

PRE-INDUS AND EARLY INDUS CULTURES OF PAKISTAN AND INDIA¹

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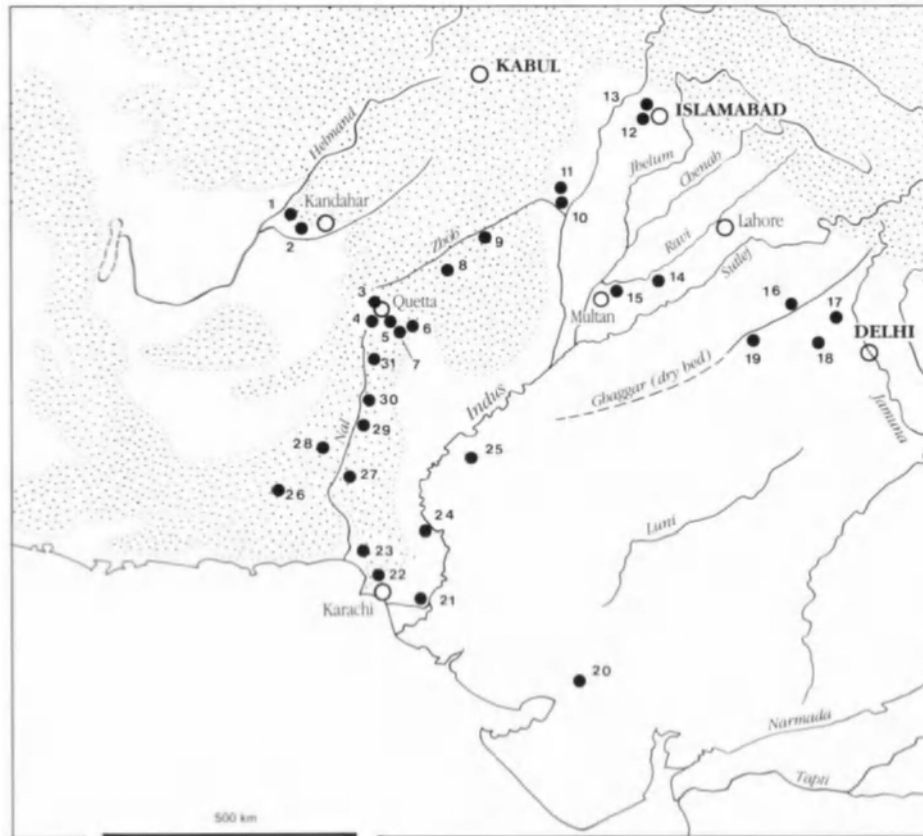
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PART ONE (J. G. SHAFFER)

BALUCHISTAN and the Indus valley are adjacent geographical regions with strikingly different characteristics. Baluchistan consists of north-east-south-west mountain ranges separated by narrow alluvial valleys. It has some perennial rivers, but receives most of its moisture from summer and winter rains (sometimes snow). The Indus valley, on the other hand, is a broad, fertile alluvial valley watered by major perennial rivers and summer monsoons. With such environmental variations, it is not surprising that the two areas saw the development of similar yet distinctive cultural traditions.

¹ See Map 8



1 Mundigak	9 Periano Ghundai	17 Rakhigarhi	25 Kot Diji
2 Said Qala	10 Gumla	18 Mitathal	26 Kulli
3 Kili Gul Muhammad	11 Rahman Dheri	19 Kalibangan	27 Nindowari
4 Darò Sadaat	12 Jhang	20 Surkotada	28 Mehri
5 Kechi Beg	13 Sarai Kala	21 Allahdno	29 Nal
6 Mehrgarh	14 Harappa	22 Tharri	30 Anjira
7 Faiz Muhammad	15 Jalilpur	23 Balakot	31 Nausharo
8 Rana Ghundai	16 Banawali	24 Amri	

Map 8 Pre-Indus and early Indus sites of Pakistan and northern India.

To aid discussion of archaeological data for these regions, two cultural concepts will be used – ‘tradition’ and ‘phase’.² A tradition³ refers to persistent patterns of basic technologies and cultural systems within the context of spatial and temporal continuity. This concept allows grouping stylistically diverse archaeological assemblages in an analytical unit, but limits the need for establishing precise cultural and chronological relationships linking assemblages. Although definition of such relationships is the ultimate research goal, it is currently prevented by limited data (small stratigraphic tests and sporadic C14 dates). A phase represents ‘an archaeological unit possessing traits sufficiently characteristic to distinguish it from all other units similarly conceived, whether of the same or other cultures or civilizations, spatially limited to the order of magnitude of a locality or region and

² For similar applications of these concepts, see Flam, 1981a pp. 16–23; Possehl, 1980 pp. 13–21.

³ Willey and Philips, 1958 p. 37.

chronologically limited to a relatively brief interval of time'.⁴ At present, a diagnostic ceramic style located at one or more site is the major characteristic of a phase.

The Baluchistan Tradition⁵

The adaptive strategy of this tradition was food-production based on domesticated plants and animals. The Mehrgarh excavations⁶ indicate that the most important plants were barley and wheat, while the important animals were cattle, sheep, goat, water buffalo and possibly camel (in later periods). This economic strategy is reflected in numerous settlements ranging from small agricultural villages to large urban centres located throughout Baluchistan. Although conclusive evidence is lacking now, it is likely that pastoral nomadism was also an important part of this adaptive strategy.⁷

Habitation structures were constructed with mud-brick, *pisé* stone and combinations of all three depending upon local circumstances. Large, or public, architectural units have been defined at only a few sites, but with the large size of many sites numerous types of public architecture must be present.

The most common stone tools found from earliest periods include non-diagnostic milling stones, ground stone balls, and flint blades, scrapers and microliths. Stone projectile points, axes, adzes, celts or maces are rare. In general, the lapidary industry was well developed as evidenced by a variety of semiprecious stones (lapis lazuli, turquoise, alabaster, carnelian), beads and pendants as well as alabaster bowls. Steatite/chlorite was used for beads, pendants, stamp seals and, more rarely, bowls. Shell was used to make beads, bangles and pendants. The identification of chlorite and shell workshop areas at Mehrgarh suggests at least part-time craft specialists, and indicates that such activities were culturally important. Metallurgy appears to have reached a comparable level of development. Bronze, or copper, objects include pins (decorative examples are present), points, blades, beads and mirrors. The metal objects associated with the recently discovered Mehrgarh cemetery indicate that metallurgical skills were more highly developed than current evidence indicates. Although the quantity and quality of these objects varies from site to site, the general impression is that a variety of part-time, and perhaps full-time, craft specialists were present throughout the Baluchistan Tradition.

⁴ Ibid., p. 22.

⁵ Since both traditions share many characteristics, the Baluchistan Tradition will be discussed in more detail here to simplify presentation of data.

⁶ Jarrige and Meadow, 1980.

⁷ Shaffer, 1978b pp. 112–69.

The most impressive craft activity, and a major feature of this tradition, was the ceramic industry. The high quality and rich, decorative diversity of Baluchistan ceramics has few parallels in Bronze Age Central Asia. Most pottery is a red-buff ware, but regionally (Quetta valley, Kachi plain) significant quantities of grey ware are known. Hand-made and mould-made (basket impressed) techniques persist through the tradition, but wheel-made pottery occurs early and rapidly becomes the dominant manufacturing technique. A wide variety of bowl and jar forms are known, some of which are unique to this tradition (e.g. the Nal Phase cannisters). Besides plain surfaces the following modifications are known: (a) basket impressed; (b) red, buff and white slips; (c) a sandy or rusticated slip; and (d) a fine, patterned, textured slip known as 'wet ware'.⁸ Painted motifs are applied directly to the surface or on a coloured slipped surface. Most motifs are executed in black or red paint, but a variety of colours are known (brown, white, yellow, blue and green). The predominant decorative scheme is bichrome but polychromes are also produced. Geometric motifs are the most common, but they occur also in combination with zoomorphic and floral motifs. The most important zoomorphic motifs are humped cattle, a gazelle or deer-type animal, fish, dogs, and non-diagnostic birds. The only diagnostic floral motif is the pipal leaf. Grey wares (i.e. Faiz Muhammad grey ware) are very distinctive, being manufactured from a finer paste, turned on a fast wheel, fired to a higher temperature and decorated with red or black motifs painted directly on the surface. The rich stylistic variation definable among this Tradition's ceramics forms the bases for designating the various phases which make up this tradition. Other important terracotta objects include: beads, bangles, biconical balls, animal and human figurines, stamp seals (rare), house models, rattles and buttons.⁹

Limited data precludes thorough discussion of the cultural systems responsible for this tradition's development and maintenance. Although food-production was the economic base, it is evident, judging from the quantity and quality of associated objects, that considerable development of craft activities occurred. For example, Mehrgarh appears to have developed into a regional production centre and it is probable that similar centres were also present in other regions. Existence of such centres implies a level of economic organization capable of coordinating production and distribution of commodities. The efficiency of this economic organization is reflected in the development, distribution and persistence of homogeneous regional ceramic styles. At the same time, distribution of some commodities (marine shell, certain semi-precious stones, and intrusive potsherds) indicate that inter-regional economic interaction occurred. However, this interregional interaction was never intense enough to integrate the various phases into a homogeneous cultural system. Unlike

⁸ Fairservis, 1956 pp. 268–70.

⁹ Ibid., pp. 263–65.

the Indus Valley Tradition where regional phases were integrated into a single cultural system or phase (i.e. Harappan or Indus Valley Civilization), social groups in Baluchistan maintained a strong regional identity reflected in the persistence of regional ceramic styles.

