in the Near East (J. Jarrige 1993: 82).

The earliest stone tools (big chisels, stone axes, polisher, picks) were usually rougher than the later ones in this period. Grinding stones of different size, oval hammer or mortars were found from in and outside of the houses. These grinding slabs or stones were used to grind cereals, process red ochre and sometimes bitumen. Apart from these, many spatulas and grooves stones were recovered. Similar grooved stones were found from West Asian Neolithic settlements. The chisels and spatulas of the upper levels often bear zigzag incised decoration lines (J. Jarrige *et al.* 2013: 126-27).

*Bone Tools:* A rich bone industry was recorded in the first detailed report like awls, spatulas, a needle with an eye and two bone pendants (C. Jarrige *et al.* 1995: 244, 246). Moreover, later many points were recorded which were used as pins—few with eyes, from sheep, goats, and gazelle bones have been attested. Spindles, needles, scrappers, several antlers to stick picks in the soil used as percussion flakers or blade punchers were found. An exceptional find was the chisel from the elephant bone and an ivory was found too (J. Jarrige *et al.* 2013: 127). The bone tools have largely been of Mesolithic character (Asthana 1985: 59). The bone tools were mostly used to make baskets and cloths (Possehl 1999: 458; Agarwal and Kharakwal 2002:

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<sup>20</sup> A Stone Age period with characteristics of Palaeolithic and Mesolithic periods.

167). However, the awls in the context of Neolithic Mehrgarh must have been used for working with animal skins (J. Jarrige 1993: 83).

*Containers and Lumps of Bitumen/Asphalt:* Among containers, baskets covered with bitumen on their rim or bottoms were the most common ones (see Pl. 14). Stone vessels, stone bowls (see Pl. 13), some unbaked clay vessels, and a small vessel with holes were unearthed from the period (J. Jarrige *et al.* 2013: 128).

Lumps of bitumen were found abundantly in trash deposits. They were used to coat baskets to make them waterproof and to make sickles or arrows. It is important to know that the bitumen springs are present till today at Gokhurt near Bolan Pass (J. Jarrige *et al.* 2013: 128).

*Minor Finds:* Many small colorful stone balls and clay balls were recovered mostly 2 to 3 cm in size. Some stone balls were colored in ochre (J. Jarrige *et al.* 2013: 127). The function of the stone balls is uncertain; however, it is safe to infer that they were used as marbles. Until recently, colorful marbles are used to play the game in the region, particularly in Balochistan and Sindh (Personal Observations).

### **2.5.5 Importance of Red Ochre**

The common use of red ochre on house floors, walls, tools, domestic materials, walls and floors of burial chambers, and on the skeletons makes it clear that it was pivotal in this culture. Despite the utilitarian use i.e. leather working; it must have a hidden symbolic meaning in relation with daily and burial life yet to be deciphered (J. Jarrige *et al.* 2013: 121).

### **2.5.6 Interment Practices and Goods**

After a period of some years, the old houses were abandoned for new houses; the old ones were often reused as cemeteries (Wright 2010: 58). Nine occupational levels with nine graveyards were exposed. 315 [or 320] burials were found and 105 were excavated in this culture from Mehrgarh, out of which only 146 were intact. Among these intact burials, 179 (say 72%) contained funerary goods and 71 (say 28%) contained no grave goods but skeletons (J. Jarrige *et al.* 2013: 130-36).

There were several kinds of burials. The chambered burials contained one or several dead at the same time (see Pl. 7). They were either complete or fragmentary burials witnessing many

types of burial practices. These inhumations (burials) are primary<sup>21</sup> (with one dead body), secondary<sup>22</sup> (with one, two or three dead bodies), partial (incomplete skeletons which were intentionally rearranged,<sup>23</sup> or their bones were fractured in certain ways) or a certain combination of them. Few instances of reopening of primary graves and entering another primary inhumation by making room for it were recorded as well (Sellier 1991: 84-5).

At Mehrgarh IA, these graves were simple without any brick enclosures but at Mehrgarh IB they were associated with mudbrick "side-wall" enclosures, also known as chambers (see Pls. 7-8) (Possehl 1999: 482, 485). A burial chamber was dug to 1 meter deep and ochre was spread inside the grave and on its walls. The dead were utterly covered in ochre and ornamented with jewelry (if accompanied); later, they wrapped the dead in leather or cloth shroud [sometimes also colored with ochre] placing it in flex position with burial offerings (if any). Bricks were used to seal the chambers and then they were filled with earth completely. Few burials had a low heap of earth over them about 20 to 30 cm which is to indicate the location of the burials (J. Jarrige *et al.* 2013: 132-34) like the modern practice in the Islamic world (Personal Observations). Nevertheless, except for they occasionally contained more than one human skeleton (Quivron 1991: 84).

Only few secondary burials were found from this culture. If a person died away from village so he or she was temporarily buried on the spot or left at some safe place. After a certain period, their remains were brought back home and buried in burial chambers. It may be a desire to rejoin with the dead (Sellier 1991: 84) or there might be a biological or social line or connection among them (Possehl 1999: 486).

Very few burial pits were found too. The dead were entered in a 1 or 1.5 burial pit and buried (Wright 2010: 58).

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<sup>21</sup> First, original and undisturbed grave of a dead person

<sup>22</sup> Reburied the dead who was buried somewhere else but taken back to his village after some time when the flesh is not attached

<sup>23</sup> The burial of a part of body i.e. the skull of a dead person, perhaps for ritual purposes

More than 81% of the burials had east to west orientation and more than 7% was north south oriented. 72% had their head facing to east. Nevertheless, the combination of the grave goods is never repeated except for 2 or 3 cases at Mehrgarh I (J. Jarrige *et al.* 2013: 132, 137).

Funerary offerings included unfired clay vessels, stone vessels, and baskets coated with bitumen which may have had food in them, [however, few contained beads]; stone tools i.e. flint debitage<sup>24</sup>, cores, blades, microliths, spatulas, stone axes, chisels, hammer stones, pestles, grinding stones and mortars, etc. along with bone tools are mentioned in the reports. Other objects included cakes of red ochre, few accompanied animal offerings (the meaning of it is still unknown), and one figurine which was pierced multiple times was found in a grave in the hands of the female dead<sup>25</sup>. Apart from these goods, the dead frequently wore ornaments: necklaces, headbands, armlets, bracelets, belts, and anklets. Various materials were used to make the beads: shell, mother of pearl, limestone, chalcedony, calcite, carnelian, copper, or semi-precious stones like turquoise, lapis lazuli and steatite (J. Jarrige *et al.* 2013: 131-46).

The overall anthropological studies showed that they had a good diet, health and “low exposure to developmental stress”. And it looks like that everyone was treated differently as seen from the grave objects. In the light of these grave offerings, one cannot determine their social stratification since they were not repetitive (J. Jarrige *et al.* 2013: 135).

These graves provided a wealth of information on their burial practices i.e. some sort of social classification or organization and the phenomenon of belief on the life after death (J. Jarrige 1991a: 41). The must have imagined the afterlife to be a copy of worldly life (J. Jarrige *et al.* 2013: 137). In addition, grave goods from some burials suggested the emergence of a social class (Wright 2010: 64). In many ancient societies of the world, some individuals were supposed to have contacts with spirits and with afterlife world; they could have played a vital role in setting up the graves and performing funerary offerings of the community which may carry magical or symbolic meanings (J. Jarrige *et al.* 2013: 146).

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<sup>24</sup> The waste flakes or lithics that were created unintentionally at the area where stone tools were created.

<sup>25</sup> The figurine shows that the women must have played a role associated with it or it was accompanied to protect her in the afterlife.

### 2.5.7 Social Organization

This site may have been a base to harvest and preserve naturally grown cereals at the time (J. Jarrige 1991a: 40). Number of storage houses, which provide evidences for a complex management and organization of food resources, was used to store large quantities of cereal crops and later distributed them as food supplies among the members, most probably for difficult times (J. Jarrige *et al.* 2013: 149; J. Jarrige 1991a: 41). Moreover, the grave goods also show some certain amount of social organization and management in this culture at Mehrgarh I (J. Jarrige 1991a: 41). About sixth millennium BCE at Mehrgarh I, they emerged socially well organized and developed (Agarwal and Kharakwal 2002: 169).

### 2.5.8 Trade or Barter System

Many raw materials were brought from the adjacent regions to make ornaments. Shells must have been brought from Makuran coast or Gulf of Oman. Lapis lazuli was either imported from Badakhshan or from Chaghi hills. In the case of steatite, it must have been brought from Muslimbagh near Zhob or from Las Bela (J. Jarrige *et al.* 2013: 145-46). In short, the inhabitants of this culture indulged in a sort of barter system with north, south and west from the vast region (Possehl 1999: 460; Agarwal and Kharakwal 2002: 169). “The great “engine” of these contacts was almost certainly nomadism; pastoralism of many types, including bards, tinkers, traders and transporters” (Possehl 1999: 490).

### 2.5.9 The First or the Earliest

- Mehrgarh I is the first or earliest Neolithic settlement in South Asia (J. Jarrige and Meadow 1980: 129).
- The earliest evidences of pastoralism in South Asia come from Mehrgarh (Meadow and Patel 2003: 70).
- They were the antecedents (J. Jarrige and Meadow 1980: 122-33) and precursors of Indus Valley Civilization (Allchin and Allchin 1999: 97).
- They developed the art of dentistry (see Pl. 5); they are the first and earliest dentists known to the world yet (Coopa *et al.* 2006: 755; J. Jarrige *et al.* 2013: 135).
- The earliest traces of copper in the region were attested from this culture with a bracelet of eight copper beads in Mehrgarh IB (J. Jarrige *et al.* 2013: 145).

- The earliest traces of cotton in the world in the shape of cotton thread imprints inside the copper bracelet were found in this culture (J. Jarrige *et al.* 2013: 111-12, 145).
- Mehrgarh gave the evidence for earliest indigenous domestication of cattle zebu in South Asia (J. Jarrige *et al.* 2013: 113).
- The first or earliest figurines of Subcontinent or (C. Jarrige 2005: 27) South Asia (J. Jarrige and Meadow 1980: 128; J. Jarrige 1991a: 41) were produced in this culture.
- It is the first or earliest culture where architectural structures were constructed in the vast region (J. Jarrige *et al.* 2013: 37).
- It is the site with earliest evidences of harvesting methods in Subcontinent or South Asia (J. Jarrige 1991a: 41).
- The earliest or first traces of date or Indian jujube were recorded from this culture in South Asia or Subcontinent (J. Jarrige and Meadow 1980: 122, 124).
- It is the only site with human figurines in Indo-Iranian bordering regions (J. Jarrige *et al.* 2013: 129).
- It provides the earliest traces of water buffalo (J. Jarrige 2008: 96), possibly the earliest domesticated in South Asia (C. Jarrige *et al.* 1995: 245).
- The earliest fired steatite beads were found in South Asia from this culture (J. Jarrige *et al.* 2013: 145).
- A grooved elephant tusk was found which seem to be the earliest ivory work in the region (Asthana 1985: 112).
- The earliest bangle of conch shell was found in this culture (J. Jarrige *et al.* 2013: 143).

In conclusion, at the time we can speculate that Mehrgarh I was isolated since no other settlements were discovered of its age. However, it is possible that they are not yet discovered (Wright 2010: 64). S. Asthana has insisted that if W. Fairervis excavated Kili Gul Mohammad site, he would have received largely similar results as in Mehrgarh Period I (1985: 55). This culture marks the transition from hunter-gathering society to a Neolithic settled society for the first time in Subcontinent; it makes it the earliest settlement of the region. Local domestication of animals like cattle, goats and sheep took place alongside domestication of cereals i.e. wheat and barley (Meadow 1991: 51; Possehl 1999: 460). This culture provided subsistence base for the Greater Indus Valley (Meadow 1991: 51).

The roots of many cultures can be traced from this very culture in subcontinent or it has influenced many cultures. They somehow discovered many new ideas which formed many earliest or first ideas or innovations which were later developed with the passage of time in this vast region. In the meanwhile, they built mud brick dwellings and other structures. To facilitate them more, they bartered objects for other unavailable and non-accessible materials in the region i.e. semi-precious stones; they were not alone in the region at the time (Possehl 1999: 460; Asthana 1985: 53). At Mehrgarh I, they interacted with north, south and west and other parts of the expanded nuclear zone (Possehl 1999: 460). The heat-treated steatite, lapis lazuli and turquoise beads and shell bangles probably reached as finished goods from other areas at this time (Franke 2008: 654). They believed in afterlife as their burial patterns strongly suggest (J. Jarrige 1991a: 41). Moreover, it is presumed that people who lived in huts were semi-nomads and the people who lived in mud brick houses were probably permanent settlers at the site. About other structures in the text, they might have been used for functions i.e. marriages, ceremonies, etc. According to the excavators of Mehrgarh site, the inhabitants of this society was a socio-economically complex and organized (C. Jarrige *et al.* 1995: 366-67; Possehl 1999: 467-68).

Regarding fine materials in some burials, it is assumed that there were poor and rich people since the objects suggest. The material brought from far regions tend to be precious i.e. steatite, lapis lazuli, mother of pearl, turquoise, etc., so the grave with objects made of these were comparatively richer and were affordable to the rich class. The grave goods with little value or the dead buried with no objects suggest they were the poor class. Or else, the people referred to as poor class must have been nomads and had different beliefs. Moreover, the dead who were brought from far away after they were buried far from home; they must have wished their dead to be together with the other dead or at least be buried with their own people.

Nevertheless, the snake-like ornamentation on few figurines is taken by C. Jarrige as controlling of some natural forces; they need to be regarded only beautiful ornamentations like on jewelry historically and these days. The lumps of bitumen must also have some symbolic purpose or functions which is difficult to ascertain and requires further research. Apart from this, this culture started many 'firsts' or 'earliest' in the region which were

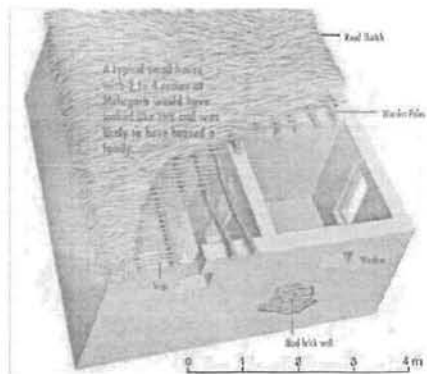
certainly followed later. Hence, they had complex burial system, a sophisticated architecture and were involve in external exchange (Franke 2015k: 50).



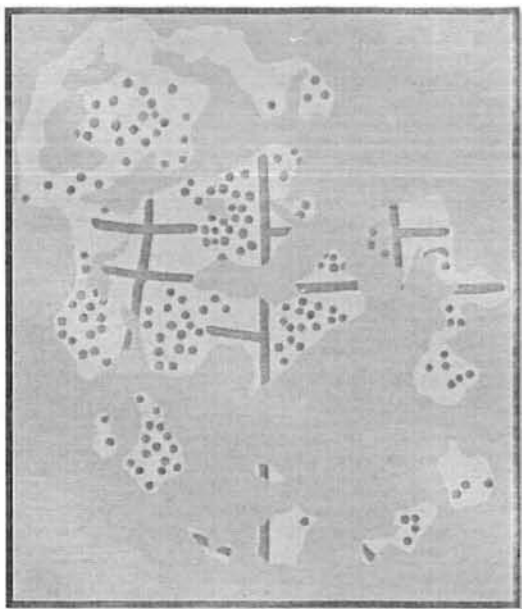
# Plates of Aceramic Neolithic Culture



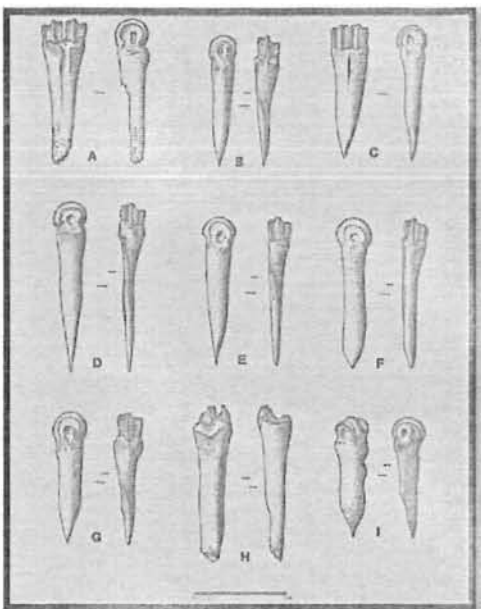
Pl. 1. Excavated Dwelling Structures  
(from J. Jarrige *et al.* 2013: 122) Not to Scale



Pl. 2. Reconstructed House Model of Mehrgarh  
(from Sarkar 2011: 10)



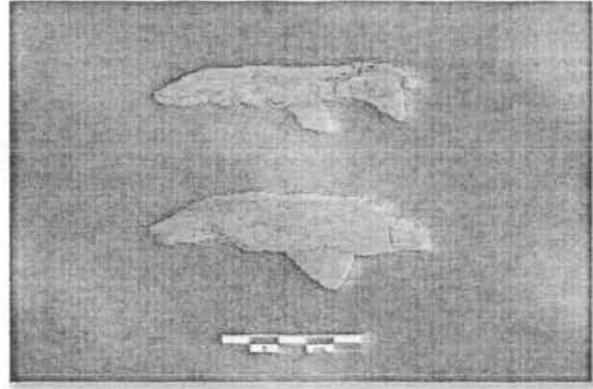
Pl. 3. Decorations on Walls from Mehrgarh I  
(from J. Jarrige *et al.* 2013: 212)



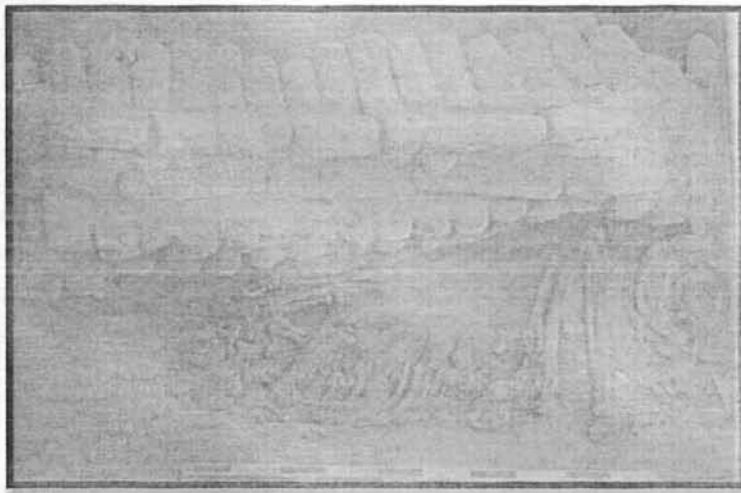
Pl. 4. Bone Awls from Mehrgarh I  
(from J. Jarrige *et al.* 2013: 212)



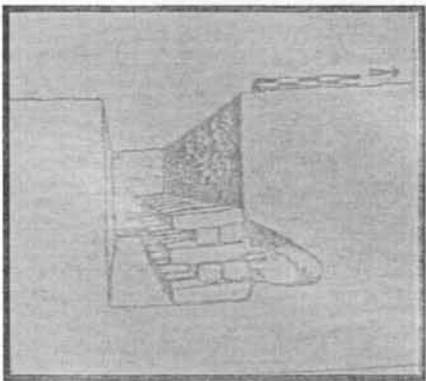
**Pl. 5. Treated Drilled Tooth**  
(from Sarkar 2011: 8) Not to Scale



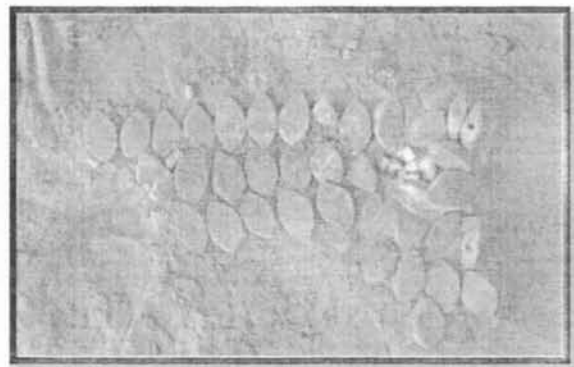
**Pl. 6. Sickle for Harvesting**  
(from J. Jarrige 2013: 422)



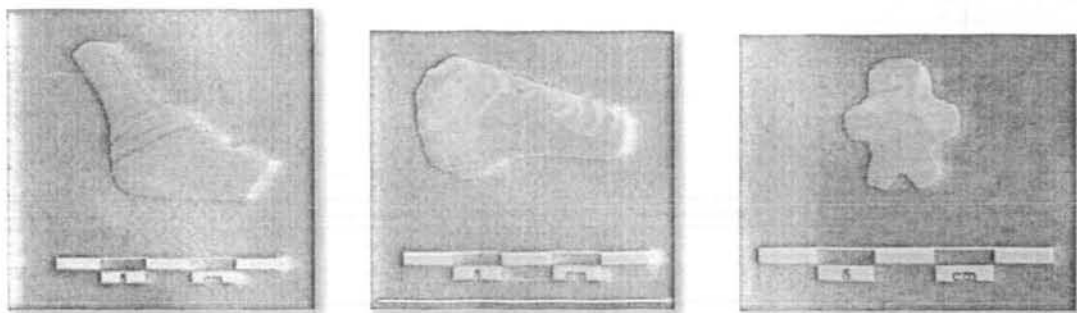
**Pl. 7. Chambered Primary Burial** (from Sellier 1991: 80)



**Pl. 8. Schematic Chambered Burial from Mehrgarh I**  
(from Sellier 1991: 81)



**Pl. 9. Two Calcite Bead Anklets, Mehrgarh I**  
(from J. Jarrige *et al.* 2013: 144) Not to Scale

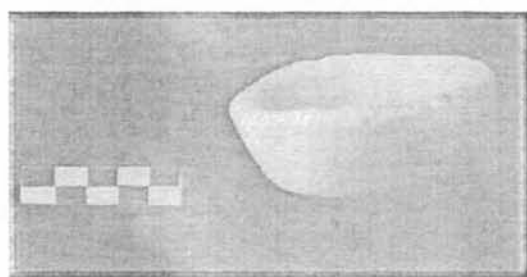


Pl. 10. Applique (L), Painted (M) and Figurine Made of Mother of Pearl (R) from Mehrgarh I  
(from J. Jarrige *et al.* 2013: 425, 429, 431)

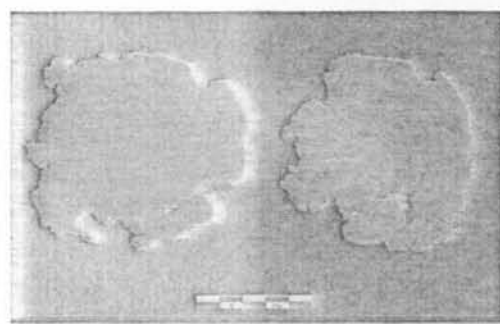


Pl. 11. Impressions of Barley (L) and Wheat (R)  
(from J. Jarrige 2003: 142) Not to Scale

Pl. 12. Copper Bead with Mineralized Fibers  
(from Moulherat *et al.* 2002: 1396)



Pl. 13. Stone Vessel  
(from C. Jarrige *et al.* 1995: 262)



Pl. 14. Preserved Baskets from Graves at Mehrgarh I  
(J. Jarrige *et al.* 2013: 451)

## 2.6 Ceramic Neolithic Culture/ Ceramic Culture (c.5500-5000 BCE)

This culture was discovered by W. Fairervis in his early reconnaissances in the Quetta Valley (1956: 335). By this time, Quetta, Zhob, Loralai and Kalat Valley in Balochistan were colonized. This stage includes many sites. For instance, this culture is represented at Mehrgarh IIA<sup>26</sup> (MR. 4) in Kacchi-Bolan (J. Jarrige 1995: 61-2, 68), Kili Gul Muhammad II, Kasiano Dozakh, Q<sup>27</sup>-17, Q-25 in Quetta Valley, Sur Jangal I in Duki, Rana Ghundai I in Loralai, Anjira I in Surab Valley in Balochistan yielded similar type of cultural materials. However, this stage is largely the continuity of the early stage of Aceramic Neolithic Culture, but also certain changes can be seen in the material culture and certain practices (Possehl 1999: 461; Asthana 1985: 55-9). Mehrgarh IIA is used as type site for this study since it is extensively excavated.

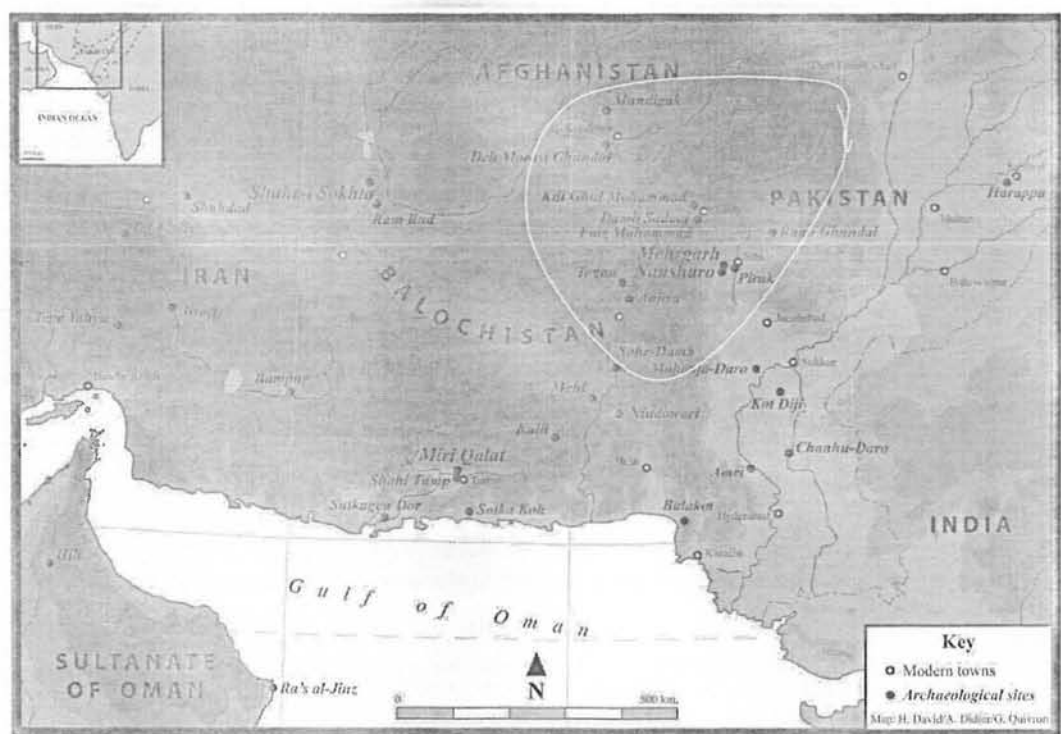


Figure 3. Ceramic Culture Distribution Area (from J. Jarrige *et al.* 2011: 8, Modified by the Present Researcher)

<sup>26</sup> However, at Mehrgarh IIIA the ware of this culture is found with Kili Gul Mohammad Ware.

<sup>27</sup> The site codes frequently with different numbers assigned to Quetta region sites named by W. Fairervis

### 2.6.1 Ancient Environment and Climate

The environment and climate did not change over time it remained the same as it was in the former culture in Kacchi-Bolan region (J. Jarrige *et al.* 2013: 111-12).

### 2.6.2 Structural Remains

There were many storage buildings in this culture along with few domestic structures (see Pl. 1) (Possehl 2002c: 31). However, there was no major change in the architectural patterns. The houses and storage rooms were constructed almost the same way as in the former culture (Asthana 1985: 55-7; Possehl 2002c: 31; Quivron 1991: 63).

*Dwelling Houses:* A rectangular building which was subdivided into six rooms was found between the storehouses (C. Jarrige *et al.* 1995: 454; Possehl 1999: 462). Because of erosion, much of the dwellings could not have survived the test of time.

*Granaries/Storehouses:* The storage buildings began to be constructed in former culture/period at Mehrgarh; however, with the increase in agricultural production their number and sophistication also increased at Mehrgarh (see Pl. 2) (Possehl 1999: 455). There were physical evidences of barley seeds in some of these storage buildings (C. Jarrige *et al.* 1995: 453; Chakrabarti 2006: 113). "In years when the rivers were in high spate, the harvest would naturally have been rich and made it necessary to build such storehouses on the outskirts of the residential areas to provide for leaner years" (Quivron 1991: 63). The storage buildings can be compared with Western Asian sites like Tell el Oueili or Umm Dabaghiyah which date back to the end of the 7<sup>th</sup> millennium BCE (J. Jarrige *et al.* 2013: 149).

*Other Structures:* Furthermore, the site had platforms areas [some covered with mudbricks] having fire pits/fireplaces and trashes that included ashes, burnt pebbles, and pieces of bone suggest food cooking (J. Jarrige *et al.* 2013: 123). Many retaining walls<sup>28</sup> and terracing features were found (Possehl 2002c: 31); the purpose of these walls were to protect the structures from erosion. Charred animal bones, ceramics and few bone tools were associated with the dwellings (Quivron 1991: 60-4). There was a massive curving wall having buttresses at Mehrgarh IIA; there was some degree of planning at the stage which reveals their well-developed social and community organization (C. Jarrige *et al.* 1995: 422; Possehl 1999: 462).

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<sup>28</sup> The wall that keeps water and earth behind it

Furthermore, as the evidences suggest today, there was at least the existence of a fence (if not a mudbrick wall) for the protection of the village from dangerous animals (J. Jarrige *et al.* 2013: 123).

The availability of flints i.e. blades, borers and cores (used to butcher, to work bone, to prepare hides), and an antler; they were mostly associated structures (Wright 2010: 57-8). On the other hand, bone tools, hammer stones, polishers covered with red ochre, etc. were also identified. These materials suggest that there were shops to process leather working, basket making and weaving (C. Jarrige *et al.* 1995: 455; Possehl 2002c: 31).

#### **2.6.2.1 Cooking Activities**

The same ways were practiced in terms of cooking as observed from the former culture at Mehrgarh I. Grains were processed by grinding into flour by mortars and millers and perhaps later baked into bread. Moreover, food was cooked in some types of pottery; they were placed on a hearth and given certain amount of heat (Wright 2010: 59-60).

#### **2.6.3 Subsistence Patterns/Mean and Domestication**

Almost all the animals (e.g. cattle, goats and sheep) and plants (e.g. varieties of barley and wheat) domesticated in this culture (Asthana 1985: 59).

*Animals and Their Exploitation:* At Mehrgarh IIA and Kili Gul Mohammad II, the excavators unearthed thousands of bones of domesticated animals were predominantly cattle, but sheep and goats were also recorded (Meadow 1991: 56; Fairervis 1971: 137). Nonetheless, hunting still existed among the dwellers but to a lesser extent (Meadow 1991: 56). The animal husbandry was not only for meat but also for plowing, threshing and used as pack animals to hunt other animals (Asthana 1985: 55). The inhabitants still hunted game (Meadow 1991: 56).

*Plant and Irrigation System:* Mostly the evidences of different kinds of barley and wheat come from this culture (Meadow 1991: 54; Asthana 1985: 55). Naked six-row barley still dominated in terms of production and its use. However, bread (also called naked or shot) wheat production increases in this culture than the former at Mehrgarh I, the Aceramic Culture. Now, they become rounder in shape. Both these look like the kinds found in Turkmenia which maybe the result of similar irrigation patterns (Meadow 1991: 56). Still somehow fruit and nuts gathering existed among the settler in this culture (Meadow 1991: 56).

It is assumed that the fields were watered from the Bolan River; the water is diverted to the fields. They may have planted nearby the natural moist soils like marshes, springs, lakes, and in water courses (Meadow 1991: 56).

#### 2.6.4 Technology

The material culture of Period II[A] at Mehrgarh received more refined treatment and some practices were left (J. Jarrige and Lechevallier 1997: 102-04). New techniques and practices emerged (Asthana 1985: 59). Industrial activities, furthermore, appeared to be on a larger scale (McIntosh 2008: 61). Moreover, pottery making was one of the greatest achievements in the region which started from this culture (Possehl 1999: 464-65).

##### 2.6.4.1 Pottery/Ceramics

Two types of ceramics were attested: Coarse Chaff-Tempered or Sequential Slab Constructed Ware and Burj Basket-Marked/Basket-Marked Ware<sup>29</sup> (see Table 1) (J. Jarrige 1995: 62, 68; Possehl 1999: 464-65). The former is the oldest pottery of South Asia which was recorded at Mehrgarh IIA-III alongside baskets coated with bitumen starting from the former stage (J. Jarrige 1991a: 41; Vandiver 1995: 651) and stone vessels (see Pl. 8) (Franke 2008: 654). However, the Coarse Chaff-Tempered Ware was not found from Kili Gul Mohammad II which indicates a break in the sequence, or it is because the site was not extensively excavated. The typical Burj Basket-Marked Ware was produced at Mehrgarh II and Kili Gul Mohammad II (Possehl 1999: 465). The production and use of pottery were limited in Mehrgarh IIA (see Table 20 for chronological comparisons) (Asthana 1985: 55-6).

Context	Wares	Manufacturing Techniques	Prominent Shapes	Decorations	Firing
Mehrgarh IIA-III/ KGM II-III	<i>Coarse Chaff-Tempered Ware</i>	Handmade; sequential slab constructed	Bowls and basins	Very few sherds with raised perhaps caprid designs	Lightly fired
	<i>Burj Basket-Marked Ware/Basket-Marked Ware</i>	Made in baskets with clay coils and fired with the baskets	Vases and jars	Basket impressions are unintentional decorations and painted with wavy lines	Oxidizing but rarely reducing

Table 1. Ceramic Culture Wares (from the Present Researcher)

<sup>29</sup> However, later it appears with other cultures.



#### 2.6.4.1.1 *Coarse Chaff-Tempered Ware*

In Balochistan, this ware has been found only in Mehrgarh IIA-III at Kacchi-Bolan (see Table 20 for chronological comparisons and see Pls. 3, 5-7) (Vandiver 1995: 651).

*Manufacturing Technique:* "Pots were also built up from slabs and pieces of chaff-tempered clay and sometimes coated with a red slip..." (McIntosh 2008: 61).

*Shapes/Forms:* The main shapes included different sized tronconical bowls, flat circular dishes (J. Jarrige and Lechevallier 1997: 104), and basins (J. Jarrige *et al.* 2013: 148).

*Decoration Repertoire:* Some ceramics were red slipped or painted. Only two sherds had applique caprid (?) designs (see Pl. 7) (Possehl 1999: 465).

*Firing Technique:* It has been lightly baked (C. Jarrige *et al.* 1995: 453; Possehl 1999: 464-65).

*Distribution Area:* Technique, form and texture wise, these ceramics closely resemble with oldest wares from the Middle Eastern and Iranian Plateau sites (Vandiver 1995: 652; J. Jarrige 1991a: 42). It is doubted that it is related to "Chaff Ware Horizon" (Possehl 1990: 266). Similarities of this ware with similar decorations can clearly be seen at Umm Dabaghiya, a West Asian site (J. Jarrige *et al.* 2013: 149).

#### 2.6.4.1.2 *Burj Basket-Marked/Basket-Marked Ware*<sup>30</sup>

In his early reconnaissances, Aurel Stein discovered this ware for the first time from north Balochistan and Kharan and called it mat-marked (de Cardi 1965: 120). Later, W. Fairervis also found it at Kili Gul Mohammad II at Quetta and named it Burj Basket-Marked (see Pl. 4) (1956: 259; de Cardi 1965: 120). Moreover, B. de Cardi called it Basket-Marked Ware (1965: 120). Apart from Kili Gul Mohammad II, the other main sites included where this ware was recorded were at Baleli Mound, Kasiano Dozakh, Q-17, Q-25, in Quetta Valley (Fairervis 1971: 137), Mehrgarh II-III in Kacchi-Bolan, etc. (Possehl 1999: 465). However, later these Burj Basket-Marked/Basket-Marked ceramics were found associated with other cultures in

<sup>30</sup> It is usually regarded a separate pottery culture which started from Ceramic Neolithic at Mehrgarh in Balochistan and it was later used alongside many other cultures; however, the researcher is adding this pottery culture in the Ceramic Culture since it begins and develops from this period. The researcher is also using this pottery culture here to form a better sequence of this thesis.



different regions like in the cultural assemblages of Kili Gul Mohammad/Togau Culture, Kulli Culture, etc. (Personal Observations).

*Manufacturing Techniques:* Some simple ways were used: “By coating both faces of a reed core with clay, by molding clay in a bitumen-lined basket, or by covering the inside of an old basket with clay and firing it, destroying the basket and producing a distinctive type of pottery known as basket-marked ware” (McIntosh 2008: 61). The pots were sometimes coated with thick mud at Mehrgarh to hide the impressions and giving them a smooth look. However, Kili Gul Mohammad II has provided no such evidences (Possehl 1999: 465).

W. Fairservis has noted Basket-Marked Ware from the Kili Gul Mohammad II mostly. It was completely made with hands using baskets and clay coiling techniques; this ware bears coarse sandy texture. The surface is almost totally basket marked and traces of horizontally laid clay coils are observable. It looks that the potters deliberately attempted to smooth the surface of the vessels by flattening the stick out areas. The unmarked basket surfaces were smoothed (1956: 259).

*Shapes/Forms:* Short and wide-open vessels with straight or sloping walls and flat most often heavy and raised rims were the prominent shapes (Fairservis 1956: 259).

*Decoration Repertoire:* It was occasionally decorated with wavy lines, particularly at Kili Gul Mohammad II (Fairservis 1971: 137). They were slipped or painted either on exterior or interior; they were rarely red painted or slipped in buff or red at the rim area (Fairservis 1956: 259).

*Firing Technique:* The evidences suggested that it was fired in oxidized but rarely reducing conditions (Fairservis 1956: 259).

*Distribution Area:* The basket-manufacturing production with basket impressions was prevalent in Pakistan, southeastern Iran and southern Afghanistan at c. 5000-3000 BCE (Didier and Mutin 2013: 465).

*Distribution Area of Ceramic Culture:* The South Asian Ceramic Culture was largely recorded in upper Balochistan, Khyber Pakhtunkhwa and Afghanistan (see Fig. 3) (Asthana 1985: 55-9).

#### 2.6.4.2 Other Cultural Assemblages/ Cultural Repertoire

*Anthropomorphic and Zoomorphic Figurines:* From Mehrgarh Period IIA, 17 human figurines were attested. They are only seated figurines. The seated figurines were prototype of Mehrgarh I figurines. They are often covered or bearing traces of red ochre. Three figurines with applied pellet as a kind of ornamentation which surrounded their necks and resting on their breasts were found. At Mehrgarh IIA, the figurines take finer shapes with clear face, curve, hips, use of pellets, and separation of legs. They must have had the same function as in the former culture i.e. magical and religious (C. Jarrige 2005: 27-34).

*Stone and Bone Tools:* Thousands of flint tools, mostly blades, were recorded in this culture (J. Jarrige and Meadow 1980: 128). Flint tools and bone tools of the former culture continued. They still show the Mesolithic nature from Mehrgarh I. However, heavy stone tools like axes, adzes disappeared. Long blades become prominent (Asthana 1985: 55, 59). Chipped stone tools and drills, flakes, cores, grinding stones, mortars, a broken alabaster mace head, stone bowls, etc. were found. There was presence of many bone tools i.e. awls, needles, etc. (Agarwal and Kharakwal 2002: 171). Moreover, sickles with blades set in bitumen at Mehrgarh IIA were found too (C. Jarrige *et al.* 1995: 265, Figure 5.12).

#### 2.6.5 Interment Practices<sup>31</sup> and Goods

The excavators did not find any cemeteries from this period but few graves in isolation (Sellier 1991: 77). In this stage at Mehrgarh IIA, the Ceramic Culture inhabitants still buried the dead in flex position and in burial chambers (see Pl. 9) (J. Jarrige *et al.* 2013: 142). However, the major change was they did not accompany any funerary offerings except for very few beads (Sellier 1991: 77; J. Jarrige *et al.* 2013: 142). Moreover, the dead were impregnated with red ochre (Sellier 1991: 77). Hence, the idea of afterlife was slowly fading away in this culture (J. Jarrige 1991a: 41).

#### 2.6.6 Social Organization

The same pattern was applied as in the previous culture. The large number of storage facilities provided information about this aspect. They were constructed to preserve surplus cereal grains for the unproductive times. The complex social management and organization

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<sup>31</sup> Burial Practices

controlled the collection and distribution of the surplus cereals among the community. It was a well-organized social system (J. Jarrige *et al.* 2013: 149; J. Jarrige 1991a: 41). The excavators commented (J. Jarrige *et al.* 2013: 148-49), “We have pointed out that the number and the sizes of the storehouses of [Mehrgarh] Period IIA gave not only an idea of the agriculture efficiency of the inhabitants of the settlement but also implied a social organization able to coordinate collective activities on a much larger scale than it was apparently the case during [Mehrgarh] Period I”. Now, D. P. Agarwal and J. S. Kharakwal have claimed that they emerged as well organized and developed Neolithic society of its time (2002: 169).

#### **2.6.7 Trade**

Kacchi-Bolan region did not possess raw materials like turquoise, lapis lazuli, steatite, copper, carnelian, and so on; they were brought from other nearby or far regions (Possehl 1999: 469). Like in the previous culture, the sources of these materials were different: Chaghi Hills or Badakhshan for lapis lazuli, Las Bela or Muslimbagh in Balochistan for steatite, Makuran coast or from more distance regions in the same direction for shells (J. Jarrige *et al.* 2013: 145-46). The trade was performed by nomadic-pastoral people of many kinds like “bards, tinkers, traders and transporters” (Possehl 1999: 490).

#### **2.6.8 The First or the Earliest**

- This culture has proved to be the earliest or first ceramic producer in South Asia starting from Mehrgarh IIA (Vandiver 1995: 648; Hideaki *et al.* 2013: 87); it is “the most beautiful and technologically sophisticated in any early society” (Wright 2010: 69).
- First or earliest locally produced head-steatite, turquoise and lapis lazuli beads were found in this culture from Mehrgarh IIA (Franke 2008: 654).
- The earliest shell bangles were made in this culture (Franke 2008: 654).

In conclusion, there is continuity in architecture, technology (though improved), beliefs, etc. from the former culture. Many new things and techniques were introduced in this culture. However, due to limited diggings, other sites have not provided much information on this culture except at Mehrgarh IIA (J. Jarrige *et al.* 2013: 147-150; Asthana 1985: 59). These people were indulged in internal and external trade, had complex system of burial practices, had advance architecture (Franke 2015k: 50) and better technology. According to U. Franke the real beginning of technologies happened in this culture since “several workshops and

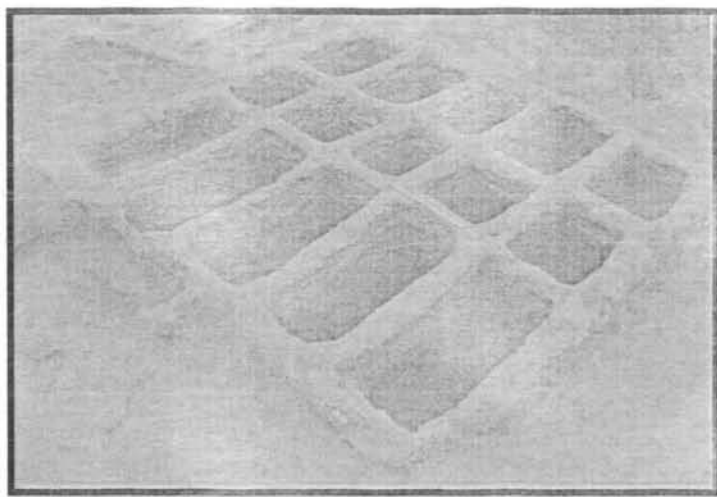
wasters” point out towards the local production of heat-treated steatite, lapis and turquoise beads and shell bangles (2008: 654). They developed the art of aesthetics in the later stage which they improved in the coming periods at Mehrgarh. In other words, this culture marks new developments: pottery making (handmade and sequential slab constructed and Basket-Marked), cotton production (?), more elaborate figurines, architecture, stone and bone tools, social organization, etc. Apart from some of the uses of figurines, some of the figurines must have been constructed for children as toys to play with them. G. L. Possehl has considered Mehrgarh IIB ceramics “a harbinger of these [coming] developments” (1999: 465). In this culture, the ratio of domestication of animals is more than the former culture.

Furthermore, “use of a similar pottery technology, in addition to stylistic similarities in vessel shape, size, and surface treatment, implies that there was communication throughout this vast region of a sort that were conducive to the transfer of pottery forming techniques” (Vandiver 1995: 652). However, it is hard to ascertain who started it first. The basket impressions on the Burj Basket-Marked/Basket-Marked Ware provide us important information about ancient weaving techniques of the time (Possehl 1999: 465). Additionally, after the innovation of pottery, the idea was copied and became famous in the vast region with adding further developments. Further, the people of this culture, especially the early inhabitants of Mehrgarh, used to migrate in summer to the upland pastures in the Quetta Valley and in winters to the lowland pastures of Sibi and Bolan Valley (Asthana 1985: 113). Thus, at this stage at Mehrgarh, they formed complex and socio-economically organized society (C. Jarrige *et al.* 1995: 366-67; Possehl 1999: 467-68).

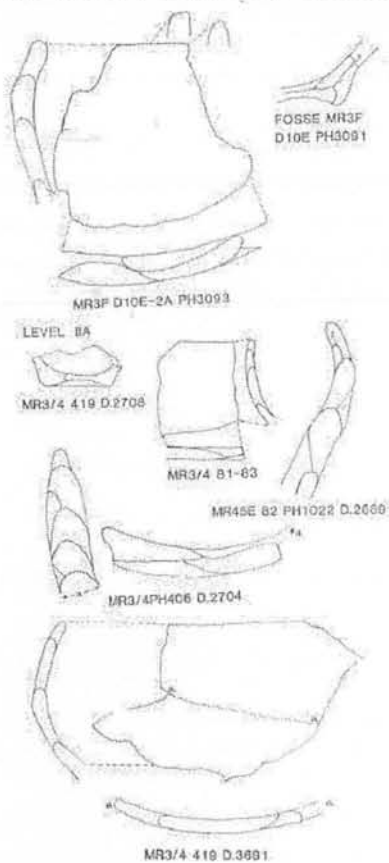
# Plates of Ceramic Neolithic Culture



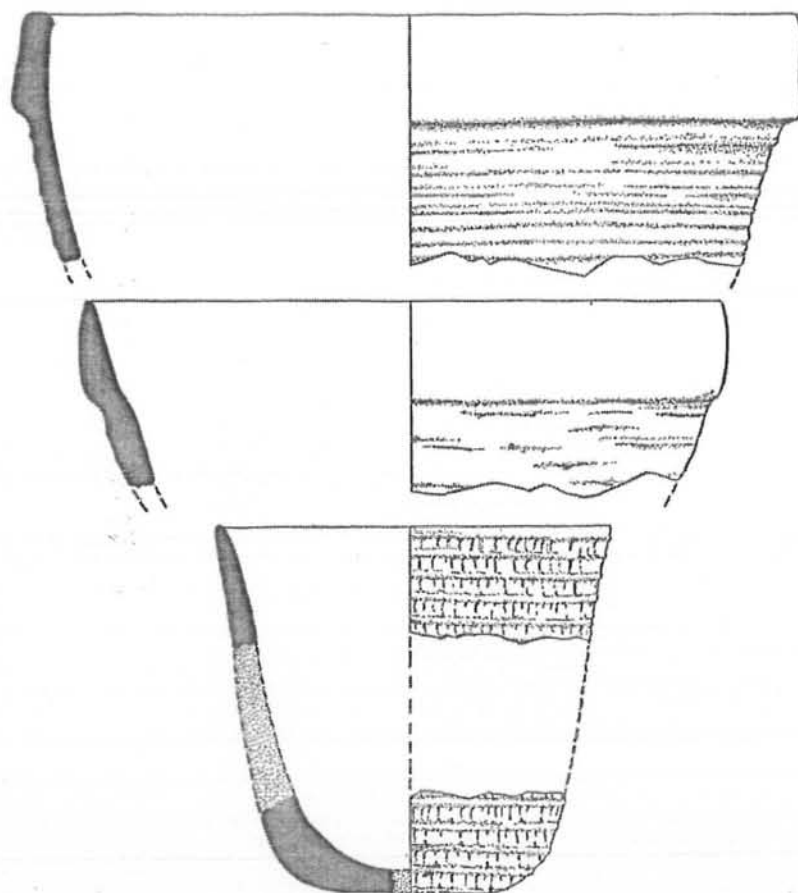
Pl. 1. Neolithic Mehrgarh Period I-II Structures (from J. Jarrige *et al.* 2013: 171)



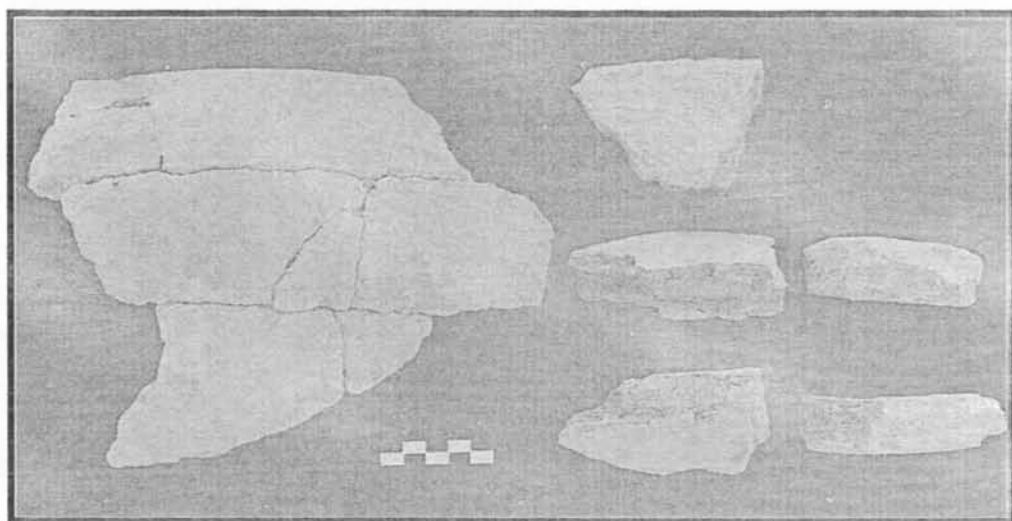
Pl. 2. Storage Structures (from C. Jarrige *et al.* 1995: 390)



Pl. 3. Pottery Drawings of Chaff-Tempered Ware (from Vandiver 1995: 654)



Pl. 4. Basket-Marked/Burj Basket-Marked Ceramic Drawings (from Fairservis 1956: 260) Not to Scale

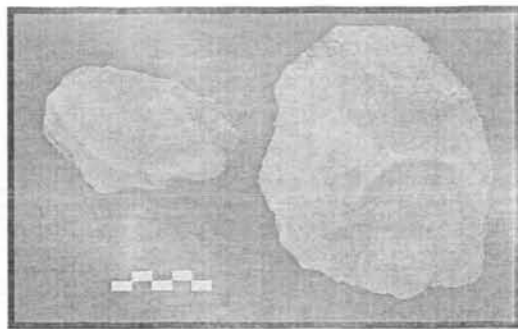


Pl. 5. Coarse Chaff-Tempered Ceramics Technique (from C. Jarrige *et al.* 1995: 540)

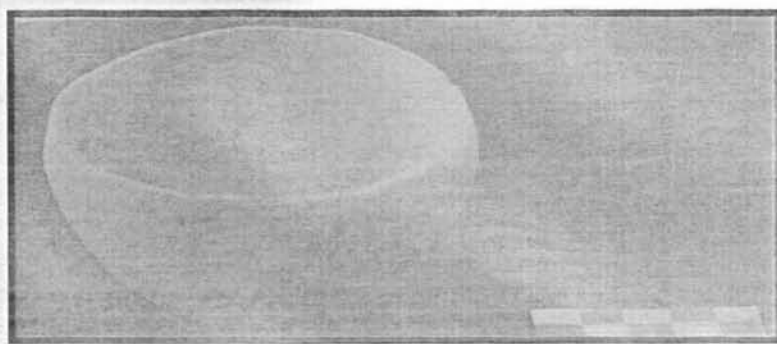




Pl. 6. Coarse Chaff-Tempered Pot Sherds  
(from C. Jarrige *et al.* 1995: 437)



Pl. 7. Coarse Chaff-Tempered Pot Sherds with Raised  
Decorations (from C. Jarrige *et al.* 1995: 539)



Pl. 8. A Stone Vessel (from C. Jarrige *et al.* 1995: 438)



Pl. 9. Burial in Mehrgarh IIA (from J. Jarrige *et al.* 2013: 314)

### **Chapter 3: Early and Middle Chalcolithic<sup>32</sup> Cultures of Balochistan<sup>33</sup>**

Many cultures emerged during this period. Some of the cultures were greatly influenced from the former cultures. Some have extensions beyond the existing borders today (Franke 2008: 654-56). These cultures are named as Kili Gul Mohammad/Togau Culture, Jangal Ware/Culture, Loralai Ware/Culture, Rana Ghundai Bull Culture, Periano Ware/Culture, Rana Ghundai Ware/Culture, and Kechi Beg Culture.

#### **3.1 Kili Gul Mohammad/Togau<sup>34</sup> Culture or KGM/T Culture (5000-3800/3600 BCE<sup>35</sup>)**

Kili Gul Mohammad (hereafter KGM)<sup>36</sup> or Q-24 settlement was discovered by Stuart Piggott in Quetta region; however, he seems to have not found KGM ceramics from his surface survey of Quetta Valley sites (1947: 134). Later, W. Fairervis was the first who clearly identified this culture from KGM II-III. Some of the important sites of this culture are KGM in Quetta Valley (1956: 256-57), Mehrgarh IIB-III in Kacchi-Bolan (J. Jarrige and Lechevallier 1997: 104-10), Rana Ghundai in Loralai, Sur Jangal in Duki (Fairervis 1956: 354; de Cardi 1965: 117), Anjira I-II in Surab Valley (de Cardi 1965: ), Mundigak I- 2-5 in Afghanistan, etc. (Fairervis 1971: 138). This pottery culture occurs in Late Neolithic and Early Chalcolithic periods; however, later it was seen in an advance form (Asthana 1985: 124). This culture was well recorded mostly at Mehrgarh II-III and KGM II-III including Togau A style (J. Jarrige 1995: 68). Interestingly, there is continuity in many aspects of material culture from Mehrgarh I-II i.e. architecture, subsistence and Togau Ware technology as well (Possehl 1999: 506). Mehrgarh III is the most important site of this culture. The site of Mehrgarh III covers over an area of 75 hectares, it was divided into buildings used as habitation, compartmented buildings used as granaries; inhumations, and craft production areas (Wright 2010: 65).

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<sup>32</sup> It is the period when copper and stone tools are being used.

<sup>33</sup> This does not include Indo-Iranian Borderlands.

<sup>34</sup> Togau Ware is defined under a separate heading after KGM/T Culture for better understanding.

<sup>35</sup> This date is particularly used for Kili Gul Mohammad Ware.

<sup>36</sup> Hereafter in this chapter KGM will be used for its variants by further adding their names as KGM Black on Red.

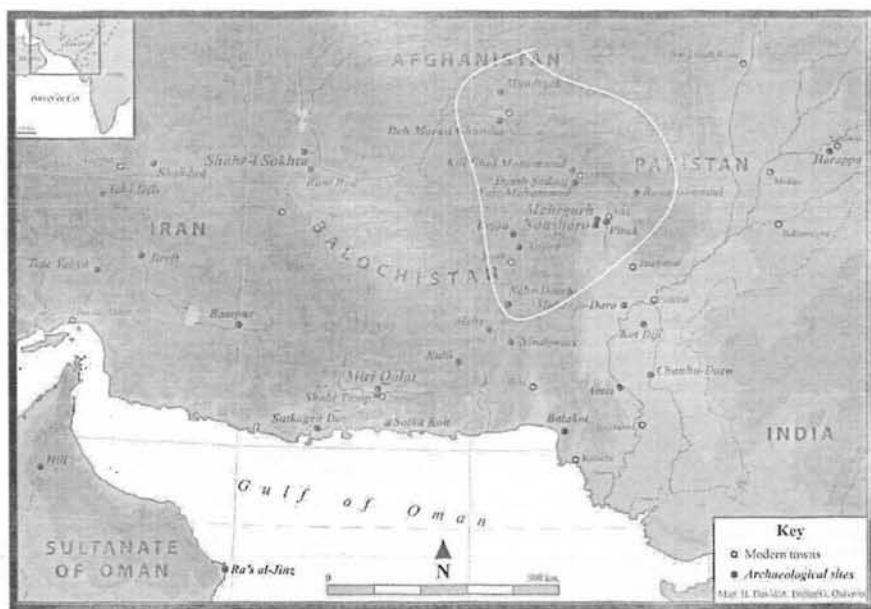


Figure 4. KGM Ware Distribution (from J. Jarrige *et al.* 2011: 8, Modified by the Present Researcher)

### 3.1.1 Structural Remains

Architectural continuity from Mehrgarh I-II could be seen from the excavations (Possehl 1999: 498). Mainly four types of structures were recorded in this culture: dwelling houses, storage buildings, walls and platforms (Wright 2010: 65).

*Dwelling Houses and Other Structures:* The people of this culture lived in mudbrick houses or houses of pisé; sometimes the mud brick houses had rough boulder or rough square stone foundations (de Cardi 1964: 23; Asthana 1985: 124-25). Also, at Mehrgarh III, they built small mudbrick dwellings commonly divided into four to five rooms either on clay or gravel footings (Samzun 1991: 66; Wright 2010: 65). They used two courses of mudbricks for construction; nonetheless, the construction of back wall took three courses of mudbricks which was suggested a protection wall; thicker walls may have been a support for the second story. Larger houses had small openings while smaller ones had no openings; they were perhaps used as storage and entered from the roof (see Pl. 1) (Wright 2010: 65).

*Granaries/Storehouses:* The granaries/storehouses were only recorded at Mehrgarh in this culture. At Mehrgarh III, in KGM/Togau Culture, rectangular multi-celled compartmented structures usually with clay plastered floors and walls were built to preserve cereal grains;

they were granaries/storehouses (see Pl. 2) (Quivron 1991: 63; Samzun 1991: 66). Their presence suggests some sort of a social organization in the community (Quivron 1991: 64; J. Jarrige 1995: 70). They were used for storing grains and later redistributed in at an unproductive time (C. Jarrige *et al.* 1995: 285; Possehl 1999: 504). Stone mortars, pestles, and slabs were discovered in their context which suggests food processing (Wright 2010: 65-6).

*Other Structures:* A system of platforms, terraces and retaining walls were planned to safeguard and stabilize the settlement from high flood waters of Bolan River were documented at the Mehrgarh III (J. Jarrige 1995: 70; Wright 2010: 66).

### **3.1.2 Subsistence Patterns/Means and Domestication**

*Animals:* The people of this culture principally domesticated sheep, goats and cattle (Meadow 1991: 54-5; Wright 2010: 65). Moreover, these people hunted wild game like onager, wild boar, swamp deer, blackbuck, gazelle, and the like at Mehrgarh IIB-III (Meadow 1991: 54-5). They probably applied similar methods of exploitation of them as was the case in the earlier cultures i.e. for milk, plowing, etc.

*Plants and Irrigation System:* In Mehrgarh III, varieties of barley and wheat along with oats and (J. Jarrige 1995: 70; Wright 2010: 65; Asthana 1985: 113) goats-face grass were cultivated (Wright 2010: 65). Hence, these people introduced two new bread wheats, another form of barley, and oats in this culture (Asthana 1985: 114). This resulted from better understanding and knowledge of ecosystem among them (J. Jarrige 1995: 70). They, furthermore, constructed simple structures that collected floodwater for irrigation (Wright 2010: 65). Cotton seeds were found from Mehrgarh IIB (J. Jarrige 1995: 67; Asthana 1985: 55). Cotton was used for threads (Fuller 2011: 359), for clothes (J. Jarrige 1995: 67), for oil and fiber. It was perhaps domesticated (J. Jarrige and Meadow 1980: 128).

### **3.1.3 Technology**

There is certain degree of development in the crafts and technology of this culture. There were evidences of craft specialization in metallurgy, bead manufacturing and pottery making (Possehl 1999: 500). Workshops have been discovered which were to prepare wheel made pottery (J. Jarrige 1984a: 27; 1991a: 44) and to shape beads with semi-precious stones as lapis lazuli, turquoise, carnelian, etc. and pierced them with a bow drill/cylindrical green jasper

drills and stone tools (C. Jarrige *et al.* 1995: 320; J. Jarrige 1991a: 44; Samzun 1991: 68). The jasper bits are the earliest examples yet known in the region (Asthana 1985: 113). Moreover, the pyro-technological skills included copper metallurgy, bead production from fired steatite, preparation of various pigments for ornamentation of pottery, etc. In addition, stone and bone working, faience production, etc. were also noticed (Wright 2010: 67, 70). Red ochre was perhaps also used for leather processing (Quivron 1991: 64).

### 3.1.3.1 Pottery/Ceramics

Moreover, at the earliest periods of KGM II-III, Mehrgarh [IIB]-III and Anjira I-II, three major wares were usually found together: KGM, Togau and Burj Basket-Marked/Basket-Marked Ware (de Cardi 1983: 41, 43). Furthermore, both, KGM and Togau are now considered the variants of the same pottery tradition which were thought to be related to different cultures before (see Table 3 and Pls. 3-27) (Jarrige *et al.* 2011: 31; Fairservis 1956: 256-57; Possehl 1999: 490). Fine Red Ware (see Pl. 9), which was found in Mehrgarh IIB, “seems to represent a very early stage of the Kili Gul Mohammad III style, well represented in Period III at Mehrgarh...” (see Table 20 for chronological comparisons (C. Jarrige *et al.* 1995: 247).

Mehrgarh	KGM/DS		Major Pottery Types/Variants
VII	G3	DS III	Faiz Mohammad Ware, Zhob Red Ware, Damb Sadaat Ware, Sadaat Single-Line Ware, Harappan Ware, etc.
VI	G2	DS II	Quetta Ware climax, Faiz Mohammad Ware, Damb Sadaat C Ware, etc.
V	G1	DS II	Transnational: Quetta Ware, Kechi Beg Wares, Togau C Ware, Anjira Ware, Damb Sadaat B Ware, etc.
IV	H2	KGM IV/ DS I	Kechi Beg Wares climax, Togau B Ware, Damb Sadaat A Ware, Prototype of Quetta Ware, Mustafa Temper Ware, Khojak Parallel Striated Ware climax, Sultan Purple Ware, etc.
III	H1	KGM III	KGM climax, Togau A, Prototypes of Kechi Beg Ware, Prototypes of Mustafa Temper Ware, Prototypes of Sultan Purple Ware, Adam Sandy Ware, etc.
II	I	KGM II	Burj-Basket-Marked/ Basket-Marked Ware, KGM Ware, Khojak Parallel Striated Ware, Adam Sandy Ware, etc.
I	J	KGM I	Aceramic

Table 2. Cultural Chronology of Quetta Region as Presented by W. Fairservis (from the Present Researcher)

Reference: Fairservis 1956: 335, 349-52

KGM Ware is a thin, hard and buff ware which was red slipped and at times burnished. The people of this culture at Surab region made a coarser type of pottery using identical motifs of KGM Ware. The coarse wares were used for domestic purposes (de Cardi 1965: 116-17).

Generally, at Chalcolithic Mehrgarh IIB-III, most of the ceramics were made on potters' wheel alongside few Basket-Marked Ware and 30 of coarse buff tempered with crushed potteries were included. Moreover, others were light buff and sometimes red slipped; 10% of them were decorated on a buff surface or red background frieze of either processing caprids or birds among geometric designs. The caprid and bird designs occurred in a limited number on Togau Ware at Surab Valley. But it has been found in large variety (J. Jarrige and Lechevallier 1997: 106-07). They have further noted (1997: 108-09):

It seems in fact that the isolated sherds decorated with processing animals in Surab area in Central Baluchistan or in the early levels of Mundigak in Afghanistan reveal the influence of producing centre of such potteries like Mehrgarh in Baluchistan itself. Not far from Mehrgarh, at Ispilnji, to the south of the Bolan Pass and the Quetta Plateau, one of the two mounds standing there has its surface covered by potsherds identical with those from MR.2 area [at Mehrgarh]. It is interesting to note that the people living today at Ispilnji spend the winter months in the Kachi Plain...Elsewhere, in Northern Baluchistan, zoomorphic motifs, with processing caprids, at sites in Loralai and Zhob Valley, belong to the same ceramic tradition but there we see the development of a strong original style which will be marked in a slightly later stage by the occurrence of processing humped bulls.

Context	Wares	Manufacturing Techniques	Prominent Shapes	Decorations	Firing
<b>Kili Gul Mohammad II-III/ Mehrgarh IIB-III</b>	<i>KGM Black on Red Slip Ware (it has two variants)</i>	Wheel-made (Variant 1) coil made sometimes wheel made (Variant 2)	Bowls and jars	Geometric designs	Oxidized
	<i>KGM Red Paint Ware</i>	Handmade with coiling technique	Bowls and vases	Geometric designs	Oxidized
	<i>Jangal Coarse Painted Ware</i>	Handmade; combining coiling and basketry	Bowls	Geometric designs	Oxidized but rarely reducing
	<i>Adam Sandy Ware</i>	Basket-coiled	Open bowls	Not decorated	Oxidized-reduced conditions

Context	Wares	Manufacturing Techniques	Prominent Shapes	Decorations	Firing
	<i>Nazim Hard Clay Temper Ware</i> <sup>37</sup>	Fine: Wheel-made Coarse: Baskets involving some clay coiling; also, slow wheel specimens	Open bowls	Not decorated	Oxidizing
	<i>Loralai Striped Ware</i>	Wheel-made	Open bowls	Geometric designs	Oxidized
	<i>Togau A</i>	Coil and wheel-made	Bowls and jars	Frieze of caprids	Oxidized
	<i>Togau B</i>	Coil and wheel-made	Bowls and jars	Frieze of caprid head and horns	Oxidized
	<i>Togau C</i>	Coil and wheel-made	Bowls and jars	Frieze of hooks pointing left	Oxidized
	<i>Togau D</i>	Coil and wheel-made	Bowls and jars	Frieze of hooks pointing right	Oxidized
	<i>Togau E</i>	Coil and wheel-made <sup>38</sup>	Bowls	Frieze of simple strokes	Oxidized <sup>39</sup>

Table 3.. KGM/T Wares, Their Types/Variants, and Few Other Coexisting Ceramics (by the Present Researcher)

### 3.1.3.1.1 KGM Black on Red Slip Ware

It was found at Kili Gul Mohammad and Damb Sadaat in Quetta Valley. It was dominate in Period H1 (see Table 2 for chronological comparisons). Today one knows that it is either fine or medium-coarse red ware possessing simple geometric designs in black (see Pl. 3). It has two variants: Fine Paste and Coarse Paste (Fairservis 1956: 256-57, 335).

*Manufacturing Techniques:* In terms of making, it was formed in two variants: 1. Fine Paste: according to the observations, it was a wheel made pottery with fine paste and smooth texture and it was sometimes polished having simple geometric designs over red slip. 2. Coarse Paste: it was coil made and at times wheel made with sand mixed coarse paste and rough texture.

<sup>37</sup> It was dominant in Period I-G; however, in Period G it is of minor importance (see Table 2 for chronological comparisons) (Fairservis 1956: 249).

<sup>38</sup> Personal observations

<sup>39</sup> Personal observations



There is no difference in geometric designs of these variants, but only stratigraphic difference occurs (Fairervis 1956: 256-57; Asthana 1985: 174).

*Shapes/Forms:* Curved or expanded open bowls, small mouthed large jars and a single pedestaled pot were found related to this ware (Fairervis 1956: 256-57; Asthana 1985: 174).

*Decoration Repertoire:* The rim was most often designed with broad black banded on both sides from where other designs emerge. The designs frequently were executed close to the rim. Occasionally, these designs are bordered with lower band as well. Other designs consisted of diagonally hatched dangling triangles which are usually knobbed/dot-tipped and often attached to the rim band, vertical dangling knobbed/dot tipped lines (drumsticks) at the upper rim band, multiple horizontal or wavy bands vertically arranged, dot-tipped or knobbed rosettes (Fairervis 1956: 271-73, Designs 1, 8, 9, 13, 18, 21, p. 272-74; de Cardi 1965: 117-18, Fig. 8, Designs 1, 2, 4, 8, 15, 16, 18, 20, p. 118), diagonal lines in three pairs with spaces, Togau C and D hook motifs, multiple vertical lines bordered with horizontal lines, intersecting diagonals from the horizontal band or they meet with a horizontal line at the end of a vessel, attached diagonal lines from the rim or intersecting horizontals till the end of the pottery, probable painted triangles, multiple horizontal or/and at times vertical sigmas, frieze of hatched triangles and frieze of filled diamonds in between two broad bands, attached friezes of upside down and black painted triangles, irregular hexagon empty spaces or star like painted forms, short straight horizontal bands, diagonal hatching, standing rectangle or a square hatched with net pattern and with vertical bands, checkerboard pattern, serrated design, and parallel diagonals, etc. (Fairervis 1956: 271-74, Designs 2-7, 12, 14-17, 19, 20, 22-32, p. 272-74).

*Firing Technique:* It was fired in oxidizing atmosphere (Fairervis 1956: 256).

#### **3.1.3.1.2 KGM Red Paint Ware**

W. Fairervis has dated it to Period I, H1, and H2<sup>40</sup> (see Table 2 for chronological comparisons and see Pl. 4). Only few sherds of this type were discovered from Kili Gul Mohammad at Quetta (1956: 271, 261-62, 320, Fig. 54a).

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<sup>40</sup> Only a very few sherds from were recorded from the latter two periods (Fairervis 1956: 271, 320).

*Manufacturing Technique:* Hard clay was used for its construction. It was handmade using coiling technique. It possesses smooth to slightly rough surface finish and it also possesses rough and sandy texture (Fairervis 1956: 262).

*Shapes/Forms:* Open bowls with flat bottoms and vases with small mouths were identified as its main forms (Fairervis 1956: 261).

*Decoration Repertoire:* The ceramics have painted designs inwards and outwards. The lined paintings were crudely drawn in red. The potters painted the orifice areas with a band and designs like KGM Black on Red Ware. The double frequently attached diagonal bands created zigzag patterns; these diagonals are broad also, and frieze of semi-circles attached to the rim band and non-attached hooks (Fairervis 1956: 262, 271, Designs, 33-36, p. 274).

This is the decoration collection for KGM Fine Red Paint Ware which was recorded at Damb Sadaat I. The designs included bands on the rim and body, small triangles with attached vertical bands, small strokes between horizontal or diagonal bands and a set of willow leaves resting on two horizontal bands (Fairervis 1956: 278, 320, 397, Designs 62-5, p. 277).

*Firing Technique:* It was fired under oxidizing conditions (Fairervis 1956: 262).

### **3.1.3.1.3 Jangal Coarse Painted Ware<sup>41</sup>**

It was found in Sur Jangal cut 1 in Duki region (see Pl. 5). W. Fairervis has claimed that Jangal Coarse Painted Ware is 'equivalent' with KGM Black on Red Slip and possibly with KGM Red Paint. Its time range is Sur Jangal I-III and Rana Ghundai I-III (see Table 20) (1959: 327, 365, 383). Generally, it is a thin ware which is beautifully made taking a buff color (Fairervis 1971: 138).

*Manufacturing Techniques:* Hard clay was used for its construction. The study confirmed it a handmade; nonetheless, there are some evidences of clay coil technique and basket technique. The interior is sometimes burnished, and the exterior was left rough (Fairervis 1959: 365).

*Shapes/Forms:* Different shaped bowls look to be used as the main forms of this variant (Fairervis 1959: 366, Fig. 63).

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<sup>41</sup> According to. S. Asthana has suggested that it is a type related with Kechi Beg Ware (1985: 65).

*Decoration Repertoire:* It was painted on the interior and exterior. It was occasionally red slipped. Moreover, sometimes the interior of the vessels was frequently painted and burnished while the exterior is left rough. The geometric designs are applied on the rim area and on the interior bottom of the vessels with black color. The painting motifs are generally dangling with a band. There are broad vertical bands, several diagonal bands, diagonally hatched and diagonally cross-hatched hanging triangles usually knobbed/with a disk, several drawn triangles within one another and rarely a color spot within the empty space of the last triangle, many triangles with small filled triangle below them, a knobbed rosette, horizontal and diagonal crossed pattern, horizontal bands below rim; one of them is marked with small vertical lines forming frieze of tiny squares and horizontal lozenges within horizontal bands (Fairervis 1959: 365, 383, Designs 1-17, p. 386-87).

*Firing Technique:* The firing seems to be oxidizing and rarely reducing (Fairervis 1959: 365).

#### **3.1.3.1.4 Adam Sandy Ware**

It was found in Period I and H 1 (see Table 2 for chronological comparisons and see Pl. 6). It was recorded at Kili Gul Mohammad, Damb Sadaat, Kechi Beg and Karez Site in Quetta Valley (1956: 250).

*Manufacturing Technique:* It was made with coarse grain sand. It was basket-coiled with sandy texture and smooth and granular finish (Fairervis 1956: 250).

*Shapes/Forms:* Different sized open bowls with high walls and heavy rims were the main forms discovered (Fairervis 1956: 250).

*Firing Technique:* Oxidizing-reducing conditions were recorded as its firing in the kiln (Fairervis 1956: 250).

#### **3.1.3.1.5 Nazim Hard Clay Temper Ware**

It was made during Period I and it survived till Period G (see Table 2 for chronological comparisons and see Pl. 7) having little importance in the last periods. It was found at Kili Gul Mohammad, Kechi Beg, Damb Sadaat and Karez Site in Quetta Valley. It was also found in Period G. It has two variants (1. Fine and 2. Coarse) without any stratigraphic difference (Fairervis 1956: 249-50).

*Manufacturing Technique:* Variant 1: It was made with perhaps hard clay or shell (dissolved in hydrochloric acid). It is a wheel turned with smooth and slightly rough texture. It has a smooth finish (Fairservis 1956: 249-50).

Variant 2: Hard clay or probably shell was used to make this variant. It was molded in baskets with probably some coiling technique involved; there were also traces of slow wheel turned in this variant. It possesses a coarse sandy texture and smooth finish (Fairservis 1956: 250).

*Shapes/Forms:* The most common recorded shapes or forms were open bowls (Fairservis 1956: 249).

*Decoration Repertoire:* Both variants were not decorated. However, variant 1 was occasionally slipped while variant 2 was frequently slipped (Fairservis 1956: 249).

*Firing Technique:* Both variants were fired in oxidizing conditions (Fairservis 1956: 249-50).

#### **3.1.3.1.6 Loralai Striped Ware**

This type/variant was mainly found at Sur Jangal I-III in Duki (see Table 20 for chronological comparisons and see Pl. 8) (Fairservis 1959: 349, 368-69).

*Manufacturing Technique:* It was formed on the wheel which bears a smooth finish (Fairservis 1959: 369).

*Shapes/Forms:* Open bowls were found as main shapes of this variant/type (Fairservis 1959: 369).

*Decoration Repertoire:* It was red slipped and occasionally buff slipped or left un-slipped. Red and black colors were used for paintings. However, some of the designs present here are KGM Black on Red Slip and Jangal Painted. This ceramic type may belong to other decorated ceramic types. We are perhaps dealing with the history of one decoration here (Fairservis 1959: 369).

Characteristically, it is decorated with a group of heavy lines tapering and slightly curving together ending at the horizontal line near the rim. In detail, the broad or thin tapering or non-tapering bands are either hanging or attached at the end with a line; occasionally when they start they are heavy and condense but they separate into thin lines later, framed verticals, broad

and thin vertical framed bands, diagonal broad bands, other elements are added i.e. small diagonally hatched trapezoids, probable triangles or diagonally hatched lozenges, single meander (either framed or set of free meanders), verticals on the lower part of vessels, scales, scallops within scallops, etc. (Fairervis 1959: 429-30, Designs 354- 364, p. 416-18).

*Firing Technique:* It was fired in oxidizing atmospheric conditions (Fairervis 1959: 369).

To conclude, generally, the study and observations of the making techniques of KGM Wares (uncertain of the types) preserved in Aichi Museum, Japan were conducted which resulted the following points: the potters made a rough form of a vessel on slow turntable/non-rotating anvil. The coils were joined, and this process was repeated after leather hard drying of the vessels. For smoothing, either a spatula or fingers were used. Using coiling technique, the vessels were formed to a certain level, or its parts were formed. Later, they were joined after leather hard drying process. For finishing, the vessels were placed on a rotating anvil or slow turntable and were scraped with a spatula and further smoothed with fingers or a spatula. The ceramics have oblique or uncertain directions of smoothing and scrapping; the smoothing is inefficient. The use of turntable is inefficient and slow. At the end, the pottery was turned upside down to complete the making procedures. They were usually polished (Hideaki *et al.* 2013: 88).

At Mehrgarh, 70% of the ceramics were produced on fast wheel whereas Iran and Central Asia were producing hand-made ceramics at this time (J. Jarrige 1984a: 27; Samzun 1991: 69). The earliest KGM Ware was handmade with chaff-temper. Whereas, later it becomes wheel or tournette made and free of chaff (J. Jarrige 1995: 68).

#### **3.1.3.1.7 Togau Ware (c.4000-3100 BCE)**

Togau is a big mound discovered by B. de Cardi in her reconnaissance in 1948 where she found Togau Ware (hereafter TW) in Kalat (de Cardi 1983: 2; Possehl 1999: 498). Notwithstanding, the site is not excavated until now (Possehl 1999: 490). TW was present in Anjira III and at Siah Damb in Trench II, in its three phases (de Cardi 1965: 129). Moreover, it was defined from the excavations at Siah Damb (de Cardi 1983: 43).

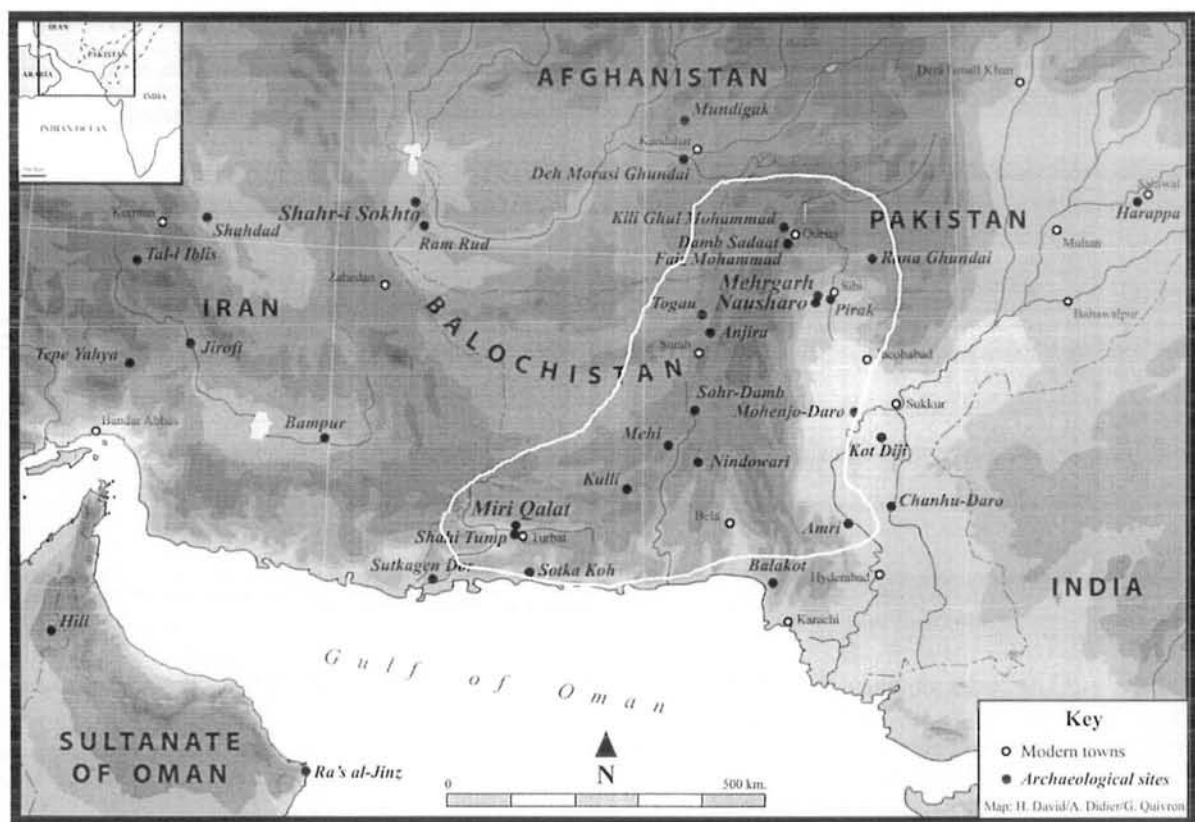


Figure 5. Togau Ware Distribution Area (from J. Jarrige *et al.* 2011: 8, Modified by the Present Researcher)

Chronologically, TW is important for this region. The cultural chronology of Central Balochistan, Sarawan was established with the excavations at Anjira and Siah Damb sites (Franke 2015d: 60).

This ware was marked from a single motif called the Togau horns (alternatively called hooks) by B. de Cardi which most frequently occurred on open bowls and dishes. They are used to see four stages of evolution of Togau Ware i.e Togau A, B, C and D (1965: 130-31; Franke 2015d: 60; Possehl 1999: 498-99). For example, Togau A Ware is recognized from a frieze of caprids or ibexes; Togau B Ware is recognized from their neck, head and horns; Togau C Ware is recognized from a single horn (hook) facing right and Togau D Ware is recognized from a single hook like a hockey stick, facing left (see Pls. 18-29) (de Cardi 1965: 130-31; Franke 2015d: 60). The recent excavations at Naal site also included another type named by U. Franke as Togau E with mere stroke (see Pl. 28) (2008: 654). In the case of Mehrgarh, Togau A Ware was found at Mehrgarh III, Togau B-C Wares were found at Mehrgarh IV and



Togau D Ware was found at Mehrgarh V (see Table 20 for chronological comparisons) (J. Jarrige and Lechvallier 1997: 106-18; de Cardi 1983: 43).

*Manufacturing Techniques:* Different methods were used to form the ceramics. First the fast wheel thrown technique was used for the complete vessel building. However, R. Wright was unable to detect them all. Furthermore, the well mixed clays included feldspar, quartz, mica, hematite stain, and carbonate with dense nature and few pores (1995: 664-65).

First, using clay coil building technique, a rough form of the pottery was created either on a non-rotating anvil or a slow turntable. With the help of a spatula or fingers, the clay coils and parts of pottery were joined and smoothed with fingers or a spatula. After leather hard drying, a spatula was used to scrape the unwanted materials on a non-rotating anvil or a slow turntable. Later on, horizontal smoothing and joining of the clay cords with pottery parts was repeated with the help of fingers or a spatula. The potters used the slow turntable (uncertain of its type) efficiently; however, there is inefficient scrapping of ceramics. Furthermore, a clay coil was attached at base to create a ring base by positioning the vessel upside down. The finishing was done with smoothing and scraping with fingers and a spatula (Hideaki *et al.* 2013: 89).

*Shapes/Forms:* Small number of forms and decoration were identified (de Cardi 1965: 130; Wright 1995: 664). Nearly flat based open bowls, deep bowls, sharp carinated bowls, small sized globular jars, etc. were the commonly identified forms. In the later two stages (Togau C and D Wares), the forms became more globular than the former stages (de Cardi 1965: 130).

*Decoration Repertoire:* R. Wright has considered Togau A Ware the earliest decorated ware of the region painted with animal motifs (2010: 69). The ceramics were either red slipped or left plain with no slip (Hideaki *et al.* 2013: 88-9). At Mehrgarh context, two or three colors were used for adornments: black, red and dark-brown (Wright 1995: 664-65). The painted decorations were either presented on the interior or on the exterior (Hideaki *et al.* 2013: 88). Nevertheless, most of the decorations were executed on the exterior except for the Togau B Ware in which external stitching is present and sometimes with single or tripple horizontal drawn bands. There were monochrome and bichrome wares associated with this ware (de Cardi 1965: 129-34).



The observations today claim that the painted designs consist of frieze of horns inwards which is the frequently used motif; moreover, double, tripple or more parallel bands always with horn motifs appeared on the interior, sleeping ladder motifs either with stright lines or diagonal lines (single band on the interior while double band on the exterior), balls in pannels but hatched with plain gaps, loop and tussel pattern, hatched registers (sometimes with gaps in between), ball in pannel, crochet, fringe, stitching, lacing, fringed hooks, fringed swags, hanging lentoids, banded zigzags, double stepped band, multiple rayed rosettes, wavy lines in between two bands, sigmas arranged between two lines and band attched rising spirals. The animal motifs include caprids, birds (de Cardi 1965: 129-34) and humped bulls (see Pl. 18) (Hideaki *et al.* 2013: 89).

*Firing Techniques:* The ceramics were most often well fired to red color which gave ringing tone as they were struck which proves well firing. Moreover, regarding firing, in the later stages it was fired in reducing atmoshpere/conditions that frequently resulted in its black color (de Cardi 1965: 129).

#### **3.1.3.1.8 Distribution Areas**

*Kili Gul Mohammad Ware:* This, Kili Gul Mohammad Ware, covered a vast region including mainly Quetta, Loralai, Zhob, Khuzdar, Kacchi-Bolan and Kandahar in Afghanistan (see Fig. 4) (de Cardi 1983: 43; Asthana 1985: 174). There are some other variants/types that need further research for the identification of their distribution area.

*Togau Ware:* It clearly was popular and has a wide distribution area. It includes Quetta and Kalat plateaus, Las Bela, Indus Valley to the east of Irannian border (Gar), Rakhshan Valley in the northwest and Panjgur Oasis (de Cardi 1965: 128; de Cardi 1983: 45, 42, Figs. 5, 43). Moreover, it was also found at Mundigak near Kandahar and Amri at southern Sind (see Fig. 5) (Franke 2016: 183).

#### **3.1.3.1.9 Comparison of Kili Gul Mohammad and Togau Ware**

B. de Cardi (1965: 127) J. Jarrige (1995: 56-7), and along with J. Jarrige, A. Didier and G Quivron (2011: 31) found it hard to differntiate between KGM and TW so they concluded that it must be a pottery one pottery industry/tradition.

To summarize these wares, J. Jarrige and others have called KGM and Togau A Wares are the earliest decorated and wheel turned wares of Balochistan (1991a: 34; J. Jarrige *et al.* 2011: 30). Moreover, there is no sophistication in the painted motifs and there is absence of abstract or naturalistic designs on KGM pottery. Most of them are adorned with simple geometric designs (Hideaki *et al.* 2013: 88). Togau Ware is claimed to be of high quality, hard ware with no clear grits and thin good slip (de Cardi 1965: 129). Interestingly, KGM/T Culture, at Mehrgarh III, became a production center for manufacturing quality ceramics of these types (J. Jarrige and Lechevallier 1997: 109).

### 3.1.3.2 Other Cultural Assemblages/ Cultural Repertoire

*Anthropomorphic and Zoomorphic Figurines:* Some human figurines were discovered in Mehrgarh IIB which are finer than the ones appeared in the former period (C. Jarrige 2005: 31-2) and only one human figurine is recorded in Mehrgarh III (Wright 2010: 67). Terracotta animal figurines were also found like one humped bull and one probably a dog, etc. (J. Jarrige and Lechevallier 1997: 109).

Domestic tasks and craft activities were carried out at residential areas. For example, grinding stones and pestles for cooking purposes, bone needles for weaving or basketry, and awls and bone points for leather working have been witnessed. At pottery workshops, bone tools either for polishing or burnishing ceramics, grinding stones and pestles for clay and pigment processing are noted (Wright 2010: 68-9).

*Metal Objects:* The inhabitants of this culture look to have indulged themselves in the art of metal working since some amount of smelting crucibles indicate the fact (J. Jarrige 1995: 72; Samzun 1991: 68-9). The objects of this category are a copper ring and a copper bead (J. Jarrige and Meadow 1980: 129; Asthana 1985: 113), double spiral-headed pins, a gold bead, and three fragments of compartmented seals/amulets, point fragments, hooks (perhaps for fishing) (J. Jarrige 1995: 72; Wright 2010: 67), and a chain of thread in bronze/copper, etc. (Samzun 1991: 68-9). Sadly, many have vanished due to salination over ages (J. Jarrige 1995: 72). To add more, the seals can be regarded as administrative units of this culture (J. Jarrige 1991a: 44).

*Stone and Bone Tools:* The discovered stone tools were blades, bladelets, flakes, notched blades, truncated blades, borers, burins, sickle blades, ring-stones (Lechevallier 1984: 43; J. Jarrige and Lechevallier 1997: 109), gouges, chert scrapers, leaf-shaped arrowheads, lunates (Asthana 1985: 113-14, 125; de Cardi 1964: 23), chisels (Samzun 1991: 71), grinding stones, pestles, mortars, perforated stones (ring stones) (perhaps used as hammers), mace-heads, weights, counterweights, etc. (J. Jarrige 1995: 72; Wright 2010: 67). Also, at Kili Gul Mohammad II, the presence of couple of sickle blades points towards cultivation for some sorts of cereal crops. Ground stone tools and chipped flints were also found (Fairservis 1971: 137). Furthermore, bone needles, awls, fine polished spatulas (Asthana 1985: 113-14, 125; de Cardi 1964: 23; Samzun 1991: 71) The excavated arrow heads may have been used for hunting and sickles for harvesting (Lechevallier 1991: 73).

*Terracotta Objects:* The finds of this category consisted of bangles, rattles and small balls (Samzun 1991: 71; Wright 2010: 67).

*Other Findings:* Painted and ridged-incised<sup>42</sup> bangles, clay rattles, a disc shaped pendant (J. Jarrige and Lechevallier 1997: 105, 109), and marine shells, etc. (Wright 2010: 67).

#### **3.1.4 Interment Practices and Goods**

The funerary remains were only recovered from Mehrgarh IIB-III. But Mehrgarh IIB only yielded few isolated graves. The people of this culture buried their dead in east-west orientation (Sellier 1991: 77; Samzun and Sellier 1985: 100-02, 104, 105-06, 115). The dead were buried in simple pits, few had mudbrick side walls. They were bandaged with a non-leather material as a shroud (Wright 2010: 66). Sometimes the skeletons accompanied a large brick as a pillow under their heads (known as brick pillows) (Samzun 1991: 66; Samzun and Sellier 1985: 103). The burials were organized in such a way which gives the sense of mass graves. Also, few disarticulated burials were found which could also be termed secondary inhumations (Samzun and Sellier 1985: 103-04, 115-16; Sellier 1991: 83). They buried the dead in a flex position sometimes accompanied by ornaments (see Pl. 31 for Tomb in Togau Period at Naal) (Possehl 1999: 505).

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<sup>42</sup> It is ridged and the ridge is incised.

Three types of funerary offerings were attested: graves with no goods, graves with standard ornaments like necklaces, anklets and bangles made of [white fired] steatite, turquoise, calcite, lapis lazuli, shell and copper, graves with exceptional goods like standard ornaments with pottery, stone vessels, semiprecious stone jewelry (Sellier 1991:77; Wright 2010: 66), bronze mirrors, bronze seals, etc. (Franke 2015k: 51), chrysoprase ornaments, dentalium shells, etc. (Possehl 1999: 505).

### **3.1.5 Trade and Barter System**

The people of this culture traded till northern Afghanistan to Arabian Sea. Mehrgarh III was a hub of commerce during this time (Possehl 1999: 500). Whereas, J.-F. Jarrige has claimed that it was a marketplace in which exchange of raw and finished materials and agriculture products with others occurred; it was simply a center for distributing goods and services (C. Jarrige *et al.* 1995: 366-67; Wright 2010: 70). As the data suggests, many i.e. nomadic-pastoralists, traders, transporters, etc. were involved in exchange of raw or perhaps finished materials. Ideas must also have been exchanged too (Personal Observations).

The similarities of material culture indicate strong cultural contacts of Mehrgarh with the high lands (Wright 2010: 71). The similarities of ceramic designs mostly ibexes in Iranian Plateau (Sialk) sites and southern Turkmenia (Namazga II-III at Kara Tepe) are just cultural similarities as today; Apart from this, it is wheel thrown and of good quality which sets it apart from those pottery cultures where the pottery is still handmade. Moreover, this culture has its roots in local pottery traditions (J. Jarrige 1991a: 44).

### **3.1.6 The First or the Earliest**

- KGM is the oldest decorated pottery in Balochistan (Hideaki *et al.* 2013: 87).
- This culture introduced slow wheel or tournette to the region in Mehrgarh IIB to produce Fine Red Ware (earliest KGM Ware) (J. Jarrige 1995: 62, 68; C. Jarrige *et al.* 1995: 248).
- Fast potters' wheel was introduced in the region at Mehrgarh III (Franke 2015k: 50).
- Emergence of first bichrome ware was recorded in this culture (J. Jarrige *et al.* 2011: 31).
- There were the physical evidences as many burnt cotton seeds from Mehrgarh IIB, which is the earliest record of cotton in the world at any site (J. Jarrige 1995: 67; J. Jarrige *et al.* 2013: 111-12).

- For the first time, steatite was heated malleable and squeezed from a thin tube of metal and cult into beads in Subcontinent (Samzun 1991: 68; Possehl 1999: 502).
- This presents the earliest or first evidences of local copper smelting in the vast region in the shape of terracotta crucibles having the traces of copper (Chakrabarti 2006: 113).
- It possessed the earliest geometric, caprid, bird decorated (KGM II-III and Togau A styles) pottery in Pakistan or Subcontinent (J. Jarrige 1991a: 34).
- In Mehrgarh IIB, a male figurine was found which is the earliest in the region (see Pl. 30) (C. Jarrige 2005 31).
- Terracotta humped bulls for the first time appear at Mehrgarh IIB (Chakrabarti 2006: 113).
- The people of this culture used the earliest japer bits yet known in the region (Asthana 1985: 113).

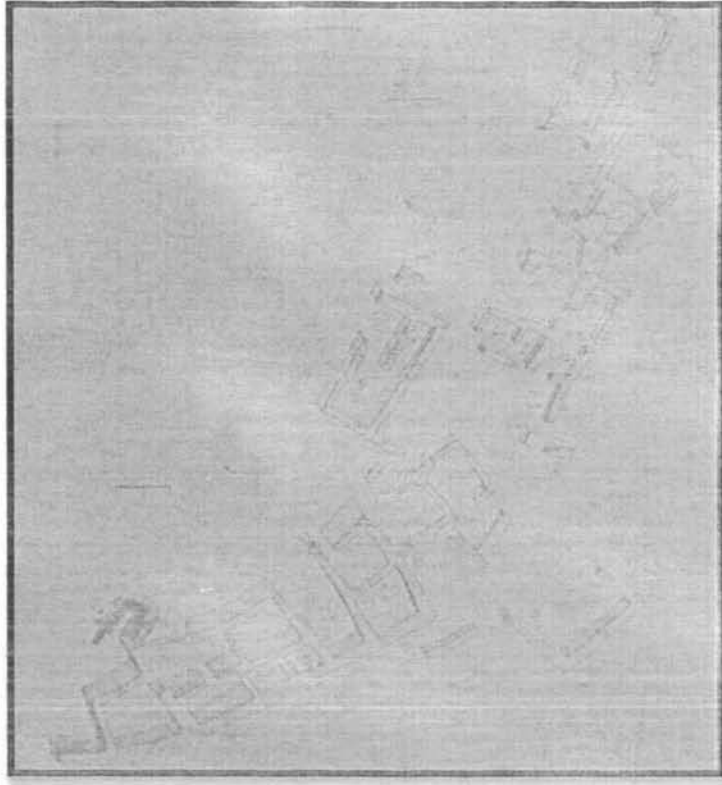
To summarize, these people continued mixed cereal cultivation (i.e. wheat and barley) as in the former cultures with animal husbandry like cattle, goats and sheep at Mehrgarh III. Moreover, the cotton production is one of their major achievements which show their technological development leading to agricultural prosperity (Asthana 1985: 59).

Technologically and artistically, this culture marks great achievements and developments as seen at Mehrgarh IIB-III. This culture at Mehrgarh IIB-III gives a higher specialization feeling in almost all fields such as architecture, technology and funerary codifications (Samzun and Sellier 1985: 116). The technological practices as crafting like pottery making, stone and bone working, metal working, steatite bead working, semi-precious stone working, and so on; these crafts kept being refined until the Indus Civilization time (Samzun 1991: 68). They were prepared at small workshops (Franke 2015k: 52). There is good amount of metallurgy resulted in the replacement of some stone and bone tools at Mehrgarh III (Franke 2015k: 51). In one way or the other, there are largely similarities in the material culture with Mehrgarh I-IIA (Personal Observations).

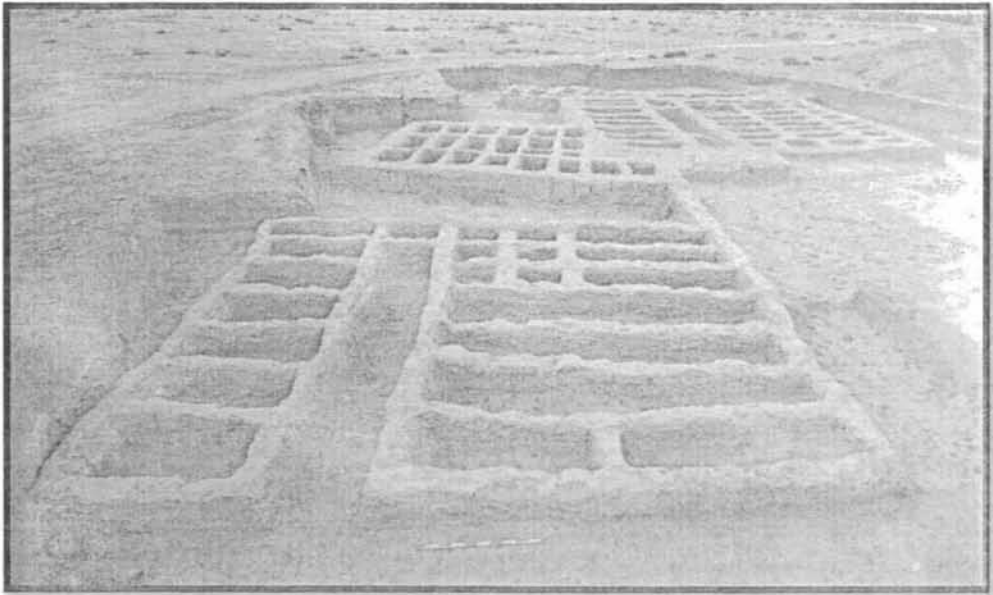
After the excavations at Mehrgarh IIB-III, which yielded KGM Ware and Togau Wares, it is hard to clearly differentiate between them. B. de Cardi and J. Jarrige contemplated these two wares “as the products of a development within one pottery industry” (Franke 2015d: 60). Whereas, G. L. Possehl has claimed TW to be an aspect of KGM Black on Red Ware (1999:

490). However, before excavations at Mehrgarh, groups from Sialk (Iranian Plateau) brought with them to Mundigak and then to Balochistan (J. Jarrige 1995: 56). However, the TW helped building the chrono-cultural sequence of ancient Balochistan. Nevertheless, with the results of new reconnaissance and excavations by the German-Pakistani Mission headed by U. Franke who suggested reconsidering B. de Cardi's assumptions that classified TW and showed its evolution based on its painted motifs; however, it is too complex and complicated. U. Franke has claimed that the painted motifs appeared and coexisted at about the same time frame [Togau A-C Wares at Naal Period I] (Taken from Hideaki *et al.* 2013: 88-9). Furthermore, this culture has produced the earliest decorated ceramics. The decorated patterns were probably borrowed from basketry patterns (Wright 2010: 69). Further, TW in shape and ornamentation is comparable with Chashma Ali painted ceramics in north Iran (Pakistan Archaeology 1964: 30). At Mehrgarh III, circular or somewhat oval shaped kilns were found built with mudbrick where the potters fired their ceramics, animal figurines, beads etc. to transform them into terracotta (Samzun 1991: 68). The introduction of potter's wheel and bow drilling, etc. made Mehrgarh III (J. Jarrige and Meadow 1980: 130) a marketplace and craft center for the upland people who gathered here seasonally as they do today (Possehl 1999: 467-68).

**Plates of Kili Gul Mohammad/Togau Culture**

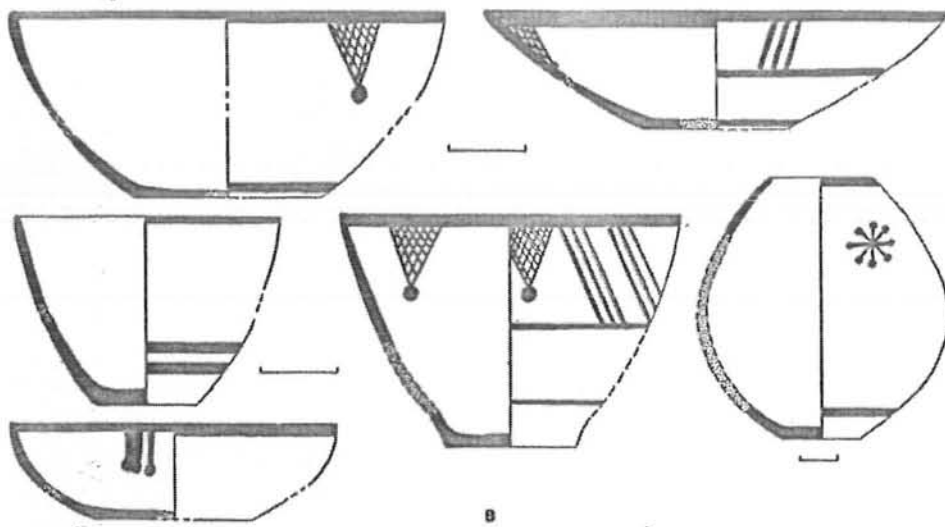


**Pl. 1. Isometric Structures of Mehrgarh III (from Meadow 1989: 170) Not to Scale**

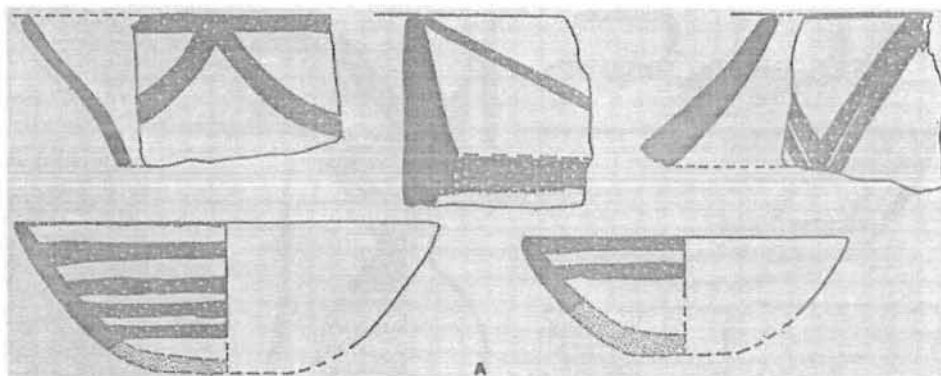


**Pl. 2. Compartmented Buildings at Mehrgarh III (from Franke 2015k: 51)**

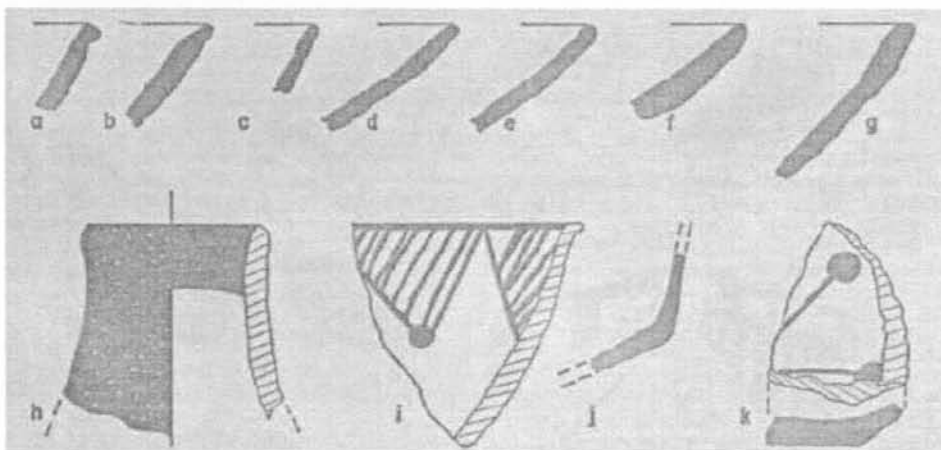




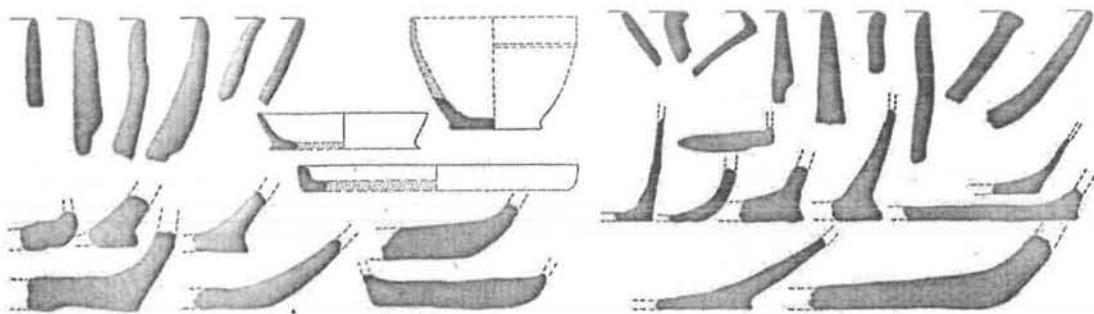
Pl. 3. Pottery Drawings of KGM Black on Red Slip Ware (from Fairservis 1971: 139)



Pl. 4. Pottery Drawings of KGM Red Paint Ware (from Fairservis 1956: 262) Not to Scale

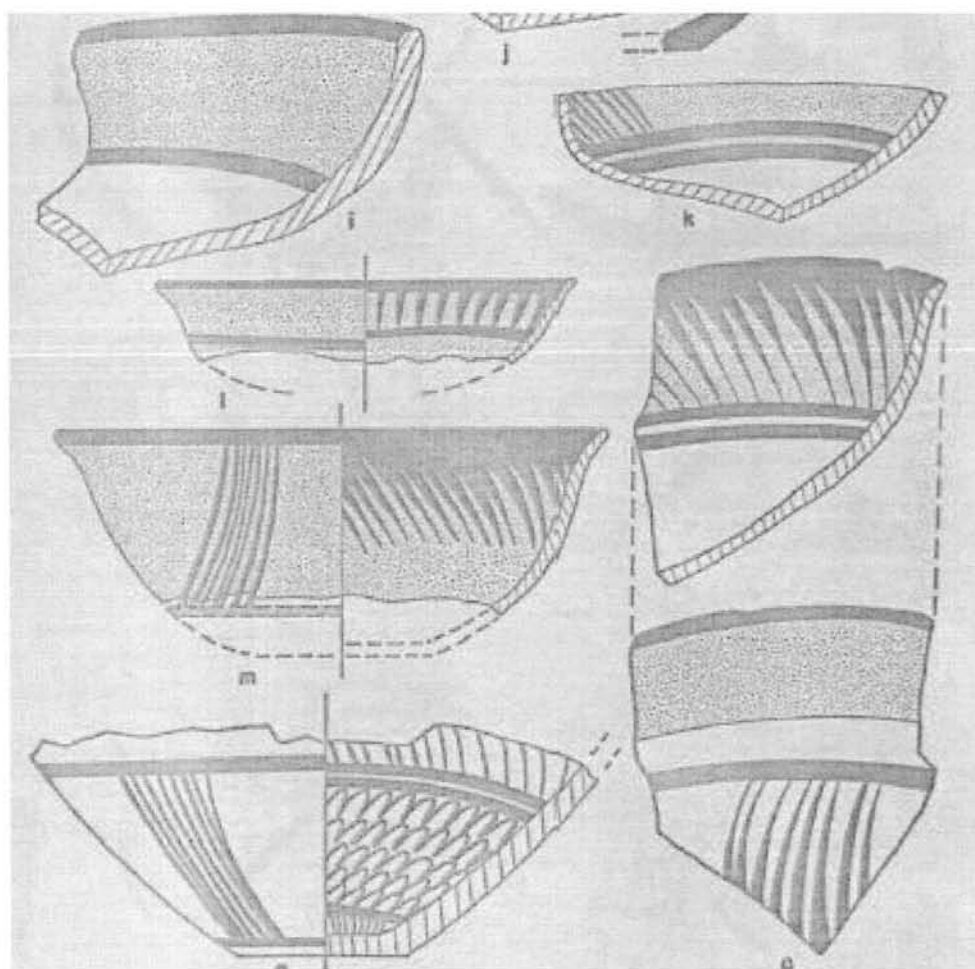


Pl. 5. Pottery Drawings of Jangal Coarse Painted Ware (from Fairservis 1959: 366) Not to Scale

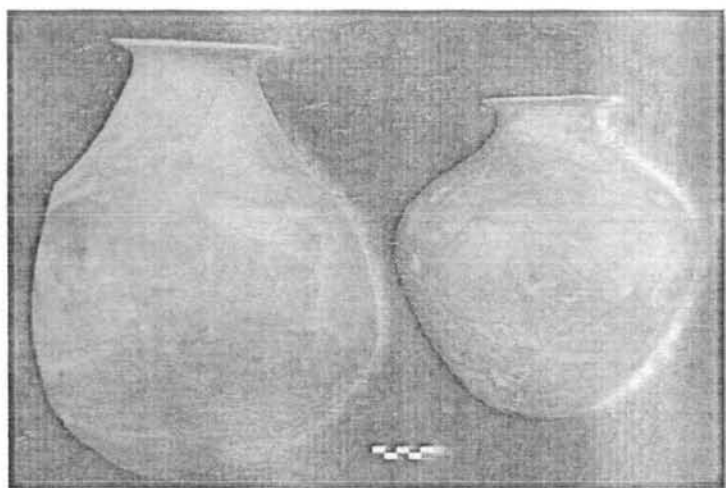


Pl. 6. Adam Sandy Ware Pottery Drawings  
(from Fairservis 1956: 251) Not to Scale

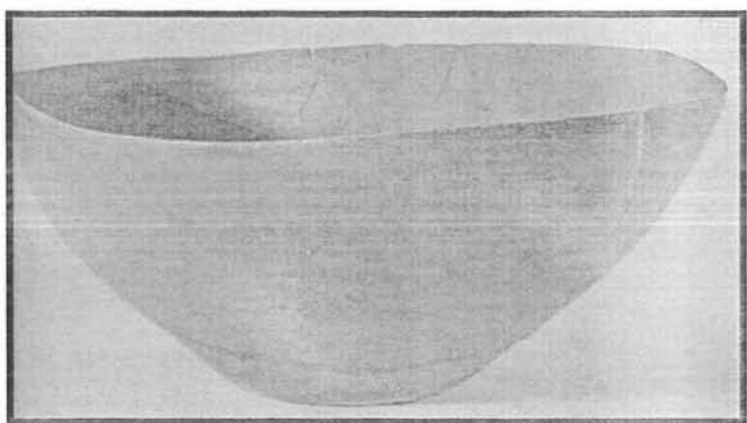
Pl. 7. Nazim Hard Clay Temper Ware Pottery Drawings  
(from Fairservis 1956: 250) Not to Scale



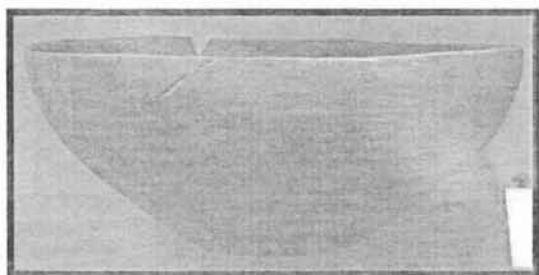
Pl. 8. Loralai Striped Ware Pottery Drawings (from Fairservis 1959: 372) Not to Scale



Pl. 9. Red Ware from Mehrgarh IIB (from Franke 2015k: 50)



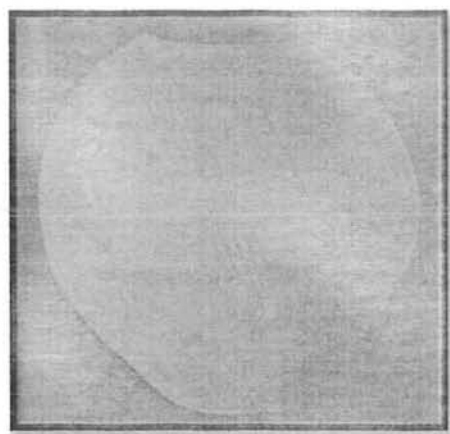
Pl. 10. KGM Painted Bowl (Qasim Ali Qasim) Not to Scale



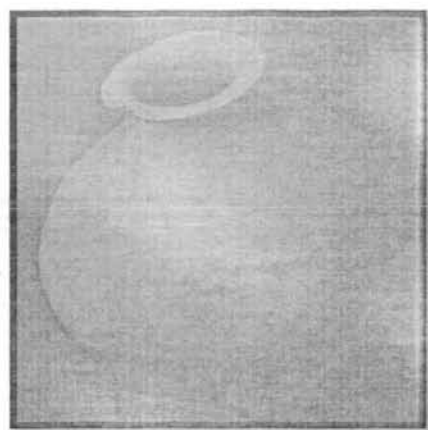
Pl. 11. KGM Ware Exhibited in Islamabad Museum  
(from the Present Researcher) Not to Scale



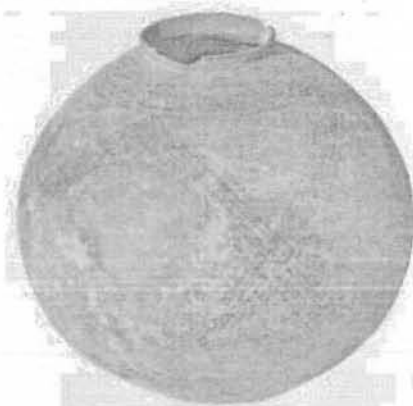
Pl. 12. KGM Ceramics  
(from Jonathan Mark Kenoyer)



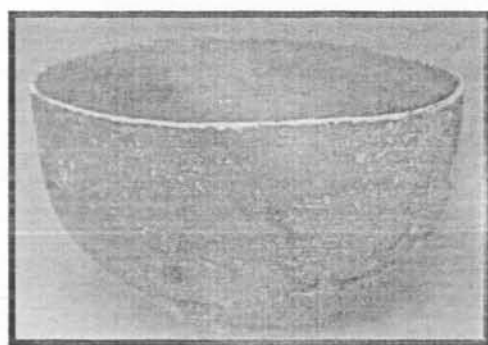
Pl. 13. KGM Ware (from Samzun 1991: 67)  
Not to Scale



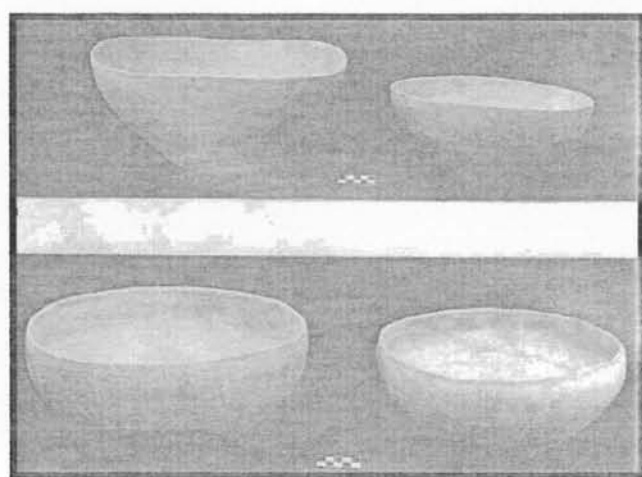
Pl. 14. Pottery (from J. Jarrige 1991a: 41)  
Not to Scale



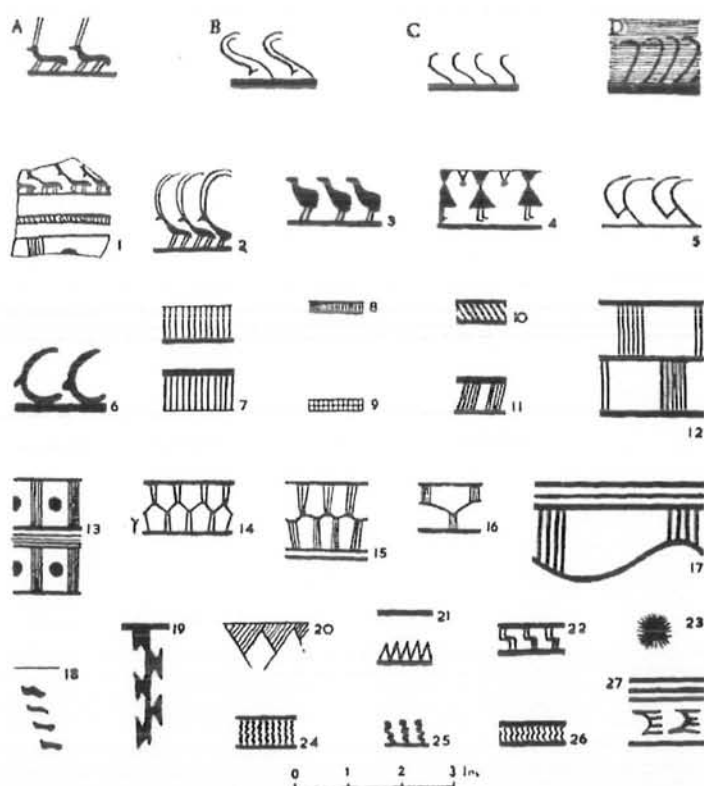
Pl. 15. KGM Ware from Naal Period I  
(from Franke-Vogt 2003/2004: 107) Not to Scale



Pl. 16. KGM Ware  
(from Franke 2015d: 81) Not to Scale



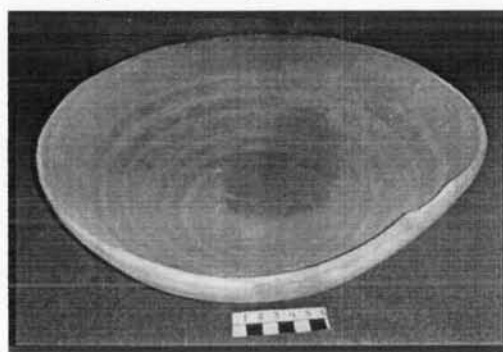
Pl. 17. Pottery from Mehrgarh IIIB/ KGM/T Ware (from C. Jarrige *et al.* 1995: 302)



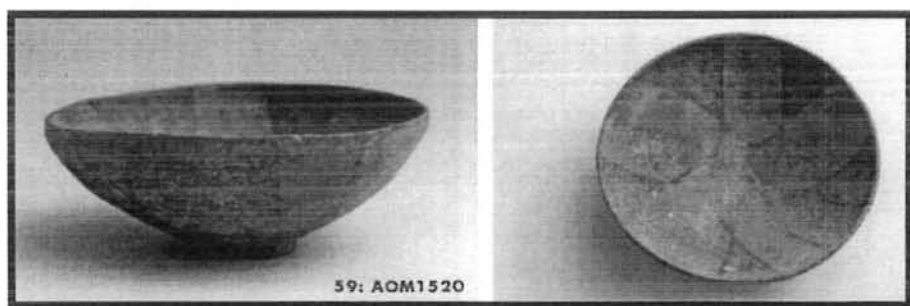
Pl. 18. Togau Ware Development and Common Designs (from de Cardi 1965: 129)



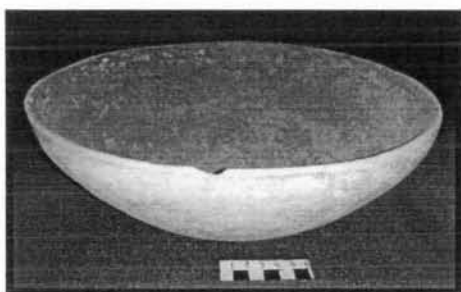
Pl. 19. Togau C Ware (from the Present Researcher) Pl. 20. Togau C Ware (from the Present Researcher)



Pl. 21. Togau C Ware (from the Present Researcher) Pl. 22. Togau Ware (from the Present Researcher)



Pl. 23. Togau Ware (L, exterior) and (R, interior) (from Uesugi 2013: 103) Not to Scale



Pl. 24. Black Slipped-Togau Ware  
(from the Present Researcher)



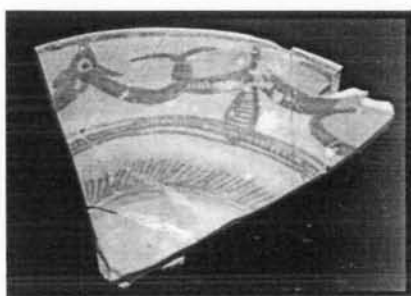
Pl. 25. Togau Ware  
(from Franke 2015d: 85) Not to Scale



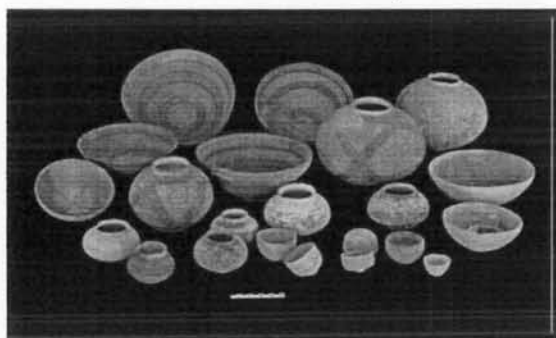
Pl. 26. Togau Ware  
(from the Present Researcher)



Pl. 27. Hybrid Togau-Kechi Beg Wares<sup>43</sup> from SD/N I<sup>44</sup>  
(from Franke 2015d: 68) Not to Scale



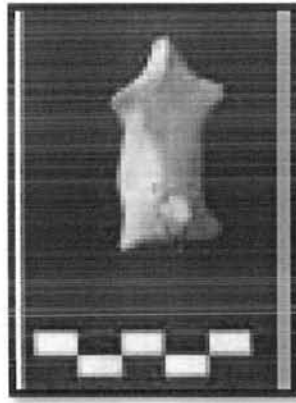
Pl. 28. Togau E Sherd  
(from Franke 2015j: 156) Not to Scale



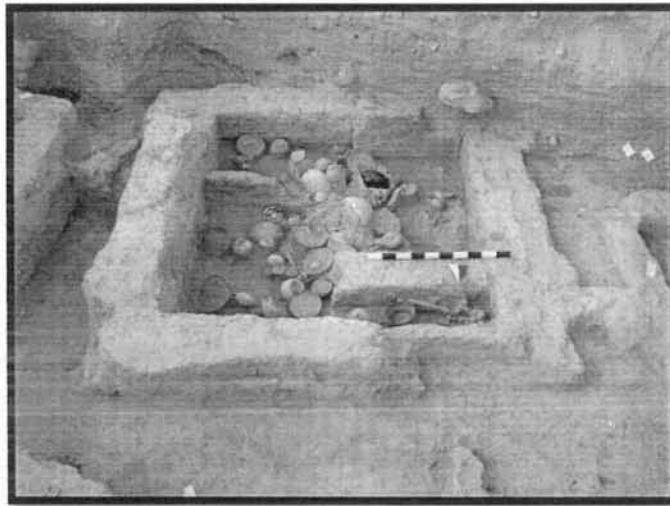
Pl. 29. KGM/T and KB Ceramics from Naal Period I  
(from Franke 2008: 657)

<sup>43</sup> The shape is of Kechi Beg but fabric and decorations are of Togau Ceramics (Franke 2015d: 67-8).

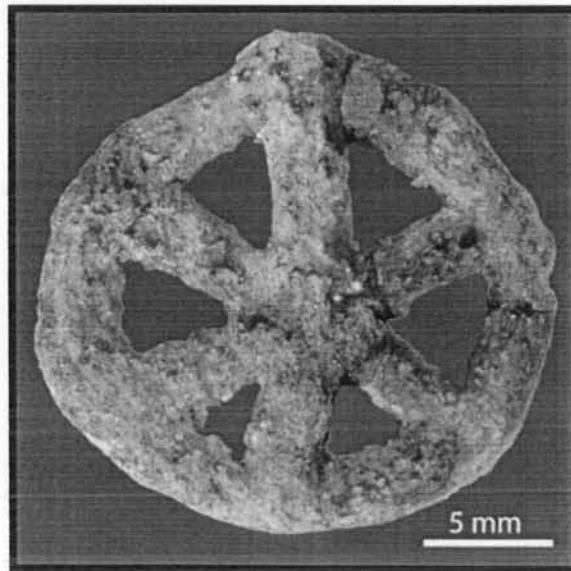
<sup>44</sup> Sohr Damb/Naal I



Pl. 30. Clay Figurines and Male Figurine (Right) (from C. Jarrige 2008: 159)



Pl. 31. Togau Period Tomb from SD/N I (from Franke 2008: 657)



Pl. 32. Bronze Wheel Object from Mehrgarh III (from Srini Kalyanaraman)



### 3.2 Jangal Ware/Culture (c.4400-3200 BCE)

This pottery culture was first identified and recorded by Walter Fairervis with his reconnaissances in the Zhob and Loralai regions. This culture is best represented at Sur Jangal I-III in Duki and Rana Ghundai I-III in Loralai (see Table 20 for chronological comparisons) (1959: 183-85, 279-80, 359).

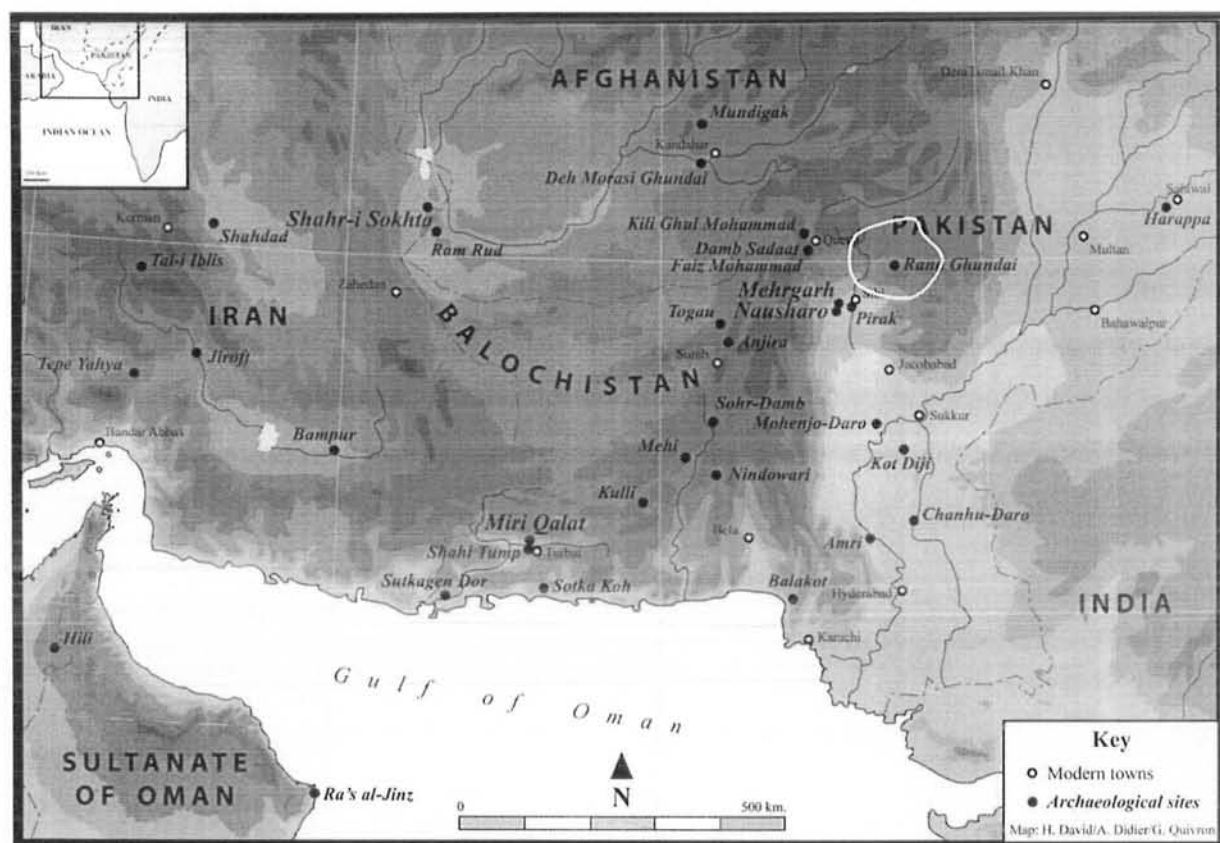


Figure 6. Map of the Center of Jangal Ware/Culture (from J. Jarrige *et al.* 2011: 8, Modified from the Present Researcher)

#### 3.2.1 Technology

Different kinds of ceramics are largely known. They are as followed:

##### 3.2.1.1 Pottery/Ceramics

This pottery culture possesses several types/variants which are as followed (see Table 4):

Major Ware	Types/Variants	Manufacturing Techniques	Prominent Shapes	Decorations	Firing
Jangal Ware	<i>Jangal Polychrome Ware</i>	Wheel thrown	Pots and probably jars	Geometric designs	Oxidized
	<i>Jangal Fine Red Slip Ware</i>	Wheel thrown	Bowls and jars	Bands applied and either completely slipped or half slipped	Oxidized
	<i>Jangal Dark Slip Ware</i>	Handmade, perhaps coiling technique	Bowls and jars	Slipped	Oxidized but with occasional reducing atmosphere
	<i>Jangal Ring Stamped Ware</i>	Wheel thrown	Bowls and jars	Stamped ring designs, most often slipped	Oxidized

Table 4. Jangal Ware and Its Types/Variants (by the Present Researcher)

#### 3.2.1.1.1 *Jangal Polychrome Ware*

This type was found only at Sur Jangal in Duki. Chronologically, it mostly occurred in Sur Jangal III (see Table 20 for chronological comparisons and see Pl. 2) (Fairservis 1959: 369, 430).

*Manufacturing Technique:* The making technique was purely wheel thrown method which left a smooth texture and finish (Fairservis 1959: 369).

*Shapes/Forms:* It consisted of pots, and probably jars as its main forms (Fairservis 1959: 369 373, Figs. 67 and 72).

*Decoration Repertoire:* It is a beautifully decorated ware. It was either black or white slipped. Linear geometric patterns in black on red or tan slip were executed. White, additionally, is used to fill the spaces between the lines. There is occasionally a composition of black and red colored designs on a white slip or white is used to cover major portion of the vessels (Fairservis 1959: 369, 373).

*Firing Technique:* This type gives traces of oxidizing firing conditions (Fairservis 1959: 369).

#### 3.2.1.1.2 Jangal Fine Red Slip Ware

It was also recorded at Sur Jangal in Duki (see Pl. 1). “Undeniably, some sherds included under this caption are represented merely by the undecorated parts of vessels belonging to red-slipped decorated types such as Jangal Painted or Periano Painted. In this there is a similarity with Charikar red Slip...” (Fairervis 1959: 375).

*Manufacturing Technique:* Fine hard clay or in some cases unrecognized sort of clay was used to make this type/variant. It was formed on wheel providing a smooth surface finish and texture (Fairervis 1959: 375).

*Shapes/Forms:* The shapes of this type consisted of shallow and deep bowls and jars, etc. (Fairervis 1959: 375, Fig. 76).

*Decoration Repertoire:* The vessels were either slipped completely, partly or quarterly slipped. The slip covered around three quarters on some vessels. Occasionally, broad red band slip was applied on plain vessels. Moreover, some other sherds were also included in this category. They were dark red brown or blue black slipped (Fairervis 1959: 375-76).

