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# TALKING STONES

PAINTED ROCK SHELTERS  
OF THE SWAT VALLEY

LUCA M. OLIVIERI



Pakistan-Italian Debt Swap Program  
Italian Archaeological Mission in Pakistan  
Directorate of Archaeology and Museums, KP Province

ACT-FIELD SCHOOL PROJECT REPORTS AND MEMOIRS  
SERIES MINOR, 2

# TALKING STONES

## PAINTED ROCK SHELTERS OF THE SWAT VALLEY

LUCA M. OLIVIERI

FOREWORD BY MASSIMO VIDALE

WITH CONTRIBUTIONS BY  
M. DI CHIARA AND M.W. MEISTER



PAKISTAN-ITALIAN DEBT SWAP PROGRAM  
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LIST OF MAIN ABBREVIATIONS UTILIZED IN THE TEXT

AMSV: Archaeological Map of the Swat Valley Project  
asl: above the seal level  
c.: circa  
DoAM: Department of Archaeology and Museums, Ministry of Culture,  
Government of Pakistan  
FORTHC. : FORTHCOMING  
fn.: footnote  
IAM: Italian Archaeological Mission in Pakistan  
IFRAO: International Federation of Rock Art Organizations  
IsMEO: Istituto Italiano per il Medio ed Estremo Oriente  
IsIAO: Istituto Italiano per l'Africa e l'Oriente  
IUO: Istituto Universitario Orientale (currently: UNO: Università degli Studi  
di Napoli "L'Orientale")  
KP: Khyber Pukhtunkhwa  
MAE - DGCC: Ministero degli Affari Esteri (currently: Ministero degli Affari  
Esteri e della Cooperazione Internazionale - MAECI), Direzione Generale  
Cooperazione Culturale (currently: DGSP: Direzione Generale Sistema Paese)  
NAs: Northern Areas (presently: Gilgit-Baltistan)  
NWFP: North-West Frontier Province (currently: KP)  
m, km, ha: meter, kilometer, hectare  
sq m, sq km: square meter, square kilometer  
N, S, E, W: North, South, East, West  
RV: Rigveda

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MAPS BY  
E. MORIGI

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## FOREWORD

MASSIMO VIDALE

*Some of the sunniest and carefree days of my archaeological career were spent walking in the valleys near Barikot, Swat, between 2000 and 2006, searching for rock art sites. My living nightmare was the author of this book: seven years younger, many more kilos lighter, he costantly walked 150 m ahead of me. When I reached, panting and puffing, the place where he had smoked in happiness his three cigarettes, he turned away, and started again without a word. In this way, we found dozens of painted shelters. Before our work, nobody had even suspected that the middle Swat was a core area of this peculiar form of prehistoric art.*

*Some archaeologists may like speaking of their 'discoveries': we will not. We were accompanied, day by day, by our wonderful friend, Mr. Akhtar Munir, from house to house across slopes, boulders and mountain crests. We used to sit in the courtyards, where the local farmers offered us tea, butter, millet bread, and the honey of wild bees. After these delicious symbols of local melmastia (hospitality), we were accompanied to sites that farmers and sheperds had always known since childhood. We enquired and asked for starnge signs and figures on the rocks; sometimes, after long walks, we were disappointed to find natural rock formations or unusual patterns drafted on the cliffs by erosion or mosses; but in most cases under our eyes appeared ancient red-blood paintings – not always of exceptional artistic quality, sometimes of great complexity – which opened a new, dramatic window on a forgotten past that in our archaeologies was mainly made of pottery, earthen layers and mute, ruined architecture.*

*This is how I learnt that rock art is like one's dreams. When we have them, they impact on our mind and spirit with the force of another mysterious life. But when we try to recount these emotions to others, they almost vaporize under the logical structure of our words and sentences. When I first saw the gigantic face of Sargah-sar, and I suddenly realized the eyes, the open mouth, its saddle-shaped surface*

*smeared with red ochre like a supernatural tongue, and the crowd of abstract signs, bowmen, animals and dancers that resurrected tales lost since almost 2000 years, my heart was tumbling hard as it never had done in front of a new archaeological evidence.*

*But this is not archaeology. This book, in fact, does not indulge in sensations. It is serious, practical, honest, like his author. The reader will find in the following pages a general archaeological introduction, the explanation of the methods used for recording, and a set of logical deductions that frame each rock painting in a reliable – as much as this is scientifically possible – chronological and historical sequence. The stories retold by the paintings then become part of Olivieri's deeper understanding of the cultural history of Swat, a history where the role of the main valleys and their ancient cities and waterway is constantly paired by that of the peripheral mountain communities. It is a wonderful, seminal addition to the archaeology of a region of a bewildering archaeological richness.*

*Luca M. Olivieri made me love these strange, remote paintings; but, always ahead of me, when I finally came to appreciate their manifold values, at the end of the research, he had somehow lost his original interest. I suspect that one of the reasons was that many colleagues did not fully understand the value of our work. Believe me, they were totally wrong. The other reason is that Luca was already thinking to his new enterprise, the extensive dig at Barikot. But Luca well knows that there are some important paintings that we still have to record, and that sooner or later, we will have to go back to our rocks...*

*Rome, September 20th, 2014*

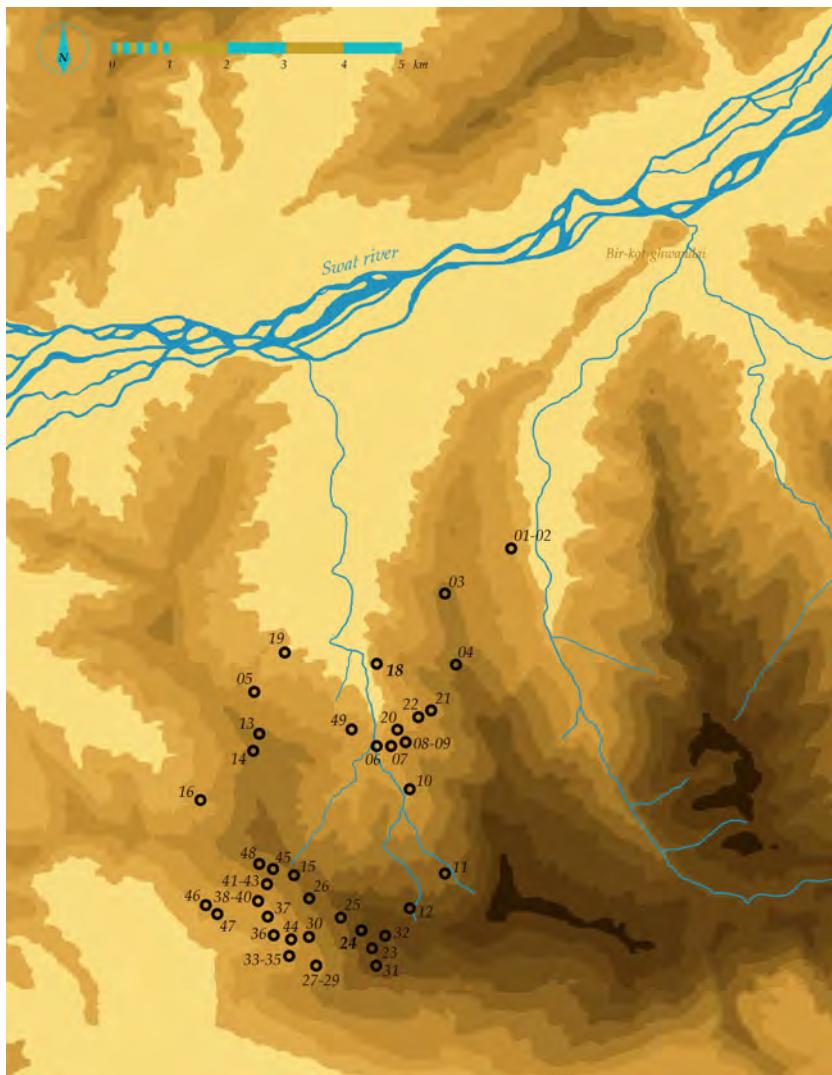
*To Akhtar Munir (aka Tota)  
Village Panr, Swat*

*With the Mission, since ever*



*Map 1*

*The Middle Swat valley with the locations of the shelters found in 2012 and not included in the present Volume (see OLIVIERI 2013). The shaded area marks the position of Map 2. (Elaborated by E. Morigi after SPAGNESI 2006: fig. 1)*



Map 2



## PREFACE

The present work focuses on a segment of the Swat-Malakand region, which straddles two administrative areas of the Khyber-Pakhtunkhwa Province (KP, former NWFP) of Pakistan: the Swat District and the Malakand Agency. The rock shelters that are the subject of this research have all been documented within a territory of Middle Swat, which borders these two districts, located between the area of Barikot (SW Swat) and the S slopes of the ridge, which runs between Topialai peak and the Shahkot pass (SE Malakand).<sup>1</sup>

Before the discovery of these paintings, our knowledge of the Swat rock art was limited to the extraordinary artistic phenomenon represented by devotional rock reliefs of late Buddhism (FILIGENZI 2014). In contrast, the small amount of information relative to 'non-Buddhist' production<sup>2</sup> (whose origin and function did not fall within the scope of monastic devotion) appeared initially to be a minor phenomenon, both in extent and quality. Instead, painted shelters discovered subsequently in the mountains between Swat and Malakand represent a phenomenon, which is qualitatively conspicuous as well as historically significant, and, in quantitative terms, only slightly less than the late Buddhist rock art of the same region.

From the beginning we were surprised at the continuity of the rock art phenomenon in Swat. It is as if carving or painting the rocks was a cultural marker of the people who inhabited Swat: whether this was done through the use of simple incisions or complicated permutations of cup-marks, within complex paintings in isolated shelters, or through the serene gestures of Buddhism. We were impressed that one phenomenon flowed into another; as in certain areas, in distinct but contiguous phases, the Buddhist acculturation of Swat replaced the archaic geomancy of high places, of the water

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<sup>1</sup> For the definition of Middle Swat see ISIAOREPMEM VI.

<sup>2</sup> According the definition coined by JETTMAR 1985.

springs, with its signs, as they were indicators of a sacred geography (like the *Songslines* narrated by B. Chatwin).

The purpose of this work is to present as a whole the results of a dozen of years of research carried out within the framework of the Italian Archaeological Mission in Pakistan (IAM). This research project was conducted as part of the activity of the Archaeological Map Project of the Swat Valley (AMSV), whose first phase regarding the valleys surrounding Barikot (Karakar, Najigram, Kandak and Kotah) concluded after four campaigns (2000, 2004, 2005, and 2006).<sup>3</sup> This project was funded by IsIAO (Istituto Italiano per l'Africa e l'Oriente), by the Italian Minister for Foreign Affairs (MAE - DGSP), and (relating only to the 2006 campaign) by the Karakorum Trust (Everest-K2-CNR).

As aforesaid, this work is primarily interested in a discussion of the shelter paintings found in Swat and Malakand; therefore, it is not the Author's intent to simply introduce individual discoveries or rediscoveries, but also and above all to present an overall picture, to analyze the major potential problems, and to attempt to provide a historic advance. As this is the first time this artistic phenomenon has been studied, and it involves a wide spectrum chronologically, it is probable that the initial reconstruction will leave many questions unanswered and open the door to various new topics of research. The task is difficult, almost pretentious: the study of rock art in Swat is still a young discipline. On the other hand, the importance of the theme makes this attempt justified, if not urgent. In ten years, or perhaps before, this work will be only a preamble. Other sites will have been discovered, many issues will have been clarified,

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<sup>3</sup> OLIVIERI/VIDALE ET AL. 2006.

<sup>4</sup> The year 2006 was the last when extensive surveys were possible in Swat, before the security conditions deteriorated.

The surveys carried out in the Chargul and Doga areas in Summer 2010 by the Author and Mr Abdul Nasir, and the reconnaissance carried out in and around Mt. Ilam in Spring 2012 (in company with Mr Arshad Khan), are reported in other publications (OLIVIERI 2012, 2013).

The fieldwork carried out in 2012 was part of the ACT-Field School Project.

and new hypotheses will have been made, while those presented here will have been discussed, integrated, and surpassed. This study is yet a definitive work, even though we are well aware of its limits. It is based on data available through 2007 and updated in 2010 and 2012.<sup>4</sup> In the future, new discoveries will change the conclusions drawn. However, if the assumptions, suggestions, and issues presented here will retain their validity in the future, it will be in part due - I hope - to the methodological approach adopted.

Much of the research were conducted by the Author in collaboration with Massimo Vidale, who on this occasion chose to stand aside to encourage his slightly younger friend. At this time, I would like to formally thank him; without him, I must admit, this research project would not have passed the preliminary stage in which I left it after my initial discoveries of the 90's. Without Massimo Vidale's discovery of the two key sites, Sargah-sar and Kakai-kandao, from which the analytic study of this phenomenon took hold, all sites here presented would have been ignored. It also goes without saying that the tireless and inspiring work carried out by Akhtar Munir must be mentioned; he was, and still is, in charge of local field staff of the IAM in Swat.

Last but not least, I would like also to remember the contribution of the colleagues of the Department of Archaeology and Museums, Govt. of Pakistan (DoAM) in the field and particularly those by Tahir Saeed in 2004, A. Nasir Khan in 2005, 2007 and 2010, and Faiz-ur-Rahman in 2006, now in force respectively to the DoAM, to the Provincial Directorates of Archaeology and Museums of Punjab, and of Khyber-Pakhtunkhwa.

I would have liked to thank Professor Gherardo Gnoli, last President of IsIAO, who authorized the research and the then Directors of the Italian Archaeological Mission, Dr. Domenico Faccenna and Professor Maurizio Taddei, but their untimely passing, allow me only to offer them a spiritual *ringraziamento*. I would also like to thank Dr. Fazal Dad Kakar, Director General DoAM (retd.) for his support; Professor Harry Falk

(retd.), Institut für Indische Philologie und Kunstgeschichte, Freie Universität, Berlin, under whose supervision this research became a theme for a PhD thesis; Dr. Ute Franke for her comments; Dr. Anna Filigenzi for her insight. My thanks go also to Professor Harald Hauptmann, Director of the Research Unit 'Felsbilder und Inschriften am Karakorum Highway' of the Heidelberger Akademie der Wissenschaften, who granted me the permission to anticipate in this publication a shorter version of a volume planned for the series MANP (issue no. 12).



## INTRODUCTION

### ROCK ART IN SWAT AND SURROUNDING AREAS

The study of rock shelters had not been particularly significant in the history of the IAM in Swat, at least up to 2000. For this reason, the discovery of the carved wall of Gogdara I, credited to Giuseppe Tucci in 1956, published in 1977, should be considered a parenthesis preceding his definitive study.<sup>5</sup> Nonetheless, it should be remembered that this discipline is part of a tradition of study in which Italian scientists have made major contributions in Karakoram and the Hindu Kush, but only occasionally and within the setting of mountaineering, geological, and anthropological expeditions. Particular recognition must be given to the expedition of the Duke of Abruzzi (1909), to the reconnaissance missions of Biasutti-Dainelli (1913-14), to those of the Duke of Spoleto (1929), to those of Ardito Desio from the second half of last century onwards, up to the expeditions in the Hindu Kush.<sup>6</sup>

Indeed, Karl Jettmar was the first in Pakistan to completely dedicate a research project to the study of rock art, in particular in the Upper Indus. In 1980 he launched, with A.H. Dani, a joint German-Pakistan research mission in the Upper Indus of Pakistan<sup>7</sup> (from 1984: Heidelberger Akademie den Wissenschaften - DoAM), which has been headed by Harald Hauptmann since 1989, and deals with the first comprehensive regional rock art study of the Himalaya-Karakoram area. Therefore, the Heidelberger publications (ANP 1-5, MANP 1-10) remain the primary reference for any other similar research in the neighboring areas (i.e. the research carried out by H. Tsuchiya). Other research projects conducted in surrounding areas and culturally associated with ours should be mentioned. In the Ladakh area (Upper Indus/India) the research carried

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<sup>5</sup> TUCCI 1958; ISMEOREPMEM I; BRENTJES 1977; TUCCI 1977; OLIVIERI 1998.

<sup>6</sup> See the bibliography in DESIO 1985; GARIMOLDI/GUALDONI/MANTOVANI 1991; MARAINI 1997.

<sup>7</sup> When not indicated otherwise, the term Upper Indus utilized in the text refers to the Pakistani side of the Indus river's course (presently Gilgit-Baltistan; formerly Northern Areas).

out by B. R. Mani, H.-P. Francfort and, more recently, that of M. Vernier and L. Bruneau, is to be considered. Other researches done in N India (Himalaya) are of particular relevance to our area of interest, especially those carried out in Kumaon and Garhwal by D. P. Agrawal and Y. Mathpal.

Returning once again to the discussion of Pakistan, in recent years numerous other fieldworks have been carried out in this field by archaeologists of the DoAM and University of Peshawar (Department of Archeology). The areas involved are located in particular in the Middle Indus and the surrounding region, within the KP province. It is in these areas where the first rock art sites were documented thanks to the pioneering work of A. Foucher, D.H. Gordon, C. King, H. De Terra and T.T Paterson. Since that time other areas have been added: first Malakand and Swat, and, recently, Chitral and Bajaur, but also Swabi and Mardan (OLIVIERI 2013), Buner and Manshera (see PAYR 2012). Up to this point, however, only preliminary reports or local studies are available on rock art in these areas, and (excluding Upper Indus) no comprehensive studies have ever been attempted.<sup>8</sup>

Research carried out in Swat-Malakand, after the incomplete parentheses during the study of Gogdara I, and casual discoveries (such as those of Hatiano-kandao),<sup>9</sup> took

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<sup>8</sup> For references to studies preceding World War II see GORDON/GORDON 1941, GORDON 1960, FOUCHER 1942-1947 (see also OLIVIERI 2012). For references pertaining to later studies, excluding the Italian works, refer particularly to: MIZUNO ET AL. 1962; MIAN SAID QAMAR 1974-1986; SHAH NAZAR KHAN 1995; SAEED-UR-REHMAN ET AL. 1996; LUFT-UR-REHMAN 1997; BAHADUR KHAN ET AL. 1999; ARSHAD MUGHAL 1999; ASHRAF KHAN ET AL. 1999-2000; BADSHAH SARDAR 2000; NASIM KHAN 2000; ASHRAF KHAN ET AL. 2002; QASIM JAN MOHAMMADZAI 2005. Recently Zulfiqar Ali Kalhoro is carrying out several important field research in Sindh, which are revealing an extraordinary and totally unknown rock-art patrimony (KALHORO 2009, 2011).

As far as concerns Tibet, Kumaon, Ladakh, and Afghanistan, see e.g. BELLEZZA 1997, 2002a, 2002b; AGRAWAL/KHARAKWAL 1998; MATHPAL 1995; AAS 2008; MANI 2010; BRUNEAU/VERNIER 2010; BRUNEAU 2011, ID. FORTHCOM; JUNG 2003; FERRANDI 2010.

<sup>9</sup> NAZIR KHAN 1983.

hold again in 1989 with the discovery of new rock shelters in Kafir-kot and surrounding areas within the Malakand Agency.<sup>10</sup> These paintings had been executed utilizing metal oxides (ochre, red and yellow), which can be dated through the contents representative of a historic period: pictograms of sacred Buddhist architecture and mounted warriors, along with geometric ideograms. In 1995, a definitive study that included a complete graphic documentation of the site of Gogdara I was finally carried out. Thanks to this project it was created an initial chronological sequence of the Swat rock art data.<sup>11</sup> In the last ten years, many new sites have been added to these data, not only those containing graffiti and engravings, but also a wide variety of new sites containing cup-marks, tanks, dot-marks, etc.<sup>12</sup> New painted shelters of extraordinary importance came to light during the systematic reconnaissance of the Kandak Valley begun in 2000 by Massimo Vidale in preparation of the Archaeological Map of the Swat Valley (AMSV Project). Although some of these paintings were (slightly) stylistically/syntactically different from those of Kafir-kot, and primarily attributable to late protohistory, they belong to the same cultural phenomenon.<sup>13</sup>

In addition to the sites, which have been the object of the present research, several others have been discovered in the KP Province: the group of Khanpur-Shikaoli (next to Rustam, Mardan, with more than 3 sites), Parlai-dab (or Parlai-dub, Karamar E, Swabi, 1 site), Kala-tassa (Manshera, 1 site), Tanawal (Manshera, 4 sites), and Kafir-smast (Swat, 1 site).<sup>14</sup> Those of Chargul (Karamar N, Swabi, 6 sites),<sup>15</sup> finally represent another important step for the present research.<sup>16</sup>

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<sup>10</sup> NAZIR KHAN 1994, ABDUL NASIR KHAN ET AL. 1995.

<sup>11</sup> OLIVIERI 1998, 2005.

<sup>12</sup> OLIVIERI 2005; OLIVIERI/VIDALE 2004; VIDALE/OLIVIERI 2005; OLIVIERI 2006a; OLIVIERI/VIDALE ET AL. 2006; OLIVIERI 2008, ID. 2010a, Id. 2012, Id. 2013. For other bibliographic references on Swat, see OLIVIERI 2006b.

<sup>13</sup> VIDALE/OLIVIERI 2002.

<sup>14</sup> NASIM KHAN 2000; SHAH NAZAR KHAN 1995; PAYR 2012; BADSHAH SARDAR 2000, ID. FORTH.

