

# CONFERENCE ABSTRACTS

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**Abstracts Arranged Alphabetically by Author****Tanveer Afzal**, State Bank Museum, Karachi***Challenges of Bringing Physically Challenged to the Museum***

Due to lack of consideration, most of the schools, institutes & museums do not provide access to the physically disabled/challenged people in Pakistan. The State Bank of Pakistan Museum took up the challenge to change this scenario by upgrading the physical features of the museum in order to provide access to all people who want to visit the SBP Museum. The main objectives were to study the hurdles in the way and then to develop a system to implement solutions for this problem. The first encountered issue is the access and mobility of those people; secondly, there are some rules and regulations of the organizations that have to be followed. A balanced path or code of conduct has to be defined that will help in bringing them to Museum without disturbing any of the organizational value of the museum, At the same time it is necessary to develop respect and acceptance of all visitor. The third aspect is to stimulate their interest in the museum by involving them in some of the specially designed activities they are capable of being involved in. Finally, fourth step is to consider a sustained relationship with the organizations who work with these special types of visitors. The recent results showed that the efforts are worth taking, as the activity has earned positive reviews from the concerned organizations, scholars, related NGOs, parents and above all it has generated satisfaction among the participants.

**Noor Agha and Atif Iqbal**, Hazara University, Mansehra***ACTing practically: The first steps of a wide-scope archaeological project in the Swat valley (Khyber Pakhtunkhwa, Pakistan)***

ACT (Archaeology Community Tourism) is a joint project carried out in the Swat valley (Pakistan) by the Italian Archaeological Mission and the Department of Archaeology and Museums of Khyber Pakhtunkhwa (Pakistan). The goal of the project is to recover and strengthen the archaeological heritage of the valley, endangered and wounded by a devastating earthquake, a disastrous flood and by armed conflicts. Preserving and promoting the Swat heritage is a mandatory precondition for the resurrection of tourism business in the whole valley. ACT was designed as an intensive Field School of archaeology and conservation, open both to operators of the local communities and to students of the national Universities.

**P. Ajithprasad**, Maharaja Sayajirao University, Baroda***Harappan Settlement features at Bagasra and Shikarpur in Gujarat: Unity and Diversity***

Harappan settlements have a general similarity in their planning and organization of space mainly defined by a protective wall around them. Organization and utilization of space within the general framework of planning however depended up on several factors primarily related to economic activities. Variation in focus of economic activities in different sites resulted into difference in space management and layout of structures between sites. The paper discusses the diversity and unity of the Harappan settlement features unearthed at Bagasra and Shikarpur, two sites located on either side of the eastern margin of the Gulf of Kachchh. Located within 20kms these two sites have a rather similar looking general settlement plan predominated by a massive fortification. There is also a general similarity in

the materials used in the architectural constructions. However, the focus of economic production at these two sites it appears had varied quite significantly. While Bagasra appears to have had mainly focused on economic craft production, Shikarpur was focusing on collection and distribution of resources and craft products. This suggests diversity in the polity related to management of resources and organizational skill of the Harappans at these two sites. The diversity is better reflected in the structural planning and utilization of space at these two sites. Evidence unearthed in the excavations at these two sites is orchestrated to demonstrate the above aspects of the development of Harappan society and polity in Gujarat.

**Marta Ameri**, Fashion Institute of Technology, New York

***The View from the Other Side: Changing Patterns of Indo-Iranian Interaction in the Third and Second Millennia BCE as Seen from the Ahar-Banas Culture Region, Rajasthan***

The analysis of contacts and interactions has always played an important role in archaeological studies of Middle Asia in the third millennium BCE. The discovery of seals and sealings with iconography long known from Iran and Central Asia at Ahar-Banas sites in Rajasthan suggests that interaction networks previously documented only as far as the Indus River in fact spread much farther. The sites of the Ahar-Banas culture in southwestern Rajasthan are located far from the centers of urban culture in Southern and Western Asia, and have limited contact with these areas. Nonetheless, the presence of seals and sealings at these sites reflects changing relations with lands further to the west, particularly during periods of instability at the beginning and end of the millennium. While the seals and sealings found at Gilund were locally produced, the foreign origin of the sealing technology and of some of the iconography is clear. This paper is a study of the how people at the furthest edges of an interaction sphere are affected by and react to the changes at their borders. A careful analysis of the material will show that the people of the Ahar-Banas were not only aware of the technologies and traditions of the distant centers of Iran, Central Asia and the Indus Valley, but that they also actively adopted them to their own needs. A chronological analysis of the material found at Gilund, Ahar, and Balathal suggests that once adopted, sealing was a long-lived tradition in the Ahar-Banas. It also demonstrates that the local production of seals was affected by the patterns of contact and development of Middle Asia, particularly by the constantly shifting patterns of Indo-Iranian contact.

**Muhammad Arif and Ghulam Murtaza Khoso**

Department of Archaeology and Museums, Govt. of Pakistan

***Moenjodaro -An Overview of the Causes of Failure and Decay of the Structural Remains***

Moenjodaro is one of the most important sites in Pakistan and has been the focus of considerable efforts for preservation since being declared a World Heritage monument. This paper will review the efforts taken to preserve the site and its current state. It will also provide an overview of the problems faced by the site and treatments that have been successful.

**Anas Mahmud Arif**, Hazara University, Mansehra  
***Museum and Community: Results of a Pilot Survey***

Museums play a vital role in the education and enjoyment of a community. Pakistan has a diverse cultural heritage which needs to be preserved and promote properly. To know the existing knowledge and interest of the local community about their cultural heritage and museums, a pilot survey was initiated in Peshawar city. This questionnaire based survey was a first step of its kind, where we involved local community and schools. Through this paper results will be shared, which will ultimately help the provincial government to devise new strategies for the development of these museums.

**Jamil Hussain Baloch**, Quaid-i-Azam University, Islamabad  
***The Discovery of new Archaeological Sites at the Bank of Kech River in Balochistan***

The land of Balochistan has been the center of human development through ages. It gives us a clear continuity of prehistoric to historic period cultures. The continued development of prehistoric (Stone Age) periods culminated into the well-known Neolithic Revolution which resulted in the human settlement into well developed villages like Mehrgarh dated to 8<sup>th</sup> millennium BC. Mehrgarh is considered a milestone towards the urbanization of South Asia. The urban centers of the Indus Civilization flourished in a vast territory of the Indian sub-continent. Some of the areas have come to light such as those of Mohenjo Daro, Harappa, Kalibangan, Lothal, Sokhta Koh and Sotkagendor, but many sites of pre-Indus, Mature Indus and Post Indus periods are still lying under the earth. Balochistan seems to be the most neglected region for archaeological activities. It is impossible to think that the first human evolution took place there but there will be no traces of the sequence of the later human development. The Author, thus, took pain to go around and see for the traces of pre-Indus and mature Indus periods on the Makran Coast. In the area of Kech (Makran) the author found the traces of both of the periods at the bank of Kech River which will be the topic of discussion in this paper.

**Rasul Bawary**, Department of Archeology, Kabul University  
***The First Civilizations of Afghanistan***

After 1919 started archaeological excavation in Afghanistan by different missions at different times. For first time beginning study of archaeological sites by French archaeologists in Afghanistan at 1922 (Mr.Fuscha and Mrs. Fuscha ) . Then coming Russian archaeologist delegation in 1922 (Wawilov, Garatsov, and Wicheslov).After to this time coming continuous some archaeologist delegation from different countries in Afghanistan, for example: Italian, English, American, Chinese, Japanese, and others groups. So that had good resolution for found of archaeological artifacts and ancient history of Afghanistan. Yet we can show some artifacts about Middle Paleolithic particularly Mousterian period of center and northern Afghanistan is dated from 100000 years ago. In 1959 L. Dupree and A. Wardak found many flint Mousterian -type flake tools at Dasht-i- Nawar in Gazni province, Darra-e-Dadil and near by Darra-e-Chaqmaq, Balkh province and so.

Between 4-5000 years ago, as urban civilizations rose in the major river valleys of the Nile, Tigris- Euphrates and Indus, peasant farming herding villages served as the backbone

of the economy. Control of a relatively guaranteed food surplus was necessary to support the growing cities and towns with their multitudes of full-time religio- artisan- political specialists. Three sites in southern Afghanistan probably relate to the evolution of the elaborate complex of rural communities, which supported the urban scene. Mundigak (J.M. Casal) Dem Morasi Ghundai (L. Dupree) and Said Qala (J. Shaffer and M. Hoffman ) in Kandahar province. These three sites tend to complement each other. Mundigak evolved from an agricultural village (with some evidence of early semi-sedentism ) to a genuine town, including a granary and a massive monument complex the other two sites remained farming-herding villages. Late Bronze Age and early Iron Age objects, about 2-3000 years age, have been reported in northern Afghanistan and Sistan, south of Afghanistan. About 3000 B.C (Chalcolithic) civilizations emerged on the bank of Indus River. Mundigak and Sistan areas of Afghanistan, Anau of Uzbekistan, and Mesopotamia developed. A major cultural relationship developed between Mundigak and Mohenjo daro during this Age. Those artifacts discovered under J. M. Casal's, mission from Mundigak in 1951 are similar to these artifacts excavated by British archaeologist, Marshall, who excavated Mohenjo daro of the Indus valley.