*Firing Technique:* It, too, was treated with oxidized firing conditions (Fairervis 1959: 375).

#### 3.2.1.1.3 Jangal Dark Slip Ware

It was recorded mainly from Sur Jangal in Duki (see Pl. 3). “A dark slip ware suggesting Malik Dark Slip of the Quetta Valley...”. However, it also possesses its own characteristics different from that type/variant. For example, it was occasionally polished leaving out a shiny surface (Fairervis 1959: 374).

*Manufacturing Techniques:* Medium fine hard clay was used to manufacture this type of vessels. It was hand and coil made. Also, the potters of this ware used wheel to make pottery. However, its texture is rough and it looks smoothly finished and was frequently highly burnished (Fairervis 1959: 374-75).

*Shapes/Forms:* Bowls and jars were the main discovered shapes of this type (Fairervis 1959: 374, Fig. 75).

*Decoration Repertoire:* "A dark slip ware suggesting Malik Dark Slip of the Quetta Valley has its distinguishing characteristic an occasionally polished, shiny surface" (Fairervis 1959: 374).

*Firing Technique:* It was fired in oxidizing conditions with occasional reducing atmosphere (Fairervis 1959: 375).

#### **3.2.1.1.4 Jangal Ring Stamped Ware**

It is a coarse ware and was found at Sur Jangal in Duki (see Pl. 4). One sherd was found from Sur Jangal III and others from the surface of the site (see Table 20 for chronological comparisons) (Fairervis 1959: 378-79).

*Manufacturing Technique:* Hard clay was used for its making. It was manufactured on wheel; it was smoothly finished but now it possesses slightly rough texture (Fairervis 1959: 379).

*Shapes/Forms:* Bowls and jars can be called the prominent shapes of this type (Fairervis 1959: 380, Fig. 84).

*Decoration Repertoire:* The paste is pale buff, soft orange to dark brown. It was most often slipped in buff color and was decorated by stamping a ring or a circle. There is also either an incised or non-incised raised ridge vessels. The decorations were executed before firing. They were perhaps made with a hollow tube like a reed. This type is assumedly assigned to Sur Jangal III or this belongs to a later period not defined in Sur Jangal (Fairervis 1959: 378-79).

*Firing Technique:* It received oxidizing firing conditions (Fairervis 1959: 379).

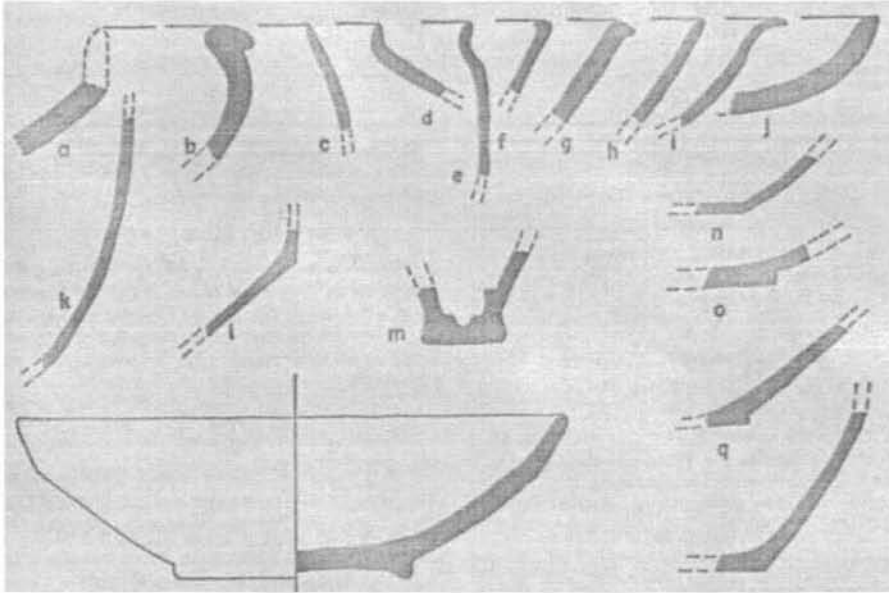
#### **3.2.1.1.5 Distribution Area**

It was found in Loralai region (Fairervis 1959: 365-66) and at Kot Diji I levels (Asthana 1985: 79).

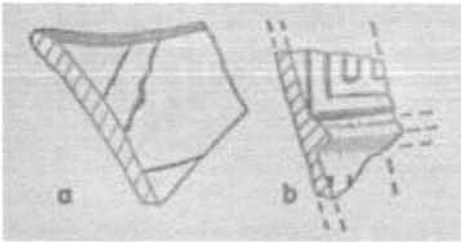
To summarize, many types/variants were recorded related to this pottery culture. Zhob and Loralai are the main production centers of this pottery culture. This culture is mostly known from its pottery which in various variants and of good quality representing high quality with geometric, zoomorphic and floral decorations. Other aspects are yet to be clearly witnessed.

Further surveys and large-scale excavations could help in better understanding of this culture in Balochistan. Its sites are looted and are in danger.

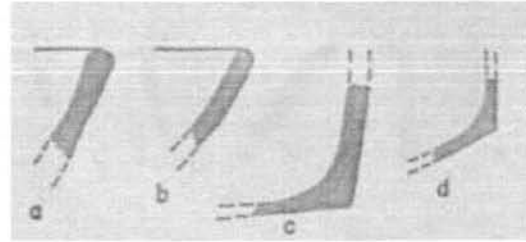
## Plates of Jangal Ware/Culture



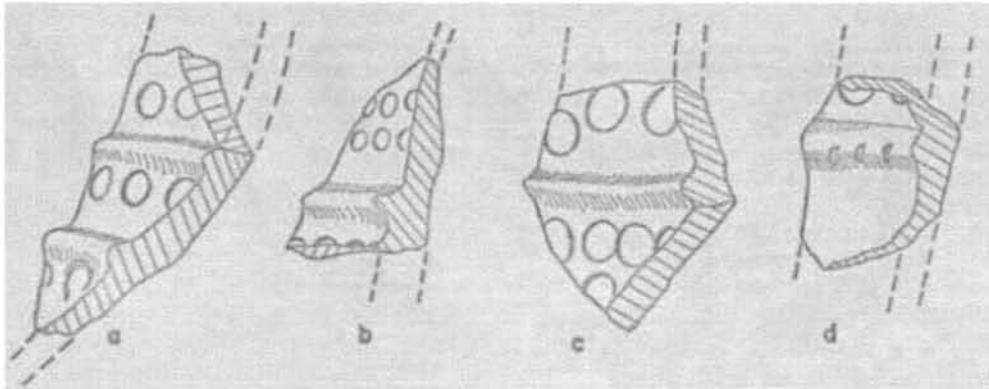
Pl. 2. Pottery Drawings of Jangal Fine Red Slip Ware (from Fairservis 1959: 375) Not to Scale



Pl. 2. Drawings of Jangal Polychrome Ware (from Fairservis 1959: 373) Not to Scale



Pl. 3. Drawings of Jangal Dark Slip Ware (from Fairservis 1959: 374) Not to Scale



Pl. 4. Pottery Drawings of Jangal Ring Stamped Ware (from Fairservis 1959: 380) Not to Scale

3.3 Loralai Ware/Culture (c.4900-3400 BCE)

This is basically a pottery culture was found from mainly at Sur Jangal in Duki (Fairservis 1959: 377-78).

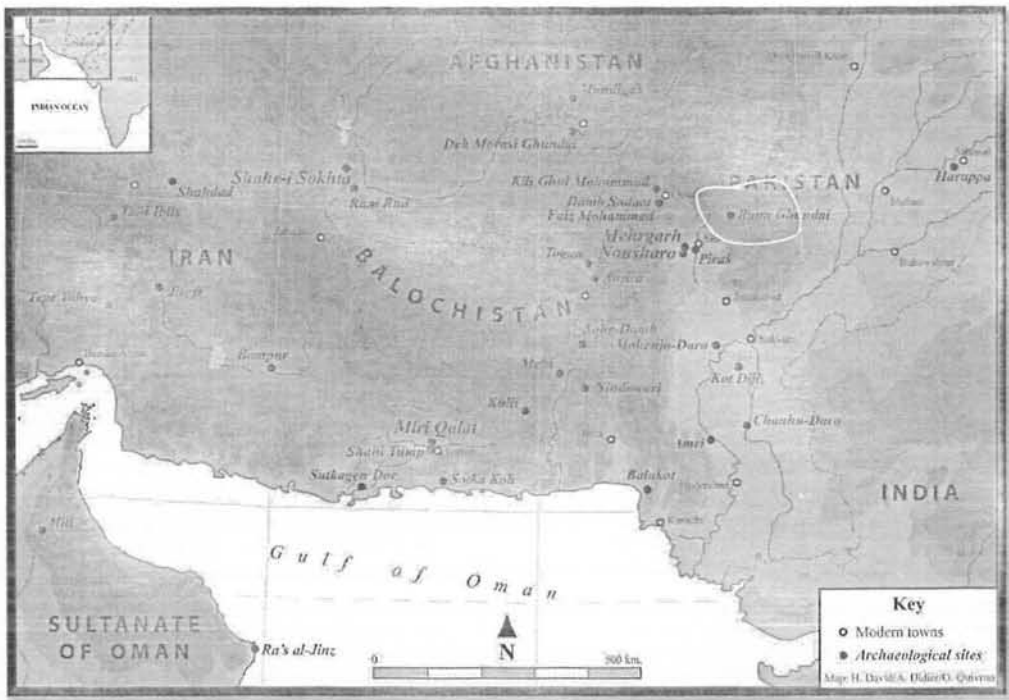


Figure 7. Loralai Ware Distribution Area (J. Jarrige *et al.* 2011: 8, Modified by the Present Researcher)

3.3.1 Technology

This category only included ceramics which are as followed:

3.3.1.1 Pottery/Ceramics

It is divided into two types/variants: Loralai Smooth Temper Ware and Loralai Coarse Plain Ware (see Table 5). They were found at Sur Jangal in Duki (Fairservis 1959: 377-78).

Major Ware	Types/Variants	Manufacturing Techniques	Prominent Shapes	Decoration	Firing
Loralai Ware	Loralai Smooth Temper Ware	Wheel-made	Open bowls	Not decorated but Slipped	Oxidized
	Loralai Coarse Plain Ware	Handmade; coiling technique and in baskets	Bowls, pots, jars, dishes, etc.	Not decorated but lightly slipped	Oxidized but with occasionally reducing conditions

Table 5. Loralai Ware and Its Types/Variants (by the Present Researcher)



#### **3.3.1.1.1 Loralai Smooth Temper Ware**

It was found at Sur Jangal in Duki (see Pl. 1) (Fairervis 1959: 377).

*Manufacturing Technique:* It was formed with fine hard clay; at occasions it was dark tempered. It was formed on the wheel. It has a slightly rough to rough texture and smooth to rough finish (Fairervis 1959: 377).

*Shape/Forms:* They made open bowls and decorated their interiors (Fairervis 1959: 368).

*Decoration Repertoire:* It was occasionally buff slipped (Fairervis 1959: 377).

*Firing Technique:* It was fired in oxidized conditions (Fairervis 1959: 377).

#### **3.3.1.1.2 Loralai Coarse Plain Ware**

It was also found at Sur Jangal in Duki (see Pl. 2) (Fairervis 1959: 378).

*Making Technique:* Fine hard clay was used to make these ceramics. It was constructed with hands i.e. with clay coils and in baskets to make vessels; also there were evidences of vessels constructed on slow wheel. It has a coarse to sandy texture and usually rough finish. The surface is usually rough; however, there are specimens with highly burnished and very smooth inner surface (Fairervis 1959: 378).

*Shapes/Forms:* The found principal shapes were bowls, pots, jars, dishes, etc. (Fairervis 1959 380, Fig. 83).

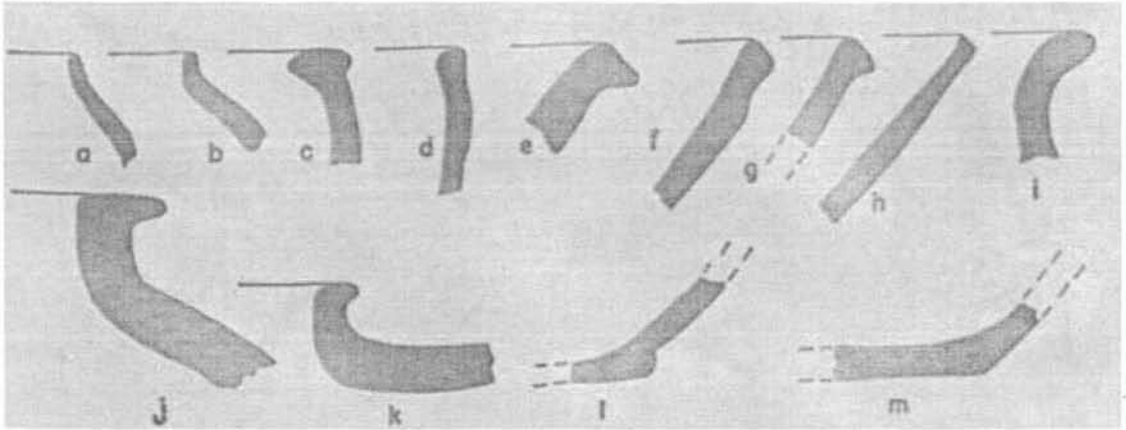
*Decoration Repertoire:* This ware was occasionally lightly slipped, and it was not decorated (Fairervis 1959: 378).

*Firing Technique:* The firing was oxidizing with occasionally reducing conditions (Fairervis 1959: 378).

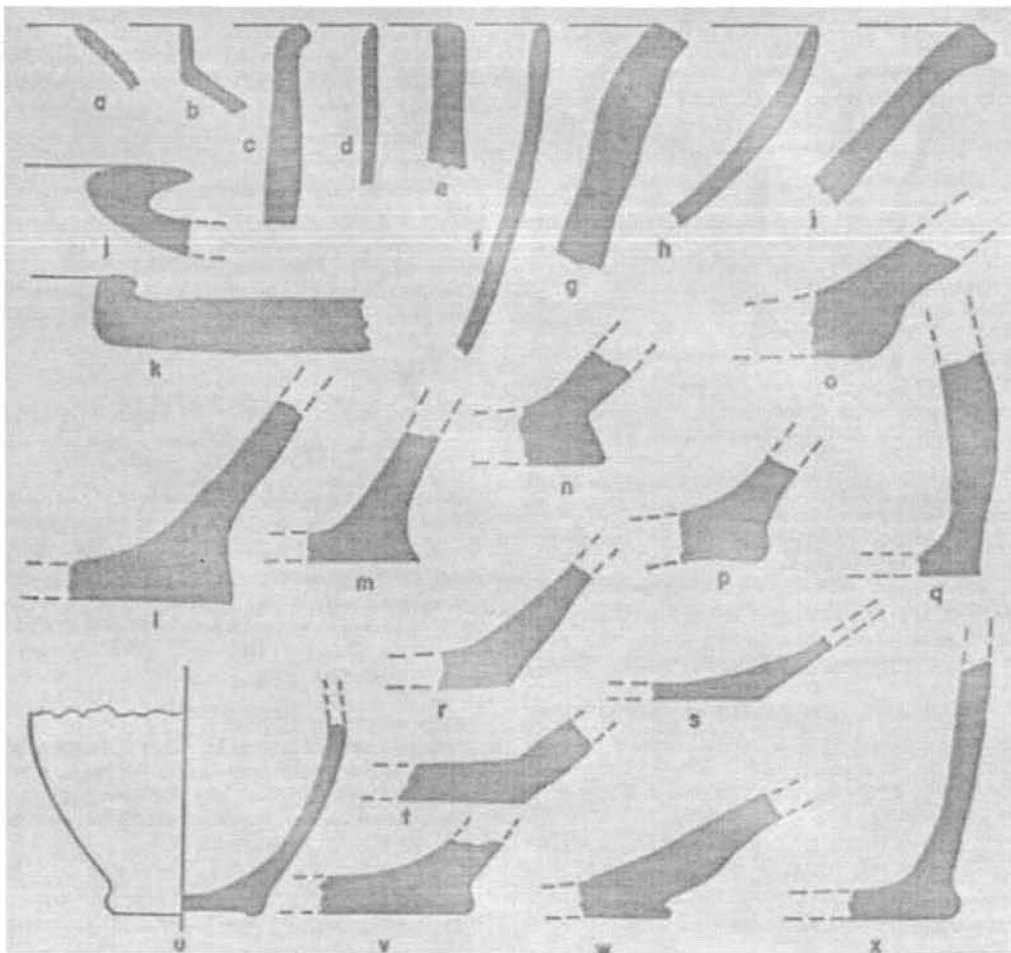
*Distribution Area:* Generally, this pottery culture is known only in Loralai region (see Fig. 7) (Fairervis 1959: 377-78).

In conclusion, it has two variants/types and it is limited to Loralai region. Nothing much is known related to this pottery culture. It is a beautiful ware. Further explorations will define more accurate results of this pottery culture in the region and can add to its distribution area.

# Plates of Loralai Ware/Culture



Pl. 1. Pottery Drawings of Loralai Smooth Temper Ware (from Fairservis 1959: 379) Not to Scale



Pl. 2. Pottery Drawings of Loralai Coarse Plain Ware (from Fairservis 1959: 380) Not to Scale

### 3.4 Rana Ghundai Bull Culture (c.4400-3700 BCE)

This culture was first properly reported and named by E. J. Ross at Rana Ghundai Period II in Loralai. This culture was found in fully developed form; however, yet no traces of its origins are detected (1946: 300, 303).

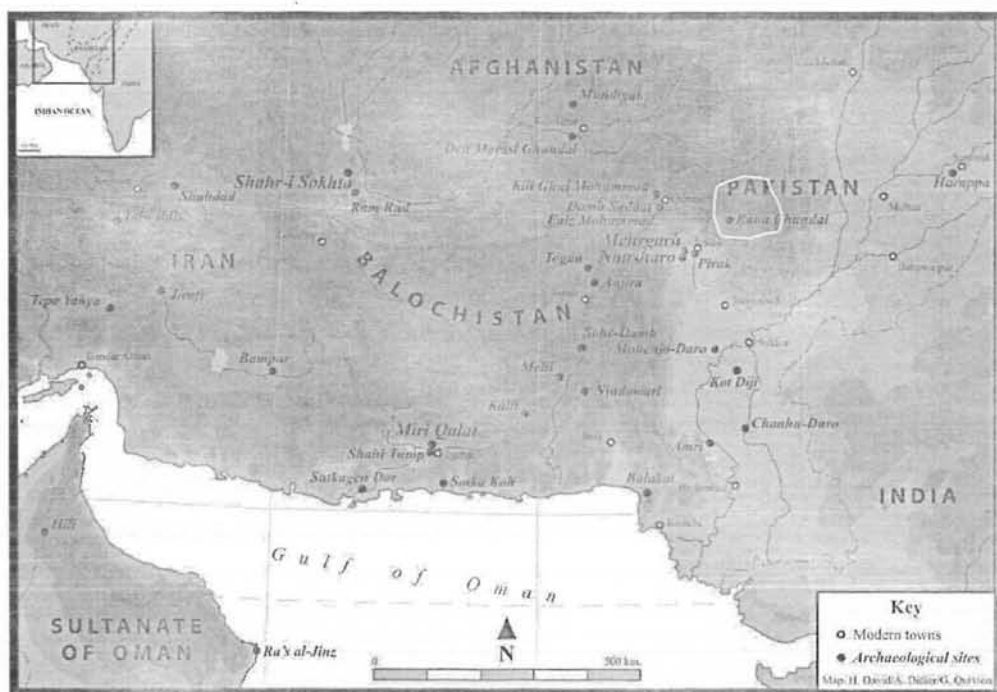


Figure 8. Rana Ghundai Bull Culture Center in Balochistan (from J. Jarrige *et al.* 2011: 8, Modified by the Present Researcher)

#### 3.4.1 Subsistence Patterns/Mean and Domestication

Many types of animal bones are found which proves that they either domesticated or hunted animals for survival (Ross 1946: 300).

#### 3.4.2 Technology

Not much is known about the technology of this culture in this region since trial digs have only contributed in the identification of the culture from the site.

##### 3.4.2.1 Pottery/Ceramics

“Its pottery style is so clear cut, so striking, so artistic, and of such a high level of technical skill... [that] the standard of artistic spirit and [technical skills] shown by the ceramics of this period is quite unexpected at such an early date” (see Pls. 1-4) (Ross 1946: 300).

*Manufacturing Techniques:* E. J. Ross (1946: 300) explains the manufacturing process in the following words: "From a small and well-finished base [,] the material slopes widely and gracefully, without any bulging, to a distinct shoulder, whence the angle is considerably steeper to the fine rim. The material is beautifully graduated to give strength near the base, becoming light and fine toward the rim. The surface finish is often so fine as to give a polished feeling to the touch, the interior being always [especially] well finished. These vessels are obviously made on the wheel".

*Shapes/Forms:* Bowls (Ross 1946: 300), vases, etc. were recorded as common forms (McCown 1946: 289).

*Decoration Repertoire:* It was slipped on the outside. Mostly opaque brown-black color was used to decorate the pottery; however, sometimes blend of two colors can be seen. For instance, one is lighter and the other is darker. It may be the result of faulty firing or chemical reaction over the time. Moreover, the exterior was decorated only (Ross 1946: 300-01).

The designs include a narrow black line at the base, one or sometimes two wide blank line at shoulder angle often with stylized flowers on the upper side, another black line at the base and "the shoulder by groups of four or five parallel lines", rush net designs, series of bands often connected with each other by diagonal strokes and with stylized flowers on the lower side. Friezes of animals like humped cattle, black buck or antelope, "groups of vertical hachure strokes connecting the frieze with a black edge round the rim, scroll designs, parallel wavy zigzag bands, and other geometric designs. The background probably often shows pastures. Hence, the potters decorated these designs with extreme care and control which shows the quality and fineness of their work (Ross 1946: 301-02).

*Firing Technique:* It was completely fired in oxidized conditions (Ross 1946: 300).

*Distribution Area:* Distribution wise, "...it seems best to consider [this culture] in the stage seen in Rana Ghundai IIA as a later extension of the earlier Iranian culture...Rana Ghundai IIA represents an offshoot of the earlier Hissar culture of northern Iran and was established in Baluchistan by late Uruk or Jamdat Nasr times" (see Fig. 8 for the center of this culture in Balochistan) (McCown 1946: 290-91). It has also been found at Sur Jangal II levels in Duki (Mughal 1970: 250).

### **3.4.2.2 Other Cultural Assemblages/Cultural Repertoire**

Not much data was discovered related this category. Apart from ceramics, this culture had flint tools, etc. (Ross 1946: 300).

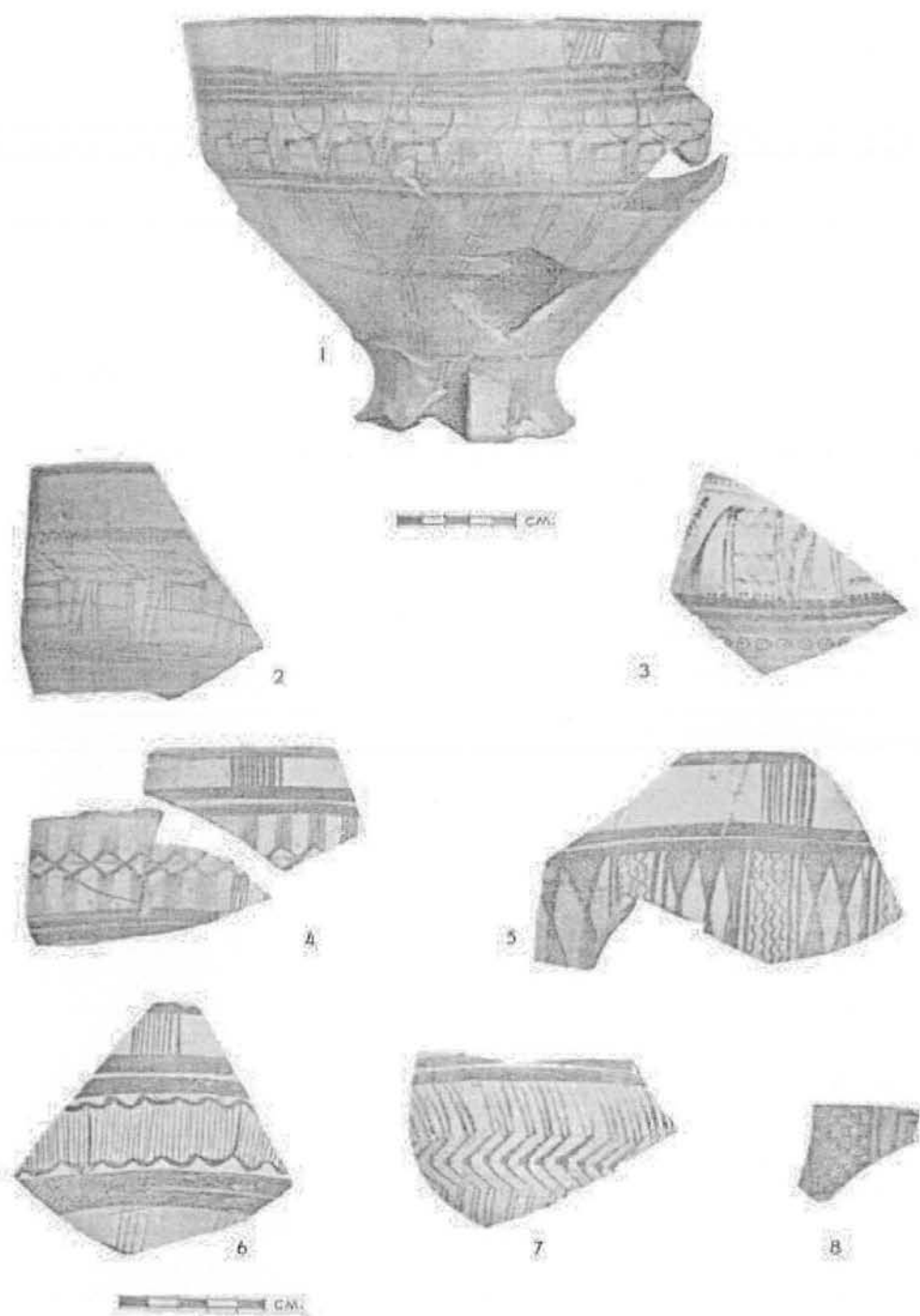
### **3.4.3 Religion**

The bull motif on the ceramics might represent a cult or some sort of religious belief (Ross 1946: 303).

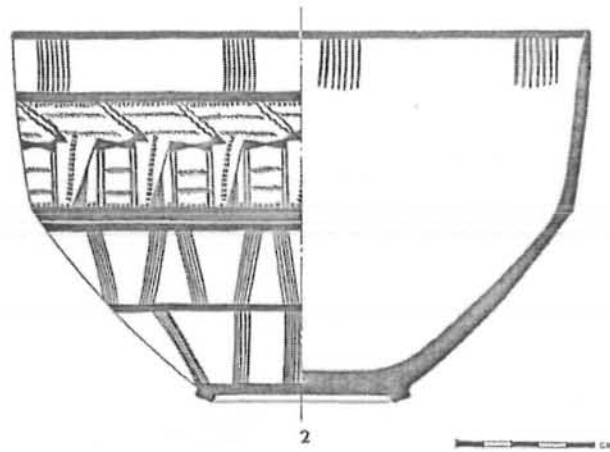
To summarize, there is strong similarity in one shape i.e. 'Bull Vase' with Hissar Culture of northeastern Iran. However, the animal decorations differ from that of the Hissar Culture. There are decorations i.e. group of vertical bands, two zones of designs, separated groups of vertical bands, etc. which remind strong similarities with the cultures of northern Iran. There is similarity in shape, designs and ware of this culture with Hissar Culture (McCown 1946: 289).

To conclude, "a fresh culture then arrived from with-out-that of the makers of the "Bull" period pottery, evidently a race with considerable technical skill and artistic perception who made their pottery on the wheel. We have no evidence as to the region whence this culture came or where it was developed, but the motifs of the Indian ox and the Indian antelope lead us to suspect an Indian origin, or at least a sojourn in the Indian region before the culture came to northwestern Baluchistan" (Ross 1946: 311-12). The culture looks socio-economically and technologically developed. However, not much is known about this culture. Further excavations can prove better understandings to this culture.

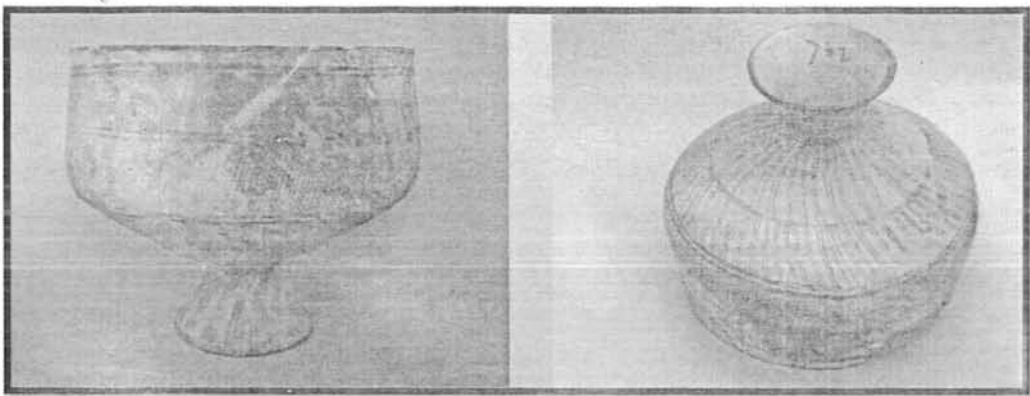
Plates of Rana Ghundai Bull Culture



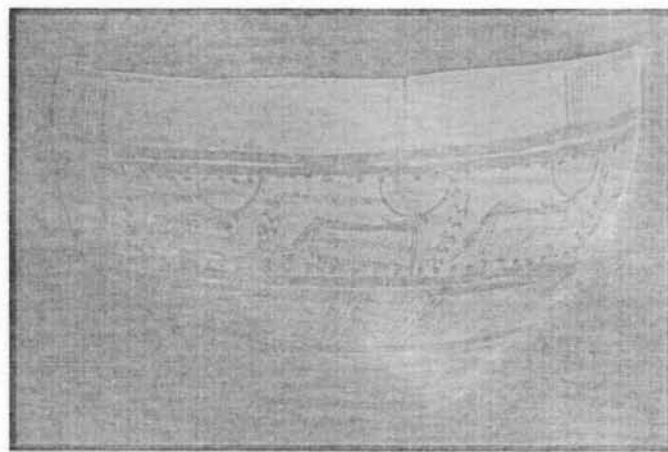
Pl. I. The Bull Vase and the Black Buck Vase (Ross 1946: Plate IX)



Pl. 2. Pottery Drawing of Black Buck Vase (Ross 1946: Plate XII)



Pl. 3. Rana Ghundai Bull Culture Ware (from Franke 2015d: 65) Not to Scale



Pl. 4. Match (Ayumu *et al.* 2011: 155) Not to Scale



### 3.5 Periano Ware/Culture (c. 3600-2900 BCE)

Fritz Noetling, a geologist, was the first to publish cultural repertoire of this culture from its type site Periano Ghundai (Z-2) in Zhob in 1998 (Pedde 1993: 215). Later, A. Stein brought in view further pottery assemblage to this culture (1929: plates PG-V-VIII; MG-X, XI; SJ-XX)<sup>45</sup>. After some decades, E. J. Ross provided information from his reconnaissance of the site (1946: 295, 315). S. Piggott tried to find the cultural sequence of the region using this ceramic culture and G. Childe has also discussed it (Pedde 1993: 215-16). W. Fairservis further collected more material assemblage on this culture and clearly classified it from other pottery cultures found in Northern Balochistan (1959: 322, 356-58, 359-60, 385, 402-15, 367-68). M. R. Mughal also conducted trial excavations on the site and found ceramics of this culture (1972: 140-42). F. Pedde later studied F. Noetling's collection at Museum of Indian Art which included pottery of this culture (1993: 215-30).

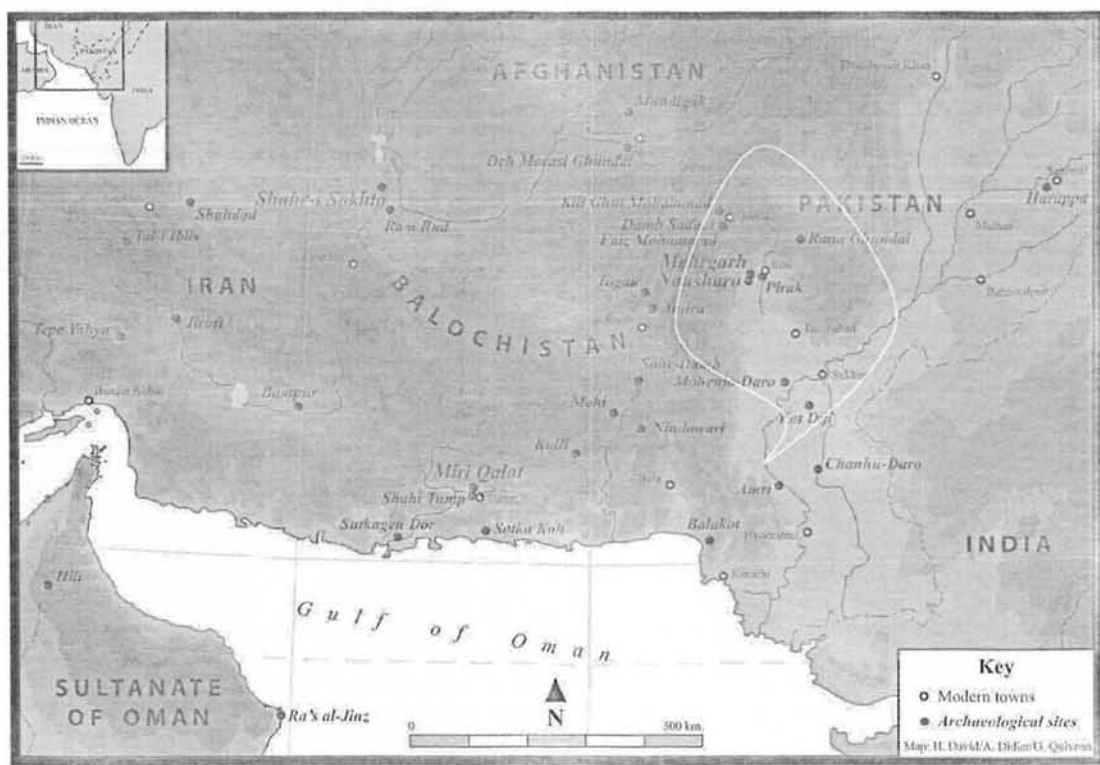


Figure 9. Periano Ware Distribution Area (from J. Jarrige *et al.* 2011: 8, Modified by the Present Researcher)

<sup>45</sup> Abbreviation of sites attached i.e. PG-Periano Ghundai, MG-Mughal Ghundai and SJ-Sur Jangal

Some of the important sites of this culture are Periano Ghundai and Rana Ghundai [III], Mata Kaudani, Uruske Zara, Kaudani in Zhob, Sur Jangal [III], Dabar Kot in Duki, etc. (Pedde 1993: 216).

### 3.5.1 Technology

Technologically, ceramics have been only recorded until now. It can be seen in the following paragraphs:

#### 3.5.1.1 Pottery/Ceramics

The pottery of this culture was categorized into one type i.e. Periano Painted Ware and it was further classified (see Table 6):

Major Ware	Types/Variants	Manufacturing Techniques	Prominent Shapes	Decorations	Firing
Periano Ware	<i>Periano Painted Ware (Two Variants: Black on Buff Ware and Black on Red Slip Ware)</i>	Wheel-made	Bowls, cups and dishes	Geometric, Fauna and floral	Oxidized

Table 6. Periano Ware and Its Types/Variants (by the Present Researcher)

##### 3.5.1.1.1 Periano Painted Ware

It was found from Sur Jangal in Duki. Its time range is Sur Jangal III and Rana Ghundai III (see Table 20 for chronological comparisons) (Fairservis 1959: 327, 369). Periano pottery culture developed from Jangal Painted Ware (Pedde 1993: 217). In terms of decorations, there are two variants of this ware: Black on Buff Slip and Black on Red Slip (see Pls. 1-5). They were found within one stratigraphic context (Fairservis 1959: 367-68; Asthana 1985: 188).

*Manufacturing Techniques:* Both of the variants were wheel thrown having a smooth texture and finish (Fairservis 1959: 367-68; Pedde 1993: 216; Asthana 1985: 188).

*Shapes/Forms:* The prominent discovered forms were open bowls, large dishes, and cups used in this variant/type (Fairservis 1959: 367; Asthana 1985: 188).

*Decoration Repertoire:* The painted lines of the geometric patterns are broader than usual on both variants (Fairservis 1959: 367). Apart from geometric motifs, it sometimes bears floral

motifs; all the decorations were painted with black color (see Pls. 6-8). Also, it was frequently red or reddish-brown slipped (Pedde 1993: 216).

**Black on Buff Slip:** The decorations were executed with black on buff or cream slip (see Pl. 1). The geometric designs consist of broad and narrow horizontal bands, sometimes these bands occur together in certain combination, vertical bands resting on a horizontal with other horizontal bands, horizontally and vertically cross-hatched squares or rectangles, wavy or undulated horizontal bands, horizontal band attached different kinds of scallops frequently demarcated with another band beneath, vertical hatching, different kinds of sigmas, a kind of flower, a wheel motif, diagonally cross-hatched hourglass motif, square or rectangular designs, floral designs, etc. Moreover, diagonally hatched rectangles, an unrecognized animal, eye motif, etc. are also noticed (Fairservis 1959: 385, 402-06, 429, Designs, 193-233, p. 402-06).

**Black on Red Slip:** It has mostly the same existing design repertoire; however, it includes further designs (see Pls. 1-2). For example, multiple and vertically but slightly S shaped lines and other variations, various sort of meandering lines, scallops in the middle of bands in one or many rows, diagonally or vertically hatched scallops, two crossing or non-crossing meanders creating empty spaces, two paneled squares, square checkerboard, vertically and horizontally hatched rectangles and other designs in rectangles, diagonally (up and down at a side) and horizontally stocked pattern with its surroundings filled with color, terracing pattern, serrated pattern, filled lozenges, dots with or without circles used in many ways, the bucranium<sup>46</sup> pattern, intersecting but unidentifiable patterns, close space multiple horizontal lines, rectilinear<sup>47</sup> patterns, arrow heads pointing upwards, hung scallops with two verticals each attached to a band, diagonally cross hatched rectangles with vertical multiple short lines on its two sides, vertical bands differently arranged with a horizontal line in the middle at the end of vessels, curvilinear<sup>48</sup> vertical zigzag pattern, vertically hatched scallops/loops attached to a band, manipulated triangles, multiple branched sigmas, eye pattern, dots in lozenges, open

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<sup>46</sup> It is the skull of an ox

<sup>47</sup> Straight bands

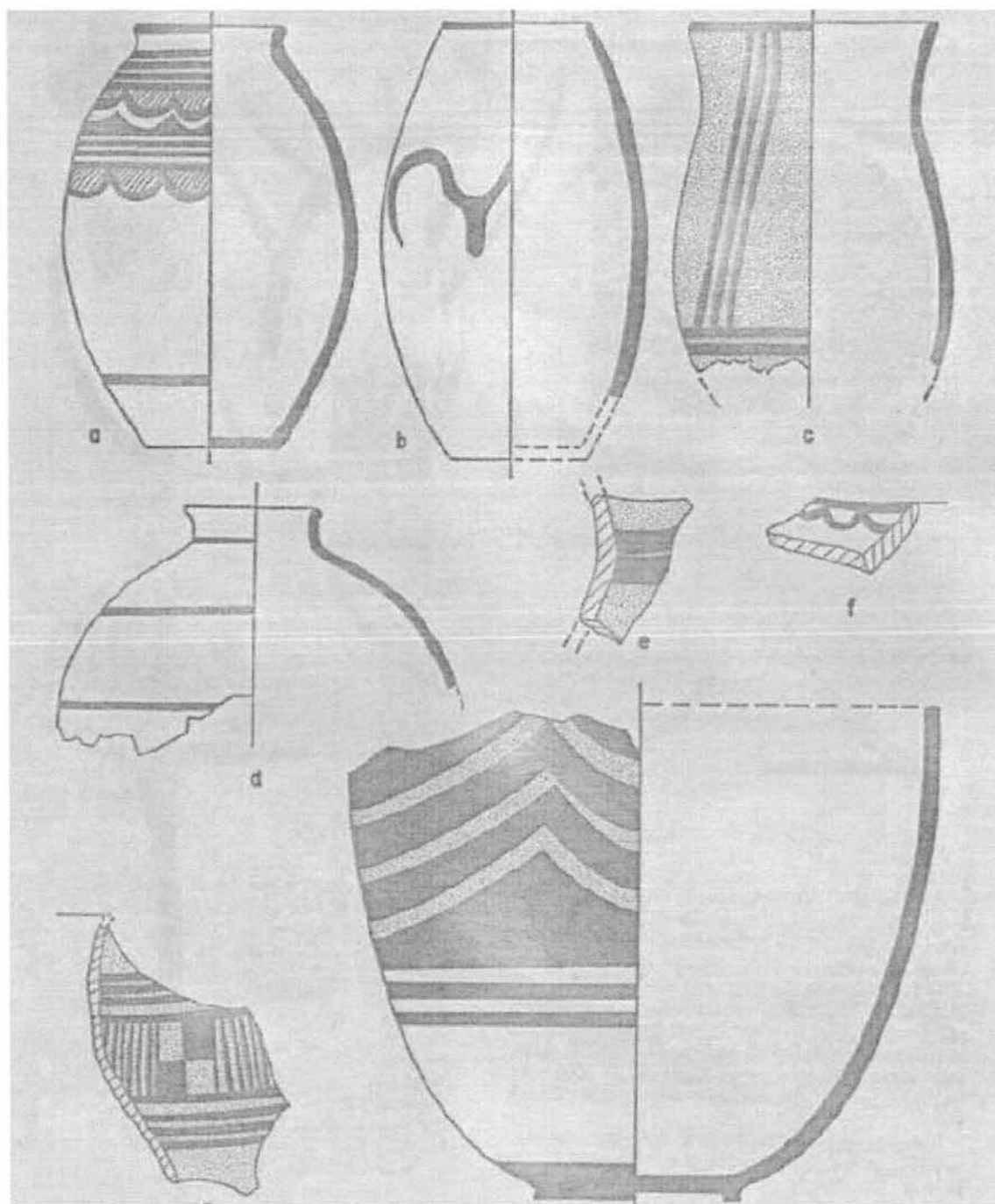
<sup>48</sup> Curve band

willow leaves, an animal motif (probably a cow), etc. (Fairservis 1959: 406-15, 429, Designs 234-344, p. 406-15).

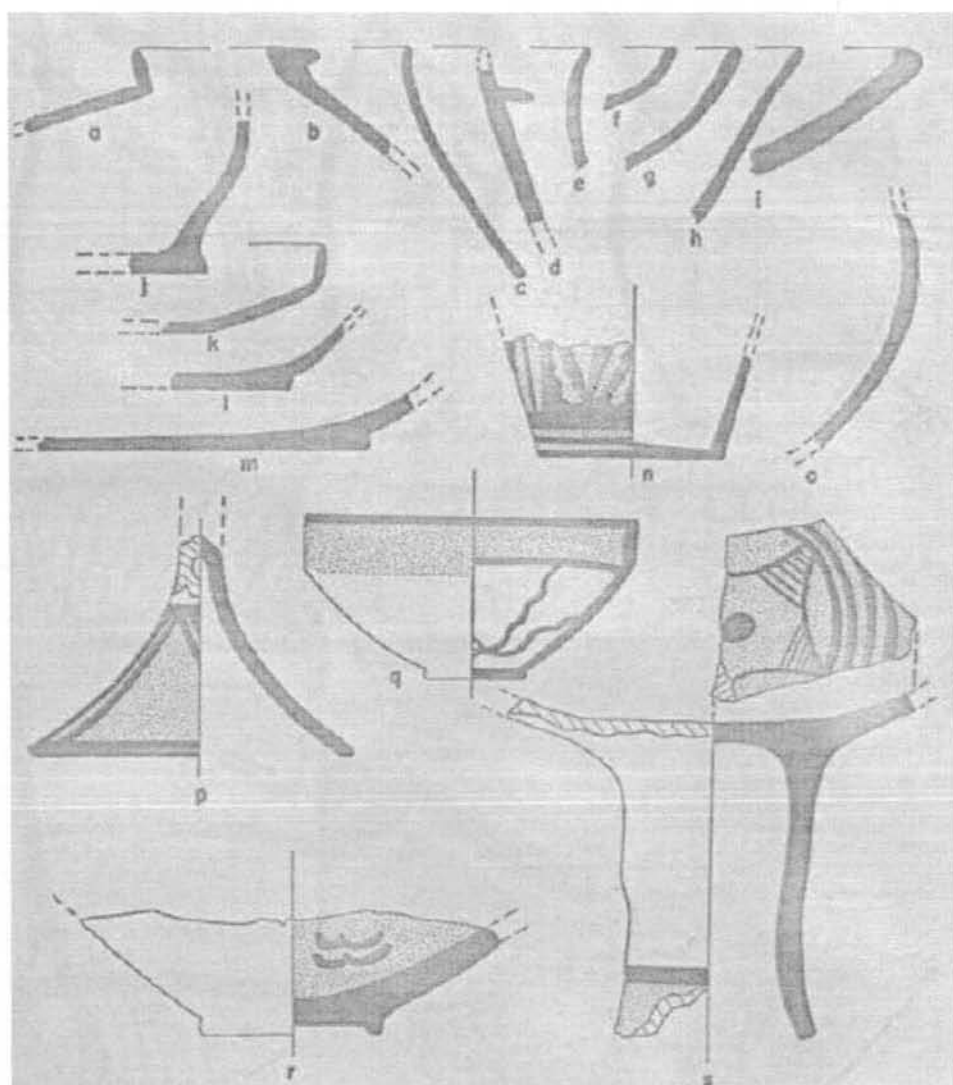
*Firing Technique:* Both variants were fired in oxidizing conditions (Fairservis 1959: 367-68).

To summarize, there is not much information regarding its other aspects since no large-scale excavations were conducted on any of its major sites. Large scale excavations can result in the identification of its other aspects. Pottery has been found abundantly from various surveys and trial trenches. There are a variety of pottery types of this ware with impressive pottery quality and designs. Technologically, their artifacts are of good quality. It has a small distribution area. Moreover, the sites are endangered from humans and climate since they are devoid of protection.

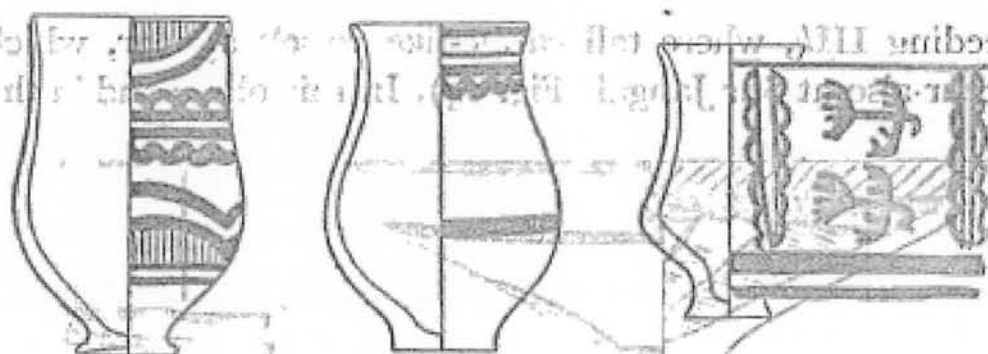
# Plates of Periano Ware/Culture



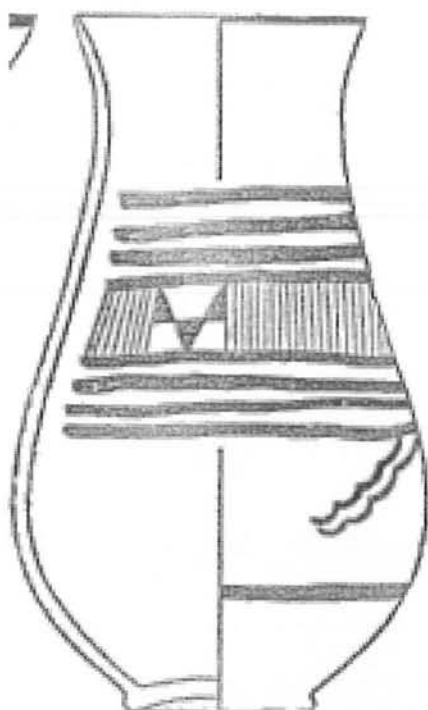
Pl. 1. Periano Painted Pottery; Black on Buff and Black on Red Slip Ware (from Fairservis 1959: 370)  
Not to Scale



Pl. 2. Periano Painted; Black on Red Slip Ware (from Fairservis 1959: 371) Not to Scale



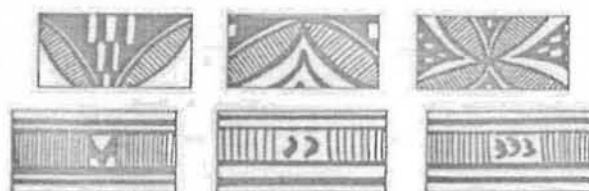
Pl. 3. Drawing of Periano Painted Ware (from Piggott 1950: 124) Not to Scale



Pl. 4. Drawing of Periano Painted Ware  
(from Piggott 1950: 123) Not to Scale



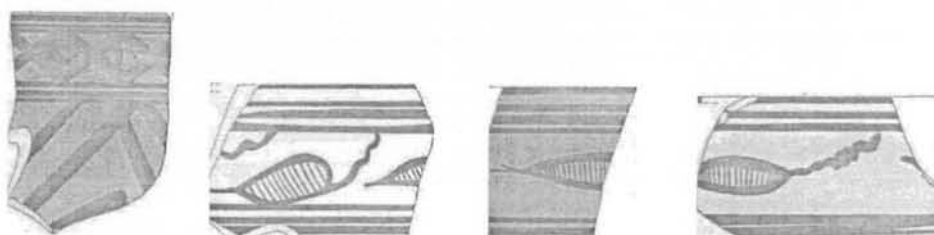
Pl. 5. Periano Painted Ware  
(from Ross 1946: 307)



Pl. 6. Designs on Periano Painted Ware (from Pedde 1993: 224) Not to Scale

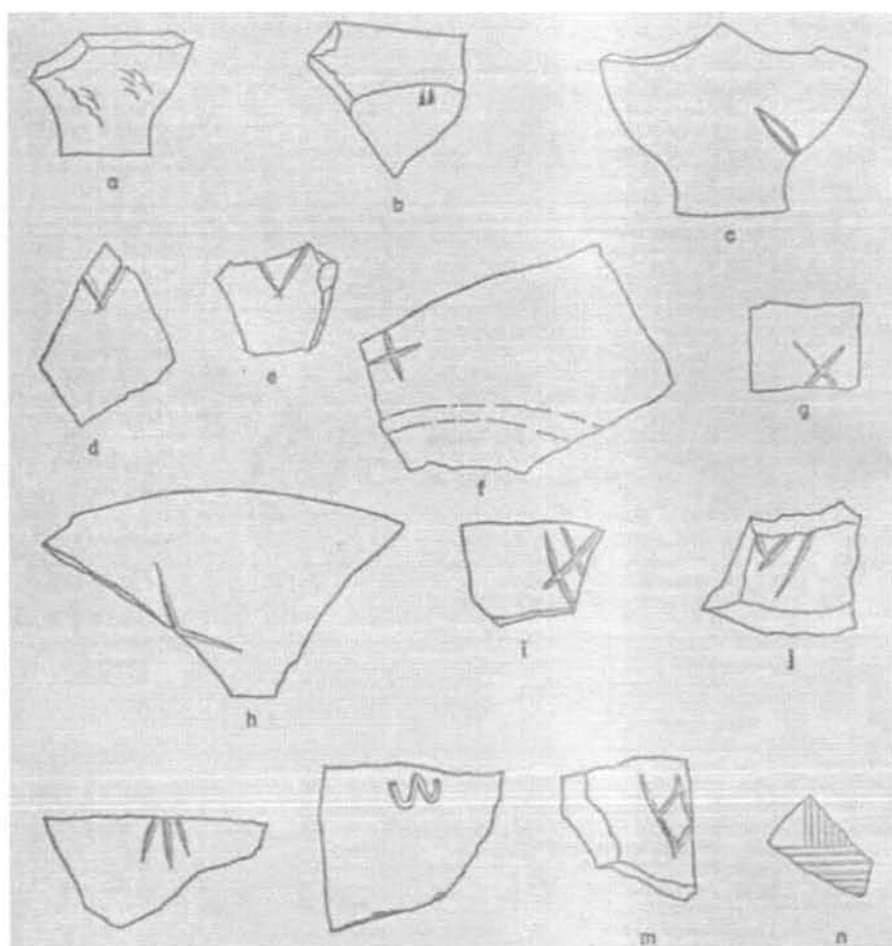


Pl. 7. Geometric Designs on Periano Ware (from Pedde 1993: 225, 228) Not to Scale



Pl. 8. Floral Example Designs on Periano Ware (from Pedde 1993: 227, 228) Not to Scale





Pl. 9. Periano Potters' Marks from Surface Collection (from Fairervis 1959: 354) Not to Scale

7.1 3.6 Rana Ghundai Ware/Culture (c.3600-3400 BCE)

This pottery culture was first reported by Aurel Stein (1929: 52-53). E. J. Ross excavated the type site, Rana Ghundai in Loralai, adding further information regarding its importance (1946: 291-315). S. Piggott further redefined and added to the sequence of the site (1950: 119-25). It was further defined by W. Fairservis from his reconnaissances in the region. Now we know that it was found mainly at Rana Ghundai Loralai and Sur Jangal in Duki; Loralai and Duki regions was its center (1959: 430). The recent excavations at Sohr Damb/Naal III which is said to be associated with this culture including RG IIIc (Franke 2015i: 85).

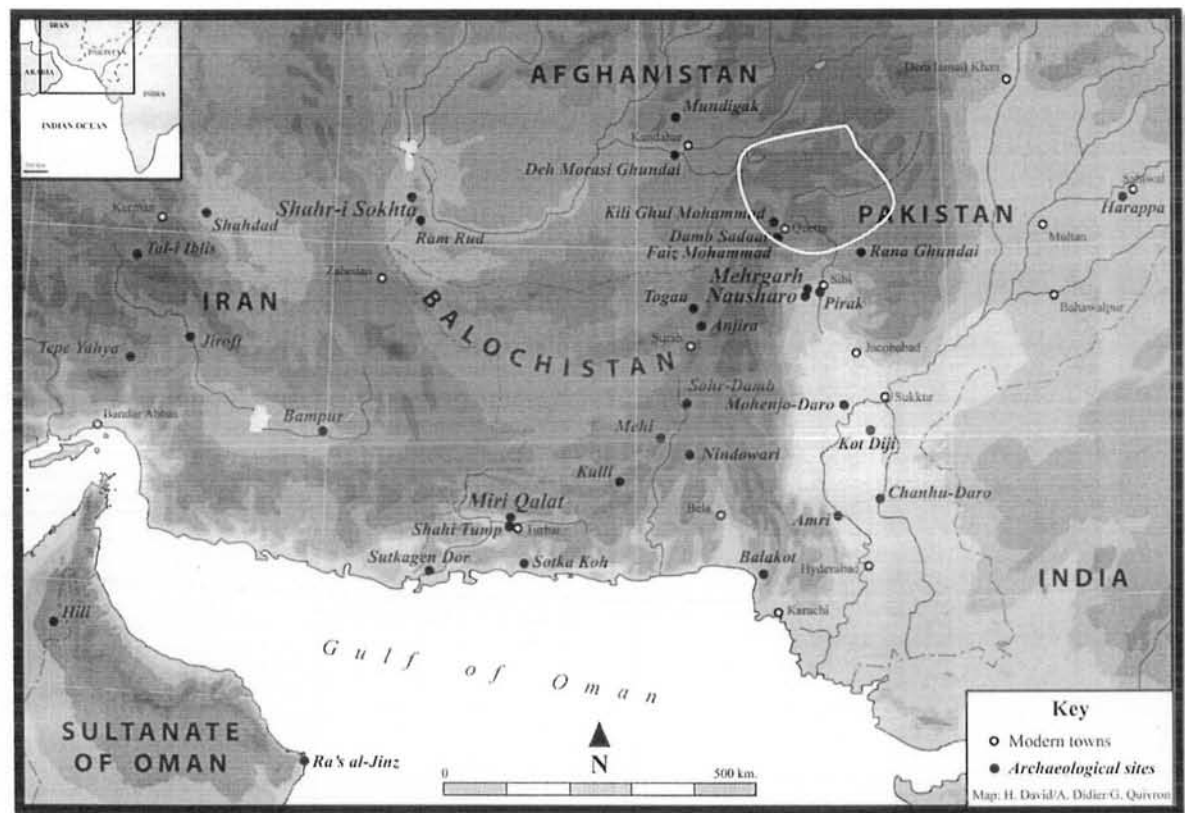


Figure 10. Map of Main Center of Rana Ghundai Ware/Culture (from J. Jarrige *et al.* 2011: 8, Modified by the Present Researcher)

3.6.1 Subsistence Patterns/Mean and Domestication

There were traces of domesticated Indian ox, sheep, ass, goat and horse (Ross 1946: 296).

3.6.2 Technology

Technological aspects are as followed:

### 3.6.2.1 Pottery/Ceramics

In the upper levels of the main site, the ceramic assemblage resembles the Sur Jangal ceramic assemblage (see Pl. 1) (Fairervis 1959: 306).

#### 3.6.2.1.1 Rana Ghundai Red on Red Slip Ware

This pottery represents only one type as Rana Ghundai Red on Red Slip Ware (Fairervis 1959: 269).

*Manufacturing Technique:* It was constructed on wheel leaving a smooth texture and finish (Fairervis 1959: 369).

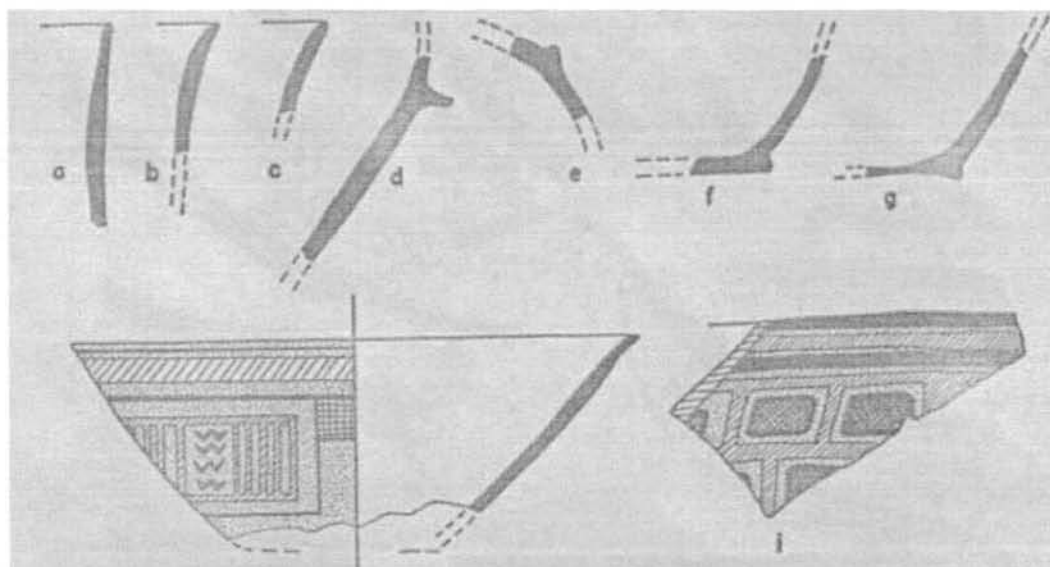
*Shapes/Forms:* Deep bowls and jars were the principal recorded shapes of this type/variant (Fairervis 1959: 373, Fig. 71).

*Decoration Repertoire:* It was red slipped and red or black painted designs were applied on it. W. Fairervis has called it "one of the handsomest wares of Baluchistan". However, the drawing method resembles Jangal Painted Ware and Kechi Beg Polychrome Ware; it was derived from either or one of them, having some different characteristics; it looks parallel with both these types in terms of design. Black and red geometric designs were executed; however, most often they were used in combination. They are simple horizontals occasionally ridges, squares or rectangles with another diagonally lined square or rectangle, large undulated lines between vertical lines, willow leafs, floating squares or rectangles with diagonal or cross diagonal hatching frequently within other squares or rectangles in red, setting or standing hourglasses in rectangles with red lines beside them, vertical frieze of sigmas between the red line panels, chevron within diagonally lined triangles, checkerboard pattern surrounded with red lines, horizontal meanders, scallops or scales, set of diagonal hatching, the checkerboard but the black parts are horizontally and vertically cross-hatched, set of diagonally cross-hatched or diagonally and horizontally cross-hatched diagonal broad bands, vertical hatched or plain chains; one with intersecting vertical band in the middle, row of eye motifs and an unidentified animal design (see Pl. 2 for some designs) (1959: 369, 430, Designs 365-414, p. 417-21).

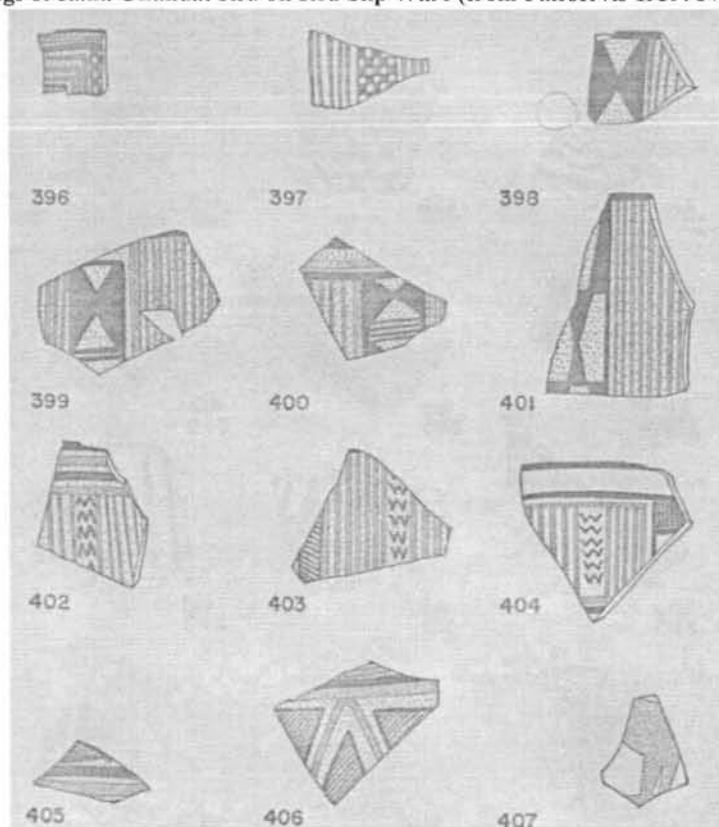
*Firing Technique:* It was fired in oxidizing atmosphere (Fairervis 1959: 369).

In conclusion, because of lack of extensive excavations not much is known about the other aspects of this culture. There is possibility that it will be discovered in the vast region after extensive researches and excavations. Much of the sites are endangered and are open to illegal diggers which need protection. Some of them even have been illegally excavated as well.

# Plates of Rana Ghundai Ware/Culture



Pl. 1. Drawings of Rana Ghundai Red on Red Slip Ware (from Fairservis 1959: 373) Not to Scale



Pl. 2. Rana Ghundai Red on Red Slip Ware Designs (from Fairservis 1959: 420) Not to Scale

3.7 Kechi Beg Culture (c.3600-3200 BCE)

Walter Fairservis defined this culture with his test trenches from Kechi Beg (also known as Q-14): the type site; he assigned this site as a single culture site which is sized about ninety by fifteen meters (1956: 218-22; Possehl 1999: 511). This culture was recorded at KGM IV, Damb Sadaat I, Karez site, Kechi Beg (hereafter KB<sup>49</sup>), etc. sites in Quetta Valley (Fairservis 1956: 330), and Mundigak I- 4 to 5 in Afghanistan (Fairservis 1971: 127). B. de Cardi has called it early Quetta Culture (1964: 22, 25).

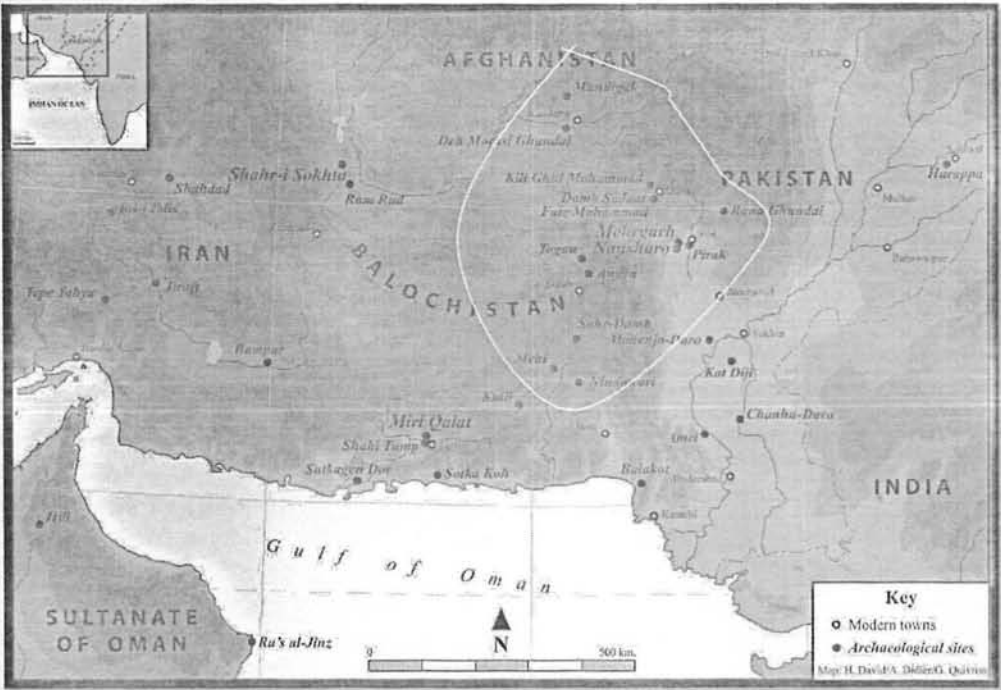


Figure 11. KB Ware Distribution Area (from J. Jarrige *et al.* 2011: 8, Modified by the Present Researcher)

3.7.1 Structural Remains

At KB site, the people of this culture made mudbrick houses with one or two courses of bricks. W. Fairservis also recovered a foundation stone wall with assumed mudbrick upper portion of a earlier period (1956: 222). They frequently lived in mudbrick houses set in mud mortar and these houses were occasionally built on stone foundations (Chakrabharti 2006: 119).

<sup>49</sup> Including the additional name of the type/variant with wares

Moreover, at Damb Sadaat I, alongside mudbrick houses on stone bases, boulder walls were found too (Asthana 1985: 120).

### 3.7.2 Technology

Pottery has been largely found from this culture, but other aspects are not well known.

#### 3.7.2.1 Pottery/Ceramics

W. Fairservis has classified KB Ware further into several types/variants on the basis of slip, decorations, etc. They are: 1. KB Black on Buff Slip Ware; KB Black on Brown Ware, 2. KB White on Dark Slip Ware, 3. KB Polychrome Ware, 4. KB Red Paint Ware, 5. KB Oxidized Ware, and 6. KB Wet Ware, etc. (see Table 7 and see Pls. 1-31) (1956: 246, 257-67, 262, 268). KB Wares have similarities with Naal and Amri Wares (Asthana 1985: 176; Franke 2015d: 68,72). To add more, Balochistan played a vital role in developing and perfecting this pottery culture (see Pls. 18-32) (Franke 2015d: 68). It was found in fully developed form. It is thin, buff and beautiful (Fairservis 1971: 138).

Context	Wares	Manufacturing Techniques	Prominent Shapes	Decorations	Firing
<b>Mehrgarh IV-V Sur Jangal I- III/ Rana Ghundai I- III</b>	<i>KB Black on Buff Ware; KB Brown on Buff Surface Ware</i>	Wheel-made	Bowls and jars	Geometric and rarely animal designs	All the variants were fired in oxidized conditions
	<i>KB Polychrome Ware</i>	Wheel-made	Bowls, jars and platters	Geometric designs	
	<i>KB White on Dark Slip Ware</i>	Wheel-made	Bowls, jars and pedestalled cups	Geometric designs	
	<i>KB Red Paint Ware</i>	Wheel-made	Bowls, jars and platters	Geometric designs	
	<i>KB Oxidized Ware</i>	Wheel-made but rarely coiled constructed	Bowls and jars	Not decorated but slipped	
	<i>KB Wet Ware</i>	Wheel-made	Large jars	Ridges were formed from some sort of wet fabric	
	<i>Spezand Black and Red Rim Ware</i>	Wheel-made	Open bowls and large dishes	Polychrome decorations with broad lines	Oxidized
	<i>Sultan Purple Ware</i>	Variant 1: Wheel-made	Open bowls and Vases	Not decorated	Oxidized



Context	Wares	Manufacturing Techniques	Prominent Shapes	Decorations	Firing
		Variant 2: Wheel-made and coiled			
	<i>Khojak Parallel Striated Ware</i>	Wheel-made	Jars	Series of ridges and depressions and deliberate curves and peaks are also formed	Oxidized
	<i>Mustafa Temper Ware</i>	Variant 1 and 2: Wheel-made Variant 3: Wheel-made; occasionally handmade	Open bowls and globular jars	Not decorated	Oxidized
	<i>Charikar Red Slip Ware</i>	Variant 1: Wheel-made Variant 2: Handmade involving coiling; slow wheel-made	Open bowls and jars	Not decorated	Oxidized
	<i>Malik Dark Slip Ware</i>	Wheel-made but in Fine Black Slip handmade pottery occurs	Open bowls, jars and a pedestal	Not decorated but slipped	Oxidized
	<i>Sirdar Coarse Buff Ware</i>	Wheel-made	Open bowls	Not decorated	Oxidized
	<i>Wali Sand and Gravel Temper Ware</i>	Handmade using coiling technique in baskets	Jars	Not decorated	Oxidized
	<i>Jangal Painted Ware (Variants: Jangal Black on Buff; Jangal Black on Red)</i>	Wheel-made	Globular pots, bowls, tall jars and pedestalled pots	Geometric and naturalistic designs	Oxidized

Table 7. KB Ware and Its Types/Variants (by the Present Researcher)

### 3.7.2.1.1 KB Black on Buff Slip Ware; KB Brown on Buff Surface Ware

These ceramics were found at Kili Gul Mohammad, Damb Sadaat, Kechi Beg and Karez Site. These ceramic types reached their peak during H2 period (see Table 2 for chronological comparisons and see Pl. 1) i.e. KGM IV and DS I (see Table 20 for chronological comparisons). Decoration wise, KB Black on Buff Slip is considered the prototype for Quetta Black on Buff Slip. The decorative motifs were executed on buff or yellowish-brown

background/slip with black [or brown] color (Fairservis 1956: 256). The Jangle Painted Ware very much resembles the KB Black on Buff Slip Ware (Asthana 1985: 175).

*Manufacturing Technique:* This was wheel made with smooth texture and finish (Fairservis 1956: 256; Asthana 1985: 174).

*Shapes/Forms:* Small open bowls, small mouthed and everted rim bowls, and small mouthed jars were the the common collected or obtained forms (Fairservis 1956: 256).

*Decoration Repertoire:* These variants almost have the same designs. The decorations were applied with a delicate feature or hair pen brush or such an instrument. The patterns were mostly executed between horizontal bands. The painted motifs consist of frieze of diagonally cross-hatched or hatched lozenges, triangles with an extra line in between, diagonally banded diamonds, triangles, a frieze of dangling or standing festoons with horizontals with more festoons, heringbone or harrowheads, frieze of ill-shaped 'z' type strokes, verticals between horizontals, frieze of short vertical strokes, short diagonal strokes either in one or two rows, groups of four diagonal lines between horizontals, hanging diagonals from rim, several friezes of arch designs over the other and empty spaces are cross-hatched, wavy bands, 8-shaped design with loops in the empty spaces, a shingle design, double outlined double-stepped motifs, diagonals between verticals, a leaf pattern, a humped bull design, etc. (Fairservis 1956: 320, Designs 38-60 p. 275-77).

*Firing Technique:* It was baked in oxidized conditions (Fairservis 1956: 256).

#### **3.7.2.1.2 KB Polychrome Ware**

It was found at Kechi Beg, Kili Gul Mohammad and Damb Sadaat in Quetta Valley (see Pls. 2, 17-18, 21-22 and 30). It is also a production of H2 Period—KGM IV-DS I formed by W. Fairservis (see Table 2 and 20 for chronological comparisons) (1956: 259; Asthana 1985: 176).

*Manufacturing Technique:* It was on wheel formed having smooth texture and finish (Fairservis 1956: 259; Asthana 1985: 176).

*Shapes/Forms:* Open bowls, bowls with straight walls, jars with small mouths and vases with large and straight walls were the basic shapes associated with this type (Fairervis 1956: 259; Asthana 1985: 176).

*Decoration Repertoire:* The vessels were decorated with geometric and floral motifs on red and black on reddish yellow surface. The main designs are horizontal parallel lines in these two colors and drawing frieze of motifs in between them. The lines and/or demarcation lines are usually executed with black and the broad red lines are executed between the black demarcated lines and the designs are applied in black color. With band designs, other geometric designs included cross-hatched or net designs, frieze of diamonds diagonally hatched, diagonally hatched designs, horizontal bands between verticals bands, zigzag diagonals in double lines, hanging loops with a dot inside and vertical lines, five vertical bands with gaps and black borders, diagonally hatched ellipses between bands, a frieze of wavy line between two bands and diagonally hatched ellipses bordered with below band, diagonal short strokes between two bands, herringbone/arrowhead shapes demarcated by two bands, palm leaf shape arranged between two bands, five vertical lines beside which two standing leader patterns that contained dots and it is bordered by two bands, irregular shaped rows of Zs between lines, banded verticals with standing rectangle and it is also surrounded with rectangle line, frieze of zigzag band within which standing and hanging cross-hatched triangle were drawn, rows of painted lozenges, etc. (Fairervis 1956: 277-79, Designs 66-84 p. 277-79).

*Firing Technique:* The firing conditions were recorded to be oxidizing (Fairervis 1956: 259).

#### **3.7.2.1.3 KB White on Dark Slip Ware**

It was recorded at Kechi Beg, Kili Gul Mohammad and Damb Sadaat in Quetta Valley. This is also associated with H2 (see Table 2 for chronological comparisons and see Pl. 3) (Fairervis 1956: 257-59). It is further classified into two variants in terms of slip colors i.e. 1. KB White on Reddish Slip and, 2. KB White on Blackish Slip which are most likely the result of different firing (Fairervis 1956: 257-58; Asthana 1985: 176).

*Manufacturing Techniques:* Both the variants were constructed on wheel; they usually have a smooth texture (Fairervis 1956: 258-59; Asthana 1985: 176).

*Shapes/Forms:* The two variants of this type were observed in straight or curved-sided open bowls, straight sided jars having flaring rims and pedestalled cups frequently occurred (Fairervis 1956: 258).

*Decoration Repertoire:* KB White on Reddish Slip (Variant 1): - Light paint was executed on red slip on this variant. It was usually decorated on the interior and exterior decoration is mostly parallel bands. This variant was decorated with linears or a combination of them. The repertoire of painted designs are frieze of loops or scallops, rim bands, frieze of multiple festoons, double diagonals from the rim, inner scalloping, groups of verticals between horizontal bands, a meandering line between with attached groups of verticals up and down and curvilinear vertical lines (Asthana 1985: 176; Fairervis 1956: 259, 321, Designs 98-107 p. 279-81).

KB White on Blackish Slip (Variant 2): - It was designed with white horizontal bands on the inner portions of bowls or platters. Other type of high vessels were painted on the outer side. They are widely spaces white bands, encircled dot, multiple horizontal lines, festoons without rim band and occasionally with a band, multiple friezes of horizontally arranged scallops and sometimes differently presented and occasionally elongated, semi-circles, horizontal bands, wavy horizontals, curve lines, etc. (Fairervis 1956: 259, 321, Designs, 85-97 p. 279-80).

*Firing Technique:* Both variants were fired in oxidized atmosphere (Fairervis 1956: 258-59).

#### **3.7.2.1.4 KB Red Paint Ware**

The survey of W. Fairervis recorded it from Kechi Beg, Kili Gul Mohammad, Damb Sadaat and Karez Site in Quetta Valley (see Pl. 4). It occurred in Period G and H2 (see Table 2 for chronological comparisons) (Fairervis 1956: 262).

*Manufacturing Technique:* It was made on wheel; its construction is with very fine sand but occasionally with fine hard clay. It possesses a sandy smooth texture and has a smooth finish (Fairervis 1956: 262-63).

*Shapes/Forms:* The often-occurring shapes were open bowls, platters, and small mouthed jars related with this type (Fairervis 1956: 262).

*Decoration Repertoire:* It was mainly decorated on the inside of the vessels with red or brown colors. The designs include horizontal broad bands, hooks, frieze of tripple lined triangles, multiple strokes attached with vertical lines, etc. (Fairservis 1956: 262-63).

*Firing Technique:* The analysis described its firing to be in oxidized conditions (Fairservis 1956: 262).

#### **3.7.2.1.5 KB Oxidized Ware**

It was found from Kechi Beg, Kili Gul Mohammad, Damb Sadaat and Karez Site in Quetta Valley. It was found comonly in Period H2 in the valley (see Table 2 for chrnological comparisons and see Pl. 5) (Fairservis 1956: 246).

*Manufacturing Techniques:* It was constructed with fine sand with occational bits of hard clay and red, black and brown tempers. It was mostly wheel made though rarely coiled constructed specimens occur too. The final result was a smooth to sandy texture and having smooth surface (Fairservis 1956: 246).

*Shapes/Forms:* Two forms were common: open bowls and globular jars with small mouths (Fairservis 1956: 246).

*Decoration Repertoire:* No decoration was applied on it; however, it was often slipped (Fairservis 1956: 246).

*Firing Technique:* The potters fired it in oxidizing conditions (Fairservis 1956: 246).

#### **3.7.2.1.6 KB Wet Ware**

It was recovered at Kechi Beg, Kili Gul Mohammad, Damb Sadaat and Karez Site in Quetta Valley (see Pl. 6). It was largely found in Period H2 (see Table 2 for chrnological comparisons) (Fairservis 1956: 268).

*Manufacturing Technique:* This ceramic type was formed on leaving a smooth texture (Fairservis 1956: 269; Asthana 1985: 188).

*Shapes/Forms:* Only large jars with small mouths were reported as the main by W. Fairservis (1956: 269; Asthana 1985: 188).

*Decoration Repertoire:* As a usual practice, the usual upper body was decorated. Some sort of fabric was used to create series of redges while the vessels were still leather hard. The paste applied was red or bright and it was cream or buff slipped (Fairservis 1956: 269; Asthana 1985: 188).

*Firing Technique:* This type/variant of the KB Ware was fired in oxidized conditions (Fairservis 1956: 268).

#### **3.7.2.1.7 *Spezand Black and Red Rim Ware***

This type was found from Kechi Beg, Kili Gul Mohammad and Damb Sadaat in Quetta Valley (see Pl. 7). It is a beautiful polychrome ware. It was only found in Period H2 (see Table 2 for chronological comparisons) (Fairservis 1956: 265).

*Manufacturing Technique:* It was made with very fine hard clay. It is a wheel turned ware with smooth texture and finish (Fairservis 1956: 265-66).

*Shapes/Forms:* Open bowls and large dishes were discovered its major forms (Fairservis 1956: 265).

*Decoration Repertoire:* It was sometimes buff or white slipped and polychrome decorations were applied. It was often painted with broad horizontal bands in red which were bordered with black narrow bands rim decoration was mostly inside and on the open bowls it occurred on the near the rim around the inside of the open vessels close to the rim. Some marginal red or black is usually at the rim on the exterior. It was also painted the exterior of the vessels on a buff or white slipped ware (Fairservis 1956: 265-66).

*Firing Technique:* As hinted from the non-porous vessel walls/sections, it was fired in oxidizing conditions (Fairservis 1956: 265).

#### **3.7.2.1.8 *Sultan Purple Ware***

It was witnessed at Kechi Beg, Kili Gul Mohammad, Damb Sadaat, Karez Site in Quetta Valley (see Pl. 8). It was frequent in period H2 (see Table 2 for chronological comparisons). It has two variants with no stratigraphic difference: 1. Fine and 2. Coarse (Fairservis 1956: 244-45).

*Manufacturing Techniques:* Variant 1: It was wheel-made with smooth and somewhat sandy texture and smooth finish. Variant 2: It was wheel-turned and coiled having sandy to rough texture and smooth finish (Fairservis 1956: 245).

*Shapes/Forms:* Open deep bowls, vases with small mouths and a piece of pedestal were associated as its frequently occurring forms (Fairservis 1956: 244).

*Decoration Repertoire:* Buff or light brown slip was applied on the vessels. When they were fired, this slip assumed purplish hue. "The purple color is not, as a rule, an over-all color (in both variants); it usually appears in patches or blocks, especially on the rims and upper body, indicating that the vessel was fired upside down with the upper part of its body close to the oxidizing flame". Nevertheless, both variants are undecorated (Fairservis 1956: 244-46).

*Firing Technique:* The makers fired this ware in oxidizing atmosphere (Fairservis 1956: 245).

#### **3.7.2.1.9 Khojak Parallel Striated Ware**

W. Fairservis recorded it at four major sites in Quetta Valley: Kechi Beg, Kili Gul Mohammad, Damb Sadaat and Karez Site (see Pl. 9). It is coarse ornamented ware common in Period H2 of W. Fairservis (see Table 2 for chronological comparisons) (1956: 268).

*Manufacturing Technique:* Mustafa tempers and hard clay was used for its construction. It was made on wheel with rough texture. It is smoothly slipped whereas the un-slipped wares were roughly finished, most often with granular (Fairservis 1956: 268).

*Shapes/Forms:* Jars were found to be its main forms (Fairservis 1956: 268).

*Decoration Repertoire:* The same slip as in Sultan Purple was used; it is thick. It was still wet when potter placed it on the wheel and rotates the wheel putting his fingers on the wet clay. Thus, it formed a series of ridges and depressions. Occasionally, curves and peaks were formed which was deliberate. Parallel bands run at right angles (Fairservis 1956: 268).

*Firing Technique:* It was fired in oxidizing atmosphere. Evidences suggest that the same firing techniques were used for Sultan Purple (Fairservis 1956: 268).



### 3.7.2.1.10 *Mustafa Temper Ware*

It was found in Quetta Valley sites like Kechi Beg, Kili Gul Mohammad, Karez Site and Damb Sadaat (see Pl. 10). It is a plain coarse ceramic in Period H2 (see Table 2 for chronological comparisons). It has three variants that resulted from different firing temperatures with no stratigraphic differences: 1. Mustafa Black Temper, 2. Mustafa Brown Temper and 3. Mustafa Red Temper (Fairervis 1956: 247-48).

*Manufacturing Techniques:* Three of the variants were wheel made; nevertheless, in Mustafa Red Temper occasional handmade was recorded. Mustafa Black Temper has a rough texture and granular or rarely gritty surface finish. Mustafa brown Temper is sandy and most often somehow rough and occasionally smooth texture with rough smooth or granular surface finish. Mustafa Red Temper is sandy but most often rough and occasionally smooth with mostly granular and occasionally smooth surface finish. Moreover, Mustafa Brown Temper “illustrates the technique of constructing a vessel in two parts and joining them when still wet. The joint is tightened by roughening the rim surfaces of the opening halves by incisions”. Further, Mustafa Red Temper “Black or brown temper is associated with red. Occasionally a piece of temper will be half red and half black, suggesting that the composition of the two tempers is identical. The difference lies in the kind of firing”. Occasionally, it was constructed in two pieces and then joined (Fairervis 1956: 247-48).

*Shapes/Forms:* As the discoveries have shown, the main forms were open bowls and globular jars (Fairervis 1956: 247).

*Decoration Repertoire:* A slip was applied mostly on red fired ware of variant 1. However, none of them was decorated (Fairervis 1956: 248).

*Firing Technique:* Three of the variants were fired in oxidizing atmosphere (Fairervis 1956: 248).

### 3.7.2.1.11 *Charikar Red Slip Ware*

Kechi Beg, Kili Gul Mohammad, Damb Sadaat and Karez Site in Quetta Valley (see Pl. 11). It has two variants. Variant 2 is coarser and thicker than variant 1. Variant 1 reached its climax in Period H2 while variant 2 was common in Period H1 (see Table 2 for chronological comparisons) (Fairervis 1956: 252-53).

*Manufacturing Techniques:* Variant 1: It was made with very fine sand and at times hard clay. It was wheel made having a smooth texture and finish. Variant 2: It was hand-made involving coiling technique; moreover, slow wheel made ceramics were present too. It has a rough texture and its finishing is smooth to a little rough (Fairervis 1956: 252-53).

*Shapes/Forms:* Open bowls and occasionally jars with inward-tapering walls were related with it (Fairervis 1956: 253).

*Decoration Repertoire:* Variant 1 were occasionally polished. However, both variants were slipped (Fairervis 1956: 253).

*Firing Technique:* Both variants were fired in oxidizing conditions (Fairervis 1956: 253).

#### **3.7.2.1.12 Malik Dark Slip Ware**

It occurred at Kechi Beg, Kili Gul Mohammad, Damb Sadaat and Karez Site in Quetta Valley (see Pl. 12). It has four variants: 1. Fine Dark Slip, 2. Coarse Dark Slip, 3. Fine Black Slip and 4. Coarse Black Slip. There was no stratigraphic difference among these variants; their climax occurs in Period H2 (see Table 2 for chronological comparisons) (Fairervis 1956: 253).

*Manufacturing Techniques:* All the variants were declared wheel-made but in Fine Black Slip handmade occasionally occurred (Fairervis 1956: 253). Other details are as followed:

Variant 1: It was made with fine hard clay and fine sand. It has a smooth texture and smooth finishing (Fairervis 1956: 253).

Variant 2: Mustafa temper, hard clay and sandy clay was used in its construction. Its texture is sandy to rough with a smooth or slightly rough surface finish (Fairervis 1956: 253).

Variant 3: It was made with fine hard clay and its texture is smooth; it has a smooth finish (Fairervis 1956: 253).

Variant 4: Its construction was with hard clay with black temper. It possesses a rough texture with smooth to rough finish (Fairervis 1956: 253).

*Shapes/Forms:* All the variants have mainly open bowls, jars with small mouths, jar with straight walls, and a pedestal example occurred among them (Fairervis 1956: 253).

*Decoration Repertoire:* It appears not to be decorated (Personal Observations).

Variant 1: It was slipped on the outside although open bowls were slipped on the inside; rarely both in and out sides are slipped (Fairervis 1956: 253).

Variant 2: It was slipped on the exterior but open bowls were slipped on the interior (Fairervis 1956: 253).

Variant 3: Mostly exteriors of the vessels were slipped while interiors of the bowls are slipped (Fairervis 1956: 253).

Variant 4: It is only slipped (Fairervis 1956: 255).

*Firing Technique:* All the variants were fired in oxidizing atmosphere (Fairervis 1956: 253).

#### **3.7.2.1.13 Sirdar Coarse Buff Ware**

It was found at KGM, Damb Sadaat, Kechi Beg and Karez Site (see Pl. 13). It was mostly discovered from Period H2 (see Table 2 for chronological comparisons) (Fairervis 1956: 246).

*Manufacturing Technique:* It was completely wheel-turned with sandy texture and smooth to a little rough (Fairervis 1956: 246).

*Shapes/Forms:* This type/variant, as the W. Fairervis suggested, was particularly made in the shape of open bowls (1956: 246).

*Firing Technique:* It was fired in oxidizing atmospheric conditions (Fairervis 1956: 246).

#### **3.7.2.1.14 Wali Sand and Gravel Temper Ware**

It is a coarse plain ware recorded from sites like Kechi Beg, Kili Gul Mohammad, Karez Site and Damb Sadaat in Quetta Valley (see Pl. 14) which was frequently found in Period H2 of W. Fairervis (see Table 2 for chronological comparisons) (1956: 248).

*Manufacturing Techniques:* Coarse sand and gravel were used as paste. It was hand made with coiling and basket techniques together. It has a coarse sandy and a rough texture and roughly smoothing traces and most often granular surface finish (Fairervis 1956: 248).

*Shapes/Forms:* “Straight or slightly expanded flat-bottomed jars [and] heavy built-out rims...” occurred frequently as its main shapes (Fairservis 1956: 248).

*Decoration Repertoire:* It was not decorated but rarely slipped (Fairservis 1956: 248).

*Firing Technique:* It was fired in oxidizing atmosphere (Fairservis 1956: 248).

#### **3.5.1.1.2 Jangal Painted Ware**

It was found at Sur Jangal II in Duki; however, some of its stylization continued in Sur Jangal III (see Table 20 for chronological comparisons). This ceramic has two variants based on surface treatment: Black on Buff (see Pl. 15) and Black on Red (see Pl. 16). Both the variants have the same features i.e. paste and firing technique. There are thin and rarely thick specimens in the pottery corpus<sup>50</sup> (Fairservis 1959: 365-66).

*Manufacturing Technique:* The vessels were constructed with fine hard clay. It is a wheel thrown Pottery. They have a smooth surface with smooth finish (Fairservis 1959: 366).

*Shapes/Forms:* From the discovery, the main shapes included were globular pots, open bowls, tall jars, pedestalled pots, etc. (Fairservis 1959: 367-68, from Figs. 65 and 66).

*Decoration Repertoire:* The decorations of this ware (often Black on Buff) are very identical to fine line Kechi Beg Black on Buff Ware. “It is difficult to define Jangal Painted as a separate type, because of similarity of its decoration to that of fine-line Kechi Beg decorated wares of the Quetta Valley. This is especially true in the black-on-buff ware sherds recovered in the lower levels of Sur Jangal II”. Moreover, also, the motifs of Black on Red are like those Kechi Beg fine line decorated wares; however, further decorations were added i.e. bulls and black bucks. “The stylization of several design motifs becomes extreme in some examples that seem to be characteristic of Sur Jangal III phases”. Moreover, “the Kechi Beg and these black-on-buff wares are undeniably of a similar origin”. The vessels are slipped with red or reddish purple or buff colors; there were also non-slipped vessels. Geometric and naturalistic (stylized animals) designs are applied on the ceramics (Fairservis 1959: 365-66).

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<sup>50</sup> Group

*Jangal Black on Buff:* The decorations was found mostly framed or paneled. It was decorated with horizontal bands near the rim and sometimes with thin suspended verticals attached, groups of thin vertical bands, scallop attached verticals either in group or having spaces, cross-hatched standing rectangle attached with a broad band bellow, scales, glass-like splinter, willow leafs, triangles with smaller triangles within, serrated patterns, row of diagonally lined diamonds, rows of scallops up and down attached with lines and verticals in between the lines, hourglasses between group of verticals on each side, sigmas or perhaps birds, Togau hook or antler motif; cattle animals and other stylized animals drawn, elongated but thin animals separated by frieze of diagonal or horizontal strokes vertically arranged which are also seen bellow and up the animal body; plant-like verticals, probably multiple branched star like motif forming a hexagon space which is diagonally hatched, group of verticals with two row of scallops one at each side and diagonal strokes at each side, diagonally cross-hatching between two widely drawn lines, thin verticals between broad horizontals, net pattern and rectangular empty space, diagonally lined standing long rectangles with undulated vertical lines in the middle, diagonally lined or diagonally cross-lined lozenges, hand fan-motif, chain-like motif, thin verticals with intersecting diagonal lines making a shot pattern, circle and a dot pattern, very thin vertical groups of lines with a frieze of diamonds crossing horizontally between them, hourglasses between undulated vertical lines, and arrow head with hands at each side. Moreover, the animal designs occurred with other designs like frieze of slightly elongated stylized bucks separated with small horizontal strokes vertically and diagonal small strokes surround them, elongated row of humped and non-humped thin cattle with wide horns (Fairservis 1959: 383-84, Designs 47-89, p. 390-93).

*Jangal Black on Red:* It was dominantly found at Sur Jangal II. The designs frequently occur in panels or frames. Though it has usually the similar designs, they were then, at this stage, under control and carefully executed; it possess more sophistication in decoration than Jangal Black on Buff. Diagonals between horizontals, verticals on pedestal bases, hair line motifs, short verticals or diagonals framed by two horizontal lines, [diagonal bands vertically and thinly lined to create short trapezoids] with two sets of chain motifs framed with horizontals, framed diagonals in groups with spaces, framed and occasionally floating horizontal arrow heads/chevrons, horizontal arranged horizontally lined chevrons/arrowheads, zigzag elements, meandering elements; sometimes several together, framed scallops, horizontal

framed chains, lozenges differently hatched each and filled in one case, checkerboard pattern, diagonally lined verticals in panels, eye or dot design, broad net pattern, dashes, double triangles with a frieze of vertical strokes in the middle, framed sigmas, multiple verticals between two horizontals closely dangling and heavy verticals, small hanging scallops, double line scallop filled with short verticals, three lined hanging triangles, hatched willow leaf motifs, thinner verticals intersecting broader horizontals, etc. The animals (bulls, cattle, bucks or antelopes, goats or sheep) were represented usually in stylized manner which include mostly bulls with undulating lines or incline dashes, and the elongated legs are sometimes horizontally hatched. It includes stylized buck or antelope with elongated legs hatched in between in the same manner (Fairservis 1959: 184-85, Designs 90-161, p. 393-399).

*Firing Technique:* As observed, the firing was oxidizing (Fairservis 1959: 366).

In general conclusion, the potters first formed a rough shape of a decided vessel in mind either on a non-rotating anvil or a slow wheel using clay coils. The upper and lower portions were constructed separately in the case of many vessels; they were later joined carefully. For smoothing and joining clay coils, fingers or a spatula was used. After making pottery leather hard by drying, the smoothing and joining process was repeated. For finishing the ceramics, they were placed on a slow turntable or non-rotating anvil where they were scrapped with kind of a spatula and then smoothed with the add of fingers or a spatula. The smoothing and scrapping is efficient and in horizontal direction. However, the use of wheel (of an uncertain kind) is slow and inefficient too. At the end, turning the pottery upside down to attach a clay coil to form a ring base to most of the ceramics. Fingers or some sort of spatula was used for smoothing and scrapping this part (Hideaki *et al.* 2013: 89-90). Decoration wise, the complex decorations with black, red and white or a combination of them. The designs were mostly geometric applied in friezes giving controlled painting designs. The traces suggest that they were piled up in a kiln for firing but the firing was not often well controlled (Franke 2015d: 68-70). Furthermore, "Despite differences in fabric, the fine brush painting and patterns such as hatched lozenges and 'ladders' link this pottery with Amri Period I in Sindh" (Franke 2008: 660). Additionally, "The pottery with caprid and bird motifs recall the pottery of Sialk III, Hissar IB and IC, Namazga II..." (Asthana 1985: 64).

### **3.7.2.1.15 Distribution Area of Kechi Beg Ware**

It was distributed in Northern and Central Pakistani Balochistan and Southern Afghanistan (Asthana 1985: 65, 176). To specify, this culture was found at KB site (Fairervis 1956: 330), Anjira III-IV (de Cardi 1965: 127), KGM IV in Quetta, Mehrgarh IV-V in Kacchi-Bolan (Franke 2015d: 68-9), Rana Ghundai IIIa in Loralai and Sur Jangal II in Duki (Fairervis 1959: 385). It was also found in Naal I in Khuzdar (Franke 2008: 660). Furthermore, a recent survey S. Naseer has shown that it was found also at Siah Damb II, Sohr Damb I in Noushki in the Northwest Balochistan (see Fig. 11) (Personal Communication, October 12, 2018).

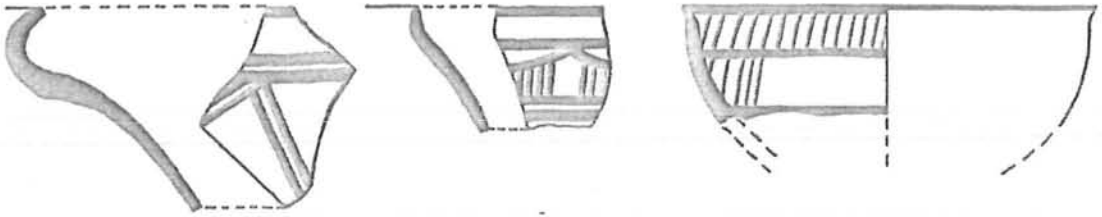
### **3.7.2.2 Other Cultural Assemblages/ Cultural Repertoire**

Stone and bone objects were recorded at Damb Sadaat I in large number (Kakar 1992: 12; Asthana 1985: 120). Stone objects included scrappers, cores, beads, stone balls, and so on (Asthana 1985: 120).

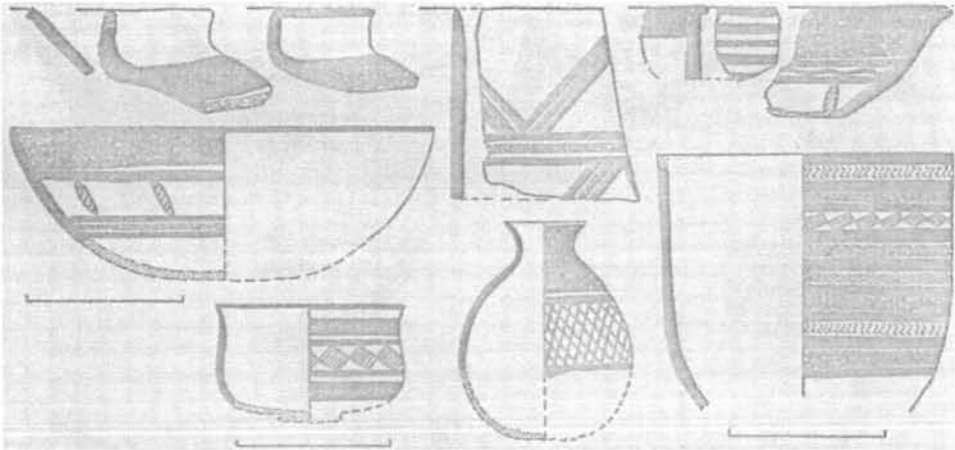
To summarize, many aspects of this culture are missing due to limited works focusing on this culture. For example, there is limited data on structural remains and cultural assemblages of this culture. Moreover, there is no data about the subsistence means or domesticated animals or plants of the culture yet. Only limited structures have been recorded with mud bricks and sometimes with stone foundations. Regarding pottery, there is a large number of types or variants related to this culture. In comparison with older pottery cultures, the KB Polychrome Ware bears complex designs covering all the outer surface (Franke 2015d: 72). Moreover, the evidences point out the annual transhumance movement of these people from Balochistan to Indus Plains (Possehl 1999: 513). KB Black on Buff Ware is the prototype for Quetta Black on Buff Slip Ware (Fairervis 1956: 259). KB Polychrome can be regarded the earliest polychrome ware. The pottery of this culture is distributed on a large scale in Balochistan and partly Afghanistan. In this culture, we see development and evolution in the arts and crafts, particularly ceramics, than the former ones. The type site is not yet excavated which might bring clear results about the unknown patterns of their life.



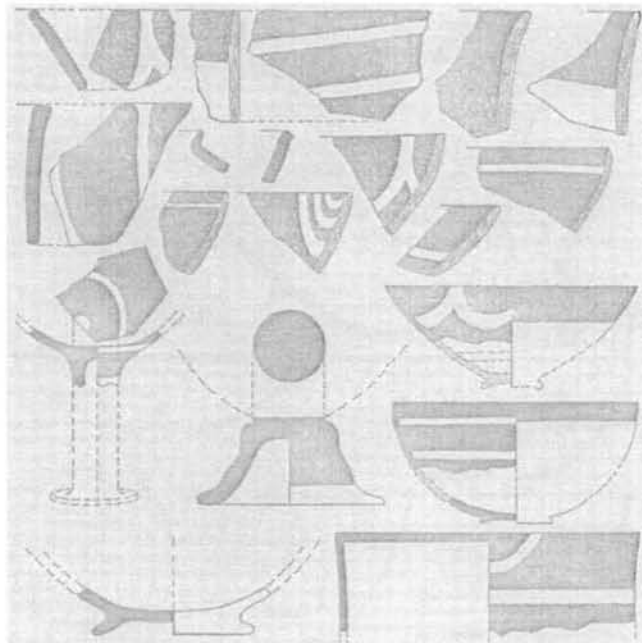
# Plates of Kechi Beg Culture



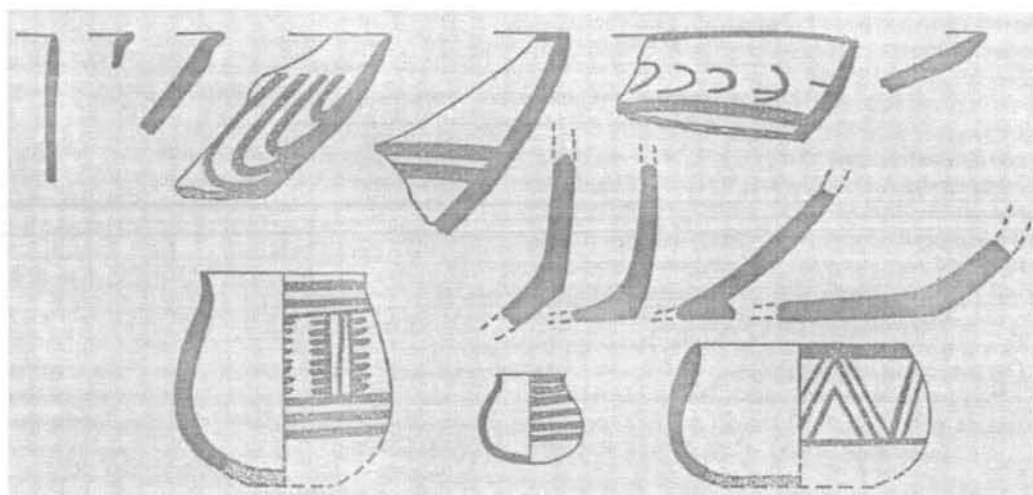
Pl. 1. Pottery Drawings of KB Black on Buff Slip Ware (from Fairservis 1956: 257) Not to Scale



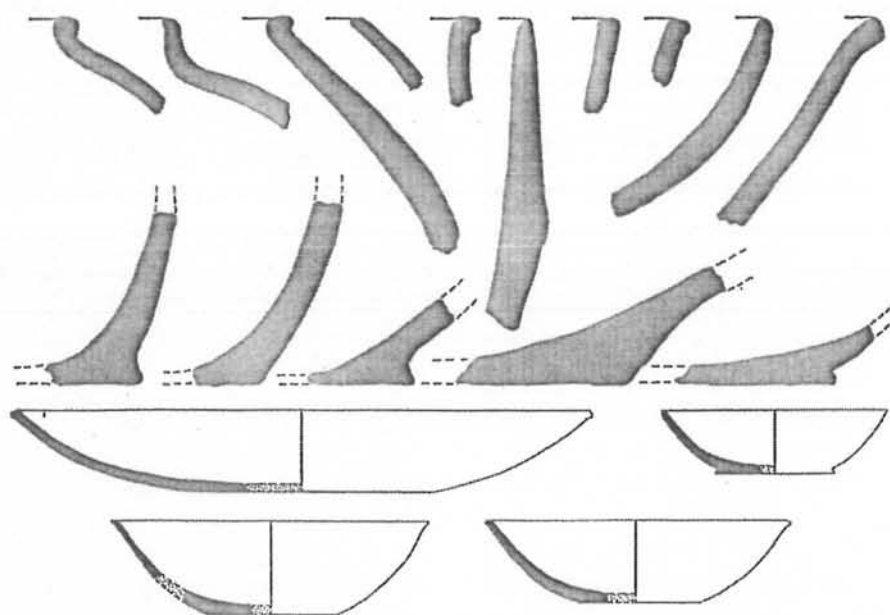
Pl. 2. Pottery Drawings of KB Polychrome Ware (from Fairservis 1956: 261)



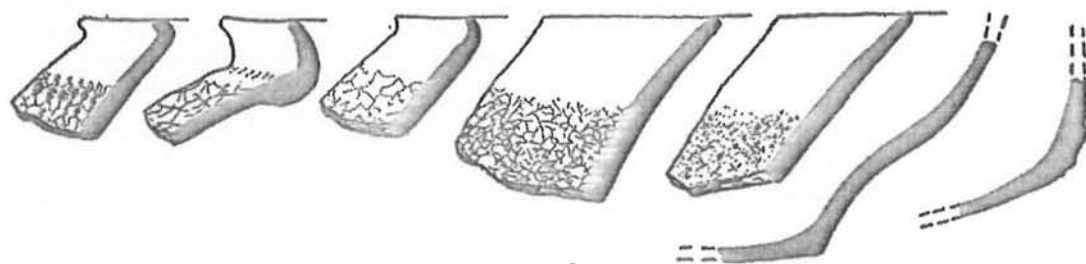
Pl. 3. Pottery Drawings of KB White on Dark Slip Ware (from Fairservis 1956: 256) Not to Scale



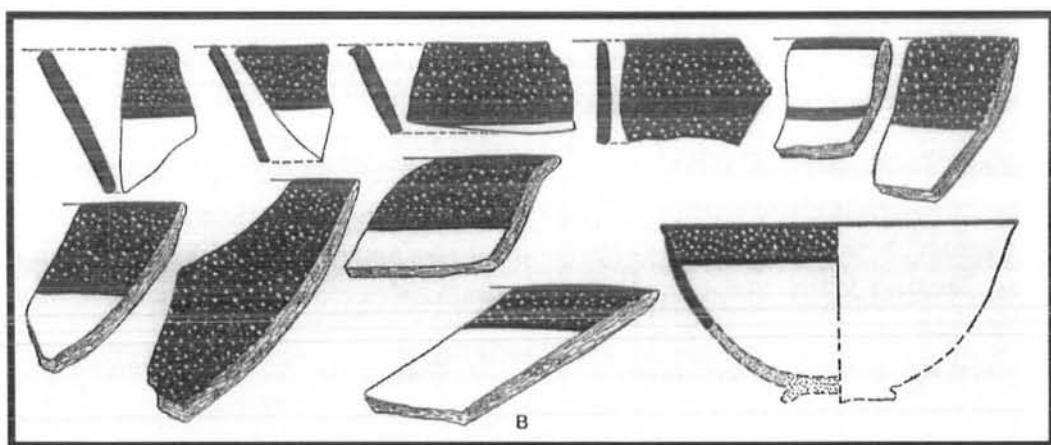
Pl. 4. Pottery Drawings of KB Red Paint Ware (from Fairservis 1956: 262) Not to Scale



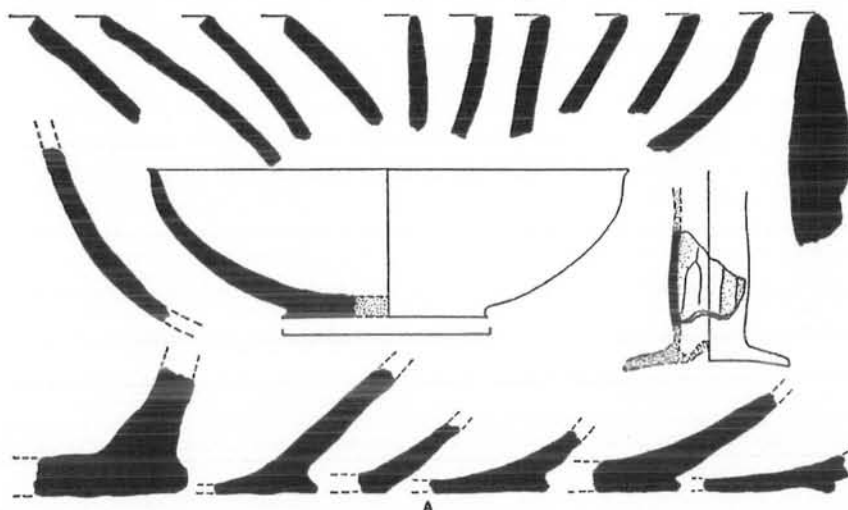
Pl. 5. Pottery Drawings of KB Oxidized Ware (from Fairservis 1956: 246) Not to Scale



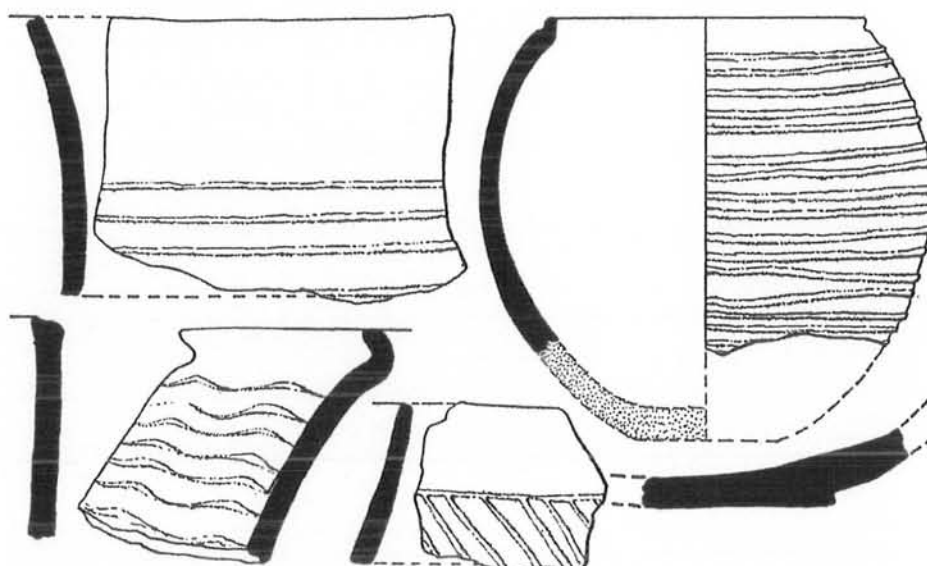
Pl. 6. Pottery Drawings of KB Wet Ware (from Fairservis 1956: 269) Not to Scale



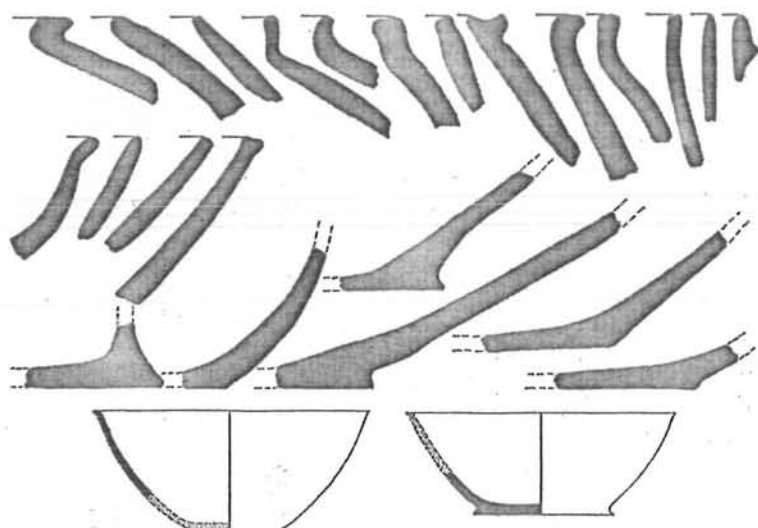
Pl. 7. Spezand Black and Red Rim Ware Pottery Drawings (from Fairservis 1956: 265) Not to Scale



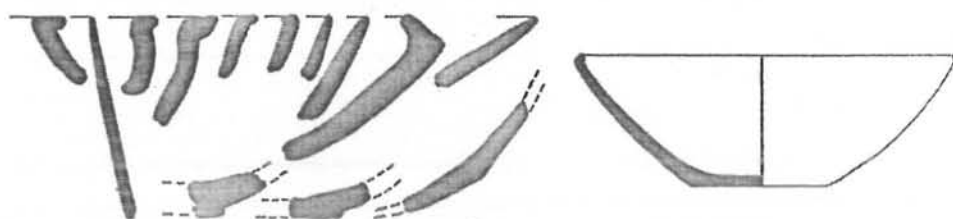
Pl. 8. Sultan Purple Pottery Drawings (from Fairservis 1956: 245) Not to Scale



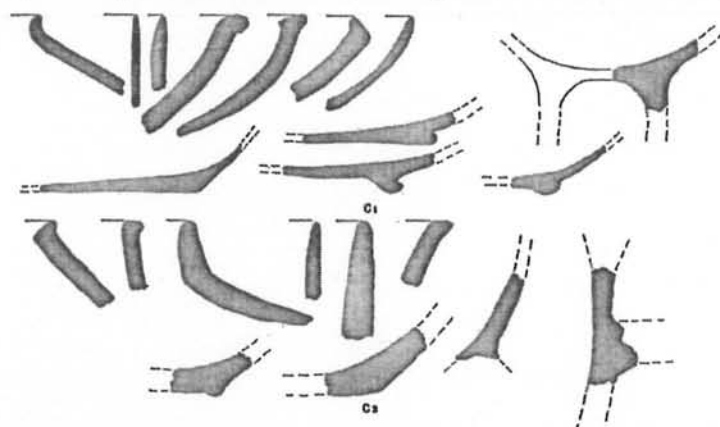
Pl. 9. Pottery Drawings of Khojak Parallel Striated Ware (from Fairservis 1956: 268) Not to Scale



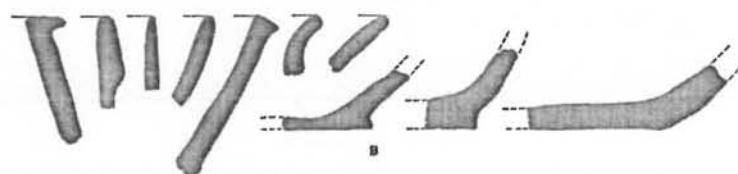
Pl. 10. Mustafa Temper Pottery Drawings (from Fairservis 1956: 247) Not to Scale



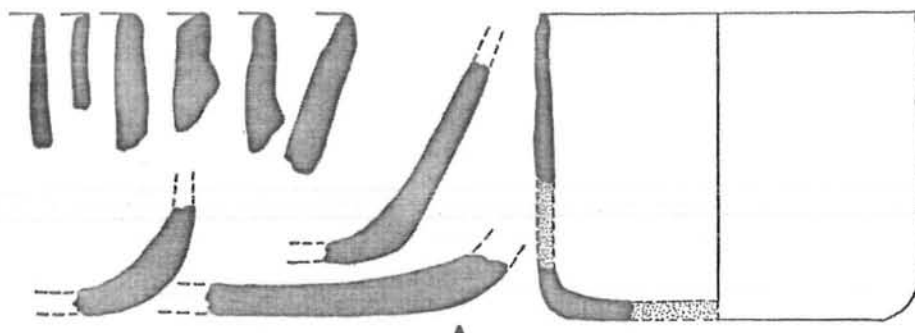
Pl. 11. Pottery Drawings of Charikar Red Slip Ware (from Fairservis 1956: 252) Not to Scale



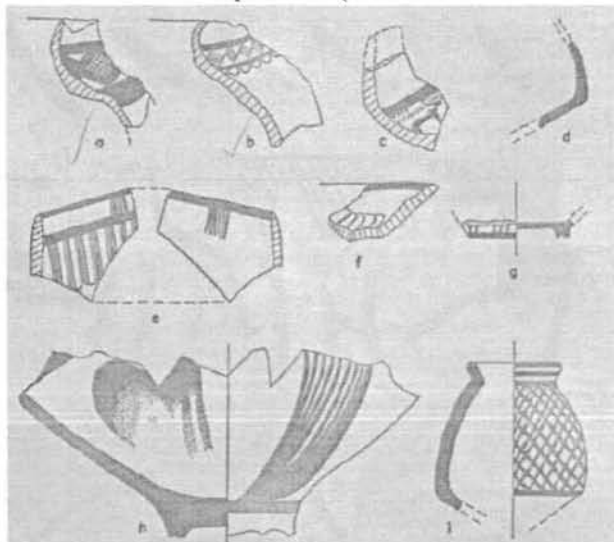
Pl. 12. Pottery Drawings of Malik Dark Slip (Fine: C1; Coarse: C2) (from Fairservis 1956: 252) Not to Scale



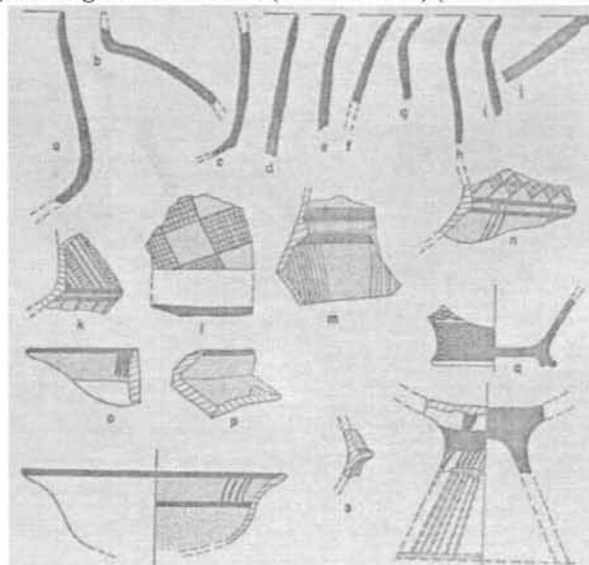
Pl. 13. Sirdar Coarse Buff Pottery Drawings (from Fairservis 1956: 245)



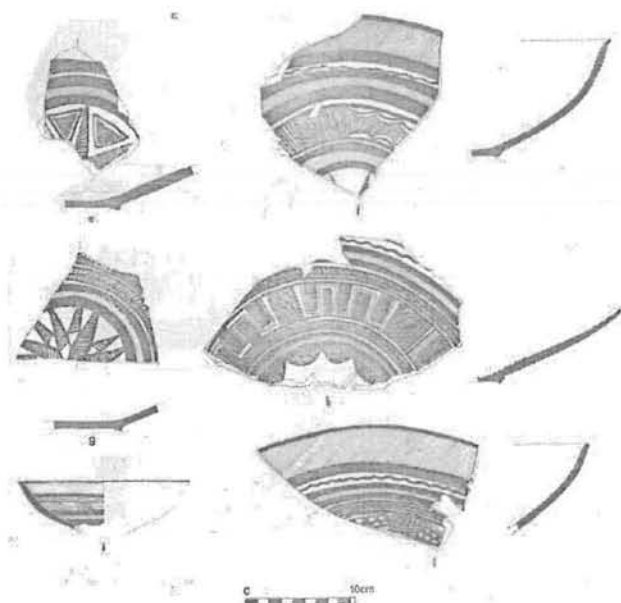
Pl. 14. Wali Sand and Gravel Temper Ware (from Fairservis 1956: 249) Not to Scale



Pl. 15. Pottery Drawings of Jangal Painted Ware (Black on Buff) (from Fairservis 1959: 367) Not to Scale



Pl. 16. Pottery Drawings of Jangal Painted Ware (Black on Red) (from Fairservis 1959: 368) Not to Scale



Pl. 17. Pottery Drawings of Kechi Beg Polychrome Style from Mehrgarh (from C. Jarrige *et al.* 1995: 150)



Pl. 18. Kechi Beg Polychrome Ware in Quetta Museum (from the Present Researcher) Not to Scale

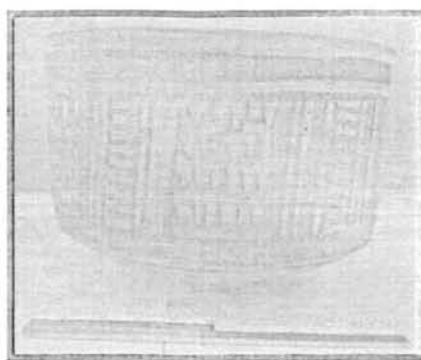


Pl. 19. Kechi Beg from S. S. Collection<sup>51</sup> (from the Present Researcher)

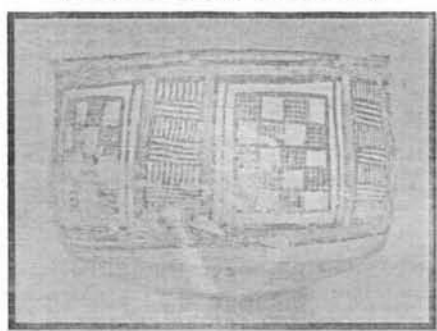
<sup>51</sup> Similar examples, including shape and decorations, have been found on KB sites (Fairservis 1956: 261). S. S. stands for Mr. Sultan Shahwani



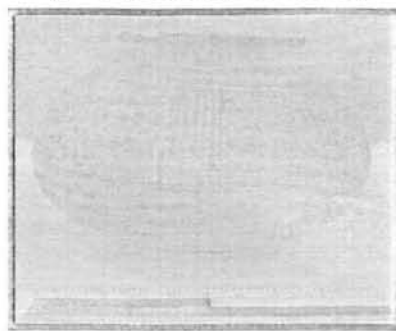
Pl. 20. Kechi Beg Pottery from DOAM Collection  
(from the Present Researcher)



Pl. 21. KB Polychrome Ware from DOAM Collection  
(from the Present Researcher)



Pl. 22. Kechi Beg Ware from Islamabad Museum  
(from the Present Researcher) Not to Scale



Pl. 23. KB Pottery from DOAM  
(from the Present Researcher)



Pl. 24. Kechi Beg Pottery from DOAM Collection<sup>52</sup>  
(from the Present Researcher)



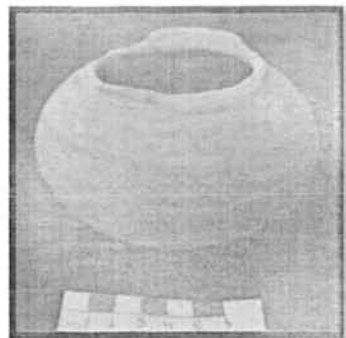
Pl. 25. Kechi Beg Miniature Pot from S. S. Collection  
(from the Present Researcher)

<sup>52</sup> This shape is common but decorations i.e. net pattern and hanging loops (Franke 2015d: 104-108, 118).

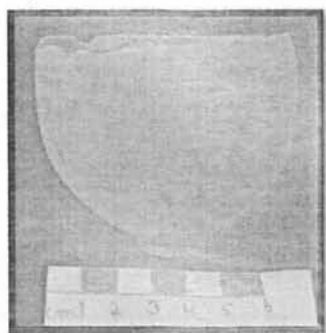




Pl. 26. Kechi Beg Ware from S. S. Collection<sup>53</sup>  
(from the Present Researcher)



Pl. 27. Kechi Beg Ware from S. S. Collection<sup>54</sup>  
(from the Present Researcher)



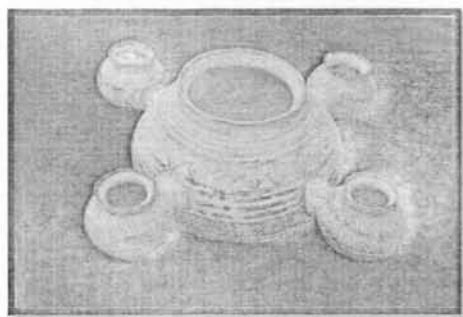
Pl. 28. Kechi Beg Ware from S. S. Collection<sup>55</sup>  
(from the Present Researcher)



Pl. 29. Kechi Beg Miniature Ware from S. S. Collection  
(from the Present Researcher)



Pl. 30. KB Polychrome Ware  
(from Franke 2015d: 69) Not to Scale

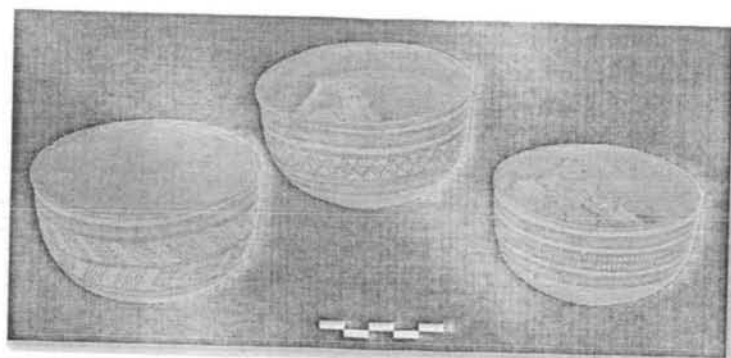


Pl. 31. Kechi Beg Ritual Pot  
(Franke 2015d: 79) Not to Scale

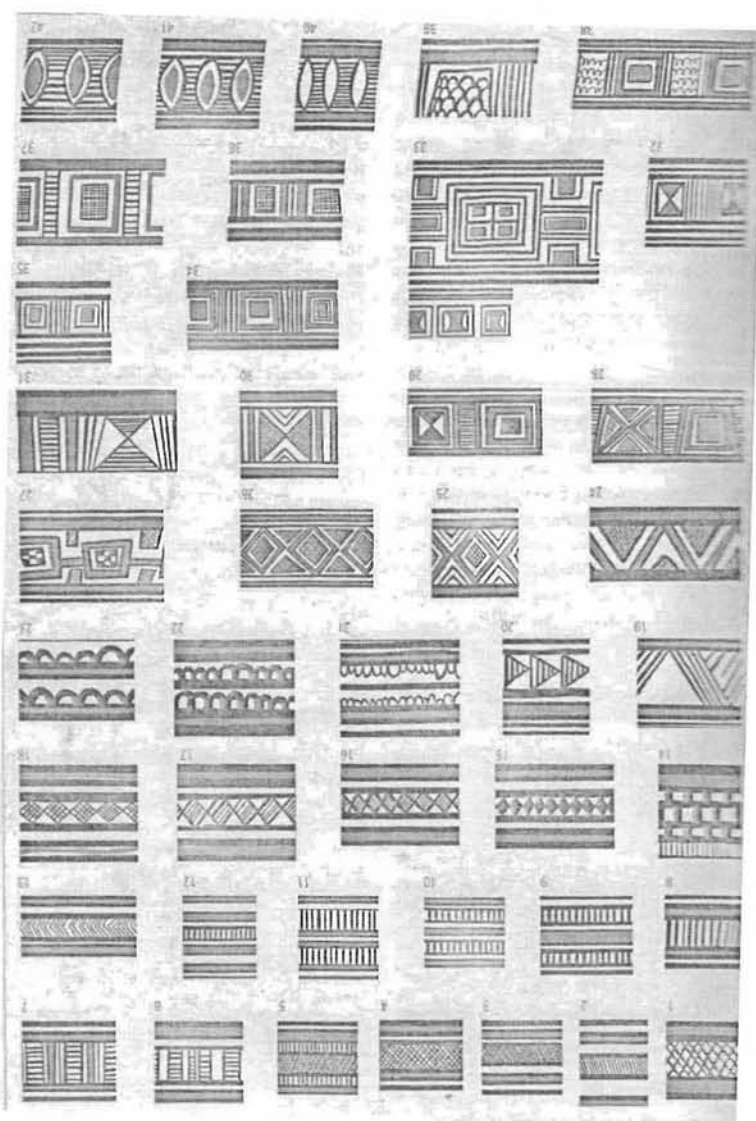
<sup>53</sup> The exact shape and similar decorations (hatching with bands) are found at Naal I, sometimes decorations take different places and sometimes an extra band is included in some specimens (Franke 2015d: 98-101, Figs. 78, 86, 88 and 89).

<sup>54</sup> The net pattern designs are depicted on similar shapes at Sohr Damb/Naal I, however the above loop decoration takes the banded pattern in other specimens and the above decoration is present on the other forms of the same period (Franke 2015d: 96-99, 108, Figs. 72, 78, 80 and 81).

<sup>55</sup> Almost this shape and the exact net pattern decorations with bands is found among undated pottery (Franke 2015d: 111, Fig. 141).



Pl. 32. Kechi Beg Ceramics from Sohr Damb/Naal I (from Franke 2008: 658)



Pl. 31. Bichrome Decorations (from Franke 2015d: 71) Not to Scale

## Chapter 4: Late Neolithic, Chalcolithic and Bronze Age Cultures of Indo-Iranian Borderlands/Balochistan

These cultures are usually regarded as an extension to the Iranian Cultures. There are many cultures i.e. Aceramic Culture<sup>56</sup>, Miri Culture, Early and Late Shahi Tump Cultures, Dasht/Emir Culture, etc. (Franke 2008: 654-58).

Very limited data was unearthed from Miri Qalat in Kech regarding Indo-Iranian Aceramic Culture. Stone architectures, some flints and few sherds were recorded. However, this culture is still confusing which requires further investigations (Besenval 2005: 1-2).

### 4.1 Miri Culture (1<sup>st</sup> half of the 4<sup>th</sup> mil. BCE to 2<sup>nd</sup> half of the 4<sup>th</sup> mil. BCE)

This culture was well attested from two major excavated sites Miri Qalat and Shahi Tump in Kech-Makuran. Overall, ten sites of this culture were recorded in Kech-Makuran<sup>57</sup>. Few other sites were traced in Bampur Valley and Kerman in south east Iran (Didier and Mutin 2015: 300-04). It has two major variants: Miri Ware and Miri Basket Ware. However, the records have a coarse ware as well (Mutin 2013: 253-54).

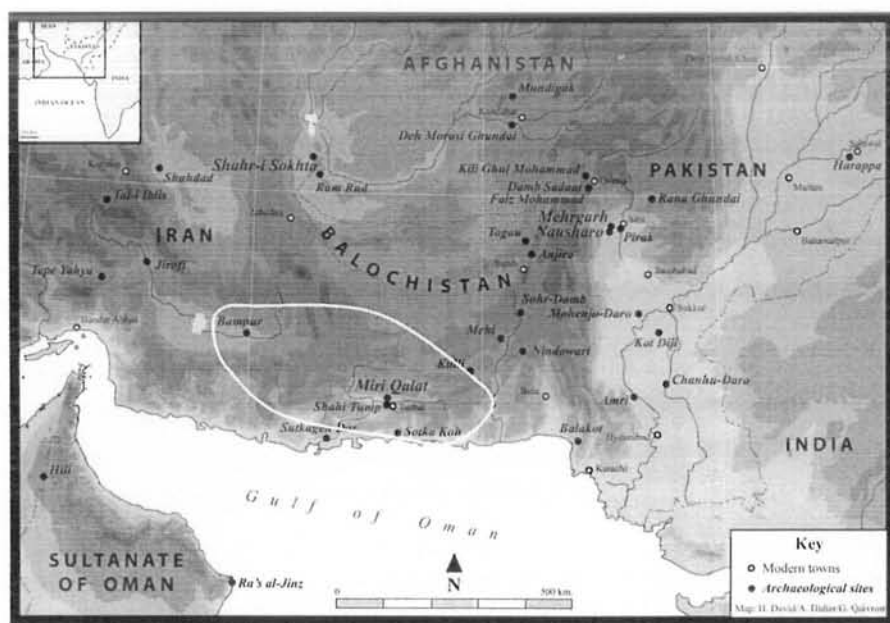


Figure 12. Miri Ware Distribution Area (from J. Jarrige *et al.* 2011: 8, Modified by the Present Researcher)

<sup>56</sup> Compare it with Aceramic Culture in the Chapter 2 i.e. Early and Late Neolithic Cultures of Balochistan.

<sup>57</sup> The name historically and phonetically is Makuran not Makran; it has been misspelled and pronounced.

suggests local influence. Hence, it is the result of neighboring areas and bears its own local character from the local tradition. The Irani connection is the strongest (Didier and Mutin 2013: 465).

