The Archaeology of Gomal Valley, North West Frontier Province, Pakistan: New Hypotheses about the Earliest South Asian Civilization in the Light of Recent Discoveries

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Abstract

The archaeological and historical significance of the Gomal Valley of the North West Frontier Province, Pakistan, is largely determined by its location within the eastern fringe of the Indo-Iranian borderlands. Lying between the right bank of the Indus River in the east, the mountain range of Mihtar Sulaimanis in the west, the Marwat and Bithani Hills in the north, and the plains of the Dera Ghazi Khan region in the south, the Gomal Valley has, for many centuries, been an important passage way between Central Asian, Iranian, and South Asian worlds. Recent explorations and excavations conducted by the Department of Archaeology of the University of Peshawar and the Directorate of Archaeology and Museums of the North West Frontier Province east of Chaudwan and southwest of Dera Ismail Khan have given a new impetus to the archaeology of the Gomal Plain. The team of Pakistani archaeologists discovered, recorded and surveyed a significant number of archaeological sites dating from the Neolithic to the Hindu Shahi Period. Several of these sites are particularly interesting as their excavation is likely to shed new light on some of the key questions of South Asian protohistory such as: the origins and spread of agriculture in the South Asian subcontinent; the nature and genesis of the Harappan/Indus civilization; and the relation between Central Asian, Iranian and South Asian worlds in the Bronze Age. This paper discusses the significance of recent discoveries in the Gomal Valley in the context of the origin of South Asian civilization.

Introduction

Archaeological explorations in the Gomal Valley began at the end of the 19th century with the travels of one of the first great explorers of ancient South Asia, Sir Alexander Cunningham (1882). On his visits to the Gomal Valley, Cunningham recorded several sites of the Hindu Shahi period near the city of Dera Ismail Khan. Following Cunningham, another great archaeologist-explorer, Sir Aurel Stein (1929) visited the Gomal Valley in 1927. On his tour of the western fringes of the valley, Stein recorded nine sites, all dating to the early historical period. Stein's records remained the main source on the antiquities of the Gomal Valley until 1967, when Ahmad Hasan Dani, the then chair of the Department of Archaeology at the University of Peshawar, launched a series of new surveys and excavations. Dani's project at Gumla was particularly informative (1970-71), as it disclosed a continuous sequence of human occupation from the Neolithic Period to the Iron Age. In the 1970s and 1980s, Farzand Ali Durrani developed the work of Dani by undertaking the excavation of Rehman Dheri, a site that elucidated previously unknown aspects of the Chalcolithic and Bronze Age cultures of the Gomal Plain (see Durrani 1982; 1988; Durrani, Ali and Erdosy 1991; 1994; 1995). Until a few years ago, the results of these two important projects formed the basis of our knowledge of the protohistory of the Gomal Valley.

The Gomal Valley and the Harappan/Indus Civilization

The excavation of Rehman Dheri conducted under the directorship of Durrani demonstrated the significance of the archaeology of the Gomal Valley for the study of the Harappan/Indus Civilization. Recent discoveries by Peshawar University confirm the presence of the Harappan material culture in the Gomal Valley yet challenge some of the previous interpretations.

It is often forgotten that there is no evidence for distinctive Harappan occupation at Rehman Dheri. Although earlier periods at Rehman Dheri reveal material culture that was initially described as belonging to the Early Harappan cultural continuum, Period III is characterized by a mix of cultural traditions - e.g., the later Kot Dijian, Central Asian, and local - yet lacks a definitive Harappan component (see Durrani 1988; Durrani, Ali and Erdosy 1991; 1994). The question then arises as to what degree it is legitimate to view the earlier periods at Rehman Dheri as pre-Harappan in a culture-historical sense. The situation is further complicated by the fact that the Gomal Valley has several Harappan sites that are contemporaneous with Period III at Rehman Dheri and several Kot Dijian sites that seem to lack distinctive Harappan occupations.

