NOTES ON SHORTUGAI:
An Harappan Site in Northern Afghanistan

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Dr. Dupree has a long service record in Afghanistan. Beginning with his excavation at Deh Morasi Ghundai, he has made a contribution to our knowledge from prehistory to history. Here Dr. Dupree is presenting a summary account of the important Harappan outpost in the Kunduz region of the Oxus Valley — a site which emphasizes the importance of the lapis lazuli trade, and also on the nature of the mid-station between the Indus Valley and the Sogdian region of the Oxus.

Shortly after World War II, Sir R.E. Mortimer Wheeler (who along with S.P. Tolstov, ranks as one of the great archaeologists of the 20th Century) made a brief field trip to Afghanistan, and expressed disappointment that he had found no evidence of Bronze Age sites on his limited survey (Wheeler 1947). Since that time, a number of sites have been discovered and several excavated. For example, see: Casal 1961; Dupree 1958, 1963, 1973; Dupree, et al. 1971; Dupree, et al. 1972; Fairservis 1959, 1961; Goin 1972; Hammond 1970; Sarianidi 1971, 1972; Kruglikova and Sarianidi 1971; Kuz'mina 1976; Shaffer 1978; Tosi and Wardak 1972; Trousdale (personal communication).

The most exciting recent finds have been at the French excavations at Shortugai, near Ai Khanoum, itself one of the more important classical sites of 20th Century archaeology (Bernard, et al. 1973; Bernard and Francfort 1978). The following notes are based on the French reports available to me in Lahore at the time of writing, January 1980 (Lyonnet 1977; Francfort and Pottier 1978; Francfort mss. 1978).

The Bronze Age mounds at Shortugai were discovered in October 1975 during a survey carried out by J.C. Gardin, P. Gentille and B. Lyonnet of the Delegation Archeologique Francaise en Afghanistan (DAFA) and the Centre National de la Recherche Scientifique (CNRS).

At the time of the discovery, my wife (Nancy Hatch Dupree), Abdul Wahab Tarzi (an Afghan scholar), and I were visiting the DAFA excavations at Ai Khanoum. We planned to make a pilgrimage to the shrine of Nasir-i-Khusrau in Badakhshan. Mr. Tarzi was writing a book on that renowned Ismailiya poet and philosopher (Dupree 1976; Tarzi 1976). When we arrived at the French camp, the surveyors showed us some sherds which seemed to be out of context with the rest of the collections (Fig. A). I looked at the sherds and immediately pronounced them to be Indus Valley Civilization.

And so it turned out. Lyonnet, in her first published report on the site, convincingly related the Shortugai sherds to the Harappan Civilization (Lyonnet 1977). She further discussed the site, not only as an agricultural settlement, but as a trading outpost of the Harapans. Her theories were confirmed and reconfirmed by two sondages sunk in 1976 by Francfort and Pottier (1978), and two seasons of excavations in 1977 and 1978 (Francfort mss. 1978).

SONDAGES: 1976

The six Shortugai mounds are located on the terrace of an old meander of the Amu Darya (Maps 1 and 2). The highest, Mound A (Number 209), is 4.5 meters. Mound A is elliptical and 150 meters by 75 meters. Mound B, to the north, is also trapezoidal and 200 meters by 50 meters. Mound C, to the northeast,
is circular, with a 10 meter diameter. Mound D, to the east, is an elongated 100 meters by 15 meters. Mounds E and F, to the south, are very low on the terrace and difficult to measure accurately.

These six proto-historic mounds are separated from other mounds in the vicinity by some ravines which line the edge of the terrace. A canal system related to the mound complex re-emphasizes the importance of the settlement, although apparently not all the mounds were continuously occupied during all the periods represented.

The size of Mound A (Number 209) and the Harappan sherds found during the 1975 survey convinced the excavators to sink a test pit in this mound during the 1976 season, in spite of the fact that subsequent Hellenistic occupants had disturbed the underlying levels at various places. Mound B, with no trace of Hellenistic occupation, offered the possibility of exposing undisturbed strata of both the Harappan and post-Harappan periods, as indicated by the initial surface collection of ceramics.

Mound A. The sondage (SHA) ran from the highest point toward the south, to the edge of the terrace. The excavated Hellenistic occupation covered an area 16 meters by 4 meters, and went to a depth of 1.5 meters; earth removed was 93 cubic meters. The underlying, excavated proto-historic occupations covered 10 meters by 4 meters, and extended down to virgin soil (1.50 meters to 4.0 meters); total earth removed was 100 cubic meters.

Mound B. The sondage (SHB) was dug near the top center, a flat area which had yielded the greatest concentration of sherds during the survey. The test pit was 5 meters by 5 meters, and went down 2.5 meters, where virgin soil was reached.