B. Mutin has further added that the evidences indicate that it might have been developed from southeastern Iran (Bampur Valley). Nevertheless, the building technique of Miri Ware is coiling which is either poorly documented or not found on the borderland areas of Iran and Pakistan. Future researches may bring about coiling techniques from southeastern Iran or Turkamenia posterior to c.5000 BCE. Although technicalities are differeing, there are influences of Iranian ceramics on Miri Ware. In terms of ceramic forms and adornments, it looks to be a different ceramic tradition. He assumed that even though there are no presence of ceramic before this in the area, they might have produced iconographic images on some material that disintigrated with the passage of time. In the light of evidences, He summarised that Miri Ware developed most likely from southeastern Iraninan settlements; however, northeastern Balochistani settlements cannot be excluded as well (2012: 172). There are two major types/variants i.e. Miri Ware and Miri Basket Ware. However, there is also a coarse ware associated with this ware (Mutin 2013: 253-54).

Major Ware	Types/Variants	Manufacturing Techniques	Prominent Shapes	Decorations	Firing
Miri Ware	Miri Ware	Clay coils constructed and smoothed on rotating device	Bowls, goblets, jars	Geometric and animal designs and potters' marks	Oxidized but with reducing conditions
	Miri Basket Ware	Clay coils constructed inside baskets	Not defined	Automatic basket designs	Not defined

Table 8. Miri Ware and Its Types/Variants (by the Present Researcher)

4.1.3.1.1 *Miri Ware*

Miri Ware was found from Miri Qalat II and six or nine other Makurani sites in the region (see Pls. 2-3) (Mutin 2013: 253-54). It is mostly buff, red, gray, pink, or pink colored (Didier and Mutin 2015: 303).

*Manufacturing Techniques:* The clay/paste was well mixed (Didier and Mutin 2015: 302). The ceramics were constructed with clay coils. The shaping, smoothing and cleaning is

perhaps carried out on some sort of rotating device [perhaps a tournette] with an uncertain tool/tools (Besenval 1994: 82; Mutin 2013: 253). The ceramics are very fine (Didier and Mutin 2015: 303) or just fine wares (Mutin 2013: 254). Interestingly, it was constructed in a better and controlled way in Makuran than on Iranian settlements (Mutin 2012: 172).

*Shapes/Forms with Decoration Repertoire:* Different types of geometric decorations were applied on various shapes; also, an ibex design is common on this ware. The color for decoration was brown/black (Mutin 2013: 254; Didier and Mutin 2015: 303). Shallow bowls (decorated on the interior having lattice designs at four sides or with radiating designs), tall goblets (decorated with vertical designs), everted rimmed pots, small sized jars, big globular jars (Besenval 1994: 82). Apart from the body, the bases were also decorated and potters' marks are witnessed on some of the ceramics. They were used for eating, drinking and storing (Didier and Mutin 2015: 303).

*Firing Technique:* The ceramics were stacked on one another to fire in oxidizing and reducing conditions (Besenval 1994: 82). Firing resulted in their various colors. They were well-fired (Didier and Mutin 2015: 303).

#### **4.1.3.1.2 Miri Basket Ware**

Basket Ware was found from excavations at Miri Qalat (Mutin 2013: 254). The basket ware pottery had already started from Ceramic Culture in Balochistan (Personal Observations).

*Manufacturing Technique:* This ware was molded inside the baskets with coiling technique (Besenval 1994: 82; Mutin 2013: 254).

*Decoration Repertoire:* It possesses the impressions of the baskets which can be regarded as an automatic decoration caused from the basket designs which were said to be influenced for the later painted decorations in Ceramic Culture (Personal Observations).

*Firing Technique:* The ceramics were fired at "oxidizing and reducing conditions" (Besenval 1994: 82).

To conclude, this way of pottery making and designing is witnessed in the west and southeastern Iran (Besenval 1994: 84).

#### **4.1.3.1.3 Distribution Area**

It was found from Makuran sites and Bampur Valley (Chah Husaini). Its distribution area covered 400 kilometers from east to west (see Fig. 12). It shows much similarities with Chalcolithic ceramics of Iranian Plateau (Mutin 2013: 254).

#### **4.1.3.2 Other Material Assemblages/Cultural Repertoire**

*Stone Tools:* Stone vessels made of alabaster, steatite and other stones have been found. A mace-head was also found (see Pl. 4) (Besenval 2005: 3).

*Terracotta Objects:* Ovoid sling-stones, humped bovine figurine (Besenval 2005: 3), mat-impressed flat terracotta bangles, terracotta lamps, etc. were recorded (Besenval 1994: 82).

*Other Findings:* Seashell objects like bangles, bivalve and some filled with red ochre and other objects like skate sting, mother-of-pearl amulets, a mother-of-pearl figurine of a flat fish (see Pl. 7) and a sawfish rostrum (see Pl. 8) (Besenval 2005: 3) and a copper seal (see Pl. 5) (Didier and Mutin 2015: 306).

#### **4.1.4 Interment Practices and Goods**

The presence of a cemetery with 25 burials unearthed from the above mentioned complex architectural structures (see Pl. 9) (Didier and Mutin 2015: 301). The dead were placed in a foetal position and coated with ochre; they were also wrapped in a piece of cloth shroud or a mat coffin (Besenval 2005: 3). To obtain red ochre, hematite and galen was used (Besenval 2005: 3). The grave goods consisted of jewelry made out of sea-shell, (heated and non-heated) steatite, almandine garnet beads, bangles of sea-shell, ochre filled sea-shells, stone vessels, a small fish deposit, copper artifacts like (see Pl. 6 for bead jewelry) (Didier and Mutin 2015: 301) copper mirrors, a copper amulet, a pure copper axe (flat) which was wrapped in linen cloth, other axes, piches, spear points, chisels, and awls were recorded. A bone spatula was found in the hands of a dead (Besenval 2005: 3).

#### **4.1.5 Trade or Barter System**

They traded with Oman Peninsula objects i.e. seashells and fish (Didier and Mutin 2015: 303).

To conclude, this culture possess a rich cultural assemblage in every aspect. From the observation of limited assemblages, it seems that the inhabitants of this territory lived a

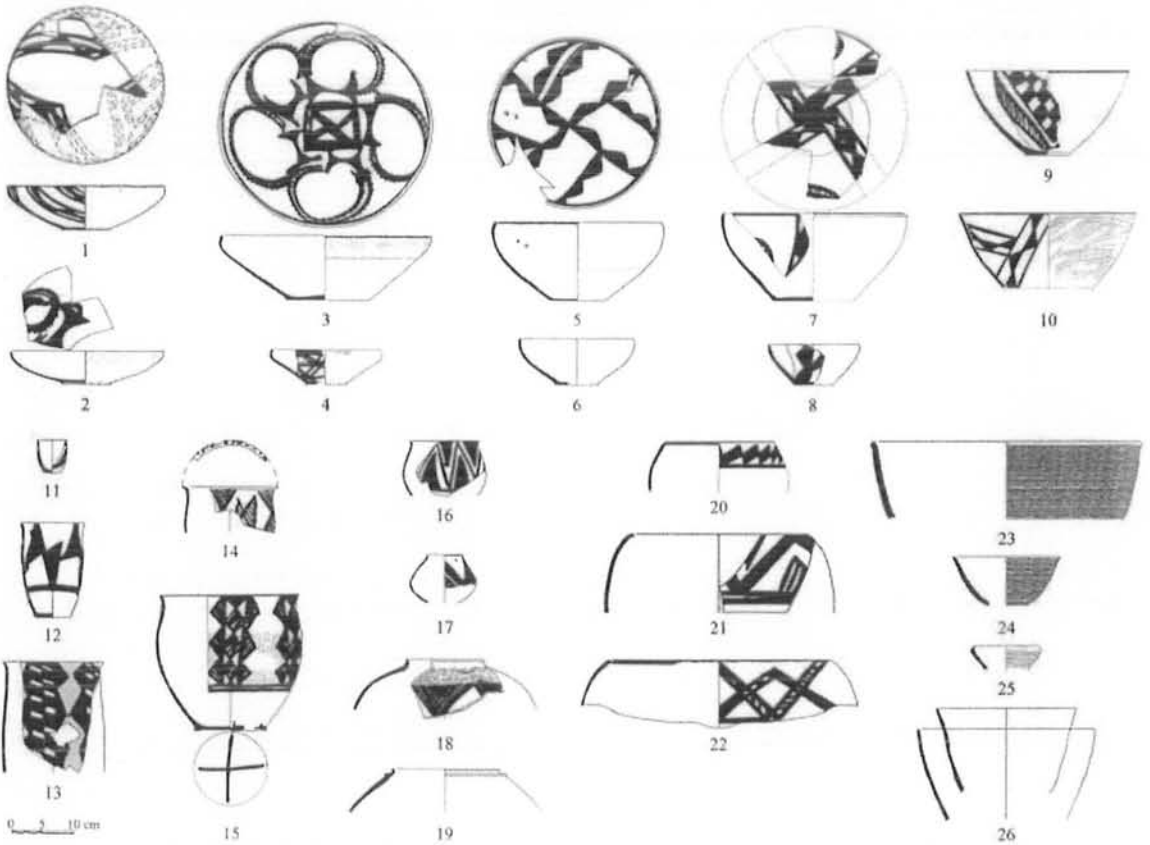
prosperous life. They lived in mudbrick houses on stone footings. They domesticated animals and plants for subsistence like cattle, goats, wheat and barley. Technologically, the inhabitants of this culture were advanced craftsmen of their time. The pottery which is already in developed form and with intriguing decorations are impressive. Eventually, the basket impressions automatically gave a decorative look on Basket Ware. According to A. Didier and B. Mutin the gray ware is one of the oldest of specimens among gray wares (2015: 303). Their burial practices speak for themselves which are different from other cultures in the region. Moreover, they had trade links with the outside world using marine and land trade routes. Further, large scale excavations are needed to get a full picture of this culture. Most of the sites in the region are plundered and are about to weather which desperately requires protection from the concerned authorities.



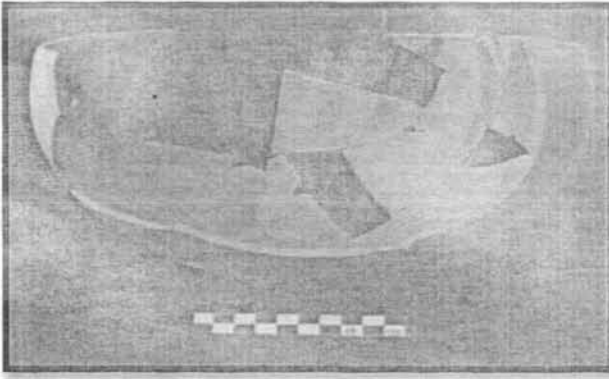
## Plates of Miri Culture



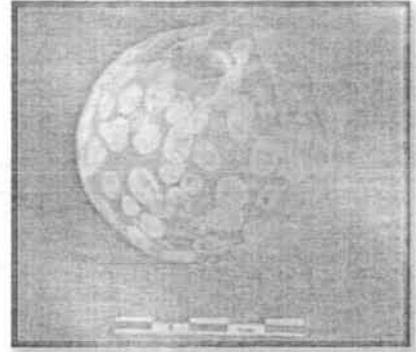
Pl. 1. Stone Building of Miri Culture (from Besenval 2005: 2) Not to Scale



Pl. 2. Pottery Drawings of Miri Ware Drawings (from Didier and Mutin 2013: 464)



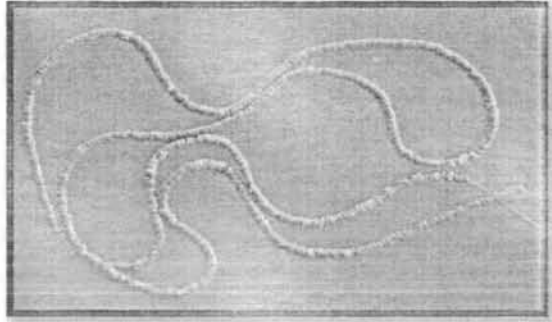
**Pl. 3. Miri Bowl with Interior Decorations**  
(from Besenval 2005: 3)



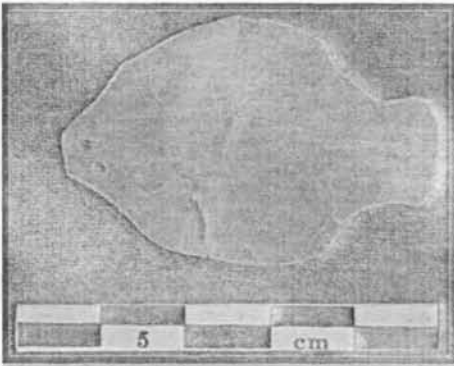
**Pl. 4. Stone Mace-head**  
(from Besenval 2005: 3)



**Pl. 5. Copper Seal** (from Didier and Mutin 2015: 306)  
Not to Scale



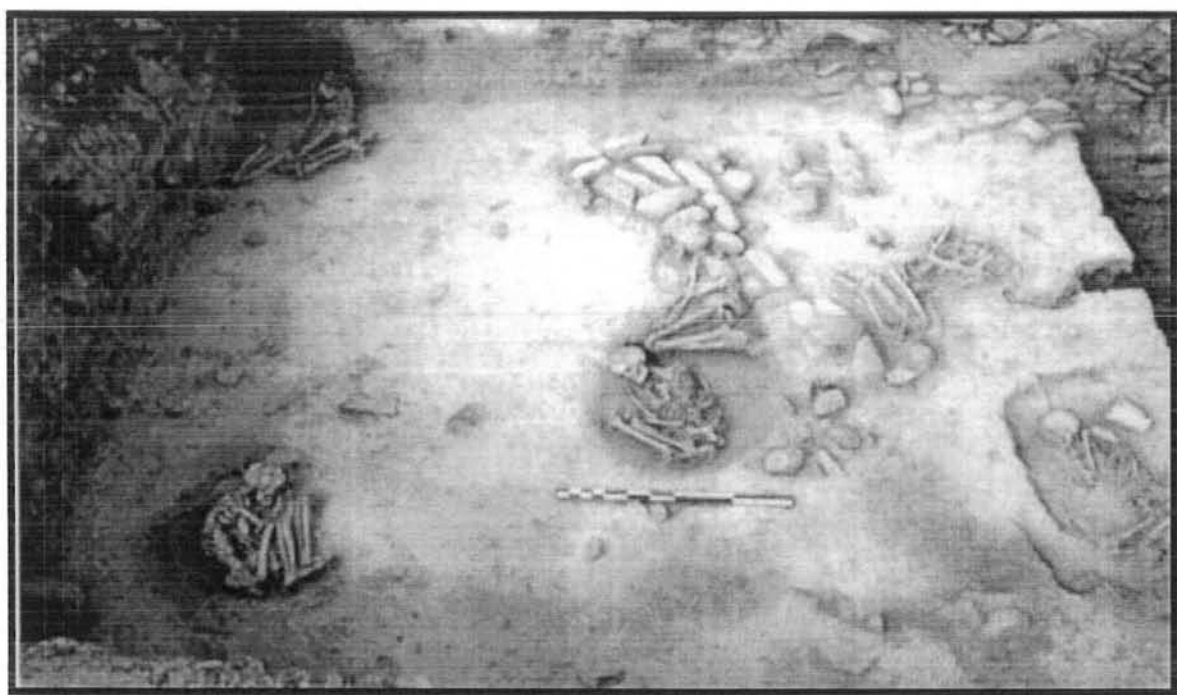
**Pl. 6. Jewelry** (from Didier and Mutin 2015: 302)  
Not to Scale



**Pl. 7. Mother of Pearl Fish Figurine**  
(from Franke 2008: 659)



**Pl. 8. Sawfish Rostrum**  
(from Besenval 2005: 3)



Pl. No. 9. Few Graves of this Culture (from Besenval 2005: 2)

## 4.2 Early and Late Shahi Tump Cultures/Shahi Tump Graveyard/Cemetery Culture (c.3500-2800 BCE)<sup>58</sup>

Aurel Stein was the first to uncover this culture who mostly recorded it from burials of Shahi Tump site in Kech Makuran (1931: 88-103). The material culture of this culture mostly was attained from large excavations at Shahi Tump and Miri Qalat in Kech Makuran (Besenval 2005: 4; Mutin 2013: 260; Didier and Mutin 2015: 304-07), Dasht Valley sites, etc. (Mutin 2013: 260; Didier and Mutin 2015: 304-07). Until now, more or less twenty sites of this culture have been recorded in Kech and the coastal region in Balochistan (Didier and Mutin 2015: 306). Most of the cultural materials come from burials. The lack of settlements and richness of graves is questionable (Besenval 2005: 4, 6). As a result of large grave material culture, A. Stein named it Shahi Tump Cemetery Culture (1931: 93-103; Besenval 2005: 4; Didier and Mutin 2015: 304; Mutin 2013: 260).

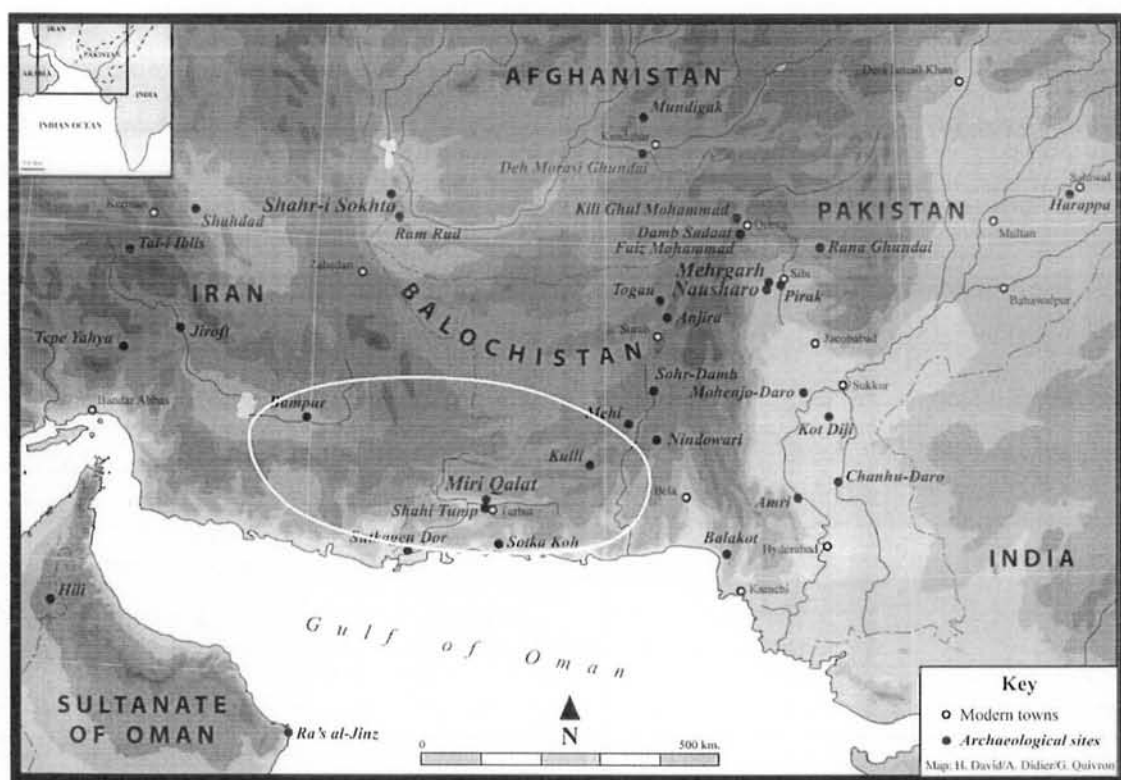


Figure 13. Shahi Tump Cultutre Extention (form J. Jarrige 2011: 8, Modified by the Present Researcher)<sup>59</sup>

<sup>58</sup> For cultural chronology, see Table 20 for comparisons.

<sup>59</sup> Tajikistan is not included in the map.

#### **4.2.1 Structural Remains**

Structures at Miri Qalat were excavated associated with STW and other wares like from eastern Pakistani Balochistan (Didier and Mutin 2015: 306).

#### **4.2.2 Subsistence Pattern/Mean and Domestication**

Naked and hulled barley and naked or free-threshing wheat were the found cereals. Besides, pulses like lentil and pea; further, wild leguminosae, wild gramineae, and flax etc. have been witnessed too (Tengberg 1999: 5-8). There were clear evidences of cotton for shroud making and a necklace thread (Besenval 2005: 5).

#### **4.2.3 Technology**

The technological aspects of this culture are as followed:

##### **4.2.3.1 Pottery/Ceramics**

The main center of this culture was Kech-Makuran. The pottery of this culture has been divided into Early and Late Shahi Tump Wares (Period IIIa) on the footings of stratigraphic variations that present two phases; namely, Early Shahi Tump Culture (hereafter ESTC) and Late Shahi Tump Culture (hereafter LSTC) (see Pls. 3-4). The former is mostly recovered from burials and architectural levels. The later is associated with only funerary deposits (Mutin 2013: 260, 264-65). As already mentioned, the whole culture was called Shahi Tump Graveyard/Cemetery Culture (Didier and Mutin 2015: 304), as that of A.H. Dani's Gandhara Grave Culture (Dani 1988: 70).

*Origins/Roots:* This ceramic culture was found alongside Miri Culture; however, its developmental phase is missing between them (Besenval 2005: 6). The ceramic assemblage shows that there is similarity in fabric, texture, firing, some certain shapes and designs to that of Miri Culture. However, it adds new design combinations, shapes, and profile features too (Didier and Mutin 2015: 304-05; 2013: 466). The ceramic colors are mostly buff, red, pink and gray. This pottery is known for its good standard (Didier and Mutin 2015: 304-5, 310). However, the traces of its genesis were evidenced from Miri Culture Period II of Kech-Makuran where this culture began to be constructed (Besenval 1994: 85; Mutin 2013: 260; Didier and Mutin 2013: 466). To conclude, the Period II and IIIa, show the gradual development of gray wares in Makuran (Mutin: 2013: 266). Moreover, according to R.

Wright, Emir Gray Ware is a product of LSTW (1984: 124-44); whereas, R. Besenval “finds comparative materials” in Makuran Period IIIb. As a whole, he has considered the whole Period IIIb a single culture<sup>60</sup> (2005: 6).

Major Ware	Types/Variants	Manufacturing Techniques	Prominent Shapes	Decorations	Firing
Shahi Tump Ware (STW)	<i>Early Shahi Tump Ware (ESTW)</i>	Coil technique and shaped on rotating device	Bowls, goblets, jars, pots	Geometric and animal	Well fired in oxidized conditions
	<i>Late Shahi Tump Ware (LSTW)</i>	Coil technique and shaped on rotating device	Bowls, goblets, jars, pots	Geometric (often swastika) and animal	Well fired in oxidized conditions

Table 9. Shahi Tump Ware and Its Types/Variants (by the Present Researcher)

#### 4.2.3.1.1 Early and Late Shahi Tump Wares (c. 3500-3000 and 3000-2800 BCE)

The LSTW is almost the same as ESTW; notwithstanding, there are multiple variations in features and design decorations as well (Mutin 2013: 264-66; Didier and Mutin 2013: 468).

*Manufacturing Techniques:* The vessels were constructed with coiling technique first. Then they were shaped and smoothed most probably on a rotating device either with fingers or with another object (see Pl. 5). This making technique was used for Early and Late Shahi Tump Ware (Didier and Mutin 2015: 319).

*Shapes/Forms:* The common forms consisted of bowls, pots, goblets, jars, bowls-on-stands and double joined vessels were among the rare forms. These were used for storing, consuming food and liquids, some for banquets at funerary rites or some served the dead (Didier and Mutin 2015: 304).

*Decoration Repertoire:* The ceramics were designed with geometric and faunal (probably antelope and scorpion) patterns with blakish-brown and red paints (Didier and Mutin 2015: 304). The decorations consist of rows of hatched lozenges, hatched triangles, triangles with wavy lines, music strokes, multiple zigzag lines, simple lines covering the body, simple lines hatched with multiple lines, etc. (see Pl. 1) (Didier and Mutin 2013: 467, Fig. 3). Bowls were

<sup>60</sup> Since the R. Besenval dealt with this culture personally, the researcher is following his classification.

adorned on the interiors with a frieze of decoration on the exteriors near the rims. The other forms of ceramics were designed on the exteriors (Didier and Mutin 2015: 304).

LSTW was decorated with Swastika motif frequently with three to six arms on the interior, a row of geometric motifs i.e. hatched triangles, loops, and diagonal bands at the interior rim part (Didier and Mutin 2015: 319). Moreover, hourglasses, lozenges, crosses in metops, garlands and palm motifs were the other decorations (see Pl. 2) (Mutin *et al.* 2017: 143, 146).

*Firing Technique:* The pottery were stacked during firing to produce gray color (Mutin 2013: 260). In the case of LSTW, the fire temperature was not controlled in the structures as they resulted gray to brown-light gray and “red on the same surface” (Didier and Mutin 2015: 319).

To conclude, generally it has its own original nature though to some extent. Furthermore, it is comparable with assemblages of Iran and eastern Pakistani Balochistan (Mutin 2013: 260). The burial deposits<sup>61</sup> were claimed to be of elite class. This type is also found in architectural contexts from these sites (Mutin *et al.* 2017: 147).

Within graves, the presence of basket-ware was also evident. In burial and architectural context, there were other pottery types, monochrome and polychrome, like found in Mehrgarh, Sohr Damb/Naal, Anjira, Amri, Togau and a style from Proto-Elamite and Uruk Civilizations. Hence, it was recognized as one of the ceramic production centers of this Shahi Tump Ware<sup>62</sup> in the Kech Valley (Didier and Mutin 2013: 466; 2015: 305-6).

*Distribution Area:* The distribution area of this pottery in general is comprised of southeastern Iranian Plateau with Sistan, Kerman, and Pakistani Makuran (Besenval 2005: 6; Mutin 2013: 266) and probably Tajikistan. However, the hub of this cultural was central southern Makuran (see Fig. 13) (Besenval 2005: 4, 6).

#### **4.2.3.2 Other Cultural Assemblages/ Cultural Repertoire**

Copper materials were compartmented rectangular or square seals (with lead alloy) found mostly in female burial context, weight made of alloy of lead and copper found in male burial context (see Pls. 7-9), seashells as red ochre containers and simple objects, incised seashell

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<sup>61</sup> The artifacts found in the graves

<sup>62</sup> It is for Early and Late Shahi Tump Ware



bangles, for bead making seashell, lapis lazuli, carnelian, quartz, citrine, gold—pure and electrum, and heated and non-heated steatite beads particularly for making bracelets and necklaces (see Pl. 10). Stone (steatite and alabaster) vessels were found too (Besenval 2005: 5). Other intermental assemblage embodied copper objects like a mirror, compartmented seals, etc. (Didier and Mutin 2015: 305-06). An egg-shaped weight having a lead core with a cast jacket in a copper and lead alloy which weighs over 15 kg was found in this culture in a funerary context. It is designed with a leopard and a goat pattern in an incrustated shell (Mille *et al.* 2005: 238, 243; J. Jarrige *et al.* 2011: 16). It is unique and one of its kind found yet. Its manufacturing required high level of craftsmanship (Mille *et al.* 2005: 243).

#### 4.2.4 Interment Practices and Goods

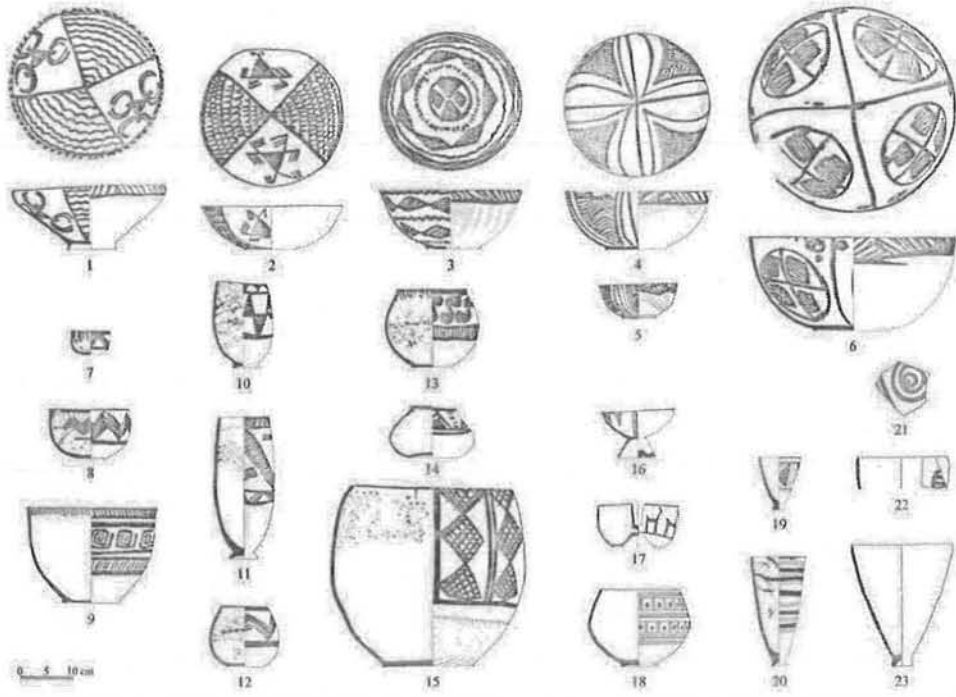
There were individual primary burial type, cremation burial type, multiple burial type and secondary burial type (Buquet 1994: 58-60). The dead were buried in foetal/flex position often covered with ochre like in the Miri Culture (see Pl. 7) (Besenval 2005: 4-6; Didier and Mutin 2015: 304). They were wrapped up either with a cloth as a shroud or a palm mat coffin (Besenval 2005: 4). Ceramics played a vital role in burial activities (Didier and Mutin 2013: 466; 2015: 305-6). Unlike Miri Culture, large number of ceramics (commonly STW) were unearthed as grave goods. Other intermental assemblage embodied stone vessels, similar bangles of seashell like in the Miri Culture, copper artifacts as a copper-lead weight with seashell design, a mirror, compartmented seals; seashell, lapis lazuli, carnelian and steatite bead bracelets and necklaces (Besenval 2005: 4-6; Didier and Mutin 2015: 304). In Shahr-e-Sokhta from burial practices, the LSTW related vessels were most often associated with fine materials, sacrificed kids are found in a specific area (Mutin *et al.* 2017: 146). A carbonized net from Shahi Tump was also discovered (see Pl. 6) (Thomas *et al.* 2012: 17).

#### 4.2.5 Trade

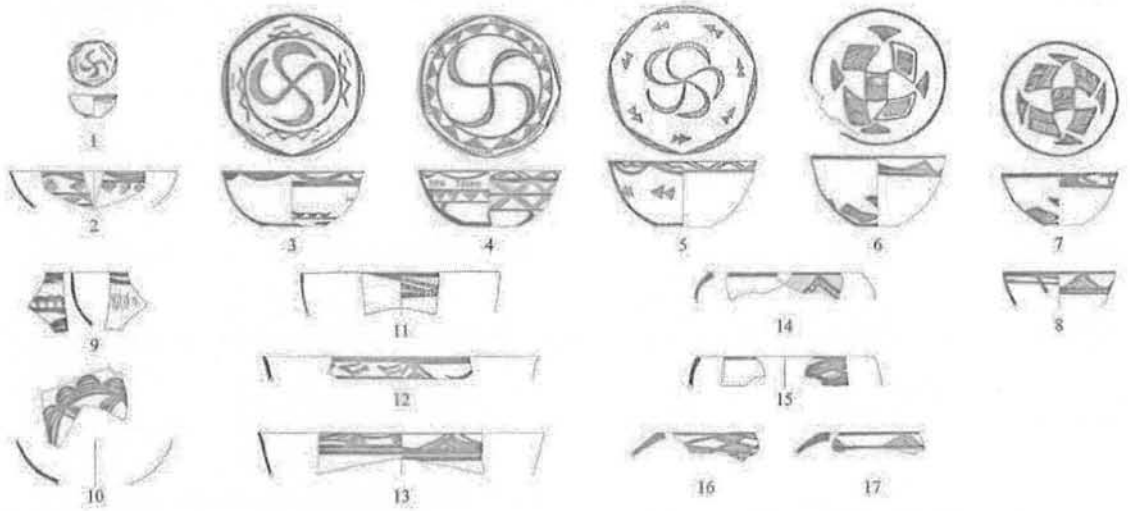
They were facilitated with foreign objects like steatite, lapis lazuli, carnelian beads and copper materials as a result of exchange from south-eastern Iran, northeastern Afghanistan, Indus Valley (Didier and Mutin 2015: 307) and probably Pakistani Balochistan (Personal Observations). Hence, it remained a part of vast interaction system (Didier and Mutin 2015: 319).

To sum up, it is divided into Early and Late Shahi Tump Culture because of chronological and aesthetic differences. There is richness and variety in the cultural assemblage of his culture. They used wheat and barley alongside other cereals as subsistence; however, animals as subsistence are yet to be researched. Nevertheless, it is assumed that as in the former culture they must have used cattle and goats for their subsistence. Technologically, they were skilled craftsmen and knew the art of making quality products like pottery, beads, seals, etc. and they knew how to easily treat and shape the precious and semiprecious stones into their desired shape. They were great metal workers; a copper-lead egg-shaped weight is the perfect example of this fact. They most probably lived in mudbrick houses and buried their dead with different objects. It can be suggested that cotton must have been cultivated and used for clothing and strings. They had established their trade links far and wide with neighbors too. Hence, they were living a prosperous life of its time in the region. Currently, people are living on ancient terms of the region like they use the shoots of date palms to make baskets, mats, etc. which was most probably the case with this culture.

# Plates of Early and Late Shahi Tump Cultures



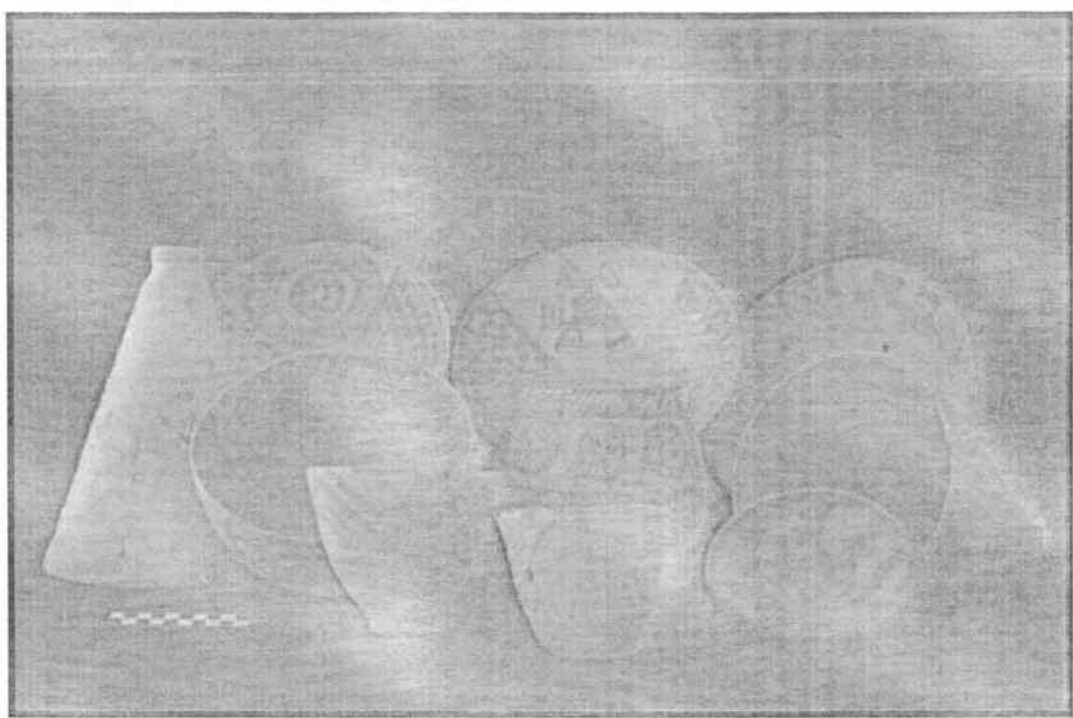
Pl. 1. Pottery Drawings of Early Shahi Tump Ceramics (from Didier and Mutin 2013: 467)



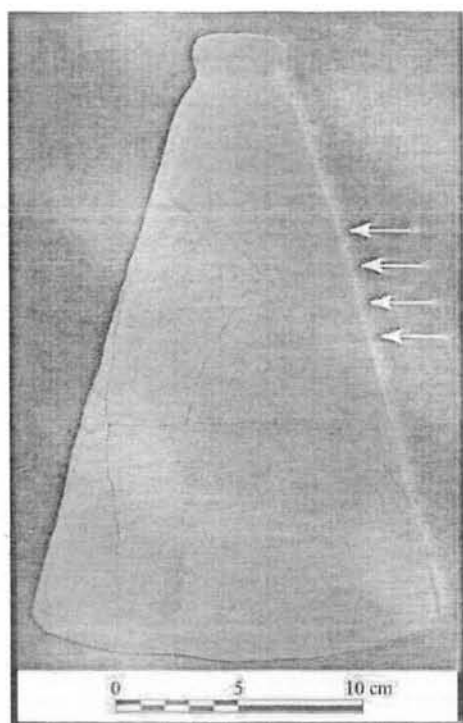
Pl. 2. Pottery Drawings of Late Shahi Tump Ceramics (from Didier and Mutin 2013: 469) Not to Scale



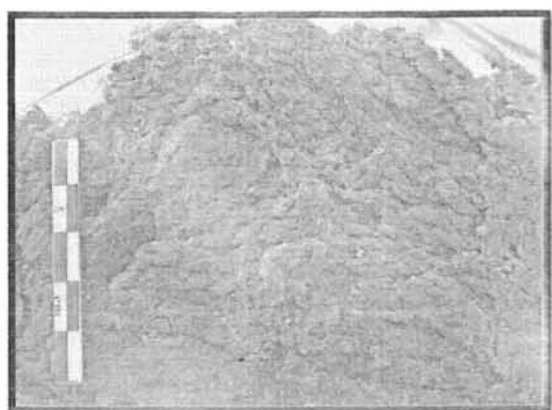
Pl. 3. Earliest Shahi Tump Pottery Ceramic Drawings (from Fairservis 1971: 226) Not to Scale



Pl. 4. Early Shahi Tump Wares (from Didier 2013: 46)



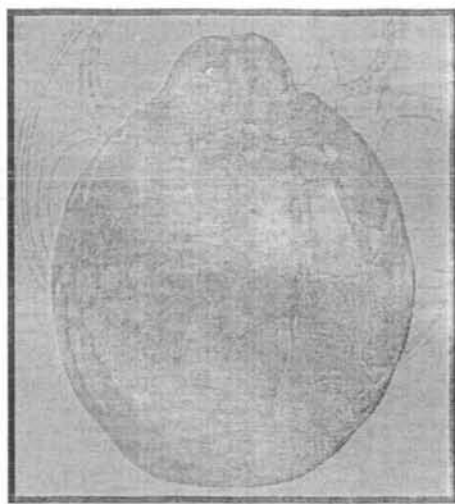
Pl. 5. Plain Conical-goblet  
from Mutin 2013: 264)



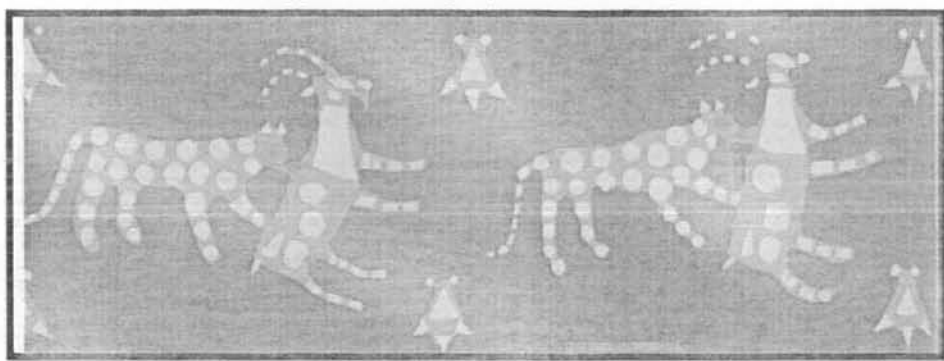
Pl. 6. Carbonized Net from Shahi Tump  
(from Thomas *et al.* 2012: 17)



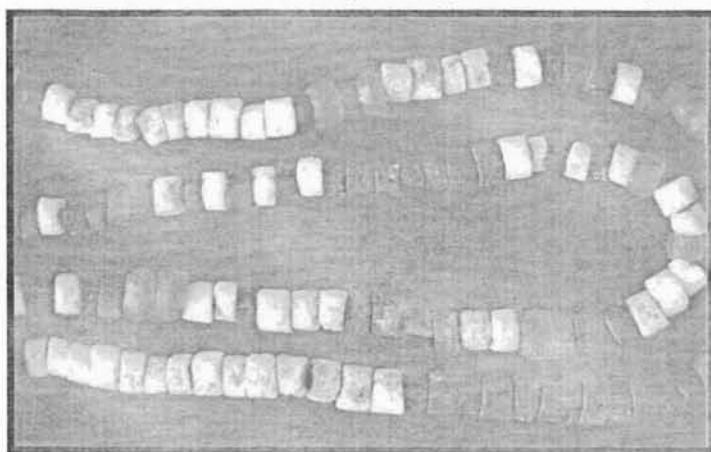
Pl. 7. A Burial with the Leopard Weight in Period IIIa (from Franke 2008: 660)



Pl. 8. The Copper-Lead Weight (Hussain 2015: 50) Not to Scale



Pl. No. 9. The Leopard Weight Unrolled View (from Mille *et al.* 2005: 236)



Pl. 10. Bead Jewelry  
(from Didier and Mutin 2015: 307) Not to Scale



Pl. 11. Ridged Decorated Bangle  
(from Besenval 2005: 4)

4.3 Dasht/Emir Culture or Dasht Plain Culture<sup>63</sup> (c.2800-2300 BCE)

This culture has been named after Dasht Plain Culture because many sites of this culture were found in and around of Dasht Plain mostly (Besenval 1992: 25). It was named Dasht/Emir or Dasht Plain Culture (hereafter Dasht/Emir Culture) after the attesting of huge amount of Dasht/Emir Ware (Didier and Mutin 2013: 309-10). It is a Bronze Age culture (Didier and Mutin 2013: 470) and is extremely homogenous. Eighty sites of this culture are known today (Didier and Mutin 2015: 308-9). This culture is principally found in some major areas like Dasht Plain and Valleys—Panodi, Karkak, Tang and Gurg Sechi; Nihing Valley and Kech Valley—Phulabad, Mand, Nazarabad, Miri Qalat, Sami and Shahrak; Coastal region i.e. Pasni—sites of Prahag and Jiwani—some traces; and the Northern Valleys of this region—Abdui, Dambitan and Wakai (Besenval 1992: 26-7). The inhabitants of this culture preferred hill slopes to reside and pottery workshops were constructed in the plains but not far from their houses (Didier and Mutin 2015: 308). This culture includes settlements, graveyards, pottery workshops (Besenval 2005: 6) and fishing settlements on the coastal region of Balochistan (Besenval 1992: 25-6).

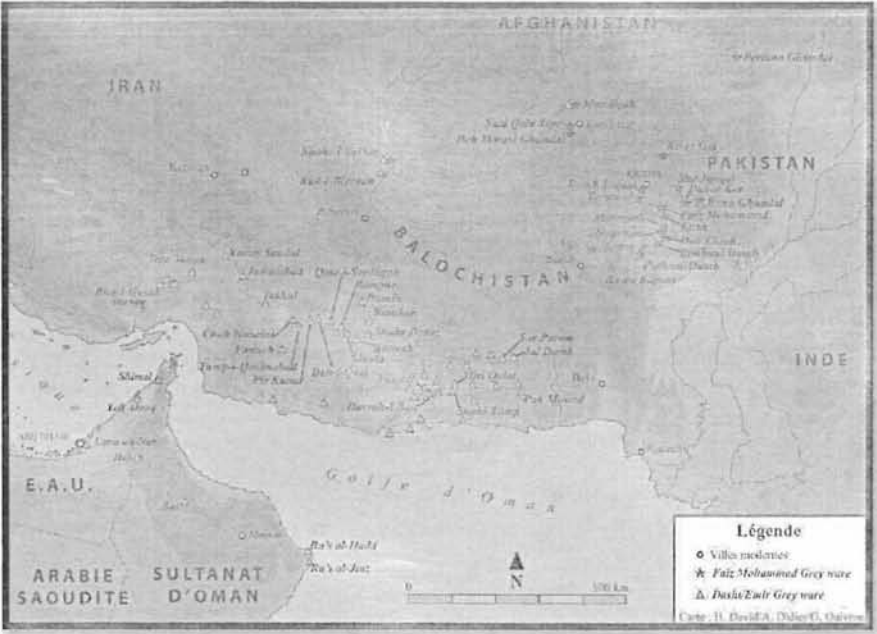


Figure 14. Dasht/Emir Ware and Faiz Mohammad Ware Distribution Areas (from Didier 2013: 237)

<sup>63</sup> The researcher has focused mostly on Pakistani Balochistan for this culture.



Chronologically, in Kech-Makuran, Dasht/Emir Ware was found in Period IIIb (c.2800-2600 BCE), Period IIIc (c.2600-2500 BCE) and it continues somewhat till Period IV at Miri Qalat (c.2500-2300 BCE) (see Table 20 for chronological comparisons) but in the later period it is different morphologically, stylistically and technologically (Méry *et al.* 2012: 195-7). Nonetheless, Period II and IIIa of Kech-Makuran show the gradual development of gray wares in Makuran (Mutin 2013: 266). The early Emir Gray Ware dates back to c.3300/3200-2900/2800 BCE<sup>64</sup> (Mutin *et al.* 2017: 143).

#### **4.3.1 Structural Remains**

The architecture pattern was not studied due to some issues. However, few architectural structures were uncovered from the later phase of this culture (Didier and Mutin 2015: 309, 312).

#### **4.3.2 Subsistence Patterns/Mean and Domestication**

The subsistence patterns and domestication could not be studied because of some uncertain problems. The sites near coastal region exploited the marine resources like fish and seashell (Didier and Mutin 2015: 309, 312).

#### **4.3.3 Technology**

There are many artifacts points out towards the technological aspect as in the following:

##### **4.3.3.1 Pottery/Ceramics**

The ceramics of this culture provided information regarding the production methods and distribution in early Bronze Age; they define continuity, change and rise of more artistic specialization and diversity in these ceramics (see Pls. 7 and 11) (Didier and Mutin 2013: 473; 2015: 309-10). This ceramic tradition has its roots in the local ceramic cultures during fourth millennium BCE, including Early Shahi Tump Ware (Méry *et al.* 2012: 195-7; Mutin *et al.* 2017: 146). Furthermore, there is a higher degree of specialization and standardization attached to it (Didier and Mutin 2013: 470). The ceramics mostly produced here are called Dasht/Emir Ware which is a fine painted ceramic culture (see Pl. 1) (Didier and Mutin 2015: 309-11). This pottery culture has multiple stylistic, technological and aesthetic similarities

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<sup>64</sup> However, its prototype is not included here; it is included in Shahi Tump Culture.

with southeastern Iranian sites, particularly Shahr-e-Sokhta II-IV and Bampur I-VI (Didier and Mutin 2013: 471; 2015: 311, 315).

This culture has many types. [Dasht]/Emir Ware is one of the principal productions of this culture along side fine decorated Red /Buff Ware, Ridged Ware, Dasht Polychrome Ware, Basket Ware (Méry *et al.* 2015: 269, 181; Didier and Mutin 2015: 309-13), Incised Gray/[Red] Ware (Besenval 2005: 6), and Wet Ware, etc. (Didier and Mutin 2015: 313). These wares possess high diversity in ornamentation themes and surface treatment (Méry *et al.* 2012: 196). The following table has the types/variants and their major characteristics (see Table 10):

Major Ware	Types/Variants or Classification	Manufacturing Techniques	Prominent Shapes	Decorations	Firing
Dasht/Emir Ware	<i>Dasht/Emir Ware or Emir Ware</i>	Combining coiling technique and rotating anvil or wheel-made	Bowls, goblets, pots, dishes jars, etc.	Monochrome, bichrome and polychrome; geometric, flora and fauna	c. 1000° C
	<i>Dasht Polychrome</i>	Combining coiling and rotating anvil technique or wheel-made	Bowls, cups, rarely jars and plates	Geometric designs	Oxidized
	<i>Orange Ware</i>	Not defined	Open vases, bowls, jars, dishes, and pots	Geometric, flora and fauna designs	Well fired
	<i>Burnished Streak Ware</i>	Not defined	Bowls, dishes, cups, jars, etc.	Geometric, flora and fauna designs	Well fired
	<i>Ridged Ware (Buff/Red and Gray)</i>	Wheel-made	Large bowls, pots, jars, etc.	Geometric designs	Well fired
	<i>Painted Buff/Red Ware</i>	Not defined	Not defined	Geometric designs	Well fired
	<i>Incised Gray/Red Ware</i>	Combining coiling and rotating anvil technique	Bowls, pots and beakers	Comb incised; architectural and geometric designs	At about 1000° C
	<i>Wet Ware</i>	Wheel-made	Not defined	Fingers applied when wet to form designs	Well fired

Major Ware	Types/Variants or Classification	Manufacturing Techniques	Prominent Shapes	Decorations	Firing
	<i>Basket Ware</i>	Handmade; molded in baskets	Not defined	Basket impressions	Well fired

Table 10. Dasht/Emir Ware and Its Types/Variants (by the Present Researcher)

#### 4.3.3.1.1 *Dasht/Emir Ware or Emir Ware*

Dasht/Emir Ware or Emir Ware was first reported by A. Stein from Seistan in Iran with its characteristics (1931: 88-103). Further, W. Fairservis has defined it after Iran Plateau research (1961a: 86). Later, it was recovered from the surveys and excavations of French Mission to Makuran under the supervision of R. Besenval (2005: 1-9; Besenval and Sanlaville 1990: 100-22). Additionally, W. Fairservis named it Emir Ware after studying a pottery corpus from Seistan, Iran (1961a: 86; Mutin *et al.* 2017: 143).

It has various fine types and is often called Black on Gray (Mutin *et al.* 2017: 142). Many pottery workshops were recorded in Dasht Plain in Period IIIb and IIIc and there was limited assemblage in Period IV of Kech-Makuran chronology (see Table 20 for chronological comparisons) (Méry *et al.* 2012: 196-97). The potters' of this culture were highly specialized in pottery making of this type (Méry *et al.* 2015: 171; Mutin *et al.* 2017: 143).

*Manufacturing Techniques:* Fine clay was available in Dasht Plain or in the vicinity so they used it. First the body was formed roughly from shaped coils on some sort of rotating support; few others were formed from only clay coils. The bases of the vessels had a ring formed from a coil, "either modelled or turned" (Méry *et al.* 2012: 196-7; Didier and Mutin 2015: 310, 312). Hands, fingers or some type of tool was used for smoothing, scrapping and finishing (Didier and Mutin 2015: 310). As a result, it becomes very fine; however, seldom with identifiable inclusions (Wright 1989: 139).

In the later phase, especially the painted gray ware showed no stylistic change. However, technical changes occurred i.e. they used wheel frequently with better fabric, shaped vessels in a much-controlled way and it received a higher standard than in the former phase (Didier and Mutin 2015: 312; 2013: 474). The use of burnishing technique on the red paste is found too (Didier and Mutin 2013: 474).

More generally S. Hideaki and his fellows have observed from the collection of Aichi Museum in Japan that first a rough shape on a turntable or a non-rotating anvil was created with clay coils. The upper and lower parts were constructed separately. Then, these parts and coils were smoothed with fingers or a spatula and joined later. After leather drying, it was again smoothed by fingers or a spatula. The pottery was held upside down on a rotating device and scrapped. Horizontal smoothing is witnessed. They are flat and round based ceramics finished with scrapping by placing the ceramic upside down (2013: 90-1).

*Shapes/Forms:* Thin walled bowls, small sized goblets, canister pots, globular pots, large dishes, bowls with stands/pedestals, bowls and/or dishes with carinations, “truncated-conical jars and canister pots with a low truncated-conical” base, large bowls, wide open jars, basins, short-necked jars, etc. were the main forms selected for production (Didier and Mutin 2015: 310-13). While in the later stage, thin-walled bowls disappear and dishes, plates, and big truncated conical based-pots appeared (Méry *et al.* 2012: 196; Méry *et al.* 2015: 171, 73).

*Decoration Repertoire:* It was painted with black (Méry *et al.* 2015: 177) or reddish black (Méry *et al.* 2015: 177) but occasionally painted red. It is lustrous and occasionally matt. These decoations were applied either on inside or outside or both sides together (Wright 1989: 139). The geometric patterns include horizontal lines, triangle hatched friezes, frieze of hatched diamonds, etc. Two animals were painted on this ceramic tradition: caprid and fish. Floral patterns consisted of palm leaves/palm trees and hatched leaves. They are most probably the “representative of a late evolution of the Quetta Style” from Shahr-e-Sokhta I ceramics (Méry *et al.* 2015: 177).

In its later stage, the paintings were in black/brown, brownish light-red or seldom reddish brown. The bowls were either decorated on the interior or exterior of the upper area or on both sides together. The decorative motifs are mostly geometric patterns—lozenges and triangles—drawn in friezes, plant motifs—trees, palm trees, and certain kinds of leaves and zoomorphic designs—ibexes/goats, fish, seldom bees or scorpions. A new decoration technique called streak burnishing treatment in combination (see Burnished Streak Ware), on the interior or exterior, with painted designs and cordons on the bowls, jars and dishes. Also, bird and fish as decorations appeared in this stage. Running or jumping ibexes or goats presented in stylized manner on gray wares, leaf designs, eye design, slanted spirals, etc. were introduced. Now,

there is more homogeneity in ceramic paste and painted colors. The ceramic colors include brownish light red and pinkish buff. The painting pigments consisted of black to brownish black (Didier and Mutin 2015: 310-13).

#### **4.3.3.1.2 Dasht Polychrome Ware**

Dasht Polychrome Ware occurred mostly at Dasht Plain sites in Makuran (see Pls. 2 and 7) and it is dated to c.2800-2600 BCE (Didier 2011: 144).

*Manufacturing Techniques:* Moreover, it has also been claimed that it was made on wheel combining coiling technique (Didier and Mutin 2015: 310; Méry *et al.* 2015: 171).

*Shapes/Forms:* Bowls, cups, rarely jars and dishes have occurred as its main shapes (Didier 2013: 138-40, from Figs. 99-101).

*Decoration Repertoire:* Dasht Polychrome Ware was highlighted with black color and these decorations were filled with red, white and yellow pigments. The decorations consisted of geometric designs arranged in metopes or friezes (Didier and Mutin 2013: 472; 2015: 311).

#### **4.3.3.1.3 Orange Ware**

It was mainly recorded in Period IIIc in Makuran (see Table 20 for chronological comparisons and see Pl. 3) (Besenval and Didier 2004: 163).

*Shapes/Forms:* Bowls, open vases, jars, dishes, and pots have been mostly attested associated with this ware (Besenval and Didier 2004: 164-66, Fig. 8).

*Decoration Repertoire:* The decorations are mainly geometric, flora and fauna. For instance, horizontal lines, wavy lines, zigzags, hourglasses, pipal leaves, multiple leaf flower, peacock, lion (?), and others (Besenval and Didier 2004: 165).

#### **4.3.3.1.4 Streak Burnishing Ware**

It is a variant of this culture (see Pl. 4).

*Manufacturing Technique:* It has been declared wheel-made (Didier and Mutin 2015: 312).

*Shapes/Forms:* Bowls, dishes, jars, etc. were selected to create ceramics of this type (Didier and Mutin 2015: 3013).

*Decoration Repertoire:* Streak burnishing technique has been applied as decoration (Didier and Mutin 2015: 301). It was painted either on the interior or exterior with geometric or naturalistic motifs. Its decorations are the same as on other types i.e. Orange Ware, etc. (Besenval and Didier 2004: 167-68, Fig. 9).

#### **4.3.3.1.5 Ridged Ware (Buff/Red and Gray)**

*Shapes/Forms:* Large bowls were recorded for it mostly (Didier and Mutin 2015: 311).

*Decoration Repertoire:* Mostly pointed or hatched wavy band related to hatched triangles were used; others decorations included square type triangles, stepped bands and lined leaf in combination with horizontal undulating lines and stright lines. In Period IV, they were mostly unpainted (Méry *et al.* 2015: 182-83).

#### **4.3.3.1.6 Painted Buff/Red Ware**

It is regarded as a variant of this culture (see Pl. 5).

*Manufacturing Techniques:* It looks that it was formed on wheel combining coiling technique (Méry *et al.* 2015: 171).

*Shapes/Forms:* The shapes included large bowls, cups, pinched rim jars, and canister jars (Besenval 1992: 25).

*Decoration Repertoire:* It is decorated with a row of lined lozenges, lined triangles, zigzag band, horizontal, wavy lines, friezes of dots, row of gazzelles, fish and stylized birds, rows of stylized caprids, probably feline, plant motifs, etc. (Méry *et al.* 2015: 177, Fig. 4).

#### **4.3.3.1.7 Incised Gray/Red Ware**

It was found in Period IIIc of Makuran Chronology (see Pls. 6 and 10) (from Besenval and Didier 2004: 171).

*Manufacturing Techniques:* It seems to have been made with the combination of coil building and rotating anvil (Didier and Mutin 2015: 310).

*Shapes/Forms:* The principal shapes are beakers, small pots, small bowls (Méry *et al.* 2012: 197), and goblets (Besenval 2005: 7). It was observed that the same incision characteristics also bear in Kot Dijian ware with similar temporal context (Personal Observations).

*Decoration Repertoire:* It was comb incised. Architectural designs, hatched triangles, braid motifs, wavy lines and zigzags, straight and oblique bands, and festoons were applied as decorations; they were sometimes applied in combination. These decorations were made with a sharp awl on the un-fired pottery (Méry 2015: 177, 183, 185). In the later stage, the ornamentation on it turned out complex. For example, they were decorated with “braiding motifs, wavy lines, festoons, hatched triangles, and hut motifs” (Didier and Mutin 2015: 313, 15).

#### **4.3.3.1.8 Wet Ware**

*Decoration Repertoire:* When the pottery was wet, the fingers were applied on the surface to make finer impressions as decorations (Didier and Mutin 2015: 311).

#### **4.3.3.1.9 Basket Ware**

*Manufacturing Techniques and Decoration Repertoire:* However, the basket ware was shaped in basket molds (Didier and Mutin 2013: 474) and the ceramics were fired with the baskets. The basket impressions can be considered as unintentional decorations.

*Firing Techniques for Dasht/Emir Ceramics:* Commonly, the ceramics were fired in a better way which produced the colors like light gray to bluish gray, buff, pink and red (Didier and Mutin 2015: 310). When fired, the vessels were stacked or a *saggar*<sup>65</sup> with combustible that produced reducing atmosphere and resulted in giving out similar colors i.e. light to dark gray. The ceramics were fired at c. 1000° C (Méry *et al.* 2012: 196). It was fired in a double chamber updraft pottery kilns (Hideaki *et al.* 2013: 90).

To conclude, the aesthetic innovation was on its height with the profusion of new complex designs, sometimes executed in combination with realistic decorations (Didier and Mutin 2013: 471). All the color decorations were applied after firing process on all the kinds of ceramics of this culture (Didier and Mutin 2015: 311).

#### **4.3.3.1.10 Distribution Area of Dasht/Emir Ware**

The core productivity center of Dasht/Emir Ware was Dasht Makuran region (J. Jarrige *et al.* 2011: 30). The above ceramic styles were found in southeastern Iran, particularly Dasht/Emir

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<sup>65</sup> It is a kiln furniture.



Ware was distributed to southern Indo-Iranian bordering regions, southern Afghanistan, eastern Balochistan (based on technological similarities of Faiz Mohammad Ware with Emir Gray Ware), western Makuran (Dasht Polychrome) and Oman Peninsula (fine Red and Gray Wares) (see Fig. 14 for the main distribution area) (Didier and Mutin 2015: 312). This culture reached an internationalization level of trade (Didier and Mutin 2013: 474).

To conclude, the potters of this culture were skilled pottery manufactures and had knowledge regarding the chemistry of colors (Wright 1989: 147). Various decorations were used; they were combined sometimes. They made monochrome, bichrome and polychrome painted gray ceramics. They used various ornamentations with geometric, animal and floral patterns. In Period IIIc geometric patterned turn simple and polychrome disappeared (Méry *et al.* 2015: 171, 173).

#### **4.3.3.1.11 Relation of Dasht/Emir Ware and Shahi Tump Ware**

The Dasht/Emir Ware<sup>66</sup> “is more broadly used at present to name the totality of fine, black-on-gray ceramic products distributed on the southeastern Iranian Plateau and beyond Persian Gulf from late 4th to middle second half of the 3rd millennium BC”, including Late Shahi Tump ware<sup>67</sup> (Mutin *et al.* 2017: 143). However, Late Shahi Tump Ware is excluded and dealt as the latter part of the Shahi Tump Culture.

Hence, R. Wright has dealt Emir Gray Ware as the ceramic culture with Late Shahi Tump Ware<sup>68</sup> (1984: 124–44). However, R. Besenval defined it a different culture from Makuran Period IIIb (Dasht/Emir Culture)<sup>69</sup> (2005: 6; Mutin 2013: 266).

#### **4.3.3.1.12 Dasht/Emir Gray Ware and Faiz Mohammad Ware**

The fine gray ceramics developed in two regions in two productions of exceptional quality i.e. Emir Gray Ware and Faiz Mohammad Ware (Méry *et al.* 2015: 269). According to R. Wright, Emir Gray Ware and FMGW have similar technological methods i.e. forming, thinning, the chemistry and mixing of colors and firing processes (1989: 146). They gradually developed from Period II and IIIb in Kech Makuran and continued in the later periods in Kech Valley

<sup>66</sup> See Shahi Tump Cemetery Culture for its origins

<sup>67</sup> Also termed Shahi Tump Cemetery Culture; it is dealt separately as a culture

<sup>68</sup> Since she has never visited the region, it is better to use the excavator's idea who dealt with it personally.

<sup>69</sup> Later is used to categorize this work.

and Iranian Plateau (Mutin 2013: 266). It is purely the result of interregional contacts or technological exchange with each other (Wright 1989: 146 Mutin 2013: 266).

#### **4.3.3.2 Other Material Assemblages/Culture Repertoire**

In the later period, alabaster and steatite vessels, terracotta bangles, balls, animal figurines and beads, flint blades and arrowheads, bone tools, lapis lazuli, carnelian and copper beads, and copper pins were discovered (Didier and Mutin 2015: 315). Copper seals (compartmented) alongside ceramics were found too (see Pl. 12) (Besenval 1992: 25; 2005: 6).

#### **4.3.4 Interment Practices and Goods**

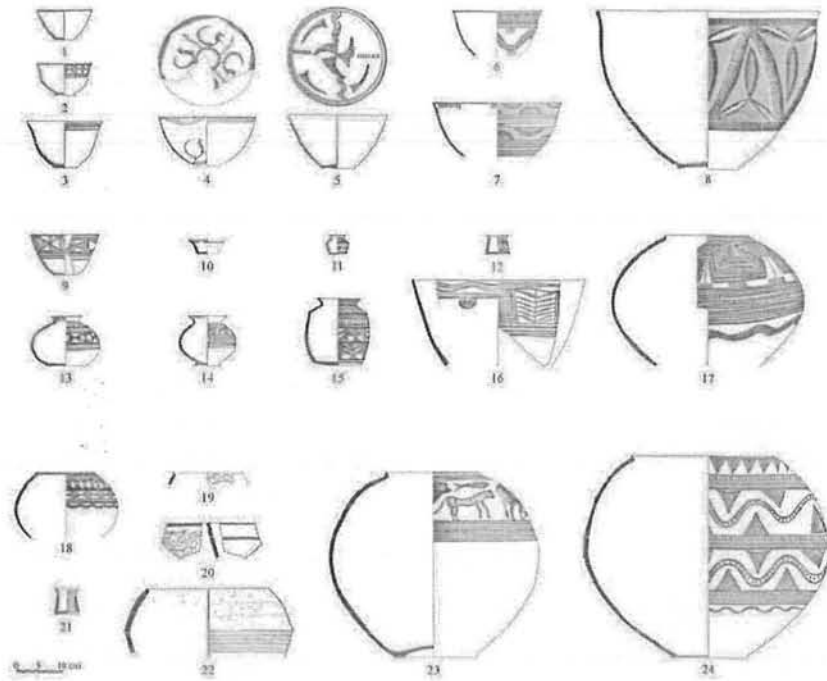
Interestingly, burials were found with undecorated vessels. Moreover, Dasht Polychrome is only found with burials as a ceremonial tendency not for any utilitarian purpose (Didier and Mutin 2015: 310-11).

#### **4.3.5 Trade**

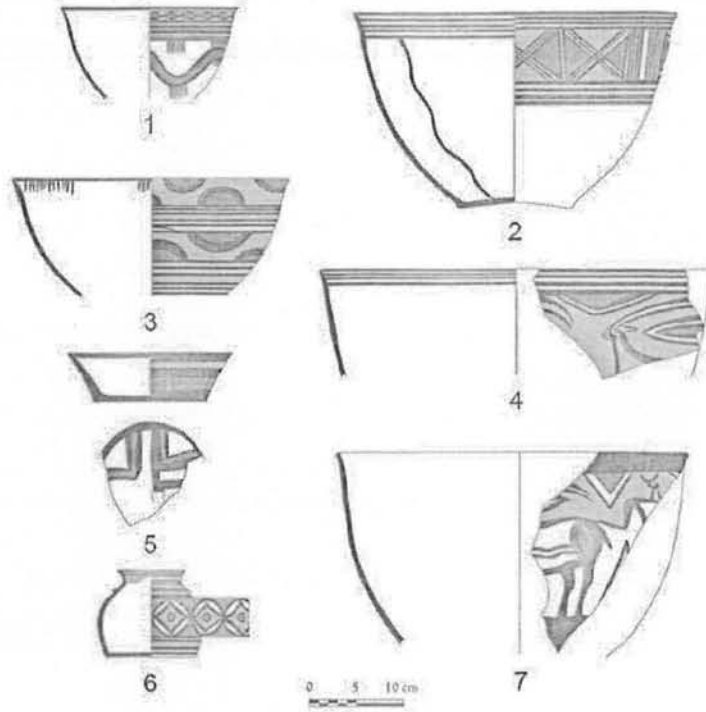
The ceramics were found in large quantity and of great quality. After their production, they were transported in and around the region to neighbors, also outside Dasht Plain region (Didier and Mutin 2015: 308-09). The most prevalent pottery type was monochrome fine ware (Didier and Mutin 2013: 471). They maintained connections with all Kech-Makuran and its adjacent areas as far as Oman Peninsula (Didier and Mutin 2015: 308).

The study reveals that the quality of the ceramics gives this culture an edge in this vast region. They produced a variety of them. The fine gray ware must have been produced for exporting as it was found on Oman Peninsula sites. Similar technological craftsmanship and iconographic developments again demonstrated a common cultural horizon for Bampur Valley and Makuran, Dasht (Didier and Mutin 2013: 474). Moreover, Dasht Polychrome was particularly used as a ceremonial pottery (Didier and Mutin 2015: 310-11). the quality of the technology is also clear from other found objects of this culture. Moreover, the subsistence pattern is mostly uncertain currently along with some other aspects. They buried their dead with objects and sometimes with fine objects which perhaps indicated their status in the society. This culture is not clear yet, it will be clear after extensive excavations of its major sites. Sadly, most of its sites are vandalized and at risk which require protection and it is the duty of the concerns authorities to do so.

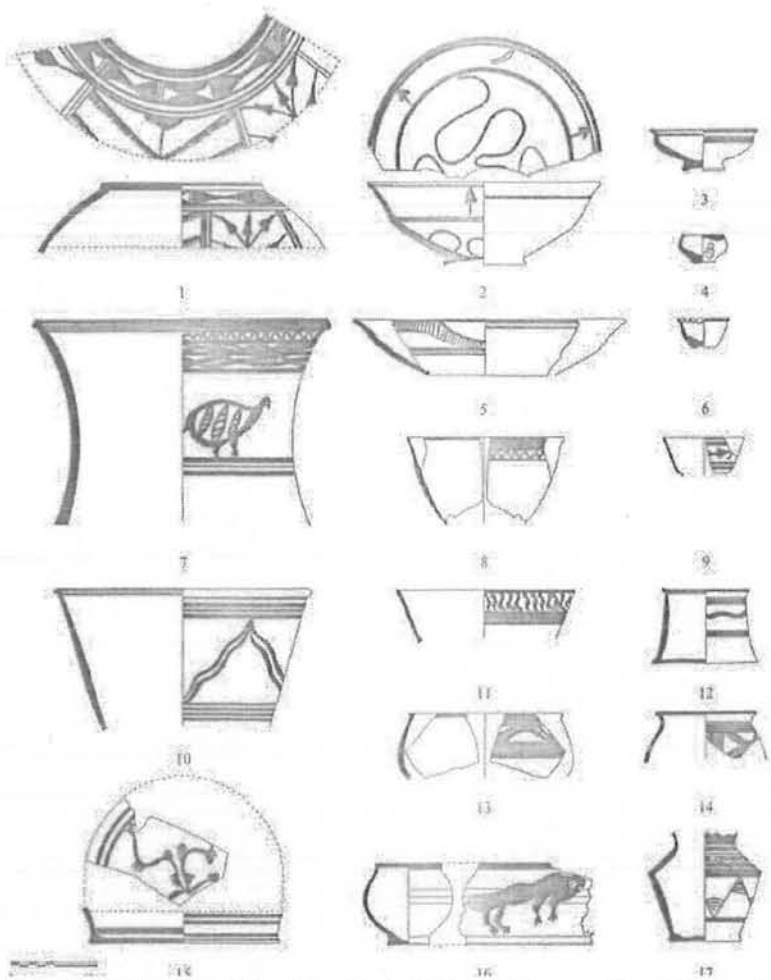
# Plates of Dasht/Emir Culture



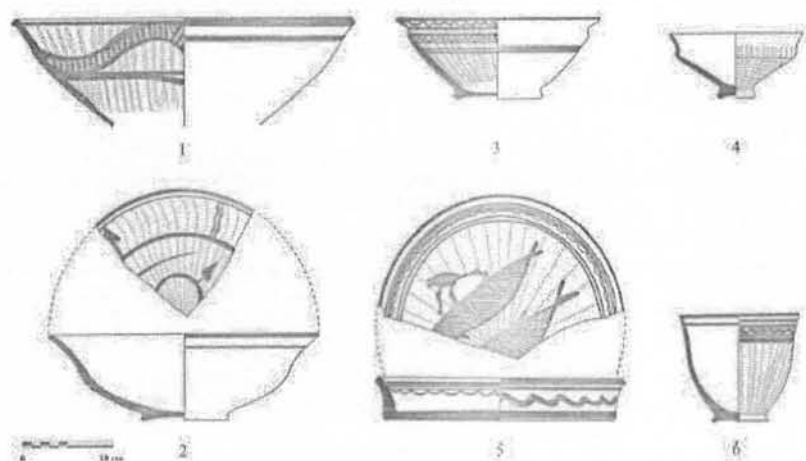
Pl. 1. Ceramic Drawings of Dasht/Emir Culture (from Didier and Mutin 2013: 471)



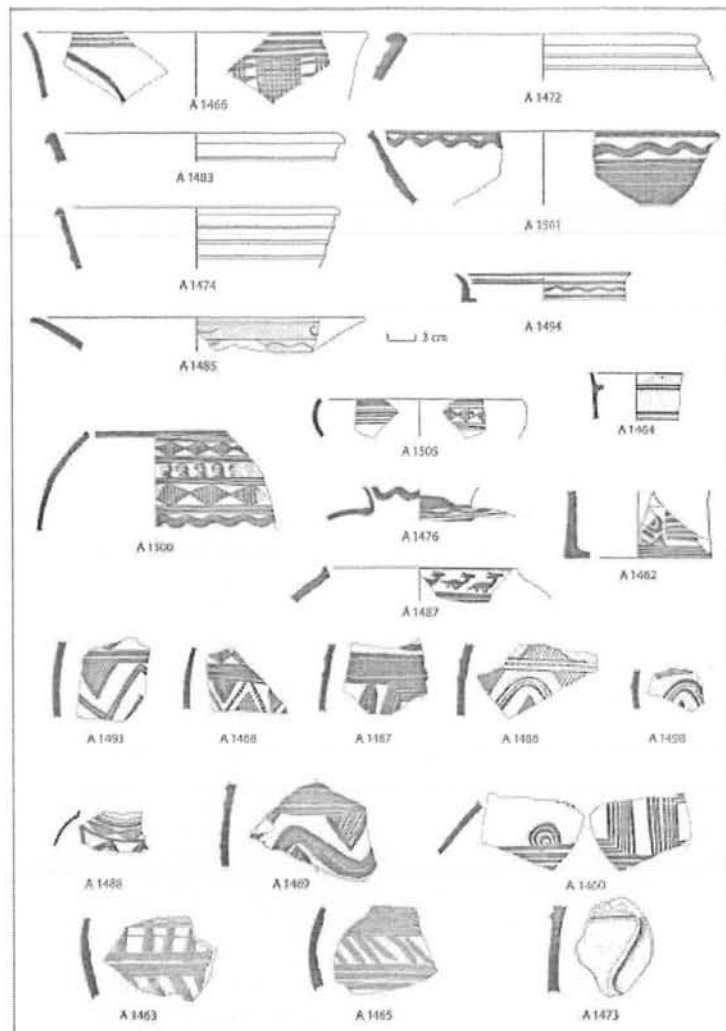
Pl. 2. Ceramic Drawings of Dasht Polychrome Ware (from J. Jarrige *et al.* 2011: 15)



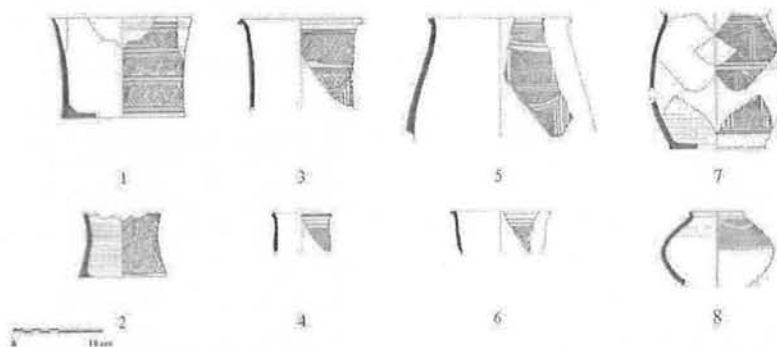
Pl. 3. Ceramic Drawings of Orange Ware from Period IIIc of Makuran (from Besenval and Didier 2004: 166)



Pl. 4. Ceramic Drawings of Streak Burnished Ware from Period IIIc of Makuran (from Besenval and Didier 2004: 167)



Pl. 5. Ceramic Drawings of Painted Red/Buf Ware (from Méry *et al.* 2015: 181) Not to Scale



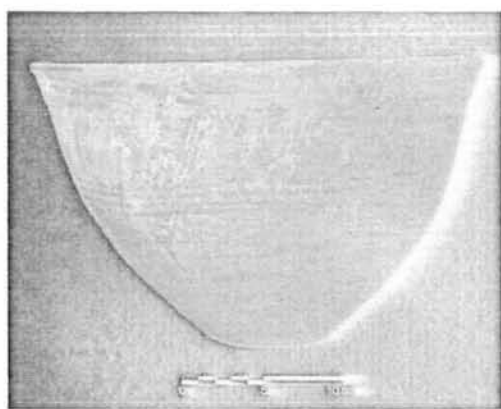
Pl. 6. Ceramic Drawings of Incised Gray Ware from Period IIIc of Makuran (from Besenval and Didier 2004: 171)



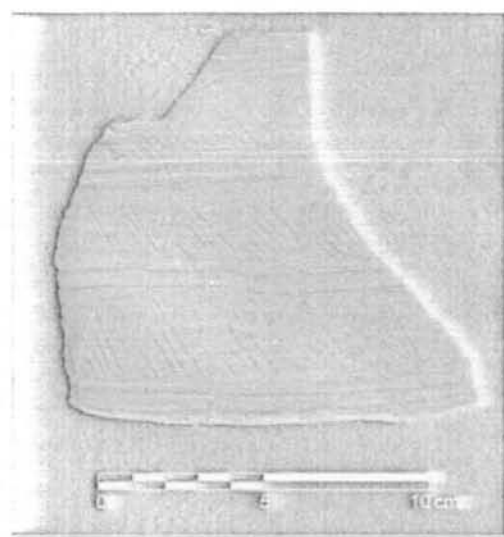
**Pl. 7. Kech-Makuran Late IIIa/Early IIIb**  
(from Didier and Mutin 2015: 329) Not to Scale



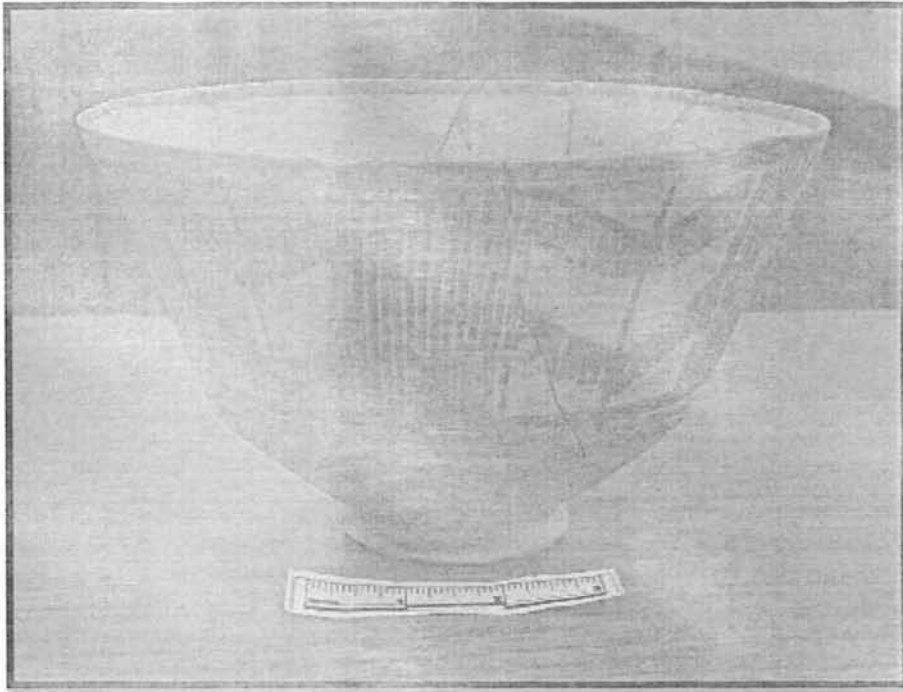
**Pl. 8. Kech-Makuran Late IIIa/Early IIIb**  
(from Didier and Mutin 2015: 329) Not to Scale



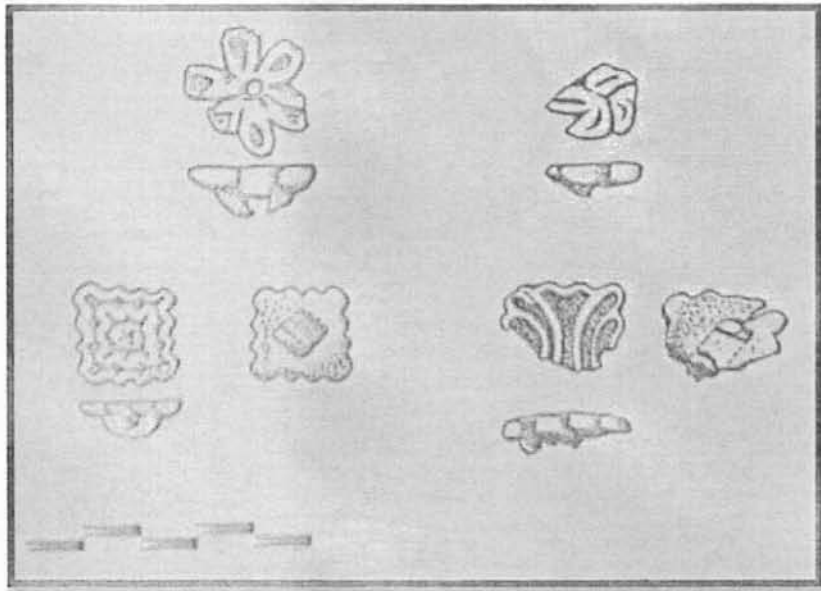
**Pl. 9. Dasht/Emir Polychrome Bowl**  
(from Franke 2003: 663)



**Pl. 10. Incised Gray Ware**  
(from Franke 2003: 666)



Pl. 11. Fine Dasht/Emir Ware<sup>70</sup> at Museum of Archaeology and Ethnology (from the Present Researcher)



Pl. 12. Dasht/Emir Culture Copper Seals (from Besenval and Sanlaville 1990: 135)

<sup>70</sup> Similar specimens were recorded on Dasht IIIb sites in Makuran region; however, Fig. 683 is the exact copy of it and Fig. 685 much resembles this ware too (Didier and Mutin 2015: 323-24).



## **Chapter 5: Late Chalcolithic and Bronze Age Cultures of Balochistan**

This was the time when the people of Balochistan and Indus Valley were indulged in making Urban Centers which later helped them form one of the major civilizations of the world (Possehl 1999: 18, Table 1.1). Some of the major cultures of this time frame are Kot Diji Culture, Quetta Ware/Culture, Anjira Ware/Culture, Naal Culture and Mian Ghundai/Damb Sadaat Culture.

### **5.1 Kot Diji Culture (c.3300-2800 BCE)**

F. A. Khan was the first to identify this culture from his excavations at Kot Diji in Khairpur, Sindh in 1955 and 1957; however, the pottery of this culture was already known from M. Wheeler's excavations in 1946 at Early Harappa levels but it was not classified as a separate culture (Khan 1965: 14, 44; Mughal 1970: 50-1). Kot Diji site presented the early stages of Harappan Civilization. The Koj Dijians were the pre-Harappan settlers who owned highly sophisticated and well-developed culture; some of its cultural aspects were later borrowed by the Harappans i.e. town planning, fortification (Khan 1965: 13-6; Pakistan Archaeology 1964: 39), certain pottery designs (Pakistan Archaeology 1964: 39, 41) and forms, and terracotta cakes (Khan 1981: 21). It represents an early form of Harappan Culture/Civilization (Mughal 1992: 128). Kot Diji, the type site of this culture, was perhaps the center of Kot Diji Culture (Mughal 1970: 98-100). Some of the important Kot Diji sites in Balochistan are Dabar Kot in Duki, Mughal Kala and Rana Ghundai in Loralai, Garok Mound in Kharan, Jagjai in Pashin, Mughal Ghundai and Lahar in Zhob, Mehrgarh [VII] and Nausharo in Kachhi-Bolan, etc. in Balochistan (Possehl 1999: 727-835, from the Gazetteer of Sites of the Indus Age).

The Kot Dijians were perhaps the migrants from Balochistan who ventured to settle to a new land and ultimately built one of the earliest towns of Harappan Civilization (Khan 1981: 17-8). The developments at Kot Diji "accompanied by the appearance, transformation and disappearance of pottery styles which link different parts of Baluchistan with Sindh, and Punjab, but also Iran and Central Asia through the gradual replacement of Baluchi features at Harappa during Period 2 (2800-2600) and the appearance of Kot Diji traits, the major Early Harappan lowland cultural complex in Baluchistan and the borderland seems to signal an expansion of this horizon, which regarded as the nuclear region for the formation of Indus Civilization" (Franke 2015c: 267).



Figure 15. Kot Diji Ware Distribution Area (from McIntosh 2008: np)

### 5.1.1 Structural Remains

The Kot Diji site was divided into upper town—citadel protected by fortified wall with bastions where the ruling class resided and lower town (not fortified) where the artisan class must have lived. The houses were built of stone and mudbricks (Khan 1965: 15-6). Undressed stones were used for foundations and mudbricks for the upper part. The citadel may have been used by ruling class (Khan 1981: 18, 20). It possesses the earliest fortification wall in Subcontinent (Pakistan Archaeology 1964: 40; Khan 1965: 30; 1981: 18). The was right alignment for paths and lanes (Khan 1981: 17).

### 5.1.2 Subsistence Patterns/Mean and Domestication

In addition, “cereals, fish and meat of the domestic animals, formed the daily food of the inhabitants. Hunting appears to have been one of the diversions of the town dwellers...”. Bullock cart must have been used for locomotion purposes (Khan 1981: 18).

### 5.1.3 Technology

From minor antiquities, the objects at Kot Diji site represented superiority in shape and workmanship from that of Harappan objects (Pakistan Archaeology 1964: 42-3; Khan 1965: 31).

#### 5.1.3.1 Pottery/Ceramics

The Kot Dijians were excellent potters who made fine thin bodied ceramics (see Pls. 1-11); however, there is information about the origins of this ware (Pakistan Archaeology 1964: 39, 41). M. R. Mughal has presented twenty-two types/variants generally based on the relative occurrences in different levels and viewing differences in shapes, firing, and decorations<sup>71</sup> (1970: 60-73, 108). There are little variations in Kot Diji pottery at different sites (see Table 11) (Khan 1981: 19). However, the researcher is dealing with this culture simply avoiding details.

Major Ware	Types/Variants	Manufacturing Techniques	Prominent Shapes	Decorations	Firing
Kot Diji Ware	<i>Kot Diji Ware</i>	Wheel-made	Pots, dish-on-stands, vases, bowls, dishes, beakers, jar-covers, lids, etc.	Geometric, zoomorphic and floral designs	Oxidized
	<i>Mian Ghundai Dark Rim, Fine Ware</i>	Wheel-made	Bowls and jars	geometric	Oxidized
	<i>Periano Reserve Slip Ware</i>	Wheel-made	Pots, etc.	Wavy or parallel ridges or geometric lines	Not defined
	<i>Boot Ware</i>	?	Globular jars	Grooved	?
	<i>Quetta Wet Ware</i>	Wheel-made	Jars and goblets	Parallel ridges deliberately formed when wet	Oxidized
	<i>Periano Wet Ware</i>	Wheel-made	Pots, etc.	Geometric horizontal lines	Not defined

Table 11. Kot Diji Ware and Its Types/Variants (from the Present Researcher)

#### 5.1.3.1.1 *Kot Diji Ware*

*Manufacturing Technique:* It was made with well levigated clay on potters' wheel (Pakistan Archaeology 1964: 41; Khan 1965: 30).

<sup>71</sup> However, the researcher has skipped much details.

*Shapes/Forms:* The main shapes of this ware were, as found in the records, squat, globular pot with short everted or beaded rim. Other shapes included squat and long dish-on-stands, vases, cylindrical vessels, bowls, dishes, beakers, jar-covers and lids (Pakistan Archaeology 1964: 41; Khan 1965: 31).

*Decoration Repertoire:* The Kot Dijian potters decorated their pottery with carefully and precisely with solid bands, rarely hatched fillings, fish scale designs, intersecting circles, single loops, horizontal and wavy lines, connected roundels, simple triangular patterns, etc. The “horned deity in black and white on a dark brown glossy slip” has horns and black dotted eyes and encircled with sun flowers. The designs evolved from simple to multiple and complex later. The designs were not drawn over-crowdedly. It was painted in red, brown, warm black or sepia on cream or dull red slip (Pakistan Archaeology 1964: 41-2; Khan 1965: 30-1).

*Firing Technique:* The pottery was well fired (Khan 1981: 21).

#### *5.1.3.1.2 Mian Ghundai Dark Rim, Fine Ware*

It reached its climax at G2 Period of W. Fairservis (see Table 2 for chronological comparisons and see Pl. 1) (Fairservis 1956: 266). Two of its variants were regarded by M. R. Mughal related to Kot Diji Culture: Fine Black-Brown Rim and Fine Red Rim (1970: 77; Fairservis 1956: 266). They were found at Damb Sadaat, Kechi Beg and KGM (Fairservis 1956: 266).

*Manufacturing Techniques:* Both the variants of the variants were wheel thrown. They have a smooth texture and finish, but Fine Red Rim is also granular (Fairservis 1956: 266).

*Shapes/Forms:* Open bowls and small-mouthed jars were ubiquitous; apart from them jars with straight walls occasionally occurred (Fairservis 1956: 266).

*Decoration Repertoire:* They were slipped and un-slipped. Both were decorated. Fine Black-Brown Rim: very broad black/brown lines applied on or near the rim, they become broader on the interior of the bowls, sometimes bands overlap to exterior have been applied. Fine Red Rim: very broad horizontal lines with red on the interior of open bowls and extending the rim of the vessels on the exterior were used (Fairservis 1956: 266).

*Firing Technique:* Oxidized firing conditions have been noted from the variants (Fairervis 1956: 266).

#### **3.7.2.2.1 Periano Reserve Slip Ware**

It is a variant of Kot Diji Ware (Mughal 1970: 222). It looks like Periano Wet Ware, but it further adds other ornamentations (see Pl. 2). Khojak Parallel Striated Ware is assumed to be its prototype (Fairervis 1959: 382). One sherd of Periano Reserve Slip Ware was found at Rehmanzai (Noushki) Kalat from Period V of the region with similar shape, slip and ridges; it was used to make the fifth period merely based on this sherd only (S. Naseer, Personal Communication, October 12, 2018). Nothing has been mentioned about the firing techniques (Personal Observations).

*Manufacturing Technique:* It was most probably constructed on wheel (Fairervis 1959: 347-48, Figs. 52 and 53).

*Shapes/Forms:* Limited shapes i.e. pots, etc. were found in this type/variant (Fairervis 1959: 347-48, Figs. 52 and 53).

*Decoration Repertoire:* It was thickly coated with a light brown or buff slip. It was decorated with parallel or wavy bands and dots; moreover, ridges were also present resulted from grooving (Fairervis 1959: 382).

#### **3.5.1.1.1 Bhoot Ware**

It was first recorded at Bhoot in Khelapar in Cholistan, Harappa (in early levels), Jalilpur in Khanewal, Sarai Khola in Taxila, KP and Periano Ghundai in Zhob (Mughal 1970: 246). It possesses a deeply grooved surface finish and is a porous type. They look be water containers (see Pl. 3) (Possehl 1999: 629).

*Shapes/Forms:* Globular jars were the commonly recorded shapes associated with this ware (Possehl 1999: 629).

*Decoration Repertoire:* It was grooved which enhances “the cooling effect achieved by the evaporation of water from the vessel surface” (Possehl 1999: 629-30).

#### 5.1.3.1.3 Quetta Wet Ware

M. R. Mughal has considered it a Kot Diji variant (1970: 223). It occurred at Kili Gul Mohammad, Kechi Beg, Damb Sadaat and Karez Site in Quetta Valley (see Pls. 4 and 10). It is identical to Kechi Beg Wet Ware; nevertheless, it can be identified from its finer complexed wet leather-hard executions. It reached its climax at Period G2 of W. Fairervis (see Table 2 for chronological comparisons). Moreover, it has two variants: 1. Variegated Wet, 2. Dendritic Wet. They do not have any stratigraphic differentiation (1956: 269-70).

*Manufacturing Techniques:* Both the variants are wheel made possessing a smooth texture; however, variant 2 has a smooth finish (Fairervis 1956: 269).

*Shapes/Forms:* Goblet forms were the mere variant found (Fairervis 1956: 269) yet with sometimes empty bands/spaces at the basal above and below the shoulders (S. Naseer, Personal Communication, October 12, 2018).

*Decoration Repertoire:* Both the variants were slipped on the exterior (Fairervis 1956: 273).

Variant 1: A group of wavy parallel ridges, raised or partly raised; designs which were arranged obliquely or perpendicularly all around the vessel. A flat tool was used for forming these decorations as the surface of the vessel was wet the tool was applied and raised, so the ridges were formed (Fairervis 1956: 273). To add more, some of these wet patterns left behind impressions probably evidencing finger use on them, as some were ascertained at Siah Damb II-III in Noushki (Naseer 2017: 17).

Variant 2: A series of branch-like complicated design like leafless trees with wavy trunks and the branches join other tree branches; however, in some sherds, twigs appear. Assumedly, a wet cloth was applied on the wet surface and removed which created this formation (Fairervis 1956: 273).

There is another variant in decoration which forms C-shaped ridges horizontally (Fairervis 1956: 273). They mostly possess buff paste with occasionally pinkish patches (S. Naseer, Personal Communication, October 12, 2018).

*Firing Technique:* Firing was reported oxidizing in the case of both the variants (Fairervis 1956: 272-73).

*Quetta Circle Stamped Ware:* It was found on Quetta Valley sites. It is a variant of Quetta Wet Ware (Fairservis 1956: 270). Its making and firing techniques have not been recorded.

*Decoration Repertoire:* It was either stamped on plain or variegated wet in between the the upper part of the decorated part and the rim area. They continue till the upper part of the body with spaces (Fairservis 1956: 270, Fig. 59b2, p. 269). Its fabric was constant throughout the time (Possehl 1999: 675).

*Periano Wet Ware:* It is like Quetta Wet Ware (see Pl. 5) (Fairservis 1959: 382). M. R. Mughal considered it a Quetta Wet Ware variant (1970: 223).

*Manufacturing Technique:* From the observations, it looks to be wheel made (Fairservis 1959: 347, Fig. 52).

*Shapes/Forms:* The potters preferred to make shapes like pots, etc. of this type (Fairservis 1959: 347, Fig. 52).

*Decoration Repertoire:* It was decorated with paintings. The painted colors were most often black or red and/or black on red. They were painted at the orifice, neck and occasionally on the shoulders. The designs were only single horizontal lines (Fairservis 1959: 382; Asthana 1985: 189).

*Distribution Area of Periano Ware:* It was found in Northern Balochistan (see Fig. 9) (1959: 322, 356-58, 359-60, 385, 402-15, 367-68). It was recorded in Surab Valley in Damb Sadaat III; however, F. Pedde regarded it an import (1993: 116). It was also recorded in Kot Diji I levels (Asthana 1985: 79).

#### **5.1.3.1.4 Distribution Area**

Its extension covers central and northern Balochistan, large part of Sind and Punjab, Kalibangan in India and southwest of Khyber Pakhtunkhwa (see Fig. 15) (Khan 1981: 20).

Due to thick burnt deposit at Kot Diji site, it is claimed that Harappans fired the site until its destruction and annexed it later to settle down (Pakistan Archaeology 1964: 40). They must have not afforded to fight, or they must have been peaceful people (Khan 1981: 22).



#### **5.1.3.2 Other Cultural Assemblages/Cultural Repertoire**

The other cultural materials included stone implements, terracotta toys, painted and plain bangles, 'cakes', cones, beads, a bull figurine and other shell and bone objects, etc. (Pakistan Archaeology 1964: 42-3; Khan 1965: 31; Mughal 1970: 55, 58).

#### **5.1.4 Professions**

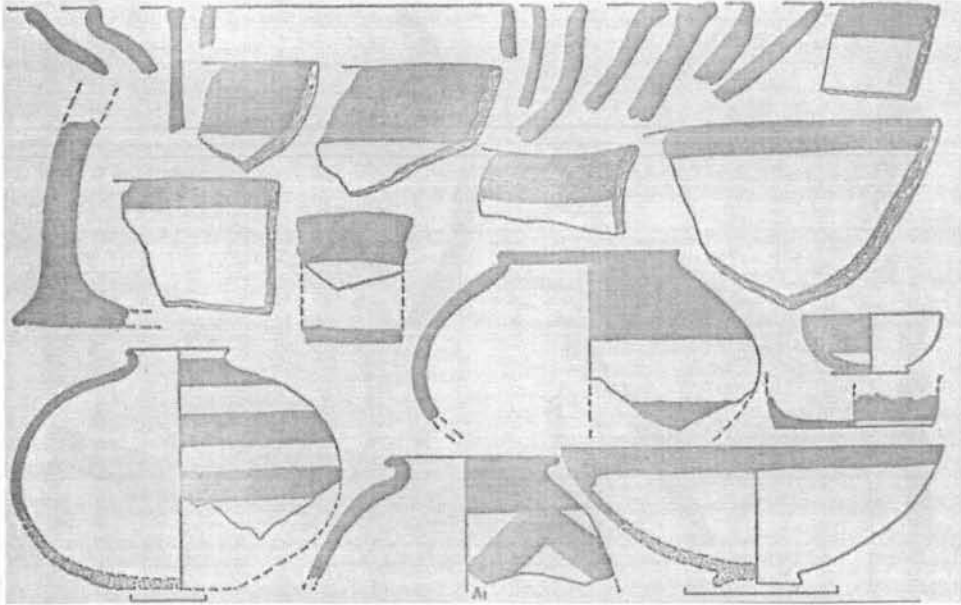
The people were indulged in different jobs i.e. ruler(s), supervisors, artisans, cultivators, food distributors, herdsman or herdsman, fishermen, potters, stone workers, masons, and brick layer (Khan 1981: 18).

#### **5.1.5 Religion**

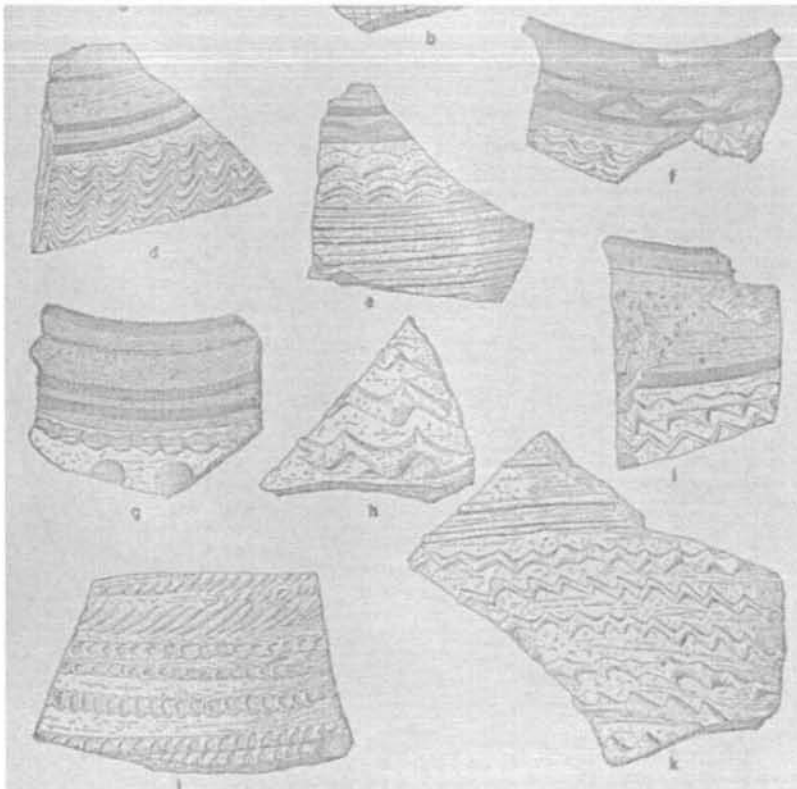
They probably worshipped mother goddesses and the horned deity; furthermore, trees and animals like bull may have been worshipped as well (Khan 1981: 19)

In conclusion, there is still incomplete knowledge regarding this culture (Khan 1981: 17). Further surveys and excavations and may provide more information regarding the culture. "There is greater hope of discovering much more undisturbed Kot Diji sites in the drier tracts than in the plains..." (Khan 1981: 17, 20). This culture forms the basis for Indus Valley Civilization which is largely influenced by the Balochi cultures of Balochistan as witnessed from its technology. This culture in Balochistan maybe the original form which were later refined. In the context of Balochistan, this culture is not known well due to limited excavations on its sites (Personal Observations).

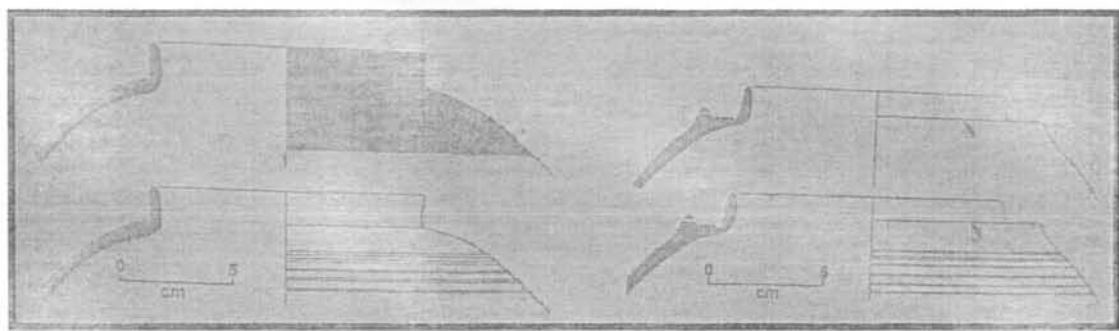
# Plates of Kot Diji Culture



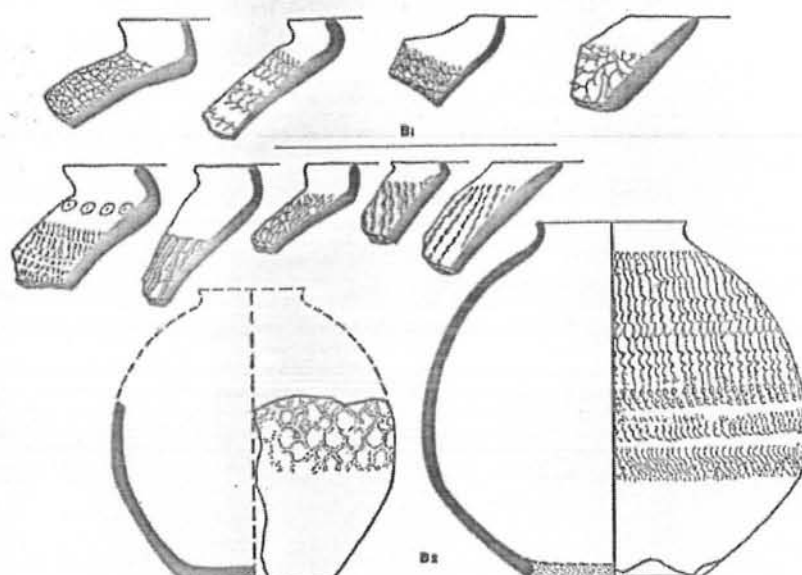
Pl. 1. Pottery Drawings of Mian Ghundai Dark Rim Fine Ware (from Fairservis 1956: 267) Scale 4 Inches



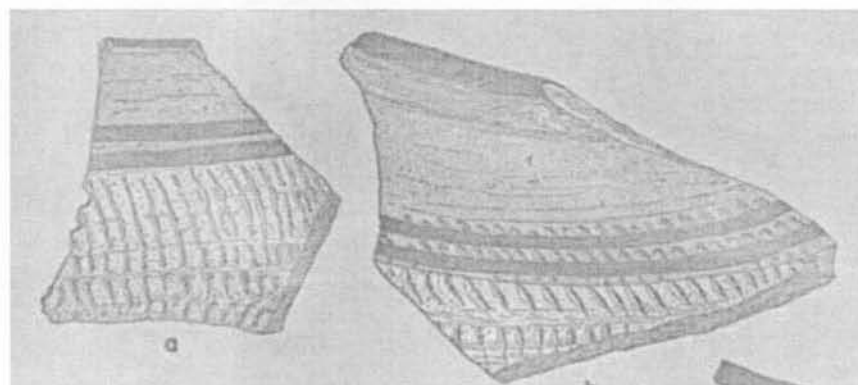
Pl. 2. Periano Reserve Slip Ware (from Fairservis 1959: 347)



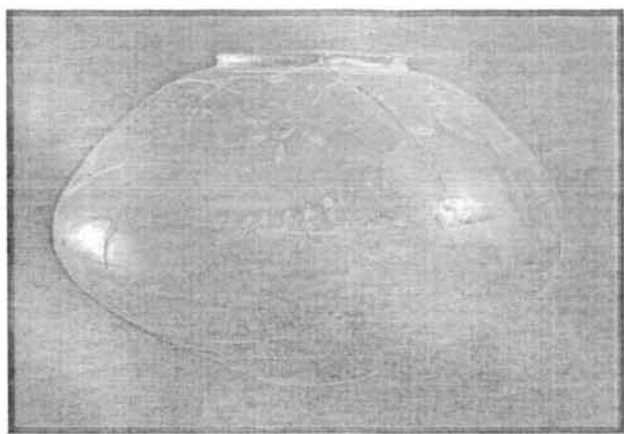
Pl. 3. Bhoot Ware Pottery Drawings (from Possehl 1999: 629)



Pl. 4. Quetta Wet Ware Pottery Drawings (Dendritic: B1; Variegated or Stamped Circle: B2) (from Fairservis 1956: 269) Not to Scale



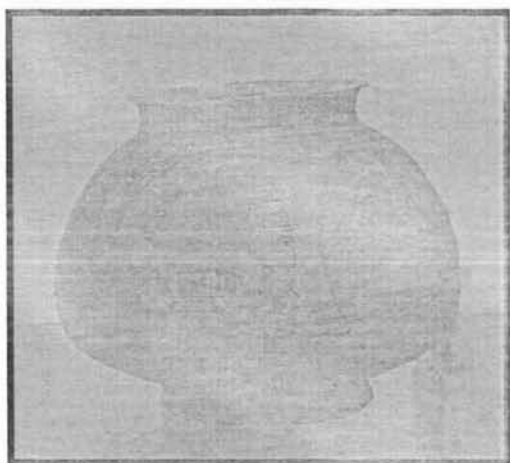
Pl. 5. Periano Wet Ware (from Fairservis 1959: 347) Not to Scale



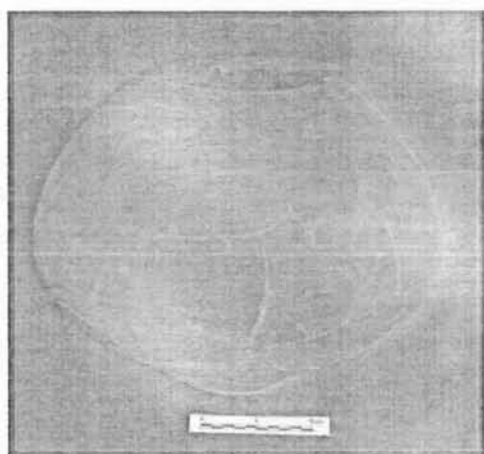
**Pl. 6. Kot Diji Pottery with Horned-Deity**  
(from Jonathan Mark Kenoyer) Not to Scale



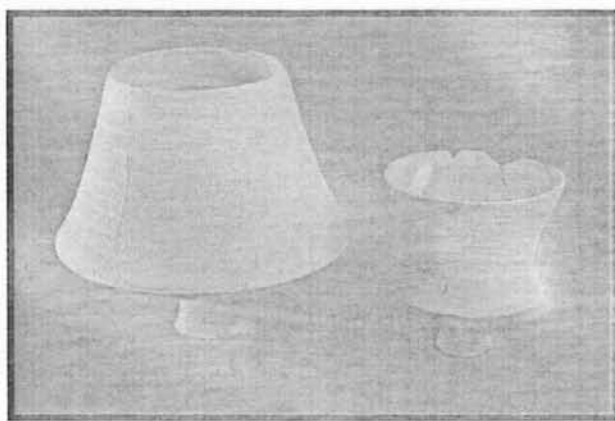
**Pl. 7. Kot Diji Decorated Pottery from Nausharo**  
(from the Present Researcher) Not to Scale



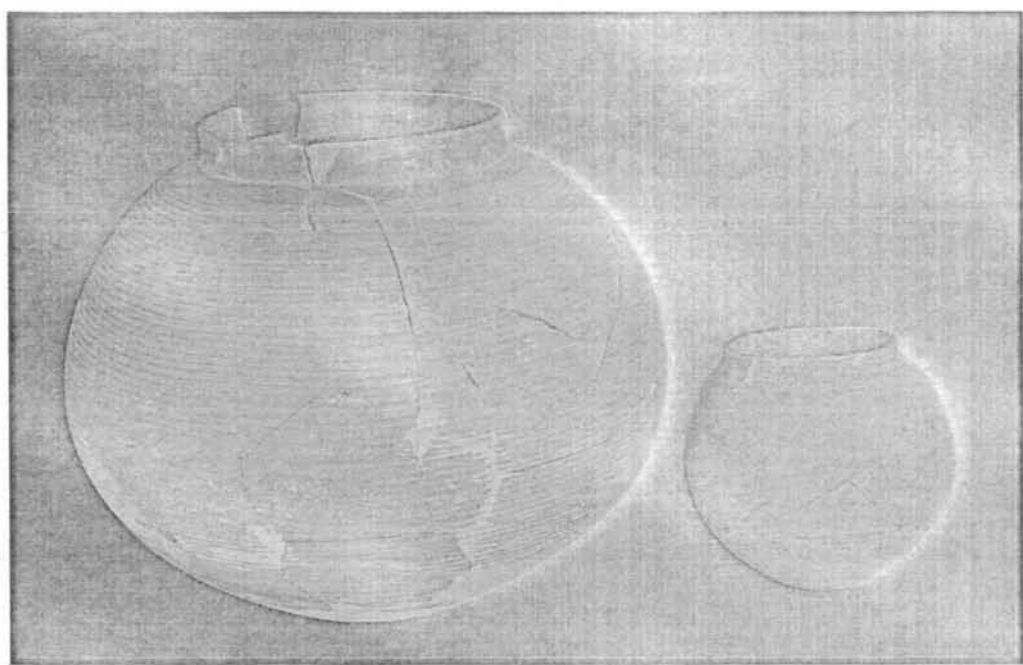
**Pl. 8. Kot Diji Pottery from Nausharo**  
(from the Present Researcher) Not to Scale



**Pl. 9. Kot Diji Fish Scale Decorated Pot**  
(from Jonathan Mark Kenoyer) Not to Scale



**Pl. 10. Quetta Wet Ware ()** Not to Scale



Pl. 10. Kot Diji Ceramics (from Jonathan Mark Kenoyer) Not to Scale

## 5.2 Quetta Ware/Culture (c.3200-2900 BCE)

Stuart Piggott first discovered Quetta Ware/Culture (1947: 131-42). With further researches and excavations especially at Damb Sadaat, W. Fairervis added more data (1956: 254-56). Excavations of J. Casal at Mundigak and excavations of J. G. Shaffer at Said Qala Tepe in Afghanistan provided more information about this culture (1978: 14-77).

The main sites that belong to Quetta Ware/Culture are Damb Sadaat II in Quetta Valley, outer Quetta Valley sites, Mundigak III-IV (Fairervis 1971: 128-32, 142), Deh Morasi Ghundai II (Dupree 1963: 106, 115), and Said Qala Tepe II-III in Afghanistan (Shaffer 1978: 73), Gumla II in southern KP (Dani 1970-71: 109) and Shahr-e-Sokhta in Iran (see Table 20 and 21 for chronological comparisons) (Shiekh 1987: 76). However, G. L. Possehl has treated it as a cultural complex<sup>72</sup> and named it “Quettan Complex” (1999: 678). According to J. G. Shaffer, it is one of the best explained cultures in Balochistan (1978: 124). Furthermore, Faiz Mohammad Ware and Quetta Ware are considered as a product of one culture centered in the Quetta Valley<sup>73</sup> (Asthana 1985: 123).

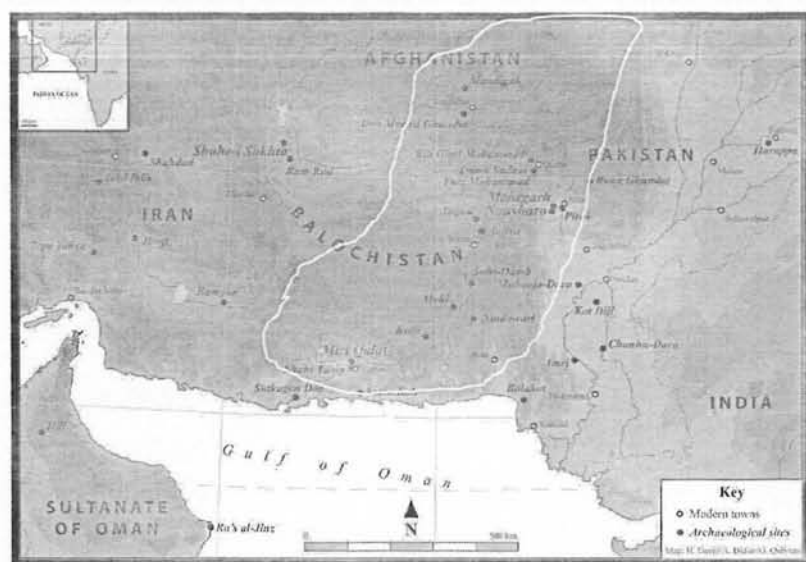


Figure 16. Quetta Ware Distribution Area (J. Jarrige *et al.* 2011: 8, Modified by the Present Researcher)<sup>74</sup>

<sup>72</sup> Ute Franke has referred a ‘cultural complex’ to a human community (2016: 177).

<sup>73</sup> Quetta and FMW pottery cultures can be regarded as one culture but they differ in time frame as from MR late IV to VII between 3200/3300-2600 BCE

<sup>74</sup> Northern Turkmenistan is not included in the Map.

### 5.2.1 Structural Remains

Moreover, these people dwelled in small dwellings made of sun-dried mudbrick lined with mud mortar which rested frequently on stone slab bases. There was a mudbrick platform at Kechi Beg perhaps used for threshing (Fairervis 1952b: 13). However, pisé-constructed houses were used as well (Fairervis 1971: 137). Furthermore, fragmentary walls and ovens were discovered as well (Fairervis 1956: 214).

### 5.2.2 Subsistence Patterns/Mean and Domestication

F. D. Kakar has claimed that barley, wheat, maize and other fruits were the main crops for Quetta Valley cultures; however, there is no archaeological record for them yet (1992: 6).

### 5.2.3 Technology

The technology aspects are known from a limited number of objects as followed:

#### 5.2.3.1 Pottery/Ceramics

Almost all the ceramics were manufactured from a buff-red paste. The decorations were either executed directly on the surface of the ceramics or on a white-buff slip (Shaffer 1978: 123).

It is assumed special ceramic craftsmen emerged in this culture. Moreover, the Early Quetta ceramic culture has similarities with Naal ceramics (Hideaki *et al.* 2013: 113). Though the making techniques remained the same, the pottery culture is termed because of its ornamentations as 'Early Quetta Culture' and Late Quetta Culture'. Both are called Quetta Culture together (Hideaki *et al.* 2013: 113; Fairervis 1952b: 17).

*Origins of Quetta Ware/Culture:* Regarding the roots of Quetta Ware/Culture, scholarship has made efforts. For example, M. Tosi, M. Masson, V. Sariandi, R. Biscione, J. Jarrige and G. P. Gupta unanimously agreed with the fact that the origins of Quetta Ware were from Central Asian (Turkmenistan, Tajikistan, Uzbekistan and Bactria) settlements based on the pottery designs. However, G. L. Possehl, M. Masson and V. Sariandi further added Central Balochistan for the its possible origins as the comparison of the assemblages and other aspects show close similarities with the material culture of this culture. About this G. L. Possehl has further illustrated that "there is an implicit assumption that there must have been a "donor-receptor" relationship between Central Baluchistan and Central Asia and that diffusion from one region or the other must have been the mechanism for the transfer of Quetta Ware, the



figurines and the rest". Hence, it happened due to the movement of people in the region (Possehl 1999: 675:79). Moreover, W. Fairservis has considered Kili Gul Mohammad Coarse Black on Brown as a prototype for Quetta Black on Surface (1956: 259). Whereas J. Jarrige (1995: 80-1) has explained:

It is, in fact, no longer possible to connect the appearance of Quetta-style motifs with the rapture and completed transformation of cultural life in Balochistan under the influence of colonists from the Tedjen Delta via Shahr-i-Sokhta and Mundigak...Quetta culture—figurines, compartmented seals, double-spiral-headed pins, lapis lazuli ornaments, etc.—had their origin locally well before the Geoksyur/Namazga III period in southern Turkmenia...It is important to make explicit here that, aside from a repertoire of relatively similar motifs, the Geoksyur pottery (made by hand with a porous paste and in many cases with vegetal temper) differs considerably from the Balochistan ceramics (wheel-made with fine paste and mineral temper and also of different shapes). [He further adds], it seems more appropriate to consider the geometric motifs of [crenellations], crosses, lozenges, and checkerboards as constituting a decorative repertoire that one finds through several centuries on very different ceramic wares in diverse regions situated on both sides of the Hindu Kush. At Mehrgarh itself, where Quetta ware with black decorations on a cream white background is rare, these motifs constitute only one element of the rich decorative dictionary characteristic of Faiz Mohammad style gray pottery. And in spite of many unifying features of Balochistan ceramics, one can recognize workshops distinct from one another using in their own manner the common repertoire of Quetta-style motifs as much for their fairly standard products as for other more carefully made pieces, examples of which are found in the catalogues of trade items throughout the Indo-Iranian frontier region.

Moreover, S. Naseer confidently claims that it is not merely traceable to Central Asian countries or Iran, whereas, one must look deep inside the Kechi Beg Ware to comprehend Quetta Ware/Culture. Its early or prototype influences are abundant in this period; it, perhaps, retained or evolved many techniques from Kechi Beg Ware to come into existence, alike forms, paste, friezes, oxidizing, etc. If its early or preceding ware (Kechi Beg) were not found succeeding then, undoubtedly one could rely its from Central Asian countries. Nevertheless, the whole area from Central Asia, Afghanistan, Iran, etc. were in contact with proper trade links. This could demonstrate the idea of exchange between these settlers. But, in fact, it would be unjust to declare it utterly a Central Asian influenced as a whole (Personal Communication, October 12, 2018).

Major Ware	Types/Variants <sup>75</sup>	Manufacturing Techniques	Prominent Shapes	Decorations	Firing
Quetta Ware	<i>Quetta Ware</i> ( <i>Quetta Black on Buff and Quetta Black on Surface</i> )	Wheel-made	Jars and bowls	Geometric, zoomorphic and floral	Oxidized
	<i>Quetta Micaceous</i>	Wheel-made	Mostly bowls	Not decorated	Oxidized
	<i>Quetta Slate Temper</i>	Mostly handmade using coiling technique; rarely wheel-made	Bowls and vessels	Not decorated but generally slipped	Oxidized but occasionally in reduced conditions

Table 12. Quetta Ware and Its Types/Variants (by the Present Researcher)

#### 5.2.3.1.1 *Quetta Ware*

It was majorly found on Quetta Valley sites (see Pls. 1-16). On the basis of surface decorations W. Fairservis has divided them into two variants: Quetta Black on Buff and Quetta Black on Surface. It is further subdivide into three more variants (black-on-brown, black-on-red and coarse black-on-brown—its prototype is Kili Gul Mohammad Coarse Black on Brown) (see Table 12) (1956: 255-56, 259, 261; Asthana 1985: 180-181). Kechi Beg Black on Buff Slip Ware is a prototype of Quetta Black on Surface (Fairservis 1956: 259).

***Quetta Black on Buff Ware:*** It occurred in Period G2 and G3 at Kili Gul Mohammad, Damb Sadaat, Kechi Beg, and Karez Site (see Table 2 for chronological comparisons). It has two variants: 1. Buff Slipped and, 2. Buff Plain (see Pls. 1-2) (similar to Mian Ghundai Buff Plain Ware). There is no stratigraphic difference between them. It reached its climax at Period G2 of W. Fairservis (1956: 255-56; Asthana 1985: 180-81).

***Shapes/Forms:*** Jars with straight or flaring rims, small mouthed bowls, and pedestalled jars were the main shapes recorded (Fairservis 1956: 255; Asthana 1985: 180-81).

***Manufacturing Techniques:*** Both the variants are wheel made with smooth finish; however, variant 1 has smooth texture while variant 2 has smooth and slightly sandy texture (Fairservis 1956: 256).

***Decoration Repertoire:*** It is adorned with multiple friezes of horizontal bands. Most of the designs are arranged horizontally (Fairservis 1956: 255; Asthana 1985: 180-81). Variant 1:

<sup>75</sup> Though, in this work, Faiz Mohammad Ware is dealt as a major type of Quetta Ware/Culture, its table is made separately with its variants.

bold geometric patterns in black on light slip; occasionally stylized fauna and flora designs occurred. Variant 2: only bold geometric patterns on either buff or green-buff surface (Fairservis 1956: 256).

The geometric designs include loops, scallops, horizontals, festoons, diagonals, zigzags, different terraces or stepped motifs, crosses, diamonds, grid work, diagonal lining, circles, various types of dots, eyes, discs, triangles, rectangles, squares, comb, interlocking key, dashes, chevrons and sigmas, etc. Floral designs include willow leaves, other leaves, needles, and others. Fauna designs consist of bulls, different fish, different birds, ibex or gazelle, and other unidentifiable animals (Fairservis 1956: 321-26, Designs 108-469, p. 281-311).

*Firing Technique:* Both the variant were fired at oxidizing conditions (Fairservis 1956: 256).

*Quetta Black on Surface:* It is a type/variant of Quetta Ware. Moreover, this has further three variants based on the surface color which was resulted after firing: 1. Black on Brown, 2. Black on Red and, 3. Coarse Black on Brown (see Pls. 1- 2) (it is Kili Gul Mohammad Coarse Black on Brown). Kili Gul Mohammad Coarse Black on Brown is the prototype of Quetta Black on Surface Ware. The former two variants are dated to Period I to Period G3. Coarse Black on Brown frequently occurred at Period H2 (see Table 2 for chronological comparisons). They have the same chronology and decorations (Fairservis 1956: 259, 261).

*Manufacturing Techniques:* Its two former variants are wheel-made while the latter is slow wheel made with some coiling. The former two variants show smooth texture and finishing while the later possess a sandy texture and smooth to slightly rough surface (Fairservis 1956: 261).

*Shapes/Forms:* The prominent shapes included bowls, different jars types, and platters (Fairservis 1956: 261).

*Decoration Repertoire:* Generally, they were decorated with geometric designs; however, Black on Red variant was occasionally decorated with zoomorphic and floral. The geometric designs were applied in bold horizontal bands (differ in number), intersecting designs, sleeping hourglasses, arrowhead design, loops, zigzag lines (differ in number), etc.; whereas,

bull and pipal leave were the abstract decorations (Fairervis 1956: 261, Figs. 48 and 49, p. 254-55).

*Firing Technique:* It was fired in oxidizing conditions (Fairervis 1956: 261).

#### 5.2.3.1.2 *Quetta Micaceous Ware*

It commonly occurred in Period H2 (see Table 2 for chronological comparisons) at Kili Gul Mohammad and Damb Sadaat in Quetta Valley (see Pl. 3) (Fairervis 1956: 248).

*Manufacturing Techniques:* It was made with micaceous clay. It is a wheel made with smooth and sandy texture. Further, it carries a smooth and slightly rough surface finish (Fairervis 1956: 248).

*Shapes/Forms:* This category included mainly open bowls only (Fairervis 1956: 248).

*Decoration Repertoire:* It was not decorated; however, it was slipped (Fairervis 1956: 248).

*Firing Technique:* It was fired in oxidizing conditions (Fairervis 1956: 248).

#### 5.2.3.1.3 *Quetta Slate Temper Ware*

It was frequent in Period G2 (see Table 2 for chronological comparisons) at Kili Gul Mohammad, Damb Sadaat, Kechi Beg and Karez Site in Quetta Valley (see Pl. 4) (Fairervis 1956: 250).

*Manufacturing Techniques:* It was mostly handmade i.e. coiling technique was used; moreover, rarely slow wheel technique was used for their construction as well. Moreover, it seems double paste was used for its making. For instance, the vessel was completed and partially dried. Later, with the same paste again a layer was added to its surface. Then, it was fired. They have rough texture. Some of them had a rough finish with granular nature; some slipped and smoothed yet commonly with rough finish (Fairervis 1956: 250).

*Shapes/Forms:* Its shapes included "...small open bowls and high-walled vessels with flaring rims, with or without bottoms" (Fairervis 1956: 250).

*Decoration Repertoire:* Interior and exterior were slipped. However, it was not decorated (Fairervis 1956: 250).

*Firing Technique:* It was fired in oxidizing conditions but occasionally with reduced atmosphere (Fairservis 1956: 250).

*Distribution Area of Quetta Ware:* The pottery of this culture is widespread in Balochistan (Hideaki *et al.* 2013: 113). Moreover, the areas in Balochistan particularly include Quetta and Pashin and their surroundings, Bolan Pass to Kacchi-Bolan district and Indus Valley plains. Farther regions include Seistan (Iran), Kandahar (Afghanistan) (Possehl 1999: 681), south-central Afghanistan (Dupree 1963: 115), and northern Turkmenistan—Central Asia (see Fig. 16) (Possehl 1999: 681).

**5.2.3.1.4 Faiz Mohammad Ware (c.3100-2600 BCE)**

The Faiz Mohammad Ware (hereafter FMW) was first identified by Walter Fairservis from his early reconnaissances in the Quetta Valley (see Pls. 17-23) and this pottery culture was named after the site where it was first discovered (1956: 196; 1959: 374). Later, R. Wright followed a detailed study of this ware (1984; 1989: 137-47; 1995: 662-64).

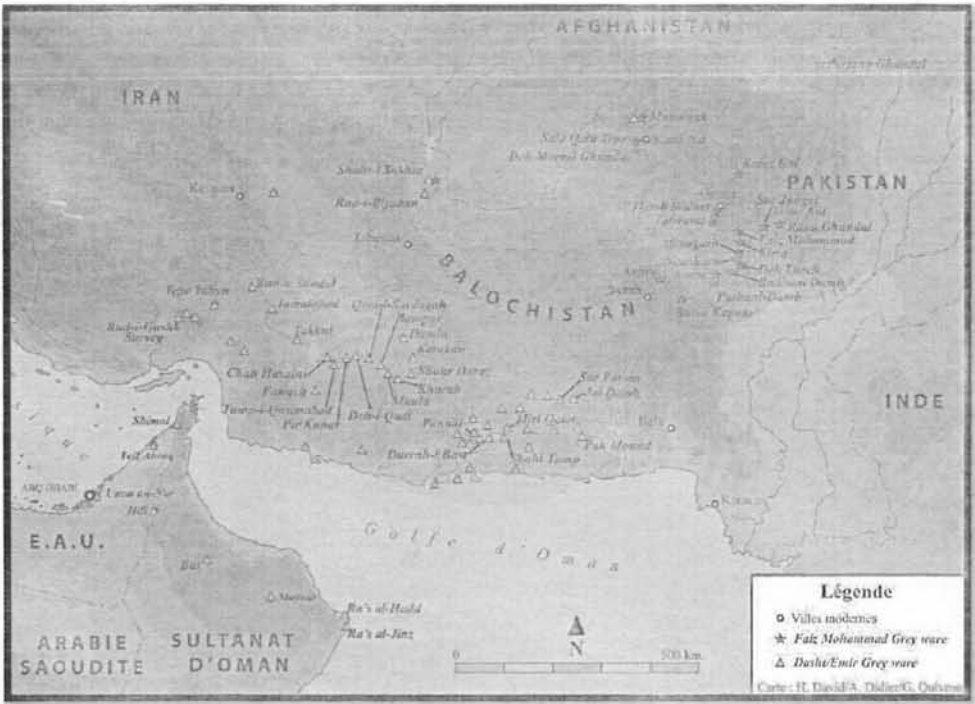


Figure 17. Faiz Mohammad Ware and Dasht/Emir Ware Distribution Areas (from Didier 2013: 237)

Some of the most important sites where this ware or subculture was found are Faiz Mohammad, Damb Sadaat [II-III], Karez Site, Kechi Beg in Quetta Valley (Fairservis 1956: 263), and Mehrgarh [V-VII] in Kacchi-Bolan are the most important sites of this pottery culture (see Table 20 for chronological comparisons) (J. Jarrige 1995: 79-80; Wright 1995: 662-64). From prehistoric sites, Faiz Mohammad is the largest in Quetta Valley (Fairservis 1956: 196).

This pottery culture is very well known in Balochistan (Asthana 1985:179). They were skilled pottery manufactures (Wright 1989: 147). W. Fairservis has recorded four types/variants of this ware: 1. FM<sup>76</sup> Fine Gray, Undecorated, 2. FM Black on Gray and 3. FM Red on Gray (1956: 263; 1959: 374), and FM Red-Brown or Black on Red to Dark Brown Slip Ware; it was formerly known as Quetta Red-Brown on Dark Slip Ware (see Table 13) (Fairservis 1959: 374). Stratigraphically, they all belong to the same time frame (1956: 263). They are mostly recorded in storage rooms, houses' context, at pottery workshop deposits and with other trash materials at Mehrgarh (Wright 1989: 146). It occurred at Mehrgarh V-VII. The skilled potters used residential dwellings and perhaps manufactured ceramics for business purposes (Wright 1995: 664).

Major Ware	Types/Variants	Manufacturing Techniques	Prominent Shapes	Decorations	Firing
Faiz Mohammad Ware	<i>FM Fine Gray, Undecorated</i>	Wheel-made	Not defined	Undecorated	Oxidized
	<i>FM Black on Gray Ware</i>	Fast wheel-made	Bowls, goblets, jars, dishes, platters, vases and lids	Geometric, flora and fauna	About 900 to 1000° C
	<i>FM Red on Gray Ware</i>	Fast wheel-made	Bowls, goblets, jars, dishes, platters, vases and lids	Geometric, flora and fauna designs	About 900 to 1000° C <sup>77</sup>
	<i>FM Red-Brown or Black on Red to Dark Brown Slip Ware</i>	Wheel-made	Bowls, platters, jars, etc.	Geometric and floral designs	Oxidized

Table 13. Faiz Mohammad Ware and Its Types/Variants (by the Present Researcher)

<sup>76</sup> FM, hereafter, will be used as Faiz Mohammad with its types/variants.

<sup>77</sup> The underline bolder is missing

*Possible Origins and Comparisons:* Togau B and C style (found in Mehrgarh IV) (see Table 20) represent prototypes/ancestors of FMW (J. Jarrige 1995: 78).

*Centers of Production of FMW:* Based on technological and clay analysis, R. Wright has concluded that Kacchi-Bolan zone is the center where FMW has its roots; it was the main production center of this ware (1987: 73; J. Jarrige 1995: 79; J. Jarrige *et al.* 2011: 16). Apart from Kacchi-Bolan Plain, Quetta, Zhob and Loralai regions were its production centers: the former two were major ones and the later two were of minor nature (Wright 1987: 73-4; Mutin *et al.* 2017: 143). In terms of Gray Ware production, two regions produced fine gray wares of exceptional quality as Emir Gray Ware in Kech, Makuran, primarily influenced by Iranian sites and FMW in Kacchi-Bolan region<sup>78</sup> (Méry *et al.* 2013: 269).

Regarding many production centers R. Wright has observed (1989: 277): “[The] upland/lowland exchange most reasonably is related to the seasonal migrations of the tribal groups between the hill and plain of Quetta and Kalat and Kacchi-Bolan. As such, their institutional settings as reasonably represents social or political ties as economic ones. Given the subsistence pattern and economic analogy, exchange relations may have been between kinsman and tribal groups where its function was related to alliance formation”.

*Manufacturing Techniques:* The clay was either selected naturally of fine clay or they refined these themselves. The clay was well mixed. It was mixed with cryptocrystalline, barley, cherts, quartz, and feldspar. The former two helped it in its plasticity (Wright 1995: 663). Observing today, it is a very fine wheel turned ceramic. It has a smooth surface with some slipped wares. It is light gray to medium gray (Wright 1989: 139). At Mehrgarh V-VII, they are fast wheel thrown with an extremely fine paste (Wright 1995: 663).

After forming on a wheel and leather hardening, the ring bases were fixed by placing the vessels upside down; it was positioned on a chuck or anchored to a wheel with clay. Later, they trimmed the unwanted clay in two directions, interior and exteriors, with either probably with a stone blade tool, bone tool or any other sharp object. Then, the vessels were sponged around the surface clear unwanted lines (Wright 1995: 663-64).

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<sup>78</sup> For comparisons see Dasht/Emir Culture and further Emir Gray Ware.