The initial survey of Gomal Valley conducted by Dani mentions five Bronze Age settlements: Rehman Dheri, Hathala, Khad Amani, Hisam Dheri and Lal Mahra Graveyard. Fortified and possibly divided into sectors, Rehman Dheri occupies an area of at least 600 by 450m. The periodization, complexity and sociocultural order of this remarkable site have been described in detail by Durrani and his students (see Durrani 1982; 1988; Durrani, Ali and Erdosy 1991; 1994; 1995). Hathala is a much smaller site yet significant for a Kot-Dijian settlement. Located one km southwest of Hathala Village, off the Kulachi-Hathala road, it occupies an area of 175 by 100m and its cultural deposit reaches at least 5 m in height. The surface collection at Hathala is characterized by Kot-Dijian pottery, bangles, stone tools and one grinding stone. Noticeably damaged by illegal digging and modern graves, Hathala is no longer suitable for further excavation. Khad Amani (or Karam Shah) is another Kot Dijian settlement. Discovered by Dani eight km north of Kulachi off the Kulachi-Hathala road, it occupies an area of 220 x 130m and its cultural deposit is over 4 m high. The surface collection at Khad Amani is characterized by Quetta Wet Ware, terracotta figurines, bangles and stone tools. Like Hathala, Khad Amani is badly damaged by agricultural activities and modern graves. Hisam Dheri is a Harappan site located 600m to the northeast of Rehman Dheri. Occupying an area of c. 15 x 15 m, it does not exceed 1.5m in height. Although it has never been excavated, Hisam Dheri has been completely destroyed by field owners for agricultural purposes. Lal Mahra Dheri is a much larger site with Harappan material, yet is poorly investigated. Located one km south of the Lal Mahra Tombs near Paroa village, it occupies an area of 200 x 300m and the thickness of its cultural deposit does not exceed 3 m. Today, significant portions of Lal Mahra Dheri are covered by modern houses and Islamic graves (both modern and old) and the excavation of its Harappan levels is not feasible.

In this context, the discovery of new Kot Dijian and Harappan sites in the Gomal Valley is clearly very important, and may, in fact, mark a breakthrough in the Bronze Age archaeology of this region. Five of the newly discovered sites, namely Gandi Umar Khan, Maru I, Maru II, Jhandi Babar II, and Mahra Dheri deserve particular attention. Gandi Umar Khan is the largest and best preserved of the newly discovered Harappan sites (see Figure 1). Lying two km west of the village of the same

name, it consists of two mounds separated by a narrow strip of land and covering an area of c. 240 x 200m. Except for several gullies created by rainwater, Gandi Umar Khan is intact and provides great potential for archaeological excavation. The surface collection at Gandi Umar Khan is characterized by a mix of Kot Dijian and Harappan pottery, terracotta bangles, terracotta cakes, lithics and burnt bricks. The preliminary excavation conducted at Gandi Umar Khan by the Directorate of the Archaeology and Museums of the North West Frontier Province revealed a cultural deposit of 13m from the top of the mound down to the virgin soil (see Ali and Rahim 2001). The excavators divided this profile into two periods: the Kot Dijian Period at the bottom and the Harappan Period at the top. The Kot-Dijian cultural profile (layers 20-13) is more than 6 m thick and, as the preliminary excavations show, lays directly on the virgin soil. Grooved ware, thin rimless bowls, Quetta Wet Ware, flanged rim jars, terracotta figurines and stone tools are the most characteristic material of this period. The main artefacts recovered from this period are ceramics, and figurines and stone tools are fewer in number when compared to the subsequent period. The exposed mud brick walls and structural features are reminiscent of those of Rehman Dheri.

The Harappan profile (layers 11-1) is likewise c. 6 m thick and is separated from the Kot-Dijian deposits by an ashy sterile layer. The Harappan period is possibly sub-divided by a break in occupation as well, yet the nature and scale of this break is to be determined. The main artefacts from the Harappan period contexts include black-on-red pottery (see Figures 2-3), perforated vessels (see Figure 4), terracotta bangles, figurines, steatite stone seals (see Figures 5-6), precious and semi precious stone and paste beads, toy cart frames, and terracotta cakes. Terracotta cakes are present throughout the entire Harappan period with a particular increase in ratio during the later levels. Painted pottery, figurines and small finds are found in lesser numbers than in Harappa and Mohenjo-Daro. This is likely to be indicative of a regional influence on the Harappan phenomenon. The exposed houses and platforms are constructed from standardized mud bricks. The excavated rooms are both square and rectangular in plan.