That some interaction did take place between the Baluchistan and Indus Valley Tradition is indicated by sporadic finds of Harappan artefacts throughout Baluchistan (an exception to this being Dabar Kot).¹⁰ Although Harappan sites are found on the eastern borders of Baluchistan, and a few sites have been located within Baluchistan (in the Kirthar range and Bolan pass), the interaction between traditions appears to be limited. This limited interaction between the two traditions may reflect significant cultural differences which inhibited development of the necessary linking networks. In the Quetta valley-Kachi plain area, however, there appears to have been a cultural intrusion, or at least very strong cultural influences, from southern Afghanistan. At present, these intrusive developments appear to have had but small impact on the rest of the Baluchistan Tradition, and the same may be said for the Indus Valley Tradition as well. The reasons and nature of this influence from Afghanistan are at present unknown.

Unfortunately, limited data prevent a discussion of the other cultural systems (e.g. social, political and religious organizations) affecting this tradition. Excavated sites are too few and the scope of excavations too limited to attempt even a preliminary reconstruction of these important cultural systems. Current excavations at Mehrgarh will contribute greatly to our understanding of this complex and interesting tradition, but even when these excavations are completed, comparative data will be needed before comprehensive interpretations can proceed. Given these limitations, the following discussion is tentative and subject to later revision.

The Kili Gul Muhammad No. 1 (hereafter KGM) Phase was preceded by the Mehrgarh Phase represented by Mehrgarh Period I and Kili Gul Muhammad Period I (hereafter a site name followed by Roman numerals indicates occupational periods at that site, e.g. Mehrgarh Period I becomes Mehrgarh I). These important occupations are discussed in Chapter 6 and will not be repeated here.

The Kechi Beg (hereafter KB) Phase dates from the middle to the end of the fourth millennium B.C. (3500–3200 B.C.). Besides the major sites of Kili Gul Muhammad and Mehrgarh, KB Phase occupations have been identified at Surab III,¹¹ Sur Jangal III (the final occupation), Rana Ghundai III–IV, and *possibly* at Dabar Kot and Periano Ghundai (knowledge of these northern Baluchistan sites is limited). Again, this phase was originally

¹⁰ Fairseriv, 1959 pp. 308–28; Mughal, 1972a pp. 137–44.

¹¹ Unless specific points of information are discussed, sources of information about particular sites will not be cited after their initial occurrence.

discovered by Fairservis¹² at Kili Gul Muhammad IV-Damb Sadaat I, but our most extensive information comes from Mehrgarh VI–V. At both Mehrgarh and Kili Gul Muhammad, the KB Phase demonstrated stratigraphic and cultural continuity with KGM Phase.

The major characteristic of the KB Phase is the introduction of polychrome pottery. However, this introduction was not abrupt since KGM Phase pottery continued to be produced, albeit in a modified style. Mehrgarh IV¹³ had three major styles of decorated pottery: (a) monochrome with black motifs; (b) bichrome with motifs in two colours; and (c) polychrome (Fig. 1). Monochrome and bichrome pottery are similar to KGM Phase pottery except that geometric motifs are more intricate and the zoomorphic motifs highly stylized. Polychrome motifs, brown or plum filled with red or white on a pink or creamy surface involve complex geometric patterns covering large vessel areas. This stylistic diversity contrasts significantly with the more homogeneous style encountered in Mehrgarh II–III (Fig. 2). The greenish-grey wet wares are now found in quantity including fragile goblets and carinated jars. Jars and bowls with a sculptured snake motif were also made in this ware.

In Mehrgarh V several progressive changes can be detected in the polychrome pottery. Geometric motifs become bolder and are limited to bowls and small vessels. The decorative scheme usually involves an upper band of black diamonds against a white background, and a lower area of wide large squares or chevrons in black, filled with white, on a red background. Bichrome pottery is gradually replaced by monochromes with increasingly stylized motifs. Improved firing technology in Mehrgarh V allowed production of more homogeneous red and reddish-grey wares. On the reddish-grey wares, there is an evolution from geometric to more naturalistic elements such as fish and pipal leaves and anticipates the pottery which characterizes Mehrgarh VI–VII.

Among other terracotta objects, the only significant changes involve female figurines. A complete Mehrgarh IV female figurine has a tubular head with pinched nose, pendulous breasts, no arms, heavy hips and joined legs tapering at the end. This seated figurine appears to represent a further development of the KGM Phase figurines. Mehrgarh V female figurines are similar except that they have applied curly hair on the head. Stamp seals with geometric motifs appear for the first time in the KB Phase; two were of terracotta, and bone and steatite examples were also found. Lithic cutting implements decrease in frequency, which Jarrige¹⁴ attributes to the increasing importance of metal tools, though only copper/bronze chisels, pins or rods were found.

¹² Fairservis, 1956 pp. 334–5.

¹³ Jarrige, 1977; see also all previous references to this site.

¹⁴ Jarrige, 1981 p. 111

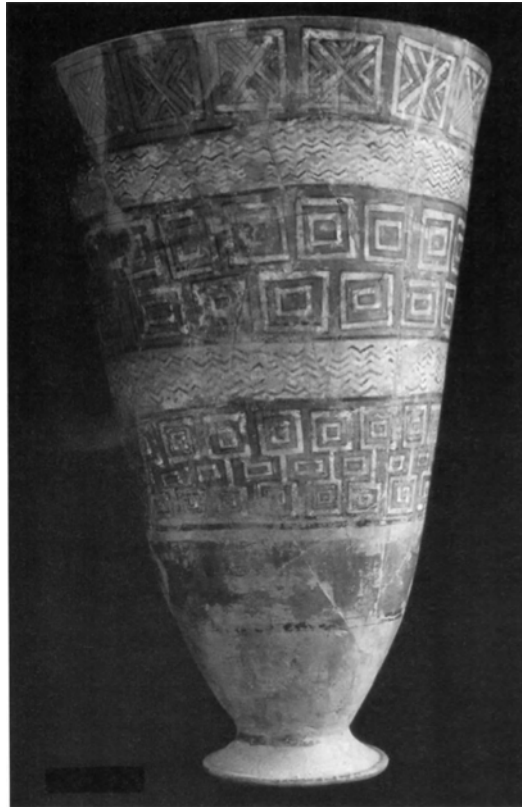


FIG. 1 Polychrome jar from Mehrgarh IV (3300 B.C.).

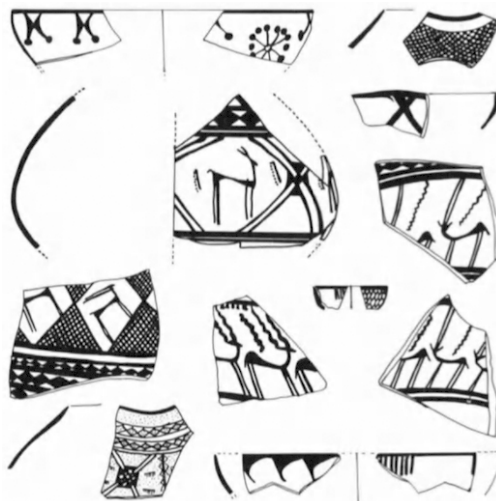


FIG. 2 Kili Gul Muhammad Phase decorated pottery from Mehrgarh (Period III)

Significant structures were defined only in Mehrgarh IV. Unlike KGM Phase structures these were made with modelled mud-bricks, and some had clay plastered floors. The structure(s) appears to represent a complex series of rooms and open areas associated with

habitation activities such as food storage and preparation. Workshop areas have not been found as yet, but must exist at the site. Plant and animal remains from this phase have not been reported so far, but no drastic differences from the KGM Phase are expected.

The Faiz Muhammad Phase is defined only at Mehrgarh VI–VII. It seems to represent an evolutionary development from the KB Phase. The Faiz Muhammad (hereafter FM) Phase does, however, share many characteristics with the Damb Sadaat Phase defined for the Quetta valley. It is treated here as a separate phase for two reasons. First, the early Mehrgarh VI ceramic characteristics, including continued production of polychromes, overlap with those of Mehrgarh V. Second, although Quetta black-on-buff pottery (the diagnostic Damb Sadaat Phase pottery) is found in limited quantities at Mehrgarh, and despite resemblances in decorative style, the excavators¹⁵ maintain that Mehrgarh ceramics are distinct from those found at Quetta. Thus, the FM Phase is treated separately here.

Chronologically, at Mehrgarh, the FM Phase spans the first half of the third millennium B.C. (3000–2600 B.C.). The terminal date for this phase may, however, extend into the last half of the third millennium B.C. Quetta black-on-buff and the Damb Sadaat Phase in the Quetta valley date to the middle and last half of the third millennium B.C. This pottery is also the major diagnostic type found at Said Qala, Deh Morasi Ghundai, Mundigak III–IV, and Shahr-i Sokhta I–III, all of which date to the last half of the third millennium B.C.¹⁶ Although no diagnostic Harappan Phase artefacts were found at Mehrgarh, some non-diagnostic artefacts were located that may suggest a Harappan affiliation.¹⁷ Moreover, at Nausharo, a Harappan Phase site 6 km south of Mehrgarh, artefacts of a Mehrgarh VII affiliation were found on the surface. Although the Harappan Phase may date as early as the mid-third millennium B.C. the extensive series of dates from Kalibangan¹⁸ indicates a primary chronology spanning the later part of the last half of the third millennium B.C. Mehrgarh may have been abandoned by 2600 B.C.¹⁹ But the FM Phase may have persisted for some time at such sites as Nausharo. Clearly, data are too limited to draw precise chronological boundaries for this phase.

Ceramically, the major feature of the FM Phase was the production of fine decorated grey wares, although fine red wares were quantitatively dominant. The improved firing techniques and the fine red and reddish grey wares of Mehrgarh V were forerunners of these developments. Mehrgarh V polychromes continue to be produced in early Mehrgarh VI, but eventually disappear. Most painted pottery is the monochrome red ware, whose

¹⁵ Jarrige and Lechevallier, 1979; p. 507.

¹⁶ Shaffer, 1978a p. 76.

¹⁷ Jarrige and Lechevallier, 1979 pp. 528–30.

¹⁸ Shaffer, 1978a p. 76.