*Shapes/Forms:* W. Fairservis found mostly ring based dishes and platters of its variants (1956: 263). Other forms were mostly from Mehrgarh as bowls, the common form, goblets, jars, vases, and lids. They mostly have beveled or perpendicular rims (Wright 1995: 663).

*Decoration Repertoire:* Generally, the rich variety of motifs i.e. geometric, animal and plant motifs were recorded on this ware (J. Jarrige *et al.* 2011: 30). They were well recorded at Mehrgarh V-VII (Wright 1995: 663) and Nausharo I that looks to be borrowed/influence from Quetta Culture (J. Jarrige *et al.* 2011: 16, 30). After making them on the wheel, they were smoothed for painting (Wright 1995: 663). Apart from Kacchi- Bolan region FMW, the decorated variants were un-slipped in other regions found by W. Fairservis (1956: 263). For surface decoration, black paint; matt or sometimes lustrous was applied on either interior or exterior or both the surfaces/sides. They had knowledge regarding the chemistry of pigments and colors (Wright 1989: 139, 147).

The decorations were carried out with black and red colors while turning them on a slow wheel specially the concentric bands. They were applied on rim of the interior and exterior of the vessels. The open bowls were decorated on their interiors and other taller forms were decorated on the exterior only. The paints were mixed with fine clay particles and mixed with a color i.e. hematite (Wright 1995: 664). Additionally, the painted designs resemble the Quetta Ware ceramics (Possehl 1999: 673).

*Decorations Repertoire on FMW Types/Variants:* There are three decorated types of FMW as Followed:

***FM Black on Gray Ware:*** The designs on the second type are frequently drawn horizontally all around on the interior of the open vessels. There are several lines covering the inside of the vessels. Most often, the painted motifs are executed on “between the rim bands and the lower bands around the center”. The painted motifs comprise of terrace or stepped motifs, wavy verticals, dangling loops, interlocking zigzags, horizontal zigzags, pipal and various other leaves, sun ray circle with a dot, serrated triangles and simple diagonal lines, hovering sigmas (on the exterior), and perhaps snakes. Apart from these decorations, painted birds and other flora (Fairservis 1956: 263, 326, Designs 470-485, p. 311-12) and fish motifs are also

executed. They are also found in combinations of the above-mentioned designs (Wright 1995: 663).

**FM Red on Gray Ware:** The organization of designs is the same as in the second variant. Geometric and floral patterns often occur on the interior of the open vessels in dull red or brown red color. These designs are almost the same as in the other variant (black-on-gray). However, it adds more designs as well. For instance, checker, saw teeth in parallel line, pine needles, leaves, double stem pipal leaves, a tendril, a set of horns, needles in single row, and willow leaves are observed on this type (Fairservis 1956: 326, Designs 486-495, p. 312-13).

Moreover, scales, small strokes, brackets, four armed stars with a dot, lozenges, sun motif, herringbone pattern, frieze of eye motif, eye motif alone, sunflower-like motif, multiple headed geometric pattern, cross-hatching, quarter circles, etc. are also noticed. Moreover, ibex or caprids, fish, different birds, different kinds of leaves and other plants motifs from Mehrgarh V-VII which could be associated to both decorated variants 2 and 3 (C. Jarrige *et al.* 1995: 124, 129-30, 159-61, 170, 200-01).

One of the main features of this pottery culture is the “indented diagonal” bands on the exterior of the vessels. They are frequently executed at rim side or at base side with a tooth object or a blade on a leather hard surface. Moreover, they are also executed on other parts of the vessels and sometimes the entire surface of the vessels is covered with these bands in the same way. Earlier, it was used as a thinning technique but later this technique was used as an aesthetic sense (Wright 1995: 664).

**FM Red-Brown or Black on Red to Dard Brown Slip Ware:** Different shades of red-brown to dark black-brown or black-brown to red slips were applied. Geometric designs were applied with red-brown on the interior of the open-mouthed pottery. The geometric designs consisted of several bands, sigmas, comb-like designs, animal and plant designs were fish and pipal leave (see Pl. 18) (Fairservis 1956: 263-64, Fig. 55b).

**Firing Techniques of FMW:** It was fired under two steps. Firstly, the ceramics were fired in oxidizing atmosphere which resulted to a red-buff color ceramic. Secondly, it was baked again to desired gray color (Wright 1989: 146-47; Possehl 1999: 673; Didier 2015: 225). At Mehrgarh, they were fired at about 900 to 1000° C and fired in updraft kiln (Wright 1995:

664). It shared similar making techniques, clay plasticity, thinning, mixing and chemistry of colors and firing processes. It mainly resulted from interregional contacts with each other (Wright 1989: 146). Nevertheless, they have been independently invented. According to R. Wright, despite the differences, "there was one center for the invention of the technology behind them" (Taken from Possehl 1999: 673).

Generally, some of the Quetta Culture ceramics had marks on them: A—Incised; B—Fingernail-impressed (see Pl. 27) (Fairervis 1971: 144).

*Distribution Area of FMW:* It was most common in Kacchi-Bolan region found mostly in Mehrgarh V-VII (Wright 1995: 663). Furthermore, its distribution can be seen in Quetta (Fairervis 1956: 263), Kalat (1965: 176), Loralai, Zhob, etc. (Fairervis 1959: 430). In addition, it was also present at Mundigak [III-VI], Deh Morasi Ghundai [II] in Afghanistan and Shahr-e-Sokhta in Iran which are regarded as imports from Pakistani Balochistan (see Fig. 17) (J. Jarrige 1995: 79). Moreover, the exchange with Mundigak and Shahr-e-Sokhta cross cultural borders and hence was based on economic level (Wright 1989: 275, 277; Mutin *et al.* 2017: 158).

#### **5.2.3.2 Other Cultural Assemblages/ Cultural Repertoire**

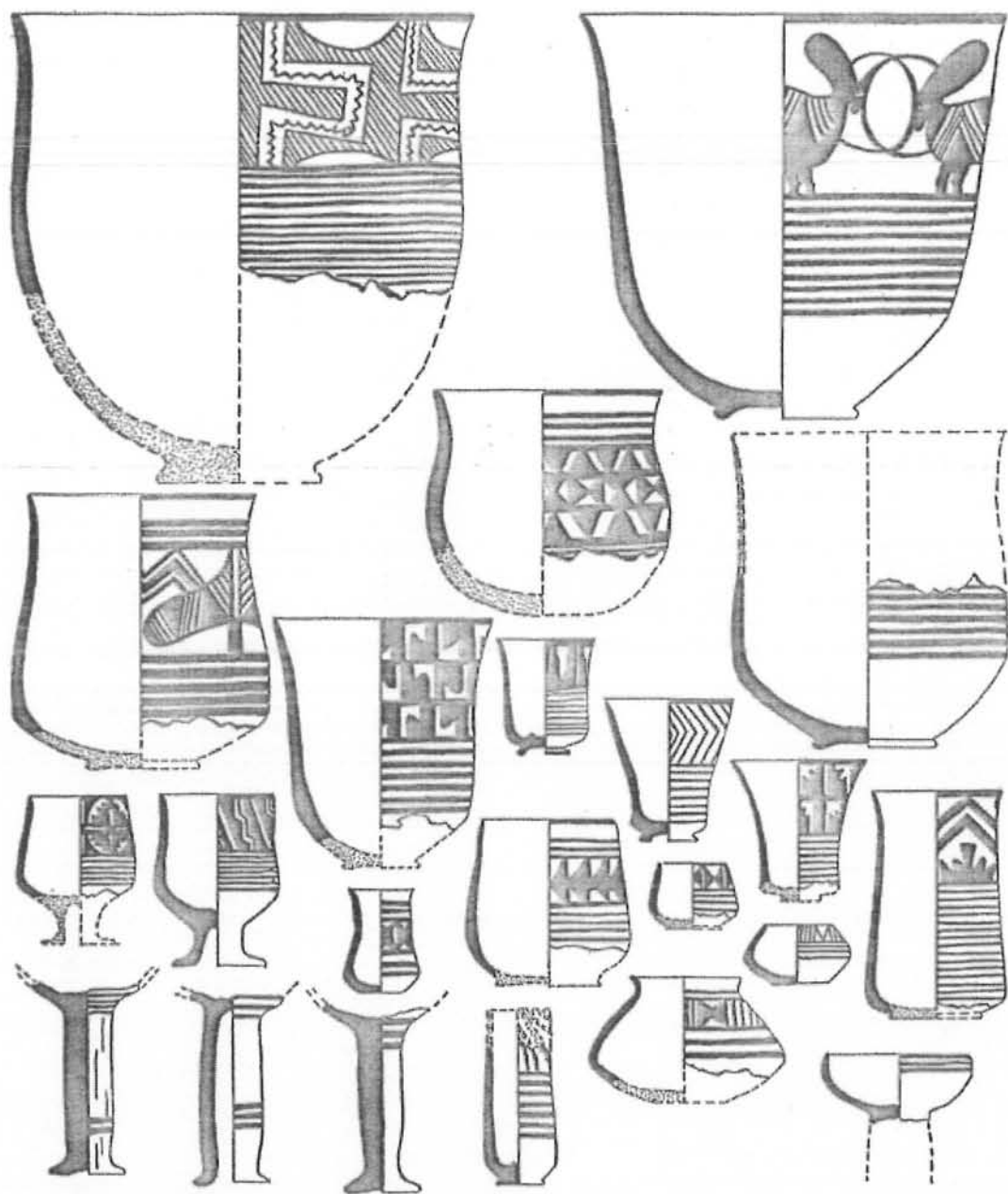
*Anthropomorphic and Animal Figurines:* The finds included figurines with pendulous breasts, broad hips, joint legs, coiled hair and ornamented with coiled jewelry (see Pl. 24). W. Fairervis called them Mother Goddesses (1952b: 15; 1971: 142). Moreover, animal figurines like cattle with black stripes W. Fairervis (1956: 213) has commented about the female figurines that "[more] important still, the female figurines, of a type developed in the Quetta Period (Damb Sadaat II) probably from the so-called Zhob figurines, represent a remarkable continuity of religious ideas and imagery in both time and space".

*Other Findings:* Pierced stamp seals (see Pl. 25), bone awls and spatulas, flint and chalcedony knives and scrapers, clay house models (see Pl. 26), clay rattles, alabaster cups, a copper knife (1952: 15), other copper fragments, button fragments, a fragment of shell bangle, bone/ivory, lapis lazuli, chalcedony and other stone beads, grinding slabs, etc. were recorded (Asthana 1985: 121-23).

To conclude, Quetta Ware and Faiz Mohammad Wares have almost the same associated material assemblages except for the change of time frame of these. Kechi Beg Black on Buff Ware is a prototype of Quetta Ware; it is considered because of its painted designs (Fairervis 1956: 256). Generally, FMW and QW, as G. L. Possehl has claimed that the FMW painted designs have close resemblance with Quetta painted ceramics (1999: 673); they are considered one culture but with a different timeframe. The origins of QW can be traced in Central Asia and Central Balochistan; for example, from Kechi Beg Ware. It is early or prototype of Quetta Ware; moreover, if not, then Kechi Beg Ware influences are abundant in this period; it, perhaps, retained or evolved many techniques from Kechi Beg Ware to come into existence, like similar forms, paste, friezes, oxidizing, etc. Kechi Beg, as being the early or proceeding, was not found succeeding then, undoubtedly one could rely its traces from Central Asian countries. Nevertheless, the whole area from Central Asia, Iran and Afghanistan were in contact with proper trade links. This could demonstrate the exchange of ideas and techniques between these settlers. But it would be unjust to declare it utterly on Central Asian influences. Many of its aspects are missing because of limited excavations. Hence, to utterly understand Quetta Culture, further researches and extensive excavations are needed (Piggott 1950: 75) even until now (Personal Observations).

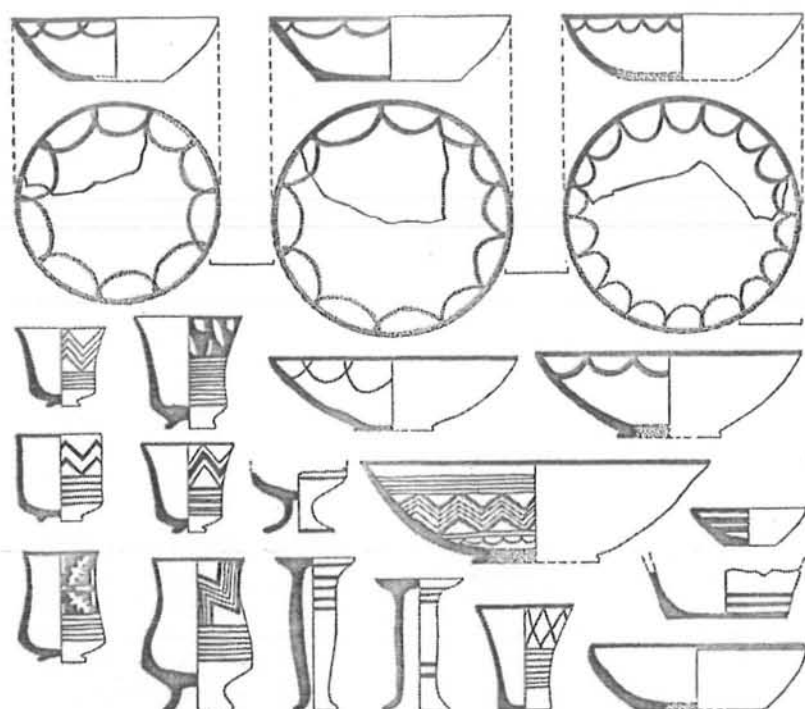
Moreover, they had trade links with Central Asia, Iran and Afghanistan. The origins of their pottery culture were also traced from Central Asia or possibly Central Balochistan. Today, the two types of Quetta ceramics are widely distributed and FMW also had influenced other ceramic cultures in the region. Both the types are of exceptional quality.

Plates of Quetta Ware/Culture<sup>79</sup> including Faiz Mohammad Ware

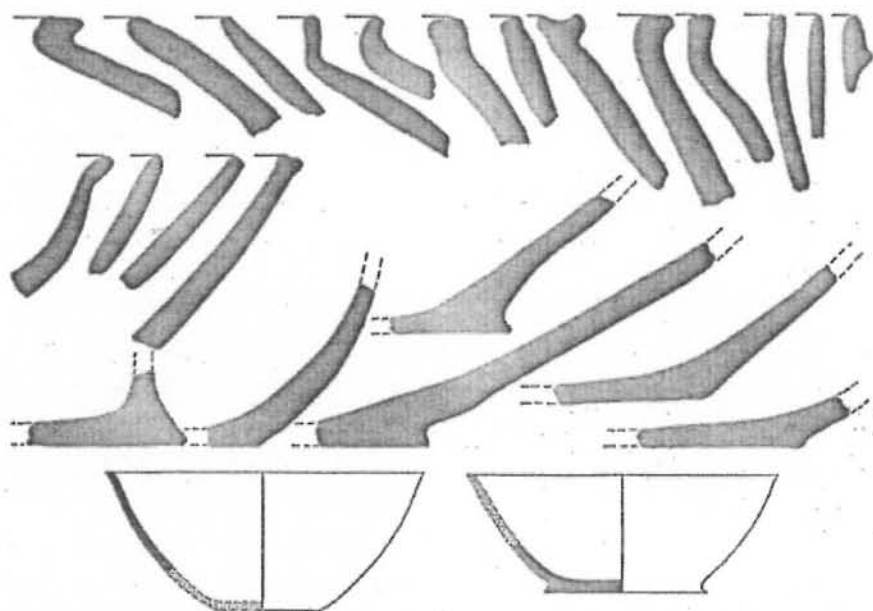


Pl. 1. Pottery Drawings of Quetta Black on Buff Ware and Quetta Black on Surface Ware (from Fairervis 1956: 254) Not to Scale

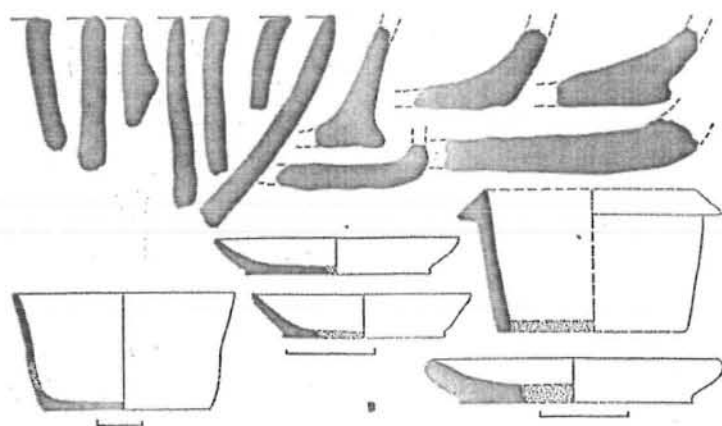
<sup>79</sup> The present researcher is dealing with it as a sub-culture of Quetta region here for the plates' categorization.



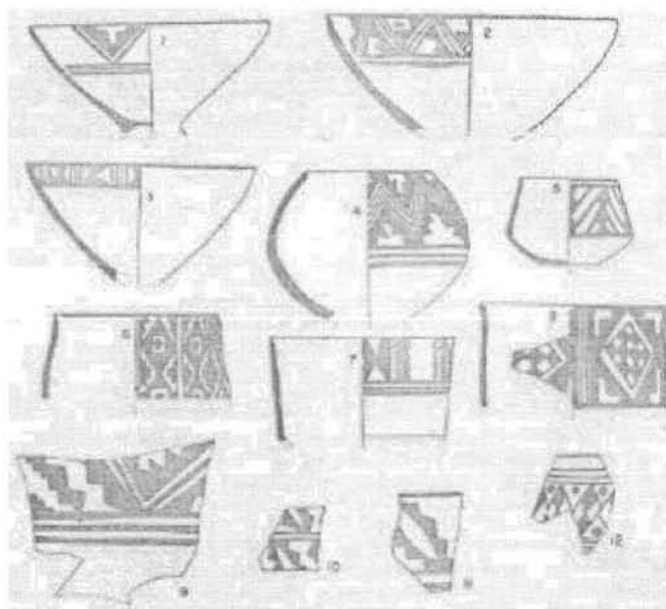
Pl. 2. Pottery Drawings of Quetta Black on Buff Ware and Quetta Black on Surface Ware (from Fairservis 1956: 255) Not to Scale



Pl. 3. Pottery Drawings of Quetta Micaceous Ware (from Fairservis 1956: 247) Not to Scale



Pl. 4. Pottery Drawings of Quetta Slate Temper Ware (from Fairservis 1956: 247) Scale 3 Inches



Pl. 5. Pottery Drawings Showing of Mehrgarh IV Showing Quetta Ware Influence (from Ahmed 2014: 423) Not to Scale



Pl. 6. Quetta Ware from Mehrgarh IV (from Franke 2008: 661)

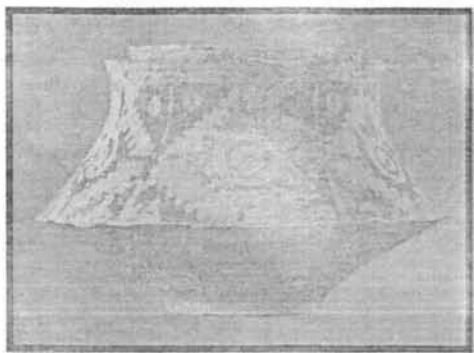




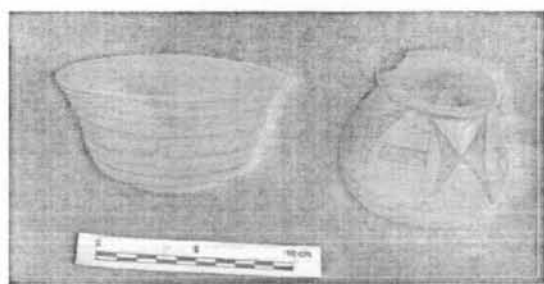
**Pl. 7. Qutta Double Bull Painted Ware**  
(from Ahmed 2014: 419) Not to Scale



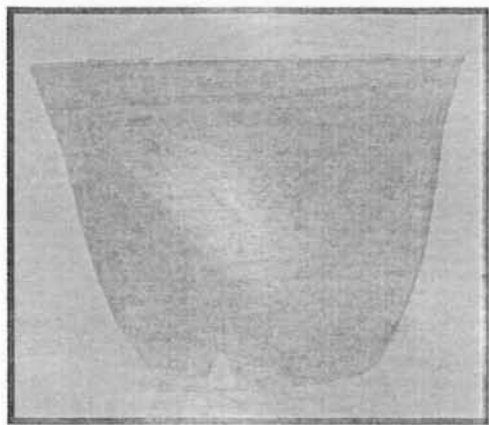
**Pl. 8. Qutta Painted Ware**  
(from Fairservis 1952a: 103) Not to Scale



**Pl. 9. Qutta Decorated Style Pot**  
(from [www. Harappa.com](http://www.Harappa.com)) Not to Scale



**Pl. 10. Qutta Black on Buff**  
(from Johnathan Mark Kenoyer)



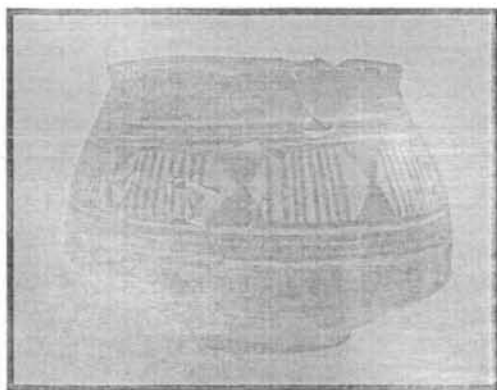
**Pl. 11. Qutta Ware from Islamabad Museum**  
(from the Present Researcher) Not to Scale



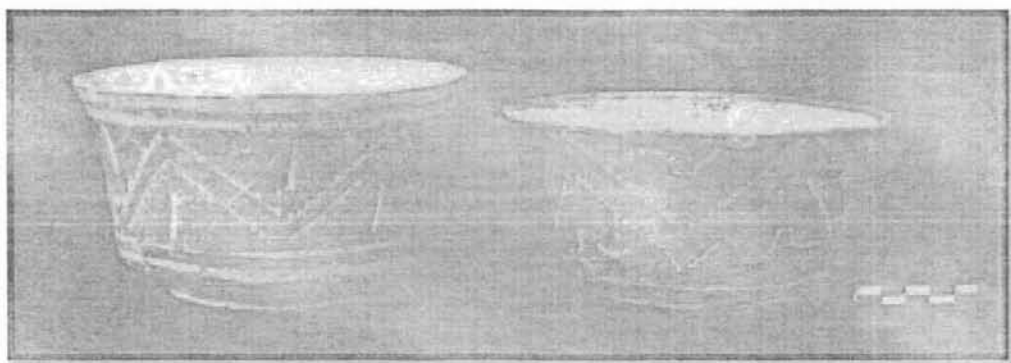
**Pl. 12. Qutta Ware from Qutta Museum**  
(from the Present Researcher) Not to Scale



Pl. 13. Quetta Ware from Quetta Museum  
(from the Present Researcher) Not to Scale



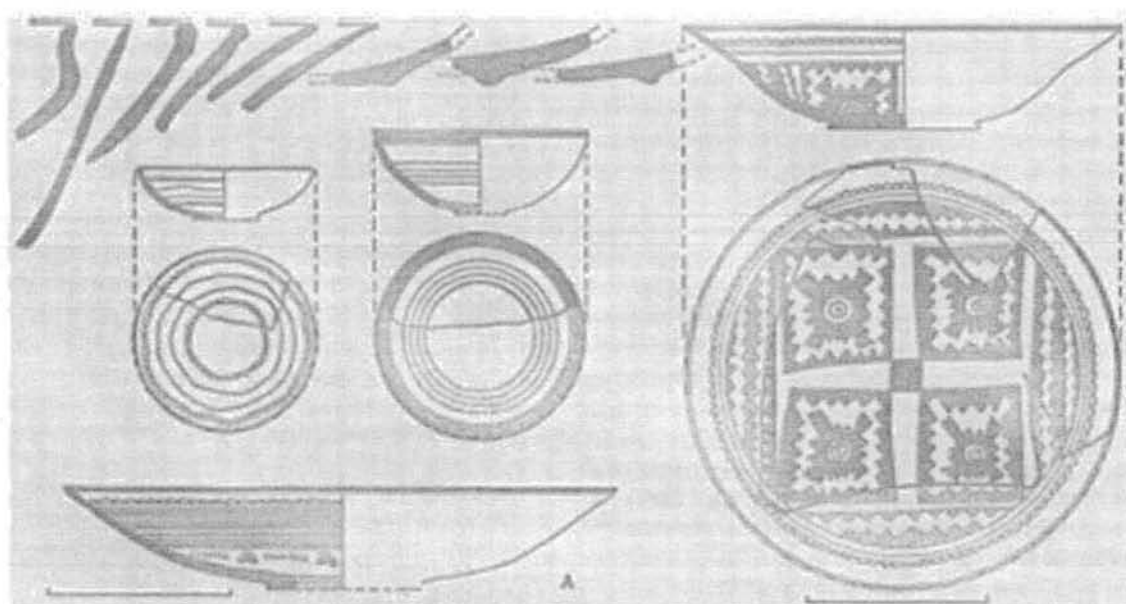
Pl. 14. Quetta Ware from Islamabad Museum  
(from the Present Researcher) Not to Scale



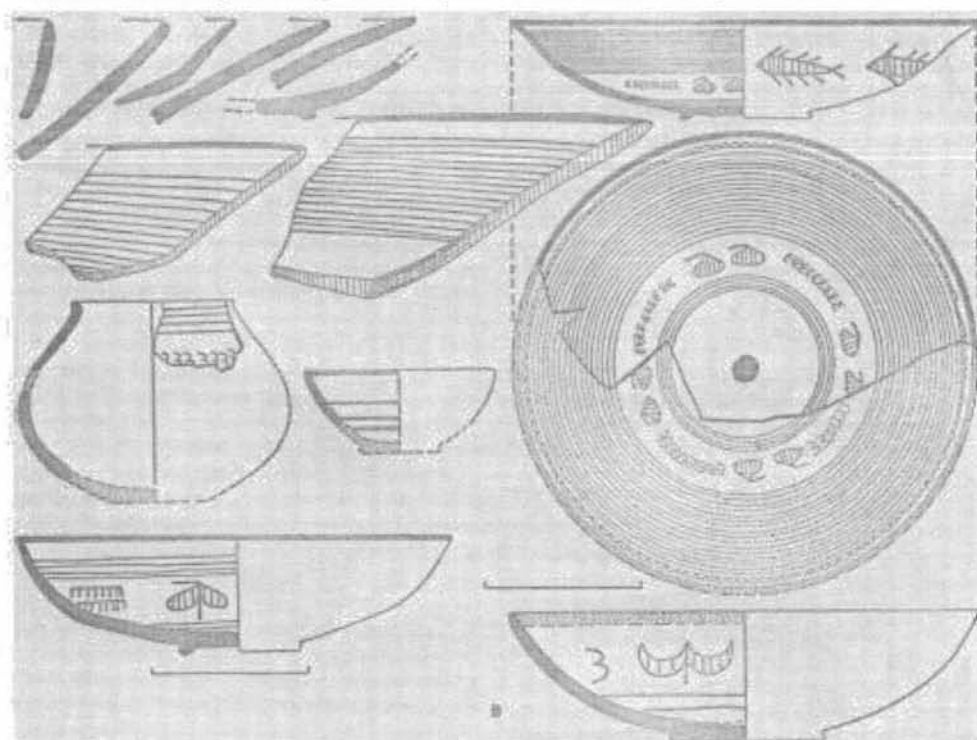
Pl. 15. Quetta Brown on Buff Ware (from C. Jarrige *et al.* 1995: 171)



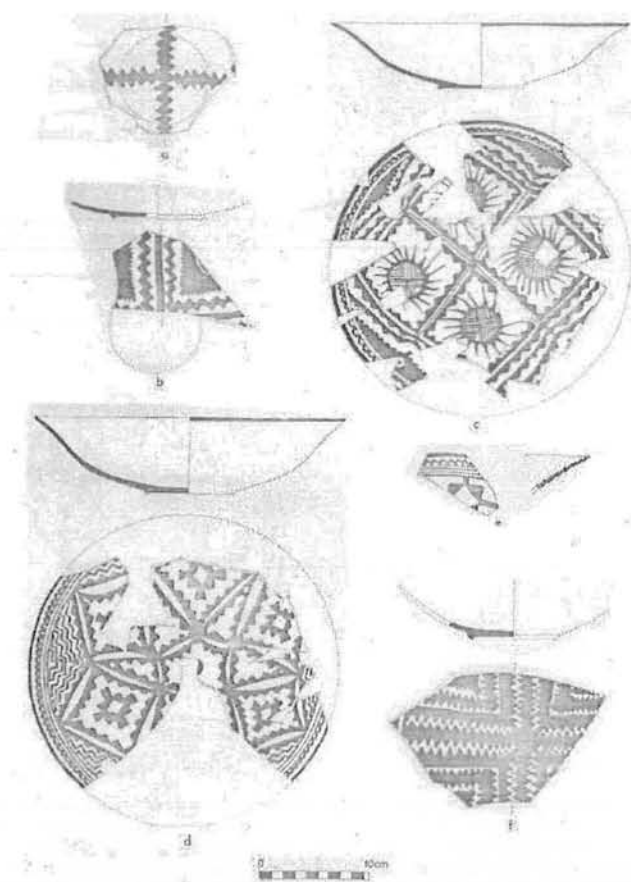
Pl. 16. Quetta Ware (from Fairservis 1952a: 103) Not to Scale



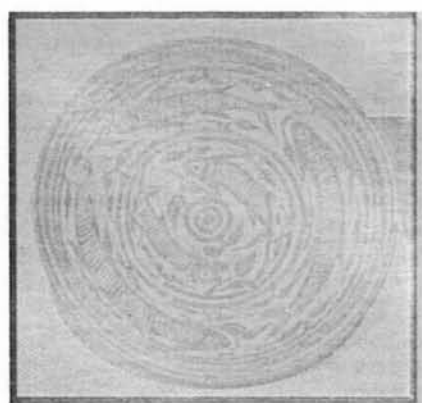
Pl. 17. Pottery Drawings of FMW (from Fairservis 1956: 264) Scale 4 Inches



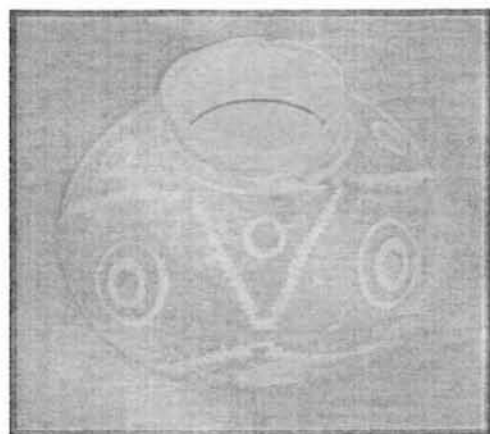
Pl. 18. Pottery Drawings of FM Red-Brown or Black on Red to Dark Brown Slip Ware (from Fairservis 1956: 264) Scale 4 Inches



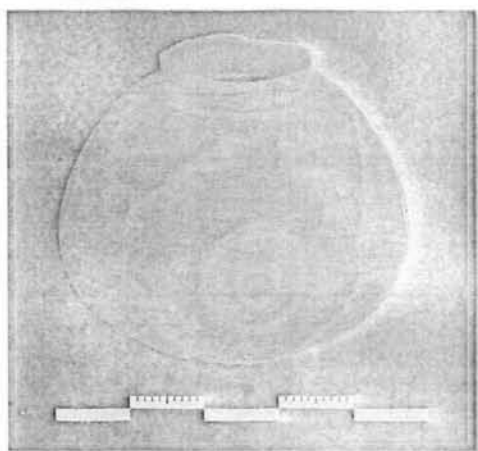
Pl. 19. FMW Pottery Drawings from Mehrgarh VI (from C. Jarrige *et al.* 1995: 160)



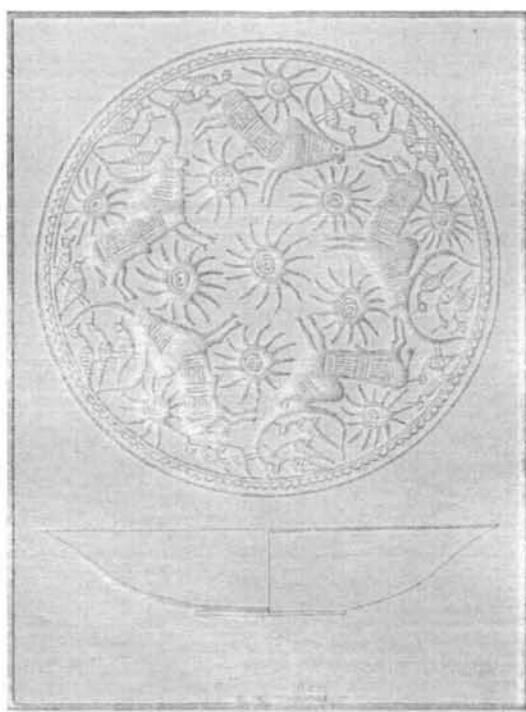
Pl. 20. FMW from Mehrgarh VIIA/B  
(from the Present Researcher) Not to Scale



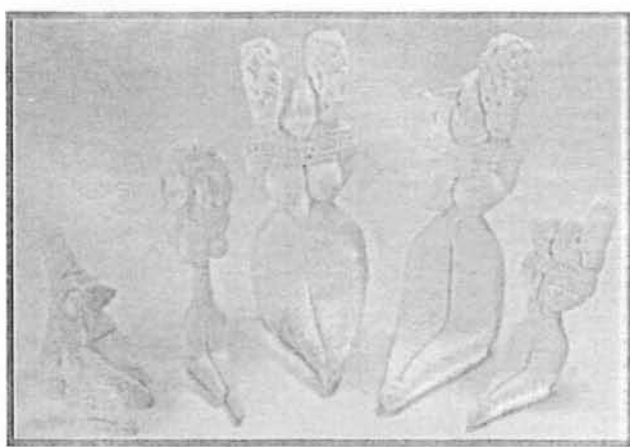
Pl. 21. FMW from Quetta Museum  
(from the Present Researcher) Not to Scale



Pl. 22. FMW Beaker  
(from Franke 2008: 662)



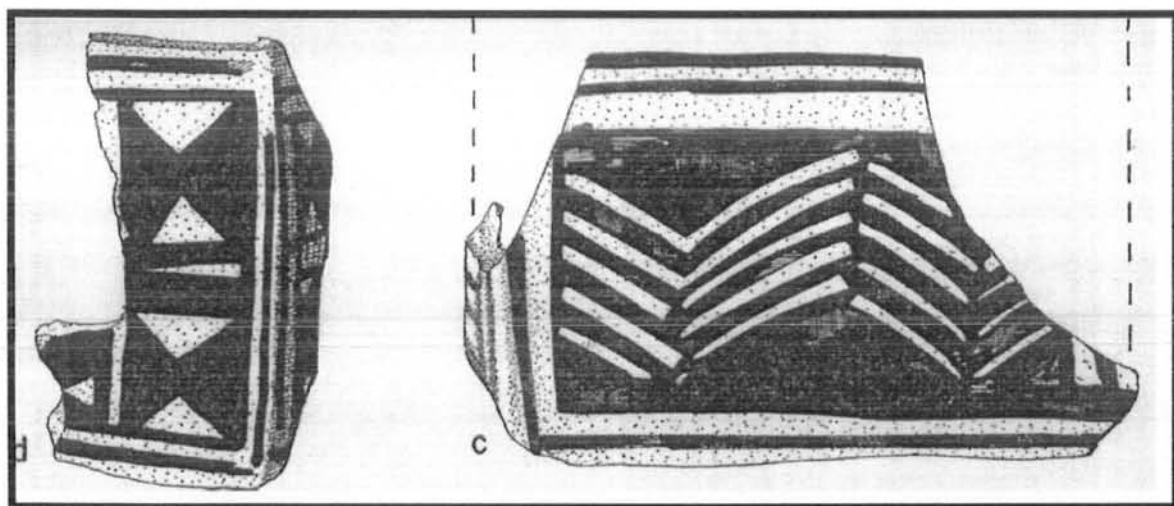
Pl. 23. Reconstructed FMW from a Sherd  
(from J. Jarrige *et al.* 2011: 280)



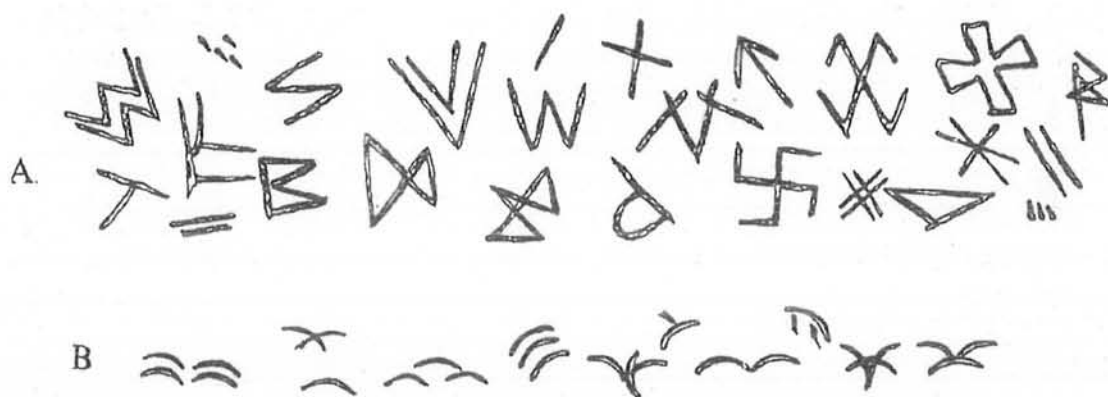
Pl. 24. Quetta Culture Related Figurines  
(from Ahmed 2014: 419) Not to Scale



Pl. 25. Quetta Culture Seal  
(from Fairervis 1952a: 102) Not to Scale



Pl. 26. Clay House Models (from Fairservis 1956: 228) Not to Scale



Pl. 27. Quetta Culture Potters' Marks on Pottery: A—Incised; B—Fingernail-impressed (from Fairservis 1971: 144) Not to Scale

5.3 Anjira Ware/Culture (c.3100-2800/2900 BCE)

This pottery culture was first defined and named after the site Anjira site by Beatrice de Cardi from her surveys and excavations in Surab region. It was found at the end of Period III at Anjira site and dominated in Period IV the same site (see Table 20 for chronological comparisons). Some other important settlements of this culture are Thale Damb and Pak in Makuran, Badrang Damb in Rakshan Valley Washuk, and others (1965: 166-67; Asthana 1985: 178-79). Anjira Ware helps in relating Naal and Kulli Wares (de Cardi 1964: 24).

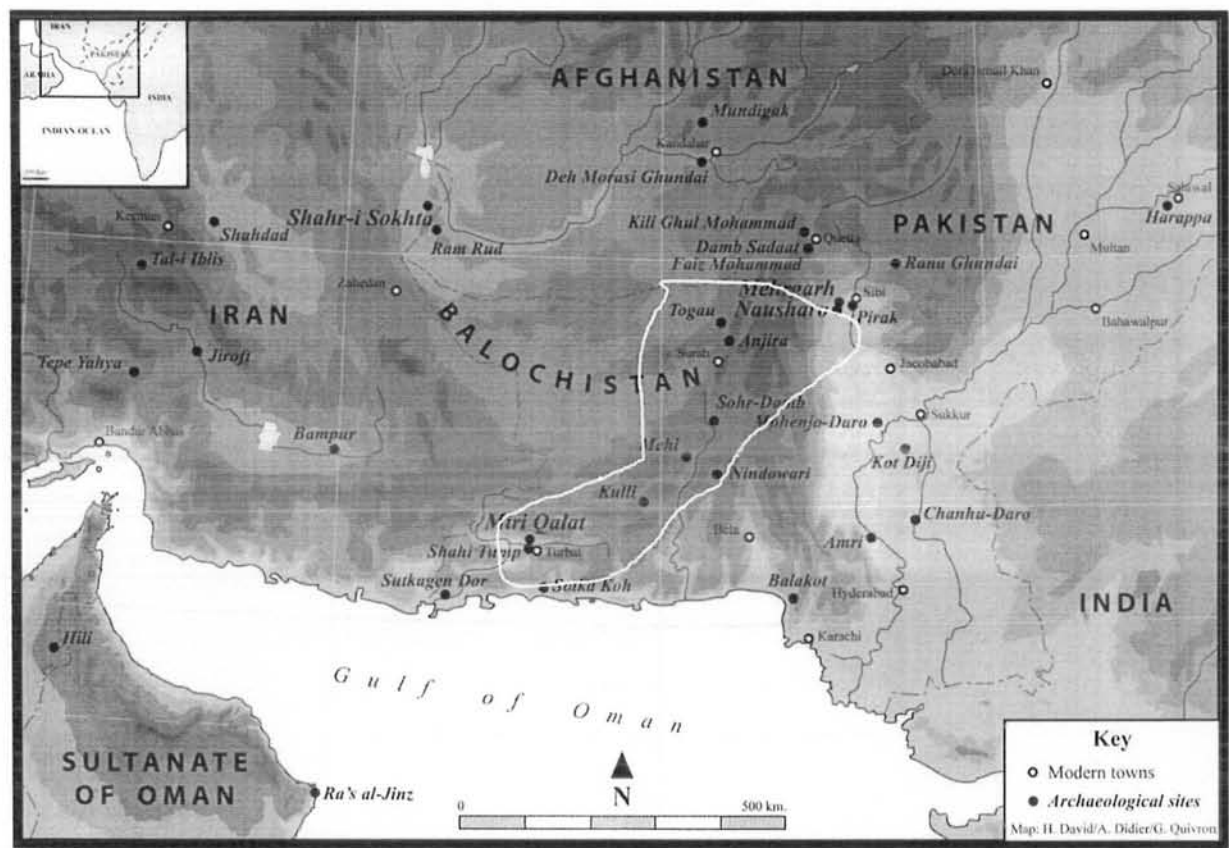


Figure 18. Anjira Ware Distribution Area (from J. Jarrige *et al.* 2011: 8, Modified by the Present Researcher)

5.3.1 Technology

The technological aspects are as given under:

5.3.1.1 Pottery/Ceramics

Technically and form wise this ware is related to Kulli pottery culture (de Cardi 1965: 166). The potters made medium-thick and thin vessels (see Pls. 1-3) (de Cardi 1965: 168-69, 172; Asthana 1985: 178).



*Manufacturing Technique:* It was made on potters' wheel (de Cardi 1965: 168; Asthana 1985: 178).

*Shapes/Forms:* There was a wide range of shapes of this ware. It included large jars, bell shaped bowls, sinuous sided bowls, a flask having, miniature vessels and basins, etc. (de Cardi 1965:168; Asthana 1985: 178).

*Decoration Repertoire:* This gritty ware is buff or greenish however it is coated with some sort of black or occasionally red slip. Cordoning and comb incising were the only form of decorations executed on this pottery culture. Mostly single cordon ridges were applied from clay coils horizontally on the exterior of the vessels either in straight or wavy lines. The smoothing was done with fingers. Sometimes double or triple cordon patterns were applied in certain composition. The wavy cordon forms were occasionally claimed to be snakes; some having diamond like heads and others with "expanded hoods and forged tongue" were recognized as cobras occurring in single, double or triple forms around the bowls (de Cardi 1965: 168; Asthana 1985: 178-79). Moreover, the potters also created twisted horns of sheep, sometimes with and sometimes without the complete faces (de Cardi 1965: 168).

Using a five toothed comb or comb-like object, the incisation was done in parallel or wavy lines applied either alone or with cordons together (de Cardi 1965: 168; Asthana 1985: 179) which seems to be restricted to S shaped bowls (de Cardi 1965: 168).

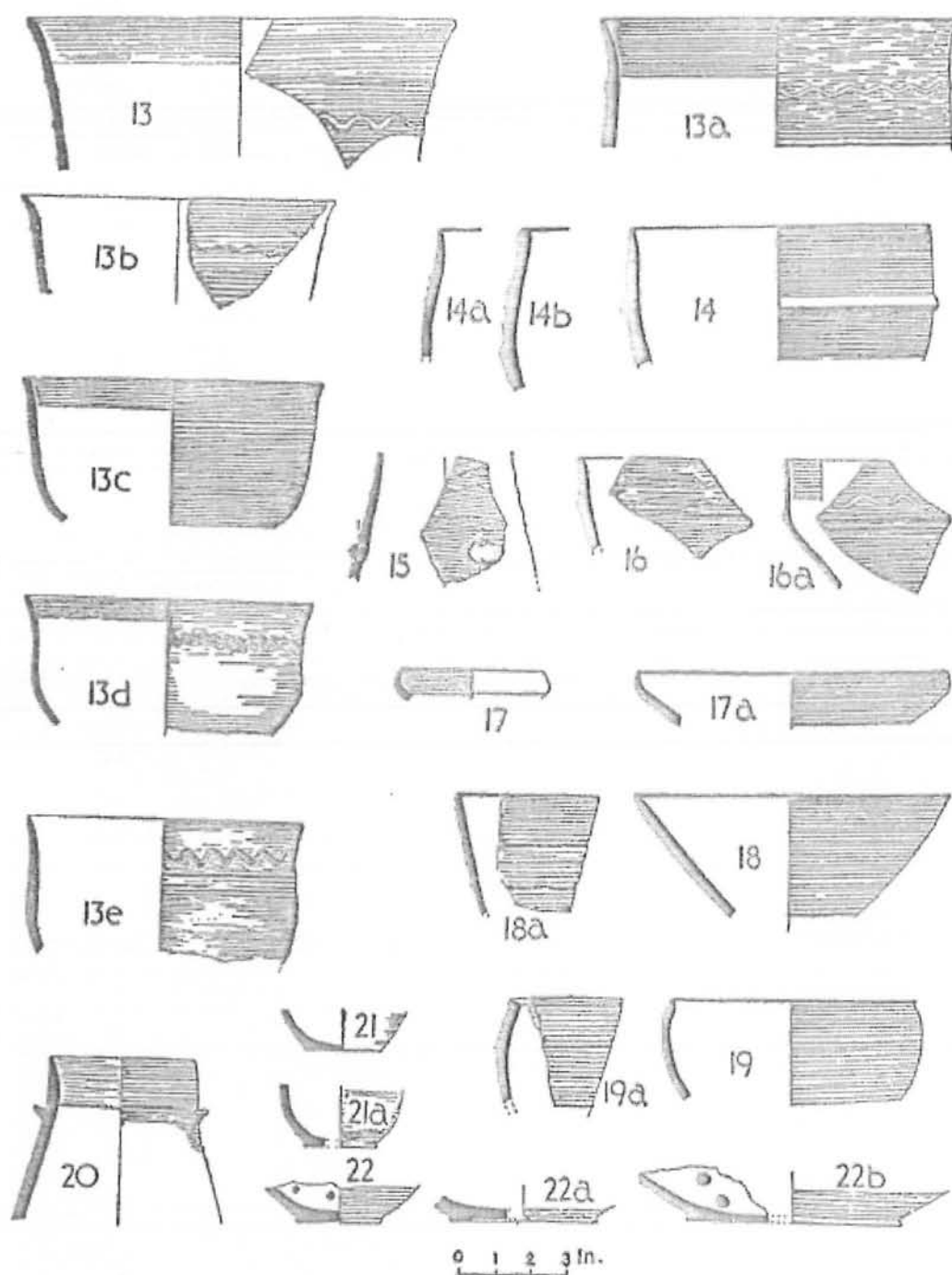
*Firing Technique:* It was fired over 1100° C high temperature (de Cardi 1965: 167; Asthana 1985: 178).

#### **5.3.1.1.1 Distribution Area**

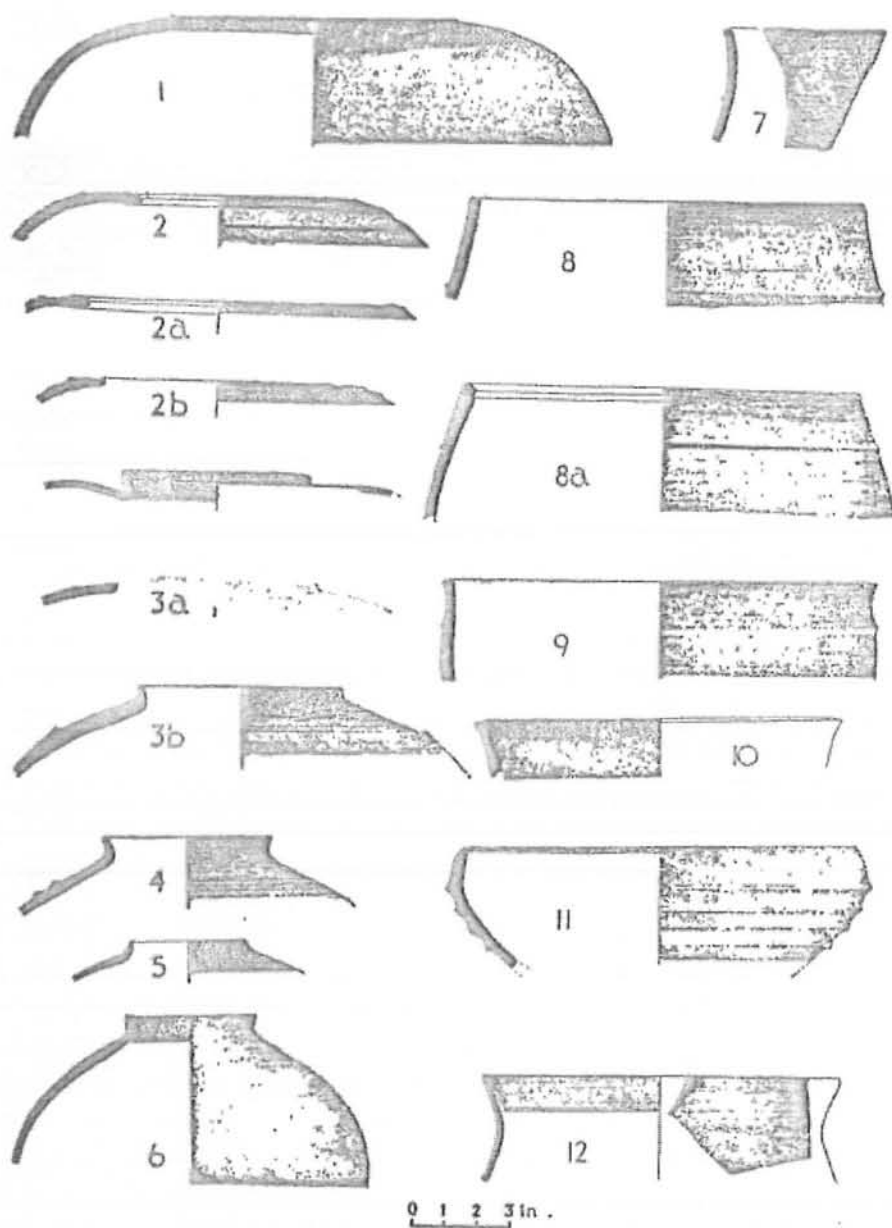
This ceramic culture is distributed southern Balochistan—Jhalawan and south of Sarawan Makuran, Rakshan Valley Washuk, and others (de Cardi 1965: 167; Raikes 1968: 127). Moreover, from Noushki, in Northwest Balochistan from the site of Jatthi Kalat IV and Rehmanzai Kalat IV, it was attested (see Fig. 18) (S. Naseer, Personal Communication, October 12, 2018).

To conclude, nothing much is known about their subsistence, structural remains, beliefs, other technologies etc. due to lack of extensive excavations on any of its major sites. However, the ceramics of this culture are of high quality distributed over the region.

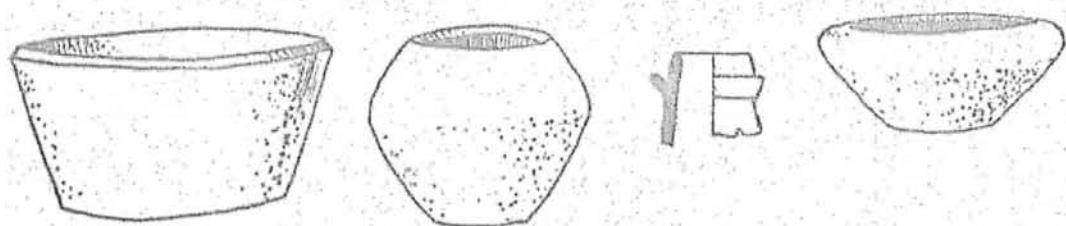
# Plates of Anjira Ware/Culture



Pl. 1. Pottery Drawings of Anjira Ware (from de Cardi 1965: 172)



Pl. 2. Pottery Drawings of Anjira Ware (from de Cardi 1965: 169)



Pl. 3. Pottery Drawings of Anjira Ware Drawings (from Fairservis 1971: 155) Not to Scale

#### 5.4 Naal<sup>80</sup> Culture (c.3100-2700 BCE)

Geographically, the main center of Naal Culture is in southern Balochistan which is demarcated from the presence of its distinct ceramics (Shaffer 1992a: 259). The location of this culture was at the interaction sphere as it is between Awaran and Makuran coast i.e. parts of central and southern Balochistan (Hideaki *et al.* 2009: 76). However, the recent excavations at Naal have proved that it was the culture in Period II of the site which is date as with the title (see Table 21 for chronological comparisons) (Cortesi 2015c: 165).

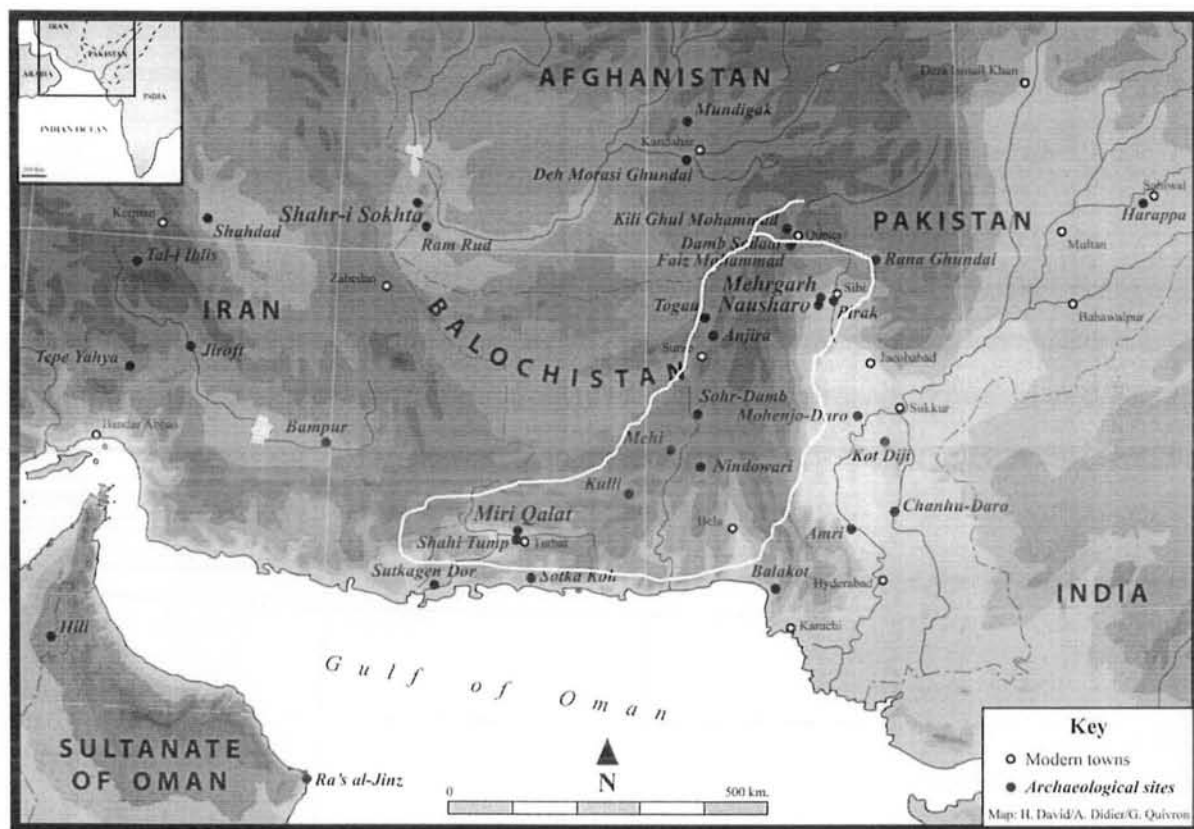


Figure 19. Naal Ware Distribution Area (from J. Jarrige *et al.* 2011: 8, Modified by the Present Researcher)

Mirza Sher Mohammad discovered Naal Culture in 1903 at its type site: the Naal site<sup>81</sup> in Naal area of Khuzdar (Hargreaves 1929: 18); nevertheless, J. Marshal provided a description to his unearthed collection (1904-5: 105-06). Moreover, the excavations exposed a cultural assemblage and their context at Sohr Damb/Naal (hereafter SD/N) by H. Hargreaves (1929:

<sup>80</sup> It is often misspelled and pronounced by non-natives like the west scholars who write it as 'Nal' which is wrong.

<sup>81</sup> It is also known as Sohr Damb.

18-31). Furthermore, the researches and recent excavations by the joint German-Pakistani Archaeological Mission in central and southeastern Balochistan from 1997 till 2007 added to the cultural assemblage which helped in the further understanding of this culture and its chronology and cultural relationships with other cultures (Franke-Vogt 2005b: 63-76; Görsdorf 2005: 77-80; Benecke and Neef 2005: 81-90; Franke-Vogt and Ibrahim 2005: 105-15). This mission uncovered this culture from period II from its type site (Franke 2015h: 178-83). Despite these researches, there is an incomplete picture of this culture (Uesugi 2017: 141). Hence, this culture is known in a fully developed stage and its initial stages are missing until now (Asthana 1985: 74).

Moreover, this culture has been named after Naal [later called Sohr Damb or Sohr Damb/Naal] (Piggott 1950: 80-4). Other sites are Chiri Damb in Panjgur, Diwana in Las Bela, Gate Dap in Makuran, Hala Damb and Jebri Damb in Khuzdar, and Kargushki Damb in Washuk, etc. (Possehl 1999: 727-76, from Gazetteer of Sites of the Indus Age). Also, this culture is represented by Naal Ware and the archaeological study of the recovered pottery was and is debated among scholars (Uesugi 2017: 141). Sadly, Naal is a much illegally excavated site (Piggott 1950: 80; Wheeler 1968: 14).

#### **5.4.1 Structural Remains**

The common structures were mudbrick houses on boulder/stone foundations “with small paths providing access”. The small houses with multiple rooms were constructed close to each other containing installations like lime floored basins, brick platforms, hearths (Franke 2015h: 180). Some objects in the houses suggested that food preparation and storage was carried out in the houses (Görsdorf and Franke-Vogt 2007: 704). Moreover, there were small rooms (measuring 1 by 2 m) most probably used as storage rooms (see Pls. 1-2) (Franke-Vogt 2005b: 68-9). However, evidences of stone slabs set in mud mortar and on few sites and mud brick walls, masonry and plastered inner walls were also witnessed. The structures were of multi-roomed of different sizes; few had doorways and one had visible lintel (Piggott 1950: 78-80). At Balakot, the inhabitants built scattered dwellings and compounds (Dales 1974: 9; Franke-Vogt 2005a: 95). They used mudbricks (10 x 20 x 40 cm) to make structures and for paving (Dales 1974: 9; Asthana 1985: 134) with stone wall foundations in two instances at the type site (Dales 1974: 9). Furthermore, along these structures, fireplaces, hearths, floors and other

debris were recorded (Franke 2015j: 156). Stone tools were also found in the context of houses at Naal site (Franke 2015h: 180).

#### 5.4.2 Subsistence Patterns/Means, Domestication and Irrigation System

Their subsistence mainly depended on animal and plant domestication mainly reported from the type site; SD/N. The domesticated animals like cattle, sheep and goats while wild animals included hemione<sup>82</sup>, gazelle, fox, bear and mustelids (Benecke and Neef 2005: 81-91). The subsistence also included pig, buffalo, hare, and several varieties of deer; though they seem not to benefit from the sea food from Balakot site. Moreover, the plants included six-row barley, legume, vetch and *ber/zyziphus* (Dales 1974: 21-2; Chakrabarti 2006: 123). Apart from them, plant remains were found from the type site of this culture, but they have not been reported yet (Benecke and Neef 2005: 81-91).

The Naal Culture settlements were associated with water controlling system used for irrigation purposes. For example, the system of reservoir dams with a basin was created to catch water and this water was later at certain times directed to fields via canals for irrigation and/or dam walls were constructed to divert water to the fields. Moreover, across the hill slopes, *Gabarbands*<sup>83</sup> were built to catch irrigable soil when washed by rivers after rain (Chakrabarti 2006: 121).

#### 5.4.3 Technology

Many objects of this category were recorded during the surveys and excavation from this culture. They are given as bellow:

##### 5.4.3.1 Pottery/Ceramics

At SD/N site, this ware is found from dwellings and burials. In other words, it was used for domestic and afterlife purposes (see Table 14 and see Pls. 3-23). There were very fine to fine, and medium to coarse fabric<sup>84</sup> ceramics (Cortesi 2015c: 165). S. Piggott has called Amri and Naal the 'products of the same culture'; nevertheless, he has described many differences in them (1950: 75-91). M. Wheeler has further added that Amri Culture belongs to plain

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<sup>82</sup> An animal known also by the name of onager

<sup>83</sup> They are ancient dams built to stop, divert, or guide seasonal flood or perennial river water. Literally, it means Zoroastrian dams; however, there is no archaeological support for it.

<sup>84</sup> Clay or clay mixture with other inclusions to make pottery



environment and Naal Culture belongs to hill environment (1968: 14). S. Piggott (1950: 82) has claimed that “we have to rely on pottery in distinguishing in one [archaeological] culture from another”.

Major Ware	Types/Variants	Manufacturing Techniques	Prominent Shapes	Decorations	Firing
Naal Ware	<i>Naal Ware</i>	Wheel-made	Jars, beakers, bowls, pots, etc.	Geometric, flora and fauna	900 to 1000° C
	<i>Zari Ware</i>	Wheel-made	Bowls, jars, cups, etc.	Geometric and fauna	Oxidized <sup>85</sup>
	<i>Balakotian Ware</i>	Wheel-made	Bowls, jars, dishes, cups, etc.	Geometric and naturalistic	Oxidized <sup>86</sup>

Table 14. Naal Ware and Its Types/Variants (by the Present Researcher)

5.4.3.1.1 *Naal Ware*

*Manufacturing Techniques:* Six types of clay were deliberately selected to produce this ware. They were prepared and processed by crushing and sieving to get homogenous effect. It was then mixed with water and stored for a couple of days to enrich its elastic nature. From the pottery evidences, the researchers have extracted few methods in which Naal Ware was produced. Studies have shown that the very fine to fine ware is wheel-made whereas medium to coarse ware is made up of coils first and then finished on a turntable or such devices (Cortesi 2015c: 165, 170-72).

The first method used was throwing the pottery on a slow turntable and forming the pottery in a desired shape by hand (Hideaki *et al.* 2009: 79). Secondly, the lower part of the coarse ware jars and other big vessels were made from coils (two, four or six in quantity) to hold weight of the upper part; the upper part was built on the wheel directly and then they were joined together. Later, they were trimmed and smoothed to be painted (Cortesi 2015c: 172). Thirdly, the Naal potters used to make handmade coils/clay rings on a slow turntable or non-rotating anvil. Most of the Naal ceramics are carinated, which consist of two parts; they were built separately using coil building method. It is assumed that at the carinated point the coils were joined or at this time the upper and lower parts were joined together to complete the

<sup>85</sup> Personal observations

<sup>86</sup> Personal observations

unfired vessels. The coils were either joined and smoothed using fingers or a spatula by scrapping either on a slow turntable or a non-rotating anvil. This turntable or non-rotating anvil was not used effectively in this process. However, before joining the two parts of the pottery, they were semi-dried (Hideaki *et al.* 2009: 91-2). The last method, though not common, is the use of chuck to make the lower part of the large mouthed jars. Once the complete form is readied then blades or spatulas were used to carve and trim the useless surface clay (Cortesi 2015c: 172).

Some pottery was finished on a fast moving turntable as spatula scrapping is visible. Moreover, the finger marks for smoothing on the rim were probably the result of rotation. The marks of scrapping are visible which shows inefficient smoothing. Some ceramics were finished only by scrapping. At the end, a clay cord was made to attach it underneath the pottery as a rim base. For finishing, the smoothing of ring base was done by fingers or a spatula (Hideaki *et al.* 2009: 92). Further, there are specimens of canisters and biconical pots which suggest that a clay cord was attached to the inner rim of them (Cortesi 2015c: 173). There is flat base pottery that was finished by scrapping (Hideaki *et al.* 2009: 92).

*Shapes/Forms:* The common shapes of this pottery culture consisted of short necked globular jars, thin walled carinated beakers, biconical pots, and globular pots (Cortesi 2015c: 165). The shapes of Naal ceramics are different from other pottery cultures (Chakrabarti 2006: 121). “The vessels have medium to thin body and are very light weight” (Hideaki *et al.* 2009: 79).

*Decoration Repertoire:* After all the procedures, the pottery was dipped/slipped and partly painted to give it a homogenous effect (Cortesi 2015c: 173). Frequently, a white slip was applied on the background for clearer paintings (Piggott 1950: 84). It is slipped in black, brown or red (Cortesi 2015c: 165). Furthermore, the colors of the wares range from greenish gray, buff and fine red (Asthana 1985: 127).

There are two types of ceramics in terms of painting decorations: black-on-buff and true polychrome (Asthana 1985: 187); moreover, there is also bichrome ware (Personal Observations). The painted motifs are geometric, zoomorphic and floral; they were painted in black panel lines and outline on a white slip before firing. After firing the outlines were filled with yellow, red or green colors (Hideaki *et al.* 2009: 79). There is a wide range of geometric

patterns (i.e. lozenges, stepped pyramids, interconnected concentric circles, serrated patterns (Uesugi 2017: 141-42), multiple crosses, loops, zig-zag patterns, triangles, squares, circles, horns, hourglasses, with bosses or knobs (Cortesi 2015c: 167-69); to add more, horizontal bands and trapezoidal panels are also seen (Asthana 1985: 129) often presented in different combinations (Cortesi 2015c: 169). However, the integration of figurative and geometric patterns was common. They are arranged in a register or in different panels which are bordered with parallel lines as already mentioned (Uesugi 2017: 142). Nonetheless, there is no single specimen colored more than three colors (Asthana 1985: 129). To be more specific, the painted animals are fish, bird, griffin, humped bull, and other unrecognized animals probably feline or dog (Uesugi 2017: 141). However, S. Asthana (1985: 129) has mentioned, cows, Sindh ibex, gazelle and scorpion as well. Pipal leaves and tree are among plant motifs. Nevertheless, there are also multiple leafed trees (Uesugi 2017: 141-42). All forms of pottery are painted and there seems to be no rule in terms of applying painting motifs on any specific pottery form. Mostly two or many combinations of motifs are arranged on the surface of the pottery (Hideaki *et al.* 2009: 79). It is interesting to note the repetitive occurrence of designs, yet hardly two specimens have been witnessed identical (Franke 2008: 661). According to E. Cortesi, the wares are finely painted (2015c: 165). Most of them are depicted sideways leaving out few of them (Uesugi 2017: 141-42).

The griffin (a mythical hybrid animal) representation in this culture is one of the most ancient in the World. It must have symbolized a powerful creature. However, its function in this culture is uncertain for the moment (Cortesi 2015c: 169-70). Interestingly, some of the new motifs appear from the looted materials of this region some of which are already mentioned. For example, “winged griffins, raptors<sup>87</sup> with spread wings, lion friezes and, more significantly, human figures with lion heads” (J. Jarrige *et al.* 2011: 14). Furthermore, the use of clay and applique methods were applied for cordon decoration on some pottery. The pottery has no gritty ingredient (Hideaki *et al.* 2009: 79). Hence, “the new motifs and designs are closely linked to Mehrgarh VII, Balakot and other sites of the late Early Harappan Period in southeastern Baluchistan” (Franke 2015h: 183).

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<sup>87</sup> Birds that kill other creatures for food/survival

*Firing Techniques:* The potteries were fired in kilns in large numbers. The firing temperature there reached about 900 to 1000° C (Cortesi 2015c: 174).

*Distribution Area of Naal Ware:* Southern Balochistan is the heart of Naal Culture (J. Jarrige *et al.* 2011: 13-4). Additionally, according to G. L. Possehl's gazetteer of sites, Naal pottery is distributed in south Balochistan, north of Khuzdar, south of Kalat, east of Halan and north of Las Bela (Possehl 1999: 727-845). Moreover, Awaran and Kirthar areas are also included (Cortesi 2015c: 165). This list also includes few sites in Dadu (Uesugi 2017: 141) and Roheljo Kund is another one of the sites in west Sind (Hideaki *et al.* 2009: 77). Intrusive Naal ceramics were found at Said Qala Tepe southern Afghanistan, at Shahr-e-Sokhta in southeastern Iran, and Tepe Yahya VA (Shaffer 1986: 83). The distribution area from north to south measures 350 km and from east to west 210 km. The sites are situated in narrow valleys of the regions (see Fig. 19) (Uesugi 2017: 141).

#### 5.4.3.1.2 *Zari Ware*

It was identified by de Cardi at Siah Damb II, phase iii, and Anjira III-IV (1965: 138). It was and still regarded a variant of Naal Culture (see Pl. 24) (de Cardi 1965: 93; Chakrabarti 2006: 120).

*Manufacturing Technique:* This ware was constructed on wheel. It is a hard reddish buff ceramic having big grits (de Cardi 1965: 138).

*Shapes/Forms:* Medium sized globular jars with in-sloping shoulder, swollen curved necked jars, wide hole-mouthed vessels, vertically walled bowl or cup, slightly slope walled wider bowls, etc. were most common forms discovered (de Cardi 1965: 138).

*Decoration Repertoire:* Zari Ware is mostly decorated with geometric patterns; however, animal decorations also occur. Generally, it was slipped either in black, red, cream or grayish-black with mostly geometric and some animal designs in black outline with white lines; on black, the white looks bluish. "The red slipped bichrome had a creamer or more opaque ground". There is little true polychrome occurrence in this ware. The geometric designs included two friezes of scallop curves forming a fish scale design, frieze of diagonally or cross-hatched lozenges between fine lines, group of diagonal lines with gaps between lines like a *zari*, triple lined chevrons, wavy white lines, two, three or four broad horizontal lines,

scallops, thin white bands, differently thick five streaky bands, etc. (de Cardi 1965: 93, 138-39, Figure 11, p. 139).

*Firing Technique:* It looks from the description that it was well fired (de Cardi 1965: 138).

#### **5.4.3.1.3 Balakotian Ware**

Balakot site which is the type site for Balakotian Ware was first identified by Robert L. Raikes (see Pl. 25) (1968: 159-60). This ware was identified by G. F. Dales in 1973 at Balakot site: Period I (1974: 3; 1981: 25, 28). At Balakot, IA-IC are Balakotian phases (Franke-Vogt 2005a: 95). The type site, Balakot, was excavated in four seasons by G. F. Dales in 1973-1976 (1981: 25). Later, a survey was undertaken after some years by the German-Pakistani Mission to Kalat who added more data to this ware. This ware can be dated to c.3100/3000-2600 BCE (Franke-Vogt 2005a: 95, 101) or late fifth millennium (c.4200 BCE) to early third millennium BCE (Chakrabarti 2006: 123).

G. F. Dales (1981: 28) has stated about the diversity of its material culture in these words: "...it seems clear that our Balakotians were in close contact with the technical and artistic skills of many other cultural groups inhabiting southern and northern Baluchistan and the lower Indus Valley". Togau C [c.3600-3300 BCE] is found in the lowest levels of Period I at Balakot and it connects it with Anjira pottery culture. Also, Amri C and D styles were found in large numbers (Asthana 1985: 135). Furthermore, Togau D, Zari and Naal Wares were found alongside Balakotian ceramics and their local production is attested on the site. Interestingly, Togau E bowls were also recorded from this site (Franke 2015j: 156). Moreover, from the site, from phases I-IX the cultural assemblage is homogenous. "In Phases X and XI changes were noted, in particular replacement of NaI-through Amri-pottery" (Franke-Vogt 2005a: 97).

Technologically and stylistically, the ceramic assemblage of Balakot IA and IC has its roots in Balochistan (Dales 1974: 3; Franke-Vogt 2005a: 102) and southern Indus Valley. In other words, regional styles were merged with Balakot ceramics (Franke-Vogt 2005a: 97, 102). "In broad terms, our Period A [of Balakot] can be described as belonging to the basic [Naal Culture] of southeastern Baluchistan with infusions of other south-central Baluchistan traditions such as are best known from the Anjira sequence of Kalat" like the animal head

design associated with Togau C. In later phases, Amri Ware was also found (Dales 1974: 11). Some painted ceramics in form and decoration seem to be directly related to Naal polychrome (Dales 1974: 11; Asthana 1985: 134; Chakrabarti 2006: 123). In addition, some of the ceramic bore incised or painted potters' marks (Asthana 1985: 135). Hence, "the co-occurrence of various styles and their merger into one local assemblage is, however, typical within the "Southeastern Balochi Ceramic Complex". This adaptation is demonstrated by the unusual combination of motifs, types and colors which reveal a chain of experiments and trials within this process" (Franke-Vogt 2005a: 97).

*Manufacturing Techniques:* It is wheel thrown (Dales 1974: 11; 1981: 28-9; Franke-Vogt 2005a: 97; Asthana 1985: 134; Chakrabarti 2006: 123). However, there were heavy and crudely made ceramics for utility and storage purposes (Dales 1974: 11).

*Shapes/Forms:* The commonly found forms were shallow bowls, dishes, storage jars, globular jars, cylindrical vessels and cups (Dales 1974: 11, 17).

*Decoration Repertoire:* The decorative motifs resemble from southern Balochistan early sites (Asthana 1985: 134). A creamy white slip is often applied on the vessels. The designs are dark brown to black and black outlined. However, few instances were filled with red. Animal horns and floral or fruit designs, comb designs, a single vertical line, bands and wavy bands on the shoulder, Naal motifs like stylized pipal leave, frieze of opposed triangles, octopus-like design, etc. Moreover, there are multiple incised motifs. Interestingly, it is presumed that the figures 7 and 8 of Pl. 3 are the prototype of proto-Shiva as depicted on many of Indus Valley seals as on the famous Moenjo Daro proto-Shiva seal (Dales 1974: 11-7). Additionally, "the elaborate painted designs are regional variations of basic motifs common to fourth to early third millennium B.C. pottery of the adjoining regions..." (Dales 1981: 29).

*Firing Technique:* It is fired in oxidized conditions as observed from various ceramic sherds (Personal Observations)

*Distribution Area:* This ware has been found in Las Bela region (Personal Observations).

To sum up, Naal Ware looks to have reached its height at its type site (Piggott 1950: 84). G. L. Possehl has called the pottery of Naal "best made and most attractive" in South Asian context

(1999: 582). The different shapes, amazing use of colors and decorations makes it unique (Cortesi 2015c: 165). Among the painted wares of Balochistan, this culture has the most distinctive painted pottery tradition (Hideaki *et al.* 2009: 91). As per the surface treatment, Naal pottery is considered superior than the Mature Indus pottery (Krishnan and Rajesh 2014: 236). The above depictions share a clear story of richness and importance of nature and wildlife in the region. It is certain that in production of such fine pottery that they had mastered the art of craftsmanship, painting, suitable firing conditions in kilns and making of different pigments. The use of different colors with motifs shows a complex society and high quality of technological experts and craft persons (Cortesi 2015c: 167). Further, polychrome ware was deemed older in the funerary context which needs to be abandoned because it was found in domestic context with monochrome pottery in recent researches (Franke 2015h: 183).

#### **5.4.3.2 Other Cultural Assemblages/Cultural Repertoire**

The findings of this culture were one steatite seal with engraved vulture catching an engraved snake (Piggott 1950: 91), another seal (see Pl. 28) (Franke 2003/2004: 99), close legged bull figurines (see Pls. 29-30), beads, grinding stones, mortars, pestles, and many other artifacts were unearthed from different contexts (Petrie 2014: 864; Franke-Vogt 2005b: 66-9). At Balakot, apart from ceramics, other findings consisted of clay humped bull figurines, flint/chert blades, chipped lithics, microlithics, lapis lazuli, stone, shell and paste beads, saddle querns, stone rubbing tools, grinders and pounders, limited copper, miscellaneous objects of terracotta, bone points and shell objects, etc. (Dales 1974: 17-21; Asthana 1985: 135).

The painted or inscribed symbols/marks may represent the potters' marks and other symbols with uncertain meanings and yet to be deciphered (Dales 1974: 17).

#### **5.4.4 Interment Practices and Goods**

A cemetery was found in which many graves were associated with Naal pottery (Piggott 1950: 81). Three types of burials are associated with Naal Culture (see Pl. 27 for a single grave): (1) Collective but fractional (incomplete) inhumations, (2) Single fractional (incomplete) inhumations and (3) Complete inhumations. Both types of fractional burials were associated with Naal ceramics; they contained bones fragments in, on and around them. Moreover, they were also associated with beads of carnelian, agate, lapis lazuli, limestone, shell and copper (Possehl 1999: 589-92). Other grave goods include a copper axe, animal bones (goats or sheep



as food offerings), and a color grinder. The indirect related materials were two copper hoards and many other beads. They were normally entered in earth having no protection (Piggott 1950: 81-2). Coming to the third type of graves which were brick lined pits and the dead were buried in a slightly flex position (Possehl 1999: 591) accompanied with couple of vessels. The grave goods might be related to the concept of afterlife (Franke 2015h: 178).

#### **5.4.5 Relation of Naal and Kulli Culture**

The main distribution zone of Naal and Kulli ceramics are in southern Balochistan; however, chronologically at different time periods—*c.*3100-2700 BCE and *c.*2600-1900 BCE, respectively (Uesugi 2017: 5).

#### **5.4.6 A Brief Note on Amri Culture in the Context of Balochistan**

According to M. R. Mughal, only four sites have Amri, Naal and Harappan wares and one site has had Amri and Naal wares together (1970: 97). Furthermore, Amri Ware was also recorded at Balakot (Dales 1974: 11), at Murda Sang in Las Bela (Franke 2015j: 160) and at Nausharo IIB (Franke and Cortesi 2015: 340).

Moreover, there are certain decorations which are found in central Balochistan. The Amrian Bichrome occurred at Siah Damb in Surab region. Moreover, “the painted style of the so-called “Kechi Beg Polychrome” in the Quetta Valley is reminiscent of the Amrian pottery...[Furthermore], the Amrian culture area also received influences from the adjoining hills to the north and northwest as indicated by the presence of the so-called “Faiz Mohammad Gray Ware” of the Quetta Valley, and “Togau” and Nal wares of central Kalat” (Mughal 1970: 97-8).

“Its influence is discernable in the Surab and Quetta regions to the west and northwest... However, despite the presence of such Kot Dijian pottery types and the so-called “Togau” and Nal decorative styles of central Kalat in Amrian contexts, they do not seem to have brought about basic changes in the form and bichrome geometric painted designs characteristic of the Amrian pottery.” (Mughal 1970: 113). “Their contacts with Kalat (Anjira), the Quetta Valley (Kechi Beg), and Afghanistan (Mundigak) as suggested earlier, now stand revised because no characteristic Amrian ware is found outside the southwestern Sind region. Only the bichrome painting tradition is noticeable at other sites but the pottery forms at those sites are different

from the Amriran ware" (Mughal 1992: 126). According to M. R. Mughal, there is not enough evidence to support the theory of J Casal who claimed that diversification of Amri ceramics was due to closer contacts with Balochistan sites (1970: 113).

To conclude, there is the discovery of new Naal site from Zehri area in Khuzdar named Miri Sarhap. The researcher has studied the pottery of the site which includes Naal pottery. To add more, the Naal Culture one of the better studied cultures of Balochistan. In winters, the pastoralists and itinerants of this culture visited the lowland pastures and returned to their homes in summers (Possehl 2002b: 115-16). Furthermore, there is richness and variety in the material of this widely distributed culture. It has a unique and attractive ceramic tradition incomparable in South Asia. Additionally, the people of this culture were very much aware of the chemistry the colors and pigments. The recent survey on Londo site in Khuzdar provides a certain occupation of Naal people. Generally, the ceramic decorations show that they believed in mythological world. The amazing architecture of this culture at some sites speaks for itself which was mudbrick houses on stone footings. They buried their dead in different ways i.e. collective, single or complete with objects usually which gives the idea of afterlife belief. There is clearly an advance culture of its time probably not comparable with any of its contemporaries. In terms of water management, they knew how to control, manage and preserve water for survival in the harsh land.

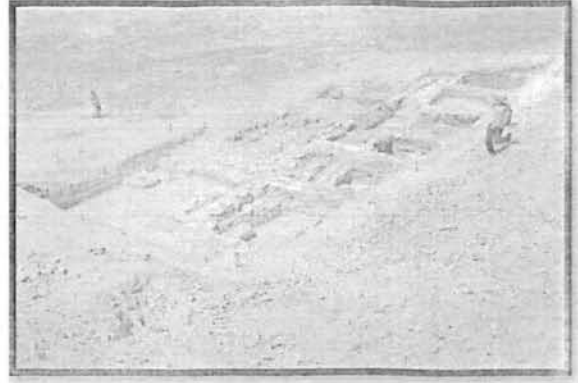
Moreover, the Balakotian Ware is unique. The Naal Polychrome Ware was luxurious in antiquity (Dales 1974: 11). This culture is a hybrid of Balochi and Indus Valley cultures of the time. However, it has its own flavor like designs on pottery, quality of materials, etc. The researcher feels that the inhabitants from Naal and Anjira Cultures might have gone there to settle and merged with them since the site is at a strategic position. They must have lived with each other peacefully. At the time nothing much can be said. However, this requires much research on the same site since it is not well known, and it has not yet been found on any other site.

Nevertheless, there are still huge lacunae and extensive excavations are needed to fully get the clarity about the different aspects of Naal Culture. Most of its sites are illegally excavated and are endangered now. It requires attention and protection from authorities from treasure hunters.

### Plates of Naal Culture



**Pl. 1. View of a Room at Sohr Damb/Naal**  
(from Franke 2016: 187)

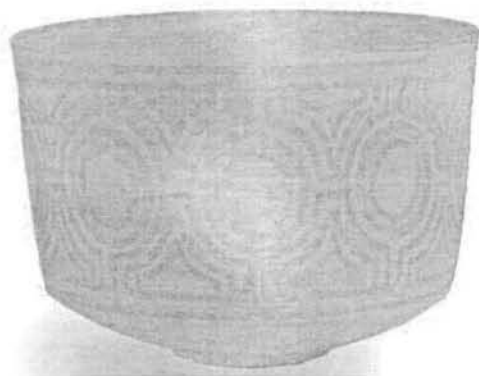


**Pl. 2. Excavated Structures from Naal Site**  
(from Franke-Vogt 2003/2004: 104) Not to Scale

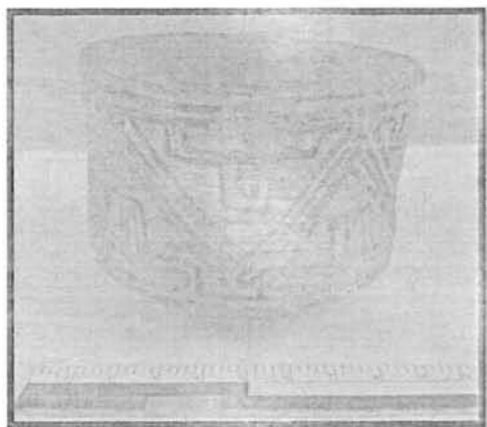
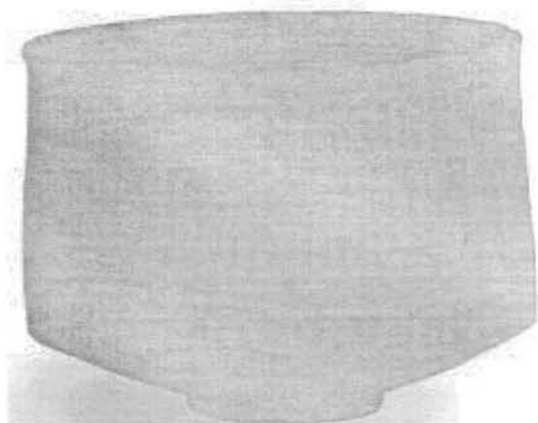


**Pl. 3. The Naal Pottery Sherd Collection from the Recent Survey of Londo Site in Khuzdar**  
(from the Present Researcher)<sup>88</sup>

<sup>88</sup> This survey proves Londo site is a multi-cultural including Naal Culture.



Pl. 4. Ceramics with Geometric and Animal Polychrome Decorations (from Akinori Uesugi) Not to Scale

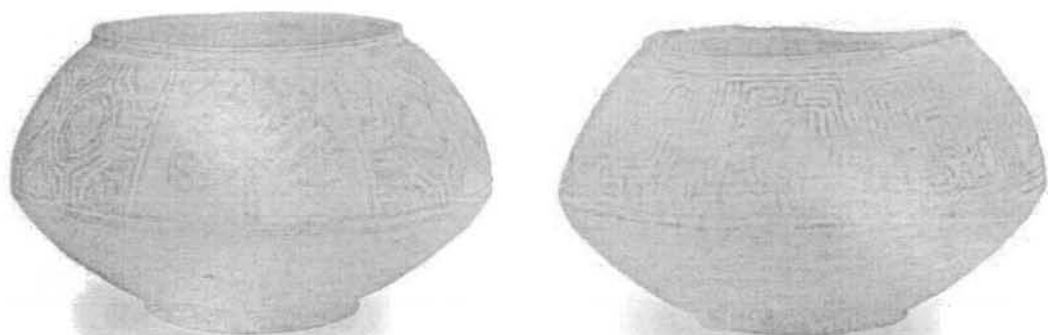


Pl. 5. Ceramic with Geometric Polychrome Decorations (from Akinori Uesugi) Not to Scale

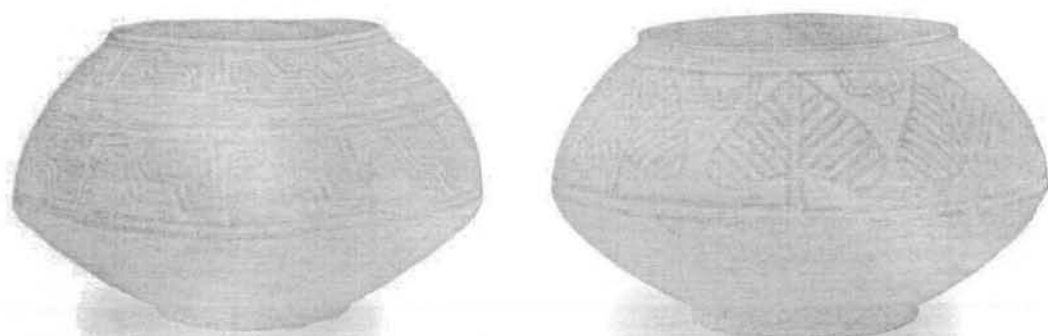
Pl. 6. Monochrome Geometric Pottery (from the Present Researcher)



Pl. 7. Ceramic with Geometric and Animal Polychrome Decorations (from Akinori Uesugi) Not to Scale



**Pl. 8. Polychrome Geometric and Flora Decorations (from Akinori Uesugi) Not to Scale**



**Pl. 9. Polychrome Pottery with Geometric and Plant Motifs (from Akinori Uesugi) Not to Scale**

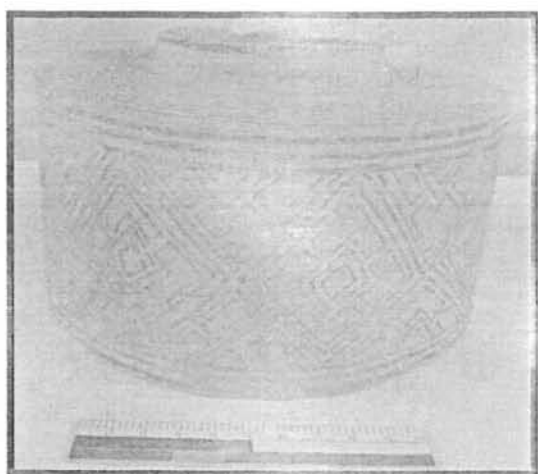


**Pl. 10. Pottery with Animal and Geometric Motifs (from the Present Researcher)**



**Pl. 11. Polychrome Pottery with Animal Motifs<sup>89</sup> (from the Present Researcher)**

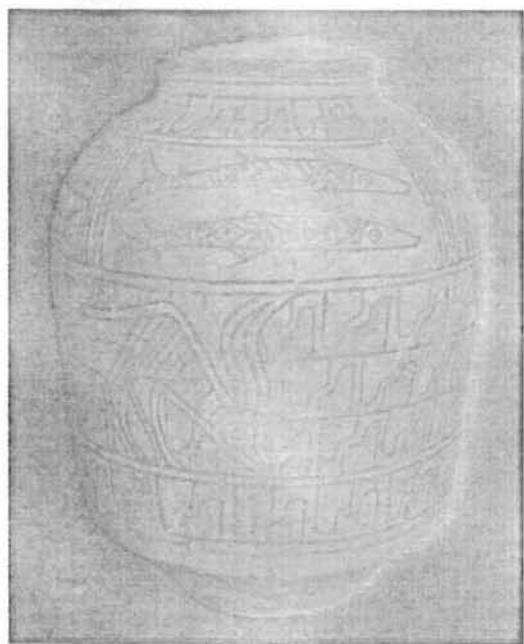
<sup>89</sup> Two sherds with such decorations was found by the researcher in the recent research in Khuzdar; however, one was picked for further comparisons.



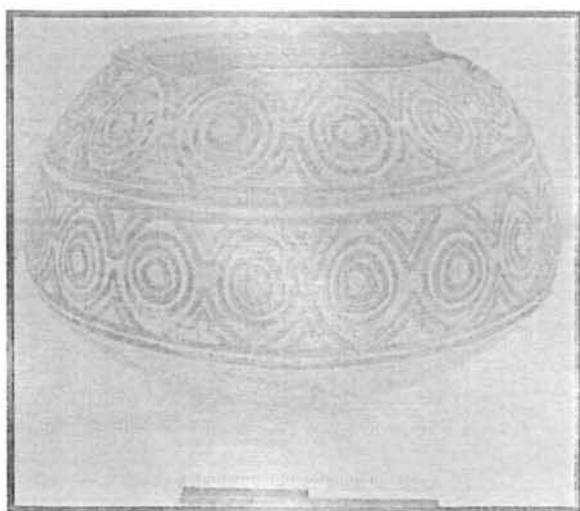
Pl. 12. Monochrome Geometric Decorated Pottery  
(from the Present Researcher)



Pl. 13. Monochrome Geometric Decorated Pottery  
(from the Present Researcher)



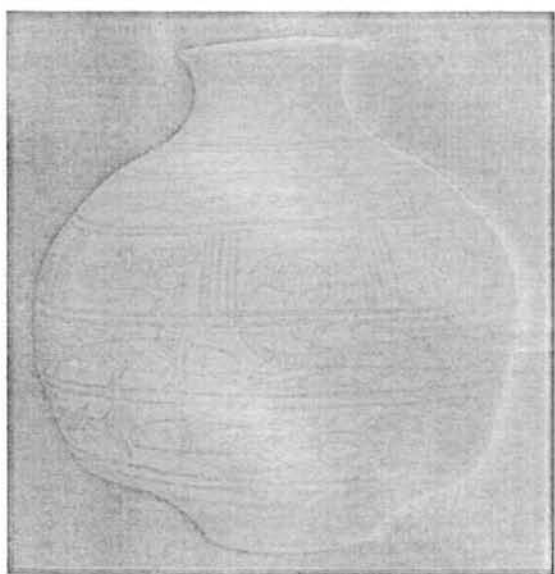
Pl. 14. Beautiful Naal Ceramics with Nauturalistic Polychrome Decorations (from [www.pinterest.com](http://www.pinterest.com))  
Not to Scale



Pl. 15. Polychrome Ware from DOAM<sup>90</sup>  
(from the Present Researcher)



Pl. 16. Ceramic Stand with Embossed Bull Head  
(from Ancient Pakistan 2016: 23) Not to Scale



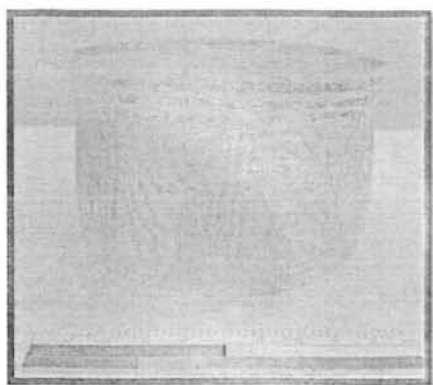
Pl. 17. Beautiful Polychrome Ceramics<sup>91</sup> (from [www.pinterest.com](http://www.pinterest.com)) Not to Scale



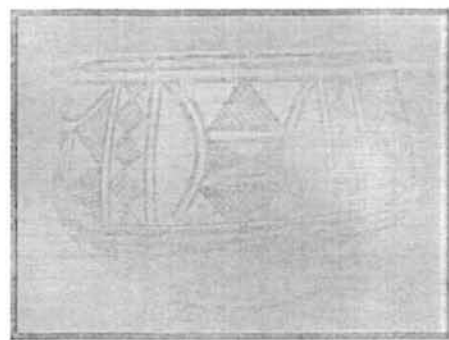
<sup>90</sup> Such a pottery with similar decoration is presented in Franke 2015

<sup>91</sup> They are perhaps replicas.

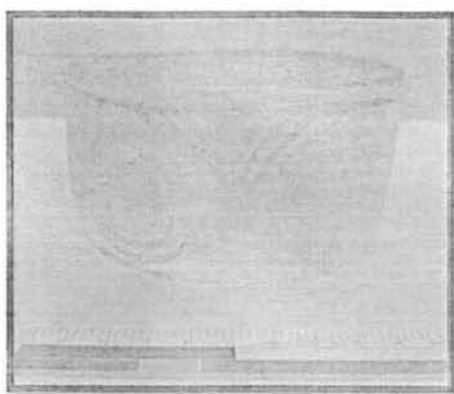




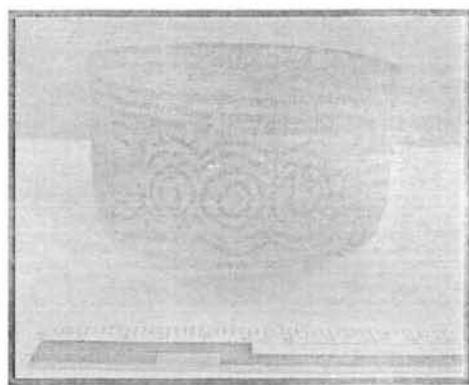
Pl. 18. Naal Pottery from DOAM  
(from the Present Researcher)



Pl. 19. Naal Pottery from Islamabad Museum  
(from the Present Researcher) Not to Scale



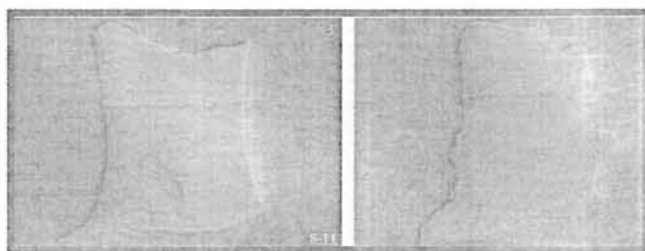
Pl. 20. Naal Pottery from DOAM  
(from the Present Researcher)



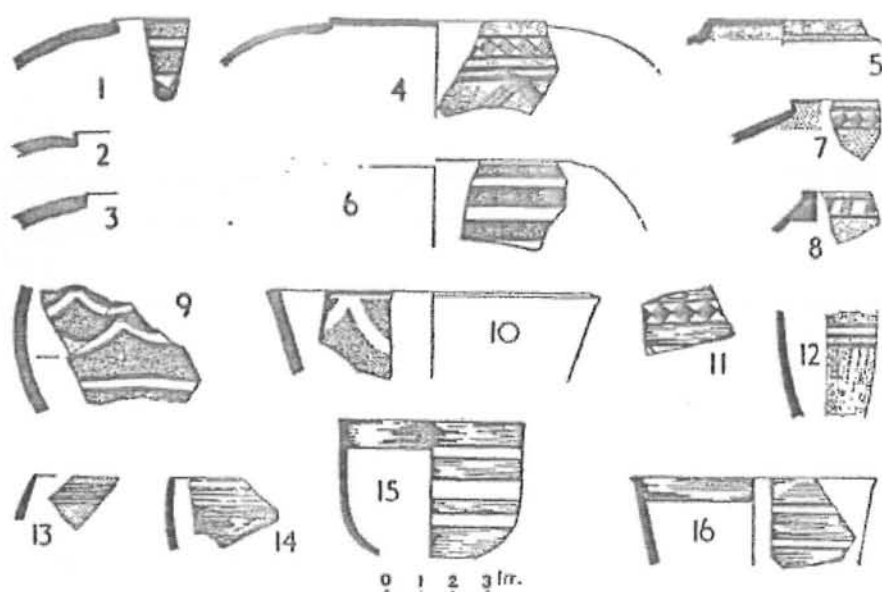
Pl. 21. Naal Pottery from DOAM  
(from the Present Researcher)



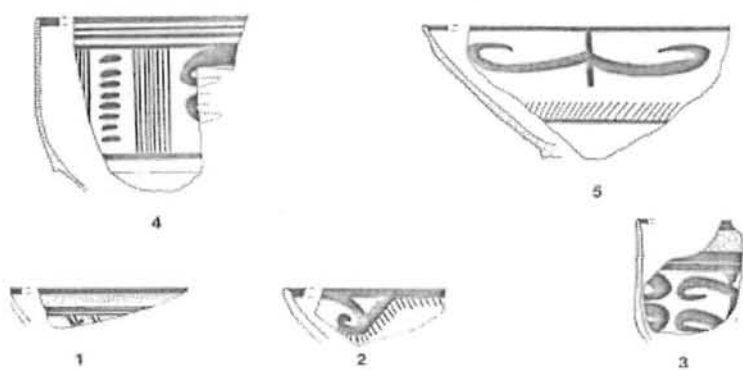
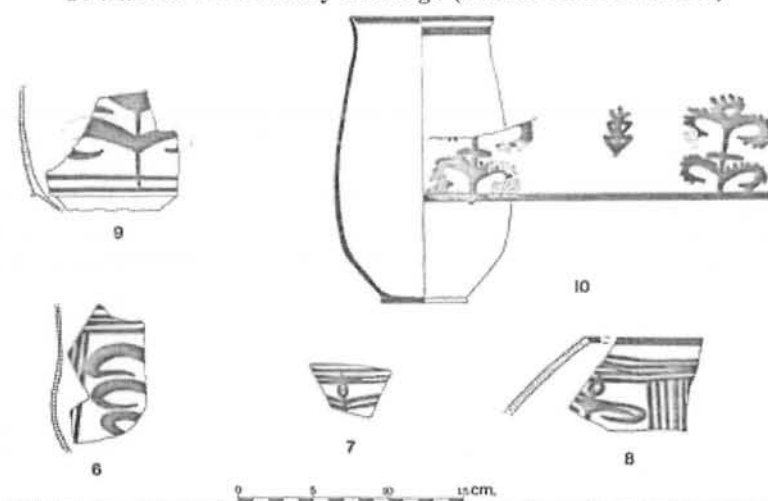
Pl. 22. A Naal Ceramic with Lion Motif  
(from [www.pinterest.com](http://www.pinterest.com)) Not to Scale



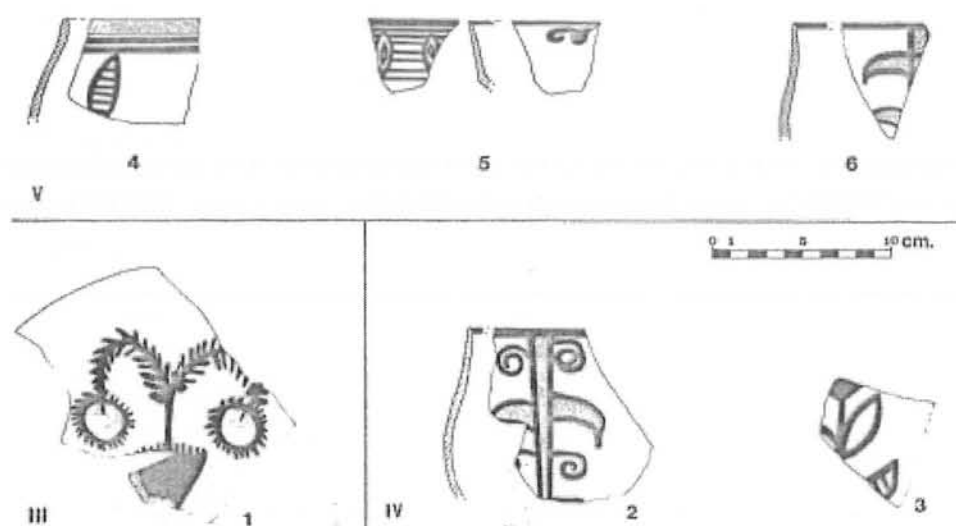
Pl. 23. Naal Painted Pottery Stand with a imbossed Lion  
(from Shudai *et al.* 2010: 115) Not to Scale



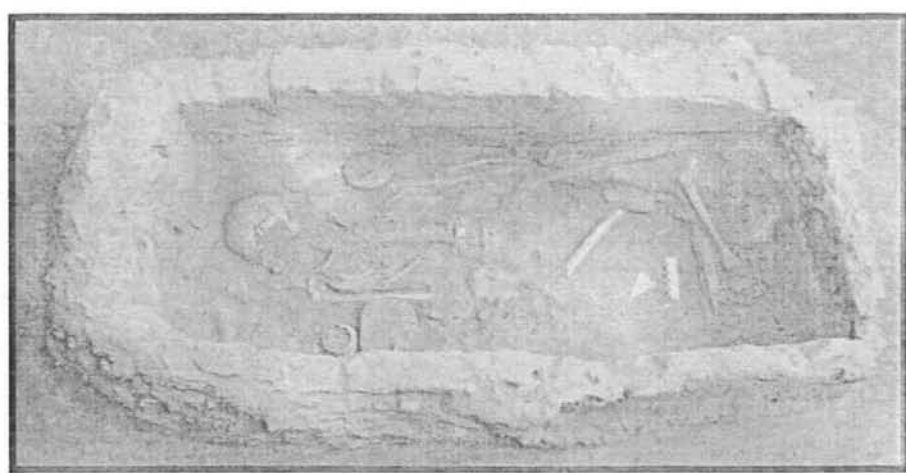
Pl. 24. Zari Ware Pottery Drawings (from de Cardi 1965: 139)



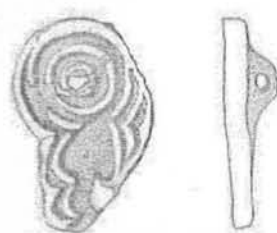
Pl. 25. Balakotain Floral and Horn Designs (from Dales 1974: 15)



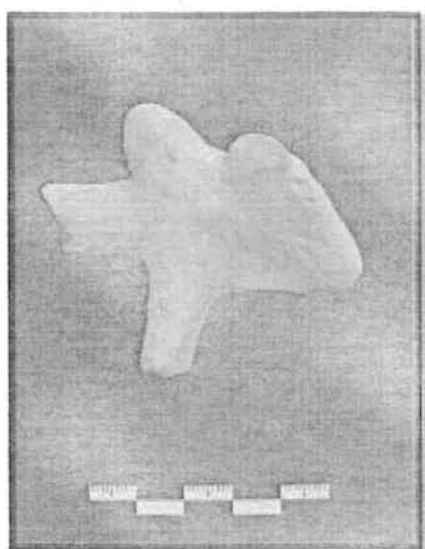
Pl. 26. Balakotain Floral and Horn Designs (from Dales 1974: 13)



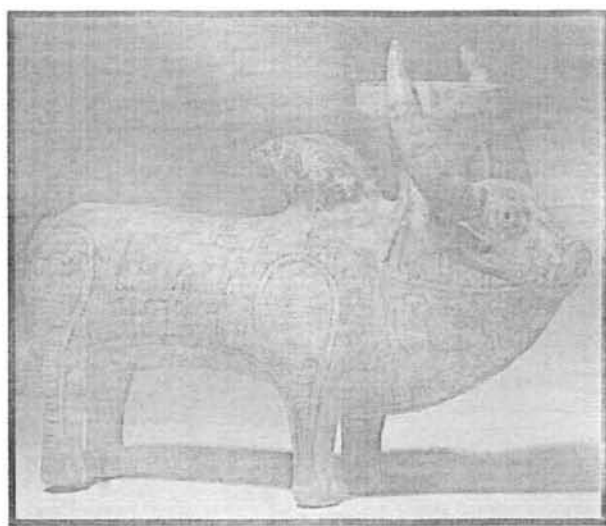
Pl. 27. Naal Culture Burial (from Franke-Vogt and Ibrahim 2005: 110)



Pl. 28. Naal Seal from Sohr Damb/Naal (Franke 2003/2004: 99)



**Pl. 29. Animal Figurine**  
(from Franke-Vogt 2003/2004: 119)



**Pl. 30. Naal Decorated Polychrome Humped Bull Figurine<sup>92</sup>**  
(from [www.pinterest.com](http://www.pinterest.com)) Not to Scale

<sup>92</sup> Such figurines are associated with Kulli Culture since one of them have already been found from Kulli sites; however, the decorations indicate that it might relate to Naal Culture. It is clearly a replicated artifact present on an internet site for auction (Personal Observations).

5.5 Mian Ghundai/Damb Sadaat Culture

It was discovered and defined by W. Fairservis (1956: 255-56). The type site of this culture takes a very important place in the entire valley (Fairservis 1952b: 13). It was mainly recorded at Damb Sadaat III, Karez Site, Kechi Beg, KGM in Quetta Valley (Fairservis 1956: 250) and Sur Jangal in Duki, etc. (Fairservis 1959: 244, 376-78).

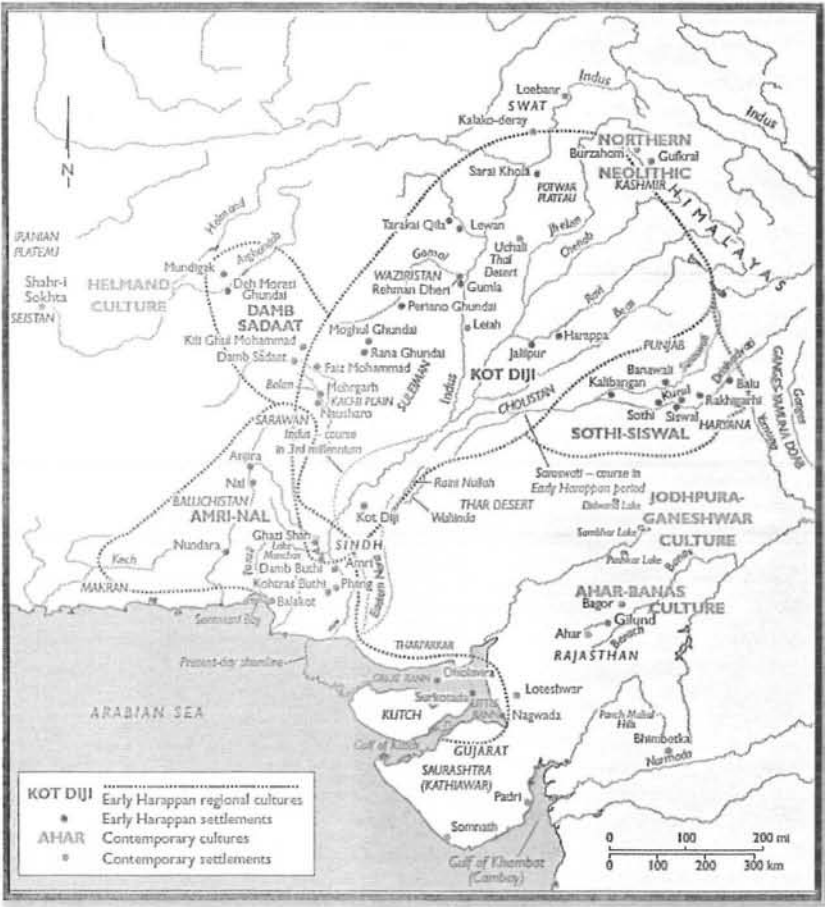


Figure 20. Mian Ghundai/Damb Sadaat Ware Distribution Area (from McIntosh 2008: np)

5.5.1 Structural Remains

At Damb Sadaat, a huge mudbrick platform surrounded with a perhaps walled compound with two stone block drains. It looks to be a ceremonial structure. The site must have been dedicated to ceremonies (Chakrabarti 2006: 119; Pakistan Archaeology 1964: 31).

5.5.2 Technology

Only ceramics are largely known which are explained below:

### 5.5.2.1 Pottery/Ceramics

There are some types/variants associated with this culture which are mentioned (see Table 15):

Major Ware	Types/Variants	Manufacturing Techniques	Prominent Shapes	Decorations	Firing
<b>Mian Ghundai or Damb Sadaat Ware</b>	<i>Mian Ghundai Plain Buff Slip Ware</i>	Wheel-made	Jars and cups	Slipped	Oxidized
	<i>Mian Ghundai Fine Plain Ware</i>	Wheel-made	Open bowls, cups and jars	Not decorated	Oxidized
	<i>Mian Ghundai Buff Plain Ware</i>	Wheel-made	Open bowls	Not decorated	Oxidized
	<i>Mian Ghundai Dark Rim, Coarse Ware</i> <sup>93</sup>	Wheel-made	Open bows and jars	Broad horizontal bands are applied often	Oxidized
	<i>Sadaat Single-Line Ware</i>	Wheel-made	Large jars	Horizontal and sometimes wavy lines	Oxidized

Table 15. Mian Ghundai/Damb Sadaat Ware and Its Types/Variants (from the Present Researcher)

#### 5.5.2.1.1 *Mian Ghundai Plain Buff Slip Ware*

It also is a common ceramic type of this culture (see Pls. 1-2). It reached height of its popularity in G2 Period (see Table 2 for chronological comparisons). It was recorded at Mian Ghundai/Damb Sadaat, Kili Gul Mohammad, Kechi Beg, and Karez Site in Quetta Valley. Many of the base sherds of Quetta Black on Buff were classified under this type (Fairervis 1956: 250).

*Manufacturing Technique:* Very fine sand and at times very fine hard clay was used for the making the ceramics of this culture. It is wheel constructed having smooth texture and finish (Fairervis 1956: 250).

*Shapes/Forms:* Open bowls were commonly found in this variant/type (Fairervis 1956: 251).

*Decoration Repertoire:* This ware is “usually slipped over the exterior surface, though open vessels are commonly slipped on the interior. The slip is of very fine texture, usually very thinly applied, i.e. less than 1 mm. thick” (Fairervis 1956: 250).

*Firing Technique:* It was fired in oxidized conditions (Fairervis 1956: 250).

<sup>93</sup> M. R. Mughal “Mian Ghundai Dark Rim, Fine” regarded it as a Kot Diji Type IV Ware (1970: 77).

#### **5.5.2.1.2 Mian Ghundai Fine Plain Ware**

This is the most common type to this culture (see Pl. 3). It was recorded in Period I to Period G3 but common in Period G (see Table 2 for chronological comparisons). It has been found at Mian Ghundai/Damb Sadaat, Kili Gul Mohammad, Karez Site and Kechi Beg in Quetta Valley. Furthermore, it was categorized by W. Fairervis into two variants because of color that emerged from firing: Fine Brown and Fine Red. Both the variants were not decorated (1956: 242, 244). This was mainly found at Sur Jangal in Duki (Fairervis 1959: 377-78).

*Manufacturing Techniques:* The Fine Brown variant was made with fine sand paste occasionally with the inclusion of other tempers; the Fine Red was manufactured with fine sand rarely mixed with other tempers but occasionally mixed with ground pottery. Both the variants are wheel made; the smooth finish and with most often tool marks and wheel striation while the latter is finished smoothly leaving wheel striation. Moreover, they have a smooth to sandy texture (Fairervis 1956: 244).

*Shapes/Forms:* The forms consist of large variety of shapes like open bowls, cups, jars with small mouths, etc. (Fairervis 1956: 242).

*Firing Technique:* Both of its variants are fired in oxidized atmosphere (Fairervis 1956: 244).

#### **5.5.2.1.3 Mian Ghundai Buff Plain Ware**

It is a fine ware which reached its climax in G1 and G2 Periods (see Table 2 for chronological comparisons). It is an undecorated ware (see Pl. 4). It was identified from Mian Ghundai/Damb Sadaat, Kili Gul Mohammad, Karez Site, Kechi Beg in Quetta Valley (Fairervis 1956: 242) and Sur Jangal III in Duki (Fairervis 1959: 377).

*Manufacturing Technique:* It is constructed with fine sand with slight mixture of hard clay and black temper on wheel that bore smooth to somewhat sandy texture and smoothly finished (Fairervis 1956: 242).

*Shapes/Forms:* The shapes repertoire consisted of flaring rimmed jars with ring bases, cups, ring-based jars with concave walls and small mouth. They made flat based and ring-based vessels (Fairervis 1956: 242, 377).

*Firing Technique:* The results of examined sherds show oxidized firing (Fairervis 1956: 242).



#### 5.5.2.1.4 *Mian Ghundai Dark Rim, Coarse Ware*

It reached its climax at G2 Period (see Table 2 for chronological comparisons). It has two variants: Coarse Black/Brown Rim and Coarse Red Rim found from Mian Ghundai/Damb Sadaat, Kechi Beg and Kili Gul Mohammad sites in Quetta Valley (see Pl. 5) (Fairervis 1956: 266).

*Manufacturing Techniques:* They are wheel made. Coarse Black-Brown Rim: the temper is black and hard with rough texture and smooth but granular finish; Coarse Red Rim: its temper is Mustafa and hard clay with rough texture and granular finish (Fairervis 1956: 266).

*Shapes/Forms:* The potters made open bowls and small-mouthed jars ubiquitously; apart from them, jars with straight walls occasionally occurred (Fairervis 1956: 266).

*Decoration Repertoire:* The surface of the two variants of this type was found slipped and unslipped. Decorations were applied on both. Coarse Black-Brown Rim: horizontal very broad black/brown lines at and near the rim on the interior of the open bowls and they overlap outwards to the rim area occur. Occasionally, there occurs a diagonal line perhaps reaching a horizontal line or [a chevron]. Coarse Red Rim: its decorations are like Fine Red Rim<sup>94</sup> i.e. broad lines but includes other details like a very broad second line below the rim and on the body of the vessels was applied. It is rarely white slipped (Fairervis 1956: 266).

*Firing Technique:* All the variants were fired at oxidized atmospheric conditions (Fairervis 1956: 266).

#### 5.5.2.1.5 *Sadaat Single-Line Ware*

This was recorded at Mian Ghundai/Damb Sadaat, Kili Gul Mohammad and Karez Site in Quetta Valley (see Pl. 6). This type is popular in Period G3 [Mehrgarh VI-VII and DS III] (see Tables 2 and 20 for chronological comparisons) (Fairervis 1956: 265).

*Manufacturing Technique:* It is made with perhaps very fine levigated clay and at times with fine hard clay. It is a wheel turned ware with sandy texture and smooth finish (Fairervis 1956: 265).

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<sup>94</sup> For comparisons, check Kot Diji Culture, Mian Ghundai Dark Rim, Fine Ware.

*Shapes/Forms:* This category consisted of large jars with small mouths and curving rims (Fairservis 1956: 265), pitchers and storage jars (S. Naseer, Personal Communication, October 12, 2018).

*Decoration Repertoire:* It is sometimes buff like slipped. It is designed with on red or brown surface or buff slip. The designs are narrow horizontal lines, usually with 5 to 10 mm wide, around the shoulder or near the base. They occasionally occur in horizontal double lines. Wavy lines occur in the middle of the horizontal lines (Fairservis 1956: 265).

*Firing Technique:* It seem to be fired in oxidized conditions (Fairservis 1956: 265).

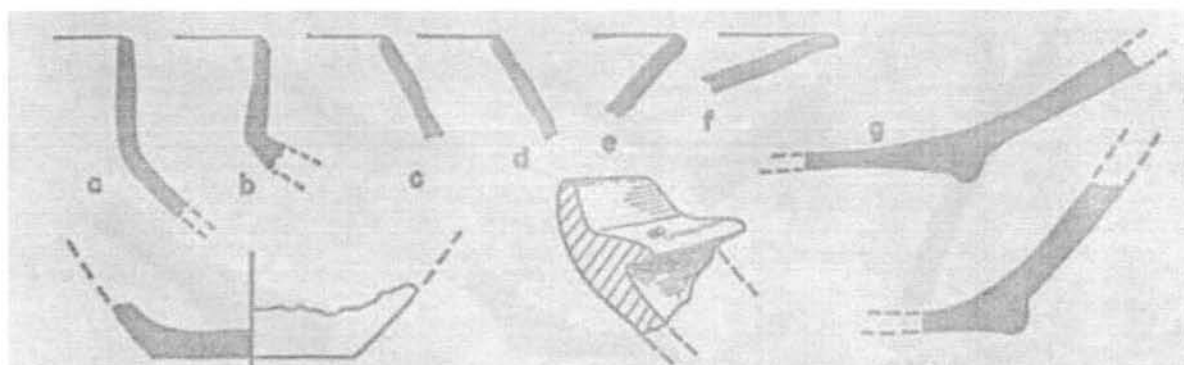
*Distribution Area:* Generally, these wares were found in upper Pakistani Balochistan at Damb Sadaat and Kili Gul Mohammad and in the eastern Afghanistan at Deh Morasi Ghundai and Mundigak (see Fig 20) (McIntosh 2008: np, from the map). Mian Ghundai Dark Rim Fine Ware was found on Kapoto in Kalat, Anjira and Siah Damb in Surab (de Cardi 1965: 159).

#### 5.5.2.2 Other Cultural Assemblages/Cultural Repertoire

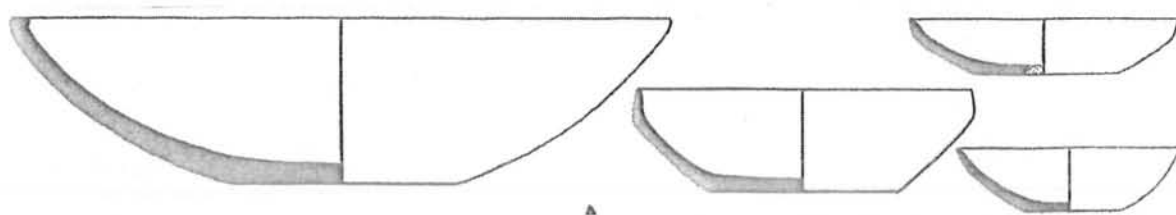
Female (see Pl. 7) and animal (bulls—painted, dogs, etc.), house models (see Pl. 9), compartmented clay seals (see Pl. 8), bone points and spatulas, pieces of alabaster cups, clay bangles, stone beads, pottery stoppers, a point of dagger, a fragment of brooch, and pieces of copper artifacts are among its cultural repertoire (Asthana 1985: 123; Pakistan Archaeology 1964: 30-1). In a stone-built cache, a human skull was found (Pakistan Archaeology 1964: 31).

To conclude, to the present state of our knowledge, it looks to be an advance culture as the objects point out. They were skillful workers, artists, etc. They made plain and simple decorated pottery. However, other objects, though few, are well made. They most probably bartered materials with other surrounding areas as the sources of material are all not available in the region or they must have obtained some of them as finished goods. Moreover, this culture is yet to be carefully studied.

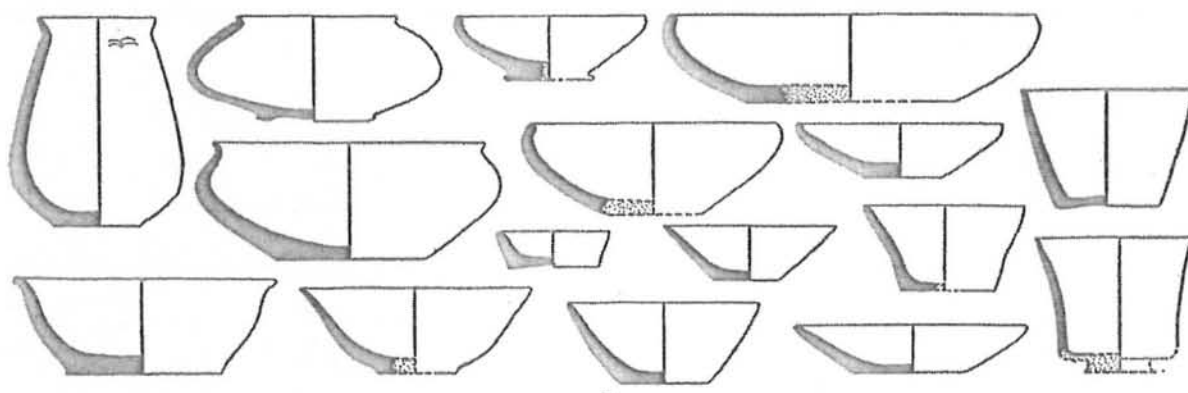
# Plates of Mian Ghundai/ Damb Sadaat Culture



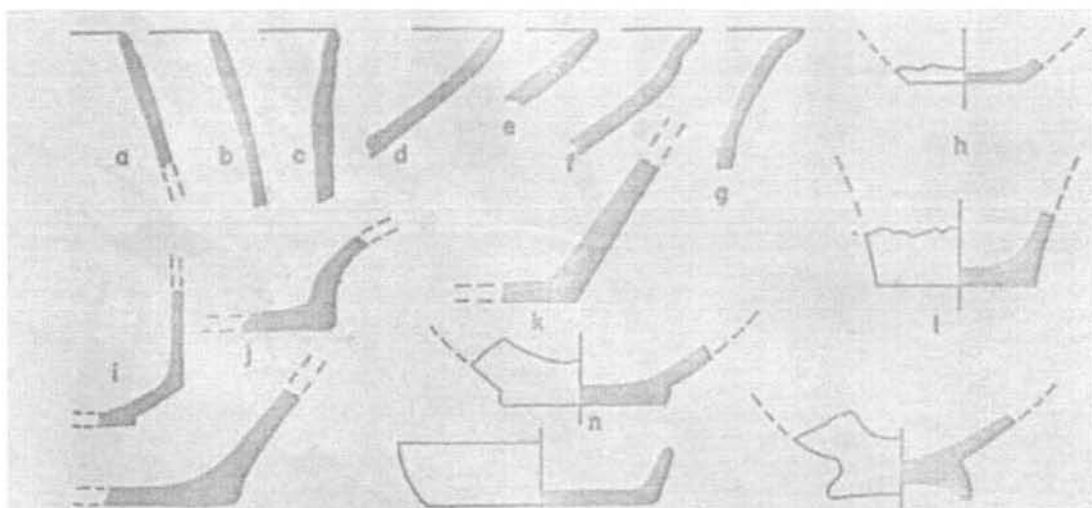
Pl. 1. Pottery Drawings of Mian Ghundai Plain Buff Slip Ware (from Fairservis 1959: 376) Not to Scale



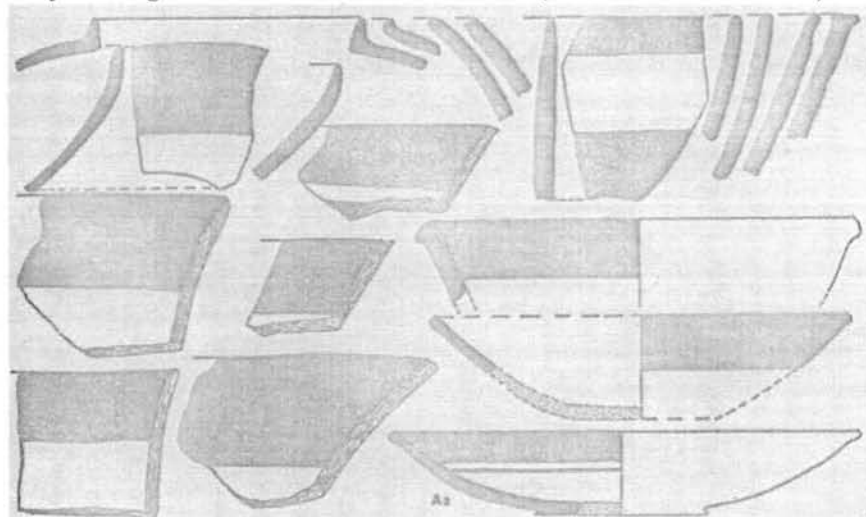
Pl. 2. Mian Ghundai Plain Buff Slip Ware Drawings (from Fairservis 1956: 252) Not to Scale



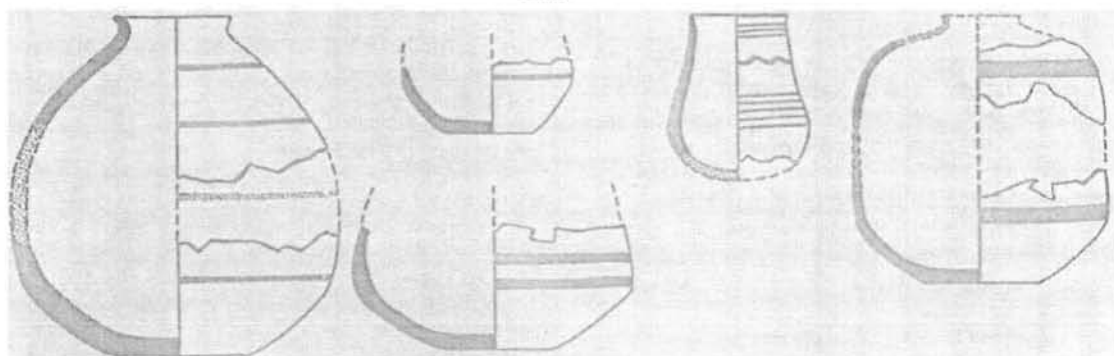
Pl. 3. Pottery Drawings of Mian Ghundai Fine Plain Ware (from Fairservis 1956: 244) Not to Scale



Pl. 4. Pottery Drawings of Mian Ghundai Buff Plain Ware (from Fairervis 1959: 379) Not to Scale



Pl. 5. Pottery Drawings of Mian Ghundai Dark Rim Coarse Ware (from Fairervis 1956: 267) Not to Scale



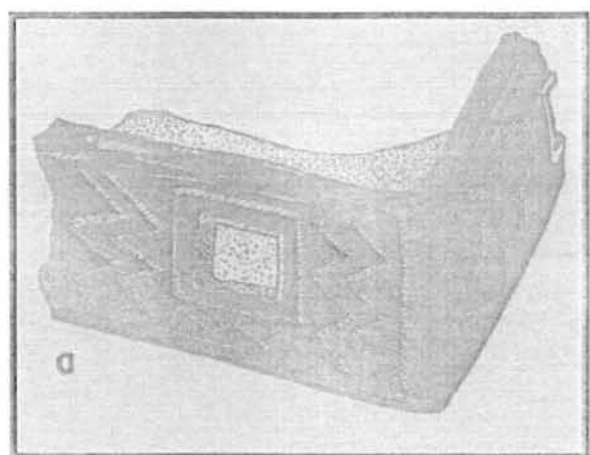
Pl. 6. Pottery Drawings of Sadaat Single-Line Ware (from Fairervis 1956: 265) Not to Scale



Pl. 7. Damb Sadaat Culture Figurine  
(from Fairservis 1952a: 103) Not to Scale



Pl. 8. Pierced Seal  
(from Fairservis 1952a: 102) Not to Scale



Pl. 9. Clay House Model (from Fairservis 1956: 223) Not to Scale

## Chapter 6: Advance Bronze Age and Iron Age Cultures of Balochistan

This was the time of civilizations in Balochistan and Indus Valley. One of the major civilizations emerged in the Indus Valley with the help of surrounding cultures in Balochistan, KP, Sindh and Punjab (see Table 25) (Possehl 1999: 18, Table 1.1). Some of the important cultures of this time frame are Kulli Culture, Harappan Culture/Civilization, Mehrgarh VIII-Sibri Culture, Early and Late Pirak Cultures and Londo Horizon.

### 6.1 Kulli Culture (c.2600-1900 BCE)

Aurel Stein was the first to attract attention of scholars towards Kulli Culture from his early researches in *Gedrosia*<sup>95</sup> (1931: 118-25; 1937). S. Piggott researched, organized and named the Kulli assemblage as Kulli Culture which he confirmed from painted pottery and figurines mostly (1950: 98-121). J. Casal (1966), W. Fairervis (1971), G. L. Possehl (1986), R. Besenval (1997, 2005), U. Frank-Vogt (2008), J. Jarrige, G. Quivron and C. Jarrige (2011), and others also later worked on this culture. Nindowari is better excavated site of the culture until now (Wright 2013: 57). Sadly, many aspects of this culture are missing and confusing due to limited number of large-scale excavations (Uesugi 2017: 192; Franke-Vogt 2001: 262).

It is also regarded a Cultural Complex<sup>96</sup> which is a part of larger cultural entity (Possehl 1986: 1-3) which was named after its type site, the Kulli in Kolwa region in Awaran (Piggott 1950: 96; Wheeler 1968: 15). Geographically, Kulli Culture is situated on a strategic location for Harappan settlements (Mortazavi 2005: 110). They covered the important strategic locations with many of their settlements i.e. on the top of mountains or stepped hills; they positioned themselves to overlook the valleys and control the plains and passes (Franke 2000: www.harappa.com; Chakrabarti 2006: 123). Furthermore, southern Balochistan was the home of this culture (McIntosh 2008: 163).

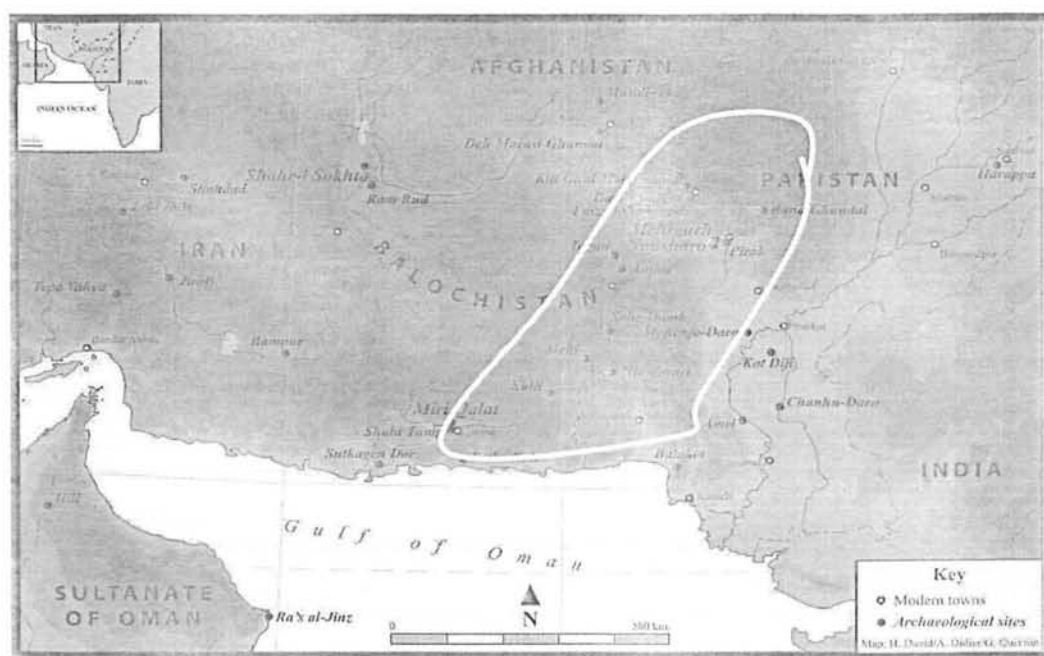
W. Fairervis divided Kulli Culture into Kulli Complex A and Kulli Complex B in Mashkai Valley. He has considered Edith Shahr, Niaithuthi, Las Bela-13, Las Bela-14, Las Bela-16 and Las Bela-17 in Las Bela district as Kulli Complex A sites (1971: 195-216). The other sites are Nindowari in Khuzdar (Ornach Valley) which is a Complex A and B site, while Mehi in

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<sup>95</sup> Old name of Balochistan

<sup>96</sup> It means that a group of artifacts and traits which occur repeatedly at two or more sites within a restricted region over a time; it is assumed to represent an archaeological culture.