Maru I is a Kot Dijian site, located one km southwest of Maru village and occupying an area of 300 by 200m (see Figure 7). The height of its cultural deposit is 7m and the site is divided into two areas, northern and southern, of which the latter is higher and larger than the former. The surface of Maru I is covered with Kot Dijian pottery, fragments of terracotta figurines, and red and gray terracotta bangles. Maru I is intact and thus a good site for excavation. Maru II is a Harappan site, located one km west of Maru I and occupying an area of c. 150 by 150m (see Figure 8). Reaching 6 m in height, it consists of three distinct mounds, which aside from several gullies and a small section covered by recent graves are intact and would make excavations feasible. The surface collection at Maru II is characterized by Harappan painted pottery, terracotta cakes, and burnt bricks. Remarkably, the proximity of Maru I and Maru II provides great potential for investigating the chronological and cultural relations between Kot Dijian and Mature Harappan cultures in the Gomal Valley.

Jhandi Babar II is a Kot Dijian site, located two km northwest of Jhandi Babar village and occupying an area of 200 by 250m (see figures 9-10). The height of its cultural deposit is at least 6 m and its surface collection is characterized by Kot Dijian pottery, Quetta Wet Ware, terracotta bangles and stone tools. Jhandi Babar II is located within the sight of Jhandi Babar I, a magnificent Neolithic site, the significance of which has been pointed out elsewhere (see Rehman 1987; Khan, Knox and Thomas 2000).

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Last but not least, Mahra Dheri is a Harappan site, located 1.5km north of Lal Mahra Sharif tombs near the village of Paroa, or 2.5 km north of Lal Mahra Dheri Graveyard, the aforementioned Harappan site discovered by Dani. Occupying an area of 100 by 60m and reaching only 2 m in height, Mahra Dheri is significantly smaller than Gandi Umar Khan and Maru II. Like other sites in the region, Mahra Dheri has been destroyed by the agricultural activities of field owners, and has little potential for excavations.

Therefore, of the newly recorded Bronze Age sites, Gandi Umar Khan, Maru I, Maru II and Jhandi Babar II provide the best potential for research oriented excavation. What is particularly important is that the co-existence of these Harappan and Kot Dijian sites along with Rehman Dheri posits a number of intriguing questions about the genesis of the Harappan/Indus civilization and the expansion of the Harappan phenomenon.

The Genesis of the Harappan/Indus Civilization

The genesis of the Harappan/Indus civilization is one of the most debated issues of South Asian archaeology. The previous work in the Gomal Valley - in particular, the excavations of Gumla and Rehman Dheri - contributed to the study of this issue by demonstrating the depth and continuity of cultural traditions in western South Asia. It should, however, be kept in mind that the excavation of Rehman Dheri was conducted at the time when Rafique Mughal (1970) formulated the idea of the 'Early Harappan'. Based on similarities in pottery, architecture, terracotta objects, metallurgy, lithics, bone tools, graffiti, and faunal remains, Mughal (1970:361) defined the Early Harappan as 'one cultural continuum stretching over a very large area (the Greater Indus Valley), with the time range of approximately 2800-2400 B.C.' and, by doing so, offered a new conceptual framework for investigating the genesis of the Harappan/Indus civilization. Given the novelty and holistic nature of Mughal's theoretical framework, which has played a definitive role in South Asian archaeology for the last three decades, it is not surprising that many of the initial interpretations of material from Rehman Dheri were carried out in the context of the genesis of the Harappan/Indus civilization. This meant that the earlier periods at the site were defined as proto-urban, proto-literate and proto-Harappan.