¹⁹ Jarriage and Meadow, 1980 p. 110

motifs represent further developments of those in Mehrgarh V despite the presence of a few Quetta motifs. The previous tendency towards naturalistic motifs continues, and elaborate friezes of zoo-morphic (humped cattle, fish, caprids, birds) and floral (pipal leaves, palm fronds) motifs in a hatched style are found. Grey wares are fired at higher temperatures and have elaborate naturalistic and geometric motifs in black. A much wider range of vessel forms is found among both red and grey wares.

During Mehrgarh VII, the site became a ceramic production centre as evidenced by extensive kiln remains.²⁰ Pottery for everyday use and luxury-type vessels were mass produced in a variety of vessel forms (brandy-shaped glasses, tulip-shaped goblets, plates of various sizes). Large storage jars with collared rims and tapering lower parts are comparable to Harappan Phase jars. On monochrome red ware the pipal leaf remained a popular motif on open bowls. A 'buff' ware was made in a variety of vessel forms (tulip-shaped, goblets, small geometric pots, and carinated bowls) and decorated with 'Quetta' style geometric motifs similar to those found in Damb Sadaat III. The most spectacular pottery was the black painted grey ware which was fired to a very high temperature. Grey ware motifs have been described as follows:

Animal, vegetal and geometrical designs are quite often remarkable for their quality and variety. Running caprids on a background of pipal leaves, fish sometimes swimming among aquatic plants, combinations of finely painted geometric motifs represent some of the best decorations ever met on potteries found in Baluchistan. . . . Besides, rather stereotyped 'Quetta' motifs occur on open bowls.²¹

This grey ware corresponds to what Fairservis²² called Faiz Muhammad grey ware in the Quetta valley, though the range of variation in vessel shape and decoration is much more extensive (Fig. 3). Manufacture of wet wares also continued but in limited quantities.

Another major characteristic of the ceramic industry was the massive production of human figurines. The figurines, like painted pottery motifs, demonstrate a stylistic evolution towards more naturalistic representations. In Mehrgarh VI female figurines are still seated with tapered legs, but now have a coiffure of large coils flanking the head, modelled arms clasped below pendulous breasts, and multistrand necklaces. In Mehrgarh VII, both male and female figurines (Fig. 4(a) (b)) are mass-produced but the arms and legs are separated from the body and both have protruding eyes and beak-like noses. The female coiffure is draped along the head and shoulders and often painted, as is the appliqué necklace. Males are depicted with a 'turban' and appliqué necklaces. The females now

²⁰ Jarrige and Audouze, 1980.

²¹ Jarrige and Lechevallier, 1979 p. 520.

²² Fairservis, 1956 pp. 263–5.



FIG. 3 Faiz Muhammad Phase decorated grey ware from Mehrgarh VII (2088–2600 B.C.)

resemble the so-called ‘Zhob mother-goddesses’ found throughout Baluchistan. Humped cattle, bird and pig terracotta figurines are also found in some numbers. Compartmented square and circular terracotta stamp seals with geometric motifs and one with a zoomorphic motif were found.

The lapidary industry demonstrates continuity with previous Mehrgarh periods and includes beads of semi-precious stones (a few lapis lazuli and turquoise), a few flint points, and steatite stamp seals. Copper or bronze objects were rare but included a chisel, flat axe and decorative pin.

Mehrgarh VI architectural remains are badly eroded but a series of habitation rooms and open work areas have been found. Also associated with this period were extensive kiln remains, indicating that Mehrgarh was a major centre for the ceramic industry. Mehrgarh VII had the first example of public/ monumental architecture, a large mud-brick platform. North of this platform was a narrow mud-brick wall with regularly spaced pilasters attached to a room complex. A complex series of mud-brick rectangular rooms was found in an area overlooking the platform. These rooms appear to have been habitations some containing basements with large numbers of ceramic vessels. In a corridor separating two rooms, an adult burial in a clay box was found. It was oriented east-west, flexed and faced north. Grave-goods included two plates (one below the hands), and a necklace and bracelet (beads of kaolin, carnelian and lapis lazuli). In deposits above Mehrgarh VII, a series of infant burials in clay boxes were found, some of which were associated with a limited number of grave-goods. A large number of adult graves and cenotaphs have been reported from Mehrgarh, which are associated with grave-goods that appear to be Central Asian in origin, but their stratigraphic affiliation is not published yet.

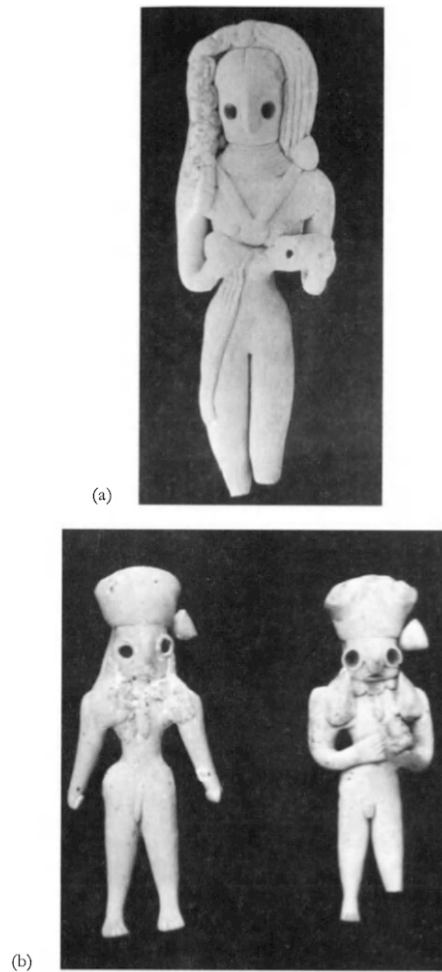


FIG. 4 (a) Faiz Muhammad Phase female figurine from Mehrgarh VII (2800–2600 B.C.) (b) Faiz Muhammad Phase male figurines from Mehrgarh VII (2800–2600 B.C.).

The presence of finished lapis lazuli and turquoise beads suggests interaction with social groups outside the Baluchistan Tradition to the west. Interaction with other Baluchistan Phases is indicated by intrusive Quetta type pottery of the Damb Sadaat Phase and Nal polychrome pottery associated with the Nal Phase. The presence of a few Harappan Phase type artefacts may also indicate interaction with Harappan or Kot Dijian Phases of the Indus Valley Tradition. The presence of these intrusive objects, and of evidence suggesting that Mehrgarh was a regional centre for ceramic production, may indicate that interregional interaction intensified during this phase.

The agricultural economic base for the FM Phase is similar to that of other phases with one important exception: Meadow's²³ preliminary analysis indicates that the economic importance of cattle was not as great as it was earlier.

²³ Meadow, 1987

The Damb Sadaat (hereafter DS) Phase is known only from the Quetta valley, where it is represented by Damb Sadaat II–III in Fairservis's²⁴ sequence. It is stratigraphically later than the KB Phase, but cultural relationships between the two Phases are problematic at present. Although the site of Dam Sadaat is continuously occupied, the diagnostic pottery, Quetta ware, is significantly different from anything in the KB Phase. Moreover, this pottery is dramatically similar to that found at Mundigak III 5–6, IV, Said Qala Tepe I–IV, Deh Morasi Ghundai I–III, and Shahr-i Sokhta I–IV, all of which are located in the Helmand region to the west. At present the DS Phase appears to represent an intrusive cultural influence from these regions. The few available dates indicate the second half of the third millennium B.C. (2500–2000 B.C.) for this phase. It is important to note that this DS Phase chronology implies that the KB Phase may have persisted longer in the Quetta valley than it did elsewhere in Baluchistan.

The diagnostic pottery, Quetta ware, is a red-buff ware decorated with black (sometimes red) motifs executed on a white-cream coloured slip, or sometimes applied directly to the vessel's surface.²⁵ In the initial stages (i.e. Damb Sadaat II) emphasis is placed on solid geometric motifs and occasional use of zoo-morphic (humped cattle) and floral (pipal leaf) motifs with hatching. Later stages, such as Damb Sadaat III, however, emphasize more linear geometric motifs with curved elements. A wide variety of bowl and jar forms have been identified, including pedestal and stemmed vessels. Faiz Muhammad grey wares (shallow bowls) and wet wares (large jars) are also found in limited quantities. Other important terracotta objects include: beads, bangles, rattles, compartmented stamp seals, house models, animal and human figurines. The female figurines are similar to those of the FM Phase – the Zhob style.

Stone tools are found, as well as beads made from semi-precious stones (carnelian, lapis lazuli and turquoise) and fragments of alabaster bowls. Only a few small copper or bronze objects are found. The limited nature of Fairservis's excavations makes it difficult to assess the material culture of the DS Phase in detail.

A series of rectangular mud-brick habitation structures were found in Damb Sadaat II. In Damb Sadaat III a large mud-brick platform represents the only example of public architecture. Rough limestone block drains and a mud-brick bench were associated with the platform which also had spur walls connecting it with other areas of the site. Below the main platform wall a small hollow contained a human skull, and in the immediate vicinity several examples of female figurines were found.

²⁴ Fairservis, 1956 pp. 334–5

²⁵ *Ibid.*, pp. 255–6, 259–61, 321–6.

Quetta ware, Faiz Muhammad grey and wet wares are identified in both FM and DS Phases, indicating cultural interaction between the two phases. More intense interaction with groups in south-eastern Afghanistan is indicated by the extreme similarity of ceramics at those sites and ceramics of the DS Phase. The nature of this interaction is unknown at present.