Awaran is a Complex B site, etc. (Wright 2013: 57-8). The sites of this culture are mostly mounds (Piggott 1050: 97) and were multi-functional (Possehl 1986: 55). Interestingly, some of the sites cover many hectares (Possehl 1986: 55; J. Jarrige *et al.* 2011: 187). In addition, evidences show it a homogeneous and original culture of the region (J. Jarrige *et al.* 2011: 181, 186).



**Figure 21. Kulli Ware Distribution Area or Kulli Culture Extension (after J. Jarrige *et al.* 2011: 8, Modified by the Present Researcher)**

### 6.1.1 Origins/Roots of this Culture

At first, the Kulli people were living a nomadic life in camps; eventually, they settled in agricultural villages which were turned into developed and bigger towns at that time (Mortazavi 2005:110). According to D. K. Chakrabarti, Adam Buthi is the earliest Kulli site which dates to c.3000 BCE; it possessed stone terraced dwellings and mostly handmade pottery and few slow wheel-turned pottery (2006: 121). Moreover, the ceramics from Nausharo Period ID are claimed to be prototypes of Kulli Ware because of their animal and plant designs which date back to c.2700-2600 BCE (Uesugi 2017: 192). Also, its roots may be traced from Naal site since its ceramic is found in proto-developed form. Kulli Ware started earlier than typical Harappan Ware. Moreover, “it is now possible to put aside the amalgam



made by some specialists between the Kulli ware and pottery of the Indus Civilization, for instance when they define the earliest Kulli style as “Early Kulli-Harappan” ware” (J. Jarrige *et al.* 2011: 181, 184-85).

#### **6.1.2 Structural Remains**

The people of this culture selected the architectural material according to their regional availability. Boulders or ashlar were used to build the structures (see Pls. 1 and 5) (Franke 2000: [www.harappa.com](http://www.harappa.com); Chakrabarti 2006: 123). They sometimes used baked bricks to build the upper portion of a structure (Possehl 1986: 13- 17, 55-6). They established many small village sites (Fairervis 1984: 282) and many large sized sites which could be regarded as towns in this culture; the towns present a developed and organized picture. Furthermore, they followed systematically an organized plan. Some of the sites have a layout like Indus sites i.e. houses were built in rows with streets and lanes in grid pattern, sometimes with paving. Sometimes, a flight of stairs provided way to the upper terraces (Franke 2000: [www.harappa.com](http://www.harappa.com); Chakrabarti 2006: 123). To specify, Nindowari had rows of stepped terraced platforms leading to a huge platform where at the top was a drain. Edith Shahr resembles Nindowari in this manner. Many larger settlements were fortified (McIntosh 2008: 87). Moreover, at the site of Nindowari, there is a chance that the multi-celled structures had a mudbrick second story. The structure of the main mound can be beyond merely living units. The terraced building was built with cyclopean masonry (J. Jarrige *et al.* 2011: 187-89). At Nindowari and Kulli some cells can be regarded as granaries. At Nindowari in a room, human (28) and animal (178) figurines were recovered which is now regarded as a shrine (McIntosh 2008: 87). At Nindowari, J. Casal suggested the main buildings as a part of a ceremonial center which has been rejected now (Taken from J. Jarrige *et al.* 2011: 187-89). Thus, the people of this culture often planned their structures in Harappan style (Franke 2000: [www.harappa.com](http://www.harappa.com); Chakrabarti 2006: 123).

#### **6.1.3 Subsistence Patterns/Means, Domestication and Irrigation System**

Economically, they depended on cultivated crop cereals from the permanent settlements. The cereals included wheat, barley and grapes (Mortazavi 2005: 110). The inhabitants of Kulli perhaps hunted fish from rivers and streams. Apart from fish, they used dates as a part of their subsistence (McIntosh 2008: 88, 135).

They seem to combine pastoralism with agriculture based on irrigation. The Kulli settlements were invariably associated with dams which were used to catch water, divert water towards the fields to deposit silt, for impounding water to later direct it to the fields; hence, it was whole irrigation system that mainly depended on such a technology in Balochistan after c.3000 BCE (McIntosh 2008: 115, 163).

#### **6.1.4 Technology**

There were many technological aspects found in this culture as followed:

##### **6.1.4.1 Pottery/Ceramics**

The classification of Kulli ceramics or Kulli sequence was drawn largely from Nindowari; nonetheless, Kulli and Mehri also provided some understandings as it was first found from these sites. Based on the stylistic and shape studies, it has been in two periods from Nindowari excavation and respectively two styles: Kulli A (Period II) or Early Kulli and Kulli B (Period III) or Late Kulli-Mehri (see Pls. 2-4). This has been used for the establishing the chronology (J. Jarrige *et al.* 2011: 186; Wright 2013: 57; Uesugi 2010: 10). Early Kulli is contemporary with Mature Harappan A and Late Kulli-Mehri is contemporary with Mature Harappan B and C (Wright 2013: 57; Uesugi 2010: 10). Nevertheless, A. Uesugi (2010: 11) questions the chronology; he has argued that there is a “stylistic gap between fully developed painting styles of Nindowari II and the painting styles of bulls in Nindowari I”. The stylistic distinction has been recorded from animal decorations i.e. humped bulls, felines, frieze of caprids, plant decorations i.e. pipals and other tree-like designs, and several geometric designs. However, at Mehri one can see the continuation of the decorations from Early Kulli to Late Kulli-Mehri but with significant differences; other differences are clear from pottery shapes (Wright 2013: 57).

The ceramics were manufactured with elaborate decorations and different forms and colors (see Pls. 6-18) (Possehl 1986: 14; Chakrabarti 2006: 121). Gray ware or black on gray was common of this culture (Murtazavi 2005: 110). Moreover, the people of this culture also used buff and black ware (McCown 1946: 288). Basket marked pottery was also recorded in this culture (Possehl 1986: 56). The Kulli pottery has been found in domestic and funerary contexts suggesting it was used for both purposes. However, owing to its elaborate painted designs, it must have been used for special occasions as well (Uesugi 2017: 231). Moreover, there is no

clear influence of beginning of Indus Valley Civilization on the materials of Kulli Culture at Nindowari (J. Jarrige *et al.* 2011: 185).

*Manufacturing Techniques:* It was constructed either on a wheel or a turntable from start till the end. However, it is worthy to note that only small ceramics are manufactured throughout on the wheel; whereas, others included a combination of processes like on wheel and turntable to complete them. Moreover, most probably turntable was used as a potter's wheel as observed from the ceramics. Both techniques were used side by side in the same temporal context (Hideaki *et al.* 2013: 95). The two techniques are described as bellow:

*Turntable Technique:* Firstly, clay coils were used on a slow turntable to form rough shapes of the vessels. After semi-drying, the clay coils were joined together. In the case of carinated vessels, the upper and lower parts were formed separately and joined after semi-hardening. They were smoothed horizontally with fingers or a spatula on a slow turntable. The horizontal smoothing and scrapping was followed on a fast turntable. When in rotation, few ceramics were polished with cloth on a turntable (Hideaki *et al.* 2013: 95).

*Wheel Thrown Technique:* Using hands, a rough form of a vessel was made on the wheel first. Nonetheless, rarely vessels were finished completely on the potters' wheel from start to end. They, probably, were initially formed on a wheel and finishing i.e. smoothing was carried out on a fast turntable. The upper and lower parts were manufactured separately and later joined together. First, scrapping with the help of a spatula done and later smoothing was followed with the help of a spatula or fingers; both the times either placed on a wheel or a turntable (Hideaki *et al.* 2013: 95).

For constructing a ring base, a clay cord was attached to the base while turning the ceramic upside down and smoothed by fingers or a spatula. There are many flat base ceramics in Kulli Culture too. The flat based ceramics bore a slightly depressed pottery base. The ceramics which were formed on the wheel from start to end bore a string-cut-mark (Hideaki *et al.* 2013: 95).

*Shapes/Forms:* The shapes also underwent a change. Variety of shapes were used in this culture as barrel or cylindrical shaped vessels, bowls, jars with flaring walls, carinated pots, globular jars, plates, short based jars, tall jars, dish on stands, cups on stand, large jars, bulbous

short mouthed jars, short based bowls, vases, pots, etc. (J. Jarrige *et al.* 2011: 97, 225-61, 264-73, Figs. 4-20, 23-32, p. 225-261, 264-273).

*Decoration Repertoire:* There is rich of iconography of figurative motifs combined with symbols and other signs. Based on iconography (though some changes) and change of shapes, Kulli ceramic is divided into Kulli A and Kulli B. They share many motifs, however, differ in some. Some motifs disappear and new motifs appear<sup>97</sup>. Generally, the painted decorations include geometric, naturalistic and zoomorphic representations. Geometrics include straight and wavy bands (sometimes lined in between), and applied relief on exterior. Additionally, friezes of chequered triangles and squares, festoons, etc. are other motifs. Animal motifs consist of rows of tiny stylize caprids, humped bull friezes, caprids and felines are almost always represented with sigmas, small combs and pointed circles (see Pls. 2-4) (J. Jarrige *et al.* 2011: 95, 97-8, 186). The rows of animals are the best recognitions in this culture (Piggott 1950: 100; J. Jarrige *et al.* 2011: 95). The iconography of Kulli Culture most probably has a symbolic background i.e. myths etc. (J. Jarrige *et al.* 2011: 192; Uesugi 2017: 213-15). Furthermore, there is Kulli iconographic influences at Amri IIIC, Chanu Daro and Mohenjo Daro (Uesugi 2010: 11).

*Firing Technique:* They are well fired in oxidizing conditions as observed from the Kulli Wares of DOAM, and Islamabad Museum Collections.

*Distribution Area:* This culture is distributed to Quetta Valley, Loralai, Zhob, Khuzdar, Awaran, Kalat, Makuran, and North of Las Bela (see Fig. 21) (Uesugi 2010: 11-2, Fig. 6; McIntosh 2008: n.p., from Map 2).

#### **6.1.4.2 Other Cultural Assemblages/ Cultural Repertoire**

*Anthropomorphic and Zoomorphic Figurines:* Scholars have female and animal figurines were from different Kulli Culture settlements (see Pls. 19-21) (Piggott 1950: 96). The scholars found human figurines with bird like faces with their hands either placed on the chest or waist and some with visible breasts and some with applique discs; different hair styles were represented with coils (twisted or incised) and some wore turbans or hats of clay; they are wearing necklaces, pendants and sometimes bangles made of clay coils either incised or plain;

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<sup>97</sup> See the differences in Pls. 2-4 in Plates of Kulli Culture

some of the figurines had suckling babies with them and some pawn shaped figurines were recorded as well. A. Stein considered his found female figurines as Mother Goddesses. However, there were male figurines from his findings as well. Moreover, painted animal (mostly bull) figurines were recorded in large quantity (J. Jarrige *et al.* 2011: 131-39). The terracotta animal figurines are regarded to be for religious purposes of the local Kullis (Uesugi 2017: 5).

*Other Findings:* The material culture consisted of large stone querns and rubbing stones, beads made of lapis lazuli, black stone, agate and carnelian, bone bangles, objects of copper, gold and glass (?) (Chakrabarti 2006: 121), seals, mortars, pestles, containers (J. Jarrige *et al.* 2011: 140), stone vessels (see Pl. 24) (Piggott 1950: 111), other bone objects like awls (see Pl. 24) (J. Jarrige *et al.* 2011: 176-77), a bronze mirror (see Pl. 23), etc. (Piggott 1950: 112).

*Harappan Objects from Kulli Culture Sites and Kulli Objects on Harappan Sites:* Indus seals from Nindowari (see Pl. 25) and weights Mehi and Kinneru and toy carts [from Kulli, etc.] were found on several Kulli settlements. Moreover, few Kulli objects were found on Indus sites like steatite boxes, and other objects in Nausharo, Lohumjo Daro and Moenjo Daro (McIntosh 2008: 163). In addition, Kulli ceramics were found on the upper levels of Mohenjo Daro (Uesugi 2010: 11). Kulli pottery and figurines were found in Harappan objects at Balakot [II] (Asthana 1985: 135). Kulli region was rich in mineral resources which they traded with the Harappans; they included copper ores in Las Bela region, steatite and agate in Zhob and Makuran, carnelian and jasper in Hub Valley and “chert, the latter probably exploited from the Harappan settlement of Bakkar Buthi”. They possibly exported dates and fruits too (McIntosh 2008: 163-64).

#### 6.1.5 Nindowari: A Kulli City?

Firstly, G. L. Possehl has claimed Nindowari a city based on its huge size. Secondly, huge public structures probably built with the efforts of the inhabitants to create an urban settlement. Thirdly, writing wise, two Indus seals with Indus script were found and some sherds bore graffiti that may have been an ancient form of local writing. It had a fully urban system (1986: 55).

#### 6.1.6 Interment Practices and Goods

The burials were only found at Mehi site; two types of burials were found: First, the dead were cremated and placed in large pots separately alongside smaller vessels, figurines, and other objects. Second, the burials were cremated and placed in a small pit covering it with earth which is called actual cremation (Possehl 1986: 16). Having similar kind of practices at Periano Ghundai in Zhob, W. Fairervis (1971: 209) has assumed that Quetta Valley and *Gedrosia* have played some roles in this ritual complex.

#### 6.1.7 Connection of Kulli Culture and Indus Valley Civilization

Earlier it was assumed that Indus Civilization is the result of Kulli Culture; notwithstanding, the idea is generally not accepted among the scholarship. Today, existing at about the same timeframe, both the cultures interacted and exchanged goods and ideas consistently. The result of these interactions is seen in different artifacts found from both cultures (Mortazavi 2005: 110). The Kulli pottery borrowed some of the elements from Harappan pottery which shows a close connection between them because of strong interactions with the Indus Valley Civilization (Uesugi 2017: 228).

It is indeed no longer sustainable to interpret the Kulli Culture, after and allegedly rather first phase, as a hilly provincial version of the great urban Indus civilization. The originality displayed by the Kulli A and B styles is even more striking that their distribution area is, as we said it several times, an enclave in the wide area of diffusion of the Indus civilization material culture. [They further add] that Kulli pottery and the Indus pottery were for some of their shapes and decorations related to an early common local tradition. Therefore, some resemblances between the Kulli pottery and Indus pottery do not always imply direct influences but can be explained by a common heritage (J. Jarrige *et al.* 2011: 186-87).

However, J. Jarrige (1991a: 49) once believed: "The Kulli culture...represents an interesting synthesis between the Indus Civilization and local traditions". Regarding the Miri Qalat, R. Wright (2016: 31) has stated that "There is every reason to believe that the two [Kulli and Harappan Cultures] were involved in a competitive relationship". Whereas, R. Besenval has believed that the site attracted the Harappans because of its agricultural potential and here they could get other products which were not available in the alluvial plains (2011: 54). Moreover, R. Wright has asserted, Harappans were hurdles for the Kulli people to expand their extent westwards which had control over coastal trade in the shape of Sutkagen Dor and Sutkagen Koh. Their presence at Miri Qalat assures their control of this important inland trade route to

the west. Hence, there certainly has been economic and political connections between the two cultures which must have resulted in their peaceful lives (2016: 31).

S. Piggott has emphasized similarities in Kulli and Indus objects i.e. pottery forms (dishes, dishes on stand and perforated jars) and fabric though their designs are quite different (1950: 99-115). There were certain Indus objects i.e. toy carts, terracotta cakes, puppet figurines, etc. as well (Possehl 1986: 1). Moreover, G. L. Possehl has claimed that few painted motifs resemble the Indus motifs (1986: 17). Despite strong contacts with Harappans, they kept their originality in terms of pottery and figurines (J. Jarrige *et al.* 2011: 189).

#### **6.1.8 Writing System of Kulli Culture**

There were signs different from potters' marks; they might represent short inscriptions as elements of cursive script (see Pl. 27) (J. Jarrige *et al.* 2011: 190, Fig. 16).

#### **6.1.9 Trade or Barter System**

The trade links started from Kulli A and continued in Kulli B which resulted in the expansion of the culture later (Wright 2016: 31). Kulli Culture was engaged trading with Harappan, Mesopotamian civilizations, Iranian Plateau, and Dilmun (Bahrain) (Wright 2013: 51, 53). Some Kulli settlements were positioned at strategic locations which covered major trade routes in the Kulli region. It was indulged trading with Indus Valley culture. The trade routes of the time connected Indus Valley Civilization with Makuran and Iran. These routes linked the Harappan settlements of Makuran coast with high terrain and Kacchi-Bolan region and Indus or Sindh region when sea journey was difficult or almost impossible. They also controlled the routes from Sindh in Kulli region. The transhumant shepherds and herders who seasonally moved to Indus regions acted as carriers; they were being loosely controlled by the Kulli Culture (McIntosh 2008: 89, 163-64, 268). Hence, G. L. Possehl has insisted that Kulli and Harappan Cultures formed a highland and lowland partnership to benefit from the commercial relations with Mesopotamia (1986: 104); in other words, they formed an alliance which helped them in their urbanization process (Wright 2013: 49). There was high volume exchange of goods from Mesopotamia which was mostly maritime. At this time, it emerged as a center of trade (Wright 2013: 47, 52). Interestingly, in one of the texts from Mesopotamia mentions a place name between Meluha and Marhashi which was known as Kupin which is now somewhere Makuran region (Wright 2016: 31-2). While R. Wright has called 'textual



references to Kupin are to the Kulli' region (2016: 32). In general, Kulli Culture had connections with the surrounding regions (i.e. Indus Valley Civilization, other parts of Balochistan, south-east Iran and western Arabian Peninsula, Mesopotamia and South-Central Asia) (see Fig. 22). The southern expansion of inhabitants of this culture in Balochistan was to control the trade activities with the west (Uesugi 2017: 192-3, 228-31).

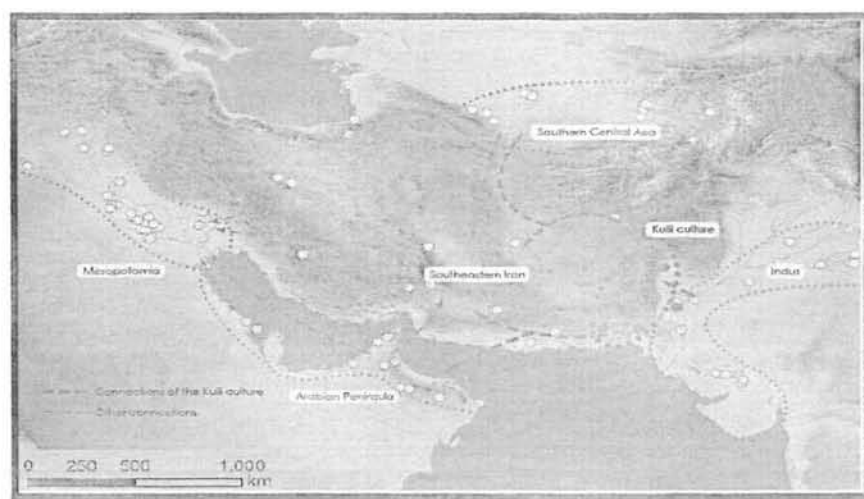


Figure 22. Connections of Kulli Culture with its Surrounding Areas (from Uesugi 2017: 228)

Scholars have defined civilization with five characteristics 1) advance cities with monumental structures; 2) specialized workers; 3) complex institutions; 4) writing or record keeping 5) advanced technology (Littell 1999: 18). In the case of Kulli, the large sized sophisticated structures, sophisticated agricultural practices with impressive water management with *gabarbands* high cultural homogeneity in its assemblage, with complex iconographic pottery indicates “a well-structured social organization”. These all things apply on Indus Civilization by on a larger scale (J. Jarrige *et al.* 2011: 191). G. L. Possehl has considered it a civilization based on the presented data; however, the authors also have the same opinion in some stance (1986: 55). It has cities (?) with monumental structures, specialized workers, complex institutions, writing system, and advanced technology. Hence, their presence was but on a smaller scale than the Indus Valley Civilization. Justly, for now it should be called a semi-civilization rather than a fully-fledged one since we are short of complete data regarding it being a civilization. Moreover, it must have been due to the climatic conditions of this harsh land with hardly any large rivers like Indus River which hindered this culture into a full-

fledged civilization. The future researches may prove fruitful in this regard. Furthermore, the villages of this culture supported towns and cities (?). Their subsistence included cereal and animal domestication and hunting of fish. For cereals, they had collective granaries. We should not forget that Balochistan is not completely explored yet and sites which are not found until now and other major sites are not excavated extensively; furthermore, we should not forget that diffusionist theories were presented about Indus Valley Civilization which were discarded after the Mehrgarh excavation. So, there are chances of Kulli Culture cities to be discovered in future.

The extensive study of the materials has shown that this culture developed indigenously. It kept its originality despite having strong connections with neighboring civilizations (Wright 2013: 56-7). J. Jarrige and G. Quivron has regarded it as a “complete misconception to interpret Kulli culture as a composite culture mixing some local surviving traditions with a strong Indus cultural component” (2008: 630; Wright 2013: 57). In southwestern Asia around late fourth millennium BCE, the regional societies were connected. This period and region attested the rise and fall of cultures, movements of people, trade and commerce, exchange of technology, ideas and information, conflicts over resources and power, shifts of political and economic centers, and many more (Uesugi 2017: 229-31). Its trade relations were with Mesopotamia, Indus Valley, Iranian Plateau, Afghanistan, Gulf region, etc.

Being contemporary with Indus Valley Civilization, in one way or the other they complimented each other in terms of town planning, pottery, figurines, and other artistic objects, etc. It covers a large region which was the strategic point used by the Harappans. The Kullis used the town planning of Harappans or their system of planning were copied and perfected. Some towns or perhaps cities had monumental structures built by architects with precise knowledge. They influenced each other's pottery decorations and possibly techniques and borrowed other host of ideas from each other. Because of their strong trade relations, their artifacts were usually found each other's sites. Harappans look to have hindered the expansion of Kulli Culture at Miri Qalat. The land resources attracted them in west region which may be the result of political and economic cooperation at Miri Qalat. As a result, they shared ideas of art and technology with each other either directly or indirectly.

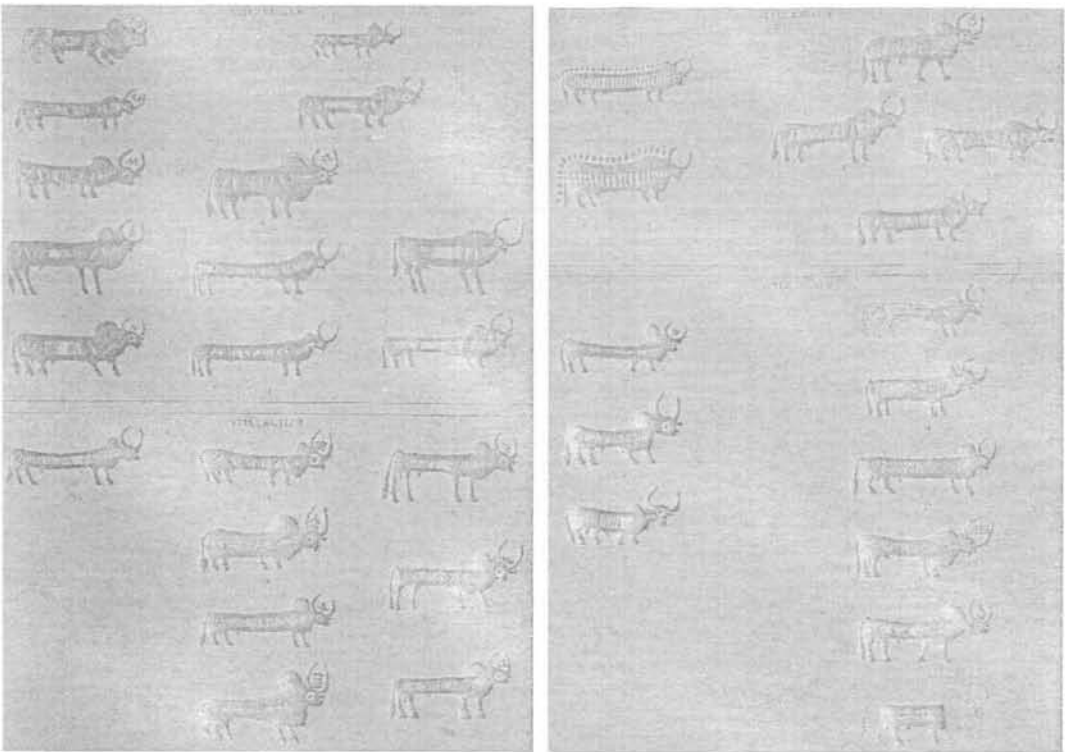
They were great artists and believers in some sort of powers. Their pottery is unique, of high quality and attractive with a diversity of decorations which may include some symbolic meaning; they used it for domestic and ritualistic purposes. Furthermore, human and animal figurine sometimes with applied pigments, semi-precious stone beads, and other metallic objects, etc. were other marvels of their artistic knowledge. They had a set of beliefs which they followed. They followed two types of burial practices: Both included cremations and even burials with objects may indicate the concept of afterlife. The figurines may be attached to their religious beliefs as well as some of the decorations on the pottery. A shrine at Nindowari is also related to their religion.

However, still more work is needed to fully understand the ancient lifestyle of these inhabitants. Many aspects are either not well known or completely missing i.e. political, religious, technological, cities, etc. Still, however, this culture is comparatively known better than others. There is no protection the sites of this culture; its sites are affected by the treasure hunters.

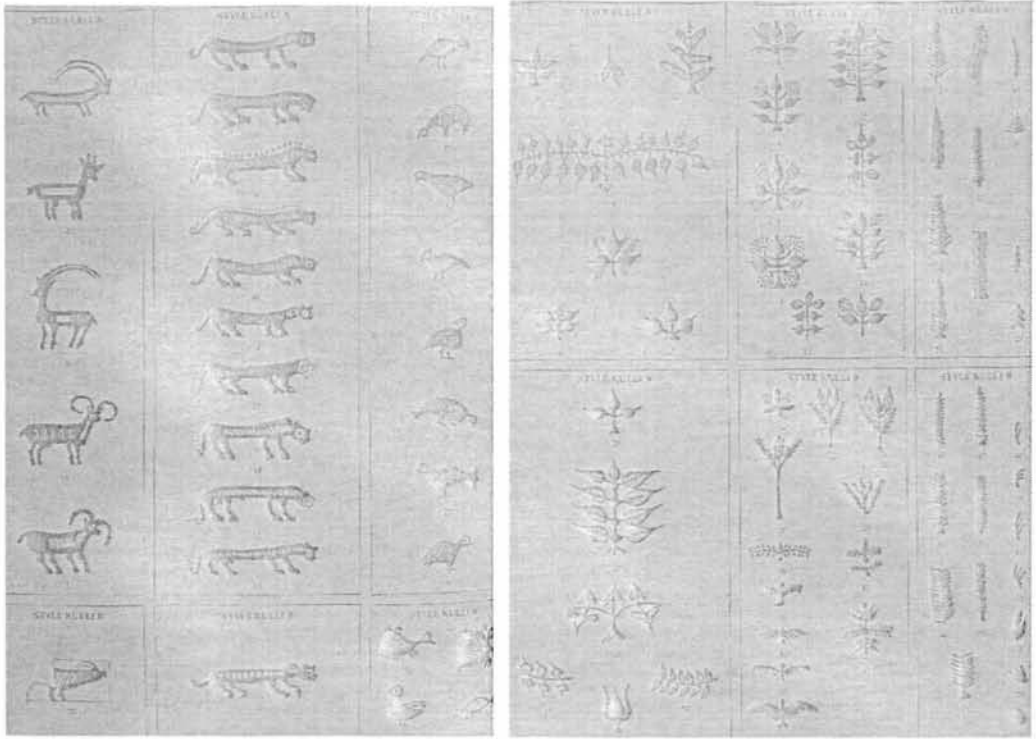
## Plates of Kulli Culture



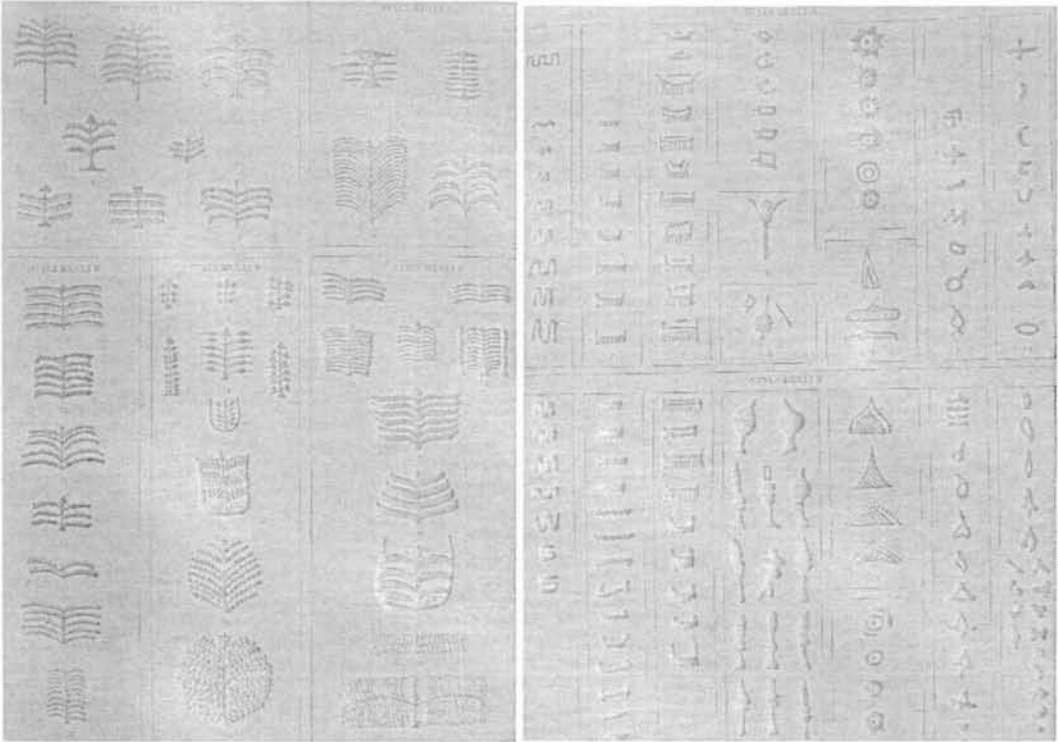
Pl. 1. The Excavated Structures at Nindowari Site (from J. Jarrige *et al.* 2011: 298) Not to Scale



Pl. 2. Kulli A and Kulli B Bull Types (from J. Jarrige *et al.* 2011: 274-75) Not to Scale



Pl. 3. Kulli A and Kulli B Animals and Floral Designs (from J. Jarrige *et al.* 2011: 276-77) Not to Scale



Pl. 4. Kulli A and Kulli B Floral and Other Designs (from J. Jarrige *et al.* 2011: 278-79) Not to Scale



Pl. 5. A Kulli Room at Kulli Site  
(from Stein 1934: 84) Not to Scale



Pl. 6. Kulli Ware  
(from Shudai *et al.* 2010: 104) Not to Scale

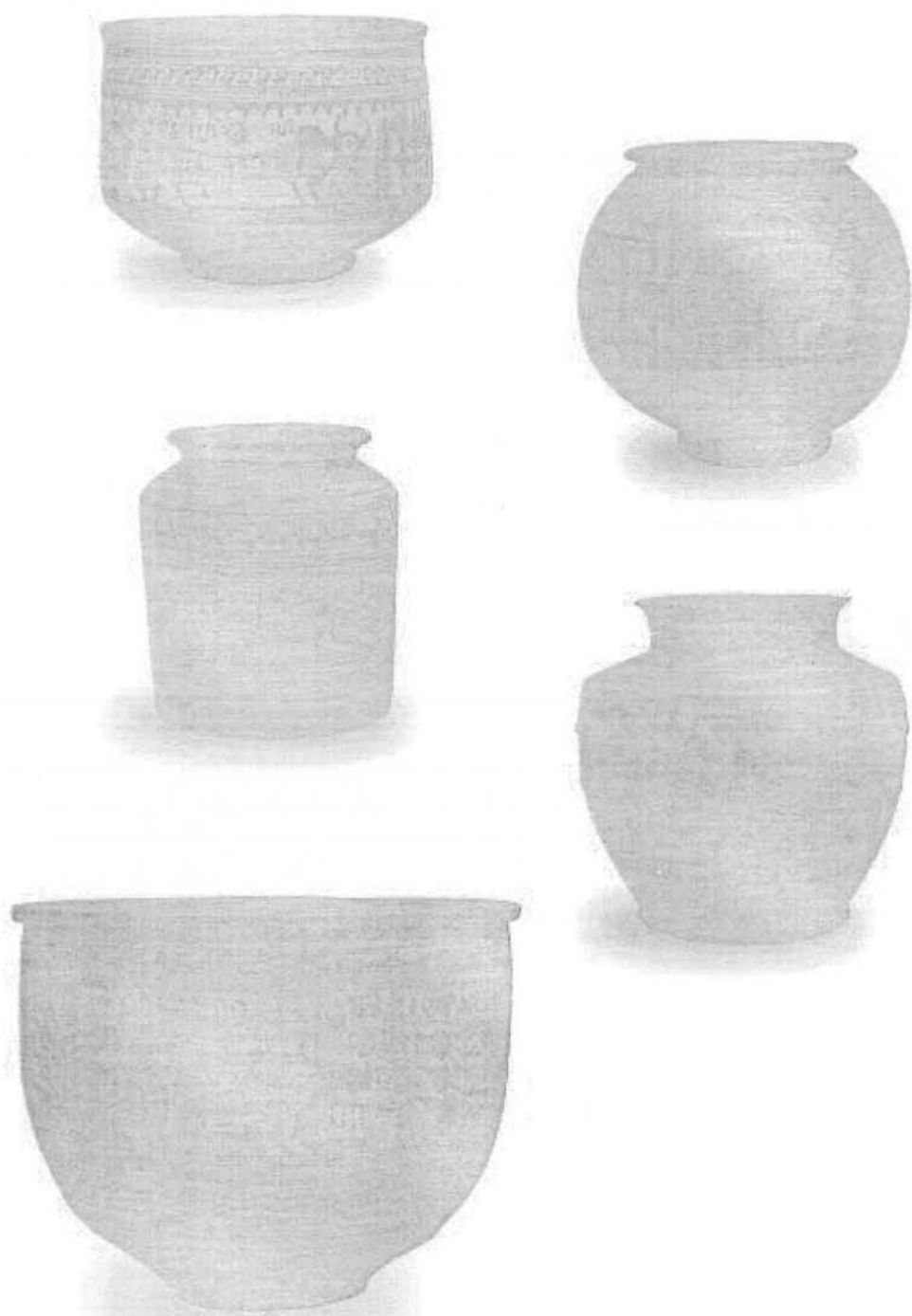


Pl. 7. Kulli Ware with Bull Motif  
(from Shudai *et al.* 2010: 100) Not to Scale



Pl. 8. Kulli Ware with Decorations<sup>98</sup>  
(from the Present Researcher)

<sup>98</sup> This shape and the decorations are very common in Kulli A Culture (Personal Observations).

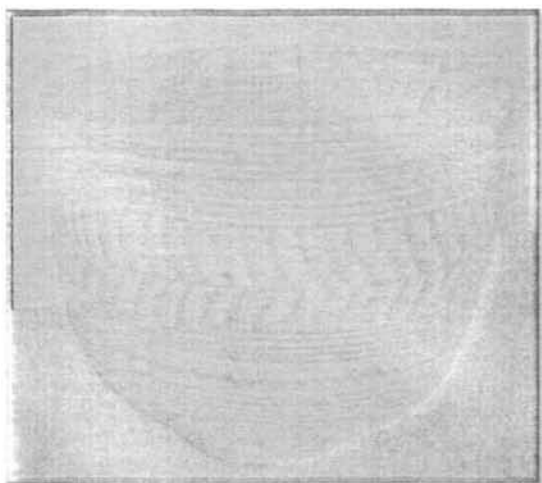


Pl. 9. Different Forms of Kulli Culture Ceramics (from Akinori Uesugi) Not to Scale

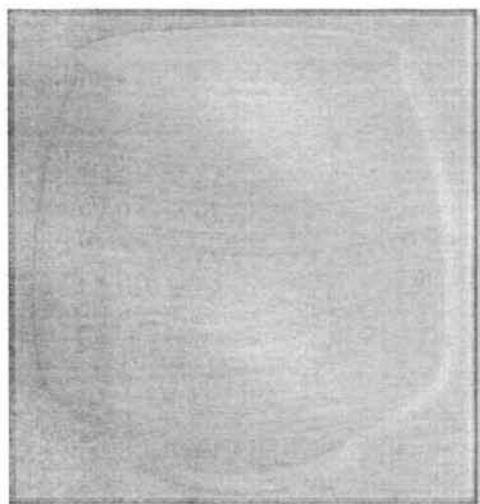




**Pl. 10. Kulli Ware**  
(from Akinori Uesugi) Not to Scale



**Pl. 11. Kulli Ware from Quetta Museum**  
(from the Present Researcher)



**Pl. 12. Kulli Ware with Tethered Bull**  
(from Shudai *et al.* 2010: 102) Not to Scale



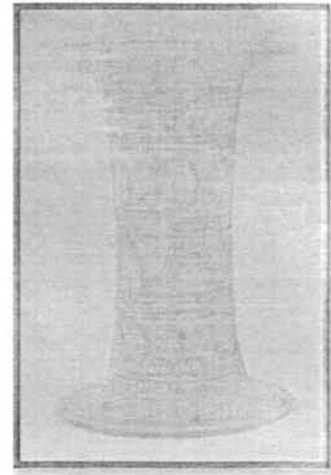
**Pl. 13. Kulli Ware with Caprids and Geometric Motifs**  
(from Akinori Uesugi) Not to Scale



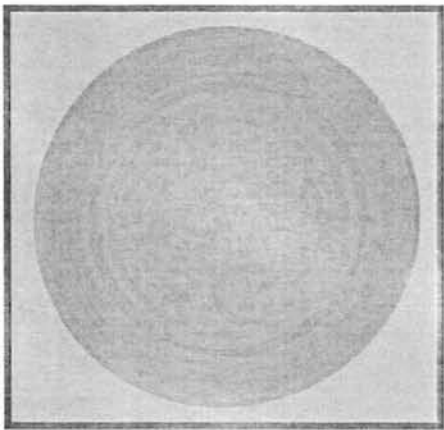
Pl. 14. Kulli Pottery at Islamabad Museum (from the Present Researcher) Not to Scale



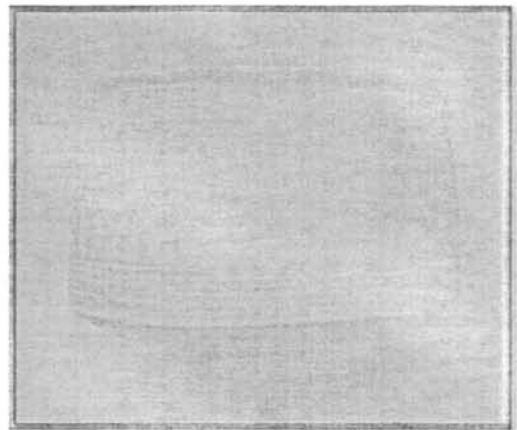
Pl. 15. Kulli Monochrome Ware  
(from J. Jarrige *et al.* 2011: 292) Not to Scale



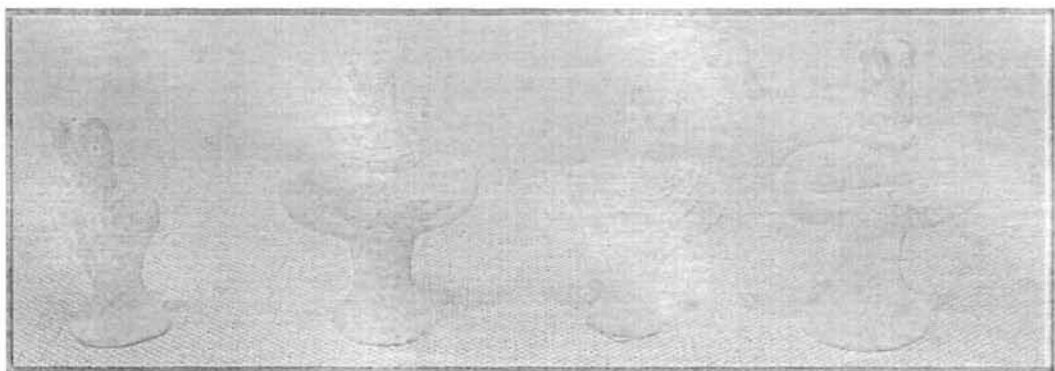
Pl. 16. A Kulli Stand  
(from Uesugi 2013: 74) Not to Scale



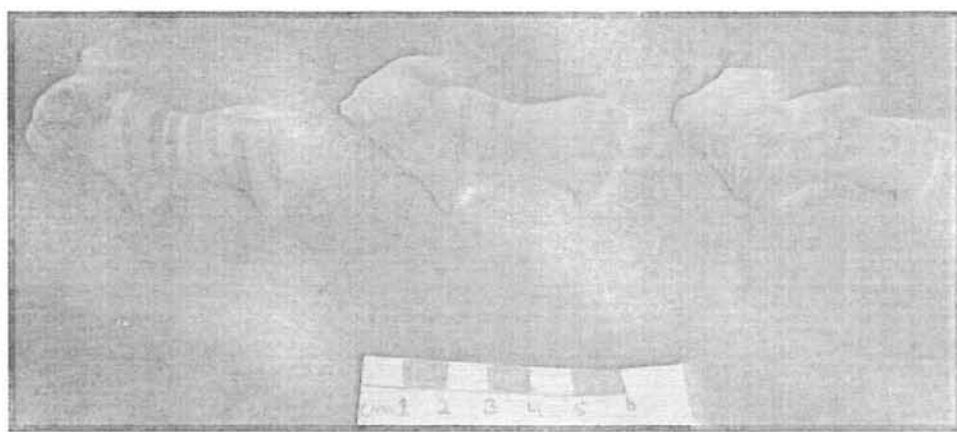
Pl. 17. A Kulli Plate  
(from Uesugi 2013: 65) Not to Scale



Pl. 18. Kulli Ware at Islamabad Museum  
(from the Present Researcher) Not to Scale



Pl. 19. Kulli Human Figurines at Islamabad Museum (from the Present Researcher) Not to Scale



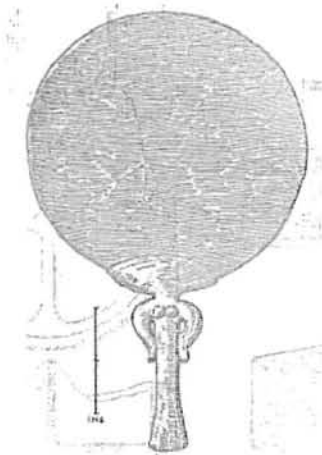
Pl. 20. Kulli Animal Figurines from Shahwani Collection (from the Present Researcher)



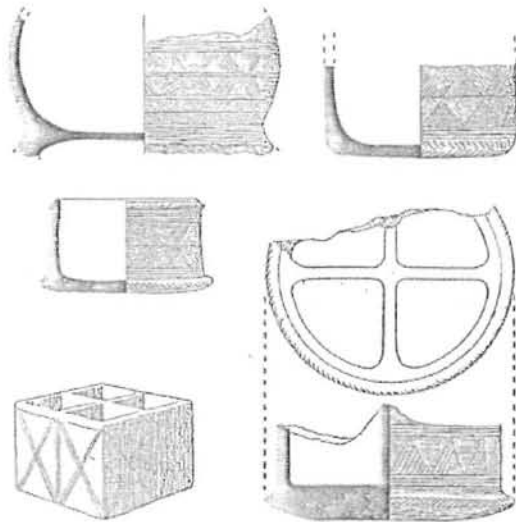
Pl. 21. Ring-Shaped Object (see Right for 3D Drawing)  
(from Uesugi 2013: 5) Not to Scale



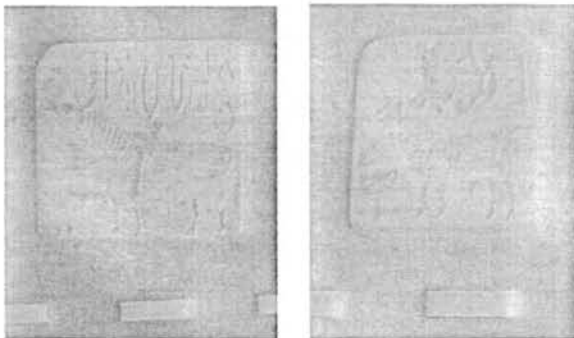
Pl. 22. 3D Drawing of Ring-Shaped Object  
(from Uesugi 2013: 2) Not to Scale



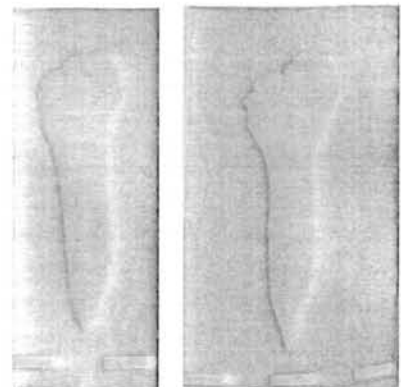
Pl. 23. Bronze Mirror of Kulli Culture  
(from Piggott 1950: 112)



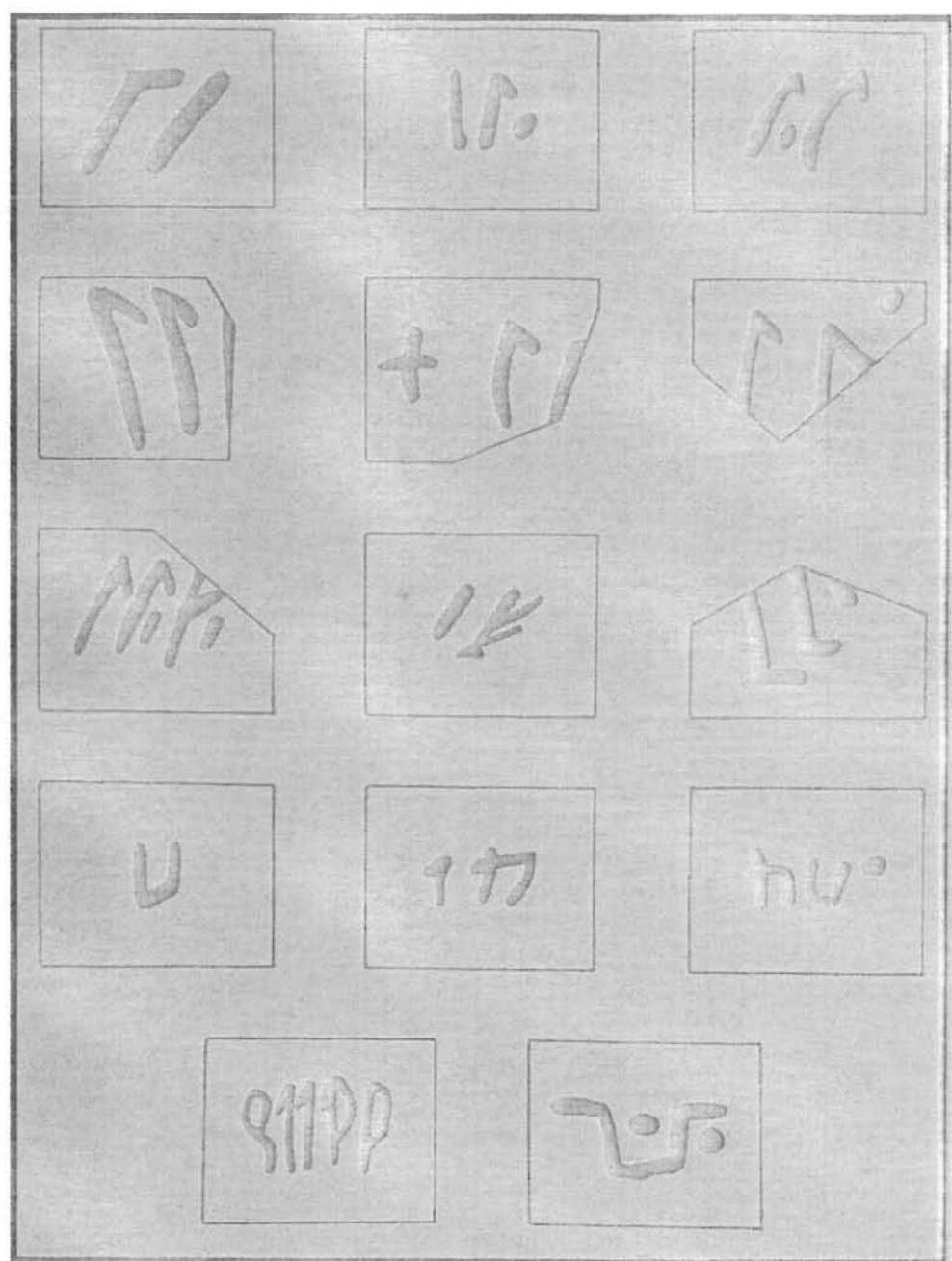
Pl. 24. Kulli Incised Stone Vessels  
(from Piggott 1950: 111) Not to Scale



Pl. 25. Two Indus Seals found from Nindowari Site  
(from J. Jarrige *et al.* 2011: 169-70)



Pl. 26. Bone Awls  
(from J. Jarrige *et al.* 2011: 176-77)



Pl. 27. The Possible Writing System of Kulli Culture (from J. Jarrige *et al.* 2011: 262) Not to Scale

## 6.2 Harappan Culture/Civilization<sup>99</sup> (c.2600-1900 BCE)

Edward Mockler (1877: 126-34) was the first to record Harappan Culture in Balochistan when he discovered Suthkagen Dor (hereafter SD) in Gawadar district. After him, F. Noetling visited and collected pottery sherds from Dabar Kot in Duki in 1898 (1899). Later, A. Stein (1905, 1929 and 1931) traced strong signs of this culture in Balochistan in his tours. He was followed by G. F. Dales with his team on the coastal region who discovered another Harappan Culture settlement—Sutka Koh (hereafter SK) in Gawadar district (Dales and Lipo 1992: 108). The early Harappans chose Balochistan for their first settlement around 3500 BCE and later moved to Harappa and Mohenjo Daro where they developed cities (Sharma 2006: 9).

Pathani Damb, Judeirjo Daro, Nausharo [II-III] in Kacchi-Bolan, SD, SK in Gawadar, Dabar Kot in Duki, Kirta in Sibi, Miri Qalat [IV] in Kech and Balakot [II] in Las Bela, etc. are the most important Harappan sites in Balochistan. Most of the sites do not provide much information since they were not excavated on a large scale or only surveyed (Quivron 2000: 147-62). However, Miri Qalat IV has indicated that Harappans and locals lived together; it was a cohabitation settlement at this time (Besenval 2005: 7). Bakkar Buthi in Las Bela is the only Harappan Culture site in the interior mountains of Balochistan (Franke and Cortesi 2015: 346). Balakot is said to be a fishing settlement of this culture (McIntosh 2008: 136). Interestingly, the transitional phase was well documented at Nausharo IC and ID, Mehrgarh VIIC and Lal Shah in Kacchi-Bolan Plain (Possehl 2002b: 126). Sadly, this culture is still not well-known and confusing (Franke-Vogt 2001: 262).

Additionally, the beginnings of Indus Valley Civilization are traced from Mehrgarh in Kacchi-Bolan which dates to late 8<sup>th</sup> millennium BCE. The study of the material culture has shown a gradual developmental process till Harappan times in the large region (Franke 2015f: 5).

Nausharo is the most intensively studied site of this culture in Balochistan. After abandoning Mehrgarh in Bronze Age, Nausharo was expanded. (Franke and Cortesi 2015: 338). The Harappan Culture is known from it three periods at Nausharo: II, III and IV while Nausharo ID is the transitional phase between Mehrgarh and Nausharo (Quivron 2000: 147) which is

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<sup>99</sup> The researcher is mostly dealing with this culture in Pakistani Balochistan; however, it is largely found in Sindh, Punjab and adjacent regions of India.

dated from c.2600-2500 BCE (Franke and Cortesi 2015: 341). Evidences of Early Harappan Culture were present at Nausharo Period IC and ID (c.2700-2500 BCE) (Quivron 1994: 635-37, 643). There is amazing cultural uniformity in c.2500-2000 BCE throughout the Indus Valley region (J. Jarrige 1991b: 101).

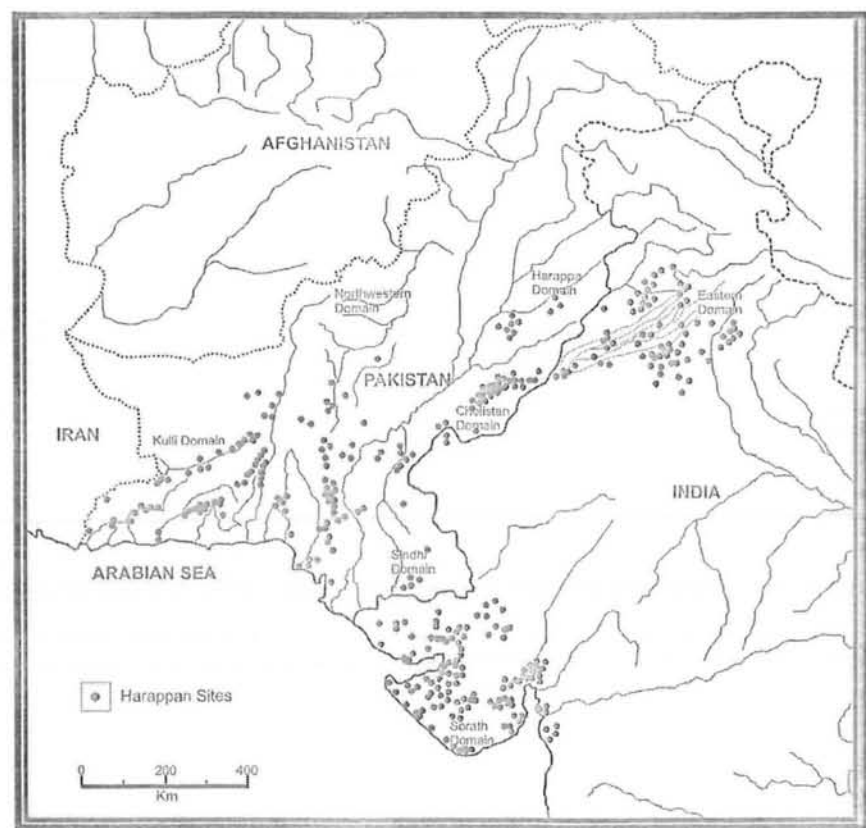


Figure 23. Harappan Sites Distribution in Indus Domains (from Possehl, Modified by Pakharia *et al.* 2014: 443)

### 6.2.1 Structural Remains

The towns were preplanned like in the usual Harappan pattern. It was arranged into two parts: the lower town and an acropolis with a huge structure. The whole site was fortified with a gateway having a ramp. In the lower town, the mudbrick houses were constructed in rows joining each other and forming lanes and streets. There were workshops as well (Quivron 1994: 635; 2000: 148; Franke and Cortesi 2015: 341-42). A drainage system covering the whole site connected with a water reservoir to supply water was constructed. Later, lanes and streets running at right angles between the houses were set up which now included storerooms



and courtyards. The water related structures were built with terracotta bricks (Franke and Cortesi 2015: 341-43; Quivron 2000: 148-51). Also, they constructed massive mudbrick or pisé platforms (Dales and Lipo 1992: 110).

At SD there might be an earlier Mature Harappan occupation outside the citadel; this phenomenon is known from the excavations of E. Mockler who has reported several building occupations (Quivron 2000: 159). SD and SK were walled towns with a gate and two towers each; each had two parts: a citadel and a lower town (see Pl. 1) (Dales 1962: 4-10; Franke 2000: [www.harappa.com](http://www.harappa.com); Wright 2010: 141). They are called trading stations (Wright 2010: 144).

Bakkar Buthi was fortified [with probably a gateway]. It was divided into two parts: the citadel on the high ground which also separately walled with boulders; it consisted of organized small rooms and hearths. The lower town was separated with a wall in between. However, this portion is not well known (Franke and Cortesi 2015: 345).

Balakot was a preplanned town. It was divided into two parts: the high citadel and lower town. The main street in the middle of citadel portion where ran mud brick houses having plastered floors with hearth kitchens and storage jars. They related to backed brick drains. A house had a washroom with terracotta tub, storage jar and a hearth. Lower town had huge nondomestic and domestic architecture. Kilns were outside of the settlement to fire pottery and figurines. A suburb settlement may have existed outside it. In addition, Balakot was craft production center (McIntosh 2008: 218, 225, 261)

#### **6.2.2 Subsistence Patterns/Mean, Domestication and Water Management System**

Cattle, sheep and goats were domesticated; they were kept for meat and probably for milk as well. Moreover, carp and catfish were probably hunted. In wild game, wild boar, chinkara, and onager; rhinoceros for their horns and hide were hunted. Nigai and Gazelle were found at Balakot (McIntosh 2008: 125-26, 135, 139-40). Many fish bones were recovered from Miri Qalat and Prahag; nevertheless, the source of their recovery is uncertain (Besenval 1994: 90). At Balakot, marine resources were perhaps not given much importance (McIntosh 2008: 64).

They developed an economy on marine resources i.e. fish. They used it as protein; they caught different types of fishes. They hunted them near the shore or in deep waters with boats; they

fixed nets for big fishes and threw nets for small fishes. Moreover, they must have used trolling system to catch fish with hooks. These two practices are still common in Sonmiani Bay, Las Bela. At Prahag, they hunted fish with hooks and line and preserved them with salt or drying them with salt perhaps to export [and store for summer/off seasons]. Balakot in Las Bela and Prahag in Gawadar were related to fishing and shell industry. Furthermore, they obtained shellfish to produce shell artifacts. At Miri Qalat [IV], 120 km away from coast, must have also traded marine fish to its neighbors (McIntosh 2008: 134, 136-37, 208, 218).

The main crops were naked and hulled barley, free threshing wheat; others include pulses and pea, fruits like *cordia. sp.*, sesame, *coriandrum sativum*, *pisum sativum* and *vitis vinifera* were present at Miri (Tengberg 1999: 5-10). Many varieties of date stones; grape pips, linseed for obtaining oil were recorded at Nausharo (McIntosh 2008: 114).

Dams were probably built at environmentally dry regions to catch rainwater and fertile silt as at Bakkar Buti in Las Bela, south Balochistan (Franke and Cortesi 2015: 344). Moreover, apart from earth dams or levees to capture or divert water of seasonal floods, open canals may have been used (Tengberg 1999: 11).

### **6.2.3 Cities or Urban Centers of Harappan Culture in Balochistan**

Pathani Damb and Judeirjo Daro in south Kacchi-Bolan district were the metropolitan centers for Indus Valley Civilization in Balochistan. Now, scholars have witnessed other urban settlements in Balochistan (de Cardi 1964: 18; J. Jarrige 1984a: 28). Nausharo is also considered an urban settlement (Quivron 2000: 148). J. McIntosh has considered Pathani Damb one of the major cities of IVC; however, it is not excavated yet. He has mentioned more unexcavated cities too. Pathani Damb is claimed to be a gateway to Harappan/Indus realms since it was near Mula Pass, a transport route (2008: 211, 264). As a result, the evidences of this culture have confirmed an advance urban pattern in the region (Franke and Cortesi 2015: 341-46; Quivron 2000: 148).

### **6.2.4 Technology**

The material assemblage presents the typical picture of Harappan Culture (Franke and Cortesi 2015: 343). At SD skilled workmanship has been found in stone artifacts (McIntosh 2008: 29).

#### 6.2.4.1 Pottery/Ceramics

Standard pottery was manufactured in this culture (see Pls. 2-10). At Nausharo in Period ID, [which was the transitional period], many ceramics designs were like Harappan Culture designs (see Pl. 2). At the same site, Period II and III were purely Harappan Culture while IV represents a different pottery culture. The ceramics of Period II and III are slightly different; however, identical shapes and designs occurred. Of Period II, some designs were like the previous period ID and designs and shapes were copied from Period IC. The period IC may have led a homogenous and uniform Harappan Culture (Quivron 1994: 629, 635, 641, 643).

The pottery from SD is typical Harappan Red Ware with typical shapes and black on red ware (Dales and Lipo 1992: 157-60; Possehl 2002c: 80). Many sun-dried vessels were recovered too (Dales and Lipo 1992: 160). There were other types of wares as well such as wet ware in the shape of small jars having the same spatial distribution. There is also buff ware (Quivron 1994: 636). Ridged pots were also found (see Pls. 3-4 for Harappan ceramic drawings) (Franke and Cortesi 2015: 343). Red, buff and gray wares were found from Kech-Makuran: black was used for paintings (Besenval and Marquis 1993: 41). The Miri ceramics belong to first phase of Harappan Culture in Balochistan (see Pl. 3) (Besenval 2005: 7). Thus, there is no uniformity in Harappan pottery since regional culture variations occur. There is diversity and homogeneity in Mature Harappan ceramic culture which show gradual evolution led to various regional groups (Quivron 2000: 177-78).

*Manufacturing Techniques:* Sandy marl and fine grained clay with little organic matter was used (Méry *et al.* 2007: 1104). Moreover, at Balakot, the potters used various types of clays with different tempers (Dales and Lipo 1992: 63). It was plastic enough for throwing on the wheel (Méry 1994: 476).

They were skilled and highly specialized craftsmen (Méry *et al.* 2007: 1113). Pottery making activities were carried out at the site (Franke and Cortesi 2015: 342-43). The evidences indicate several methods were recorded. Throwing or turning<sup>100</sup> and molding (Méry 1994: 480). The making of this pottery is well attested only from Nausharo Period II (c.2500-2400 BCE) at a pottery workshop where unfired sherds, flint blades, clay waste, red ochre, a ring

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<sup>100</sup> It is a finishing process; when the vessel is semi-dried then it is placed on the wheel and rotated trim the excess thick wall with some sort of tool.

shaped clay coil, and tools like “the bone smoothing tool, the backed clay shaping tool, and the grinding stones” to create paints and slips were found around. It is suggested that an accident must have occurred (perhaps because of a fire). Moreover, kilns, sherds of unfired vessels and potters’ tools were found from several parts of the site in Period II and III of Nausharo. The pottery was perhaps produced in rooms. Some sort of potter’s wheel was mainly used for creating the ceramics. It is proved that they made local pottery and clay analysis also suggested pottery from Indus Valley as Black slipped jars (Méry *et al.* 2007: 1198, 1103, 1113-114).

Wheel was used to shape the complete or parts of the vessels at Mohenjo Daro. The foot riven or kick wheel is traditionally used in Pakistan until now (Dales and Kenoyer 1986: 64-5). At Balochistan sites, large bowls, pedestalled dishes and perforated jars were constructed by throwing technique. In throwing, a ball of clay was placed on the wheel to shape it in some desired form with both hands. The process of opening, raising, collaring and other processes were carried out. It was smoothly finished (Méry 1994: 476-77). The dish and perhaps the bases of the pedestalled dishes were assembled when semi-dried. The base was attached after applying semi-fluid clay and a clay cord was applied internally and another clay cord was applied externally on the base (Méry 1994: 478).

The molding technique was used at Balakot (Dales and Kenoyer 1986: 66) and Nausharo. At Nausharo, they were used to form the bases of the many types of vessels; the clay was pressed in the molds. The mold traces were cleared with some sort of tool. The mold was either placed on a wheel or a turntable when turning. A chuck was also used to keep the mold on the wheel or perhaps semi-plastic clay was used. A clay coil ring was attached at the end (Méry 1994: 477). Blades were used for trimming vessels while being turned on a wheel and scrapping was perhaps done with fingers (Méry *et al.* 2007: 1198). There is irregular scrapping with a flint blade. Flint blades were used for turning tools; when the pottery was on the wheel and turning the excess material from the ceramics were removed. This was inefficient at Nausharo (Méry 1994: 478-79). After finishing, the pots were placed to be dry at the workshop before getting fired or [decorated] (Méry *et al.* 2007: 1103).

*Shapes/Forms:* Many forms of vessels were recorded. Big globular jars, cylindrical perforated vessels, pedestalled dishes, bowls with flat bottoms, bowls with cylindro-conical shape, jars

with flanged rim (Quivron 1994: 635-39), goblets with concave necks, short mouthed globular vases, dishes, bowls with flat bottoms, bulbous jars, pedestalled cups, vertical side vases, narrow based and curved profile goblets (Quivron 2000: 152-53), very large pots, small bottles, medium globular pots and jars, pots with ledge shoulders, small jars and pots, straight-sided jars, ridged bowls, vertical or convex-sided jars or pots, flaring sided bowls, handled cups (Dales and Lipo 1992: 159-249, Fig. 33, p. 159) and canisters, etc. (Besenval and Marquis 1993: 41).

*Decoration Repertoire:* The potters prepared and stored the vessels at the workshop. The decoration was carried out after firing (Méry 1994: 473). There are plain, decorated, sometimes red slip and other kinds of slips are applied as well (Dales and Lipo 1992: 159-249). Sometimes the decorations presented are overcrowded (Quivron 2000: 153). Many vessels were painted with black and occasionally with red. They are mostly red slipped or left plain. The painted strokes were applied on the rotating device when revolving with a large flat brush (Méry 1994: 479).

There were simple and decorated wares. The upper part of the vessels was half red and shiny slipped and decorated with black designs. "Sandy clay, sometimes arranged in wavy combed bands, was applied to the lower halves of the vessels" for a functional purpose. The motifs comprised of peacocks surrounded with pipal trees, undergrowth, undulated lines, and sun-like motif with its rays. They are always paneled in two horizontal lines; with the below horizontal line dotted line lines are dangling. Changes occur in iconography in Period III of Nausharo. Reed design, incised circles, complex floral designs, parallel horizontal lines, incised grooving, concentric circles, intersecting circle patterns, comb-like patterns, scale pattern (Quivron 1994: 635-36), loops with or without hanging dots, small strokes, "borders of triangles with incurved sides and spaces filled in with hatched leaves", checkerboard pattern with cross lined rectangles, hide motif, the squarish spaces were dotted between the leaf design, leaf-like water weed or seed design, erected lined leaves separated by curved leaves in horizontal (Quivron 2000: 153, 158), pipal leaf motif, fish and birds, etc. (Quivron 1994: 636).

The painting evolution (especially of fish scales, pipal leaves, and intersecting circles) of this tradition is witnessed from Nausharo Period ID, Kot Diji and Harappa; Nausharo presented

several proto-Indus characteristics. Some of the simple designs were presented in a complicated way in the Harappan Culture; they were borrowed from local cultures. Therefore, we can say that the Harappan Culture iconography was a creation from local designs (Quivron 2000: 185-86). Plain buff ware and purplish red slip vessels were designed with black color (Franke and Cortesi 2015: 346). Moreover, black slip was applied on some of the vessels (Quivron 1994: 635). Further, there were full slipped vessels (Quivron 1994: 636). Many of the vessels of Nausharo II were red slip and black painted (Méry *et al.* 2007: 1103).

*Firing Techniques:* There were two ways of firing the pottery. 1. open-air firing in which flat and round cakes of clay and straw were used to cover or to protect laterally. 2. baked firing boxes (*saggars*) covered with lids and sealed with clay and straw were used to protect small fragile materials from breaking, combustion gas and flames. This process was used at Nausharo (Méry 1994: 480-81) and Judierjo Daro (Shar and Vidale 2001: 59, 62). Interestingly, it is the first-time *saggars* were discovered from a Harappan site (Méry *et al.* 2007: 1103-104). When fired in kilns, there terracotta cakes were used as transmitting heater (Franke and Cortesi 2015: 342-43). The ceramics at this site were fired at high temperatures with oxidizing temperatures (Shar and Vidale 2001: 59, 62). At Balakot, a vertical kiln likely with a domed cover; it also had a fuel box as well (Dales and Kenoyer 1986: 69).

*Distribution Area:* Indus Valley covers an area from South and Central Balochistan, Sindh, Pakistani Panjab, Indian Gujrat and Rajistan (see Fig. 23) (Possehl 1999: 727-835, Gazetteer of Sites of the Indus Age).

#### 6.2.4.2 Other Cultural Assemblages/ Cultural Repertoire

*Anthromorphic and Zoomorphic Figurines:* Models of women kneading dough and grinding cereals (McIntosh 2008: 124), male head stone sculpture and terracotta human head and clay figurines were also found at Harappan sites in Balochistan (Asthana 1985: 110). The figurines were described as stiff legged wearing skirts and having a turban on the head (see pl. 19) (C. Jarrige 1997: 37-8). Terracotta animal figurines i.e. bull, pig, bird, a figurine head of an elephant (see Pl. 21) (Franke and Cortesi 2015: 343, 346), figurines of bovine, etc. were also identified (Shar and Vidale 2001: 53-65).

*Seals and Weights:* A square and steatite Harappan seal with Indus script (Franke and Cortesi 2015: 343 and other seals (see Pls. 15-18 and 20), weights, etc. have been recorded (Quivron 2000: 151; Besenval 1994: 89).

*Beads:* Copper, carnelian, lapis lazuli and gold (Franke and Cortesi 2015: 346), onyx (Possehl 2002c: 80), terracotta (McIntosh 2008: 248; Shar and Vidale 2001: 53-65), two ceramic (Shar and Vidale 2001: 53-65), and other types of beads were recorded from different sites (Besenval 1994: 89; Asthana 1986: 110).

*Toys:* Terracotta toy carts or cart wheels and frames (see Pl. 26) (Franke and Cortesi 2015: 346; Besenval and Marquis 1993: 41; Shar and Vidale 2001: 53-65), yoke models, (McIntosh 2008: 124), terracotta models of furniture (Shar and Vidale 2001: 53-65), and others (Besenval 1994: 89).

*Other Findings:* Terracotta bangles (see Pl. 25) (Franke and Cortesi 2015: 346; Dales and Lipo 1992: 150; Shar and Vidale 2001: 53-65), a terracotta cake (Dales and Lipo 1992: 150), terracotta balls (Shar and Vidale 2001: 53-65), copper bangles, a copper cup (Asthana 1986: 110), copper arrowheads (see Pl. 23) (Dales and Lipo 1992: 150; Possehl 2002c: 80), copper cone, sandstone objects, etc. (Dales and Lipo 1992: 150) and arrowheads of stone and worked shells (Possehl 2002c: 80), a probable potter's wheel disk (see Pl. 22), a mold or chuck, ceramic cones which were used for rubbing or fine polishing (Shar and Vidale 2001: 53-65), blades (Dales and Lipo 1992: 150; Possehl 2002c: 80), stone vessels (alabaster, chlorite, etc.) (Possehl 2002c: 80; Dales and Lipo 1992: 150; McIntosh 2008: 166), a comb, (Besenval 1994: 89), and other stone tools, etc. were discovered from different sites (Asthana 1985: 110).

#### **6.2.5 Harappan Writing System and Potters' Marks**

Moreover, a typical Harappan seal with Indus writing and an unidentified creature was found on it from Nausharo. Pottery vessels also bore Indus writing from Bakkar Buthi (Franke and Cortesi 2015: 343, 346), Nausharo (Quivron 2000: 148), Judeirjo Daro, etc. (see pls. 12-14) (Shar and Vidale 2001: 65-66). Objects with Indus Writing was found on seals from Kulli sites like the two Indus seals at Nindowari, a seal from Kinneru, and Pathani Damb, etc. (see Pls. 15-18) (Franke and Cortesi 2015: 337, 348).



Inscribing the pottery at Nausharo was a common phenomenon with 47 kinds of marks from the early periods. For example, dot, lines or a combination of them and V shape pattern, etc. The impressions were made with a tool or with nails (see Pl. 13). They are usually vertical cut reeds, nail marks, etc. (Quivron 1997: 45-61).

#### **6.2.6 Trade or Barter System and Trading Posts/Outposts**

They settled at strategic positions to control movements of people and goods in the valleys (Dales and Lipo 1992: 110) which is accessible from sea and inland in Kech Valley. The Harappans came with basic Harappan goods and settled at the strategic locations (Wright 2010: 225). Moreover, there is a small number of sites with more close characteristics of Harappan Culture in Balochistan and are usually regarded as outposts of Harappan Culture. They are SD, Sutka Kuh (hereafter SK) in Gawadar, Miri Qalat in Turbat, Balakot in Loralai and Bakkar Buthi in Las Bela and Nausharo in Kacchi-Bolan (Franke and Cortesi 2015: 338). The people of SD gave their pottery a local touch later and it is suggested that SD and SK were not the border outposts of the Indus Civilization (Dales and Lipo 1992: 157-60).

Sites like SD, SK and Pathani Damb perhaps obtained raw materials (or perhaps processed them) or finished goods from their neighbors or internationally and traded them in the Harappan/Indus realms. Furthermore, the coastal sites (i.e. SD, Balakot and [SK]) in Balochistan at this time were engaged in sea trade with outsiders and to use marine resources (McIntosh 2008: 21, 216). Some Harappan sites in Balochistan traded with Mesopotamian sites. The trade with Mesopotamia ended so the twin trading stations were abandoned which were used for intercultural exchange of goods, etc. (Wright 2010: 320, 322).

“It seems likely that shiploads of goods from Oman and from trade through the Gulf were brought to Sutkagen-dor and Sotka Koh in the [Makuran], with no restriction on the time of year when sailing could take place in the sheltered waters of the Gulf” ... [They were sites which were indulged in] controlling or guarding coastal traffic... It is possible that sea level changes that had taken effect by around 2000 BCE had caused the coastline to recede along the [Makuran] coast, resulting in the important towns of Sutkagen-dor and Sotka Koh losing their key role in sea trade”. The trading posts SD and SK offered land routes through the mountains (McIntosh 2008: 89, 170, 194, 208).

### 6.2.7 Relations between Harappan Culture and Kulli Culture

Harappan sites were on the foothills of Balochistan; agriculturally watered by seasonal streams and it provided routes to highlands. Pastoralists migrated uplands in summer and lowland in winters seasonally in search of pastures passing through sites like Pathani Damb (100 hectare) near Mula Pass; it “may have functioned as customs’ and warehousing centers for goods being transported by these pastoralists” (McIntosh 2008: 208).

Kulli artifacts or elements sometimes occurred on some of these sites; Kulli assemblage has a strong Harappan touch (Quivron 2000: 151, 159, 160; Franke and Cortesi 2015: 338). It is a western expansion of Harappan Culture which merged with local traditions at about 2400 BCE (Franke and Cortesi 2015: 338). Kulli and Harappan assemblages were found in the same period in Miri Qalat context (Besenval and Marquis 1993: 40). At Bakkar Buthi, Kulli artifacts were also present i.e. pottery shapes and decorations, terracotta bangles, a toy cart, a pierced bird figurine, etc. (Franke and Cortesi 2015: 345-46).

Harappan objects were found at Kulli sites like typical Indus seals were found at Nindowari, weights at Mehi and Kinneru which is a result of strong trade network with the Harappans (McIntosh 2008: 164). Harappan materials like fruit stands, graters, toy carts, terracotta cakes, and others have been found on Kulli Culture sites (Pakistan Archaeology 1964: 33). A. Uesugi has claimed that Harappan Culture has influenced the ancient Baloch settlements in Balochistan. Some of them are Nindowari in Khuzdar, Nausharo Kacchi-Bolan, Miri Qalat in Kech, Dabar Kot in Duki, Periono Ghundai in Zhob, SD, SK in Gawadar and others (2017: 227).

To conclude, the harsh geography, as the data has suggested, did not allow Balochistan to grow a full-fledged civilization but it formed the grounds for the third oldest civilization of the world starting from Neolithic time. Also, major sites of Harappan Culture/Civilization have been recorded in Balochistan which means a part of civilization existed in Balochistan. However, it is mostly existed on plain areas of Balochistan bordered with Sindh and areas near sea to control traffic. The transitional period of Harappan Culture is well documented at Nausharo. Hence, we can suggest that not all Balochistan played a vital role in the making this civilization by sharing its strategic geography, resources, ideas, etc. It is the largest among the ancient civilizations. According to A. Uesugi, it also influenced Balochi settlements like

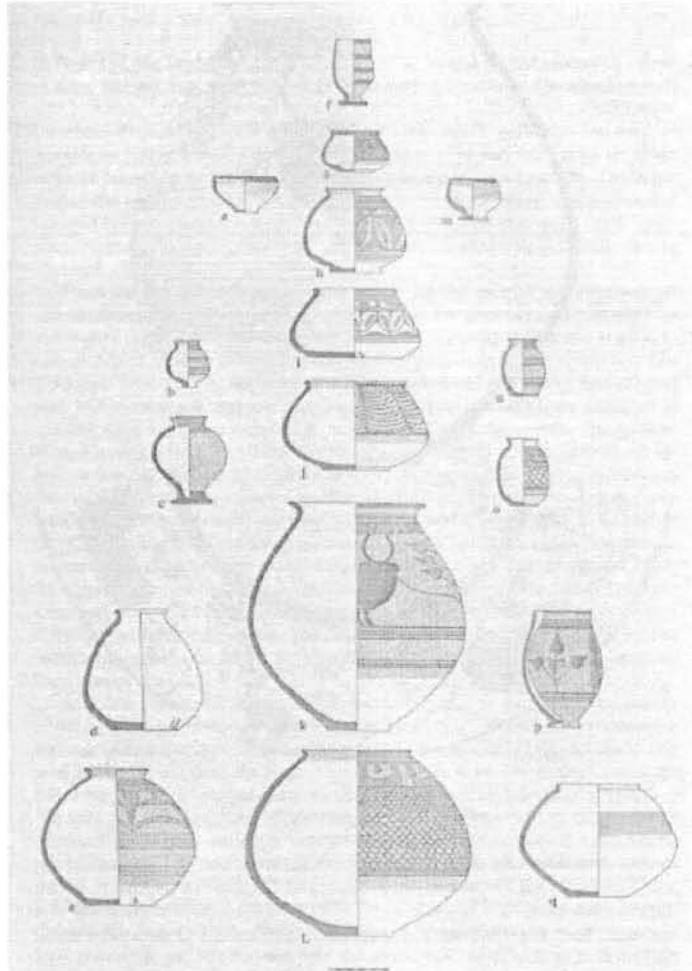
Nindowari, Nausharo, Miri Qalat, Dabar Kot, Periano Ghundai, SK and many more (2017: 227). Since there are no signs of battles, we can assume that Harappans and Kullis lived peacefully supporting each other in trade and perhaps other matters. Thus, the Harappan Culture/Civilization was incomplete without Balochistan Archaeology.

It clearly has all the major traits that a civilization requires i.e. advance cities, specialized workers, complex institutions, writing system and advanced technology. There are villages, towns and cities of this culture of different nature in Balochistan. For instance, simple settlements, fishing settlements, etc. were found. Interestingly, two major cities as Pathani Damb and Judeirjo Daro of Harappan Culture are recorded from Balochistan. Some sites functioned as trading stations which improved the trading system. The Harappans colonized the major trading routes. They depended on land and sea animals and cereals for subsistence. It was a well-developed culture i.e. well-organized architecture, advance technology and material culture, trade, water management, etc. moreover, the Harappan writing system also existed on Balochistan sites. There is diversity and homogeneity in pottery of this culture. The pottery is often decorated with a combination of geometric, animal and floral designs; it is usually overcrowded. However, not much is known about this culture in Balochistan except for Nausharo which is excavated.

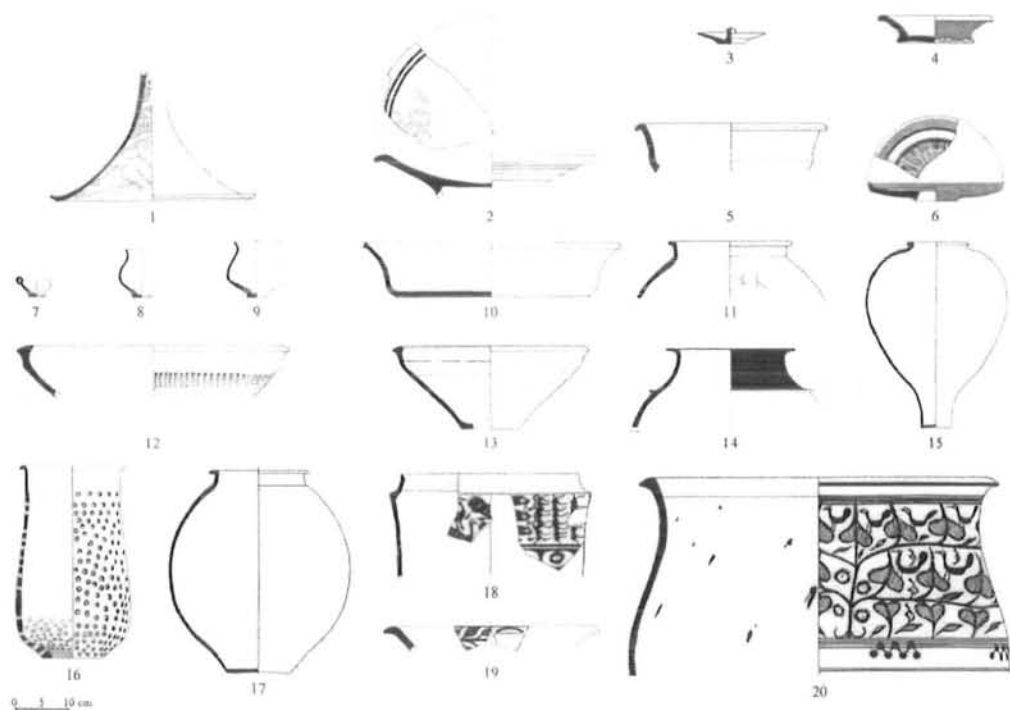
## Plates of Harappan Culture in Balochistan



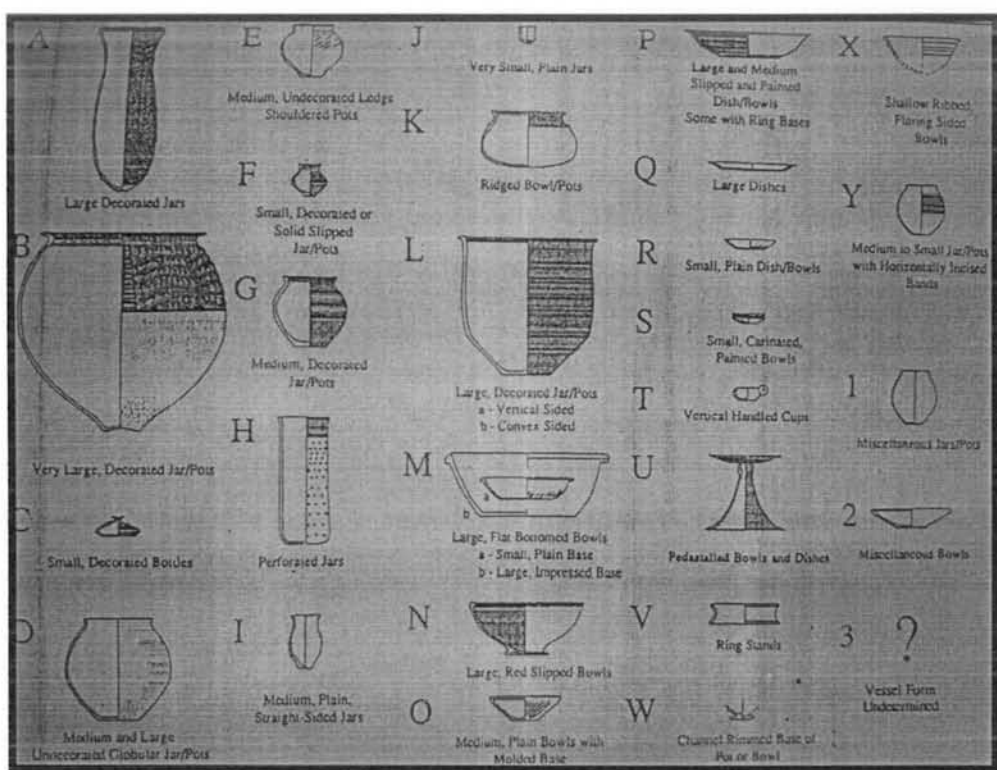
Pl. 1. The Reconstruction of SD (from [www. google.com.pk](http://www.google.com.pk)) Not to Scale



Pl. 2. Pottery of Nausharo ID, Transitional Phase from Early to Mature Harappan Phase (Quivron 1994: 633)



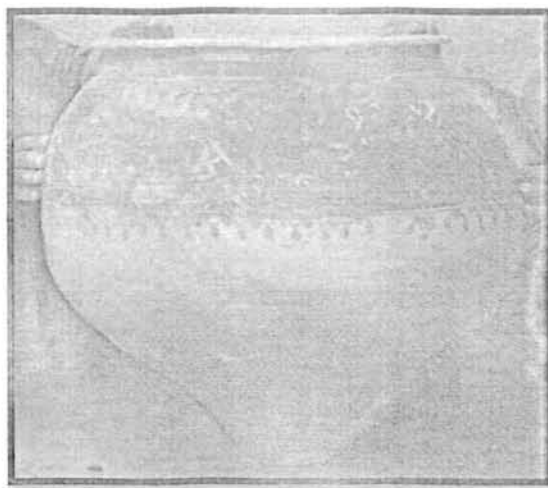
Pl. 3. Pottery Drawings of Harappan Ceramics from Miri Qalat IV (from Didier and Mutin 2013: 478)



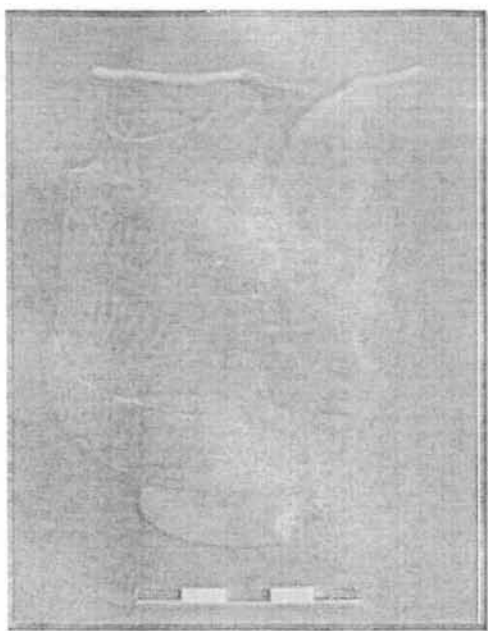
Pl. 4. Harappan Pottery Drawings from SD and SK (from Dales and Lipo 1992: 159) Not to Scale



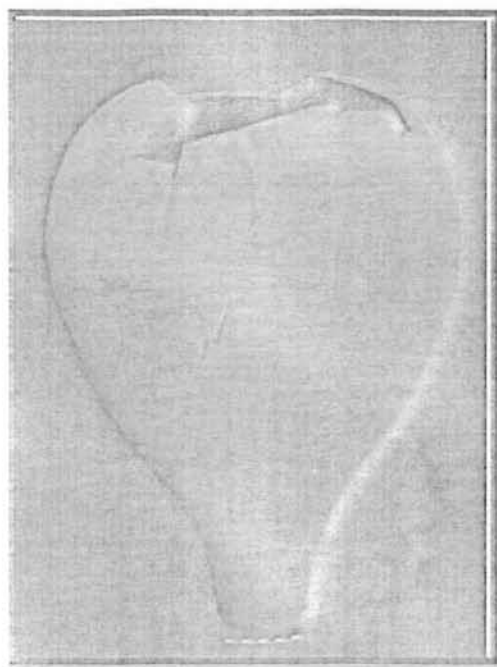
Pl. 5. Transitional Phase Ware from Nausharo ID  
(from the Present Researcher) Not to Scale



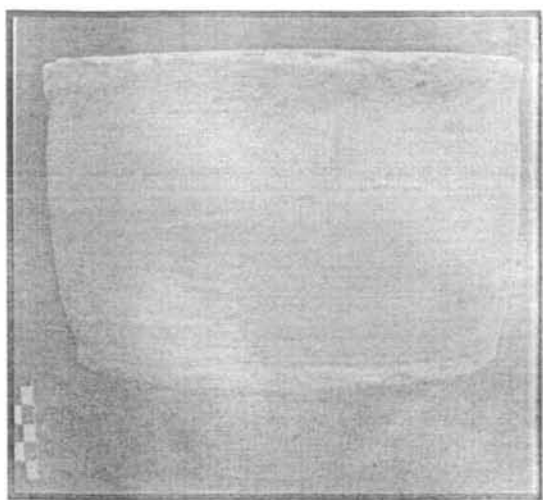
Pl. 6. Harappan Storage Ware from Nausharo  
(from Franke and Cortesi 2015: 342) Not to Scale



Pl. 7. Black on Red Harappan Ware  
(from Franke 2008: 666)



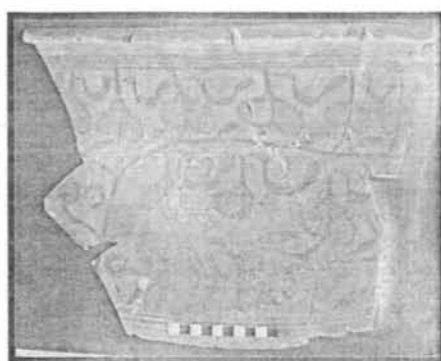
Pl. 8. Black Slipped Harappan Jar from  
(from Franke 2008: 666)



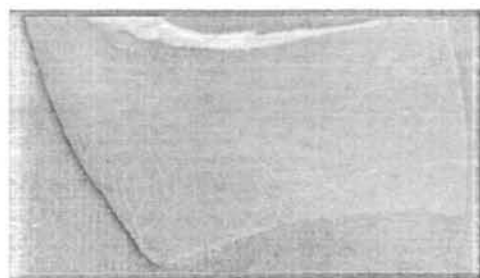
Pl. 9. Firing Box from Nausharo  
(from Méry 1994: 480)



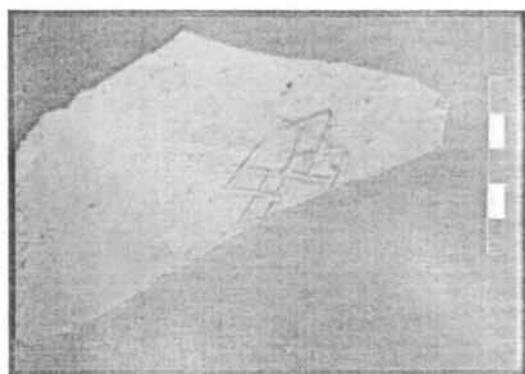
Pl. 10. Tiny Pottery Pot from SD  
(from Dales and Lipo 1992: 155)



Pl. 11. Harappan Sherd from Miri I  
(from Didier and Mutin 2015: 316)



Pl. 12. Pot Sherd with Indus Inscription, Bakkar Buthi  
(from Franke and Cortesi 2015: 345) Not to Scale



Pl. 13. Incised Sherd from Murda Sang  
(from Franke 2015j: 160)



Pl. 14. Inscribed Indus Inscription from Judeirjo Daro  
(from Shar and Vidale 2001: 66) Not to Scale

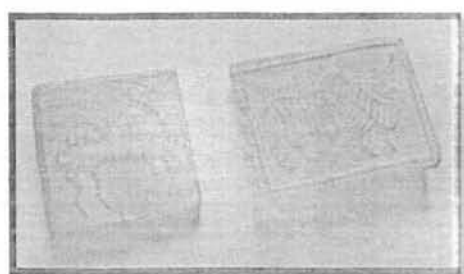




Pl. 15. Harappan Seal with Humped Bull from Kinneru  
(from Franke 2016: 193) Not to Scale



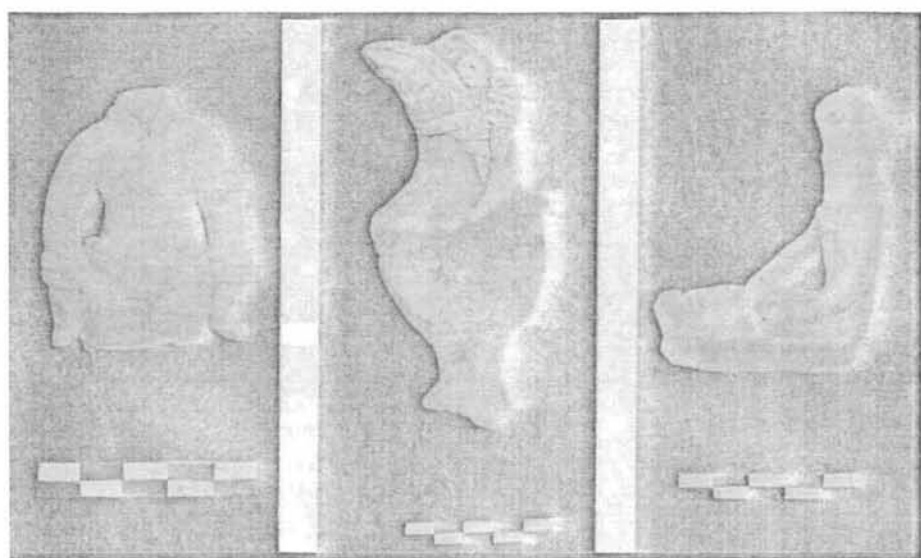
Pl. 16. Harappan Seal from Nausharo  
(from Franke and Cortesi 2015: 342)



Pl. 17. Indus Seals from Pathani Damb  
(from Sheikh Javed Ali Sindhi) Not to Scale



Pl. 18. Indus Seals from Pathani Damb  
(from Sheikh Javed Ali Sindhi) Not to Scale



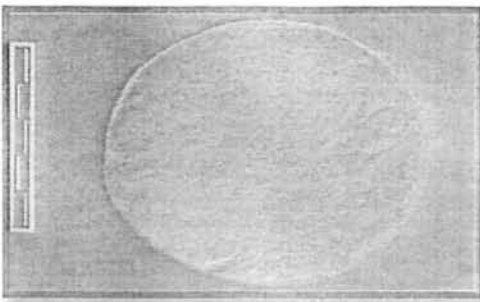
Pl. 19. Figurines from Nausharo III (from C. Jarrige 1997: 39)



**Pl. 20. Harappan Seal from Balochistan<sup>101</sup>**  
(from ebay.com)



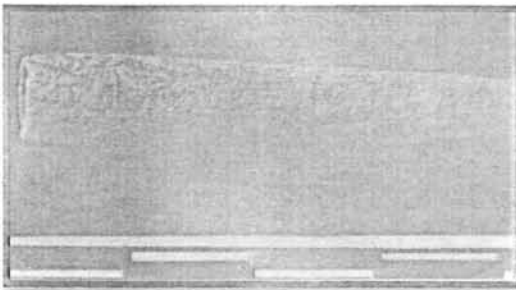
**Pl. 21. Elephant Figurine Head from Nausharo III**  
(from Franke and Cortesi 2015: 343)



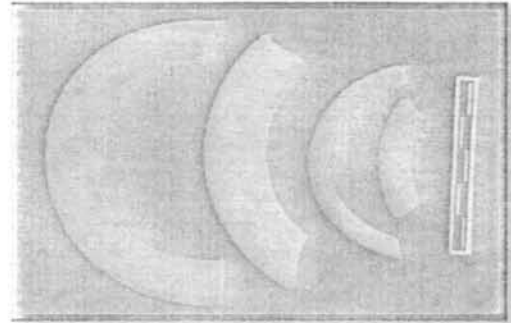
**Pl. 22. Copper Disk from SD**  
(from Dales and Lipo 1992: 15)



**Pl. 23. Copper Arrowhead from SD**  
(from Dales and Lipo 1992: 154)

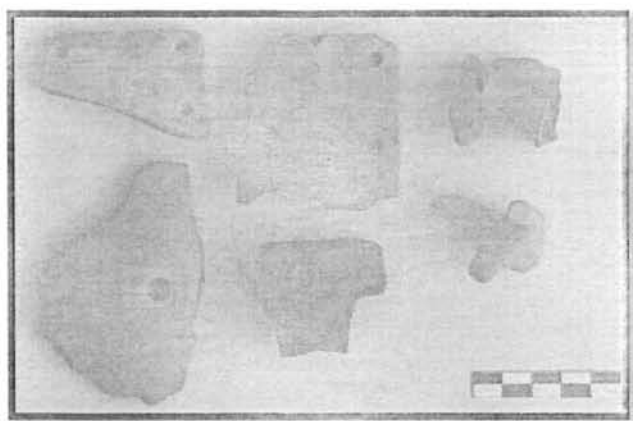


**Pl. 24. Copper Tube from SD**  
(from Dales and Lipo 1992: 153)

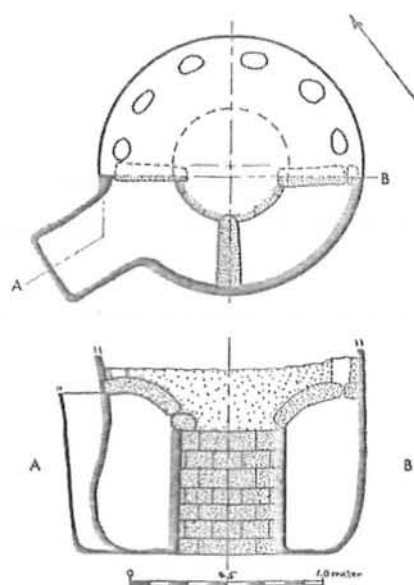


**Pl. 25. Terracotta Bangles from SD**  
(from Dales and Lipo 1992: 156)

<sup>101</sup> It is on an auction internet site which claims it to be a seal from Balochistan; however, it does not look old enough too (pinterst.com)



Pl. 26. Model Carts, Ceramic Wheel and Animal Figurines  
(from Shar and Vidale 2001: 55)



Pl. 27. Indus furnace at Balakot  
(from Dales 1974: 10)

### 6.3 Mehrgarh VIII-Sibri Culture (c.2100-1900 BCE)

Mehrgarh VIII is only known for its funerary remains (J. Jarrige 1995: 88). At Mehrgarh VIII itself, there was no settlement of this culture; however, 10 km away an ancient hamlet was found, named Sibri which is comparable with Mehrgarh VIII (see Table 20 for chronological comparisons) (J. Jarrige 1991b: 96). Sibri is the only known settlement where they settled, prepared ceramic and metal objects and domesticated plants and animals (Santoni 1984: 57). There was certain ceramic continuity in Mehrgarh VIIC and VIII despite a break of several centuries. The excavators noted “the existence of links in terms of ceramics forms and technology between Mehrgarh VIIC and Nausharo I, on the other hand, and the Harappan periods of Nausharo II and III and those of Mehrgarh VIII and Sibri, on the other”. This culture sorted out several problems (J. Jarrige 1995: 90). Moreover, on 19<sup>th</sup> March 1985, Quetta Hoard was discovered accidentally when digging for Serena Hotel foundations (J. Jarrige and Usman 1989: 153; J. Jarrige 1991b: 102). From Quetta, the rich funerary artifacts and hoard are the most interesting objects of this culture verification of an elite class in the society in this culture (J. Jarrige 1991b: 102) where once it was used to be McMahon Museum before 1935 earthquake (S. Naseer, Personal Communication, October 12, 2018).

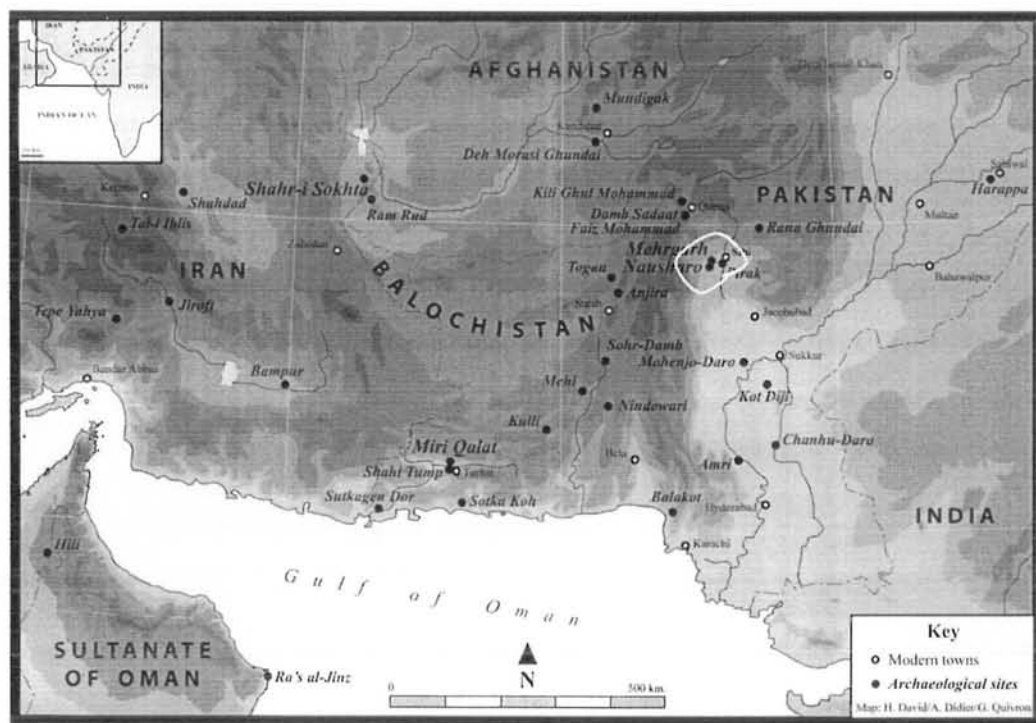


Figure 24. Mehrgarh VIII-Sibri Ware Main Center (from J. Jarrige *et al.* 2011: 8, Modified by the Present Researcher)

### 6.3.1 Structural Remains

At Sibri, mudbrick architecture, craft manufacturing installations (J. Jarrige 1995: 89), a buttressed wall and one gravel foundation platform were found (Santoni 1984: 56). Moreover, beside the craft working areas and few graves were detected at Sibri (J. Jarrige 1991b: 96).

### 6.3.2 Subsistence Patterns/Mean and Domestication

This category includes domesticated animals like cattle, sheep, goat, pig, and game wild equid are used. From plants, six-row barley is found. This was all part of their known subsistence (Santoni 1984: 57).

### 6.3.3 Technology

Many technological aspects were discovered from this culture. They are discussed in the following paragraphs:

#### 6.3.3.1 Pottery/Ceramics

The Quetta Treasury ceramics are like Mehrgarh VIII-Sibri Culture. "Nausharo sees the emergence of most of the ceramic forms which are subsequently to predominate in Mehrgarh Period VIII and at Sibri" (see Pl. 1) (J. Jarrige 1991b: 98, 102). In Mehrgarh VIII, wheel-made buff or pinkish ware was found. The shapes of the ceramics are like Central Asian ceramics i.e. pedestalled cups and bowls and "truncated conical bowls, etc. (C. Jarrige *et al.* 1995: 252).

*Manufacturing Techniques:* They constructed fine wheel made ceramics of various forms. At Sibri, the pottery types are handmade, and wheel made. The handmade is coarse with sherd-temper while the wheel turned is vegetal tempered or occasionally vegetal temper and sherd-tempered together (Santoni 1984: 52, 56). At Sibri, large coarse ware jars were found with basket impressions at the bottom (C. Jarrige *et al.* 1995: 288).

Moreover, "...one sees a progressive transformation of the ceramic industry from the characterized individual pieces to plain ware mass produced fast wheel, by use of standardization moulds for bases by string cutting, by binding large vessels with cords for firing and other features that are characteristics of Harappan pottery and also Mehrgarh VIII assemblage" (J. Jarrige and Usman 1989: 162).

*Shapes/Forms:* M. Santoni has mentioned tumblers, goblets, pedestalled bowls, carinated wide open jars, globular jars, carinated bowls, truncated pots, pedestalled goblets, open-mouthed globular pots, high-necked globular pots, perforated jars, open-mouthed pots, small bowls, miniature pots, spouted pots and bowls, flat vases, truncated pots, etc. (1984: 54, 56).

*Decoration Repertoire:* Very few (less than 1% of the corpus) pots are painted with fugitive brown on light plain ware with black geometric designs like horizontal bands, undulated bands, hourglasses between a group of vertical bands, and long hanging triangles; there are also stylized birds and flowers. There were two more types discovered even with lesser number and decorated with appliqué cordons (perhaps triangles) and grooved wavy lines. "They are usually painted or slipped in or re-brown". Incising is only found on carinated wide open jars (Santoni 1984: 54-6).

*Firing Technique:* It is well fired (Personal Observations).

#### **6.3.3.2 Other Cultural Assemblages/ Cultural Repertoire**

*Anthropomorphic and Zoomorphic Figurines:* All are figurines were constructed from sherd-temper. They are mostly pawns or violin-shaped female figurines (see Pl. 6). They have eyes and breasts and some had hair dresses. Some are represented with ornaments and necklaces in the shape of incised holes. Appliqué breasts are applied and with incision armpit and pubic hair is represented. The second type is a seated callipygian figurine found in southern Turkmenia and the third type is standing flat figurine with applique breasts in small size. Few animal figurines were found as well like humped bulls and other unidentified ones (Santoni 1984: 57).

*Seals:* They are few interesting findings. Two types of seals were recovered from this culture: 1. bronze or stone triangle and square or compartmented seals (see Pl. 8); 2. only one specimen represent this kind. It is a cylindrical seal made of black steatite with a top boss; the engraving can be defined as zebu confronting a probable lion surrounding the cylinder part; a scorpion is engraved at the base as well. It was associated with two black steatite beads; it may have been a necklace (Santoni 1984: 56).

*Gold Artifacts:* A gold cup with a row of lions and a rope design (see Pl. 2), two pendants or figurines of bull (see Pl. 3) and hundreds of beads (J. Jarrige and Usman 1989: 156; J. Jarrige

1991b: 102; Possehl 2002c: 233-34), semi-precious stones on a gold chain were recorded as well (J. Jarrige and Usman 1989: 162).

*Copper/Bronze Findings:* The discovered artifacts of this category were mirrors, spatulas, a flat axe and a long chisel, a portable and intersecting copper censer or brazier with ashes inside (see Pl. 4) (J. Jarrige and Usman 1989: 156, 160), bird headed pins, a seal, a cosmetic bottle and round mirrors. These objects from south cemetery in Mehrgarh VIII are clear examples of Bronze Age culture in Bactria (J. Jarrige 1991b: 94). A perforated bronze object (see Pl. 5) (J. Jarrige and Usman 1989: 160), a bronze shaft-holed axe-adze (see Pl. 7), etc. were also found (Santoni 1984: 56).

*Stone Objects:* Stone scepters or rods, stone discs, miniature incised pillars or columns; bars with incised circles and dice similar to Harappan types, clad in woolen robe or *kaunakes*<sup>102</sup> which is Mesopotamian characteristic (J. Jarrige and Usman 1989: 153, 156; J. Jarrige 1991b: 102-03), conical pawns and small balls (in stone or frit) (J. Jarrige and Usman 1989: 160), alabaster and chlorite vases (one incised and another one with a beak), grinding stones, pestles, polishing stones, hammer stones, sling-stones (Santoni 1984: 56), amulets with incised cruciform designs, and a probable frit vessel in kidney shape (J. Jarrige 1991b: 97), two steatite beads were recorded (Santoni 1984: 56).

*Terracotta Objects:* Figurines, spindle whorls, small wheels, rattles (one incised perhaps with numbers), sling stones and a cake-shape object with several seal and cruciform impressions, etc. were also discovered (Santoni 1984: 56-7).

*Other Findings:* Crucible fragments, potsherd discs (Santoni 1984: 56), ivory discs with incised circles, etc. were found (J. Jarrige and Usman 1989: 156).

At Mehi II-III, A. Stein found two burials and “some metal objects (among which is the famous mirror with the “human-shaped” handle) together with large open pedestaled cups and truncated conical bowls that are comparable to the pottery from the “Bactrian” cemetery of Mehrgarh” (C. Jarrige *et al.* 1995: 253).

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<sup>102</sup> A woolen mantle





Furthermore, the grave at Quetta was more likely a “votive deposit in a funerary complex” (J. Jarrige and Usman 1989: 162). All the graves were disturbed by illegal diggers in Mehrgarh VIII. The dead or other funerary objects were placed in a rectangle box, sometimes with mud and few with mudbricks. All of them were east-west oriented in flex position; with either complete or almost complete skeletons (C. Jarrige *et al.* 1995: 252, 286-88). From four cenotaphs, single brick structures, two robbed, in the other two ceramics, a lunate a black steatite stamp seal with snake representation, a glazed frit vase like kidney shaped vases but clearly showing the head of a caprine, etc. (Santoni 1995: 324).

Some other bronze artifacts were found at cenotaph area. They included bangles, [copper/bronze] earrings, bird headed, or double spiral headed, and button headed pins, cosmetic bottles, toilet artifacts like mirrors or perhaps scissors, blades or spatulas. These types of objects were all found at Bactria and Marianna (Santoni 1984: 54). Other funerary objects were an agate, lapis lazuli, carnelian, jasper, other semi-precious stones and a copper/bronze beads’ necklace, ceramics, lapis lazuli and other semi-precious stone beads, mother-of pearl triangle stepped pieces, triangle stepped limestone lunates, etc. (C. Jarrige *et al.* 1995: 252). Moreover, “...the grave goods and the cenotaph deposits comprise a collection of earthenware, while obviously linked in certain respects to antecedent local traditions, are not original products of Kachi Plain”. However, such deposits were already recorded from Mehi funerary offerings, in south Balochistan and at Khurab in Iranian Balochistan (J. Jarrige 1991b: 94).

#### **6.3.5 Writing System**

Indus script was found on a steatite amulet which is the continuity of Harappan Culture (J. Jarrige 1991b: 96; C. Jarrige *et al.* 1995: 378).

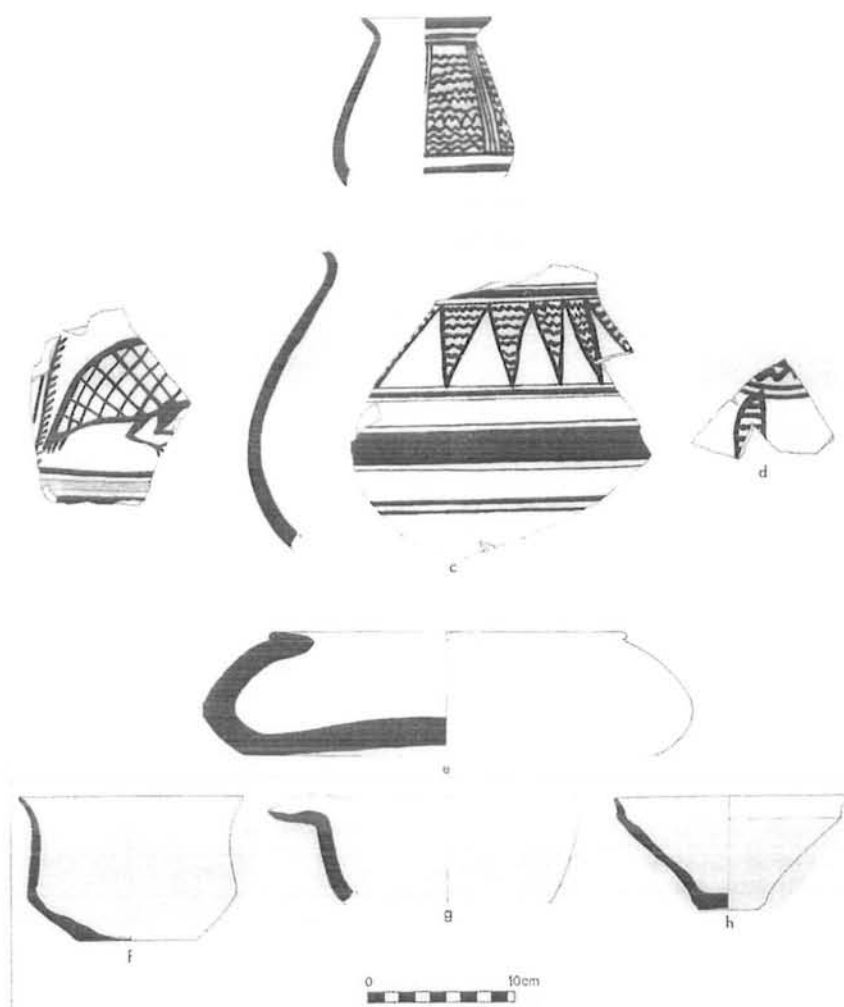
#### **6.3.6 Trade and Interactions**

The objects at Quetta Treasury are like those found in Bactria<sup>103</sup>, southern Turkmenistan, Iran and to some extent in Balochistan. This culture traded with Indo-Iranian and Indo-Aryan cultures which thrived at the start of second millennium BCE (J. Jarrige 1991b: 103).

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<sup>103</sup> Basically, it was the old name of Afghanistan.

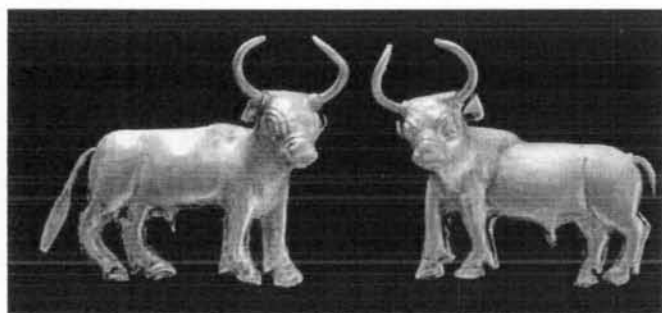
## Plates of Mehrgarh VIII-Sibri Culture



Pl. 1. Painted and Plain Ceramics from Sibri (C. Jarrige et al. 1995: 359)



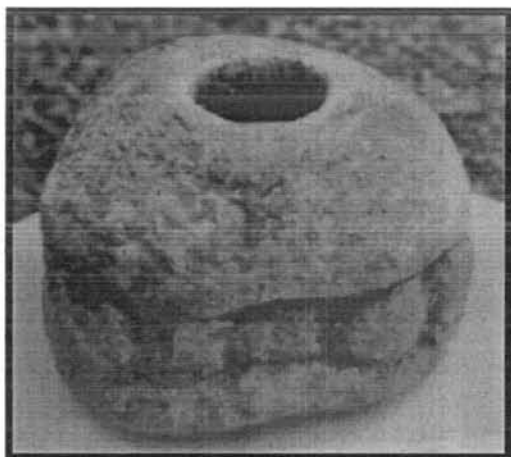
Pl. 2. The Golden Bowl from Serena Diggings  
(from Qasim Ali Qasim) Not to Scale



Pl. 3. Two Gold Pendants from Serena Diggings  
(from Qasim Ali Qasim) Not to Scale



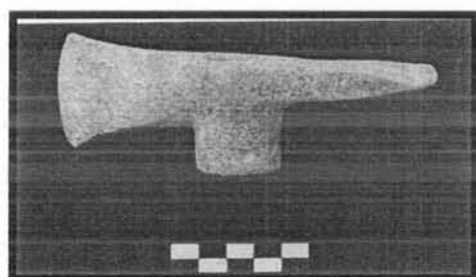
Pl. 4. Pedestalled Brazier  
(J. Jarrige 1991b: 102) Not to Scale



Pl. 5. Perforated Article in Lead  
(from J. Jarrige and Usman 1989: 163) Not to Scale



Pl. 6. Figurines from Sibri  
(from C. Jarrige 1997: 41)



Pl. 7. Shaft-Axe from Sibri  
(from C. Jarrige *et al.* 1995: 361)



Pl. 8. Seal from Sibri (from C. Jarrige *et al.* 1995: 360)

#### 6.4 Early Pirak Culture and Late Pirak Culture (c.1800-700/600 BCE or c.2000-1300 BCE)<sup>104</sup>

Robert L. Raikes identified this culture for the first time and named its type site as Pirak. Earlier this culture was mistakenly termed as a Chalcolithic culture on the basis of pottery seriation assumptions (1963a: 56, 67; Casal 1973: 171). To be precise, it was dated around sixth millennium BCE (Franke 2015b: 368). This misconception was cleared by J. Casal (1973: 175). Furthermore, it can be divided into Early Pirak Culture (hereafter EPC) (Late Bronze Age in Balochistan) and Late Pirak Culture (hereafter LPC) (Early Iron Age in Balochistan) (Dani 1988: 63-69).

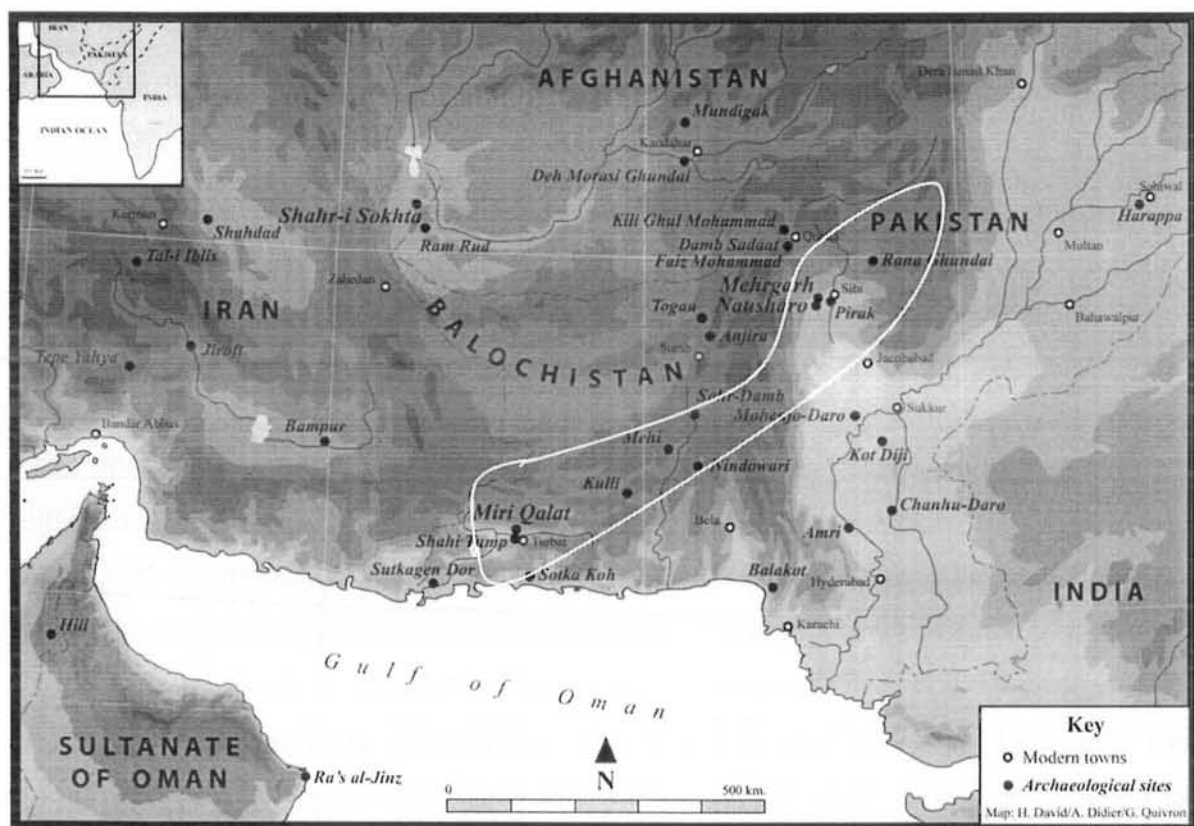


Figure 25. Pirak Ware<sup>105</sup> Distribution Area (from J. Jarrige *et al.* 2011: 8, Modified by the Present Researcher)

Some of the important sites of this culture are Pirak—the type site, Pathani Damb II, Pathani Damb III in Kacchi-Bolan, Sulemanzai and Malazai in Pashin, and others (de Cardi 1983: 13). However, Pirak is the only extensively excavated site of this culture (McIntosh 2008: 97). It

<sup>104</sup> The date is for Early and Late Pirak Wares together

<sup>105</sup> It represents Early and Late Pirak Cultures hereafter.

were witnessed there. Also, in LPC, a number wells were found too. Furthermore, blocks of buildings were sometimes quadrangularly walled. They were roofed with reed mats. Also, identical system was found earlier in third millennium BCE at Shahr-e-Sokhta and Mundigak; some trapezoidal terracotta firedogs were found in fireplaces (Dani 1988: 64-67).

#### **6.4.2 Subsistence Patterns/ Means, Domestication and Irrigation System**

They domesticated animals like the zebu cattle, sheep and goats (Shaffer 1986: 98; Habib 2004: 84). The introduction of domestication of horses, donkeys and Bactrian camel was recorded from terracotta figurines with riders in EPC (Franke 2015b: 368; Habib 2004: 84). Moreover, the bones of the horses were found in LPC (Habib 2004: 84). It represented the first domestication of horse in Subcontinent (Franke 2015b: 368).

Variety of crops were cultivated at Pirak in *rabi* and *khareef*. *Rabi* crops were bread and shot wheat, six-row varieties of barley, chickpea, oats, and linseed. *Khareef* crops were rice, two types of miller—*jowar* and *cheena*, and grape (Habib 2004: 84). However, rice was for the first time introduced in Balochistan by them and sorghum and millet were the earliest cereals that were cultivated in the vast region (Dani 1988: 68). Rice was perhaps the principal crop of Pirak Culture which was situated in an arid zone and required proper irrigation (McIntosh 2008: 113). Additionally, the second agriculture revolution took place after the decline of Indus Valley Civilization with the production of new winter and summer crops like rice, sorgho and millet (Franke 2015b: 368; J. Jarrige 1997: 6-7). In other words, the inhabitants of Pirak Culture were practicing the double crop system. They introduced new summer crops (J. Jarrige 1997: 6-9).

To add more, “[summer] rainfall was coupled with rain water brought down in the summer by seasonal streams and rivers from the surrounding mountains, which was often retained in simple dams; this combination enabled growers to raise rice in the Kachi plain, where it was the main crop at Posturban Pirak. Kachi plain is the only area in Greater Indus region in which there is evidence of irrigation. In addition, Kachi plain was closely linked to [other parts of] Balochistan, where small-scale dams were used for water conservation since at the Early Indus period” (McIntosh 2008: 121). The evidence of a canal shows the irrigation system which is a continuation in this region which they perhaps directed the water to the fields in Period IA

(J. Jarrige 1997: 8). The agricultural system is most likely that it was their own innovation (Franke 2015b: 368).

### 6.4.3 Technology

Generally, bronze and copperworking was common in Pirak Culture. In EPC, they practiced bronze and copper smelting and producing a variety of objects from them. Later, they slowly learnt the art of iron smelting and manufactured midribbed arrowheads and a dagger blade, etc. Flint objects continued to be made. New type of flint was introduced which is important regarding the agricultural practices. Deer antler carving, horses, camels and cattle cannon bones and elephant tusk working were other important craftsmanship. Use of fresh water shells was common and making semi-precious stone beads and ornamnets out of them were also witnessed (Dani 1988: 68).

#### 6.4.3.1 Pottery/Ceramics

There is a large number of pottery production in Pirak Culture (see Pls. 2-7) (Dani 1988: 67). The ceramic styles were borrowed from earlier local styles after the end of Indus Civilization (see Table 16) (Franke 2015b: 369).

Major Ware	Types/Variants	Manufacturing Techniques	Prominent Shapes	Decorations	Firing
Pirak Ware	<i>Early Pirak Ware</i>	Handmade and wheel-made	Jars, bowls, goblets, dishes, etc.	Monochrome and bicchrome geometric motifs	Oxidized <sup>106</sup>
	<i>Late Pirak Ware</i>	Handmade and some wheel-made	Bowls, dishes, goblets, etc.	Monochrome and bicrhome geometrics	Oxidized <sup>107</sup>

Table 16. Pirak Ware Types/Variants (from the Present Researcher)

##### 6.4.3.1.1 Early Pirak Ware (c.1800/1700-1300/1200 BCE)

*Manufacturing Techniques:* Most of the ceramics were handmade, “coarse, and red-buff ware coated with a white wash”. Moreover, a red/pink wheel made with a coarse paste, heavy vegetal temper and carbonized core was also found. Later, gray specimens of this type

<sup>106</sup> Personal Observations

<sup>107</sup> Personal Observations



appeared. In terms of paste, this pottery is deemed similar an early Iron Age culture, namely Painted Gray Ware Culture which is red and gray in color (Shaffer 1986: 95).

*Shapes/Forms:* Cylindrical jars, cylindrical and hemi-spherical bowls (Shaffer 1986: 95), dishes, goblets, jars with handles, single or double lugged jars, few spouted or lipped jars, etc. are some of the major forms (Dani 1988: 63-4).

*Decoration Repertoire:* The decoration on the ceramics include applique designs, incision, monochrome and bichrome geometirc designs. These painted designs are hatching and variety of lines or pannelled patterns which covered the upper part of the vessels while the lower part of the vessels. Initially, monochromes dominated but in Pirak II, bichrome replaced it completely. The monochrome is applied in red/brown/plum. The black and red bichromes decorations get complex in the later part of this culture. "Pirak decorated pottery, particularly bichromes, is very similar to Mehrgarh's [Kechi] Beg Phase pottery, except that it is handmade". Furthermore, the designs on wheel made pottery were geometric motifs like panelled parallel and free standing bands and cross-hatched diamonds (Shaffer 1986: 95, for general details of decorations of this culture see Late Pirak Culture Decoration Repertoire).

As stated earlier, bichrome pottery dominated later in Period II and monochromes were left out. The bichrome has two variants: 1. black colored outlines with vivid red colored fillings; 2. brown colored outlines and filled with plum red extracted from red ochre (Dani 1988: 65).

*Firing Techniques:* As per the personal observations, the pottery is fired to the oxidized nature (Personal Observations).

#### **6.4.3.1.2 Late Pirak Ware (c. 1300/1200-700-600 BCE)**

Earlier the bichrome pottery dominated in this culture. However, in Period IIIC it was replaced with gray wares which was coming from earlier periods and it dominated till the end of this culture. It possesses a soapy texture. The wheel turned pink ware also existed and continued from previous periods in this culture. The bichrome possess the same characteristics or features and added nothing as they were found in plum-red in the previous periods. Pale red ware was also recorded. The handmade geometirc designed bichrome disapeared from the scence (Dani 1988: 66).

*Manufacturing Techniques:* They are handmade and the decorated ones are slow wheel-made (Raikes 1963a: 56-7).

*Shapes/Forms:* The same shapes, as in EPC, continued mostly with inclusion of some more forms like spouted pitchers, bell-shaped beakers, and other shapes (Dani 1988: 66).

*Decoration Repertoire:* R. L. Raikes found two types of ceramics for both cultures: plain and decorated. The decorated can be further subdivided into two types: monochrome and bichrome. The designs were arranged most often diagonally. The designs comprise of chequers, color filled or hatched diamonds, complicated multiple diagonally lined triangles, hatched rectangles forming squares with a dot in the middle, diagonally hatched squares surrounded plain rectangles, cross-hatched hanging friezes of triangles, diagonally hatched and arranged friezes of triangles, frieze of triangles within hatched and un-hatched diamonds, triangles with chequers inside, triangular panels, squares or rectangles with chequers inside, bands, herringbone pattern, diagonally hatched chevrons, double criss-cross ladder pattern, etc. (1963a: 57-9, Plates I, II, III, p. 65-67). Also, incised chevrons occur (Dani 1988: 64). Black and Reddish brown, dull purplish brown etc. were used as the second color. The background slip is buff, cream or whitish but at times it is reddish (Raikes 1963a: 57-8).

*Firing Techniques:* It was fired in oxidized atmosphere (Personal Observations).

To conclude, generally, the discovered ceramics were mostly coarse and handmade; however, some with a finer texture among them. It seems wheel made pottery like black decorated gray ware was produced for trade and exchange purposes. Whereas, handmade decorated pottery was produced for local uses which was presumedly in Kacchi-Bolan region in early post-Harappan period. And, gray ware is closely related to the diffusion of iron working. Few shapes of LPC are identical to Iron Age at one part of Asia (Dani 1988: 64, 67). The inhabitants of Early and Late Pirak Cultures preferred using strong geometric motifs which are identical to earlier bi and polychromes of about fourth and third millennium BCE (Franke 2015b: 368).

*Distribution Area of Pirak Ware:* The distribution area of both cultures is very limited or not known yet. It is found only in Kacchi-Bolan and Pashin regions (see Fig. 25) (de Cardi 1983: 13). The black decorated gray wares of this culture were traded till Seistan in Iran (Dani 1988: 67).

#### 6.4.3.2 Other Cultural Assemblages/ Cultural Repertoire

*Copper/Bronze Objects:* Bronze-copper objects as axe-chisel, a midribbed dagger, midribbed arrowheads, small convex shaped buttons, nails, or rod tops, copper seals, few copper points were unearthed. In LPC, two blades, a double barbed arrowhead, drills, curved out buttons with loops, beads, pendants and rings, two silver ring fragments, a broken gold ring, a gold leaf piece were uncovered (Dani 1988: 64-8).

*Iron Objects:* These objects only occurred in LPC. Some iron artifacts were noticed like five arrowheads with barbs, two blades, a piece of axe or chisel and fragments of iron. It looks that iron was for used to make weapons (Dani 1988: 66).

*Clay and Terracotta Objects:* Figurines mostly of horse riders, humped bulls, double-humped camels (see Pls. 10-11), horses (see Pl. 9), animal heads' pawns (Shaffer 1986: 96; Dani 1988: 64-6), and a broken head of a Mother goddess were recorded (Casal 1973: 177). The camel and horse figurines have painted decorations, perforation<sup>108</sup> and strapings (?) on them (Shaffer 1986: 96). Violin-shaped female figurines and dog figurines were only recorded in LPC. Moreover, a seal form object, made of clay; over fifty terracotta seals having holed bosses in many shapes (see Pl. 8): circular, diamond square and cross shapes bearing crosses and dots like those found in Mundigak and Shahr-e-Sokhta were discovered. Furthermore, spindle whorls of terracotta (Dani 1988: 64-8), and terracotta compartmented seals were also found (Kenoyer 1998: 178; Franke 2015b: 368).

*Stone and Bone Tool:* Flint objects like sickle blades, thick flakes and blades, and a crystalline flint arrowhead were found in EPC. Cores, grinding stones, limestone pestles, and grinders were found in LPC. In EPC, many worked ivory and bones, beads of carnelian, agate, lapis lazuli and terracotta were common. Bone points (in EPC and LPC), two incised ivory combs, etc. were attested too (Dani 1988: 64-6).

*Other Findings:* In EPC, shell bracelets, etc. were recorded. In LPC, some lead pieces and other objects were noticed. Moreover, several coarse pottery crucibles were found.

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<sup>108</sup> It is for attachment of strings and wheels.

Furthermore, among them two furnaces, one two storied, with ash and metal slag were found (Dani 1988: 65-6).

#### **6.4.4 Trade**

The culture was connected with its adjacent areas and highlands on the western side (Kenoyer 1998: 177; J. Jarrige and Enault 1979: 121). Also, they imported copper and lapis lazuli from Balochistan resources and shells from the coastal region (Kenoyer 1998: 178). Moreover, BMCA or Oxus Civilization artifacts occurred at Pirak (McIntosh 2008: 399).

#### **6.4.5 The First or the Earliest**

- Rice was introduced for first time in Pakistan, specifically in Balochistan (Shaffer 1986: 97).
- Sorghum and millet were introduced in the vast region (Dani 1988: 68).
- Double or multi-crop system was introduced in the region (J. Jarrige 1985: 45; Franke 2015b: 368).
- Apart from the introduction of horse, donkey and Bactrian camel were introduced in South Asia in EPC (J. Jarrige 1995: 53; Franke 2015b: 368).