In the context of the newly acquired data, it is now becoming clear that relations between the Harappan and Kot Dijian cultural phenomena are not as straightforward as initially thought. If Period III at Rehman Dheri is defined as a later development of the Kot Diji phenomenon in conjunction with a diverse range of local and foreign cultural traditions - and in our view, this is precisely how Period III should be defined - the role played by the Kot Dijian traditions in the formation of the Harappan phenomenon must be reconsidered. Instead of leading to the formation of the Harappan/Indus civilization, the Kot Dijian traditions may have transformed into a set of unique and complex cultural phenomena that were contemporaneous with, yet culturally distinct from, the Mature Harappan style. In the Gomal Valley, late Kot Dijians seem to have lived side by side with the Harappans arriving from the east. Moreover, judging from the scale of complexity of Rehman Dheri during Period III, the sociocultural organization of the late Kot-Dijians was at least as complex as the sociocultural organization of the newly arriving Harappans. A further study of Period III at Rehman Dheri and, in particular, of the relationship between Rehman Dheri of Period III, Gandi Umar Khan and Maru II of the Mature Harappan Period may shed new light on the dynamics of cultural interaction within the Gomal Valley during the later part of the third millennium BCE.

The Expansion of the Harappan/Indus Civilization

It has been repeatedly argued that ancient civilizations - e.g. Predynastic Egypt, Uruk and Teotihuacan - experienced similar patterns of colonial expansion. The earliest civilization of South Asia was not an exception to this model, as the discovery of Sutkagen-Dor, Surkotada, Sutka-koh, Shortugai and other Harappan sites located outside the core areas of the Harappan/Indus culture provided ample evidence of the Harappan colonization. The sites recently discovered in the Gomal Valley present yet additional potential for investigating the dynamics of this important process. The chronological correlations and cultural links between the new Harappan and Kot Dijian sites may even elucidate the dynamics and stimuli of the Harappan westward expansion.

When the Harappans arrived in the Gomal Valley, they must have found several large and prosperous settlements, some of which were as complex as their own. Rehman Dheri of Period II, Maru I, Jhandi Babar II and Gandi Umar Khan of Period I provide a unique opportunity for investigating these local developments which were autochthonous enough to withstand Harappan arrival. As indicated by the proximity yet cultural distinctiveness of Hisam Dheri from Rehman Dheri, the Harappans must have directly interacted with the bearers of local traditions. With the discovery of new sites, the nature of this interaction can be properly investigated.

As far as the dynamics, directionality, and causation are concerned, there is no up-to-date and thorough analysis of the Harappan expansionism. Following the Mesopotamian pattern, Algaze (1993:314) has distinguished three types of outposts that can be applied to the Harappan model: 1. 'Inland outposts at strategic locations near passes controlling trade routes in and out of the Indus valley'; 2. 'Inland outposts away from the Indus Valley situated near coveted commodities', and 3. 'Coastal outposts tapping into inland resources but also oriented toward maritime routes'. Shortughai, Sutkagen-dor and Sutka-koh meet the definitions of the second and third types. The first type is more difficult to define, as the geographical core of the Harappan/Indus civilization remains the point of controversy. Algaze has suggested that the first type is represented by the sites such as Dabar Kot and Periano Ghundai located in the mountains of Northern Baluchistan. Judging from the size, location, and the published results of fragmentary exploration, both of these sites are clearly very important, yet neither can be currently excavated. The newly recognised sites of Gandi Umar Khan and Maru II provide great potential for excavations, and as they are located at strategic positions within the eastern fringe of the Indo-Iranian borderlands and on the way to the Gomal Pass, they are very likely to represent the first type of outposts defined by Algaze.

Exploring the dynamics of Harappan expansionism nonetheless requires a better definition of the core areas of the Harappan/Indus civilization. The concept of the Early Harappan cultural horizon as defined by Mughal implies that the core of a relatively homogenous pre-Harappan archaeological entity/s encompassed immense geographical areas, while the transition from the Early to Mature Harappan occurred almost simultaneously across the entirety of this vast territory. This conception of the Harappan urbanization seems to us unlikely. As far as the definition of the core area is concerned, both the eastern fringe of the Kachi Plain and the southern part of the North West Frontier Province must have been the foci of Harappan expansion rather than of local cultural genesis. As far as the pace of urbanization is concerned, some urban centres could have evolved gradually over long periods of

time, following intricate cultural trajectories, while other urban centres could have experienced a rapid cultural change or, as is the case with Mohenjo-Daro, have been built as 'founder's settlements'.

