### Archaeology on the North-West Frontier: the Bannu Project, Pakistan Ken Thomas

Since 1985 a team of British and Pakistani archaeologists have been carrying out surveys and excavations in the remote Bannu area close to the Afghanistan border. The Bannu Archaeological Project<sup>1</sup> is investigating ancient settlement, subsistence and cultural change in the area, and here a member of the team describes discoveries that relate to the Late Neolithic, Chalcolithic and Bronze Age periods.

he North-West Frontier fires the imagination with images of barren hills with jagged profiles, cut by Kipling's "narrow defiles" and larger passes (including the clichéd Khyber) and guarded by fiercely independent Pathan tribesmen. In the days of the British Raj, the Frontier was perceived as a real, if rather diffuse, border zone that needed to be defended from potential invaders (players in Kipling's "Great Game") and pacified to prevent rebellion by local Pathan tribes, whose tribal, territorial and kinship affiliations recognized no border between Afghanistan and British India. Despite this military perception of, and preoccupation with, the Frontier as a barrier, in reality it was always open to regular movements of nomadic peoples between Afghanistan and the plains of the Indus Valley. Such movements of pastoralists, traders or seekers of employment were often seasonal, into the Indus Valley and beyond in the autumn and early winter, to avoid the harsh winters in adjacent Afghanistan, and into the hills and back to Afghanistan in the late spring, to avoid the searing summers on the plains.

Compared with the Indus Valley - home of the well known Harappan civilization, which reached its apogee between about 2500 and 2000 BC - relatively little archaeological research has been undertaken in the North-West Frontier region. But its strategic position, astride ancient routes between South and Central Asia, imbues its past with great significance. The Bannu Division of Pakistan's North-West Frontier Province (Fig. 1), together with the adjacent tribal areas of Waziristan farther west, straddles important routes of migration, invasion and trade between the Indus Valley and Afghanistan (Fig. 2) that were used in the historic and prehistoric past.<sup>2</sup> The field surveys and excavations undertaken by the Bannu Archaeological Project have revealed interesting new social-cultural units of the later prehistoric and early historic periods, and as our work has developed so the results of earlier seasons have led to the formulation of more clearly focused research questions. Our discovery in 1985 of a late Neolithic or Chalcolithic site with a cultural assemblage previously

unknown in South Asia raised questions about the external contacts of the Bannu area in this period: did isolated local cultures evolve along their own lines or in response to external influences? After we had developed a radiocarbon-dated chronology for the three quite distinct later prehistoric cultures in the area, the relative chronology of which we already knew from stratigraphic data, it became clear that there was virtual chronological overlap between the successive cultures. Was this apparently rapid cultural turnover



**Figure 1** Pakistan, showing the location of Bannu Division.

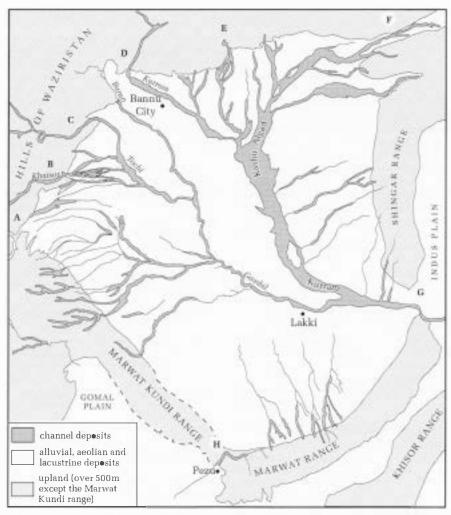


Figure 2 The Bannu basin showing topographical features and major routes of entry and exit (A–H).