To sum up, the Pirak Cultures “indicate a great deal of cultural continuity characterizing the transition from Bronze to Iron Age in south Asia. At the same time, there were important changes in the subsistence economy and in the means of transport and communication among social groups”. The material assemblage of this culture is a hybrid combination of regional and external different sources. There are evidences of survival of Harappan Culture in this culture. It is a synthesis of local features and elements and Central Asia or other India regions features or elements. “Lastly, on the site itself, the division into squares, the existence of a block of building where craftsmen seem to have lived in a community, the stereotyped layout of the houses with niches, the conservatism of the material culture throughout almost ten centuries are features that suggested an organization into different social classes which felt the weight of a strong tradition, just as in the present-day villagers” (Dani 1988: 68-9). They show amazing craftsmanship in ceramic manufacturing and decorating (Raikes 1963a: 57-8). Variety of objects confirm the fact they were good craftsmen (J. Jarrige and Enault 1979: 121).

Stratigraphically, this culture helps understanding a long cultural sequence from Aceramic Mehrgarh to Nausharo and to [Pirak]. It covers the lacuna of Indus Civilization and affirms that no invasion occurred (Franke 2015b: 368). They brought deep transformation in terms of double crop system of agriculture by cultivating in winters and summers like rice, sorghum and millet. They were introduced in the region for the first time. For irrigation, they used simple dams and canal system. Also, they introduced horse, two humped camel and donkey in Subcontinent (J. Jarrige 1997: 6-7) which were most probably used as new mode of transportation for the people (Kenoyer 1998: 178). What they introduced are still used and productive today in subcontinent or South Asia.

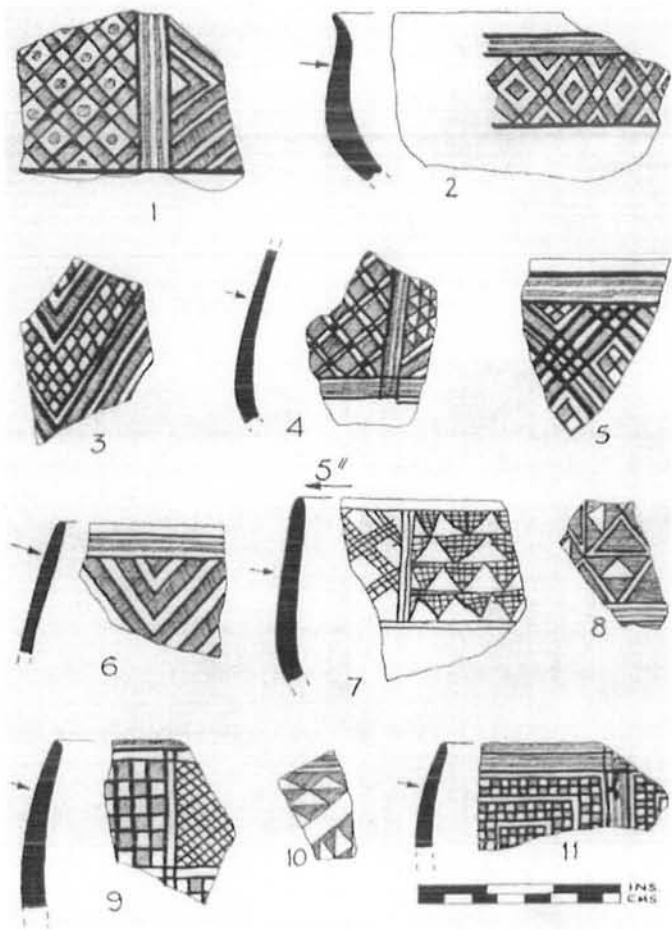
The prototypes of Pirak Culture might be from Mundigak or Shahr-e-Sokhta since evidences point out towards this. The horse riders and camel breeders were obviously outsiders in Period IA and politically and ideologically played an pivotal role at this time (J. Jarrige 1997: 8, 10). Moreover, “[many] of the seals, either in terracotta or in copper/bronze can be linked with the older specimens found in Baluchistan” (J. Jarrige and Enault 1973: 122). Thus, “[it] is clear than previous conceptions concerning a “Dark Age” separating the Bronze and Iron Ages in South Asia are no longer valid” (Shaffer 1986: 98-9).

All of this show a developed culture tradition which from the extinct cultures of the vast region. There are clear influences or continuity of Harappan Culture in some of the artifacts. It can be seen a hybrid culture. They knew the art of survival in the region after the decline of Harappan Culture. They depended on cultivation, domestication, and trade. However, much of this culture is yet to be surveyed and discovered.

Plates of Early Pirak Culture and Late Pirak Culture

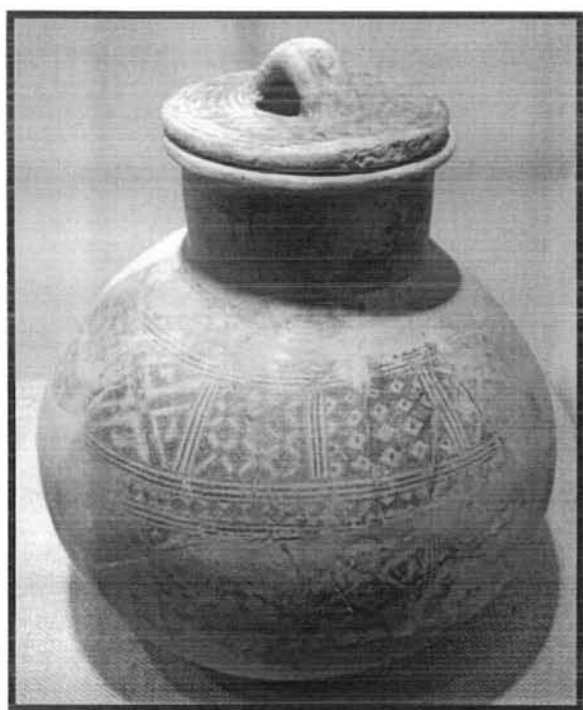


Pl. 1. Pirak Culture Houses with Niches (from Franke 2015b: 369) Not to Scale



Pl. 2. Pottery Drawings of Pirak Ware (after Raikes 1963a: 65)





**Pl. 3. Decorated Pirak Ware**  
(from the Present Researcher) Not to Scale



**Pl. 4. Decorated Pirak Ware**  
(from the Present Researcher) Not to Scale



**Pl. 5. Decorated Pirak Ware**  
(from the Present Researcher) Not to Scale

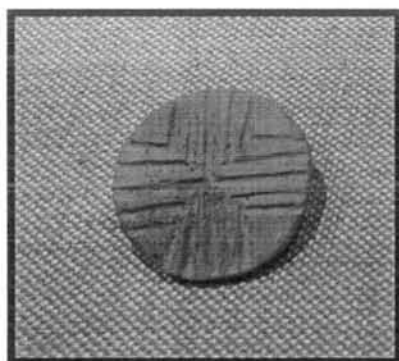


**Pl. 6. Decorated Pirak Ware**  
(from the Present Researcher) Not to Scale





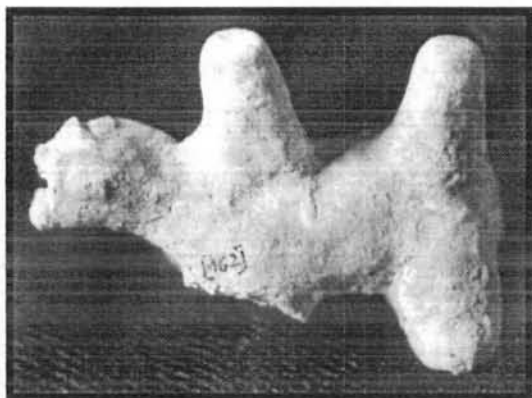
Pl. 7. Pirak Ware (from Raikes 1963a: 69)  
Not to Scale



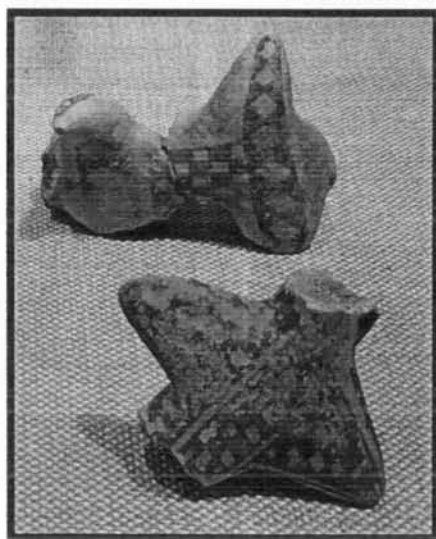
Pl. 8. Terracotta Seal (from the Present Researcher)  
Not to Scale



Pl. 9. Teracotta Horse at Islamabad Museum  
(from the Present Researcher) Not to Scale



Pl. 10. Double-Humped Camel  
(from Kenoyer 1998: 177) Not to Scale



Pl. 11. Decorated Pieces of Camel Figurines at Islamabad Museum  
(from the Present Researcher) Not to Scale

### 6.5 Londo Ware/Horizon (c.300 BCE-200 CE)<sup>109</sup>

This ware was first discovered by A. Stein who regarded it a prehistoric ware with some other wares (Franke-Vogt 2001: 270). Some of the main settlements of Londo Horizon are: Londo site, Kulliki-an Damb, Nindowari (J. Jarrige *et al.* 2011: 38), Kullu-Kalat in Kalat, Lena Sing in Surab, Tegak, Rais Sher Mohammad, Hadi and Derakh in Gidar, Anjira in Surab, etc. However, she has claimed it a variant of Sialk VI B of Iran (de Cardi 1951: 65-6, 72).

The Londo Ware/Horizon people preferred to live on high lands; it was perhaps to get a strategic position to face their enemies i.e. foreigners or neighbors and/or maybe for other security purposes. "The distinct preference for high ground may perhaps be interpreted as the natural wariness of an alien and minority community or it may simply reflect the general state of insecurity which prevailed in Baluchistan towards the close of the second millennium B.C." (de Cardi 1951: 66). Furthermore, B. de Cardi has also conducted small scale excavations at Alizai site (1983: 13, 29; Franke-Vogt 2001: 270). Nindowari-Kulliki-an Damb was excavated by J. Casal who reported Londo Ware; moreover, she discovered boulder constructed towers and bastions too (1966: 17-8; J. Jarrige *et al.* 2011: 63-4, 91). There is probability that some of these villages were fortified as long stone walls are visible until now (de Cardi 1951: 66).

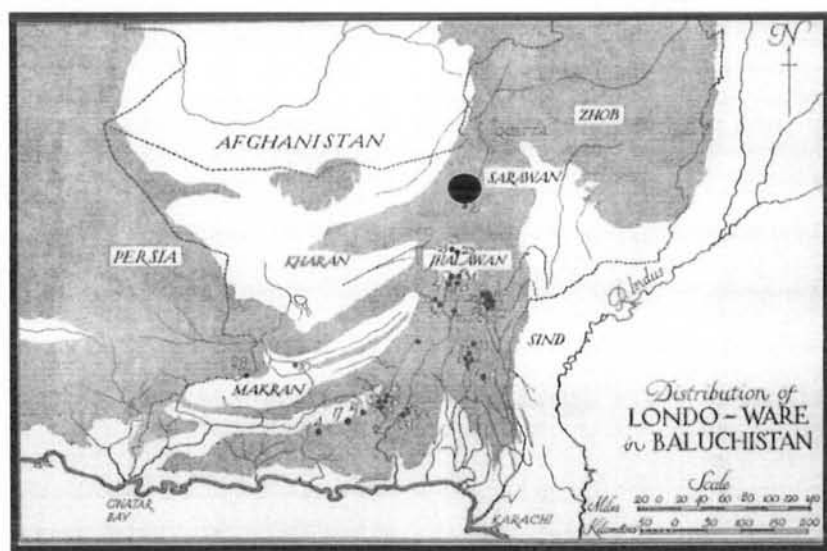


Figure 26. Londo Ware Distribution Area (from Franke-Vogt 2001: [www.harrappa.com](http://www.harrappa.com), Modified by the Present Researcher)

<sup>109</sup> However, B. de Cardi considered it older i.e. c. 1200-1000 BCE (1951: 63).

6.5.1 The New Survey on Londo Site

The previous researches i.e. A. Stein (1931) and B. de Cardi (1951; 1983) have only included two types of wares: Togau (very limited) and Londo Wares. The present researcher paid a visit recently which resulted in collecting pot sherds for research purposes. Hence, the mentioned wares and some other wares like Naal and Harappan Wares which can be strong evidences in changing the chronology of the site (see Pl. 5).

6.5.2 Structural Remains

The Londo horizon has four types of sites: 1. small settlements by low mounds having mudbricks and stone structures, 2. large settlements with small multi-roomed houses but at least one bigger complex structure in boulders built in dry masonry, 3. large fortified and neucleated settlement, and 4. large, isolated, complex multi-roomed buildings of a rectangular and rarely round planned (Franke-Vogt 2001: 271). The strucures at Londo are of boulders that looked to be either square or rectangular in plan.

6.5.3 Technology

The technological category included limited findings but largely ceramics as followed:

6.5.3.1 Pottery/Ceramics

Two types/variants of ceramics are associated with it: Londo Ware and Ghul Painted Ware (see Table 17) (Fairservis 1956: 337).

Major Ware	Types/Variants	Manufacturing Techniques	Prominent Shapes	Decorations	Firing
Londo Ware	Londo Ware	Handmade and wheel made	Bowls, beakers, goblets, spouted pots, etc.	Geometric, flora and fauna	Well-fired
	Ghul Painted Ware	Handmade	Different bowls and cups, etc.	Geometric or linear forms, flora and fauna	Not defined

Table 17. Londo Ware and Its Variants (from the Present Researcher)

6.5.3.1.1 Londo Ware

As observed from Sultan Shahwani’s private collection, the ceramic is of good quality. The ceramics are plain and painted (see Pls. 2-4 and 6-15).

*Manufacturing Techniques:* They are often burnished which gave the results of smooth and shining finish (de Cardi 1951: 67). It is usually handmade but sometimes wheel-made with gritty, gong, mineral temper and thick walls (Franke-Vogt 2001: 270).

*Shapes/Forms:* Different sized carinated bowls, small pedestal-footed beakers and goblets, handled vessels, and lids for covering are included in prominent forms and shapes. Moreover, two other shapes (therimorphic vessels and side spouted pots) found on different sites but could not be determined whether they belong to this pottery culture with limited data and B. de Cardi has suggested their confirmation with further surveys and researches in future (de Cardi 1951: 67).

*Decoration Repertoire:* Generally, the ceramics are either partially or completely slipped or a darker slip is applied and later on decorated with black or polychrome patterns (de Cardi 1951: 66). One finds buff, red, brownish-maroon or tan slips on this ware (Franke-Vogt 2001: 270). There is striking and wide range of patterns and compositions presented in conservative style (de Cardi 1951: 66). The decorations are parallel lines, triangles, voluted scrolls or spirals, discks with rays, wide black lines occasionally with more border lines and dots, etc. (de Cardi 1951: 67; Franke-Vogt 2001: 270). The naturalistic decorations include horses, ducks, swans, frogs, turtles, fish and horsmen variously stylized (Franke-Vogt 2001: 270). There is Black on Red, Brown on Buff too. The white is used as infill on the former while red, brown, violet or maroon are used on latter as additional colors making it polychrome. Brown on Buff is considered Late Londo Ware (de Cardi 1983: 13; Franke-Vogt 2001: 270). Apart from them, incise and cordon patterns are also used on the vessels (de Cardi 1951: 67; Franke-Vogt 2001: 270).

*Firing Techniques:* It was well fired (de Cardi 1951: 67).

*Distribution Area of Londo Ware:* This widely distributed ware is found in from Kech to Khuzdar and in Kalat and west of Kharan (de Cardi 1951: 66) and Las Bela (J. Jarrige *et al.* 2011: 91). Furthermore, the recent research shows that it was also distributed to Noushki Damb and Sivah Kalat in Noushki (see Fig. 26) (S. Naseer, Personal Communication, October 12, 2018).

#### **6.5.3.1.2 Ghul Painted Ware**

It was found in Kili Gul Mohammad and many other sites in Quetta Valley. Ghul Painted Ware is a coarse ware with granular paste and hard temper mostly. It is a black-brownish to red or red-brownish ware. thick ware with polychrome or black-on-red slip painting on the exterior and frequently on the interior (Fairservis 1956: 336-37).

*Manufacturing Techniques:* It looks to be handmade (Fairservis 1956: 336).

*Shapes/Forms:* Few shapes have been recorded i.e. large carinated bowls and closed bowls. Few others like cups and open bowls have occurred too (Fairservis 1956: 336).

*Decoration Repertoire:* The ceramics are painted on buff or light brown slip. It is also a polychrome or black on red slipped painting is applied on the exterior and often on the interior. The decorations consist of geometrics or linear forms i.e. triangles, simple verticles, diagonls, dots, hanging loops, curves, volutes and hatching, etc. It also had petal-like designs and animal designs. Furthermore, "Frequently a ridge was formed at the shoulder break on the body of the vessel. Most often this ridge is plain, although three decorative techniques were also common: first notching at intervals; second, punching; third, criss-cross incising" (Fairservis 1956: 336-37).

#### **6.5.3.2 Other Cultural Assemblages/Cultural Repertoire**

Bones, two bull figurines (one painted and one unpainted) were found and metal implements were assumed to be used in this culture (de Cardi 1951: 64).

#### **6.5.4 Interment Practices and Goods**

The people of Londo horizon seem to practice fractional burials included often bone fragements. Some cairns are associated with Londo horizon because Londo Ware has been found there (de Cardi 1951: 64; Franke-Vogt 2001: 263, 276-78).

#### **6.5.5 Gabarbands**

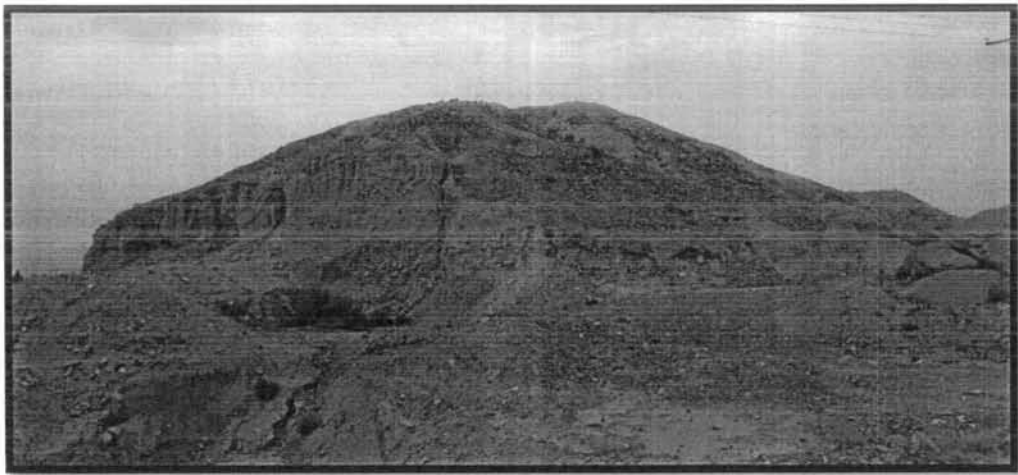
The horizon is associated with several *gabarbands*. According to G. L. Possehl, the evidences of Londo Horizon in relation with *gabarbands* are stronger than any other culture in the region (1975: 37).

#### **6.5.6 Illegal Digging on Londo Site**

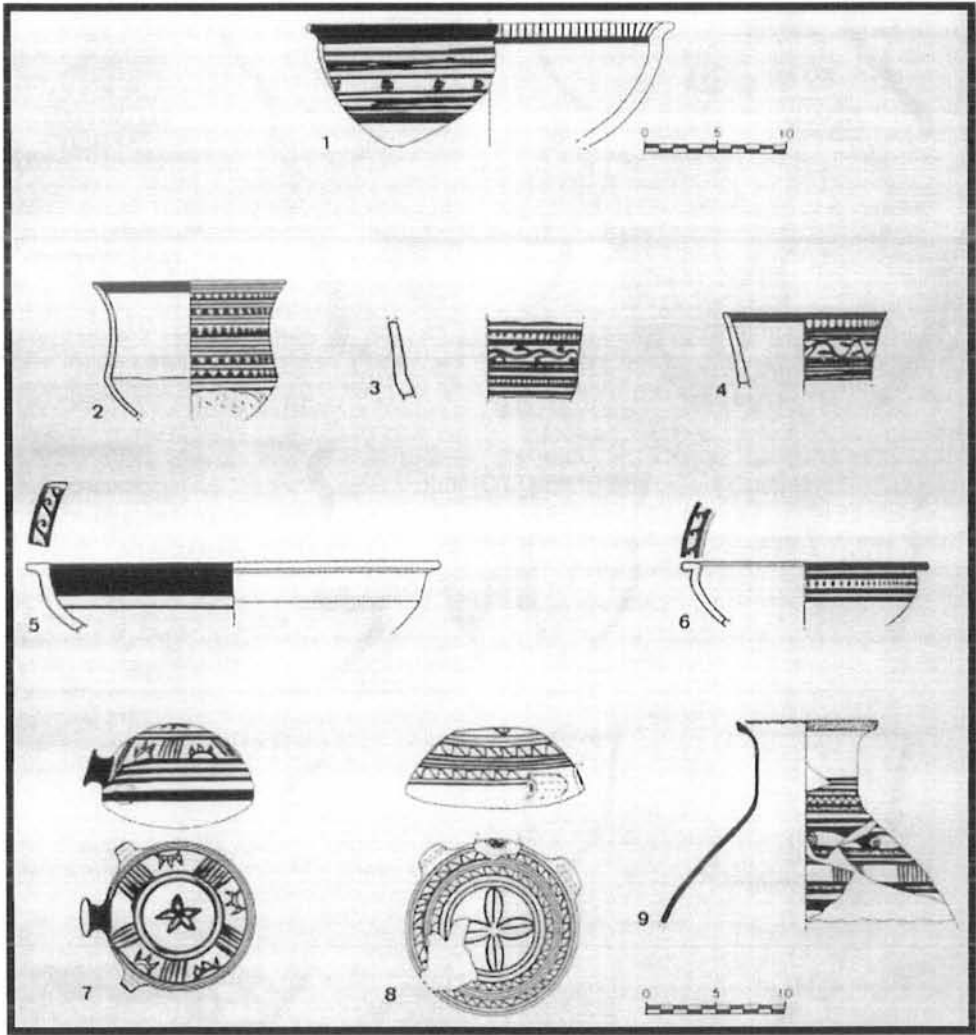
The researcher paid a visit to Londo site recently which resulted to be a forced small-scale survey. Sadly, Londo site has been affected by illegal digging and illicit trafficking (see Pl. 1). One portion of the site has been carved and many ditches have been dug by antique mafia. According to locals, an outsider came and offered them half the dug materials so they agreed and let him dig the site. The mound and anyone doing such activities can be seen from the main road to Quetta so they usually conducted these works at night. They even directed us to the rich area of the mound thinking us from the antique mafia. Their digs have destroyed the culture of the site and the context of the artifactual materials. However, because of these diggings, several stone structures have been exposed. Interestingly, some of the materials were found in the collection of Sultan Shahwani who has bought them for their protection; they most probably are from Londo or other Londo Ware sites in and around the region (see Pls. 7-12).

In conclusion, the ceramics of this culture are of amazing quality with beautiful aesthetism in the painted motifs; there is diversity in them. It has long distribution area which seems to be famous and liked very much and perhaps had multi-purpose use. There is somewhat Hellenistic influence in some of the ceramics from this culture. Now there is a new cultural chronology for the site which includes Togau, Naal, Harappan, with a gap here and Londo Wares. Moreover, the recent research proves that there is destruction on Londo Horizon sites which need abrupt attention from the concern authorities.

Plates of Londo Ware/Horizon

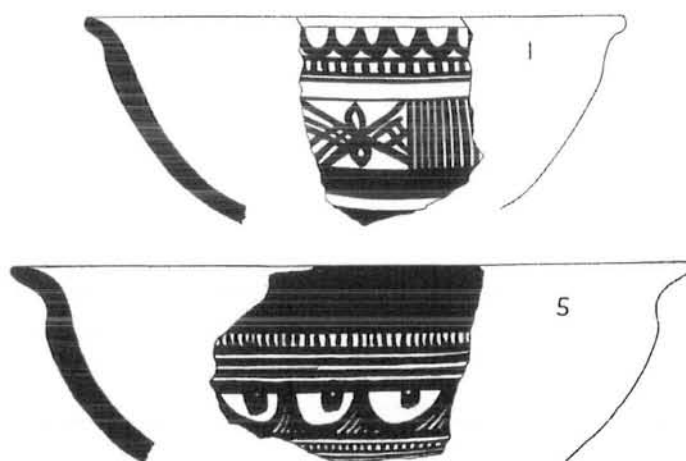


Pl. 1. The Main Mound of Londo Site (from the Present Researcher) Not to Scale

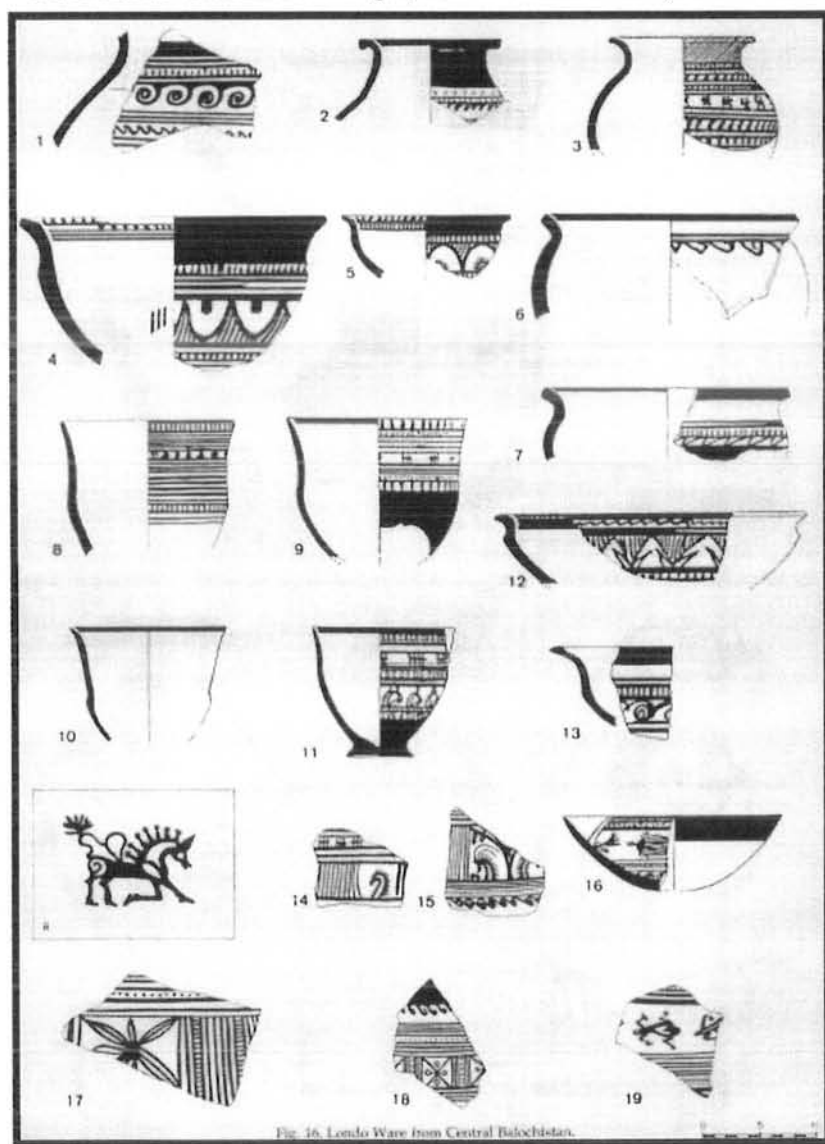


Pl. 2. Pottery Drawing of Londo from Makuran and Las Bela (from Franke-Vogt 2001: 272)

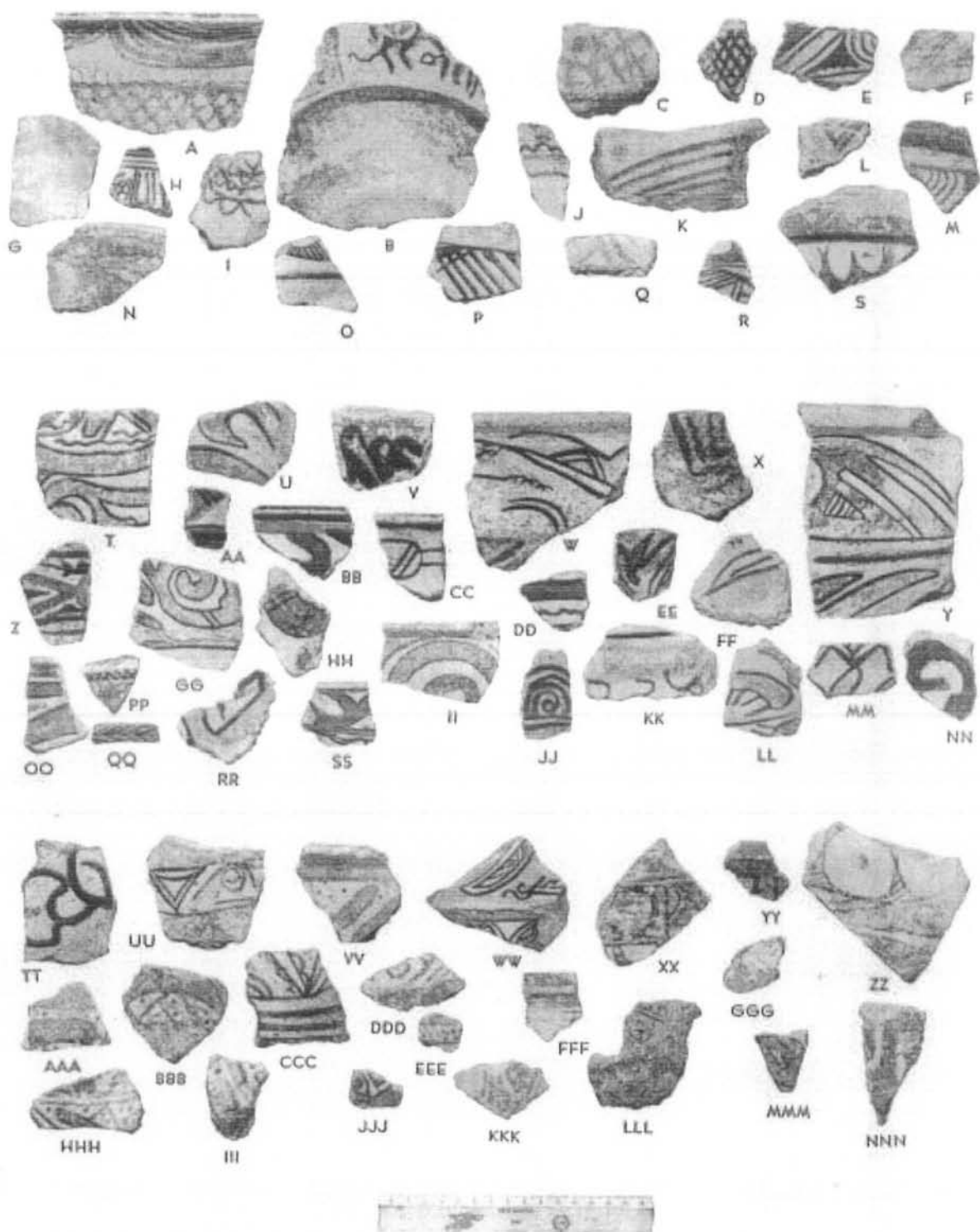




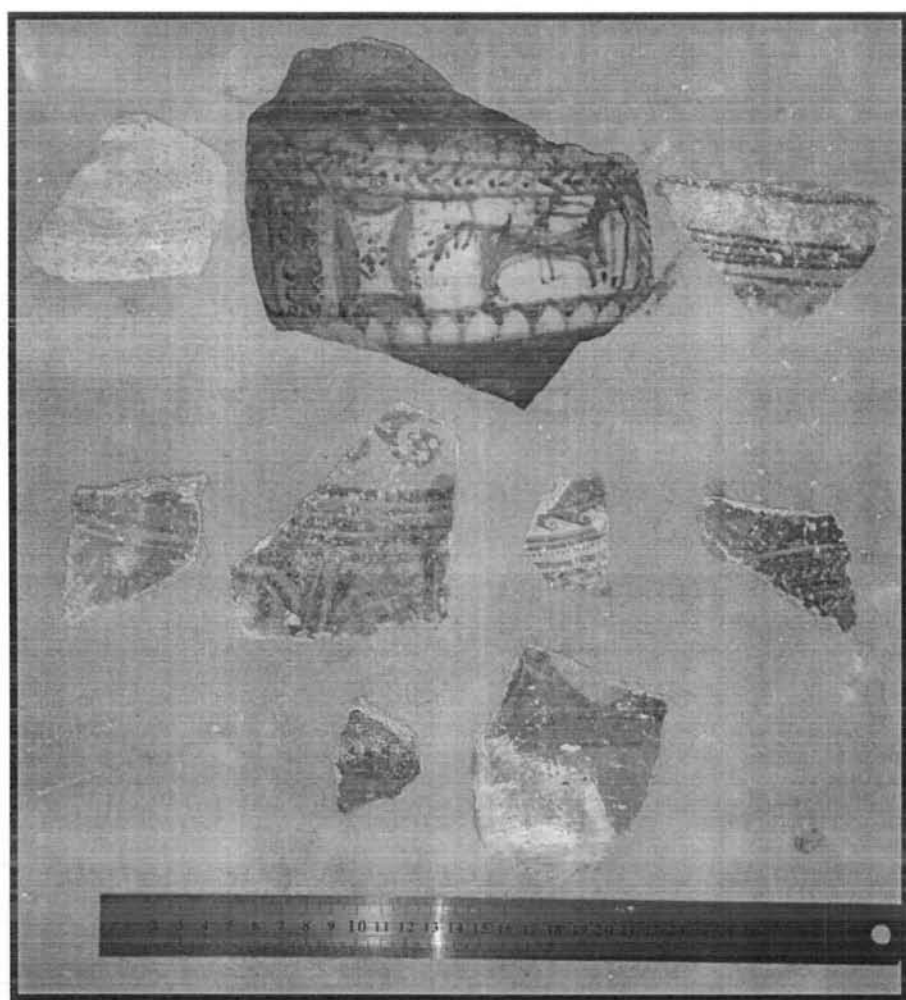
Pl. 3. Londo Ceramic Drawings (from de Cardi 1951: 4) Not to scale



Pl. 4. Londo from Central Balochistan (from Franke-Vogt 2001: 271)



Pl. 5. Ghul Painted Ware (from Fairervis 1956: Plate 16)



Pl. 6. Recent Pottery Collection from Londo Site by the Researcher (from the Present Researcher)



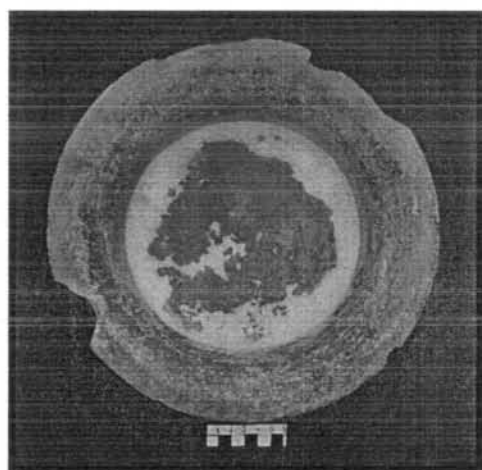
Pl. 7. A Londo Painted Cup  
(from the Present Researcher)



Pl. 8. Londo Painted Ware  
(from the Present Researcher)



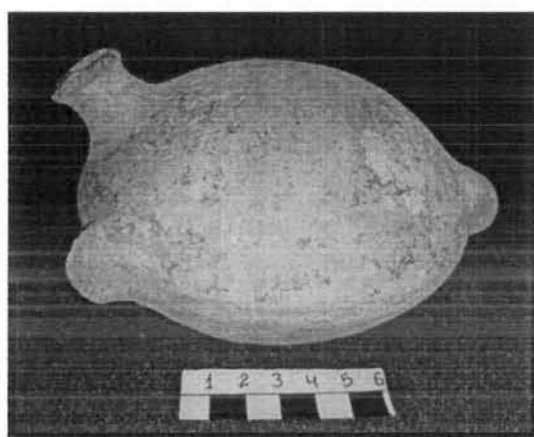
Pl. 9. Londo Painted Ware  
(from the Present Researcher)



Pl. 10. Londo Painted Ware<sup>110</sup>  
(from the Present Researcher)



Pl. 11. Londo Painted Ware  
(from the Present Researcher)



Pl. 12. Londo Ritual Ware  
(from the Present Researcher)

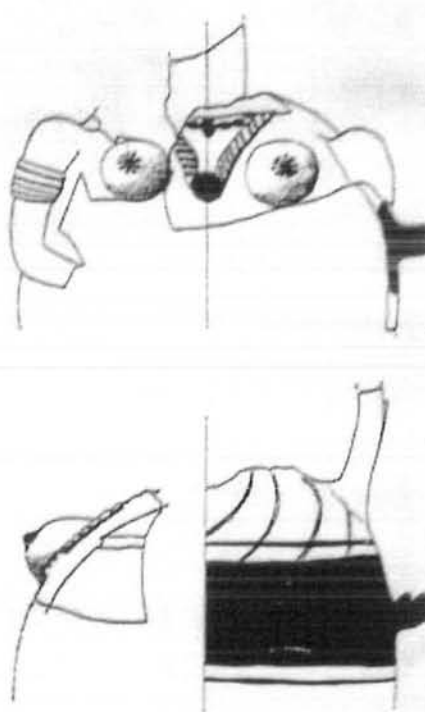
<sup>110</sup> The painted decorations on some pottery are not clear even after cleaning them with water. Some of these Londo Wares had faint traces of decorations; however, the shapes and visible decorations, when had a close look, resemble the typical Londo Ware.



Pl. 13. Londo Ware (from Franke 2015b: 365)  
Not to Scale



Pl. 14. Londo Ware (from Franke 2015b: 366)  
Not to Scale



Pl. 15. Londo Anthropomorphic Jug (from Besenval and Sanlaville 1900: 141) Not to Scale

## Chapter 7: Balochistan Archaeology

Balochistan which is now an arid or [semi-arid] piece of land; it is sparsely inhabited now-a-days (Ross *et al.* 1946: 284-85). The climate of the region was the same as in today and it is geographically beautiful and fertile. It possesses mountains, plateaus, valleys, non-perennial and [few] perennial rivers, etc. The ancient dwellers of Balochistan at different times adapted to the harsh climatic conditions of the region as it is well documented from Mehrgarh site in Kacchi-Bolan (Chakrabarti 2014b: 41-2). Additionally, it is full of mineral resources (copper, zinc, lead, and barite), stones (lime and sandstone, gray chert, alabaster and marble), semi-precious stones (agate, lapis lazuli and vesuvianite-grosular) (Franke 2016: 179). Due to its geographic position, it is regarded as the 'Nuclear Zone' the vast region (Asthana 1985: 46).

The earliest major reconnaissances of H. Hargreaves (1929), A. Stein (1905; 1929; 1931; 1943), W. Fairervis (1956; 1959), B. de Cardi (1964; 1965; 1983), R. L. Raikes (1968), French Archaeological Missions (Casal 1966; 1968; 1973; C. Jarrige *et al.* 1995; J. Jarrige *et al.* 2013; J. Jarrige *et al.* 2011; Besenval and Sanlaville 1990; Besenval 1992; 1994; 1997; 2005), G. F. Dales (1962; 1981; Dales and Lippo 1992), M. R. Mughal (1972; 1974), etc. have revealed the rich prehistoric, protohistoric and historic nature of Balochistan with its various archaeological cultures mostly with different kinds of ceramic representations. In fact, A. Stein, with the discovery of large number of pre and proto-historic settlements/sites from all around Balochistan, led the future researchers towards a rich and diverse area in archaeology; thus, he formed the foundation for further archaeological works (1905; 1929; 1931; 1943; Possehl 1986: 3). According to G. L. Possehl, there are probably thousands of unrecorded archaeological sites in Balochistan (1999: 432). The limited surveys, soundings, small test trenches and few large-scale excavations represent a vivid picture of rich Balochistan heritage and its cultures (Franke 2015: 41; J. Jarrige *et al.* 2011: 191). However, throughout history the limited archaeological excavations make it difficult to study the archaeological and pottery cultures of Balochistan. There are lacunae in Balochistan archaeology and history because of dearth of archaeological works and scarcity of historical accounts on this region. Notwithstanding, the archaeological attempts have somewhat contributed in understanding of the ancient history of Balochistan and its archaeological cultures. More researches and excavations are needed for complete understanding of the cultural chronology of Balochistan

(Uesugi 2017: 137-40, 192, 231). For getting a full picture of Balochistan ancient life, more extensive and scientific excavations are needed on some of its vital sites (Fairervis 1984: 286).

Archaeology only extracts meanings from the systematically surveyed or excavated cultural materials to reconstruct the social life and its patterns (Habib 2004: 81). To add more, it is always silent until an expert in the field extract meanings from the silent structural remains, arts and crafts, graves, plant and animal evidences that were used by the inhabitants of a region or site; the archaeologist with the help of others search clues of their lifeways (Dales 1991: 129). The archaeological evidences (surveyed or excavated) were used to reconstruct the ancient lifeways of primitive people of Balochistan. For example, they have ascertained how they ate how were their houses, what they used i.e. arts and crafts, how was their health, and what they did in between till death. Hence, it is almost utterly the study of the ways of life they adopted (Franke 2015f: 8).

The richness of Balochistan in archaeology is well attested from its prehistoric settlements (Kakar 1992: 1). The settlements of Balochistan were not inhabited all at the same time. They took centuries to spread across Balochistan. However, few are still inhabited. Large population in many settlements inhabited in this land; however, today the harsh environmental conditions does not support such a theory (Wheeler 1968: 10). Additionally, W. Fairervis (1961b: 4) has noted: "In Baluchistan it is a remarkable but nevertheless definite fact that the bulk of the known pertinent prehistoric sites are located in close proximity to modern villages, indicating a similar dependence upon identical water and soil resources". Ethnographically, the types of settlements that exist in Balochistan are "camps, transhumant villages, sedentary permanent villages, administrative centres, fishing villages and pilgrimage places" (Fairervis 1984: 278). For millennia, as the evidences suggest, most of such settlements most certainly seem to have existed throughout ancient Balochistan which today need an extensive systematic study of the available data (Personal Observations).

However, before the discovery of Mehrgarh, scholars like M. Wheeler envisaged that Balochistan cultures as "a back curtain to the main scene". He also opined them as "ill-sorted industries and cultures" of plains and hills with many disordered ceramic styles (1968: 9). Today, "the discovery of an early, complex, agricultural economy reflecting a local



domestication of animals and, possibly, plants have fundamentally changed the archaeological perspective on cultural development in this region. Earlier views attributed major cultural developments in Baluchistan to the diffusion of Western traits or peoples into the region. It is clear now that not only was Baluchistan occupied very early by indigenous social groups...” (Shaffer 1986: 99). It is believed that more sites with such characteristics are waiting to be discovered elsewhere in Balochistan (Chakrabarti 2006: 107). Most importantly, today it is the homeland with the evidences of the oldest Civilization in South Asia which started from Neolithic period (Franke 2016: 177). Thus, Balochistan offers a promising prehistoric land regarding economic adaptation and social formation; it was used as “the richest natural laboratory in South East Asia” (Tosi 1982/83: 32).

Ancient Balochistan has been a multi-cultural land as the evidences clearly show today. These cultures took birth and ended up here. Examining their development, expansion and abandonment, it becomes clear that Balochistan was a “dynamic interaction zone” (Franke 2008: 669). Furthermore, Neolithic and Chalcolithic Balochi village communities conquered the harsh and rugged environment by creating diverse cultures with their own individuality, especially known from the high-quality decorated ceramics (Khan 1981: 15-6). Until now, Mehrgarh is the best known early South Asian village site (Possehl 1999: 447) with clear chronology and developmental stages which is situated in the Kacchi-Bolan of Balochistan (J. Jarrige and Lechevallier 1997: 94-137). However, U. Franke culturally categorizes Balochistan into four divisions: Northern Balochistan, Central Balochistan, Southeastern Balochistan and Southwestern Balochistan (2015l: 42-5).

In terms of quantity of sites, the archaeological heritage of Balochistan is impressive (Possehl 1999: 727-835; Fairervis 1952b: 5). Balochistan Archaeology is comprised of large number of archaeological and ceramic cultures that emerged and died out from Neolithic to Iron Age (Hideaki *et al.* 2013: 88-106). Moreover, “...sites in [Balochistan] are major keys to understanding cultural developments during the Neolithic-Iron Age, not only in South Asia but also in the eastern Iranian Plateau. While and understanding of [Balochistan] prehistory has advanced considerably, further archaeological research will no doubt demonstrate how inadequate the current picture of this important region” (Shaffer 1986: 102). U. Franke (2008: 551) remarks about Balochistan Archaeology in the following words:

In Baluchistan, human development from the seventh millennium BC onwards, from mobile food hunters and gatherers to sedentary communities based on farming and animal husbandry, has been uncovered. Increasing levels of complexity in economy and technology, social and political organization, accompanied by a population growth and settlement expansion, fostered the development of villages, towns, and cities and provided the basis for urbanization and state formation. Throughout, [it] maintained a distinctive character, notwithstanding regional differences and changing patterns of interaction.

Balochistan (including southern part of KP) was the Old Neolithic Homeland of farming and pastoral inhabitants of Subcontinent (Possehl 2002c: 32). It has seen the growth of indigenous cultures in the north (Asthana 1985: 76). Furthermore, “it is thus necessary to put aside the old models of M. Wheeler’s time, stressing the so-called division and isolation of the different geographic entities of Balochistan and neighbouring areas. Beyond the diversity of the craft productions from many sites, which doubtlessly reflect local identities, broad factors of unity clearly appear on the scale of the Indo-Iranian regions. One of the most significant features is the progressive setting of complex technical knowledge over time, which appears to be synchronous at several sites of different regions” (J. Jarrige *et al.* 2011: 29). Furthermore, if one questions that how the early or ancient communities of Balochistan managed to live in such harsh, inhospitable and difficult conditions, one must observe the present Baloch dwellers of the vast region (Fairservis 1952a: 100).

The sites in early Balochistan had simple social structure with limited craft specialists and almost no long-distance trade. However, the early ornaments of Mehrgarh show high quality craftsmanship and technology (J. Jarrige 1984b: 295-96). In addition, “...the inhabitants of these mountainous regions [Balochistan], who still lead lives determined by an economy which depends on seasonal migration, must have likewise formed a relatively homogenous cultural group in the ancient past” (C. Jarrige 1991b: 92-3).

While on the research in Khuzdar region, the researcher found many preserved artifacts in a private collection; most of them were unpainted ceramics of different sizes and some painted ceramics. This collection also included three unique human figurines with writings on their back; nevertheless, two of the figurines are fake ones. Kulli animal figurines, two stone

weights<sup>111</sup> (see Pl. 22), a small terracotta container with embossed animal decorations which is also a fake one (see Pl. 12), etc. Moreover, the researcher also found pottery and human figurines of Balochistan from two other persons' private collections from Sind.

## **7.2 Naming of Sites in Balochistan**

It is hard to name sites in Balochistan. The sites are named after the local or nearby villages. Some of these villages are usually named after the current chiefs; when he dies, they are replaced, and the village name is also changed. Sometimes language creates problems as Balochs use another name and Pakhtoons use another name for the same site (Fairservis 1971: 139).

## **7.3 Chronology**

According to G. L. Possehl (1999: 447), "[taken] as a whole, the dates from Mehrgarh I and II seem to indicate there was a settlement there at the beginning of the eighth millennium BC". The excavators of the site agree with his claim in the following words: "At least it can be safely be assumed that the early levels of Mehrgarh are not posterior to the 8<sup>th</sup> millennium BC." (J. Jarrige *et al.* 2013: 152). The long cultural tradition started from Neolithic Mehrgarh I, later it shifted to Nausharo and giving birth to Indus Civilization and continued at Pirak; it continued without a break from early Neolithic till Iron Age (see Tables 20 to 21 for chronological comparisons) (Franke 2015l: 48).

## **7.4 Structural Remains**

In Balochistan, whatever the culture happened to be, the construction material depended on local availability of the resources. In short, the inhabitants of Balochistan constructed dwelling houses with mudbrick, stone or *pisé* and/or they were combined to make structures which relied on local availability of material (see Pl. 2) (Shaffer 1992a: 239, 248).

## **7.5 Subsistence Patterns/Mean, Domestication and Transport**

In Balochistan, particularly at Mehrgarh, the transition from hunting-gathering to herding began in its earliest period. The inhabitants hunted game like gazelles, wild goats, wild sheep, wild cattle, swamp deer, onagers, nilgai, etc. Later, they principally depended on

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<sup>111</sup> According to A. Didier, they are not original (Personal Communication, October 29, 2019).

domestication of cattle, sheep and goats (J. Jarrige 1984b: 293). Water buffalo and camels were perhaps used in the later periods at Mehrgarh (Shaffer 1992a: 248). Furthermore, "...grains, goat and sheep supposed to have arrived...from Southwest Asia [to east], cattle, in particular the humped bull, the most frequent domestic mammal, most likely originated in eastern Iran or Pakistan" (Franke 2015k: 48). Additionally, fish remains have been discovered at Mehrgarh, Nausharo and Balakot in Balochistan starting from Early Food Producing Era to Integration Era. Some were even processed for commercial purposes at Harappan times (Blecher 2018: 36-8). Generally, "fishing could also have taken place in the rivers and streams of Baluchistan; the pools that form in the dry season on the Hub River in the Kulli province are today a rich source of fish" (McIntosh 2008: 135). They mainly depended on this economic strategy for survival which was prevalent throughout Balochistan. Most probably, pastoralism was also a part of this strategy (Shaffer 1992a: 248). Apart from source of meat, the animals provided them with facilities like milk, hair, traction and transport (Meadow 1991: 58). It is assumed that the flocks and herds were tended by the females and children (Khan 1981: 16). Hence, stock raising, and extensive cultivation were the bases of their economy (Tosi 1982/83: 36).

Balochistan is one of the centers where origins of some crops can be traced (J. Jarrige 1984b: 293). However, before the discovery of Mehrgarh site C. A. Reed (1977: 917) has claimed: "On the basis of present Knowledge no evidence exists for the presence of agriculture in India before 5000 B. P.". The staple crops were barley and wheat cultivated in winters with some more summer crops like vegetables and fruits i.e. dates and grapes (Franke 2015a: 28).

## 7.6 Ancient Water Management and *Gabarbands*

*Gabarbands* were first properly studied by R. Hughes-Buller and he associated them with Zoroastrians because they were named '*gabar*' means the Zoroastrians and '*band*' means dam; hence, it means the dams of fire-worshippers or Zoroastrians (1904: 194-201) and later they were studied by R. L. Raikes agreed with him in this regard (1965a: 26-35). However, archaeological evidences do not support this theory. They are also called *Ghorbasta* or *Ghorband* (see Pl. 23) (Brunner 2006: 104). They can be found all over Balochistan, particularly southern Balochistan and Jhalawan (Khuzdar region). They can be dated to late

4<sup>th</sup> or early 3<sup>rd</sup> millennium BCE<sup>112</sup>. They were usually built with huge stone retaining dams frequently combined with smaller earth protection dams known as *kirai*. They were built in interior mountain valleys. Some were built to collect water for irrigation downstream, and some to catch fertile soil for irrigation and some to divert or control the flow of water towards to avoid the destruction of fields (Brunner 2006: 104-05; Franke 2015a: 28-31). In clearer words, they were barrage dams to collect water, protection dams to control the flow of water, enclosure walls to protect a fertile area, mud walls i.e. *kirai* (still largely used) for agriculture, double stone walls, filled two-layer double walls and multi-chambered wall dams (Brunner 2006: 128-30). Sometimes a *gababand* blocked the complete riverbed which created a lake which resulted the rising of the water table. These are the testimonies of prehistoric water management and ancient engineering (Franke 2015a: 28, 30).

## 7.7 Cultural Systems

There is limited data regarding the maintenance and development of Balochistan in the ancient time. Food production remained the economic base; as the evidences prove, there is development in the craft technology judging from quality and quantity of the objects. For instance, Mehrgarh most probably has been a regional production center; there are high possibilities that other such regional production centers must have existed. The presence of such centers proves that there was some level of economic organization responsible for the production and distribution of the commodities. The economic organization of this kind can certainly be seen in the “development, distribution, and persistence of homogeneous” in the regional pottery styles (Shaffer 1992a: 250). He has further noted (1992: 250, 252):

At the same, [distributions] of some commodities (marine shell, certain semi-precious stones, and intrusive pot-sherds) indicate that interregional economic interaction occurred. However, this interregional interaction was never intense enough to integrate the various phases into a homogenous cultural system. Unlike the Indus Valley Tradition where regional phases were integrated into a single cultural system or phase (Harappan or Indus Valley Civilization), social groups in [Balochistan] maintained a strong regional identity reflected in the persistence of regional ceramic styles.

That some interaction did take place between the [Balochistan] and Indus Valley Tradition is indicated by sporadic finds of Harappan artefacts throughout [Balochistan] (an exception to this being Dabar Kot). Although Harappan sites are found on the eastern borders of [Balochistan], and a few sites have

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<sup>112</sup> R. L. Raikes has associated them with Togau, Naal and Kulli, Londo and possibly Zhob Wares (1965a: 27).

been located within [Balochistan] (in the Kirthar range and Bolan pass), the interaction between tradition appears to be limited. This limited interaction between the two traditions may reflect significant cultural differences which inhibited development of the necessary linking networks. In the Quetta valley-Kachi plain area, however, there appears to have been a cultural intrusion, or at least very strong cultural influences, from southern Afghanistan. At present, these intrusive developments appear to have had but small impact on the rest of the [Balochistan] Tradition, and the same may be said for the Indus Valley Tradition as well. The reasons and nature of this influence from Afghanistan are at present unknown.

The number of bovine and cariovine domestication may relate to the ideological concepts of the inhabitants of Balochistan (Tosi 1982/83: 37). Moreover, the limited amount of data restrains us from further discussion of other social systems like social, religious and political organizations in this culture (Shaffer 1992a: 252).

## 7.8 Technology

Technologically, there are technological and artistic high standards evidenced in Balochistan. To be clearer, “Baluchistan’s cultural heritage has been known for its high-quality craftsmanship and beauty” (Franke 2015f: 5).

*Pottery/Ceramics:* It is the most spectacular craft activity and a major feature of Balochistan Archeology (Shaffer 1992a: 248). It is basically a device to measure changes over time. To define a ware or type of ware, one must measure the basic features of a ceramic i.e. construction, form, paste color, firing technique, kind, texture, hardness, thickness, surface color, surface finish, presence and absence of painted decorations (Fairservis 1984: 281). The ceramics or “pottery—fragile but durable, widely used, with enormous potential for variation in form, manufacture, and decoration—is particularly useful as a typological dating tool, and pottery styles provide much of the dating for prehistoric sites in the Indian subcontinent” [including Balochistan] (McIntosh 2008: 42). The earliest ceramics South Asia were found in Mehrgarh II (Krishnan and Rajesh 2014: 237).

“The most impressive craft activity, and a major feature of [Balochistan Archaeology], was the ceramic industry”. The ceramics, as we see today, are of high quality and rich in decorations with diversity (see Pls. 3-11). The ceramics are mostly buff and red wares; however, in Kacchi-Bolan and Quetta regions gray ware is also recorded. Technologically,



they are handmade, and mold constructed. Ceramic making in baskets was practiced from the beginning and it existed till the Bronze Age. Moreover, in Chalcolithic time wheel thrown ceramic start and dominates all the other making techniques throughout. There is almost no parallel of Balochistan ceramics in Bronze Age in their high quality and diversity of decorations in Central Asia. Many forms are recorded among bowls, jars, etc. The ceramics known from the surfaces as basket marked; buff, red and white slipped; rusticated or sandy slipped; fine, patterned and textured slipped (Wet ware). They are either painted on the surface or on the slip. The colors for decorations are black and red often; nonetheless, white, brown, yellow, green, and blue are used as well. The dominant scheme was bichrome and polychrome. Geometric designs are ubiquitously usually with animal and plant designs. The painted animals are humped cattle, deer-sort of animal or gazelle, fish, unrecognized birds, dogs, etc. The plants consist of the clear pipal leaf, etc. However, the gray wares are different having been wheel thrown and possess finer paste, fired at higher temperatures carrying black or red decorations direct on the surface of the ceramics. Hence, one comes to know that Balochistan possesses a wealth of stylistic variations and in different phases (Shaffer 1992a: 248-50). Moreover, “intricate geometric patterns on clay vessels, highlighted in different colours, betray an intense aesthetic sense, hybrid creatures and magical creatures provide a glimpse into a world of phantasy and imagination” (Franke 2015f: 5). It can be certainly said that there is “diversity and heterogeneity of styles” in Balochistan pottery cultures (J. Jarrige 1984b: 292). The differences in pottery style suggest a different regional group as it is the case in Balochistan (see Fig. 27 for comparisons of some major wares) (McIntosh 2008: 68).

Mehrgarh is the only site where clear development of this pottery tradition of Balochistan can be witnessed (Franke 2015d: 72). As mentioned in previous chapters, the pottery of these cultures gradually developed and received popularity in early Balochistan (Hideaki *et al.* 2013: 88-106). Interestingly, the study of cultures and their development is largely based on ceramic studies (Franke 2015l: 41). In fact, the “prehistoric [and protohistoric] Balochistan pottery had been classified into many types by characteristics of painted motif designs, painted color, surface treatments and belonging ages in every research by scholars”. Most of the Balochi ceramic types are vaguely known until now (Hideaki *et al.* 2013: 82, 113).



Moreover, “it is also important to insist on the fact that the rich iconography displayed on so many vessels produced by the Balochistan potters is not purely decorative but is most probably linked to some symbolic background...” (J. Jarrige *et al.* 2011: 192).

“It is certainly that these changes of pottery making techniques and painted motives are derived from inter-relationship between areas in Balochistan... However, we can see some changes on one hand, we can see on the other hand the system of maintenance tradition on the pottery making of pre- and protohistoric Balochistan. This conservative on pottery making is prime character of pre- and protohistoric Balochistan culture...” (Hideaki *et al.* 2013: 113).

J. G. Shaffer has closely observed from the material cultures that Balochistan was inhabited with different ethnic groups. He has justified it in the following paragraph (Shaffer 1986: 100-02):

Baluchistan archaeology is also characterized by distinct regional variations in ceramic styles which might reflect the existence of several contemporary ethnic groups. For example [,] Damb Sadaat in the Quetta Valley and [Kacchi-Bolan Plain, Naal] in the south, and Periano in the north are contemporary to some extent and overlap with Kulli in the south, and Harappan in the [Kacchi-Bolan] plain and along the southern fringes. These regional variations are quite pronounced ceramically, but the extent to which other cultural differences may exist is unknown. At the same time, intrusive sherds at the most sites indicate interaction between these regional groups, with some exchange of commodities involved.

Because of the limited time the researcher could not include all the types of ware except for the major ones. Some of them may be found in the following references of A. Stein (1929; 1931), E. J. Ross (1946), W. Fairervis (1956; 1959), B. de Cardi (1965; 1983), Raikes (1968), etc. However, there are many ceramic types which were not named due to their limited number or they were not well presented, or they were not well presented, etc. In future, some of them will be further defined and clear to be separate pottery cultures or types of pottery culture.

*Anthropomorphic and Zoomorphic Figurines:* Advances in the production of human (see Pls. 13-19) along with animal figurines have been confirmed. These are thousands of pieces have been dug out from the entire site with strong similar characteristics from Zhob, Quetta, Kakat, Loralai and some others similar with Mundigak and Shahr-e-Sokhta (J. Jarrige 1991a: 46).

The terra-cotta figurines in South Asia date back from Neolithic to historic times (Uesugi 2017: 232). Balochistan figurines can be categorized into Zhob and Kulli types mainly (Hideaki *et al.* 2015: 14). Additionally, they represent diversity (human and animal) in their shapes in different regions and in different times. Both—human and animal figurines—were regarded as ‘symbols of fertility’ since the female can give birth to children and humped bull used as livestock to serve humans. Also, they are related to religious beliefs of the ancient inhabitants of the region (Uesugi 2017: 232). In other words, it is believed that these human and animal figurines were constructed for the offerings to different cult deities (Chakrabarti 2014a: 348).

“Today, it is becoming more apparent that most of the figurines recovered from excavations and trial digs on the Quetta plateau and in the Zhob or Loralai valleys show very close parallels to the range of types found in Mehrgarh. Consequently, they have their roots in the same symbolism and hence also in the same ideological system” (see Fig. 28 for comparisons of figurines from different cultures) (C. Jarrige 1991b: 92).

*Metallurgy:* Metallurgy properly started from Mehrgarh III (Lechevallier 1984: 42). In Copper and Bronze Age, metallurgy reached a good level of development in Balochistan; the objects included frequently were pins (sometimes decorated), blades, points, beads and mirrors. It was even highly developed in Neolithic Mehrgarh as the specimens from the cemetery suggest. Certainly, the quality and quantity of materials differ from one site to another; there must have been part-time craft specialists or likely full-time craft specialists all over Balochistan (Shaffer 1992a: 248).

*Terracotta:* The other terracotta objects include human and animal figurines, bangles, beads, biconical balls, rarely stamp seals (see Pl. 21), house models, buttons and rattles (Shaffer 1992a: 250).

*Stone Objects:* From the earliest periods, flint blades, crappers, microliths, milling stones and ground stone balls were the stone tools ubiquitously recorded. Nevertheless, axes, projectile points, maces or celts and adzes are seldom recorded. They maintained a lapidary industry and manufactured different artifacts (beads and pendants; alabaster bowls) from semi-precious stones like turquoise, carnelian, lapis lazuli, alabaster, etc. Moreover, chlorite/steatite was

used for beads, stamp seals (see Pl. 21 for stamp seals), pendants, and rarely bowls were also discovered (Shaffer 1992a: 248).

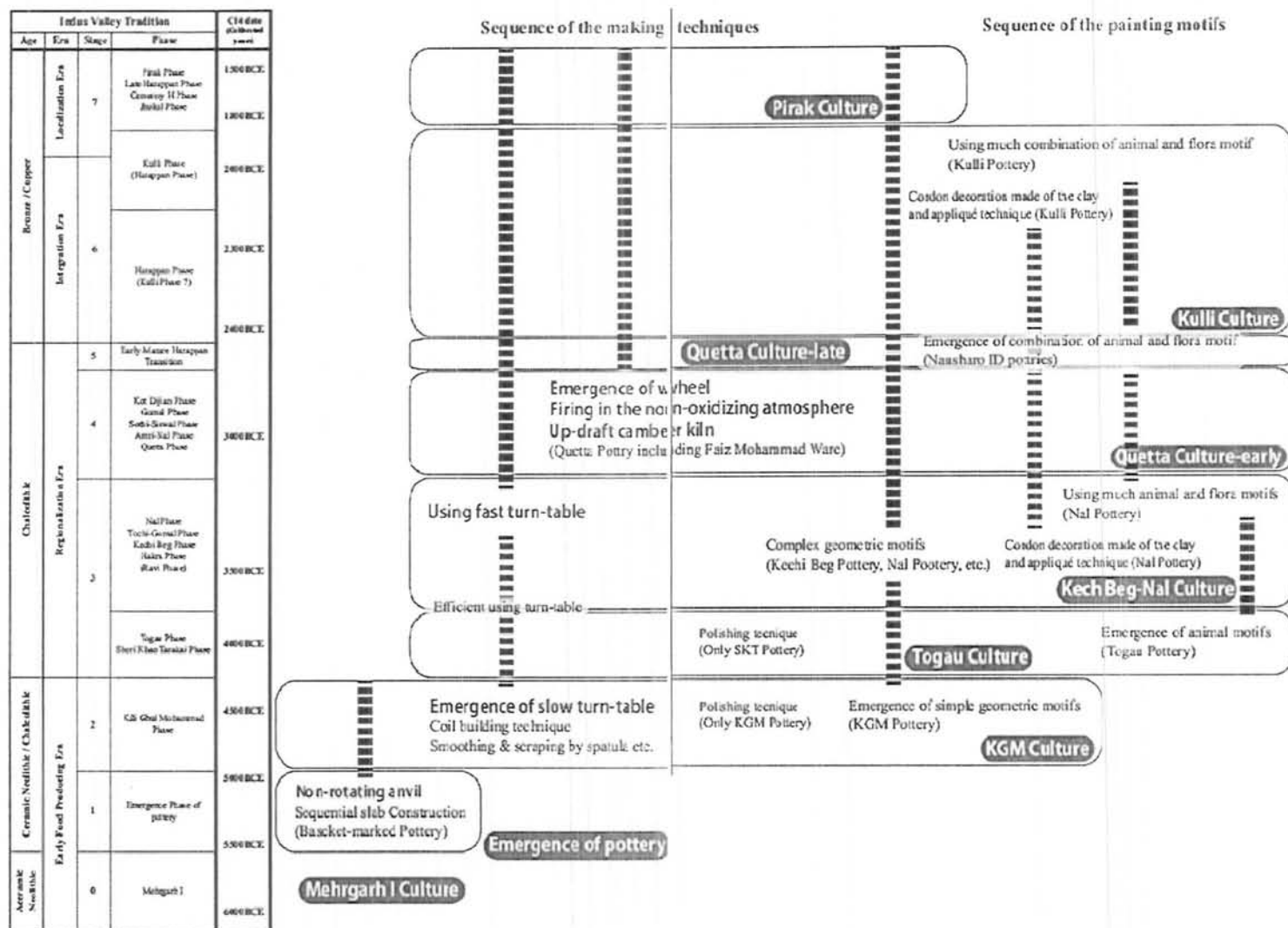


Figure 27. Making Techniques and Painting Styles in Prehistory and Protohistory of Some Major Cultures of Balochistan (from Hideaki *et al.* 2013:

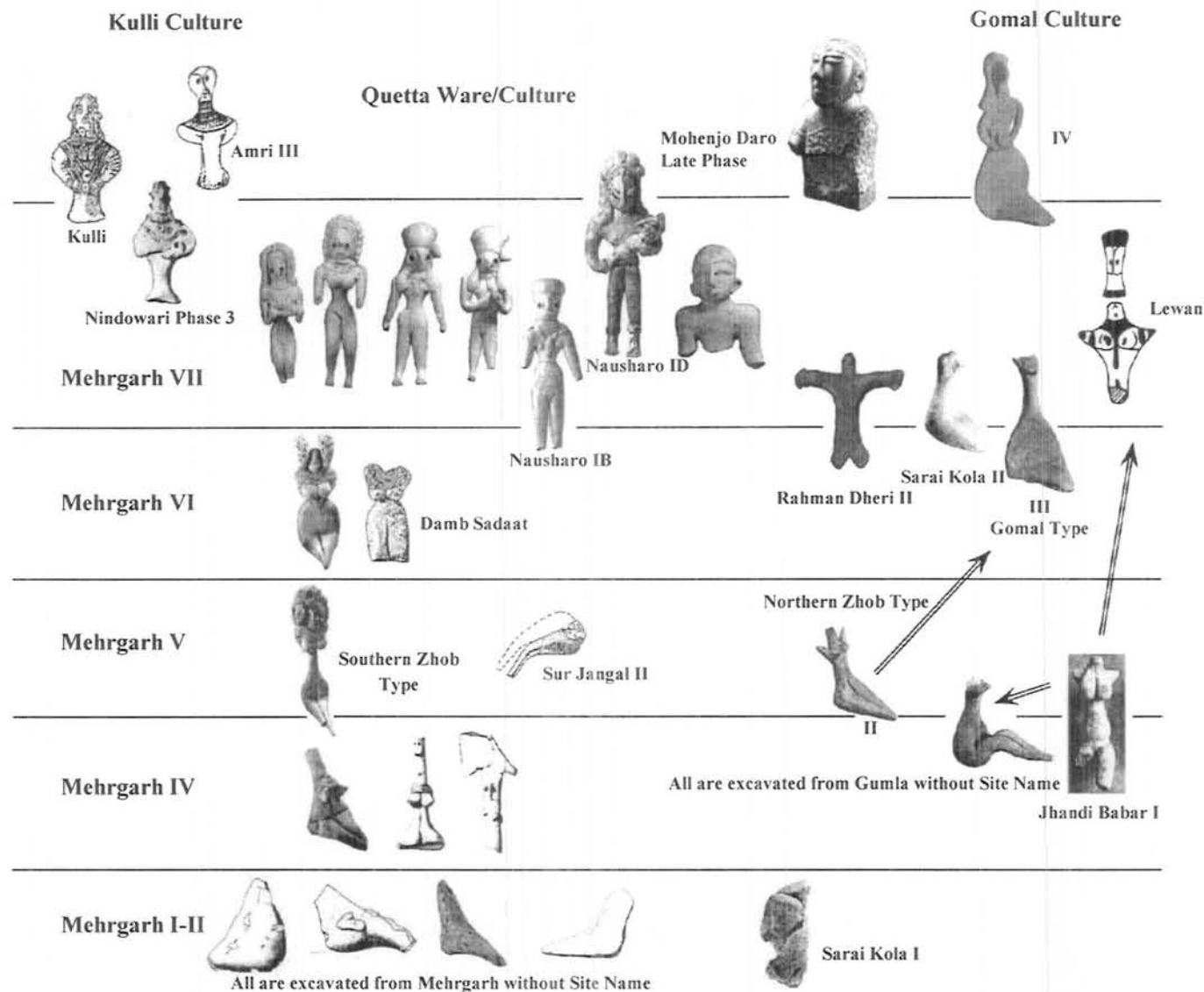


Figure 28. Human Figurines of Balochistan (from Konasukawa *et al.* 2015: 16) Not to Scale

*Shell Findings:* Shell was commonly used for bangles, beads and pendants (Shaffer 1992a: 248).

To conclude, “the use of potter’s wheel, the bow drill (amply attested in the lapidary workshops where lapis lazuli, turquoise and other types of [precious and semi-precious] stones were worked), the major advances in pyro-technological skills (copper metallurgy, production of beads of fired steatite, manufacture of various pigments for monochrome and polychrome ceramic ornamentation)...” were major achievements of the time (J. Jarrige 1991a: 44).

### **7.9 The Use of Pigments or Colorants**

The pigments/colorants were used for a variety of purposes and situations in Balochistan Archaeology: painting pottery, decorating plastered walls, covering the dead, decorating textiles, and covering or decorating figurines (human and animals) (Cortesi 2015c: 176). “For quite a [long-time] specialists have often underscored the decorative and the stylistic diversity of the pottery of Balochistan from the fifth to the third millennium BC” in Balochistan (J. Jarrige *et al.* 2011: 191).

### **7.10 The Role of Balochistan Archaeology in Formation of Civilizations<sup>113</sup>**

After the several productive archaeological researches, it is now clear from the obtained data that Balochistan played a vital role in the forming processes of Indus and eastern Iranian Civilizations (Tosi 1982/83: 32). Indeed, Mehrgarh site possesses the foundation and cultural developmental information about Harappan civilization (Possehl 1990: 266).

“This important step in the history of mankind, also known as the ‘Neolithic Revolution’, marks the beginning of a village farming tradition that ultimately prepared the grounds for the formation of the Indus Valley Civilization”. (Franke 2015f: 5). In simple words, “In Period VII [at Mehrgarh], the ‘Baluchi’ styles, mainly painted decorations on or shapes of pottery, are replaced by features related the Indus Plains, a development which foreshadows the expansions of a cultural horizon which around 2600 BCE will become the Indus Valley Civilization” (Franke 2015k: 54). The Early Harappan period is well attested in Nausharo IC

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<sup>113</sup> See Harappan Culture for more details

later ID where earlier Balochi features are getting replaced by Kot Dijian features (Franke 2008: 667).

### **7.11 Interment Practices and Goods**

In Neolithic Mehrgarh, the dead were usually buried with different goods i.e. stone tools, jewelry of different materials (see Pl. 20), baskets, etc. and some graves were found without goods (J. Jarrige *et al.* 2013: 131-146). They were primary, secondary, partial or a certain combination of them (Sellier 1991: 84-5). The dead were often covered with red ochre (Sellier 1991: 77, 84-5). Entering the dead with goods gives hints towards the concept of life after death (J. Jarrige 1991: 41). Furthermore, now the Chalcolithic people of Mehrgarh buried their dead with very limited ornaments (Possehl 1999: 505). They stopped partial and secondary burials and treating the dead with red ochre (Franke 2008: 654). It looks that the life after death concept was fading away (Sellier 1991: 77). At Chalcolithic Age, the people in central Balochistan were multiple fragmentary burials with grave goods like pottery vessels, semi-precious stone ornaments, red pigmented shells, grinding stones and stone weights. In early Makuran, the body of the dead was covered with red ochre and placed on a mat in grave or wrapped in a shroud. The grave goods included metal artifacts as axes, spearheads, mirrors, and tools. Later in Makuran, the dead were still buried with pottery but shells with ochre, stone vessels, stone vessels, beads, copper seals, and copper weight (Franke 2008: 654-55, 657, 659). In Mehrgarh VIII-Sibri Culture, the body or bodies were cremated and placed with grave goods; there were rectangular structures with objects; there were objects isolated in pit or rectangular ground and there were large upside-down jars with a pot or pots (Santoni 1984: 52).

### **7.12 Trade/Exchange/Barter System, Trade Routes and Trade Materials**

A. H. Dani has regarded Balochistan ‘the gateway to central Asia’ which means it was easy to access for the central Asians (1998: 105). There were great cultural developments starting from early times which make it clear, as the data defines, that they were not culturally isolated; they interacted with neighboring regions. It has been observed from the intrusive artifacts and some similarities in the material culture of Balochistan (Shaffer 1986: 99-100; Sheikh 1987: 68-73, 76-9). Balochistan, generally, was the most vital route which connected the Indus Valley Civilization and other adjacent surrounding areas (Uesugi 2017: 229). According to C. A. Petrie (2015: 7), “Within the highlands [...], but also in many of the arid regions,



communication and interaction is made possible by paths, tracks, and passes of differing length, which make use of oases, plains, and intermontane valleys of varying width, and also narrow geological faults and passes. These routes provide access between different [regions and] enable people to traverse the plateau in different directions, along specific corridors. These routes of passage make up networks of interaction and communication that were (and are) used by people moving between lowland and highland areas and across the interior of the Plateau, and within each of these zones”.

The ancient Baloch inhabitants took three traditional routes for trade purposes or migrations:

1. Bolan Pass. “It connects the lower Indus Valley with Kachhi plains (Mehrgarh), Quetta and Pishin Valleys as also Kandahar and Helmand Valley. Mula Pass also joins the lower Sind with South Central Balochistan”. Type site: Amri
2. Loralai Valley at the south of Gomal. It joins south eastern Afghanistan. Type site: Dabar Kot.
3. Gomal Pass of Zhob Valley; it is located midway from Kabul to Kandahar to Panjab plains. Type site: Gumla (Asthana 1985: 79-81).

The distribution of exotic objects like semi-precious stones i.e. turquoise, lapis lazuli and carnelian, metals i.e. gold, silver, copper, tin and marine shells through trade routes connecting Seistan, Balochistan and Indus Valley Civilization mark the ancient trails which were used pastoralists, peddlers and traders. Moving on foot crossing long distances through this harsh terrain, they traded precious and utilitarian objects like cotton, wool, tools, leather and fragile ceramics. Moreover, it also transported technological ideas and decorative regional styles (Franke 2015f: 5). These strong contacts have resulted in strong similarities in the material cultures of Balochistan with that of southern Turkmenia to Helmand basin by late 5<sup>th</sup> to the beginning of 2<sup>nd</sup> millennium BCE (Tosi 1982/83: 34). They were indulged in internal trading and external trading i.e. in and surrounding regions of Balochistan, Indus Valley, Iran, Afghanistan, southern Turkmenia (or central Asia), (Sheikh 1987: 68, 84-7), Gulf countries (Dani 1998: 105), Mesopotamia, etc. (Wright 2010: 322). In simple words, the researches “...demonstrated close cultural links of Balochistan with the region on its north, northwest and west existing since prehistoric times”. The diverse prehistoric and protohistoric cultures were in close contact with their contemporaries in Indus Valley and Balochistan (Mughal

1972: 137). Hence, Balochistan has played an important role in the interaction sphere from Neolithic Mehrgarh onwards till Harappan (Sheikh 1987: 84-7) or Late Pirak Culture (Shaffer 1986: 100). In addition, Balochistan had the command of land trade routes between South Asia (Indo-Pakistan), Middle East and central and western Asia (Qasim and Khattak 1998-99: 57).

### **7.13 Decline of Cultures**

“Balochistan has always been a core region for the growth and diffusion of human cultures over the millennia” (Naseer and Jan 2018: 54). “There are evidences of decline of cultures throughout Balochistan during second millennium BCE. At this point, they largely stopped existing, perishing or they were annexed by the foreigners (de Cardi 1951: 63). The evidences until now, however, suggest that the ancient inhabitants of Balochistan had no ruthless neighbors to fear or fight (Ross 1946: 312). It was after the collapse of Indus Valley Civilization. Moreover, it appears that they must have organized new social set ups in certain regions (Uesugi 2017: 231).

### **7.14 Museums in Balochistan**

Despite a rich cultural heritage dating back to ancient times, Balochistan province has only few museums; some of them are even not functional (Personal Observations). Some of the museums maybe McMahon Museum, Quetta (sadly an earthquake in 1935 destroyed it and then its artifacts were mostly shifted to Karachi Museum in Sind), Quetta Geological Museum, Quetta, Quetta Museum, Quetta, Sibi Museum (though not functional), Quaid-e-Azam Residency Museum, Ziarat, Command and Staff College Museum, Quetta, Kech Museum, Kech-Makuran (not functional), Gawadar Museum, Gawadar (not functional) and Balochistan Study Center Museum, Quetta. The museums house a large variety of artifacts from different periods of Balochistan regions (Naseer *et al.* 2017: 82-93). They concluded as (2017: 94):

Nevertheless, there are still [well-preserved] sites with multi-dimensional cultural artifacts in Balochistan. We are sure that further archaeological explorations and excavations, if conducted in this province will not only produce valuable artefacts to cater to the needs of our new museums but will further unfold the rich legacy of Balochistan and will greatly facilitate establishment of new Museums. Development of archaeological sites and establishment of more museums in the province will boost cultural tourism while flow of more and more tourists will not only enhance the beauty of Balochistan

but will also add tremendously to the socio-economic development of the province and ultimately restore peace and tranquility in the restive province.

Moreover, there are many private museums in Balochistan in cities and towns which portray the ancient lifestyle of the inhabitants in different time periods. Also, many people have private collections which they have preserved from illicit traffickers who smuggle these objects. However, the materials they have mostly were illegally excavated then they were bought by these history and archeology lovers to prevent them from going in the hands of the antique mafia outside Pakistan (Personal Observations).

### **7.15 Laws for the Archaeology of Balochistan and DoAM,B<sup>114</sup>**

There is Balochistan Antiquities Act, 2014 introduced by Directorate of Archaeology and Museums presents several rules and regulations regarding Balochistan Archaeology on different aspects i.e. defining terms, protecting, survey, excavation, receiving, museums, acquisition, punishments, and the like (Balochistan Antiquities Act, 2014: np). Recently, 101 sites have been presented as ‘protected’ sites under Balochistan Antiquities Act, 2014 which was previously 30 (Directorate of Archaeology and Museums, Balochistan 2019: 1-5). The Directorate of Archaeology and Museums, Balochistan is actively working now receiving funds, excavated materials in Sindh, making a museum, making close museums functional, preserving sites, initiated an award named Jarrige Award which is given to deserving candidate or candidates who worked on the archaeology of Balochistan, etc. (J. Baloch, Personal Communication, November 28, 2019).

### **7.15 Treasure Hunting, Illegal Trafficking and Illegal Replicating**

“Unfortunately, the law-and-order situation in Baluchistan prevents a continuation of archaeological work, leaving the large number of sites unguarded and exposed to looters. [Hence], many other consignments from the custom authorities arrived at the National Museum of Pakistan in Karachi...” (Bukhari and Elahi 2015: 1) and at other cultural authoritative institutes and departments of Pakistan. Lamentably, according to S. Matheson (1967: 148), “any prehistoric site yielding signs of human habitation was looked upon as a potential treasure trove”. One consignment, comprising almost from Balochistan, has been

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<sup>114</sup> Directorate of Archaeology and Museums, Balochistan

confiscated and recently handed over to the Pakistani authorities by the French Ministry. Moreover, the antique mafia is always active in the province in such activities. They are one of the reasons for the destruction of cultural history of sites. Lots of illegally exported artifacts are open on the Internet for auction and other international antique markets which shows the demand; it is certain that many objects present in different museums all around the world like today are the result of such heinous activities. Many other Balochistan ancient objects fulfill the needs of museums in countries who have visited country for surveys and excavations (Personal Observations). Moreover, U. Franke observes that Balochistan soil has great number of artifacts buried and many of them have already been lost (2015f: 8).

E. Cortesi (2015a: 374) has keenly observed particularly about the illegal mafia and the replicating of objects that "...the illegal market is growing not only in terms of quantity of smuggled artefacts, but also in terms of facilities and labour force at disposal. In this constellation of illegal activities not only gangs are involved in fights over the control of ancient sites, but also simple diggers and artisans are engaged by a well-established supply network. The people are trained to master the art of modelling and mending to replicate the very artefacts presented in scientific publications".

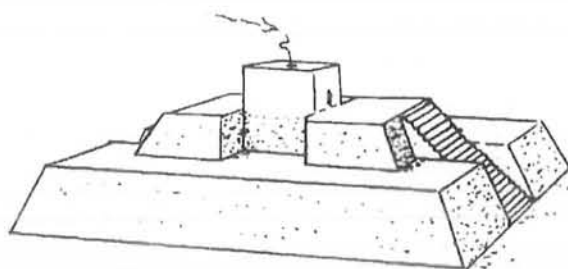
To summarize, there has been cultural continuity and change throughout Balochistan. They are not normally associated with environment but a process in which the man is in pursuit of societal and food-seeking activities; it was the case for Balochistan as well. As seen from the cultural developments and diversity at different times, "there is little doubt that had soil, water and a more concentrated population been possible, urban situations have developed contemporaneously in...parts of Baluchistan" (Fairservis 1979: 75-6, 77-8). "Baluchistan is solidly articulated with a cultural complex than spans, geographically, from the Caspian Sea to the Arabian Sea" (Tosi 1982/83: 35). Furthermore, the cultural heritage of Balochistan is certain incredibly rich and stylistically outstanding which opens a "fascinating, though narrow, window into its past – for those travelling through the barren landscape of [Balochistan] today, and this view may be truly amazing". It is a treasure with an amazing cultural legacy (Franke 2015f: 8-9). Despite the ecological and geographical challenges, which were adapted by the inhabitants of Balochistan at different times, they reached to become amazing craft specialists. There is amazing quality and beauty of material culture;

however, with the passage of time, there is population growth in relation with ecological relationships by a long process of adaptation (Tosi 1982/83: 35-6). The Neolithic Mehrgarh was the early agricultural center for cereals in the whole region (J. Jarrige and Meadow 1980: 122).

## Plates of Balochistan Archaeology

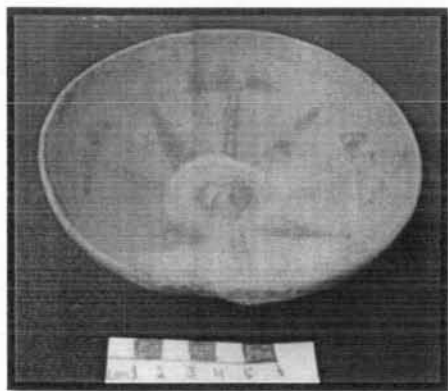


Pl. 1. The Endangered Site of Mehrgarh with Excavated Structures (from Zakir Khan) Not to Scale



Edith Shahr

Pl. 2. The Edith Shahr Structure (from Fairservis 1979: 74) Not to Scale



Pl. 3. Monochrome Pottery from a Khuzdar Site<sup>115</sup> (from the Present Researcher)



Pl. 4. Monochrome Pottery<sup>116</sup> from Islamabad Museum (from the Present Researcher) Not to Scale

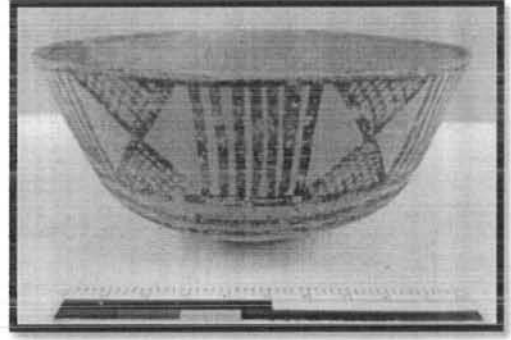
<sup>115</sup> These decorations are not found together before; however, star type designs are found on dishes at Mehrgarh IV (J. Jarrige *et al.* 1995: 150, from Fig. 2.12 (d and e). This design can be seen at Naal III but differently and on different forms (Franke 2015: 270, from Fig. 10.10). Similar design with multiple arms and frogs running in circle was also found (Franke-Vogt 2001: 268). Moreover, the four hands are not attached. There are four ladders with mounted triangle heads filled. Black is used to draw the lines while filling is done with red. It also has a knob in the middle.

<sup>116</sup> This is most probably related to Pl. 3.

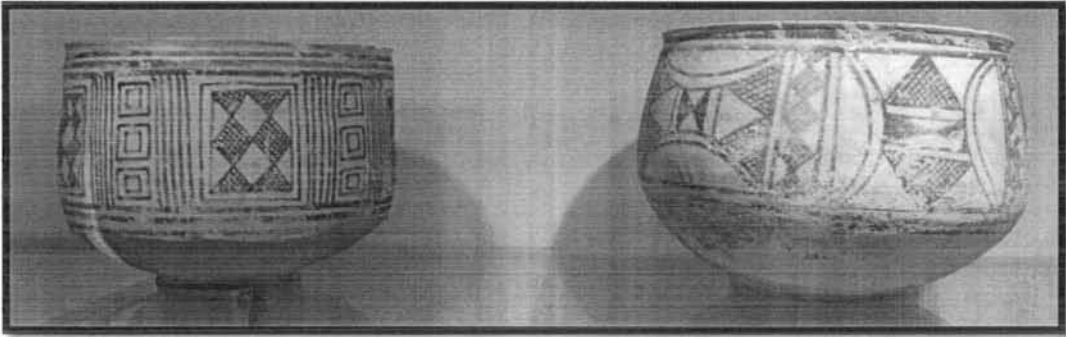




Pl. 5. A Beautiful Pottery with Smooth Decorations  
(from Uesugi 2012: 97) Not to Scale



Pl. 6. Balochistan Ceramics from DOAM<sup>117</sup>  
(from the Present Researcher)



Pl. 7. Balochistan Pottery on Display at Islamabad Museum (from the Present Researcher) Not to Scale

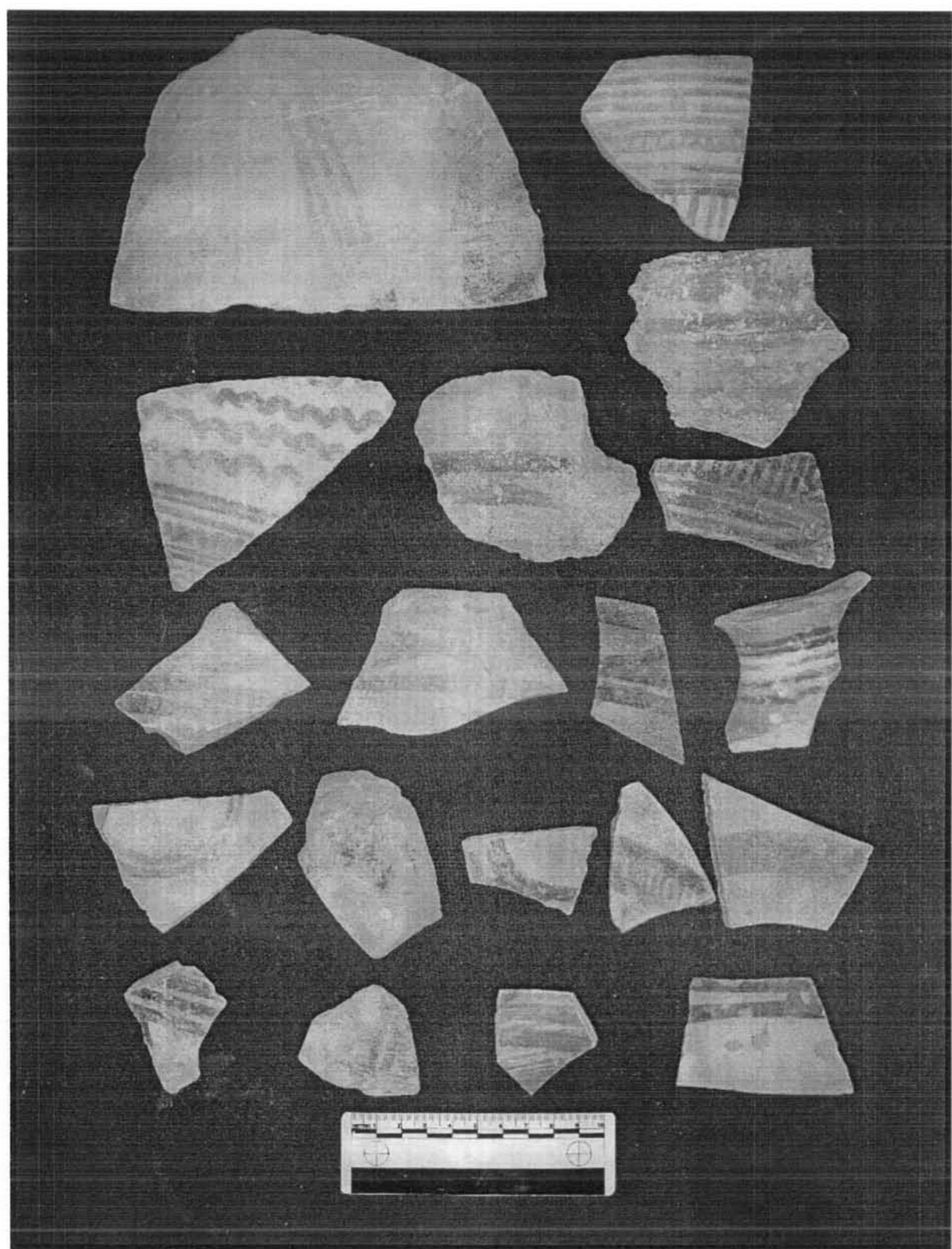


Pl. 8. Londo Ware (L, Exterior) and (R, Interior)<sup>118</sup> (from the Present Researcher)

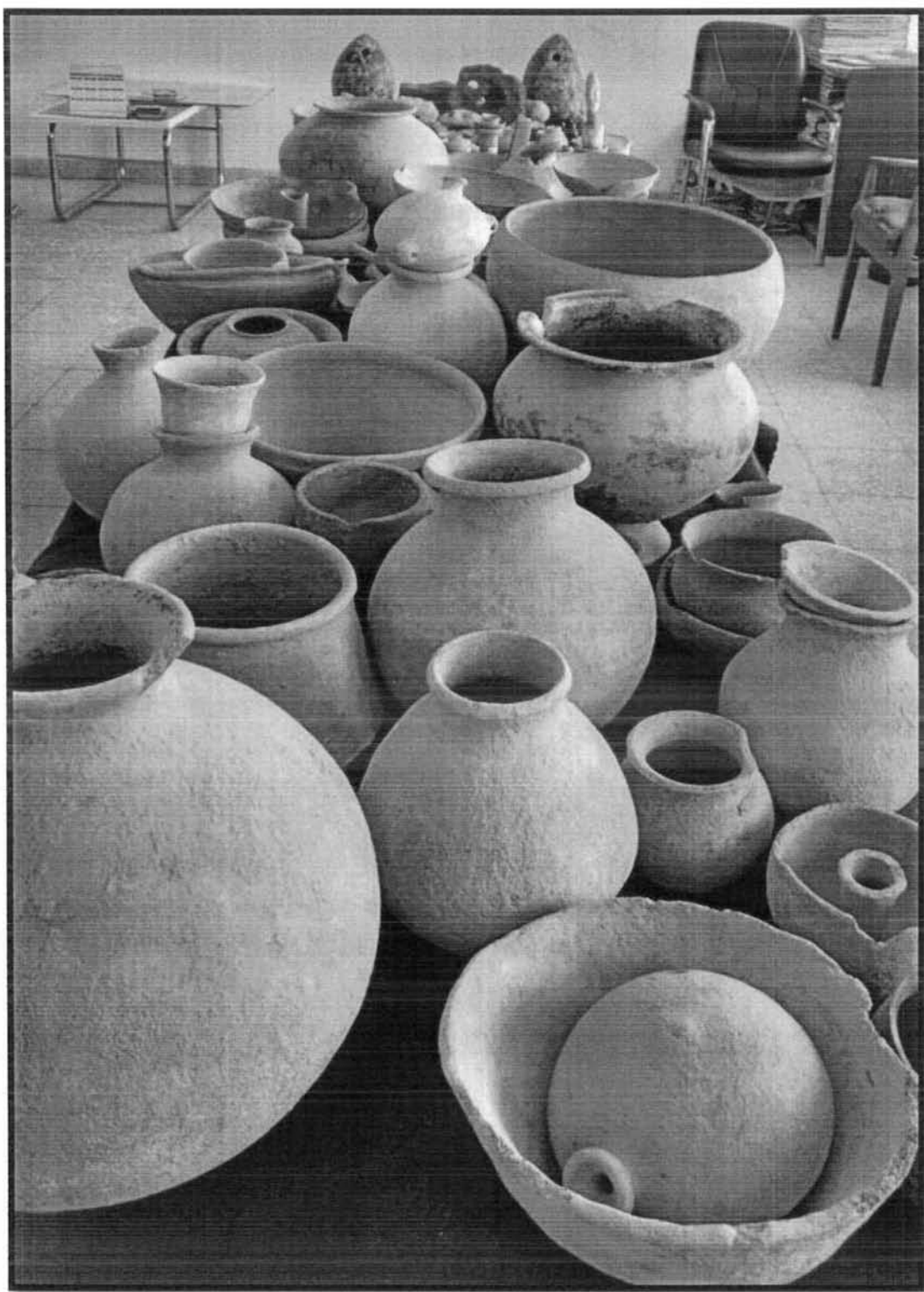
<sup>117</sup> Many such shapes have been found with almost similar decorations but slightly different as Figs. 180-184. They are all dated about c.3300-3100 BCE (Franke 2015d: 121-22).

<sup>118</sup> The volute decorations resemble the Londo decorations; however, the interior decoration have never occurred on Londo ceramics (Franke-Vogt 2001: 272, Fig. 17, No. 9). However, the interior animal decoration is unknown.





Pl. 9. Pottery from Khudabadan Damb (from the Present Researcher)



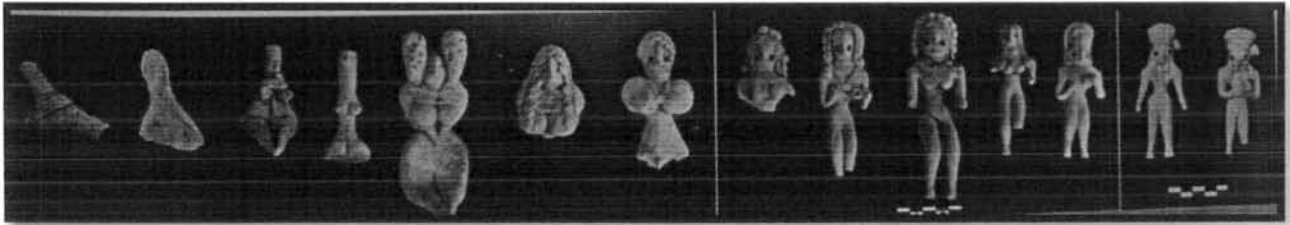
Pl. 10. The Private Material Collection from Khuzdar Region (from the Present Researcher) Not to Scale



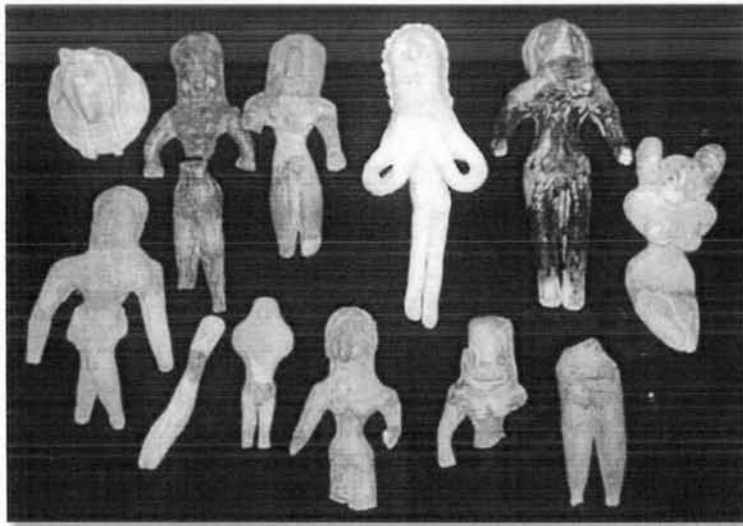
Pl. 11. Private Ceramic Collection<sup>119</sup> (from Syed Mahdi Shah) Not to Scale



Pl. 12. A Container with Humped Zebu (L) and Fish (R) Motif<sup>120</sup> (from the Present Researcher)



Pl. 13. Evolution of Figurines from Mehrgarh I-VII (from J. Jarrige *et al.* 2011: 137)

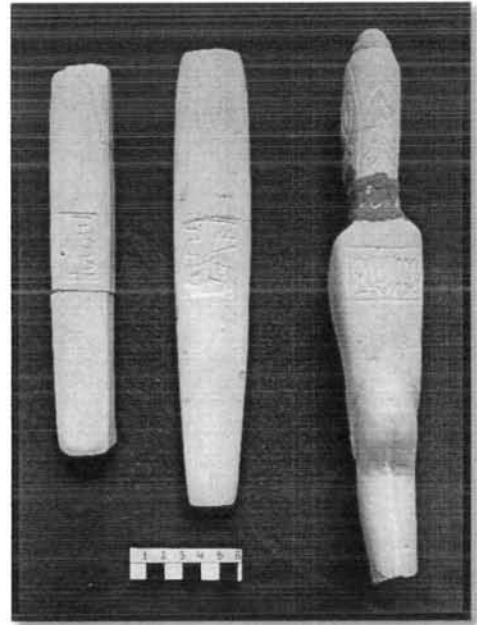


Pl. 14. Private Figurine Collection Mostly from Balochistan<sup>121</sup> (from Syed Mahdi Shah) Not to Scale

<sup>119</sup> Majority of the ceramics relate to Quetta Ware/Culture (Personal Observations).

<sup>120</sup> According to S. Shahwani, it contained some sort of powder inside which was thrown away after it was opened. However, the researcher thinks that it is a fake artifact which has been made just to fascinate an art lover.

<sup>121</sup> They are figurines from different cultures and sites illegally dug out by treasure hunters. This collection belongs to Syed Mahdi Shah who is protecting them and saving the cultural heritage.



Pl. 15. Three Figurines with Scripts on Their Backs from Khuzdar Region<sup>122</sup> (from the Present Researcher)



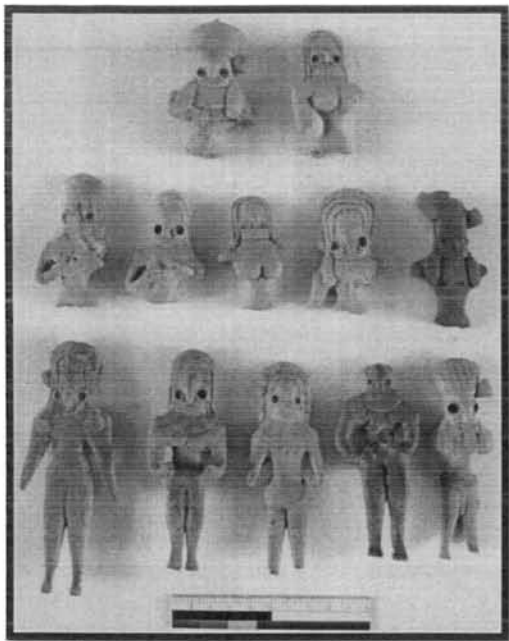
Pl. 16. Figurine from Jhal Magsi  
(from Sheikh Javed Ali Sindhi) Not to Scale



Pl. 17. Figurines from Mehrgarh VII-VIII  
(from Qasim Ali Qasim) Not to Scale



<sup>122</sup> The two figurines on the left with a sort of script are fake ones; however, the one on the right can be called a unique piece with probably Indus Script. It can be regarded an original. There is undoubtedly no such piece recorded before. They are from Sultan Shahwani's collection.



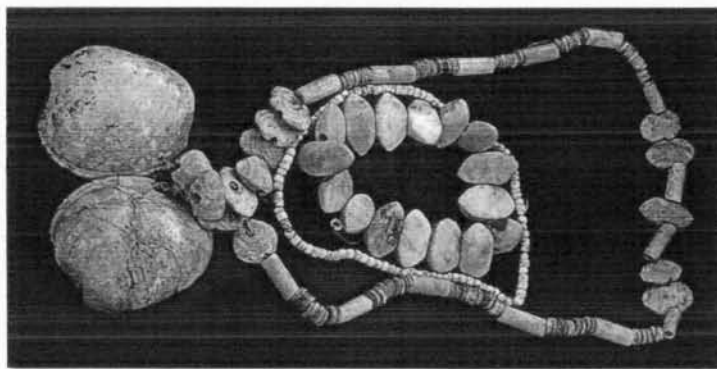
Pl. 18. Balochistan Figurines at DOAM<sup>123</sup>  
(from the Present Researcher)



Pl. 19. Safrani Damb Figurines<sup>124</sup> of S. J. A. S<sup>125</sup>  
Collection (from the S. J. A. S.) Not to Scale



Pl. 19. Figurines from Balochistan Cultures at Islamabad Museum (from the Present Researcher)  
Not to Scale



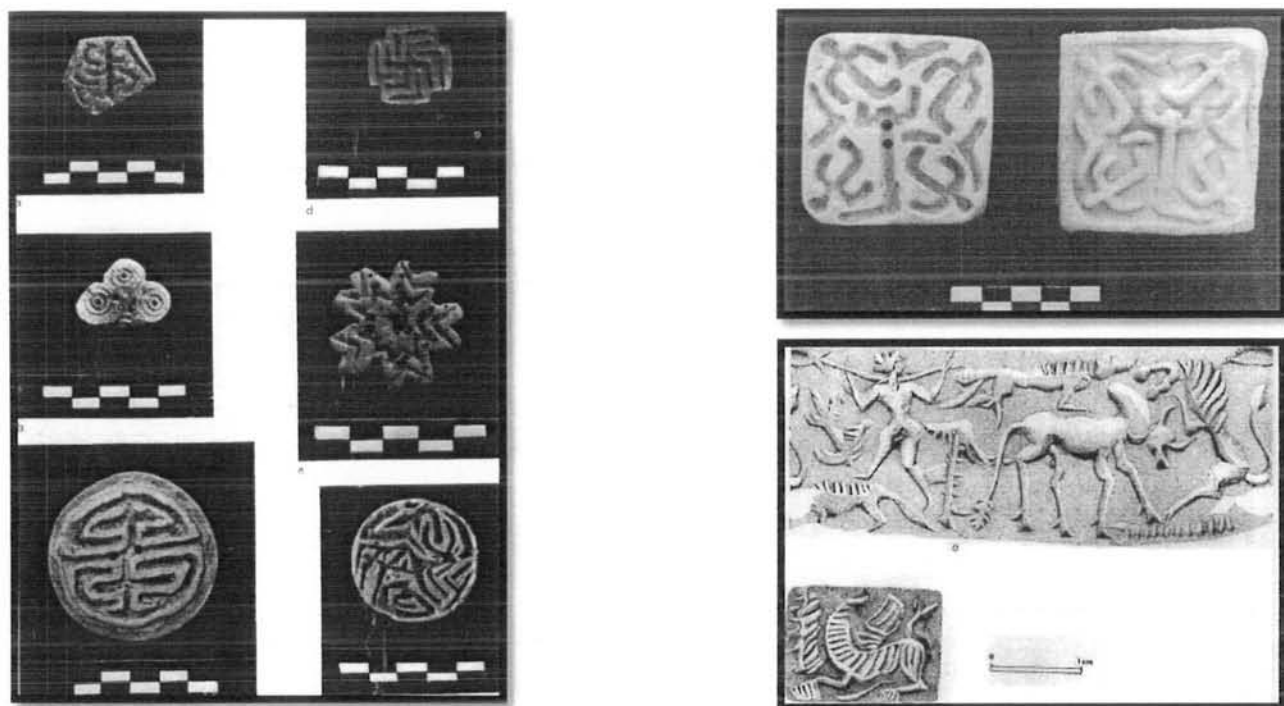
Pl. 20. Early Jewelry from Mehrgarh (from Balochistan Directorate of Archaeology) Not to Scale

<sup>123</sup> They are like Nausharo figurines (Personal Observations).

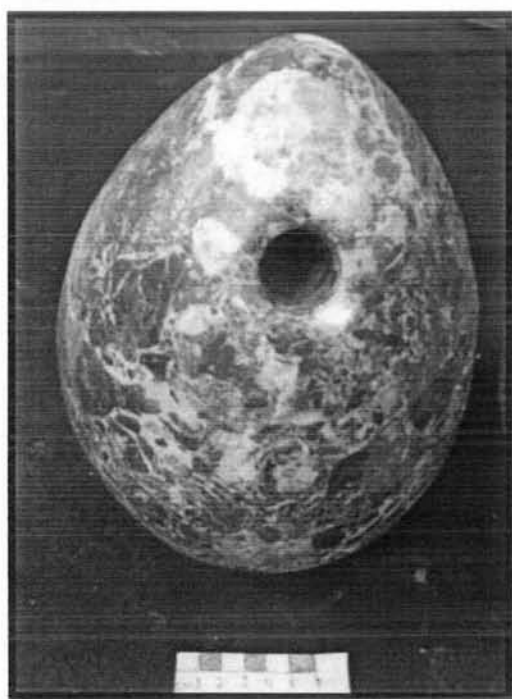
<sup>124</sup> The human figurines in the middle are like those found at Nausharo (Personal Observations).

<sup>125</sup> Sheikh Javed Ali Sindhi



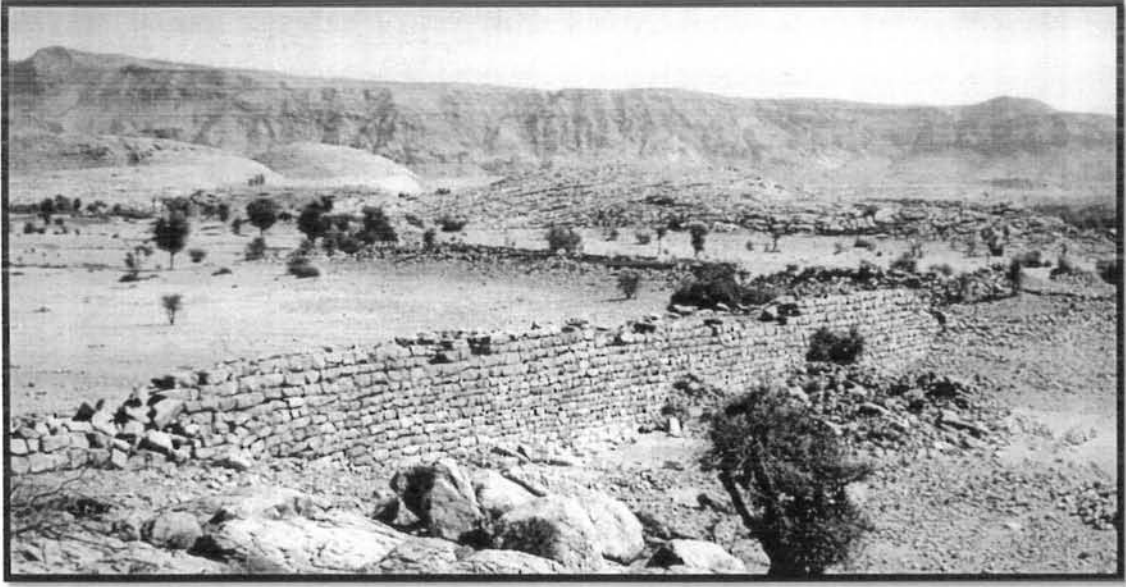


Pl. 21. Seals from Mehrgarh VI and VII on Top Left and VIII on the Left Bottom  
(from C. Jarrige *et al.* 1995: 172, 412, 549)



Pl. 22. Egg-Shaped Weights<sup>126</sup> (from the Present Researcher)

<sup>126</sup> There are two such weight in Sultan Shahwani Collection which are very much the same leaving out difference in weight. According to Aurore Didier, they do not look to be old; they must be fabricated ones.



Pl. 23. Pir Mnuaghara Dam—Early 3<sup>rd</sup> Millennium BCE (from Franke 2015a: 30) Not to Scale



7.16 New Discoveries in Khuzdar, Balochistan

A small-scale survey was conducted in Khuzdar at Zehri area by Mr. Bilal Zehri in the absence of the researcher (see Fig. 29). The survey only yielded ceramics and bones pieces. The other objects were witnessed by the locals or dug out by the illegal diggers at below mentioned sites. Three new sites have been discovered in this survey of Zehri region in Khuzdar: Miri Sarhap in Zehri, Kaali na Mash in Balbal Zehri, and Eswarhi in Zehri.

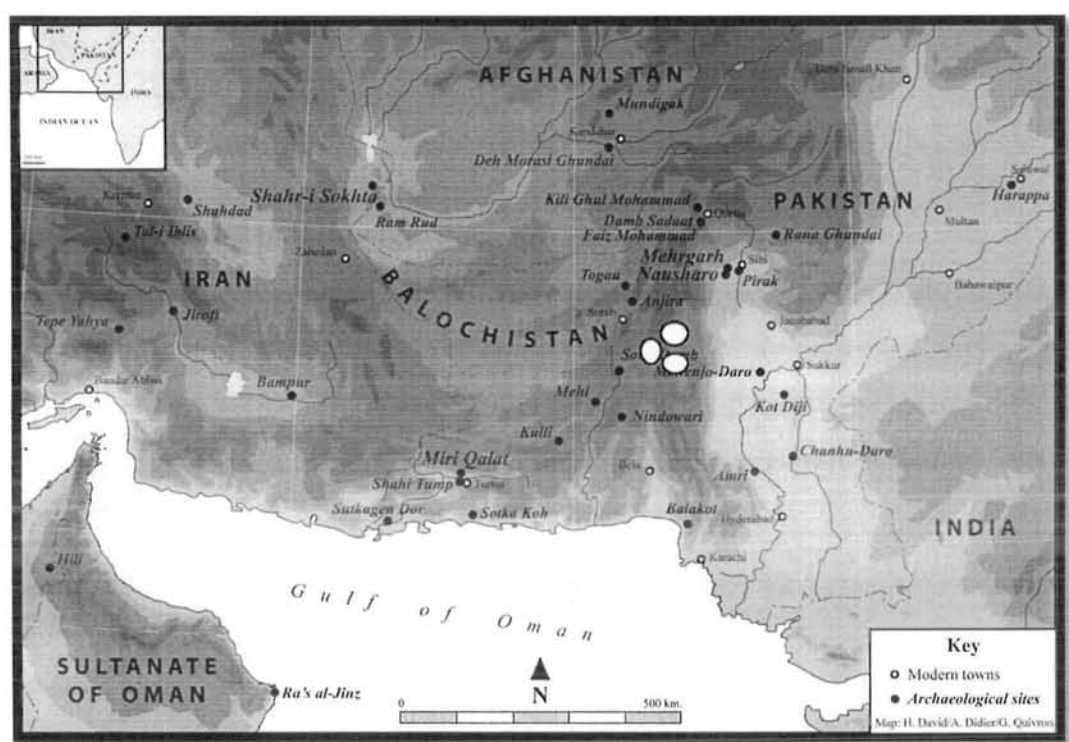


Figure 29. Locations of Newly Discovered Sites in White Dots (from J. Jarrige *et al.* 2011: 8, Modified by the Present Researcher)

Site No.	Site Names	Pottery	Other Cultural Materials	Cultural Chronology	State of Preservation
1	Miri Sarhap	Mehrgarh VIII-Sibri Kulli Naal Kechi Beg Togau KGM	Pottery, beads, human and animal figurines, metal objects like arrows, etc., seals, stone tools, etc.	c. 5000-2000 BCE	Endangered
2	Kaali na Mash (the Mountain of Kaali)	Prehistoric or Protohistoric (?)	Pottery, beads, stone tools, a metal/bronze oblong object, etc.	Protohistoric	Endangered
3	Eswarhi	Prehistoric or Protohistoric (?)	Pottery	Protohistoric	Endangered

Table 18. Newly Discovered Sites in District Khuzdar (from the Present Researcher)

7.16.1 Miri Sarhap, Zehri

There are many mounds of this site; approximately eight of them connected with each other. The main mound is approximately 500 meters long and 300 meters wide and 30 meters high. It is a site pre and protohistoric in Zehri village, 12 km away from Norgama, Khuzdar region. Only one portion of a mound has been illegally excavated and damaged. The illegal diggers have terribly damaged one portion of the site by running tractor blades on the site in search of treasure (see Pl. 1). Sadly, within a few years the site will not be seen if abrupt and serious strides are not taken.

7.16.1.1 Pottery/Ceramics

There is decorated and plain pottery from this site (see Pls. 3-6). They perhaps belong to different cultures of Balochistan. The decorations include exist on Kili Gul Mohammad, Togau, and Naal ceramics. All of them carry geometric decorations. However, in the case of Kili Gul Mohammad Ware and Togau Ware black color is used only. In the case of Naal Ware, bichrome decorations occur which much have consumed a lot of time and caution in their application. In the case of Mehrgarh VIII-Sibri Culture, the pictures of complete jars, bowls, globular vessels, bowls-on-stand, platters, etc. were found but they are not decorated.

7.16.1.2 Cultural Materials

According to locals, many things like huge number of ceramics, beads (see Pl. 13), human and animal figurines (see Pls. 10-11), metal objects like arrows, etc. (see Pl. 12), seals (see Pl. 9), stone tools, etc. were found and sold out by the illegal diggers in the illegal market.

Chronologically, this site looks like exactly that of Sohr Damb/Naal. It has various kinds of plain and beautifully decorated and quality pottery.

Site	Cultural Chronology		Age	Pottery/Ceramics	State of Site
Miri Sarhap, Zehri	Period IV	Mehrgarh VIII-Sibri	Bronze Age	Plain Pottery	Endangered
	Period III	Kulli	Middle Bronze Age	No Pottery, based on Kulli Animal Figurines	
	Period II	Naal	Chalcolithic/Early Bronze Age	Decorated sherds	
	Period I	KGM/Togau	Neolithic/	Decorated sherds	

Site	Cultural Chronology		Age	Pottery/Ceramics	State of Site
			Chalcolithic		

Table 19. Miri Sarhap Chronology and Salient Features (from the Present Researcher)

To sum up, this site yields many pottery cultures already reported many objects have already been the sites needs protection or at least a proper survey to document it completely before it is completely destroyed.

### 7.16.2 Kaali na Mash (*the Mountain of Kaali*), Zehri

This site is in Balbal Zehri village. It is 5 acres in diameter. This site is a like small mound with two wells on the top of it. They may have been dug by the illegal diggers. The collection of the pottery has been from the side of the mound. The tentative date of this site may be c.5000-2000 and historic. The locals think that this region was dominant in tribal system and tribes fought with each other. They also talk about a Hindu king who was a follower of *Kaali Maatha*. This site is named after *Kaali Maatha* as well.

#### 7.16.2.1 Pottery/Ceramics

This site yields different kinds of plain and decorated pottery related to different cultures (see Pl. 7). Apart from painted pottery, there were some grooved sherds found. The pottery is buff except for one sherd. The decorations are geometric with black color and sometimes red. Because of lack of time, these sherds are yet to be properly studied.

#### 7.16.2.2 Cultural Materials

The researcher only received pottery. However, according to locals, other materials include human and animal figurines, a figurine of *Kaali Maatha*, a metal/bronze oblong object, beads, stone tools, etc. which were dug out by illegal diggers. They surely have lost their context; they are most probably sold in the illegal market by now.

To conclude, this site in endangered and illegal diggers may destroy it so it is the duty of the accountable authorities to save this cultural site to study it detail in the future.

### 7.16.3 Eswarhi, Zehri

It is a site in is 15 km away from Chasma, Zehri in Khuzdar. The site is 300 acres in diameter. Moreover, it is endangered because it looks to be looted.

#### **7.16.3.1 Pottery/Ceramics**

Some pottery sherds were collected from this site (see Pl. 8). The sherds are mostly thick to medium thick but coarse in nature. All of them are not decorated but are buff wares. They seem to have been constructed with a sandy clay. They are not well fired. It can be assumed that globular jars can be one of the shapes included. Due to lack of time, these ceramics could not be properly studied, however.

#### **7.16.3.2 Cultural Material**

The researcher has received only pottery sherds for study purposes. This site yields structures of stone which are still visible (see Pl. 2). Moreover, locals claim that this site yielded semi-precious stone beads, and other materials. These materials have lost their context and are now sold in the illegal market for money.

There is a *Gabarband* beside this site which is most probably used by the inhabitants of this site most probably for irrigation purposes.

To sum up, these objects could have provided a wealth of information regarding their livelihood and cultural aspects. This site has been subjected to illegal digs. If the case prevails, then the site will vanish because of unscientific and illegal digs. The authorities must take abrupt actions to protect precious sites before they vanish away.

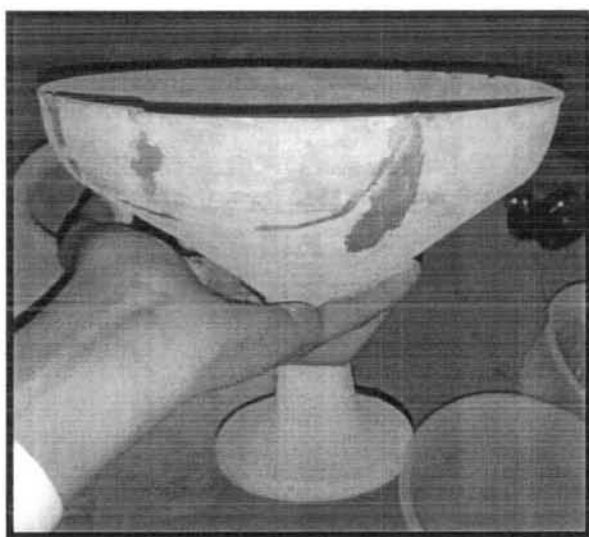
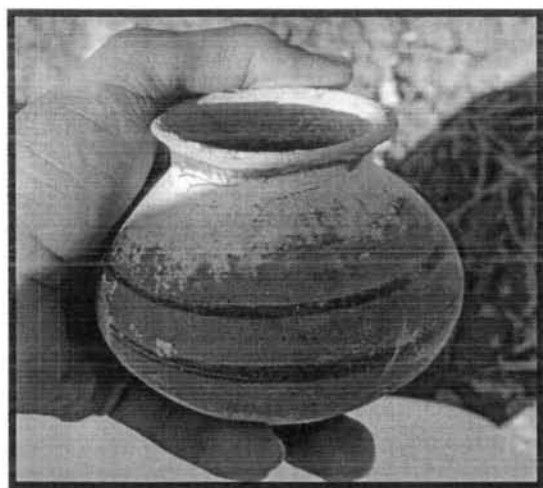
**Plates of New Discoveries in Khuzdar, Balochistan**



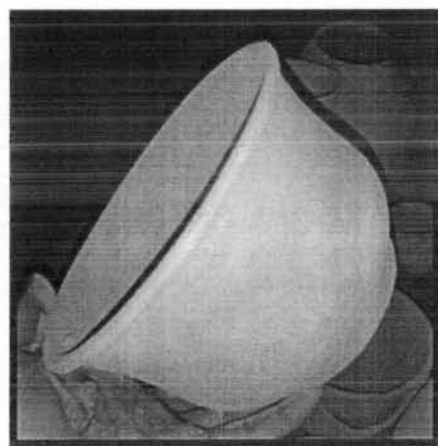
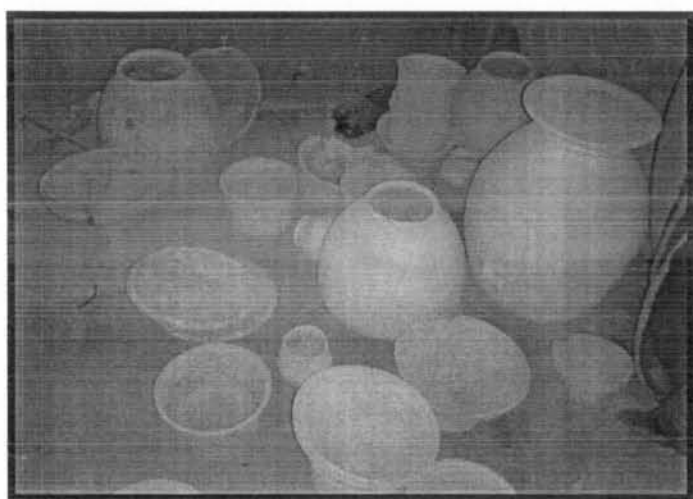
**Pl. 1. A Section of Miri Sarhap (from Bilal Zehri) Not to Scale**



**Pl. 2. Structures from Eswarhi (from Bilal Zehri) Not to Scale**

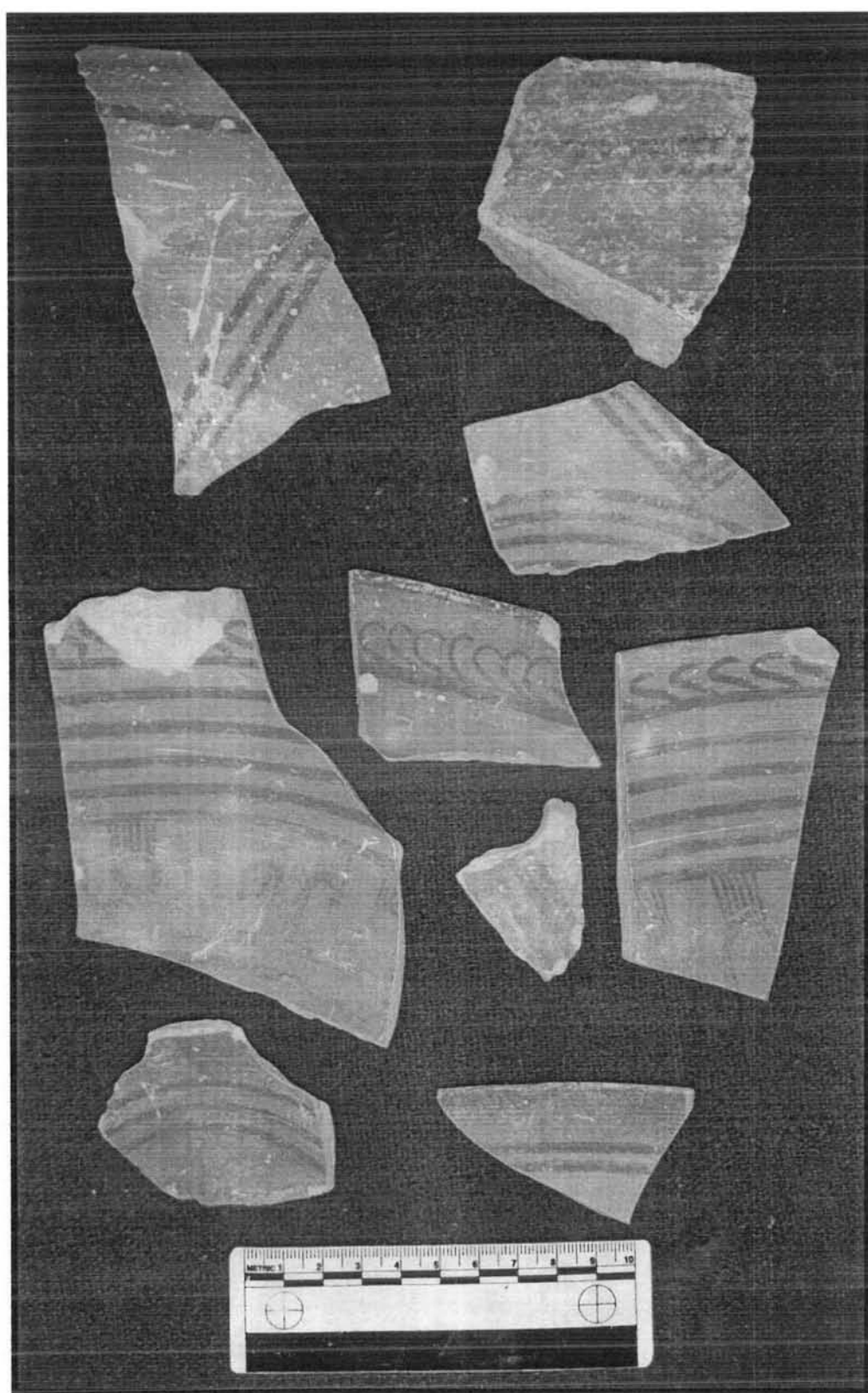


Pl. 3. Decorated and Plain Ceramics from Miri Sarhap (Bilal Zehri) Not to Scale



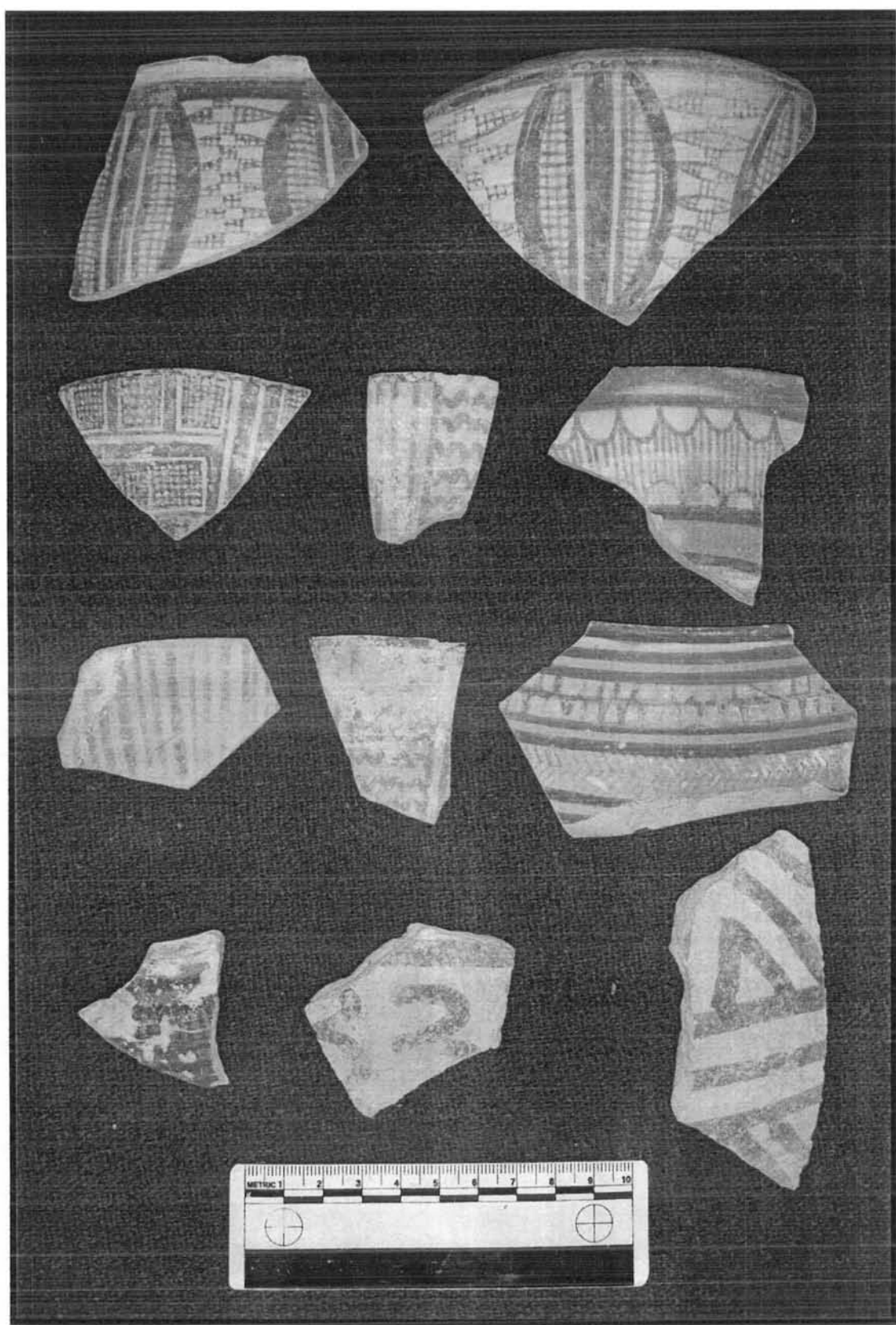
Pl. 4. Plain Wares from Miri Sarhap (from Bilal Zehri) Not to Scale



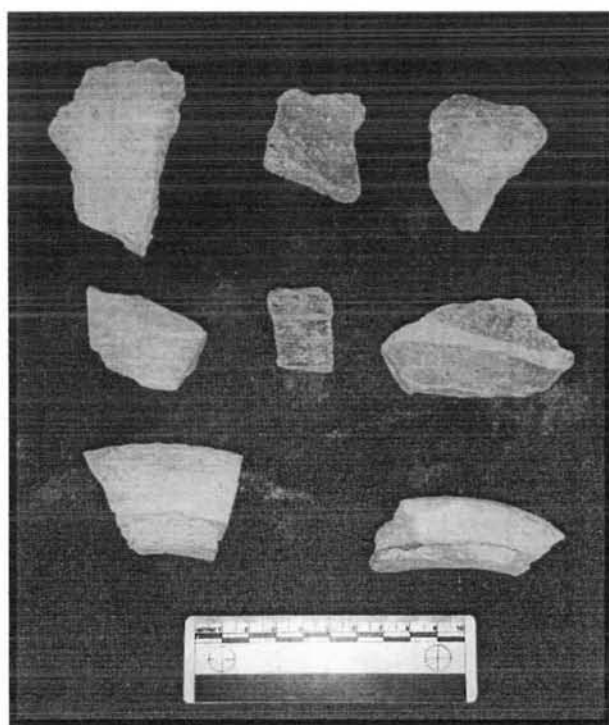


Pl. 5. Ceramic Sherds from Miri Sarhap (from the Present Researcher)

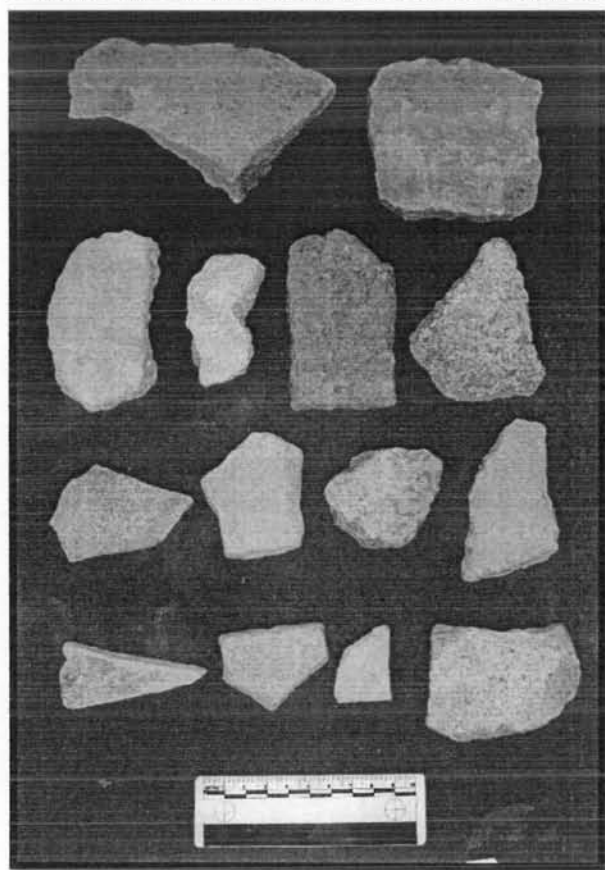




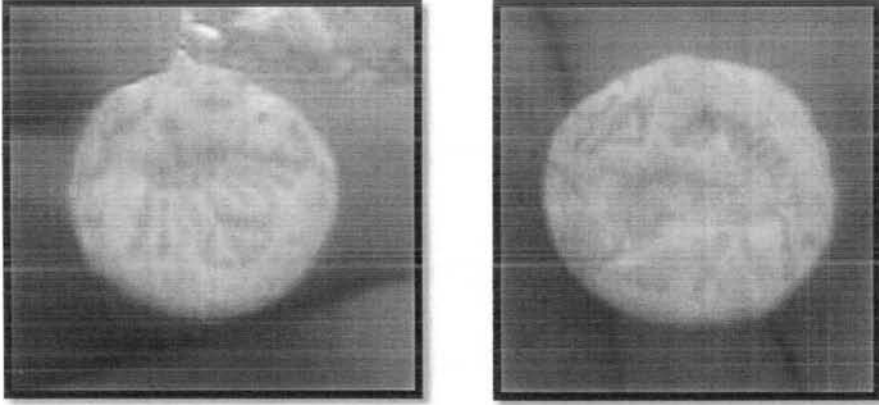
Pl. 6. Pottery Sherds from Mir Sarhap (from the Present Researcher)



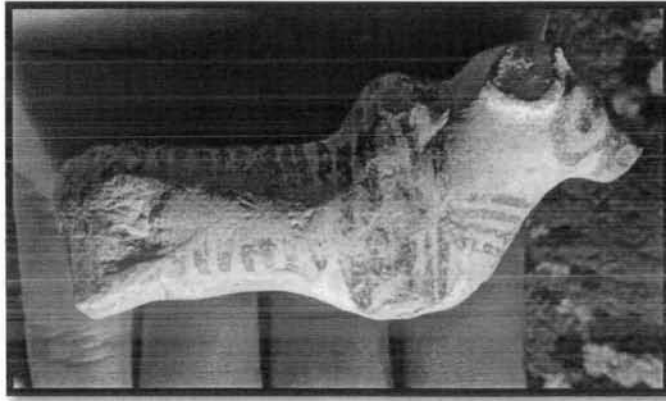
Pl. 7. Pottery Sherds from Kali na Mash (from the Present Researcher)



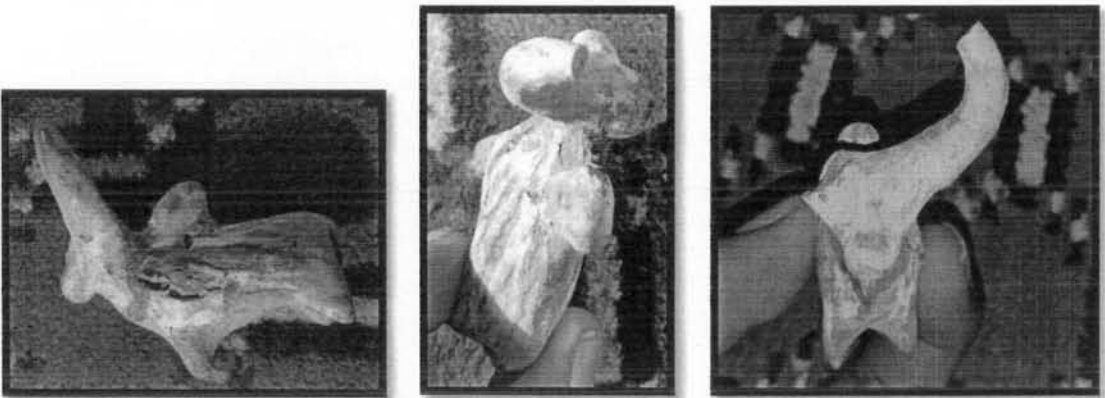
Pl. 8. Pottery Sherds from Eswarhi (from the Present Researcher)



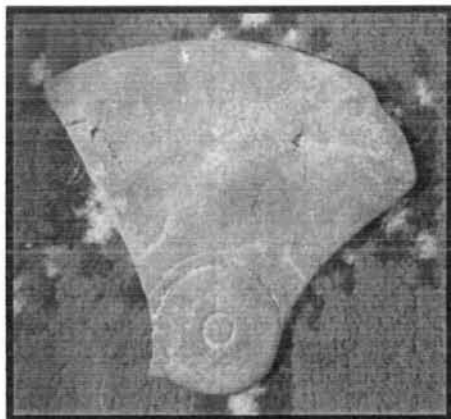
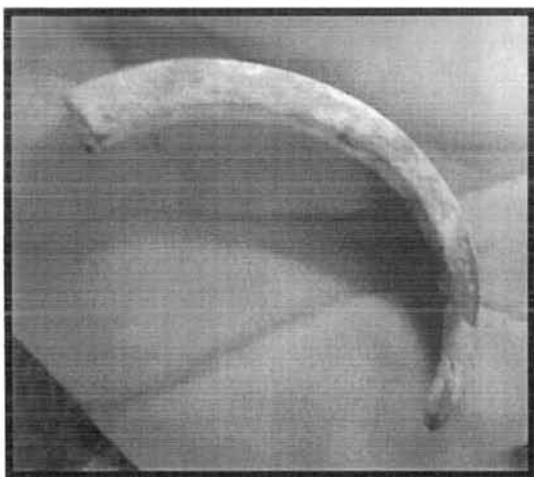
Pl. 9. Two seals from Miri Sarhap (from Bilal Zehri) Not to Scale



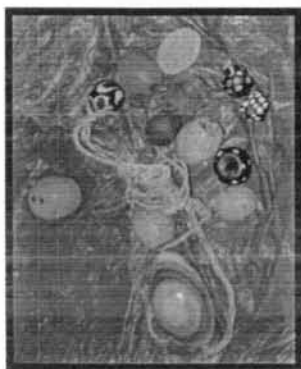
Pl. 10. Kulli Figurine from Miri Sarhap (from Bilal Zehri Not to Scale)



Pl. 11. A Figurine from Different Angles from Miri Sarhap (from Bilal Zehri) Not to Scale



Pl. 12. Copper/Bronze Objects from Miri Sarhap (from Bilal Zehri) Not to Scale



Pl. 13. Beads from Miri Sarhap (from Bilal Zehri) Not to Scale



Pl. 14. Beads from Sites (from Bilal Zehri) Not to Scale

## Conclusion

Balochistan is full of cultural heritage sites ranging from Palaeolithic to Historic times. This cultural heritage was discovered and studied by mostly archaeologists. This process has now taken over a century, yet unfortunately it still presents an incomplete picture of its unwritten history. Some of its regions are completely devoid of archeological researches since other scholars have followed the footsteps of the scholars like A. Stein, W. Fairervis, B. de Cardi, H. Field, R. L. Raikes, M. R. Mughal, to name a few. However, their works are of huge importance since they provide the basis for the Balochistan Archaeology. Presently Balochistan possesses more than five hundred prehistoric and protohistoric settlement sites, mostly settlements. They can be dated from Palaeolithic to Iron Age and are often multi-cultural settlements with several cultural periods. It is assumed that Balochistan province has the potential to possess thousands of sites (prehistoric, protohistoric or historic) to its name. Today, we know that it is still an unexplored zone and more researches are required to retrieve the full hidden history of the region.