Nal Phase occupation is found mainly in southern Baluchistan, and present knowledge about it is restricted almost entirely to its distinctive ceramics. No direct radiocarbon dates are available, and stratigraphic information is limited to N. de Cardi's²⁶ Surab sequence. Nal Phase pottery (Fig. 5) is associated with KB Phase pottery in Surab III and is the dominant pottery in Surab IV. Hargreaves²⁷ at Sohr Damb located a Nal Phase occupation and cemetery below extensive Kulli Phase (see below) deposits, but methodological problems make it difficult to use this data. At Niai Buthi I Fairervis²⁸ found Nal Phase pottery associated with what he calls early Kulli. Niai Buthi II is a Kulli Phase occupation dated to the first half of the second millennium B.C. Stratigraphically the Nal Phase appears to be 'sandwiched' between the KB and Kulli Phases. Associated with Surab IV were a few sherds of Quetta ware, Faiz Muhammad grey and wet wares suggesting some interaction and contemporaneity with the DS Phase. Nal pottery has been found in the FM Phase at Mehrgarh, and in DS Phase related occupations at Said Qala²⁹ dating to the early second millennium B.C. While the Nal Phase may be as early as the late fourth millennium B.C., its main chronological span seems to be the last half of the third to the early second millennium B.C. (2500–1800 B.C.).

Our knowledge of this phase is restricted almost exclusively to its distinctive decorated pottery. Fairervis has given this succinct description of it:

These include wheel-made canisters, bowls with inward-turned rims, and flat-sided bowls – all with ring bases. It is the decoration which makes this ware the most distinctive in Baluchistan. . . . The Nal ceramic style is basically the repetition of a motif or pattern by multiplying its outline, often in concentric fashion. Red, blue or yellow pigment is often applied to the spaces between outlines or to fill out a motif, many of which occur in northern Baluchistan. Animals and plants also occur. In the case of these motifs, techniques of hatching and rather precise geometric drawing were used.³⁰

At Sohr Damb, H. Hargreaves located a series of rectangular, mud-brick with stone foundation structures associated with Nal Phase pottery. Also associated with these structures was a variety of copper or bronze objects (points, celts, chisels, pins), stone tools

²⁶ De Cardi, 1965.

²⁷ Hargreaves, 1929.

²⁸ Fairervis, 1975 pp. 189–94.

²⁹ Shaffer, 1978A pp. 157–8.

³⁰ Fairervis, 1975 pp. 158–9.



FIG. 5 Nal Phase decorated pottery.

(including celts and pots) and several types of beads (agate and lapis lazuli). However, most of the Nal Phase pottery was associated with a series of fractional burials which may have been later than this occupation. Fairservis³¹ has associated water-control systems involving dams with Nal Phase occupations in southern Baluchistan. Until more extensive excavations are conducted, not much more can be said of the Nal Phase of the Baluchistan Tradition.

Information about the Kulli Phase is also very limited. Stein's³² early work at Mehi is interesting but of limited value. Fairservis's³³ work in the Lasbela area is important, but was limited to a survey and small excavations. Casal³⁴ undertook major excavations

³¹ Ibid., pp. 171–2.

³² Stein, 1931.

³³ Fairservis, 1975 pp. 185–202.

³⁴ Casal, 1966.

at Nindowari, but these remain unpublished. It is difficult to assess fully this phase of the Baluchistan Tradition without more data.

Kulli Phase occupations are found throughout the south-eastern and southern fringes of Baluchistan. At Sohr Damb, Niai Buthi II, and perhaps Nindowari, the Kulli Phase is stratigraphically later than the Nal Phase. However, in Niai Buthi I, Kulli and Nal Phase potteries were found in association indicating some degree of overlap. Stylistic parallels exist between some Kulli Phase artefacts and those of the Harappan Phase, and some intrusive Harappan artefacts have been found at Kulli Phase sites. Single radiocarbon dates from Nindowari and Niai Buthi II suggest a chronology spanning the last half of the third to the early part of second millennium B.C. (2500–1800 B.C.).

Kulli Phase pottery (Fig. 6) is a wheel-made red-buff ware. Although black-on-buff slip decoration occurs in early stages (Niai Buthi I), the diagnostic decorative scheme is black-on-red slip. The major decorative characteristic is a central frieze of naturalistic animals (mainly humped cattle, but other animals are also depicted) and plants. This frieze has two animals (sometimes male and female) with elongated hatched bodies, exaggerated eyes, usually tethered to some undefined object. Plant motifs separate the animals and the remaining area is cluttered with smaller motifs. A variety of jar and bowl forms are found, the most important being the dish-on-stand and a straight-sided collared jar which has affinities with the Nal cannister. Other terracotta objects include beads, bangles, toy cart-frames and wheels, animal and human figurines. Human figurines have elaborately moulded coiffures, necklaces and pinched facial features, but most lack diagnostic sexual features.

Besides the usual stone tools, semi-precious stone beads and alabaster stone bowls have been found. At Mehi, Stein found examples of carved steatite stone bowls. Shell bangles are present. Copper or bronze objects include points, pins, celts, bangles and mirrors.

Little is known about Kulli Phase habitation structures. However, at Las-bela³⁵ and Nindowari large complex units of public architecture were found. These included large architectural complexes with a stepped profile and associated ramps of stairways. The construction of large walls also appears associated with these complexes. Building materials included large river boulders, mud and fired bricks, and clay plaster. These complexes were not used for habitation, and their precise function is unknown.

Until the Nindowari excavations are published, the Kulli Phase remains indeterminant. Some degree of interaction between the Kulli and Harappan Phases took place, as evidenced by the intrusive artefacts and certain stylistic similarities. Decorative similarities also exist between the Kulli and FM Phase potteries. Likewise, Kulli Phase sites near the

³⁵ Fairservis, 1975 pp. 195–205.



FIG. 6 Kulli Phase decorated pottery.

Iranian border have pottery similar to that found by N. de Cardi³⁶ in the Bampur sequence. The Kulli Phase is one of the most intriguing phases of the Baluchistan Tradition, but too little is known for any definitive interpretations about it.

The Periano Phase (Fig. 7) is known only sketchily from areas north of the Quetta valley, and most information is restricted to pottery. At Rana Ghundai,³⁷ Periano Phase pottery is found in Periods III–IV suggesting an overlap with the KB Phase. However, Fairservis's³⁸ reanalysis of the Rana Ghundai sequence indicates that Periano Phase pottery was the dominant ceramic type in his Level C, implying that the Periano Phase is later than the KB Phase and possibly contemporary with the DS Phase. At the same time, the black-on-red slip decorative scheme of the Periano Phase suggests continuity with the KGM Phase pottery. At Periano Ghundai and Dabar Kot, Periano Phase pottery was associated with

³⁶ De Cardi, 1970.

³⁷ Ross, 1946.

³⁸ Fairservis, 1959. pp. 302–6.



FIG. 7 Periano Phase decorated pottery.

Harappan pottery indicating a degree of contemporaneity and perhaps interaction with that phase of the Indus Valley Tradition. Chronologically, it appears that the Periano Phase may date between the mid-third and early second millennia B.C. (2500–1800 B.C.).

The diagnostic pottery of this phase corresponds to what Fairservis³⁹ defines as Periano and Faiz Muhammad painted ware for the Zhob and Loralai regions. Black-on-red slip decorations characterize Periano painted ware, and black-on-grey characterize Faiz Muhammad painted ware. Geometric motifs predominate and are similar to those on Faiz Muhammad and Quetta ware potteries of the DS Phase. The ceramic evidence suggests a cultural connection between the Periano and DS Phases. At the same time, the presence of Harappan artefacts and stylistic traits (e.g. Periano Phase pottery with a double or flanged rim) also indicate interaction with the Indus Valley Tradition. At present the data are insufficient to determine the cultural role(s) played by the Periano Phase in the Baluchistan Tradition.

The Indus Valley Tradition

Many basic technologies and adaptive strategies of this tradition are similar to those of the Baluchistan Tradition and need not be repeated here. Instead, a brief review will include those characteristics which distinguish the Indus Valley Tradition from the Baluchistan Tradition.

The agricultural economies of the two traditions are very similar, including the emphasis on cattle and probable pastoral nomadism. Craft activities are highly developed indicating

³⁹ Ibid., pp. 367–9, 373–4.

the presence of full and/or part-time specialists. The potter's craft was highly developed and stylistic variations define the various phases. These phases cover larger geographical areas probably reflecting the region's alluvial plain topography. Pottery was basically a red-buff ware, with grey ware production more limited than in Baluchistan. Many vessel forms of the two traditions are similar, but the Indus Valley Tradition is distinguished by the dish-on-stand, pot lids, and vessels with double or flanged rims. Other distinguishing terracotta objects are toy cartframes and wheels, triangular cakes, and a higher frequency of beads, bangles and animal figurines.

Except for the large flint blades, stone tools are very similar to the Baluchistan Tradition. Stone beads and vessels are found manufactured from many of the same materials. The shell industry is more developed and a greater variety and frequency of shell objects characterize this tradition. Examples of stone or terracotta stamp seals are not present until the later Harappan Phase. Copper or bronze objects of various types are found and increase dramatically in the Harappan Phase.

The overall impression is that craft activities were more intense in the Indus Valley Tradition, but this may reflect simply a larger sample size. There does appear to be more movement of craft objects and/or commodities throughout the region. Presence of intrusive potsherds and objects made from commodities with limited sources of origins (e.g. marine shells, semi-precious stones, metals) not immediately available in the locale of many settlements suggests more intense and regular interaction between social groups of this tradition. This interaction involved more than the simple movement of objects, as indicated by the widespread occurrence of script characters foreshadowing the development of the Harappan script. The nature and structure of this interaction remain obscure, but it intensified and eventually integrated various regional phases of this tradition into a single cultural phase – the Harappan or Indus Valley Civilization. A comparable stage of cultural integration was never achieved in the Baluchistan Tradition, and it is the Harappan Phase that yields many of the most diagnostic characteristics distinguishing the Indus Valley Tradition from the Baluchistan Tradition (see [Chapter 12](#)).

Although most Indus Valley Tradition sites are small agricultural settlements or temporary camp sites, industrial sites and urban centres are known. Moreover, at least one urban centre, Kalibangan in the Kot Diji Phase, has been excavated. This site diversity reflects our greater knowledge of the Indus Valley Tradition, and similar sites will no doubt eventually be found in Baluchistan. Still, no Baluchistan Tradition site is yet known which approaches the magnitude and complexity of Mohenjo-daro and Harappa, associated with the later Harappan Phase.