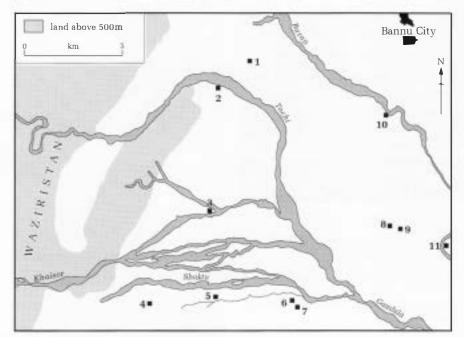


Figure 3 The northwestern Bannu basin, southwest of Bannu City, showing the distribution of late prehistoric sites and the early historic site of Akra. (1) Islam Chowki, (2) Tarakai Qila, (3) Girdai, (4) Tarakai Ghundai, (5) Sheri Khan Tarakai, (6) Barrai Khuarra I, (7) Lak Largai, (8) Lewan, (9) Seer Dheri, (10) Ter Kala Dheri, (11) Akra.

attributable to immigration, or even violent invasion, from outside? Or was it caused by rapid internal cultural evolution?

Bannu, which occupies a small topographic basin in a semi-arid zone, is of interest not only because it is surrounded by hills and mountains, with few well defined routes of contact with areas outside, but also because it is climatically marginal for agriculture and settlement. It is an area that imposed environmental constraints on agropastoral production, with attendant problems for the development and stability of settlements, and yet was potentially open to outside social influences. Could instabilities in the subsistence economy have led to episodic social collapse, and replacement by other groups bearing different material cultures?

Our field observations, and the questions raised by them, have led us to identify the Bannu area as a potentially useful model for the archaeological examination of the dynamics of subsistence and social systems. There is a marked difference in climate, settlement and subsistence today between the western and eastern parts of the area: the east has lower rainfall and higher temperatures, sparser settlement and less arable agriculture, and is more dependent on pastoralism, than the west. 4

# Archaeological sites in the Bannu area

Sites dating to the Mesolithic (and possibly the Palaeolithic), the Neolithic, Chalcolithic, Bronze Age, Iron Age to Early Historic, and Islamic periods have been found in the Bannu area.<sup>5</sup> Many of them have quite deep occupation deposits that attest to their relative success as enduring settle-

ments, although we are not in a position to say that settled life was a continuous phenomenon in Bannu from the Neolithic onwards. Two major gaps exist in the record, one being cultural and the other a gap in chronology. There is an absence of mature Harappan (Indus civilization) sites, but it is not clear whether this also represents a chronological gap in settlement (a programme of radiocarbon dating is in progress to help clarify this issue) or whether the Harappans just never arrived here, and life continued without them. However, there appears to be a real gap in settlement from the later part of the third millennium to the early first millennium BC (essentially, the second millennium appears to be missing), and this we are currently investigating.

Our archaeological fieldwork in Bannu has focused mainly on the later Neolithic, Chalcolithic and early Bronze Age, but in the past few years it has broadened to include the Early Historic period. Despite the diverse cultural and social features of these different phases, all show clear contacts with the outside world, but, conversely, all also show distinctly local traits and developments. This adds greatly to the archaeological interest and singularity of the Bannuarea, as is shown by the two topics discussed below: the Sheri Khan Tarakai cultural horizon, and the cultural transition of the late Neolithic/Chalcolithic to Bronze Age.

## Sheri Khan Tarakai: a new cultural assemblage

When we discovered the site of Sheri Khan Tarakai, in the dry rocky piedmont zone in the western Bannu basin (Fig. 3), we immediately recognized that it had a hitherto unknown cultural assemblage. The distinctive pottery, crudely handbuilt but finely decorated with various motifs (Fig. 4), the diverse terracotta human (Fig. 5) and animal figurines, the refined bone-tool industry and the large and clumsy stone flakes, marked it out as an assemblage quite new to archaeology. Its character, coupled with a complete absence of metal objects, suggested that it was an early (pre-Bronze Age) cultural manifestation, probably of the late Neolithic or Chalcolithic. The absence of a clear cultural sequence for northwestern Pakistan meant that we had no useful framework to apply to our work in Bannu, and that we needed to construct such a sequence. Radiocarbon dating of the site has since confirmed our assumptions, giving (calibrated) dates that range from the latter part of the fifth millennium to the very early third millennium BC. Subsequent field surveys in the area have revealed three other sites of this cultural horizon, one of which (Ter Kala Dheri) is discussed in the next section.