## THE PAINTED SHELTERS OF SWAT

The painted shelters discovered are similar in regard to their location, techniques utilized, style and subjects. Therefore, we will consider them physically as a relatively homogeneous group. The rock shelters are situated on bare eroded crystalline rock on the edge of steep sloping ground or ravines. The paintings are hosted within natural, relatively deep, rounded, niche-shaped cavities; these cavities were formed by naturally occurring erosion into gneiss, granitic gneiss or granite rocks (with only one exception). The location of the shelters is not associated (inside or outside) with satisfactorily preserved archaeological deposits. One likely consequence is that their dating will depend primarily on the study of the material culture portrayed in the designs themselves, as well as the study of comparative stylistic considerations, and the analysis of topographic contexts.

As far as their physical features are concerned, let us first consider some established points:

1) The rock shelters rise to approximately the same absolute height, and are sometimes located in the vicinity of major mountain passes, springs, or along ancient paths. In general, it is difficult to ignore the impression that most sites were chosen due to their visual dominancy. The rocks, boulders or pinnacles that host the paintings rise as landmarks and are visible from a considerable distance (with a few exceptions).

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<sup>15</sup> These paintings, according to GORDON 1960 (110-11, fn. 9) were first noticed by C. Maxwell of the Archaeological Survey of India in 1881; then they were briefly (and wrongly) analyzed in FOUCHER 1942-47. A. Cunningham dismissed them as "boyish sketches – a sort of Afghan Noah's Ark" (GORDON 1960: 110). On the matter, see OLIVIERI 2013.

<sup>16</sup> Most of the painted shelters have been documented in Swat-Malakand. In Upper Indus only few paintings are recorded: at Gurikot (Astor), near the Babusar pass, and at Gor, uphill Gilgit. After the discoveries of 2012 (OLIVIERI 2013), 70 paintings are in the KP province record (out of which 52 are from Swat-Malakand-Buner).

N.B.: In addition to these references, the reader may also refer to some brief reports published in the DoAM KP bulletin, *Frontier Archaeology*.

2) The painted walls are often not easily accessible or visible. For the painter as well as visitors and onlookers, access to most of the shelters was always quite difficult. Arriving to them often necessitated climbing, sometimes painstaking sliding, and then in some cases required one to lie on one's back. In these cases, the ceiling and other paintings had to be observed from a short distance, only a few centimetres from one's face, and only one painter or onlooker at a time would have been able to enter the shelter to execute/observe the figures. In general, it is evident that the paintings had been traced and had been observed, by individuals or very small groups, sitting or crouching.

3) All the paintings were made utilizing mineral pigments made with base metals. Tests performed did not reveal the existence of organic substances such as casein, for example, which should have been present in the composition of the pigment. The ochre tints utilized are listed in order of their frequency: carnelian red, crimson red, orange red, scarlet red, white, and cadmium yellow. The latter color is used at only a single site.

4) The application of color was most likely done with the artist's fingers. In all cases, the breadth of the application is similar to and differs only slightly from the average width of a finger; in one case, signs of fingerprints were documented. In few cases was there evidence of the use of brushes or sticks.

5) All of the figures within each individual painting appear to be part of a complex: apart from few exceptions, one does not have the impression that the figures were added gradually. Therefore, the work of more than one artist's hand within the same painting has never been clearly highlighted. There is very few evidence of the overlapping of colors or shapes, or of additional layers of colors.

## TOPOGRAPHICAL SETTING

The painted rock shelters are located prevalently in an area of approximately 50 sq km. This area is composed of three sectors: the first is included within the Swat District; the other two are part of the Malakand Agency.

The first area covers the upper half of two parallel valleys (from E: Kandak and Kotah), oriented on a N-S axis, through which flow two streams (left tributaries of the river Swat). The Kotah flows into the Swat River to the SW of Barikot, near the village of the same name. The Kandak flows into the Swat River, E of the hills of Barikot, but after having jointed with another tributary, the Karakar. The two valleys are separated by a mountain ridge (Jaurbanda-ghar) which pushes up to an altitude of 900-1800 m asl and reaches 2068 m asl with the peak of Doplai-sar (Topialai-sar) at the summit located SE of the watershed

The second area lies immediately W of the orographic chain that separates the Kotah valley from the more western Thana valley (Morah-ghar).

The third area lies just S of the watershed, which separates Swat from the Mardan plain. This orthographic caesura runs E-W, at an average altitude of 1700 meters asl, from the Doplai-sar peak to the E, to the Saffar-sar peak to the W (the Doplai-Saffar range).

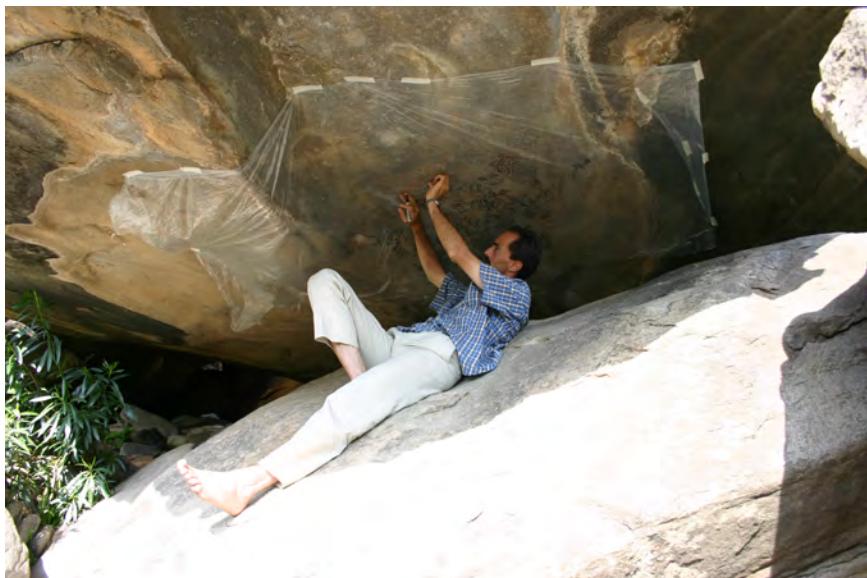
All the areas considered are characterized by a stony terrain typical of crystalline (gneiss) geology, relevant to the so-called Jambil Unit of the geology of Swat.<sup>17</sup> Many stretches have assumed a typical 'Inselberg' configuration as they have been heavily eroded by glacial action.

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<sup>17</sup> ISIAOREPMEM VI: 14-15, fig. 5.

## DOCUMENTATION TECHNIQUES

The paintings were located and documented in the field with the help of local guides and members of the staff of the Italian Mission (together with Mr. Akhtar Munir, I would like to remember the late Mr. Fazal Wahid who helped me during the Kafir-kot 1990 documentation campaign).



*Tracing a shelter.  
(Photo by M. Vidale)*

After careful cleaning (grass, mosses, etc.), which was carried out where possible, the paintings were photographed with the IFRAO colour standard scale,<sup>18</sup> and contact-traced onto transparent polyethylene sheets (available at the local bazaars; see Pl.

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<sup>18</sup> BEDNARICK 1991.

LXXXVIII) using permanent markers.<sup>19</sup> At the Mission headquarters at Saidu Sharif the designs were recomposed and reproduced on polyethylene sheets, then photographed, digitally reduced to the necessary scale and graphically reproduced.

With regard to the photographic documentation, during the last documentation campaigns, we adopted a more complex processing system: digital color calibration and re-constitution was carried out utilizing computer programs (Lightroom and Adobe Photoshop) when necessary. Thanks to this system, in many cases it was possible to integrate the contact copies made on site, particularly those of figures whose color spectrum had not permitted the naked eye to clearly distinguish them from the rocky surface. Obviously, there is a huge difference in terms of quality and reliability between the first tracings (1990, Sites 13, 15-17) and those executed after 2000. The standard system we adopted after 2000 has given better results, as one can easily notice from the graphic documentation presented in this Volume.

Only in the case of the campaign records for the Kafir-kot area did we proceed with the collection of pigment samples to carry out a chemical analysis for metals.<sup>20</sup> As the working conditions during the last campaigns in Swat, with regard to security, were not optimal, documentation was restricted to the graphic phase and digital photographs.

## INFORMED METHODS: ROCK ART AS VISUAL ART

To better clarify the methodological approach used in this research project, it will be necessary to attempt to define the problem clearly, and in tandem present the project's postulates, as well as define the three fundamental contexts in which the phenomenon of rock art may be positioned.

Chronologically world rock art lies in the midst of a long sequence (from the Paleolithic to the Modern age), which spans from a-literate to literate cultures, always

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<sup>19</sup> ANATI 1976, ACTREPMEM, 1: 16.

<sup>20</sup> See VITALI in ABDUL NASIR KHAN ET AL. 1995: 343-34.

in a primary orality context<sup>21</sup>, or visually-orally oriented environment<sup>22</sup>, with various noted features.<sup>23</sup> A context such as the one just proposed infers a series of consequences. The principal concern refers to tout court chronology. It is obvious that starting from the non-literate stage, each stage is diversified in terms of its specific chronology and with respect to various geographical areas. In terms of absolute chronology, one can have the same stage in different areas, on points in the timeline, which are distant from each other, even by thousands of years. The process (autogenous or 'allogeneic') that leads to the literate phase (the inevitable destination, one must admit) brings with it a progressive articulation and specialization of the internal functions of a culture. From a linguistic point of view this leads to a lexical extension, while from a social and economic point of view this results in the emergence of forms that gradually become more complex. For this reason, certain categories or cultural patterns are recognized as constants.<sup>24</sup> In this study we refer to non-literate cultures that nevertheless possess a significant mythopoetic patrimony.

Therefore, the second context of particular relevance is the recognition of local cultural patterns within which it is also possible to effectuate more extensive comparative attempts. For this reason, we find the school of thought of E. Anati most interesting, as it has chosen to focus on cultural categories rather than historical stages. This is especially pertinent in areas and cultures (e.g. non-European or rural/remote) that remained virtually unchanged for centuries and have only recently acculturated (post-contact phase=acculturation). According to Anati, these categories (with the inevitable

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<sup>21</sup> According to the definition coined by W. J. Ong (ONG 1982).

<sup>22</sup> To better understand the definition of visual-oral, see SEVERI 2004: 21.

<sup>23</sup> 1) A-literate (or pre-literate): there is a total absence of any written form of communication; 2) Non-literate: if such forms exist elsewhere, they are not shared by the culture; 3) Co-literate: the culture is familiar with and shares written communication at various levels, but only as an allogenous mode of expression; 4) Literate: written communication is prevalent, and gradually supplants any other form of communication. The following sequence was first presented in VIDALE/OLIVIERI 2002.

<sup>24</sup> ANATI 1994: 35-38.

sub-categories and multiple stages of transition) are in agreement with regard to a precise lexicon, perceptible thanks to a purely visual approach. For example, the bow and arrow is present only from a certain category on, while domestic livestock are present in second one, and agricultural activities (and related artifacts) are present in another one. According to this hypothesis, even the syntax within the rock phenomenon varies in relation to the category; for example, descriptive scenes appear only from a certain category on, while in the others, the association of signs most often reveals the use of expressions which are difficult to understand from a purely visual approach (a-syntactic and non-verbal). In the category, used to describe complex economies, one encounters repetitive schematic forms (ideograms) (see Anati 1994). In this study we refer to two cultural sub-categories: Agricultural Community, (or better: subsistence-agriculturalists and gatherers), and Pastor-Breeders These categories represent the prevailing features during the long transitional phases towards complex economies (or better: mixed economies), that were dominant in the main valley of Swat from the Bronze Age on, and slowly intruded into the off-center areas.<sup>25</sup>

A third context seeks to establish interpretative models for signs as facts in themselves. Attempting to interpret rock art, where possible, not only as a manifestation of self-experience, but also as a mode of communication (especially visual), means trying to recognize semantic patterns which are more or less specialized. These, far from being an evolutionary model of increasing complexity, instead serve to identify characteristic markers representing specific cultural stages. As with semantic patterns, where possible, the distinction between pictograms, ideograms and psychograms is useful.<sup>26</sup> This is the case, of course, if by pictogram one intends an objective representation of an object, and by ideogram one intends a more complex, conceptual representation. For example, a central cruciform shield, which dominates a scene with warriors armed

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<sup>25</sup> ISMEOREPMEM XX; YOUNG 2003

<sup>26</sup> As elaborated in ANATI 1994. Regarding the structural concepts of grammar and syntax in the analysis of prehistoric rock art, see again the definition provided in ANATI 1992: 97 and ff.

with shields, is an ideogram, while shields, which have been taken up are pictograms; an anthropomorph which is larger than the human figures which surround him could be an ideogram, while the human figures are clearly pictograms. Instead, a psychogram is a sign that no longer represents an object as much as an action, or a modification of both (as can be said of adjectives and adverbs): an abstract element that is introduced as a visual sign on the rock. Generally, enigmatic symbols such as points, sinuous lines, zigzags, etc., represent the most common vocabulary present in psychograms. Obviously this three-fold meaning often leads to a gradual increase in the intricacy of interpretation.

## DEFINITIONS

The following glossary contains only terms used in the text which are pertinent to the specific lexicon of rock art (e.g., cup-marks), or which, within the text, or more generally in the specified literature, have a meaning which is special or a variant compared to that currently used (e.g., ceiling). Terms, with their synonyms and antonyms, are in bold, and are grouped according to their pertinence, not alphabetically.

### *Physical setting*

#### **Area**

A cluster of rock art **sites**. It is primarily defined by its topographical characteristics.

#### **Site**

A place, which hosts a rock art record. It is defined on the basis of physical consistency. Two or more sites may be hosted within the same physical space if separated from each other.

### **Shelter**

Typology of a **site**. "A concavity in a rock wall, formed by one or more natural processes, although most often by erosion. It is wider than it is deep."<sup>27</sup>

### **Niche**

Typology of a **site**. A shallow natural concavity/cavity.

### **Open-air wall**

Typology of a **site**. A rock surface with a reasonably uniform orientation.

### **Ceiling**

The apex, of a **shelter** or **niche**, which is generally horizontal or sub-horizontal.

**Sanctuary, Hermitage, Public painting place, Casual painting place**

See below (pp. 93 ff.).

## *Organization of the paintings*

### **Complex/Composition**

A group which consists of more than one **figure**.

### **Sector**

A physical portion of a **complex**.

### **Scene**

Part of a **complex**. "A presumed depiction of a real or imaginary episode involving more than one rock art motif."<sup>28</sup>

### **Figure**

"A design or pattern painted [...] on a rock surface; a rock art motif."<sup>29</sup>

### **Sign/Design**

A single element of a painting, which has been completed.

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<sup>27</sup> ANATI 1994: 11.

<sup>28</sup> IFRAO ROCK ART GLOSSARY.

<sup>29</sup> IBID.

## **Center**

The central, primary or privileged portion of a composition (opposite: **periphery**).

## **Permutation**

A complex and apparently coherent cluster of several identical **signs** without clear significance.

### *Interpretation of the figures*

## **Syntax**

The position of the figures in the physical space, potentially in relation to a recognizable meaning of a composition. Consequently, an isolated figure is said to be in **syntactic isolation**, or be in an **asyntactic position**.

## **Grammar**

The recognition of various degrees of communicative value in different pictorial signs (for example, a **pictogram** is recognized for its substantival value, which is objective, like a noun; a **psychogram** is recognized for its emphatic or verbal value, which is dynamic).

## **Lexicon**

The group of signs utilized (synonym: **vocabulary**).

## **Pictograms, Ideograms, Psycograms**

See above (p. 14).

## **Iconic**

"Providing visual information recognised by most contemporary humans as resembling the form of an object."<sup>30</sup> See also **Pictogram**.

## **Non figurative/Non iconic**

"Providing no visual information recognised by contemporary humans as resembling the form of an object."<sup>31</sup> See also **Ideogram, Psycogram**.

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<sup>30</sup> IBID.

<sup>31</sup> IBID.

## **Icon**

A synonym of **Ideogram**: an **icon** implies a resemblance between the sign and what is represented.

## **Anthropomorph/Supernatural being**

A human figure, which is distinguishable by size, position, details and body modifications, from other human figures.

## **Hero**

A figure, which is usually depicted as a warrior in an isolated position or **syntactic isolation**.

## **Deity**

An **anthropomorph**, **hero**, or animal figure, clearly recognizable as pertaining to a deity of the pantheon of a formalized religion.

## **Theriozoomorph**

A painting, which provides adequate visual information to contemporary humans so that it resembles a highly modified **zoomorphs**.

## **Zoomorph**

"A [...] painting providing adequate visual information to contemporary humans so that it resembles an animal form."<sup>32</sup>

## **Association**

A physical or spatial connection between two figures, often achieved through the use of **association lines** (see).

## **Descriptive/Non-descriptive association**

A connection, which may or may not lead to a clear and evident description.

## **Body modification**

A **non-descriptive** alterations/emphasis of parts of a human body. See Appendix 3.

## **Association line**

**Non-descriptive** connective lines between figures or parts thereof. See Appendix 3.

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<sup>32</sup> IBID.

## Dots

They are considered to be emphasis markers (**psycograms**) when **isolated** (or linked to a figure with a **non-descriptive association**). In association with grid-like designs, dots are interpreted as **pictograms**. See Appendix 3.

## *Others*

### **Contact/ Post-contact**

"A form of rock art pertaining to the period of initial contact with European colonies or other aliens, characterized by the occurrence of depiction of imported object or ideas."<sup>33</sup>

### **Cup-mark**

"A hemispherical percussion petroglyph, which may occur on a horizontal or vertical rock surface."<sup>34</sup> It can also be conical in section.

### **Dot-mark**

Analogous to **cup-marks**, but generally less than 5 centimeters in diameter.

### **Wine-press**

A **tank** equipped with a drainage hole. If characterized by incised channels used to house movable panels on sub-horizontal surface, it is called **palette**.

### **'U-like' figure**

An **anthropomorph/human figure** with inverted-U legs.

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<sup>33</sup> IBID.

<sup>34</sup> IBID.



## CATALOGUE

In the description, where the directions ('right' and 'left', 'high' and 'low', 'top' and 'bottom') are indicated, they are defined according to the observer's viewpoint, which if possible corresponds to the point of view of the painter. However, it must be noted that, for example, 'high' in relation to a sub-horizontal wall most of the time corresponds to its innermost portion (if otherwise located, it will be indicated in the description). The cardinal points are abbreviated (N, S, E, W).

For all other elements of the Catalogue, please refer above to the 'Definitions', and to the following key:

CATALOGUE NO., AMSV SITE NO.; NAME

*Area Group (Kotah Valley: KH, Kandak Valley: KK, Malakand Ridge: MD, Thana Valley: TH);*

*Year of Discovery;*

*Chromatic Scale (Red: Crimson, Carnelian, Scarlet, Orange; White; Yellow: Cadmium);*

*State of Preservation (Optimal, Good, Mediocre, Poor) with description.*

*Approximated total extension (only when the data is relevant and fairly calculable).*

*Approximated surviving paintings (in percentage; only if fairly calculable).*

REFERENCES

Description:

Site.

Paintings.

## GAZETTEER

### 01. 138A; DWOLASMANE-PATAI 1

*KK; 2000; Red (Crimson); Good: the surviving part is bordered on the right by a thick blackish crust and decayed lichens, and on the left by the effects of an intensive peeling process that has removed all the original stone surface and exposed a powdery stone core; 90%.*

VIDALE /OLIVIERI 2002; OLIVIERI 2004; OLIVIERI 2005; OLIVIERI/VIDALE ET AL. 2006.

The shelter is composed of a thick horizontal eroded slab of gneiss, which rests on a huge, squared boulder of the same type of stone. The slab faces NE. The paintings were found within a naturally eroded cavity on the lower face of the uppermost slab. The cavity is approximately 100 cm deep and high; the inner niche is roughly 15 cm deep.

The surviving paintings display a complex, irregular geometric pattern (probably a *stūpa*) on the left, and human figures carrying weapons (bows, swords or poles) in their right hands (or in their left when the right hand holds a shield).

### 02. 138B; DWOLASMANE-PATAI 2

*KK; 2005; Red (Crimson); Mediocre: the pictures have almost completely faded; 95%*  
OLIVIERI/VIDALE ET AL. 2006.

A second rock pinnacle is situated slightly uphill from the preceding site. It is composed of a thick eroded horizontal slab, which rests on a squared boulder; both consist of gneiss. The slab faces NE. The paintings were found inside a naturally eroded cavity on the lower face of the uppermost slab. The cavity is approximately 50 cm deep.

The paintings contain four anthropomorphs with body modifications on the right and an unidentified pictograph on the left.

### 03.130A; KAKAI-KANDAO 1

*KH; 2000; Red (Scarlet); Optimal: the surface is extensively deteriorated and covered by patches of lichen. A band of blackish incrustation departs from the top of the main slab and descends towards the right, skirting the edge of one of the smaller cavities to the right. Another area of blackish incrustation can be seen along the left edge of the main erosive niche, where it has covered or destroyed part of the surviving designs. Frequent exposure to fire is probably responsible for cracking and peeling the rocks, as well as covering them with soot. The original painted surface might well have measured around 6 sq. m; 80%*

VIDALE/OLIVIERI 2002; OLIVIERI 2004; OLIVIERI 2005; OLIVIERI/VIDALE ET AL. 2006; OLIVIERI 2008; OLIVIERI 2010a.