The expansion of the Harappan cultural phenomenon thus is a poorly explored topic. Moreover, the aspects of material culture that characterize Harappan colonial outposts may indicate that the nature of the Harappan expansion followed different pattern in different areas. Consider the following: the material culture of Sutkagen-Dor lacks seals, figurines, beads and faience objects, i.e., several types of important artefacts typically found on the Mature Harappan sites. A similar situation is observed at Sotka-Koh, another Harappan site in the Makran. The excavator of Sutkagen-Dor, George Dales, did not provide an explanation for this intriguing phenomenon except for noting that this 'may reflect the difference in activities and function between these coastal sites and those more closely associated with central Indus Valley sites' (Dales and Lipo 1992:156).

Meanwhile, one of us has recently suggested that the lack of these artefacts and technologies may be indicative of the absence of the sociopolitical structures and mechanisms which these artefacts and technologies represent, and that the sociocultural order of the sites such as Sutkagen-Dor and Sotkah-Koh was likely to be homogeneous; it neither required rigid residential sectioning nor produced the usual products of the Harappan social order, such as writing, seals, and bead ornaments (Eltsov 2007: 142-144). The survey and fragmentary excavations of the newly discovered sites in the Gomal Valley nonetheless illustrate the opposite. Both Maru II and Gandi Umar Khan reveal the presence of seals, figurines, and beads, indicating that the Harappans were well established in the Gomal Valley and that the patterns of their expansionism in this region may have been different from those in the Makran.

The Gomal Valley and the Indo-Iranian Borderlands

The Gomal Plain is part of the Indo-Iranian borderlands, which, from a strictly geographical point of view, are marked by the Sulaiman-Kirthar hills that run parallel to the Indus River, from the Hindu Kush in the north to the Arabian Sea in the south. From the point of view of archaeology, linguistics, ethnography, and ancient history, the concept of the Indo-Iranian borderlands is nonetheless much broader and more difficult to define. Ethnographically, the borderlands have always been a mosaic of ethnic groups of Central Asian, Iranian and Indian origins. Historically, the borderlands have been the crossroads between the Indian, Iranian and Central Asian worlds as well as the gate to India from the West. In the view of historical linguistics, the borderlands are the place through which the alleged migration or infiltration of the Indo-Iranians and possibly proto-Dravidians took place. Finally, from the point of view of archaeology, the borderlands are a melting pot and meeting point of cultural traditions and influxes moving between South Asia, the Larger Near East, and the Eurasian Steppes. Given this diversity, the archaeologist Rita Wright (1984: 1) defined the borderlands as 'a territory that encompasses all of Pakistani Baluchistan, southern Afghanistan, Iranian Seistan, Kerman and the Bampur Valley'. The evidence that Wright provides for this definition is however limited to the distribution patterns of Faiz Muhammad Black-on-Gray Ware. Evidently, the concept of the Indo-Iranian Borderlands needs a more substantive archaeological and cultural definition.

In archaeological literature, the concept of the Indo-Iranian borderlands arose from the works of Stein (1929; 1931), Hargreaves (1929), Childe (1934; 1939), Piggot (1943; 1946; 1947; 1950), Ross (1946), Gordon (1947; 1955; 1960), Fairservis (1956; 1959; 1961a; 1961b; 1975), and De Cardi (1965;

1967; 1983). Stein drew attention to the archaeological significance of the region by conducting the first systematic surveys and excavations there, yet he did not envision the borderlands as a cultural entity. The first to allude to the idea of a continuum from the eastern fringes of the Iranian Plateau to western South Asia in the Bronze Age was Childe. In his famous book New Light on The Most Ancient East, Childe (1934: 278) suggested that beginning with the Jemdet Nasr phase or even earlier there was 'a cultural continuum, would 'help to clarify the conception of a cultural complex that broke up this continuum'.