It is difficult to assess the character of the Sheri Khan Tarakai settlement. It was probably a small village with buildings made of pressed mud and cobbles, some of which had boulder footings to their walls, and some with roofs of wattle and daub. Unbaked clay structures inside at least one building have been interpreted (by analogy with remarkably similar structures in the nearby modern village) as grain storage silos. The charred plant remains are dominated by grains of barley, with wheat being much less abundant. Barley is more tolerant of aridity than wheat and its dominance probably attests to the difficulty of farming in the area. The plant remains suggest a strong seasonal component to agrarian activity, with winter to spring cultivation and harvesting. The rest of the year, including the long hot summer, could have been given over to pastoral production, possibly involving some transhumance to the hills,3 The animal bones found consist mainly of domesticated cattle, sheep and goat, but the presence of bones of onager and gazelle indicates that wild animals were hunted. Evidence for contact with the hills comes from the wood charcoals, 6 which, although dominated by species of the local dry thorn vegetation, also include species such as oak that could only have been obtained from the higher hills and were probably brought in (or acquired by exchange) as wooden artefacts.

There are indicators among the archaeological finds at Sheri Khan Tarakai of far-ranging external contact southwards and northwards: alien pot sherds from northern Baluchistan, fragments of marine shell from the coast of the Arabian Sea and lapis lazuli from Badakhshan in Afghanistan. The curious terracotta cones, although made at Sheri Khan Tarakai, and some attributes of the human figurines, suggest even more distant contact with

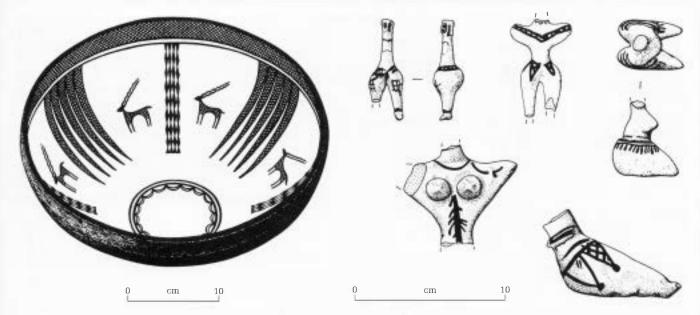


Figure 4 A hand-built bowl from Sheri Khan Tarakai, decorated with mountain goats and other motifs.

Figure 5 A selection of terracotta female figurines from Sheri Khan Tarakai.

Turkmenistan.<sup>7</sup> The recent discovery of another site of Sheri Khan Tarakai type, Jhandi Babar, in Dera Ismail Khan Division, some 145km south of Sheri Khan Tarakai and approximately midway between it and the possible contact sites in northern Baluchistan, adds a further exciting dimension to the late Neolithic/Chalcolithic in this frontier region between the plains of the Indus and the mountains of the Afghan borderlands.

# Late Neolithic/Chalcolithic to Bronze Age transition

One of the major achievements of the Bannu Project has been to establish a late prehistoric sequence of three distinct cultural phases for the region and adjacent areas and to date it by radiocarbon (Table 1). The first phase is defined by the type site of Sheri Khan Tarakai (see above) and the second by the type site of Rehman Dheri, which is located outside Bannu in Dera Ismail Khan Division, although the phase is represented in Bannu by sites such as Lak Largai (Fig. 3). Thirdly, there is the pre-Harappan phase (a misnomer in the context of Bannu, because, as noted above, there is no Harappanthere), defined by the type site of Kot Diji (located far to the south in Sindh Province), but which in Bannu is represented by sites such as Lewan and Tarakai Qila (Fig. 3). The relationships between these phases were, until recently, far from clear, and they still remain so for the second and third phases. The first and second phases virtually overlap in terms of the youngest radiocarbon dates for Sheri Khan Tarakai and the oldest one from Lak Largai (Table 1). What does this represent in terms of cultural processes? Did the societies of the first phase become extinct and those of the second one enter the area soon after? Was the area invaded, with the carriers of the second