**Kuldeep K. Bhan**, Maharaja Sayajirao University, Baroda  
***Some Important Aspects of Craft Production and Organization in Harappan Tradition of Gujarat***

The purpose of this paper is to discuss some aspects of craft production and organization during Harappan Phase of Gujarat which corresponds with the Integration Era. The data for presentation will be mainly derived from three recently excavated sites – Gola Dhoro (Bagasra), Nagwada and Nageshwar. Nevertheless the data obtained from others sites of Gujarat will also be viewed in conjecture, in order to have a holistic view of the organization and production of stone bead making, shell working and faience production. The interpretations are based on the rigorous recording and analysis of the archaeological data and the application of specialized ethnoarchaeological and experimental studies that has led to the development of more appropriate interpretive models. A possible organizational pattern emerges from the available evidence, since we have detail information now available on the stone bead making and shell working from the above mentioned sites of Gujarat. Both Gola Dhoro and Nagwada have revealed intensive and efficient manufacturing evidence and show very specialized techniques were used in the transportation of semiprecious stones into beads. Comparisons with the ethnoarchaeological studies from Khambhat has indicated that the Harappan stone bead industry of Gujarat was more flexible, independent form of production as compared to centralized production, controlled by the political elite represented by the manufacturing center of Chanu-daro. While the analysis of shell industry, has revealed three levels of production with sites like Nageshwar and Gola Dhoro at the top of hierarchy. The studies have highlighted the importance and dependence of larger urban Harappan settlements on small settlements for the procurement of raw material as well as finished goods.

**Mastoor Bukhari**, Shah Abdul Latif University, Khairpur

***Brick Stupas of Sindh: Unique Perspectives on Buddhist Architecture in Pakistan***

In Sindh all stupas made by burnt and unburnt bricks, as compare to northern areas material used in Sindh is entirely different most of the stupas now in ruined and Deteriorated condition, only three of them are in better condition. Such stupas, Monasteries and viharas wiped out from the scene due to ravages of time, topographical conditions, re-cycling of material, manhandling and most of all because of negligence and unawareness. The 5th, 6th and 7th Centuries AD witnessed usage of new material with old traditional patterns. Stupas made here are of burnt or backed bricks with mud plaster containing very beautiful carvings on terracotta; sometimes having Jataka scenes carvings – a delicate and sophisticated cut brick revetment. The use of clay as a building material has been common since time immemorial in the plains of Sindh. Initially unbaked mud was employed but soon baked stuff was introduced. It was a common and a favourite medium. The Buddhist masons of Sindh also preferred it for secular and religious edifices. Building of the brick stupas and decorating them with carved and moulded bricks and figures caught their fertile imagination as this new mode of construction was cheaper. These brick stupa became common in northern and central India but some of the splendid brick stupas from Sindh prove brick construction as a favourite medium of artistic expression.

**Muhammad Shah Bukhari**, National Museum, Karachi

***Illustrated manuscripts in National Museum of Pakistan***

In terms of Archaeological material, the National Museum of Pakistan is the biggest Museum in Pakistan. The largest collection of Islamic Manuscripts is housed in it. Among the this large collection of manuscripts, there are 40 illustrated manuscripts. Some of these are in no other museums or libraries in the world. The illustration in Islamic manuscripts begins with the scientific diagrams, and drawings. Medicine, astronomy, mathematics, and Geography were the main subjects for applying illustrations. Later on, this art had also been utilized in books related to arts, poetry and history. Illustrated manuscripts in the National Museum of Pakistan range from 12th century AD to 19th century. The earliest manuscripts are in astronomy and medicine. The earliest manuscript on the topic is 800 hundred years old in Arabic which deals and guides with sketches, diagrams and other illustration as to how to read the Astrolabe, the scientific instrument for studying celestial bodies and for sea faring. There is a very unique copy of illustrated manuscript of astronomy of the 18th century in which the ozone layer is discussed with the help of illustration but it was only discovered by modern scientists in early 20th century. There are illustrated manuscripts on Shah Namah-e-Firdousi, the legendary stories of Iran and written in 10th century by the order of Mahmud of Ghazni. On medicine, the book entitled "Azharul Adwiah"( the Flowers of medicine) is although transcribed in the beginning of 20th century but very unique. Every flower is illustrated and almost all the available names are given in different languages of the world, like English, Greek, Latin, Sanskrit, Hindi, Arabic, Persian, Punjabi, Kashmiri etc.

**Ahtesham Aziz Chaudhury**, Lahore Museum

***Preservation of Cultural Heritage through documentation and exhibition***

Lahore Museum has an invaluable collection on Islamic arts, crafts and history. There are around 3000 artifacts from different areas of South Asia including a wide range of materials like paintings, leather, metal, textile and wooden artifacts displayed in one of the biggest galleries of Lahore Museum. In this report, a complete scheme for the upgrading of the Islamic Gallery (display and cataloguing) has been presented. The theme of this design is to make exhibition more appealing & driving for visitors and to attain more control on agents of deterioration. The core idea of this project is to bring effective modifications within very nominal regular budget of one of the 19 collections of the museum. The success of this pilot project will not only help improving the precious collections but also encourage the concept of resource management for the whole museum. Furthermore, some pipeline projects have also been shared including field research and academic programs with other departments in which documentation and projection of cultural heritage are being made. Establishment of "Traditional Crafts Recognition and Revitalization Association (TCRRA)" is also one of the projects which are in progress. These projects have been designed such that no institutional funds will be utilized.

**Yasmin Cheema**, Beacon House University

***The Consolidation and Preservation of Bibi Jawandi Tomb Complex***

Uch Sharif is located 38 miles south-east of Bahawalpur and has a population of approximately 20,000. The city dates back to the mature Harappan period, 2600-1700 BCE, and is spread over 350 hectares, comprising 15 provincial and national monuments linked to traditional bazaars, historic streets, and open squares. Therefore, the city is a monument of global heritage value. Of the 15 monuments currently extant, the most striking are a group of three from the late 15th c., the Bibi Jawandi Tomb Complex, located south-west of the city. The Conservation and Rehabilitation Center (CRC) was established in 1994 to prepare heritage inventories, conserve the monuments and rehabilitate small historic cities. Since its foundation, CRC's main involvement has been: 1) the conservation and revalorization of Uch city and 2) the consolidation of Bibi Jawandi's Tomb Complex. After mapping the city, CRC prepared conservation plans for the historic neighborhoods of Uch, as well as a master plan. Eleven projects were designed, including the restoration of the traditional bazaar and Mela critical to the city's rehabilitation and future sustainable development. The existing sewage network was also mapped, a new sewage plan was prepared, a government-funded sewage main laid out, and secondary and primary sanitation pipes financed and installed by the community. The Bibi Jawandi Tomb Complex is being conserved through a scientific methodological approach encompassing pre-conservation studies and investigations to mitigate unintentional damage to the monuments and the site that inform physical and management interventions. This attempt is being made to steer monument conservation in Pakistan towards current internationally accepted norms. Given time constraints, the concern of this paper will focus on the CRC consolidation work of the Bibi Jawandi tomb complex, with a focus on the investigative methodology and decision-making process.

**Mary Davis**, University of Wisconsin, Madison

***Lithic Analysis of the Indus Civilization: Insights into the nature of early urban centers through the study of chipped stone tools at Harappa***

This paper is focused on the analysis of the assemblage of chipped stone tools at the site of Harappa recovered by the Harappan Archaeological Research Project (HARP). Chert blades or blade segments of Rohri-like raw material, dominate the Harappa's chipped stone tool assemblage. While a wide range of tool forms have been recovered at the site, most of the assemblage does not conform to standard forms and types that have been described for classic Western archaeological assemblages. Such typologies were typically designed for hunter and gatherers and provide little interpretative value. I present a new typology developed at Harappa to classify the bulk of materials in a behaviorally meaningful way. This typology can be used as a basis for comparison and a tool for the creation of typologies for other assemblages in Pakistan and adjacent regions. This classification scheme is used to address important questions that are not limited only to the study of stone tools but to larger social questions. The spatial distribution of stone tools across different proposed neighborhoods and districts of the site has led to the development of hypothetical spatial organization of the site and the nature urbanism and the ancient inhabitant's social interactions.

