

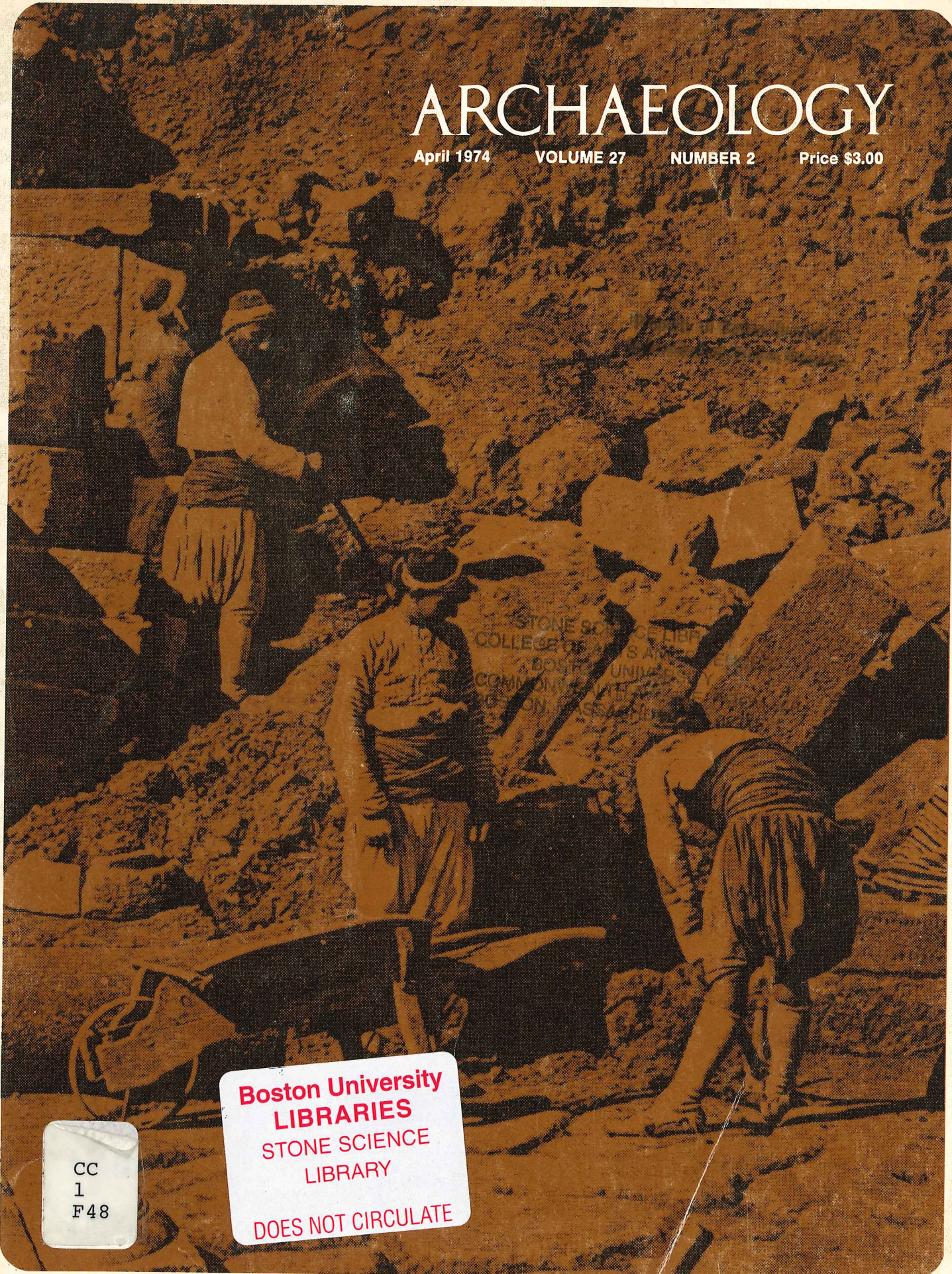
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New Evidence of the Early Harappan Culture

from Jalilpur, Pakistan

By M. RAFIQUE MUGHAL

Half a century ago, large-scale excavations were initiated at Harappa and Mohenjo-daro, the two principal sites of the Harappan or Indus civilization. The investigation of these two sites and other major Harappan settlements such as Chanhudaro in the province of Sind, Kalibangan in north Rajasthan, and Lothal and Rangpur in Saurashtra, Gujarat, together with extensive explorations of the general area have enormously enlarged our knowledge of the material culture and the geographical range of the Harappan peoples outside the Indus Valley proper. To date nearly 270 sites in India and Pakistan containing Harappan re-

Area encompassed by the early and mature Harappan cultures as indicated by the distribution of identical material remains. Extension along and down to the Arabian seacoast coincided with the rise of mature Harappan urban centers.