cultural phase triumphing over the first, or was there a more peaceful merging of different social groups or cultural traditions? Or was the cultural change from the first to the second phase an entirely internal affair? Our work had shown that external contacts existed in all cultural phases, so an entirely local or indigenous transition that occurred in isolation seems unlikely.

Our work at the site of Ter Kala Dheri (Fig. 3) produced dramatic and compelling evidence not only for contact between the possessors of the first and second cultural assemblages but also of a transition from one to the other.8 The site has now been almost wholly destroyed to create level fields, but we were able to investigate a small surviving remnant of the site before it, too, was destroyed. Excavations and surface collections in this area yielded pottery and terracotta figurines identical with those found at Sheri Khan Tarakai, but also a pit was discovered that contained abundant pottery of the second cultural phase, together with a curious and unique type of crudely handbuilt pottery that appeared to be transitional, in style and technique, between the two phases. In addition, a

female figurine was found, unfortunately not *in situ*, that combined morphological characteristics of the otherwise quite distinct female figurines from both cultural phases (Fig. 6). This find is especially interesting because it suggests the possible merger of certain ideological traits in the transition to the early Bronze Age.

#### Future research in the Bannu area

Since 1996 the scope of the Bannu Archaeological Project has expanded to include the Early Historic Period, specifically survey and excavation at the huge site of Akra<sup>9</sup> (Figs 3 and 7), which was an important city and possibly the capital of a Persian provincial governorship (satrapy). Work on the late prehistoric cultural phases will also continue, with the final analysis and publication of the material from Sheri Khan Tarakai and small-scale work at several other sites to investigate further the cultural transition noted above.

 Table 1
 Cultural sequence and chronology of late prehistoric sites in the Bannu Area.

Cultural phase	Type site	Bannu sites	Date ranges (cal BC)
Early Harappan (Early Bronze Age)	Kot Diji (Sindh Province)	Islam Chowki Taralai Qila Tarakai Ghundai Lewan Seer Dheri	2500–2040 None available Ditto Ditto Ditto
Pre-Harappan (Chalcolithic to Early Bronze Age)	Rehman Dheri (RHD phase I)	Islam Chowki Lak Largai Ter Kala Dheri Lewan	2750–2550 2885–2625 2920–2620 None available
Late Neolithic to Early Chalcolithic	Sheri Khan Tarakai	Ter Kala Dheri Sheri Khan Tarakai Barrai Khuarra i Girdai	3110–2880 4240–2915 None available Ditto

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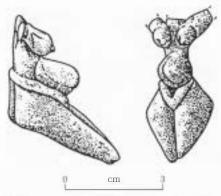


Figure 6 A terracotta female figurine from Ter Kala Dheri showing elements (pregnancy and pendulous breasts) characteristic of Sheri Khan Tarakai types, combined with the typical morphology of Early Bronze Age types known from sites such as Rehman Dheri, Lewan and Lak Largai.

### Notes

1. The Bannu Archaeological Project was established in 1985 as an interdisciplinary collaborative project, with its directorship shared equally between Professor Farid Khan (then of the Department of Archaeology, University of Peshawar, now of the Pakistan Heritage Society, Peshawar), J. R. Knox (Keeper of the Department of Oriental Antiquities at the British Museum) and Dr K. D. Thomas (of the Institute of Archaeology, UCL). The Project has worked under licence from the Government of Pakistan Department of Archaeology and Museums, and we are grateful to successive Directors-General of that Department for their support. Over the years we have received financial support from the British Museum, the Society for South Asian Studies of the British Academy, and the University of Peshawar, for which we are very grateful. Our

work in the Bannu area would not have been possible without the support of the local administration, especially the successive Commissioners and Deputy Commissioners who have shown great interest in our Project and in the history and archaeology of Bannu Division. We are grateful to the many people of Bannu, too numerous to mention individually here, who have supported the work of the Project by giving practical assistance or sharing their local knowledge.