The shelter is on the same path and at the same level as Site 04, approximately 150 meters below the Jaurbanda-ghar top range. It lies below a small cliff formed by two oblique, parallel slabs of fine-grained gneiss, one of which projects above the other and faces W, toward a steep slope. The uppermost slab is approximately 45 cm thick; it rises in a dominant position above a promontory. A small hemispherical cavity shaped by erosion opens at its center, which is 15 cm deep and roughly 50 to 80 cm wide. Cup-marks are documented above and below the shelter. The designs form a crowded, vivid composition consisting of animals (a monkey can be identified), human figures some of which carry bows (characterized by body modifications, and T-shaped forms), geometric patterns (grid- and dotted-squares) and a large round crossed disk. The monkey is associated together with a single and triple line with the central grid- and dotted-square (with a comb-like upper termination). The monkey is facing a second dotted-square; seven human figures are associated to the three ideograms in various manners: (two T-shaped figures, one with a triangular gown, two which are carrying bows, of which one has body modifications, and two - of which one may be an anthropomorph - with heavy body modifications: one is drawn with open arms and with outstretched fingers on its right hand, and pincer-like left hand; the other is shown

with an elongated right arm (and a pincer-like right foot). Surrounding the central figures are what appear to be another round-crossed disk (at left), a pair of associated archers with elongated arms, and a double-dotted square with a comb-like termination at its bottom.

#### **04. 1121A; SARGAH-SAR 1**

*KH; 2000; Red (Scarlet); Optimal: the surface is extensively deteriorated and covered by patches of lichen. A band of blackish incrustations departs from the top of the main slab, and descends towards the right, skirting the edge of one of the smaller cavities, on the right. Another blackish incrustation may be seen along the left edge of the main erosive niche, where it has covered or destroyed part of the surviving designs. Frequent exposure to fire probably cracked and peeled the rocks, and covered them with soot. The original painted surface might well have measured around 6 sq. m; 80%*

VIDALE/OLIVIERI 2002; OLIVIERI 2004; OLIVIERI 2005; OLIVIERI/VIDALE ET AL. 2006; OLIVIERI 2008; OLIVIERI 2010a.

At short distance SW of the previous shelter, the base of the Sargah-sar cliff is composed of a group of huge gneiss boulders. The geological setting of this major landmark consists of a series of thick slabs of fine-grained gneiss, which are superimposed, and project obliquely downhill, facing SW.

The dominant projecting slab has taken on a polygonal shape (lozenge), and is oriented in a way that one of its main corners points upward.

It is further characterized by two round natural cupules, approximately 35 cm in diameter and 10 to 15 cm deep, symmetrically positioned in the upper surface of the slab, and a major natural cavity in the form of a pointed inflected arch, at its base, which measures not less than 150-170 cm (the inner niche's depth ranges from 15-20 cm). The surface of these erosive features is particularly smooth and lends itself to being painted. Remains of thin parallel slabs, reduced by erosion to a large saddle-shaped feature, are visible on the lower surface of the slab. The space between the top

of this boulder and the projecting slabs is restricted, not leaving enough room to stand in front of the rock. Contact-tracing of the designs was carried out, as in the previous case, in a sitting or kneeling position. The saddle-shaped feature below the main niche bears traces of mechanical impact and abrasion. The feature is doubtlessly artificial; its surface still bears solidified splashes of red ochre. This suggests that this odd stone was utilized for on-the-spot grinding *in situ* and mixing of the red ochre used in painting. This artificial modification of the stone surface, clearly related to painting, is a feature unique to the Sargah-sar site. The projecting surface of the main slab bears three erosive cavities, which might have been perceived as having symbolic implications. When looking at Sargah-sar, one has the impression of standing before a gigantic, supernatural face, which is staring at the Kotah valley. The two round cupules in the upper part of the slab easily suggest eyes, while the large arch-shaped cavity at the base reminds one of an open mouth. The designs across the face resemble tattoos. Even the saddle-shaped rock, with remnants of pigments used in painting, suggest a red tongue at the base of the mouth. This imagery would seem to be confirmed by the toponomy: *sargah* means "the place of the head, or face", while the suffix *-sar* indicates a peak or hilltop (see Appendix 1). At the base and peak of the pinnacle there are several cup-marks; the sub-vertical rock surface below the painted niche is characterized by a palimpsest of faint engravings which were documented in 2005 and recognized as being subsequent to the niche paintings. In particular, there are representations of horsemen (amongst them, there are two prominent figures: one of which is holding a bow, and a second which is holding an ibex above his head as a symbol of possession). There are also several animals: a great feline, two ibexes and a humped bull. Painted designs, or their surviving traces, are currently primarily visible within the natural erosive cavities.

The natural niche, shaped like a pointed inflected arch, must have attracted the attention of the ancient dwellers of the local valleys due to its peculiar shape. It is still crowded with painted designs in various states of conservation: human figures, some of

which carry bows, agricultural tools, and shields (for instance, a figure of a hero with his head flanked by two dots, and holding a sun-like radial round shield/*chakra*); one figure with body modifications (with elongated arm and pincer-like right hand); animals (an ibex surmounted by an anthropomorph/uman figure and facing a feline: a ritual scene?); and elaborate geometric patterns such as grid- and dotted-squares, as well as many others pictograms most of them unidentified (amongst them a multiple circular permutation of dots). All the designs are thickly clustered in the limited space of the niche.

The focus of the complex consists of an inverted anthropomorph with 'U-like' legs inserted within a grid-and-dotted-square. To the right, an inverted human figure with 'U-like' legs holds a vertical object (a sort of *linga*-like object) with his left hand, and a series of three dots departs from his right hand. To the left, a diagonal grid- and dotted-square associated to a human figure, and a grid-rectangle is surrounded by five human figures; two of them are holding what appears to be an agricultural tool, two are wearing triangular gowns, and one has inverted 'U-like' legs. A multiple antennae-like structure is represented at the top left. To its right, a grid- and dotted-square surrounded by three associated inverted 'U-like' human figures is represented. The first figure has an indication of the penis, a series of three dots is departing from the right hand of the third figure. Below the main grid- and dotted- square a human figure with raised arms is represented near a grid-square. Below, a man holding an agricultural tool is figured with, an archer with an indication of a penis, outstretched fingers and elongate arms.

The designs within the upper round cupules are poorly preserved. Other designs had been painted outside, but are not almost completely washed away and are reduced to faint traces. There is another archer on the face of the lower saddle-shaped slab, to the left of the main niche, and a group of four dancers on the upper edge of the same feature; some of them show body modifications). It is important to note that at Sargahgar it appears that there are more than one layer of pigment on a few of the figures,

those better preserved in the center. The positive proof of alterations of color on the central figures suggests that the shelter had been re-painted and visited over a long period of time.

#### **05. 336; KAMAL-CHINA**

*KH; 2005; Red (Carnelian); Optimal: the designs are nevertheless better preserved where the sub-horizontal roof has protected the paint from washing-out; the original surface has been covered by formations of dark-grey, green and silvery lichens. The inner cavity has undergone a light but extensive process of whitish calcareous encrustation. The original painted surface may have measured approximately 9 sq. m.; 95%*

OLIVIERI/VIDALE ET AL. 2006; OLIVIERI 2008; OLIVIERI 2010a.

The paintings are located beneath an extremely low sub-horizontal gneiss slab of large dimensions which shelters a spring of water; the site is positioned on a hill W of the village of Talang. A cluster of horseback riders is represented at the center (for the most part, facing right). Above this, a reproduction of four (right) hands stands out; several humped bulls are also recognizable. One of these humped bulls is represented as being held by his hooves by a human figure. Two battle-axes are painted at either end of the slab. On the left border, a horseback rider and feline are depicted flanking an unidentified geometric pattern. Among the recognizable figures in the upper portion of the area are the following: a standard; slightly below, the figure of a horseback rider (anthropomorph) with significant body modifications; an anthropomorphic figure represented frontally with a colored rectangular body with significant body modification of its right hand.

#### **06. 342. BADZE 1**

*KH; 2005; Red; Poor. The drawings are very poorly preserved and scarcely recognizable.*

OLIVIERI/VIDALE ET AL. 2006; OLIVIERI 2008.

On the other side (right/E) of the valley, several painted shelters have been found along the rocky precipice of a deep ravine. The shelter at Badze 1 is extremely small, low and accessible with difficulty due to its position on the edge of the ravine. Within the area of its low ceiling, poorly defined human figures can be discerned with some difficulty, as well as other unidentified signs.

#### **07. 343. BADZE 2**

*KH; 2005; Red; Poor. The cavity shows faint traces of red designs, totally obliterated by a thick layer of soot.*

OLIVIERI/VIDALE ET AL. 2006; OLIVIERI 2008.

This niche consists of a round, vertical erosive cavity, located just E of the previous area. It hosts traces of paintings, which are barely visible.

#### **08. 344A. DANDI-SAR 1**

*KH; 2005; Red (Carmelian); Good. Most of the drawings are preserved and recognizable. The original painted surface might well have measured around 5 sq. m.; 70%*

OLIVIERI/VIDALE ET AL. 2006; OLIVIERI 2008; OLIVIERI 2010a.

Two shelters are located on the N side of the same deep ravine of the previous Site, where there is a large rock pinnacle, which resembles a human facial profile. The lower shelter is tiny, with a low ceiling, and a floor, which slopes dangerously towards the bottom of the ravine. It is accessible with great difficulty.

The paintings to the right represent a large human figure (a hero?). Upon its head there is a large radial disk, and it holds a round shield. To the left, there is a structure with two radial disks, which may represent a chariot, and a small human figure with body modifications. Below these figures, there are two other human figures, one with a

round radial shield significantly larger than the figure carrying it a hero?). Yet further below these figures, there are other unidentified patterns .

#### **09. 344B. DANDI-SAR 2**

*KH; 2005; Red (Orange); Good. The majority of the drawings are preserved and recognizable. The original painted surface might well have measured around 2.5 sq. m.; 65%*

OLIVIERI/VIDALE ET AL. 2006; OLIVIERI 2008; OLIVIERI 2010a.

The vertical erosive cavity located above the previous shelter displays a clearly visible complex of geometric patterns. These patterns include: grid- and dotted-squares, grid-squares (in one case with dot-marks), *trisūla*-like ideograms (in one case with dot-marks), circular, sub-circular or semi-circular permutations of dots, a crossed circle, and various unidentified geometric patterns.

#### **10. 362A. MALAK-ZIARAT**

*KH; 2005; Red (Orange); Optimal; 100%*

OLIVIERI/ VIDALE ET AL. 2006; OLIVIERI 2008; OLIVIERI 2010a.

This site is located on the right side of the valley, not far from the village of Sandok. A *stūpa* and a *trisūla* (with dots) are represented within a shallow, vertical, open natural cavity which faces the ruins of a Buddhist monastic complex.

#### **11. 379. GWAREJO-PATAI**

*KH; 2005; Red (Carnelian); Poor; 25%.*

OLIVIERI/VIDALE ET AL. 2006.

The paintings (all unidentified) were found within a shelter formed by an agglomerate of eroded collapsed boulders which lies on the N side of the mountain crest at the top of the valley. A 'palette'-type winepress is on the floor.

## 12. 380A. PALWANO-GATA

*KH-MD; 2005; Red (Orange and Carnelian: note that the figures painted in Carnelian turned Orange in the less protected lower sector). Optimal. Almost all of the drawings have been preserved and are recognizable. It is possible that the original painted surface measured approximately 3 sq. m.; 85%*

OLIVIERI/VIDALE ET AL. 2006; OLIVIERI 2008; OLIVIERI 2010a.

At the top of the crest ESE of Saffar-kandao (Saffar-sar) there are numerous traces of an ancient human presence. These (mostly rock-artifacts, and amongst them a flight of steps cut into the rock) are probably connected to the ruins of a Buddhist sacred area on the NW end of the plateau, which is one of the many ruins scattered along the crest between Amluk and Kafir-kot. A natural niche, which forms a comfortable shelter with its projection, hosts a vertical wall bearing numerous paintings. These represent mainly goats and dogs (probably also a couple of low-size felines and an ibex are represented); portions of them are painted in dark-red (carnelian). Amongst the other paintings, there are two anthropomorphs with relevant body modifications (on the left: with bird-like head and trident-like right hand, winged left arm; on the right: with crescent-like legs and feathered head). On the lower part of the niche, a representation of a carved *stūpa* has been documented.

## 13. 350. KAFIR-KOT 1

*KH-TH; 1990; Red (Carnelian). Good. The original painted surface might well have measured around 3.5 sq. m.; 75%*

NAZIR KHAN 1994; ABDUL NASIR KHAN ET AL. 1995; OLIVIERI 2005; OLIVIERI/VIDALE ET AL. 2006; OLIVIERI 2010a.

The shelter is situated on the crest of Morah-sar, which separates the Kotah valley from the Thana valley, near the main peak, which dominates the two valleys, and not far from the vast array of ruins belonging to the Buddhist site of Kafir-kot (to the W). The cavity containing the paintings is located at the rear of a group of massive gneiss

granite boulders, which rest upon one another. The shelter, which opens to NNW, is a shallow semi-circular cavity approximately 1.50 meters in depth, by the same height. On the left there are six human (amongst them three archers and a mounted warrior) figures are still recognisable in and around surrounding a depiction of a Buddhist sacred area which includes many *stūpas*. Of these, the central *stūpa* is depicted in detail with railing, stairways, its two storeys and elaborated *chattrāvalī*. An ideogram, in the form of a crossed circle with a crescent-shaped upper projection, is represented in the center of the scene (a *tamga*?). Three horseback riders documented by Nazir Khan as well as the stairway of the central *stūpa*, had totally disappeared as of the time of our final campaign. To the right, *stūpas* accompanied by a archer and a horseback rider are depicted. Here too, at the time of our final documentational campaign many details, previously noticed, had already been lost.

#### **14. 396. KAFIR-KOT 2**

*KH-TH; 2005; Red (Carnelian). Good; 90%*

OLIVIERI/VIDALE ET AL. 2006; OLIVIERI 2008; OLIVIERI 2010a.

Near the composition of boulders which host the paintings cited at Site 13, this tiny, extremely low rock-shelter is characterized by an awkward entrance. The paintings display four *stūpas* in a row, each of which shows finials representing different ideograms.

#### **15. 352. MARANO-TANGAI**

*KH; 1990; Red (Carnelian). Good; 90%*

NAZIR KHAN 1994; ABDUL NASIR KHAN ET AL. 1995; OLIVIERI/VIDALE ET AL. 2006.

Crossing the peak of Morah-sar utilizing the Saffar-kandao (in the vicinity of other interesting artifacts such as steps and passages which have been cut into the rock), and entering the Kotah valley, there is a small vertical niche with paintings. This Site is not far from the Chuwa *stūpa* (to the SSW). The small cavity, which opens to the NNE, is

formed by a huge partially inclined block of granitic gneiss, which shows no sign of artificial intervention. The paintings consist of a series of ideograms: squares (empty and partitioned) and dotted-squares. A few metres from the cave there is a gneiss plateau with tanks and cup-marks.

#### **16. 006; SHAMO**

*TH; 1992; Red (Carnelian). Mediocre.*

ABDUL NASIR KHAN ET AL. 1995.

The paintings are located in the Thana valley within a natural shelter, which opens to the N. The dimensions are similar to those of the preceding shelter. The shelter is slightly below the Buddhist ruins of Giroban and Kafir-kot. The representations consist of two archers, a warrior with a shield, a sword (?) and a helmet. A horseback rider and another horse are depicted near a detailed *stūpa*.

#### **17. 007; HINDUANO-HATAI**

*TH; 1992; Red (Orange); Yellow (Cadmium): traces overlaying the red paintings. Mediocre.*

ABDUL NASIR KHAN ET AL. 1995.

The cave is situated in the side-valley of Allahdan-dherai, not far from the village of Binjanr or the Buddhist sacred area of Loriyan-tangai in the Thana valley. The paintings are located within a large naturally-formed cave, which opens to the E onto a calcareous cliff which dominates the aforementioned village. Many Shahi watchtowers have been found in the area, possibly explaining the derivation of the toponym. The paintings represent primarily *stūpas* (and a possible *tamḡa*); on one wall of the grotto, fingerprints have also been documented (the author or authors of the paintings cleaned the color from their fingers in this manner). There are paintings on the right-hand wall and left-hand wall upon entering, on the far wall, and in an inner cavity linked to the front cavity by a narrow passageway. Here two pigments have been utilized: in one

case an orange-red color was used to touch-up a yellow representation of *stūpa*. In a second case, yellow paint seems to have been utilized to repaint two *stūpas* located on the far wall which were originally an orange-red color. The marks resulting from the artists' cleaning off excess pigment from the tips of their fingers once the painting was finished, are both in yellow and orange-red.

#### **18. 388. TALANG**

*KH; 2005; Red (Orange). Poor. Any trace of the pictures has been totally obliterated by later engravings.*

OLIVIERI/VIDALE ET AL. 2006; OLIVIERI 2008; OLIVIERI 2010a.

Traces of completely unidentified paintings were documented on the lower sidewall of a large dihedral-shaped gneiss boulder, which is covered by a jutting slab. Cup-marks are present on the upper face of this large slab. The paintings are obliterated by later carvings (horseback riders with round shields and swords). On the larger wall several lines of a long inscription are engraved in Brahmi-Śarada, which in turn have obliterated the carvings. On the rocky floor at the base of the dihedral (formed by a third boulder) there are permutations of cup-marks and grooves. Excavations conducted by the writer at the base of the agglomerate of rocks in 2006 revealed that the boulder, in antiquity, was located near the pebbly bank of a stream (the Kotah river), in the vicinity of a ford. On a neighboring boulder, a set of steps carved into the rock has been documented. On the outside of the agglomerate an incision has been documented which probably represents Śiva and his bull.

#### **19. 407. CHURKHAI**

*KH; 2005; Red (Carnelian). Good. The pictures are poorly conserved chromatically and have undergone a light but extensive process of fading. The drawings are better preserved in the W sector, far from the edge of the horizontal roof, where they have been protected from the detrimental effects of the rain. A blackish incrustation can be*

*seen along the E edge of the niche, where it has covered or destroyed a part of the surviving drawings. The original painted surface might well have measured approximately 3.5 sq. m.; 80%*

OLIVIERI 2010a.

The cliff is at the head of a grassy valley (also known as Kabbal-dab), uphill from the village of Churkhai. The village bears traces of a large historic civil settlement to its NW, as well as a large Buddhist monastic settlement to its SE. At the peak of the gneiss-granite cliff is a large horizontal boulder. The cavity, formed by a rock projection open to the N, is approximately 50-100 cm high, and its roof hosts the drawings.

The majority of the figures represent horseback riders, and human figures with body modifications, gigantic globular heads and an indication of the penis, as well as two humped bulls. The figures are clustered in two separate groups, in each case assembled around the central figure of a large anthropomorph with body modifications. In the group to the left, the anthropomorph has a rectangular trunk, which is divided vertically with an indication of the penis, a globular head, a right hand which is also divided vertically, and a pincer-like left hand. The figure, which is of a larger dimension than the human figures and animals, is connected to a sign with a square-grid. There is an unidentified geometric pattern below. The anthropomorph in the group to the right has a horn-like head and complex body modifications, which will be analyzed in detail later (see Appendix 3). A complex geometric pattern, which perhaps represents a structure, is at his left.

## **20. 409. RAM-DUNAI 1**

*KH; 2005; Red (Carnelian). Mediocre. The paintings have undergone a light but extensive process of fading. The drawings are better preserved in the upper sector, where they have been protected from the effects of the rain. The original painted surface may have measured around 0.6 sq. m.; 60%*

OLIVIERI 2010a.

The pictures are located within a smooth sub-vertical round cavity, which is open to the N; it is localized within the same valley as Site numbers 06 to 09. The figures represent at least six *stūpas*, surrounded by patterns of dot-marks. To the right is a partial grid and dotted-square.

#### **21. 410. RAM-DUNAI 2**

*KH; 2005; Red (Carnelian). Poor. The cavity shows faint traces of red designs, which have been totally washed out.*

At the summit of the cliff that hosts Site 20, there is a plateau formed by a large slab of gneiss characterized by traces of cup-marks, and permutations of dot-marks and grooves. A tilted boulder resting on the slab forms the roof of a cavity where traces of pigment have been found.

#### **22. 411. RAM-DUNAI 3**

*KH; 2005; Red (Carnelian). Poor. The cavity shows faint traces of red designs, which have been totally obliterated by recent scratching.*

A vertical shelter with traces of paint lies on the W wall of the cliff just below the summit which hosts Site 21. The identifiable crossed lines may pertain to the *chatrāvalī* of a *stūpa*.

#### **23. 415. BACHA-KOT**

*MD; 2006; Red (Carnelian). Good; 60%*

The site is located on a terrace exposed to the S, along the S wall of the crest ESE of Saffar kandao. It is formed by a large boulder with several erosive cavities which rests on a large slab of gneiss. In the N cavity, there are two human figures turned to the right; to the left, there is a tip of an arrow which certainly belongs to the figure of a

archer which is no longer discernable; to the right, a horseback rider, with an emphasis on the feet (stirrups?).

#### **24. 416. BUSUS-SMAST**

*MD; 2006; Red (Carnelian). Good. Most of the paintings in the lower part of the cavity have undergone recent peeling. The drawings are better preserved in the upper sectors, left and right. The original painted surface might well have measured around 6.5 sq. m.; 60%*

The paintings are located on the rear wall of a long shallow shelter which is exposed to the S and still used as a stable. The shelter is located along the S slopes of the ridge ESE of Saffar kandao. From left to right we have documented several scenes: at the top, a archer hunting three ibexes; above that, the figure of a horseback rider with open arms and body modifications, and a second horseback rider at its right; at the bottom, a series of three horseback riders and a horse with an ornate (beribboned) mane; and to the right, a large horseback rider armed with a bow and an unidentified geometric patterns (geometric patterns with dots). Below an archer standing on an equid (?) is recognizable.