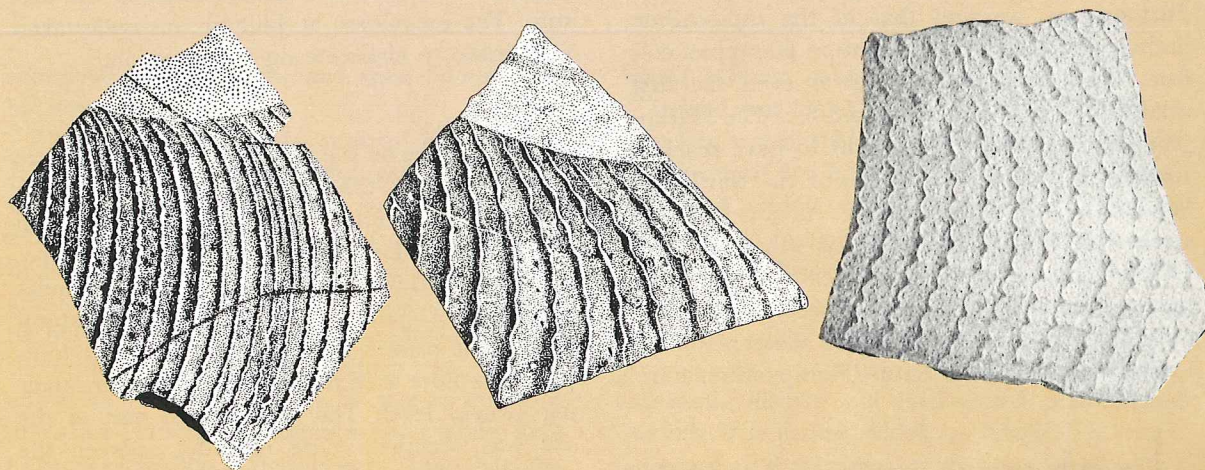
mains have been reported. Beginning with the Iranian and Afghan borders on the west—that is, with Sutkagen-dor and Periano Ghundai—these settlements are distributed over the vast plain of the Indus and the now-dried Ghaggar-Hakra river system. They extend eastward beyond Delhi (Alamgirpur) and, reaching as far south as Surat (Malvan), cover the whole of Gujarat (Katiawad and Kutch).

The geographic position and archaeological evidence of the various sites have posed exciting questions that are bringing us to the threshold of a new understanding of South Asia's earliest civilization. Students of the Harappan culture

generally believe that colonizing foreigners initially gave the Indus civilization its impetus. This belief rests primarily on the evidence available from the mature Harappan culture. But this hypothesis, we are discovering, is too simplistic. It begs several questions, and it ignores the ecology of the Indus River plain, which is inherently favorable to the indigenous exploitation of resources and the development of a stable culture. The new material recovered from several sites, especially Kot Dijli, Amri, Kalibangan, Siswal, Mitathal, Sarai Khola, Surkotada, Gumla and Jalilpur, forces us to recast our beliefs. In the picture that emerges the materials found stratigraphically and chronologically earlier than the mature Harappan materials appear to be not pre-Harappan, as they have been called for so long, but rather *early* Harappan. In other words, the culture of the Indus civilization is continuous; the mature phase which begins about 2500 B.C. evolved by recognizable steps out of the nascent cultural pattern, which may extend back to 3200 B.C.

The work at Mohenjo-daro illustrates this change of viewpoint. Attempts have been made to reach the lowest strata, but they have consistently been foiled by rising ground water. In 1964, Professor George F. Dales carried out deep borings that indicated remains at a depth of 34 feet below the field surface surrounding the

35-foot mound; this means that, at the least, there is a cultural accumulation 69 feet thick (ARCHAEOLOGY 18 [1965] 145-150). During the initial excavations in the 1920's and early 1930's, the archaeologists recovered early materials from two deep pits, but they did not, at that time, understand that these materials were significantly different from the mature Harappan materials. Then, in 1932, E. J. H. Mackay found some potsherds in a pit 42 feet deep, potsherds which he assigned to "early" levels. Some of the examples of this pottery were not mature Harappan ceramics but "wet" wares, commonly found in Damb Sadaat I-II contexts in the Quetta Valley and dated by radiocarbon (with MASCA correction factors added) between 3100 and 2700 B.C. In 1950, Sir Mortimer Wheeler and his colleagues, working at another part of the site, were able to excavate down only to 16 feet below the water level. Beneath the mature Harappan remains, however, they uncovered "crude, vigorous, and unstandardized" pottery, according to Leslie Alcock, which they thought to be "far earlier than anything previously discovered on the site." Similarly, at Harappa, another principal city in the central Punjab, the earliest occupation prior to the construction of the city wall about 2500-2400 B.C. produced evidence of "a variant and even alien" culture which the excavators described as markedly different from the succeeding mature Harappan material.