STRATIGRAPHY AND CULTURAL FINDS

The non-cultural strata consisted mainly of the ubiquitous yellow loess (loess jaune), which blankets most of the plains and foothills of northern Afghanistan, plus a red clay (marne rouge) partly naturally deposited by water action, partly introduced by the irrigation canal. The loess was also used in the construction of tamped earth (pise) walls, brick joints, and mortar for walls, with fibrous matter added to improve adhesion. Bricks were made of clay; size: 37 x 17 x 10 cm. Also, chopped straw mixed with clay was used to cover walls, and reeds from the marshes of the Amu Darya served as inner roofing. The walls had no foundations.

According to Francfort and Pottier (1978) the stratigraphy of the two test pits was continuous, with no indications of long-term breaks in sequence. Bricks of the same dimensions occurred in all proto-historic levels, and the walls were superimposed, probably indicating continuous occupation from the establishment of the first Harappan settlement.

Utilitarian and domestic objects were virtually absent in SHA, but numerous in the habitation areas of SHB. (See Chart I for list of cultural items by period at SHA and SHB). On the other hand, more industrial debris (such as lapis lazuli scrap flakes, bronze slag, an ingot mould, broken pottery crucibles, etc.) was found in SHA. These finds seem to justify the assumption that Mound A was an area which combined artisans' workshons and residences (Francfort, 1979), much like modern Afghan bazaar areas (Dupree 1973; Centlivres 1972). Mound B was primarily residential. Most items occurred in all levels, but bead finds were concentrated in Shortugai I (SHA), the period contemporaneous with the Mature Harappan. The Harappan love of (and the fine workmanship of) beads has been well established. The Shortugai beads were probably made in situ.

Evidence of other artisans' activities were found: copper or bronze workings (rare); goldwork (fragment of gold leaf); carnelian bead making; lapis and ceramic beads (mentioned above). Artisan activity appears to increase in the upper proto-historic levels. Ten hearths occurred in association with the pottery crucible fragments. Also, the excavators found a profusion of broken fire-burned pebbles, with greater concentrations in the upper proto-historic levels. Placing pebbles in hearths is one way of prolonging heat in a hearth.

About 86,700 sherds were recovered, of which 2300 (2.6% of the total) have been studied. The differences in types and percentages in SHA and SHB may reflect the separate economic roles of the inhabitants: agriculturists (SHB) and artisans (and possibly traders?) in SHA. Further excavations at Mounds A
and B and the other four mounds (CF) in the Shortugai complex may help illuminate this problem.

An unique cache of six pottery vessels occurred in SHA, Level 5b (Shortugai IV), associated with a human burial (Fig. 1). Four were narrow-mouthed pots (Fig. 2); two, wide-mouthed bowls (see Fig. 1). Francfort and Pottier compared the pottery to that of the tomb wares of the Sogdian Biskent Culture of Tulhar in the valley of Kafirnigun and Tajikistan (1978:52). In 1979, a tomb of Mullolian Type (A. Askarov terminology) was found near the Biskent tomb (Francfort, 1979).

Of greater general interest are the various decorated sherds.

1. Painted Designs (Fig. 3). The excavators identified 164 Harappan-related, black-on-red painted sherds which appeared in all levels of SHA, with major concentrations in Levels 1 and 2, where they represented 1.7% of the total ceramic assemblage from these levels. No painted sherds were found in SHB. The designs included: radiating lines; intersecting circles (cercles secants, 18 sherds); pipal leaves (11 sherds); fish (1 sherd).

2. Cord-Marked (Fig. 4). The cord-marked ware is definitely in the Harappan tradition.

3. Incised, Parallel Line Ware (Fig. 5). This ware is also found in Indus Valley sites, Namazga VI (=Tahir-baj 3) and Biskent, according to the excavators.

4. Graffito on Rim Sherds (Figs. 6-8). Three sherds exhibited graffito. Two (Figs. 6-7) had recognizable Indus Valley script. The third (Fig. 8) had a design reminiscent of a painted pottery motif from Mundigak (Casal 1961), Deh Morasi Ghandai (Dupree 1963), Shamsuir Ghar (Dupree 1958), Aq Kupruk (Dupree, et al. 1972), Said Qala (Shaffer 1972), Tillji Tepe (Sarianidi 1972), etc.

5. Inside Incisions (Figs. 9-12). Another diagnostic ware with close Harappan affinities was identified: a pedestaled cup or "fruit stand" with irregular, radiating, circular incisions.

A final Harappan type is the "greater" or "steamer" perforated sherds (Fig. 13). The function of this widespread type is unknown, but possibly the vessels could have been used in steam-cooking. Perforated sherds are found only in SHA, but occurred in all levels, but were more numerous in Levels 1-3. Similar perforated sherds are found in Central Asia (Khan 1964; Sarianidi 1976).

The single white gypsum seal found in SHB (Fig. 14) has an incised, stylized ibex, and recalls examples from Khukar, Shamshir Ghar, and Namazga VI.

Although a definite Harappan ceramic assemblage exists at Shortugai, the repertoire is rather limited. However, this is not strange, for the same can be said for many other sites with Harappan affinities (Gumla, for example; Dani 1970-71). Pots, unlike people, do not reproduce themselves genetically, although some archaeologists often subconsciously (Friede would be pleased!) assume this to be the case, especially with our continued emphasis on sherd counts.