#### **25. 417. KWAR-PATAI**

*MD; 2006; Red (Crimson). Good. Some of the paintings has been recently damaged through scratching. The original painted surface might well have measured around 1 sq. m.; 80%*

The paintings are on the back wall of a small shallow shelter, which is exposed to the E, in the same area as the previous site. The shelter is accessible through few steps carved into the rock.

Two hunters armed with bows, a dog, and two other animals (perhaps sheep) are represented to the left, while at the center a horseback rider is depicted with a round shield, perhaps in the act of protecting a humped bull from the threat of a feline.

Above the center another animal is depicted. To the right, two other hunters of smaller dimensions are shown with a dog facing a wild cat.

#### **26. 418. THAKHT-GAT**

*MD; 2006; Red (Carnelian). Optimal; 95%*

OLIVIERI 2010a.

The paintings are on the ceiling of a small niche, projecting and partly sheltering a path, at c.a 2.5 m above the ground; the path proceeds towards Saffar-kandao (S side). There are three bi-triangular human figures depicted in profile. The first figure is turned to the right with a double-loop chignon and spears terminating in tridents (*trisūla*-like?). The second figure is also turned to the right and depicted with a tiara or headpiece and a sword by its side. It is represented in the act of hitting a third figure with a spear. The third figure is turned to the left, and depicted with a sword at its side. There is an unidentified figure behind and slightly below the first figure.

#### **27. 421A. LAL-KAMAR 1**

*MD; 2006; Red (Carnelian, Scarlet, Orange). Good; in several points, the surface shows traces of exfoliation; toward the external margins of the shelter, the pigment appears faded due to exogenous factors, such as the percolation of rainwater. The original painted surface might have measured around 9 sq. m., 95%*

OLIVIERI 2007; OLIVIERI 2010a.

The paintings pertaining to Sites 27, 28 and 29 are located within cavities of various shapes and sizes on the S side of a huge irregular boulder composed of gneiss granite. This boulder resembles a huge mushroom which has been stretched and pinched; it towers over and rounds the summit of a large rock slab located near the slopes SW of Saffar-sar, near the village of Loe-band.

The paintings pertaining to the first site are located on the ceiling of a large, deep shelter which is open on three sides (W, S, and E) in a sector to the SW of the boulder.

The distance varies from the ceiling to the bedrock, which serves as the shelter's natural floor. This floor follows a downward gradient toward the S, where the opening is at its largest; the height of the shelter ceiling varies from 30 cm (at its most internal point it is even less) to 150 cm (as mentioned, to the S). There are approximately 100 recognizable figures painted on the ceiling. These were grouped into four different focal points (counter clockwise: A-B with intermediate positions and C-D), corresponding to the position of the artist as if he were rotating in a supine position on the rocky bed within the shelter. The majority of the figures are represented within focal point A (from the S, the point of the shelter's maximum opening: from top in Pl. 23), 11 figures are located within group B, and 6 figures lie within each of the focal point groups C and D. It appears evident that points A and B should be considered as contiguous along the same visual plane of rotation (deriving from the physical location of the artist) as well as being executed in contiguous phases in time, which appear to be consistent in their design. Conversely, it is possible that the other two points should be attributed to two successive stages, to two additional periods, although they are lexically consistent with the primary palimpsest. As a whole, the figures compose a scene, which is seemingly disordered, but coherent, portraying a horde of warriors/hunters. Representations of horseback riders (hunters) with dogs and wild animals have intersected the principal scene and there are also isolated figures of anthropomorphs. Amongst the figures, nearly 20 remain unidentified.

A: On the inner side of the shelter the figures include: an isolated horseback warrior with his head in profile; another two horseback rider, probably warriors, riding in the same direction and both holding swords (the figure includes an indication of reins, the first warrior appears to be wearing a mushroom-like helmet, while the second is represented in profile); a horseback archer accompanied by a dog, who together are heading toward a wild animal. Depicted in the center (from left to right): three horseback warriors, all with swords and shields (the last one also holds a round dotted shield); two horseback warriors with feathered helmets and bows, with an indication of

reins and stirrups, and a wild animal (a feline?). A standing warrior holding a sword is figured near the second of the three above-mentioned horseback riders. Through association lines, which depart from his shield, this warrior is linked to the shield of another horseback warrior who is heading toward the left and facing a second horseback warrior holding a standard (?) possibly in the act of dueling. Another association line departs from his horse's tail. This line terminates within a cluster of figures of horseback warriors (at least four), which are partially destructured and compose a type of pattern that resembles an anthropomorph as well as a geometric pattern. This pattern represents the core of the entire painted palimpsest. To the pattern's left, 14 horseback warriors are represented dueling (at least three pairs are recognizable) or hunting (as in the case of one horseback archer) depicted near a representation of a wild animal). To the core's right, three horseback warriors are shown heading to the right with shields and swords, one of whom is wearing a feathered helmet; another horseback warrior, depicted in profile, faces left and holds a sword and a long shield (the reins are here clearly indicated). A bleeding feline (probably a male) is represented next to these figures Below the central scene, a long series of minor horseback warriors (five) and animals (11) is represented. At the base of the entire scene, another four horseback warriors are represented: one armed with a sword and a round (ogival) shield; another wearing a double-feathered helmet, who is presumably also holding a spear; an archer; with six wild animals (of these, one is represented capsized, i.e. dead). In particular, the three standing figures merit mentioning: an anthropomorph with a triangle-shaped face, open arms and outstretched or comb-like fingers; a standing warrior depicted with a sword, a round shield and a double-feathered helmet; a very lean human figure represented in profile with one arm open, outstretched fingers and probably wearing a helmet or a cap. In addition to these figures, there is also a snake-like ideogram.

B: The figures in this area include: a horseback warrior with a round shield, four horseback riders (one of whom seems to have dismounted), a horse (?), a wild feline, a monkey (?), a archer with outstretched fingers, and two wild animals (felines).

C: The figures in this area include: a cluster of six horseback warriors, interconnected utilizing association lines, who are fighting each other (one is holding a battle axe, the second, a spear, the third, a sword and a shield, and the fourth, a bow).

D: The figures in this area include: two horseback warriors with round shields and swords, one of whom is wearing a conical feathered helmet, three wild animals (one of which is probably a feline), and a possible structure.

#### **28. 421B. LAL-KAMAR 2.**

*MD; 2006; Red (Scarlet). Poor.*

A concavity runs along the length of a vertical wall of the same massive boulder a few meters E of the preceding Site. Protected by the mass's jutting roof, the standing frontal view of a human figure is recognizable beside a second unidentified figure.

#### **29. 421C. LAL-KAMAR 3**

*MD; 2006; Red (Scarlet). Good; 90%*

The figures are located slightly S of the previous Site, within a nearby analogous concavity running along the same wall mentioned above. Standing and horseback human figures (sheperds) are represented together with a herd of zebu; on the right, a large representation of a horseback rider (archer/hunter) is depicted in the act of hunting a large feline.

#### **30. 422. BARA LOE-BANDA**

*MD; 2006; Red. Poor*

Proceeding slightly uphill and SE of the village of Loe-banda, one comes across a stream. After crossing the stream, there is a small shelter within a rock, which hosts traces of paintings.

### **31. 423. GWELUNO-GHAR**

*MD.; 2006; Red (Carnelian), White. Good; 90%*

OLIVIERI 2010a.

The large boulder of Gweluno-ghar is found approximately 1 kilometer E of Loe-banda, at approximately the same altitude as the village. At the base of the boulder there is a large but shallow natural niche, whose internal vertical wall hosts the paintings. At the left edge of the niche, a natural basin has formed which collects percolating water. To the right of the niche, there are traces of other paintings, which have almost entirely disappeared. Nearby, other paintings found in the hollow of a boulder, which has split exactly in half, have almost entirely disappeared.

From left to right, there are paintings representing the depiction of a butterfly or bird in red ochre, followed by a series of seven *stūpas* rendered in white ocher (relating to the first *stūpa* the recognizable characteristics are its first and second stories, as well as its dome and the pinnacle of umbrellas (*chattrāvalī*), while two lateral columns are recognizable from the sixth *stūpa*). To the right, there are three figures in red: an unidentified element, a frontal view of a grotesque anthropomorphic figure, and perhaps the finial or pinnacle of a *stūpa*.

### **32. 424. BANJ-SMAST**

*MD; 2006; Red (Carnelian). Optimal; 90%*

Slightly E of the previous site, there is a representation of a horseback rider, possibly armed with a bow, within a small cavity of a boulder. The cavity opens to the S.

### **33. 426A. LAL-KAMAR-CHINA 1**

*MD; 2006; Red (Orange). Optimal; 90%*

OLIVIERI 2010a.

A large boulder, which appears stretched and compressed, is located slightly downhill from Sites 27-29, and close to the point of origin of a stream separating the area of the Lal-kamar village from that of Loe-banda. The boulder hosts three natural niches on its N side. In the first niche (Site 33) there are two associated human figures, both with body modifications. The first figure has elongated feet and antennae-like raised arms, while the figure to the left is tangential to the second figure by means of an association line. The second figure is positioned slightly higher and characterized by an arrow-like foot.

### **34. 426B. LAL-KAMAR-CHINA 2**

*MD; 2006; Red (Orange). Optimal; 90%*

In the second niche of the abovementioned boulder, there are three human figures. At the top, a pair of figures is engaged in a duel or fighting; a archer with his right arm raised uses a bow with a long curving arrow which transforms into an association line and touches a second figure which is wearing headgear resembling a wide-brim hat. Positioned below, there is a reclining anthropomorph with outstretched arms and comb-like fingers; it is also characterized by one pincer-like foot, while the other is comb-like.

### **35. 426C. LAL-KAMAR-CHINA 3**

*MD; 2006; Red (Orange). Optimal; 90%*

In the third niche within the abovementioned boulder, there are seven painted figures. To the left, a representation of a *stūpa* is positioned alongside a standing frontal representation of a human figure. In the center, there is a highly complex zoanthropomorphic figuration. At the top, an animal figure (possibly an equid or a feline,

judging from the form of its paws) is shown. The animal's tail has transmuted into the right leg of a human figure (with open arms, trident-like fingers, and an indication of a penis), while the left arm of the human figure has transmuted into a headless archer, whose arrow is associated with a second human figure (with an elongated left arm and a hand on his flank). At the bottom of the niche, there is a scene where two human figures are fighting or possibly mating (the figure on the right either has the face of an animal or is wearing a mask). To the right, there is a scene with two human figures who are fighting; the figure on the right has an arrow-like hand and an animal face, and the other figure's right foot is comb-like.

### **36. 427. LOE-BANDA**

*MD; 2006; Red (Crimson). Good; 75%*

OLIVIERI 2010a.

To the SSW of the village of Loe-banda, beyond the stream that flows from Lal-china-Kamar, and to the W of a small rock, there is a niche where numerous pictures have been painted. Beginning from the top left, there is a human figure with its right hand on its flank, which is facing an ibex-feline theriomorphic animal. In the center, an anthropomorph is represented in profile with an open mouth and a comb-like left (?) foot. He is wearing a double-feathered helmet and holding a round shield. The warrior is shown facing the figure of a reclining anthropomorph with raised arms, a comb-like left hand and other minor body modifications. Below, one observes a human figure with association lines departing from his left foot, which then transform into a geometric pattern, only to transform once again into a human figure with raised arms. The pattern is flanked by two representations of *stūpas* (in the second representation the first, second and third stories are visible).

Above two human figures with significant body modifications are depicted in association to an anthropomorph, who is possibly wearing an animal mask; a third figure appears to be a archer.

On the lower right, there is a potential hunting scene, in which a horseback rider is chasing a feline.

### **37. 428. CHOWRA-DAB**

*MD; 2006. Red (Crimson). Mediocre; 20%*

The Site, which is located less than one kilometer W of Loe-banda, is composed of various boulders which host vertical niches and are exposed to exogenous agents.

Conspicuous traces of paintings have been preserved on only one of the rocks, while the other traces are so slight that the sparse traces of pigment are barely perceptible.

The niche, which is open to W, contains a set of figures which have been preserved only at the niche's exterior edges, while the central figures have been completely washed away. To the right, two ungulates (a deer and possibly an ibex) are represented near a *stūpa*. On the left there is an unidentified geometric pattern.

### **38. 429A. DAB 1**

*MD; 2006. Red (Crimson). Optimal; 90%*

OLIVIERI 2010a.

Approximately 200 meters W of Site 37, at the peak of a low but steep rocky protrusion, there is a boulder with three niches, which open to the east. Two scenes are represented within the first niche (Site 38). Near the top, below a representation of a herd of male ibex or a trip of goats, there is a scene of bestiality where a human figure is represented while mating with an equid, which is being immobilized by a second human figure. A horseback rider (archer), depicted in profile and with an aggressive stance, is faced with the scene. Below, four horseback rider (warriors) are represented galloping toward the right.

### **39. 429B. DAB 2**

*MD; 2006. Red (Crimson). Optimal; 90%*

OLIVIERI 2010a.

There are three scenes housed in the second niche. From top to bottom, the first scene contains a horseback rider (warrior) with a long spear positioned behind a archer with a hair-knot and a comb-like left hand. Slightly below, a human figure is linked to an unidentified geometric pattern utilizing an association line.

The second scene represents two human figures, which have both undergone body modifications associated with wild animals. The first figure (a warrior) has an elongated arm, which has been transformed into a sword, which passes through the neck of an ibex. The second figure (with comb-like hand) is associated with the horns of a second ibex.

The third scene centers on a figure (an anthropomorph?), which is associated with a horseback rider (warrior); he is shown alongside a wild animal, which is possibly a wolf.

#### **40. 429C. DAB 3**

*MD; 2006. Red (Crimson). Optimal; 90%*

OLIVIERI 2010a.

The third niche depicts two horseback riders (warriors), one shown with a long sword, perhaps in the act of hunting a deer or a male ibex.

Slightly below, there is an unidentified figure, and a depiction of a fox. Still further below, a fight is depicted between an archer on the right and a horseback rider (warrior) with a round shield on the left.

#### **41. 441A. PALANGAI 1**

*MD; 2006. Red (Crimson), White. Optimal; 90%*

OLIVIERI 2010a.

Sites 41-43 are located within a large boulder featured by three major interconnected cavities. The first niche is a sub-vertical circle in the SW side (Site 41). Within it, the

paintings are arranged in three groups of figures along a plane parallel to the circular edge of the niche itself. The first group to the left is made up of a bi-triangular horseback (warrior) with a long trident-shaped spear (with an indication of reins), which could possibly be a deity. He is flanked by a large monumental structure, which is possibly a *stūpa* or a temple (the first story or its railing, as well as the second story are visible). Immediately above the same figure, another *stūpa* is depicted (where the first story, the dome, and the pinnacle, as well as the stairway, are still visible). Below the figure, there is a large ibex. Continuing to the right, there is a *stūpa* followed by an unidentified structure, and then a deer and two dogs, overlaped by a *stūpa* derivative or a *stūpa*-like structure in white. The last scene of the series consists of at least three *stūpas*, a large *stūpa* derivative or *stūpa*-like structure, and a large bull attached to a plow driven by an unidentified figure. Another unidentified figure, with minor body modifications and holding a club, is represented in front of the bull.

#### **42. 441B. PALANGAI 2**

*MD; 2006. Red (Crimson). Poor; 60%*

OLIVIERI 2010a.

A group of four horseback riders, at least one of which is holding a sword or a club, is depicted within a sub-horizontal tiny niche in the N side of the boulder. On the lower left, a human figure is connected to a possible equid.

#### **43. 441C. PALANGAI 3**

*MD; 2006. Red (Crimson). Good. The original painted surface might well have measured around 3.5 sq. m.; 90%*

The NE side of the shelter opens onto a long, deep, low niche. Paintings have been found on the niche's back wall. A cup-mark is present at floor level.

From left to right along the back wall, which measures approximately 3.5 meters, there is a series of figures subdivided into three scenes. Within the first scene, two horseback

riders, both turned to the left, flank a human figure with raised arms and a trident-like right hand, which is accompanied by a dog. Further to the right, seven fragmentary representations of horseback riders (?) are located near an antennae-like geometric pattern (probably a structure), and big ungulate depiction. The figure furthest to the right has a comb-like left hand. The final scene consists of 11 horseback riders (of which seven are depicted open-armed) with body modifications (comb-like hand, antennae-like arm) and in one case associated with a feline. Others figures are less easily identifiable: mostly horseback riders or mounted archers (archers) and a standing human figure.

#### **44. 442. HAJI-SMAST-BANDA**

*MD; 2006. White. Poor.*

On the back wall of a tiny shelter, in front of a shelf with cup-mark permutations, two or perhaps three *stūpas* were painted (only the first story, dome and pinnacle of a *stūpa* are slightly recognizable).

#### **45. 443. SAFFAR-KANDAO**

*MD; 2006. Red (Orange). Good; 90%*

On the back wall of a tiny shelter, one finds the figure of a dismounted horseback rider holding a horse loaded with a heavy saddle by the reins. To the left and below are unidentified figures.

#### **46. 444. KHAISTA-KAMAR 1**

*MD; 2006. Red (Orange). Optimal. The original painted surface might well have measured around 4 sq. m.; 90%*

Olivieri 2010a.

A series of figures was painted on the back wall of a deep but high shelter, which is exposed to the S. Some of these are the result of recent interventions carried out by

drawing with ceramic fragments used as chalk (lines and dotted fields in the drawing). In front of the wall, on the rocky floor of the shelter, a cup-mark has been dug. The paintings represent a battle scene and hunting with horseback riders (warriors), archers and wild animals. Beginning from the left: three horseback riders (warriors) are figured facing left, two of which have mushroom-like helmets, and the third a bow, (the reins are represented); a group of three horseback riders (warriors) facing left, a fourth, possibly a hunter, represented facing right with body modification (his bow has been transformed into an association line connecting it to one of a pair of wild animals – canids?); other horseback riders (warriors) are recognizable with two other unidentified figures). Above, there are two ibex figures, including one where there is an indication of the sex (above there is another figure of a wild animal, possibly an ibex, and an unidentified figure). Below, two figures of archers are placed in the vicinity of a picture of an anthropomorph with body modification (raised left arm) and double-feathered headgear. Further below there are unidentified patterns. The central scene is characterized to the left by three standing human figures, probably dancers (of which one is T-shaped), surrounded by unidentified figures, and at the bottom, by a bull. At the heart of the scene, a horseback rider (possibly a hunter) on a horse with body modification (gigantic head) is chasing an ibex with body modification as well (pincher-like front hooves). In front of the horse there is a scene of bestiality; while above, a T-shaped human figure stands. Below, horseback riders (warriors) are represented in profile with a archer. Still further below, two unidentified figures are depicted. The scene on the right is built around the figure of an archer whose open legs are associated with two wild animals, while below there is a hunting scene, with two horseback riders (hunters), a feline, and an ibex. Still further below, a scene of a duel is shown between two warriors, both with their penises represented. At the top, a fighting scene is shown where a horseback rider (warrior) is represented killing his enemy, who is lying on the ground.

#### **47. 445. KHAISTA-KAMAR 2**

*MD; 2006. Red (Crimson). Poor; 30%*

OLIVIERI 2010a.

Not far from the previous site, within an uncomfortable and low shelter, some figures of horseback riders (warriors) and wild animals have been preserved. Curiously, the head of one of the horses seems to be decorated with a rack of horns.

#### **48. 446. DREMA-PALANGAI (formerly TREMA-PALANGAI)**

*MD; 2006. Red (Orange). Optimal. The original painted surface might well have measured around 2,25 sq. m.; 90%*

OLIVIERI 2007; OLIVIERI 2010a.

The figures are housed in a shallow sub-vertical niche, which is protected by a jutting roof. At the top, four *stūpas* are represented (the fourth one on the right as well as a *stūpa*-like structure) and other unidentified figures. At the center there is a hunting scene where two horseback riders (hunters) are represented together with three different wild animals: two ungulates and a predatory mammal. Another heavily armed horseback rider (warrior) holding a spear is represented in front of a reclining human figure. Below, three ibexes or wild ungulates, are pictured together with another horseback rider (warrior) and a curious scene where gigantic hunter kills a large ibex with his arrow.

#### **49. 461. DWO-QUMBOJAI**

*KH; 2006. Red (Crimson). Mediocre; 60%*

This is the only group of paintings, which is not housed within a shelter, but instead on an external wall exposed to the open-air, although it is partially protected by a rocky jutting roof. It is also the only group of paintings hosted on a type of stone other than granite gneiss, a phyllite. Due to these two physical features, the location of the figures on the rocky ledges will be described separately.

A: On the upper left, there are three unidentified figures; it is possible that among them there is a human figure with body modifications.

B: Five figures flank the previous group. To the left, there is a human figure with a comb-like foot and hands, next to two fronting (?) animals (one may be bleeding), a human figure with an indication of the penis and a pincer-like hand, and a horseback rider (warrior) with a horse characterized by a gigantic head.

C: Above the previous group, there are six figures, which include an animal and two human figures with considerable body modifications. In particular, the two human figures are connected by an association line which departs from the feet of one of the two figures, which also has a pincer-like hand, and arrives on the head of the other which has disarticulated arms and open legs and is placed at a lower level. At the far right there is a horseback rider (warrior) and an unidentified figure.

D: Below group B, there are three unidentified figures.

E: Below the preceding group, there is another group of five figures, four of which are unidentified, and one is a human figure with open arms.