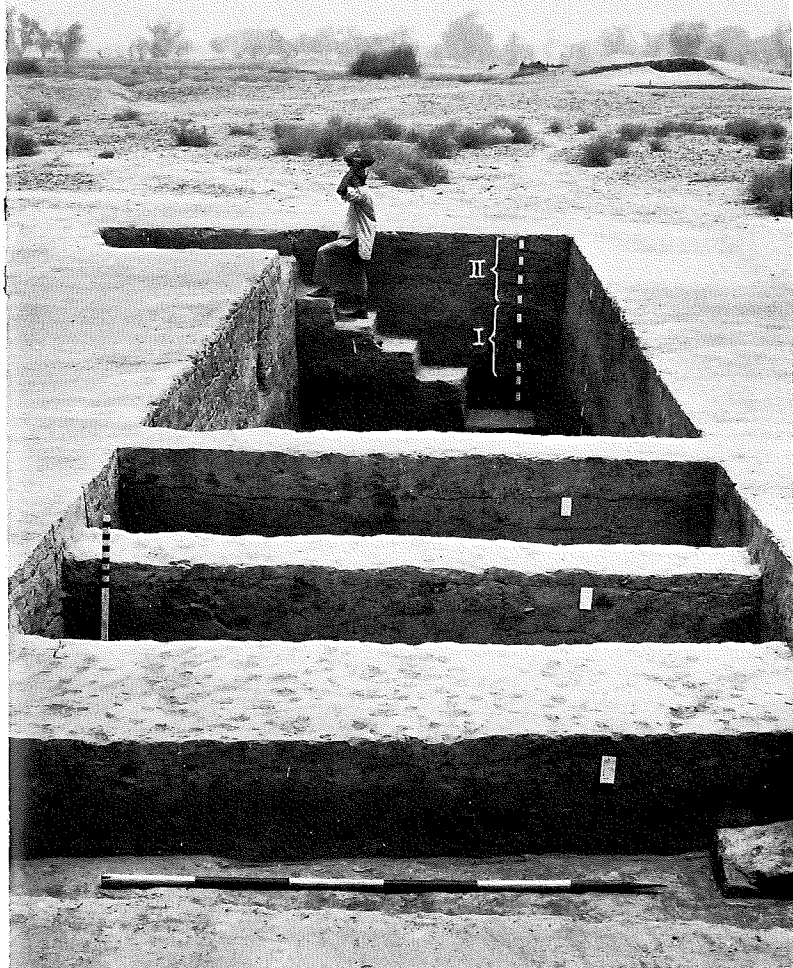
'Wet' wares of early Harappan date with identical surface treatment from three widely separated sites in the greater Indus Valley and Baluchistan. (Left) Sherd from early levels of Mohenjo-daro found in association with a carved steatite piece. (Center) Sherd from Damb Sadaat III in the Quetta Valley. This type, however, occurs most frequently in levels I and II along with Kot Dijian wares. (Right) Surface sherd from a Gumla type assignable to Gumla II-III levels. The "wet" wares occur extensively in Baluchistan covering the Zhob, Loralai and Quetta valleys and Kalat district. Photograph, courtesy Professor A. H. Dani.

The real significance of this "alien" culture and its chronological relationship to the mature Harappan culture began to come into focus when materials comparable to those from the earliest levels were unearthed by F. A. Khan at Kot Diji in Sind, 25 miles east of Mohenjo-daro on the left bank of the Indus. At Kot Diji, 17 feet of cultural deposits occurring below the mature Harappan remains yielded abundant ceramic and other materials which have been designated "Kot Dijian." These Kot Dijian ceramics are identical to those from the pre-defense levels of Harappa. They are also found in the early third millennium B.C. contexts of Damb Sadaat I-II in central Baluchistan. At Damb Sadaat and at several other sites in the Zhob and Loralai valleys of Baluchistan, the Kot Dijian wares occur *in association with* the "wet" wares of the type reported from the "early" levels of Mohenjo-daro. According to the corrected radiocarbon dates, the occupation of the early Harappan period at Kot Diji falls between about 3155 and 2590 B.C. This suggested time range for the Kot Dijian culture is also consistent with the major Amrian occupation at Amri, in the lower Indus Valley where Kot Dijian pottery assignable to the end of the fourth or the early third millennium B.C. was also found. Levels II-III at Gumla, a site situated at the northern end of the Indus plain in the Gomal Valley, have remains of the Kot Dijian culture dating by radiocarbon to about 2798 ± 74 B.C. At Kalibangan in northern Rajasthan, the Kot Dijian-related occupation begins about 2920 B.C. Furthermore, we find that of the radiocarbon datings established for the mature Harappan culture, none goes back as far as even the first quarter of the third millennium B.C. The Harappan culture, indeed, is thought to have reached its maturity about the middle of the third millennium B.C. or slightly earlier. All this evidence verifies an important conclusion—that the Kot Dijian materials are chronologically prior to the mature Harappan remains. At most sites, moreover, the Kot Dijian and related materials occur immediately below the mature Harappan remains.