Also, it continues to be true that although Harappan objects have been found at contemporary sites outside the Indus Valley, the reverse is seldom (if ever?) true (Lamberg-Karlovsky 1972).

Francfort and Pottier (1978) emphasized an intensification of local elements in the Shortugai periods, especially II and III. This is also not strange, for transplanted "colonists" at all periods of prehistory, protohistory, and history have had to shift their ways of life, at least in the economic sphere, to adapt to local conditions. The Harappan colonists (if, indeed, they were such) would have had to adjust from a semi-tropical climatic zone (the Indus Valley) to a semi-arid zone (Bactria). Irrigation would have been necessary for farming communities, but, again, locally adapted, probably borrowing technological ideas from the indigenous population.

A number of tentative conclusions were reached by Francfort and Pottier (1978:60-61) at the completion of the two sondages.

1. The founding of Shortugai witnessed the creation of an important Harappan outpost (or colony) in the plains of Central Asia (Period I).

2. At the end of the Mature Harappan period,
local development continued, and the people had close relations with the Sogdian (Biskent) Culture (Periods II and III).

3. In Periods I-III, traditions of architecture, metallurgy, stone-working, and ceramics evolved locally, probably based on the availability of resources. Agriculture adapted to the Central Asian region, again using local techniques.

4. Trade with the Indus Valley and Sogdia can be assumed from the cultural finds, especially finished and semi-finished products excavated in SHA.

5. The geographic position of Shortugai probably related directly to the availability of raw materials.

6. After abandonment of at least part of the site, a new period (IV) is represented by a burial in the style of the Sogdian culture of Biskent.

7. No evidence appeared in SHA and SHB to indicate that, after five or six centuries of existence, the people of Shortugai were swallowed up by a catastrophe, as some archaeologists believe happened to the Indus Civilization and Namazga V. The culture at Shortugai seems to have evolved without drastic interruptions, but the apparent abrupt abandonment of the site remains a mystery.

8. The absence of a palace, temple, or citadel posed problems, and, without such finds any statements about the social, religious, and political institutions would be premature.

EXCAVATIONS: 1977

At the end of the 1976 sondage season, Francfort and his associates planned a three year attack on Shortugai. The 1977 season reaffirmed the chronological sequence revealed in the sondages, permitted an overall evaluation of the topographic evolution of the site, and produced solid evidence of the existence of an irrigation system (i.e., a canal).

EXCAVATIONS: 1978

The second season of excavations (10 April—2 June 1978) uncovered an area of 600 horizontal square meters on Mound B. Four stratigraphic levels were identified, and the excavators reached virgin soil after 2.5 meters. Major finds by level, from bottom to top, are included in the following discussion.

MOUND B

Level 4 (= Shortugai, Period I, as defined in the 1977 sondages). Level 4 represented the first period of occupation at Mound B. The cultural material, particularly the pottery, exhibited numerous Harappan traits, such as pedestaled bases with incised decorations. Pots with narrow feet, a Bactrian form, like those found at the Dashli sites of Sarianidi (1971; 1974), were also found. The excavators uncovered no genuine architecture, but did find a large pit surrounded by a ditch, associated with horizontal beams and walls.

Level 3: Shortugai II. Cultural material found in Level 3 resembled that of Level 4, but had less obvious links with the Indus Valley; i.e., two fragments of a clay Harappan chariot model. The expansion of three habitation units with fireplaces and connecting rooms, surrounded by solid mud (pise) walls, probably indicated population growth.

Level 2a (Lower Sub-Level): Shortugai III. Level 2a was the period of maximum occupation, as indicated by streets and courtyards, including a west quarter delineated by a street and an alleyway. Two habitation complexes were identified, one with four units, another with three. Two burials were discovered: 1) In Room 17, the skeleton of a baby was found in a jar at the base of a wall; 2) Room 22 disclosed the intentional burial of a sheep in a pit, along with several unfired clay vessels. Other examples of intentional animal burials include: Darra-i-Kur, Badakhshan (Dupree et al. 1972:81-82); Burzahom (Gupta 1979, II:42); Dashli, ancient Bactria (Masson and Sarianidi 1969; Sarianidi 1971; Gupta 1979: II:199-200); Sapalli Tepe, southern Uzbekistan (Francfort mss: 3). No Harappan elements were found in the Shortugai III level, but certain Biskent traits have been identified by the French: Knotted scrapers, incised gourds, pots with inverted (rentante) rims. Certain types of spherical pottery vessels and jars with graffiti resembled Bactrian forms found at Dashli, Sapalli, and even Namazga VI.
Level 2a ends with a sudden, unexplained abandonment of Mound B.

Level 2b (Upper Sub-Level): Shortugai IV. After what was apparently a brief hiatus, and with the architectural structure of Level 2a still intact, Mound B was at least partly reoccupied. The people utilized both the east and west habitation units. The cultural finds generally resembled those of Level 2a, but now with an overall dominance of Biskent elements, including: two caches of pottery, one associated with the scattered contents of the grave, possibly an infant but difficult to determine without additional bone analyses. The other cache represented the first time Biskent wares had been found not associated with a burial complex. Also, no Harappan elements were detected.

