

Experimental Archaeology in Pakistan and India 2014

By J. M. Kenoyer
University of Wisconsin, Madison

As part of the ARCP/IP project Dr. Kenoyer has been involved in developing experimental archaeological research in traditional crafts of Pakistan and India to help in the interpretation of ancient archaeological remains and to better understand the nature of exchange between the two regions. These projects were undertaken at Hazara University, Quaid-i-Azam University, Khairpur University, National College of Arts Rawalpindi in Pakistan and Maharaja Sayajirao University, Baroda, India.

Experimental archaeology involves traditional craftspeople who are asked to replicate ancient artifacts as well as archaeologists who attempt to replicate objects to better understand their construction and materials. During this past year the following people and crafts were studied.

Stone Flaking and Bead Making: Two craftsmen in Khambhat India who helped in the replication of stone tools and beads are Anwar and Mustaq, sons of the late Inayat Hussain. These two individuals use traditional flaking techniques to manufacture long stone blades similar to those produced by the ancient Harappans. They also flake, grind, and polish stone beads in a way that is similar to that undertaken by the ancient Harappans. They were asked to prepare replicas of stone blades as well as beads that could be used in various experimental projects of tool use and bead decoration. Some of the beads were decorated using a special bleaching technique that was developed by the Harappans. They also provided bead blanks that were later used for drilling with stone drills. The bleaching and drilling experiments were carried out by Dr. Kenoyer in both India and Pakistan as part of his demonstrations for students at participating universities. In order to compare the bead making of India with that practiced in other regions, an Afghan bead maker from Peshawar was invited to participate in the project. Mr. Abdul Momin showed the students at the Pakistani Universities how to make stone beads and students were able to replicate soft stone bead making using steatite. These beads were also fired in a small kiln and hardened as was done in the Harappan period.

Stone Carving and Stucco Manufacture: Mr. Iftikhar Ahmed of Taxila demonstrated how to carve schist sculptures in the Gandhara style at the Pakistani Universities. He also constructed a display wall of a stupa in the museum at the Taxila Institute for Asian Civilizations (TIAC) to show how these structures were constructed and used in housing sculptures. This wall has been partly covered with stucco plaster to show how it would have looked originally. When the stucco has dried completely it will be painted using traditional pigments to replicate the style of early Buddhist stupas and architectures. The stone sculptures that he made will also be painted to demonstrate the way they were originally displayed. This is the first time that such reconstructions have been done in Pakistan. Subsequently, Mr. Iftikhar Ahmed was employed by the Department of

Archaeology, KPK to repair stucco replicas that had been put up at the Julian Monastery in Taxila.

Pottery Manufacture: Mr. Muhammad Nawaz and his son Allah Ditta came to TIAC to demonstrate Harappan pottery making. They trained the students in pottery making and decoration and with their help built a kiln and fired the pottery in an outdoor experimental lab on the Quaid-i-Azam University Campus. This is the first experimental kiln to be created on a campus in Pakistan. Through these experiments the students were able to better understand how to describe and analyze pottery from ancient sites. Similar pottery experiments were undertaken at MS University Baroda in 2015 and will be discussed in the final report.

Copper Smelting: Dr. Kenoyer was able to help the students to understand how ancient metalworkers smelted copper from ore. He was able to obtain some copper ore through contacts that one of the students had in Balochistan. With the help of the students, the copper ore was crushed and then smelted to create tiny copper prills that were later refined to produce copper metal. This is the first time this type of smelting has been done in an experimental class at a Pakistani university. Similar copper smelting experiments were undertaken at MS University Baroda in 2015 and will be discussed in the final report.

Samples of the completed objects and the different stages of manufacture have been kept in the experimental archaeology labs and museums for students to look at and use in future projects. Students in both India and Pakistan have continued to undertake various experimental projects throughout the year and Dr. Kenoyer will undertake some follow up projects to help them continue to develop their understanding of these crafts. These experimental projects have helped the students and the faculty at the participating universities to develop new teaching methods and to encourage original research projects. The use of experimental archaeology encourages critical thinking about technology and helps students to develop new interpretive models about social and technological organization in the past.