F: To the right of group C, there is another group of six figures, of which four are recognizable: a horseback rider (warrior), a *stūpa*, a tree-like figure, and a wild animal. The other figures are unidentified.

G: In the lower center, there is a group of seven figures, of which three are unidentified. To the left there is an anthropomorph with open arms and considerable, but unclear, body modifications. At the center, there is a warrior with a club and a comb-like right hand. To the right, there are two human figures, which are probably both warriors.

H: To the right of the preceding group, there are three recognizable figures: a horseback rider (warrior), a human figure (with U-shaped legs), and a warrior with a round shield.

I: To the right of the previous group, and above a geometric pattern, there is a recognizable anthropomorph holding a standard. To the right, partially painted on a

higher-most band of phyllite there is a human figure with a comb-like foot and hands identical to the figure depicted in band B.

K: Above the previous group, and after two geometric patterns, which may represent structures, and more specifically possibly *stūpa*, there is a third geometric pattern, which is associated with a human figure. Below, there is a human figure with a pincer-like left hand in front of an anthropomorph with a horn-like head and a comb-like foot and right hand. Following these figures, there is an animal and a row of dot-marks.



*Correspondence chart between Gazetteer and Plates*

No.	AMSV	District – Valley	Site	Drawings Pl.	Photos Pl.
01	138a	Swat - Kandak	Dwolasmane-patai 1	1	I-II
02	138b	Swat - Kandak	Dwolasmane-patai 2	2	
03	130a	Swat – Kotah	Kakai-kandao	3	III-V
04	1121a	Swat – Kotah	Sargah-sar	4	VI-IX
05	336	Swat – Kotah	Kamal-china	5	X-XIV
06	342	Swat – Kotah	Badze 1	6	XV
07	343	Swat – Kotah	Badze 2		
08	344a	Swat – Kotah	Dandi-sar 1	7	XVI
09	344b	Swat – Kotah	Dandi-sar 2	8	XVI, XVII-XVIII
10	362a	Swat – Kotah	Malak-ziarat	9	XIX-XX
11	379	Swat – Kotah	Gwarejo-patai	10	XXI-XXII
12	380a	Swat – Kotah	Palwano-gata	11	XXIII-XXVI
13	350	Malakand (Thana)	Kafir-kot 1	12	XVII-XXX
14	396 (formerly: 350-2)	Malakand (Thana)	Kafir-kot 2	13	XXXI-XXXII
15	352	Swat – Kotah	Marano-tangai	14	
16	006	Malakand (Thana)	Shamo	15	
17	007	Malakand (Thana)	Hinduano-hatai	16	
18	388	Swat – Kotah	Talang		XXXIII
19	407	Swat – Kotah	Churkhai (Kabbal-dab)	17	XXXIV-XXXVII
20	409	Swat – Kotah	Ram-dunai 1	18	XXXVIII-XXXIX
21	410	Swat – Kotah	Ram-dunai 2		
22	411	Swat – Kotah	Ram-dunai 3		
23	415	Malakand (Morah)	Bacha-kot	19	XL

24	416	Malakand (Morah)	Busus-smast	20	XLI-XLIV
25	417	Malakand (Morah)	Kwar-patai	21	XLV-XLVI
26	418	Malakand (Morah)	Thakht-gat	22	XLVII-XLVIII
27	421a	Malakand (Morah)	Lal-kamar 1	23	XLIX-LXI
28	421b	Malakand (Morah)	Lal-kamar 2		XLIX, LXII
29	421c	Malakand (Morah)	Lala-kamar 3	24	XLIX, LXIII-LXIV
30	422	Malakand (Morah)	Bara Loe-banda		
31	423	Malakand (Morah)	Gweluno-ghar	25	LXV-LXVI
32	424	Malakand (Morah)	Banj-smast	26	LXVII-LXVIII
33	426a	Malakand (Morah)	Lal-kamar-china 1	27	LXIX
34	426b	Malakand (Morah)	Lal-kamar-china 2	28	LXIX
35	426c	Malakand (Morah)	Lal-kamar-china 3	29	LXIX
36	427	Malakand (Morah)	Loe-banda	30	LXX-LXXI
37	428	Malakand (Morah)	Chowra-dab	31	LXXII
38	429a	Malakand (Morah)	Dab 1	32	LXXIII-LXXIV
39	429b	Malakand (Morah)	Dab 2	33	LXXIII
40	429c	Malakand (Morah)	Dab 3	34	LXXIII, LXXV
41	441a	Malakand (Morah)	Palangai 1	35	LXXVI-LXXIX
42	441b	Malakand (Morah)	Palangai 2	36	LXXVI
43	441c	Malakand (Morah)	Palangai 3	37	LXXVI, LXXX
44	442	Malakand (Morah)	Haji-smast-banda		
45	443	Malakand (Morah)	Saffar-kandao	38	LXXXIII
46	444	Malakand (Morah)	Khaista-kamar 1	41	LXXXI-LXXXII
47	445	Malakand (Morah)	Khaista-kamar 2	39-40	
48	446	Malakand (Morah)	Drema-palangai (formerly: Trema-palangai)	42	LXXXIV-LXXXVIII
49	461	Swat-Kotah	Dwo-qumbojai	43	LXXXIX-XCIV

*Charts of subjects I-IX*

Human figures	Site			Quantity		
human figure (generic)	01	19	38	1	8	2
	02	27	39	4	1	1
	03	33	42	5	2	1
	04	34	43	3	2	1
	08	35	46	3	6	2
	15	36	49	2	6	11
farmer	04			7		
shepherd	29			2		
horseback rider	05	29	(45)	5	5	(1)
	16	32	48	1	1	
	19	38		9	2	
	23	40		1	1	
	24	42		4	1	
	27	43		4	20	
archer	01	35		2	1	
	03	36		4	1	
	04	39		1	1	
	15	40		3	1	
	16	46		2	3	
	34			1		
mounted archer	24			2		
	27			2		
	38			1		
warrior	01	46		3	2	
	16	49		1	2	
	26			3		
	27			2		
	36			1		
	39			1		
mounted warrior	05	39	48	1	2	2
	13	40	49	1	2	4
	24	41		1	1	
	25	42		1	3	
	27	46		46	11	
	38	47		2	1	
hunter (archer)	24			1		
	25			4		
	48			1		
mounted hunter (archer)	27			4		
	29			1		
	46			1		
	48			1		
dancer	04			9		
	46			3		
hero	04			1		
	08			2		
priest* see Chart II	04 (?)			1		

*Chart I*

Anthropomorphs		Site		Quantity	
		03	36	1	2
		04	39 (?)	3 (2)	1
		(04)	46	2	1
		05	49	2	2
		12		2	
		19		2	
		27			

Chart II

Body Modifications	Human Figures	Anthropom.	Theriozoom.	Animals	Site	Quantity
comb-like hair		x			05	1
		x			36	1
triangle-shaped face		x			27	1
globular head		x			05	1
		x			08	1
		x	x		19	1
					35	1
horned/feathered-like head		x			12	1
		x			19	1
		x			46	1
		x			49	1
animal face/mask		x			12	1
		x	x		35	1
			x		36	1
			x		36	1
			x		39	1
gigantic head				x	05	2
				x	19	1
				x	46	1
				x	49	1
bitriangular body	x				26	3
rectangular torso		x			05	1
		x			19	1
		x			36	1
triangular torso		x			36	1
filiform torso	x	x			27	1
					34	1
open arms	x				24	1
	x				42	1
	x				43	7
	x				49	2
	x	x			49	1
elongated arm	x				03	1
	x				04	1
	x				08	1
	x				33	1
	x				43	1
	x				49	1
elongated arm (with weapon)	x				03	2
	x				04	2
	x				40	1
	x				46	2
winged arm		x			12	1
raised arm	x				34	1

Body Modifications	Human Figures	Anthropom.	Theriozoom.	Animals	Site	Quantity
	x	x			36	1
		x			43	1
					46	1
disarticulated arm	x				49	1
hand on flank	x				13	2+2
	x				35	1
	x				35	1+1
	x				36	1
	x				40	1
outstretched fingers		x			03	1
		x			04	2
	x				05	1
	x	x			08	1+1
	x				27	1+1
	x				27	1
	x		x		34	1+1
	x				35	1
					39	1
trident-like hand		x			12	1
		x			19	1
	x		x		35	1
					43	1
pincer-like hand		x			03	1
		x			04	1
		x			05	1
		x			19	1
	x				34	1
	x				49	2
comb-like hand	x				02	2
	x				39	1
	x				43	1
	x				49	2+2
	x				49	1
arrow-like hand	x				35	1
antennae-like arm	x				33	1
	x				43	1
globular hand		x			19	1
inverted U-like legs	x				04	7
		x			04	1
T-like legs	x				03	2
	x				04	1
		x			19	1
crescent-like legs	x				02	1
		x			12	1
pincer-like foot	x				03	1
comb-like foot	x	x			02	1
	x				27	1
	x				34	1
	x				35	1
		x			36	1
					49	3+3
elongated foot	x				08	1
	x				33	1+1
arrow-like foot	x		x		33	1
			x		35	1
pincer-like pawn			x	x	36	1
				x	46	1
indication of penis	x	x			04	2
					04	1

Body Modifications	Human Figures	Anthropom.	Theriozoom.	Animals	Site	Quantity
x	x		x	x	04 12 19 35 36 x 38 38 40 46 46 49	1 1 1 1 1 1 1 2 1 2 1 1
x				x		
x				x		
x	x					
grotesque		x			31	1

*Chart III*

Wild Animals		Site		Quantity	
monkey		03 27		1 1	
felines		04 12 25 27 29 36	43 46	1 2 2 8 1 1	1 1
ibex		12 24 27 39 41 46 48		1 3 2 2 1 3 4	
	male ibex	04 38 40 46		1 3 1 1	
canids		46		2	
	wolf	39 48		1 1	
	fox/jackal	05 40		1 1	
other ungulates		41 43 48		4 1 1	
	deer	37 39		2 1	
	bovines	46		1	
bird/butterfly		31		1	

Domestic animals		Site		Quantity	
equids		38		1	
	horse	16 24 27		1 1 1	

Domestic animals		Site				Quantity			
		45				1			
	mounted horse	05	25	40	48	6	1	3	4
		13	27	41	49	1	56	1	4
		16	29	42		1	6	4	
		19	32	43		9	1	20	
		23	38	46		1	5	12	
		24	39	47		7	2	1	
bovines		41				1			
	zebu	05				3			
		19				1			
	(humped bull)	25				1			
		27				1			
		29				3			
ovines		25				2			
caprids		12				8			
dogs		05			27	1			5
		12			41	2			1
		25			43	2			1

Theriozoomorph		Site				Quantity			
	ibex-feline	36				1			
	equid-feline	35				1			

Unidentified		Site				Quantity			
		05	13	41	45	49	2	1	1
		12	27	43	46		4	10	1

Chart IV

Structures		Sub-term		Site		Quantity					
stūpa						13	35	3	1		
						14	36	1	1		
						17	41	6	5		
						20	48	3	3		
						31	49	5	1		
		with railing, 2 storeys and elaborated <i>chatrāvalī</i>				13		1	(1)		
						16		1			
		with 1 storey				13		4			
		with 2 storeys				13		5			
						31		1			
						36		1			
		with 2 stories and a stairway				13		2			
						17		1			
						20		1			
		with <i>triśūla</i> -like finial				17		4			
		with <i>chakra</i> finial and a stairway				14		1			
		with elaborate finial				14		2			
						31		1			
temple-like (with railing)		with column				31		1			
stūpa-like						41		1			
						10		1			
						41		2			
						48		1			

Structures	Sub-term	Site	Quantity
column-like		13	1

Geometric patterns	Sub-term	Site	Quantity
grid-square		19 39	1 1
	-rectangle	04 08 15	1 1 1
d.o with crossed wheel		08	1
d.o with globular/ horned termination		09	1
dotted-square		03 15	1 3
grid-and-dotted- square		04 08 09 15	1 1 1 2
	-rectangle	03 09	1 1
	diagonal	04	1
grid-and-dotted-open square ( <i>trisūla</i> -like)		09 10 20	(1) (1) 1
multiple grid (and-dotted) square		04 19 49	(2) 1 3
d.o with antennae-like		01 27 (?)	1 1
d.o associated to crossed circle		03	2
antennae-like figuration/ termination		04 05 43	1 2 1
tree-like figuration		49	1
comb-like termination		03	1
permutation of dots			
	circular, sub-circular or semi circular	09 13 20	1 1 1
permutation of dots	d.o multiple	04 09	1 1
crossed circle		09	2
partitioned circle		09	1

Chart V

Tools and Headgears	Sub-term	Site	Quantity
tool			
	agricultural tool	04	3
plow		41	1
headgear	double-feathered	19	1
hat		24 27 34	2 1 1
tiara		26	1
chignon		39	1
	double loop	26	1
gown/kaftan		01 03 26 41	5 1 3 1
club		01 03 29	2 1 1
<i>linga-like</i>		04	1
standard and standard-like		05 49	2 1
horsemanship gears/ornaments			
	crenellated mane	24 45	1 1
	covered tail	45	1
stirrup		23 27 29 45 46 47	1 35 1 1 8 1
rein		27 41 45 46	8 1 1 2
saddle		24 45	1 1
disk* s. Chart VII			1
	round radial	08	2
	round crossed	03 13	2 1
<i>chakra*</i> s. Chart VII		04 (?) 08 (?) 14	1 2 1

*Chart VI*

Weapons	Sub-term	Site			Quantity		
		03	27	39	4	6	1
bow		04	34	40	1	1	1
		15	35	46	3	1	3
		16	36		2	1	
		24	38		2	1	
	reflex	01			2		
sword		01	40		1		1
		01	47		1		1
		26	48		2		1
		27			21		
		39			2		
		39			1		
knife (dagger)		26			1		
sabre		27			1		
battle-axe		05			3		
		27			1		
spear		26			1		
		39			1		
		48			1		
	trident-shaped	26			1		
		41			1		
shield							
	round	08			1		
		08 (?)			1		
		27			4		
		36			1		
		40			1		
	round radial* s. Chart VI	04 (?)			1		
		08 (?)			1		
	round dotted	27			1		
	round small	25			1		
	round concave	27			5		
		46			1		
	triangular	27			1		
	convex	16			1		
shield	generic	24			1		
		47			1		
helmet	conical	24			1		
	feathered	27			3		
	double-feathered	27			1		
		36			1		
	d.o conical	27			2		
		46			1		
	mushroom-like	16			1		
		27			2		
		41			1		
		46			2		

Chart VII

Psycograms	Site		Quantity	
dot	04	14	2	1, 3
	09	16	-	3
	10	19	4, 4	1, 5
	11	20	6, 3	-
	12	49	3	2
	13		-	

Ideograms			
hand print	05		6
<i>trisūla</i> -like	09		3
	10		1
crossed circle	03		1
and horned circle or <i>tamḡa</i> *	09		1
see Charts V, VI	13		1
	14		2
	17		1
radial disk*	03		1
see Charts V, VI	04		1
	08		3
grid and/or	03		3
dotted square*	04		3
grid and/or	15		8
dotted square*	19		1
see Chart V			
battle-axe	05		2

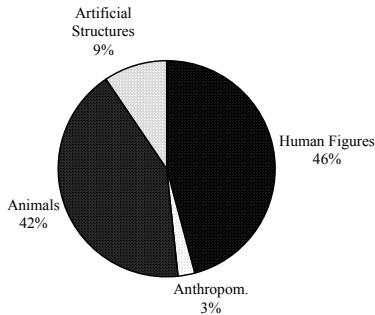
Deity or kings		
holding a <i>trisūla</i> -like spear	26	1
	41	1
inserted in a grid-like ideogram	04	1
on the back of an ibex	04	1
holding a <i>chakra</i> * s. Charts V, VII, I	04 (?)	1
	08 (?)	2

Chart VIII

Main actions	Sub-term	Site
fighting	duel	26 34 40 46
	battle	27
killing		27 34 46 49
mating		35
	bestiality	38 46
hunting/chasing		24 39 25 46 27 48 29
dancing		04 46
galloping		38 43
cattle ownership		05
pastoral scene		(12) 29
plowing and sowing		04 04
ritual slaughtering*		04 (?)

*Chart IX*

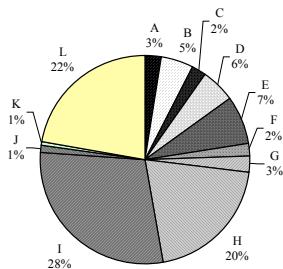
### Graphics I-V



Graphic I

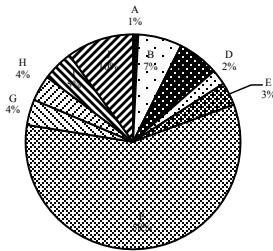
Presence (%) of subjects (per major groups):

Human Figures: 46%, Animals: 42%, Artificial Structures: 9%, Anthropomorphs: 9%



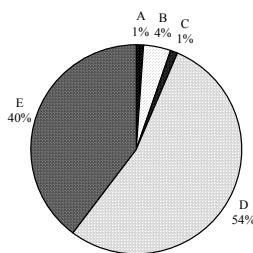
Graphic II

Non mounted - A: farmers (7=3%) B: dancers (13=5%) C: hunters (6=2%) D: warriors (15=6%) E: archers (20=20%) J: heros, (3=1%) K: shepherds (2=1%) L: generic (61=22%) Mounted - F: archers (5=2%) G: hunters (7=3%) H: horseback riders (55=20%) I: warriors (78=28%)



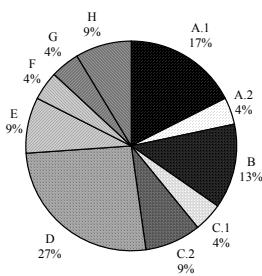
Graphic III

Wild animals: A: monkeys (2=1%) B: ibexes (22=7%) C: felines (17=6%) D: canids (6=2%) E: other ungulates (9=3%)  
 Domestic animals - F: horses (150=58%) G: bovines (10=4%) H: ovines (10=4%)  
 I: dogs (12=5%) J: unidentified



Graphic IV

Structures - A: column-like (1=1%) B: stūpa-like (4=4%) C: temple (1=1%) D: stūpa (52=54%) E: Geometric pattern (30=40%)



*Graphic V*

*Recognized actions (out of a total of 24 complexes)*

*A.1: fighting: duel (I=17%) A.2: fighting: battle (I=4%) B: killings (4=13%) C.1: mating (I=4%) C.2: matig: bestiality (2=9%) D: hunting (7=27%) E: galloping (2=9%) F: cattle ownership (I=4%) G: pastoral scene (I=4%) H: plowing and sowing (2=9%)*

## DISCUSSION

The first thesis concerning shelter painting in the Swat Valley was written in the early 1990s. It was based on the information provided by the discovery of four shelters (Sites 13, 15, 16 and 17). The interpretation proposed at the time was in line with the panorama of knowledge regarding ancient Swat, and essentially set the paintings within a marginal phenomenon of Buddhist Swat.<sup>35</sup> Ten years later, following the discovery of Sites 01, 03 and 04, the overall picture of the phenomenon had to be expanded chronologically, but was still believed to be a marginal phenomenon. In total only seven painted shelters had come to light. Four Sites were dated to a historical period due to the presence of representations of Buddhist architecture (Sites 13, 16 and 17),<sup>36</sup> or due to features of clothing and weapons depicted (Site 01).<sup>37</sup> Sites 03 and 04 were dated to a protohistoric period, and more precisely, although hypothetically, to the Bronze Age.<sup>38</sup>

\* \* \*

During a dedicated survey program carried out from 2004 to 2006, an additional 42 shelters were documented until the current number was reached (which was 49 in 2007 and 52 in 2012: OLIVIERI 2013). At the same time, the previous historical assumptions, not contradicted by new information, remained unchanged, although enriched by new phases. Synthesizing, a continuity of the phenomenon was hypothesized through an extensive period of time, stretching from the mid-2nd millennium BCE to the second

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<sup>35</sup> ABDUL NASIR KHAN ET AL. 1986.

<sup>36</sup> IBID.

<sup>37</sup> VIDALE /OLIVIERI 2002.

<sup>38</sup> Compare, for example, OLIVIERI 2005 with OLIVIERI /VIDALE 2004: 174-6, and with OLIVIERI/VIDALE ET AL. 2006: 124-5.

half of the 1st millennium CE. This continuity was attributed to a substantial preservation of homogeneous cultural characteristics attributed to the human groups authors of these paintings. These communities or groups are assumed to have constituted the original ethnic substratum of a part of ancient Swat, which then retreated into marginal environments as a result of the cultural colonization of the main valley.<sup>39</sup>

The issue of chronology and the subsequent reconstruction of the cultural phases will be re-assessed in the following pages. The structure of the methodology adopted for the interpretation of the paintings from 2002 onwards has been briefly described in the Paragraph 'Informed methods' (see above, pp. 12-15), and in its definitive form was described in OLIVIERI 2012. This methodology is indeed an approach, which, even in its preliminary form, gave positive results.<sup>40</sup> Based on this positive element and the results of the analytical research, we will look at the entire phenomenon of these painted shelters, and attempt to extract the relevant information required to comprehend them, at the level of the individual shelter, in its complexity, and as regards the consequences that may be derived for the understanding of the wider context of the cultural history of Swat.

## ELEMENTS OF CONTINUITY AND DISCONTINUITY

### *Physical homogeneity*

The main data regarding physical homogeneity, as indicated above, relate to the area of distribution and its topographical setting. The area corresponds to the medium-altitude range astride the watershed separating the catchment basin of the Swat river from that of the lower reaches of the Kabul river (Mardan plain) in the Malakand Agency.