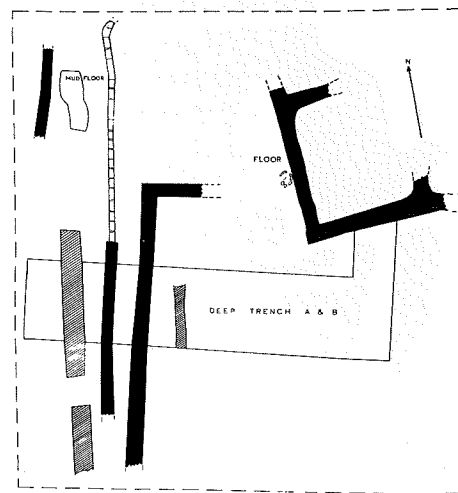
The early cultural assemblages of the Indus civilization demonstrate a remarkable degree of uniformity. The exceptions are minor ones of a regional nature such as the sites at Amri in southwestern Sind and Kalibangan in the east-central Indus Valley. Otherwise, the similarities can be seen in both public and private architecture, like

fortifications, drains and multiroomed houses; in the use of two-wheeled carts and terracotta "cakes"; in the presence of humped bulls, sheep and goats among the faunal remains; in a common stone-tool technology and in the red ceramic wares and their painted designs. The very recent discovery of several early sites in the upper Indus Valley by the Pakistan Department of Archaeology in December 1972 and by Professor A. H. Dani of Peshawar University in 1971 has widened even further this distributional pattern. I identified similar cultural material at several sites in northern Baluchistan during the summer of 1972. It is remarkable how the geographical range of such cultural assemblages from the early third millennium B.C. duplicates, almost exactly, that of the mature Harappan culture in the Indus Valley proper and in northern Baluchistan. This fact assumes significance when we find, in addition, that almost all of the early traits of the material culture were absorbed and further developed during the mature Harappan period. It would therefore appear that this mature civilization not only grew out of the Kot Dijian-related culture of the early Harappan period, but also represents, with its large urban centers, the climax of a process of urbanization that may have started as far back as the middle or the end of the fourth millennium B.C. In the occupation of some sites there is a temporary break between the early and mature Harappan phases that has yet to be explained, but these disruptions do not seem to have retarded the evolution of the culture. The excavation at Jalilpur was undertaken specifically to elaborate on this question.

Jalilpur sits on the intensively cultivated plain of the Punjab in the central Indus Valley. It was located on the former flood plain of the Ravi River, which flows north of the site. Harappa, also, is located on the banks of the Ravi, 46 miles northeast of Jalilpur. As a result of natural erosion the present height of the mound at Jalilpur is no more than five feet above the surrounding ground level. The southeastern part of the site was occupied more recently, between the seventh and twelfth centuries after Christ, and the mound in this section rises to a height of fifteen feet. The mound as a whole measures 1,400 by 1,200 feet—almost five times the size of the modern village of Jalilpur nearby. To judge from the present-day population density of the villages in the area, the prehistoric settlement must have



Trench A and B at Jalilpur during excavation. Two major periods of occupation were identified: I, pre-Early Harappan; and II, Early Harappan. In the foreground are the mud-brick and pešé walls of Period II.



JALILPUR 1971
STRUCTURES OF PERIOD II

FIRST PHASE
SECOND PHASE
SCALE
Feet 1 2 3 4 5 10 Feet
Centres 100 0 1 2 3 metres



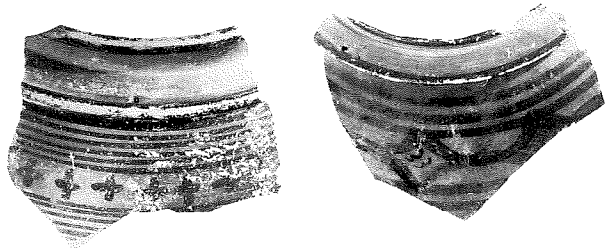
Fragment of handmade red pottery with appliqué decoration, characteristic of Jalilpur I. Similar wares occur in the earliest IA levels of Amri and in level I at Sarai Khola.

contained between eight and nine hundred inhabitants.

There were two main reasons for selecting Jalilpur as a special excavation site. First, it was situated in the middle of the Indus Valley, and therefore seemed likely to provide evidence of links between the pre-defense or early occupation at Harappa and the settlement at Kot Diji. It also promised to establish links between these sites and the settlements of northern Baluchistan. Second, unlike most other early sites, it gave no evidence of mature Harappan occupation and thereby gave us hope of finding materials even older than the early Harappan culture. At Kot Diji, at Amri, at pre-defense Harappa and at Gumla, the early Harappan culture seems to appear in an already-developed form; the only hint of a cultural horizon earlier than the early Harappan had appeared at Sarai Khola near Taxila, on the Potwar Plateau of the upper Indus Valley. We

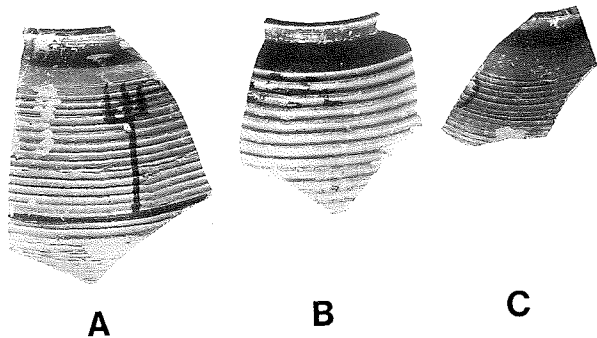
hoped Jalilpur would add a second such site.