**K. N. Dikshit**, Indian Archaeology Society, New Delhi

***The 'Lost Saraswati' : The Cradle of Indian Civilization***

Before taking up the problems of the origin of Harappans whose rise was undoubtedly an urban revolution, of our knowledge was limited concerning the contribution of the excavations at Harappa (1946). While cutting through the defences, a pre/non Harappan level was encountered at Harappa. After 1947 the lowest levels at Kalibangan, Banawali, Balu, Sothi, Nohar etc. were recognized after some years keeping in view of similar results from Kot Diji, Amri, Harappa, Rehman Dheri and other small sites of the adjoining regions. An analysis of the material culture noticed on these sites and also in the hinterland could not push back the antiquity of the region before the beginning of the 3<sup>rd</sup> millennium B.C. However, in the last two decades, the excavations carried out in India and also in Pakistan provided the material elements of a Neolithic pastoral stage. How this phenomena evolved, as revealed by the excavations of some small sites, maintaining a kind of a cultural continuity from Neolithic to primary urbanism, still requires some stages to understand its broader clarification. The results of the excavations at Kunal and Bhirrana, no doubt provided a stage of further development from dwelling pits to the primary stage of a settled life. To understand this phenomena as provided by the Carbon 14 dates which go back to the time bracket of c. 6647-4353 B.C. – could be compared in the Indo-Pak sub continent only with similar Neolithic levels at Mehrgarh ( 6500 -4500 B.C.) or other Neolithic settlements for which no firm Carbon 14 dates are available. This time bracket put the region of the 'Lost Saraswati' in a larger context of the Neolithic pastoral stage starting in the west from Anatolia between the 9<sup>th</sup> - 4<sup>th</sup> millennium BC with the limited use of copper as noticed on the Neolithic sites in Turkey. The stages of the later chalcolithic period between c. 4500-3500 BC are not so clear perhaps due to limited technology or climatic environment in which people live. In this paper an attempt has been made to present the evolving stages through the recent excavations carried out in the area of 'Lost Saraswati' and its tributaries in India.

**Muhammad Farooq**, Hazara University, Mansehra  
***Microbial Decay of Cultural Heritage of Pakistan***

The growth of some microbial populations on the surface of archaeological monuments and historical buildings of Pakistan has become a serious problem for the conservation authorities. The physico-chemical changes in the structure of monuments due to the physiological and metabolic activities of microbes are very significant. These changes appear in different ways as cracking, blistering, fragmentation, staining, leaning, pitting and disfigurement of cultural heritage. Some scientific investigations were carried to evaluate the present status of biological deterioration of archaeological sites of Pakistan. The fungal genera *Alternaria*, *Aspergillus*, *Cladosporium*, *Helminthosporium*, *Mucor*, *Rhizopus*, *Penicillium*, *Dematium*, *Fusarium* and *Arthobotrys* were isolated with high percentage of occurrence. The diverse effects of these fungi on the cultural heritage were also noted. The biochemical tests of isolated fungal strains were carried out to understand the mechanism of decay of building materials of monuments. Different chemicals (Fungicides) were evaluated in some in vitro experiments for the conservation of cultural heritage. The detailed aerial analysis and transportation of microbial populations were also noticed scientifically to forecast any future deterioration of cultural heritage of Pakistan.

**Abdul Wasey Feroozi**, Head of Archaeology Department  
Academy of Sciences, Afghanistan  
***An overview of the Archaeology of Afghanistan***

Our country, Afghanistan in the course of history has played an as being a crossroad of civilization. Afghanistan's ancient civilization and culture are also of special importance to the history of world Religion. Studies of pre and proto historical periods of Afghanistan testify to the fact that all period from the Paleolithic, Neolithic, bronze and iron ages up to the recent past Greek-Bactrian, Kushan, Sassanian, Hephtalite, as well as the Islamic period, are all of great importance. This country is also known as a meeting place of important civilizations from east and west. And has drawn the attention of many scholars and researchers from around the world. Officially, archaeological activities were initiated in 1922, when first contract was signed between the Afghan State and the Delegation Archeologique Francaise en Afghanistan (DAFA).

After the Second World War, in 1949/50, an American mission headed by Louis Dupree started prehistoric research in the South, at sites like Deh Murasi Ghundai, Dasht-e- Nower, Sistan (Neim Rooz ), etc. Later on Archaeological activities were carried out by missions from Germany, Italy, Greece, Great Britain, India, Russia and Japan, which also signed protocol and conducted excavations and surveyed different sites in Afghanistan, up to 1978. As a result, hundreds of ancient sites were discovered and excavated, and numerous objects were unearthed. With the establishment of the Institute of Archaeology in 1966, all archaeological activities were promoted, and certain sites such as Hadda (Tepe Shotor, Tepe Toop Kalan), Tepe Maranjan, Kham –e- Zargar, etc. were independently excavated by Afghan experts. Among the standing sites the names of the great temple in Shotor Hadda, the Buddhist temple of Marangan hill should be remembered. From 1976 to 1992, due to the destabilization of security the only excavation carried out was at tepe Maranagan in Kabul, and the institute concentrated more on archaeological publication, dissertation and articles. From 1992 onwards, after the government of Dr. Najibullah was toppled and the mujaheddin government was installed, chaos and irregularity took over the system of our state. Looting

and vandalism started, and our country lost its infrastructure and all state departments experienced extreme problems.

More than 70% of the objects in Kabul Museum collections and 100% of the objects deposited in the archaeological institute were plundered and exported to neighboring countries for sale clandestine excavation started in every nook and corner of the county, and through illicit traffic, historical objects found their way to international markets. During the period of the Taliban, a majority of our cultural heritage, which was precious and unique, was demolished, such remains as the colossal Buddha statues in Bamiyan and smaller images in the Kabul Museum were destroyed. Hard conditions and uncertain security culminated with day-by-day difficulties and budget shortages hindered archaeological activities and caused a drain from Afghanistan. Following the collapse of the Taliban regime and the establishment of the new government we hope that with the help and cooperation of friendly countries, we can resume archaeological activities and research, and start joint projects in some very important sites like Bamiyan, Kabul Kharwar, Mes Ainak (in Logar province) etc.

**Abdul Azeem Hafiz**, Lahore Museum

***Concepts of Heritage Conservation: Beyond Laboratory Science***

Conservation professionals and associated experts generally focus on physical conservation of artifacts and monuments. Everyday challenges to minimize the rapid deterioration of cultural assets keep them busy in technical assignments. In spite of all these efforts, in Pakistan our cultural heritage is passing through a state of entropy. The required goal can be best achieved by the education of new generation by creating entertainment for a common man and developing a scene of custodianship among people. Lahore Museum has extended this concept of heritage conservation by linking up with community and kids at various forums. Fortunately, right in the beginning of phase one, a positive public feedback has been observed. It is largely believed that sometimes common sense about scientific phenomena happening around us can be very beneficial in finding less expensive and practicable solutions of the problems with near to desired results. In this report, some similar case studies have also been enclosed.

**Abdul Hameed**, Hazara University, Mansehra

***Some Endangered Heritage Sites and Monuments in Hazara Division***

Hazara (or the ancient Uruga) is the northern most division of the Khyber Pakhtunkhwa province of Pakistan and the only territory to the east of Indus. Being located on the Karakoram Highway, this region has remained the cradle of ancient cultures and civilizations. Recent archaeological field investigations conducted by the Department of Archaeology, Hazara University (Mansehra) have unfolded more than eight hundred archaeological sites ranging from the prehistoric to the colonial period. Of these, the Islamic monuments, the most neglected and exposed to the manifold threats, are disappearing without even being properly documented and published. These Islamic monuments comprise the Mughal period buildings mostly tombs/mausoleums of the Muslim saints and rulers. During the recent archaeological explorations in districts Abbottabad, Haripur and Mansehra, we noticed that most of the Islamic monuments have been vanished completely, while the remaining ones are in a very bad state of preservation. Since it is difficult to include all of

them, therefore we have confined the scope of this work to the two: The tomb of Shah Hamadan and the Tomb of Zinda Pir Karnol. Both of these monuments are located in Mansehra, the second largest district of Hazara Division and are dated to the early and late Mughal period. The aims and objectives of the present paper are four fold: firstly to properly document the recently explored endangered heritage sites of Hazara Division; secondly, to analyze the architectural features of said buildings by comparing them with the already known Mughal monuments in the surrounding areas; thirdly, to assign proper dates to these structure remains; and lastly, to plan mechanism for the conservation and preservation of these historical and archaeological assets.

