

EAST AND WEST



I s I A O

Vol. 56 - Nos. 1-3 (September 2006)

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FOREWORD

This triple issue of East and West, edited patiently by one of the most 'senior' collaborators of our Mission in Pakistan, Luca M. Olivieri, accompanies the special volume dedicated to the memory of Maurizio Taddei, edited by Anna Filigenzi and Pierfrancesco Callieri (EW, 55, 1-4, 2005). The present issue is entirely dedicated to an important event in IsIAO history, in particular for that part of the Institute that has taken up the legacy of the IsMEO of Giuseppe Tucci. The event in question is the fiftieth anniversary of the Archaeological Mission in Pakistan, which was founded by Tucci himself. The act of foundation of this institution, the first of its kind outside the Mediterranean, saw Tucci personally involved through what may probably be considered his last great Asian exploration, but also the philological epilogue to his Himalayan expeditions.

From 1956 to the present time, the Mission has carried on an uninterrupted activity with the full support of its institutional referents, in particular the Italian Ministry of Foreign Affairs, always acting in close collaboration with its Pakistani counterpart, the Department of Archaeology and Museums (Government of Pakistan). Without overlooking any of the DOAM representatives, we wish here to recall the unflinching friendship and collaboration of the first Director General, the unforgettable Dr F.A. Khan, as well as the present incumbent, Dr F.D. Kakar, to whom I address my heartfelt thanks, as well as for the strong support afforded to our activities, also for the attention and enterprising spirit with which he has followed the initiatives linked to the commemoration of this event.

On the subject of thanks I would need to add too long a list for the space available to this introduction. I hope I shall be pardoned if, including many others in my thoughts, I limit my thanks to the Ambassador Roberto Mazzotta, our Representative in Islamabad, and the Ambassador Mirza Qamar Beg, the Representative of Pakistan in Rome, for their great interest and material collaboration in favour of our Archaeological Mission.

In my memory however I cannot avoid addressing many sincere thoughts to our Friend, to Maurizio Taddei, who in the Mission took his first scholarly steps beside Tucci, and who was its Director until his untimely death. Before him, for forty years, the animator, indeed the very soul, of the Mission was Domenico Faccenna, the precursor of Buddhist architecture in Italy; today the Director is Prof. Pierfrancesco Callieri, his first pupil in Swat.

The history of the Mission, whose important anniversary we are celebrating today, is therefore, from the human and scientific point of view a history with an astonishing continuity: from Tucci on, the activity of the Mission developed along guidelines that are still valid today. This is further evidence, if any were needed, of the seminal value of Giuseppe Tucci's original intuition: this is demonstrated by many, if not all, of the following articles. Non-Buddhist rock art, the wooden mosques of upper Swat, are but

some of the topics inaugurated by Tucci in 1956 and on which work is still being done today. The research has also been continuous, uninterrupted, and cogent, as is proved by nearly 400 bibliographic titles embracing all fields of historical research.

One consideration must serve as a corollary to the foregoing: this Anniversary coincides with the transfer of the Centre of Excavations of Archaeological Research in Asia from its historical site in Palazzo Brancaccio to the current IsIAO premises. The Centre, unique of its kind in Italy in the years in which it was set up, is part of the history of the Institute, of which the Mission in Pakistan has always been an important but not the only part. Here I would like to recall the activities in Iran, Afghanistan, Nepal, Oman, Yemen, Turkmenistan and Thailand, as but a few of the more important, and certainly that, with greater continuity, have contributed to the high esteem in which the IsIAO Excavations Centre is held and in which the Institute as a whole will hopefully continue to be held in future.

Lastly, it is my pleasure to announce that, following the request I received from the collaborators of the Mission in Pakistan and from its Director, and to which I have great pleasure to accede, this issue of East and West will be offered as a token of respectful friendship and gratitude to a doyen of Italian archaeology in Pakistan, Prof. Giorgio Stacul. On the same occasion, I also wish to announce that the IsIAO Board of Administration, at the request of the Ordinary Member Pierfrancesco Callieri, has decided to confer on him the title of 'Honorary Member' in recognition of his tireless activity in following up Tucci's early intuitions on the protohistory of Swat and his numerous long and felicitous excavation campaigns. Thanks to his work the primacy of our Mission in Pakistan has been definitively consolidated also outside the confines of Buddhist archaeology. To Giorgio go the most sincere best wishes from all of us.

Gherardo Gnoli

Archaeology and Settlement History in a Test Area of the Swat Valley

Preliminary Report on the AMSV Project (1st Phase)

by LUCA M. OLIVIERI
and MASSIMO VIDALE

with contributions by
ABDUL NASIR KHAN, TAHIR SAEED, LUCA COLLIVA,
RICCARDO GARBINI, LEONARDO LANGELLA,
ROBERTO MICHELI and EMANUELE MORIGI

Above [the ruins] rise boldly eroded cliffs of red sandstone looking like frowning walls. The contrast offered by this wild solitude, a small Thebais, to the smiling green fields below was strangely impressive in the light of the evening.

M.A. Stein, *An Archaeological Tour in Upper Swāt and Adjacent Hill Tracts*, Calcutta 1930, p. 14.

Introduction

It was on the valleys S of Bir-kot-ghwandai that Giuseppe Tucci made his seminal, fundamental observations on the ancient history and archaeology of Swat (1958). It is with a feeling of pride and satisfaction that our Mission returns on its own tracks, also because this happens – and we envisage this as a particularly appropriate coincidence – on the celebration of our 50th year of continuous field activity. We present the first part of the preliminary report of the Archaeological Map of the Swat valley (AMSV) project, led by Luca M. Oliveri (LMO) and Massimo Vidale (MV) in the framework of the IsIAO Archeological Mission (IAM) activities directed by P. Callieri. This preliminary report has the goal to present all data so far collected during our 2000-2005 survey campaigns, concerning an area of about 100 km². In fact, the aim of the 2000-2005 campaigns was to accomplish the surface exploration and mapping of a first, meaningful sample area of the AMSV project.

For this purpose, we had selected the valleys immediately facing the Bir-kot-ghwandai area to the east and south-east, thoroughly – if not systematically –

* The present research has been edited on a fifty-fifty basis by these two Authors. All the photographs are property of IsIAO.

explored by the Mission over the past 20 years (see Olivieri 2003a for bibliography). The project started in the year 2000 with the reconnaissance of the Kandak and right Lower Kotah valleys, followed in 2004 by the exploration of the Upper Kandak, Middle Kotah and Najigram valleys. Finally, in 2005 (and 2006) the Upper Kotah and Karakar valleys were surveyed. The exploration did not include the Mt Ilam area (already surveyed by G. Stacul and LMO in the past), which is geographically part of the Saidu valley area. In addition we carried out limited exploration tests in other areas as well, namely in Zalam-kot. The survey of the Zalam-kot valley led us to the discovery of a possible Shahi religious building.

The results of the research are summarized in the enclosed Sites List ⁽¹⁾. In the List the topographical setting is indicated according to the different valleys surveyed, namely the Kandak, Najigram, Karakar and Kotah valleys (somewhere abbreviated respectively as KK, NG, KR, KH) (Fig. 1) as well as other valleys, where we conducted preliminary research (Saidu=SA, Zalam-kot=ZK). The Sites List subdivides the locations into specific types (*Pre-Protohistoric sites*: graveyards, settlements; *Rock-art/artifact sites*: painted shelters, carvings, cup-marks, tanks and wine-presses, axe-sharpeners and others; *Historic sites*: Buddhist sites, settlements; *Late Historic [and Early Islamic] sites*: religious buildings, fortifications, settlements). Chronology, at this preliminary stage, is indicated only roughly, farming each site in wide cultural horizons inferred by ceramics found on surface and other kinds of macroscopic evidence ⁽²⁾. Each site has an individual inventory number (numbers are not necessarily serial and many have not been assigned or cancelled). Each site is indicated by its name: the transcription of toponyms follows the rules indicated in Olivieri & Vidale 2004: n. 8. When they exist, references to published information are also reported. To each Site, if not published elsewhere and/or if the evidence was deemed sufficient, a short description is attached. The List is illustrated by selected photographs and by distribution maps for each type of site and/or cultural horizon.

The second part of the report will discuss some issues that emerged from the preliminary study of our data, but will also present some finds (so far unpublished

⁽¹⁾ The already published data are simply referenced.

⁽²⁾ Note that some Periods of the Swat Cultural Sequence (SCS, aka 'Ghalegay Sequence') have been here defined as following: Period IV=Bronze Age (1700-1400 B.C.); Per. V-VI=Late Bronze Age (1400-600 B.C.); VII=Early Iron Age (600-400 B.C.); Per. VIII-BKG Early Periods=Early Historic (3rd -1st B.C.); 1st-6th A.D.=Historic (subdivided in 'Historic' 1=Saka-Parthian, 2=Kushan, 3=Kushano-Sasanian in Tables 1 and 2); 7th-11th A.D.=Late Historic; 12th-15th A.D.=Early Islamic. The first digit indicates the survey year (0=*ante* 2000, 1=2000, 2=2004, 3=2005 4=2006); this is followed by the individual number of the site (e.g.: 1121=Site 121 documented in 2000) and, eventually by a subscript letter if the site revealed different chronologies. In the Sites List measurements are given in m.cm (0.00); the following abbreviations have been used: l=length, w=width, d=diameter, h=height, dp=depth, m=meters, m²=square meters, ha=hectars, qt=100 kg, hl=hectoliters.

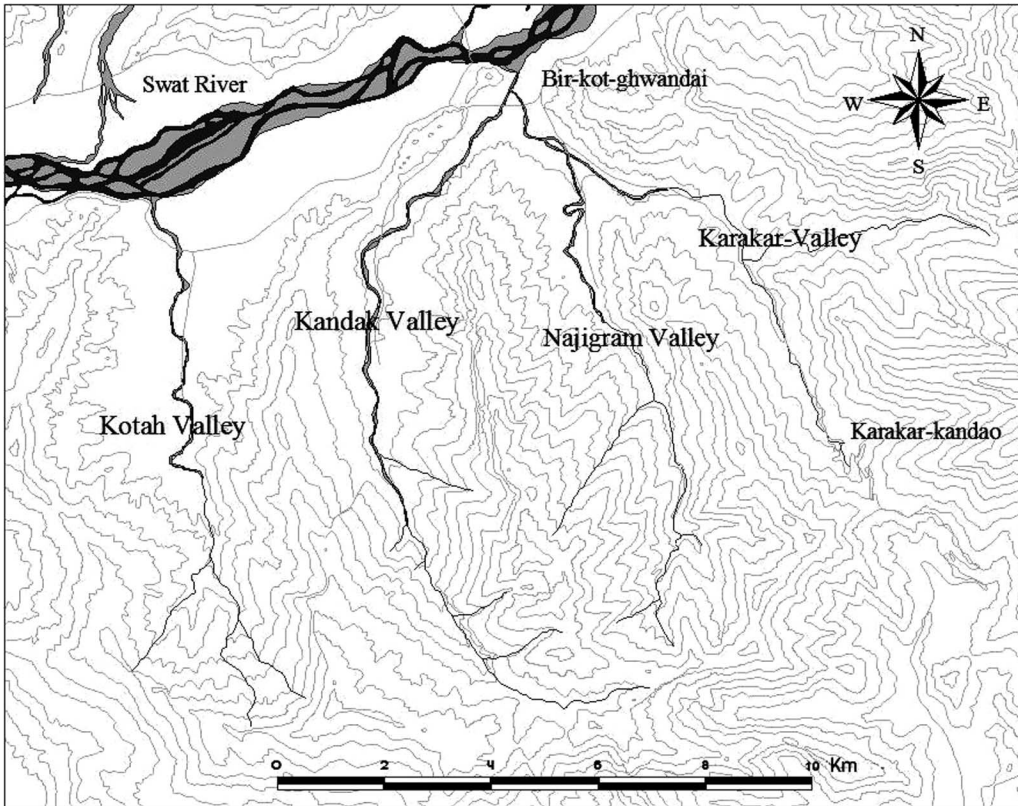


Fig. 1 - The AMSV study area (all the maps are processed by EM).

and, we think, important) from the Jambil valley. The surveying of the latter (together with Saidu and Ugad valleys) will be the subject of the second phase of activity of AMSV ⁽³⁾.

General information on the AMSV Project, data regarding the previous campaigns, geographical and geological features of the sample area, and the reappraisal of the previously available data, are available in recently published reports (Vidale & Olivieri 2002; Olivieri 2003a; Olivieri & Vidale 2004; Laurenza & Vidale 2005; Filigenzi, forthcoming f).

⁽³⁾ Some of the issues here presented (those dealing with the prehistoric artefacts and rock-art) had already been briefly anticipated in two papers presented at the last South Asian Archaeology Conference, London, July 2005 (Micheli & Vidale, forthcoming; Olivieri, forthcoming b).

The 2005 AMSV Campaign

The 2005 campaign was carried out from July 27 to September 4. The 2005 survey was carried out with the contribution of other specialists: Luca Colliva (LC), Roberto Micheli (RM), Emanuele Morigi (EM), Piero Spagnesi (all permanent members of the IAM in Pakistan) and in close collaboration with the Department of Archaeology and Museums, Gov.t of Pakistan, directed by Fazal Dad Kakar. Abdul Nasir Khan (ANK), Curator of the Reserve Collection, Swat Museum, Saidu Sharif, was appointed by the Department as his representative; he also directed the survey in the Zalam-kot Valley ⁽⁴⁾. The success of this research is also due to the invaluable help of our head worker and restorer, Akhtar Manir.

During the first three weeks many new sites were found in the Karakar area. They are mainly Buddhist sites belonging to the late-historic period. Amongst them it is important to recall the large site of Kanderai 1, to be considered the largest monastic settlement of the entire project area (Spagnesi, this issue). A complete photographic survey of the monastic buildings overlooking the sacred areas of Abbasaheb-china 1-2 and Tokar-dara 1-2 was also performed.

The other three weeks were devoted to the control in the field of the information previously gathered in Kandak and to the exploration of the Upper Kotah valley. New sites were documented in the Middle Kandak, as well as in the Kotah valley, where also new painted shelters were discovered.

New information confirmed the importance of the area for the knowledge of the painted rock-art of the Swat Valley and its evolution. These shelters, like the other previously published, namely Sargah-sar 1, Kakai-kandao 1, Dwolasmane-patai 1 (Vidale & Olivieri 2002) and the Kafir-kot group (Abdul Nasir et al. 1995), are painted in red ochre. The shelters span a wide chronological range, as may be inferred from the subjects of the different paintings. We believe that the rock paintings may range from the Bronze Age to the Early Iron Age, as well as to Historic and Late-historic phases. The earliest paintings are distinguished by a particularly complex repertory of designs, including possible deities arising from ibexes and tigers or holding sun-like radiating wheels. No depiction of domestic animals, *stūpa* designs or images of metal weapons are represented in these paintings.

A stone slab at the shelter of Muhammad-patai 1, in the Kotah valley, among various designs, shows a scene of a horse sacrifice comparable to the designs found by G. Stacul on a few potsherds from Bronze Age layers of Bir-kot-ghwandai, and therefore provided a new chronological clue of primary importance. Early Iron Age

⁽⁴⁾ He was also representative for the Department in 2000, while Tahir Saeed (TS) represented it in the 2004 Campaign. Leonardo Langella (LL) draughtman and archaeologist took part in the 2004 Campaign.

paintings, in contrast, include designs of domesticated animals such as, in the first place, humped bulls and metal battle axes, two 'classic' motives of later rock-art repertoires in other regions of the Indo-Pakistani subcontinent.

A monumental Brahmi-Śarada rock inscription in several lines was discovered near Talang. The inscription is sheltered below a large projecting boulder and partially covers earlier carvings. Traces of red paintings with superimposed carvings, as well as large 'permutations' of cup-marks (in the sense of Olivieri & Vidale 2004), are also visible at this spot.

The campaign scheduled for Summer-Fall 2006 has been entirely devoted to finalizing the survey of the left Lower Kotah valley, as well as to the study of the stratigraphic sequence on a specific key site, Talang (where the rock carvings may still be partially covered by archaeological deposits) (see the Postscript above). In the same campaign, we also started the survey of the Saidu valley (together with the Mt Ilam area), the Jambil valley, and Puran. All these areas are included, together with the Ugad valley, in the second future phase of the project (2007-2010).

SITES LIST

Pre-Protobhistoric sites (Fig. 2)

Karakar Valley

Uech-tangai (Site 311)

Late Bronze-Early Iron Age graveyard.

Kandak Valley

Bir-kot-ghwandai 1 (Site 001a) (ref. in Olivieri 2003a)

Bronze-Early Iron Age settlement.

Bir-kot-ghwandai 2 (Site 101) (Tusa 1981: as 'Barikot'; Olivieri 2003a; Olivieri & Vidale 2004)

Late Bronze-Early Iron Age graveyard.

Gwel[angaso]-dherai (Site 103a) (Olivieri & Vidale 2004)

Protohistoric settlement.

Abwa 1 (Site 104a) (Olivieri & Vidale 2004)

Bronze Age materials found on surface.

Abwa 2 (Site 105a) (Olivieri & Vidale 2004; Micheli, this issue: as 'Daman')

Bronze Age materials found on surface; prehistoric stone tools.

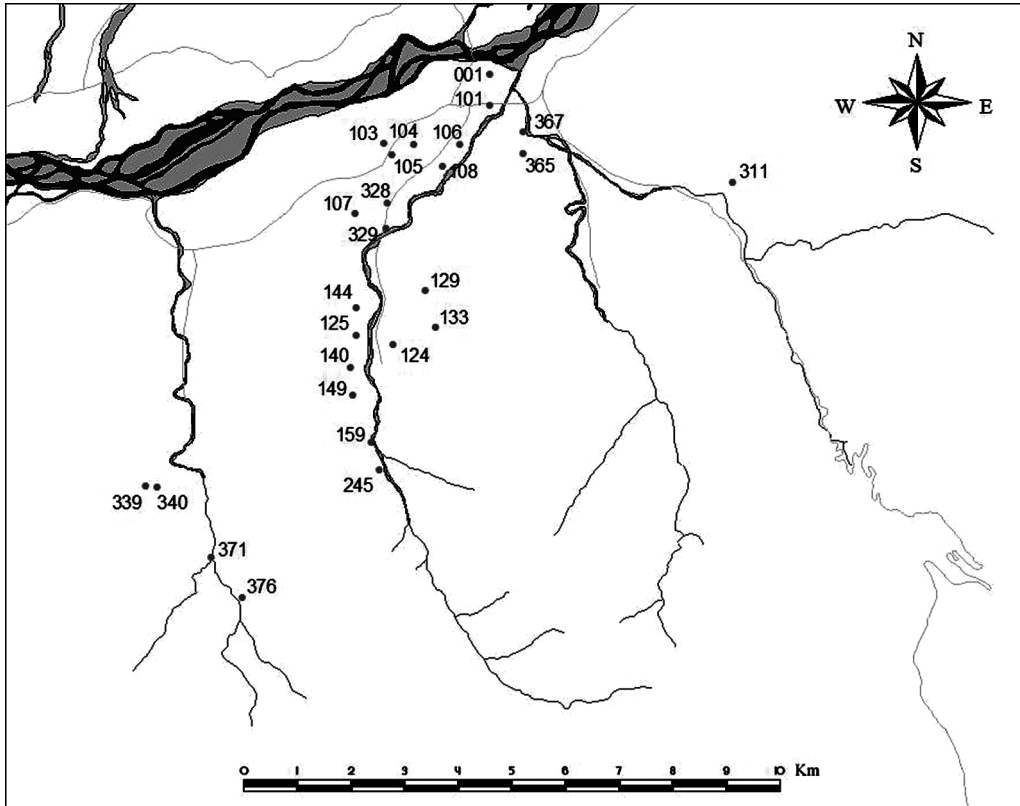


Fig. 2 - AMSV: Pre-Protohistoric Sites.

Abwa 3 (Site 328a)

Late Bronze-Early Iron Age materials found on surface.

Goratai-kandao 1 (Site 106) (Olivieri & Vidale 2004; Micheli, this issue)

Late Bronze-Early Iron Age graves.

Above this small graveyard, near the Buddhist centre of Goratai, there is an ancient mine for the extraction of slabs of philladic rocks, the same slabs as were used for covering the graves; prehistoric stone tools.

Goratai-kandao 2 (Site 107) (Olivieri & Vidale 2004)

Bronze Age layers.

Tahsildar[sep]-kaboruna (Site 108a) (Olivieri & Vidale 2004)

Late Bronze-Early Iron Age graves.

Shaga-malkidam 1 (Site 365)

Late Bronze-Early Iron Age graves.

Shaga-malkidam 3 (Site 367)

Sporadic Bronze Age materials, perhaps from one or more destroyed graves (?).

Kanjar-kote 2 (Site 329)

Late Bronze-Early Iron Age graves.

Garam (Site 129a)

Rare protohistoric materials found on surface.

Kandak (Site 124) (Olivieri & Vidale 2004)

Bronze and Early Iron Age materials found on surface; Late Bronze-Early Iron Age graveyard.

Kandarai 2 (Site 144a) (Olivieri & Vidale 2004)

Protohistoric materials found on surface.

Gumbat 4 (Site 125) (Olivieri & Vidale 2004: as 'Gumbat')

A few Bronze Age materials found on surface.

Dwolasmene-patai 3 (Site 159) (Olivieri & Vidale 2004: as 'Dwolasmene-patai 1')

Late Bronze-Early Iron Age graveyard.

Jowar-bandai 1 (Site 140a) (Olivieri & Vidale 2004: as 'Jaur-bandai')

Late Bronze-Early Iron age graveyard.

On the surface a dozen plundered graves were visible. One of the slabs belonging to a grave showed a single cup-mark.

Jowar-bandai 2 (Site 149a) (Olivieri & Vidale 2004: as 'Jaur-bandai 2')

Bronze Age materials found on surface.

Miage 2 (Site 245a)

Plundered Late Bronze-Early Iron Age graveyard, apparently including no more than 10 graves.

Torkmara-patai (Site 133a) (Olivieri & Vidale 2004)

Bronze Age materials found on surface (?).

Kotah Valley

Kamal-china 4 (Site 339) (Fig. 3)

Late Bronze-Early Iron Age graveyard.

One of the slabs belonging to a grave shown a single cup-mark.



Fig. 3 - Kamal-china: a cup-marked slab from the graveyard. (Photo by MV).

Kamal-china 5 (Site 340a)

Late Bronze-Early Iron Age graves (?).

Rahmanuddin house (Site 371)
Late Bronze-Early Iron Age graves.

Bang-khas 1 (Site 376)
Late Bronze-Early Iron Age graves.

(LMO & MV)

Rock-art/artefact sites (Figs. 4-5)

Najigram valley

Kuz Jamsara (Site 253a)
Tanks.

Karakar Valley

Amluk-dara 2 (Site 307) (Fig. 6) (Di Florio et al. 1993: as 'Amlukdara')
Cup-marks, tanks and axe-sharpeners on slabs and boulders.