Indeed, our hopes were fulfilled. We laid three trenches, two in the middle and another near the northwestern limits of the mound. The largest trench, A and B, originally measured 56 by 60 feet but had to be reduced to 46 by 10 feet when we hit mud-brick structures just a few inches down. We excavated this reduced area down to virgin soil. Our work revealed an accumulation roughly six feet thick which represented two culturally distinct but interrelated occupational periods. The earlier, which we labeled Jalilpur I, consisted of three main occupational levels above the natural soil, levels that yielded a tremendous number of thick, underfired light red handmade sherds most of which had been treated on the surface with a thick coating of mud mixed with pottery bits. Similar handmade wares have come from Amri IA where they were dated as early as the second half of the fourth millennium B.C.



A characteristic vessel of the early Harappan period is a globular vase with a prominent flange below the rim which is intended to receive a lid. The flange is perforated, and the exterior is painted in black on a red slip. Pottery of this type is distributed extensively all over the greater Indus Valley and in central and northern Baluchistan. (Left) A sherd from Jalilpur I. (Right) A sherd from Periano Ghundai.

The pottery finds from Jalilpur I also included a number of small cups and fragments of large jars in a variety of plain red fabrics. Bichrome wares painted black and brown or chocolate on red appeared at the end of Period I and became frequent in the upper levels assigned to Period II. Period I was devoid of any architectural remains except a pair of floors made of rammed earth on lime beddings. Also from Period I we found chert blades, some of which had retouched edges, net-sinkers, beads of gold sheet with tubular perforations, cylindrical and biconal beads of terracotta and numerous bone points. There were no copper implements. The presence of many animal bones that were either burned or cut suggested that the inhabitants of Period I depended on

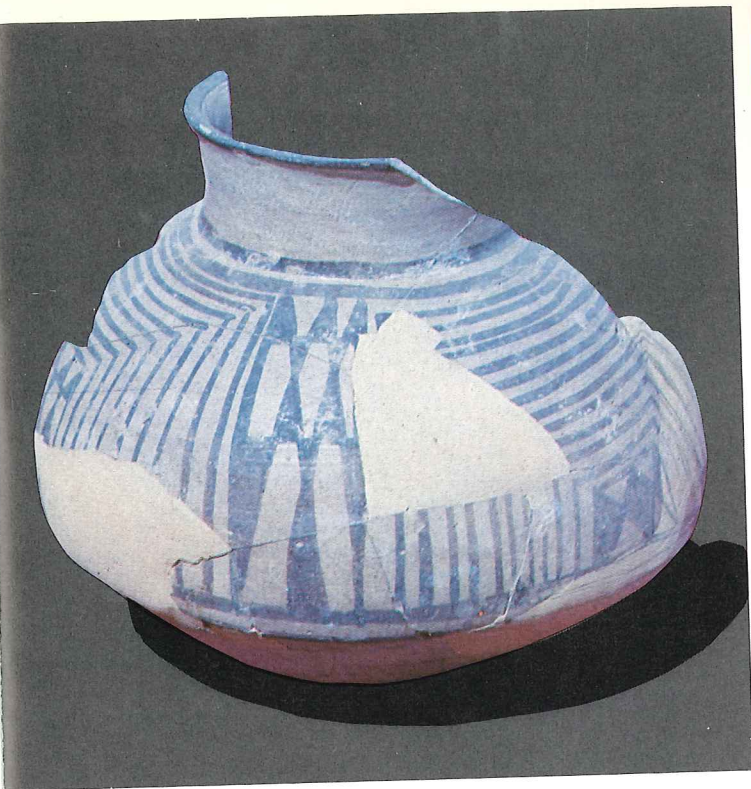


Diagnostic early Harappan pottery consisting of globular vessels with short rims was widely distributed. Sherds have been found in pre-dense levels at Harappa, at several sites in Bahawalpur, around the Gomul Valley and in the northern and western Punjab. A and C are from Jalilpur; B is from Periano Ghundai.

slaughtered animals for a major part of their diet. On the basis of the present evidence—the pottery, the bones and the stone tools—we think Jalilpur I is stylistically related to Amri IA. Among the other contemporaneous settlements, level I at Sarai Khola has yielded an abundance of similar bone points, microblades and hand-made red-burnished wares with basket-like impressions on their bases which are comparable in technique—though neither culturally nor chronologically associated—with the red-ware group of the Chinese Yang-shao Neolithic horizon. A few examples of handmade pottery with external surface appliqué also occur at Sarai Khola. Pottery was absent from Period I at Gumla, but chert blades and bone points have been reported, just as they have at Kile Gul Mohammed I, Rana Ghundai I and Anjira I-II in Baluchistan, all of which indicates a common level of technology during the fourth millennium B.C.