**Brent Huffman**, Northwestern University  
*The Buddhas of Aynak (Documentary Film Preview)*

This is the story of a race against time to preserve the world's most precious Buddhist relics at an archaeological site in Afghanistan threatened by Taliban attacks and the encroachment of a massive Chinese copper mine that will destroy forever these ancient and sacred artifacts. Aynak, a desert region 20 minutes southwest of Kabul, is an archaeological treasure trove of ancient Buddhist artifacts dated at over 2,500 years old. An ancient Buddhist monastery complex, extensive wall frescos, devotional temples known as stupas, and more than 150 Buddha statues comprise a discovery of immense global importance and one of the country's richest historical sites. But it is also a site with a violent and troubled history. At the same time, Aynak is home to the largest undeveloped copper reserve in the world. Directly beneath the Buddhist site lie mineral deposits worth an estimated \$100 billion. Following two years of aggressive bidding, China Metallurgical Group Corporation, a Chinese government-backed mining company, beat out all international competitors and was awarded an exclusive contract in 2008 by the cash-strapped Afghanistan government to exploit the site. The fate of the ancient Buddhist artifacts hangs in the balance as the Chinese begin planning their destructive open-pit style copper mine.

Under immense international pressure, the Chinese company gave Afghan and French archaeologists three years to excavate and move the artifacts before the copper mine gets underway. But with extremely limited resources, the dedicated archaeologists have made little progress. Efforts to save and preserve the site have been drastically scaled back to a project whose best hope is now merely to document what is known to exist at the site before the Chinese begin construction, which they are planning to do in 2012. The remaining cultural relics, which are both too large and fragile to be moved or are still underground and thus, undiscovered, will all be destroyed.

The Buddhas of Aynak documentary film will follow several main characters to tell this dramatic and multi-layered story: Philippe Marquis, a French archaeologist leading the effort to save the Buddhist statues; Abdul Qadeer Temore, a leading Afghan archeologist at the Afghan National Institute of Archeology working to protect his cultural heritage in Aynak; Liu Wenming, a Chinese manager working for China Metallurgical Group Corporation in the compound at Aynak; and Laura Tedesco, an American archaeologist working for the Kabul-based U.S. Embassy, who is using a million dollars of U.S. military funding to attempt to save the Buddhist ruins.

**Asma Ibrahim**, State Bank Museum, Karachi

***Thematic Museums: Case Study for Establishing Oxford University Press (OUP) Museum in Karachi***

The museums are there to convey information and impart education in an informal but interesting manner. Establishing a museum is an all-encompassing activity, but the basic requirement is its “theme”. The writer of this paper is presently responsible for establishing a museum for Oxford University Press (OUP). It is understood to portray the commendable role played by OUP in dissemination of information and furtherance of printed texts. But this objective has to be fully related to the context, for instance the “art of book” is a major aspect that has to be addressed. How book making evolved, through the ages is a curious happening. Another is the development of printing technology. But can it be discussed without focusing on the material used for writing and circulation? From the stone to clay tablets, and going further from metal tablets to the papyrus, leather, parchment and paper is an interesting march forward. Once the theme is developed the selection of material for museum begins. Searching the archives and identifying the material for displays; creating displays and exhibits, building suitable mounts and showcases, dedicated to the type and kind of material is another aspect that is being considered and extensively worked to finalize designs. Likewise the requirements of lights, and combination of least affecting system is being designed. Environment control is another major concern. The emergency and backup plan is one thing the modern museums consider most important now a days, and that has to be in accordance to the material on displays and the museum collections. The paper will discuss the experiences in this regard and the way many obstacles have been tackled, and the resolutions of problems arising due to varied physical difficulties as well as material limitations.

**Sayed Gul Kalash**, Bumburate Museum Kalash Valley Bumburate

***Tangible and Intangible Activities in Kalash Valley***

Chitral valley of Pakistan is famous for its unique cultures. The most exquisite example among all is the Kalasha community. Kalasha community has added a huge and rich variety of tangible and intangible heritage based on rich cultural events. The annually held four major festivals along with casual events like death funerals, child birth, winter sports (which are very important but unfortunately never be documented) etc. Kalash culture and heritage are facing new challenges day by day as they are a living museum (kalash culture) that is gradually declining. The Kalasha Durr museum is the main source to provide information about their culture to the younger generation, and its goal is to help them to learn how to preserve Kalasha culture and heritage. The required goal can be best achieved by the education of new generation by creating different types of activities, entertainment for the common man and developing a scene of custodianship among the local people. Kalasha Durr Museum has extended this concept of heritage preservation by linking up with community and kids at various forums. Fortunately, right in the beginning of phase one, a positive public feedback has been observed.

**Zulfiqar Ali Kalhoro**, Quaid-i-Azam University, Islamabad

***Memorial Stones in Nagarparkar, Sindh: Meanings, symbols and motifs***

The landscapes of Tharparkar in general and Nagarparkar in particular are dotted with memorial stones of Sati (Widow-burning) and Jhujhars (headless Heroes). The sati and Jhujhar cults are common and widespread among the Hindus of Tharparkar. There are a number of villages in Nagarparkar that boast the shrines and temples of Kuldevis (tutelary or family goddesses), Kul satis (Family or lineage Satis) Sati matas (Sati Mother) and Maha sati (Great Sati). However, memorial stones are more prominent and discernible in Nagarparkar. These memorials are objects of veneration and worship for the local Hindu population who visit the stones frequently. The purpose of this paper is to discuss the meaning, symbols and motifs associated with these memorials. So far as the meaning is concerned, the paper will discuss the various terms and words locally used for these memorials. Symbols found on the memorial stones will also be described. Finally, different motifs or designs carved on the memorials will also be discussed in detail.

**J. Mark Kenoyer**, University of Wisconsin, Madison

***Trade and Technology of the Indus Tradition: Internal and External Contacts***

The Indus Tradition refers to the long term cultural processes that led to the emergence of the first cities of the greater Indus region. The core regions lie in the vast plains of the Indus and Ghaggar-Hakra River Valleys. These alluvial plains are rich in agro-pastoral and riverine resources, but the only major mineral resources are found in the Rohri Hills, Sindh. Internal and external trade contacts were necessary to link the Indus settlements to distant resource areas and also to major markets and consumers. This paper will explore the important technologies that used exotic raw materials, such as stone, shell and metal that were necessary for the emergence of Indus urban centers. It will also examine changing resource networks that were developed and changed during the emergence of Indus cities during the Harappa Phase, circa 2600-1900 BCE. This time period is commonly referred to as the Indus Civilization and it was during the height of this urban phase, between 2200-1900 BCE that we see the greatest extent of trade connections linking the vast regions of the Indus with adjacent regions in Afghanistan, India, Central Asia, the Gulf and even to Mesopotamia and Anatolia.

**Gul Rahim Khan**, University of Peshawar

***Recent Developments in the SSAQ Museum of Archaeology & Ethnology, University of Peshawar (August-December 2011)***

The Sir Sahibzada Abdul Qayyum Museum, part of the Department of Archaeology, is open to public, scholars and visitors since 1998. Presently it accommodates archaeological material which includes the stuff of prehistoric, proto-historic, Indus Civilizations, Gandhara Grave Culture, Gandhara art, Hindu period, Islamic period and coins of different periods. In the last six years research and developmental works of the Museum like display, recording and documentation of antiquities and other activities have been very limited due to the shortage of curatorial staff. **Documentation:** We have completed documentation of the Gandhara pieces and are now focusing on the full documentation of the coin collections. **Display:** Upgrading of labels/ captions and displays of the Gandhara gallery. **Reserve Collection (Storage):** Arranged all coins of the Museum in available storage cabinet. **Learning/ Education:** With the help of students (M.Phil) I have started childrens education

and guidance through (drawing and painting) activities. I have also involved the M.A. students in museum studies.