While the Harappan Phase is the most diagnostic of the Indus Valley Tradition, a full account of it is beyond the scope of this chapter. Instead the focus will be on the four phases that clearly formed the foundation for the Indus Valley Tradition. Our data for these phases are still limited, but the phases laid the cultural foundations for one of the most spectacular Bronze Age civilizations in the whole of Central and South Asia.

Like the KGM Phase the Hakra Phase was preceded by early agricultural groups, probably similar to Mehrgarh I (see Chapter 6). Unlike the KGM Phase, however, the cultural, stratigraphic and chronological relationships between the Hakra Phase and these early agriculturalists are ill-defined. The existence of this phase has only recently been recognized due to Mughal's⁴⁰ Bahawalpur survey. It seems that the occupations of Sarai Kala⁴¹ and Jalilpur⁴² are affiliated with the Hakra Phase. Unfortunately, excavated materials from these sites provide no connection with the Mehrgarh sequence.

The Balakot Phase is known only from excavations at Balakot⁴³ on the coast near Karachi. Three radiocarbon dates from later occupations of this phase suggest a late-fourth-millennium date (3500–3000 B.C.).

Pottery was all wheel-made red ware, except for some hand-made storage jars. The most diagnostic vessel form was again the globular jar with short everted rim. Other vessel forms include a variety of jar forms, angular walled bowls, and dish-on-stand. The most common decorative scheme was a series of widely spaced horizontal, sometimes wavy, bands executed in black or brown paint on a cream/white surface. Complex floral and zoomorphic motifs were found, executed in a style similar to Nal Phase pottery in the Baluchistan Tradition. Sometimes these motifs were filled in with red or green paint producing a polychrome effect. On the other hand, later Balakot Phase pottery closely resembles that from the Amri Phase (see below). Originally, on the bases of the ceramics, Dales⁴⁴ proposed a close affiliation between the Nal and Balakot materials, but more recently⁴⁵ he maintains the Balakot material should be treated independently, as it is considered here. Other terracotta objects include beads, cattle figurines and a scoop.

The small-scale excavations limit data collected about other objects but the following artefacts were found: grinding implements, flint blades, semi-precious stone beads (including lapis lazuli), shell beads, and a few amorphous copper or bronze objects. Likewise, knowledge about architectural features is limited, but multi-room, rectangular, mud-brick

⁴⁰ Mughal, 1981 1982.

⁴¹ Halim, 1972 pp. 1–32; Mughal, 1972*b*.

⁴² Mughal, 1972*a* 1974.

⁴³ Dales, 1974 1979 1981.

⁴⁴ Dales, 1974.

⁴⁵ Dales, 1979.

habitation structures as well as large paved areas of mud-bricks (platforms?) were found. Faunal analysis⁴⁶ indicates that although domestic sheep and goat and wild gazelle were present, domestic cattle provided the bulk of the diet. Shellfish were also exploited and domestic barley was present.

Part- or full-time craft specialists are certainly indicated by the pottery and perhaps by the other craft objects. The degree of interaction with other social groups is somewhat difficult to determine since many necessary commodities for craft production may have been available locally. Certainly the similarities with Nal and Amri Phase potteries suggest some awareness of other social groups in both the Baluchistan and Indus Valley Traditions. Furthermore, Hakra Phase pottery present in the Amri Phase may indicate some degree of interaction with that phase. Finally, painted and incised script characters on Balakot Phase pottery are similar to those found on Amri and Kot Diji Phase potteries, suggesting that various kinds of cultural interaction were taking place and providing a connection with the later Harappan Phase.

Surveys have located numerous Amri Phase settlements in the southern Indus valley,⁴⁷ but most information comes from Casal's⁴⁸ excavations at Amri itself. Hakra Phase style pottery was located in the earliest occupations at Amri (Amri IA), and Kot Diji Phase style pottery has also been identified in Amri IA and ID.⁴⁹ The Amri Phase, then, seems to have maintained interaction with, or chronologically overlapped with, all three phases. The two radiocarbon dates from Amri ID date to the first half of the third millennium (3000–2500 B.C.). It should be noted that there is a possibility that the Amri Phase, like the Kot Diji Phase, may have lasted longer in some localities.

Amri Phase pottery is a red-buff ware, mainly hand-made, and included such vessel forms as angular-walled and hemispherical bowls, dish-on-stand (rare), and most commonly S-shaped jars. Black, brown and red paint were applied to the vessel's surface or to a cream or buff slip or wash in monochrome or bichrome schemes. Decorative schemes emphasized geometric motifs in horizontal bands with frequent use of 'checkerboard' and 'sigma' motifs (Fig. 8). In Amri ID, motifs become more complicated and involve the use of intersecting circles, 'fish-scale' motifs, zoomorphic motifs and the rare use of red slip. Other terracotta objects include beads, bangles, humped cattle figurines, and circular, square and triangular cakes.

⁴⁶ Meadow, 1979.

⁴⁷ Flam, 1981b, 1982; Deva and McCown, 1949; Majumdar, 1934; Mughal, 1972a pp. 133–7.

⁴⁸ Casal, 1964

⁴⁹ Mughal, 1970 pp. 84–7.

Stone tools are similar to other phases except that, like the Hakra Phase, there was an emphasis on geometric microliths.⁵⁰ Only the following additional type objects have been identified: carnelian beads (rare), shell bangles, bone points and bangles, a steatite rod and a copper blade. Certainly ceramic craft specialists were present, but it is difficult now to establish certainly other types of full- or part-time specialists.

In Amri IB, several small, contiguous, rectangular mud-brick houses divided into small rooms were found. Two types of structures were identified in Amri IC-D. One type was a large, rectangular mud-brick house with lateral doorways. The other was large rectangular mud-brick structures divided into small units similar to those found in the KGM Phase at Mehrgarh, which may have had a storage function.⁵¹ Stone was also used in construction

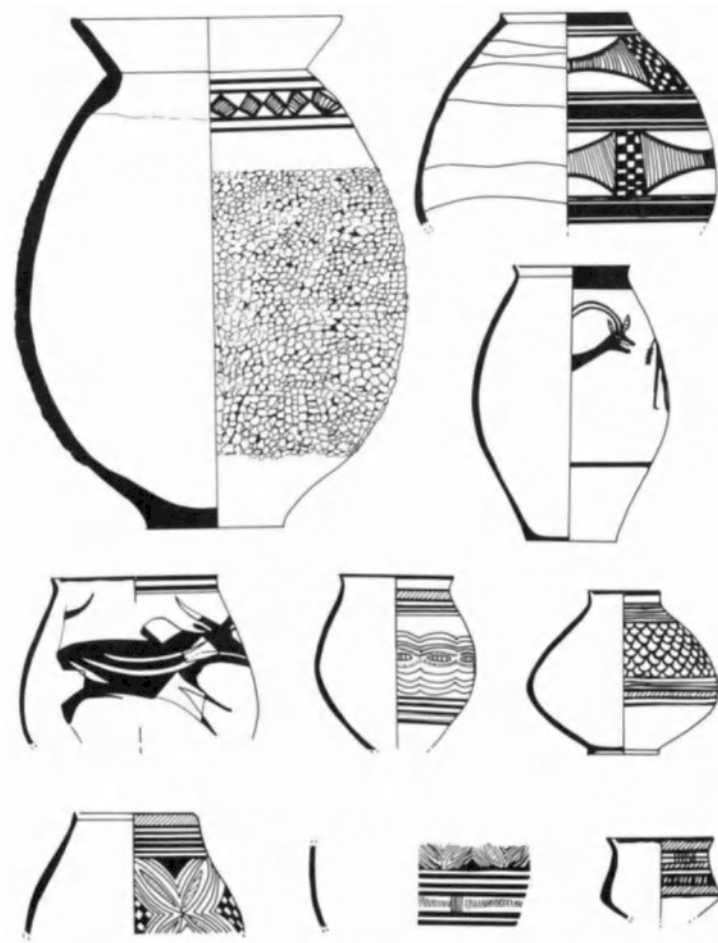


FIG. 8 Amri Phase decorated pottery.

⁵⁰ Cleland, 1977 pp. 82–92.

⁵¹ Jarrige 1981. p.105.

but probably as a foundation for mud-brick. Public architectural units (enclosing walls) have been noted only at unexcavated sites.

Hunting and fishing may have been more important in the Amri Phase, though the economy was still based on domesticated plants and animals (especially humped cattle). Some Amri Phase sites seem associated with large shell middens, and at Amri Casal found large quantities of gazelle as well as other wild animals. Fairservis⁵² has also noticed a slightly more varied settlement pattern involving two settlement types – dispersed (single or small clusters of houses) and nucleated (larger settlements with multiple structures and units of public architecture). This more varied settlement pattern may reflect the larger economic role of hunting and fishing.

This part of the Indus valley region is poor in mineral and semi-precious stone deposits. The presence of semi-precious stones and metal artefacts in the Amri Phase therefore indicates some interaction with other social groups in the Indus Valley and/or Baluchistan Traditions. Some degree of interaction is also suggested by Amri Phase style pottery in the Balakot Phase and Kot Diji Phase pottery located at Amri. Moreover, the presence of similar script characters on the pottery of all these phases suggests that the communication networks linking these phases involved more than just the simple movement of commodities.