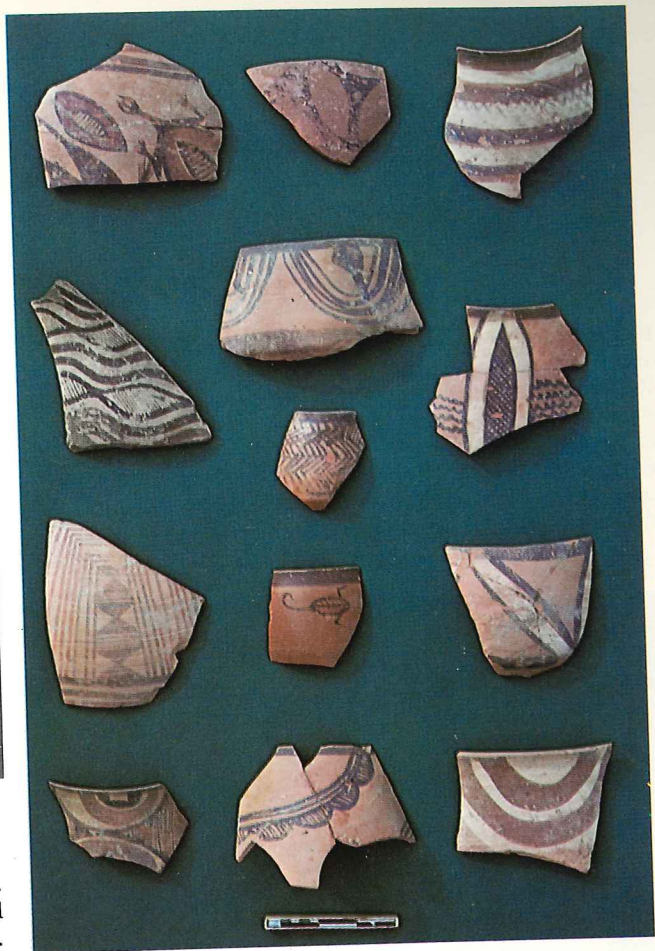
The findings in the last level of Period I at Jalilpur overlapped Period II with new wheel-made pottery forms, a new decorative style and new artifacts. In the main trench A and B, Period II was represented by a three-foot thick deposit divided into three layers which included two structural phases: IIA (first) and IIB (second). Along with new ceramics and other sorts of material, we found regularly laid out small rooms made of mud or clay lumps in phase IIA and rooms made of mud brick in phase IIB. The average size of the bricks from phase IIB was 18 by 9 by 3 inches. One partially excavated room measured 14½ by 12½ feet, with walls from 24 to 27 inches thick. The floor level, associated with both phases IIA and IIB, was made of mud and contained groups of pottery.

Most of the pottery types belonging to Jalilpur II, moreover, are also found at several other sites of the early Harappan period in the Indus and Ghaggar-Hakra river valleys and in northern Baluchistan. The plain and painted red wares fall into several distinct groups: (1) Globular vessels with a short rim; these are usually painted around the neck with a black or red band and have plain or grooved external surfaces that are covered with red slip. (2) Flanged vessels, often painted black on red and having knobbed lids. These flanged and globular vessels are among the characteristic Kot Dijian wares of the early Harappan period and are widely found in association with ceramic wares known under different names, e.g., Amrian, Sothi, Zhob and Quetta. (3) Black-and-brown or chocolate-on-red wares



A unique vessel in the Indus Valley, from Jalilpur Period II. It has been restored.

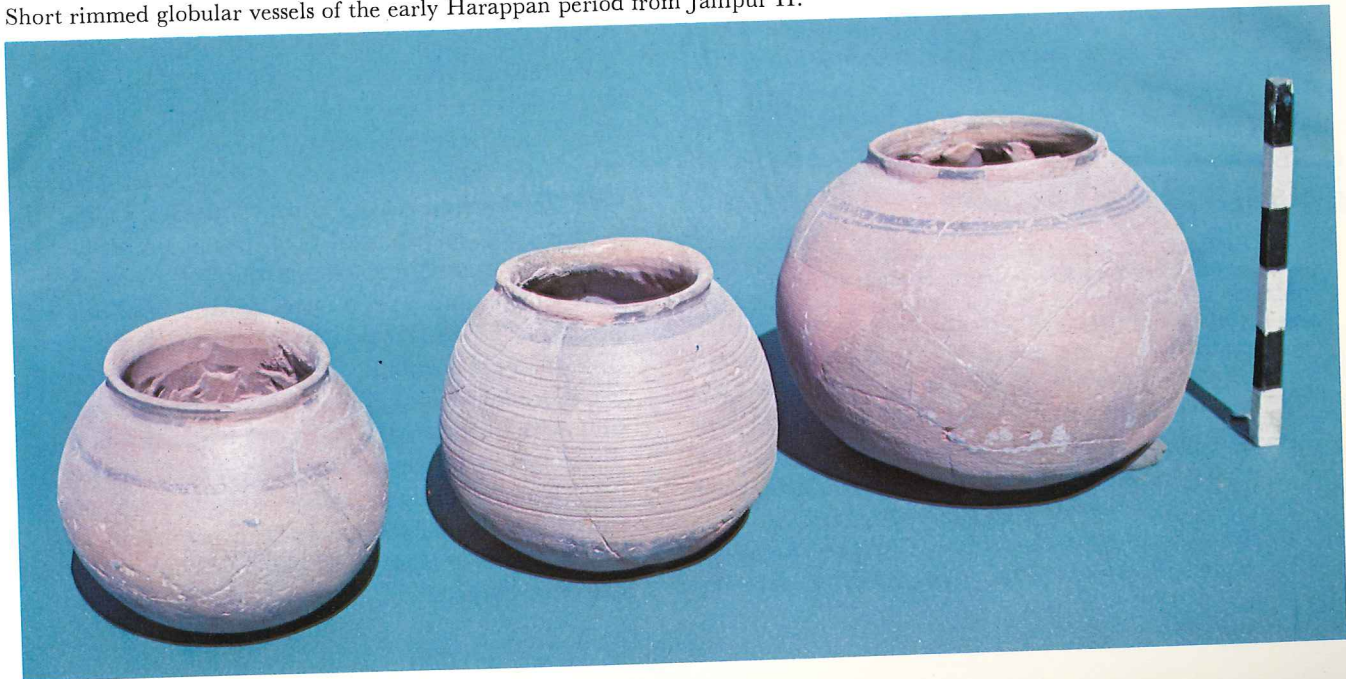
Monochrome and bichrome pottery from Jalilpur. The white and black of the right hand column recall the "Sothi" wares of the east-central Indus Valley.