**Muhammad Afzal Khan, Saleemul Haq and Malik Maqsood,**  
Directorate General of Archaeology, Punjab  
***Recent Development for management and conservation of Archaeological Heritage in Punjab***

The Province of Punjab is exceptionally rich in archaeology. Punjab is the only region in Pakistan where a complete cultural profile from the Early Stone Age to the Islamic period has been established which is high-lighted by archaeological sites, historical monuments, ethnic traditions and folklore. Punjab Govt. established its own Directorate of Archaeology on December 1, 1987 under the Information Culture and Youth Affairs Department. It has been keenly pursuing and contributing in the maintenance and restoration work of historical monuments for quite a long time. To share the responsibility for the preservation of heritage, the Govt. of the Punjab also promulgated an ordinance, the Punjab Special Premises (Preservation) Ordinance, 1985 so that it could also declared such monuments protected which are important from archaeological and historical point of view. After the promulgation of ordinance, it was considered that rather than conservation cell in Auqaf Department there should be a full-fledge Directorate General of Archaeology that could carry out the conservation and preservation work of monuments and other related activities. The process of devolution of Archaeological sites and monuments was completed in April 2010 and all Archaeological sites and Monuments declared protected under the Antiquity Act, 1975 have been transferred to Govt. of the Punjab. This is not only just transfer the monuments but all relevant staff that was associated with the Conservation and Preservation of these monuments in the Federal Department of Archaeology has also been transferred to the respective provinces and now they are working as a team along with already existing staff of Directorate General of Archaeology, Govt. of the Punjab. This better management will now increase the awareness and understanding amongst institutions and locals, which will lead to the improvement of the coordination between managing bodies and better involvement of the local communities in the management, presentations, and interpretations of the cultural properties.

**Muhammad Ashraf Khan,** Quaid-i-Azam University, Islamabad  
***Recent Explorations of Archaeological Sites and Monuments in District Rawalpindi and Islamabad***

The area under present study (Rawalpindi and Islamabad) is rich in archaeological wealth, a transitional region between the high lands of Swat, Kashmir and the alluvial plains of the Punjab played a very active role in the human history since the remote antiquity. The earliest stone tools used by the man of this region, some two millions ago have been recovered along the course of river Soan near Riwat. Then we come across the Bronze Age sites of Jhang Bahtar and Serai Khola, the Gandhara Grave period settlement of Hathial and the great center of the Buddhist art of Gandhara in Taxila

Valley. This paper is based on the recent archaeological survey conducted in the region of Rawalpindi and Islamabad and as a result of this extensive survey 82 archaeological sites and monuments were recorded during 2009 which include rock shelters, historic mounds, historical period monuments are known from caravan serais, baolies along the ancient routes, religious and secular buildings of Hindu, Muslim and Sikh periods. Many newly discovered sites and monuments were placed on the archaeological map of Pakistan for the first time, ranging from prehistoric to the British period. Large numbers of pottery, and other antiquities such as grinding stones, terracotta figurines and shell bangles were collected from the sites.

**Muhammad Safdar Khan**, Hazara University, Mansehra

***Termites: A threat to Cultural Heritage***

Termites are social insects because millions of individuals live in a systematic, highly organized colony with hygienic environment, maintaining constant temperature and humidity. The colony members are divided into a number of groups, each group performing its own duty. Due to this organized living mechanism, termite colonies flourish and remain established for centuries and it has made termites one of the most successful groups of animals in the world today. Usually there are five basic classes within a termite colony including reproductive; winged-elates, workers, soldiers, and nymphs. Most of our cultural heritage is presently under attack of termites that are going to disintegrate the perishable material and cause the downfall of our cultural assets.

**Sarfaraz Khan**, Quaid-i-Azam University, Islamabad

***Persistence of Pre-Islamic Traditions in the Pakhtoon Society:  
A Study of Some Selected Shrines***

The historic land of Gandhara has been the scene of contacts among different peoples whether they were invaders like the Achaemenians, the Greeks, the Parthians, the Kushanas, the Scythians, the Huns, traders or the holy Chinese pilgrims. This historic interaction contributed much to the evolution of culture and civilization in Gandhara. The foreigners who ranged from Achaemenians to the Greeks, the Mauryans, the Parthians, the Kushanas, the Scythians, and the Huns brought in the Gandhara country different world views, beliefs and philosophies of life. The gradual merger of the outsiders into the local environs left many specific marks on the ever-evolved culture and civilization of the region. All these developments led to a civilization known to the world as Gandhara civilization where cultural, religious, and social syncretism was at peak. Scholars from all over the world including historians and archaeologists paid attention to Gandhara and its history. Some of them tested their pen while other tested both their pen and spade during the last three centuries. They discussed in detail various influences on Gandhara, especially, Peshawar valley in terms of its interaction with different cultures and civilizations. But they left untouched the roots of some pre-Islamic traditions prevailing in the present day Pakhtoon society, which has its roots in the belief system persisting before the advent of Islam. An attempt will be made in this paper to trace the Pre-Islamic roots of some of the shrines in the present day Gandhara region, especially, in the valley of Peshawar. As per requirement of this paper a brief history of Gandhara and some sites of Peshawar valley such as Shahbaz Garhi, and Charsadda will be discussed because the shrines in focus are situated in these ancient cities and have been mentioned by Chinese Buddhist pilgrims

**Shahbaz Khan** (Retired), Directorate General of Archaeology, Punjab  
***Sardhi, A newly discovered archaeological site in the Salt Range Area***

Sardhi is a small village some 13 Km south of Kallar Kahar. To the south-east of the village, at a distance of about 1 Km as the crow flies, are the ruins of a Buddhist monastery. For reaching the site one has to travel on the matalled road leading to nearby village of Moar Jhang for about ½ kms and then take kacha path to the left. This kacha path leads one to the salt mines of Pir Khara. The archaeological site of Sardhi is 2 kms away on a winding route and one has to walk steep slopes till reaching the site. The site was discovered as a result of illegal diggings in June 2005 and there is no record of this site on the archaeological map of District Chakwal. The site was even overlooked during a survey conducted by Punjab Directorate General of Archaeology in 1994 when the overall Salt Range area was partially explored. As a result of this survey restricted to District Chakwal only, 65 important archaeological sites were located and the known history of the area pushed back from 2<sup>nd</sup> cent. BC to 7,000 BC. Archaeological remains of the site are found scattered on a relatively small area measuring approximately 400' x 400' of a wide flat platform. A small *kas* of water emerging from the nearby spring runs from west to east and divides the flat platform into two. The *kas* finally falls into Sohal River flowing further east of the site. The site is a landed property owned by Mr. Tassadaq Hussain and his brother both local residents. When the site was first visited by a team of Punjab Archaeology on 24<sup>th</sup> January, 2006, the signs of fresh excavations by the illegal diggers were very clear. Diggings had been carried out sporadically at various points and a few walls were exposed. Heaps of dressed kanjur stone blocks, once used for the construction, were lying scattered here and there which showed how ruthlessly the site was plundered in the hunt for treasures/antiquities. To the south of the site is a Muslim grave on a high square base built by reusing the kanjur Stone blocks of the site. This grave has also been dug from the west side. According to local people while constructing a road such an isolated grave was damaged accidentally and instead of a skeleton a huge treasury was found. This was because the Hindus of the area before escaping to further south buried the statues of god and goddesses and other treasures, which they could not carry with them, and constructed a grave on that. This was because they believed that the Muslims will never dig and disturb a grave and therefore whatever has been buried will remain safe till times to come. This is how such graves in the area still are mostly intact except those which are being excavated by the antiquity hunters now. As a result of small scale excavations here the remains of a Buddhist monastery have been discovered. Certainly there was a stupa court attached to it but no such remains have been found. The site seems to had been plundered many years before present illegal diggings of 2005. Most probably site was abandoned centuries back because of shifting of the inhabitants to some other place for one reason or the other. If so then it is one of the sites about which famous Chinese traveler Hieun Tsang, who visited this area in the beginning of 7<sup>th</sup> century A.D., had left a reference by mentioning that he saw hundreds of new Hindu structures coming up and many deserted Buddhist ruins in this area .

**Habibullah Khan Khattak**, National Institute of Management, Peshawar  
***The Fate of Archaeology after the 18th Constitutional Amendment***

***TBA***

**Ravi Korisettar**, Karnatak University, Karnataka, India

***Palaeolithic Research in South Asia: Potential Research Areas in Sindh and Balochistan***

The last three decades of Palaeolithic research in southern India has contributed significantly to our understanding of the cultural and environmental processes governing the patterns of dispersal of hominins from out of Africa, both by *Homo erectus* and anatomically modern humans, into South Asia. Aided by new dating methods the earliest colonization of the South Asia can be securely placed in the Lower Pleistocene (> 1.5 Ma) and the emergence of AMH at around 100 Ka. Systematic evidence for behavioural similarities has been documented and the dates from different regions of South Asia are clearly suggesting the continental route of dispersal, as opposed to the southern route, into this region, indicating the need to intensify Palaeolithic research in Sindh and Baluchistan. The suggested Basin Model (Korisettar 2007) recognizes Pakistan as a critical area for future research. The presentation emphasizes the need for interdisciplinary collaboration between prehistorians of India and Pakistan.