Besides the site of Kot Diji,⁵³ occupations belonging to Kot Diji Phase have been identified at Sarai Kala II, Jalilpur II, Gumla I–III,⁵⁴ Rahman Dheri,⁵⁵ Siswal,⁵⁶ Kalibangan,⁵⁷ and at various sites in Bahawalpur.⁵⁸ At Sarai Kala IA-early II and Jalilpur I–II, Kot Diji (hereafter KD) Phase and Hakra Phase potteries overlapped. Limited examples of KD Phase pottery were found at Hakra Phase sites in Bahawalpur. At several sites, KD Phase occupations, or pottery, were stratigraphically earlier than those of the subsequent Harappan Phase (e.g. Kot Diji, Gumla, Harappa), and Kalibangan I has consistently dated earlier than the Harappan Phase Kalibangan II occupation. KD Phase pottery at Amri suggests that these two phases are at least partially contemporary. Present evidence suggests that the KD Phase which succeeds the Hakra Phase, is contemporary with the Amri Phase, and precedes and the Harappan Phase. Radiocarbon determinations date the KD Phase to the first half of the third millennium B.C. (3100/3000–2500 B.C.). It is very important to note that in the eastern Punjab, KD Phase occupations (Siswal) were found to be

⁵² Fairservis, 1975 pp. 208–16.

⁵³ Khan, 1965

⁵⁴ Dani, 1970/71

⁵⁵ Durrani, 1981; Khan, 1979

⁵⁶ Suraj Bhan, 1972; See also Shaffer, 1981 for an extensive summary of this material.

⁵⁷ Fairservis, 1975 pp. 182–3, 340, 352.

⁵⁸ Mughal, 1982.

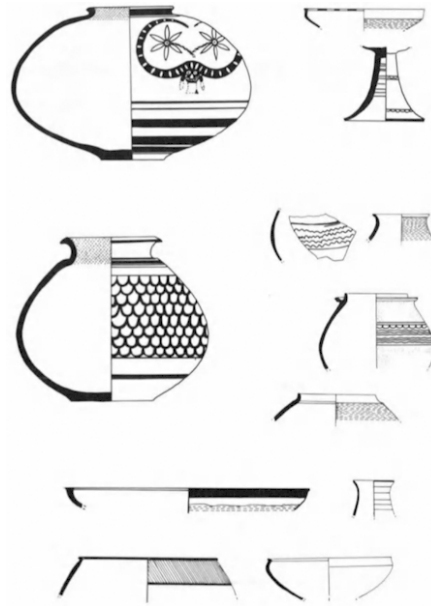


FIG. 9 Kot Diji Phase decorated pottery.

contemporary with and even post-date the Harappan Phase.⁵⁹ Therefore, some degree of regional chronological variation exists and must be considered when discussing this phase.

Likewise, a great deal of regional variation exists in what is called KD Phase pottery (Fig. 9). Indeed, future research may warrant establishment of sub-phases or even new phases. The most diagnostic vessel is a wheel-made red-ware globular jar with everted or flanged/double rim. Everted rim jars are found in three varieties: (a) simple jars with black or brown horizontal bands painted on the surface; (b) jars with black or brown motifs (geometric and naturalistic) on a red slip; and (c) decorated jars with a fluted surface or with a mud or sandy slip on the lower areas. Flanged-rim jars tend to have complex motifs involving geometric (intersecting circles, 'fish-scales', and others), zoomorphic (fish, bovines, caprids, turtles and the horned deity) and floral (pipal leaves) designs. These complex motifs are done in black or brown paint applied directly to the surface or on a red slip. White paint is also used either as a background or to fill in these complex motifs. Another characteristic vessel is an angular-walled bowl, with incised interior motifs similar to those found in the Hakra Phase. Other important vessel forms include collared and S-shaped jars, dish-on-stand, small carinated bowls with parallel walls (often decorated), and pot lids.

Additional terracotta objects of significance were bangles, beads, balls, toy cart-frames and wheels, triangular cakes, animal and human figurines. Two varieties of female figurines are found: (a) bent and extended legs with modeled buttocks and occasionally mounted on

⁵⁹ See Shaffer, 1981 for a summary discussion of this eastern Punjab sequence.

a pedestal stand; and (b) a flat stylized torso with a forward extension which functioned as a stand. Facial features are pinched, arms are raised or extended to the front, and some have elaborate coiffures.

Stone tools include flint blades, a few leaf-shaped points, and, at Sarai Kala II, significant numbers of stone celts. The lapidary industry was well developed as evidenced by the variety of beads made from semi-precious stones (including lapis lazuli) and steatite. The shell industry is reflected in numerous fragments of beads, bangles and rings. A variety of copper or bronze tools and items of personal adornment (pins, rings, bangles, etc.) have been located at many KD Phase sites. It seems that most craft activities were highly developed, with part or full-time specialists present.

Rectangular mud-brick structures have been found at most sites, but complete architectural units have been defined only at Kalibangan.⁶⁰ At Kalibangan I large rectangular structures were divided into rooms arranged around central courtyards which contained ovens and storage pits. Buildings were oriented towards cardinal directions and arranged along streets. A large mud-brick wall with exterior buttresses enclosed the entire settlement. Drains made of red brick were also found at Kalibangan. The magnitude and complexity of Kalibangan I suggests it may have been an urban centre.

In Bahawalpur, Mughal⁶¹ associates a significant increase in the total number of sites with the KD Phase, and notes a particular increase in the number of sites associated with industrial activities. Moreover, the differential site size categories may indicate that various social and economic activities were not uniformly distributed among settlements, strengthening the argument for the presence of urban centres.

Floral remains from KD Phase sites have yet to be published, but the presence of a ploughed field at Kalibangan indicates the importance of agriculture. In Jalilpur II cattle were the dominant domestic animal,⁶² more importantly, these cattle lived longer and were larger than contemporary populations elsewhere, suggesting they may have been kept for dairy products, traction and breeding. Sheep and goats, on the other hand, were apparently kept mainly as a meat source.

The data indicate that not only were ceramic craft specialists present, but that local ceramic production centres existed. A similar situation may hold for other craft activities. Existence of local production centres implies the presence of interaction networks linking various communities for the distribution of their surplus production. There is also indirect evidence of more extensive interaction networks linking the KD Phase with social groups

⁶⁰ Lal, 1979

⁶¹ Mughal, 1982

⁶² Meadow, 1988.

in other traditions and geographical areas. KD Phase sites are located mainly in the central Indus valley region, which is poor in deposits of semi-precious stones and minerals, and with non-existent marine shells. The presence of these commodities in KD Phase sites implies the presence of such an extensive interaction network. Moreover, KD Phase pottery has been found in the Amri Phase and sporadically in Baluchistan, Kashmir and southern Afghanistan, suggesting diverse sources of supply for these commodities. Furthermore, location of KD Phase (Siswal) settlements in the eastern Punjab may have provided access to the rich mineral deposits in Rajasthan and the Himalayas. It is increasingly apparent that KD Phase interaction networks played a crucial role in procurement, processing and distribution of these commodities both within the Indus Valley Tradition and beyond. Once again, the presence of script characters on KD Phase pottery similar to those found in other phases suggests that such interaction networks involved more than just commodity exchanges; An interesting aspect of this interaction and distribution network may be indicated by a canopied cart and driver motif painted on a KD Phase pot from Banawali I.⁶³ This motif, the presence of ceramic toy cart-frames and wheels, and bull figurines, along with Meadow's suggestion that cattle may have been used for traction, suggest that land transport was important for these interaction networks.

The KD Phase clearly was critical in the development of the Harappan Phase, or Indus Valley Civilization.⁶⁴ The basic technologies and the social and economic structural framework of the Harappan Phase were established by the KD Phase, if not before. While the Harappan Phase is distinguished by its own particular style in the production of many artefacts, the majority do not radically differ from the KD Phase. For the most part, artefact changes associated with the Harappan Phase appear more quantitative than qualitative. The homogeneity in Harappan Phase characteristics over such a broad geographical area suggests that the changes involved in its development focused on an intensification of the KD Phase's interaction networks. This homogeneity in Harappan Phase artefacts also suggests that production became more centralized which, in turn, would have been aided by more intense and regular interaction networks. Another indication that interaction networks intensified is the appearance of stamp seals and cubical stone weights, artefacts usually associated with the regular movement of commodities between social groups. How or why this intensification occurred, and its impact upon various other cultural systems (social, political, religious) remain unknown. However, the recent rediscovery⁶⁵ of a camel burial at Mohenjo-daro may provide a clue for the mechanism of this intensification. Camels

⁶³ Bisht and Asthana, 1979

⁶⁴ Mughal, 1973

⁶⁵ Meadow, 1984

can carry or pull a large load more efficiently (i.e. needing water less frequently and having more versatile foraging capacity) than cattle. If the camel, as a beast of burden, was introduced from Central Asia sometime during the late KD Phase or early Harappan Phase, the economic impact would have been very significant for many aspects of cultural development.

Summary

Both Baluchistan and Indus Valley Traditions developed from an early agricultural society at present known only from the early occupations at Mehrgarh. By the fourth millennium B.C. distinctive phases in each tradition can be defined on the bases of ceramic stylistic variations. Intrusive artefacts and commodities indicate that a degree of interaction existed between phases and to a lesser extent between traditions, but the cultural impact of these interactions was limited. During the third millennium B.C. several distinct cultural phases persisted in the Baluchistan Tradition, with the degree of interaction remaining limited but constant. The only exception to this is the Damb Sadaat Phase which came under direct influence of social groups in southern Afghanistan. However, in the Indus Valley Tradition the degree of interaction between phases seems to have intensified. This intensification is reflected in intrusive artefacts and commodities as well as in ceramic stylistic similarities and identification of common script characters. Finally, in the late third millennium B.C. this interaction is further intensified, reflected by a single cultural phase, the Harappan, identifiable in most areas of the Indus Valley Tradition. Interaction between the Baluchistan and Indus valley Traditions continued to occur, but with the possible exception of the introduction of the camel from middle Asia, the cultural impact of these interactions appears to have been minimal. Although interaction with groups to the west probably occurred in both Traditions, such interaction seems culturally important only for the DS Phase. Both traditions reflect indigenous cultural development, and the Indus Valley Tradition witnessed the development of a major Old World civilization during the Harappan Phase discussed in the next chapter.

PART TWO (B. K. THAPAR)

The Early Bronze sites situated in India are marked by similar traits. Particularly in the river Ghaggar basin, the settlements culturally near to Kot Diji Phase are located.