Kandak Valley

Bir-kot-ghwandai 1 (Site 001b) (Olivieri 2003a)
Cup-marks.

Chirgai-gat (Site 002) (Olivieri 2003a)
Cup-marks.

Jaurbanda-ghar (Site 166) (Olivieri & Vidale 2004: as 'Site Area 23')
Cup-marks; crossed wheels.

Kanjar-kote 3 (Site 330)
Cup-marks; crossed wheels.

There are 2 boulders with rock-carving along the path from Kanjar-kote to Gumbat.

Jabbrai (Site 332) (Fig. 7)
Cup-marks; crossed wheels.

5 carved boulders along the path from Kanjar-kote to Gumbat.

Gumbat 2 (Site 126a) (Olivieri & Vidale 2004: as 'Gumbat 1')
Cup-marked spring.

Gumbat 3 (Site 164) (Olivieri & Vidale 2004: as 'Gumbat 2')
Cup-marked spring.

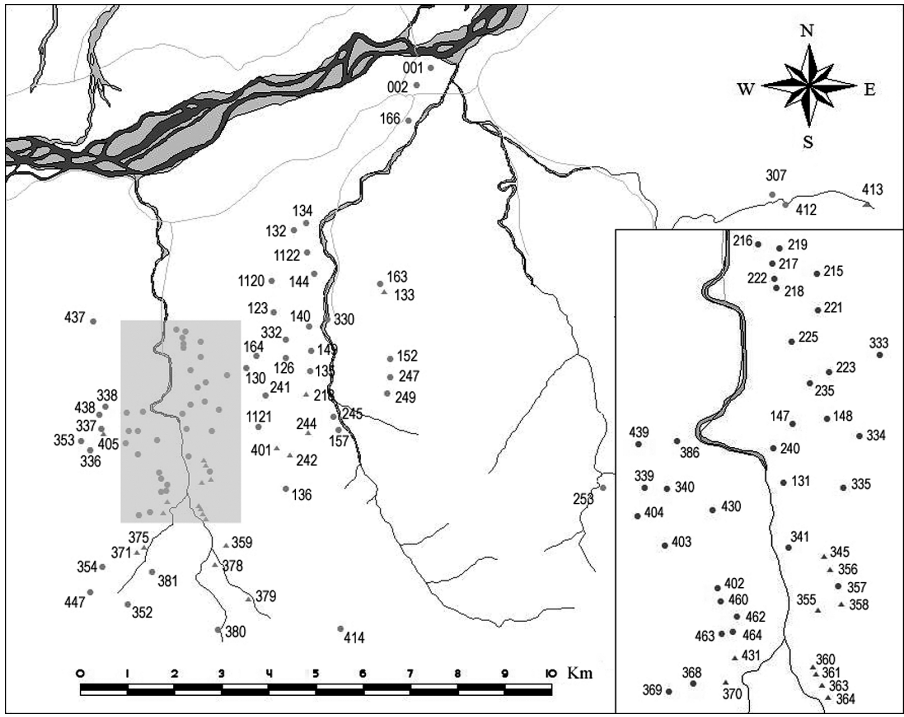


Fig. 4 - AMSV: Rock-art and Rock Artifacts Sites (Triangle = wine-presses and palettes).

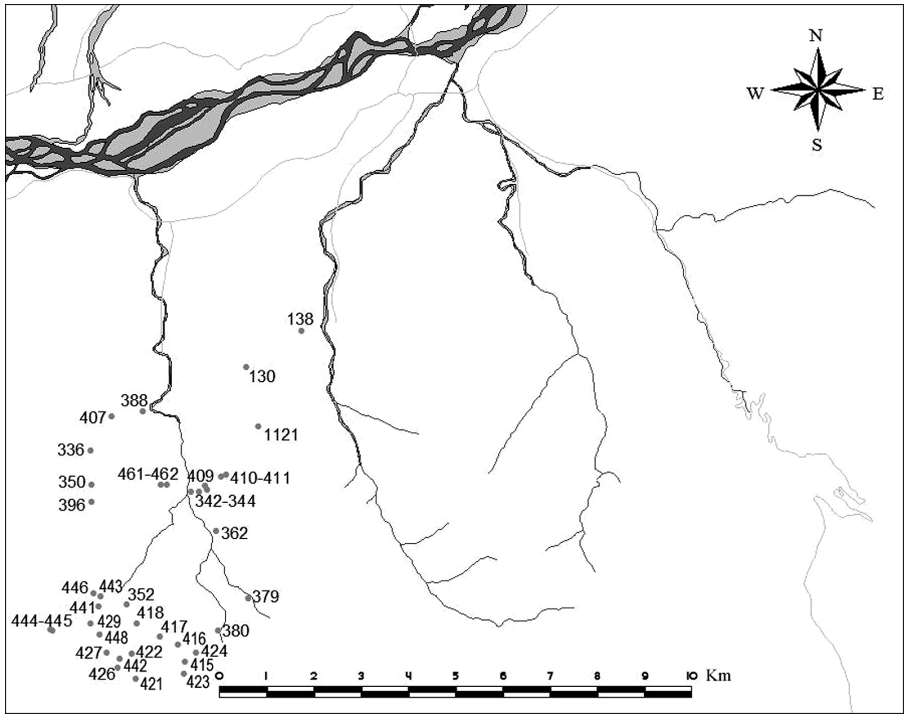


Fig. 5 - AMSV: Painted shelters Sites.



Fig. 6 - Amluk-dara: tanks and basins. (Photo by LMO).

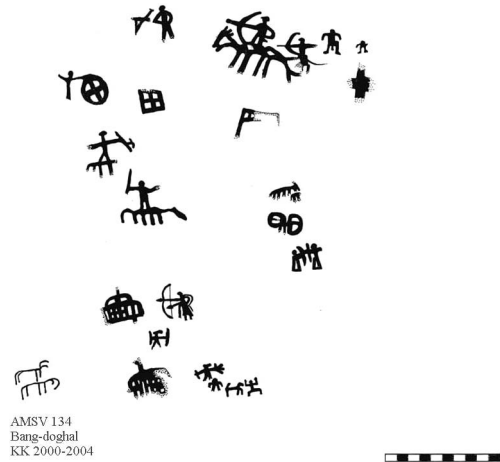


Fig. 8 - Bang-doghal, the carvings. (Drawing by LMO and MV).

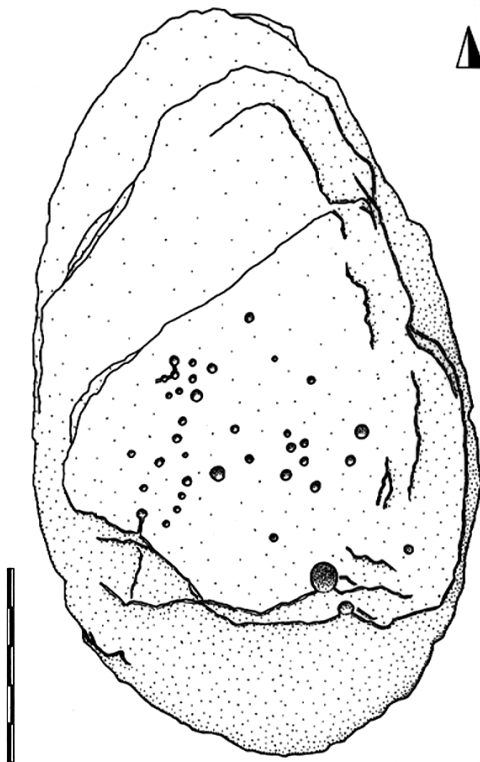


Fig. 7 - Jabbrai: a cup-marked boulder. (Drawing by LMO, RM and MV).

Kandak-dherai (Site 132a) (Olivieri & Vidale 2004)
Cup-marks.

Torkmara-patai (Site 133a) (Olivieri & Vidale 2004)
Wine-press; cup-marks; Bronze Age materials found on surface (?).

Bang-doghal 1 (Site 134) (Fig. 8) (Olivieri & Vidale 2004: as 'Bang-doghal')
Carvings (historical period).

Bang-doghal 2 (Site 1122) (Olivieri & Vidale 2004: as 'Bang-doghal 1')
Carvings.

Jowar-[jabagai] (Site 135) (Olivieri & Vidale 2004)
A circle of boulders and slabs with many cup-marks.

Dwolasmene-patai 1 (Site 138a) (Figs. 9-10) (*ibid.*)
Painted rock shelter of uncertain dating.

Dwolasmene-patai 2 (Site 138b; aka as '138-2')

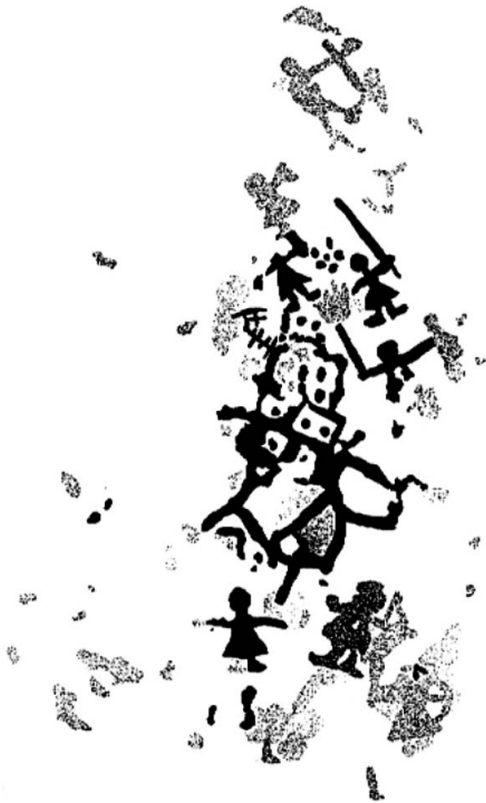


Fig. 9 - Dwolasmane-patai 1, the paintings.
(Drawing by MV and F. Martore).



AMSV 138-2
Dwolasmane-patai
KK 2005



Fig. 10 - Dwolasmane-patai 2, the paintings.
(Drawing by LMO and MV).



Fig. 11 - Amluk, tanks and basins. (Photo by MV).

Painted rock shelter of uncertain dating;
cup-marks.

The colour of the paintings is dark red.
On top of the boulder some cup-marks are
visible.

Dheri (Site 157a) (Olivieri & Vidale 2004)
Axe-sharpeners on boulders.

Jowar-bandai 1 (Site 140b) (Olivieri &
Vidale 2004: as 'Jaur-bandai')
Cup-marks; rock-carvings; wine-press.

Jowarbanda-sar (Site 220) (Olivieri & Vidale
2004: as 'Site 96')
Cup-marks.

Balah-kalai (Site 144) (Olivieri & Vidale
2004)
Cup-marks.

Kandak ford (Site 1120) (Olivieri & Vidale
2004, 2006b)
Cluster of large boulders with cup-marks,
tanks, axe-sharpeners.

Jawan-kote (Site 152a)
Cup-marks.

Amluk (Site 136a) (Fig. 11) (Olivieri &
Vidale 2004)
Cup-marks; tanks.



Fig. 12 - Kandarai 2, cup-marks. (Photo by MV).

Kandarai 2 (Site 144b) (Fig. 12)
Cup-marks.

Miage-sar (Site 243) (Olivieri & Vidale 2004: as 'Site 106')
Wine-press; cup-marks.

Miage 1 (Site 244) (Olivieri & Vidale 2004: as 'Site 107')
Wine-press.

Miage 2 (Site 245b)
Cup-marks; tanks.

Manzare (=Site Area 123) (Olivieri & Vidale 2004: as 'Site Area 23')
Modern carvings.

Manzare-tangai 1 (Site 242) (Olivieri & Vidale 2004: as 'Site 107')
Wine-press.

Jowar-bandai 2 (Site 149b) (Olivieri & Vidale 2004)
Carvings.

Samgalai (Site 247)
Cup-marks.

Daud-bandai 1 (Site 249)
Cup-marks.

Nakhtar-patai (Site 163) (Fig. 13) (Olivieri & Vidale 2004: as 'Nashtar-patai', 'Site 62').
Carvings.

Maishkano-kandao (Site 241) (Olivieri & Vidale 2004: as 'Site 105')
Cup-marks.

(LMO, MV & TS)

Kotah Valley

Tope-china (Site 215) (Fig. 14) (Olivieri & Vidale 2004: as 'Site 78')



Fig. 13 - Nakhtar-patai, cup-marks. (Photo by MV).

Cluster of large gneiss boulders with carvings.

Top-china 1 (Site 216)
Cup-marks.

Top-china 2 (Site 217)
Cup-marks.

Top-china 3 (Site 218)
Cup-marks.

Top-china 4 (Site 219)
Cup-marks.

China (Site 222)
Cup-marks.

Torkamar (Site 225)
Cup-marks.

Lekha-gata 1 (Site 221) (Olivieri & Vidale 2004: as 'Lekha-gata, Site 84')
Protohistoric carvings; cup-marks.

Modern carvings have been documented about 500 m northwards (see below, Fig. 79).

Lekha-gata 2 (Site 235) (Fig. 77) (Olivieri & Vidale 2004: as 'Lekha-gata 1')
Protohistoric carvings; cup-marks.

Lekha-gata 3 (Site 333)
Cup-marks and crossed wheel.

Kakai-kandao 1 (Site 130a) (Vidale & Olivieri 2002; Olivieri & Vidale 2004: as 'Kakai-kandao')
Protohistoric painted shelter (Bronze Age?).

Kakai-kandao 1 (Site 130b) (Fig. 15) (Vidale & Olivieri 2002; Olivieri & Vidale 2004: as 'Kakai-kandao').
On top and at the base of the boulder hosting the paintings there are cup-marks.

Kakai-kandao 2 (Site 147) (Olivieri & Vidale 2004: as 'Kakai-kandao 3')
Carvings.

Kakai-kandao 3 (Site 148) (Olivieri & Vidale 2004: as 'Kakai-kandao 4')
Carvings.



Fig. 14 - Tope-china, carvings. (Photo by MV).

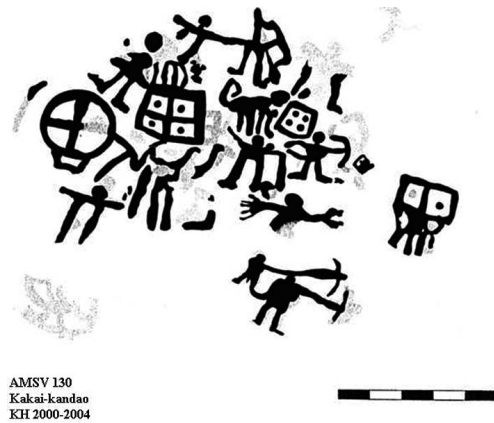


Fig. 15 - Kakai-kandao 1, the paintings. (Drawing by LMO and MV).



Fig. 16 - Sargah-sar 1, the shelter. (Photo by MV).

Sargah-sar 1 (Site 1121a) (Figs. 16-17)
(Vidale & Olivieri 2002; Olivieri & Vidale
2004)

Protohistoric painted shelter (Bronze Age?).

Sargah-sar 1 (Site 1121b) (Fig. 18)

Carvings; cup-marks.

Many faint rock carvings are visible (and were recorded) on a sub-vertical boulder surface immediately below Sargah-sar 1 (Site 1121a). There are anthropomorphic figures riding horses and other 'sgraffito' designs. On top of this boulder and on the surrounding stone surfaces other cup-marks are visible.

Sargah-sar 2 (Site 334)

Cup-marks.

Sargah-sar 3 (Site 223)

Cup-marks.

Sargah-sar 4 (Site 240)

Cup-marks.

Muhammad-patai 1 (Site 131) (Figs. 19-20)
(Olivieri & Vidale 2004)

Bronze Age-Iron Age carvings.

On the vertical edge surface of a huge projecting slab we found a series of anthropomorphic and animal figures portrayed in complex groups (see below). Part of the same rock surface was damaged by cleavage, and on the newly exposed surfaces more carvings were traced. Thus Site 131 provides at the same time the most complex example of rock art in the Kotah valley and a chronological clue to stylistic variation over time.

Muhammad-patai 2 (Site 335a)

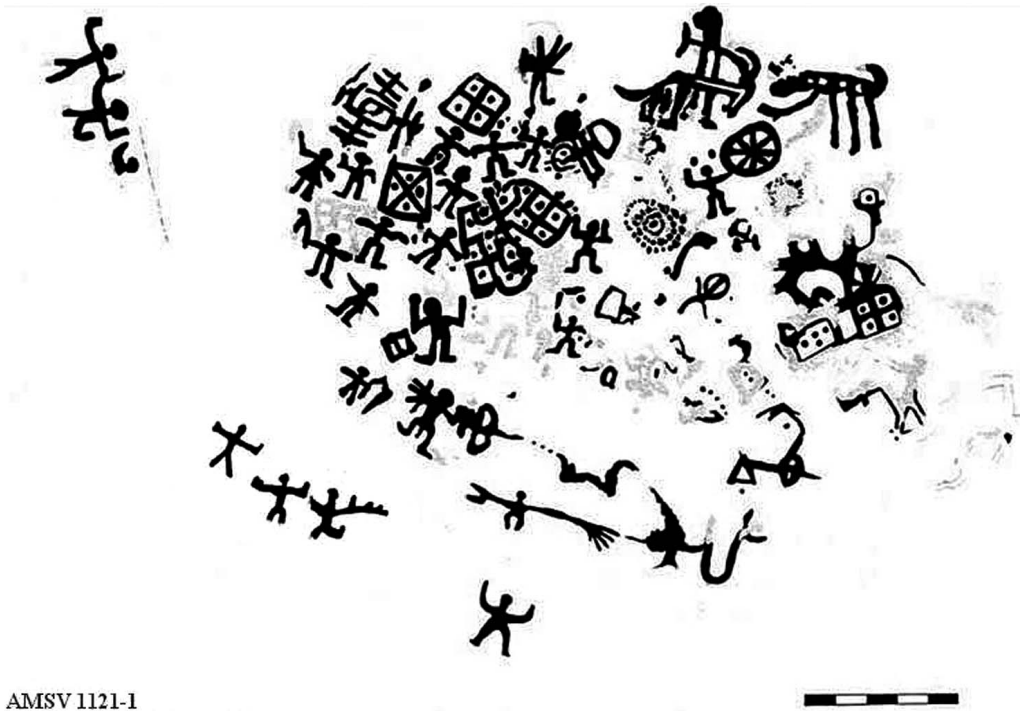
Cup-marks; crossed wheel.

Kamal-china 1 (Site 336) (Figs. 21-22) Protohistoric painted shelter (Early Iron Age); cup-marks; modern carvings.

The paintings (dark red ochre) may be seen below a very low shelter protecting a spring. Designs include horse riders, right hands, humped bulls and battle axes. Near the shelter there are cup-marks and some modern carvings.

Kamal-china 2 (Site 337) (Fig. 23)

Crossed-wheels; modern carvings.



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Sargah-sar KH 2000-2004

Fig. 17 - Sargah-sar 1, the paintings. (Drawing by LMO and MV).



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Sargah-sar
KH 2005

Fig. 18 - Sargah-sar 1, the carvings. (Drawing by LMO and MV).



Fig. 19 - Muhammad-patai 1, the upper carvings. (Drawing by LMO and MV).

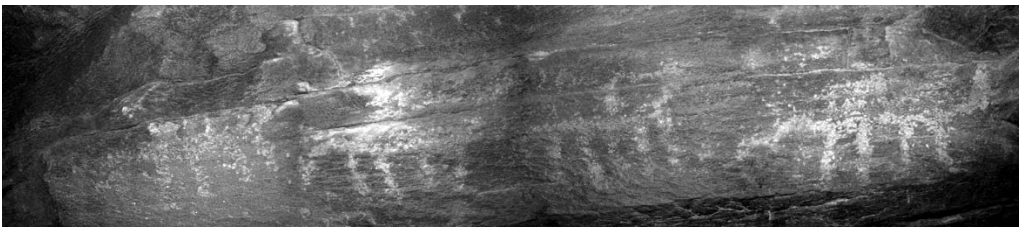


Fig. 20 - Muhammad-patai 1, the lower carvings. (Photo by MV).



Fig. 21 - Kamal-china 1, the shelter. (Photo by LMO).



Fig. 22 - Kamal-china 1, the paintings. (Drawing by LMO and MV).



Fig. 23 - A tradition still alive: modern carvings obliterating ancient ones near Kamal-china 2. (Photo by LMO).

Fig. 24 - Dandi-sar 1, the paintings. (Drawing by LMO and MV).

Kamal-china 3 (Site 338)

Cup-marks.

Kamal-china 5 (Site 340b)

Cup-marks.

Bara Kamal-china 1 (Site 353)

Cup-marks.

Pore-tangai (Site 341)

Cup-marks.

Badze 1 (Site 342)

Painted shelter.

Drawings (in dark red ochre) are very poorly preserved and scarcely recognizable. The shelter is very low and barely accessible, on the edge of a deep ravine facing Pore-tangai.

Badze 2 (Site 343)

Painted shelter.

An erosive cavity a few m E of Badze 1 (Site 342) shows faint traces of red designs, covered by a thick layer of soot.

Dandi-sar 1 (Site 344a) (Fig. 24)

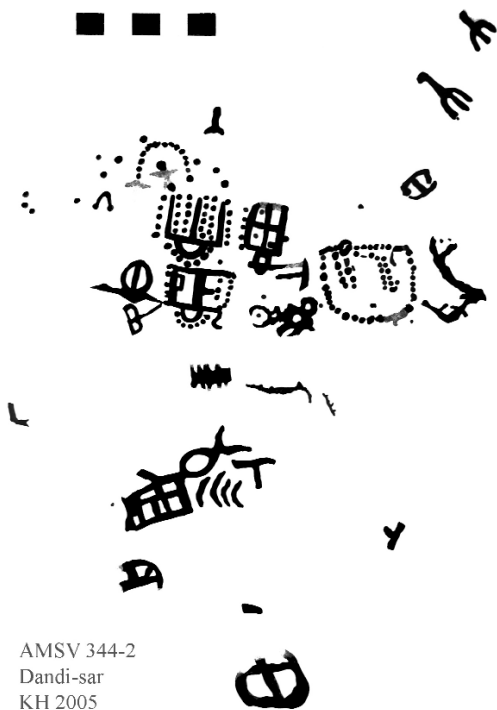
Painted shelter (Bronze or Early Iron Age).

On the northern side of the same Pore-tangai there is a big anthropomorphic rock resembling the profile of a human face. Here there are 2 rock shelters. One, very low, has a floor dangerously sloping towards a deep ravine and shows the remnants of a complex array of dark red ochre designs, including 2 anthropomorphic figures with radiating wheels.

Dandi-sar 2 (Site 344b) (Fig. 25)

Painted shelter.

Above the former shelter, another erosive cavity displays a clearly visible complex of geometric symbols or ideograms, including an animal figure surrounded by dots and squares



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Dandi-sar
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Fig. 25 - Dandi-sar 2, the paintings. (Drawing by LMO and MV).