**K. Krishnan**, Maharaja Sayajirao University, Baroda

***Scientific Analysis of Harappan Ceramics from India***

Scientific analyses of ceramics, although rare in the Indian sub-continent, are an essential component of ceramic studies. This is done based on the composition of elements or minerals present within the ceramic body by chemical or petrographic methods or a combination of both, with an objective to put forth, support or verify archaeological propositions. This paper focuses on the analyses of ceramics from the Harappan sites in India using thin section methods, x-ray diffraction methods, scanning electron microscopy, energy dispersive x-ray analysis, differential thermal analyses and thermo gravimetric analyses. The paper will discuss the advantages and limitations of these methods and demonstrate how these methods have been employed in the study of ceramics from Nageswar, Vagad, Ratanpura, Bagasara, Padri (Gujarat) and Bhirrana (Haryana). The variations within the microstructure of various Harappan ceramics within a site, between sites, within a region and between different regions will be demonstrated. The variations in different clay pastes, its preparation techniques, composition of different decorative pigments, surface micro-morphology of different ceramics and the probable manufacturing methods of ceramics will be discussed.

**James Lankton**, Research Scholar/Harvard University/University College London

***Glass Beads of Pakistan, Afghanistan and India: New Insights on technology and trade in the protohistoric and early historic periods***

Glass beads and vessels formed an important component in trans-cultural exchange in the ancient world. The varied typologies and technologies of ancient glass, when combined with scientific analysis including the determination of chemical composition, make glass an ideal medium for the study of production and exchange pathways. This presentation will review our current approach to glass study, with an emphasis on the evidence from ancient Pakistan and Peninsular India. While the scientific study of early glass in Pakistan is just beginning, the data already available suggest significant glass production as early as the Kushan period, with exchange of this glass through trade networks extending north into the Silk Route sites of Central Asia, Mongolia and eventually Korea.

**Kaleemullah Lashari**, Secretary to the Government of Sindh

***Conservation of Mukhi House Museum, Establishment of a Museum of the Recent Past***

An abandoned house in the city of Hyderabad was brought to various usages, not compatible with its character. It caused great wear and tear to an Italian new classical house, that was built with personal affection and maintained with great care by a wonderful family. The civil disturbance and political agitation caused great structural damage, as same was subjected to arson attack twice. The government agreed to a proposal of its conservation, but to get the physical possession of the house was an issue, that involved many questions of civil, legal and moral nature. Its resolution was necessary before proceeding with the works on physical rehabilitation. Thus the steps were taken to come to terms with various stake holders. The property continued to remain in the name of the Mukhi family, a full list of the legal owners was prepared and their consent was obtained. The District Government was brought in the process of negotiations for obtaining an understanding for the need to conserve the house, and preserve same for creating a Museum, retaining the same Name, and arranging an alternate premises for the Girls school that was running in the building. The conservation work started after extensive documentation so that the any element must not be lost to the rehabilitation works. The selection of theme was another matter that required consideration. The restoration of lost elements was done through research and extensive inter-action with the Mukhi family. The Museum will be a show window of the recent past of the city, that began its modern existence in 18th century. The exhibits will be selected accordingly.

**Qasid Mallah**, Shah Abdul Latif University, Khairpur

***Kot Dijian sites in the Thar Desert and Indus Plains of Upper Sindh, Pakistan***

At this stage of research, at least 157 Kot Dijian sites are reported throughout Indus valley; among which, 122 are previously reported (Possehl 2002:44, Mallah 2000, Shaikh *et al* 2001, 2002, Biagi and Vessar 1998/99) and 35 sites are added through present research. Archaeologically this is very important period of cultural achievements which eventually resulted the Urbanism. There are only few sites excavated but when the documented sites through regional surveys are added to the information; various key cultural features become clearer. Some of those essential features has been considered 'Preconditions' for the urbanism in Indus valley; are now becoming an authentic model for understanding the phenomenon of culture change and development (Kenoyer 1995, 1997, 2000, 2003). The nature of preconditions like surplus, interaction, technological capability, social status has been considered to discuss in this presentation. The type site 'Kot Diji' and other settlements in the Thar Desert and Indus plain are re-examined through inter-site and intra-site context. The data from 35 sites would suffice to comprehend the viability of Preconditions model. The questions like the nature of settlements; the variability and intensity of material is on the surface of sites; and location pattern are the main issues addressed in this presentation.

**Farzand Masih**, Department of Archaeology, University of the Punjab  
***Explorations in Cholistan 2011***

Cholistan desert is replete with the settlements of the Indus valley civilization. Prior to Dr. M. R. Mughal expedition in Cholistan, Sir Aurel Stein and Henry Field conducted small scale explorations in 1941 and 1955 respectively in Cholistan. But their write ups remained hidden and their final works were practically lost. Dr. Mughal mapped over 400 sites of early, mature and late Harappan sites in Cholistan and completed the project in 1977. The team lead by the author resumed the investigations in Cholistan after four decade and surveyed number of sites along the dry bed of the lost river. The present paper is based on the explorations carried out in 2011 by the Department of Archaeology, University of the Punjab, Lahore. The exploratory team carried out documentation at Damana Vihar (Buddhist establishment), Siddhu Wali ( late Harappan site), Watto Wala (mature Harappan mound), and Derawer Ther ( mature Harappan site). The team discovered a rare Indus valley seal with variation in executing the pictograph and the perforated boss. The seal is comparatively thinner as compared to the seals found from other Harappan sites. Damana Vihar seems to be erected to impart teaching of Sankhya cult, which is one of the six schools of Hindu philosophical Astika founded by sageKkapila. This Vihar is located about 12 km in the south of River Satluj and bears sufficient witness to the involvement of human and natural factors responsible for its depredation for the lost over two thousand years but the tragic plundering and eradication of historic record after august 1947 is exceedingly distinct on the trail of the destruction.

**Heidi Miller**, Harvard University  
***The Legacy of Chanhu-Daro; Ongoing Research and Lasting Significance***

Excavated in 1935-36 by E.J. H Mackay, the site of Chanhu-daro has a unique place in the archaeology of the Indus Valley. This site was much smaller than its better known neighbor, Mohenjo-daro, and during the urban phase (c. 2600-1900 BC) Chanhu-daro was a craft production center creating the highly specialized and widely traded long-barrel carnelian beads, in addition to other items made from a variety of materials. During the post-urban period (following 1900 BC), the site bears witness to a change in culture, but not necessarily population, as recent research suggests. The materials collected by Mackay have been re-analyzed and have yielded new interpretations and expanded our understanding of the Harappan culture and the post-urban phase, the Jhukar. This paper will review the curation of the Chanhu-daro Collection at the Museum of Fine Arts, Boston and how this collection along with Mackay's archival records have enabled new research.

**John Mock**, University of California - Santa Cruz  
***New Materials on the History and Culture of Afghanistan's Wakhan Corridor:  
 Rock Art, Monuments and Inscriptions on the Silk Road, 7<sup>th</sup>-9<sup>th</sup> c. CE***

Wakhan, the remote north-eastern district of Afghanistan's Badakhshan Province, is intimately connected with the Silk Road. Wakhan's archeology is known largely from Aurel Stein's travels in 1906 and less so from the work of Austrian, German and American teams in the early 1970s. On five trips to Wakhan in 2004-2007, Dr. John Mock re-visited all sites described by Stein. In this paper, Dr. Mock expands upon Stein's descriptions and presents an initial analysis of several new finds. These include the site Lien Yuen, which Stein

discussed but was unable to locate, Tibetan-style fort complexes and watch towers, Tibetan inscriptions, and numerous rock carvings that appear to represent Silk Route caravan trade. These materials offer new information on the history and culture of Central Asia and the Silk Road, and underline an urgent need for thorough documentation and preservation of this globally significant heritage.

**Abdul Nasir**, Taxila Museum, Directorate General Archaeology, Punjab  
***World Heritage sites of Taxila valley and the conservation and preservation problems of these sites***

Taxila valley is the location of numerous sites that include world heritage sites and unexcavated mounds. These sites are an important heritage of Pakistan as well as the entire world. This paper will discuss some of the major features of these sites and also the issues of conservation and preservation that are faced in maintain them. The remains lie under tropical climatic conditions. As such due to their constant exposure to weather hazards viz. sun, rain, storms, earthquakes and thunders, etc. the remains developed cracks, leaned, bulged out, collapsed or decayed considerably and surviving in a precarious condition. The conservation of ancient monuments is however, an intricate process completely different in from and spirit from the repair of new buildings. The primary objective of the conservation is to preserve the original components of a monument as long as possible so that the authenticity of the monument is not impaired. The restoration where necessary, is to be carried out in the technique and material used by the original builders. To preserve the scale and setting of the monument it is also essential to preserve its environment and surroundings as far as possible. Well-preserved and developed monuments pave the path for tourism and provide a primary source of education in various fields to the students, researchers and scholars.