As a result of exploration in Rajasthan, Haryana, Punjab and Gujarat in India, over 400 Harappan and late Harappan sites have been freshly discovered. This area of spread falls

broadly into two geographical regions, called 'eastern' and 'southern', divided essentially by the Thar desert. The former affording wide flood plains is drained by the Ghaggar-Sarasvati system, including the Sutlej and the Beas, of which the vast aggradational surface shows topographical changes associated with numerous shifts and divisions of the rivers. The neighbourhoods of this region, especially the Aravalis, are rich in copper and other raw material. The latter region, marked by a littoral on one side and dissected plateaux, scarps and estuarine plains on the other, is drained by the Luni, Banas, Bhadar, Savar-mati, Mahi, Narmada, Kim, Tapti and Godavari rivers, all unrelated to one another. Within these regions, 'pre' or 'early' Harappan settlements have been located only in the eastern, principally on the Ghaggar (ancient Sarasvati) and Chautang (ancient Drishadvati), being an extension of the pattern in Cholistan across the border in Pakistan,⁶⁶ noteworthy sites being Kalibangan, Sothi, Bana-wali, Rakhigarhi, Siswal and Balu. Besides these, another site of the same genre, Mitathal, was located on the dried-up old course of Jamuna, which at one time is reported to have contributed to the Ghaggar system. Excepting Sothi, at each of the sites a stratified or cultural relationship between the pre-Harappan and Harappan cultures has been determined.

We may now turn to the principal sites, starting with Kalibangan. The name Kalibangan means literally 'black bangles' from the sight of countless fragments of weather-stained terracotta bangles strewn over the surface of the site. It lies some 310 km north-west of Delhi along the left bank of the now-dry river Ghaggar (ancient Sarasvati) in the northern part of Rajasthan. It comprises two mounds, with the smaller one (KLB-1) located on the west and the larger (KLB-2) to the east, recalling identical disposition of mounds at Mohenjo-daro and Harappa. The excavation (1961-69) revealed a sequence of two periods of occupation, of which the upper belonged to the Indus civilization (see Chapter 12) and the lower to the antecedent phase termed, albeit loosely, as 'pre' or 'early' Harappan. In the present stage of research, however, a more appropriate name would be Kalibangan I.⁶⁷

The settlement was situated on the bend of the river beyond the active flood-plain and was a parallelogram some 250 m from north to south and 180 m from east to west. It was found to have been fortified from the very beginning of the occupation. The fortification wall was made of mud-bricks (30 × 20 × 10 cm) and, in its extant portion, showed two structural phases. In the earlier phase, the basal width was 1.9 m, while in the latter it measured 3-4 m – the extra thickness being added on the inner side. Both the inner and outer faces of the wall seem to have been originally plastered with mud, patches of which were found preserved at many places.

⁶⁶ Mughal, 1981

⁶⁷ Thapar, 1975.

Within the walled area, the houses were built of mud-bricks of the same size as those used in the fortification wall, the masonry being in the English bonding. The use of baked brick was attested by a drain, the size of bricks being the same as that of mud-bricks. The excavation also brought to light part of a 1.5 m wide lane running in an east–west direction. Interesting evidence regarding cooking practices was revealed by the presence, inside the house, of ovens of both underground and overground varieties closely resembling the present-day *tandurs* in the region. Equally noteworthy was the existence of cylindrical pits lined with lime-plaster, possibly for storing drinking water. The alignment of the houses as also the size of the bricks used was significantly different from those of the Harappans.

The distinctive trait of this period, however, was the pottery,⁶⁸ which was characterized by six fabrics, labelled for convenience as Fabrics A to F.

Fabric A was marked by an individuality that isolates it from other fabrics. The vessels of this fabric, though made on the wheel, were carelessly potted, showing unskilled handling with tell-tale traces of irregular striations. Comparatively light and thin in section and red to pinkish in colour, most of the vessels were painted in black, combined at times with white over a dull red surface, the field of decoration being confined to the portion above the girth. The design elements drawn in free-style included: (a) horizontal bands, sometimes as thick as the height of the neck; (b) loops fringed below or enclosed by horizontal bands; (c) grouped converging lines forming opposite triangles or rhombs; (d) segments or scallops with fillers; (e) pendant latticed leaves bordered above by horizontal bands; (f) moustache-like bifold scroll within wavy verticals; (g) pendant latticed leaves; (h) symmetrically joined semi-circles with intervening space giving the effect of pendant concave-side triangles; and so on. Various motifs such as radiating lines ending in solid discs, four-petalled flowers, squares with radiating flowers at the corners, cactus-like plants were used as fillers. The range of shapes was, however, limited and comprised vases with out-turned and out-curved rims with disc or ring bases and bowls with tapering or convex sides. Of unusual interest were a vase with a pedestal base and another with a holemouth.

Fabric B was distinguished primarily by its paste, texture and surface treatment. The vessels (Fig. 10) of this fabric were carefully potted on the wheel and were treated with a red slip up to the shoulder, the slipped area being decorated with black painted horizontal bands of varying thickness. The remaining surface of the pot was covered with a thin clayey solution often mixed with sand, and, while wet, roughened by horizontal or wavy combings or by tortoise-shell or dendritic impressions. Over this rusticated surface, naturalistic designs – floral, animal and bird – were painted in black, complemented at times

⁶⁸ Thapar, 1969, 1973.

with the ancillary white. Only one shape, namely, a globular jar, was represented in this fabric.

Fabric C was marked by a finer-textured paste and all-over smooth-slipped surface in shades of red and plum or purple-red. The repertory of painted designs included, besides the recurrent carefully ruled horizontal bands or loops or crisscross borders of plants, fish-scale, metopes, pendant triangles, panelled butterfly or double axe, etc. The shapes represented in this fabric comprised globular or ovoid vases with disc bases, lids, straight-sided bowls, dishes and offering stands.

Fabric D was characterized by vessels with thick sturdy section and slipped red surface. Common shapes included heavy jars, bowls, troughs or basins. The last named, however, was the most characteristic of this fabric. Such basins with ring bases were decorated internally on the sides with sharp-ridged incisions of varying patterns, including grouped wavy lines and on the outside with single or multiple rows or cord impressions. Besides, black painted horizontal bands and loops were not infrequent.

Fabric E comprised vessels with a buff or reddish buff slip. Common shapes included: large and medium-sized jars, including those with a flange round the rim, lids, bowls,

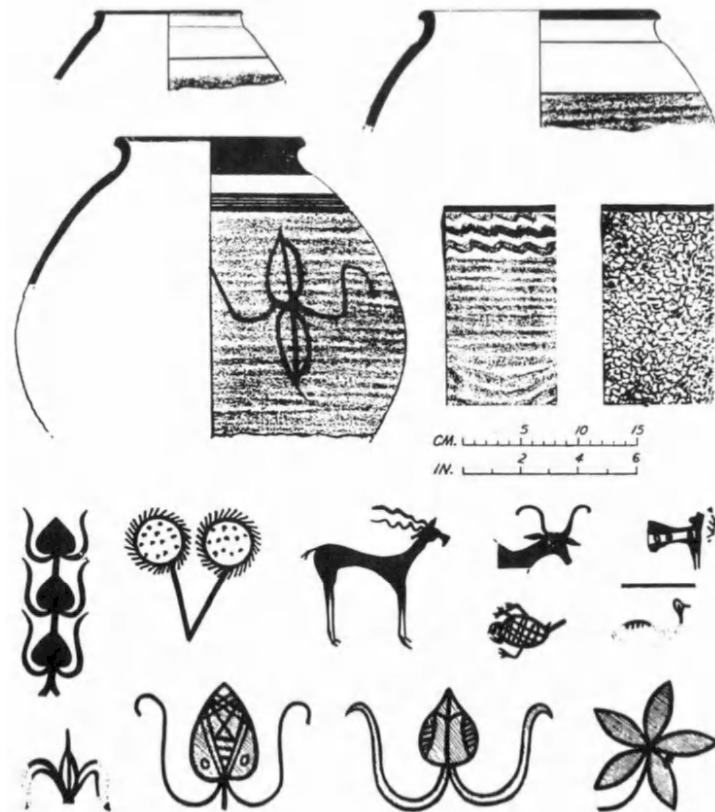


FIG. 10 Kalibanganpottery from Fabric B and painted designs.

offering stands and dishes, including a small chalice. The painted decoration (in black sometimes tending to purplish and occasionally white) consisted of ubiquitous rim bands, oblique lines with fronds, sigmas, borders of scales, latticed or plain scallops, multi-petalled flowers, fish, double-axe or butterfly within wavy verticals.

Fabric F is related to the grey-coloured pottery and was represented in forms commonly met with in other fabrics, namely dish-on-stand, basins, bowls, vases, etc. For decoration the use of both black and white pigment was current.

Among Fabrics E and F, the difference was more apparent than real and lay in the colour of the surface-dressing (respectively buff and grey), some of the forms being common to other fabrics. In frequency, Fabric A showed the highest percentage, followed in a regression by Fabrics B, C, D, E and F, the last-mentioned two being somewhat uncommon. Being current throughout the occupation, these fabrics did not represent any evolutionary series or different ethnic endogamous groups, but may have resulted from specific uses or demands. The classification of these fabrics is essentially based on purely technical characteristics.

Among the other finds of this period, the more noteworthy were small-sized blades of chalcedony and agate, sometimes serrated or backed; beads, variously of steatite (disc), shell, carnelian, terracotta and copper, shell bangles, terracotta objects comprising a fragmentary bull, a toy-cart wheel with single-sided hub, an annular ring, bangles, both of rectangular (single or subjoined) and circular section; a quern stone with mullers; a bone point, and copper objects, comprising a celt, a bangle, a nondescript cutting tool, and a few other fragmentary pieces. No figurine of the mother goddess or any other deity have been obtained from the excavation.