<sup>39</sup> For example, see OLIVIERI 2008; in OLIVIERI 2010a the hypothesis was reasserted after a preliminary analysis of the features distinctive to the syntax of the shelters.

<sup>40</sup> See VIDALE/OLIVIERI 2002.

From an ecological point of view, the sector corresponds to sunny lands, which are rich in silicon and with substantial residues of humus (clay) typical of areas once covered with pine and holm oak, now largely deforested (*pinus roxburghii*, *olea ferruginea*, *quecus ilex*: the typical 'Sub-Tropical Chir Pine Forest' of Middle Swat). The area is full of water springs, mostly related to the rainy seasons, as is typical of granitic areas where rainwater is stored from one rainy season to another one in 'pans, crevices and pot-holes'. For this reason, there is no shortage of good pasture-land in the mountains. Among the wild species useful today or in the past, several stand out: in addition to conifers (timber), *buxus papillosa* (*Ghwaraskhe*, used to waterproof the roofs in vernacular architecture), *ilex aquifolium*, *quercus leucotrichophora* (*Banj*), and remnants of wild *vitis vinifera* (common grape vine).<sup>41</sup> In the E sector of the area it is not uncommon to find outcrops of white quartz, a material that, until not long ago, was used like flint. The area is also provided with convenient mountain passes connecting the territories between the Swat valley and the plains of Mardan. Such passes are important for settlements, trade and agriculture. The area is lithologically characterized by enormous outcrops of gneiss (Augengneiss) and granite.<sup>42</sup>

To summarize, the distribution area of the paintings, inscribed in a quadrilateral oriented NE-SW with a surface area of 50 sq km, has the characteristics of a dominant landmark, whether one looks at it from Swat, or from the plains of Mardan. Its profile forms a type of orographic twinning with the profile of Mt. Ilam.<sup>43</sup> To paraphrase the summary given for a similar morphological and ecological context, even though

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<sup>41</sup> As to the possible production of wine in this area during ancient times, see below. See also OLIVIERI/VIDALE ET AL. 2006 and OLIVIERI 2008. As concerns the local phytogeography, see *inter alia* HUSSEIN ET AL. 2006, IBRAR ET AL. 2007, SIDDIQUI ET AL. 2009.

<sup>42</sup> This portion of territory belongs to an area geologically known as the 'Lower Formation' (see C. FACCENNA ET AL. 1993: 257-62, with references).

<sup>43</sup> As to Mt. Ilam and its importance in antiquity see OLIVIERI 1996 and VIDALE/OLIVIERI 2005.

geographically distant, it is a "complex landscape of its own - which one is large enough and well enough furnished to be a complete, autarkic life world in itself".<sup>44</sup>

In general, the topographical setting is common to all Sites, and for this reason as well it even has been chosen to define them all under the term 'Painted Shelters'. As already mentioned, the paintings are housed in natural cavities (deep shelters in 18 cases, niches or vertical shelters in 29 cases), in one case within a grotto, and in another on a partially open-air wall. A good number of these locations are bound together by their relatively poor accessibility and/or internal practicability. In general, the rocks that host these cavities or shelters are in detectable positions, or positions of visual dominancy whether active or passive<sup>45</sup> (17 cases of passive visual dominancy, i.e., landmarks), located near mountain passes, or paths (20 cases), in the vicinity of water springs or other water sources (18 cases).<sup>46</sup>

All these elements of physical homogeneity are shared with the paintings of Mt. Ilam, Mt. Karamar (Chargul and Parlai-dab), Khanpur-Shikaoli and Tanawal areas.

#### *Elements of physical continuity*

Other elements of physical continuity are the choice of the 'canvas' and the technique used. Obviously the choice of the 'canvas' is conditioned by the information provided above: in all cases, with only two exceptions (Sites 17 and 49), the original conformation provides a smooth surfaces, at times laminated with chalky encrustations produced by percolation onto gneiss or granite rocks. The two exceptions regard the inner walls of a limestone cave (Site 17) and the horizontal ledges of a wide open-air wall in phyllite, partially protected by an overhanging ledge (Site 49). As regards the

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<sup>44</sup> LENSSEN-ERZ 2004: 134.

<sup>45</sup> Visually active dominancy refers to those sites/areas, which can be enjoyed from the point itself, vice versa if the dominancy is passive it refers to the visibility of the point from elsewhere. A point with a passive visual dominancy is defined as a 'landmark', is generally.

<sup>46</sup> A detailed analysis of these variants is provided later in this Chapter.

technique all the paintings were made utilizing mineral pigments made with base metals.<sup>47</sup> As previously mentioned, tests performed<sup>48</sup> did not reveal the existence of organic substances such as casein, for example, which should have been present in the composition of the pigment. The ochre tints utilized are listed in order of their frequency: carnelian red (19), crimson red (13), orange red (11; Site 12 is excluded), scarlet red (4), white (2), and cadmium yellow (1), in some cases (3) was not possible to record the shade of the color red due to the poor state of preservation; in four cases, the use of different colors was registered: carnelian red-scarlet, red-orange red (Site 27), orange red-yellow (Site 17), carnelian red-white (Sites 31 and 41).<sup>49</sup> As noted above, it is most likely that the application of color was carried out with the artists' fingers themselves. In all cases, the breadth of the application is similar to and differs only slightly from the average width of a finger, and in one case traces of fingerprints were documented (Site 17). Notwithstanding the lack of evidence regarding the use of brushes or sticks, their use can not be ruled out, but rather assumed possible in at least two cases (Sites 26 and 45).

All of the figures within each individual painting appear to be part of a complex.<sup>50</sup> Therefore, the work of more than one artist's hand within the same painting has never been emphasized. There are only two clear examples of the overlapping of colors (Site

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<sup>47</sup> Carnelian red: probably an ochreous hematite ( $Fe_2O_3$ ) (percentage w/w Fe 0,91); orange red: probably a minium ( $Pb_3O_4$ ) (percentage w/w Pb 11,86); yellow: Fe hydroxide ( $Fe(OH)_2$ ) or limonite (percentage w/w Fe 2,20 Mn 0,107); see VITALI in ABDUL NASIR KHAN ET AL. 1995: fig. 17.

<sup>48</sup> VITALI in ABDUL NASIR KHAN ET AL. 1995: 345.

<sup>49</sup> Chromatic variations could also be due to varying degrees of oxidation, to the result of differing levels of exposure within the shelter (see for instance Site 12); CHAKRAVARTI/BEDNARICK 1997: 47.

<sup>50</sup> Additional touches seem to have been carried out in Sites 03 and 04 (s. VIDALE/OLIVIERI 2002: 201); additional stages have been recognized, for example, in Site 05.

17), and color and shapes (Site 41). Additional layers of color or more than one phase could also be hypothesized in several Sites.<sup>51</sup>

All these elements of physical continuity are shared with the paintings of Mt. Ilam, Mt. Karamar (Chargul and Parlai-dab), Khanpur-Shikaoli and Tanawal areas.

#### *Elements of lexical and syntactical continuity/discontinuity*

Some lexical elements are recurrent or common. For instance, geometrical patterns (in 11 Sites) anthropomorphs (9) and body modifications (12). Actions, rhythmic gestures, sounds and psychograms, in general, are also recurrent (> 11).

Another interesting aspect regards the formal features of pictograms with same meaning. It is interesting to note that not every type of pictogram demonstrates the same degree of formal transformation in time (see tables at the end of this Chapter). Mounted warriors, for instance, show an evident increase in details, distinguished by the depiction of particular details such as reins, saddles, armour, and weapons. A somewhat similar trend occurs in the depiction of felines. On the other hand, *stūpas* images show a decrease in the details rendered, their architecture transformed into mere symbolic representations. Another interesting aspect concerns the appearance in some shelters of the representation of the human figure with the head in profile (certainly in Sites 26, 27, 29, 36, 38, 39, 45, 46 and 48). These are the only cases that recognize a formal improvement of the painting techniques, that may be linked to the use of brushes (which is assumed at least in Sites 26 and 45 for the minuteness of the items details). In general, however, the stylistic feature of these findings is consistent, though, given the common technical features (support lytic, mineral pigment application techniques), it remains difficult to speak of style *strictu sensu* (see the Conclusions).

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<sup>51</sup> VIDALE/OLIVIERI 2002: 183. These aspects will be analyzed in greater detail in the Paragraph 'Archaeological data'.

Finally, if we look at the painted shelters as a whole, their syntax clearly shows different patterns (a regressive evolution, in preliminary chronological terms).<sup>52</sup> The composition in certain Sites consists of a complex language, centered on associations of ideograms surrounded by pictograms playing a coherent role (for instance at Sites 03 and 04). The syntax in the majority of the other shelters was simplified when this complex code was replaced by more paratactic repetitions of ideograms and pictograms. Even if prestigious - such as hands and battle-axes - the symbols, due to the absence of a real syntactical center, appear simply redundant (as for example at Site 05). In other sites, syntax patterns became totally unstructured and chaotic (Site 27 offers the best example of it).

All these elements are shared with the paintings of Mt. Ilam, Mt. Karamar (Chargul and Parlai-dab), Khanpur-Shikaoli and Tanawal areas.

## ITEMS FOR CHRONOLOGY

### *Structures* (see Chart V)

The most conspicuous and evident chronological elements present in the paintings are representations of structures such as *stūpas*, *stūpa*-like columns, "temples". Such representations are present in 15 Sites (Sites 10, 13, 14, 16, 17, 20, 22, 24, 31, 35, 36, 37, 41, 48 and 49). Among these representations, three are at times associated with horseback riding (Sites 16, 24, and 41); wild animals are associated with them in two cases (Sites 35 and 41); and individuals with body modifications are correlated in two cases (Sites 35 and 49). Representations of Buddhist architecture are set within a defined range between two extremes: 1st century BCE and 10th century CE.<sup>53</sup> Obviously, within this absolute chronological horizon, various phases may be defined:

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<sup>52</sup> In OLIVIERI 2010a.

<sup>53</sup> The longest existing Buddhist site so far identified in Swat, which touches both limits of the range, is Butkara I (s. FACCENNA 1980-1981).

one, based on specific comparisons with real architecture, can be dated with greater precision (see Appendix 2). This phase concerns Sites 13 and 31, which can be attributed to the 1st-3rd century CE.<sup>54</sup>

### *Horseback riding* (see Chart I)

Scenes relative to horseback riding can also be considered chronologically relevant, although evidently not with the same temporal definition provided by Buddhist

<sup>54</sup> In the first case, see the argument sustained in ABDUL NASIR KHAN ET AL. 1995. In Kafir-kot 1 (Site 13) the particular struts of the *chattrāvalī* provides the main datable element. An important structural model for these elements is provided by the Panr I sacred area (ISMEOREPMEM XXV: 285 ff., 321-22, figs. 113-14). The *stūpa* typology with two storey, pilasters at the base, and a flight of steps, shows affinity with the Panr I 'type I' *stūpa* (1st Period; second half 1st-2nd centuries AD; FACCENNA ET AL. 1993: pl. VIII), and with the Butkara I 'late type 1, 2' *stūpa* (Period 4/1, 2; 3rd-mid 4th century CE; ISMEOREPMEM III: pl. X).

In the case of Site 31, where the *stūpas* are represented with columns, one notes the reference to the chronology of the Main *Stūpa* of Saidu Sharif I (with reference to type 1: Period 1, phase a; first half 1st century CE; ISMEOREPMEM XXIII: tabs. VIII, VIII, XXI); in reference to the columns of the *stūpa* of Saidu (culminating with sitting lions' statues) see FACCENNA 1986. In this regard, the painted representations of two *stūpa* with columns topped by sitting lions from Kala-tassa are particularly interesting (NASIM KHAN 2000: fig. 25).

In general, however, it is clear that the true architectural panorama, or the reference to the representations of *stūpas* in the paintings of Swat-Malakand, represents Gandharan architecture. This is evidently different from the repertoire of the Upper Indus where the 'Himalayan' *stūpa* forms prevail. In the 'Himalayan' form, the lower body of the structure is distinguishable because it is not tapered in an progressive manner (in reference to the few Gandharan style *stūpas* within the Upper Indus repertoire refer to: MANP 1: 82:1, 86:5, 110:16, 111:1; MANP 4: 14:9, 22: 1, 22:2, 23:1, 23:3, 24:4, 34:7, 48:6, 48:7, 57:1, 80:1, 80:2; MANP 8: 225:6, 225.7, 226:2, 373:48, 373:55, 373:47). Another typical characteristic of Swat-Malakand *stūpa* representations is the presence of projecting stairways, which are not common in the Upper Indus. Elaborate finials like those displayed in Site 14 (Fig. 39), are not commonly seen in the Upper Indus' repertory, where most *stūpas* show *trishūla*-like or trident-like finials (but see also MANP 4: 5:2; for the *chakra* finials s. MANP 8: 272: 5, 272:14, 372.8; MANP 1: 15.3). For a general overview on this issue, see BRUNEAU 2007.

architecture. In total, horseback riding is represented at 21 cases (Sites 05, 13, 16, 19, 23, 24, 27, 28, 32, 38, 39, 40, 41, 42, 43, 45, 46, 47, 48 and 49). In nine cases this linked is associated with weapons and warriors (Sites 05, 13, 16, 27, 38, 39, 40, 48 and 49), in five cases is associated with livestock (Sites 05, 19, 24, 28 and 48) and in four cases associated with hunting activities (Sites 24, 27, 28 and 46). Three times horseback riding is represented in the presence of Buddhist architecture (twice in association with arms or warriors, Sites 13 and 16, and in another instance with hunting, Site 24).

If one turns to the paintings where there are representations of horses, but no Buddhist architecture, (see below), one notes that there is indeed a significant difference, as it is possible to notice, for instance, when comparing Site 05, and Site 27. Site 05 associates horseback riding and ideograms of axes and hands, let alone standards, but also to a scene of possession, in which a man holds a zebu by the hooves above his own shoulders. This scene closely resembles the scene incised under the niche at Site 04 (Sargah-sar 2; see below).

This difference is primarily stylistic, with regard to the rendering at Site 27 of the mounts, the significant additions of new details (regarding the reins, the feet of the horsemen beneath the belly of the horse, and probably indicating stirrups, the weapons, the helmets with double feathers, the small circular shields (see below), as well as the representation of riders in profile). Considering the presence of similar details, one can not avoid associating, for example, Sites 05 and 19, which are both characterized by the central positioning of two large anthropomorphs and a large sub-divided square. Instead Site 27, referring to details - may be associated with multiple sites (29, 38, 39, 40, 46, 45 - which in turn suggest Sites 24 and 46 due to the reproduction of the elaboration of the horses' manes.

It is possible to consider Sites 05 and 27 as the two chronological extremes with regard to scenes representing horses. In chronological terms, it is reasonable to place Site 05 closer to the late protohistoric period, and Site 27 to the extreme late-antique period, of

the plausible chronological horizon. The process tentatively regards both the Sites, which are associated or associative to these two.

One fact to consider is that although the first representation of a horse dates back to the second half of the 2nd Millennium BCE (Period IV; painted ceramic fragment from Barikot),<sup>55</sup> it is not until the mid-1st millennium BCE that there is continuity in the depiction of horses.<sup>56</sup> The earliest representations of the rearing and the use of horses as an aid in transportation appear in engravings at the site of Gogdara I (probably mid-1st millennium BCE), where they are also shown pulling two-wheeled carts, but not as

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<sup>55</sup> BKG 500, STACUL 1983, 1987: 109, fig. 46h, pl. XLIIIC. It has been suggested the possibility of a relationship within the sacrificial worship of the horse in the Rgvedic milieu (STACUL 1983, 1987). See also BKG 1057, ISMEOREPMEM XX: fig. 46g, pl. XLIV; BKG 154, IBID.: fig. 46f. These three finds could be considered amongst the oldest representations of 'horse' in the Sub-Continent (ISMEOREPMEM XX: 109).

<sup>56</sup> The role played by the horse in protohistoric Swat is controversial. Faunistic evidence of equid was attainable due to the excavation of protohistoric settlements from Chalcolitic-Bronze Age (Ghalegai Period IV) to Iron Age: at Loeban III (Period IV), Aligrama (Periods IV-VI), Bir-kot-ghwandai (Period IV), as well as from the Ghalegay rock shelter (Period III) (see ref. in OLIVIERI 1998: 67). Two complete skeletons of a "very robust eastern breed of *Equus*" were found in the Katalai graveyard. Their deposition inside the protohistoric necropolis (Period VII) is indicative of the important role this animal played in the late necropolis cultures of Swat (TUCCI 1963; AZZAROLI 1975; STACUL 1983; CASTALDI 1968: 598-602). Two objects representing horses come from tombs in Katalai and Loeban (Period VI) (SILVI ANTONINI 1963: 24, fig. 12; SILVI ANTONINI/STACUL 1972: 24, fig. 33, pl. LIIa, c).

The massive presence of this animal in late engravings at Gogdara I leaves no doubt that it was an icon, possibly antagonistic, but in any case subsequent to the icons of ibex and felines widely represented in the early phase of Gogdara I. The role of the horse is there associated with the representation of three light carts. Note however that except in one (dubious) case, the horses represented are not mounted; thus it seems evident that the late phase of Gogdara I refers to a horse breeders and cart drivers culture, rather than of horseback riders (see NEUMAYER 1991: 63) (but the carvings at Lekha-gata in the Kotah valley show both representations; see OLIVIERI/VIDALE 2004).

mounts.<sup>57</sup> It is therefore not impossible that some of the depictions of horseback riding in the paintings of Malakand-Swat are the oldest so far discovered.<sup>58</sup>

*Horsemanship gears* (see Addendum 1, Chart VI)

Some details of the harnesses, saddles and stirrups, etc. may be useful to the chronological issue, as was mentioned, in that these items appear in some paintings and not in others (see above). In absolute terms, one considers the novelty represented by the depiction of a whole-foot stirrup, which is evident at Sites 23, 27, 29, 45, 46 and 47 (excluding Sites 23 and 47, these are the same sites where reins were depicted as well).

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<sup>57</sup> In reference to Gogdara I see TUCCI 1977; BRENTJES 1977; OLIVIERI 1998, 2005; and more recently KU'ZMINA 2007: 388, where an earlier dating is proposed (the second half of the 2nd millennium BCE) based on comparisons with similar representations found in Kazakhstan and Central Asia.

Another depiction of a cart found at the site of Lekha gata-1 (Swat, Khota Valley) (OLIVIERI/VIDALE 2004: 154-5, fig. 29; OLIVIERI/VIDALE ET AL. 2006; OLIVIERI 2008: fig. 12).

<sup>58</sup> It is not known with certainty how ancient they are. Contradicting data have originated from two major Alexandrographs Arrian and Curtius Rufus. The first, whom we have noted elsewhere as not appearing to be particularly reliable (OLIVIERI 1996: *infra* 57, 59, 61, etc.) mentions in his *Anabasis* (IV 25, 5) that two thousand horses were among the Assakenoi forces (compared to 30,000 infantry). Curtius Rufus in his *Historiae* does not mention the presence of cavalry, nor among the Assakenoi, neither in the armies of their Indian allies (Omphis and Abisares). Only in Punjab, in the final phase of the Battle of the Jhelum, were four thousand horses in the army of Porus. Infantry in mountainous areas, and carts, elephants and infantry in the plains, seem to be the units, which Alexander faced in the Hindu Kush and the Punjab according to Curtius Rufus. Instead, both Alexandrographs agree on the importance of cattle breeding between Kunar and India (Arrianus: IV 25, 4; Curtius Rufus: VIII 12, 11; JETTMAR 1995). Moreover, the absence (or limited presence) of the cavalry as military force, should surprise in a population, whose name preserves that of the horse (TUCCI 1977: 28, 45-6). It is not excluded that the horses of Swat, where there were horses (and there were to judge by Gogdara I), were at that time kept for pulling light loads. If this were true (and to some extent it has been proven by Gogdara I itself, OLIVIERI 1998), then we would deduce that the earliest depictions of horseback riders (carved and painted) date from the very last centuries of the 1st millennium BCE (including the carvings of Lekha-gata, see fn. 56).

The presence of stirrups is not necessarily an index of late antiquity in this part of the Sub-Continent, as already argued.<sup>59</sup> The earliest (and geographically coherent) representations of the use of whole-foot stirrups comes from a heliotrope seal (from KP) depicting a figure on horseback with a rod or cruciform spear, already identified as Vima Kadphises.<sup>60</sup>

There are two representations of saddles (Sites 24 and 45) both associated with horses with a characteristic crenellated (ribboned) mane. That seen in Site 45 clearly represents a solid-treed saddle, with a high cantle and cushion, a pommel with prominent bow-shaped horn, and stirrups. Regarding this typology of saddle, specific comparisons can be made with saddles of the Upper Indus dated around 4th-5th century CE.<sup>61</sup>

Depictions of horses with crenellated manes (Sites 24 and 45) deserve in-depth consideration. This Central Asian and Iranian fashion spread in the Sub-Continent in the early centuries of the 1st millennium CE (there is substantial iconographic proof in the form of coins and seals).<sup>62</sup> Numerous examples also derive from the iconographic repertoire of the Upper Indus, in particular, beautiful scenes of horses handled by

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<sup>59</sup> OLIVIERI 2007: 30. For a critical review of the archaeological and iconographic data from the Sub-Continent, see LITTAUER 1981. Moreover it should also be noted that in the detailed boulder carving of a hunter on horseback with the famous onomastic stone inscription by Vima Kadphises, the stirrups are clearly visible (OROFINO 1990: fig. 35).