Level 1: Shortugai IV. Apparently, another short period of abandonment occurred, and three habitation units of Mound B (those between the old walls) were reoccupied. Two caches of Biskent Culture ceramics were discovered; one on the floor of a room in association with a skull fragment, possibly human.

After Shortugai IV, Mound B was abandoned by sedentary peoples, although a number of sherds of the Steppe Culture, the horse cultures of Central Asia, were found. According to Francfort’s preliminary observations, several sherd s with dotted incisions resembled types found at Tazabag’yab, Ak Tangin, and Kajtrak-Kum (Francfort 1978 mss: 3).

MOUND A

The 1978 excavations at Mound A also verified the previously identified six cultural levels. The most important discovery in Mound A was a structure of "monumental architecture", with massive walls, constructed of bricks measuring 10 x 19 x 38 cm. The complex was dominated by a room (4.25 x 2.80 meters) with a floor of baked bricks. Walls of adjacent rooms to the east and west were also massive, 2 meters thick by 2.5 meters high. The north wall of the paved floor room and the adjacent rooms formed a partition between the monumental structure and the artisans’ area previously uncovered during the 1977 sondage. Apparently, some sort of delimitation is implied, and a possible class structure is suggested. However, the significance of the monumental structure is unknown at this time, and all questions will remain unanswered unless the French can once again excavate at Shortugai.

SONDAGE IN AN IRRIGATION CANAL

In 1977, a sondage in the slopes of Mound A indicated a canal with three phases of utilization. Possibly, all phases were in the Hellenistic period because the system had been dug into existing proto-historic levels. Another area on Mound A, however, yielded evidence of proto-historic pottery in a two phase irrigation system.

BOTANICAL FINDS

A preliminary report by G. Willcox on the botanical finds at Shortugai is interesting. Seeds have been identified from charcoal and ash samples from hearths. Careful methods of flotation and sifting of samples yielded evidence for the following domesticated plants: wheat (notably Triticum aestivum); barley, millet, lentils, small peas, and vetch. Seeds identified included grapes and almonds. An oilseed (sesame) was also present. Charcoal wood was used to identify the following trees and bushes: Russian olive (Elaegnus angustifolia), pistachio, willow, poplar, tamarisk, almond, and Lycium.

Finally, and importantly, an Harappan seal with a rhinoceros portrayed was discovered during the 1978 season in the same level as a knife (?) blade (lame de sangu) of Bactrian shape and a painted sherd with a bird design (peacock), all close by a Biskent scraper type.

EXCAVATIONS: 1979

From 20 April — 12 June 1979, Francfort (1979, mss) and his colleagues concentrated their efforts on Mound A, primarily attempting to determine the origins of Periods I and II (end of the 3rd-beginning of the 2nd millennium B.C.). A large courtyard was exposed. Several monumental walls of fired bricks apparently divided the area into different functional zones. The thick hearth accumulations and large quantities of collected artifacts (stonework, ceramics, etc.) once again furnished evidence of intensive economic activity and human occupation during the earlier periods.

Additional evidence of lapis lazuli workings was uncovered. Also, carnelian beads and bracelets were
found, along with more evidence of the goldsmith’s craft: beads and bracelet fragments.

A Bactrian tomb (eastern-type) had been dug into Mound A after the abandonment by the earlier inhabitants. The tomb-type and grave objects gave evidence of the final connections of Shortugai with the neighboring late cultures of Soviet Tajikistan and Uzbekistan. The phase represented in the tomb relates to the Mullolian of Central Uzbekistan.

The 1979 excavations also revealed widespread stratigraphic disturbances caused by Hellenistic farmers. And, unhappily, pits dug by treasure hunters had also disturbed parts of the excavated area. In spite of this, the crossroads aspects of Afghanistan have never been more vividly illustrated than at Shortugai.

Therefore, as matters stand now, Chart 1 illustrates the tentative stratigraphic and chronological position of Shortugai, and its relationships with contemporary cultures.

What follows is simply speculation, for which I am solely responsible. As several papers at the recent conference on “The Harappan Civilization: A Contemporary Perspective” pointed out, the dynamics of how the Indus Valley Civilization developed are still imprecisely understood. The origins are unknown, although two major early Neolithic regions have been identified: North Afghanistan (Dupree et al. 1972); southern Baluchistan (Jararlige 1976; Jararlige and Lechevalier 1977). Also discussed in several papers at Sri-nagar (see Appendix A) were several processes involved in contemporary inter-regional commercial dynamics.

The most important question to be considered now is: What is the significance of Shortugai? In my opinion, the mounds at Shortugai could not represent the only “colony” of the Harappan Civilization, or an isolated administrative-trading center. Naturally, it is too early to speculate about the functions of the possible “monumental architecture” (architecture monumentale) discovered in the Shortugai IV Period of Mound A.