**Ghani ur Rahman**, Quaid-i-Azam University, Islamabad  
***Decorative Patterns in the Islamic architecture of Swat: Study of some selected Mosques***

Wooden Architecture, an important marker of Swat in the 19<sup>th</sup>-20<sup>th</sup> century, is almost extinct now. Unfortunately very few examples of wooden architecture are still standing. This wooden architecture had clear pre-Islamic signs and symbols. The author has already reported a wooden mosque from Shangla District (Rahman, G., 2011: 277-302). The author took ahead the research and when visited some modern cemented mosques he came to know that although many mosques have been reconstructed but these still have the same pre-Islamic signs and symbols which once decorated the wooden mosques. This paper will thus discuss the Pre-Islamic decorative patterns in a few selected mosques from Swat, including wooden and cemented modern mosques, see why and how the continuity persists in this region, how fast is the tradition vanishing and how these could be preserved.

**Shahid Ahmad Rajput**, International Islamic University, Islamabad  
***Common Features of the Regional Islamic Archaeology and its Significance***

The paper will discuss the common features of Islamic archaeology in the countries of the region such as Afghanistan, Pakistan and India together with the Central Asian and Iran and an attempt shall be made to highlight their significance. Islamic Archaeology in the region is found in abundance, what state it is in and what attempts are being made for its upkeep in various countries of the region at present shall also be the part of this paper. A critical analysis shall be brought forward on the attempts made in the recent days for the conservation and preservation of the Islamic archaeological sites in the regional countries and an attempt shall be made to find the possible future projects for the conservation and preservation of the Islamic archaeology of the regional countries. Evidence has it that these countries were linked together through trade by land and sea routes. Important archaeological sites of the region connected through the trade routes shall be highlighted and the finds from these sites shall be brought into discussion of this paper.

**Muhammad Nadir Rasooli**, Director of Archeology Institute, Kabul  
***Tapa Naranj (Orange Hill) and Khawaja Safa: Historical Sites of Kabul, description and analysis***

The city of Kabul has been enjoying a significant position through the history of our country alongside the history of all Asian countries. The excavations of historical sites of Kabul indicate that the city was an important commercial center for centuries and that it has been impacted by numerous different communities. This paper will present an overview of the archaeological studies undertaken to reveal the history of this important city. Two major monuments will be discussed in more detail, the tomb of Khawaja Safa, and archaeological site of Tapa Naranj (Orange Hill). The upper part of the tomb of Khawaja Safa has two parts. In the upper part there is a stupa, while in the lower part there is a temple. Excavations of the site of Tapa Naranj have revealed a big temple that includes numerous smaller individual stupas and one large standing sculpture five meters high. The site has been conserved and is now a protected monument.

**Uzma Rizvi**, Pratt Institute, New York  
***The Ganeshwar Jodhpura Cultural Complex Archaeological Survey: Community Participation, Heritage and Constructing Pre-history in Rajasthan***

In this presentation, I will outline the archaeological survey results of the Ganeshwar-Jodhpura Cultural Complex (GJCC), Rajasthan, India. Located in Northeastern Rajasthan, the GJCC is a collection of 3rd millennium BC settlements bound together by shared cultural traits that are articulated as stylistic similarities in material culture, production of copper tools, and geographic proximity to copper mines. Based on survey data, the indigenous development of the GJCC was in response to a regional economic niche that continued to increase in demand throughout the 3rd millennium BC allowing for economic autonomy (Rizvi 2007). In addition to the archaeological results, I will also articulate key shifts in archaeological methodology that allowed for community based participation, and how those changes in method provided for expanded notions of heritage practice on a local level.

**Tahir Saeed**, Department of Archaeology and Museums, Govt. of Pakistan  
**Local and Foreign influences on the Iconography of Buddhist Art of Korea**

Buddhism after its adoption in Korea during the 4<sup>th</sup> Century CE of Three Kingdoms Period was adopted as the official state religion in each of the three kingdoms namely; Goguryeo, Baekje and Silla. It remained the state religion through dynastic changes over the next seven centuries in Unified Silla and Koryo, until the 5<sup>th</sup> Century CE. The Korean sculptures evolved in two important areas; in the cult images of the Buddhist religion and in the art of sculptures. However, the origin of the Korean sculptures can be traced to Chinese culture. It soon began to go its own way and take on typically Korean characters up to about the middle of the 7<sup>th</sup> Century CE. The Korean sculptures are however highly selective in their interpretations of foreign models, sometimes multiple styles from different regions of China. However, a new style of thin monastic garment worn by the left shoulder bare appears in 8<sup>th</sup> or 9<sup>th</sup> Century Buddha images in Korea, after Korean monks began traveling to Tang China, Central Asia and as far as India. During the Unified Silla period, the traditional friendly human face of the Buddha was immersed with dignity. The early formative stage of Korean Buddhist culture and art is closely followed by the earlier Chinese models which were developed from different sources starting from Indian sub-continent. Therefore in order to trace the origin of iconography and styles of the early Korean Buddhist images we have to consider a variety of traits and changes from various regions and different periods. Later on every society influenced the Buddhist art with its own cultural heritage and every society left its footprints on the Buddhist art and evolved it. However, it is certain that the arts of China, Korea and Japan adopted Greco-Buddhist artistic influences but tended to add many local elements as well.

**Abdul Samad**, Hazara University, Mansehra  
***Archaeology - a tool for sustainable tourism in Pakistan***

Khyber Pakhtunkhwa has received 1.21 million domestic tourists in 2010 where only 2 % had visited museums and archaeological sites. These alarming figures forced us to devise new strategies and master plan for the promotion of archaeological tourism in Khyber Pakhtunkhwa. The Heritage awareness program (2011) in KPK, as an instrument for heritage protection, is gaining increasing attention around KPK and has turned the conservation and management of heritage into a high concern. In addition, the sense has been developing that Archaeological heritage of Pakistan also has significant economic potential. Recent Cultural Heritage Workshop 2011 in USA (organized by American Institute of Pakistan Studies and US embassy Islamabad) happened to be a capacity building opportunity for Pakistani professional. After this workshop we have successfully replicated several US heritage management ideas in Gor Khatri Peshawar. Purpose of this paper will be to share these recent developments in Khyber Pakhtunkhwa Archaeology and Museums.

**Badshah Sardar**, Allama Iqbal Open University, Islamabad  
***Buddhist Collections of Nimogram, Swat: Its History, Classification, Analysis and Chronology***

The research paper is going to be focused on a very rare and important collection of large scale artifacts (467 stone sculptures, 43 stucco pieces, 05 copper coins and 02 relic caskets) excavated from the Buddhist site of Nimogram Swat. Except few, most of these are dumped in the reserve collection of the Swat Museum. The antiquities discovered were not studied

scientifically nor were documented properly. After a salvage excavation conducted on the site, only a preliminary report is published by the Department of Archaeology & Museums Government of Pakistan in 1968, no systematic and scientific study or research has been done. Despite the artistic beauty of these sculptures and the high reputation of the Nigmogram Buddhist complex in the Gandhara region, with the exception of a preliminary report no information is available to public and scholars. As such, a bulk of artefacts remains out of the fold of academic research. To address this problem I intend to trace the history of the collection, classify it on the basis of style, analyze it for the subject matter, kind of material and workout its chronology by correlating it to the already established sequence of the Swat valley sites i.e. Butkara I, Saidu Sharif Stupa, Butkara III, Shnaisha Gumbat and Panr Stupa. To resolve this academic issue there is an urgent need that this collection should be studied in detail, scientifically and published soon afterwards for the ready reference to students and scholars. The main task of the paper will be to examine directly the Nimogram collection (published & unpublished) and to evaluate its religious, cultural, historical and iconographical/artistic importance, so far ignored. In order to know the nature and degree of foreign influences on the collection, a comparative study of the data will be conducted. It is for the first time that such a huge collection of sculptures and other objects have been found from a single site, which makes Nimogram an important site. I therefore, do not hesitate and accept this research as challenge to dig out related information through various sources. This research paper will be the first scientific attempt at a systematic compilation of Nimogram collection and would open new avenues for future research on the subject.