Fig. 26 - Manzare-tangai, a wine press. (Photo by LMO).

or grids filled with dots. The colour of the pigment is bright red. North of this shelter there are cup-marked boulders.

Dandi-sar 3 (Site 345a)

Tank; cup-marks.

About 200 m N of Dandi-sar 2, moving towards Muhammad-patai, you come across a tank (l 1.55; w 1.10) dug out of a huge cup-marked boulder. Other slabs or boulders with cup-marks are visible nearby.

Manzare-tangai 2 (Site 355)

Tank.

A tank dug out of a gneiss boulder (l 0.95; w 1.30). On the boulder and on the bottom of the tank there are 2 cup-marks. Sites 355-357, all under the toponym of Manzare-tangai, are located on the Kotah side of the Manzare-tangai pass, while Manzare-tangai 1 (Site 242) lies on the opposite side.

Manzare-tangai 3 (Site 356) (Fig. 26)

Wine-press.

The tank (l 1.30; w 1.00; dp. 0.50-0.30) displays a flow hole on the west side.

Manzare-tangai 4 (Site 357)

Tank; cup-mark.

Near an abandoned Gujar settlement, a tank dug into the rock (l 1.00; w 1.50).

Nirbazai (Site 358a)

Wine-press.

A wine-press with a square tank inside a ruined abandoned settlement (l 1.25); cup-marks.

Tapa (Site 360a)

Wine-presses.

Near some ruins, there are 3 wine-presses with well preserved flow holes, a tank formed by a naturally eroded boulder and an example of 'palette' (*ibid.*: n. 21) (l 1.75; w 1.00); cup-marks.

Sanchar (Site 361) (Figs. 27, 85)

Wine-presses; axe-sharpener.

The Site has many of these rock-artifacts: at least 8 wine-presses (both 'tanks' and 'palettes') and 2 axe-sharpener (the latter, like those found at Dheri, have wear traces ascribable both to stone and metal blades).

Malak-ziarat (Site 362a) (Fig. 80)

Historic period painted shelter.

Within a shallow, open natural cavity facing a Buddhist sacred area, there are religious symbols and a *stūpa* design. The pigment used here is a bright red ochre.

Mena (Site 363a)

Cup-marks, rock carvings, wine-presses.

Near a modern settlement. W of the settled area there are several cup-marks, various rock carvings (including a concentric squares design) and 2 circular presses with a lateral cavity for the wooden shaft that was to hold the stone.

Sandok (Site Area 364)

Wine-presses.

Near the contemporary village of Sandok (E of Banj-ghwandai) a short visit revealed the presence of not less than a dozen of these rock artefacts.

Alim Salim house (Site 368) (Fig. 28.b)

3 wine-presses (2 of which badly preserved) and a 'palette'.



Fig. 27 - Sanchar, an axe-harpener. (Photo by LMO).

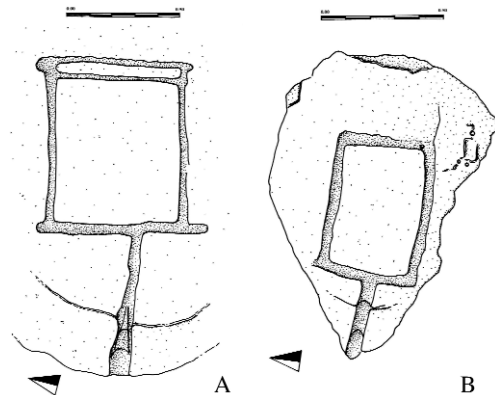


Fig. 28 - 'Palettes': A, Banj-ghwandai 2; B: Alim house.

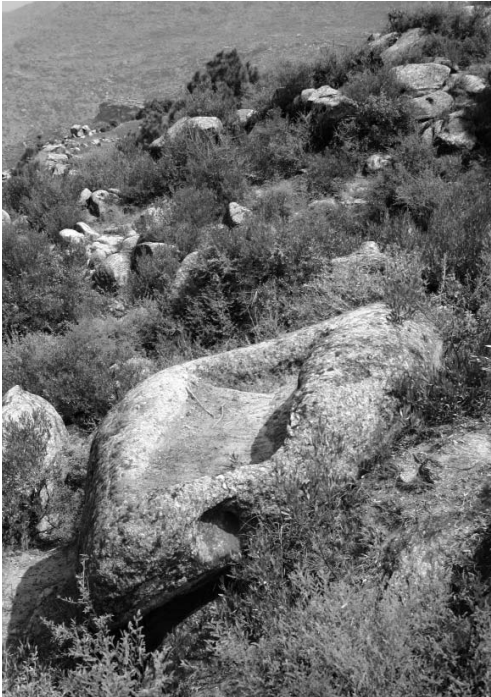


Fig. 29 - Banj-ghwandai 2, wine press. (Photo by LMO)



Fig. 30 - Gwarejo-patai, a 'palette' inside the shelter. (photo by MV).



Fig. 31 - Gwarejo-patai, the paintings. (Drawing by LMO and MV).

Sandok-tangai 1 (Site 369)

Tank.

A tank dug into a prominent boulder (l 1.30; w 1.10; dp. 0.60).

Sandok-tangai 2 (Site 370)

Tanks.

Banj-ghwandai 1 (Site 374) (Fig. 28.a)

A 'palette' and a wine-press, partially buried by soil (l 1.70; w 1.40; dp. 0.65).

Banj-ghwandai 2 (Site 375a) (Fig. 29)

Wine-presses; tanks.

The finds include 2 large wine-press and a 'palette'. One of the wine-presses still has its original walls, made of heavy rectangular stone slabs.

Bang-khas 1 (Site 359a)

Wine-presses; tanks.

On the sub-horizontal upper surfaces of a gigantic boulder (l 10.50; w 5.40), at a height of about 2 m, there is 1 wine-press and a tank, both partially covered by soil. The press (l 2.20;



Fig. 32 - Palwano-gata, the shelter. (Photo by MV).

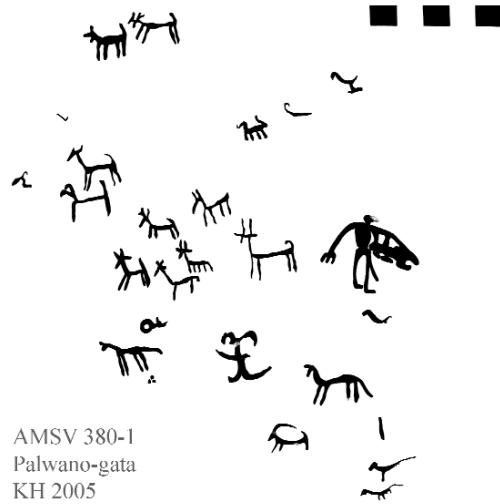


Fig. 33 - Palwano-gata, the paintings. (Drawing by LMO and MV).

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Palwano-gata
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w 1.60) has outer walls still in their original setting, made by single, thick rectangular stone slabs (w 0.15); the inner excavated cavity, therefore, is smaller (1.90; w 1.35). From the tank a flow hole leads off and ends in a lower, smaller basin. Another tank beside the one just described, partially buried by earth, may have been similar in size and features. All along the edge of the boulder runs a continuous groove that originally supported a row of other stone slabs. Cup-marks are visible on top of the same boulder, as well as along the exterior wall. At the foot of the boulder there is a round press.

Bang-khas 3 (Site 378a)

Wine-presses.

Here we observed 4 wine-presses, one of which of the 'palette' type.

Gwarejo-patai (Site 379) (Figs. 30-31)

Painted shelter; wine-press.

Paintings were found inside a shelter and a 'palette' type wine-press on the floor.

Palwano-gata (Site 380a) (Figs. 32-37)

Painted shelter; carvings; rock-artifacts.

On the top of the crest ESE of Saffar-kandao numerous traces of excavation activity and rock carving are visible: interconnected basins, carved steps. These include a natural arch forming a shelter with its projection, bearing numerous bright red ochre paintings. WNW of the shelters lies a large eroded ophidiform boulder on the side of which, corresponding to the head, an eye has been carved. Near the shelter a ruined mound (*stūpa?*) has been documented.

Kafir-kot 1 (Site 350) (Abdul Nasir Khan et al. 1995)

Historic painted shelter.

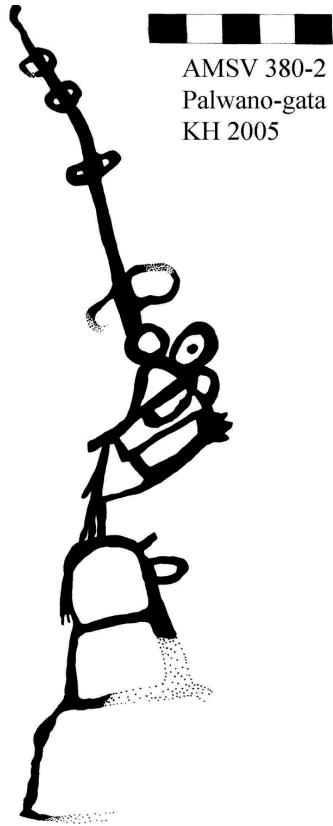


Fig. 34 - Palwano-gata, the carvings. (Drawing by LMO and MV).



Fig. 35 - Palwano-gata, carved steps. (Photo by LMO).



Fig. 36 - Palwano-gata, interconnected basins. (Photo by LMO).



Fig. 37 - Palwano-gata, the gigantic zoomorphic boulder. (Photo by LMO).

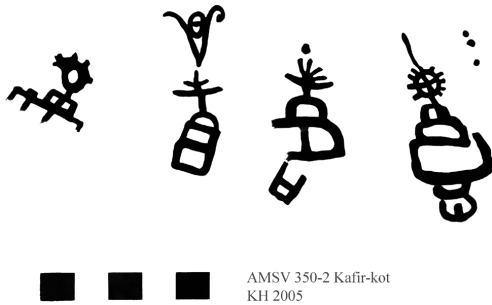


Fig. 38 - Kafir-kot 2, the paintings. (Drawing by LMO and MV).

Kafir-kot 2 (Site 396; aka as '350-1') (Fig. 38)
Historic painted shelter.

Alongside the previous one, a tiny painted shelter (dark red ochre) depicting Buddhist architecture.

Chuwa 2 (Site 381) (Abdul Nasir Khan et al. 1995)
Tanks.

In addition to those already published a further 3 tanks were found dug out of the surface of gneiss boulders. These include one with a circular press.

Marano-tangai 1 (Site 352) (Abdul Nasir Khan et al. 1995)
Painted shelter; tanks; cup-marks.

Safar-kandao (Site 354) (Abdul Nasir Khan et al. 1995: as 'Saffar Pass')
Rock-artifacts.

Talang (Site 388) (Figs. 39-41)
Cup-marks; historic painted shelter; carvings; inscriptions.

One of the most important sites of the Kotah valley. The shelter consists of a large jutting slab of highly metamorphosed gneiss. On top of the shelter and inside it there are permutations of cup-marks, while on the back

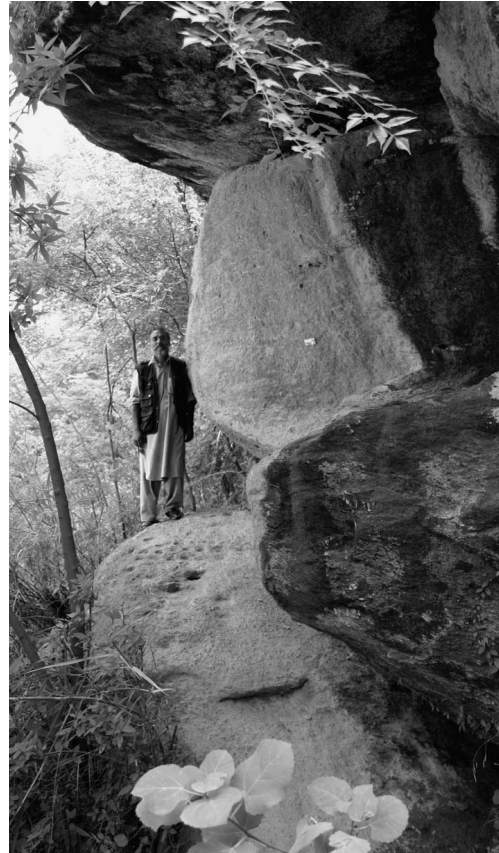


Fig. 39 - Talang, the shelter. (Photo by LMO).

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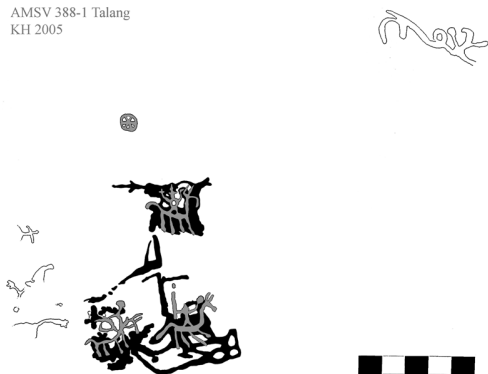


Fig. 40 - Talang, red ochre paintings obliterated by later carvings. (Drawing by LMO and MV).

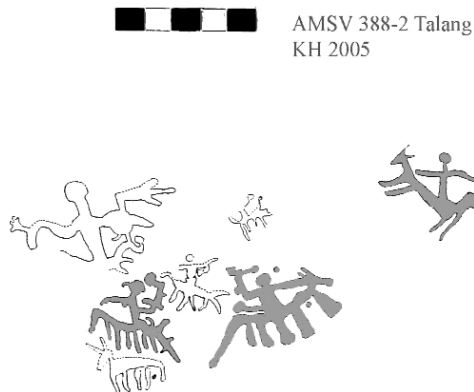


Fig. 41 - Talang, detail of the carvings obliterated by the Late Historic inscriptions. (Drawing by LMO and MV).

Fig. 42 - Madeslam, the wine presses. (Photo by LC).

and side walls there are traces of bright red ochre paintings, largely covered by Historic Age engravings. The latter, on the back wall, are themselves covered by 5 lines relating an inscriptions in Brahmi-Śarada script dating to 8th-12th A.D. from the paleographic point of view (Fig. 86).

(LMO, MV & TS)

Saidu Valley

Madeslam (Site 389) (Fig. 42) Wine-presses.

Two large tanks are carved into a big gneiss boulder. The first of these, on the left, consists of a large rectangular tank with a gently sloping bottom, ending in an overflow canal leading to a large basin (d 0.60). A small incised canal also terminates in the basin. The second, on the left, consists of two linked basins situated at different levels. The upper basin is roughly square in shape (l 0.80), and the lower one circular (d 0.43). Above the first basin a large horizontal recess is situated (l 0.40). This second artefact has been interpreted as a wine press: the press may have been connected by means of a rod pivoting on the recess and moved by hand at the other end. The press linked to the first basin allowed the pressing of juice into the lower basin. In the vicinity other rock artefacts of difficult interpretation have been found.

Ghirai (Site 390) (Figs. 43-44) Wine-presses, cup-marks.

The site presents different artefacts to the right and left of an irrigated meadow in which the water from a spring is collected. The main one is a large gneiss boulder (l 9.00), on which numerous cup-marks have been incised. On one sloping side two basins joined at different levels lie. The site is characterized by the presence uphill of a huge anthropomorphic boulder (Fig. 45).

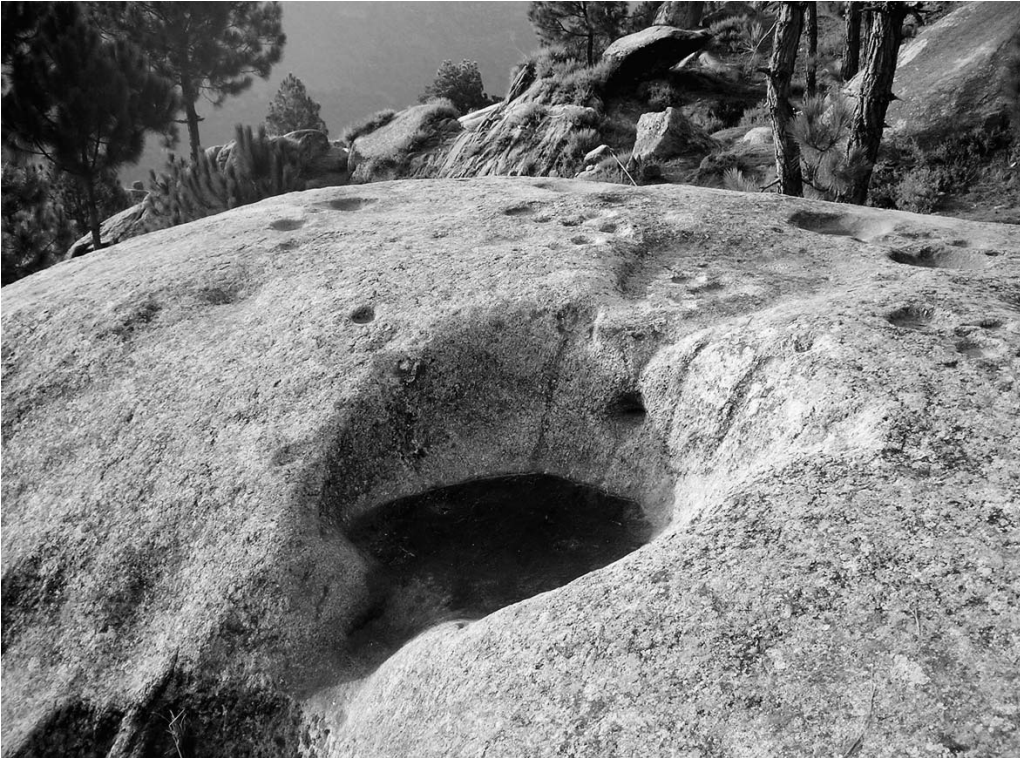


Fig. 43 - Ghirai, wine press (?). (Photo by LC).

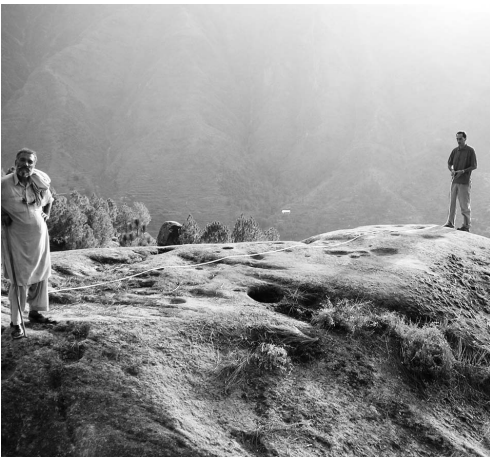


Fig. 44 - Ghirai, the cup-marked boulder. (Photo by LC).



Fig. 45 - Ghirai, the gigantic anthropomorphic rock. (Photo by LC).

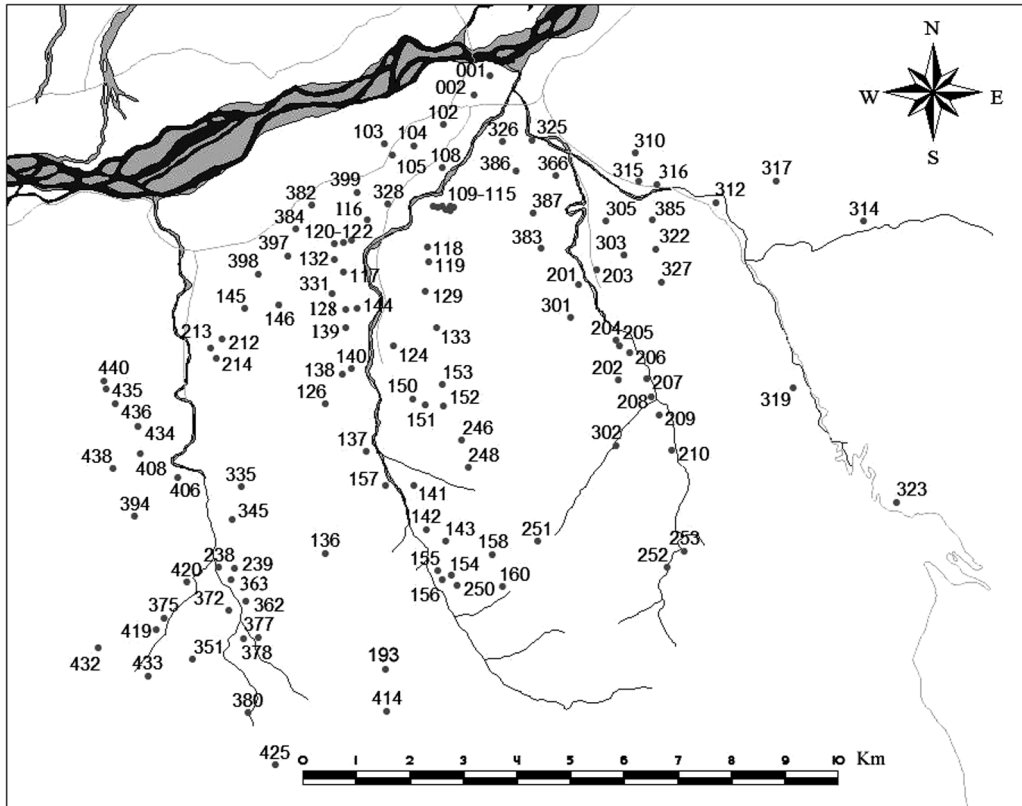


Fig. 46 - AMSV: Historic Sites.

Badra (Site 391)
Tanks.

Meragai (Site 392)
Tank.

(LMO)

Historic Sites (Fig. 46)

Najigram Valley

Tangai-kote (Site 383)
Buddhist site (?).
Masonry remains.



Fig. 47 - Najigram, the ruins of the barrage (a dam?). (Photo by MV).

Bila-tangai (Site 386)
Buddhist site (?).
Masonry remains.

Dwagalai (Site 387)
Buddhist site (?).
Masonry remains.

Najigram (Site 203) (Fig. 47) (Stein 1930;
Barger & Wright 1941; Tucci 1958a)
Buddhist site.

This is a huge complex (c. 2,000 m²) spread over several pairs of artificial terraces. To the N at least 4 terraces are visible, each of which containing a sacred area (relatively well conserved traces of *stūpa*). To the south S there are at least 3 other terraces with relative, badly disturbed, sacred areas. Between the two pairs of terraces runs a small stream alongside which lie the remains of a large section of wall. This sloping wall presents a large number of drainage holes and so, owing to its position and structure (as well as in comparison with the similar structure at Tokar-dara 2), may have had the function of water control.

Tokar-dara 1 (Site 201) (Stein 1930; Barger & Wright 1941; Tucci 1958a; Ashraf Khan 1993; Olivieri 2003a; Abdul Nasir 2005; Spagnesi, this issue; Faccenna, forthcoming a)
Buddhist site.

For a description, see Spagnesi, this issue.

Tokar-dara 2 (Site 301) (Fig. 48) (Spagnesi, this issue)
Monastic settlement.

For a description, see Spagnesi, this issue.