To examine the possible function of the site, we must look at evidence elsewhere. I do not propose to go into details in this sketchy outline, but it appears to me that (in agreement with the excavators) Shortugai may ultimately prove to be a manufacturing and commercial center, one of the many links which connected the luxury trade route which thrived in the 3rd-2nd millennia B.C., stretching from the eastern end of the Mediterranean to Central Asia (and China? ?).

Shortugai, although currently an isolated site with Harappan affinities, sits in a good ecological-geographical zone between Badakhshan (and the lapis lazuli mines) and the Turkestan Plains. The discovery of other sites in the future may help clarify the picture, just as a recent unpublished survey in the Ab-i-Istada (Ghazni Province, Afghanistan) yielded pottery which may possibly link with Indus Valley by way of Gumla (Figs. 15-20).

One commercial route, then, may have run from the Indus Valley through Gumla to Ab-i-Istada and on to the Mundigak-Said Qala-Deh Murasi Ghundai area (Kandahar, Afghanistan), and then to Shahr-i-Sokhta and Tapa Yahya. However, as yet, we have no conclusive evidence of the links which connected Baluchistan with Turkestan. Possibly, one route to the south out of Shortugai may have followed the path currently used to bring livestock for sale from Badakhshan to Kabul: Anjuman Pass through the Panjsher Valley, and via the Kabul River to the Indus Valley. The Kabul River flows into the Indus at Attock.

Of course, the above is just speculation, but we do have further evidence of extensive trade through north Afghanistan between Central Asia and Mesopotamia. It is well known that lapis lazuli from Badakhshan travelled to Mesopotamia, Egypt and the Indus Valley, during two climax periods: From the middle to the end of the 3rd millennium B.C.; and about 1350 B.C. (Herrmann 1968).

In 1966, the accidental discovery of a gold and silver hoard of excellently produced vessels dramatically emphasized the importance of northern Afghanistan on the Lapis Trade Route (Dupree et al. 1971; Tosi and Wardak 1972). The site of Tepe Fuloll (or Khosh Tapa) sits within 50 kilometers of the lapis mines and Shortugai. The hoard consisted of five gold and 12 silver vessels, almost all fragmentary, for the farmers, who had chanced onto the cache as they excavated the rich
mound soil to use as natural fertilizer, cut up the vessels to share the loot. Quick work on the part of the Afghan government saved much of the hoard, but several vessels disappeared on their way to Kabul and reappeared in the Kabul bazaar. Apparently, Figs. 21-22 represent such a specimen; it was photographed in a Kabul antique shop by Rolando Schinasii.

Many diagnostic motifs of major contemporary cultural areas are represented in the Tapa Fullol hoard (possibly, all date about the end of the 3rd millennium B.C. — or even a little earlier). The hoard has been discussed elsewhere (Dupree et al.; Tosi and Wardak 1972), but a few illustrations are appropriate to this chapter, to indicate the richness of the Bronze Age commercial activities.

Fig. 23 is a small, yellow gold bowl with a rounded base. The bearded bull (a Mesopotamian motif) is carefully engraved, and the entire design is slightly embossed.

Fig. 24 shows a pale gold goblet with engraved undulating snake motifs. Such motifs often occur on steatite vessels from the 3rd-2nd millennia B.C. in the Indus Valley, Iran, Mesopotamia, Syria and elsewhere (Durrani 1964). The eight pointed star and vulture motifs are unique in the hoard.

Fig. 25, a large yellow gold bowl, has two boars separated by a stylized tree of life. The designs are very similar to those of northern Iran.

Fig. 26 is a small silver bowl, decorated with three boars, all facing to the right. Iranian steatite examples with similar engraved bodies are well known.

Fig. 27, a large silver bowl, has a frieze of two sets of three bulls each, separated by a palm plant (tree of life?). The motifs appear to be a mixture of Indian and Mesopotamian motifs.

Fig. 28, a small silver bowl, exhibits a hybridization of styles, Indian and Iranian. The eight-armed "octopus" (a stylized star?) is engraved on the interior of the vessel.\textsuperscript{12}

More sites like Tapa Fullol must exist in the Baghlan area of Afghanistan, particularly in the Nahrin region, an area literally covered with mounds, most of which are, however, heavily capped with Kushano-Sasanian and Early Islamic occupation.

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When and if the French are permitted to return to the fantastic sites of Ai Khanoum and Shortugai, more startling discoveries will probably be made. Just possibly, linkages will be found between the end of the late Biskent Culture (ca. 9-8th centuries B.C.; my estimates, positive dates are still elusive), the Steppe Bronze Age, and the later periods which climaxd with the great Achaemenid Empire.

What is needed is a proto-historic equivalent of Begram (ca. 1st-3rd centuries A.D.), which yielded specimens of almost all the known luxury goods of the great Silk Route trade which extended from the Classical European world to China, from the Baltic through India.