See K. D. Thomas & J. R. Knox, "Routes of passage: later prehistoric settlement and exploitation of a frontier region in northwestern Pakistan", Bulletin of the Institute of Archaeology, London 31, 89–104, 1994. For a general discussion of South Asian routes see H. C. Verma, Medieval routes to India: Baghdad to Delhi. A study of trade and military routes (Calcutta: Naya Prokash, 1978).

 See K. D. Thomas, "Getting a life: stability and change in social and subsistence systems on the North-West Frontier, Pakistan, in later prehistory". In *The pre*history of food, C. Gosden & J. G. Hather (eds), 306–321 (London: Routledge, 1999).

See K. D. Thomas, "Environment and subsistence in the Bannu Basin". In Lewan and the Bannu Basin, F. R. Allchin,
 B. Allchin, F. A. Durrani, F. Khan (eds),
 13–33 (Oxford: British Archaeological Reports International Series 310, 1986).

 See F. Khan, "Archaeological sites in the Bannu basin". In Lewan and the Bannu Basin, F. R. Allchin, B. Allchin, F. A. Durrani, F. Khan (eds), 183–95 (Oxford: British Archaeological Reports, International Series 310, 1986), and F. Khan, J. R. Knox, K. D. Thomas, Explorations and excavations in Bannu District, North-West Frontier Province, Pakistan, 1985– 1988 (London: British Museum Occasional Paper 80, 1991).

6. The wood charcoals from various sites in the Bannu area are being examined by Caroline Cartwright of the British Museum's Department of Scientific Research and I am grateful to her for the information given here.

 See F. Khan, J. R. Knox, K. D. Thomas, "Tradition, identity and individuality: exploring the cultural relationships of Sheri Khan Tarakai", Pakistan Archaeology 26, 156–74, 1992.

 See K. D. Thomas, J. R. Knox, F. Khan, "Technology transfer and culture change: an example from northwest Pakistan". In South Asian Archaeology 1995, volume 1, R. Allchin & B. Allchin (eds), 237–51 (New Delhi: Oxford and IBH, 1997).

9. The Bannu Archaeological Project, especially in its work at Akra, has been considerably strengthened since Dr Peter Magee (University of Sydney) joined it, together with postgraduate research students Justin Morris and Cameron Petrie (Institute of Archaeology, UCL, and University of Sydney). The Society for South Asian Studies of the British Academy has also kindly increased its financial support of the project for the Akra excavations.

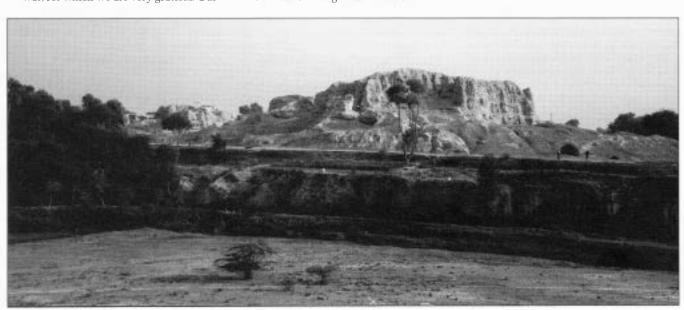


Figure 7 The main mound of Akra viewed from the west. The higher mound or "acropolis" is situated on a lower more extensive mound; together they rise to some 35 m above the surrounding plain, which is here cut by a stream that flows below the cliff-like feature in the foreground.