Sperki-gumbat 1 (Site 204) (Tucci 1958a)
Buddhist site.

Remains of a *stūpa*.



Fig. 48 - Tokar-dara 2, ruins of the monastic settlement. (Photo by LC).



Fig. 49 - Abbasaheb-china 2, general view of the monastic settlement. (Photo processed by LC).

Sperki-gumbat 2 (Site 205)

Buddhist site.

Remains of a *stūpa*.

Dabagai 1 (Site 206)

Buddhist site.

Remains of a *stūpa*.

Dabagai 2-3 (Sites 207-202)

Buddhist site.

Remains of *stūpas*.

Abbasaheb-china 1 (Site 208) (Stein 1930; Barger & Wright 1941: as 'Abarchinar'; Tucci 1958a; Olivieri 2003a; Spagnesi, this issue; Faccenna, forthcoming a)

Buddhist site.

For a description, see Spagnesi, this issue.

Abbasaheb-china 2 (Site 302) (Fig. 49) (Spagnesi, this issue)

Monastic settlement.

For a description, see Spagnesi, this issue.

Masum Shahid (Site 209) (Fig. 50)

Buddhist site.

Inside the modern cemetery it is possible to identify the large walls of a monastery complex that are perfectly well conserved and a large *stūpa*. It may be identified as either Jrandu-gumbat or Jerando-dag (Stein 1930; Tucci 1958a)

Kolai (Site 210) (Fig. 51)

Buddhist site.



Fig. 50 - Masum Shahid, the main *stūpa*. (Photo by LMO).



Fig. 51 - Kolai, the modern hamlet built on the ruins of the Buddhist site. (Photo by LMO).

The small modern hamlet of Kolai, in the middle of the valley, stands on a small artificial mound formed by the ruins of a Buddhist complex.

Bara Jamsara (Site 252)

Settlement.

Remains of an ancient masonry water conduit; a circular millstone has been documented.

Kuz Jamsara (Site 253b)

Buddhist site.

Remains of dwellings, perhaps referring to a monastery complex; tanks documented downstream.

(LC, EM, LMO & MV)

Karakar Valley

Gumbatuna 1 (Site 326) (Stein 1930; Olivieri 2003a: as ‘Gumbatuna’; Faccenna, forthcoming a: as ‘Barikot A, B’)

Buddhist site.

No traces exist of the site today. It was a large monastery complex of which, until the 1990s it was possible to visit the vaulted cells and various chambers. The monastery faced on to a sacred area, of which two *stūpas* were still visible in the 1960s (Faccenna, forthcoming).

Gumbatuna 2 (Site 325) (Stein 1930)

Pit-well.

‘On moving up the good mule-path which had been constructed to the pass under the ruler’s order, we first passed after a mile from Bīr-kōṭ an ancient well, 9 feet in diameter and lined with Gandhāra masonry. It had been recently cleared to a depth of 15 feet without yielding water’ (*ibid.*: 17).

Kandarai 1 (Fig. 52) (Site 303) (Stein 1930; Tucci 1958a; Spagnesi, this issue)
Buddhist site.

This is the largest and most impressive Buddhist site in the whole Karakar area. For a description, see Spagnesi, this issue.

Asharai (Site 322)
Buddhist site.

These are structures linked to Kandarai 1 (Spagnesi, this issue).

Ab-china (Site 327)
Buddhist site.

Spring with masonry. These are structures linked to Kandarai 1 (Spagnesi, this issue).

Nawagai (Site 385) (Stein 1930; Barger & Wright 1941; Tucci 1958a; Said Qamar 2004)
Buddhist site.

Naitmara 1 (Site 305) (Stein 1930: 17, as 'Kotanai'; Tucci 1958a: 316)
Buddhist site.

Ghadiar 2 (Site 310)
Buddhist site.
Remains of a *stūpa*.

Ghadiar 3 (Site 315)
Buddhist site (?).
Masonry traces.

Ghadiar 4 (Site 316) (Olivieri 2003a: 21, as 'Ghadial')
Buddhist site.
The monastic settlement published in Olivieri 2003a has now disappeared completely.

Top-dara (Site 312)
Buddhist site.
On the ridge separating Uech-tangai from Ubo-tangai lie the remains of a large sacred area; the remains of 3 *stūpas* are visible.

Tok-dara (Site 317) (Figs. 53-54) (Olivieri 2003a: 21)
Buddhist site.
An important complex site located in a lateral valley on the right hand side parallel to Amluk-dara. The entrance to the valley presents numerous masonry remains on the two sides, which rise on the two ridges. At the bottom of the valley there is a sacred area, marked by a fine example of circular *vihāra* (for further details of this typology see 'Amluk'). Also documented is a walled spring that is certainly contemporary with the ancient monuments. Near the entrance to the valley, on the rock walls on the right bank of the Karakar lies a quarry bearing traces of *chāttra* extraction.



Fig. 52 - Kandaraï 1, the large monastic settlement. (Photo by LMO).



Fig. 53 - Tok-dara, the circular *vibhāra*. (Photo by LC).

Amluk-dara 1 (Site 314) (Stein 1930: 18-19; Tucci 1958a: 315-18; Olivieri 2003a: 21; Spagnesi, this issue; Filigenzi, forthcoming f: as '27'; Faccenna, forthcoming a)
Buddhist site.

For a description, see Spagnesi, this issue.

Bila-tangai (Site 319)
Buddhist site.

Remains of a *stūpa*.

Karakar-kandao 2 (Site 323) (Tucci 1958a: as 'Karahar')
Buddhist site.

'On the same pass of Karahar near the police post, there are ample remains of walls in diaper work: in some places the plaster is still preserved: on the very top the basement of a *stūpa* is visible' (*ibid.*: 315).

(RM, LC, EM & LMO)

Kandak Valley

Bir-kot-ghwandai 1 (Site 001c) (Ref. in Olivieri 2003a)
Fortified town (2nd B.C.-5th A.D.).

Bir-kot-ghwandai 1 (Site 002d) (Ref. in Olivieri 2003a; Filigenzi, forthcoming f: as '26')
Buddhist site; Buddhist rock carvings (7th -8th A.D.).

Goratai (Site 102) (Figs. 55-56)
Buddhist site.

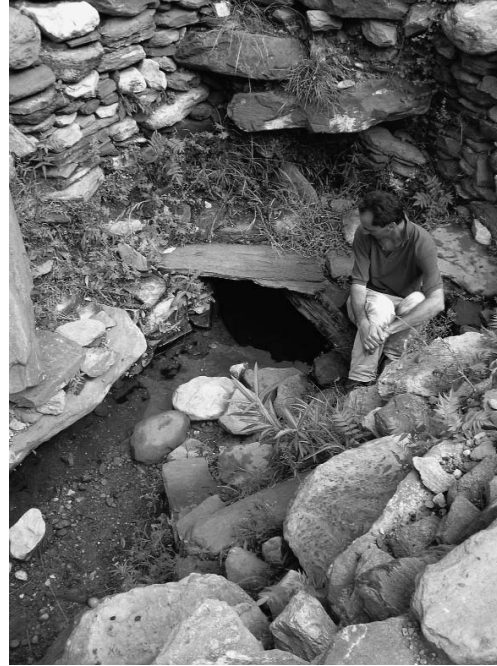


Fig. 54 - Tok-dara, the walled spring. (Photo by LC).



Fig. 55 - Goratai, detail of the archaeological area spoiled by illegal excavations. (Photo by MV).



Fig. 56 - Goratai, a general view from NNW. (Photo by MV).

The site lies alongside the S continuation of Chirgai-gat on the Jaurbanda-ghar ridge. A monastery complex and a small sacred area are visible. Of the monastery a least one row of cells open on to a wide corridor and an open courtyard. The constructions are enclosed in a wall perimeter marked at irregular intervals by pseudo-turretted forebuildings, to be interpreted as small jutting buildings, as at Tokar-dara 2. The monastery complex covers an area of *c.* 4,800 m² with a N-S alignment. The sacred area, now completely ruined, lies N of the complex and can apparently be identified by a series of small *stūpas*. Numerous ruined buildings can be observed in the vicinity, at the top of the hill and to the W of the latter. Fragments of Gandhara schist and stucco decoration have been identified, together with historic age pottery. The site has been badly damaged by illegal digging.



Fig. 57 - Abwa 1, detail of the ruins visible on the spot. (Photo by MV).

Gwel[angaso]-dheri (Site 103b) (Olivieri & Vidale 2004)
Settlement.

On the alluvial terrace E of Gouratai recent farmwork has uncovered, and at the same time irreparably damaged, the remains of buildings separated by cobbled lanes. The probable area of the site was about 6,000 m².

Abwa 1 (Site 104b) (Fig. 57) (Olivieri & Vidale 2004)
Settlement; Buddhist site.

This is the main historic age settlement located on the N side of the ridge separating Swat from Kandak (Jaurbanda-ghar): reconnaissance suggested a built up area of about 15,000 m². The remains are characterized by masonry and pottery. E of the area, in the direction of the river, the remains of a *stūpa* are visible.

Abwa 2 (Site 105b)

Settlement.

Masonry remains.

Abwa 3 (Site 328b)

Settlement.

Masonry remains.

Tahsildar[sep]-kabiruna (Site 108b) (Olivieri & Vidale 2004)

Settlement.

Located on a hill on the right bank of the river, the site features a large substruction wall, above which lies a kind of monumental terrace. The remains of buildings are visible on the latter.

Shaga-malkidam 2 (Site 366)

Settlement.

Masonry remains.

Kandak-khwar 1 (Site 109)

Settlement; Buddhist site (?).

Scattered over an area of *c.* 6,000 m² the remains of masonry and a circular shaped structure, probably a large *stūpa*, are visible (d 20.00).

Kandak-khwar 2 (Site 110)

Buddhist site (?).

Remains of a *stūpa* (?).

Kandak-khwar 3 (Site 111)

Buddhist site.

Together with the 4 subsequent sites, this was probably part of a single Buddhist complex covering the N slopes of the Sur-ghar, about 20.00 m above the river, opposite the site of Gwel[angaso]-dheri. The area covered is about 10,000 m² and was apparently known by the toponym of Ghisio. This first site presents a *stūpa* (d 6-7.00) conserved to height of about 6.00 m. The remains of stucco and schist decoration have been documented.

Kandak-khwar 4 (Site 112)

Buddhist site.

Small *stūpa* (d 4.00) with a second one slightly further downhill, of which a part of the dome has been conserved.

Kandak-khwar 5 (Site 113)

Buddhist site.

Small *stūpa* (d 6-8.00). Remains of circular *vibhāra* (d 3.00). This typology is found both at Amluk and Tok-dara in the Karakar Valley (see 'Amluk'). Remains of schist decoration and architectural elements have been documented.

Kandak-khwar 6 (Site 114) (Fig. 58)

Buddhist site.



Fig. 58 - Kandak-khwar 6, the circular chamber. (Photo by MV).



Fig. 59 - Kanjar-kote 1, the lower terrace. (Photo by MV).

Possible monastery complex consisting of outer walls enclosing a rectangular area (l 15.00, w 30.00), inside which there are several chambers, one circular. To the NE lie the remains of a *stūpa*.

Kandak-khwar 7 (Site 115)

Buddhist site.

This part of the complex comprises a small, badly damaged, *stūpa* and the remains of a building of approximately 200.00 m².

Kanjar-kote1 (Site 116) (Fig. 59) (Stein 1930; Barger & Wright 1941; Faccenna, forthcoming a) Buddhist site.

The sentence from Stein (1930: 14) we quoted at the beginning of this paper describes the explorer's feelings in front of the landscape visible from this site. This is perhaps the largest Buddhist site in the whole valley. Dominating the course of the Kandak, the complex covers two main *stūpa* terraces and other smaller ones, sloping down the hill. For a description of the complex as it appeared during the first third of last century see the references indicated above. Today the remains of the complex, after the damage caused by decades of illegal digging, may still be identified. It covers the side of the ridge, occupying an area of about 8,000 m². The lower terrace (S) is supported by a substruction wall, some 40.00 m has been conserved (max. h 6.00). To the SW lie monastic dwelling structures of the type found at both Tokar-dara 2 and Abbasaheb-china 2. In front of the upper terrace (N) stands a large double *vihāra* conserved to a height of about 3.00 m. The upper terrace houses a *stūpa* (d 6.00) and, in the NW corner, the remains of buildings with extensive traces of plaster have been found. Numerous fragments of schist architectural decoration have been documented. Some 100.00 m to the S lie other remains of masonry structures.

Kanjar-kote 2 (Site 120)

Buddhist site.

300.00 m S of Kanjar-kote 1 the remains of a large *stūpa* on a platform lie (w c. 8.00) inside an area of 400.00 m².



Fig. 60 - Gumbat 1, the great *vihāra*. (Photo by MV).

Kanjar-kote 3 (Site 121)

Buddhist site (?).

Uncertain *stūpa* remains.

Kanjar-kote 4 (Site 122)

Buddhist site.

Remains of a small *stūpa*.

Bazar-khela Kanderai (Site 117)

Buddhist site.

At the foot of the Kanjar-kote a sacred area of some 4,000 m² lies. The main *stūpa*, cut and damaged by farm work, seems to be large in size (d 10.00).

Tanare-gharai (Site 331)

Settlement; Buddhist site (?).

Mata-bara (Site 118)

Settlement (?).

Historic layers have been recorded.

Sanda-sar (Site 119)

Buddhist site (?).

Remains of a *stūpa* (?).

Gumbat 1 (Site 139) (Fig. 60) (Stein 1930; Barger & Wright 1941; Spagnesi, this issue; Faccenna, this issue; Faccenna, forthcoming a)

Buddhist site.

The best conserved complex in the whole of Kandak. With its characteristic splendid *vihāra* still standing, it must have been more deeply appreciated at the time of Stein. The double artificial terrace on which the sacred areas stood must have been appreciated even more. The upper one is still visible today and, in addition to the *vihāra*, houses also the remains of three *stūpa*, two of which are large (d about 10.00). Traces of closed chambers may be identified in the corners of the outer walls. Here, more than elsewhere, a substantial presence of pottery has been recorded and sampled. The pottery was probably due to the presence of two dwelling units to the S and W of the complex, each about 3,000 m² in area.

Gumbat 2 (Site 126b) (Fig. 61) (Olivieri & Vidale 2004: as ‘Gumbat 1’)

Small masonry tank linked to the spring.

Kandarai 2 (Site 144b) (Fig. 62)

Buddhist site (?).

Located on a headland S of the village of Kandak, the site presents highly run-off eroded terraced structures supported by ancient masonry remains. The finding of schist decoration fragments, potsherds, but also of a masonry well, and layers marked by the persistence of ash, suggests a settlement linked to a sacred area (theoretical area: *c.* 5,000 m²).



Fig. 61 - Gumbat 2, the masonry tank. (Photo by LMO).



Fig. 62 - Kandarai 2, the masonry well. (Photo by MV).



Fig. 63 - Shorghar, the *stūpa*. (Photo by MV).



Fig. 64 - Garam, ruins of a *stūpa*. (Photo by MV).

Kandak (Site 124b)
Historic layers.

Shorghar (Site 128) (Fig. 63)
Buddhist site.

Remains of a large rectangular building (*c.* 300 m² in area; max. h 3.00) as well as a large *stūpa* (*d c.* 10.00) characterize this site located about 200.00 m N of Kandarai 3.

Garam (Site 129b) (Fig. 64)
Settlement; Buddhist site.

Probably the largest inhabited settlement in Kandak (*c.* 6 ha). The site covers a natural sloping terrace which is strongly favoured as it gathers the water of numerous small watercourses. The morphology appears to be characterized by a *cavea* formed of successive steps that are found to be formed by large, partially buried, ruins, of widespread contiguous masonry structures. Numerous potsherds have been sampled. Uphill from the *cavea*-terrace, a monumental building is reduced to ruins along the slopes of the Sur-ghar. Higher up, *c.* 70.00 from each other, the remains of two small *stūpas* lie.

Kandak-dherai (Site 132b)

Buddhist site (?).

Scarce masonry remains referring to a demolished *stūpa* (?).

Torkmara-patai (Site 133b)

Settlement.

Small settlement composed of building remains and farming terraces.

Amluk (Site 136b) (Barger & Wright 1941; Olivieri & Vidale 2004; see also the Postscript)

Buddhist site.

The importance of the site emerges clearly from the pages of Barger and Wright. Together with China-Bara, this is the highest Buddhist site in Kandak (c. 2,000 asl). Compared with the decoration published in 1941, a part of the sacred area (with three still recognizable *stūpa*) is still visible together with the monastery building. In addition to these, to the SE, a structure is visible, perhaps a circular *vihāra*, introduced by a rectangular antichamber. Circular *vihāras* have been documented at Kandak-khwar 6 and Tok-dara; see also the site of Gumbatuna, on the right bank of the Swat: here there was a circular *vihāra* with a vaulted roof photographed in Stein 1930: fig. 5. Another circular *vihāra* is documented at Mulano Tangi, Allahdand-dheri (photo in Bahadur Khan et al. 1999: 9). Beside it lie the remains of thick walls enclosing a rectangular access area to the SE. In a small adjacent courtyard to the N the remains of a small *stūpa* lie. Evidence of pottery, fragments of schist decoration, fragments of cereal grindstones. On the E side of the site large stratified remains of ancient food garbage dumps and ashes lie.

China-bara (Site 193) (Barger & Wright 1941)

Buddhist site.

Large hill site with traces of *stūpa* and well dug out of the rock.

Dwolasmāne-patai 1 (Site 138c)

Settlement.

Masonry remains.

Dheri (Site 157b)

Historic layers.

Jowar-bandai 1 (Site 140b) (Olivieri & Vidale 2004: as 'Jaur-bandai')

Settlement.

Kuz Jowar-bandai (Site 246)

Buddhist site.

Traces of 3 *stūpas* on the right and left bank of a stream.

Miage 3 (Site 137)

Settlement.

About 1 ha in area where traces of masonry and scattered potsherds are visible.

Jalalai (Site 141)

Buddhist site.

The site is characterized by an artificial terracing (3,500 m²) on which a large *stūpa* is situated (d 10.00).

Alidad (Site 142)

Buddhist site.

The cultual complex is situated at the foot of Mount Daud-banda, near a huge waterfall. The usual terracing (max. 150.00) houses the remains of at least 3 *stūpas*, the largest of which (d c. 13.00) has conserved a staircase on the NW side. The ruins cover about 2 ha. The masonry type closely resembles those of Amluk. Numerous remains of schist architectural decoration and potsherds.

Shahr-banda (Site 143) (Barger & Wright 1941: as 'Sharban')

Buddhist site.

The site is situated about 500.00 m W of Alidad. The remains of at least 2 *stūpas* are visible in an area of about 1 ha.

Bandu-china (Site 150)

Buddhist site.

Monumental terrace built on a colluvial conoid at the foot of Sur-ghar. The terrace contains the remains of a monastery, several rooms of which are visible, one of which with a niche. Outside the remains of a *stūpa* lie. Fragments of schist architectural decoration are visible.

Gumbatke-china (Site 151)

Buddhist site.

Uphill from the previous one an isolated *stūpa* lies (d c. 6.00). In the vicinity a masonry tank linked to a now dry spring lies (like that of Gumbat 2).

Jowan-kote (Site 152b)

Buddhist site.

Even higher than the previous one a building complex lies, among whose scarce and almost unrecognizable ruins numerous remains of schist architectural and sculptural decoration have been documented. The latter are concentrated on a rocky spur and cover an area of c. 2,500 m².

Abadi (Site 153)

Settlement (?).

Parla-banda Damazai (Site 248)

Settlement.

Traces of masonry scattered along the path leading to Dur-bandai.

Dur-bandai (Site 154) (Fig. 65)

Buddhist site.

Immediately below the Sur-ghar ridge a large complex lies (1.5 ha). On an artificial terrace lie dwellings with courtyards where fragments of large jars and saddle querns have been found. In the S corner of the terrace stands a building with a false domed roof, probably a *vihāra*. From here a staircase leads to the upper complex where at least one *stūpa* (d c. 12.00)



Fig. 65 - Dur-bandai, a general view of the archaeological area (damaged by illegal diggings) from S. (Photo by LMO).



Fig. 66 - Daud-bandai 3, the circular masonry well. (Photo by MV).

lies together with other ruins, possibly from smaller *stūpa*. To the NW of the sacred area lies a third terrace supporting the remains of a large building about 800 m² in area. A very large number of schist architectural and decorative fragments have been found.

Daud-bandai 2 (Site 250)
Buddhist site (?).

Series of walls, perhaps related to a sacred area.

Daud-bandai 3 (Site 251) (Fig. 66)
Settlement.

Circular masonry well (d 0.90). Scattered walls. The site is located in the vicinity of a pass leading to the Upper Najgram Valley.

Ghar-patai (Site 155)
Buddhist site.

Masonry remains (*stūpa* platform with pilaster strips) and potsherds, mixed with schist decoration fragments and a saddle quern.

Jahangir (Site 156)
Buddhist site (?).

Remains of a *stūpa* (?).

Noor-band Gumbat (Site 158)
Settlement; Buddhist site (?).

Investigations show that the site covers an area of about 3 ha. Several indications (masonry and architectural remains) suggest that the site included also a Buddhist sacred area.

Inzar-bandai (Site 160)
Settlement.

Masonry remains.

Kotah Valley

Usmani (Site 399) (Abdul Nasir Khan & Faiz-ur-Rehman 1996)

Settlement.

For a description see the above-cited work.

Ulu-tangai (Site 382) (Abdul Nasir Khan & Faiz-ur-Rehman 1996: as 'Oloo Tangai')

Settlement.

For a description see the above-cited work.

Ghoba-khel (Site 384) (Abdul Nasir Khan & Faiz-ur-Rehman 1996: as 'Ghoba Khal')

Settlement.

For a description see the above-cited work.

Nawe-kalai (Site 398) (Abdul Nasir Khan & Faiz-ur-Rehman 1996: as 'Barabru'; Filigenzi, forthcoming f: as '28')

Buddhist site; Buddhist rock carvings.

Dandi (Site 397) (Abdul Nasir Khan & Faiz-ur-Rehman 1996)

Settlement.

For a description see the above-cited work.

Mullah Hasan 1 (Site 201) (Abdul Nasir Khan & Faiz-ur-Rehman 1996)

Settlement.

For a description see the above-cited work.

(ANK)

Mullah Hasan 2 (Site 212)

Buddhist site (?).

Masonry remains of a *stūpa* (?).

Mullah Hasan 3 (Site 213)

Buddhist site (?).

Masonry remains of a *stūpa* (?).

Mullah Hasan 4 (Site 214)

Buddhist site (?).

Masonry remains of a *stūpa* (?).

Tor-gumbat (Site 146a)

Buddhist site.

Masonry remains of a *stūpa* (d 6.00).

Sur-kamar (Site 145a)

Historic layers.

Muhammad-patai 2 (Site 335a)

Settlement (?).

Masonry remains.



Fig. 67 - Mena, the isolated hill seen from N. (Photo by LMO).