Until that happy moment, however, we must rest at content which the knowledge that the French excavators at Shortugai have, in the words of Dales, introduced "profound implications for any understanding of the scope of Harappan activities outside the geographical boundaries of the ‘Greater Indus Valley'" (Dales 1976:78).\textsuperscript{13}

\section*{FOOTNOTES}

1. Sarianidi's work at Tillye Tepe (1972) near Shibarghan, Jozjan Province (northern Afghanistan) has caused me to revise the dating of the sequence at Shamshir Ghar, excavated in 1950. The lower three levels are Bronze Age. Sarianidi suggests (and I concur) that what I called Early Kushan (ca. 100 B.C. to 100 A.D.), Late Kushan (ca 100 A.D. to 300 A.D.), and Kushano Sasanian (ca. 300-700 A.D.) should relate to the lower levels at Tillye Tepe (ca. 1300-1000 B.C. and 1000-600 B.C.).

2. Sadly for archaeology, the DAFA contract for excavations with the Afghan government was prematurely terminated by the Democratic Government of Afghanistan in late 1978. However, Henri-Paul Francfort was able to mount a short season in 1979 (20 April–12 June).

3. The first reports indicated seven mounds in the overall area (Dales 1976:78). Francfort and Pottier describe Shortugai proper as a single mound complex with six small submounds (Francfort and Pottier 1978:30).

4. For discussion on loess, see I. Dupree 1973:3-31.

5. Relatively nearby natural resources include: lapis lazuli
from Badakhshan; gold from the rivers of Badakhshan; silver from the Panjshir Valley; copper from Tashkurgan. In addition, Afghan mining engineers operating the Aïnak copper mines in the Logar Valley (south of Kabul) have personally informed me that old pick marks have been discovered in the old workings. The engineers also report finding bronze and flint pick fragments and pottery, but I have not had the opportunity of examining these objects, nor am I implying that they necessarily are contemporaneous with Shortugai, but simply mentioning their reported existence.

6. I wish to thank Henri-Paul Francfort for a photocopy of his preliminary observations on the second season. It was written eight days after the termination of the excavations.

7. For good general discussions in English of most sites mentioned in this chapter, see Masson and Sarianidi (1972), Fairservis (1975), Gupta (1979, II) and Jacobson (1979).

8. I have personally examined all these objects.

9. Held in Srinagar (Kashmir), 22-24 June 1979. For a list of most of the papers to be published, see Appendix A.


12. All the Tapa Fuloll specimens were in the Kabul Museum until April 1979, when all objects in the Kabul Museum were removed and stored in a compound in the center of Kabul. The fate of the priceless Kabul Museum collection is unknown to me as of this writing. The collections had been moved on the orders of the Ministry of Defence of the Democratic Government of Afghanistan, for the regime was preparing the entire Darul Aman area as a military zone of defence. On 22 December 1979, 2 days before the Russian invasion, the People’s House in the Arg in central Kabul was renamed the People’s Museum, but hopefully no hurried measures were taken to move in.

13. I wish to thank the following members of DAFA for reading and commenting on these notes: Paul Bernard, Henri-Paul Francfort and G. Wilcox. Errors in fact and interpretations are my responsibility alone.

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APPENDIX A

PAPERS PRESENTED AT THE CONFERENCE: 
THE HARAPPAN CIVILIZATION,
A CONTEMPORARY PERSPECTIVE
(Srinagar: 22-24 June 1979)

Vishnu-Mitra: Harappan Civilization and the need for new approaches.

C.C. Lamberg-Karlovsky: Sumer, Elam and the Indus, Three urban processes equal one structure?

Jim G. Shaffer: The Harappan Civilization, some thoughts on structure.

K.V.S. Rajan: Motives for Early Indian Urbanization, A scrutiny.

J.F. Jarriage: Excavations at Mehrgarh (Baluchistan), Their significance for understanding the background of the Harappan Civilization.


A.K. Sharma: The Kalibangan cemetery.


Shashi Asthana: Harappan trade in metals and minerals, A regional approach.

D. Chakrabarti: The long ‘barrel cylinder’ carnelian beads and the issue of pre-Sargonic contact between India and Mesopotamia.


B.P. Sinha: Harappan fall-out (?) in the mid-Gangetic Valley.


Y.D. Sharma: The Harappan complex on the Sutlej (India).

B. Allchin: Substitute stones.

Shareen Ratnagar: A possible interpretation of the location of the city of Harappa.

Marcia Fentress: From Jhelum to Yamuna, City and settlement in the 2nd and 3rd millennia B.C.

A. Ghosh: The deurbanization of the Harappan Civilization.

S.P. Gupta: The Late Harappan, A study in cultural dynamics.

F.R. Allchin: The cultural legacy of the Harappan Civilization.

B.B. Lal: When West was West and East was East but when and how did the twins meet, The role of Baghwanpura as a bridge between certain stages of the Indus Civilization.


K.N. Dikshit: Hulas and the Late Harappan complex in Western Uttar Pradesh.

Y.M. Chitalkalla: Harappan settlements in the Kutch Saurashtra Region, Distribution patterns and routes of communications.

S.A. Salii: The Harappans at Diamabad.