Balochistan was first properly colonized in the Neolithic era c. 7250 BCE. The earliest culture that started from hunting and gathering largely alongside some domestication of animals and plants, develop at Mehrgarh Kacchi-Bolan region. This was the very beginning of settled life in Kacchi-Bolan at Mehrgarh, Balochistan. What attracted them and later others was the rich resources and strategic position of Balochistan like its few perennial rivers for watering fields, drinking, washing, etc., jungles with wild animals, plants and woods, lands for cultivation, clay to make pottery, copper to make objects, semi-precious stones to make beads and jewelry and stones for making architectural structures and *gabarbands* and sea coast for trading overseas, mountains for protection from the invaders, and many more.

Mehrgarh site in Kacchi-Bolan, Balochistan eradicated the prevailing misconceptions regarding the inception of Indus Valley Civilization after its extensive excavations. It also proved to be a site with no cultural gaps from Neolithic to Iron Age including Nausharo and Pirak. It shows life switching from hunting gathering to domestication of animals and plants and later urban life in Nausharo in Balochistan. It is the site with the earliest traces of dentistry and cotton production in the world known yet. Many 'firsts or earliest' emerged in the region from Mehrgarh site like Neolithic settlement, architecture, domestication of animal and plants,



figurines, pottery, emergence of wheel-turned pottery, seals, etc. Many cultures are known from these sites respectively as Aceramic, Ceramic, Kili Gul Mohammad/Togau, Kechi Beg, Quetta, (in Mehrgarh) Kot Diji, Harappan (in Nausharo), Early and Late Pirak (in Pirak). They developed architecture art and crafts of quality incomparable with its contemporaries in the neighboring. They developed a way of life never seen in the region before. What they started ultimately resulted to be Indus Valley Civilization in the vast region. Furthermore, Suthkagen Dor and Suthka Koh and Balakot were the trading posts for Harappan Civilization in Balochistan. Many other major Harappan settlements are in Balochistan like Judeirjo Daro, Pathani Damb, etc. Almost all these cultures developed indigenously from the Neolithic times in Balochistan.

There are more than twenty-four archeological and ceramic cultures (combined) that have been witnessed all over Pakistani Balochistan at different times and some even existed side by side at different areas. The reasons behind their decline are often uncertain. The Neolithic major cultures were Aceramic, and Ceramic Cultures. Chalcolithic and Bronze Age cultures were Kili Gul Mohammad<sup>127</sup>, Rana Ghundai Bull, Kechi Beg, Indo-Iranian Aceramic, Miri, Early and Late Shahi Tump, Quetta, Naal, Mian Ghundai/Damb Sadaat, Kot Diji, Dasht/Emir, Kulli, Harappan, Mehrgarh VIII-Sibri, etc., and Iron Age cultures were Early and Late Pirak and Londo. There are other pottery cultures like Jangal, Loralai, Rana Ghundai, Anjira, Periano Ghundai, etc. After having many recorded cultures, one can claim that Balochistan has once been a homeland of ancient cultures. Many of the cultures are yet to be discovered or identified. However, G. L. Possehl has accepted Balochistan as one of the homelands of Neolithic Cultures (2002c: 32). Thus, we could call Balochistan the home of cultures or a cultural civilization where most of these cultures started and ended up due to some uncertain reasons. The contemporary cultures often have similarities and differences at the same time. Similarities are most probably because of trade links or transfer of ideas and differences give these cultures a unique trademark and make them exceptional and identifiable. From all aspects, they maintain their respective places in the history of Balochistan and its making and transferring of different ideas which moved from Mehrgarh and reached us in refined form and are luckily very fine today. Furthermore, certainly there are more cultures in Balochistan

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<sup>127</sup> It is also a Neolithic culture.

which await discovery. However, the scholars were unable to form a clear chronology of the region; it is often confusing and leading towards misunderstandings. This aspect needs to be dealt carefully with further excavations at other sites to confirm their observations.

The architecture of the cultures or sites depended on the availability of the building material. They built their houses with mudbricks, stones or a combination of them. At Neolithic and Chalcolithic Mehrgarh, granaries were used to preserve cereals. The houses were usually square or rectangular. For roofing, as known from some sites, wood has been used. Wooden doors and windows must have also been used.

From earliest period at Neolithic Mehrgarh, these inhabitants started domesticating animals and plants for their subsistence. The major animals were cattle, goats, sheep and plants were barley and wheat all archaeological cultures. Moreover, other animals, fruits and vegetables were also domesticated too. The animals were used for traction, their skin, wool, horns, etc. This continued almost in all the later cultures. Balochistan owns largely a diverse but mostly a harsh climate and environment; it was the same in the ancient time. Yet, they battled the nature and found ways of living. Earlier, the people used simple canal system to water the fields. Togau, Naal, Kulli, Harappan, and Londo Horizon or Culture peoples built *gabarbands* to catch irrigable soil or water or to divert it to avoid danger.

The development of pottery in Subcontinent starts from Mehrgarh, Balochistan and is transferred to other cultures. Balochistan has produced the earliest pottery of South Asian or at least Subcontinent at Mehrgarh. In Ceramic Culture, the people introduced handmade Chaff-Tempered Ware and Basket-Marked Ware pottery in crude form and later wheel made pottery was introduced which can be regarded as the precursors. In the meanwhile, the Iranian sites did not know the art of pottery. Mehrgarh III (KGM/T Culture) became a center for pottery production and it was called a marketplace by J. Jarrige. Wheel was introduced in this region since no one was making wheel made ceramics, but the people of Ceramic Culture were. Starting from earlier times, there are handmade slab constructed, handmade basket constructed, handmade coil and basket constructed, slow wheel-made, fast wheel-made, etc. Though the technology developed, the old methods were still used in other cultures later but in refined form. Kili Gul Mohammad and Togau Wares are the earliest decorated ceramics in Subcontinent and Togau Ware is the first with animal motifs in this vast region. Kechi Beg,



Naal, Kulli, etc. are the most beautiful ceramics known in the region today either quality or decoration wise. Generally, the Quetta side cultures were influenced from each other a lot like Faiz Mohammad Ware and Quetta Ware have similar decoration motifs which are sometimes hard to identify; however, their time frame differs. The ceramics of Indo-Iranian borderland cultures i.e. Aceramic, Miri, Shahi Tump, Dasht/Emir, etc. were also found in Iranian Plateau which is geographically a part of Iranian Plateau. In the Late Bronze Age, Pirak Ware and then later Londo Ware is worth a mention for its quality and aesthetic sense. Overall, monochrome (largely using black) was prevalent in these cultures but bichrome (Togau, Kechi Beg, Naal, Dasht/Emir, Pirak, Londo Cultures) and polychrome (Kechi Beg, Jangal, Naal, Dasht/Emir, Pirak and Londo Cultures) later became common too. All of them used geometric motifs mostly but sometimes or occasionally plant and animal motifs were used too, particularly in combination. The decorations are mostly the same, particularly geometric, on many cultures but their organization, size, color, may differ. Moreover, sometimes the same decorations are used in other cultures but with modifications. Each culture portrayed a great sense of aesthetics. Furthermore, majority of the ceramic wares were well fired except for the earliest ones. However, there are other pottery types which have not yet been organized or named in different areas of Balochistan (Stein 1929; 1931; Fairervis 1956; 1959; Raikes 1968; de Cardi 1965; Mughal 1972; etc.).

The pottery of Sultan Shahwani's collection, Bilal Zehri's surveyed collection and the present researcher's survey collection are studied which can be related to different cultures and periods. They are mostly from Khuzdar region except for one site which is from Panjgur. The pottery collection of Sultan Shahwani included mostly plain ceramics with of different of shapes and sizes used for different purposes. However, some painted ceramics were present in them too. Almost all the ceramics are fine, and wheel thrown. They Kechi Beg, Togau C, Londo, etc. Wares. The plain wares were not studied yet due to lack of time. These ceramics were illegally excavated from Khuzdar or neighbouring districts. The researcher also witnessed this phenomenon at Londo site in Khuzdar. Almost all of them are wheel-turned. They represent amazing quality in their making and aesthetic sense. Moreover, the pottery sherds of Bilal Zehri from Khuzdar sites, particularly Miri Sarhap at Zehri represents many types of ceramics i.e. Togau, Kechi Beg, Naal, Mehrgarh VIII-Sibri, etc. A small-scale survey at Londo site has provided with sherds of Togau, Naal, Harappan, and Londo Wares. This

survey has helped in modifying the cultural chronology of the site. Furthermore, the pottery collection from Khudabadan Damb in Panjgur by the researcher are of KGM (one large sherd), Kot Diji (?) and others relate to Makuran cultures; they have not yet been properly studied because of lack of time at the end.

The earliest figurines of Pakistan appeared in Mehrgarh I. Almost each archaeological culture made figurines and there is diversity in them. They were mostly female figurines assumed as Mother Goddesses. Male figurines appeared in Mehrgarh VI. However, in Mehrgarh II was found which may be called a male figurine. They wore ornaments and had a variety of hair styles which shows that the people were stylish at that time. Later, figurines even wore some sort of turban. We could trace similar ornaments, hair styles and turbans even today in Balochistan. We could trace prevalent fashions from their hair styles. To add to the functionality of figurines, later it was claimed at Mehrgarh that they may have been used for rituals or religious and magic purposes as well. Some were most probably used as toys. One thing is worth noting that the female private part is never depicted on the figurines in Balochistan cultures which is worth a further study. The human figurines of Sultan Shahwani's collection are three recorded ones and some animal figurines. Among the human figurines, one is original with Indus script its back side. The other two figurines are fake ones and must have been copied from Mesopotamian type figurines, but both have some sort of script on their backs. Some cultures made animal figurines i.e. bulls, dogs, camels, horses, etc. sometimes they were painted too. Three bull (two painted and one unpainted) figurines represented Kulli Culture from the Sultan Shahwani's collection. Two animal pictures were provided by Bilal Zehri. According to locals they were excavated from Miri Sarhap. One is exactly Kulli painted bull figurine and the second is Zhob bull figurine.

Seals first appeared in Chalcolithic cultures. The earliest seal in Subcontinent was found from Mehrgarh IV. Later, the seals, mostly geometric, were found in many other cultures made of different materials as copper, bronze, bone, terracotta, semi-precious stones, etc. and shapes like square, rectangular, etc.; they must have been used for trade purposes like identifiers. The seals from Miri Sarhap with animal depictions may be related to Harappan Culture. The Sultan Shahwani's collection had two large stone weights with holes for hanging to weight. These stone weights are replicated and fake ones. They were replicated from Indo-Iranian

Borderland cultures egg-shaped weights. Moreover, the pictures of metal objects from Bilal Zehri yet be compared.

The ancient inhabitants of Balochistan made beads out of gold, copper, bronze, bone, and semi-precious stones i.e. lapis lazuli, carnelian, steatite, etc. and converted them into jewelry mostly. Bead making with different materials was common in all the cultures from the start. The stone beads were worked with bow drilling. The earliest beads of Pakistan or Subcontinent were discovered from Mehrgarh. They made round, long, oval, rectangular, etc. shaped beads. The beads pictures from Miri Sarhap seem to be from different cultures; however, further study is required to confirm this fact. However, they seem to belong from prehistoric to historic period.

The burial practices are found in Balochistan cultures are more or less being practiced today in different religions like burying in a pit with a protection wall known from Aceramic Culture is practiced by Muslims, cremation from Kulli Culture is known from Hindus, secondary burial practices from Aceramic and Ceramic Cultures still exist in Zoroastrians, etc. However, the Aceramic and Ceramic had a concept of after life and they buried their dead with objects. Similar concept existed among the cultures of Indo-Iranian borderland. At Naal Culture, multiple fragmentary burials with grave materials were found. In the later times, however, the dead were buried without grave goods or with few ornaments. In the Indo-Iranian cultures, they also buried their dead with objects with having a similar concept. In Mehrgarh VIII-Sibri Culture several types of burial practices were: cremation of body or bodies and placing them with grave goods, rectangular structures with objects, objects isolated in pit or rectangular ground and large upside-down jars with a pot or pots.

Many other technological aspects were also prevalent like stone tool technology, pyro-technology, and others. A certain time came when the pyro-technology was advanced and used in copper metallurgy, pottery, beads, pigments, bricks, etc. Economically, the cultures depended on arts and crafts and food surplus trading.

They traded finished goods and probably unfinished goods far and wide and bringing back what was not available in their locality. The cultures traded with international community in antiquity like with Gulf regions, Iran, Afghanistan, Indus Plain, Oman, Turkmenistan, etc.

Kulli Culture clearly had gone to trade as far as Mesopotamia. In the ancient time, these people, no matter to what culture or time they belong to, seem to be peaceful people in every age since there are no signs of battle in excavated sites. The presence of similarities and objects of different cultures in the other contemporary cultures clarifies that these cultures, some of which existing side by side at a certain period, traded with each other to meet their daily requirements or for exquisite objects from other cultures. They also may have traded perishable materials like food as well. Overall, the ancient cultures of Balochistan largely influenced other neighboring cultures but rarely were influenced from other cultures.

Leaving out major cities and towns, the inhabitants of Balochistan—whether Baloch or Pashtoons, still live a primitive style of life. They still live in mudbrick or stone houses or a combination of them; they domesticate animals and plants; they still wear jewelry made of different semi-precious stones, gold, etc., they still have the love for aestheticism as pottery drawings of different cultures particularly of Naal, Kechi Beg, Quetta, etc. are used on Balochi embroidery largely. The people still use palm mats to use them on the roofs, as mats to set on, etc. as did the people of Mehrgarh, Miri Qalat, Shahi Tump, etc. most probably have. Today, they still follow the same pattern of migration as in Aceramic and Ceramic cultures did long ago; they still find a stone to hammer something rather than a modern tool for hammering purposes.

Despite the variety and richness of cultural heritage, Balochistan has only few governmental museums and few non-governmental museums. They are not enough to house the large number of artifacts recovered from the sites of Balochistan. Because of this, cultural objects were usually sent out the province to other provincial museums. Museums are needed for the promotion of the cultural heritage of Balochistan which have been largely ignored. This is one of the major reasons the locals do not understand the value of cultural heritage. In 2019, National Museum of Karachi handed over thousands of artifacts from Balochistan; they are now to be exhibited in Quetta Museum in Quetta which is ready. Hence, there is a dire need of functional museums for Balochistan which could preserve the long and rich cultural heritage of Balochistan and encourage and enlighten its people for its protection. Such a rich and diverse cultural heritage in time and space has great potentials for opening great tourism possibilities since the security situation of Balochistan has become more peaceful.

The only hurdle is the investing and planning which needs to be given in enthusiastic, energetic and expertise team to take fruitful initiatives in this regard. The museums can play their role in cultural tourism. Sultan Shahwani's also wishes to open an official museum in Khuzdar where he could exhibit his collection for which the measures are being taken.

The mistreatment of cultural heritage is common in the shape of illegal diggings and illicit trafficking. It is due to the ignorance of the value and importance of it and in what way it can benefit the future generations. They are either doing it themselves or they are not stopping those who come for treasure hunting which alongside illicit trafficking is occurring at an alarming rate in Balochistan. Almost every second site is reported to have vandalized by such people. Yet there are no concerns regarding the protection of many important sites, though many have been vandalized and others will be if the situation remains the same. According to the Balochistan Antiquities Act, 2014, there are 101 protected sites of different nature (prehistoric, protohistoric and historic) (see Table 29 for the heritage list of protected sites); however, lamentably the observations have confirmed that only a few among them were protected, particularly Quetta sites, while most are open for antique mafia which is always active at sites with rich potentials. There are sites which should be given in the protection of some influential local people or post a legal watchman on the site to avoid illegal lootings of such sites. It is high time to take valid and accurate measures for their protections or else they will be no more. According to locals, the Periano Ghundai site have almost vanished now because of new constructions.

Because of the is great demand of artifacts from Balochistan all over the world, the illicit mafia have always been active in looting and transporting the rich cultural heritage all over the world. Before the partition, the excavated artifacts either went to Britain or today's India. Now many museums all around the world have Balochistan artifacts; these countries may be India, Britain, France, America, Japan, Italy, China, and many others. They are acting as encouraging machines for the treasure hunters and illicit traffickers because they just want to full their museums with quality and rich artifacts from all around the world.

To stop such heinous acts like illegal digging, illicit trafficking, and the like, an active archaeological department is required. It is a pleasure to write that recently the Directorate of Archaeology and Museums, Balochistan have been active and working. Recently, the

department received a developmental and non-developmental budget which is more than 110 million. Moreover, the efforts of the department have added more sites in the list of protected sites, working on the protection of five major sites i.e. Mehrgarh, Miri Qalat, Shahi Tump, Chaukandi Graveyard, and Chakar Fort, brought back thousands of artifacts from National Museum of Karachi which belonged to Balochistan, thousands of artifacts are being retrieved from foreign countries, built new building for a museum in Quetta city which will be functional soon, Jarrige award has been started which was given for the first time by C. Jarrige, more jobs are about to be announced, and the like.

There are lacunae in the archaeology of Balochistan; many regions either have never been archaeologically explored or they were not well explored. For example, Chaghi, Panjgur, Washuk, Naseerabad, Jhal Magsi, Jaffarabad, Kohlu, Dera Bugti, Bharkan, Musa Khel, Sherani, etc. were either partially explored or not explored at all.

## Tables of Balochistan Archaeology

Periods/ BCE	Indus Valley Tradition				Kacchi-Bolan		Quetta Valley	Zhob-Loralai		Kalat/Surab		Noushki	Makuran	
	Age	Era	Sta ge	Phases	MR <sup>128</sup> / Sibri	Nausharo	KGM <sup>129</sup> / DS <sup>130</sup>	RG <sup>131</sup> / SJ <sup>132</sup>	PG <sup>133</sup>	Anjira	Siah Damb	RZ <sup>134</sup> / J <sup>135</sup> /SD <sup>136</sup> /SK <sup>137</sup>	MQ <sup>138</sup> / ST <sup>139</sup>	SD <sup>140</sup>
1900	Late Bronze Age	Localization	7	Pirak	M-VIII/ Sibri	N-IV Sibri			?				MQ- IV Indus	SD
2000		Integration	6	Kulli (Harappan?)		N-III								
2100				Harappan (Kulli ?)	M-VIII	N-II								
2200	M-VII					N-I D							RG-IV	MQ- III c Dasht 2
2300					N-I C									
2400					N-I B	DS-III		RG-III c		MQ- III b Dasht I				
2500														
2600														
2700	Middle Bronze Age	Regional ization	5	Early- Mature Harappan Transition						Surface				

<sup>128</sup> Mehrgarh

<sup>129</sup> Kili Gul Mohammad

<sup>130</sup> Damb Sadaat

<sup>131</sup> Rana Ghundai

<sup>132</sup> Sur Jangal

<sup>133</sup> Periano Ghundai

<sup>134</sup> Rehmanzai

<sup>135</sup> Jatthi

<sup>136</sup> Siyah Damb

<sup>137</sup> Sevah Kalat

<sup>138</sup> Miri Qalat

<sup>139</sup> Shahi Tump

<sup>140</sup> Sutkagen Dor



Periods/ BCE	Indus Valley Tradition				Kacchi-Bolan		Quetta Valley	Zhob-Loralai		Kalat/Surab		Noushki	Makuran					
	Age	Era	Sta ge	Phases	MR <sup>128</sup> / Sibri	Nausharo	KGM <sup>129</sup> / DS <sup>130</sup>	RG <sup>131</sup> / SJ <sup>132</sup>	PG <sup>133</sup>	Anjira	Siah Damb	RZ <sup>134</sup> / J <sup>135</sup> /SD <sup>136</sup> /SK <sup>137</sup>	MQ <sup>138</sup> / ST <sup>139</sup>	SD <sup>140</sup>				
2800	Early Bronze Age		4	Kot Diji Gomal Sothi-Siswal Amri-Naal Quetta	M-VI	N-I A			PG-I (Upper)	A-IV	SD-III	RZ V SD IV SK III	MQ- III a Shahi Tump Cemetery Culture					
2900					M-V										DS-II	RG-III b	A-III iii	SD-II iii
3000																		
3100	Late Chalcolit hic		3	Naal Kechi Beg Tochi-Gomal Hakra (Ravi)	M-V	DS-I KGM-IV	RG-III a SJ-III	A-III ii		SD-II iii	RZ III J III SD II SK I	Hiatus						
3200																		
3300																		
3400	Middle Chalcolit hic Age			M-IV	M-III	KGM-III	RG-II SJ-II	Periano A	A-III i	SD-II ii-i	RZ II J II SD I	MQ-II/ ST-II						
3500																		
3600																		
3700	Early Chalcolit hic Age			M-II B	KGM-II	RG-I b SJ-I			SD-I	RZ I J I	ST-I ?							
3800																		
3900																		
4000																		
4100																		
4200																		
4300	Late Neolithic Age		2	KGM	M-II A	KGM-I	RG-I a ?											
4400																		
4500																		
4600																		
4700																		
4800																		
4900	Ceramic Neolithic Age		1	Emergence of Ceramic														
5000																		
5100																		
5200																		

Periods/ BCE	Indus Valley Tradition				Kacchi-Bolan		Quetta Valley	Zhob-Loralai		Kalat/Surab		Noushki	Makuran	
	Age	Era	Stage	Phases	MR <sup>128</sup> /Sibri	Nausharo	KGM <sup>129</sup> /DS <sup>130</sup>	RG <sup>131</sup> /SJ <sup>132</sup>	PG <sup>133</sup>	Anjira	Siah Damb	RZ <sup>134</sup> /J <sup>135</sup> /SD <sup>136</sup> /SK <sup>137</sup>	MQ <sup>138</sup> /ST <sup>139</sup>	SD <sup>140</sup>
5300														
5400														
5500	Aceramic Neolithic Age													
6500			0	Mehrgarh	M-I									
7250						I Lower								

Table 20. Cultural Chronology of Neolithic, Chalcolithic and Bronze Age Balochistan (from the Present Researcher)

References: J. Jarrige *et al.* 2013: 151-52, 167; J. Jarrige *et al.* 2011: 208; Franke 2008: 669; Hideaki 2013: 109-111; Naseer 2017: 164; Shaffer 1992b: 426-27; Asthana 1985: 220, 222; Michael Jansen *et al.* 1991: XII; Shudai *et al.* 2010: 59; Ayumu *et al.* 2012: 144; Ayumu *et al.* 2011: 78; Mutin 2006: 178

Periods BCE	Indus Valley Tradition				Awaran/Khuzdar			Las Bela	Kacchi-Bolan	Sind and Balochistan			Gomal Valley	Turkmenia		Iran			Bactria/Afghani stan
	Age	Era	Stage	Phases	Kulli and Mehi (Stein )	Nindo wari	Naal	Bala Kot	Pirak	Amri	Kot Diji	Indus	Gumla	Nam azga	Altin Tepe	Tepe Yahya	Shahr-e-Sokhta	Bampur	Mnudig ak
600/800	Late Bronze	Localization	8	Pirak					P-III C										
900									P-III B										
1000									P-III A?										
1100									P-II										
1200																			
1300			P-I A P-I B						A. IV	Cemete ry H	N-VI	N-VI							
1400																			
1500																			
1600																			
1700																			
1800										7								N-V	

Periods BCE	Indus Valley Tradition				Awaran/Khuzdar			Las Bela	Kacchi-Bolan	Sind and Balochistan			Gomal Valley	Turkmenia		Iran			Bactria/Afghani stan																											
	Age	Era	Stage	Phases	Kulli and Mehi (Stein )	Nindo wari	Naal	Bala Kot	Pirak	Amri	Kot Diji	Indus	Gumla	Nam azga	Altin Tepe	Tepe Yahya	Shahr-e-Sokhta	Bampur	Mnudig ak																											
1900	2000			Kulli (Harappan?)	Mehi-IV	Nindo III				A-III c/d		Late Indus III	G-V?		1	Yahya IVA																														
2000					Mehi-III					Naal IV?			Aban doned							A-III b	2	G-IV?	3	Yahya IV B	Shahr-e-Sokhta IV (Phases 1)	Bampur V-VI 1																				
2100					Mehi-II																						Naal III. 1-4	Bala Kot I	A-II	4	G-II	9	Shahr-i-Sokhta II (Phases 7-5)	Bampur V-VI	Mundigak IV 1-4											
2200	2300	Integration	6	Harappan (Kulli ?)	Kulli V (II/X)	Nindo II		Bala Kot II		A-III a	3	Urban Indus II	G-III?	N-IV	4	Yahya IV B	Shahr-e-Sokhta IV (Phases 1)	Bampur V-VI 1	Gap?																											
2300					Gap															Naal IV?	Aban doned	A-III b	2	G-IV?	3	Yahya IV B	Shahr-e-Sokhta IV (Phases 1)	Bampur V-VI 1																		
2400					Kulli V (I) (I/VII I)																								Naal III. 1-4	Bala Kot I	A-II	4	G-II	9	Shahr-i-Sokhta II (Phases 7-5)	Bampur V-VI	Mundigak IV 1-4									
2500					Kulli IV																																	Naal III. 1-4	Bala Kot I	A-II	4	G-II	9	Shahr-i-Sokhta II (Phases 7-5)	Bampur V-VI	Mundigak IV 1-4
2600																																														
2700																																														

Periods BCE	Indus Valley Tradition				Awaran/Khuzdar			Las Bela	Kacchi-Bolan	Sind and Balochistan			Gomal Valley	Turkmenia		Iran			Bactria/Afghanistan											
	Age	Era	Stage	Phases	Kulli and Mehi (Stein )	Nindowari	Naal	Bala Kot	Pirak	Amri	Kot Diji	Indus	Gumla	Namazga	Altin Tepe	Tepe Yahya	Shahr-e-Sokhta	Bampur	Mundigak											
2800	Early Bronze		4	Kot Diji, Gomal, Amri-Naal and Quetta			Naal-II. 1-4			A-I	16			N-III	10	Yahya IV C	Gap? Shahr-e-Sokhta I (Phases 10, 9, 8)		Mundigak III 1-3											
2900																				Gap										
3000																														
3100	Late Chalcolithic																		3	Kot Diji, Gomal, Sothi-Siswal Amri-Naal, Quetta		Naal-I. 2					?		G-I	
3200																														
3300	Middle Chalcolithic																													
3400																														
3500	Early Chalcolithic																													
3600																														
3700																														
3800																														
3900																														
4000																														
4100																														
4200																														

Table 21. Cultural Chronology of Balochistan with Other Affiliated Regions (from the Present Researcher)

References: Jarrige *et al.* 2011: 208; de Cardi 1983: 7; Franke 2008: 669; Asthana 1985: 220, 222; Besenval and Didier 2004: 162; Shaffer 1992b: 426-27; Michael Jansen *et al.* 1991: XII; Franke-Vogt 2001: 249; Hideaki *et al.* 2013: 111-12; Shudai *et al.* 2010: 59; Ayumu *et al.* 2012: 144; Ayumu *et al.*

2011: 78

Stages	Name of the Stages	Time Period	Salient Features
1	Pastoralism with Limited Cultivation	KGM I-II Rana Ghundai Ia Sur Jangal I Anjira Dabar Kot Periano Ghundai (c. 7000-4000 BCE)	<ul style="list-style-type: none"> <li>Transformation from hunting-gathering to settled life</li> <li>Domestication i.e. of cattle, goats and sheep and limited cereal</li> <li>Lithic, stone tool and bone tool industry</li> <li>Handmade ceramics, frequently basket-marked and some crudely painted ones</li> <li>Small houses of crude bricks or <i>pisé</i> with hearths</li> <li>Semi-nomadism and seasonal movement</li> </ul>
2	Developed Cultivation and Pastoralism	KGM III-IV Damb Sadaat I Rana Ghundai Ib-II Periano Ghundai Mughal Ghundai Sohr Damb/Naal (c. 4000-3000 BCE)	<ul style="list-style-type: none"> <li>Larger and more substantial houses constructed with mudbrick, boulder and cut stones</li> <li>Permanent village life</li> <li>Handmade and wheel-made painted and plain ceramics; painted with geometric and abstract paintings (emergence of polychrome) and potters' marks occur</li> <li>Wide use of copper, stone bead cutting, rushing and weaving</li> <li>Burials</li> <li>Perhaps goats, sheep and cattle herded with seasonal movement</li> <li>General similarity in the material and Influences from northern Iran</li> </ul>
3	Fully Developed Sedentary Village Life	Damb Sadaat II Sur Jangal III Rana Ghundai III Dabar Kot Periano Ghundai Mughal Ghundai Anjira IV and surface Kulli Mehi Naal Edith Shahr Niai Buthi Judeirjo Daro Gandhava (c. 3000-2300 BCE)	<ul style="list-style-type: none"> <li>Complex village life</li> <li>Many villages with bigger size</li> <li>Variety of copper and bronze objects</li> <li>Terracotta gross female and cattle figurines</li> <li>Seals, unpainted terracotta bangles, alabaster vessels, etc.</li> <li>Large number of pottery shapes, variety of painted motifs as geometric and zoomorphic i.e. pipal leaves, humped bulls, snakes, birds, and fish, Potters' marks system, etc.</li> <li>Indianization in process and movement of villagers towards alluvial plains i.e. Indus</li> <li>Burials inside houses</li> <li><i>Gabarbands</i> or dams associated with some sites</li> <li>Interregional contacts maintained as seen in the similar and different artifacts</li> <li>Early Harappan or mature phase</li> <li>Clear influence from northern Iran on the cultures of this phase</li> </ul>
4	The Period of Urbanization	Damb Sadaat III	<ul style="list-style-type: none"> <li>Cities/towns and urban development with monumental buildings with drains</li> </ul>

Stages	Name of the Stages	Time Period	Salient Features
		Rana Ghundai III-IV Dabar Kot Periano Ghundai-Zhob cult Nindowari Kulli Mehi Edith Shahr Balakot Sutkagen Dor Suthka Koh Judeirjo Daro Dabar Kot (c.2300-1600 BCE)	<ul style="list-style-type: none"> <li>Pottery painted from earlier period designs and new ones</li> <li>Continuation from previous stage in general aspects</li> <li>Goggle eyed female figurines with prominent breasts and heavy ornaments and painted cattle figurines</li> <li>Lapis lazuli, carnelian, agate, steatite, serpentine beads and clay and steatite seals, copper and bronze objects, stone and bone tools as in earlier stage</li> <li>The monumental structures occurred either separate from the villages or with the villages</li> <li>Emergence of full-time workers like potter, metal smith, weaver, seal maker, figurine maker, constructor, or toy maker</li> <li>Greater uniformity</li> <li>Contacts with the outside world like Mesopotamia, Iran, etc.</li> </ul>
5	<b>Economic Decline and the General Abandonment of the Indo-Iranian Borderlands by Farmers of Developed Villages<sup>141</sup></b>	Pirak (c. 1600-300 BCE)	<ul style="list-style-type: none"> <li>Villages were mostly abandoned except for few big ones in Balochistan but deteriorating conditions.</li> <li>Decline in building structures, quality artifacts and economy</li> <li>Late Harappan flourished in Punjab and in Gujrat and people of Balochistan and Sindh moved east wards by leaving the villages</li> <li>Arrival of new people and cultures and only few conflicted the older occupants of the region</li> </ul>

**Table 22. One of the Earliest Classifications of Balochistan Data by Fairservis (from the Present Researcher)**

References: Fairservis 1967: 5-16; 1979: 68-75; 1984: 282-86; 1989: 133-40

MR. <sup>142</sup> Periods	Time Frame	Area	Age	Parallels	Salient Features/Findings
I	c. 7250-5500 BCE	MR. 3 and MR. 4	Aceramic Neolithic	KGM <sup>143</sup> I	<ul style="list-style-type: none"> <li>With no pottery</li> <li>Domestication of animals i.e. cattle, sheep and goats and plants i.e. barley and wheat which continues in all periods</li> <li>Hunting of wild game</li> </ul>

<sup>141</sup> W. Fairservis believed this stage did not affect the Balochi culture that is why he did not include it in the specific article discussing Balochistan stages.

<sup>142</sup> Mehrgarh

<sup>143</sup> Kili Gul Mohammad

MR. <sup>142</sup> Periods	Time Frame	Area	Age	Parallels	Salient Features/Findings
					<ul style="list-style-type: none"> <li>• Earliest dentistry</li> <li>• Earliest human figurines</li> <li>• First architects of South Asia</li> <li>• Dead buried with offerings</li> <li>• Grain storage facilities</li> <li>• They wore imported semi-precious stones</li> <li>• Human and animal figurines which continued in every period</li> <li>• Reed baskets coated with bitumen</li> </ul>
<b>IIA</b>	c.5500-5000 BCE	MR. 3 and MR. 4	Ceramic Neolithic	KGM II	<ul style="list-style-type: none"> <li>• Earliest pottery (handmade) in Pakistan</li> <li>• Earliest traces of cotton in the world</li> <li>• Evidences of dates</li> <li>• Grain storage facilities</li> <li>• A grooved elephant tusk which is the earliest ivory work Subcontinent</li> </ul>
<b>IIB</b>	c.5000-4500 BCE	MR. 4 (upper layers)	Advance Ceramic Neolithic or Late Neolithic	KGM III Mundigak I (1-3)	<ul style="list-style-type: none"> <li>• Increase and finer ceramics</li> <li>• Earliest decorated wares in South Asia or Subcontinent</li> <li>• Earliest slow wheel in South Asia</li> <li>• Storage pottery jars</li> </ul>
<b>III</b>	c.4500-3700 BCE	MR. 2	Early Chalcolithic	KGM III Mundigak I (1) Togau A	<ul style="list-style-type: none"> <li>• Same domesticated animals and plants (more in quantity) adding few others</li> <li>• Innovation of fast wheel</li> <li>• Copper objects</li> <li>• Craft production center</li> <li>• Trade center</li> <li>• Figurines rare</li> <li>• Storage facilities</li> <li>• Dead buried without goods or only with few ornaments</li> <li>• Bead workshops</li> </ul>
<b>IV</b>	c.3700-3400 BCE	MR. 1: Main Mound	Middle Chalcolithic	Damb Sadaat I Togau B-C Amri IA	<ul style="list-style-type: none"> <li>• Earliest polychrome ceramics discovered in Balochistan</li> <li>• Earliest seals; Bone and terracotta seals appeared</li> <li>• Storage ceramics</li> <li>• Figurines continued</li> <li>• A wooden lentil over a door</li> </ul>



MR. <sup>142</sup> Periods	Time Frame	Area	Age	Parallels	Salient Features/Findings
V	c.3400-3100 BCE	MR. 1: Main Mound	Late Chalcolithic	Togau D Mundigak II	<ul style="list-style-type: none"> <li>• Earliest evidences of wine grapes in Balochistan</li> <li>• Storage ceramics</li> <li>• First gray wares</li> </ul>
VI	c.3100-2800 BCE	MR. 1 Main Mound	Early Bronze Age	Damb Sadaat II Mundigak III Shahr-e- Sokhta I Rehman Dheri I Amri IIA	<ul style="list-style-type: none"> <li>• Variety of ceramics</li> <li>• Large scale ceramic production</li> <li>• Human and animal figurines</li> <li>• Limited metal objects</li> <li>• Stone and bone tools</li> </ul>
VII	c.2800-2500 BCE	MR. 1 Main Mound	Middle Bronze Age	Damb Sadaat III Mundigak IV Shahr-e- Sokhta II Kot Dijji Amri IIB	<ul style="list-style-type: none"> <li>• A monumental mudbrick platform</li> <li>• Buildings and storage rooms with storage jars</li> <li>• Traces of wooden lintels</li> <li>• Mass production of female and male figurines</li> <li>• Sorghum and millet introduced</li> <li>• Human and animal figurines</li> <li>• Many stamp seals</li> </ul>

**Table 23. Mehrgarh at a Glance**

References: Jarrige and Lechevallier 1997; C. Jarrige *et al.* 1995; J. Jarrige *et al.* 2013

Indus Valley Tradition	Balochistan Tradition	Helmand Tradition
Early Food Producing Era Mehrgarh Phase	Early Food Producing Era Mehrgarh Phase	Early Food Producing Era Ghar-i-Mar Phase <sup>144</sup>
Regionalization Era  Balakot Phase Amri Phase	Regionalization Era Kacchi Phase Kili Gul Mohammad Phase	Regionalization Era  Mundigak Phase Helmand Phase

<sup>144</sup> It is not present in J. Shaffer's table because its report was published later so scholars have included it in the list (Kenoyer 1991: 341).

Indus Valley Tradition	Balochistan Tradition	Helmand Tradition
Hakra Phase Kot Diji Phase	Sheri Khan Tarakai Phase <sup>145</sup> Kechi Beg Phase Damb Sadaat Phase Naal Phase	
<b>Integration Era</b> Harappan Phase		<b>Integration Era</b> Shahr-e-Sokhta Phase
<b>Localization Era</b> Punjab Phase Jhukar Phase Rangpur Phase	Kulli Phase Periano Phase Bampur Phase Pirak Phase	<b>Localization Era</b> Seistan Phase

**Table 24. Archaeological Traditions of Northwestern South Asia (from Shaffer 1992b: 441)**

**Stage One:** Beginnings of village farming communities and pastoral camps

Kili Gul Mohammad/Mehrgarh Phase (7250-5000 BCE)

Burj Basket-Marked/ Basket-Marked Phase (5000-4300 BCE)

**Stage Two:** Developed village farming communities and pastoral societies and expansion of sites

Togau Phase (4300-3800 BCE)

Kechi Beg Phase (3800-3200 BCE)

Hakra Wares Phase (3800-3200 BCE)

Ravi Phase (3600- 3300 BCE)

**Stage Three:** Early Harappan four phases thought to have been generally contemporaneous

Amri-Naal Phase (3500-2700 BCE)

Kot Diji Phase (3100-2700 BCE)

Sothi Siswal Phase (3100-2700 BCE)

Damb Sadaat Phase (3100-2700 BCE)

**Stage Four:** The Transition from Early Harappan to Mature Harappan

(a) Early Mature Harappan Transition (2700-2600 BCE)

(b) Copper Hoard and O.C.P. Tradition (2800-1500 BCE)

**Stage Five:** Mature Harappan phases thought to be generally contemporaneous

<sup>145</sup> It was later added by scholars (Kenoyer 1991: 341).

Sindhi Harappan Phase	(2700-2000 BCE)
Kulli Harappan Phase	(2700-2000 BCE)
Sorath Harappan Phase	(2600-2000 BCE)
Panjabi Harappan Phase	(2700-2000 BCE)
Eastern Harappan Phase	(2600-2000 BCE)
Two related Phases in adjacent regions thought to be generally contemporaneous with the mature Harappan	
Quetta Phase	(2560-2000 BCE)
Late Kot Diji Phase	(2600-2000 BCE)
<b>Stage Six:</b> Post-urban Harappan	
Jhukar Phase	(2000-1800 BCE)
Early Pirak Phase	(1800-1000 BCE)
Late Sorath Harappan Phase	(2000-1600 BCE)
Lustrous Red Ware Phase	(2000-1400 BCE)
Cemetery H Phase	(2000- 1500 BCE)
Swat Valley Period IV	(1650-1300 BCE)
Late Harappan Phase in Haryana and Western Utter Pradesh	(2000-1500 BCE)
Late Harappan-Painted Gray Ware Overlap Phase	(1600-1500 BCE)
Early Gandhara Grave Culture Phase	(1900-1000 BCE)
<b>Stage Seven:</b> Early Iron Age of Northern India and Pakistan	
Late Pirak, Lahura-Deo Phases	(1000-700 BCE)
Painted Gray Ware	(1600-500 BCE)
Late Gandharan Grave Culture	(1000-600 BCE)

**Table 25. Absolute Chronology of Indus Age Including Balochistan Chronology**  
References: Possehl 1999: 23, Modified by the Present Researcher

Cultural Phases of Balochistan	Sites	Time Frame	Major Characteristics/Salient Features/Major Findings
Kili Gul Mohammad/ Mehrgarh Phase	Mehrgarh I KGM I	c. 7250-5000 BCE	The prominent characteristics are its pre-pottery culture and domestication of plants i.e. barley and bread wheats and animals i.e. cattle, sheep and goats. Mudbrick houses and objects like stone and bone tools, hearths, etc. were recorded. Furthermore, number of burials coated with red ochre mostly in simple pits and with grave offerings as personal ornaments made of semi-precious stones and goats. There is presence of internal and long-

Cultural Phases of Balochistan	Sites	Time Frame	Major Characteristics/Salient Features/Major Findings
			distance trade in the artifacts (see Aceramic Culture for more information) (Shaffer 1986: 66-8)
<b>Burj Basket-Marked/ Basket-Marked/ Kacchi Phase</b>	Mehrgarh IIA KGM I-II	c.5000-4300 BCE	It marks the Ceramic Culture. The indigenous coarse pottery was placed in baskets and fired with it which left its impressions. Mudbrick buildings, granaries to store grains, graves and grave goods as in the previous phase, clay human and animal figurines, domestication of the same animals and plants including some more kinds of barley and jujube and date seeds were also found (see Ceramic Culture for more details) (Shaffer 1986: 69-70).
<b>Togau Phase</b>	Mehrgarh IIB-III KGM II-III Surab I-II Sur Jangal I-II Rana Ghundai I-III Early Dabar Kot Early Periano Ghundai? And others	c.4300-3500 BCE	Thin, plain, finer, wheel made pottery, some with simple and later complex geometric designs were recorded; in later periods, pottery becomes finer and is now also painted with geometric and zoomorphic designs. The pottery types are KGM, Togau, Jangal Painted, Wet Wares, etc. Mehrgarh III becomes a regional ceramic center. Other objects included human and animal figurines, bangles, rattles, ornaments of beads from lapis, carnelian, steatite, and shells, few copper rods, pins and crucibles with copper ore, a fragment of compartmented copper amulet or seal, burials with few grave goods (see KGM/T Culture for more details) (Shaffer 1986: 71-3).
<b>Kechi Beg Phase</b>	Mehrgarh IV, V KGM IV Damb Sadaat I Surab III Late Sur Jangal III-IV Rana Ghundai III-IV Perhaps Dabar Kot and Periano Ghundai	c.3500-3000 BCE	More complex decorations, finer pottery with improved firing technique were introduced. The ceramics included mainly Kechi Beg Ware and few KGM Ware, etc. At Mehrgarh IV, mud brick structures were located with "a series of rooms and open areas associated with habitation activities". Female figurines, steatite, terracotta and bone seals having geometric motifs, etc. There is a decrease in lithic cutting tools and increase in metal tools. Animal and plant records have also been found too (Shaffer 1986: 75-7).
<b>Damb Sadaat Phase</b>	Damb Sadaat II-III Mehrgarh VI-VII	c.3200-2600 BCE	In this phase, Mehrgarh was a local pottery production center. The potteries include monochrome red ware, a local variety of Quetta Ware, Faiz Mohammad Ware, polychrome wares with geometric, animal and plant designs, etc. are associated with this phase. Rectangular mud brick dwellings, open specialized working areas and large mud brick platforms which is regarded the first public/monumental architecture found in Mehrgarh

Cultural Phases of Balochistan	Sites	Time Frame	Major Characteristics/Salient Features/Major Findings
			VII. Moreover, other objects consist of large number of terracotta human figurines with coiled hair, ornaments, etc. (identical to Zhob mother goddesses), standing male figurines wearing turban-like hats in Mehrgarh VII, and several animal figurines, terracotta circular or square seals, beads, bangles, house models are in the recorded in this phase. The other lithic objects included semi-precious stone beads like lapis lazuli, carnelian, steatite, alabaster bowls, and steatite geometric seals. The copper/bronze objects are rare, and they included functional tools and pins with decorative designs. Sheep, goats, cattle and wheat and barley were the main subsistence. They indulged in internal and external contacts as attested in the material culture. Their contacts were broader and intensified (Shaffer 1986: 77-80).
Balakot Phase	Balakotian Levels	c. 3100/3000-2600 BCE	Wheel made or a combination of wheel and handmade ceramics painted with black, brown and randomly green and red having geometric, floral and flora designs and with potters' marks were produced <sup>146</sup> . Multi-celled rectangular mudbrick dwellings and possible mudbrick platforms were discovered. Terracotta bull figurines, beads and a scoop were also recorded. Lithic objects and semi-precious stone and shell beads and copper/bronze objects. The economy was based on hunting and shellfish gathering, cattle, somewhat goats and sheep were domesticated with barley and gourd or melon. They had internal and external trade links (Shaffer 1986: 73-5).
Kot Diji Phase including Late Kot Diji Phase	Kot Diji Nausharo Kotra Karezgai	c. 3200-2600 BCE/ c. 2500-1900 BCE	See Kot Diji Culture
Faiz Mohammad Phase	Mehrgarh VI-VII Mundigak III-IV Shahr-e-Sokhta I-IV	c. 3000-2600 BCE	FMW forerunners appeared in Mehrgarh V. The pottery is decorated with geometric, naturalistic and floral designs using largely monochrome colors. Mehrgarh VII became a ceramic center. Female, male and animal figurines were produced in great number. Moreover, the other cultural repertoire included beads with semi-precious stones which show outer contacts, stone tools, steatite stamp seals, copper and bronze objects. Burials were also found with grave goods (see also Quetta Ware/Culture for more details) (Shaffer 1992a: 254-57).

<sup>146</sup> Now considered a Naal variant/type

Cultural Phases of Balochistan	Sites	Time Frame	Major Characteristics/Salient Features/Major Findings
<b>Periano Phase</b>	Rana Ghundai III-IV Dabar Kot and Periano Ghundai Surface Collections	c.3000-2300 BCE	It is only found in northern Balochistan and it is contemporary with Damb Sadaat phase. Periano Painted Ware and Faiz Mohammad Painted Ware <sup>147</sup> are the major pottery found in this phase. Some artifacts suggest contacts with the Harappans. There is not much information about this phase (Shaffer 1986: 81-2).
<b>Naal Phase</b>	Sohr Damb/Naal II Niani Buthi I Nindowari I Surab III-IV	c.3100-2700 BCE	It has a beautiful, distinct, quality pottery with particularly polychrome geometric and zoomorphic designs. Rectangular mud brick structures on stone foundations were found at Sohr Damb/Naal and Nindowari. At Sohr Damb/Naal, stone tools, beads and copper/bronze artifacts were associated with them. The pottery was often found from burials (Shaffer 1986: 83). This phase is associated with water management system i.e. the <i>gabarbands</i> (see Naal Culture for more details) (Fairervis 1971: 171-72).
<b>Kulli Phase</b>	Kulli Mehi Nindowari II-III Niai Buthi II Sohr Damb/Naal	c.2600-1900 BCE	This phase is found mainly in southern Balochistan. Kulli Ware is the characteristic pottery with geometric and zoomorphic decorations in mostly black in variety of shapes. Other objects included beads, miniature cartwheels and frames, beads, and human and animal figurines. The human figurines lack sexual features but wear necklaces, bird like faces, and elaborate coiffures. Moreover, there were shell bangles, alabaster or steatite bowls, semi-precious stone beads, and copper/bronze tools, bangles, pins, and mirrors were found (Shaffer 1986: 84). Monumental/public structures were found at Nindowari and Niai Buthi. "Constructed with large stone slabs, mud and fired bricks, and clay plaster, these buildings formed rectangular units enclosed by walls. The most interesting type of structure consisted of a series of clay platforms and stone substructures with a step-like profile of ramps or stairs connecting various levels. A large stone structure divided into small rooms may have been a granary at Nindowari" (see Kulli Culture for details) (Shaffer 1986: 85).
<b>Harappan Phase</b>	Nausharo II-III Balakot Harappan Levels Suthkagen Dor Suthka Koh Pathani Damb	c.2600-1900 BCE	This phase is the representation of the peak of one of the world's ancient civilizations. The material culture and features show no specific differences in Balochistan than those in the Indus Valley. Economically, they were strong, and they planted barley, pulses, and melons and cotton to some limit. They had a double cropping system in Balochistan particularly at Balakot. They used irrigation or inundation system for irrigating the crops. Predominantly cattle were domesticated but sheep and goats were domestication as well. Moreover, water

<sup>147</sup> However, this ware is also associated with FM Phase.

Cultural Phases of Balochistan	Sites	Time Frame	Major Characteristics/Salient Features/Major Findings
	Dabar Kot Judeirjo Daro		buffalo and nilgai were reported too. Remains of shellfish and fish were increasingly found. The shellfish is related to the shell bangle industry found at Balakot. "This economic information suggests that the production of shell objects, cotton and perhaps dried fish may have been the important economic reasons for establishing coastal Harappan settlements like Balakot, [Suthkagen Dor and Suthka Koh], rather than the usually proposed explanation of trade with groups to the west". These sites are mostly on eastern and southern parts of Balochistan. However, one site, Dabar Kot, is in the interior Balochistan (see Harappan Culture for details) (Shaffer 1986: 88).
Sibri Phase	Mehrgarh III, the south Cemetery Sibri	c.2100-1800 BCE	See Mehrgarh VIII-Sibri Culture for details.
Early Pirak Phase	Pirak I-II	c. 1800/1700-1300/1200 BCE	See Early Pirak Culture for details.
Late Pirak Phase	Pirak III	c. 1300/1200-800/700 BCE	See Late Pirak Culture for details.

**Table 26. Phases of Balochistan Archaeology**  
References: Shaffer 1986 and 1992a; Possehl 1999, Modified by the Present Researcher

Regions/Site	Period	Chronology and Culture	Salient Features/Characteristics/Findings
<b>Kacchi-Bolan Region</b> (as Known from Mehrgarh, Nausharo and Pirak)	Period 1 (MR. I)	c.7250-5500 BCE; Early Neolithic (Aceramic Neolithic Culture)	Mudbrick houses and granaries; open areas and cemeteries; flexed and extended human burials; human and animal clay figurines; sheep, goat, cattle, wheat, barley, jujube, etc. domestication; lapis lazuli, turquoise, shell and one copper bead; one copper ring; microliths and polished axes
	Period 2 (MR. II)	c.5500-4500 BCE Late Neolithic (Ceramic Neolithic Culture)	Elaborate mudbrick houses and granaries; cemeteries and open areas; handmade and wheel made ceramics with geometric designs and straw-tempered handmade ceramics; human figurines; specialized craftsmanship like flint drills for bead making; bead working with lapis lazuli, turquoise and shells; first cylindrical seal; sickles and continuity in agriculture added cotton only



Regions/Site	Period	Chronology and Culture	Salient Features/Characteristics/Findings
	Period 3 (MR. III)	c.4500-3700 BCE Early Chalcolithic (Kili Gul Mohammad/Togau Culture)	Larger and more elaborate compartmented houses, storerooms and open areas; developed crafts i.e. innovation of metallurgy i.e. crucibles with molten metal; first discovery of double headed pin; mass pottery production and painted ceramics with geometric, flora and fauna decorations; figurines; jasper drill-bits and use of lapis lazuli, turquoise and carnelian; apart from the above ones, two new bread wheats, oats
	Period 4 (MR. IV)	c.3700-3400 BCE Advance Chalcolithic Age	Elaborate mudbrick dwellings, pottery firing area and a children's cemetery; technological development; wheel made ceramics having monochrome and polychrome designs; Togau Ware; terracotta female figurines; first appearance of stamp seals, bone seal; amulet
	Period 5 (MR. V)	c.3400-3100 BCE Transition; Advance Chalcolithic Age	Ceramics with white pigments and monochrome ceramics with geometric motifs, commonly Gray Ware and Togau D Ware; human figurines
	Period 6 (MR. VI)	c.3100-2800 BCE Early Bronze Age	Towns; elaborate mudbrick structures, a pottery firing area and open areas; mass production of ceramics with regional distribution like Black on Gray (Faiz Mohammad Ware), Quetta Ware, Naal Polychrome Ware and red ware with leave designs, compartmented stamp seals, lapis lazuli, turquoise and copper objects etc.; agriculturally grape is added now
	Period 7 (MR. VII)	c.2800-2500 BCE Bronze Age	Cities: huge platform, storerooms and open areas; ceramics like Black on Gray Ware, Late Quetta Ware and few Kot Dijian pot sherds; large number of female and male figurines and Zebu figure; terracotta cakes; copper objects like double spiral headed pins, etc.; alabaster ram; lapis lazuli, turquoise objects and stamp seals
	Period 8 (MR. VIII, Nausharo I)	c.2900 to 2000 BCE Bronze Age	Mehrgarh VIII: cemetery; ceramics, etc. Sibri: domestic structures and open areas; ceramics, cylindrical stamp seal, etc. Nausharo: mudbrick buildings, a large platform, buttressed walls; proto-Harappan pottery i.e. shapes and decorations later with late Quetta/Mehrgarh tradition; female and animal figurines, etc. (Franke and Cortesi 2015: 340-41).
	Period 9 (Nausharo II)	c.2500-2300 BCE Bronze Age	Advance urbanism; a lower city and an acropolis bearing a huge architecture with a gateway, a rampart and a drainage system liked with a fired brick water reservoir, dwelling structures; ceramics including less frequently Quetta Wet and bracketed

Regions/Site	Period	Chronology and Culture	Salient Features/Characteristics/Findings
			ware; craft activities near kilns; terracotta cakes as heat transmitters, a steatite Indus seal (Franke and Cortesi 2015: 341-42).
	Period 10 (Nausharo III)	c.2300-2100 BCE Bronze Age	Town; houses with Indus type arrangement but in mudbricks, backed brick drainage system connected with houses; Indus type ceramics; head of an elephant figurine (Franke and Cortesi 2015: 343).
	Period 11 (Nausharo IV)	c.2100-1900 BCE Bronze Age	Ceramics and figurines with similarities to Kulli Culture (Franke and Cortesi 2015: 343).
	Period 12 (Pirak I)	c.1800/1700-1400 BCE Late Bronze Age	Mudbrick buildings with reed roofing, few fireplaces either in or outside houses, traces of conduit system; wheat, barley, millet and some traces of rice; handmade decorated/undecorated pottery with some wheel made ones; dozens of unbaked and baked animal figurines i.e. humped bulls, camels, a horse, etc.; horse riders; terracotta seals in different shapes and a copper seal; copper pins and flint tools; carnelian and agate beads; terracotta spindle whorls and firedogs comprised the cultural repertoire (Dani 1988: 63-4).
	Period 13 (Pirak II)	c.1400-1200 BCE Late Bronze Age	Mostly the same cultural repertoire as in the earlier period; quadrangular connected mudbrick buildings and courtyards in a regular pattern; mostly wheel made and few handmade ceramics (either decorated or plain); sickle blades and flake tools; Bronze/copper objects include a flat axe chisel, a dagger, several arrowheads, small buttons and rod-tops or nails; animal figurines i.e. horses and double-humped camels and horse riders; lapis lazuli and terracotta beads and shell bracelets (Dani 1988: 64-5).
	Period 14 (Pirak III)	c.1200-800/700 BCE Early Iron Age	Better organized mudbrick buildings, many rooms with double niches, paved platforms and flight of steps to reach up, fireplaces and kilns mostly linked with workshop activities; wheel made and handmade pottery; unbaked humped bulls, dogs, horses animal figurines and a violin-shaped female figurine; stone tools i.e. flakes, blades, flint cores, grinding stones and limestone pestles and mortars; iron objects include five barbed arrowheads, two blades, an axe or chisel fragment, (iron seems to have been used for weapons); copper objects include two blades, an arrowhead, drills, buttons, beads, rings and pendants; other objects include lead fragments, two fragments of silver rings, a fragment of gold ring, and a fragment of

Regions/Site	Period	Chronology and Culture	Salient Features/Characteristics/Findings
			gold leaf; terracotta, carnelian, and lapis lazuli beads; seals continued and pottery usually with geometric designs (Dani 1988: 66).
Quetta Valley	Period 1	c.5500-4500 BCE/ or more appropriately c.6500-5000 BCE KGM I	Aceramic Culture; houses of wattle and daub/or of mud, cattle, goat, sheep, horse/ wild ass, microlithic and other ground tools, and bone points and spatula.
	Period 2	c.5000-4100 BCE Ceramic Culture KGM II	New Features: Crude handmade and basket made ceramics, and basket weaving.
	Period 3	c.4100-3700 BCE KGM III	New Features: Kili Gul Mohammad/Togau Culture; Fine KGM Black on Red with geometric designs, and an unidentified copper object.
	Period 4	c.3700-3400 BCE KGM IV and DS I	New Features: Kechi Beg Culture; Kechi Beg Ware with geometric designs, mud brick houses occasionally on stone foundations.
	Period 5	c.3400-3100 BCE DS II	Multi-roomed structures frequently on limestone foundations with fire pits or modern tandoor-like ovens inside the houses, Quetta Ware or a Black on Buff Ware with geometric motifs, Faiz Mohammad Ware mostly with geometric motifs, female terracotta figurines with bulbous breasts and joint legs and cattle terracotta figurines (some painted with black stripes), clay house models, clay compartmented stamp seals, clay rattles, clay ladle, copper or bronze dagger or knife blade, alabaster vessel and potters' marks on ceramics.
	Period 6	c.3100-2600 BCE DS III	Continuation of earlier period. New Features: large ceremonial structure on platform associated with limestone block drain, "a human skull without the lower jaw found in a small stone-built hollow beneath the main wall", and terracotta Zhob type mother goddesses.
Kalat Plateau	Period 1	c.5000-4000 BCE KGM II	Semi-nomadic community, red slipped pottery and flake blade industry.
	Period 2	c.4000-3700 BCE KGM III	Mudbrick houses on boulder footings, red slipped and burnished gray wares, coarse ceramics molded in baskets.
	Period 3	c.3700-3500 KGM IV-DSI	Rough square stone blocks used as house footings, Togau Ware and Zari Ware (a variant of Naal Ware),

Regions/Site	Period	Chronology and Culture	Salient Features/Characteristics/Findings
	Period 4	DS II	Well-squared masonry structures and Naal ceramics.
	Period 5	DS II	DS II cultural assemblage was found in this period.
<b>Rana Ghundai Sequence (Based on Ross 1946)</b>	Period 1	c.5000-4500 BCE (Pre-Bull Period)	Handmade plain ceramics, bones of sheep, goat, ox and ass, microlithic chips and blades, bone points and eyed needles, ash deposits, occasionally boulders and hard clay mass, a semi-nomadic community.
	Period 2	c.4500-3700 BCE (Bull Period) Rana Ghundai Bull Culture	Microlithic chips and blades, fine wheel made pottery with bands and cattle and black buck representations in some cases.
	Period 3	c.3700-2700 BCE RG III	New Features: basic pottery shapes continued, and later other shapes emerge, introduction of red and perhaps white in painted designs.
	Period 4	c.2700-2400 BCE RG IV	No painted pottery, large open bowls of coarse grey material and probable microlithics.
	Period 5	Buddhist Period RG V	No painted pottery but coarse embossed pottery was found.
<b>Khuzdar Region</b>	Period 1	Dominated by Togau Culture	Cemetery with fractional and secondary burials with grave goods like ceramics and beads of semi-precious stones and shell.
	Period 2	Naal Culture	Naal ceramics with beautiful decorations in monochrome, bichrome, and polychrome, single graves with limited ceramics, small mudbrick houses with domestic activities and objects storage bins, number of vessels, grinding stones, bone and stone implements, bull figurines and beads.
	Period 3	Late Quetta-Damb Sadaat Cultures	Associated with Northern Baluchistan, Mehrgarh, Mundigak in Afghanistan and Shahr-e-Sokhta in southeastern Iran; larger houses and rooms with clay or plaster floors, gravel foundations and wood used for foundations and roofs, objects found in rooms are pottery, beads, figurines and some copper seals and stone and bone implements. "Kilns, misfirings, auxiliary means and casting crucibles show that the pottery was produced locally and that copper, perhaps also silver, was processed at the site".
	Period 4	Late Sadaat-Kulli Harappan Cultures	Associated with Late Kulli and Harappan Culture.

Regions/Site	Period	Chronology and Culture	Salient Features/Characteristics/Findings
	Period 5	Londo Horizon	Londo sites and horizon is the characteristic of this period.
Turbat Oasis	Period 1 (level 5 and 6)	End of fifth millennium BCE	Aceramic Culture of Kech Valley: A large wall, microliths, and a grave with covered stones.
	Period 2	First half of fourth millennium BCE; Miri Culture	Mud brick dwellings on stone foundations, orange-red to gray ceramics with geometric patterns, terracotta bangles, terracotta sling ball, shell bangles, terracotta lamps, steatite and other stone vessels.
	Period 3	2nd half of the 4th to half/middle of the 3rd millennium BCE	Presence of Naal polychrome pottery, and earlier pottery types apparently continued.
	Period 4	Harappan Culture	Harappan materials alongside local ones
Mashkai-Kolwa Region	Period 1	c.3100-2700 BCE Naal Culture	See Naal Culture
	Period 2	c.2600-1900 BCE Kulli Culture	See Kulli Culture
Noushki	Period 1	c.5000-4300 BCE	The cultural chronology has been derived from the survey ceramics only (Naseer 2017: 73-143, 164).
	Period 2	c.4300-3700 BCE	
	Period 3	c.3700-3500 BCE	
	Period 4	c.3500-3100 BCE	
	Period 5	c.3100-12800 BCE	
	Period 6	c.2400-1900 BCE	
	Period 7	c.1200-800 BCE	

**Table 27. Cultural Sequences of Balochistan**

References: Chakrabarti 2006; 2014b; Jarrige *et al.* 1995; Asthana 1985; Naseer 2017; de Cardi 1964; 1965; Franke-Vogt 1999; Franke and Cortesi

S. No	Cultures/ Major Wares	Center or Main Region	Chronology	Age	First Reported	Reported by
1	<b>Aceramic Culture</b>	Kacchi-Bolan Valley and Quetta Valley	c. 7250-6000 BCE	Neolithic or Proto-Neolithic	1956	W. Fairservis and Confirmed by J. Jarrige
2	<b>Ceramic Culture</b>	Kacchi-Bolan Valley and Quetta Valley	c. 5500-4800 BCE	Neolithic	1956	W. Fairservis
3	<b>KGM/Togau Culture</b>	Kacchi-Bolan/Quetta Valleys	c. 5000-3800/3600 BCE (KGM)/ c. 4000-3100 BCE (Togau)	Chalcolithic	1956 And 1964	W. Fairservis (KGM) and B. de Cardi (Togau)
3	<b>Jangal Ware/Culture</b>	Zhob/Loralai	c. 4400-3200 BCE	Chalcolithic	1959	W. Fairservis
4	<b>Loralai Ware/Culture</b>	Loralai	c. 4400-3400 BCE	Chalcolithic	1959	W. Fairservis
5	<b>Periano Ware/Culture</b>	Zhob	c. 3600-2900 BCE	Chalcolithic and Bronze Age	1898	F. Noetling
6	<b>Rana Ghundai Bull Culture</b>	Iran but also found in Loralai in Balochistan	c. 4400-3700 BCE	Chalcolithic	1946	B. Ross <sup>148</sup>
7	<b>Rana Ghundai Ware/Culture</b>	Loralai	c. 3600-3400 BCE	Chalcolithic	1929	A. Stein
8	<b>Kechi Beg Culture</b>	Northern and Central Balochistan	c. 3600-3200 BCE	Chalcolithic	1956	W. Fairservis
9	<b>Miri Culture</b>	Kech Makuran	c. 4000-3400 BCE	Chalcolithic	1994 <sup>149</sup>	R. Besenval
10	<b>Kot Diji Culture</b>	Khairpur, Sindh	c. 3300-2800 BCE	Chalcolithic and Bronze Age	1965	Discovered: M. Wheeler Confirmed: F. A. Khan

<sup>148</sup> Identified this culture in Balochistan

<sup>149</sup> This is the date when clear traces of this culture were discovered after excavations at Miri Qalat.

S. No	Cultures/ Major Wares	Center or Main Region	Chronology	Age	First Reported	Reported by
11	Early and Late Shahi Tump Cultures	Central Southern Makuran	c.3200-2800 BCE	Chalcolithic and Bronze Age	1931	A. Stein
12	Quetta Ware/Culture	Quetta	c.3200-2600 BCE	Chalcolithic and Bronze Age	1947	S. Piggott
13	Anjira Ware/ Culture	Kalat	c.3100-2800/2900 BCE	Chalcolithic and Bronze Age	1965	B. de Cardi
14	Naal Culture	Khuzdar/southern Balochistan	c.3100-2700 BCE	Chalcolithic and Bronze Age	1905-06	M. S. Mohammad
15	Mian Ghundai/ Damb Sadaat Culture	Kalat	c.3100-2700 BCE	Chalcolithic and Bronze Age	1959	W. Fairervis
16	Faiz Mohammad Ware	Kacchi- Bolan/Quetta/Zhob and Loralai	c.3100-2600 BCE	Chalcolithic and Bronze Age	1956	W. Fairervis
17	Dasht/ Emir Culture	Dasht Valley, Makuran	c.2800-2300 BCE	Bronze Age	1931	A. Stein/ later added by R. Besenval
18	Kulli Culture	Southern Balochistan and Awaran	c.2600-1900 BCE	Bronze Age	1931	A. Stein
19	Harappan Culture/ Civilization	Kacchi-Bolan and southern Balochistan	c.2600-1900 BCE	Bronze Age	1877	E. Mockler
20	Mehrgarh VIII- Sibri Culture	Kacchi-Bolan/ Quetta Valley	c.2100-1900 BCE	Bronze Age	1984	M. Santoni
21	Early Pirak Culture	Kacchi-Bolan	c.1800-1300/1200 BCE	Bronze Age	1966	J-. M. Casal
22	Late Pirak Culture	Kacchi-Bolan	c.1300-700/600 BCE	Iron Age	1966	J-. M. Casal



S. No	Cultures/ Major Wares	Center or Main Region	Chronology	Age	First Reported	Reported by
23	Londo Ware/ Horizon	Khuzdar	c. 300 BCE-200 CE	Iron Age	1951	B. de Cardi

Table 28. Archaeological Cultures and Major Wares of Balochistan (from the Present Researcher)

Major References: Mockler 1877, Noetling 1898a; 1898b; 1899, Stein 1929; 1931, Ross 1946; Casal 1966, Besenval and Sanlaville 1990, Khan 1965, Raikes 1968, Fairservis 1956; 1959; 1971, de Cardi 1951; 1964; 1965; 1983, Piggott 1947, Marshal 1904-05

S. Number	Name of Archaeological Sites/ Buildings/Forts/etc.	Location/ District	Reason of Enlistment as Heritage
1	Mehrgarh	Kot Kai Village, Tehsil Dhadar, Kacchi-Bolan	Archaeological Value
2	Pirak Mound	Kolachi Village, 17 km south of Sibi, Sibi	Archaeological Value
3	Nausharo Mound	Nausharo Village, Tehsil Bhag, Kacchi-Bolan	Archaeological Value
4	Nidowari or Nindo Damb	Kudk Village, Tehsil Wadh, Khuzdar	Archaeological Value
5	Har-o-Goke/Garuk Mound	Garuk, Kharan	Archaeological Value
6	Fort Wall of Jhalawar Pass	Jhalawar Pass, Kharan	Archaeological Value
7	Fort of Azad Khan (Kharan Fort)	Kharan Town, Kharan	Historical/Archaeological Value
8	Nauroze Fort	Nauroz, Kalat, Kharan	Architectural Value
9	Pally Kalat/Pali Kalat	Washbohi, Pali, Kharan	Historical Value
10	Ancestral Cemetery of Jam of Las Bela	Dabra, Las Bela	Architectural Value
11	Tomb of General Mohammad Ibn-e-Haroon	Bela Town, Las Bela	Architectural Value
12	Greek (Rummis) Grave	Bhawani main RCD road Gadani, Las Bela	Religious/Architectural Value
13	Tomb Hinidan	Durgi Hub, Las Bela	Religious/Architectural Value
14	Dabar Kot/ Dabarkot	Dabar Kot, Duki	Archaeological Value
15	Sur Jangal	Sur Jangal, Duki	Archaeological Value
16	Tor Dherai Site	Tor Dherai, Loralai	Archaeological Value
17	Judeir Jo Daro/Damb Judeir	Jhat Pat, Naseerabad	Archaeological Value
18	Ahmed Khanzai, Mound No. 5	Kila Ahmed Khan, 5 km south of Quetta	Archaeological Value
19	Damb Sadaat, Mound No. 3	Damb Sadaat, 13 km south west of Quetta	Archaeological Value
20	Kuchlak Site, Mound No. 7	Kuchlak main Bazar, Quetta	Archaeological Value
21	Kechi Beg, Mound No. 4	Kechi Beg, Quetta	Archaeological Value
22	Shahi Khan, Mound No. 6	Pir Ballo Saryab, Quetta	Archaeological Value

S. Number	Name of Archaeological Sites/ Buildings/Forts/etc.	Location/ District	Reason of Enlistment as Heritage
23	Mehtarzai, Mound No. 9	Mehtarzai Village, Quetta	Archaeological Value
24	Kili Gul Mohammad, Mound No. 1	Kili Gul Mohammad Village, Quetta	Archaeological Value
25	Nauhisar, Mound No.11	Nauhisar Village, Quetta	Archaeological Value
26	Samali, Mound No.8	Samali Village (Dozak-i-Khasiyan), Quetta	Archaeological Value
27	Samungli, Mound No.2	Samangali Village, West side of Airport Quetta	Archaeological Value
28	Sheikh Manda, Mound No. 10	Village Shaikh Manda (Chaman Road), Quetta	Archaeological Value
29	Chakar Qila	Sibi Town, Sibi	Archaeological Value
30	Quaid-i-Azam Residency Building	Ziarat, Ziarat District	Archaeological Value
31	Miri Qalat	Miri Village, Kech Turbat	Archaeological Value
32	Shahi Tump	Shahi Tump Village, Kech Turbat	Archaeological Value
33	Hosahb Damb-1	Hoshab Village, Kech Turbat	Archaeological Value
34	Hoshab Damb-2	Hoshab Village, Kech Turbat	Archaeological Value
35	Dambi Karez	Hoshab Village, Kech Turbat	Archaeological Value
36	Sami Fort	Sami Village, Kech Turbat	Archaeological Value
37	Karki Fort	Karki Village, Kech Turbat	Archaeological Value
38	Tumpak	Kurmb Kaur, Mand, Kech	Archaeological Value
39	Kalatuk Bund	Mand in Kalatuk, Kech	Archaeological Value
40	Tump Qalat	Tump, Kech	Archaeological Value
41	Phulabad/ Phulabad Qalat	Phulabad Tump, Kech	Archaeological Value
42	Nazarabad Qalat	Tump area in Nazarabad, Kech	Archaeological Value
43	Churbuk	Tump area in Nazarabad, Kech	Archaeological Value
44	Abdul Damb <sup>150</sup>	Karpasi, Kech	Archaeological Value
45	Sutkagen Dor	Suntsar, Gawadar	Archaeological Value
46	Sutka Koh	Pasni, Gawadar	Archaeological Value
47	Prahag A, B, C, D	Pasni, Gawadar	Archaeological Value
48	Damb South of Pasni	Pasni, Gawadar	Archaeological Value
49	Damb West of Pasni	Pasni, Gawadar	Archaeological Value
50	Pidarak Oasis	Pidarak, Kech	Archaeological Value
51	Zamuran Mound	Buleda, Kech	Archaeological Value

<sup>150</sup> Probably Abdui Damb

<b>S. Number</b>	<b>Name of Archaeological Sites/ Buildings/Forts/etc.</b>	<b>Location/ District</b>	<b>Reason of Enlistment as Heritage</b>
52	Shahrak Pogunsh	Shahrak, Kech	Archaeological Value
53	Kulli Damb	Kolwa, Awaran	Archaeological Value
54	Madagy Kalat	Dandar, Kech	Archaeological Value
55	Awaran Fort	Awaran	Historical Value
56	Siah Damb	Jhau, Awaran	Archaeological Value
57	Karpas Buthi	Bela, Las Bela	Archaeological Value
58	Buband	Bela, Las Bela	Archaeological Value
59	Niai Buthi	Bela, Las Bela	Archaeological Value
60	Murda Sang	Murda Sang, Las Bela	Archaeological Value
61	Bakkar Buthi	Bakkar, Las Bela	Archaeological Value
62	Balakot	Winder, Las Bela	Archaeological Value
63	Alam Khan Shahr	Ornach Valley, Khuzdar	Archaeological Value
64	Gaji Bhut	Ornach Valley, Khuzdar	Archaeological Value
65	Kinneru Damb	Ornach Valley, Khuzdar	Archaeological Value
66	Channal Kund Damb	Ornach Valley, Khuzdar	Archaeological Value
67	Phusi Damb	Khuzdar	Archaeological Value
68	Belar Damb	Drakalo Valley, Khuzdar	Archaeological Value
69	Sumer Damb	Khuzdar	Archaeological Value
70	Makri Mas/ Marki Mas	Drakalo Valley, Khuzdar	Archaeological Value
71	Sohr Damb/Naal	Naal, Khuzdar	Archaeological Value
72	Lehri Damb	Naal, Khuzdar	Archaeological Value
73	Londo Damb	Bhagbana, Khuzdar	Archaeological Value
74	Reko Cave	Khuzdar	Archaeological Value
75	Mai Peer/ Gondrani Caves	Bela, Las Bela	Archaeological Value
76	Anjira	Surab, Shaheed Sikandarabad	Archaeological Value
77	Siah Damb	Surab, Shaheed Sikandarabad	Archaeological Value
78	Isplinji Mounds I and II	Isplinji, Mastung	Archaeological Value
79	Kardagap/Kirdagap	Kirdagap, Mastung	Archaeological Value
80	Tor Ghundai/Tor Warai	Panjpai, Quetta	Archaeological Value
81	Sra Kala	City Area in Pashin	Archaeological Value
82	Sahib Khan Damb	Sahib Khan village, Pashin	Archaeological Value

S. Number	Name of Archaeological Sites/ Buildings/Forts/etc.	Location/ District	Reason of Enlistment as Heritage
83	Mata Ghundai	Zhob	Archaeological Value
84	Kuchnai Ghundai	City Area in Pashin	Archaeological Value
85	Karezgai	Hindubagh/Muslimbagh, Kila Saifullah	Archaeological Value
86	Rana Ghundai	Loralai	Archaeological Value
87	Duki Mound	Duki District	Archaeological Value
88	Periano Ghundai	Zhob	Archaeological Value
89	Mughal Ghundai	Zhob	Archaeological Value
90	Kaudani/ Rogha Kaudani	Zhob	Archaeological Value
91	Uruske Zahra	Zhob	Archaeological Value
92	Fort Sandeman	Zhob	Historical Value
93	Mughal Kala	Loralai	Archaeological Value
94	Jungla Populzai	Chaman, Kila Abdullah	Archaeological Value
95	Miri Kalat	Kalat	Historical Value
96	Miri Kalat/Quetta Miri	Quetta	Historical Value
97	Malazai Kalat	Malazai Kuchlak, Quetta	Archaeological Value
98	Syed Moraz/Saiyid Maurez	Khalidabad in Manguchar, Kalat	Archaeological Value
99	Pingo Damb	Dasht, Mastung	Archaeological Value
100	Noushki Damb	Noushki	Archaeological Value
101	Archaeological Zone of Buzi Top	Las Bela	Archaeological Value

**Table 29. The List of Protected Sites in Balochistan under Balochistan Antiquities Act, 2014<sup>151</sup> (from Directorate of Archaeology and Museums Balochistan Quetta, Corrected by the Present Researcher)<sup>152</sup>**

<sup>151</sup> This list further needs modifications and clarifications since many sites are used with alternative names and their locations are also questioned which have already been modified by the present researcher. Some sites might be new and unpublished.

<sup>152</sup> According to Jameel Baloch, Deputy Director Directorate of Archaeology and Museums Balochistan, the new list has been updated and there are about 100 enlisted sites. However, there is a error in the list which is making the sites more than 100, say 101 (J. Baloch, Personal Communication, November 28, 2019).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
1.	<b>Abdul But</b>	Wadh Valley, Khuzdar 27° 20' 00 N 66° 25' 00 E	Kulli?	1.00 hectares	1931	A. Stein	Surveyed	Faint traces of stone walls were observed. Moreover, pottery pieces, stone tools i.e. flint, chert, cores, and flakes, were recorded. Stone circles identified as burials were recorded as well (Stein 1931: 175).
2.	<b>Abudai/ Abdui/ Site 103</b>	10 km west of Kallag in Kech Makuran 26° 20' 00 N 62° 19' 00 E	Shahi Tump Dasht	0.05 hectares	1990	R. Besenval and P. Sanlaville	Surveyed	The inhabitants built stone houses to live in. The cultural assemblage consisted of Dasht and Shahi Tump ceramics (Besenval and Sanlaville 1990: 122)
3.	<b>Adam Buthi/ Khakhr Buthi/ Kharkhar Kaur Damb</b>	Las Bela  26° 19' 00 N 66° 16' 00 E	Kechi Beg Togau Burj Basket- Marked Kili Gul Mohammad	0.14 hectares 7.5 m. high	1943 1968	R. L. Raikes believes that it may be one of the unidentified sites of A. Stein	Surveyed several times and trial trenches laid several times	There were clear traces well-built stone/boulder houses. Small platforms were recorded as well. Pottery of different cultures (handmade and wheel-made, plain and painted), stone tools i.e. blades, and flakes, etc. comprised the cultural artifacts (Franke 2015k: 54-7). Also, R. Raikes reported pottery from the site (1968: 157).
4.	<b>Adasta Damb</b>	Awaran 26° 27' 00 N 65° 39' 00 E	Kulli- Harappan	1.10 hectares	1931	A. Stein	Surveyed	Walls of roughly dressed stone slabs, plain and painted pottery were recorded (Stein 1931: 138).
5.	<b>Ahmed Khanzai/ Ahmad Khanzai (South)/ Q-16</b>	More than 2 miles north of Quetta City, in village Ahmad Khanzai 30° 09' 00 N 66° 57' 00 E	Damb Sadaat Kechi Beg	0.40 hectares 4 m. high	1947	S. Piggott/  H. Hargreaves	Surveyed several times and excavated	S. Piggott identified pottery and traces of mud houses (1947: 134). Moreover, lapis lazuli and chalcedony beads were also identified (Kakar 2000: 192).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
6.	<b>Ahmed Khanzai/ Ahmad Khanzai (North)/ Q-15</b>	More than 3 miles south of Quetta City, in Ahmad Khanzai village 30° 11' 00 N 66° 58' 00 E	Quetta Kechi Beg	0.60 hectares 8 m. high	1947	S. Piggott/  H. Hargreaves	Surveyed several times	S. Piggott detected mud structures and pottery (1947: 134). He obtained different types of ceramics. It is also a graveyard site and is subject to illegal excavations (Fairservis 1956: 197, 334, 342, 350).
7.	<b>Aidu Damb</b>	Drakalo Valley, Khuzdar 27° 08' 00 N 66° 25' 00 E	Londo Kulli Naal Togau	?	1931	A. Stein	Surveyed twice	Structures of undressed stones and different types of pottery were reported from the site (Stein 1931: 177; Raikes 1968: 151).
8.	<b>Ajab Damb<sup>153</sup> B-05</b>	Near Adam Buthi, Las Bela	Londo	?	1968	R. L. Raikes	Surveyed	Ceramics were discovered and collected for research purposes (Franke 2015k: 55).
9.	<b>Ala Damb</b>	Naal Vicinity, Khuzdar	Early Historic Londo Kechi Beg Togau	?	1971	Discovered: R. L. Raikes Published: W. Fairservis	Surveyed	The main finds consisted of ceramics of different cultures (Possehl 1999: 728).
10.	<b>Alam Khan Shahr</b>	Ornach Valley, Khuzdar 26° 27' 00 N 66° 05' 00 E	Early Kulli Naal	?	1971	Discovered: R. L. Raikes Published: W. Fairservis	Surveyed twice	Ceramic sherds mainly comprised the findings of this site (Possehl 1999: 728).
11.	<b>Alizai</b>	Shaheed Sikandarabad (Surab)	Londo	90 by 80 ft. 20 ft. high	'1959	B. de Cardi	Surveyed	The archaeological materials consisted of ceramics, bones and ruins of structures. Moreover, quern fragments and stone hones were among the other archaeological finds (de Cardi 1983: 29).

<sup>153</sup> R. Raikes most probably considered this site and Adam Buthi as one site (1968: 157).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
12.	<b>Ander Damb</b>	Shaheed Sikandarabad (Surab)	Kulli Naal	?	1959	H. Field	Surveyed	The findings were smazing decorated wares of Kulli and Naal Cultures with a diversity of motifs (Khan 1959: 189).
13.	<b>Anjira</b>	Zehri Road in Shaheed Sikandarabad (Surab) 28° 17' 00 N 66° 19' 00 E	Anjira Naal Kechi Beg Togau Burj Basket- Marked	3.00 hectares	1959	B. de Cardi	Surveyed several times and trial excavated	It has four cultural periods. Ceramics of different cultures were picked or unearthed; they were plain, monochrome, polychrome, etc. The excavations at this site greatly helped establishing the chronology of Surab region (de Cardi 1983: 31). Besides pottery, blades, flake microliths and lunates of chert; bull figurines, beads of bone and shell (Kakar 2000: 192).
14.	<b>Anjiri Damb</b>	Near Porali River, Khuzdar	Londo	?	1968	R. L. Raikes	Surveyed	The surveyor only identified Londo Ware from the site (Raikes 1968: 149).
15.	<b>Archaeologic al Zone of Buzi Top</b>	Las Bela	Protohistoric Prehistoric?	?	?	?	Surveyed	Currently, it has been added in the list of protected sites under Balochistan Antiquities Act 2104 due to its archaeological importance (Directorate of Archaeology and Museums Balochistan Quetta 2019: 5).
16.	<b>Ashal</b>	Kolwa in Kech, Makuran 26° 03' 30 N 64° 25' 00 E	Londo Naal Kechi Beg	0.50 hectares	1931	A. Stein	Surveyed	The cultural repertoire recorded from the site was only plain and decorated pottery fragments (Stein 1931: 110-11).
17.	<b>Awaran Niabat</b>	Awaran 26° 25' 00 N 65° 14' 00 E	Medieval Londo Kulli Naal Togau	3.10 hectares	1931	A. Stein	Surveyed	It is crowned with an old ruined fort. A. Stein recorded broken mudbrick structures and different kinds of pottery sherds (Stein 1931: 129).
18.	<b>B-1</b>	1-mile South of Bibi Nani Levy Post, Bolan Pass	Historic Kulli- Harappan Damb Sadaat Quetta	?	1956	W. Fairservis	Surveyed	From the surface survey, different types of ceramics were recorded at this site (Fairservis 1956: 352).



Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
19.	<b>Babar/ Khosti</b>	Zhob	c. 18,000 BCE	?	?	F. D. Kakar	Surveyed	10 rock shelters bearing Palaeolithic Magdalenian culture with evidences of variously engraved animals including leopard (Kakar 2000: 190).
20.	<b>Babari Ghundai (P-4)</b>	Saranan village, Pashin	Early Historic Bronze Age?	100 by 75 yards and 7 m. high	1929	A. Stein	Surveyed several times	W. Fairervis recoded pottery fragments only (1956: 351, 392).
21.	<b>Badanzai</b>	Zhob	Bronze Age	?	1990	F. D. Kakar	Surveyed	The artifactual objects from the surface reflected a Bronze Age culture (Kakar 2000: 191).
22.	<b>Badrang Damb (the Ugly Mound)</b>	Rakhshan Valley, Washuk 27° 40' 00 N 65° 31' 00 E	Kulli Naal Kechi Beg	10.80 hectares 4 m. high	1931	A. Stein	Surveyed several times	Stone masonry structures were also discovered (Ali 2010: 173). The discoveries from the site comprised of different types of pottery pieces (Stein 1931: 35-6). Unfortunately, this site is subjected to illegal diggings (Ali 2010: 174).
23.	<b>Badri Bund (KA 00)</b>	Kanrach Valley, Las Bela	Islamic? Londo Kulli Harappan	?	1999	U. Franke- Vogt	Surveyed	It is known mainly from the ceramic collections (Franke-Vogt 1999: 31, from table 2).
24.	<b>Bagh-i- Kumb</b>	Zin-Jik, Dhera Bugti Area	Amri-Naal c. 4000-5000 years old	?	1967	S. Matheson	Surveyed and trial trench by S. Matheson	Pottery and figurines can be found on the site. Interestingly, pottery which were in use from the same <i>damb</i> at a certain place S. Matheson regarded it Amri. She discovered cores, flakes, and microliths (Matheson 1967: 160-63).
25.	<b>Bakkar Buthi (KA 41)</b>	Kanrach Valley, Las Beal	Late Islamic (?) Harappan Kulli- Harappan Early Harappan	?	1998-99	Q. A. Qasim and M. H. K. Khattak	Surveyed twice and excavated	It is associated with <i>gabarbands</i> . It is fortified with boulders with two parts with a citadel and a lower area. The enclosed wall has a bastion. In the inside, there were rooms containing hearths, and storage jars. Harappan pottery (also Kulli Ware), a pottery fragment with Indus script inscribed, terracotta figurines, bangles, toy carts, beads (copper, gold, one lapis lazuli carnelian) and tools, etc. comprised the cultural assemblage. It is the only Harappan settlement in the interior mountainous Balochistan (Franke and Cortesi 2015: 344-46).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
26.	<b>Balakot/ Bala Kot/ Kot Bala</b>	Near Sonmiani, Las Bela  25° 28' 30 N 66° 43' 30 E	Mature Harappan Naal	2.60 or 4.5 hectares and 9.75 meters high	1907	C. F. Minchin	Surveyed several times Dales excavated it in 4 seasons i.e.1973- 1976	Its cultural chronology is comprised of two periods: Early Harappan and Harappan (Franke 2015j: 155; Asthana 1985: 134-35). Stone and burnt brick structures were attested on the settlement. Some of the traces suggested the presence of a citadel on the mound as well. Pottery of Harappan Culture were found in abundance alongside other cultures. It is a coastal Harappan settlement. The cultural assemblage included a beautiful chert blade, shell and clay bangle fragments, shell and clay beads, terracotta bull figurines, two probable terracotta carts, etc. (Raikes 1968: 159-60). In the earliest period, a Naal variant, Balakotian, was discovered (Franke 2015j: 156).
27.	<b>Baleli Mound/ Q-29</b>	Quetta  30° 20' 00 N 66° 53' 00 E	British Togau Burj Basket- Marked and Kili Gul Mohammad	0.60 hectares 18 m. high	1929	A. Stein	Surveyed and laid trial trenches	W. Fairervis (1956: 342, 349, 350) and B. de Cardi (1983: 19) documented ceramics and stone tools from this site. Also, a chert bangle and copper fragment were recorded (de Cardi 1983: 19).
28.	<b>Bambe</b>	Sharhr Gudro, Khuzdar	c.1900-1400 BCE	?	1959	B. de Cardi	Surveyed	The chronology of this site has been formed from the ceramics found during the survey (Fairervis 1971: 405).
29.	<b>Bandu Damb/ Ridge of Abdul But</b>	Wadh, Khuzdar 27° 23' 00 N 66° 24' 00 E	Kulli Naal	5.4 hectares	1931	A. Stein	Surveyed twice	A roughly stone squared block two roomed cottage foundations were discovered. Apart from Kulli and Naal Wares, flint blades and gouges, cores and lunates, etc. were discovered (Raikes 1968: 147).
30.	<b>Bari Damb</b>	Shaheed Sikandarabad (Surab)	Londo	180 yards EW and 35 ft. high	1931	A. Stein	Surveyed	Mudbrick or <i>pisé</i> structures were recorded. Pottery and animal bones comprised the other archaeological findings (Stein 1931: 180-81).
31.	<b>Bari Bund (KA 31)</b>	Kanrach Valley, Las Bela	Early Harappan (?)	?	1999	U. Franke- Vogt	Surveyed	Ceramics were the main collection from the site (Franke-Vogt 1999: 31, from table 2).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
32.	<b>Barnima Ghundai</b>	Loralai 30° 40' 69 N 68° 85' 12 E	Londo Harappan Kot Diji	0.2 hectares	2018	M. Zahir and M. A. Khan	Surveyed	There were boulder structures. For the time being, only ceramics i.e. Kot Diji, Harappan, Ghul etc. wares have been reported. Moreover, a serpent-shaped broken figurine was also discovered. The site was affected from treasure hunters (Zahir and Khan 2018: 15).
33.	<b>Barra Kapoto/ Burra Kapoto</b>	Kalat	Damb Sadaat Quetta Togau	?	1964	B. de Cardi	Surveyed	Boulder footings of structures still existed. The principal finds from this site were ceramic sherds of various cultures (de Cardi 1983: 25-6).
34.	<b>Bazdad Kalat/ Basdad Kalat</b>	8 miles North west of Kulli site, Awaran 26° 21' 00 N 65° 07' 00 E	Kulli Naal	0.80 hectares	1931	A. Stein	Surveyed	Different kinds of ceramics were discovered; A. Stein did not mention any structure from the site (1931: 127).
35.	<b>Belar Damb I-II</b>	Drakalo Valley, Khuzdar 27° 07' 00 N 66° 27' 00 E	Historic Londo Kulli (?) Togau (?)	2.20 hectares	1931	A. Stein	Surveyed twice	It is crowned with a stone-constructed citadel. It further yielded different pottery types and a flint was discovered too (Raikes 1968: 151).
36.	<b>Benn Chah</b>	Kalat 28° 48' 00 N 66° 23' 00 E	Kechi Beg Togau Burj Basket- Marked	2.50 hectares	1931	A. Stein	Surveyed	This site only bore ceramics but there was variety in them (Stein 1931: 18).
37.	<b>Besham Damb</b>	Panjgur 27° 00' 00 N 64° 10' 00 E	Islamic Buddhist Kulli	3 quarter a mile and 500 yards diameter	1931	A. Stein	Surveyed	It is comprised of two mounds. Only variety of pottery fragments (plain and painted) of different ages were recorded (Stein 1931: 45). H. Field also received similar results from his survey on the site (Khan 1959: 186).
38.	<b>Bhut Shamshi/ Bhut Shamsi</b>	Mastung 29° 56' 00 N 66° 44' 00 E	Quetta Naal	?	1972	M. R. Mughal	Surveyed twice	Ceramics, lapis lazuli and carnelian beads and a complete alabaster bowl were found (Mughal 1972: 146-47, 158).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
39.	<b>Bit Damb/ Bit Sino Damb</b>	Baghbana, Khuzdar	Londo	50 yards diameter and 30 ft. high	1931	A. Stein	Surveyed	Ceramics were detected and later used for chorological studies of the site (Stein 1931: 179).
40.	<b>Bizinjau Kasar/ Bizanjo Kasar/ Site 47</b>	North of Bizanjo Kasar Village in Kech 25° 49' 15 N 62° 42' 45 E	Zangian Kulli Dasht	?	1990	Besenal and Sanlaville	Surveyed twice	Stone buildings, terraces, and pottery manufacturing areas were recorded here. Dasht, Kulli and Zangian objects particularly ceramics were recorded (Besenal and Sanlaville 1990: 102).
41.	<b>Bodhani Damb</b>	Kacchi-Bolan Plain	Quetta	?	?	J. Jarrige?	Surveyed	Ceramics, particularly Faiz Mohammad Wares, were mentioned by W. Rite (1987: 67).
42.	<b>Buband<sup>154</sup></b>	Las Bela 26° 22' 30 N 66° 19' 30 E	Kulli Naal	?	1943	A. Stein	Surveyed twice	The found cultural material relate this site with Kulli and Naal cultures (Possehl 1999: 742).
43.	<b>Budhi Buthi</b>	Las Bela	Protohistoric	?	?	?	Surveyed	Ceramics were discovered from this site.
44.	<b>Bulbul/ Balbal/ Kale Damb</b>	Noorgama in Zehri Khuzdar	Londo	?	1959	B. de Cardi	Surveyed	It is fortified with stone masonry and a variety of pottery sherds were obtained from the survey (de Cardi 1983: 33).
45.	<b>Bundakhi Damb</b>	Kalat 29° 04' 00 N 66° 37' 00 E	Kechi Beg Togau	80 yards EW 15 ft. high	1931	A. Stein	Surveyed twice	Largely plain but few painted ceramics comprised the collection of A. Stein (1931: 185).
46.	<b>Cape Gadani</b>	Las Bela	Historic Harappan	?	2012-13	P. Biagi, R. Nesbet and A. Girod	Surveyed	Flint flakes, a bladelet core, animal bones, etc. were discovered. It is a fishing site near the sea where the Harappans probably exploited the marine resources (Biagi <i>et al.</i> 2012-13: 77-78).

<sup>154</sup> According to A. R. Khan, W. Fairervis gave this site a new name in confusion: Edith Shahr (1979: 63). However, the present researcher has included both the names separately in the table (see Edith Shahr in the same table).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
47.	<b>Cape Phuari</b>	Northeast of Qasim Village, Las Bela	Protohistoric	?	2012-13	P. Biagi, R. Nesbet and A. Girod	Surveyed	Pottery sherds, bladelets, raw chipped stone implements, marine shells, marine gastropods, and other marine remains are mentioned in the records (Biagi <i>et al.</i> 2012-13: 79-80).
48.	<b>Chakar Bazar/ Site 53</b>	Dasht Plain in Chakar Bazar village, Kech 25° 40' 00 N 62° 25' 00 E	Shahi Tump	?	1990	R. Besenval and P. Sanlaville	Surveyed twice	It is a "settlement surrounded by potters' activities...". Remains of eroded walls were noted too (Besenval and Sanlaville 1990: 104).
49.	<b>Chahi Damb</b>	Kolwa, Awaran/Panjgur 26° 18' 00 N 64° 57' 00 E	Kulli Naal	1.60 hectares 15 ft. high	1931	A. Stein	Surveyed	Roughly dressed stone structures and different types of ceramics were identified (Stein 1931: 115-16).
50.	<b>Channal Kund Damb</b>	Khuzdar 27° 07' 00 N 66° 09' 00 E	Kulli Naal Kechi Beg Togau	?	1931	A. Stein	Surveyed twice	This site yielded boulder constructed walls in ruins and pottery of different cultures (Raikes 1968: 154-55).
51.	<b>Chashma Murad/ Chasma Murad Khan Damb</b>	Waher, Khuzdar	Complex B Pirak? Early Kulli Naal Kechi Beg Togau	?	1931	A. Stein	Surveyed twice	Stone built structures cover the mound and wares of several cultures were identified (Raikes 1968: 150).
52.	<b>Cheri Damb (West site)/ Site 20</b>	Hoshab Region in Kech Makuran 26° 00' 45 N 63° 53' 00 E	Protohistoric	?	1990	R. Besenval and P. Sanlaville	Surveyed	R. Besenval and P. Sanlaville has considered this site to be A. Stein's Thale Damb. Protohistoric ceramic collection was found from this site (Besenval and Sanlaville 1990: 118).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
53.	<b>Cheri Malars/ Cheri Malar Kambar- Band</b>	Kolwa, Awaran	Kulli Naal	0.50 hectares 20 ft. high	1931	A. Stein	Surveyed	The survey resulted in the discovery of beautiful pottery sherds; however, nothing else was found or reported (Stein 1931: 115).
54.	<b>Cheshma Damb One</b>	Naal Vicinity, Khuzdar	Complex B Kulli Naal Kechi Beg Togau	?	1971	Discovered: R. L. Raikes Published: W. Fairservis	Surveyed	The chronology has been formed from the documented ceramics of the survey (Possehl 1999: 748).
55.	<b>Chhalgari/ Chalgari/ Budhani</b>	Kacchi-Bolan 28° 50' 00 N 67° 50' 00 E	Early to Mature Harappan	?	1905	A. Stein	Surveyed twice	Pottery and figurines were discovered from the site (J. Jarrige 1986: 117).
56.	<b>Chimri</b>	Khuzdar 26° 58' 00 N 64° 02' 00 E	Islamic Naal Kechi Beg Togau Burj Basket- Marked	2.50 hectares 30 ft. high	1931	A. Stein	Surveyed	Many types of ancient and beautiful wares were recorded (de Cardi 1983: 37).
57.	<b>Chinjane/ Chinjan</b>	Loralai	Mehrgarh III, IV and VI c.4300-300 BCE	?	1990	F. D. Kakar	Surveyed and trial excavated	The surface collection included ceramics (Kakar 1990: 112). Moreover, the other material collections included terracotta figurines, blades of flint and terracotta balls (Kakar 2000: 191).
58.	<b>Chipok (KA 04)</b>	Kanrach Valley, Las Bela	Kulli? Late Islamic?	?	1999	U. Franke- Vogt	Surveyed	Ceramics were the main collection from this site (Franke-Vogt 1999: 31, from table 2).
59.	<b>Chiri Damb</b>	Tasp, Panjgur	Islamic Kulli- Harappan Naal	12 ft. high	1931	A. Stein	Surveyed several times	A. Stein identified protohistoric and historic pottery; he also found historic stone structures. Moreover, the surveyor also received ancient beads and a stone scraper which are said to be from this site. A figurine was also recorded (1931:44). H. Field has also recorded several terracotta humped bulls from this site (Khan 1959: 187).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
60.	<b>Chota Kapoto/ Chhota Kapoto</b>	Kalat 28° 46' 00 N 66° 25' 00 E	Kechi Beg, Togau Kili Gul Mohammad	?	1964	B. de Cardi	Surveyed	The site possessed ceramic fragments and chert flakes (de Cardi 1983: 25).
61.	<b>Churbuk/ Sites 21, 22</b>	Tump Area in Nazarabad, Kech 26° 04' 15 N 62° 40' 30 E	Dasht	?	1990	R. Besenval and P. Sanlaville	Surveyed twice	They are two <i>dams</i> . It is a complex which was in danger because of village extension. The second mound has a fortress in ruins. From both mounds prehistoric pottery was collected (Besenval and Sanlaville 1990: 111-12).
62.	<b>Churook Mound</b>	Taluka, Khuzdar	c.3000-2800 BCE	170 by 130 meters and 15 m. high	1931	A. Stein	Surveyed	A. Stein only discovered ceramics. It has been subjected to illegal diggings (1931: 45). Also dressed stone walls were observed (Haq and Ali 2011: 2).
63.	<b>Dabar Kot/ Dabarkot/ L-9</b>	Duki District 30° 05' 00 N 68° 41' 00 E	Partho- Sassanian Buddhist Iron Age Mature Harappan Kot Diji Kechi Beg	24.30 hectares (or 46 hectares) 35 m. high	1899 but was discovered in 1893	F. Noetling	Surveyed several times and trial trenches dug	A wide range of cultural assemblage was collected in the shape of painted ceramics variously decorated, flint blades, terracotta figurines, etc. The observations also have confirmed drains of burnt bricks (Kakar 2000: 191-92). It has been dug carelessly by A. Stein (Asthana 1985: 109).
64.	<b>Damb Channarozai</b>	Iskalku Valley, Kalat	Islamic Kechi Beg	Large site	1972	M. R. Mughal	Surveyed	Only ceramics were identified from this site (Mughal 1972: 146).
65.	<b>Damb Goram</b>	22 miles from Kalat on Surab Road	Quetta Naal Kechi Beg	?	1971	Fazalur A. Khan Discovered it but reported by W. Fairservis	Surveyed twice	M. R. Mughal has formed the chronology of this site via the ceramic sherds he collected from his survey (1972: 147).
66.	<b>Damb Hasal Khanzai</b>	Iskalku Valley, Kalat	Islamic? Kechi Beg	Large site	1972	M. R. Mughal	Surveyed	The cultural material that was recorded were only ceramics (Mughal 1972: 146).



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67.	<b>Damb Kulu</b>	12 miles west of Kalat City, Kalat	Quetta Naal Kechi Beg Togau	?	1971	Fazalur A Khan reported it to W. Fairservis	Surveyed	The survey yielded ceramics which were used in forming the chronology of the site (Fairservis 1971: 403).
68.	<b>Damb Shehr</b>	Kalat	Londo	?	1972	M. R. Mughal	Surveyed	Ceramics were discovered on the mound (Mughal 1972: 147).
69.	<b>Damb Shirinab</b>	Mastung 29° 55' 00 N 66° 44' 00 E	Quetta Naal	?	1972	M. R. Mughal	Surveyed	Ceramics comprised the main and only cultural assemblage of the settlement (Mughal 1972: 146).
70.	<b>Damb Siaho Zai/ Ziaho Zai Mound</b>	Kharan	Protohistoric	?	2015	Baloch <i>et al.</i>	Surveyed	Different kinds of terracotta objects of prehistoric nature were said to be identified including ceramics (Baloch <i>et al.</i> 2015: 46).
71.	<b>Damb Wali Mohammad</b>	Iskalku Valley, Kalat	Kechi Beg Togau	Large site	1972	M. R. Mughal	Surveyed	Pottery is the only source of its cultural information that was retrieved by M. R. Mughal in his survey (1972: 146-47).
72.	<b>Damb Zargaran</b>	Kalat 29° 06' 00 N 66° 23' 00 E	Kechi Beg	?	1972	M. R. Mughal	Surveyed	Only ceramics comprised the surface collection (Mughal 1972: 148).
73.	<b>Dambani/ Dambani Kaur</b>	Kech, Makuran	Historic Kulli	?	1990	R. Besenval and P. Sanlaville	Surveyed	Pottery fragments were the only material found from the site (Besenval and Sanlaville 1990: 188).
74.	<b>Dambi Karez</b>	Hoshab village, Kech, Makuran	Prehistoric? Protohistoric	?	?	?	Surveyed	Recently it has been added in the list of protected sites under the Balochistan Antiquities Act 2014 (Directorate of Archaeology and Museums Balochistan Quetta 2019: 2).
75.	<b>Damboli</b>	Kacchi-Bolan 29° 21' 00 N 67° 36' 00 E	Mehrgarh VIII-Sibri Harappan	?	1984	M. Santoni	Surveyed	Ceramics of two cultures were recorded from this site (Santoni 1984: 58).
76.	<b>Damb-de Gwaram</b>	Near Kalat	c. 3500-2500 BCE	?	?	?	Surveyed	Only ceramics were mentioned in the text (Ali 1991: 2).

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77.	<b>Damb-e-Taghzai/ Taghzai Mound</b>	Besema, Washuk 27° 49' 00 N 65° 50' 45 E	Londo Kulli	140 yards NE and NW 40 ft. high	1931	A. Stein	Surveyed several times	Ruined structures and ceramics of two cultures were attested (Stein 1931: 31-2). It is subjected to treasure hunting in the region (Baloch <i>et al.</i> 2015: 46).
78.	<b>Damb-i-Dambi/ Damb-i-Bambi</b>	Panjgur, Makuran 26° 57' 20 N 64° 04' 00 E	Kulli	?	1931	A. Stein	Surveyed several times	Rough stone walls with plain ceramics were recorded here (Stein 1931: 44-5). Apart from beautiful painted ceramics, terracotta humped bulls, and discs for gaming were collected too (Khan 1959: 186-87).
79.	<b>Dandar/ Site 54</b>	2 km northwest of Dandar Village, Kech 25° 44' 00 N 62° 27' 00 E	Dasht	?	1990	R. Besenval and P. Sanlaville	Surveyed twice	Pottery construction area i.e. ruined kilns, sherds, slags, ashes, etc. were recorded. It was said to have related to Dasht Culture (Besenval and Sanlaville 1990: 104).
80.	<b>Dardan Mound</b>	Dardan Village in Taluka, Khuzdar	Kulli c.2800-1900 BCE	310 by 220 m. and 11m. high	2001	Saleem-ul- Haq and S. S. Ali	Surveyed	It is a group of mounds named as Dardan A and Dardan B. They bore mudbrick structures. However, Dardan B shown later occupation. They were covered with Kulli Ware. Furthermore, illegal digging was noticed (Haq and Ali 2001: 2-3).
81.	<b>Daudar Damb</b>	Kacchi-Bolan	c.2100-1800 BCE	?	1986	J. Jarrige	Surveyed	Pottery sherds seem to be the findings mainly (Franke-Vogt 2001: 249).
82.	<b>Dawrao Tul Damb/ Dawroo's Hill or Castle</b>	Dhera Bugti Area	c.2300-1400 BCE	?	1967	S. Matheson	Surveyed	Pot sherds and a female terracotta figurine were the main findings from this site (Matheson 1967: 163).
83.	<b>Dehlura Damb</b>	Kacchi-Bolan	Prehistoric	?	1995	J. Jarrige	Surveyed	Pottery must have been found; however, there is nothing mentioned about its cultural materials (J. Jarrige 1995: 53).

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84.	<b>Derakh</b>	Near Derakh Village in Gidar, Shaheed Sikandarabad (Surab)	Londo	A large mound	1951	B. de Cardi	Surveyed	Terracotta animal horned heads like at the Hadi site were said to have been discovered (de Cardi 1951: 66).
85.	<b>Dhana Abdullahzai</b>	Zhob	c. 18,000 BCE	?	?	F. D. Kakar	Surveyed	1 rock shelter with paintings like of humans and animals were noted. Moreover, for the first time, boar is also engraved (Kakar 2000: 190).
86.	<b>Dhoki (KA 05)</b>	Kanrach Valley, Las Bela	Late Islamic? Kulli	Small settlement	1999	U. Franke- Vogt	Surveyed	Ceramics were used for the identification of its cultural chronology (Franke-Vogt 1999: 31, from table 2).
87.	<b>Dholi (KA 07)</b>	Kanrach Valley, Las Bela	Late Islamic Kulli	?	1999	U. Franke- Vogt	Surveyed	Kulli and Islamic ceramics were found from this site (Franke-Vogt 1999: 31, from table 2).
88.	<b>Dilekim</b>	Kech, Makuran	c. 800 BCE- 300 CE	?	1931	A. Stein	Surveyed several times	The site yielded broken house structures. Plain pottery comprised the main findings in surveys (Stein 1931: 85).
89.	<b>Diwana</b>	Las Bela 26° 06' 00 N 67° 15' 00 E	Naal	?	1961	W. Fairservis	Surveyed	The inhabitants of this site built cut stone houses but now in ruins mostly and with flat platforms and associated <i>gabarbands</i> . Naal Culture materials particularly ceramics were discovered (Fairservis 1971: 168).
90.	<b>Diz Paroom I Fort</b>	Paroom, Panjgur	Protohistoric	?	1931	A. Stein	Surveyed	Ceramics comprised the cultural material; painted ceramics were few, however (Stein 1931: 49).
91.	<b>Diz Paroom II Mound East</b>	Paroom, Panjgur 26° 38' 00 N 63° 32' 01 E	Londo Kulli	0.20 hectares	1931	A. Stein	Surveyed	Ceramic fragments were only recorded from this site (Stein 1931: 49).
92.	<b>Dosia Khal Damb</b>	Wadh, Khuzdar 27° 18' 00 N 66° 22' 00 E	Kulli Naal Kechi Beg	9.00 hectares	1968	R. L. Raikes and J. M. Casal	Surveyed	Rough squared stone foundations of the structures were detected. The other artifactual collection comprised of ceramics, figurines, and flints (Raikes 1968: 149).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
93.	<b>Drakalo Damb</b>	Drakalo Valley, Khuzdar 27° 09' 00 N 66° 25' 00 E	Early Historic Iron Age Kulli Kechi Beg	0.10 hectares	1931	A. Stein	Surveyed twice	Roughly set undressed blocks of calcareous sandstone and different kinds of pottery pieces were recovered (Stein 1931: 177). There is a ruined defense post or fort. There is also a <i>gababand</i> nearby (Raikes 1968: 151-52).
94.	<b>Dranjan site I</b>	Near Kirta Village inside the Bolan Pass in Kacchi-Bolan District	Buddhist Mature Harappan Kot Diji	200 by 150 feet/height 18 feet	1964	Pakistan Archaeology	Surveyed	It is a group of three low mounds covered with pot sherds. Massive stone structures and a stupa was also reported too (Pakistan Archaeology 1964: 14).
95.	<b>Dranjan Site II</b>	Near Kirta Village inside the Bolan Pass in Kacchi-Bolan District	Mature Harappan Kot Diji	20 by 20 feet	1964	Pakistan Archaeology	Surveyed	Pottery remains were well documented from this site (Pakistan Archaeology 1964: 13-4).
96.	<b>DSL-1</b>	Dori, Loralai 30° 54' 99 N 68° 11' 14 E	Kot Diji	4.8 hectares	2018	M. Zahir and M. A. Khan	Surveyed	Kot Diji ceramics were recorded from the site (Zahir and Khan 2018: 13, Table 5).
97.	<b>DSL-2</b>	Dori, Loralai 30° 54' 99 N 68° 11' 52 E	Kot Diji	0.4 hectares	2018	M. Zahir and M. A. Khan	Surveyed	Dot Diji pottery was found for the site (Zahir and Khan 2018: 13, Table 5).
98.	<b>DSL-4</b>	Dori, Loralai 30° 54' 77 N 68° 12' 55 E	Kot Diji	1.8 hectares	2018	M. Zahir and M. A. Khan	Surveyed	Kot Diji and Wet wares comprised the survey materials (Zahir and Khan 2018: 13, Table 5).
99.	<b>DSL-5</b>	Dori, Loralai 30° 55' 78 N 68° 12' 35 E	Harappan	0.24 hectares	2018	M. Zahir and M. A. Khan	Surveyed	Harappan Ware included the cultural materials from the site (Zahir and Khan 2018: 13, Table 5).
100.	<b>Duki Mound L-6</b>	Duki District 30° 10' 00 N 68° 34' 00 E	Waziri Kot Diji Kechi Beg Togau Burj Basket-Marked	6.50 hectares	1959	W. Fairservis	Surveyed	There is a small fort on the top of it (Fairservis 1959: 289). Different types of ceramics comprised the material culture of this site (Possehl 1999: 756).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
101.	<b>Durrah-i-Bast Hill</b>	Dasht Plain, Kudan area, Kech 25° 45' 00 N 62° 30' 30 E	Zangian Shahi Tump	?	1990	R. Besenval and P. Sanlaville	Surveyed twice	Zangian and Shahi Tump assemblages were recorded (Masih 1994: 41).
102.	<b>Dwa Sarak Mound I</b>	Bar Nimai, Loralai	4 <sup>th</sup> millennium BCE to 5 <sup>th</sup> millennium century CE	120 x 50 x 90 meters	2014	Z. Khan	Surveyed	Kechi Beg Ware, Quetta Buff Ware, applique and other varieties were found. A mother goddess was also found (Khan 2014: 63-5).
103.	<b>Dwa Sarak Mound II</b>	Bar Nimai, Loralai	Protohistoric	45 x 65 x 22 x 120 meters	2014	Z. Khan	Surveyed	Illegal diggings were observed from the site. Furthermore, plain, painted and applique wares comprised the pottery collection (Khan 2014: 67-9).
104.	<b>Edith Shahr/ LB-1<sup>155</sup></b>	Welpet, North of Las Bela  26° 23' 00 N 66° 20' 00 E	Kulli	29 hectares	1943	A. Stein	Surveyed several times and excavated several times	It is a complex site. This site has been classified into Complex A and Complex B based on its architecture and associated materials. There were many rectangular boulder structures probably for mud brick dwellings with regular orientation and divided by narrow lanes. There were evidences of terraced platforms on which mudbrick structures existed. Some of these remnants must have been ritual buildings. Whereas Complex B is associated with series of stones circles and box-like structures usually like Complex A structures. It is related with Kulli and Londo Cultures since their assemblages have been found from here (Pakistan Archaeology: 33).
105.	<b>Eswarhi Damb</b>	Zehri, Khuzdar	Prehistoric or Protohistoric?	300 acres in diameter	2019	Zahir Hussain and Bilal Zehri	Surveyed	Pottery is known from this site and some stone structures were noted in the survey. The locals also claimed that beads and other materials were also found by treasure hunters. The site is affected by treasure hunters.

<sup>155</sup> See also Buband site in the table.

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
106.	<b>Faiz Mohammad Ghundai</b>	Shahbozai Village, Loralai 30° 23' 34 N 68° 46' 36 E	Protohistoric	3.39 hectares	2017	Z. Khan	Surveyed	Different kinds of ceramics were collected i.e. painted, plain, rope, applique and incised wares. The structures of houses can be seen and traces of treasure hunting from the site are visible. (Khan 2017: 83, 86-8).
107.	<b>Faiz Mohammad/ Q-9</b>	Faiz Mohammad Village, Quetta 29° 57' 00 N 67° 06' 00 E	Quetta Damb Sadaat Kechi Beg Togau	1. 70 hectares and 2 m. high	1956	W. Fairservis	Surveyed	Ceramics were documented abundantly on this site. A kind of ceramic which was encountered here for the first time has been named after it i.e. Faiz Mohammad Ware (Fairservis 1956: 342, 350).
108.	<b>Firoz Khan Damb/ Feroz Khan Damb</b>	Kolwa, Awaran 26° 30' 00 N 65° 16' 00 E	Londo Kulli	2. 90 hectares and 25 ft. high	1931	A. Stein	Surveyed	Decayed structural remains as some remains of stone walls which were roughly constructed, and ceramics comprised the findings (Stein 1931: 130).
109.	<b>Gajar Damb</b>	Southern Mashkai Valley, Khuzdar 26° 06' 50 N 65° 34' 00 E	Historic Kulli Naal Kechi Beg	Few hundred yards	1931	A. Stein	Surveyed	Roughly built stone structure, huge built walls (now pile of rubble) and pottery fragments were recorded. Also, a historic fort of Mirwari chief is on the top of the mound (Stein 1931: 151).
110.	<b>Gaji Bhut</b>	Near Nindowari site, Khuzdar 26° 59' 00 N 66° 05' 00 E	Partho- Sassanian Londo Naal	?	1968	R. L. Raikes	Surveyed	Ancient stone foundation walls were found. The pottery repertoire clearly resembled with different ancient wares of Balochistan (Raikes 1968: 152-53).
111.	<b>Gaji Bhuti 1 2, 3<sup>156</sup></b>	Las Bela	Londo Protohistoric?	?	?	?	Surveyed	Londo and probably other prehistoric ceramics were discovered.
112.	<b>Galuga Mound Mashkel</b>	Mashkel, Kharan	Protohistoric and Historic	?	2015	Baloch <i>et al.</i>	Surveyed	No archaeological surveys have yet been conducted here. Human bones, ceramics and other objects have been observed (Baloch <i>et al.</i> 2015: 47).

<sup>156</sup> It is a site with three *dams* Gaji Bhuti 1 is associated probably with protohistoric period and the other two with Londo Horizon.

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
113.	<b>Gar Mound</b>	Paroom, Panjgur 26° 52' 00 N 63° 33' 00 E	Togau	?	1931	A. Stein	Surveyed	Only pottery sherds were found from this site (Stein 1931: 47).
114.	<b>Garonk Mound</b>	Hoshab in Kech, Makuran 26° 00' 22.25 N 63° 53' 34.35 E	Protohistoric	50 x 42 x 5 meters	2013	J. Baloch	Surveyed	The site is affected by illegal diggings. Stone houses, a graveyard, wheel-made pottery with motifs, beads of semi-precious stones were reported from this site (Baloch 2013: 52-8).
115.	<b>Garuk Mound/ Har-o-Gok or Mound of Harogok (donkey and cow)</b>	Saleemabad Village in Garuk, Kharan  28° 25' 89.0 N 65° 40' 29.6 E	Kot Dijian Quetta	500 by 300 m. and 5 m. high	1931	A. Stein	Surveyed several times	This site is comprised of a series of mounds (Baloch <i>et al.</i> 2015: 46). Boulder structures and pottery were the ancient evidences. Moreover, fragments of female and animal humped bull figurines were also mentioned in the records. Sadly, illegal digging was also witnessed (Ali 2010: 162).
116.	<b>Gate Dap/ Gate-Dap</b>	Kolwa, Kech, Makuran 26° 07' 00 N 64° 13' 00 E	Islamic- British Naal Kechi Beg	1.10 hectares	1931	A. Stein	Surveyed	Systematically laid stone walls were recorded. Painted and plain ceramics were the primary artifactual materials which led to the identification of the age of the site (Stein 1931: 108-09).
117.	<b>Ghalaihak/ Sar-i-Damb/ Site 19</b>	Hoshab in Kech, Makuran 26° 01' 00 N 63° 56' 00 E	Kili Gul Mohammad	80-100 m in diameter and 4-5 m high	1931	A. Stein	Surveyed twice	Pottery fragments and a stone scrapper were attested from the site (Stein 1931: 104).
118.	<b>Ghand Dhamb/ Ghand Philawagh</b>	Masori, Dhera Bugti Area	Kot Diji Harappan c.2500-1000 BCE	150 ft. long and 30 ft. broad	1967	S. Matheson	Surveyed and trial trenches laid by S. Matheson	Ceramics formed the basic cultural repertoire of the site. In addition, animal bones, traces of cooking fires, fragments of bangles, and a piece of copper pin, and a fragment of stone were unearthed or collected (Matheson 1967: 156-58).
119.	<b>Ghannal Kund Damb</b>	Khuzdar	Early Historic Iron Age Kechi Beg Togau	?	1971	W. Fairservis	Surveyed	The ceramics were used to establish the chronology of this site (Fairservis 1971: 405; Possehl 1999: 759).



Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
120.	Ghar	Kalat	Londo?	?	1972	M. R. Mughal	Surveyed	Its chronology has been established from its ceramics which were possibly Londo Wares (Mughal 1972: 148).
121.	Ghulam Mohammad Goth	Near Muridani, Las Bela	Kulli	?	1968	Discovered: D. B. Morris Published: R. L. Raikes	Surveyed	R. Raikes studies the collected sherds of D. B. Morris which he claimed to be of Kulli Culture. There is also a mosque on the <i>damb</i> (Raikes 1968: 157).
122.	Ghulam Damb/ Damb Ghulam/ Benn Chah of F. A. Khan <sup>157</sup>	25 miles south of Kalat, Benn Chah, Kalat 28° 42' 00 N 66° 17' 00 E	Kulli Naal Kechi Beg	2.50 hectares	1931 1959	A. Stein H. Field	Surveyed several times	Different plain and paint pottery, a pendant in stone, a barrel-shaped stone bead, and a fragment of an agate bowl have been recorded (Khan 1959: 188-89). Moreover, different types of ceramics were also discovered by B. de Cardi as well (1983: 27).
123.	Ghulam	Makuran	Naal Kechi Beg	?	1971	W. Fairservis	Surveyed	Ceramics formed the chronology of the site (Possehl 1999: 760).
124.	Gilli Reg/ Site 96	15 to 20 km west of Mianaz in Kech 26° 17' 15 N 62° 55' 15 E	Zangian Dasht	?	1990	Besenal and Sanlaville	Surveyed	An area with scattered pottery sherds was attested. The pottery of two cultures was recorded (Besenal and Sanlaville 1990: 120-21).
125.	Gorpat (Devour of the Dead)	Shaheed Sikandarabad (Surab) 28° 20' 00 N 66° 07' 00 E	Islamic-British Kechi Beg Togau Burj Basket-Marked Kili Gul Mohammad	?	1959	B. de Cardi	Surveyed	Pottery of different ancient cultures were recorded which give it a deep-rooted history (de Cardi 1983: 29). Moreover, it seems to have yielded Togau A-C pottery (de Cardi 1965: 113).

<sup>157</sup> F. A. Khan treats them as one site while some others do not (1959: 188-89); however, their chronology exactly matches. The researcher is also treating them separately.

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
126.	<b>Gudri Mound</b>	Sibi 29° 32' 00 N 67° 23' 00 E	Early Historic Partho- Sassanian Iron Age Quetta Damb Sadaat	1.70 hectares	1973	W. Fairservis	Surveyed twice	It is a two-mound site. The finds were only pottery sherds (plain and decorated with geometrics mostly) of different kinds (Enault and J. Jarrige 1973: 193).
127.	<b>Guni Damb</b>	Wadh Valley, Khuzdar	Londo	?	1968	R. L. Raikes	Surveyed	Pottery and a probable terracotta horse were recorded from the site (Raikes 1968: 146).
128.	<b>Gushanak</b>	Gushanak, Awaran (Kolwa) 26° 14' 00 N 64° 57' 00 E	Early Historic Iron Age Kechi Beg	150 ft. high	1931	A. Stein	Surveyed	There is a historic fort on the top of it. Different types of ceramics were recorded from this site (Stein 1931: 117-18).
129.	<b>Gushtang Damb/ Chasir Mound/ Site 17</b>	Kech, Makuran 26° 00' 00 N 63° 02' 00 E	Zangian	100 x 100 in diameter and 6-8 high	1931	A. Stein	Surveyed twice	Its age has been formed from the ceramics documented in surveys (Besenval and Sanlaville 1990: 114).
130.	<b>Gwani Kalat/ Gwani Damb</b>	Naal, Khuzdar 27° 29' 00 N 65° 55' 00 E	Islamic- British Early Islamic Partho- Sassanian Early Historic Kechi Beg	0.5 hectares	1931	A. Stein	Surveyed	There is a small ruined fort on the top of this mound. Apart from different types of ceramics, chert cores and scrapers were also recorded (Stein 1931: 165).
131.	<b>Habib Kili</b>	Loralai	Historic Prehistoric?	?	1972	M. R. Mughal	Surveyed	Historic ceramics and chert blades were the finds of M. R. Mughal. Nonetheless, there is probability of prehistoric assemblage in the finds (1972: 1948).
132.	<b>Hadi Islam-B</b>	Shaheed Sikandarabad (Surab)	Londo	?	1972	M. R. Mughal	Surveyed	Ceramics were only collected from survey (Mughal 1972: 148).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
133.	<b>Hadi/ Hadi Islam A</b>	Gidar in Shaheed Sikandarabad (Surab) 28° 18' 00 N 66° 44' 00 E	Londo Anjira Naal Kechi Beg Togau Kili Gul Mohammad	380 ft. EW and 20 ft. high	1959	B. de Cardi	Surveyed twice	It is comprised of two small mounds. The time has reduced the houses to rubble among which bones were found together. Variety of quality ceramic sherds attested to be of protohistoric nature. There were other culture materials like three figurines of clay—female and a bull and a head of a ram and a bronze ring too (1983: 30).
134.	<b>Haji Mohammad Damb</b>	Drakalo Valley, Khuzdar	Londo	20 yards in diameter and 12 ft. high	1931	A. Stein	Surveyed	Ruined structures and Londo pottery were identified (Stein 1931: 177-78).
135.	<b>Haji Qasim Khan</b>	Quetta-Pashin	Early Historic Protohistoric?	?	?	?	Surveyed	Chert blades and pottery related to historic period were discovered in M. R. Mughal's survey (1972: 148).
136.	<b>Hala Damb</b>	Northern Mashkai Valley, Khuzdar 27° 37' 00 N 66° 22' 00 E	Kulli Naal	2.30 hectares	1931	A. Stein	Surveyed	The site is covered with rubble of small stones and at some places with one can find rough enclosures of large boulders. Some amount of pottery has been found as well (Stein 1931: 169).
137.	<b>Hammal Damb</b>	Northern Mashkai Valley, Khuzdar 27° 40' 30 N 66° 13' 30 E	Londo Kechi Beg	?	1931	A. Stein	Surveyed	The cultural findings only included pottery sherds from the site (Stein 1931: 169).
138.	<b>Hampada I</b>	Kacchi-Bolan Plain	Kechi Beg Togau	?	1995	J. Jarrige	Surveyed	Only pottery is known from this site (J. Jarrige 1995: 75).
139.	<b>Hampada II</b>	Kacchi-Bolan Plain	Kechi Beg Togau	?	1995	J. Jarrige	Surveyed	It is known from the ceramic collection (J. Jarrige 1995: 75).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
140.	<b>Hor Kalat</b>	Kolwa, Awaran 26° 12' 00 N 71° 39' 00 E	Kulli Naal	0.60 hectares	1931	A. Stein	Surveyed	A. Stein found different types of painted and plain wares from the site. However, traces of rough enclosure wall and structures can be seen on the top of it (1931: 112).
141.	<b>Hotal Damb I</b>	Hotal Village, Washuk 28° 03' 97.4 N 65° 46' 25.4 E	Kulli	110 by 70 m. and 3 m. high	2010	S. S. Ali	Surveyed	Rich variety of Kulli and some other wares were found. It has been badly damaged in search of antiquities by illegal diggers (Ali 2010: 165-66).
142.	<b>Hotal Damb II</b>	North of Hotal Village in Besima, Washuk 28° 03' 93.7 N 65° 47' 22.3 E	c.3300-3000 BCE	600 by 180 m. and 9 m. high	2010	S. S. Ali	Surveyed	Roughly constructed masonry structures were visible. Few handmade and others wheel made ceramics were collected. Illegal excavations were conducted on the site (Ali 2010: 167).
143.	<b>Hurro Damb</b>	Ornach Valley, Khuzdar 27° 06' 00 N 66° 10' 00 E	Burj Basket- Marked	?	1968	R. L. Raikes	Surveyed	R. Raikes discovered ancient hand-made and cordoned pottery; he also recorded microlithic flints (1968: 155).
144.	<b>Imad Ali Area and Site 60</b>	Nilag Area, Kech 25° 48' 30 N 62° 38' 50 E	Zangian Shahi Tump	?	1990	R. Besenval and P. Sanlaville	Surveyed	At site 60, Londo Ware was discovered and Shahi Tump and one sherd of Togau C wares were discovered at Imad Ali Area (Besenval and Sanlaville 1990: 101).
145.	<b>Inayat Shah Damb</b>	Baghbana, Khuzdar	Londo	120-80 yards and 12 ft. high	1931	A. Stein	Surveyed	This site possessed Londo ceramics (Stein 1931: 179).
146.	<b>Ismailzai</b>	Zhob	Neolithic to Bronze Age	?	1990	F. D. Kakar	Surveyed	The surface material, [most probably ceramics] were used to date the site from Neolithic to Bronze Age (Kakar 2000: 191).