Fig. 68 - Mena, detail of the walled outer circuit (SW side). (Photo by LMO).

Dandi-sar 3 (Site 345b)
Settlement.

Uphill from the boulder (see) runs a stream, while immediately downhill lie farm terraces with frequent Historic and Late-Historic potsherds.

Malak-ziarat (Site 362b)
Buddhist site; cup-marks.

On the ridge NW of the site the ruins of 3 *stūpas* may be identified. On the rock platforms supporting them are basins and cup-marks.

Mena (Site 363b) (Figs. 67-68)
Settlement.

This is the largest Historic Age settlement in the valley. Dozens of wall structures make up the substrate of a flat elongated plateau (about 3 ha).

Bar Sandok 1 (Site 238)

Buddhist site (?).

Masonry remains (*stūpa?*).

Bar Sandok 2 (Site 239)

Buddhist site (?).

Masonry remains (*stūpa?*).

Banj-ghwandai 2 (Site 375b)

Settlement.

Masonry remains.

Ghwandai (Site 372)

Settlement; Buddhist site (?).

Bang-khas 2 (Site 377)

Buddhist site.

Ruins of a *stūpa*.

Bang-khas 3 (Site 378b)

Settlement.

Chuwa 1 (Site 351). (Abdul Nasir Khan et al. 1995: as 'Chuwa')

Buddhist site.

Bara Kamal-china 2 (Site 394)

Settlement; Buddhist site (?).

Palwano-gata (Site 380b)

Buddhist site (?). WNW of the shelter traces of walls lie (*stūpa?*).

(LMO & MV)

Late Historic (and Early Islamic) Sites (Fig. 69)

Karakar Valley

Hakim Barikot (Site 004) (Olivieri 2003a: 21)

Tower-house complex.

Naitmara 2 (Site 304) (Barger & Wright 1941)

Tower-house (?).

Kandarai 2 (Site 306)

Tower-house (?).

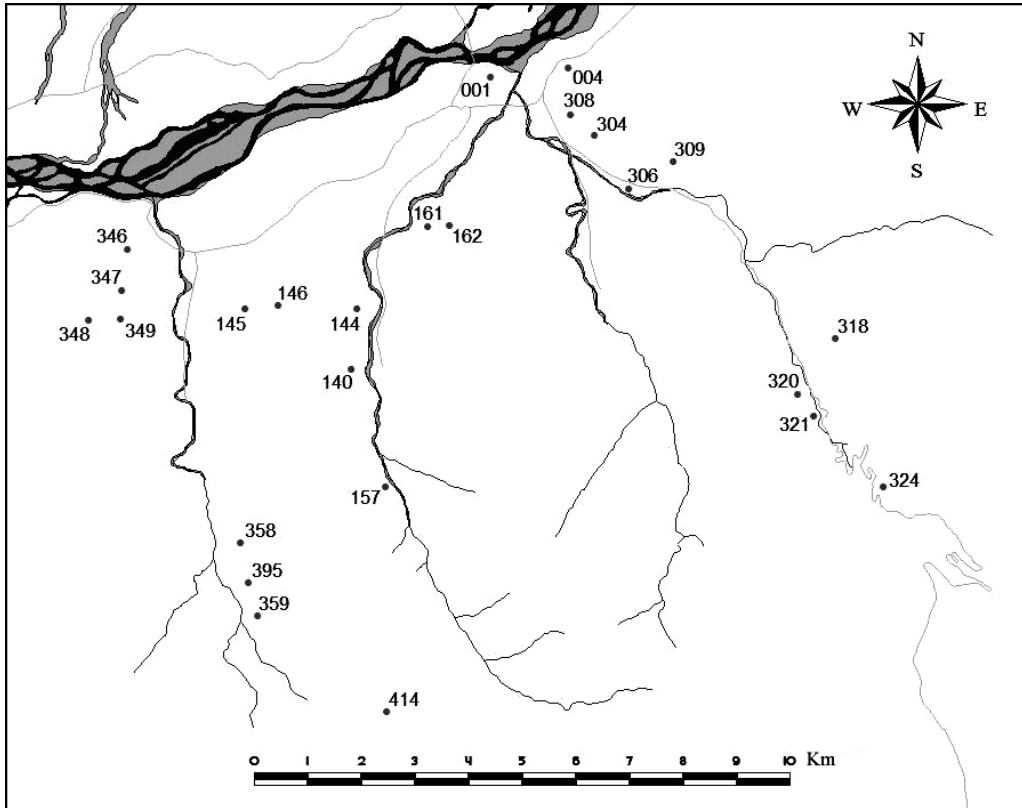


Fig. 69 - AMSV: Late Historic and Early Islamic Sites.



Fig. 70 - Ghadiar 1, the ruined settlement seen from SE. (Photo by LMO).

Ghadiar 1 (Site 309a) (Fig. 70) (Barger & Wright 1941; Olivieri 2003a: as 'Nawagai')
Tower-house complex.

This dwelling complex comprises 7 main groups of buildings. The dwelling unit almost always consists of the repetition of an identical module (l 6.00; w 13.00).

Ashtarai-ghar (Site 309b)
Tower-house complex.

Kilarano-tangai (Site 318)
Tower-house complex.

Nare-tangai (Site 320)
Tower-house complex.



Fig. 71 - Mia-kote, the main tower-house. (Photo by LMO).



Fig. 72 - Maishkano-maidan, the tower-house. (Photo by MV).

Mia-kote (Site 321) (Fig. 71)

Tower-house complex.

The complex develops along a ridge, running E-W. An outer wall is seen to run around the complex and support it: from here it is possible to gain access to the upper terrace through a double flight of steps on the S side. The buildings are squarish in shape (w 3.90; l 4.40) and are towered. The first storey, marked by the holes for beams on the inside, is marked on the outside by a string course of jutting slabs. A later building phase is identified, with curved masonry and a rough wall structure.

Karakar-kandao 1 (Site 324) (Stein 1930; Tucci 1958a: 315)

Early Islamic pottery has been documented.

(LC & LMO)

Kandak Valley

Bir-kot-ghwandai 1 (Site 001d) (Callieri et al. 2000-2001; Olivieri 2003a)

Tower-house complex (5th-9th A.D.); Shahi religious building (8th-10th A.D.); fortification (10th-11th A.D.).

Bir-kot-ghwandai 1 (Site 001e) (Callieri et al. 2000-2001; Olivieri 2003a)

Early Islamic settlement (12th-15th A.D.).

Maishkano-maidan (Site 162) (Fig. 72)

Tower-house complex.

This complex has fairly clear-cut characteristics. The dwellings are built on two terraced levels in the vicinity of a now dry spring.

Kandarai 2 (Site 144c)

Settlement.

Masonry remains.



Fig. 73 - Begum-kot, the fortress overlooking from the top ridge. (Photo by LMO).

Nawarale-tangai (Site 161)
Tower-house complex (?).

Dheri (Site 157c)
Late Historic layers.

Jowar-bandai (Site 140c)
Late Historic layers.

Begum-kot (Site 359b) (Fig. 73)
Tower-house complex.

(LMO & MV)

Kotah Valley

Sur-kamar (Site 145b)
Settlement.

Two rows of buildings may be identified, perhaps the remains of a small tower-house complex.

Tor-gumbat (Site 146b)
Tower-house.

Hisar 1 (Site 346) (Stein 1930; Olivieri 1996b, 2003a)
Tower-house complex.

Hisar 2 (Site 347) (Stein 1930; Olivieri 1996b, 2003a)
Tower-house complex.

Hisar 3 (Site 348) (Stein 1930; Olivieri 1996b, 2003a)
Tower-house complex.

Hisar 4 (Site 349) (Stein 1930; Olivieri 1996b, 2003a)
Tower-house complex.

Nirbazai (Site 358b)
Settlement; Buddhist site (?).

Numerous structures may be identified, some of which characterized by walls built using large pseudo-isodomic blocks.

Tapa (Site 395)
Settlement.
Masonry remains.

(ANK, LMO & MV)



Fig. 74 - Hati-dara, a general view of the temple podium from S. (Photo by LC).



Fig. 75 - Hati-dara, detail of the architectural decoration. (Photo by LC).



Fig. 76 - Hati-dara, detail of the architectural decoration. (Photo by LC).

Zalam-kot Valley

Hati-dara (Site 393) (Farooq Swati et al. 2002: as 'Takht') (Figs. 74-76)

Religious building; fortifications.

The site is located at the end of the Zalam-kot Valley, in the Allahdand-dherai area (Malakand Agency), in a zone lying outside that included in the AMSV work. Its vicinity to the W border of the AMSV, as well as its historical importance (see Abdur Rahman 1998), justifies treating it herein. The area S of Allahdand-dherai splits into two valleys – to the E that of Loryan-tangai, which ends in the not Periano-kandao (very far from the Cherat-kandao); to the W the actual valley of Zalam-kot, which ends in the Shakkot-kandao. From here it is easy to walk to Palai, and Dargai along two ancient roads that are still accessible today. The site,

uphill from the village of the same name, is characterized by a powerful defensive line, large sections of which are still visible. This closes the valley and then climbs up to the ridge, taking in the Shahkot-kandao, which becomes an integral part of them, together with its ancient road itinerary. Halfway up the hill a huge substruction wall running E-W has been found, with a curtain of large isodomic blocks (max. w 20.00; max. h 3.50). On this substruction stands a moulded podium with the same orientation (l 21.10; w 13.00; max. h 3.80). The platform is punctuated by pilaster strips 1.35 m apart; the latter are decorated with slender columns with reverse trapezoidal capitals of a non Gandhara type. The decoration, masonry technique and layout exclude the likelihood of its being a Buddhist building. On the other hand, the orientation and indeed the decorative and moulding typology suggest the features of the Shahi temple of Bir-kot-ghwandai (see Callieri et al. 2000, 2000-2001).

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IMPLICATIONS OF ROCK-ART STUDIES FOR A HISTORY OF HUMAN SETTLEMENT IN SWAT

Introduction

One of the most important discoveries made by Giuseppe Tucci in 1955 in Swat was that of the carved wall at Gogdara I (Tucci 1958; Brentjes 1977; Olivieri 1998). Standing sheer over the road, it displayed only a few carvings, which nevertheless increased as a result of the excavation of the deposits covering its base. Unfortunately, for some reason, the dig gave no useful indications concerning the dating of the carvings (Olivieri 1998: 59). The wall is covered by over one hundred figures, the majority of which deeply incised, others merely scratched on the surface. The carvings were carried out using metal points; the rock face was then cut by quarrying operations typical in this area during the golden age of the great Buddhist monastic foundations (Di Florio et al. 1993). These two elements allow the carvings to be dated to between the Bronze Age and the beginning of the Historic Age (16th-4th B.C.). Retouches and overlaps point to two large carving phases: one comprising large wild animal figures (all facing right), the other one with the depiction of carts, herds of horses, standards (all facing left); the human figure is absent (the contrary of what Tucci wrote in the legend to fig. 2 in *On Swat* in 1977). The two phases are stylistically different: large animal figures are often bi-triangular, while later images, as a rule, are linear and schematic.

For a long time Gogdara I was considered an isolated case in Swat, an early example of a tradition that reached its peak only with the rock art of the later Buddhist monuments, in late antiquity. After a decade of new, intensive research, Gogdara I, although still representing a key site for protohistoric archaeology, is

obviously part of a much wider and richer heritage. In the following pages we shall try to place the rock art of Swat in a wider archaeological reconstruction, centered on the fluctuating relationships between human societies and their territories.

Urban Growth and Land Use at Bir-kot-ghwandai

The most important archaeological feature is without doubt the large settlement of Bir-kot-ghwandai (hereafter BKG), which was continuously occupied from the Bronze Age to the Early Iron Age, after the excavations of G. Stacul (for references see Olivieri 2003a), and the trenches exposing the layers below the Indo-Greek city, both in the lower town (Callieri et al. 1992) and in the hilltop or acropolis (Callieri et al. 2000; see also Olivieri 2003a). The settlement seems to have covered a total area of 5 ha (without the acropolis). Stacul found a Bronze Age settlement with semi-subterranean dwellings (or dwelling-pits: perhaps huts and/or storage facilities). In the latest Bronze Age phases, huts were built above the ground with walls of mud and pebbles. The material culture includes a highly refined painted ware, previously unknown in the contemporary sites of Swat, clearly belonging, from a stylistic point of view, to the 'Cemetery H' culture of the Localization Era of the Indus tradition (according to the M. Kenoyer's definition), c. 1700-1300 B.C. Both at BKG and in other sites of the valley, these Bronze Age settlements based their subsistence upon sedentarian agricultural practices. Thus they clustered near the available cultivable lands, usually at the confluence of river courses, as in the cases of BKG or the Mingora area (sites of Aligrama, Loebanr 3 and Kalako-dheri) (Stacul 1987; *contra* Coningham & Sutherland 1997-98).

In front of BKG there are about 250 ha of naturally irrigated floodplains, consisting of fertile fine silt and clay beds. This surface appears to have been free from settlements or other constructions (with the possible exception of the small graveyard of Shaga-malkidam 3). On the outer bounds of this area, again in the hillsides or mountain sides, we found 3 major contemporaneous settlement areas or large villages: Abwa 1-2 (in the Swat valley), Gumbat and Jowar-bandai 2 (in the upper Kandak valley). At BKG the most common crop was rice, which was easy to grow on these easily irrigable lands, followed by wheat and barley (data from Costantini 1987). The flowrate of the Swat was without doubt greater than it is today, also in view of the existence of a much larger niveo-glacial basin at the time; and perhaps the bed of the river was much wider than it is now (as also suggested by the find of thick alluvial layers in the Ghalegay shelter, see Stacul 1987. The *minimum* Pleistocene glacial, according to A. Desio, was identified at an absolute height of 1,400-1,500 m asl, while the present-day ELA lies over 4000 m asl; cit. in *ibid.*: 5).

The BKG natural hill perhaps appeared as a peninsula extending towards the N and NE into the Swat river bed. Although the rice fields in the present bed of the

Swat are a recent result of a major hydrographic shift, the water table in ancient times was definitely higher. There is little doubt that the land south of BKG, along the Karakar and Kandak rivers, represented the most favourable land for cultivating rice. The BKG Bronze Age settlement relied heavily on the humped bull (*Bos indicus*), more than in any other contemporary village of Swat, while sheep grazing came a clear second (not only in absolute terms, but also when compared, for example, to Loebanr 3) (data from Compagnoni 1987).

The following settlement at BKG is quite different: it had rectangular houses with mudbrick walls built above partially subterranean stone foundations. In this settlement 2 chronological horizons were identified: a Late Bronze Age and an Early Iron Age occupation (Stacul 1987: 63). Painted ceramics were replaced by a black and grey burnished ware, sometimes decorated with comb-like patterns, spike and chevron designs. Between this settlement and the later fortified city there is a little settlement gap, as demonstrated by the mud brick debris found in the fillings of the foundations of the Indo-Greek boundary wall (3rd-2nd B.C.).

In this time-span the best agricultural land in front of BKG was slowly covered by a huge graveyard, doubtless the largest in the whole Swat valley. Initially identified at several individual sites (from Bir-kot-ghwandai 2 to Thasildar[sep]-kibiruna and Goratai-kandao 1, up to Shaga-malkidam 1), this burial ground was finally recognized as a single cemetery extending for more than 1 km², thus occupying about 1/3 of the best available ploughing surfaces. This huge graveyard may well have contained 30,000-60,000 individuals buried over a millennium. This evolution in the land-use pattern, in the late Iron Age, doubtless had a considerable impact on local economies.

Minor protohistoric burial grounds were found in more remote locations: Uech-tangai in Karakar, Kandak, Jowar-bandai 1, Miage 2 and others in the Kandak valley, Kamal-china 4, Rahmanuddin house, Bang-khas 1, in Kotah. Although Gwel[angaso]-dherai seems to have been the only other major protohistoric settlement in Kandak, the frequency of small cemeteries hosting 10-50 graves suggests a widespread occupation of the general area by localized family groups.

The Kandak valley was the most intensely occupied area, followed by the Upper Kotah Valley. In the Karakar and Najigram valleys, there is only one known protohistoric site, while the latter valleys were densely settled in the Historic periods. In protohistoric times, the Karakar might have been used and controlled in a quite different way. According to the historical sources, the Karakar pass was already open during the second half of the 1st millennium B.C. and this might have been one of the reasons for the increasing prosperity of BKG (Olivieri 1996b). A scarcity of ancient settlements would indicate that roads and the pass were managed indirectly, as they might have represented a potential danger, rather than a source of wealth. This may be considered evidence of a state of marginalization, particularly when it is compared with the previous settlement patterns of the Bronze Age (as originally perceived in Tusa 1979).

This inference might be biased by the flimsy nature of the archaeological evidence, particularly if we accept with R. Young (2003, 2005) that the core of the economy depended upon sheep grazing and transhumance and on seasonal strategies of subsistence farming (Id. 2003: 81).

In the second half of the 2nd millennium B.C. there is clear evidence of a sudden change (see also Stacul 2001). A loss of interest in farmland and a shift towards building and maintaining large and rapidly expanding burial grounds can hardly be questioned. This might have promoted an important inversion in the economy of our valleys and of Swat in general. While agriculture (apparently in progress, again, in the Early Iron Age, thanks also to important innovations such as the introduction of large saddle querns: see Id. 1995) was not abandoned, crops and diets may have been transformed. The overall contribution of cereals to subsistence decreased, and, in husbandry, feeding on straw, hay and cereals might have been partially replaced by the exploitation of mountain meadows. This is also the opinion of K. Jettmar when he examines the passage from Arrianus (*Anabasis* IV 25, 4) that mentions the confiscation of 240,000 oxen or bulls by Alexander from the tribes inhabiting the NW borders of Swat (Jettmar 1995):

They were of such a superb quality that he ordered to bring a selection back to Macedonia, for ploughing. Evidently the dominant tribes of the region were experienced cattlebreeders. As a pre-condition for the maintenance of large herds of superior quality, we may assume a system of transhumance. (*Ibid.*: 36).

Little is known about this important change, nor whether it was fast or slow. At BKG,

[...] a thick, alluvial, almost barren deposit [...] separates the occupation of Period IV [...] from the layers of Period V [...]. Here, in this clayey deposit, some human skulls and a few other disconnected skeletal remains, were recovered, scattered over a large area without traces of graves [...]. (Stacul 1987: 63).

Painted Shelters and Their Possible Implications

More information on the dynamics of settlement, intrusion and marginalization, comes from the rock art in Kandak and Kotah. Such artistic or graphic (and, at least in part, ritual) tradition has been attested since the Bronze Age and survived the transformations brought about by Buddhism, declining only in the later historical phases. The shelters are usually large gneiss boulders metamorphosed and eroded by glacier action located in rugged and hard to access places, but clearly visible at a great distance. The interior, or protected space, may barely have been sufficient to shelter more than 1-3 persons at the same time. The figures are painted in dark red ochre, the more recent in orange ochre, and more rarely in yellow or white. The paintings deemed to be the most ancient, those of Sargah-sar 1 (Figs.

16-17) and Kakai-kandao (Fig. 15), display highly symbolic compositions, the syntax of which is based on associations, oppositions and combinations of iconographic themes. The elaborate structure suggests co-literate cultural contexts, that is, typical of illiterate cultures that nevertheless possess a complex mythopoeitic and lexical heritage (Vidale & Olivieri 2002; Olivieri 2005, and forthcoming b; Olivieri & Vidale 2004; Laurenza & Vidale 2005). While the fundamental theme of the early phase of Gogdara I is the wild animal icon, the ibex and the leopard, two sacred animals in the traditional cultures of the Hindukush and the Karakorum, the dominant theme at Sargah-sar 1 and Kakai-kandao 1 seems to be agriculture. The following is doubtless highly speculative – an almost inevitable condition for any rock art study – although we willingly pay this price in the hope of combining this fascinating evidence in a unitary reconstruction of the history of the ancient population of Swat.

At Sargah-sar 1 we have actually hypothesized scenes of ploughing, sowing and consecration of the field entrusted to three types of actors. Men and women, perhaps equipped with farm implements, have the task of ploughing; other men, who seem to occupy a hierarchically higher position have the task of sowing (they have typical upside down U-shaped legs), a large anthropomorph, with the same characteristics as the sowers is lastly depicted inside a large ploughed and sown field, of which the same symbol is part, as in a drawing by Escher. In our attempt to relate these scenes back to a Vedic (or R̥gvedic) ideological background, we cited the preclusion of priests from ploughing, who with their tools (all the worse if made of metal) would have injured the virginity of the field (see also *Manu* X 84, ff.). The priests have the task of sowing, in the name of the god of the fields, which was reborn from them through the ritual act. The presence of animals in the painted shelters is limited in Kakai-kandao to a monkey depicted in the act of defecating on a sown field: in a R̥gvedic environment this animal could be a reference to the goddess-symbol of the autumn equinox (ref. in Vidale & Olivieri 2002, and Olivieri & Vidale 2004).

At Sargah-sar 1, a marginal sector of the painted sector is dominated by a heroic scene. An individual with U-shaped legs armed with a shining shield intervenes between an ibex surmounted by an anthropomorph and a large feline that is attacking it. Here we again see, although expressed through a syntactic language, an association between the themes of the leopard and the ibex, which is dominant in phase one of Gogdara I, where an ibex surmounted by an anthropomorph is perhaps depicted. This icon doubtless corresponds to the hypostasis of one of the many *devi* of the mountain, known throughout the Karakorum-Himalaya area until recent times *sub specie Durgae*, called Murkhum by the peoples of Kafiristan. This reference to hunting (interpreted in its metaphysical or ritual meaning) is linked to the marginal, although not absent, role played by this activity in the osteological evidence yielded by the excavations (Compagnoni 1987).

At Sargah-sar 1 and Kakai-kandao the principal compositions are surrounded by secondary figures: archers aiming arrows rigorously to the right of the onlooker, dancers or figures with theriomorphic modifications or open hands extending outwards. Also in the Bronze Age painted pottery of BKG (inv. no. BKG 302; Stacul 1987: fig. 47.*k*), as in that of Cemetery H at Harappa (or, for the sake of example, in the painted pottery of the 2nd millennium B.C. of Maharashtra) such depictions exist. The theme has often been associated with a state of shamanic trance or ritual death (ref. in Vidale & Olivieri 2002: nn. 23-24). These observations probably bring us nearer to the meaning of these shelters, inside which a man often has difficulty even in remaining seated. Clearly the art of the earlier painted shelters was not created simply to be observed: it could be linked to long periods of isolation and deprivation and associated with forms of initiation ritual.