M.K. Dhavalikar: The Diamabad bronzes.

Robert Sharer: Mayan and South Asian prehistory, The eclipse of ancient urban civilizations.

B.M. Pande: History of research on the Harappan culture.

G.L. Possehl: Discovering India’s earliest cities, The first phase of research.

K. Deva: The contribution of Aurel Stein and N.G. Majumdar to research into Harappan Civilization with special reference to their methodology.

Robert Dyson: Tepe Hissar, Available radiocarbon dates.

R.N. Mehta: Some rural settlements on Indus Culture in Gujarat.

M.N. Deshpande: The character of Harappan urbanism.

1. The Conference was organized by Prof. Gregory L. Possehl, and sponsored by the American Institute of Indian Studies.


Trousdale, W., personal communication.

FOOTNOTES TO CHART I


2. Tentative correlations:

   Shortugai I = Namazga V = Dashli (Early Phase) = Mature Harappan

   Shortugai II = Namazga VI = Dashli-Sapalli (Sapallian)
                 = Post Harappan (Jhukar, etc.)

   Shortugai III = Namazga VI = Dashli-Sapalli
                 (Dehakutanian phase) = Post Harappan

   Shortugai IV = Biskent = Dashli-Sapalli (Mullolian)

   The total time span from Period I through IV possibly ranges from 2200-1600 B.C., or 1600-1200 B.C., depending on whether or not one subscribes to the early or late Harappan chronology.

3. For a detailed discussion of pottery types, see Francfort and Pottier 1978:41-54.
<table>
<thead>
<tr>
<th>Beads</th>
<th>Seals</th>
<th>Bronze</th>
<th>Ceramic</th>
<th>Worked</th>
<th>Burials</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gypsum seal with engraved</td>
<td>Terracotta</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>stylized ibex;</td>
<td>chariot model fragments</td>
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<tr>
<td>1) Agate, brownish-red;</td>
<td>2) Faience; spherical;</td>
<td>1) Laurel leaf projectile point (LLPP); translucent brown flint; length 4 cm.</td>
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<tr>
<td>oblong; carefully</td>
<td>diam. 1.3 cm.; hole 1 mm. in</td>
<td>2) LLPP, brownish-red flint; finely retouched; length 4.8 cm.</td>
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<tr>
<td>polished (Fig. 29g)</td>
<td>diameter.</td>
<td>3) Point (?); spindle shaped; brown; highly polished.</td>
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<td></td>
<td>(Fig. 29b)</td>
<td></td>
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</tr>
<tr>
<td>1) Lapis fragment;</td>
<td>1) Bronze pin; 8.5 cm. long;</td>
<td>2 hand-made ovoid spindle whorls.</td>
<td>1) Scraper (?); worked flake of green pebble; length 10 cm.; thickness .5 to 1.5 cm.</td>
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<tr>
<td>2 faces polished; 0.75 cm. thick.</td>
<td>3 markhor (?) heads. (Fig. 30)</td>
<td></td>
<td>2) Biskent scraper; polished, worked flake of green pebble; length 12.5 cm; thickness 5.5 to 1.2 cm.</td>
<td></td>
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</tr>
<tr>
<td>2) Faience; spherical; 1.1 cm. diameter; hole 1 mm. diameter (Fig. 29d)</td>
<td>2) Bronze pin; 18.5 cm. long; square cross section (.5 cm) at head; circular at point.</td>
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<tr>
<td></td>
<td>3) Bronze point in bone handle.</td>
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<tr>
<td>Shortugai Periods</td>
<td>MOUND A (Artisans Area)</td>
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<tr>
<td></td>
<td>Beads</td>
<td>Seals</td>
<td>Bronze</td>
<td>Gold</td>
<td>Ceramic Objects</td>
</tr>
<tr>
<td>I 1) Turquoise,</td>
<td>Harappan</td>
<td>Knife (?)</td>
<td>Gold leaf</td>
<td>Harappan pottery</td>
<td>Pottery</td>
</tr>
<tr>
<td>bluish-green;</td>
<td>seal with</td>
<td>blade</td>
<td>fragment</td>
<td>pottery</td>
<td>Pottery</td>
</tr>
<tr>
<td>oblong</td>
<td>rhino-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Fig. 29b)</td>
<td>cerosus</td>
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<tr>
<td>2) Carnelian;</td>
<td>motif</td>
<td>1 ingot</td>
<td>mould (?)</td>
<td></td>
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<tr>
<td>lenticular;</td>
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<td>0.8 x 0.6 x</td>
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<td>0.3 cm.</td>
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<tr>
<td>3) Faience, dull</td>
<td>Faience</td>
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<tr>
<td>reddish-brown;</td>
<td>yellow</td>
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<tr>
<td>cylindrical;</td>
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<td>length 1.4 cm.,</td>
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<tr>
<td>diam. 0.4 cm.</td>
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<td>(Fig. 29e)</td>
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<tr>
<td>4) Faience, white;</td>
<td>Faience</td>
<td>same dimensions</td>
<td>as 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cylindrical;</td>
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<tr>
<td>5) Four cylindrical</td>
<td>Faience</td>
<td>white;</td>
<td>length 0.5 - 0.6 cm.,</td>
<td></td>
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</tr>
<tr>
<td>Faience beads;</td>
<td></td>
<td>length</td>
<td>diam. 0.3 cm.</td>
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<tr>
<td>6) Lapis; cylindrical;</td>
<td></td>
<td>length 0.4 cm.,</td>
<td></td>
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<tr>
<td>length 0.4 cm.,</td>
<td></td>
<td>diam. 0.06 cm.</td>
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<td>(Fig. 29b)</td>
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<tr>
<td>II</td>
<td>Carnelian; round;</td>
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<td>(Fig. 29b)</td>
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<tr>
<td></td>
<td>exterior diam. 3 mm.</td>
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<tr>
<td>III</td>
<td>LLPP; green stone (?);</td>
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<tr>
<td></td>
<td>length 4 cm.</td>
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<tr>
<td>IV</td>
<td>Human Burial with pottery hoard (Figs. 1-2)</td>
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</tbody>
</table>
Map 1: Central Asia, showing passes through Hindu Kush. (From Lyonnet 1977, Fig. 11).