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147.	<b>Isplinji I</b>	Isplinji Village, Mastung 29° 49' 30 N 67° 03' 00 E	Quetta Damb Sadaat Kechi Beg Togau	1.20 hectares	1964	R. L. Raikes	Surveyed	Illegal diggings were witnessed from the site. Ceramics and other objects were reported. Other objects consisted of chert blades, bangles in terracotta, copper bits, beads of semi-precious stones, banded agate, a bowl and cup fragments of alabaster and terracotta balls and rattles (Pakistan Archaeology 1964: 15-6).
148.	<b>Isplinji II</b>	Isplinji Village, Mastung 29° 49' 30 N 67° 02' 30 E	Quetta Damb Sadaat Kechi Beg Togau	0.70 hectares	1964	R. L. Raikes	Surveyed	Burials, pottery and other objects have been reported. It must be a cemetery (Pakistan Archaeology 1964: 15-7).
149.	<b>Jagjai</b>	Pashin	Kot Diji Quetta Damb Sadaat	?	1972	M. R. Mughal	Surveyed	Ceramics were recorded from this site. Beads, chert blades, scrappers and terracotta bangles were also reported (Mughal 1972: 144, 148).
150.	<b>Jahan</b>	Near Mulla River in Jahan village, Khuzdar 28° 17' 00 N 67° 12' 00 E	Kulli Naal Kechi Beg Togau	?	1959	B. de Cardi	Surveyed	Boulders, rubble and some stone masonry with varieties of ceramic types existed on the mound (de Cardi 1983: 34).
151.	<b>Jahan Northeast</b>	Mulla River in Jahan village, Khuzdar 28° 18' 00 N 67° 13' 00 E	Kulli- Harappan- Quetta Naal Kechi Beg	?	1959	B. de Cardi	Surveyed	Evidences of stone masonry were observed. B. de Cardi also recorded several ceramic types (1983: 34).
152.	<b>Jai Damb</b>	Jaian Village in Paroom, Panjgur 26° 38' 93.5 N 63° 21' 365 E	Kulli	100 m NS 80 m EW 4 m high	1931	A. Stein	Surveyed	There is a small roughly mudbrick enclosure wall of 1900s. A. Stein found plenty of painted pottery. A type of gray ware was found too (1931: 49-50).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
153.	<b>Jangal</b>	Jangal in Besema, Washuk	Protohistoric	?	1959	F. A. Khan	Surveyed	Painted and plain ceramics and terracotta jar-stopper were discovered (Khan 1959: 188).
154.	<b>Jaren/ Jaran</b>	Kolwa, Awaran 26° 13' 00 N 64° 45' 00 E	Kulli Naal Kechi Beg	0.20 hectares	1931	A. Stein	Surveyed	It is enclosed with a 1900s rough stone wall. Different types of ancient ceramics were recorded as well (Stein 1931: 112).
155.	<b>Jaroji</b>	Las Bela	Kulli Early Kulli	?	1961	Discovered: R. L. Raikes Published: W. Fairservis	Surveyed	Ceramics were found and used in forming the chronology of the site. This site clearly is related to Kulli Culture (Possehl 1999: 768).
156.	<b>Jatti Kalat</b>	Noushki	Prehistoric	?	2017	S. Naseer	Surveyed	Pottery sherds were recorded from this site (S. Naseer, Personal Communication, October 12, 2018).
157.	<b>Jawarji Damb/ Jawarji Kalat</b>	Naal, Khuzdar 27° 31' 00 N 65° 52' 00 E	Islamic- British Early Historic Kechi Beg Togau	0.60	1931	A. Stein	Surveyed	A small fort is on the top of it and a small number of pottery sherds were found (Stein 1931: 165).
158.	<b>Jebri Damb One</b>	Southern Mashkai Valley in Jibri, Awaran 27° 17' 20 N 65° 45' 00 E	Naal	0.10 hectares	1931	A. Stein	Surveyed	There is a modern fort on the top of this mound. Only Naal pottery has been found (Stein 1931: 163).
159.	<b>Jebri Damb Two</b>	Southern Mashkai Valley in Jibri, Awaran 27° 17' 20 N 65° 45' 10 E	Kechi Beg Kili Gul Mohammad	0.50 hectares	1931	A. Stein	Surveyed	On this site, there were ancient walls of rough stones. A. Stein found ceramic sherds, small worked stone blades, and stone cores (1931: 163).

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160.	<b>Jeman Goth</b>	Bela, Las Bela	Kulli Kulli- Harappan	?	1968	Discovered: W. Fairervis Published: R. L. Raikes	Surveyed twice	The surveyors found pottery of Kulli and Kulli-Harappan (Raikes 1968: 156).
161.	<b>Jhallo Damb</b>	Gaz Village in Taluka, Khuzdar	c. 3500-3000 BCE	300 by 170 m. and 35 m. high	2001	Saleem-ul- Haq and S. S. Ali	Surveyed	Structures of dressed and undressed boulder were visible, and pottery was mainly collected (Haq and Ali 2001: 4).
162.	<b>Jogenai</b>	Wadh, Khuzdar	Early Historic Late Historic Londo	?	1931	A. Stein	Surveyed twice	Both A. Stein and R. Raikes found Londo and historic type of ceramics (Raikes 1968: 147).
163.	<b>Jori Damb-I</b>	Kalat	Londo	?	1972	M. R. Mughal	Surveyed	Londo Ware ceramics were the only findings from the site (Mughal 1972: 148).
164.	<b>Jori Damb-II</b>	Kalat	Londo?	?	1972	M. R. Mughal	Surveyed	Ceramics found were possibly of Londo Horizon (Mughal 1972: 148).
165.	<b>Judeir Jo Daro/ Juderirjo- Daro/ Jodal/ Joder/ Judeir Ko Damb (a group of mounds)</b>	Jhat Pat, Naseerabad  28° 28' 00 N 68° 15' 00 E	Mature Harappan	25.00 hectares 25 to 35 ft. high	1961	R. L. Raikes	Surveyed several times	It looks to be ancient [city] of Indus Valley Civilization from its probable town planning. Apart from the Harappan pottery, many terracotta animal figurines, terracotta and shell bangles, beads, cones, cakes, toy carts and chert blades have been reported. This site is located on a strategic location for trading in ancient time (Pakistan Archaeology 1964: 11-2).
166.	<b>Jungla Populzai/ P-3</b>	Chaman in Kila Abdullah 30° 51' 00 N 66° 45' 00 E	Historic Quetta	0.50 hectares 5 m. high	1929	A. Stein	Surveyed several times	It bore Quetta region ceramics and historic ones as well (Fairervis 1956: 151, 392).



Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
167.	<b>Jwarji Kalat</b>	Greshak Valley, Jhalawan	Islamic- British Early Islamic Partho- Sassanian Early Historic Kechi Beg Togau	0.50 hectares	1931	A. Stein	Surveyed	A small decayed fort was on the top of the mound. Few pottery fragments were reported from here (Stein 1931: 165).
168.	<b>K-1</b>	Near Lak Pass, Mastung 29° 57' 50 N 66° 51' 00 E	Quetta Damb Sadaat Kechi Beg	0.60 hectares	1956	W. Fairservis	Surveyed	Pottery has been documented from the site (Fairservis 1956: 393).
169.	<b>Kaali na Mash (the Mountain of Kaali)</b>	Zehri, Khuzdar	Protohistoric? Prehistoric?	5 acres in diameter	2019	Zahir Hussain and Bilal Zehri	Surveyed	Ceramic fragments are the main findings from this site. Other findings are human and animal figurines, beads, a copper/bronze object, etc. Moreover, there were two wells on the top of it. The locals relate the site with a Hindu king.
170.	<b>Kabulzai</b>	Near Hindubagh, Zhub	c.800 BCE- 300 CE	70 by 40 yards	1929	A. Stein	Surveyed	Rubble and mud brick structures and ceramics were mentioned in the record (Stein 1929: 50-1).
171.	<b>Kadr Dad Damb</b>	Porali River, Las Bela	c.1400 BCE- 300 CE	?	1971	R. L. Raikes	Surveyed	Different types of ceramics were discovered which helped in the identification of its age (Fairservis 1971: 408).
172.	<b>Kafir Kot</b>	Panjpai, Quetta	Quetta Naal Kechi Beg	?	1951	B de Cardi	Surveyed	The survey yielded pottery which helped in the establishing the cultural chronology of the site (de Cardi 1964: 21).
173.	<b>Kalaro Damb</b>	Southern Mashkai Valley, Awaran 27° 05' 00 N 65° 34' 30 E	Kulli	?	1931	A. Stein	Surveyed	There were traces of ancient an occupation. Kulli pottery has been found from the site (Stein 1931: 150).

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174.	<b>Kalat</b>	Kalat 29° 01' 00 N 66° 24' 00 E	Naal Kechi Beg	?	1983	B. de Cardi	Surveyed	B. de Cardi considered Kalat a prehistoric settlement where traces of life could be seen from the different beautiful, quality and scattered ceramics (1983: 25).
175.	<b>Kalat Damb</b>	Mand in Kech, Makuran	Kulli	?	1959	H. Field	Surveyed	Its cultural repertoire comprised of mostly rough and coarse style of pottery with incised motifs. They belonged to Kulli Culture (Khan 1959: 184).
176.	<b>Kalatuk Bund/ Site 97<sup>158</sup></b>	Kech, Makuran 26° 08' 00 N 62° 01' 30 E	Islamic Shahi Tump Dasht	0.05 hectares	1990	R. Besenval and P. Sanlaviile	Surveyed	The cultural materials like ceramics of this site dates it back to prehistoric times (Besenval and Sanlaviile 1990: 109).
177.	<b>Kalatuk Damb (the Fort Mound)</b>	Nag, Washuk 27° 22' 45 N 65° 09' 00 E	Kulli	14.70 hectares	1931	A. Stein	Surveyed	Ancient rough squared stone walls alongside painted pottery. Moreover, this site possessed a terracotta bird-faced female figurine (Stein 1931: 36-7).
178.	<b>Kalatuk/ Dambani Kaur/ Site 30</b>	Buleda Valley in Kech, Makuran 28° 18' 00 N 63° 8' 15 E	Zangian	?	1990	R. Besenval and P. Sanlaviile	Surveyed	It is a settlement and a cemetery. Pottery has been collected from the site (Besenval and Sanlaviile 1990: 119).
179.	<b>Kali Kot</b>	Uthal, Las Bela	c.1400 BCE- 300 CE? and 300-1800 CE	?	1971	R. L. Raikes	Surveyed	The pottery ceramics from the survey helped in identification of its age/chronology (Fairservis 1971: 408).
180.	<b>Kallag</b>	Kolwa in Kech, Makuran 26° 18' 00 N 64° 53' 00 E	Kulli- Harappan Naal	150 yards from the south and 40 feet high	1931	A. Stein	Surveyed	On its west, massive walls of stone were found. Rough dressed slab masonry of regular courses. Furthermore, plain and painted pottery was also found (Stein 1931: 114-15-).
181.	<b>Kamar Band</b>	Makuran 26° 18' 00 N 64° 64' 30 E	Kulli Naal	0.50 hectares 20 ft. high	1931	A. Stein	Surveyed	A wall of rough slabs of sandstone with pottery sherds on the mound was attested (Stein 1931: 115).

<sup>158</sup> R. Besenval and P. Sanlaviile are in doubt if this site is H. Field's Kalat Damb in the area (1990: 109); however, the chronology of the site differs.

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
182.	<b>Kambar Damb</b>	Kolwa, Awaran 26° 28' 00 N 65° 14' 00 E	Londo Kulli Naal	2.40 hectares	1931	A. Stein	Surveyed	There is a small fortified wall associated with it. Several types and pieces of pottery were (Stein 1931: 129-30).
183.	<b>Kambaro Damb (Bedi)</b>	Kolwa, Awaran 26° 26' 30 N 65° 25' 30 E	Kulli	380 yards and 45 ft. high	1931	A. Stein	Surveyed	The only attested assemblage from A. Stein's survey from this site was pottery sherds (Stein 1931: 131).
184.	<b>Kaonri</b>	Loralai	Early Historic Harappan Rana Ghundai II-III	?	1972	M. R. Mughal	Surveyed	Ceramic sherds, terracotta cakes and bangles were found (Mughal 1972: 143).
185.	<b>Kanar Damb</b>	Porali River, Khuzdar	c. 1400 BCE- 300 CE	?	1968	R. L. Raikes	Surveyed	This site mostly yielded pot sherds which were used to define the age of the site (Raikes 1968: 156).
186.	<b>Kan Mehtarzai I</b>	Kila Saifullah 30° 43' 30 N 67° 33' 00 E	Burj Basket- Marked	12 ft. high	1929	A. Stein	Surveyed several times	Ceramics comprised the material assemblage (Mughal 1972: 148).
187.	<b>Kandai</b>	Loralai	Waziri Kot Diji	?	1972	M. R. Mughal	Surveyed	M. R. Mughal found only pottery sherds (1972: 148).
188.	<b>Kanrach Thana (KA 10)</b>	Kanrach Valley, Las Beal	Islamic Londo	?	1999	U. Franke- Vogt	Surveyed	U. Franke-Vogt with her team found ceramics of Londo and Islamic period (1999: 31, from table 2).
189.	<b>Kanri Buthi</b>	Las Bela	Kulli	?	2000	U. Franke	Surveyed	The findings were Kulli ceramics (Franke 2000: www.harappa.com).
190.	<b>Kanori</b>	Loralai	Early Historic Mature Harappan Kot Diji Kechi Beg	?	1972	M. R. Mughal	Surveyed	The survey materials mainly comprised of different kinds of ceramics (Mughal 1972: 148).
191.	<b>Kapoto Damb</b>	Kapoto, Kalat 28° 47' 00 N 66° 40' 00 E	Kulli Kechi Beg Togau	?	1959	H. Field	Surveyed	They were two mounds: big and little Kapoto. The finds included only pottery but in variety (Khan 1959: 189).

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192.	<b>Kapoto Rock Shelter</b>	Kalat 28° 47' 00 N 66° 40' 00 E	Kechi Beg Togau	?	1959	H. Field	Surveyed	The pottery found from this site resembled the Kapoto Damb pottery (Khan 1959).
193.	<b>Kaptun Bra</b>	20 miles southeast of Kalat City	Partho- Sassanian Quetta Naal Kechi Beg Togau	?	1971	Fazalur A. Khan reported it to W. Fairservis	Surveyed	This site yielded a variety of ceramics which has established a time frame for it (Possehl 1999: 775).
194.	<b>Kardagap/ Kirdagap</b>	Kirdagap, Mastung 29° 45' 00 N 66° 18' 00 E	Quetta Naal	Small mound	1959	B. de Cardi	Surveyed	Few pottery sherds were collected from this settlement (de Cardi 1983: 21).
195.	<b>Karez Damb</b>	Ornach Valley, Khuzdar 27° 05' 00 N 66° 11' 00 E	Complex B Kulli Kili Gul Mohammad?	Small mound	1964	Discovered: R. L. Raikes Published: B. de Cardi	Surveyed several times	Traces of dwelling and wall foundations could clearly be witnessed. Crude handmade and Kulli Ware have been found from the site. Stone tools included blades, cores, gouges, flakes, and lunates. A bull figurine and a shell bangle were also in its cultural materials (Raikes 1968: 153-54; de Cardi 1983: 39).
196.	<b>Karez Site/ Q-13</b>	Quetta Valley, Quetta-Pashin 30° 07' 00 N 66° 57' 00 E	Damb Sadaat	0.02 hectares 3.5 m. high	1956	W. Fairservis	Surveyed and trial excavations conducted	The inhabitants of this site lived in mud brick houses on stone footings. Various types of pottery assemblage of different time frame and semi-precious stone beads, etc. were recorded (Fairservis 1956: 202, 217-18, 230, 350).
197.	<b>Karezgai/ Karezagi/ Karezai</b>	Hindubagh/Mu slimbagh, Kila Saifullah  30° 48' 30 N 67° 45' 00 E	Partho- Sassanian Waziri Kot Diji Kechi Beg Burj Basket- Marked	0.20 hectares 15 ft. high	1931	A. Stein	Surveyed	Historic walls of rough stone probably to serve protection at war time. The recorded materials were only painted ceramic sherds (Stein 1929: 80).

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198.	<b>Kargushki Damb</b> <i>(the Rabbit's Mound)</i>	Rakhshan Valley, Khara 27° 29' 00 N 65° 19' 00 E	Early Kulli Naal Kechi Beg	15.30 hectares 10 m. high	1931	A. Stein	Surveyed and laid trial trenches by Stein	Different kinds of painted pottery were documented. Clear traces of apartments and rooms have been excavated which were built of stone slab masonry. Some of these structures found which rested on previous debris and loose earth of the dwellings. Also, a trace of pebble flooring was found (Stein 1931: 38-41).
199.	<b>Karkak/ Site 33</b>	Karkak Village, Kech 25° 45' 00 N 62° 20' 00 E	Dasht	?	1990	Besenal and Sanlaviile	Surveyed	Stone buildings and pottery manufacturing area with sherds, kiln fragments, slags, ashes, etc. and fragments of copper seals were documented (Besenal and Sanlaviile 1990: 106-07).
200.	<b>Karki Mound</b>	Hoshab, Kech, Makuran 26° 01' 05 N 63° 41' 17 E	Contemporary of Sutkagen Kuh and Sutkagen Dor (c.3000 BCE)	30 by 20 and 8 m. high	2013	J. Baloch	Surveyed	The houses were made of stones. Red, gray, brownish, coarse and basket wares were documented. Some of the sherds had geometric patterns. Illegal diggings have been reported as well (Baloch 2013: 37-41).
201.	<b>Karo Buthi (KA 19)</b>	Kanrach Valley, Las Bela	Late Islamic Kulli Prehistoric	?	1999	U. Franke- Vogt	Surveyed	The table shows that different kinds of ceramics were recorded (Franke-Vogt 1999: 31, from table 2).
202.	<b>Karpas Buthi LB-13</b>	Bela, Las Bela 26° 24' 30 N 66° 20' 30 E	Kulli Early Kulli Naal	?	1961	W. Fairservis	Surveyed twice	Different ceramic cultures were found which could easily be related to some famous cultures of Balochistan (Possehl 1999: 776).
203.	<b>Karrari Kiri Buthi (KA 62)</b>	Kanrach Valley, Las Bela	Late Islamic Kulli	?	1999	U. Franke- Vogt	Surveyed	The ceramics could be related with two periods (Franke-Vogt 1999: 31, from table 2).
204.	<b>Kasano Damb/ Kissano Damb</b>	Tump in Kech, Makuran 26° 7' 30 N 62° 22' 45 E	Londo	?	1931	A. Stein	Discover ed: A. Stein Surveyed. Besenal	This is site with Londo Ware shreds; however, the site was not visited by A. Stein due to lack of time. A collection of pottery was brought to him (1931: 85).
205.	<b>Kashi Qalat Cemetery/ Site 51</b>	Makuran	Shahi Tump? Dasht?	?	1990	R. Besenal and P. Sanlaviile	Surveyed	As the name suggests, it is a cemetery but of protohistoric age. The tombs were covered with piles of rubble of stones (Besenal and Sanlaviile 1990: 106).

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206.	Kashi Qalat/ Site 44	Northwest of Gurg Sechi Village in Kech, Makuran 25° 45' 10 N 62° 15' 30 E	Shahi Tump Dasht	?	1990	R. Besenval and P. Sanlaville	Surveyed	Remains of stone buildings and terraces covered the mound. Furthermore, there was presence of tombs. Along with ceramics, a necklace of carnelian and lapis lazuli beads was found (Besenval and Sanlaville 1990: 105-06).
207.	Kashimi Damb	Wadh Valley, Khuzdar 27° 24' 00 N 66° 25' 00 E	Medieval Kulli?	4.00 hectares	1931	A. Stein	Surveyed twice	Probable rough stone foundation walls and could be related to buildings of huge size. On the north of the site, there is an undressed stone structure which perhaps served for defense (Stein 1931: 176). R. Raikes discovered different types of ceramics from the site (1968: 146).
208.	Kashkai	Loralai	Wazir Kot Diji Kechi Beg	?	1972	M. R. Mughal	Surveyed	Ceramic were the only cultural material from this settlement (Mughal 1972: 148).
209.	Kasiano Dozakh (Q-34)	Quetta 30° 27' 00 N 66° 56' 00 E	Damb Sadaat Kechi Beg Togau Burj Basket- Marked Kili Gul Mohammad	1.30 hectares 5 m. high	1929	A. Stein	Surveyed twice	There is a local legend regarding the wickedness of tribe Kasis who are now dispersed in different areas. This tribe is assumed to have first settled here. Apart from this, the surveyor only documented variety of ceramic sherds (Stein 1929: 88).
210.	Kasmi Damb	Besema, Washuk	Ismalic- British Kechi Beg Togau	?	1931	A. Stein	Surveyed twice	A. Stein only found ceramics (1931: 31). Pottery basically formed the cultural repertoire which is used in the formation of the chronology (Possehl 1999: 777).
211.	Kasu Nilag/ Site 82	Bizanjo Kasar Area in Kech	Early Islamic Zangian	?	1990	R. Besenval and P. Sanlaville	Surveyed	It is a settlement and cemetery. The collected materials mainly consisted of pottery (Besenval and Sanlaville 1990: 103).

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212.	<b>Kaudani/ Rogha Kaudani/ Z-4</b>	Near Fort Sandeman, Zhob  31° 26' 00 N 69° 18' 00 E	Partho- Sassanian Buddhist Waziri	3.60 hectares	1929	A. Stein twice	Surveyed twice and test excavatio ns were conducted by Stein	Plain and geometric decorated sherds were recorded. Other cultural material included a bust of a female figurine, a bronze button, a scrapper-shaped flint, a stone ball, a bangle and a button in bronze, a fine jar of bronze perhaps for antimony or other cosmetic, a pot sherd with a stamped decoration on the interior which is perhaps a stamp or seal impression, etc. (Stein 1929: 42).
213.	<b>Kcuhlagh/ Kuchlaak</b>	Quetta	DS I-III	?	1972	M. R. Mughal	Surveyed	M. R. Mughal made a pottery collection from this site and reported nothing else (1972: 148).
214.	<b>Kechi Beg/ Q-14</b>	Saryab Levy Post Vicinity, Quetta 30° 07' 00 N 66° 57' 00 E	Kechi Beg	0.50 hectares	1952	W. Fairservis	Surveyed and trial trenches laid by W. Fairservis	Two structural phases yet known from this site (de Cardi 1983: 20). Ceramic types with monochrome, bichrome and polychrome patterns were discovered (Kakar 2000: 192).
215.	<b>Khad-i- Kohing</b>	Kalat	Londo	100 by 40 yards 10 ft. high	1931	A. Stein	Surveyed	Only pottery was discovered from this site (Stein 1931: 185).
216.	<b>Khad-i- Tegak</b>	Kalat	Londo?	?	1972	M. R. Mughal	Surveyed twice	Ceramics are only known from the records (Mughal 1972: 148).
217.	<b>Khatti Damb</b>	Wadh, Khuzdar	Historic Scytho- Parthian Londo	?	1968	R. L. Raikes	Surveyed	A stone wall and ceramics were recorded from this site (Raikes 1968: 148).
218.	<b>Khoedada</b>	Zhob	Kot Diji Kechi Beg Togau	?	1972	M. R. Mughal	Surveyed	Ceramics are the only records known retrieved from this site (Mughal 1972: 148).
219.	<b>Khul</b>	Mula River, Khuzdar	c.1400 BCE- 300 CE and 500-1800 CE	?	1959	B. de Cardi	Surveyed	The surveyor found pot sherds which were later used to create the chronology of the site (Fairservis 1971: 405).



Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
220.	<b>Khwaja Zabar/ Khwaja Zabor</b> <sup>159</sup>	22 miles away from Kalat City 29° 00' 00 N 66° 24' 00 E	Islamic Londo Togau Burj Basket- Marked	East to west 130 yards and 100 yards across	1931	A. Stein	Surveyed several times	The discoveries included painted pottery from here (Stein 1931: 185). Apart from pottery, B. de Cardi collected flakes of chert, a small whorl in stone and scattered bones (1983: 25).
221.	<b>Khudabadan Damb</b>	Khudabadan in Panjgur, Makuran	Kot Diji Shahi Tump? Dasht? Kili Gul Mohammad c. 5000-2000 BCE	Roughly 100 by 100m and 8 ft high	2019	Zahir Hussain	Surveyed	The site soil has already been used for construction and terribly been damaged. The site is distributed among three parties. The pottery is limited on the surface. The surface collection or the pottery retrieved from the dug-out soil mostly comprised of Makurani wares, but one Kili Gul Mohammad Ware was also found. Other finding comprises of a fragment of grinder. While observing the side eastern sections of the mound, few burials could be seen.
222.	<b>Khuzdar Rock Arts</b> <sup>160</sup>	Khuzdar	Historic Protohistoric Prehistoric	Prehistori c and Protohisto ric	2019	Zahir Hussain	Surveyed	There were many rock arts, either engraved or painted with pigments, all over Khuzdar district. They are either geometric, animal or symbolic shapes which may represent some sort of believe system (Personal Observations).
223.	<b>Kili Gul Mohammad/ Kile Gul Mohammad</b>	Near Kili Gul Mohammad Village, northwest of Quetta City 30° 17' 00 N 66° 58' 00 E	Kechi Beg Togau Burj Basket- Marked Kili Gul Mohammad	0.50 hectares	1947	S. Piggott	Surveyed several times and trial Trenches laid	It represented four cultural periods with diverse artifacts. It was the first site with pre-ceramic levels in Balochistan (Asthana 1985: 123-24). The cultural repertoire recovered was painted and plain ceramics, stone tools like chert blades, and bone spatulas and terracotta humped bull figurines (Kakar 2000: 192).

<sup>159</sup> There is another site with a similar name which was mentioned as Khwaja Zubeir by W. Fairservis. It was reported to him by Fazul A. Khan. It dated to c. 3500-1400 BCE. It is most probably the same site.

<sup>160</sup> It is a combination of many sites in Khuzdar district yet to be documented.

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
224.	<b>Kinneru Damb</b>	Ornach Valley, Khuzdar  27° 03' 00 N 66° 12' 00 E	Burnished Red and Gray Complex B Londo Kulli- Harappan Naal	A sizeable site	1964	Discovered: R. L. Raikes Published: B. de Cardi	Surveyed several times	Alongside many different types of ceramics, this site possessed stone masonry. B. de Cardi received a stone weight from a villager which was collected from the same site (1983: 38). R. Rakes only found pottery (1968: 154).
225.	<b>Kirta/ B-2</b>	Bolan Pass area, Sibi  29° 32' 00 N 67° 28' 00 E	Harappan- Quetta Damb Sadaat Kechi Beg	0.70 hectares 8 m. high	1956	W. Fairservis	Surveyed	Different types of ceramics confirm the ancient occupations and age of the site. Illegal digging was witnessed (Fairservis 1956: 200, 352). Apart from ceramics, two terracotta bull figurines and bangle fragments and flakes were also documented (Enault and J. Jarrige 1973: 190-92).
226.	<b>Kissu Damb</b>	Baghbana, Khuzdar	Londo	60 yards diameter and 20 ft high	1931	A. Stein	Surveyed	The discoveries consisted of Londo pottery mostly (Stein 1931: 179).
227.	<b>Kiya-a-Qalat</b>	Dasht, Kech- Makuran  25°48' 41.32 N 62°39' 17.98 E	Mehrgarh III, KGM II and Mundigak I 5 <sup>th</sup> to 4 <sup>th</sup> millennium BCE	40 x 40 x 12 meters	2013	J. Balochi	Surveyed	Stone masonry structures were visible from the site. Pottery and pottery sherds with animal and geometric designs were recorded. A copper bull figurine and different types of stone beads and other stone objects were also found. It has been affected by illegal diggings (Baloch 2013: 85-97).
228.	<b>Kiyani Damb</b>	Kacchi-Bolan Plain	Kechi Beg Togau	?	1995	J. Jarrige	Surveyed	A pottery collection is known from this site (J. Jarrige 1995: 75).
229.	<b>Kohing-II</b>	Kalat	Buddhist? Londo	?	1972	M. R. Mughal	Surveyed	The data of this site only comes from its ceramics (Mughal 1972: 148).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
230.	<b>Kohn Kalat/ Kohna Kalat (the Old Fort)</b>	Bonistan, Panjgur 26° 54' 00 N 64° 04' 00 E	Islamic Kulli? Naal	0.50 hectares 7 m. high	1931	A. Stein	Surveyed	It is said to have been the seat of Makiks of Makuran. Different types of wares were discovered from here (Stein 1931: 43-4). Also, a copper seal has been discovered (Khan 1959: 185). The researcher has visited the site and found mudbricks and terracotta bricks as well. It is assumed that there is a small fort on the top level of the mound. It has been damaged badly by illegal excavators (Personal Observations)
231.	<b>Kohna Camp</b>	Bazar Chib Village, Washuk 26° 52' 802 N 63° 21' 911 E	c.3000-2300 BCE	60 m EW 50 m NS 3 m high	2010	S. S. Ali	Surveyed	Ceramics were the only collection from the site (Ali 2010: 146).
232.	<b>Koreji Damb</b>	Ornach Valley, Khuzdar	Scytho- Parthian Londo	Small site	1968	R. L. Raikes		Remains of a rough or rounded stone boulder wall and ceramics were found (Raikes 1968: 154).
233.	<b>Kot</b>	Kacchi-Bolan 29° 30' 00 N 67° 26' 00 E	Quetta	?	1973	Enault and Jarrige	Surveyed	Quetta style ceramics and a seal with geometric designs was identified (Enault and J. Jarrige 1973: 189-90).
234.	<b>Kotori Dagar A, B, C Site 71</b>	Basol, Gawadar 25° 28' 29 N 64° 23' 15 E	Londo	?	1990	R. Besenval and P. Sanlaviile	Surveyed	It is basically a site with dry stone buildings. It is perhaps a settlement and cairns are certain. Few ceramics and fragments of copper bowls were recorded (Besenval and Sanlaviile 1990: 91).
235.	<b>Kotra</b>	Kotra in Gandhava, Jhal Magsi 26° 34' 00 N 67° 24' 00 E	Quetta- Mature Kot Diji Harappan Kechi Beg	?	1959	B. de Cardi	Surveyed	They seem to have lived in mudbrick houses. Different ware types were present on the mound (1983: 35).
236.	<b>Kouhlagh</b>	Quetta-Pashin	Quetta Damb Sadaat Kechi Beg	?	1972	M. R. Mughal	Surveyed	M. R. Mughal ceramics from this site (1972: 148).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
237.	<b>Kowas/ L-1</b>	Kowas Village, Loralai 30° 28' 00 N 67° 35' 00 E	Iron Age Kot Diji Kechi Beg	4.10 hectares	1929	A. Stein	Surveyed	Ruins of modern buildings were present on the site. However, pottery of ancient cultures was identified from the site as well (Fairservis 1959: 287, 328).
238.	<b>Kranai/ Kranai Hill</b>	Surkhab Valley, Pashin 30° 35' 30 N 67° 05' 30 E	Historic Quetta Damb Sadaat	10.70 hectares	1929	A. Stein	Surveyed and a cut was made by Stein	A rough and decayed stone wall was traced. Traces of ancient pottery, animal bones and worked stones i.e. cores, chips, a blade and an arrowhead, a probable carnelian stone bead were also collected in the cultural repertoire. Illegal digging has been carried out on the site (Stein 1929: 85-6).
239.	<b>Kuchnai Ghundai</b>	City Area in Pashin 30° 43' 20 N 67° 02' 30 E	Partho- Sassanian? Quetta Damb Sadaat Kechi Beg	0.20 hectares	1929	A. Stein	Surveyed several times	Pottery collection makes its cultural repertoire (Mughal 1972: 148).
240.	<b>Kuddour Damb</b>	South of Serani Levy Post, Dhera Bugti Area	c. 2800-1900 BCE (?)	?	1967	S. Matheson	Surveyed	The ancient remains were stone structures, hollowed door-stones, petrified wood, bones, ashes, beads, and ceramics were the main finds (Matheson 1967: 160).
241.	<b>Kuhan</b>	Mula River, Khuzdar	c. 1400 BCE- 300 CE and 500-1800 CE	?	1959	B. de Cardi	Surveyed	The artifacts comprised of only pottery sherds (Fairservis 1971: 405).
242.	<b>Kuki Damb</b>	Rojinjo, Kalat 28° 45' 00 N 66° 21' 00 E	Naal Kechi Beg Togau Burj Basket- Marked	0.10 hectares	1931	A. Stein	Surveyed twice	Apart from different pottery types, nothing else was discovered from this site (de Cardi 1983: 26).
243.	<b>Kuleri</b>	Kalat	Londo	?	1972	M. R. Mughal	Surveyed	Ceramics were only found from this settlement (Mughal 1972: 148).
244.	<b>Kuleri Damb-I</b>	Kalat	Londo	?	1972	M. R. Mughal	Surveyed	Pottery fragments from the surface were collected (Mughal 1972: 148).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
245.	Kulli	Kolwa, Awaran 26° 15' 00 N 65° 00' 00 E	Londo Kulli	10.80 hectares	1931	A. Stein	Surveyed and laid trial trenches	It is the type site for Kulli Culture. They built multi-roomed stone houses. Ceramics with diverse color and shape, [human and animal figurines], querns, rubbing stones, different beads, bangles, copper, gold and glass (?) objects, etc. were discovered (Chakrabarti 2006: 121).
246.	Kulliki-an Damb (Mound of Potteries)	Near Kud River, Khuzdar	Londo	Oblong, 40 m. long and 5 m. high	1966	J.-F. Casal	Surveyed and excavated	A small fort with bastions with stones. The artifactual assemblage suggested it to be associated with Londo Culture/Horizon (J. Jarrige <i>et al.</i> 2011: 63-4).
247.	Kulloi	Brinchinnau, Mastung	Quetta Naal Kechi Beg	?	1959	B. de Cardi	Surveyed	B. de Cardi conducted a survey and selected pot sherds from the site (1964: 21).
248.	Kullu- Kalat/ Kullo-Kalat/ Kullu Kalat	Mungachar, Kalat 29° 04' 00 N 66° 22' 00 E	Early Historic Londo Togau	1.20 hectares 40 ft. high	1931	A. Stein	Surveyed several times	The cultural assemblage documented was ceramics of different periods. A. Stein did not visit the site himself but examined the ceramics which were brought to him (1931: 186). They lived in boulder houses which were found in ruins; though there were traces of stone walls too (de Cardi 1983: 23-4).
249.	Kunar Kull	Ornach Valley, Khuzdar	Protohistoric?	?	1964	B. de Cardi	Surveyed	The reported cultural assemblage from the site is its ceramic collection (Fairservis 1971: 406).
250.	Kurragi Damb	Vicinity of Besima in Washuk 27° 58' 25.7 N 65° 47' 399 E	Kulli? Naal	0.90 hectares 10 m. high	1931	A. Stein	Surveyed twice	It is covered with large stones which were perhaps intentionally brought for building purposes. Moreover, pot sherds were recorded from the site as well (Stein 1931: 30-1).
251.	Kuruzkol/ Sar Paroom Mound (the Head of Paroom)	Paroom, Panjgur 26° 39' 00 N 63° 23' 00 E	Kulli	0.20 hectares	1931	A. Stein	Surveyed several times	Pieces of red and gray painted wares were recorded from this site (Stein 1931: 50-51).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
252.	<b>Kutirki Buthi (KA 58)</b>	Kanrach Valley, Las Bela	Late Islamic Applique Londo Kulli	?	1999	U. Franke- Vogt	Surveyed	Pottery has been found and used for dating the site (Franke-Vogt 1999: 31, from table 2).
253.	<b>Kuzbagh</b>	Quetta-Pashin	Damb Sadaat Kechi Beg	0.20 hectares	1972	M. R. Mughal	Surveyed several times	It is known from its ceramic collection and its cultural chronology has been established based on the ceramics (Mughal 1972: 148).
254.	<b>L<sup>161</sup>-2</b>	Ziarat Road, 4 miles west of Sinjawi, Ziarat 30° 18' 00 N 68° 10' 00 E	Kot Diji Kechi Beg Togau Burj Basket- Marked	0.60 hectares 5 ft. high	1959	W. Fairservis	Surveyed	Large boulder walls and tower presence compelled W. Fairservis hypothesized that it must have been a fortified village. This type of structures is not common in ancient Balochistan, however. Different types of ancient ceramics confirm the cultural chronology of the site (1959: 287, 327-28).
255.	<b>L-3</b>	3 miles east of Sinjawi, Ziarat 30° 18' 00 N 68° 12' 00 E	Kot Diji Kechi Beg Togau Burj Basket- Marked	12.60 hectares 30 ft. high	1929	A. Stein	Surveyed	W. Fairservis observed scattered stones on the mound and collected different kinds of ceramics (1959: 287, 327).
256.	<b>Lahar</b>	Near Muslimbagh, Kila Saifullah	Kot Diji	?	1972	M. R. Mughal	Surveyed	Only pottery was found from this site. Moreover, fragments of alabaster vessels, chert blades and a stone arrowhead (Mughal 1972: 141, 148).
257.	<b>Lahri Damb</b>	Taluka, Khuzdar	Kulli c.2800-1900 BCE	220 by 180 m. and 15 m. high	1929	H. Hargreaves	Surveyed	Kulli pottery and two bull figurines (one in stone) were recorded (Saleem-ul-Haq and Ali 2001: 3-4).

<sup>161</sup> L stands for Loralai

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
258.	<b>Lak Plateau/ Site 76</b>	2 km north of Jiwani in Gawadar, Makuran  25° 04' 15 N 61° 44' 45 E	Zangian Dasht	?	1877	E. Mockler	Surveyed several times and Excavated	It is a group of burial cairns and some buildings. There is also protohistoric assemblage i.e. pottery and small buildings (Besenval and Sanlaville 1990: 98-9). A cairn with sandstone built enclosed walls and earth filled was identified. They bore human bones, beautifully designed ceramics, a hook, etc. Moreover, copper anklets or bracelets, a copper ring and a carnelian bead and iron object fragments comprised the other cultural materials. These people exposed the bodies of the dead to the animals like the Zoroastrians do and they look to have practiced Oriti (Stein 1931: 77-82).
259.	<b>Lakaha Band</b>	Zhob	c.18,000 BCE	?	?	F. D. Kakar	Surveyed by Fazal Dad Kakar	4 rock shelters with prehistoric traces like paintings of humans and animals and stone tools were recorded (Kakar 2000: 190).
260.	<b>Lal Ghundai/ P-6</b>	15 miles from Khanozai on Pashin- Khanozai Road, Pashin 30° 35' 00 N 67° 07' 00 E	Kili Gul Mohammad	?	1956	W. Fairservis	Surveyed	Remains of stone walls and pottery and flints were recorded (Fairservis 1956: 201, 351).
261.	<b>Lal Shah</b>	Kacchi-Bolan Plain 29° 25' 00 N 67° 33' 30 E	Mehrgarh VIIC	?	1985	J. Jarrige	Surveyed	Ceramics were identified (J. Jarrige 1995: 75).
262.	<b>Landau Damb</b>	Baghbana, Khuzdar	Londo	80-100 yards diameter, 20 ft. high	1931	A. Stein	Surveyed	Rough stone structures were noticed on the site. Moreover, ceramics were found from the site (Stein 1931: 180).



Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
263.	<b>Lang Buthi (KA 71)</b>	Kanrach Valley, Las Bela	Prehistoric	?	1999	U. Franke- Vogt	Surveyed	Prehistoric ceramics were discovered (Franke-Vogt 1999: 31, from table 2).
264.	<b>Langro Damb</b>	Porali River, Las Bela	Londo	?	1968	R. L. Raikes	Surveyed	Ceramics formed the major findings of the site; these ceramics have defined the age of the site (Raikes 1968: 157).
265.	<b>LB-2</b>	Las Bela	c. 1400 BCE- 300 CE	?	1961	W. Fairservis	Surveyed	Ceramics from the site are used in the formation of the chronology (Fairservis 1973: 407).
266.	<b>LB-5/ Pirkariya (Bhit)</b>	Las Bela	c. 1400 BCE- 300 CE? and 500-1800 CE	?	1961	W. Fairservis	Surveyed	Ceramic sherds have been found and used in creating the chronology of the site (Fairservis 1971: 407).
267.	<b>LB-7</b>	Khamkho Naal Pass, Las Bela	c. 1400 BCE- 300 CE? and 1300 CE- Present	?	1961	W. Fairservis	Surveyed	W. Fairservis found mostly ceramics which led him to create the chronology of the site (1971: 407).
268.	<b>LB-8</b>	Bela, Las Bela	c. 1400 BCE- 300 CE	?	1961	W. Fairservis	Surveyed	Ceramics were used in the establishment of chronology of the site (Fairservis 1971: 407).
269.	<b>LB-9</b>	Las Bela 26° 25' 30 N 66° 18' 30 E	Early Historic Londo Kulli	?	1961	W. Fairservis	Surveyed	The survey provided W. Fairservis with different kinds of ceramics which were later used to form the chronology of the site (1971: 407).
270.	<b>LB-10</b>	Las Bela	c. 1400 BCE- 300 CE	?	1961	W. Fairservis	Surveyed	Ceramics were found and used to make the assumed chronology of this site (Fairservis 1971: 407).
271.	<b>LB-13</b>	Las Bela 26° 25' 30 N 66° 20' 00 E	Kulli Early Kulli Naal Togau	?	1961	W. Fairservis	Surveyed	Pot sherds were the main findings and were used to form the chronology of the site. They seem to relate with different cultures (Possehl 1999: 789).
272.	<b>LB-14</b>	Las Bela	Kulli- Harappan Naal Togau	?	1961	W. Fairservis	Surveyed	Different kinds of pottery were discovered from this site. They related with different cultures (Possehl 1999: 789).
273.	<b>LB-15</b>	Las Bela	c. 1400 BCE- 300 CE	?	1961	W. Fairservis	Surveyed	Pot sherd were the primary findings from the site (Fairservis 1971: 407).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
274.	<b>LB-16 'A-B'</b>	Las Bela 26° 25' 00 N 66° 21' 30 E	Early Historic Iron Age Kulli Naal	22.00 hectares	1961	W. Fairservis	Surveyed	W. Fairservis found ceramics of different periods from the site (Possehl 1999: 789).
275.	<b>LB-16 'C'</b>	Las Bela 26° 30' 30 N 66° 22' 00 E	Kulli Naal	?	1961	W. Fairservis	Surveyed	Ceramic sherds were the main findings. These sherds related with two cultures of Balochistan (Possehl 1999: 789).
276.	<b>LB-17</b>	Las Bela 26° 26' 00 N 66° 21' 00 E	Early Historic Kulli Naal	7.20 hectares	1961	W. Fairservis	Surveyed	Pottery comprised to be the main findings from the survey; they were related to various cultures of Balochistan (Possehl 1999: 789).
277.	<b>LB-18</b>	Las Bela	c. 1400 BCE- 300 CE and 1300 CE-	?	1961	W. Fairservis	Surveyed	Ceramics comprised the major findings of the site (Fairservis 1971: 407).
278.	<b>Leaoha Ghozai</b>	Zhob	c. 22,000 BCE	?	?	F. D. Kakar	Surveyed	6 rock shelters and 5 caves bore paintings and stone tools (Kakar 2000: 190).
279.	<b>Lehri</b>	Naal, Khuzdar 27° 41' 30 N 66° 15' 30 E	Naal	?	1929	H. Hargreaves	Surveyed several times	The cultural remains from this site only included pot sherds of Naal Culture (Stein 1931: 168-69).
280.	<b>Lena Singh</b>	Shaheed Sikandarabad (Surab) 28° 17' 00 N 66° 18' 00 E	Early Historic Iron Age Kulli- Harappan Togau	?	1951	B. de Cardi	Surveyed	Rough boulder masonry could be seen. The cultural repertoire included variety of pottery, number of clay bull figurines and a fragment of terracotta bangle was also recorded (de Cardi 1983: 27).
281.	<b>Lidee Damb/ Jangazi Damb</b>	Janazi Village in Besima, Washuk 27° 50', 89.4" N 65° 47', 03.4" E	c. 2800-2500 BCE	370 by 290m and 9 m. high	2010	S. S. Ali	Surveyed	Nothing was recorded but pottery fragments. Lamentably, it has been illegally dug for treasures (Ali 2010: 172).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
282.	<b>Londo Damb (the Long Spoon Mound)</b>	Baghbana Area at Londo village, Khuzdar 27° 58' 00 N 66° 33' 00 E	Londo Harappan Kulli? Naal Togau <sup>162</sup>	180 m. diameter 68 ft. high	1931	A. Stein	Surveyed several times	Evidences of fallen walls and ceramic fragments were largely attested (Stein 1931: 181; Personal Observations). B. de Cardi further confirmed stone masonry walls, more ceramic variants or types and illegal digging on the site (1983: 37). Illegal excavations have terribly affected the site (Naseer <i>et al.</i> 2015: 119; Personal Observations).
283.	<b>Machuki Damb</b>	Dasht Valley, Kech 25° 41' 00 N 62° 34' 00 E	Islamic Kulli?	2.50 hectares	1931	A. Stein	Surveyed twice	Pottery from its surface resembled the pottery of Suthkagen Dor. Other types of ceramics were also recorded (Stein 1931: 59). It has been almost destroyed because of erosion (Khan 1990: 359).
284.	<b>Madak Kalat</b>	Kolwa in Kech, Makuran 26° 11' 00 N 64° 28' 00 E	Islamic- British Kechi Beg	?	1931	A. Stein	Surveyed	On the top of the site is a fort of Kaudani chiefs of historic times. The material culture consisted of ceramic sherds only (Stein 1931: 111).
285.	<b>Mai Peer/ Mahi Peer/ Gondrani Caves/ Gondrani/ Shahr-i- Roghan/ Roghan Shehr</b>	Gondrani in Bela, Las Bela	Chalcolithic Age or Earlier c. 6,000 BCE	?	1838	T. G. Carless	Surveyed	These are ancient man-made rock cut caves which can be 200 [or 1500 cave dwellings] (Raikes 1968: 158-59). The materials recorded include chert blades and hand constructed ceramics were present there (Kakar 2000: 190). Recently it has been added in the 101 protected sites of Balochistan under the Balochistan Antiquities Act 2014 (Directorate of Archaeology and Museums Balochistan Quetta 2019: 3).
286.	<b>Majo Mill</b>	Surkhab Valley, Pashin 30° 34' 00 N 64° 04' 00 E	Islamic- British Quetta Damb Sadaat Kechi Beg	?	1929	A. Stein	Surveyed	The surveyor found ceramics from this site (Stein 1929: 85).

<sup>162</sup> This is the new chronology is based on the new study pottery collected from the site on November 2019 on the site by the present researcher.

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
287.	<b>Makri Mas/ Marki Mas</b>	Drakalo Valley, Khuzdar 27° 10' 00 N 66° 25' 00 E	Londo Kulli Naal Kechi Beg	0.40 hectares	1968	R. L. Raikes	Surveyed	Different ceramics were discovered i.e. Togau, Kulli, Londo and another unnamed polychrome ceramic was also included. However, flint tools were also identified (Raikes 1968: 150).
288.	<b>Malasband</b>	Southern Mashkai Valley in Gwarjak, Awaran 26° 58' 00 N 65° 30' 00 E	Islamic- British Kechi Beg	?	1931	A. Stein	Surveyed and dug on a small scale by Stein	Pottery fragments, a piece of worked alabaster and few beads of bone were recorded from this site (Stein 1931: 148).
289.	<b>Malazai</b>	Kuchlak, Quetta 30° 23' 00 N 66° 53' 00 E	Islamic Early Islamic Pirak II Quetta	Steep sided but conical mound with 50 ft. height	1983	B. de Cardi	Surveyed	Mudbrick and stone masonry structures were the superficial. Other cultural findings included a number of fragments of ceramics and animal bones (de Cardi 1983: 17-9).
290.	<b>Malghori Damb</b>	Kalat	Kechi Beg Togau	?	1931	A. Stein	Surveyed several times	It is known for its ceramic collection which is used to detect its cultural chronology (Mughal 1972: 148).
291.	<b>Mali</b>	Kalat	Londo?	?	1972	M. R. Mughal	Surveyed	A surface collection of pottery has yet been made until now. Nothing else was found (Mughal 1972: 148).
292.	<b>Malki</b>	Kalat 29° 05' 00 N 66° 24' 00 E	Partho- Sassanian Early Historic Iron Age Kechi Beg Togau Burj Basket- Marked Kili Gul Mohammad?	175 ft. NS 10 ft. high	1959	B. de Cardi	Surveyed	Stone masonry structures were used for dwelling houses. Additionally, many types of ceramics of different time scale were recorded (de Cardi 1983: 24).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
293.	<b>Mammai Damb/ Mammoi Damb</b>	Mammoi Village in Besema, Washuk 27° 56' 00 N 65° 50' 00 E	Kulli Naal	0.60 hectares 3 m. high	1931	A. Stein	Surveyed several times	Limited structures were found. There was dearth of pottery. A small piece of humped bull of terracotta was also found (Stein 1931: 30). Treasure hunting is witnessed at this site (Ali 2010: 164).
294.	<b>Mandai</b>	Kalat	Togau c.2800-1900 BCE	?	1971	Fazalur A. Khan reported it to W. Fairservis	Surveyed	Ceramics were reported from this site; these ceramics were later used to form the chronology of the site (Fairservis 1971: 403).
295.	<b>Manzakai/ P-10</b>	Nearby the Village of Manzakai, Pashin 30° 40' 00 N 66° 59' 00 E	Damb Sadaat Kechi Beg	?	1971, 1972	W. Fairservis/ M. R. Mughal	Surveyed several times	Ceramics fragments were known from this <i>damb</i> (Possehl 1999: 805).
296.	<b>Marastan/ Marastan Enclosure</b>	Kolwa, Kech, Makuran 26° 02' 50 N 64° 11' 50 E	Kulli	0.20 hectares	1931	A. Stein	surveyed	Decayed clay and stone ramparts and the enclosure is full of ancient ceramic fragments of Kulli Culture (Stein 1931: 107).
297.	<b>Mata Ghundai</b>	Near Fort Sandeman, Zhob 30° 45' 00 N 67° 10' 00 E	Quetta Damb Sadaat Kechi Beg	?	1929	A. Stein	Surveyed	Stone footings and earthen painted wares were recorded from this site (Stein 1929: 84).
298.	<b>Mata Kaudani (the Broken Kaudani)</b>	Near Fort Sandeman, Zhob 31° 15' 00 N 69° 20' 00 E	Early Historic Waziri	1.50 hectares	1929	A. Stein	Surveyed	A. Stein found pottery, bones, etc. from the site (1929: 42-3).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
299.	<b>Mayal Chah Damb</b>	Panjgur 27° 19' 00 N 65° 05' 00 E	Kulli?	?	1931	A. Stein	Surveyed	From architectural perspective, only scanty stone masonry structures were visible to the naked eye. The artifacts included only plain ceramics (Stein 1931: 42).
300.	<b>Mazena Damb (the Big Mound)</b>	Southern Mashkai Valley, Awaran 26° 58' 45 N 65° 30' 00 E	Kulli	12.00 hectares	1931	A. Stein	Surveyed	One could see roughly built stone walls; also, one can notice the huge circumvallation of remains on the site. Apart from ceramics, the surveyor found fragments of terracotta bull figurines (Stein 1931: 148-49).
301.	<b>Mehar</b>	Loralai	Rana Ghundai I-III	?	1990	F. D. Kakar	Surveyed	The cultural assemblage comprised of ceramics which was related to Rana Ghundai I-III (Kakar 1990: 112).
302.	<b>Mehi</b>	Mashkai Valley in Mehi, Awaran 27° 13' 00 N 65° 42' 00 E	Kulli	9.90 hectares	1931	A. Stein	Surveyed and laid trial trenches	This site yielded Kulli Culture materials like pottery, copper artifacts i.e. mirrors, bangles, hairpins, discs, bowls, and beads of lapis lazuli, etc. terracotta female and animal figurines and a bronze bangle. Some burials were also documented (Asthana 1985: 130-31).
303.	<b>Mehrgarh</b>	Kot Kai Village, Kacchi-Bolan 29° 25' 00 N 67° 35' 00 E	Mehrgarh VIII-Sibri Transitional Kot Diji Kechi Beg Togau Burj Basket- Marked Kili Gul Mohammad	300 or 250 hectares	1973	J.-F Jarrige	French Archaeolo gical Mission under the Superviso n of J.-F Jarrige	It yielded seven [or eight] cultural periods starting from early Neolithic to Bronze Age (Jarrige <i>et al.</i> 1995: 555-56). Earliest Neolithic site in South Asia with the earliest evidences of domestication of animals and plants. They were the earliest dentists and cotton producers of the time. It is a well-studied site in Pakistan which gives the origin of Indus Valley Civilization (Chakrabarti 2006: 107-14, see Table 23 and 27 for more information)
304.	<b>Men Damb</b>	Sothorn Mashkai Valley, Awaran 27° 07' 00 N 65° 35' 00 E	Kulli	1.80 hectares and 35 ft. high	1931	A. Stein	Surveyed	Traces of ruined stone and mud structures were visible. Moreover, ceramics, several terracotta bull figurines were witnessed, and a head of a human figurine was also found (Stein 1931: 150-51).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
305.	<b>Mian Ghundai</b> ( <i>Pashto name</i> )/ <b>Damb Sadaat</b> ( <i>in official records or Brohui name</i> ), also Q-8	Near Mian Ghundai Levy Post, Quetta  30° 03' 00 N 66° 57' 00 E	Quetta Damb Sadaat Kechi Beg	1.70 hectares	1898	F. Noetling	Surveyed several times and trial excavations twice	Three occupational periods were assigned to it. Different cultural wares were identified (de Cardi 1983: 20). The discoveries included mudbrick structures on stone footings, painted ceramics, human and terracotta figurines, beads, bone implements, scrapers, cores, etc. (Kakar 2000: 192).
306.	<b>Minki Damb</b>	Ornach Valley, Khuzdar	Londo	?	1968	R. L. Raikes	Surveyed	Among the ceramics, R. L. Raikes mostly found decorated Londo Ware; moreover, he also found stone structures (1968: 154).
307.	<b>Miri Qalat</b> <sup>163</sup> ( <i>Ruler's Palace</i> )/ <b>Miri Fort/ Meer e Qalat/ Miri Kalat/ Site I</b>	Kech, 6 km north west of Turbat, Makuran  26° 02' 00 N 63° 00' 45 E	Medieval Shahi Tump Kulli-Harappan Naal	3.70 hectares	1931	A. Stein	Surveyed several times and later excavated extensively	The extensive excavations resulted in a huge amount of cultural material. Its period are Miri I, II, IIIa, IIIc, IIIc and IV (Besenval 2005: 1-7). These periods yielded structures, pottery, beads, bones, etc. (Besenval 2005). There were ruins of a fort on the top of the mound. It yielded painted ceramics and ceramics of different cultures (Besenval and Sanlaville 1990: 114-15).
308.	<b>Miri Sarhap</b>	Zehri, Khuzdar	Mehrgarh VIII-Sibri Kulli Naal Togau Kili Gul Mohammad	500 x 300 x 30 meters	2019	Zahir Hussain and Bilal Zehri	Surveyed	Pottery, beads, seals, human and animal figurines, metal objects, were, according to locals, dug out and sold in the by treasure hunters. However, the researcher only found some pictures of them. The pottery sherds collected are from different cultures. It has been largely damaged by treasure hunters.

<sup>163</sup> To rectify, it is correctly written and pronounced as Meer e Qalat, however, the present researcher is still using the old name in this work.



Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
309.	<b>Mishk</b>	Near Mulla River in Zehri, Khuzdar 28° 27' 00 N 67° 05' 00 E	Kulli- Harappan Naal	?	1959	B. de Cardi	Surveyed	A historic fort crowns on its top. The archaeological assemblage was only ceramic types which were recorded (de Cardi 1983: 33).
310.	<b>Mitthi Dhora (KA 51)</b>	Kanrach Valley, Las Bela	Late History Applique Londo	?	1999	U. Franke- Vogt	Surveyed	Different kinds of ceramics were collected which helped in discovering the age of the site (Franke-Vogt 1999: 31, from table 2).
311.	<b>ML-1</b>	Dori, Loralai 30° 34' 74 N 68° 62' 62 E	Kot Diji	26.28 hectares	2018	M. Zahir and M. A. Khan	Surveyed	The discoveries included Kot Diji and Wet ceramics (Zahir and Khan 2018: 13, Table 5)
312.	<b>ML-2</b>	Dori, Loralai 30° 34' 07 N 68° 65' 07 E	Harappan	0.56 hectares	2018	M. Zahir and M. A. Khan	Surveyed	In the survey, Harappan ceramics were identified (Zahir and Khan 2018: 13, Table 5).
313.	<b>ML-10</b>	Dori, Loralai 30° 34' 92 N 68° 66' 29 E	Harappan	0.4 hectares	2018	M. Zahir and M. A. Khan	Surveyed	This site has been identified as a Harappan site because of the ceramics (Zahir and Khan 2018: 13, Table 5).
314.	<b>Mobi Damb/ Damb Mobi</b>	Near Pringabad, Mastung 29° 57' 00 N 66° 45' 00 E	Islamic- British Quetta Damb Sadaat Kechi Beg	Large mound 35 ft. high	1959	B. de Cardi	Surveyed twice	The cultural assemblage of this site consisted of ceramics and two alabaster bowl fragments (de Cardi 1983: 20).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
315.	<b>Mughal Ghundai/ Moghal Ghundai/ Z-3</b>	Near Fort Sandeman/ Zhob  31° 26' 00 N 69° 16' 00 E	Buddhist Kot Diji	0.60 hectares	1929	A. Stein	Surveyed and trial trenches dug	The local tradition related it to the Mughals. Nonetheless, the material culture indicates older evidences like undressed stone walls probably used for the mudbrick wall foundations of small houses; the stones were set in mud mortar. Moreover, pottery and an iron implement, a terracotta figurine of a membrum virile, figurine of an animal head, two small bull figurines, a small terracotta relief with a hooded female bust, bone beads, glass and celadon type frit, etc. were from the culture assemblage of the site. They cremated the dead and placed the remains in a pottery and buried them; it looked like they buried the kids in the earth without cremating. Its cultural assemblage is very similar to that of Periano Ghundai (Stein 1929: 43-9).
316.	<b>Mughal Kala/ Moghal Kala/ Mughal Qila (the Fort of Mughal)/ L-13</b>	15 miles north east of Loralai  30° 26' 00 N 69° 50' 00 E	Islamic- British Kot Diji	0.90 hectares	1929	A. Stein	Surveyed	There is a fort of Mughal time on the top the mound. Apart from this, the ceramic assemblage confirms the ancient nature of the site (Stein 1929: 53).
317.	<b>Murda Sang (KA 35)</b>	Kanrach Valley, Las Bela	Kulli Amri-Naal <sup>164</sup> Togau	25 hectares	1999	U. Franke- Vogt	Surveyed and trial trenches laid	There were multi-roomed houses with mudbrick on stone foundations. It had a loosely structured plan with a fortification. This site is associated with pottery workshops and different kinds of ceramics. Two dams were found near it (Franke 2015j: 158-60).

<sup>164</sup> Amri-Naal has been used here because alongside Naal ceramic Amri ceramics occurred too on the site.

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
318.	<b>Murgha Mehtarzai</b>	Hindubagh/Hid ubagh, Kila Saifullha 30° 44' 00 N 67° 35' 30 E	Islamic- British Waziri Kot Diji Kechi Beg	?	1929	A. Stein	Surveyed	A tradition relates it to the Mughals. One can find an enclosure. A. Stein further recorded a pottery assemblage from this settlement (1929: 80).
319.	<b>Musazai</b>	Zhob	Neolithic to Bronze Age	?	1990	F. D. Kakar	Surveyed	The surface findings dated it back to Bronze Age (Kakar 2000: 191).
320.	<b>Naal Village</b>	Naal, Khuzdar 27° 42' 00 N 66° 11' 30 E	Early Historic Kulli?	?	1931	A. Stein	Surveyed	Different types of ceramics were recorded from this site. Two burials were recorded with pot sherds. Perhaps bull figurines were related to this site since somebody handed over one piece to the A. Stein (1931: 169).
321.	<b>Nag Damb/ Zamuran</b>	15 km east of Nivano, Zamuran in Kech, Makuran 26° 23' 45 N 62° 51' 15 E	Shahi Tump Dasht	?	1990	R. Besenval and P. Sanlaville	Surveyed	It is a modern village where protohistoric sherds were scattered (Besenval and Sanlaville 1990: 121).
322.	<b>Namdai/ Mandai</b>	Kalat	Naal Kechi Beg Togau	?	1971	F. A. Khan reported it to W. Fairservis	Surveyed	The cultural assemblage mainly comprised of types of ceramics (Possehl 1999: 801).
323.	<b>Nausharo/ Nowsharo/ Naushero</b>	Bhag Tehsil, Kacchi-Bolan 29° 22' 00 N 67° 35' 00 E	Pirak III Early to Mature Harappan Kot Diji	1.80 hectares	1980 Discovered	J.-F. Jarrige	Surveyed and largely excavated stating from 1982	It consisted four cultural periods (Franke and Cortesi 2015: 340-43). It possessed dwelling structures, painted ceramics, figurines of humans and animals, Harappan seals (Kakar 2000: 192). It is a remarkable settlement with local Balochi tradition to the advent of Indus Civilization (Franke and Cortesi 2015: 343).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
324.	<b>Nazarabad</b>	8 km east of Tump in Nazarabad Kech, Makuran 26° 06' 00 N 62° 26' 30 E	Shahi Tump Naal Kechi Beg	95 yards from the south and over 40 ft. high	1931	A. Stein	Surveyed several times	Varieties of painted and plain ceramics were witnessed; Gray wares were also found from the very site. Interestingly, an alabaster cup was found too (Stein 1931: 84-5). The forms and decorations of the pottery closely resembled to that of Periano Ghundai (Stein 1931: 84; Khan 1959: 182). H. Field also found a fragment of cake-like terracotta artifact and stone tools (Khan 1959: 184-85).
325.	<b>Neghar Damb</b>	Gidar in Shaheed Skandarabad (Surab) 28° 16' 00 N 66° 16' 00 E	Londo Anjira Naal Kechi Beg Togau Burj Basket- Marked	0.30 hectares	1931	A. Stein	Surveyed several times	Evidences of roughly constructed houses and other remains of different walls turned into rubble have been noted. Pottery sherds forms the other cultural assemblages from the survey of A. Stein (1931: 18-9). B. de Cardi had similar observations (1983: 28).
326.	<b>Niai Buthi/ Niain Buthi (LB-6)</b>	Welpet in Bela, Las Bela 26° 15' 25 N 66° 20' 73 E	Kulli- Harappan Naal Kechi Beg Togau Kili Gul Mohamad?	13 hectares and 13 m. high	1943	A. Stein	Surveyed several times and laid trial trenches several times	It is the most important site in Las Bela. The recent excavations revealed nine phases on the site having different cultural pottery (Franke 2015j: 152-55). The inhabitants of built houses mudbrick houses on stone foundations. Different kinds of ceramics related to different ages were identified (Raikes 1968: 157).
327.	<b>Nimkai Ghundai</b>	Duki District	Prehistoric	200 by 30/50 yards and 50 ft. high	1929	A. Stein	Surveyed	Fallen architectural structures and decorated ceramics were reported (Stein 1929: 71).
328.	<b>Nindowari/ Nindo Damb/ Mindowain</b>	Wadh, Khuzdar 26° 57' 00 N 66° 04' 00 E	Kulli- Harappan Naal Kechi Beg	50.00 hectares	1964	Discovered: R. L. Raikes and J. M. Casal Published: B. de Cardi	Surveyed several times and excavated for several seasons	It possessed stone structure, human and animal figurines particularly of bulls, ceramics of high quality with great aesthetic sense, and other objects (Casal 1966; J. Jarrige 1982/83; Asthana 1985: 131-4).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
329.	<b>Nodiz Fort/ Nodiz Damb</b>	1 mile west of Nodiz in Kech, Makuran	Islamic Shahi Tump Kulli	?	1959	H. Field	Surveyed	Different types of ceramics were discovered (Khan 1959: 184).
330.	<b>Nokjo Shahdinzai</b>	Jhalawan 27° 10' 30 N 65° 39' 00 E	Islamic- British Londo Kulli Naal	7.50 hectares	1931	A. Stein	Surveyed	Plenty of ancient pottery was found from it. It was also crowned with a historic fort in ruins. Other cultural materials comprised of bull figurines in fragments, a human figurine, and bangles of clay in fragments. Burial cairns were also found from the site (Stein 1931: 152-53).
331.	<b>Nundara (also called Siah Damb<sup>165</sup>)</b>	Awaran 26° 28' 00 N 65° 25' 00 E	Naal Kechi Beg	3.30 hectares	1931	A. Stein	Surveyed several times and laid trial trenches	A. Stein found remains of structures and plenty of ceramics from this site (1931: 134).
332.	<b>Nushki Mound/ Ch-1</b>	Nushki 29° 33' 00 N 62° 02' 00 E	Early Islamic Partho- Sassanian Early Historic Iron Age Quetta Naal Kechi Beg	?	1956	W. Fairservis	Surveyed several times	W. Fairservis (1956: 199) and B. de Cardi (1983: 21) identified almost the same wares. The beautiful and wide range of ceramics covered a long span of time
333.	<b>Old Balor/ Balor</b>	Kolwa in Kech, Makuran 26° 03' 00 N 64° 25' 00 E	Londo Kulli Togau	0.40 hectares	1931	A. Stein	surveyed	Apparently modern towers and walls on the mound were visible. The cultural repertoire of this site comprised of variety of pottery (mostly plain), two fragments of relief in terracotta (one with the head of a ram and the other with pig's snout) (Stein 1931: 110).

<sup>165</sup> This name is common for many sites in this vast region.

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
334.	<b>Oshap Damb/ Hoshab Damb<sup>166</sup> (Hoshab Dams I- II)<sup>167</sup></b>	Kech-Makuran 26° 00' 11.59 N 63° 53' 18.53 E	c.3500 BCE	40 x 25 x 10 meters high	1931	A. Stein	Surveyed several times	It had mostly red ware ceramics. Also, it had black, gray, and whitish ware with animal decorations. However, plainware sherds were found as well. Moreover, marine shell objects were also reported. Moreover, stone masonry structures were also identified. There are evidences of encroachment. Illegal diggings have also been observed (Baloch 2013: 14-21).
335.	<b>Pak</b>	Kolwa in Kech, Makuran 26° 04' 00 N 64° 13 00 E	Shahi Tump Kulli Naal	0.70 hectares	1931	A. Stein	Surveyed	Remains of the enclosure wall masonry were noticed. Moreover, a quadrangular structure was also recorded. Variety of plain and painted ceramics evidences found in abundance from the site (Stein 1931: 107-08).
336.	<b>Pandoi</b>	Dasht Valley in Kech, Makuran 25° 50' 00 N 62° 28' 00 E	Kulli	?	1931	A. Stein	Not Surveyed	This site was not surveyed because of the river was causing hurdles but pot sherds were brought to him by locals. The pot sherds proved to be Kulli and basket marked (Stein 1931: 59).
337.	<b>Panj Pai/ Panjpai/ Panj Pahi/ Q-37</b>	Panjpai Village, 115 km Southwest of Quetta City	Quetta Naal Kechi Beg	?	1964	B. de Cardi	Surveyed several times and trial excavated	Its ceramic assemblage was like that of Tor Ghundai ceramics (de Cardi 1983: 20). The trial trench excavations yielded variety of pottery and structures. However, other materials have not been reported yet (Khan 2002: 145).
338.	<b>Panju Damb/ Mehandrar</b>	Wadh Valley, Khuzdar 27° 19' 00 N 66° 25' 00 E	Early Historic Iron Age Togau	13.80 hectares	1931	A. Stein	Surveyed twice	The cultural materials were mostly ceramic fragments and a glass bead from the settlement (Stein 1931: 175).
339.	<b>Pathan Kot</b>	Loralai	Protohistoric	?	1972	M. R. Mughal	Surveyed	Chert blades and historic ceramics were recorded from the surface. M. R. Mughal and his team quickly surveyed the sites because of lack of time (1972: 149). To clear its nature, one must go for an extensive survey of this site.

<sup>166</sup> It is sometimes regarded as the Thale Damb.

<sup>167</sup> M. B. Khan has named Hoshab I as Sar-i-Damb and Hoshab II as Cheri Damb (1990: 358).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
340.	<b>Pathani Damb I/ Pathani Kot I</b>	Gandhava, Jhal Magsi 28° 31' 00 N 67° 26' 00 E	Mature Harappan Kot Diji	?	1959	B. de Cardi	Surveyed	It was possibly covered with a citadel. There were clear traces of baked bricks and quantity of ceramic sherds. B. de Cardi considered it a Harappan metropolis because of its size. Besides ceramics, some jewelry and a rattle, painted clay bangles, shell bracelets, a carnelian and a steatite bead and a torso of female figurine were among the findings (1983: 35-6).
341.	<b>Pathani Damb II/ Pathani Kot II</b>	Gandhava, Jhal Magsi 28° 31' 00 N 67° 26' 00 E	Pirak I Mature Harappan	?	1959	B. de Cardi	Surveyed	They lived in burnt brick buildings. B. de Cardi attested beautiful and quality pottery from this site (1983: 36).
342.	<b>Pathani Damb III/ Pathani Kot III</b>	Gandhava, Jhal Magsi 28° 31' 00 N 67° 26' 00 E	Early Historic Mature Harappan	?	1959	B. de Cardi	Surveyed	The cultural assemblage mostly known is pottery sherds (de Cardi 1983: 36).
343.	<b>Patki</b>	Shaheed Sikandarabad (Surab)	Londo	?	1964	B. de Cardi	Surveyed	Only pottery collection was made from the site and nothing else was found (de Cardi 1983: 28).
344.	<b>Periano Ghundai (the Mound of Mound)/ Z-2</b>	Near Fort Sandeman, Zhob 31° 22' 00 N 69° 23' 00 E	Waziri- Mature Harappan Kot Diji Kechi Beg Togau	14.40 hectares	1898	F. Noetling	Surveyed several times and trenches laid by A. Stein, etc.	The records mention pottery types i.e. painted and plain. The paintings were geometric and animals. Moreover, blades of chert, beads of terracotta, and terracotta female and male alongside animal figurines were included in the findings (Kakar 2000: 191).
345.	<b>Phulabad Qalat/ Site 112</b>	4 km northeast of Tump in Kech, Makuran 26° 06' 00 N 62° 24' 15 E	Shahi Tump Dasht	?	1990	R. Besenval and P. Sanlaville	Surveyed	Dasht and Shahi Tump cultural material comprised the collection from this site (Besenval and Sanlaville 1990: 111).



Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
346.	<b>Phusi Damb</b>	Ornach Valley, Khuzdar  27° 05' 00 N 66° 11' 00 E	Early Historic Iron Age Kulli- Harappan Naal Kechi Beg Togau	10.50 hectares	1964	Discovered: R. L. Raikes Published: B. de Cardi	Surveyed twice	There is a stone-constructed citadel on the top of it. There were also house foundations too. Pottery sherds of different cultures were obtained from the ancient settlement (Raikes 1968: 155).
347.	<b>Pidarak Oasis/ Site 34</b>	Pidarak Oasis in Kech, 25° 50' 45 N 63° 14' 15 E	Dasht	?	1990	R. Besenval and P. Sanlaville	Surveyed twice	Only ceramics were found from this site, though there were other cemetery sites in the region too. However, there may have been a site which must have vanished because of prolonged cultivation (Besenval and Sanlaville 1990: 108).
348.	<b>Pingo Damb</b>	Dasht, Mastung	Protohistoric Prehistoric?	?	?	?	Surveyed	It has been added in the list of protected sites in Balochistan (Directorate of Archaeology and Museums Balochistan Quetta 2019: 5).
349.	<b>Pir Alizai</b>	Gulistan, Kila Abdullah 30° 38' 00 N 66° 42' 30 E	Quetta	0.90 hectares	1929	A. Stein	Surveyed	Painted pottery was picked by A. Stein in abundance from the ancient ruined village. One could witness illegal digging from the site (1929: 86-7).
350.	<b>Pir Haider Shahr</b>	Gidar in Shaheed Sikandarabad (Surab) 28° 16' 00 N 66° 06' 00 E	Kechi Beg Togau	0.30 hectares 40 ft. high	1959	B. de Cardi	Surveyed	They seem to have built mudbrick houses on stone or boulder foundations. There were number of beautiful pottery (de Cardi 1983: 31).
351.	<b>Pir Hassan Shah</b>	Nouroz Kalat, Kharan	Islamic- British Early Islamic Early Historic Londo Kulli Naal	15.00 hectares	1931	A. Stein	Surveyed	Old structures were traceable from the site. Different types of pottery from different time periods were obtained from the ancient habitat of a Baloch society (Stein 1931: 28-9).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
352.	<b>Pirak/ Pirok</b>	Kolachi Village, Sibi	Pirak- III Pirak- II Pirak- I	More than 8 hectares	1961	Discovered: R. L. Raikes	Surveyed several times and excavated several times	The excavators assigned three cultural periods to this site (Jarrige <i>et al.</i> 1995: 557). Mudbrick buildings which become better organized and bigger in the latter period and paved platforms were also attested. Apart from this, firedogs were found too. The found fireplaces and kilns were associated with workshops. There is presence of conduit system. The inhabitants produced wheat, barley, millet and rice. They made handmade and wheel made decorated/undecorated, beads from different materials, stone tools, dozens of animal figurines i.e. humped bulls, camels, horses, dogs, etc. and some human ones, terracotta and copper seals, copper objects, iron objects, etc. were recorded from this site. It is a site with Bronze Age and Iron Age periods (Dani 1988: 63-6). It is the site with the earliest evidences of horse, donkey and Bactrian camel domestication (see Pirak Culture for more details ) (Cortesi 2015b: 368).
353.	<b>Pizozai Damb/ Pizozai Mound Pozhoi Damb</b>	Zik, Kharan	c. 1400 BCE- 300 CE and 1300-1800 CE	?	1931	A. Stein	Surveyed twice	It has been destroyed by the treasure hunters in search of antiquities (Baloch <i>et al.</i> 2015: 46).
354.	<b>Pogi Damb/ Qadirabad</b>	Village Pogi in Besima Washuk 27° 64' 74.2 N 65° 48' 240 E	c. 2600-2300 BCE	400 by 350 m and 6 m. high	2010	S. S. Ali	Surveyed	Only ceramic collection was made from this site. Treasure hunting has been noticed from the site (Ali 2010: 170).
355.	<b>Populazi</b>	Quetta-Pashin	DS I-III	?	1972	M. R. Mughal	Surveyed several times	M. R. Mughal has reported only ceramics from this site (1972: 149).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
356.	<b>Prahag 'A'/ Site 39</b>	Pasani, Gawadar Makuran 25° 15' 00 N 63° 27' 53 E	Kulli- Harappan Naal	5.00 hectares	1990	R. Besenval and P. Sanlerville	Surveyed twice	Prehistoric occupation was identified from the ceramics and shell-mounds. Ceramics of different cultures were present on the site i.e. Naal, Dasht, Emir Gray, Kulli, Harappan Wares, etc. (Besenval and Sanlerville 1990: 91-2).
357.	<b>Prahag B/ Site 41</b>	Pasani, Gawadar Makuran 25° 15' 15 N 63° 25' 15 E	Mature Harappan Dasht	200 by 50-80 meters	1990	R. Besenval and P. Sanlerville	Surveyed twice	It was covered with ceramics (Dasht and Harappan), fish bones, stones of hearths, etc. (Besenval and Sanlerville 1990: 92).
358.	<b>Prahag C/ Site 42</b>	Pasani, Gawadar Makuran 25° 15' 15 N 63° 25' 15 E	Mature Harappan Dasht	?	1990	R. Besenval and P. Sanlerville	Surveyed	Similar material assemblage was recorded as in Prahag B/Site 41 i.e. Dasht and Harappan ceramics, bones of fish, hearth stones, etc. (Besenval and Sanlerville 1990: 92).
359.	<b>Prahag D/ Site 61</b>	Pasani, Gawadar Makuran 25° 15' 30 N 63° 26' 15 E	Mature Harappan Dasht	?	1990	R. Besenval and P. Sanlerville	Surveyed	Pottery sherds were identified with different cultures as Dasht/Emir and Harappan Cultures (Besenval and Sanlerville 1990: 92).
360.	<b>Puchur Damb/ Puchur Damb</b>	Wadh Valley, Khuzdar 27° 16' 00 N 66° 23' 00 E	Islamic- British Kulli Anjira Kechi Beg Togau	?	1968	R. L. Raikes but he gives the credit to Mehboob Ali	Surveyed	A building with a courtyard and rooms surrounding it having square layout made of stones was discovered. Moreover, different types of ceramics proved the diverse nature of the mound and its occupation at different times (Raikes 1968: 148-49).
361.	<b>Q-6</b>	Bhalla Dasht Area, Quetta 29° 46' 00 N 66° 58' 00 E	Quetta Damb Sadaat Kechi Beg Togau	0.30 hectares 10 m. high	1956	W. Fairservis	Surveyed	This site is under being used as a graveyard when W. Fairservis surveyed it. The prehistoric nature of site is well known from the ceramic collection of W. Fairservis (1956: 196, 350).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
362.	Q-9	Zarakhu Valley, Quetta	c.3000-1400 BCE	200 by 100 yards and 10 to 20 m. high	1956	W. Fairservis	Surveyed	Ceramics and two leg fragments of animal figurines were the major finds of this site (Fairservis 1956: 224.).
363.	Q-17	Saryab Levy Post Vicinity, Quetta 30° 14' 00 N 66° 54' 00 E	Burj Basket- Marked, Togau, Kechi Beg and Damb Sadaat	0.60 hectares 15 m. high	1956	W. Fairservis	Surveyed	Pottery sherds were collected which dates it back to one of the earliest sites of Balochistan (Fairservis 1956: 197, 349-50).
364.	Q-18	Saryab Levy Post Vicinity, Quetta 30° 11' 00 N 66° 53' 00 E	Early Islamic Damb Sadaat Kechi Beg Togau	0.30 hectares 4 m. high	1956	W. Fairservis	Surveyed	It was also being used as Islamic graveyard when W. Fairservis visited it. He picked different kinds of ceramics from this site (1956: 197, 340, 343, 350).
365.	Q-20	North of Mile Post 5 on Samungli Road, Quetta 30° 15' 00 N 66° 56' 00 E	Quetta Damb Sadaat	?	1956	W. Fairservis	Surveyed	Ancient ceramics were the only collected cultural materials from this site (Fairservis 1956: 350).
366.	Q-22	Nearby Sheikh Manda Village, Quetta	c. 1400 BCE- 300 CE	?	1956	W. Fairservis	Surveyed	Mud and glazed bricks were still present <i>in situ</i> . Ceramics comprised the major finds (Fairservis 1956: 337, 340, 342, 350).
367.	Q-23	Southwestern Outskirts of Quetta City 30° 16' 00 N 66° 59' 00 E	Kechi Beg Togau	0.20 hectares 2 m. high	1956	W. Fairservis	Surveyed	Different types of pottery from the surface collection helped in establishing its cultural chronology (Fairservis 1956: 341-42, 350).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
368.	Q-25	1 Mile East of Chasma Village, Quetta 30° 21' 00 N 66° 56' 00 E	Early Historic Iron Age Damb Sadaat Kechi Beg Togau Burj Basket- Marked	1.50 hectares Highest 7 m. high and lowest 3 m. high	1956	W. Fairservis	Surveyed	The ceramic assemblage comprised of different cultural wares which greatly helped in establishing the cultural chronology of the site (Fairservis 1956: 349-50).
369.	Q-26	4 Miles Southeast of Chasma Village, Quetta 30° 29' 00 N 66° 52' 00 E	Damb Sadaat Kechi Beg	1.10 hectares 4 m. high	1956	W. Fairservis	Surveyed	It was also covered with an Islamic cemetery. The cultural repertoire included variety of pottery sherds (Fairservis 1956: 196, 350).
370.	Q-28	4 Miles South of Chasma Village, Quetta 30° 29' 00 N 66° 52' 00 E	Damb Sadaat Kechi Beg	1.30 hectares 1.5 m. high	1956	W. Fairservis	Surveyed	Its ceramic assemblage consisted of ancient pottery types of Balochistan previously known from other sites (Fairservis 1956: 342, 350).
371.	Q-30	Near Mile Post 8 on Quetta- Pashin Road, Quetta 30° 16' 00 N 66° 58' 00 E	Islamic- British Early Islamic Historic Iron Age Togau	1.20 hectares 3 m. high	1956	W. Fairservis	Surveyed	It has been disturbed because of the graves. A great number of ceramic sherds belonging to different periods and varied from each other in quality, decoration and color (Fairservis 1956: 199, 339, 340, 342-43, 350).
372.	Q-32	1 Mile Southeast of Chasma Village, Quetta 30° 18' 00 N 66° 57' 00 E	Islamic- British Early Islamic Early Historic Kechi Beg Togau	16.70 hectares 8 m. high	1956	W. Fairservis	Surveyed	Prehistoric and historic ceramics were abundantly found. Its cultural chronology was established with the help of them (Fairservis 1956: 198, 337-43, 350).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
373.	Q-33	Gwanden Valley, Quetta 29° 47' 00 N 67° 04' 00 E	Quetta Damb Sadaat Kechi Beg Togau	0.30 hectares 15 m. high	1956	W. Fairservis	Surveyed	It might have been a fortified village historically. The material culture is limited to ceramic fragments but of different natures (Fairservis 1956: 196, 350).
374.	Q-35	Aghbarg Valley, south of Mohammad Ali Village, Quetta 30° 13' 00 N 66° 47' 00 E	Quetta Damb Sadaat Kechi Beg Togau	0.40 hectares 10 m. high	1956	W. Fairservis	Surveyed	It yielded only ancient ceramic assemblage which was used for detecting its age or periods (Fairservis 1956: 350).
375.	Q-36	Near Hasani Village, West of Mile Post, Quetta 29° 58' 00 N 66° 57' 00 E	Iron Age Damb Sadaat Kechi Beg Togau	0.20 hectares	1956	W. Fairservis	Surveyed	The dwellers constructed mudbrick and stone structures. The abundant pottery ceramics from the site proved its richness archaeologically. These ancient ceramics helped in cross dating the site (Fairservis 1956: 199, 350).
376.	Quetta Miri/ Arsenal/ Q-19	Quetta 30° 25' 00 N 66° 59' 00 E	Early Historic Iron Age Harrapan Kot Dijji Quetta Damb Sadaat Kechi Beg Togau	23.00 hectares	1947	S. Piggott	Surveyed	It is crowned with a historic fort. The site has been destroyed for the construction of an arsenal or artillery in nineteenth century. Variety of ceramics ranging from prehistoric, protohistoric to historic were documented (Fairservis 1956: 197, 388-92).
377.	Radhani Damb	Baghbana, Khuzdar	Londo	Small, 20 ft. high	1931	A. Stein	Surveyed	Only a single Londo sherd was recorded from the site; the surveyor did not spend much time on the site (Stein 1931: 180).
378.	Rais Khair Mohammad	Kalat 28° 19' 00 N 66° 08' 00 E	Anjira III-IV	?	1972	M. R. Mughal	Surveyed	M. R. Mughal discovered ceramic sherds from the site (1972: 149).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
379.	<b>Rais Sher Mohammad</b>	Gidar, Shaheed Sikandarabad (Surab)	Early Historic Iron Age Naal Kechi Beg Togau	0.02 hectares 12 ft. high	1959	B. de Cardi	Surveyed	The obtained materials were only ceramic sherds belonging to Balochistan ancient cultures (de Cardi 1983: 29-30).
380.	<b>Rakhia Kot (KA 54)</b>	Kanrach Valley, Las Bela	Applique? Prehistoric	?	1999	U. Franke- Vogt	Surveyed	The German-Pakistani Mission led by U. Franke-Vogt found ceramics of different nature which could be placed into the prehistoric time frame (1999: 32, from table 2).
381.	<b>Rana Ghundai (the Queen's Mound)/ L-12</b>	7 miles east of Loralai  30° 24' 00 N 68° 45' 00 E	Buddhist Waziri Kot Diji Kechi Beg Togau Burj Basket- Marked Kili Gul Mohammad?	1.40 hectares 40 ft. high	1898	F. Noetling	Surveyed and trial trenches laid	Its chronology was established from E. J. Ross excavations which is based on five periods (Fairervis 1959: 302, 307; Asthana 1985: 107). However, illegal digging was clearly witnessed on the site. A. Stein found painted ceramics, calcined bones, fragments of wood, etc. Architectural structures were few of them; they were of mudbrick masonry or clay built. Moreover, pebbles were also used in the walls at certain positions (1929: 51-3). Furthermore, blades of flint, bone needles and points. The painted ceramics had patterns like black buck, humped bull, and polychrome geometric patterns were also attested (Kakar 2000: 191).
382.	<b>Rehmanzai Kalat</b>	Noushki	Prehistoric	?	2017	S. Naseer	Surveyed	Ceramics were the main collection from this site (S. Naseer, Personal Communication, October 12, 2018).
383.	<b>Reko Cave/ Reko/ Reco</b>	Noorgama in Zehir, Khuzdar 28° 06' 00 N 66° 38' 00 E	Londo Naal?	?	1959	B. de Cardi	Surveyed	The cultural material only comprised of ceramics (de Cardi 1983: 31).
384.	<b>Rizvi Karuna</b>	Quetta Valley, Quetta-Pashin 30° 15' 00 N 66° 55' 00 E	Kechi Beg Togau Burj Basket- Marked	?	1972	M. R. Mughal	Surveyed	M. R. Mughal attained ceramics only after conducting a survey on this site (Mughal 1972: 149).
385.	<b>Rock Crain</b>	Quetta-Pashin	Iron Age?	?	1972	M. R. Mughal	Surveyed	Iron Age materials were recorded from this site; however, he did not mention any specifically (Mughal 1972: 149).



Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
386.	<b>Rodinjo-I/ Rojinjo-I</b>	Rojinjo, Kalat	Kechi Beg	?	1972	M. R. Mughal	Surveyed twice	It is probable that Anjira III type ceramics were recorded (Mughal 1972: 149).
387.	<b>Rodinjo-II/ Rojinjo-II</b>	Rojinjo, Kalat	Londo	?	1959	B. de Cardi	Surveyed several times	Ceramics were only collected from the site (Mughal 1972: 149).
388.	<b>Rodkan</b>	Kolwa in Kech, Makuran  26° 06' 00 N 64° 64' 00 E	Islamic- British Early Islamic Kulli Naal Kechi Beg	0.90 hectares	1931	A. Stein	Surveyed	A modern wall encloses it from the top. Ancient walls could also be traced; the inhabitants of the site used rough dressed slabs of sandstone to make structures. The ceramics were the other cultural remains found from the site (Stein 1931: 110).
389.	<b>Runjan Damb</b>	Nothern Mashkai Valley, Khuzdar  27° 24' 00 N 65° 45' 00 E	Kulli	1.80 hectares	1931	A. Stein	Surveyed	<i>Gabarbands</i> were found not far from the site. Kulli Culture pottery has been discovered from this site (Stein 1931: 164).
390.	<b>Safrani Damb</b>	Gandhawa, Jhal Magsi	Protohistoric c. 2600-1900 BCE	?	2019	Sheikh Javed Ahmed Sindhi	Surveyed	Pot sherds and human and animal figurines were recorded from the site (S. J. A. Sindhi, Personal Communication, September 15, 2019).
391.	<b>Sahib Khan/ P-8</b>	Sahib Khan Village, Pashin 30° 36' 00 N 67° 03' 00 E	Quetta Damb Sadaat Kechi Beg Togau	0.40 hectares 5 m. high	1956	W. Fairservis	Surveyed	W. Fairservis found several different ceramic sherds ranging from prehistoric to protohistoric time. Other materials included flint blades, chips and a fragment of alabaster bowl (1956: 351-52).
392.	<b>Saiyid Maurez Damb/ Mandi Haji Saiyid Maurez</b>	Near Mande- Haji hamlets, Khalidabad in Manguchar in Kalat  29° 26' 00 N 66° 27' 00 E	Londo Quetta Naal Kechi Beg Togau Burj Basket- Marked	6.30 hectares	1931	A. Stein	Surveyed	A. Stein picked up different kinds of ceramics from different cultures of ancient Balochistan. He has mentioned mostly decorated wares in his reports (1931: 186-87). Besides different pottery, B. de Cardi reported flakes of chert, two alabaster bowl fragments and a clay box (1983: 22-3). An animal tooth and a figurine leg were also found (Ali 1991: 7).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
393.	<b>Saka Kalat</b>	Northern Mashkai Valley in Naal, Khuzdar 27° 34' 00 N 65° 52' 00 E	Londo Kulli	3.70 hectares	1931	A. Stein	Surveyed	It is topped with ruins of a modern fort built by Saka Khan. Of the ancient walls, the inhabitants constructed mud brick or clay walls with small stones in between the courses of them. He found Kulli Culture ceramics, a bull figurine, and a terracotta arm of a human figurine (Stein 1931: 165-66).
394.	<b>Salu Khan/ Salukhan</b>	Near Salu Hamlet, Kalat 29° 18' 00 N 66° 29' 00 E	Anjira Naal Kechi Beg	1.80 hectares	1931	A. Stein	Surveyed several times	It is crowned with an enclosed <i>Ziarat</i> . A. Stein discovered ruined house structures of clay. The cultural materials only included ceramics (1931: 186).
395.	<b>Sami Hill/ Site 9</b>	Kech, Makuran  26° 02' 00 N 63° 43' 00 E	Islamic Zangian Shahi Tump Kulli- Harappan Dasht	?	1990	R. Besenval and P. Sanlaviile	Surveyed	Structures like walls and pottery sherds were recorded. It gives the same chronology as Sami/Site14 (Besenval and Sanlaviile 1990: 117).
396.	<b>Sami/ Site 14</b>	Sami village in Kech, Makuran 26° 02' 00 N 63° 43' 00 E	Islamic Zangian Shahi Tump Kulli- Harappan Dasht	0.20 hectares	1990	R. Besenval and P. Sanlaviile	Surveyed	It yielded ceramics of Dasht/Emir, Shahi Tump, Harappan, etc. It has been disturbed because of an irrigation canal digging. (Besenval and Sanlaviile 1990: 116).
397.	<b>Sampur Mound/ K-2</b>	Mastung	c.1400-800 BCE	300 by 100 yards and 16 m. high	1929	H. Hargreaves	Surveyed several times and excavated once	The discoveries have been ceramics (Fairservis 1956: 352, 393).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
398.	<b>Sang</b>	Near Fort Sandeman, Zhob  31° 27' 00 N 69° 22' 30 E	Kechi Beg Togau Burj Basket- Marked	?	1929	A. Stein	Surveyed	Plain ceramics were found mostly. However, locals are of the view that after rain stone beads and other objects comes on the surface of the mound. Close to this site was found an ancient pipeline; it was found accidentally from a Karez dig. A. Stein has stated that "...antiquity of this relic of a civilization far higher than any which Zhob valley is likely to have seen for centuries past" <sup>168</sup> (1929: 50).
399.	<b>Sangas Damb</b>	Baghbana, Khuzdar	Londo	70-80 yards diameter and 12 ft. high	1931	A. Stein	Surveyed	Londo pottery has been collected from the site (Stein 1931: 180).
400.	<b>Sangabad Mound/ Jumpuk</b>	Kech, Makuran 26°41'34.07 N 63°41'55.89 E	Harappan 3 <sup>rd</sup> to 2 <sup>nd</sup> millennium BCE	35 x 25 x 4 meters	2013	J. Baloch	Surveyed	Stone structures were also recorded. Red slip ware and painted pottery sherds were discovered from this site. Baloch claimed it to be a port site. Sadly, it has been affected by illegal diggers (2013: 44-8).
401.	<b>Sanghai Mound</b>	Dasht, Kech, Makuran  25° 49' 13 N 62° 43' 38 E	Kulli Mature Harappan	500 x 200 x 8 m. high	?	Ronald Besenval? Or stein	Surveyed	A stone masonry citadel and stone masonry cells were observed. Blake, gray and white wares having geometric designs, mostly wheel made, were reported. Beads made of precious and semi-precious materials and terracotta humped bull figurines were found. Illegal excavations have been observed from the site (Baloch 2013: 71-80).
402.	<b>Sardar Khel Damb</b>	Near the Village of Sardar Khel, Mastung	Quetta Naal Kechi Beg Togau	1.50 hectares	1964	Pakistan Archaeology	Surveyed	Different wares of Balochi ancient cultures identified along with other minor objects (Pakistan Archaeology 1964: 17).

<sup>168</sup> A. Stein is indicating towards the possibility of a Civilization in Balochistan if proper excavations are conducted at major sites in Balochistan.

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
403.	<b>Sari Damb</b>	Tasp, Panjgur 26° 58' 00 N 64° 02' 00 E	Shahi Tump Kulli Naal	Small mound, 12 ft. high	1931	A. Stein	Surveyed	Evidences of stone walls probably built in recent history for defense purposes. A. Stein records no pottery from this site (1931: 44). However, H. Field looked to be a keen observer. He has mentioned several types of ceramics, a gaming disc of terracotta and a piece of marble (Khan 1959: 187).
404.	<b>Sarikoran Damb/ Serikoran Damb</b>	Sarikoran, Panjgur 26° 57' 00 N 64° 05' 00 E	Kulli Naal Kechi Beg	?	1931	Stein	Surveyed	Coarse ceramics and a single painted ceramic fragment were found. Moreover, a small stone flake was also recorded (Stein 1931: 44).
405.	<b>Sarkh Damb</b>	Kalat	Medieval Londo?	?	1972	M. R. Mughal	Surveyed	The main findings were ceramic sherds (Mughal 1972: 149).
406.	<b>Sawal Kala</b>	Duki District	c. 800 BCE- 300 CE and 500-1800 CE	200 NW and SE and 40/50 ft. high	1929	A. Stein	Surveyed	A. Stein documented a limestone stone wall and pieces of ceramics from the site (1929: 72).
407.	<b>Segak</b>	Segak Village, Kolwa in Kech, Makuran  26° 01' 00 N 64° 17' 00 E	Kulli Naal	1.80 hectares	1931	A. Stein	Surveyed	The mound also is crowned with a small fort. A. Stein observed dilapidated houses built of decayed walls. A wall of rough dressed slabs was recorded from the treasure hunters' created hole. The structures portray a primitive look here. He found painted ceramics and a relief-decorated fragment which looked to be a part of a stand. Illegal digging has been attested as well (1931: 109).
408.	<b>Serokali Buthi (KA 33)</b>	Kanrach Valley, Las Bela	Late Islamic Historic Kulli	?	1999	U. Franke- Vogt	Surveyed	Kulli and other types of ceramics were found from the site (Franke-Vogt 1999: 32, from table 2).
409.	<b>Sevah Kalat</b>	Noushki	Prehistoric	?	2017	S. Naseer	Surveyed	The main collection only includes ceramics from the survey (S. Naseer, Personal Communication, October 12, 2018).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
410.	<b>Shabozai</b>	Dori, Loralai 30° 33' 70 N 68° 79' 30 E	Historic Londo Harappan Kot Diji Kechi Beg or Togau	40 hectares	2018	M. Zahir and M. A. Khan	Surveyed	The pottery repertoire consisted of Jangal Coarse Painted, Kot Diji, Harappan, Jhukar Painted, Ghul and rope wares. It has been affected from illegal diggings (Zahir and Khan 2018: 16, 18).
411.	<b>Shahi Damb</b>	7 km from Kharan City	Protohistoric?	?	2015	Baloch <i>et al.</i>	Surveyed	It is being destroyed by antique mafia. According to locals, artifacts were dug out and sold out for benefit from this <i>damb</i> (Baloch <i>et al.</i> 2015: 45-6).
412.	<b>Shahi Tump (the Royal Mound)/ Site 2</b>	Shahi Tump Village in Kech, Makuran 26° 00' 30 N 63° 00' 15 E	Kulli Shahi Tump	0.70 hectares	1931	A. Stein	Surveyed several times and excavated extensivel y	The excavations bore a large amount of cultural repertoire in different periods. In the Makurani chronological context, it starts from period II, IIIa, gap, and IIIc (Besenval 2005: 2-7). Pottery of different Balochi cultures as colored in pink and gray having rough and crude geometric (commonly zigzag) designs, its pottery has thin walls and fragile (Khan 1959: 184).
413.	<b>Shahr Kuloi</b>	Manguchar, Kalat 29° 29' 00 N 66° 28' 00 E	Quetta	1.60 hectares 40 ft. high	1983	B. de Cardi	Surveyed	Rubble and heavy building debris and ceramics identified (de Cardi 1983: 22).
414.	<b>Shahr Sardar</b>	Brinchinnau, Mastung 29° 27' 00 N 66° 29' 00 E	Quetta Naal Kechi Beg	0.90 hectares	1959	B. de Cardi	Surveyed	Ruined mudbrick debris indicates that they at some point lived in much brick houses. Different ceramics and a fragment of a decorated clay box included the cultural artifacts. Illegal digging was reported too (de Cardi 1983: 22).
415.	<b>Shahrak/ Pogunsh/ Shahrak Pogush/ Site 5, 6 and 15</b>	Pogush village in Shahrak Kech, Makuran 26° 02' 00 N 63° 20' 00 E	Kulli? Shahi Tump Dasht	0.90 hectares	1990	R. Besenval and P. Sanlaville	Surveyed twice	It is basically a group of sites considered together. Alignments of stone walls near a mosque could be seen. The assemblage of these mounds is the same with cultures like Dasht/Emir, Shahi Tump and probably Kulli (Besenval and Sanlaville 1990: 115).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
416.	<b>Shakar Khan Damb</b>	Northern Mashkai Valley, Khuzdar 27° 45' 30 N 66° 17' 00 E	Kulli Kili Gul Mohammad	?	1931	A. Stein	Surveyed twice	The survey resulted ceramics and two terracotta gaming discs (Khan 1959: 188).
417.	<b>Shami Damb</b>	Paroom, Panjgur 26° 44' 00 N 63° 16' 00 E	Islamic Early Historic Londo Kulli	2.50 hectares 15 ft. high	1931	A. Stein	Surveyed	There was a great number and variety of decorated and colorful ceramics on this mound. The site has been subjected to treasure hunting (Stein 1931: 51).
418.	<b>Shari Damb</b>	Northern Mashkai Valley, Khuzdar	Londo	95 yards N, 37 ft. high	1931	A. Stein	Surveyed	Londo sherds were recorded. It was associated with a gabarband (Stein 1931: 168).
419.	<b>Sheikh Manda</b>	Quetta	Protohistoric	?	1972	M. R. Mughal	Surveyed	Chert blades and Islamic sherds were recorded (Mughal 1972: 149).
420.	<b>Sheri Damb</b>	Ornach Valley, Khuzdar	c. 1400 BCE- 300 CE and 500-1300 CE	?	1964	Discovered: R. L. Rakes Published: B. de Cardi	Surveyed several times	Ceramics are the main findings from the site (Fairservis 1971: 406).
421.	<b>Shori Damb/ Shorei Damb</b>	Ornach Valley, Khuzdar	Londo	?	1964	Discovered: R. L. Raikes Published: B. de Cardi	Surveyed twice	The discovered materials were ceramics from the site (de Cardi 1983: 39).
422.	<b>Siah Damb (the Black Mound) Jatti Damb</b>	Shaheed Sikandarabad (Surab) 28° 34' 00 N 66° 11' 00 E	Naal Kechi Beg Togau	1.50 hectares 40 ft. high	1964	B. de Cardi	Surveyed and trial trenches laid	It had three cultural periods (Asthana 1985: 126-27). Its trial excavations were used to establish the chronology of the region. Several types of wares comprised the cultural data (de Cardi 1983: 28).
423.	<b>Siah Damb, Jahu (the Black Mound)</b>	Jahu, Awaran 26° 21' 00 N 45° 40' 00 E	Kulli Naal	17.60 hectares	1931	A. Stein	Surveyed	Kulli and Naal Culture ceramics were recorded on the site. Interestingly, A. Stein recovered half a dozen of terracotta broken bull figurines, bangles of clay, and pieces of worked copper (1931: 135-36).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
424.	Sibri One	Kacchi-Bolan 29° 20' 00 N 67° 35' 00 E	Mehrgarh VIII-Sibri	?	1984	J. Jarrige	Surveyed and Excavated	"Remains uncovered include a few skeletons with or without associated materials, some architectural remains, deposits of sherds, and some hearths and ovens" (Santoni 1984: 56).
425.	Sibri Two	Kacchi-Bolan 29° 20' 00 N 67° 35' 00 E	Kechi Beg Togau	?	1995	J. Jarrige	Surveyed	Ceramics were reported from this site (J. Jarrige 1995: 76).
426.	Sianzai	Kalat 29° 05' 00 N 66° 15' 00 E	Naal	?	1972	M. R. Mughal	Surveyed	Only ceramics were collected and are known today (Mughal 1972: 149).
427.	Singen Kalat (the Stone Castle)	Near Mulla River in Zehri, Khuzdar 28° 25' 00 N 67° 06' 00 E	Londo Anjira Naal Kechi Beg Togau Burj Basket- Marked	?	1959	B. de Cardi	Surveyed	It is a fort site with large stone built defensive walls. Inwards, it has buildings and rooms. However, ancient evidences were attested from quality and handsome plain and painted pottery (de Cardi 1983: 33).
428.	Singi Kalat (the Stone Castle)	Vicinity of Nag, Washuk 26° 16' 30 N 64° 58' 30 E	Kulli	6.00 hectares	1931	A. Stein	Surveyed	Undressed sandstone slab walls and dwellings of rough slabs with small stones in between the courses of the slabs. No mortar is found in between them. Its location compelled A. Stein to hypothesis about is as safety place for many people at the time of troubles. Alongside these structures, he also recorded numerous ceramics (1931: 116-17).
429.	Singot Damb/ Singiot Damb	Wadh, Khuzdar 27° 20' 00 N 66° 19' 00 E	Kulli Togau?	?	1968	R. L. Raikes credit Sardar Attaullah Mengal	Surveyed	Stone structures and an ancient well lined with masonry surrounding it were discovered. Kulli Ware and other wares and clay bangles were recorded from the site (Raikes 1968: 149).
430.	Sinjawi Ghundai	Sinjawi, Ziarat	Partho- Sassanian Mature Harappan Kot Diji	?	1972	M. R. Mughal	Surveyed	Ceramics of different variety were found from this site (Mughal 1972: 149).



Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
431.	Site 63	Pasni, Gawadar 25° 13' 45 N 63° 28' 30 E	Mature Harappan	?	1990	R. Besenval and P. Sanlaville	Surveyed	Mature Harappan ceramics were identified from this site (Besenval and Sanlaville 1990: 93).
432.	Site 64	Pasni, Gawadar 25° 13' 45 N 63° 28' 30 E	Mature Harappan	?	1990	R. Besenval and P. Sanlaville	Surveyed	Areas with Mature Harappan sherds could clearly be attested on the site (Besenval and Sanlaville 1990: 93).
433.	Site 70	Pasni, Gawadar 25° 15' 55 N 63° 26' 00 E	Shahi Tump Mature Harappan Dasht	?	1990	R. Besenval and P. Sanlaville	Surveyed	This site is covered with verities of protohistoric Balochi wares like Dasht/Emir Ware, Shahi Tump ware, also Harappan Wares existed too (Besenval and Sanlaville 1990: 93).
434.	Site Near Kuki Damb	Thok Valley, Kalat 28° 44' 00 N 66° 21' 00 E	Historic Naal Kechi Beg	6.70 hectares	1931	A. Stein	Surveyed twice	One can find different colorful pre-historic pottery with simple designs (Stein 1931: 17).
435.	Sobeji (KA 34)	Kanrach Valley, Las Bela	Late Islamic Londo Prehistoric	?	1999	U. Franke- Vogt	Surveyed	Ceramics were the main finding from the survey (Franke-Vogt 1999: 32, from table 2).
436.	Sohar Dap	Dost Muhammad Sajidi Village in Taluka, Khuzdar	c.3000-2500 BCE	350 by 310 m. and 27 m. high	2001	Saleem-ul- Haq and Ali	Surveyed	Pottery solely comprised the cultural objects (Haq and Ali 2001: 4-5).
437.	Siyah Damb	Noushki	Prehistoric	?	2017	S. Naseer	Surveyed	The cultural assemblage from the survey only included pottery pieces (S. Naseer, Personal Communication, October 12, 2018).
438.	Sohr Damb /Naal ( <i>the Red Mound of Naal</i> ) or Sohr Damb/ Surkh Damb or Naal	Naal, Khuzdar  27° 44' 00 N 66° 16' 00 E	Early Kulli Quetta Rana Ghundai IIIc Naal Togau	4.03 hectares 14. m. high	1904-5	Col. Jacob	Surveyed several times and now excavated fairly	Its cultural chronology possessed four periods (Franke 2008: 669). This site yielded very handsome ceramics decorated with multiple colors. Moreover, structures, pot burials, and mudbrick chambers were other features. To include more, beads, and pendants, copper and silver objects or tools, and marble sling stones, etc. were the other artifacts (see Naal Culture for more details) (Kakar 2000: 193).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
439.	<b>Sohr Damb/Mound (the Red Mound)</b>	Noushki	Prehistoric	?	2017	S. Naseer	Surveyed	Only ceramic sherds were recorded from this site from a survey (S. Naseer, Personal Communication, October 12, 2018).
440.	<b>Sohren Damb One (the Red Mound)</b>	Southern Mashkai Valley, Awaran 26° 30' 00 N 65° 28' 00 E	Historic Kulli Naal	1.10 hectares	1931	A. Stein	Surveyed	Variety of pre-protolithic and historic pottery fragments was observed. When it rains, according to locals, gold and other metal objects come on surface (Stein 1931: 131).
441.	<b>Sorak Damb/ Sork Damb/ Malik Abad</b>	Wadh, Khuzdar 27° 26' 00 N 66° 28' 00 E	Partho-Sassanian Complex B Londo Kulli-Harappan Naal Kechi Beg	0.30 hectares	1931	A. Stein	Surveyed several times	Ruined stone walls and different sort of ceramics with geometric designs were found on the site. Near the fields, a house in ruins and similar ceramic were recorded. Moreover, a core of chert was also recorded (Stein 1931: 176).
442.	<b>Sorani Ghundai</b>	Loralai	Protohistoric	?	1964	Pakistan Archaeology	Surveyed	Two large storage jars contained decayed grains (Pakistan Archaeology 1964: 14-5).
443.	<b>Sorap Site</b>	Near Kokdan and Danuk in Kech, Makuran 26° 00' 12.32 N 63° 54' 36.93 E	Protohistoric	100 by 70 and 2 m. high	2013	J. Baloch	Surveyed	Stone were used for the construction of the houses. Pottery fragments with zoomorphic and floral decorations were found. Fragments of coarse pottery to a limited scale. J. Baloch also has talked about beads from the site (Baloch 2013: 62-3).
444.	<b>Spet Damb I</b>	Jahu, Awaran	Londo	110 by 70 yards and 30 ft. high together	1931	A. Stein	Surveyed	Broken dwellings, painted ceramics and two terracotta animal figurines are mentioned in the report of A. Stein (1931: 135-36).
445.	<b>Spet Damb II</b>	Jahu, Awaran	Historic Londo		1931	A. Stein	Surveyed	

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
446.	<b>Spina Ghundai</b> <i>(the White Mound)</i>	Manzakai, Pashin City Area 30° 57' 00 N 66° 40' 00 E	Partho- Sassanian Early Islamic Kot Diji DS I-III	?	1929	A. Stein	Surveyed several times	Pottery has been recorded from the surface materials (Mughal 1972: 149).
447.	<b>Sra Kala</b> <i>(Red Fort)</i>	City Area, Pashin 30° 38' 00 N 66° 59' 00 E	Partho- Sassanian Kot Diji Quetta Damb Sadaat Kechi Beg	2.60 hectares	1929	A. Stein	Surveyed several times	A ruined fort crowns the mound. Pottery and a bull figurine comprised the cultural artifacts (Stein 1929: 82-3). M. R. Mughal also found ceramics of different kinds (1972: 145).
448.	<b>Sraduk Damb</b>	Sraduk, Panjgur 27° 01' 00 N 64° 11' 00 E	Islamic- British Early Islamic Kulli Naal Kechi Beg	5.00 hectares 6 m. high	1931	A. Stein	Surveyed several times	Among the rubble, plenty of prehistoric ceramic sherds were recorded by A. Stein. Plenty of them were coarse plain, few painted and few incised fragments (1931: 45). Besides a large variety of ceramics, H. Field also found a bowl fragment of agate, a bronze rod fragment (Khan 1959: 186).
449.	<b>Strangi Ghundai I</b>	Shabozai, Loralai	c.2800 BCE	150 x 100 x 50 meters	150 by 100 m. and 50 m. high	Z. Khan	Surveyed	Illegal diggings have been witnessed. Red ware with applique patterns and gray wares of wheel made mostly plain and simple ones were discovered. Stone houses were set in mud mortar (Khan 2014: 56-8).
450.	<b>Strangi Ghundai II</b>	Shabozai, Loralai	c.2600 BCE	200 x 80 x 36 meters	200 by 80 m. and 36 m. high	Z. Khan	Surveyed	Handmade and wheel-made pottery have been collected. They are red, black, and gray and white either plain or painted (Khan 2014: 60-2).
451.	<b>Sulaimanzai</b>	Pashin	Pirak II Pirak IB	?	1983	B. de Cardi	Surveyed	The cultural assemblage is limited to Pirak Wares (de Cardi 1983: 17).
452.	<b>Sumer Damb/ Sumr Damb</b>	Drakalo Valley, Khuzdar 27° 09' 30 N 66° 26' 00 E	Naal Kechi Beg	0.20 hectares	1968	R. L. Raikes	Surveyed	Stone foundations of the structures were observed. Furthermore, varieties of pottery were the only object retrieved from the site (Raikes 1968: 150-51).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
453.	<b>Suneri Dumb</b>	Northern Mashkai Valley, Khuzdar  27° 27' 00 N 65° 45' 00 E	Islamic- British Early Islamic Partho- Sassanian Early Historic Londo Kechi Beg	3.50 hectares 35 ft. high	1931	A. Stein	Surveyed	Ruined clay and uneven stone structures were traced on the mound. Abundance of painted pottery was obtained from the survey. Plain and relief decorated ceramics were also present (Stein 1931: 164).
454.	<b>Sur Jangal (L-4)</b>	Duki District  30° 15' 00 N 68° 30' 00 E	Kechi Beg Togau	1.60 hectares 16 ft. high	1929	A. Stein	Surveyed several times and trial excavatio ns by A. Stein	Three cultural periods of the site were found (Asthana 1985: 108-09). Large number of ceramics were recorded, both plain and painted with diversity of motifs. Apart from ceramics, human and animal figurines, fragments of terracotta bangles, beads of stone, bone and clay, stone tools like scrappers, blades, flakes, pointes, etc. were discovered. Burial cairns were also found near the site (Stein 1929: 73-77).
455.	<b>Surab Valley 'A'</b>	Shaheed Sikandarabad (Surab) 28° 23' 00 N 66° 10' 00 E	Togau Burj Basket- Marked	Small mound 10 ft. high	1983	B. de Cardi	Surveyed	Ceramic sherds date it back to remote ancient times (de Cardi 1983: 28).
456.	<b>Surab Valley 'B'</b>	Shaheed Sikandarabad (Surab)	Londo	?	1983	B. de Cardi	Surveyed	Ceramics were the main finds from this site (de Cardi 1983: 28).
457.	<b>Surain Damb/ Suhren Damb (the Red Mound)</b>	Panjgur, Makuran  26° 45' 00 N 63° 53' 00 E	Shahi Tump Kulli Naal	1.50 hectares	1959	H. Field	Surveyed and a trial trench partially dug	Plain and painted wares were discovered from this site. A skeleton was discovered after which the workers from Panjgur denied working. It is deduced that a stupa had been constructed on the site (Field 1959: 88).
458.	<b>Suran-i- Jamb</b>	Panodi, Kech 25° 47' 00 N 62° 28' 00 E	Dasht	?	1990	R. Besenval and P. Sanlaville	Surveyed twice	Dasht assemblage was recorded from the site (Masih 1994: 46).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
459.	<b>Surkh Damb</b> <i>(the Red Mound)</i>	Shaheed Sikandarabad (Surab) 28° 18' 00 N 66° 16' 00 E	Buddhist Anjira Naal Kechi Beg	2.90 hectares 15 ft. high	1931	A. Stein	Surveyed several times	Plain pottery was recorded abundantly alongside few other wares (Stein 1931: 49). Apart from ceramics, B. de Cardi reported a small clay animal painted figurine which could clearly be identified (1983: 27).
460.	<b>Surmai Damb</b>	35 miles southeast of Kharan town	Prehistoric	1 and a half miles NE 1200 EW 30-5 ft high	1990	Khan Muhammad	Surveyed	It is named after the antimony colored pebbles on it. Decorated and plain sherds were traceable on the site; however, no structures were found (Muhammad 1990: 79-80).
461.	<b>Suthka Kuh/ Sotka Koh</b> <i>(the Burnt Hill)</i>	Pasani in Gawadar, Makuran 25° 25' 15 N 63° 27' 15 E	Mehrgarh VIII-Sibri Mature Harappan	16.00 hectares	1962	G. F. Dales	Surveyed	It is located at an outstanding strategic position. Harappan ceramics along with other Balochi wares were collected from the site (Besenval and Sanlaville 1990: 95).
462.	<b>Suthkagen Dor Sotkagen-dor</b> <i>(the Burnt Bed)</i>	40 Miles Northwest of Gawadar in Shadi Kaur Valley, Gawadar 25° 30' 00 N 62° 00' 00 E	Harappan	4.50 hectares	1877	E. Mockler	Surveyed several times and excavated twice	An enclosure and rough stone (slab) structures were found. The cultural repertoire consisted of stone implements as blades, scrapers, arrowheads, etc., stone vessel fragments, an alabaster cup, fragments of terracotta or shell bangles, fragments of shells, stone beads, a fragment of decorated glass bangle, different kinds of Harappan pottery i.e. plain, painted, perforated, etc. copper objects, etc. Also, A. Stein found cinerary deposits (1931: 60-71).
463.	<b>Tang/ Site 50</b>	Nowak Band, Pandoi Range in Kech 25° 46' 30 N 62° 17' 45 E	Dasht	?	1990	R. Besenval and P. Sanlaville	Surveyed	A pottery manufacturing area with fused pottery sherds, slags, kiln fragments, ashes, etc. have been discovered. Protohistoric ceramics and a compartmented copper seal comprised assemblage (Besenval and Sanlaville 1990: 107).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
464.	<b>Tarat Kalat 2/ Site 81</b>	Dasht Plain in Nilag Region in Kech 25° 48' 45 N 62° 41' 15 E	Shahi Tump Dasht	?	1990	R. Besenval and P. Sanlaville	Surveyed	An area was discovered with ceramics fragments scattered. These ceramics date back to protohistoric time and relate to Shahi Tump and Dasht/Emir Cultures (Besenval and Sanlaville 1990: 102).
465.	<b>Tegak</b>	Shaheed Sikandarabad (Surab) 28° 19' 00 N 66° 09' 00 E	Londo Kulli Togau	1.10 hectares 20 ft. high	1959	B. de Cardi	Surveyed	Decayed mudbrick structures, ceramics, a complete human figurine and a fragmentary human head of a figurine were the surviving cultural evidences on this settlement (de Cardi 1983: 30).
466.	<b>Tegak II</b>	Shaheed Sikandarabad (Surab)	Londo?	?	1972	M. R. Mughal	Surveyed	Pottery sherds consisted of its findings (Mughal 1972: 149).
467.	<b>Thale Damb A/ Thali Damb A</b>	Hoshab in Kech, Makuran 26° 00' 45 N 63° 53' 00 E	Kulli Naal	1.20 hectares	1931	A. Stein	Surveyed several times	Rough sandstone structures still existed on the site; a circular but rough enclosure of flat stones which must have had towers when built. Plain, decorated, relief and perforated pottery were discovered from the site (Stein 1931: 104-05). B. Besenval and Sanlaville has claimed Cheri Damb to be Thale Damb but it is assumed from the data that it is not true (1990: 118).
468.	<b>Thale Damb B/ Thali Damb B</b>	Hoshab in Kech, Makuran 26° 00' 45 N 63° 53' 00 E	Shahi Tump	?	1959	H. Field	Surveyed	Ceramics and a few pieces of shell were also discovered (Khan 1959: 184).
469.	<b>Thok Valley I</b>	Entrance to Valley in Kalat 28° 44' 00 N 66° 41' 00 E	Togau Burj Basket- Marked	2.50 hectares	1931	A. Stein	Surveyed	Different types of pottery have been recorded from this site (Stein 1931: 17).
470.	<b>Tihani Qalat/ Site 83</b>	Bizanjo Kasar Region in Kech, Makuran 25° 49' 45 N 62° 44' 15 E	Zangian Dasht	?	1990	R. Besenval and P. Sanlaville	Surveyed	Only ceramic assemblage included the cultural repertoire of the site (Besenval and Sanlaville 1990: 103).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
471.	<b>Tikri Damb</b>	Awaran 26° 23' 00 N 65° 24' 00 E	Kulli Naal	170 by 130 yards and over 50 ft. high; main mound	1931	A. Stein	Surveyed	Decayed stone structures of rough masonry and ceramic culture included mostly plain ones; however, few painted specimens fill the aesthetic lacuna of the ancient inhabitants of the site (Stein 1931: 133-34).
472.	<b>Togau</b>	Chhappar, 22 miles northwest of Kalat 29° 04' 00 N 66° 18' 00 E	Naal Kechi Beg Togau Burj Basket- Marked	?	1959	B. de Cardi	Surveyed several times	Circular stone enclosure represents a later camp. This site best represented Togau Ware though not yet excavated. Other ceramic wares were also found from the survey. Moreover, a small fragmented figurine was also found (de Cardi 1983: 23). M. R. Mughal also recorded Togau A-D ceramics (1972: 146).
473.	<b>Toji Damb</b>	Nouroz Kalat, Kharan 28° 53' 00 N 65° 40' 00 E	Early Historic? Iron Age? Kulli Naal Kechi Beg	0.70 hectares 25 ft. high	?	H. Pottinger	Surveyed several times and excavated	Stone structures set in mud mortar, probably foundations of structures, were found. There were also traces of circumvallation and masonry of the structures is large and small rough stones. Moreover, painted, etc. ceramics were picked from the site. It was also associated with a <i>band</i> <sup>169</sup> (Stein 1931: 22-5).
474.	<b>Tor Ghundai/ Tor Werai/ Tor Warai</b>	Panjpai, Quetta 29° 45' 00 N 66° 20' 00 E	Quetta Naal Kechi Beg	7.50 hectares	1951	B. de Cardi	Surveyed several times	In addition to different ceramics, two alabaster bowl fragments, a clay rattle and a fragment of female figurine included in the cultural objects (de Cardi 1983: 20).
475.	<b>Tor Sharghalai I (The Black Mound)</b>	Sandiyar, Zhob	c. 800 BCE- 300 CE	?	1929	A. Stein	Surveyed	A. Stein discovered pottery from the site (1931: 49-50).
476.	<b>Tor Sharghalai II</b>	Sandiyar, Zhob	c. 800 BCE- 300 CE	?	1929	A. Stein	Surveyed	The survey yielded pot sherds only which were used to form the chronology of the site (Stein 1931: 49-50).

<sup>169</sup> Small dam



Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
477.	<b>Tor Sharghalai III</b>	Sandiyar, Zhob	c. 800 BCE- 300 CE	?	1929	A. Stein	Surveyed	Ceramics were the main findings. These ceramics were studied to define the age of the site (Stein 1931: 49-50).
478.	<b>Torghar</b>	Musakhel	c. 22,000 BCE	?	?	F. D. Kakar	Surveyed	It is a group of 20 rock shelters and 2 natural caves in the Suleman Range mountains. Human and animal paintings with abstract signs were found on rock shelters. They were painted with natural pigments like iron oxide, copper oxide and manganese. Stone implements as hand axes were found around rock shelters and in the caves. They resembled closely to Acheulian culture which were perhaps utilized by Neanderthals at that time (Kakar 2000: 190).
479.	<b>Tump Qalat/ Site 109</b>	Tump Region in Kech, Makuran 26° 06' 00 N 62° 22' 15 E	Islamic Dasht	?	1990	R. Besenval and P. Sanlaville	Surveyed	Quality protohistoric and historic ceramic assemblage was recorded (Besenval and Sanlaville 1990: 110).
480.	<b>Tumpak/ Site 105</b>	Mand in Kech, Makuran 26° 07' 00 N 61° 55' 00 E	Londo Kulli	?	1931	A. Stein	Surveyed	Variety of painted pottery has been found from the site (Stein 1931: 83).
481.	<b>Two Nameless Mounds</b>	Belar Valley, Khuzdar	c. 1400 BCE- 300 CE and 1300-1800 CE	?	1931	A. Stein	Surveyed	Ceramics comprised the main artifactual evidences (Fairervis 1971: 407).
482.	<b>Umar Goth II (KA 24)</b>	Kanrach Valley, Las Bela	Late Islamic? Applique Kulli	?	1999	U. Franke- Vogt	Surveyed	Ceramics were recorded and used to detect the age of the site (Franke-Vogt 1999: 32, from table 2).
483.	<b>Unnamed Damb</b>	4 miles east of Gand, Dhera Bugti Area	c. 2500-1400 BCE (?)	?	1971	Discovered. S. Matheson Published: W. Fairervis	Surveyed	The artifactual evidences comprised of only pottery sherds (Fairervis 1971: 413).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
484.	Unnamed Site Five	2 miles south of Wad town, Khuzdar	Naal Kechi Beg	?	1971	R. L. Raikes	Surveyed	Pottery has been discovered and used in the establishing of the chronology of the site (Possehl 1999: 831).
485.	Unnamed Site near Kuhan	Khuzdar	c. 1400 BCE- 300 CE and 500-1800 CE	?	1959	B. de Cardi	Surveyed	Ceramics were found; they were used to create the chronology of the site (Fairervis 1971: 405).
486.	Unnamed Site I	Shaheed Sikandarabad (Surab)	Protohistoric?	?	1959	B. de Cardi	Surveyed	Pot sherds were probably recorded from the site which are not illustrated in the report (de Cardi 1964: 21).
487.	Unnamed Site II	Shaheed Sikandarabad (Surab)	Protohistoric?	?	1959	B. de Cardi	Surveyed	Ceramics have been found from the site which are not illustrated (de Cardi 1964: 21).
488.	Unnamed Site	Ornach Valley, Khuzdar	Protohistoric?	?	1959	B. de Cardi	Surveyed	Ceramics were found but nothing clearly can be said about the exact chronology of the site (Fairervis 1971: 405).
489.	Urusko Zhara/  Uruske Zhara	Near Fort Sandeman/ Zhob 31° 11' 30 N 69° 17' 00 E	Waziri	1.90 hectare	1929	A. Stein	Surveyed	Rough stone ruined structures and different kinds of painted ceramics comprised the material culture of this mound (Stein 1929: 49).
490.	Wadh Thana/ Var Damb	Wadh Valley, Khuzdar 27° 22' 00 N 66° 37' 00 E	Islamic- British Kulli	?	1931	A. Stein	Surveyed twice	Pottery fragments were identified from the site, but structural remains were not found (Raikes 1968: 148; de Cardi 1983: 38).
491.	Wadha Buthi	Las Bela	Shahi Tump?	?	1979	A. R. Khan	Surveyed	The surveyor has reported pottery which might be related to Shahi Tump Culture (Khan 1979: 76).



Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
492.	<b>Wahir II</b>	Khuzdar 27° 36' 00 N 66° 13' 00 E	Kulli Naal	7.50 hectares	1931	A. Stein	Surveyed	There were enclosures made of large stones near this site. It is a Brahui custom to mark a place where marriage procession stops and perform a dance, so they mark the place. A. Stein observed stone dwellings and structures on the main site. He also found ceramics and stone tools from the site as well (1931: 174-75).
493.	<b>Watuki Damb/ Wutuki Damb</b>	Paroom in Panjgur, Makuran 26° 37' 00 N 63° 24' 59 E	Medieval Kulli?	0.20 hectares	1931	A. Stein	Surveyed	A. Stein attained different ceramic types from his surface collection and concluded the site to be ancient (1931: 51).
494.	<b>Win 2 (KA 06b)</b>	Kanrach Valley, Las Bela	Prehistoric?	?	1999	U. Franke- Vogt	Surveyed	U. Franke discovered ceramics (Franke-Vogt 1999: 32, from table 2).
495.	<b>Zahrazai</b>	Munguchar, Kalat 29° 24' 00 N 66° 29' 00 E	Quetta Naal Kechi Beg	?	1959	B. de Cardi	Surveyed	Different kinds of ceramics were found from this site (de Cardi 1964: 21; Possehl 1999: 834).
496.	<b>Zangian/ Sorap Kaur Site 10</b>	Turbat Kech, Makuran	Londo	?	1931	A. Stein	Surveyed	It is a cemetery which was largely destroyed because of illegal diggings (Besenval and Sanlaville 1990: 113).
497.	<b>Zar Bhut</b>	Noorgama in Zehri Khuzdar	Protohistoric?	?	1959	B. de Cardi	Surveyed	Ceramics were known from the site which were used to establish the chronology of the site (Fairervis 1971: 405).
498.	<b>Zari Damb</b>	Shaheed Sikandarabad (Surab) 28° 18' 00 N 66° 08' 00 E	Naal Kechi Beg Togau	?	1959	B. de Cardi	Surveyed	This site bore mostly painted ceramics; in addition, chert flakes, a core, a flat stone with some sort of script but it was stolen from Surab Rest House without recording it (de Cardi 1983: 30-1).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
499.	<b>Zayak North</b>	Vicinity of Zayak in Besima, Washuk 27° 55' 00 N 65° 54' 00 E	Complex B Londo Kulli Naal Kechi Beg Togau	1.50 hectares	1931	A. Stein	Surveyed	Decayed structures and large number of different types of ceramics were recorded i.e. plain, painted, relief-decorated, etc. of different time periods. Furthermore, stone implements of ancient time (Stein 1931: 33).
500.	<b>Zayak Southeast/ Damb Near Zayak Spring</b>	Vicinity of Zayak in Besima, Washuk 27° 54' 40 N 65° 53' 40 E	Historic Naal Kulli Kechi Beg	?	1931	A. Stein	Surveyed several times	Painted and unpainted ceramics, many terracotta figurines and a small camel figurine were the artifactual evidences. The figurine is assumed to be one of the earliest of its kind (Field 1959: 92). Apart from ceramics, A. Stein found a small stone enclosure (1931: 32-4).
501.	<b>Zerger/ Damb Zerger/ Damb Zerga</b>	Chhappar, Ziarat in Kalat 29° 06' 00 N 66° 22' 00 E	Kulli- Harappan Naal Kechi Beg	?	1959	B. de Cardi	Surveyed	Only different cultural ceramics were attested from the surface collections. Moreover, a few chert flakes were noted as well (de Cardi 1983: 24).
502.	<b>Ziarat</b>	Ziarat, Kalat	Prehistoric	?	1964	Pakistan Archaeology	Not surveyed	It is assumed that prehistoric remains were reported (Pakistan Archaeology 1964: 17).
503.	<b>Ziarati Damb</b>	Hoshab in Kech, Makuran 26°00' 14.45 N 63°53' 54.84 E	Chalcolithic Neolithic	30 x 18 x 8 meters	1931	A. Stein	Surveyed	A Mohammadan burial ground covers the site (Stein 1931: 104). There are traces of stone structures and an old mosque on the site. Handmade pottery alongside buff ware with zoomorphic, geometric, and circular designs were collected. Terracotta human and animal figurines were also identified. Furthermore, stone masonry structures built with mud mortar were detected. Burials were found as well. Illegal diggings have caused some destruction of the site (Baloch 2013: 22-32).
504.	<b>Zidi</b>	Khuzdar 27° 43' 00 N 66° 47' 00 E	Anjira Naal Kechi Beg Togau	0.90 hectares	1931	A. Stein	Surveyed twice	Traces of ruined wall structures were visible, and pottery was found from the site as well (Stein 1931: 173). B. de Cardi also found ceramics of many cultures (1983: 37).

Sr #	Name of Site	Location/ District/ Coordinates	Period/ Date/ Cultural Affiliation	Size	Earliest Reference s	Discovered/ Reported	State of Works	Diagnostic Characteristics / Major Findings
505.	<b>Zik</b>	Kolwa, Awaran  26° 12' 00 N 64° 47' 00 E	Kulli Kechi Beg Naal	5.00 hectares 20 ft. high	1931	A. Stein	Surveyed	There were ruined quarters of mudbrick with roughly dressed slab foundations and Zik Kalat remains on the mound. Moreover, colorful pottery of different variety and plain pottery and two fragments of terracotta bull figurines completed the cultural repertoire of the site (Stein 1931: 112-13).
506.	<b>Zuncari Village</b>	Musakhel	c.22,000 BCE	?	?	F. D. Kakar	Surveyed	7 rock shelters with paintings and hand axes were recorded (Kakar 2000: 190).

**Table 30.<sup>170</sup> List of Balochistan Prehistoric and Protohistoric Sites<sup>171</sup>**

**Major References:** Possehl 1999: 727-845; Fairservis 1956, 1959, 1971; Stein 1905, 1929, 1931; Raikes 1968; de Cardi 1951, 1965, 1983; Mughal 1972, 1974; Baloch 2013; Naseer 2017; J. Jarrige 1995; Kakar 1990; Khan 1979; Modified by the Present Researcher<sup>172</sup>

<sup>170</sup> The present researcher has mostly skipped pottery making sites, cemetery or cairn sites, etc. Some sites have not been included due to some certain reasons i.e. not properly surveyed, only names of sites but no data, etc.; majority of the sites are settlements in this table. It is certain that currently there are more than 550 or perhaps 600 known sites in Balochistan.

<sup>171</sup> It is very difficult to name sites in Pakistan. The sites are frequently named after a local or nearby village. Many villages are named after their current headman in authority. It is renamed after a new successor comes (Fairservis 1971: 139). Moreover, coordinates are best options to find a site since district names and demarcations usually change or districts are formed.

<sup>172</sup> S. Naseer named more unexplored sites in Noushki which he was not able to document; those sites are Ruba Damb, Dhaar Damb and Sevah Kalat II (2017: 163). Moreover, S. J. A. Sindhi also told the present researcher about some sites in Jhal Magsi which cannot be accurately dated now because of no available data. The sites are Damb Dalu Rai, Ghar, Damb Huzoor Bux, etc. (Personal Communication, September 15, 2019).

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