New Evidence from Muhammad-patai 1

In the carved frieze of Muhammad-patai 1 the mythopoeitic components of protohistoric Swat are enhanced with new revelations. The shelter is decorated with two principal compositions: a frieze on the front of the jutting boulder forming the roof (Fig. 19); a second composition in several different registers overlapping on the inside, at the rear wall of the shelter (Fig. 20). While the latter presents stylistic and lexical characteristics typical of the later phases (linear or comb-like zoomorphic figures; see Olivieri & Vidale 2004: 172), on the left, the former displays a complex quadruple scene. Starting from the left we recognize a warrior figure raising a large shield in his right hand and a weapon (?) in his left; the figure of an archer facing at least one zoomorphic image; two large animals – a feline and a caprid in evident opposition, each surmounted by an anthropomorphic figure linked to the back of the animal ‘vehicles’ by vertical lines or rods; an anthropomorph (the head of which has unfortunately been lost) supporting a feline or a bird of prey pushing towards an equid (?) with lowered neck, and with the rear hoofs clearly bound to a pole. The latter scene, almost certainly of a sacrificial nature, is strongly reminiscent of few painted fragments, in particular a Bronze Age one, from BKG (inv. no. BKG 500; Stacul 1987: fig. 46.*b*). G. Stacul has in several instances emphasized the archaic stylistic reference of many of the depictions on this quality pottery, above all which scenes of ‘ritual aggression’ between animals and representations of equids are illustrated (*ibid.*: 109; Id. 2005). Although without going into the matter in detail, Stacul was doubtless thinking of the horse sacrifices that were so important in the Indian representation of regality (even though the role of the animal of prey remained undefined).

Further to the right, a part of this carving evidently fell off in ancient times, now revealing fracture surfaces with a different patina. The latter were used to make new carvings with different subjects and in different styles.

The painted shelter of Sargah-sar 1 was used also in a later era. Both here and at Kakai-kandao 1 and Muhammad-patai 1, there are actually various cup-marks that, as we will see, are a phenomenon that can definitely be dated to the Iron Age and later. Furthermore, several complex scenes scratched on the base of the niche rigorously respect the space occupied by the paintings, which were perhaps perceived as sacred or in any case prestigious (Fig. 18). At the centre of the Sargah-sar 2 surface a large figure of a horseman armed with a large bow and perhaps carrying a rectangular shield decorated with 'eyes'. Beneath the anterior hoofs of the horse lies an anthropomorphic figure, perhaps headless. A large arrow is nocked to the bowstring and its triangular head transfixes an enemy prisoner. To the immediate right lies another enemy, either fallen or taken prisoner (in both cases the state of being a prisoner is apparently indicated by the arms closed in the form of an arc on the sides, as though the wrists were bound behind the back). On a scale and in contexts that are completely different the impression is that of observing a prehistoric antecedent of the great Iranian celebratory reliefs of late antiquity, as it were. On the right of the horseman there are other figures: a dismounted archer aiming at the head of a caprid, holding it by the hoofs, in order to represent possession or capture. On the left, there are other animals and vaguely anthropomorphic figures with a 'mushroom' shape, two of which presenting some similarity with the well-known 'anthropomorphs' of the so-called Gangetic copper hoards.

The theme of the hero carrying a shield associated with the ibex and the large feline is a recurrent one in rock art after the Bronze Age: for example, on the carved boulder of Lekha-gata 2 and in the painted shelter of Dandi-sar 1. The Lekha-gata 2 boulder (Olivieri & Vidale 2004: fig. 41), as well as the (heroic?) human figure, also displays a large number of compositions executed by means of dot marks, forming wheels. Astronomically oriented wheels and crossed wheels are common in these lesser valleys of the Swat, as also in Bajaur and the upper course of the Indus, where they were recorded by the archaeologists of the German projects. 'Permutations' of larger dot-marks (or cup-marks) are very commonly found in the form of cup-marked boulders. The widespread presence of cup-marks is a truly extraordinary phenomenon in Swat, in particular in the Kandak valley. Furthermore, all the painted shelters and carved walls are literally surrounded by cup-marks. They are found around the sites, at the top and bottom of the shelters (this may support the idea that cup-marks were meant for rituals, for example for holding liquids). The earliest datable cup-marks are those carved out of the roof slab of several Iron Age graves, in the Jowar-bandai 1 graveyard (in the Kandak valley) and in that of Kamal-china 4 (in the Kotah valley). This does not rule out the possibility that many may be even older (for a reappraisal of all the aspects related to the phenomenon of cup-marks in Swat, see *ibid.*, and Olivieri 2005; as far as the compositive or sub-figurative

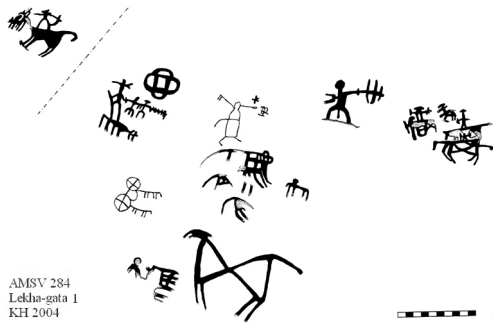
values is concerned, together with the case of the megalithic monument of Kandakford, see Olivieri & Vidale 2006b).

The painted shelters of Dandi-sar 1 (Fig. 24) and Kamal-china 1 (Fig. 22) are the expression of a progressive lexical transformation, tending towards a repetitive simplicity i.e. symbolism, as the result of an actual cultural change. The process of change might have been strictly local and autonomous, or, conversely, due to a foreign influence: we are unfamiliar with. At Dandi-sar 1, motives already observed in older painted shelters, such as body transformations (Id. 2002: n. 23) or radiating shields/wheels are rendered with a new emphasis. A minor figure, on the upper left, shows a body transformation, while the whole scene is dominated by a big anthropomorphic image holding a shield, whose head is surmounted by a radiating disc or solar symbol. Similar icons (anthropomorphs with round shields) are repeated twice in the midst of other designs more difficult to interpret.

At Kamal-china 1 the painted shelter affords us a different relationship between space and the figures: the latter are bundled together, practically filling every bare space, in a kind of *horror vacui*, which is not found in the lucid syntactic composition of the earlier shelters. At Kamal-china 1 the almost obsessively repeated icons are dominant. In the centre of the wall at least 5 hands stand out, arranged in the centre in the same line and emphasized by an anthropomorphic image displaying a huge hand as though it were the hypostasis. All around, in a cyclic pattern, figures of horsemen, anthropomorphs on horseback (with bodily modifications), humped bulls, banners and battle-axes are arranged. Below, there is a horseman with a small fringed shield and an ithyphallic anthropomorph which is raising a humped bull by the hoofs, a motif observed also at Dandi-sar 1. The site of Kamal-china 1 is one of the most interesting of the entire Kotah valley: it is surrounded by two Iron Age graveyards and three sites with cup-marks and wheels (Kamal-china 3-5).

While in the older painted shelters the horse is absent and agriculture is possibly emphasized, in the later examples warriors are constantly associated with horse-riding. The horse icon was possibly the totem of the Assakenói-Āśkakayāna, or at least their eponymous animal (Tucci 1977: 45-46): these are the peoples that Alexander encountered in Swat at the end of the 4th B.C. It is certain that the horse was present in the decoration of the precious Bronze Age pottery at BKG (Stacul 2005b); as an icon it was however found first at Gogdara I and Sargah-sar 1, at least in the latter phases of these sites. In both cases, the later carvings respect the ancient monument and make do with residual and marginal spaces. The 'horse' is then definitely found in the iconographic and osteological panorama of the graveyards (ref. in Olivieri 1998: 69). It is then certain that the entire iconographic patrimony of the *post*-Bronze Age is based on manly and warlike themes.

The impression is that highly hierarchized pastoral societies were formed, perhaps the same as those described in critical terms, for example, in *Manu X* 41-55 (see Id. 2004). These groups may have wasted large portions of farmland to



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Lekha-gata 1
KH 2004

Fig. 77 - Lekha-gata 1, the carvings. (Drawing by LMO and MV).

maintain large graveyards in which the memory of their ancestors is conserved. The leaders of chariots and herds of horses of Gogdara I, for example, avoiding the human figure, represented themselves and their people in the form of tribal standards, outstanding among the whole composition. Similar attitudes are visible in the painted shelters of Kamal-china 1 and Lekha-gata 1 and in the site of Top-china. At Lekha-gata 2 (Fig. 77), we find depictions of armed horsemen, side by side with the simplified representation

of a carriage drawn by a pair of horses (the same type as Gogdara I) and a large bi-triangular animal. In the shelter of Kamal-china 1, which may perhaps be dated by its Iron Age graveyard, everything speaks to us of a herder-horseman culture gathered around often repeated symbols: the battle-axes, the right hand, the banners, the ownership of herds. This act, as we have seen, is represented by means of the scene of a man holding the animal's hocks, both at Kamal-china 1 and Sargah-sar 2. Lastly, the style is that of typically linear later protohistoric rock art; on the other hand, the syntax is impoverished to the advantage of a composition rendered complex by the redundancy of a small number of themes. This complex of symbols might be hypothetically interpreted, at an elementary level, in the following way: hands = authority, possession; horse and riders = rank; humped bulls = material wealth; battle axes = warfare and conquest. We suggest that similar symbols are closely related to the rise of a sharply stratified society where the highest ranks fought not only for land and prestige but for cattle as well.

This is the end of a long evolution running from the 2nd millennium B.C. until the end of the 1st millennium A.D., but not of the rock art of Swat. In summary, we are dealing with an early phase datable to the Bronze Age (before 1400 B.C.), when paintings possibly represented agricultural rituals and wild animals, perhaps depicting specific divinities; in this phase the hero appeared for the first time, holding a shield. In the long transition phase towards the Iron Age (1400-400 B.C.), with the well-known extensive graveyards, warrior and pastoral figures predominate, but above all the depiction of the horse. In the phase of contact with the Buddhist cultural domination (100 B.C.-400 A.D.), we witness the expressions of a contrast with the new ideology, accompanied by symbols, which proudly underline the difference of the local tradition (Table 2). A continuous and recurrent phenomenon throughout this time span is, as we have seen, that of the cup-marked boulders.

(LMO & MV)

SETTLEMENT PATTERNS IN THE EARLY HISTORIC AND HISTORIC PERIODS

Introduction

Analysis of the distribution of the Buddhist sites suggests that the majority of the sites identified are situated inside the area of confluence of the three largest valleys (Kandak, Najigram e Karakar) in the area immediately S of the built-up area of BKG. They are located half way up or at the top of hills in a dominant position. Although our observations were based upon unexcavated ruins, usually badly damaged by plundering activities, these sites are formed by large monastic complexes, the size of which is much greater than that of the relative sacred areas.

In monumental or larger sites monastic structures with courtyard seem less common. They seem mainly to consist of complexes of isolated buildings with similar characteristics (structures with a rectangular layout with towers and external masonry staircase). Small courtyards have been found at Tokar-dara 1-2, Masum-shahid and Abbasaheb-china 1-2; they may be hypothesized at Gumbat 1, Kanjar-kote 1, Goratai and Najigram, where however isolated buildings are absent. The monastic types that are extensively documented in the Mingora area, especially at Saidu Sharif I, thus seem to be less frequent: contiguous courtyard and sacred area within well defined limits (Callieri 1989; on the differences between sites in the Mingora area and that of the BKG area, see Faccenna, forthcoming a). At Najigram no dwelling structures have been found outside the monumental terraces. Kanderai 1 (Fig. 52) may possibly have been the centre of a huge monastic settlement on which several sacred areas depended: namely, Najigram, Naitmara 1 and Nawagai. In this sense, the site or site cluster of Kanderai 1 could even turn out to be the largest monastic complex of the entire Swat. It is situated in a position of strong dominance, visually dominating many other important sites: Abbasaheb-china 1-2, Tokar-dara 1-2, Ghadiar 4, Tok-dara, Top-dara, Amluk-dara and lastly BKG (Fig. 78). On the BKG hill there must certainly have been another important sacred area: in spite of the reconnaissance and the excavations it has not been located exactly (Olivieri 2003a; Callieri et al. 2000, 2000-2001); this is demonstrated by the frequency of Gandharic sculptures and decorated architectural elements over the entire acropolis. BKG represents the second pole of this 'strategy' of visual dominance of the territory by the Buddhist foundations. From the top of the hill the gaze reaches as far as Kanderai 1, takes in the whole of Karakar, as far as the pass of the same name, the entire Kandak as far as Gumbat 1, Amluk and China-bara; it dominates the whole of Swat from Udegram to the E as far as Chakdara to the W.

Then there are lesser sites located in more marginal areas, albeit not far from the largest centres. We found, for example, a long row of sacred areas perched on the right bank of the Kandak: from Kandak-khwar 1 to Garam (the size of which is hard to assess today), as far as the hill site of Daud-banda, whose ruins appear



Fig. 78 - A general view over the confluence between Kandak, Najigram and Karakar rivers from above Kanderai 1. In the background the isolated crescent-shape hill of BKG is visible. (Photo by LMO, processed by LC).

monumental, in spite of its limited extension. In the Najigram valley in particular (but not exclusively) on the left bank there is a series of small sacred areas which gradually thin out as one climbs the valley towards the passes leading to Kandak. In the Karakar valley the sites are spread out along the valley up as far as the pass of the same name, in practice following the ancient and important communications route (Olivieri 2003a). This seems to prove that also the monastic settlements must have had some connection with the transit route owing to the great fortune and long life of the BKG site from the Bronze Age to the Islamic period. In rare cases (e.g. at Gumbat and Kanjar-kote), and only on the hillside or at the top, the settlements overlapped protohistoric graveyard area, as was found in other areas of Swat (Olivieri & Vidale 2004: n. 25; see below).

The three Valleys thus display an intensive multiradial settlement type in a quantity that in general has no equal in Swat, except in the Mingora area. Also here a radial type of settlement model was constructed which radiated from the centre towards the inner valleys: from Butkara I towards the sites of Jambil and Saidu. However, these two valleys do not have accessible outlets comparable with the Karakar pass and their occupation seems more the result of a gradual reduction in the amount of space available rather than of a strategic relocation around the trade routes. The preliminary investigations envisaged for the subsequent reconnaissances for the AMSV project will confirm or disprove this interpretation. Space reduction may also be conceived of in the case of the Najigram and Kandak valleys, although not at the end of the Karakar valley, where the coincidence between the monastic settlements and the trade route is clear-cut. The same is true for the Cherat pass, with the large settlement SW of Kafir-kot 1-2, which has now disappeared. In the

Karakar the correspondence may be seen also in the late-ancient age, in view of the tower-houses built almost on the pass itself.

In general, in the rest of Swat, except for the more densely built up (and populated) areas (BKG, Mingora, but also Mangwlaor), the Buddhist foundations follow the course of the river, especially on the left bank while the acquisition of the tributary valleys seems to be a secondary consequence. For example, the Kotah valley narrows considerably over the last one third of its course. In the lower part, there are numerous dwelling centres, although all of a small size, situated on the sides and at the foot of the mountains, and evidently controlling a territory related to the communication route along the river. In the upper part of the valley there are isolated complexes, but also hilltop hermitages of some importance, such as Amluk and China-bara and perhaps Palwano-gata. Their construction in such remote and almost inaccessible places seems to suggest the symbolic acquisition of visual space, as well as of a meditative hermitage.

If these are the elements referring to Buddhist centres and building complexes, what can be said about non-religious settlements outside the town of BKG? The only ones identified with certainty are Abwa 1, Gwel[angaso]-dheri and Garam. The first faces the Swat valley while the other two are situated on the opposite side of the Kandak area. Garam was probably a large non religious site, perhaps with smaller sacred areas on the outer edges. There is no doubt that Gwel[angaso]-dheri was non religious; it was completely destroyed in the course of farm work after our first visit. It was conceivably built in relatively early times as a station for the control of transit along the Kandak, and abandoned comparatively quickly. With this exception, the building occupation of the territory in historical times, outside BKG, seems to have been a phenomenon principally linked to the activities of the monastic centres. According to P. Callieri, with whom we have discussed this hypothesis, sacred areas, monasteries and medium sized and small rural settlements must have formed part of a polygonal model of control and management of the territory, the centre of which was BKG.

This panorama is composed of many elements, which were all taken to be contemporary. In actual fact, many of them were contemporary, albeit over a period of exposure of at least 4 centuries, a period that is too long for there not to have been reconstructive distortions.

Agriculture, Water Management and Land Use

We may now consider the relationships between the built up space and the farmland space of BKG (similar research has recently been published by Prabha Ray 2004 and Shaw 2005). Craft activities were well developed in the city (production of metal goods and weapons), as was inter-regional trade (Taddei 2004). In other parts of Swat, other economic activities were carried on, such as

quarrying high quality stone for building and sculpture (always related to Buddhist commissions) (Di Florio et al. 1993) and of course pottery production; in more outlying areas sheep and goat grazing was practised as well as cattle raising (see below). However, a good deal of BKG economy was based on agriculture. This is shown, among other things, by the finds made in the city of small and large stone artefacts used for grinding cereals as well as large jars *in situ* in store rooms. Without counting the riversides and hillside slopes, the exploitable land in the vicinity amounts to about 500 ha. If the contribution made by agriculture to the area's economy was (obviously) essential, it is also clear that the Buddhist centres and sacred areas tended to develop beyond the boundaries of the fertile land. The monastic complexes and sacred areas actually lie on the hillsides and the higher areas, above the limit of the alluvial fans and of the arable silt and clay terraces, and corresponded to rock or conglomerate outcrops of no agricultural interest. Here the water table is at least twice as deep as the lower lands (the digging of town wells at BKG indicates that the water table lies about 6 m below the surface of the time; today the aquifer is much deeper, see Stein 1930: 17. Together with the withdrawal of the glaciers and gradual drying up of the Swat this may have caused serious damage to the ancient environment).

Also the control and management of the water and irrigation must have been essential. One of the most interesting legends of Buddhist Swat is that of the *naga* Apalāla. In the myth (disregarding any detailed exegesis) Apalāla appears as a powerful pre-Buddhist indigenous entity. Originally kept at bay by the payment of regular contributions, the *naga* guaranteed control of the water. But when the collective contributions were neglected, Apalāla unleashed hydraulic disorder, devastating Swat and causing destruction and famine. It was then converted and placated by Buddha himself, who extended to the river-serpent the right to perform periodic flooding (Tucci 1958a: n. 18). The possible interpretations – beyond the superficial coincidence with the Ṛgvedic myth of Indra and Vṛtra – are various. However, the idea may well be present that efficient hydraulic control and the agricultural potential of the entire valley depended in the past on the work of complex social organizations (from the late Bronze Age on?), while periods of political and organizational crisis may have exposed the communities to disastrous events.

In this light the Buddhist communities seem ideally to be candidates for restoring an earlier order, at the same time acknowledging the marginal positive effect of flooding in regenerating the potential of its valley floor farmland. They were certainly responsible for the creation of a hydraulic panorama of unprecedented complexity. The numerous masonry wells still visible on the plain or the hillsides, such as the tanks for collecting spring water, seem to be lined with walls similar to those of the better quality masonry of the religious complexes. At BKG the contemporary non religious buildings displayed the use of different building techniques, which were less precise and in any case non homogeneous. While in the

non religious environments of the courtyards in BKG the wells have a rectangular layout, in the monastic and sacred constructions they are circular (see Figs. 62 and 66 for instance). A well may consist of a simple hole, above all in the compact clay of Swat: the fact that the wells in the country were lined with masonry is an indication of the apparent desire to create long-lasting supply points. The most monumental example is found in Buner, at the site of Sunigram, the Gandharan type stone lined well of which was accessible thanks to a stone staircase (Stein 1899: pl. V). The monasteries' interest in water supplies in the country was not limited to digging and maintaining wells, cisterns and springs. Several important complexes, such as Tokardara 1, Najigram and Tok-dara have huge building works to dam, convey, collect and distribute water from streams, also using bold technical choices, such as aerial aqueducts which extended transversely across the beds of the local *tangai*. These infrastructures may have been used both to control flooding and torrential rainfall episodes and for the accumulation of water energy to drive the water mills (never found but which must have existed: see Farooq Swati et al. 2002: pl. 11). In the lesser valleys the sacred area lie precisely on the banks of torrents (at Kolai, actually on an island on the torrent), as though water represented the principal wealth. Furthermore, the more remote sacred areas (including Amluk-dara and Abbasahebchina 1-2) are located near important springs or mountain lake basins, and in any case near large water reserves (in this connection, see also Faccenna, forthcoming a). In view of this we wondered whether any definite relationship existed between the early spread of Buddhism and the demand for farm goods, through the possibility of reconverting the best land to farming rather than to continue to waste it for the traditional burial areas. Perhaps the Buddhist ritual which, by reappropriating the land, concentrated the community funeral worship in the symbol of the *stūpa* (*pars pro toto*) (see Stacul 1995: 210; Olivieri & Vidale 2004: n. 25) had managed to satisfy also a compelling economic need.

The role of the monastic communities seems decisive not only in controlling irrigation (or the water mills) and therefore the fertile land, but also the communication routes, as well as also the mountain passes and pastures. The rural communities living in the more remote areas of our valleys and principally in Kandak and Kotah seem to have been societies in the main with a pastoral economy, after the control and management of farm land had already been jeopardized starting in the late Bronze Age. Animal husbandry and grazing were perhaps semi-nomadic, as has been suggested in a recent study (Young 2003). The seasonal activities of transhumance might have been controlled by the high altitude Buddhist centres through the management of the springs, the passes and the pastures. This management may have entrained periods of crisis and tension but must certainly have represented an important asset for the monks and a serious restriction of ownership of the pastures for the rural communities.

These remarks of ours on the economic activity of the Buddhist foundations and their role in the management of the territory must be viewed in a purely

hypothetical light. There is no doubt that they fit perfectly with the conclusions of the fine lecture by G. Schopen on *Mūlasarvāstivāda-vinaya* (prob. 1st-2nd A.D.) delivered at Kansas City nel 2000, but still to be published ('Art, Beauty and the Business of Running a Buddhist Monastery in Early Northwest India'; see also references in Schopen 2005, 2006). These data, as A. Filigenzi points out, are accompanied by important written documents (the earliest dates back to the first half of the 1st A.D.): 'mentionnant le creusement des puits ou l'aménagement des étangs, travaux qui paraissent avoir été faits par des bouddhistes à titre de bonne action "en l'honneur de toutes les êtres"' (Fussman 1994: 33), or the relationship between monkish communities and agriculture: for instance, the role attributed by the sources to the Buddhists, for example regarding the spread of the precious saffron crop in Kashmir (*ibid.*: 43).