<sup>60</sup> The seal was examined in CALLIERI 1997: Cat. U 7.29, 200, pl. 62 (according to H. Falk - personal communication - the inscribed name 'ALDShO' is possibly the name of the owner; the *tamga* is the one used by Vima Kadphises, but similar ones are also used later in the same area).

<sup>61</sup> In reference to this date, see a few lines below in the text; among various examples Thalpan Bridge (JETTMAR/THEWALT 1985:24), of N Thalpan, which contains indications of stirrups, crenellated manes, and covered tail (MANP 9: 508:10, 12, 18) and Nala Toys (MANP 4: 115:4). For a preliminary examination of the data of Upper Indus, see THEWALT 1985. The role of stirrups, from early 4th century onwards, is addressed in DIEN 1986; see also POTTS 2007.

<sup>62</sup> MAENCHEN-HELPEN 1957.

horsemen wearing Parthian clothes at Chilas II, come to mind (1st century CE).<sup>63</sup> The association of crenellated manes and covered tails in Site 45 is also interesting. The partial or complete binding of the tail, an otherwise minor decorative detail relating to mounts, is of great chronological importance, as it pertains to their traditional grooming, at least dating from 1st century BCE (in Swat this feature is still attested in 3rd century CE).<sup>64</sup> Its chronological importance is enhanced by the fact that it completely disappears in its distribution area after the 4th-5th century CE.<sup>65</sup> Once again, as in the case of crenellated manes and heavy-treed saddles, one returns to a typical Central Asian cavalry-military style, if not even a testimony to the presence of 'some specific ideas, customs or traditions of a specific ethnic group'<sup>66</sup> in the area of Swat in the early centuries of the 1st millennium CE.<sup>67</sup>

*Trisūla-like ideograms and associated figures* (see Addendum 1: Chart VIII)

Out of four cases (Sites 09, 10, 26 and 41), the presence of *trisūla*-like ideograms has been documented twice in coexistence with Buddhist architecture (Sites 10 and 41), in one instance (Site 41) a *trisūla*-like spear is represented held by a horseback rider. In another case (Site 26), it is associated to a bi-triangular figure shown alongside two analogous figures in the act of dueling. In Site 09 many ideograms of this type are associated with geometric symbols. In all cases, these ideograms are very important for

<sup>63</sup> JETTMAR/THEWALT 1985: pls. 9, 10.

<sup>64</sup> ILYASOV 2003: 264-6. In the NW of the Sub-Continent, besides the 1st-4th century CE coinage, horses with covered tails are (rarely) represented in Gandharan art. New iconographic data has been provided from the Barikot excavations (3rd century CE) (ACTREP MEM II: fig. 75). In the Upper Indus/Ladakh rock repertoire, note the horse with covered tail e crenellated mane in VERNIER 2007: fig. 43.

<sup>65</sup> ILYASOV 2003: 302.

<sup>66</sup> ILYASOV 2003: 261.

<sup>67</sup> Partial proof of the thesis cites examples from the Upper Indus (on both sides of the Line of Control), where the associations of these customs with people of foreign ethnicity is quite clear (Saka, Iranians).

their potential chronological value, but also for their implications in the reconstruction of the ancient cultural history of Swat.<sup>68</sup>

Let us first consider the figures with such an attribute. The figure found at Site 26, characterized by a bi-triangular body and a naked head, but portrayed with a chignon with a double loop, shown in profile, is also shown with its mouth open and eyes wide open (an iconographic feature typical of terrifying deities, including some forms of Śiva). The bi-triangular form of the body definitely depicts a knee-length tunic tightened at the waist by a belt from which hangs a short dagger. The figure can be compared to one depicted on a terracotta token from Kula Dheri (KP) dating from the 4th-5th century AD, depicting a standing male deity wearing a head-dress surmounted by a triangular section wearing a knee-length tunic. The figure, holding a *triśūla*-like spear and an animal (possibly a hare?) has been tentatively interpreted as Śiva.<sup>69</sup> In the scene depicted at Site 26, two other pertinent figures are depicted; one (from whose belt hangs a sword) wears a triangular headgear, which can be compared to the royal tiaras found on Kushan coinage (Vasudeva-type). For the same principal figure of Site 26, it is moreover not be rule out a resemblance with the depiction of a sovereign making an offering at the fire altar shown on the obverse of coins from Huvishka, Vasudeva, Kanishka II, as well as later imitations.<sup>70</sup> With the figure from Site 26, there is a three-way association of the tricuspid lance, the terrifying pose, and the double-loop chignon (the *jātamukha* which characterizes Śiva as an ascetic and *yogin*) typical

<sup>68</sup> Whether these ideograms refer to actual Śivaite *triśūla*, Buddhist *triratana*, or even *tamga* (although I am not convinced of this last possibility), we do not actually know. Compare for instance the representation documented at Shatial Bridge in JETTMAR/THEWALT 1985: 23 and that found in Site 10. For a brief review of the Śivaitic iconography in the Upper Indus see ARIF 2001.

<sup>69</sup> CALLIERI 1997: Cat. No. S4, 143-44, pl. 38.

<sup>70</sup> This type of representation is even more antique; see for example the obverse of the well known Indian-standard silver drachma coined by Agathocles, from Ai Khanum, representing Saṃkarṣaṇa-Balarāma (for its reverse representing Vāsudeva-Kṛṣṇa, see also RAPIN 1992). Regarding the double-loop chignon see the illustrations in ISIAOREPMEM V n.s.: pls. 104, 107, 110, 111, 112, 113.

of depictions by Brahmic ascetics and of Maitreya in a Gandharic context. These three characteristics suggest that the figure may truly refer to a deity, and possibly to Śiva. The case of the figure at Site 41 is more complex: here too, the figure has a bi-triangular structure and a tunic narrowed at the waist (decorated with horizontal stripes), however, it is presented in a frontal view. The head has a full head of hair, which flows past the shoulders. Moreover it seems (but is not clear) that the figure has four arms (the upper right above, the lower right below, the upper left bearing a tricuspid lance, and the lower left below). The figure appears to be depicted in front of an animal; wild animals are shown alongside the figure: by in large, all of the characteristics of a Śiva Paśupati (even if poorly or wrongly rendered: the lance is held with the left hand, for example). But the animal is clearly a horse and not the bull, Nandi. So, unless one wishes to consider an iconography which is mistaken or misunderstood, there remains no option but to presume that we are dealing with a royal iconography, perhaps within the Kushan sphere, but for which we have no available specific comparisons.<sup>71</sup>

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<sup>71</sup> Among the most important studies regarding the ancient religion of the region are those of FUSSMAN 1977, TUCCI 1977, JETTMAR 1997 and PARPOLA 1998 (see also CALLIERI 2006).

The question of the Rgvedic substrate in Swat has been addressed more according *argumenta e silentio* than on the bases of positive reasoning. The archeological data are scant and controversial (see for instance the hypothesis formulated in VIDALE/OLIVIERI 2005). A list of the largest contributions include, however: the observations on the native religion of Swat (TUCCI 1977); the observations on the role of Mt. Ilam in the mythography in Indo-Iranian (OLIVIERI 1996); the observations on the known depictions of horses contained in STACUL 1983 (and in STACUL 2005b); the observations on the religious character of some depictions of animals on the Gogdara I rock (OLIVIERI 1998). Finally, there is the problem of the so-called 'burials of horses' at Katelai, which were initially seen as 'proof' of a Rgvedic cultural context (for an in depth examination see MÜLLER-KARPE 1983; ALLCHIN 1995; ERDOSY 1989; KUZ'MINA 2007).

The discourse regarding popular piety in Swat is quite different (as it emerges through the terracotta figurines, for instance) which should not necessary be viewed *sub specie* of the cultured or literated Hinduisms, but certainly as pre-Buddhist and non-Buddhist (TUCCI 1977: 29-31; CALLIERI 2006: 62-5).

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This is expressed principally through the female terracotta figures, which appear from the Bronze Age, becoming frequent in the late protohistoric settlements and as funeral objects (see ref. in OLIVIERI 1998). In historic times they are still widely popular in urban settlements (Barikot, Charsadda, Taxila, and at Sahri Dheri; on the latter s. also GORDON 1932, 1938), but also in sites characterized by important Buddhist monumental remains, like Sahri Bahlol (see IBID. 1938). In the case of Barikot, the presence of the terracotta figurines starts becoming less frequent during the 2nd century CE, when the first *intramuros* buildings for Buddhist worship were built (CALLIERI 2006: 74; see also ACTREPMEM II). The vernacular cult, as they are objects of worship (BAUTZE 1990), related to these images of women does not disappear entirely, as evidenced by the small panel in schist with *devi*, found in a domestic environment in Kushan-Sasanian *facies* once again in the Barikot excavation (BKG 1591; CALLIERI 2006: 71-3, fig. 3.13; ACTREPMEM II: fig. 76). Figurines of zebu, which may also be ascribed to the popular cult, were frequent in early historic contexts (ISMEOREPMEM XX: 111). Within the context of the earlier popular Hinduism, the icon of Ganesha, was also very present in Swat (FILIGENZI 2000: fig. 14). In regard to the protohistoric production of *linga*-shaped stones found at Barikot (BKG 170) e Ghalegai (GH 23) see ISMEOREPMEM XX: 111. The presence of Indian gods in the coinage and the glyptic from the Indo-Greek age (and then in an *élite* context) and in the Gandharan art imagery will not be commented on, as it is a matter which is well known and well studied (TADDEI 1987, CALLIERI 2006; for a résumé of the earliest manifestation of ancient Hindu iconography, see SRINIVASAN 1997: 187-192.). Surely, these data represent an indirect evidence for the definition of the religious 'substrate' in which and from which these iconographies has arisen. Indo-Greek coins from Ai-Khanum (see fn. 70) may have great importance in this respect (see the review of this and other important issues in relation to the study of the temples at Taxila in RAPIN 1995).

In late antiquity in Swat one observes a gradual increase in the importance of Hindu iconographic testimonials, in the context of late-Buddhist rock reliefs; testimonials which are enriched with specific characters, and definitions of attributes typical of a popular, always richer, pantheon (TUCCI 1963; FILIGENZI 2006; FILIGENZI 2000; FILIGENZI 2014). The archeological data from the excavation have recently been enriched thanks to the discovery of what is probably a Viṣṇuitic temple at the top of the acropolis in Barikot (FILIGENZI 2005), to which must be added the recent re-discovery of the s.c. 'Takht' of Shahkot, or Hathiano-kandao, (FOUCHER 1901; OLIVIERI/VIDALE ET AL. 2006; OLIVIERI 2010b), as well as of the cultic center of Tindodag/Manyar (DEANE 1896; FILIGENZI 2006; FILIGENZI 2014; OLIVIERI FORTHC.). In a later context - certainly during the 3rd century CE - it may be worthwhile recalling the so-called 'Fashion ware' or 'Bajaur ware', in which an iconography referable to a persistent

### *Deities and Heroes*

Some iconographic details, in part established above, in the end should be registered for a few but significant figures. Unfortunately, their value for the chronology is uncertain.

The central ideogram from Site 04 is particularly relevant. It is formed by the interconnection of an ideogram representing 'plowed field' and a large 'U-like' anthropomorph, which role has already been touched here and there in these pages.<sup>72</sup>

The depiction of 'Heroes' from Site 08 is associated with two representations of disks, one pictured on the head of a large figure armed with a solid shield, the other held as a shield by the figure below. The most immediate comparison for these disks with toothed ends (resembling a 'T') is with the figures of toothed *chakra*.<sup>73</sup> Hence the possibility that both figures may be interpreted as deities rather than as heroic figures, or perhaps (but not as a compromise) as heroic deities. For one of the two

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Vedic rituality were recently recognized (BRANCACCIO 2010a; on the 'Fashion ware', see ACTREPMEM II: 219).

<sup>72</sup> The composite central ideogram in Site 04 has been interpreted as an icon referring to sacrificial rituals connected plowing and sowing (the interpretation has been extensively presented in VIDALE/OLIVIERI 2002; OLIVIERI/VIDALE 2004; OLIVIERI/VIDALE ET AL. 2006). This ritual finds its direct reference in a Rgvedic environment (think of Kṣetrabati, the deity of cultivated fields, in RV IV 57). Recognizing this as the correct interpretation, would imply attributing an antique character to the paintings in Site 04 (and Site 03, which presents many similarities with the previous). It includes not only the first representation of a Rgvedic rite performance not only in the NW Sub-Continent but more generally in whole area of India (a much stronger evidence than the one presented by the fragment BKG 500, see fn. 55; STACUL 1983; ID. 1987: 109). In any case this painting could be the oldest one in the corpus of the painted shelters of Swat-Malakand (and not just because of the agricultural icon, think also the lack of horses and riders).

<sup>73</sup> This iconography of the *chakra* is found associated with other deities in the later context (e.g. in the token S1 representing Śiva, in CALLIERI 1987: 142, pl. 38).

representations (the lower), refer to an interesting comparison with the iconography of Vāsudeva-Kṛṣṇa on an Ai-Khanum coinage from the Indo-Greek period.<sup>74</sup>

#### *Other chronologically relevant items*

##### Other domestic animals

In addition to dogs and caprid, the other domestic animals represent, other than the horse, is the zebu, which is present sporadically and often in syntactic isolation (a feature which is typical at Gogdara I).<sup>75</sup>

##### Wild animals

There is no direct dating evidence associated with figures of wild animals. It should be noted, however, that there is some specificity in the depictions of ibex,<sup>76</sup> which are

<sup>74</sup> See above fn. 70. An important representation of the couple Vāsudeva-Kṛṣṇa/ Saṃkarṣaṇa-Balarāma has been found at Chilas II. The rock carving is completed by an inscription that identifies the twin deities (FUSSMAN 1989: no. 1; DANI 1983; SRINIVASAN 1997: 187).

<sup>75</sup> The zebu was an animal important in the culture the Chalcolitic and Bronze Age (Ghalegai Period IV) in Swat, as is testified by not only the painted potsherds (ISMEOREPMEM XX: figs. 46a-d, 47g, h; pls. LXII, LXIII), but also by numerous clay figurines from settlements at Loeban III, Aligrama, Bir-kot-ghwandai (found in the vicinity of hearths; IBID.). The production of these terracotta figurines continues in ensuing periods, as documented in Aligrama and Balambat as well as the necropolis of Zarif Karuna (see ref. in OLIVIERI 1998: 71). This is certainly a chronological indication. The zebu is also represented at Gogdara I (OLIVIERI 1998).

<sup>76</sup> Regarding archeological and faunistic data from Swat, aside from two painted potsherds depicting ibex, or similar animals from Chalcolitic-Bronze Age (Ghalegai Period IV) (ISMEOREPMEM XX: fig. 47c, 1, pl. XLIIId), there is no additional information. This would seem to be sufficient to affirm that within the ceramic iconography of the Chalcolitic-Bronze age, this animal is of little significance, although it was occasionally hunted, judging from the few remains found at Loeban III (remains of goral and markhor, see reference OLIVIERI in 1998: 70). If, however, the dominant culture of Swat in the antique Bronze Age did not raise ibex for a particular role, in another moment, tentatively given as the end of the first millennium BCE, the animal appears in an insistent manner, almost as a symbol within the 'mature' phase of Gogdara I (OLIVIERI 1998). In a short but important article, Tucci

dominant in the early phases of Gogdara I. As for depictions of felines,<sup>77</sup> their earliest representations in Swat date back to the Bronze Age.

#### Agricultural ideograms and crossed disks

The former are rendered through the use of grid-like drawings (see Appendix 3). Their significance chronologically is considered to be of a 'negative' type, as they are typical in Sites where datable elements such as Buddhist structures or, with exceptions,

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emphasizes the importance of a form of worship typical in Swat, Chitral and Gilgit, of a female deity "worshipped by hunters and considered to be the overlord of all ibex" (TUCCI 1963: 153). This form of worship has been extensively studied (JETTMAR 1961, TUCCI 1963, JETTMAR 1975, ID. 1995) and it is associated with a symbol of a Sacred Tree. Indeed, the sacred branches of a juniper or holly oak with attached the horns of the sacrificed ibex, are still worshiped in remote areas of Chitral. It is interesting to note that pertaining to the same phase at Gogdara I, there are signs of *arbolets* or 'ramified marks', which may be associated with the cult of the ibex (see again OLIVIERI 1998).

<sup>77</sup> The Site 04 (Sargah-sar) scene, in our opinion, has deeper symbolic implications, and does not represent a description of the wilderness. In Swat's protohistoric art there are several instances where figures of predators attack ruminants: the oldest example is a painted potsherd from Bir-kot-ghwandai which dates to the Ghalegai Period IV (BKG 650; ISMEOREPMEM XX: figs. 46J, k; pl. XLIIId). Other important examples are provided by carvings at Muhammad-patai, Swat (AMSV 131; OLIVIERI/VIDALE ET AL. 2006: fig. 19); outside Swat, in Upper Indus, by the carving at Hodar (MANP 3: 37:A). Regarding the faunal remains from Swat, remains of *Felis pardus* and *Panthera tigris* have been infrequently documented in sites from the middle and late Bronze age (Ghalegai Periods IV, V e VI) (OLIVIERI 1998: 71). The other animal symbol on the walls of Gogdara, a large feline (in all likelihood a leopard), is however, little present in the archeological records of Swat. As far it concerns the monkey depicted in Site 03 (apparently in the act of defecating towards a 'sown field' ideogram), see VIDALE/OLIVIERI 2002 (Kapi?). A similar figure is carved at Partab Bridge (Upper Indus): the animal is represented in front of a lotus flower above a pillar standing on a basement. The carving is damaged, but apparently the animal is represented in the act of defecating (KÖNIG 1994: fig. 29).

horseback riders are absent, and vice versa. Crossed disks are present in various complexes, and in one case associated with Buddhist structures.<sup>78</sup>

### Weapons and cloth

Among the depictions of offensive and defensive weapons, one notes that reflex bows and feathered helmets with finials are emphasized. Regarding bows, the presence of reflex bows in Site 01 in combination with clubs, long kaftans and heavy boots, is also noteworthy. Due to this association of elements is not unreasonable to consider that the iconography is in line with a date between the 1st and 3rd century CE.<sup>79</sup>

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<sup>78</sup> The crossed disk representation in the Site 13 has been already discussed as a possible Saka-Parthian *tamga* (see ABDUL NASIR KHAN ET AL. 1995). Crossed disks or wheels, although rare, are present in the earliest Swat iconography (at Gogdara I: OLIVIERI 1998: 73; in funerary objects belonging to the Early Iron Age graveyards: ISMEOREP MEM VII: fig. 27e, pl. LXIb, c).

<sup>79</sup> See VIDALE/OLIVIERI 2002: 206. In Kushana iconography one finds the same long kaftan, which is worn open in front, over soft boots, shown in a typical posture with the legs spread apart. Of course, the depiction of a club (*danda*) held by some of the figures in Site 01 is quite interesting, as it suggests a possible representation of Kushana individuals (see also the divine couple represented at Chilas II already discussed, dated to 1st century CE – see FUSSMAN 1989). Other examples are seen in the Ladakh area, where at least one, well known, can be positively associated with the Kushana (through the inscription 'Vima Kadphises'; TUCCI 1958: 294; OROFINO 1990: 181, figs. 21, 33). Also in Ladakh, numerous triangular/bi-triangular figures have recently been documented (VERNIER 2007: fig. 22, 26, 27, 29, 30, 41). In Upper Indus, s. for instance JETTMAR/THEWALT 1985: 16 and many other examples. In Swat, the iconography (defined as 'nomadic attire') is found e.g. in the Turki-shahi shelter reliefs in the 'Hinduano-ghar' grotto in Tindodag (Ghalegai) (7th-8th century CE; FILIGENZI 2006: 197, fig. 2). We have obtained additional elements positively associated with the name of Kanishka in a Kharoṣṭhī inscription from the shelter pictures di Kala-tassa (Manshera, KP): two individuals wearing long-kaftan dresses represented inside the *stūpa*'s space, while other similar figures are represented outside (NASIM KHAN 2000: figs. 24-5). Inner Eurasian representations of archers with long kaftans are common but not frequent. A very interesting carving came from the Baga Oigor IV site (NW Mongolia; MMAFAC 6: fig. 1092), but according to scholars, it belongs to the Bronze age. In this case I am slightly reluctant to accept this chronology, especially if compared with the early-Turkic carvings from Kazakhstan, where

In reference to the helmets (conical) with a feathered finial one cannot construct more than a broad comparison with examples from Central Asia (*in primis* from Penjikent) dating from the 6th-7th century CE.<sup>80</sup> The majority of the other representations of weapons (especially swords, shields, but *not* the battle-axes) apparently refer to a Late Historic context.

## ARCHAEOLOGICAL DATA

Before concluding the analysis of data presenting chronological significance, another group of data should be presented albeit briefly. This group of data related to direct associations found within the paintings (the use of different colors, overlays and the indication of multiple phases or re-painting), indirect associations within the paintings (such as proximity or contiguity with structures or sites which are chronologically relevant), but also direct associations which are external to the paintings (such as superposition of carvings or graffiti to the paintings).