**Ibrahim Shah**, Hazara University, Mansehra  
*A Short Survey of Hindu Temples in Hazara*

Recent archaeological investigations in the different districts of Hazara have brought to light fairly a good number of Hindu temples. Obviously most of them date from the Sikh (1834-1849) and the British (1849-1947) periods. It does not imply that Hindu temple architecture was introduced in this part of the Indian subcontinent about the same time. Inscriptional record shows that temple architecture here goes back to the early centuries of the Common Era. But, unfortunately, no architectural remains of that temple have survived down to our times or even recorded before that could give us an idea of the mode of construction, building material, plan, sculptural decoration, type of superstructure and the landscape, etc. We are here concerned with the few ones that have been recorded in the course of explorations of the three districts of Hazara (i.e. Abbottabad, Haripur and Mansehra), some of which have been published in the catalogue of sites and monuments without being studied properly. Most of the temples of our interest in Hazara are located in Haripur and Mansehra districts with the few ones in Abbottabad. The reason is not far to seek. The first two districts remained active military bases of the Sikhs, while the last rose to prominence during the middle of 19<sup>th</sup> century when the British chose this place for the establishment of a cantonment and summer resort. Hindu temple architecture of 19<sup>th</sup> and 20<sup>th</sup> centuries here and elsewhere in the adjoining districts recognizes its own stylistic features that appear to be a blend of various architectural styles, i.e. the Muslim, Hindu and the Sikh. The architectural and decorative features of these temples are very fascinating and interesting. There is dire need to throw an intensive light on the architecture and decoration (whatsoever) of these temples before they go into decay and disappear forever. The present work aims to bringing together the Hindu temples in Hazara for a better understanding of religious architecture of the Hindu communities who happened to live here during the 19<sup>th</sup> and 20<sup>th</sup> centuries. It also throws light on the present state of preservation of these temples and the threats that contribute to their decay and deterioration. It would also put forward

suggestions and recommendations for preservation thereof. It would also provide a broad base for the students and scholars in this particular field of studies related with this part of the subcontinent.

**Shakir Ali Shah**, Department of Archaeology, Sindh  
***Archaeological Investigations along the Proposed Route for Copper Mining Project From Chagi District to Gawadar Port***

During the year 2009-10 a multinational Company was working in Balochistan province of Pakistan on the potential development of Copper & Gold mines in the Chagi district. The company aimed to build a road for transportation of supplies of the product after completion of the project. Realizing the importance of the region, authorities of the company decided to conduct an environmental impact assessment study for the proposed route including archaeological investigation. For the purpose mentioned above the company requested with the Department of Archaeology for assessment in the proposed area. The survey started from Dalbadin area of Chagi district and traveled through very difficult mountainous area Dalbadin, Kharan, Hoshab, Buleda, Paroam, Besma, Nag, Panjgour, Turbat and finally terminated at Gwadar port. During survey the results of archaeological assessment found very positive. On the proposed route there are 36 different kinds of sites and monuments documented which belongs to different eras of past from 4th millennium B.C to 17th century A.D. All the sites and monument were completely documented with description, physical condition, suggestions and complete drawing submitted to concern authorities.

**Syed Abdul Bari Shah**, Quetta Museum, Balochistan  
***An overview of Museums, Archaeology, and Traditional Cultures of Balochistan***

This presentation will provide an overview of the development of museums in Baluchistan and a brief summary of the long history of human occupation in this region. The first museum has been established in Baluchistan was in Quetta 1960. After serious damage from the 1935 earthquake, it has taken some 37 years to rebuild and re-establish this museum. The current museum has 3 galleries that focus on the Mehrgarh culture of the region, beginning with the Palaeolithic, Neolithic, Chalcolithic, and later historical periods. Future goals for the museum are to strengthen the Archaeological and Cultural history of the region.

**Zahiruddin Shar**, Department of Archaeology, Sindh  
***Shish Mahal, Kot Diji: Talpur Period Architecture in Sindh***

The Shish Mahal is one of the beautiful, remarkable, historical and bigger Mahal at Kot Diji town situated at Latitude 27.21 North and Longitude 69.43 East. The Shish Mahal is two km away from Kot Diji town in the north and two Kilometer in the south of Kot bungalow town on the Kot Diji-Kot bungalow link road. It is also two kilometer to the east of national highway running towards Khair pur in north and in south Hyderabad. Shish Mahal building was built by Mir Shah Nawaz Khan Talpur in the 19<sup>th</sup> century during Talpur dynasty for residence. The Shish Mahal was constructed with burnt bricks and sundried bricks laid in lime and mud mortar. The building was fortified with 1.8 meter thick and three meter high

mud wall, and having three gates i.e. north, east and west, constructed with burnt bricks laid in lime mortar as in building. The covered area of the whole complex is about 1.5 acres land. There is one room in the south-west corner of Shish Mahal having 12 doors, three from each side. The Shish Mahal building is very beautiful, big one, contains several rooms/ chambers and verandahs of different size and measurements and also three canopies on the different sides. The building is constructed 1.5 meter above the ground level. The stair cases are also present at all four sides and one flight of stair is at north-east corner for approaching the up stair / first floor. The exterior pillars are rounded in shape and interior pillars are rectangular with embossed rounded pillars design. The bathrooms and fire places are also present on the corners. The main chamber and adjacent rooms are decorated in beautiful fresco paintings and also rounded beautiful mirrors. There is also beautiful cornice having beautiful minarets.

**Vasant Shinde**, Deccan College, Pune

***Recent Research on the Harappan Culture in the Ghaggar Basin with Special Reference to Girawad and Farmana***

The Ghaggar basin along the India-Pakistan border was an important region for the Harappans as it was densely populated during the Early and Mature Harappan phases (4000-2000 BCE). Though many individuals have worked in this region, it is not subjected to systematic survey as it should have been. The author in collaboration with the Research Institute for Humanity and Nature, Kyoto, Japan initiated a fresh research in this region from 2006. After fresh documentation of some of the known sites and discovery of new sites, the most noteworthy feature noticed was that many of the sites fall in the course of the Ghaggar river bed. This suggests that either the river dried down sometime before 4000 BCE or the river course was considerably narrow before the flourishing of the Harappan culture in this region. As a part of the Indo-Japanese collaboration, the sites of Girawad and Farmana were selected for excavation. The team was interested in understanding the regional variation of the Harappan culture and the cultural process from Early to Mature Harappan phase. Considerable success was achieved in this regards during the course of research. Girawad is a single culture Early Harappan site, the beginning of which is going back to the beginning of 4<sup>th</sup> millennium BCE. The site has a regional Hakra material and pit-dwelling complexes along with a few rectangular mud-brick structures. Pit-dwelling complex is a characteristic feature of the Early Harappan culture in the Ghaggar basin as is clear from the evidence at even other sites as Bhirrana, Farmana and Kunal. Farmana has Early as well as Mature Harappan phase and there is a clear evidence of architectural development from pit-dwellings to a well-planned settlement. The town-planning presents a regional variation. Farmana also has the largest burial complex spread over an area of 3 ha, 70 of which were excavated. There is a considerable variation in positions, burials goods, customs, etc. Efforts are being made to understand composition of population, their diet and health. The present paper deals with the regional variation of the Harappan culture in the Ghaggar basin and the results of the excavations carried out at Girawad and Farmana.

**Zain Ul Wahab**, Hazara University, Mansehra

***Dir Museum: Issues of Preservation and Reconstruction***

Dir museum was founded on 20th September, 1970 and was inaugurated and opened to the public on 30 May, 1979. Dir Museum was a great effort of Mr. Aurangzeb Khan, the then Director Dir museum Chakdara and tremendous co-operation of the Department of Archaeology, the university of Peshawar. The ancient history of Dir reveals the interplay of

the Aryan Tribes who have been recognized in numerous graves found in Timergara and other places. Later on, the Achaemenian and Greek rulers extended their authority to this part of the land. It is through this territory that Alexander the Great passed through with great difficulty. The remains of battle of Massaga are generally identified with the famous ruins near Ziarat, in between Chakdara and Timargara. Here Alexander faced the greatest heroic Queen of that time who gave him the thoughts for fight. Subsequently, the entire area was won over by Buddhism. The Monumental remains of these people are spread over this land and can be seen in the surviving Stupas and monasteries. A lot of valuable material has been excavated in various places which has thrown abundant light on the ancient history and culture of this land. Towards the 5th century A.D. the Yousafzai established themselves in this region and developed tribal system of socio-political life.

In 2007, Taliban captured Tehsil Adinzai and took over F.C. and Levies. They had full control of Levies Fort and the artillery. Further, Taliban took control of Habib Bank and the local police station. Their next target was Dir Museum. It was the brave effort of Curator of the museum, that Dir museum is still in place and safe. Dr. Zain-ul-Wahab negotiated with the Taliban and managed to convince them not to damage the museum and the valuable cultural heritage. Though the immediate threat to the museum was over but the threat from certain aggressive and conservative groups of Taliban still remained. However, Dr. Zain stuck to his policy of negotiation and conviction to assure the safety of the museum. This went on for some time until Pakistan Army took over the entire area and Taliban fled to the mountains. Later Dr. Zain-ul-Wahab proposed and established a Muslim Gallery in the Dir Museum.