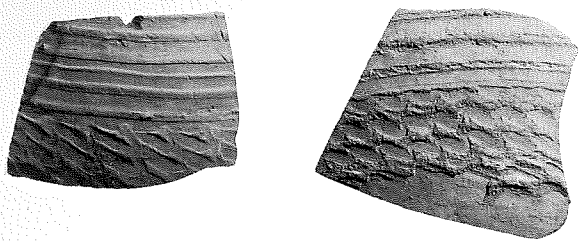


also found at Sarai Khola II, Gumla II-III and Periano Ghundai. (4) Black-and-white on red wares which recall the Sothi wares of Kalibangan I, Surkotada I, Siswal A and the painted style of the so-called horned diety from Kot Diji.

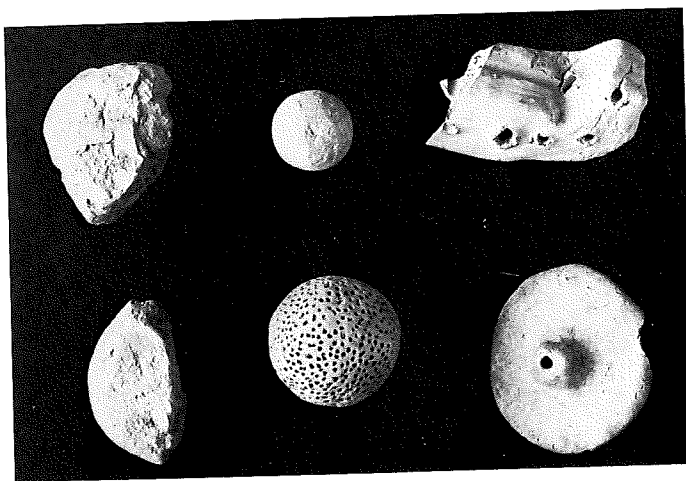
Similar examples were collected in 1972 from northern Baluchistan. (5) Rare pieces decorated in black or brown on buff slip or on a buff body which in a few forms and painted styles suggest a generic relationship with the buff wares of

Short rimmed globular vessels of the early Harappan period from Jalilpur II.

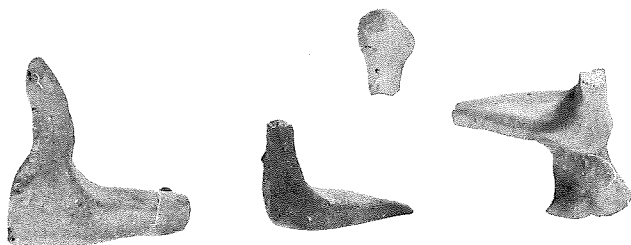




Fragments with horizontal relief lines made of mud applied on the outer surface. (Left) Jalilpur II; (Right) Periano Ghundai. Elsewhere in northern Baluchistan, this type of decoration occurs on large water pitchers belonging to the early Harappan period, sometimes called "Periano wet" or "Khojak parallel-striated" wares. Similar wares come from Gumla III and the surface of several sites in the central Indus Valley.