While on the Swat valley floor and that of its tributary valleys Buddhist monasteries and sacred areas continued to develop, the painted shelters and historic age rock art in general attest to cultures and communities that unwillingly yielded to or resisted the spread of formalized religions. In the sites of Kafir-kot 1-2 *stūpas* are depicted with the characteristics of 2nd-3rd architecture A.D. (LMO in Abdul Nasir et al. 1995); they are surrounded by archers also on horseback; in the centre stands a totemic symbol which from Gogdara I (late phase) on is repeated almost as though it was the emblem of a culture now nearing its epilogue: the crossed wheel. The opposition between Buddhist architecture and archers and warriors on horseback, sometimes gathered around their emblem, is one of the recurrent themes of historic age rock art (see Table 2). This is clearly exemplified at Dwolasmane-patai 1 (Fig. 9), Kafir-kot 1-2 (Fig. 38), Shamo, Hinduano-hatai and Bang-doghal (Fig. 8). The latter is an open-air site with numerous carvings, most of which seem to refer to an actual ideological-religious conflict, as Karl Jettmar defined it, with reference to the rock art evidence of the Upper Indus and the valleys around Nanga Parbat and Hunza (Jettmar 1997). While there is no doubt that the latter forms reflect a radical cultural opposition, it is not clear whether, in Swat, painters and carvers, whether men or women (in present-day Swat graphic decoration is often the task of women) are actual protagonists or just witnesses of an ideological clash observed from the outskirts of the more remote areas of the valley. Still today the peoples of Swat carve on boulders the mechanical symbols of the new world that is advancing, such as motor lorries and minibuses, the access of which to the valleys is still impossible (Fig. 79).

The economy of the Buddhist foundations doubtless favoured, and even conditioned, the growth, development and decadence of BKG. What is certain is that the decadence of the BKG and that of the monasteries proceeded at the same rate and with them, the abandonment of the land, the covering of the wells and of the hydraulic works; and, as P. Callieri suggests, the process may be developed chain fashion also in the opposite direction. In time, the rural communities may have regained control over the land, the pastures and the passes, thereby bringing about a

radical transformation of the economy of the Valleys. The reappropriation of mountain pasture land by semi-nomad peoples may have led to gradual deforestation (the management of the forestry economy might have been another asset held by the Buddhist mountain foundations; see, for the protohistoric age, Stacul 1987): the proof of this is the identification in many sites of high altitude stratigraphic sections with thick layers of loose red soil: this is typical soil of *Pinus excelsa*, *Pinus longifolia* and *Cedrus deodora* forests (prized trees that are nowadays residual above 2,000 and 2,500 m asl). This fact, but also the gradual desertification of many areas due to deforestation and soil erosion, the lowering of the water table and the withdrawal of the glaciers, may certainly be considered as forgotten co-causes of the economic crisis that began in the late-ancient age.



Fig. 79 - A tradition still alive: modern carvings near Lekha-gatha 2. (Photo by MV).

Chronological Evidence

The phase in which Buddhism flourished in the three valleys is easy to identify in the stratigraphy of the built up area of BKG (Olivieri 2003a). It could correspond to Periods VI-VIII of trench BKG 4/5 (the main trench of those dug between 1984 and 1992), or with the Middle-Late Kushan phases (Callieri et al. 1992; MacDowall & Callieri 2004), and thus with the ‘demilitarisation’ phase of the Indo-Greek and Saka-Parthian fortified city (Olivieri 1996b, 2003a), which had now become an integral part, together with the whole of Swat, of the ‘metropolitan territories’ of the now pacified Kushana Empire (the so-called *pax kusanica* referred to by Tucci in his long 1977 article *On Swat*). Period VI of BKG 4/5 dates the construction of an important small sacred area *intra muros*, the final building phase of which, prior to its final abandonment, are situated in Period VIII. Period VI is also involved in finds in a chamber contiguous with the sacred area of two Gandharan steles *in situ*, perhaps the first ever found in a certain stratigraphic urban context (Callieri et al. 1992: pl. XVIII). In this period of great building development, of military peace, wealth and trade (always judging by the excavation evidence), it would be possible to include the flourishing of so many new Buddhist construction in the countryside S of the city. The pottery evidence gathered in a representative sample of sites nevertheless allows us to consider the Saka-Parthian period as the one in which the occupation of the territory by the Buddhist

communities had already begun: this phase corresponds to Periods IV-V of BKG 4/5, that is, the great building development phase in BKG (*ibid.*) (see Table 2). On the other hand, as D. Faccenna points out, the large site of Tokard-dara 1 may be dated on the basis of its structure, which has much in common with Saidu Sharif I, at least in the mid 1st A.D (about the building relevance of the Saka-Parthian period see also Faccenna, this issue). One of the most interesting markers as far as pottery is concerned is the spread of the 'paddle and anvil' technique which, in the Kushana age, paralleled and then almost replaced the wheel turning technique. Since 'paddle and anvil' pottery is known to be typical of the Indo-Gangetic area, in this phase, we are apparently witnessing a process of 'Indianization' of part of the material culture brought about by the Kushana state (see Table 1). This phenomenon is not surprising as it was precisely during this phase that we find the most important evidence of inter-regional trade, principally with the Mathura area (see Taddei 2004).

The ceramic data show that only a few sites in the sample investigated survive the late age. Further elements accompany these data. Buddhist rock reliefs are the iconic expressions of the presence of Tantrayāna and Vajrayāna schools and cult centers. Studies carried out on this topic (Filigenzi, forthcoming e) show that only a few of the hundreds of complexes built in Swat, Buner, Dir, Puran developed into similar centers. This phenomenon occurred after a phase of great crisis for Buddhism in the region: between the 6th(?) -7th and 8th A.D. (see Filigenzi, this issue). Perhaps during this period only the monasteries belonging to these schools were fully active as the archaeological data and written sources (Chinese evidence, see Tucci 1977: 68 ff.) agree in indicating the 6th-7th A.D. as the *saeculum horribile* of Buddhism in Swat.

The Tantrayāna and Vajrayāna school monasteries are concentrated in specific areas, in Swat, mainly in the Saidu, Jambil and Ugad valleys (around the area of Mingora and Mangwlaor), around Udegram and Manyar, at BKG, particularly on the left bank of the Swat. The valleys mentioned so far (with three exceptions: BKG, Nawe-kalai and Amluk-dara) were not involved in this phenomenon. At Amluk-dara the relief (Stein 1930: 18) has unfortunately been lost. Nawe-kalai, although lying at the mouth of the Kotah valley, is situated outside of it and is part of the centres built on the left bank of the Swat.

Lastly BKG, because of its peculiar position, managed to survive beyond the end of the ancient age. As we have seen, the hill (acropolis) of BKG definitely housed a Buddhist sacred area also in a late age. The two reliefs on the hillside are certain evidence of this. It is statistically certain that this type of icon was always found along the paths giving immediate access to a sacred area. At BKG the Gandhara age foundation was doubtless transformed into a late Buddhist school centre and was ultimately replaced, by means of a monumental building operation, at the end of the 7th A.D. by a Brahmanic temple foundation, which was excavated by us starting from 1998 (Callieri et al. 2000, 2000-2001; Olivieri

Table 1. Chronological frequency of the ‘paddle and enfil’ technique (as far as site 104 is concerned, note that the figures in brackets indicate the number of diagnostic fragments referring to ceramic technique) (by LL & EM)

Site #	Samples	Paddle & Anvil	Early Historic	Historic 1 (Saka-Parthian)	Historic 2 (Early-Late Kushan)	Historic 3 Late Historic
142	37	*				
136	37					
102	11					
103	101					
158	36	*				
105	43					
154	10	**				
138	46	*				
137	50	*				
141	10	***				
150	55	**				
129	23	**				
139	44	***				
160	54	***				
143	52	**				
146	27	***				
155	37	**				
152	16	**				
124	75	**				
128	18	**				
140	107	***				
104	187 (22)	**				
144	45	***				
145	78	***				
118	36	**				
157	27	***				
162	55	***				
161	43	*				

2003a; Callieri 2005; Filigenzi 2005). According to these hypotheses, on the other hand, in the three valleys a situation of crisis and abandon prevailed. The abandon was perhaps only partial (the Karakar route may have retained some of its importance), although here the economic and ideological investments were not made which in other valleys led to the flourishing of the centres of the new schools.

(LMO & MV)

PEOPLE AND CULTURES OF THE LATE ANTIQUITY

Genesis of a Kafiri Human Landscape

From the 6th century A.D. onward, a sea change occurred in the human landscape in Swat. The large cities like BKG and Udegram began to decline; their inhabitants withdrew to more protected dwellings in the mountains. The cities emptied and were gradually abandoned. Many of the Buddhist monastic foundations lay in ruins, as is narrated by the Chinese pilgrims. Only a few religious complexes, as we have seen, enjoyed a new period of prosperity, becoming the headquarters of large late Buddhist schools.

This phase saw the beginning of the process of fortification typical of late ancient Swat. The city of BKG was abandoned in favour of tower constructions built on the E side of the hill (Olivieri 2003a). Other fortified centres were built on the hills in the Kotah valley, near the Swat gorges at Kalungai and Qal'a: the so-called tower-houses (Id. 1996a, 2003a). It almost seems that the settlement process during this period was concentrated in the lower part of Middle Swat (according to the definition proposed in Id. 2003a: 13), but did not extend beyond the BKG area. The focus of this settlement process is situated roughly in the Thana area, from which it radiates out through the tributary valleys to the North and South, from Talash as far as Buner.

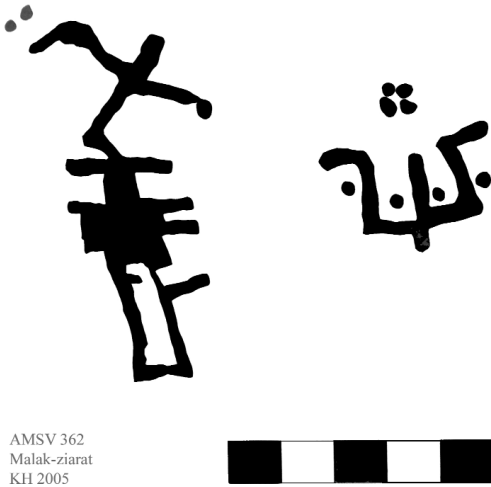
The dwelling units comprising the individual groupings almost always have a rectangular layout, subdivided into two square rooms. One of the two always has a tower form; there are occasional single towers. They are of simple construction: the walls have no foundation trenches and are built directly onto the rock. Sometimes, in order to offset the difference in level, the houses are placed on platforms supported by the hillside. Access to the interior is almost always located on the first storey, which is reached by means of a removeable ladder. In those cases in which the entrance is located on the ground floor, it could be closed from the inside by means of heavy wooden beams. Access to the upper storey is provided through a narrow trapdoor.

In individual villages (no more than seven or eight houses) the simple street layout may be recognized even today and sometimes even a rough outer wall provided with loopholes. The villages are often situated within view of each other, clearly visible on the ridges and hilltops. The tower-houses, in the absence of excavations, have been dated as *ante* 9th A.D. thanks to a serendipitous find, as well as on the basis of the reconnaissance of the BKG hill and analysis of the pottery sampled on the surface. In the site of Qal'a, situated at the entrance to the Swat gorges, a tower with cylindrical buttresses has been documented which abuts and is supported by the structure of a tower-house (*ibid.*: 40, fig. 41). This type of buttressed tower is well-known throughout Swat as a result of Italian and Pakistani research (ref. in *ibid.*). These fortified structures may be dated to the Late Shahi or Hindu-Shahi period (9th-10th A.D.; ref. *ibid.*). This simple but non banal fact points to a very important stratigraphic fact: the tower-houses may be older than a 9th A.D. and perhaps lie in the era of the so-called 'Early Shahi', or Turki-Shahi, or Shahi of Kabul (7th-8th A.D.). This is the era of the building upheaval that witnessed on the top of the BKG hill the construction of the Brahmanic foundation and, on the E hillside, the large tower-house settlement (*ibid.*; Callieri 2005: 423-24).

In the present-day Kafir villages there are buildings similar to our tower-houses, known as *kot*. Still today this comparison is one of the most interesting and stimulating for the purpose of understanding this phenomenon. Also in the Upper Indus, until a few years ago, there were villages based on models similar to those of the tower-house complexes. '[They are] built according to the pre-Islamic orientation. The towers belonged to specified quarters of the village [...]' (Jettmar 1967: 17). The actual spatial layout of the village reflects a non random structuring (houses/tower-houses, 'male'/'female' zones).

Entire valleys even appear to reflect a form of metaphysical order. For example in Punyal the women's sanctuary near the village of Bubur is situated at the bottom of the valley near the river. The men's sanctuary is on the opposite side of the river on a terrace set high on which the village of Gakuch also lies. (*Ibid.*: 73).

Our area of investigation contains several of the best conserved examples of the whole of Swat, which form the object of an excavation campaign planned for 2007: the four complexes of Hissar 1-4 situated on the left flank of the lower part of the Kotah valley. On the right hand side lie the sites of Sur-kamar and Tor-gumbat. There are only a few sites of this kind in the Kandak valley: Maishkhano-maidan, Nawarale-tangai and Begum-kot. Similar complexes in the Karakar valley are found at Hakim Barikot, Ashgarai-ghar, Gadhial 1, Kilarano-tangai, Nare-tangai and Mia-kote. Their presence at the NW boundary of the area in which this typology spread out is doubtless explained by the possibility of still controlling the Karakar route. Beyond the pass of the same name, as far as Barandu to the SW and beyond Jowar to the S, other tower-house complexes had already been identified in the past (Olivieri 1996a, 2003a).



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Fig. 80 - Malak-ziarat, the paintings. (Drawing by LMO and MV).

This transition was no doubt gradual and for a long time cities in the process of being abandoned, Buddhist centres in crisis, must have coexisted with the progression of the new models of occupation of the territory, which may be considered to have been completed by the 7th A.D. Xuanzang, for instance, describes the progress of Brahmanism (see Tucci 1977: 68 ff.) and mentions 10 temples dedicated to the *deva*. We are familiar with two of the latter: that of BKG (Callieri et al. 2000, 2000-2001; Callieri 2005; Filigenzi 2005), of which also a dedicatory inscription is believed to exist (Tucci 1977: n. 92) and probably that of Hati-dara (see above).

Moreover, in the upper Kotah valley, painted shelters have been documented with partially different characteristics from the others. In the first place, the paintings are bright ochre, almost orange, in colour and the subjects depicted, although subscribing to the ideographic lexicon typical of such manifestations, here definitely reflect a Brahmanic religious symbology. In the shelters of Dandi-sar 2 (Fig. 25) and Malak-ziarat (Fig. 80) (but also at AMSV 409, 418 and 441.1; see the Postscript) the depictions of *trīśula* stand out; at Malak-ziarat this symbol is accompanied by a *stūpa* model in a representation that could perhaps be considered an icon of this transition phase. As aptly summarized by Tucci (1977), side by side with the spread of Brahmanism and the Vajrayāna, we also witness a ‘revival of aboriginal cults’ belonging to agents and cultures that the Buddhist centres had controlled and managed but, we think, never converted. Other evidences of a ‘Kafiri’ culture came out from the Raja Gira graveyard (see Bagnera, this issue).

In the 7th A.D. Swat was apparently involved in two separate situations: NE of BKG we still find that the Buddhist foundations are dominant, those that accommodated in their doctrine the boldest elements of the new schools of Tantric inspiration. To the SW the tower-house complexes lie, while, except in a couple of enclaves, the number of late Buddhist school foundations is limited. We do not know whether this is the result of a political distinction or not. Tucci pointed out in this connection that the Tibetan and Chinese sources of the 8th century A.D. describe Swat as split into two political entities: one ruled by the Buddhist king Indrabhuti (protector of the late Buddhist schools), the other dependent on the Laghman area (Tucci 1958a: n. 1; 1977: 75). In this regard, together with P. Callieri, we wondered whether this source may be interpreted as the reflection of a political predominance in the lower Swat valley by the Shahi of Kabul.

With the foundation of the tower-house complexes we witness a radical cultural and economic change. New pottery forms appear, especially ordinary pottery, which is enhanced by handles, lugs and spouts, as well as quality ceramics, in which white and red decorations prevail, often on golden slip (Callieri 1990b, 2000; Olivieri 2003b). These new forms differ from the Late Kushan age ones, as from the typical Islamizing horizon from the 11th A.D. on. The big hydraulic plants were probably abandoned and the springs and wells filled in; the little available evidence points to pastoral activities and the onset of a 'new' agricultural or gathering activity – wine production.

On the top of Palwano-gata, where the Kotah valley opens on to the Mardan plain, we found what seems to be the latest painted shelters. In a countryside marked by a tumble of gneiss boulders, at an altitude of about 2,000 m, various indications of a non occasional presence have been documented: steps carved out of the stone (Fig. 35), basins, sinuous structures dug out of the rock (Fig. 36). The shelter contains a painting depicting a herd of caprids, horses and a single ascertained human figure: a hieratic character with an elaborate mantle, with protruding arm and a hand with the fingers extending outwards (Fig. 33). Below the paintings there is a rough carving depicting one or more superimposed *stūpas* (Fig. 34). At Palwano-gata 1 the typical style of the caprids – schematic, linear, with the body rendered by means of a single curving line – is the same as in the paintings of the Kalash peoples of the Chitral (similar paintings were discovered in Summer 2006; see the Postscript). Slightly further on, a huge boulder suggests the gigantic figure of a reptile: oddly enough, where one imagines the head of the gigantic figure to be, a hand has deeply carved the circle of the eye and the pupil (Fig. 37).

This deliberate intervention, aimed at reinforcing the suggestion that the rock resembled a monster, means that greater credence and attention must be paid to the vast and ambiguous repertoire of gigantic images sculpted by nature in these places: examples are the anthropomorphic and zoomorphic rocks in the Saidu, Kandak and Kotah valleys. The Chinese pilgrim Xuanzang mentioned the elephant-shaped rock overhanging Swat into which the white elephant of the legendary king Uttarasena had been transformed (Tucci 1958a: 299). Also significant are the remarks of Biddulph (1880: 15) and Jettmar (1967: 74) on the zoomorphic rock in the village of Gor (Gilgit), in which Taiban, the male representative of the divine couple in the Dardic pantheon, may be recognized in the form of a black stallion. Forms of anthropomorphization of the landscape are often found in Swat and neighbouring regions, at Ghirai, for instance (Fig. 45), but also elsewhere like at Ranigat. Here the natural monolith dominating the summit of the site perhaps represents the 'Queen' giving the name to the site, or else lies at the origin of the name of the ridge, the translation of which is 'Skyreaching Ridge Temple' (Odani 2000: 1, fig. 1). Lastly, the pictorial document of Palwano-gata 1 enlightens us as to what must probably have been one of the greatest assets and marks of prosperity for the peoples inhabiting this area – the possession of cattle and the consequent management of grazing land and the passes.

In accordance with an old and consolidated thesis, on which numerous researchers agree (from Raverty, Yule, Voigt to Lentz, Jettmar, A.M. and A.S. Cacopardo) Swat

can thus perhaps be included in the area of diffusion of Kafir culture ('Peristan' better than 'Greater Kafiristan') before the latter was reduced to the present enclaves in upper Chitral (Scarcia 1965; Cacopardo & Cacopardo 2001) (Table 2). The Chinese source cited by Tucci which mentioned a part of Swat being under the control of Laghmhan is of great interest regarding both what we know of this province down to modern times (Scarcia 1965) and in view of the evidence regarding its rock art, which has much in common with our later manifestations (Bourgeois & Bourgeois 1971; Jung 2003). In spite of its vagueness, this information, if incorporated in a geopolitical reconstruction that takes into account the Chinese, Tibetan and Turko-Muslim strategies, could provide an important historiographic support to the thesis.

The Importance of Wine-making

During the reconnaissance of the Kandak and Kotah valleys dozens of boulders were documented with quadrangular or irregular basins carved out of them, as well as slabs with deep quadrangular carvings; basins and carvings were all provided with an overflow hole or canal. It was therefore a triple typology: the first is the most common one – rectangular tanks with an overflow hole (a type widespread in both Kandak and more particular in the upper Kotah valley, see also Olivieri & Vidale 2004: figs. 33-34) (Figs. 81-82); the second type is characterized by sub-circular cavities connected to basins placed at a lower level, or else by basins connected to holes to house levers (documented only in the Saidu valley sites) (see Figs. 42-43); the third type consists of the so-called 'palettes' (see Fig. 28): rectangular carvings, having the same size as the tanks, carved out of inclined boulder and joined by an overflow canal (Kandak and Kotah, and also in the Jambil, at Jabbra: see *ibid.*; also at Kubla-lai and Amluk-lai, respectively nos. 10 and 102 on the Jambil Archaeological Map in Gui & Cimmino, unpubl.) (Fig. 83). Excluded from this typology are the simple excavated tanks without overflow, which are typical in the mountain Buddhist settlements (e.g. Amluk; see Fig. 11) and generally constructed on crystalline rock outcrops (*ibid.*: n. 21). The serendipitous find of 2 sites with tanks of the first type having walls made of pseudo-isodomic stone blocks (Banj-ghwandai 1, Bang-khas) suggested the hypothesis of the so-called 'palettes' used as working surface, to which stone or wood partitions were added in the outer canals.

This study unequivocally showed that they were devices for pressing grapes, i.e. wine-presses. This is a relatively widespread type of utensil: suffice it to take the example of the Italian *palmenti* that remained in used until late last century, as well as of the Roman age tanks, for instance in Tuscany (Masi 2005), but also elsewhere in Eurasia and East Africa. Even more rigorous comparisons can be made with the methods and equipment used in the 'Kafir' environment (Fig. 84). As Sir G.S. Robertson writes:

One day I went to see wine being made at Bináram, a hamlet close to Kámdesh. The arrangements were very simple. A flat-topped boulder conveniently placed by the roadside formed the floor of the wine-press [cf. Fig. 85], and one side of a

Table 2. A preliminary cultural sequence from the results of the AMSV research (by LMO)

MARKERS	SITES	ARCHAEOLOGICAL CONTEXT	CULTURAL HORIZON	CHRONOLOGY
FARMERS HUNTERS WILD WORLD ICONS ANTHROPOMORPH-ON-IBEX FELINE VS IBEX ISOLATED HEROES↓ BOWMEN↓ BODY MODIFICATIONS↓	GOGDARA I SARGAH-SAR 1 KAKAI-KANDAO MUHAMMAD-PATAI	SCS PERIOD IV PAINTED SHELTERS↓	BRONZE AGE LOCALIZATION ERA	1700-1400 B.C.
BREEDERS ISOLATED HEROES↑ SOLAR SYMBOLS↓ METAL WEAPONS CHARIOTS CUP-MARKS↓ HORSE'S ICON↓	GOGDARA I KAMAL-CHINA DANDI-SAR 1 LEKHA-GATA 1, 2	GRAVEYARDS (SCS PERIODS V-VII/VIII) FOUNDATION OF THE INDO-GREEK BKG	EARLY IRON AGE EARLY HISTORIC (INDO-GREEK)	1400-300 B.C.
BOWMEN & RIDERS BUDDHIST SYMBOLS AND ARCHITECTURE WORSHIP TANKS IDEOLOGICAL COLLISION SOLAR SYMBOLS↑	LEKHA-GATA 1 BANG-DOGHAL KAFIR-KOT 1, 2 SARGAH-SAR 2 DWOLASMANE-PATAI 1, 2 TOP-CHINA HINDUANO-HATAI SHAMO TALANG	FOUNDATION OF MONASTERIES AND BUDDHIST SACRED AREAS URBANIZATION	HISTORIC 1 (SAKA-PARTHIAN) HISTORIC 2-3 (EARLY-LATE KUSHANS/KUSHANO-SASANIANS)	3rd B.C.-5th A.D.
HINDU AND LATE BUDDHIST SYMBOLS	DANDI-SAR 2 MALAK-ZIARAT TALANG MARANO-TANGAI	PARTIAL DECAY OF THE BUDDHIST FOUNDATIONS LATE BUDDHIST SCHOOLS HINDU TEMPLES AT BKG AND HATI-DARA RELIGIOUS SYNCRETISM TALANG INSCRIPTIONS	LATE HISTORIC (TURKI-SHAHI/HINDU-SHAHI)	6th -12th A.D.
WINE-PRESSES SHEPHERDS	GWAREJO-PATAI PALWANO-GATA	TOWER-HOUSES CULTURE ISLAMIC SETTLEMENTS AT BKG	↑GREAT KAFIRISTAN CULTURE↓ EARLY-ISLAMIC (GHAZNAVID-TIMURID?)	5th-15th A.D. (?)