Following these suggestions, Piggot (1943: 169) compared the sequences of Hissar, Zhob, Harappa, and Zhukar, and emphasized the importance of further archaeological investigations on both the eastern and western sides of the borderlands. Shortly after this, Gordon (1947; 1955) defined the first systemic periodization and the classification of pottery types distributed over the borderlands, and, by doing so, presented the first clear conceptual treatment of the archaeology of the Indo-Iranian borderlands as a cultural entity. Following this, Fairservis (1975) gave the first comprehensive and comparative overview of the material culture of both the eastern and western fringes of the borderlands, as part of his investigation into the origins of the earliest South Asian civilization.

A fresh impetus to the development of the concept of the borderlands was given in the 1960s -1980s, when several new excavation and survey projects were undertaken on the Iranian Plateau, in southern Central Asia, on the Kachi Plain, and in the countries of the Persian Gulf. As a result, Dales (1965), Lamberg-Karlovsky (1996), Tosi (1973; 1979; 1983), Wright (1984; 1985), and a few other researchers demonstrated a high degree of cultural and sociopolitical interconnectedness within the Larger Near East during the Bronze Age. Remote parts of the Iranian Plateau began to be seen as a network of related entities with various economic, cultural, and political ites rather than isolated archaeological cultures. The idea of interaction spheres became an alternative to the simplistic controversy between diffusionary and autochthonous models. As a result, today we are familiar with the archaeology of the regions that lie to the east, west, and southeast of the borderlands, but little is known about the key rease of the borderlands, i.e., the southern North West Frontier Province and Northern Baluchistan.

Lying in the south of the North West Frontier Province, the Gomal Valley thus provides an exceptional opportunity to expand our knowledge of the archaeology of the Indo-Iranian borderlands in the Chalcolithic and Bronze Ages. Until recently, only seven sites containing Chalcolithic and Bronze Age occupations were known in the Gomal Valley. Two of these sites - Gumla and Rehman Dheri were excavated, yet the data from these excavations was not incorporated into the archaeology of the Indo-Iranian borderlands. Recent surveys conducted by the University of Peshawar revealed another fourteen sites containing occupations of the Kot Dijian and Harappan Periods. Two of these sites -Maru II and Gandi Umar Khan - were excavated.

As these surveys and preliminary excavations show, beginning with the Neolithic Period, the Gomal Valley was a meeting point of several cultural traditions, which coexisted side by side without necessarily loosing their unique cultural and sociopolitical configurations. The second half of second millennium BCE is known as the time of the efflorescence and spread of the Harappan/Indus civlization in northwestern South Asia, and the Gomal Valley is no exception to this. The survey and preliminary excavations of the recently discovered sites of Gandi Umar Khan and Maru II show that the Harappans were well established in the Gomal Valley at the time when the sites of other cultural traditions continued to play an important role.

As we have noted above, it is more appropriate to view the cultural sequence of Rehman Dheri as belonging to the cultural sphere of the Indo-Iranian borderlands than the cultural sphere of the Harappan/Indus civilization. Large in scale and complex in sociopolitical organization, Rehman Dheri combined traditions from the Iranian Plateau, Central Asia, South Asia, and of the local origin. Rehman Dheri presented a unique and self-sufficient sociocultural phenomenon, which in scale of complexity was comparable to and possibly more significant than the Harappan sites in the Gomal Valley. Hisam Dheri, in this case, must have been a small Harappan colony settled at the walls of a large and culturally distinctive community. Of particular interest is the relationship between Maru I and Maru II, where Maru I reveals Kot Dijian occupations, while Maru II is a Harappan site. Importantly, the two sites are located within one kilometre of one another. The absolute chronology of Maru I and Maru II is still to be established, yet if the late Kot-Dijian occupations of Maru I are contemporaneous with the Harappan occupation of Maru II, these two sites would provide an excellent case-study for investigating the relationship between the Kot-Dijian and Harappan cultural horizons in western South Asia.