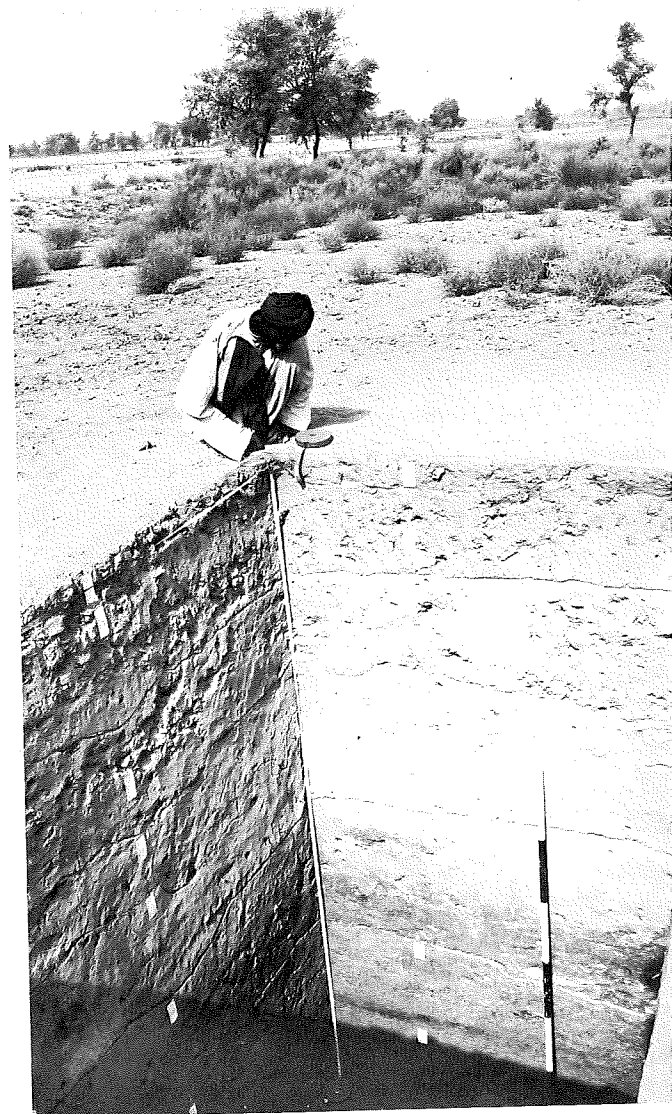


Small terracotta finds from Jalilpur II: balls; "cake" fragments and fragmentary frame and wheel of a toy cart.



Lower part of terracotta female figurines and one head from Period II and surface. Similar figurines also occur in Sarai Khola II and Gumla II-III.

southern Iran and of Mundigak III, 6 in southern Afghanistan. (6) Black-on-red wares comprising tall or squat offering stands, interacting painted designs and open-mouthed bowls like those which are found elsewhere in the early Harappan contexts but which are otherwise popularly associated with mature Harappan wares. (7) Straight



Trench C during excavation.

and wavy horizontal decoration in relief on the external surfaces of the so-called "Periano wet" or "Khojak parallel-striated" wares.

The small finds from Period II included terracotta toy-cart frames and wheels with a protruding hub; more of the so-called terracotta "cakes"; animal figurines, especially of humped bulls with short legs; copper or bronze rods; parallel-sided chert blades with reworked edges; pestles; saddle querns and leaf-shaped arrowheads of stone; terracotta bracelets either gray or red in color; shell bangles and several beads of lapis lazuli imported from Badakhshan in northern Afghanistan. Of special interest were some stylized terracotta female figurines showing a generic relationship with those from Goeksjur in Soviet Turkmenia which belong to the Namazge III period (ca. 3000-2700 B.C.), and also with examples found at Shahri-i-Sokhta in Iranian Seistan as well as Gumla and Sarai Khola in northern Pakistan.

At the northwestern edge of Jalilpur, there was a low mound littered with countless potsherds, some of which were overfired, and lumps of reddened earth. We thought this spot might have been the site of a pottery kiln. A small pit, designated C, measuring 8 by 4 feet, was excavated down to a depth of nine feet, to the level of virgin soil, but we encountered no kiln. We did find, however, a deposit of pottery waste two feet thick and a number of fired clay pieces that would indicate the presence of a kiln somewhere in that immediate region. The materials from this test trench belonged to Period II, inclusive of the structural phases IIA and IIB.

One may infer, in conclusion, that an expansion of the settlement at Jalilpur occurred about the beginning of the third millennium B.C. Such an inference is consistent with the evidence

we have of a similar enlargement at contemporary sites like Kot Diji, Amri, Kalibangan I and, possibly, the newly discovered early Harappan site of Jhang near Sarai Khola. Our investigations at Jalilpur have demonstrated, moreover, that the cultural traits which are generally attributed to the mature Harappan culture already existed at least half a millennium before the large urban centers—like those at Harappa and Mohenjo-daro—arose. The whole Indus Valley, the northern part of Baluchistan and at least part of Saurashtra formed a coherent and closely interrelated cultural sphere. That the mature Harappan culture grew out of this earlier phase is a likelihood we can hardly doubt; how, then, exactly, did the change to full urbanization take place? This is one of the major problems which South Asian archaeologists are facing today.

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Government in 1959, he has directed more than a dozen excavations in Pakistan at different sites, including Harappa. He has also carried out extensive field surveys in different parts of Pakistan. He is now head of the Central Archaeological Mission to Baluchistan which was constituted in 1972 by Pakistan's Department of Archaeology and has completed the initial survey of the northern areas of Baluchistan.