Fig. 81 - Banj-ghwandai 2, type of wine-press. (Photo by LMO).



Fig. 82 - Banj-ghwandai 1, detail of the outlet (front). (Photo by LMO).



Fig. 84 - A Kafir wine press. (After Edelberg & Jones 1979: fig. 41).

Fig. 83 - Jabbra, Jambil, the 'palette'. (Photo by LMO).

second boulder did duty for one of its walls. The other walls, more or less semicircular in continuous outline, were made by stones placed one on the top of the other and raised the height by two and a half feet, the interstice being filled up with clay. The greatest length of the vat was about five feet six inches, and its greatest breadth about four feet. The floor sloped naturally, and at the lower end, in front, an aperture had been left, partly closed by a little brushwood, from under which a deeply-grooved piece of wood, with its edges still further deepened by clay from the vat, protruded, and afforded an outlet for the expressed juice. (1896: 558-59).

Those same years, G.W. Leitner, on returning from a reconnaissance in Dardistan and Hunza, wrote with unwitting irony:

The Gilgitis are great wine-drinkers, though not so much as the people of Hunza. In Nagyr little wine is made. The mode of preparation of the wine is a simple one. The grapes are stamped out by a man who, fortunately before entering into the wine-press, washes his feet and hands. The juice flows into another reservoir, which is first well laid round with stones, over which a cement is heated. (1894²: 39).

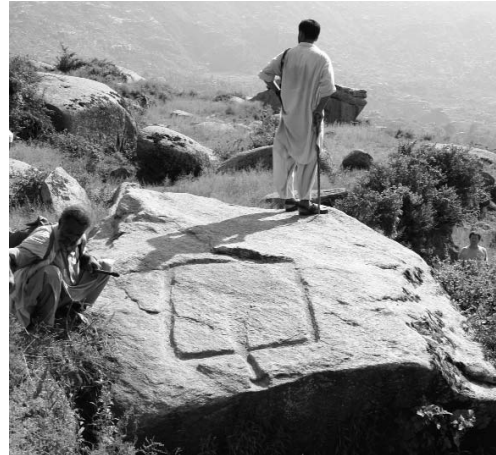


Fig. 85 - Sanchar, a 'palette'. (Photo by LMO).

Further evidence comes from Masson (see Edelberg & Jones 1979: fig. 41) and the research by the Senfts (Senft & Senft 1986). Lastly, for the consumption of alcoholic beverages as late as the 17th A.D. in Swat in populations in which elements of Kafir culture may be discerned, see the evidence provided by the Tibetan pilgrim sTag ts'añ ras pa (in Tucci 1940=Filigenzi & Callieri 1997).

In the upper Kotah valley, the frequency of these artefacts is astonishing: one artefact every 5 ha, for a possible wine pressing activity capable of treating 2-3,000 qt of grapes per day (with a conservatively estimated yield of 1,500 hl), with the employment of about 100 individuals (according to the characteristics of the similar Italian *palmenti*; source *Enciclopedia Italiana*, see 'Vino' entry). The last terraces of the Kotah valley are ideal for wine-growing: the loose silica rich soil and the specific microclimate materially create physiographic conditions quite similar to those found in many areas of inland southern Italy (still today the gravevine grows spontaneously in the area) and in the past grapes may have been the object of seasonal gathering rather than an actual cultivated crop, as is shown by the ethnographic data of Edelberg & Jones (1979: 64). In the specific area of distribution of the artefacts alone (c. 250 ha), taking into account that they are probably not specialist and intensive crops according to modern criteria, a conservative (under)estimate of the annual yield would be a maximum of 6-8,000 hl (processing of *Enciclopedia Italiana* data, see 'Vino' entry, tab. 1). The calculations envisage all the wine-presses in operation at the same time. In actual fact, the different state of conservation of artefacts on the same lithic support seems to suggest that not all these artefacts are contemporary. It is in any case probable that these zones of Middle Swat (including the upper Jambil and Saidu valleys, from which other examples come, see the Sites List) were important wine producing areas at the time.

One of these artefacts was found inside a shelter bearing traces of paintings, Gwarejo-patai (a possible indication but not proof of antiquity) (Figs. 30-31). Slightly

further downstream, at Talang, near a ford, we uncovered a large shelter where a succession of different types of rock graphics is concentrated. The earliest phase is represented by permutations of highly eroded cup-marks. On the sides of the shelter traces of red paintings have been partly cancelled out by carvings depicting warriors on horseback (Figs. 40-41). The incised scenes have themselves been covered by five lines written in Brāhmī scripts dating to the medieval age. The inscription is currently being studied by Riccardo Garbini (see Garbini, Appendix in this paper). This seems to support an indirect 'stratigraphic' according to which the artefacts used for grape pressing are rather ancient, in any case earlier than the 15th A.D. (a date that may be considered the most recent limit of the painted shelters).

(LMO)

APPENDIX

The Talang Rock Shelter: The Inscriptions (Fig. 86)

At the site of Talang, a large boulder was observed (about h 2.00 m and w 3.00 m) bearing incised figures and an inscription in the central part.

The inscription consists of 6 lines of Brāhmī script, similar to the late *śarada* variety, large in size (h 0.20 m *c.*), with a *ductus* 4 mm deep *c.* The conditions of the epigraph have been affected by exposure to atmospheric agents, which make its interpretation less than immediate.

The present note is by kind courtesy of LMO and MV who first have discovered the inscription and have collected digital photographic images and the physical characteristics of the inscription.

A first reading of the epigraph is as follows:

Text:

1. *śrī saṣo t(i)ṣṭha ṣa le pu . . cha . . śra(?)ga(?)*
2.
3. . . . *bulaputra mu(ni?)*
4. *sambū. . . ghasa sa(?)*
5. *da karatvena . .*
6.

Palaeographic Characteristics

The specimen, in *śarada* characters, seems to be a later version than those from Chilas, Gilgit and Skardu collected by von Hinüber (2004) and dating to the 7th-8th century A.D., by Hund, dating to the 8th century A.D. (Sahni, S.S. 1932) and by Laghman (Humbach 1985), as well as the ten line inscription dating to between the 8th and the 10th century A.D., incised on a boulder on the banks of the river Kunar, and found near Arandu (Khan 2002) as well as the contemporary one from the Alingar valley (Mohammadzai 2002). Also from the same area are the Barikot (Bir-kot-ghwandai) inscription dating to the 10th century A.D. (Sahni, B.D. 1933:

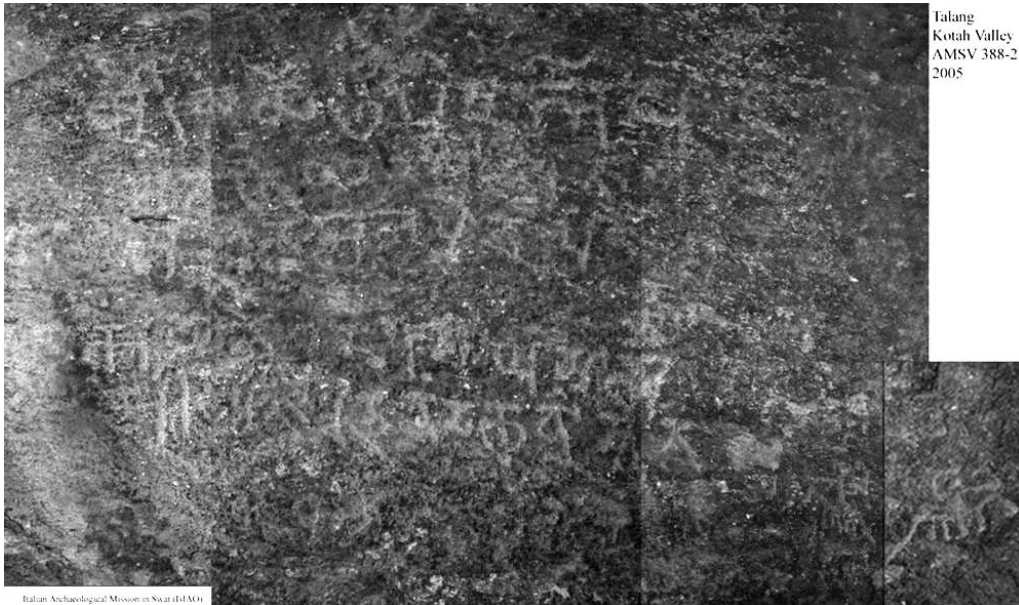


Fig. 86 - The Talang inscription. (Photo processed by LMO).

301), and the Zalamkot (Zalam-kot) bilingual inscribed stone slab dating to 401 A.H. (822 A.D.) (Abdur Rahman 1988): both are also of an earlier style than our specimen.

Several characters (*ka*, *ta*) display similarities with 'medieval inscriptions' from Chilas and, as in the case of the Gondophares Rock, 'dated to the mediaeval period, some time in the 14th or 15th century A.D.' (Dani 1983: 88, 221). Therefore the text may be provisionally dated, according to available palaeographic evidence, as between the 12th and 15th century.

(RG)

POSTSCRIPT

During the 2006 Summer campaign, with the help of Faiz-ur-Rahman, the Representative of the Department, other sites were discovered and consequently added to the maps illustrating this Report. Apart from the discovery in the Kotah valley of an impressive Iron Age rock painting near Churkhai (AMSV 407), a Late Historic one (AMSV 409) and others which were badly preserved (AMSV 410 and 411), a group of Late Historic painted shelters has been documented by chance in the area S of the Topialai ridge (AMSV 415, 416, 417, 418, 421.1, 421.2, 421.3, 423, 424, 426.1, 426.2, 426.3, 427, 428, 429.1, 429.2, 429.3, 441.1, 441.2, 441.3, 442, 443.1, 443.2, 444, 445, and 446). The newly discovered painted shelters will be presented at the next SAA Conference in Ravenna, in July 2007. During the survey many new wine-presses have been discovered both in Kandak (2 in AMSV 401, and 2 in AMSV 244) and Kotah valleys (AMSV 404, 431, 437, 439 and 4 near AMSV 364). Tanks and cup-marked boulders have also been noticed in Karakar valley, upstream Amluk-dara (AMSV 412 and 413), but the most interesting cup-mark sub-figurative

permutations came from Kotah valley (AMSV 402, but also 404, 437, 403, 430, 439, 462, 463, 464 and 438 – the latter with a tank) and from the area of Saffar-kandao (AMSV 447). New large Historic settlements have been discovered in Kotah valley (AMSV 408, 436, 438 and 419) as well as many new Buddhist sacred areas (AMSV 406, 434, 435, 440, and 420) in the Kotah valley and above Nal (Thana) (AMSV 432 and 433). A new Buddhist site has been discovered at Bacha-kot, S of Amluk (AMSV 425). A more detailed survey in the area of Amluk (AMSV 136) has revealed the existence of a monastic rock hermitage: amongst the several natural cavities piercing the precipitous NW side of the Loe Topialai rock pinnacle (2000 m asl), at least 5 caves were artificially modified and transformed into monastic cells. The near peak of Bar Topialai (2030 m asl) with its carved flight of steps hosts a tank dug out of the flat rock summit (AMSV 414). A small Late Historic settlement has been localized upstream Amluk-dara (AMSV 413, see above).

During the campaign several rock-art sites (AMSV 454, 448.2, 449.1, 449.2, 449.3, 455, 456, 457, 458, 459.1, 459.2) as well as Protohistorical (AMSV 448.1, 453) and Historical sites (AMSV 450) have been documented on the left side of the Lower Saidu valley.

(LMO)

REFERENCES

- Abdul Nasir Khan (2004) The Architectural Feature of Buddhist Site of Tokardara Najigram. *The Misulsa. The Art History Journal*, 23, pp. 303-16. (Repr. in *Journal of the Pakistan Historical Society*, Karachi 2005).
- Abdul Nasir Khan et al. 1995* [See Subsection 3.2.2]
- Abdul Nasir Khan & Faiz-ur-Rehman (1996) Archaeological Exploration on the Left Bank of River Swat. In Saeed-ur-Rehman, ed., *Archaeological Reconnaissance in Gandhara*, pp. 119-21. Karachi.
- Abdur Rahman (1998) The Zalamkot Bilingual Inscription. *EW*, 48, 3-4, pp. 469-73.
- Ashraf Khan, M. (1993) *Buddhist Shrines in Swat*. Saidu Sharif.
- Bagnera, this issue
- Bahadur Khan, M. et al. (1999) *Malakand Agency. Archaeological Survey and Documentation of Sites and Monuments. Preliminary Report no. 1*. N.p.
- Barger, E. & Ph. Wright (1941) *Excavations in Swat and Explorations in the Oxus Territories of Afghanistan*. MASI 64. Calcutta.
- Biddulph, J. (1880) *Tribes of the Hindoo Koosh*. Calcutta. (Repr. 1986, Peshawar).
- Bourgeois, J. & D. Bourgeois (1971) Les Inscriptions et Dessins rupestres de la Vallée du Laghmân. *Afghanistan*, XXIV, 2-3, pp. 52-58.
- Brentjes 1977* [See Section 2.2]
- Cacopardo, A.M. & A.S. Cacopardo (2001) *Gates of Peristan. History, Religion and Society in the Hindukush*. RepMem, Series minor, V. Rome.
- Callieri 1989* [See Subsection 3.2.1]
- Callieri 1990b* [See Subsection 3.1.2]
- Callieri 2000* [See Subsection 3.1.2]
- Callieri 2005d* [See Subsection 3.1.1]
- Callieri et al. 1992* [See Subsection 3.1.1]
- Callieri et al. 2000* [See Subsection 3.1.1]
- Callieri et al. 2000-2001* [See Subsection 3.1.1]
- Callieri & Filigenzi 2005* [See Section 1.1]

* The titles marked with an asterisk refer to the general bibliography of IAM (1956-2006) at the end of the present volume.

- Compagnoni 1987* [See Section 2.3]
- Coningham, R.A.E. & T.L. Sutherland (1997-98) Dwellings or Granaries? The Pit Phenomenon in the Kashmir-Swāt Neolithic. *Ancient Pakistan*, XII, pp. 177-85.
- Costantini 1987* [See Section 2.3]
- Dani, A.H. (1983) *Chilas the City of Nanga Parvat (Dyamar)*. Islamabad.
- Di Florio et al. 1993* [See Subsection 3.2.4]
- Edelberg, L. & S. Jones (1979) *Nuristan*. Graz.
- Faccenna, forthcoming a* [See Section 1.1]
- Farooq Swati, M., M. Naeem Bacha & Jehan Mulk (2002) Note on Exploration in the Shāngla District and the Swāt Valley. In M. Farooq Swati, ed., *Ancient Pakistan*, XV, *Professor F.A. Durrani Commemoration Volume*, pp. 217-52.
- Filigenzi, this issue
- Filigenzi, forthcoming f [See Subsection 3.2.2]
- Fussman, G. (1994) Upāya-kauśalya. L'implantation du bouddhisme au Gandhāra. In F. Fukujū & G. Fussman, eds., *Bouddhisme et cultures locales. Quelques cas de réciproque adaptations*. EFEO, Études Thématiques, 2, pp. 17-51. Paris.
- Garbini, this issue
- Gui & Cimmino, unpubl.* [See Subsection 3.2.1]
- Hinüber, O. von (2004) *Die Palola Śāhis. Ihre Steininschriften, Inschriften auf Bronzen, Handschriftenkolophone und Schutzzauber*. Mainz.
- Humbach, H. (1985) Hindu Shahi Inscriptions in Hybrid Sanskrit from Laghman. *Journal of the Epigraphical Society of India*, 12, pp. 63-68.
- Jettmar, K. (1967) The Middle Asiatic Heritage of Dardistan (Islamic Collective Tombs in Punyal and Their Background). *EW*, 17, 1-2, pp. 59-82.
- Jettmar, K. (1995) The Dards and Connected Problems. Giuseppe Tucci's Last Contribution. In B. Melasecchi, ed., *Giuseppe Tucci. Nel centenario della nascita. Roma 7-8 giugno 1994*. Conferenze IsMEO, 8. Roma.
- Jettmar, K. (1997) Symbolic Systems in Collision: Rock Art in the Upper Indus Valley. In R. Allchin, B. Allchin, N. Kreitman & R. Errington, eds., *Gandbaran Art in Context. East-West Exchanges at the Crossroads of Asia*, pp. 55-69. New Delhi.
- Jung, M. (2003) Breve disamina delle ricerche sull'arte rupestre in Afghanistan con una nota sui graffiti della valle di Lagmān. In B. Genito & M.V. Fontana, eds., *Studi in onore di Umberto Scerrato per il suo settantacinquesimo compleanno*, I, pp. 485-502. IUO-IsIAO, Series Minor, LXV. Napoli.
- Khan, M.N. (2002) A Short Note on Archaeological Discoveries in Chitral, Pakistan. In M. Farooq Swati, ed., *Ancient Pakistan*, XV, *Professor F.A. Durrani Commemoration Volume*, pp. 179-84.
- Kuwayama, S. (2006) Swāt, Udyāna and Gandhāra. Some Issues Related to Chinese Accounts. In Callieri 2006a*: 59-77. [See Section 1.1]
- Laurenza & Vidale 2005* [See Section 2.2]
- Leitner, G. W. (1894²) *Dardistan in 1866, 1886 and 1893*. Woking. (Repr. 1996, Madras).
- MacDowall & Callieri 2004* [See Subsection 3.1.2]
- Marchini, A. (1927) *Tecnologia rurale*. L'Aquila.
- Masi, A. (2005) Un esempio di archeologia dell'agricoltura: i palmenti. In A. Ciacci & A. Zifferero, eds., *Vinum. Un progetto per il riconoscimento della vite silvestre nel paesaggio archeologico della Toscana e del Lazio settentrionale*. Siena.
- Micheli, this issue
- Micheli & Vidale, forthcoming* [See Section 2.1]
- Mohammadzai, M.Q.J. (2002) Archaeological Exploration in the Mohmand Agency. *Ancient Pakistan*, XV, *Prof. F.A. Durrani Commemoration Volume*, pp. 187-96.
- Odani, N. (2000) New Discoveries from the Excavations in Rānigāt, Pakistan. In M. Taddei & G. De Marco, eds., *South Asian Archaeology 1997*, pp. 830-41. SOR, XC, 3.I-III. Rome.

- Olivieri 1996a* [See Section 1.3]
 Olivieri 1996b* [See Subsection 3.1.1]
 Olivieri 1998* [See Section 2.2]
 Olivieri 2003a* [See Subsection 3.1.1]
 Olivieri 2003b* [See Subsection 3.1.1]
 Olivieri 2004* [See Section 2.2]
 Olivieri 2005* [See Section 2.2]
 Olivieri, forthcoming b* [See Section 2.2]
 Olivieri & Vidale 2004* [See Section 2.2]
 Prabha Ray, H. (2004) The Archeology of Sacred Space: Introduction. In H. Prabha Ray & C.M. Sinopoli, eds., *Archeology as History in Early South Asia*, pp. 350-75. New Delhi.
 Robertson, G.S. (1896) *The Kafirs of the Hindu-Kush*. London. (Repr. 1987⁴, Karachi).
 Sahni, B.D. (1933) A Sarada Inscription from Hund. *Epigraphia Indica*, 22, pp. 97-98. Delhi.
 Sahni, S.S. (1932) Six Inscriptions in the Lahore Museum. *Epigrafica Indica*, 21, pp. 293-301.
 Said Qamar, M. (2004) A Preliminary Report on the Excavation of a Buddhist Site at Nawagai, Tehsil Barikot, Swat. *EW*, 54, 1-4, pp. 181-222.
 Scarcia, G. (1965) *Sifat-Nāma-yi Darvīš Muḥammad Hān-i Ġāzī. Cronaca di una crociata musulmana contro i Kafiri di Lagmān nell'anno 1582*. SOR, XXXII. Roma.
 Schopen, G. (2005) Taking the Bodhisattva into Town. More Texts on the Image of 'The Bodhisattva' and Image Procession in the *Mūlasarvāstivāda-vinaya*. In Callieri & Filigenzi 2005*: 299-311. [See Section 1.1]
 Schopen, G. (2006) On Monks and Menial Laborers. Some Monastic Accounts of Building Buddhist Monasteries. In Callieri 2006a*: 225-45. [See Section 1.1]
 Senft, W. & H. Senft (1986) *Hunza. Legendäres Volk ohne Krankheit der Seidenstrasse zwischen Karakorum und Hindukusch*. Gnas.
 Shaw, J. (2005) The Archaeological Setting of Buddhist Monasteries in Central India: A Summary of a Multi-phase Survey in the Sanchi Area, 1998-2000. In C. Jarrige & V. Lefèvre, eds., *South Asian Archaeology 2001*, II, pp. 665-76. Paris.
 Spagnesi, this issue
 Stacul 1987* [See Section 2.1]
 Stacul 1995* [See Section 2.1]
 Stacul 2001* [See Section 2.1]
 Stacul 2005b* [See Section 2.1]
 Stein, M.A. (1899) Detailed Report of an Archaeological Tour with the Buner Field Force. *Indian Antiquary*, XXVIII, pp. 14-28, 33-46, 58-64.
 Stein, M.A. (1930) *An Archaeological Tour in Upper Swāt and Adjacent Hill Tracts*. MASI, 42. Calcutta.
 Taddei 2004* [See Subsection 3.1.2]
 Tucci 1958a* [See Section 1.1]
 Tucci 1977* [See Section 1.1]
 Tusa 1979* [See Section 2.1]
 Tusa 1981* [See Section 2.1]
 Vidale & Olivieri 2002* [See Section 2.2]
 Vidale & Olivieri 2005* [See Section 2.2]
 Young, R. (2003) *Agriculture and Pastoralism in the Late Bronze and Iron Age, North West Frontier Province, Pakistan*. Bradford Monographs in the Archaeology of Southern Asia, 1. BAR International Series, 1124. Oxford.
 Young, R. (2005) Environmental Archaeology in NWFP, Pakistan: Using Plant and Animal Assemblages to Distinguish between Urban and Rural. In C. Jarrige & V. Lefèvre, eds., *South Asian Archaeology 2001*, I, pp. 337-43. Paris.