Map 2: Shortugai site localities. (From Lyonnet 1977, Fig. 2).
Fig. 9 (From Lyonnet 1977, Fig. 5). Harappan sherds found on the surface at Burial Shouriagat, Mound A sondage (1946).
Fig. 2. Four pottery vessels from burial (Fig. 1). (From Francfort and Pottier 1978, Fig. 32).

Fig. 3. Painted Harappan sherds from Shortugai, Mound A sondage (1976). (From Francfort and Pottier 1978, Fig. 31).
Fig. 6. Harappan script graffito on rim sherd, Shortugai, Mound A sondage (1976). (From Francfort and Pottier 1978, Fig. 19).

Fig. 7. Harappan script graffito on rim sherd, Shortugai, Mound A sondage (1976). (From Francfort and Pottier 1978, Fig. 20).

Fig. 8. Incised graffito on rim sherd. Shortugai, Mound A sondage (1976). (From Francfort and Pottier 1978, Fig. 21).
Fig. 9. Pedestalled cup or "fruit stand", with interior, radiating, incised decorations, Shortugal, Mound A sondage (1976). (From Francfort and Pottier 1978, Fig. 24).

Fig. 10. Same as Fig. 9. Outside view of bottom, broken pedestal. (From Francfort and Pottier 1978, Fig. 24).
Fig. 13. Perforated sherds, Shortugai, Mound A sondage (1976). (From Francfort and Pottier 1978, Fig. 30: a–c).

Fig. 14. Seal with incised, stylized ibex, diameter 5 cm, Shortugai II, Mound B sondage (1976). (From Francfort and Pottier 1978, Figs. 14–15).

Fig. 15. Perforated sherds and ceramic spindle whorl (?). Ab-i-Istada, Afghanistan (1974).
Fig. 16. "Rouletted" incised sherds. Ab-i-Istada, Afghanistan (1974).

Fig. 17. Animal figurine fragment. Ab-i-Istada, Afghanistan (1974).

Fig. 18. Painted rim, black-on-red, inside design. Ab-i-Istada, Afghanistan (1974).
Fig. 19. Seal impression on sherd. Ab-i-Istada, Afghanistan (1974).

Fig. 20. Seal impression on sherd. Ab-i-Istada, Afghanistan (1974).
Fig. 23. Gold bowl with bearded bull design (diam. 8 cm.; height 5.5 cm.), Tapa Fullol, Afghanistan (also called Khosh Tapa). (From Dupree et al 1971, Vessel 2).

Fig. 24. Gold goblet fragments (height of middle fragment in left photo is 8 cm.), Tapa Fullol, Afghanistan. (From Dupree et al 1971, Vessel 2).
Fig. 26. Silver bowl decorated with three incised boars (diam. 10 cm., height about 7 cm.). Tapa Fullol, Afghanistan. (From Dupree et al 1971, Vessel 9).

Fig. 25. Gold goblet with two boars separated by tree of life design (height 11.5 cm.). Tapa Fullol, Afghanistan. (From Dupree et al 1971, Vessel 5).
Fig. 27. Silver bowl decorated with a frieze of bulls, separated by a palm tree (tree of life?) (Diam. ca. 10 cm. height 6 cm), Tapia Fullo, Afghanistan. (From Dupree et al. 1971, Vessel 7)
Fig. 29. Beads, Shortugai, Mounds A and B sondages (1976). (From Francfort and Pottier 1978, Fig. 18). See Chart I.

Fig. 30. Bronze pin, Shortugai III, Mound B sondage (1976). 8.5 cm. long. (From Francfort and Pottier 1978, Fig. 16).
Fig. 28. Silver bowl with confronting bulls, and "octopus" design incised in interior (diam. ca. 9 cm.; height 7 cm.). Tapa Fullol, Afghanistan. (From Dupree et al 1971, Vessel 8).