A significant discovery of the excavation was a ploughed field situated to the south-east of the settlement, outside the town wall.⁶⁹ It showed a grid of furrows with one set more closely spaced (about 30 cm apart) running east–west and the other, widely spaced (about 1.9 m apart) running north–south. Curiously enough this pattern shows a remarkable similarity to modern ploughing in the neighbourhood wherein two types of crops are grown simultaneously, the combination being conditioned by the size and growth behaviour of the respective plants. No remains of a plough, ploughshare or coulter have so far been obtained from the site.

The occupation endured through five structural phases, rising to a height of 1.6 m above the natural soil, when it was brought to a close by a catastrophe (perhaps seismic), as indicated by the occurrence of displaced (faulted) strata and subsided walls in different parts of

⁶⁹ Lal, 1971; Thapar, 1975.

the excavated area. Thereafter the site seems to have been abandoned, albeit temporarily, and a thin layer of sand, largely infertile and wind-blown, accumulated over the ruins.

Siswal, another settlement of this epoch is situated 26 km west of Hissar on the left bank of the now dry Chautang (ancient Drishadvati). A small-scale excavation, conducted in the autumn of 1970, revealed in a 1.25 m thick occupation-strata a succession of two cultures, labelled here as Siswal A and Siswal B,⁷⁰ the classification being based on ceramic industries. No structures were found in the limited area of the excavated trench. Siswal A is distinguished by the occurrence of all the six fabrics in use in Kalibangan Period I, with the elaboration that the design repertoire at Siswal shows lesser variety, and the decoration particularly of Fabric D troughs is inferior in execution. Some of these troughs also show rusticated surface on the lower portion. Siswal B, although retaining all the fabrics of A, is marked by an austerity both in shape and design, particularly the absence of the use of white pigment in painting. It also shows a limited though hesitant contact with the typical Harappan ware exemplified by the occurrence of such forms as S-shaped jars, dish-on-stand, perforated cylindrical jars, etc. It may be recalled that a similar assemblage was also met with at Mitathal in Period I. No other finds were obtained from the excavation. However, an assortment of finds collected from the surface included saddle querns and pestles, terracotta bangles, sling balls and terracotta triangular cakes.

Rakhigarhi lies on the old course of the Chautang (Drishadvati) river some 190 km east of Kalibangan in district Hissar and consists of two mounds, the smaller to the west and the larger to the east; recalling the lay-out plan at Kalibangan. A closer observation supplemented by a section scraping, undertaken in 1973, revealed that the lower levels of the smaller mound represented the occupation of the 'pre' or 'early' Harappans, as indicated by the occurrence of all the six fabrics enumerated at Kalibangan. The twin-mound layout of the settlement with the smaller mound used as a citadel and the larger as the lower city was developed by the Harappans to suit their pattern.⁷¹

Banawali, situated on the Sarasvati, almost midway between Kalibangan and Rakhigarhi (being 80 km from the latter) in District Hissar is another site where remains of a 'pre' or 'early' Harappan occupation have been found stratified below those of the Harappan (see Chapter 12). The former was characterized by the occurrence of all the six fabrics recorded at Kalibangan.⁷² The structures were made of mud-bricks of standard sizes, conforming to the ratio 3:2:1 (30 × 20 × 10 cm, or 36 × 24 × 12 cm, or 39 × 26 × 13 cm). In addition, there was an aberrant size (24 × 24 × 2 cm). Kiln-burnt bricks were also

⁷⁰ Suraj Bhan, 1975.

⁷¹ Ibid.

⁷² Bisht and Asthana, 1979 pp. 225–6.

used. Noteworthy structures exposed by the excavations consisted of (a) a 2m-wide brick-on-edge pavement and (b) a partially excavated house, showing several hearths, fire-pits, etc., pointing perhaps to its use as a metalsmith's workshop. Another interesting find was the existence of circular pits neatly dug into the house-floors containing fine bluish ash mixed with charred grains. Among other finds obtained from the deposits of this occupation are points and awls of bone, microblades of chalcedony, terracotta bangles, beads of gold, semi-precious stone, steatite (disc), faience, bone and clay; bangles of shell, faience and copper and terracotta animal figurines. A noteworthy find, however, is a painted sherd depicting a canopied cart having spoked wheels. In the upper levels of this occupation there is evidence for the intrusive appearance, in a limited way, of the Harappan ware recalling the phenomena at Siswal and Mitathal. The full import and nature of this transitional phase still remains to be ascertained.

Two more sites where a similar cultural sequence has been attested by excavation are Balu in District Jind, Haryana⁷³ and Rohira in District Sangrur, Punjab.

Among the sites mentioned above only Kalibangan has been sampled for radiocarbon dating (five from the early, one from the middle and three from the late levels). Except for one, the dates are all consistent and indicate an inclusive time-range of 2370–1820 B.C. (without MASCA calibration). As the excavated cuttings from which samples have been obtained lie on the slopes of the mound with very little soil-cover, the dangers of humus contamination cannot be overlooked, especially in respect of samples belonging to the late levels of the period which show a range between 1965 and 1820 B.C. The duration of Period I at Kalibangan may in fact have been much shorter, and, on the above showing, is estimated to be 2500–2300 B.C. without MASCA calibration (calibrated equivalents would be 2900–2700 B.C.). The five structural phases, of which the upper three were large rebuildings, would fully support this postulate.

Coming to comparative study we find that in Pakistan five sites – Amri, Harappa, Kot Diji, Balakot and Gumla⁷⁴ – have furnished evidence of the existence of an occupation, yielding alien ceramics stratified below the Harappan strata. In addition, comparable material is also available from Sarai Kala, Rahman Dheri,⁷⁵ Jalilpur⁷⁶ and sites in Baluchistan and Iranian Sistan. At the outset it may be stated that as an assemblage comprising six fabrics, the pottery of Kalibangan I remains unparalleled. Among fabrics this is particularly true of Fabric A, which is the dominant ceramic of the period. The recently explored sites at Cholistan, however, afford some parallels particularly in Fabrics B and D. The surface

⁷³ Bisht, 1976, 1978, 1984

⁷⁴ Dani, 1970/71.

⁷⁵ Durrani, 1981.

⁷⁶ Mughal, 1974.

decoration of Fabric B resembles that of the so-called wet wares of Baluchistan (Sur Jangal, Dabar Kot, Periano Ghundai) and is also available at Amri⁷⁷ and Kot Diji in Sind. Fabric C is commonly met with at Amri, Harappa (preference deposits), Kot Diji, Sarai Kala and perhaps also at Rahman Dheri and Gumla. Fabric D, showing *inter alia* an exclusive decorative element of sharp-ridged incisions of various patterns including wavy, criss-cross, etc. is paralleled at Amri and perhaps also at Kot Diji.⁷⁸ Fabrics E and F were distinguished more by their surface colour than by any other technical characteristics. However, the occurrence of buff and grey fabrics is reported from sites of pre-Harappan affiliation in Baluchistan and Sind.

Coming to shapes, of which the range in the whole assemblage is limited, we find that short-necked globular vases, dishes-on-stands, pedestal bowls or chalices, bowls with tapering or convex sides, heavy jars with ledged or flanged rims and wide basins are known variously at Amri, Harappa, Kot Diji, Sarai Kala, Gumla, etc. Similarly, in ornamentation quite a few designs occurring on the pottery of Kalibangan I correspond to those on the pottery of the above-mentioned sites including those in Baluchistan, Mundigak in the Helmand basin of Afghanistan and Shahr-i Sokhta in Iranian Sistan, for example, thick bands, pendant loops, symmetrically joined semicircles, latticed triangles, dot-tipped hanging triangles, radiating lines ending in solid discs, double-axe or butterfly motif, depiction of fish, humped cattle, ibex, etc. In fact, the painted designs on the pottery of these sites are regional variations of basic motifs common to the fourth- and early-third-millennia B.C. pottery of the regions. On the basis of comparison of the material equipment of Kalibangan I with that of corresponding sites in Pakistan, it is seen that while these village/town cultures share a common level of economic subsistence, they are marked by regionalization with an uneven development and differing ceramic traditions. At some stage they were also anticipating some of the Harappan traits. The correlation of the above-mentioned assemblages indicates that the pre-Harappan communities appeared in Rajasthan somewhat later than in Sind as though reflecting a sloping horizon of cultural level, from west to east. The available radiocarbon dates of the comparable strata at Amri, Kot Diji, Rahman Dheri and Kalibangan would support this postulate. One of the characteristic types of Fabric D of Kalibangan I is found to be closely paralleled in Amri IIB,⁷⁹ thus providing a datable correlation between the two cultures on a common time-scale. On the strength of a radiocarbon date Amri IC is dated to 2600 B.C. Amri IIB, therefore, would be around 2500 B.C. which agrees with the date proposed above for the beginning of Kalibangan I.

⁷⁷ Casal, 1964; Dales, 1981.

⁷⁸ Khan, 1965.

⁷⁹ Casal, 1964.

Confirmatory evidence about the terminal time-bracket of Kalibangan I is forthcoming from layer 5 at Kot Diji, representing the late phase of Kot Diji culture and dated to 2300 B.C. On the other Indian sites, the pre-Harappan culture seems to have staggered on still later, developing on its own lines within the life-time of the Indus Valley Civilization itself.

Summary

Thus various groups of the pre-Harappan population both in Baluchistan and the Indus valley show a further cultural progress in the course of the Chalcolithic and Bronze Ages.⁸⁰ There occurred a multifaceted development of a new mode of life which accompanied the advent of the agricultural epoch; the efflorescence of the artistic culture was particularly remarkable in the development of painted pottery and terracotta sculpture. The population growth and the craft specialization created socio-economic prerequisites for the emergence of Harappan Civilization. Cultural and trade links became more intense and regular within the Central Asian region. At a number of Baluchistan sites, links with southern Turkmenistan are particularly obvious in the painted pottery. The vessels imported from Baluchistan decorated in the Nal style were discovered in wealthy graves of an important early urban centre of Shahr-i Sokhta in the Iranian province of Sistan.

⁸⁰ Mughal, 1970.