Conclusion

The importance of the Gomal Valley for South Asian archaeology has been understood for some time. More than thirty years ago, Professor Dani wrote that 'the whole of the Gomal plain is littered with sites', and the 'Early Harappan material associated with Kot Diji is dominant' (Dani 1970-71:167). Now it is becoming clear that the cultural mosaic of the Gomal Valley is even richer and more complex than thought before. Clearly, further scientific excavations are necessary for drawing any further conclusions, and all we can do at this point is to propose working hypotheses. Firstly, it seems likely that the Harappan and Kot-Dijian cultural phenomena were contemporaneous in the Gomal Valley. Secondly, the protohistoric cultural mosaic of the Gomal Valley seems to be better understood as part of the larger cross-cultural phenomenon of the Indo-Iranian borderlands, not just of South Asia per se. Thirdly, the Harappan expansion in the Gomal Valley must have been systematic and most likely different in essence from the expansion that took place in other regions.

If shown to be true, each of these hypotheses would lead to major revisions in the current models of the origins and nature of the earliest South Asian civilization. If the first suggestion is right, we would need to reconsider our understanding of the role that the Kot Diji cultural traditions had played in the formation of the Harappan style and consequently in the origin of the Harappan/Indus civilization. If the second suggestion is right, the cultural affiliations and history of Rehman Dheri need to be seriously re-evaluated. If the third suggestion is right, the study of the nature and trajectories of the Harappan expansion will be given a new and original stimulus. This being said, one hopes that the security situation in the Gomal Valley will allow further excavations in order to test these hypotheses.

In conclusion, we would like to add a few words on the Neolithic of the Gomal Valley. It is well known that the history of the transition to food-production and village life in South Asia is complicated and multilineal. There are several distinct areas where Neolithic cultures have been detected

and investigated, yet the origins, regional classifications, absolute chronologies, and periodizations of these cultures are vigorously debated (for recent summaries and points of view, see Agrawal and Kharakwal 2002: 157-224; Chakrabarti 1999: 117-150, 205-261, 326-328; Dhavalikar 2002; Ghosh 1989: I. 43-68; Korisettar et al 2002; Misra 1999; Possehl 1999: 394-553; Possehl and Rissman 1992; Shaffer 1992; Singh 1987; 2002; Thapar 1987).

Some scholars tend to view domestication in South Asia as an autochthonous process, which took place independently without any external impulses (Chakrabarti 1997: 240-241; 1999: 205-209, 326-329; Misra 1999). Others point to diffusion from the west (in the case of the northwestern Neolithic zone) and from the east (in the case of the northern and eastern Neolithic zones) (Agrawal and Kharakwal 2002: 157-224; Possehl 1999). The internal dynamics of the spread of Neolithic cultures are also debated, for as the story stands now, there is a significant chronological gap between the domestication of plants and animals in the northwestern region and the remaining parts of the South Asian Subcontinent. In Baluchistan, the earliest Neolithic communities are dated roughly to the seventh and sixth millennia BCE, while in the northern and eastern areas of South Asia, and Southern India, full-fledged agriculture does not appear until the third millennium BCE. Consequently, the nature and degree of interaction between the Harappan and non-Harappan South Asia remains one of the most interesting and poorly understood issues in South Asian protohistory.

Meanwhile, the newly discovered Neolithic sites of the Gomal valley provide great potential for the new insights into the spread of agriculture in the South Asian subcontinent. In particular, this is the case with the aforementioned site of Jhandi Babar I. Located within the sight of Jhandi Babar II and one km north of the village of the same name, this site measures at 600 x 400m and has 4m of cultural deposits. Further excavations at Jhandi Babar II would undoubtedly provide a great opportunity for shedding new light on the spread of Neolithic cultures in the South Asian subcontinent.

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Figure 1: Gandi Umar Khan



Figure 2: Painted sherd, Gandi Umar Khan



Figure 3: Dish of Stand (Fragment), Gandi Umar Khan



Figure 4: Perforated Jar, Gandi Umar Khan. Ihsan Ali and Peter Eltsov



Figure 5: Seal, Gandi Umar Khan



Figure 6: Seals, Gandi Umar Khan

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Figure 8: Maru 2



Figure 9: Jhandi Babar 2



Figure 10: Pottery Scatter, Jhandi Babar 2