### *Direct association data*

#### Sargah-sar (Site 04)

It is possible that two successive phases of paintings are represented in these complex; however, the figures are not preserved adequately to permit a definitive opinion. In any case it appears evident that at least the left (central) portion of the complex experienced the following re-painting interventions: to the extreme left, four human

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the use of long kaftan-like dress is widespread (MMAFAC 5: figs. 164-5, 167). From these carvings, we have also interesting chronological indications. In Central Asia the typology of the bow represented in Site 01 it is common only in Saka representations from the Early Historic period and later, and it is very different from the bow represented in the carvings dating from the Bronze period and the late protohistoric period.

<sup>80</sup> See the review of the subject in LITVINSKY 2003.

figures are painted around a grid-like ideogram, which is in comparison faded to a degree which suggests that the human figures had been arranged around the pre-existing ideogram in a second time. In the central part, it seems that a large grid-like ideogram has been painted around a large pre-existing 'U-like' anthropomorph, thus creating a complex ideogram.<sup>81</sup>

#### Kamal-china (Site 05)

In respect to the prevailing orientation of the figures, which is parallel to the opening of the shelter, here five figures demonstrate a curved transverse orientation top/left-bottom /right (a knight with a feline face right and are positioned on the left periphery; a cat is pictured below; a knight with a theriomorphic horse in the bottom center; a knight with outstretched fingers on the bottom right); six figures demonstrate an opposite transversal orientation (a dog below, zebu at the top left and top right; a possession scene with zebu; an anthropomorphic with its gigantic right hand raised; an equid surmounted by a large anthropomorph with a pincher-like left hand); three figures have a perpendicular orientation (horsemen); finally, four figures have a horizontal orientation (ideograms of hands, the great battle-axe above and the banner). A closer investigation has proved that the ideograms of hands were painted before all the others. We therefore recognize several distinct phases of painting, however, they are not overlapping (a part from two cases involving the hand ideograms). This fact testifies to the relatively long period during which there was a habitual visitation of the shelter.

#### Hinduano-hatai (Site 17)

In this case the two colors utilized were superimposed on two occasions: however, the form of the figure beneath was not obliterated. This is a typical, positive case of second intervention.

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<sup>81</sup> VIDALE/OLIVIERI 2002: 201.

### Lal-kamar 1 (Site 27)

Two colors were utilized in the complex. Here it appears that there is more than one pictorial phase (on the other hand it is difficult to imagine otherwise, due to the large size of the painting); however, the phases are not overlapping, but juxtaposed.

### Gweluno-ghar (Site 31)

Two colors were used in a distinct manner in this complex: white for Buddhist structures and red for the few incidental figures. In this case it is considered that the two colors were used contextually and with particularly intention to chromatically distinguish the dominant Buddhist sacred architecture from the other figures.

### Palangai (Site 41)

This is the only case in which a depiction (in this case a representation of *stūpa*-like construction, in white) covers a pre-existing representation (dogs, in red). This is the only documented case of intentional superimposition/obliteration.

### *Indirect association data*

#### Sargah-sar (Site 04)

Below the niche that houses the paintings, on a large sub-vertical plate, there is a series of graffiti figures.<sup>82</sup> Apparently, the figures were subsequent to the paintings primarily due to the fact that they occupy a physical space which is clearly subordinate to the niche. It is interesting that the graffiti respected the paintings space. The paintings do not represent horses or other domesticated animals, while the graffiti represent men on

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<sup>82</sup> OLIVIERI/VIDALE ET AL. 2006: 86, fig. 18; 126-28.

horseback, a bovine, bowmen and wild animals. A knight holding a caprid above his head is important to the scene, which can be closely compared to a figure at Site 05.<sup>83</sup>

#### Kamal-china (Site 05)

A standing figure is represented holding a bovid above his head, which can be closely compared to a figure carved below the Site 04 (see above). A small necropolis dated to the Late Bronze Age/Early Iron Age (1st millennium BCE; AMSV 339) was found approximately 100 m N of Site 05. Slightly upstream, to the W of this area, another necropolis was identified (AMSV 340).<sup>84</sup>

#### Malak-ziarat (Site 10)

Opposite Site 10, just few dozens of meters S are the ruins of a sacred Buddhist area (AMSV 362b).<sup>85</sup>

#### Gwarejo-patai (Site 11)

The paintings are located on a vertical wall within a shelter, formed by the collapse of several boulders. Onto the pavement – which consists of a horizontal plate in Augengneiss – in front of the pictures a 'palette' type wine-press is carved; its drainage hole is oriented in the direction of a natural cavity.<sup>86</sup>

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<sup>83</sup> This icon appears in the Site 38, but, apparently, in quite another context. It is interesting to note the persistence of this icon in different chronological phases.

<sup>84</sup> OLIVIERI/VIDALE ET AL. 2006: 79, fig. 3.; 126-28.

<sup>85</sup> OLIVIERI/VIDALE ET AL. 2006: 114.

<sup>86</sup> OLIVIERI/VIDALE ET AL. 2006: 93, fig. 30. The issue of wine-presses of Swat, their placement in a 'Kafir'-Dardic cultural context dated to Late Historic (ie *post*-5th century CE) was already discussed in several places (OLIVIERI 2006a; OLIVIERI/VIDALE ET AL. 2006: 142-46; OLIVIERI 2008: 19-21). For the association between wine-press and paintings in this Site see the Conclusions.

### Palwano-gata (Site 12)

Immediately below the natural arch where the paintings are located, an engraving depicting a *stūpa* is found on the wall of a small niche at ground level. Various rock artifacts are located close to the shelter, including steps, basins and a large representation of a theriozoomorph, obtained by engraving a large eye at one end of an oblong boulder. The ruins of several building constructed with pseudo-isodomeric blocks of granitic gneiss<sup>87</sup> are located in the close vicinity; a similar masonry technique was documented in the remains of monastic settlements and *stūpas* to the S and E of Kafir-kot.

### Kafir-kot 1, 2 and Shamo (Sites 13, 14, 16)

The sites are located in the immediate vicinity of the large monastic settlement of Kafir-kot.<sup>88</sup>

### Marano-tangai (Site 15)

The ruins of the sacred area of Chuwa are located in front of the site (AMSV 351).<sup>89</sup>

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<sup>87</sup> This technique is typical of the late Buddhist monastic complex of the whole area of the outcrops of granite and Augengneiss until Ranigat, Swab, and beyond. OLIVIERI/VIDALE ET AL. 2006: 93, figs. 34-37; 115 (AMSV 380b); 148 (AMSV 432 and 433).

<sup>88</sup> Regarding the monastic settlement of Kafir-kot see the pages of A. Stein, where the site is briefly described under the place names of Nal (name of nearby village) and Giroban (upstream of Nal, towards SSE, close to Saffar-kandao; probably AMSV 432 and 433; see OLIVIERI/VIDALE ET AL. 2006) (STEIN 1930: 5-6, fig. 4). Today the remains of the above-Nal (what is called here - I think more accurately - Kafir-kot) are completely destroyed (for a state of ruins in the early 90s, see ABDUL NASIR KHAN ET AL. 1995: fig. 4). Sculptures from Kafir-kot now at the British Museum has been dated to the 1st-2nd century CE (see ref. in IBID.: 350). Based on comparisons with the masonry work, for example of Ranigat, the ruins of Kafir-kot and Giroban could be dated to a *post*-3rd century CE phase (for the chronology of Ranigat: ODANI 2000).

<sup>89</sup> OLIVIERI/VIDALE ET AL. 2006: 115.

### Talang (Site 18)

A large shelter was discovered at Talang accompanied by a concentration of various types of rock art. On the floor of the shelter there is a permutation of highly eroded cup-marks; on the top of the shelter, there are larger cup-marks and grooves; on two sides of the shelter faint traces of red color have been covered by carvings of warriors on horseback. On the larger of the two sides of the shelter, the carvings were subsequently partly obliterated by a large Brahmi-Sarada inscription.<sup>90</sup>

### Khaista-kamar (Site 46)

The paintings are partially overlapped with graffiti created with potsherds. For the large part it represents sinuous or broken lines. A presentation of a bovine with a solid body is distinguishable at the top right. It is probably recent graffiti linked to use of the shelter by Gujarī shepherds.

#### *Associations with cup-marks*

Cup-marks are physically associated with the following Sites: 03, 04, 18, 23, 43, 44, 46 and 49. In general cup-marks in Swat, but also in similar ecological context, like the Tanawal area and the Kumaon Himalaya, are associated to prominent landmark spots, like the top of mid-slope promontories or on important fords. In Central India cup-marks are often associated to rock sanctuaries as well (see below). Their presence on the top of the roof of the shelters (04, 18; see also PAYR 2012, Tanawal, Fundstelle 2), on their floor (18, 43, 46 and 49), in their immediate vicinity (03 and 04) is intriguing.

<sup>90</sup> OLIVIERI/VIDALE ET AL. 2006: 146, figs. 39-41; OLIVIERI/VIDALE ET AL. 2006: 146-47: fig. 86. The inscription, still untranslated, is dated to a *post*-7th century CE phase. The 2006 excavation (carried out by the present writer) revealed that at the time of attendance of the shelter, the rock jutted out on the bank of the Kotah river, which now lies several meters below. Sand sediment formed the riverbank, which was fordable at this point thanks to a series of boulders and steps carved onto the rock. Beside the ford, just below the shelter, has been documented a small graffito depicting a bull (and Śiva?). A similar carving was found few feet below.

Unfortunately, nothing sound can be said, despite the efforts made, on their meaning and function. In Central and Northern India cup-marks physically associated to painted shelters are often linked to local fertility credences. Of course, cup-marks and paintings must not be inevitably contemporary. In cases of single cup-marks inside painted shelters (Sites 43, 46 and 49) they might be cavities used for grinding or to dilute the pigment, like those discovered inside the painted shelters in Kumaon Himalaya. However, no traces of color have been recorded. As a general phenomenon, these artifacts in Swat have been attributed to a wide chronological range, between 5th-6th century BCE and 1st-3rd century CE.<sup>91</sup>

#### TOPOGRAPHIC ANALYSIS AND COMPARISONS<sup>92</sup>

Not all the sites selected for paintings from Swat-Malakand possess the same physical characteristics. The sites were differentiated in respect to several variables, including: difficulty of access and/or permanence; optical range, i.e. potential fruition; presence of material facilities, such as water and travel routes; physical dominance of the site (landmarks). The following groups were distinguished due to a prevalence of certain elements over others:<sup>93</sup>

- 1) Sites defined as 'sanctuaries' present a low degree of difficulty to access or to stay, a reduced optical range (< 3 m), but having a strong active/passive landmark

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<sup>91</sup> For a complete study of the cup-marks phenomenon in Swat, see OLIVIERI/VIDALE 2004 and OLIVIERI 2006a. For Kumaon Himalaya, see AGRAWAL/KHARAKWAL 1998, MATHPAL 1995.

<sup>92</sup> I refer, in particular, to the methodology proposed in LENSSSEN-ERZ 2004. For a comprehensive review of the studies on the rock art landscape setting, see CHIPPINDALE/NASH 2004. With regard to the persistence of landmarks such as large boulders as markers for the detection of Buddhist shrines, see Ranigat (ODANI 2000). A fundamental reappraisal of the concept of rock 'sanctuaries' and 'hermitages' as *grottes-matrices* can be found in a seminal study by R.A. Stein (STEIN 1988).

<sup>93</sup> Where a factor prevails does not mean that others are necessarily absent. Obviously, the evaluation of these factors/elements was totally subjective.

dominancy character. A small group (2-5 people) can gather in front of them. Their pictorial composition shows a majority of ideograms. In the two documented cases documented, the sites contained </> 20 figures. These shelters, which I define as sanctuaries, has only been detected in the valley of Kotah; Sites 03 and 04 are the pertinent examples.

2) Hermitages are extremely difficult to access and/or sojourn within; they also have an extremely reduced optical range (<1 m). They are housed in landmark rock outcrops, generally in a position of active visual dominancy, although they are hidden in cavities which normally contain less than 20 figures, mostly representatives ideograms. This group, with one exception, has been detected in the valley of Kotah; the pertinent Sites are 05, 06, 08, 19, 27 and 41.

3) There are sites that present some difficulty to access and/or to stay within; they also have a reduced optical range (< 3 m), and host < 20 figures (generally pictograms). At times they have the characteristics of a landmark (Site 1). They have been defined as 'deliberate painting places'. Examples of this group have been localized both in the valley of Kotah as well as on the S slopes of the Doplai-Saffar Range (Malakand); see Sites 01, 02, 14, 16, 21, 38, 39 e 40

4) Public painted places are sites having an optical range between 3 and > 5 m (which generally corresponds to vertical shelters or open-air walls). They may contain a variable number of figures, mostly pictograms. This group, which occupies the same area of distribution of the previous group, includes Sites 09, 10, 12, 13, 18, 20, 22, 26, 31, 37, 48 e 49.

5) Casual painting places are sub-divided in three sub-groups. From the localization point of view, the sub-groups are almost all located along the S slopes of the Doplai-Saffar Range (Malakand). The first sub-group includes sites that do not present particular problems to access and/or stay within; they generally have an optical range of > 3 m, are located in proximity to material facilities, but do not have landmark

status. They generally contain less than 10 figures. This sub-group (a) includes Sites 07, 11, 15, 23, 25, 30, 32, 33, 34, 35, 36, 44, 45 and 47.

The second sub-group (b) contains Sites, which are not particularly difficult to access and/or to stay within. The Sites have an optical range of  $> 3$  m, and they generally contain more than 20 figures, and have the characteristics of short-term living places, such as camp-sites or shepherds shelters. This sub-group is formed by Sites 17, 24, 46.

Finally, sub-group (c) deals with Sites frequented by virtue of their physical features: larger shelters containing a greater number of pictures, as is the case with Sites 28, 29, 42, 43 (these four sites contain few pictures; however, they are physically connected in pairs to sites 27 and 41 respectively, see above).

A series of comparisons must be made with the available data from neighboring areas. The documentation of the painted shelters of Khanpur-Shikaoli group and of the Parlaidab site (Karamar E) is insufficient, especially in relationship to the physical description of the shelters. The paintings from the same area but located in the N side of Mt. Karamar (Chargul) are certainly all pertaining to a system of cultic caves (see OLIVIERI 2013).

As far it concerns the Tanawal shelters, see PAYR 2012 for a comprehensive report. At least three sites can be considered as 'deliberate painting places'; in particular the Fundstelle 1 may be regarded as a 'public place' and the Fundstellen 2-4 were certainly used as 'hermitages'.

If we turn to a period which is possibly coeval to the latest rock paintings, the period of the late Buddhist schools, within the area of Swat and its neighboring territories we find interesting comparisons regarding the choice and the use for cultic and ritual purposes of physical places like 'sanctuaries', 'hermitages', and public places. The clearest example of a cave shrine in Swat is located at Tindodag (Ghalegai). This is a sanctuary grotto from the Turki Shahi period (7th century CE) in which Sūrya has a central role. The grotto's entrance, at the ground level, is indicated by a large rock-

relief of Buddha. This is one case where a 'public' element, almost as a symbol, accompanies the viewer to the hidden shrine.<sup>94</sup> As for the cave hermitages (with pictures), the Tangu site offers an important comparison (the cave is located in a hidden side of the mountain overlooking the Ambela pass between Buner and Swabi).<sup>95</sup> In addition to Tangu, one may also consider other Buddhist cave hermitages (unpainted), such as those documented in Kashmir-smast and at the other sites in Buner-Swabi and Amluk in Kandak.<sup>96</sup> The topographic setting of the Kandak hermitages at Amluk is absolutely identical to the painted shelter one.

Another important comparison could be done with the Kashmir-smast area, between Mardan and Buner, particularly with the sanctuaries of Gatano (with its large landmark rocks), Dulai-smast e Bare Ubah [Bar-ubo] with their painted and carved inscriptions.<sup>97</sup>

In regard to the public signalling role of boulders and rocks, the phenomenon of the Buddhist rock reliefs in Swat can be cited (*post*-7th century CE); the reliefs are always placed in proximity to the access to Buddhist sanctuaries. We may not forget the simple fact that everywhere (like in peninsular India) the Buddhist communities have transformed the earlier concept of 'sacred cave' or 'sacred rock' into architectural and sculptural *mirabilia*.<sup>98</sup>

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<sup>94</sup> FILIGENZI 2006. The presence of the temple is clearly mentioned in DEANE 1896; see also ANP 6.

<sup>95</sup> The site is called Patwano-gata in NASIM KHAN 2000, but its correct name is Tangu. The honor of the discovery should be ascribed to the Japanese Archaeological Mission in Pakistan (see review of NASIM KHAN 2000 in OLIVIERI 2002).

<sup>96</sup> For Ranigat, see MIZUNO 1962, but also FALK 2006a: figs. 5-7; NASIM KHAN 2006, 2009; for Amluk, see OLIVIERI/VIDALE ET AL. 2006; OLIVIERI 2010b. For a brief reappraisal of the Buddhist cave hermitages, (particularly how a cave is trasformed into a *vihara*) see SCHOPEN 1994a: 152. It seems unlikely that painted shelters, like ours, could have been used as hermitages by Buddhist monks or ascetics (at least in the NW of the Sub-Continent in the first centuries of the Common Era).

<sup>97</sup> NASIM KHAN 2006: 21, 25, 35, 87-91; figs. 35, 83.

<sup>98</sup> See BRANCACCIO 2010b.

Outside the NW of Pakistan, we may quote the persistence or continuity of a ritual meaning attributed, by popular Hinduism and local beliefs, to caves, rocks and isolated boulders in N India (in Kumaon Himalaya, Uttar Pradesh), in Central India (Madhya Pradesh), and other regions.<sup>99</sup>

The endless series of shelters paintings from India suffers from certain differences of documentation. Even though there are many outstanding exceptions, like Bhimbetka.<sup>100</sup> This site represents probably the most significant phenomenon of continuity from Mesolithic to post-Gupta time: the evidence of the emergency landscape was behind the swift decision by V.S. Wakankar to get off the train to discover those imposing rock towers in 1957.<sup>101</sup> In front of some of the painted caves cup-marks were until recent times poured with milk, and regarded as fertility symbols.<sup>102</sup> In the area of Pernem, near Goa, a large boulder with cup-marks houses in a natural cavity an oblong stone venerated as a divine image and marked with red pigments. The boulder is considered as a manifestation of a local goddess.<sup>103</sup> Many similar rock sanctuaries have been documented around Poone: amongst them "a considerable red-doubled boulder"

<sup>99</sup> In India the model of continuity, between past and present religiosity, in subaltern environments, has been well studied, first by D.D. Kosambi (KOSAMBI 1965). However, continuity doesn't mean necessarily a subaltern environments: three Aśokan sites, namely Sitamahri, Barabar and Nagarjuni hills, closely resemble the physical setting of our painted shelters, with their series of scattered, wild succession of granite boulders. The stepped pathway of Barabar caves B1 and B4 closely recalls the one documented at the Site 12 (OLIVIERI/VIDALE ET AL. 2006: fig. 35). These sites represent a good example of continuity, as pointed out by H. Falk: "There certainly were rock shelters used by ascetics of many creeds in the time before Aśoka, [...] As so in many other cases, his example was followed to some extent by later rulers" (FALK 2006a: 255). The rock-shelters are still "inhabited by ascetics of all sorts", as reads the caption of FALK 2006a: fig. 6. For the shelters of Kumaon Himalaya see MATHPAL 1995.

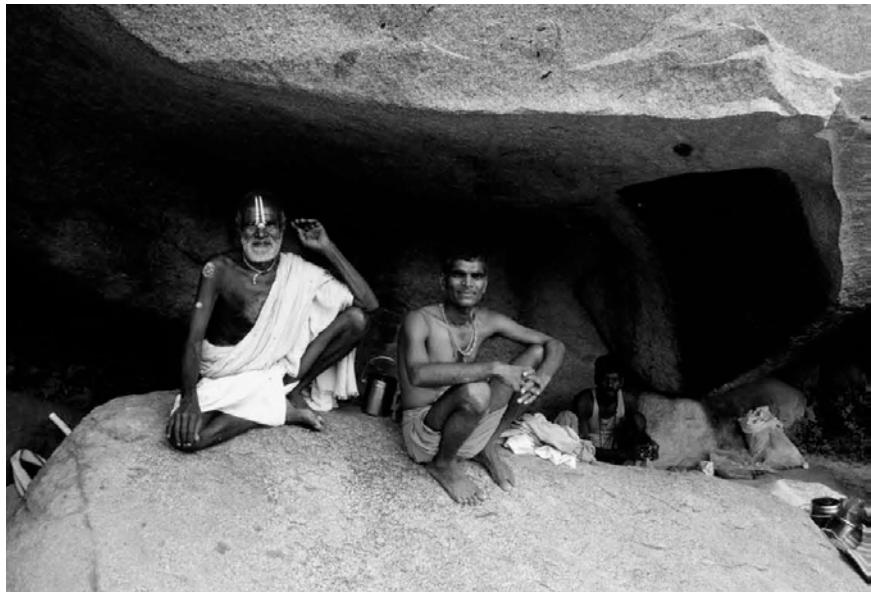
<sup>100</sup> I refer to the works appeared in *Purakala*, particularly MANUEL 2005, which examines some examples of locations to Bhimbetka (for the study of cup-marks, see KUMAR 2010).

<sup>101</sup> BEDNARICK 2005.

<sup>102</sup> See ref. in VIDALE/OLIVIERI 2004: 167.

<sup>103</sup> KOSAMBI 1965 (ed. 1987: 48-49, fig. 42).

representing a local god, who, once upon a time, rested on the spot; since then the place is believed preserving the memories of past semi-mythical pastoral migrations.<sup>104</sup> Amongst the many examples from Kumaon Himalaya, we may quote the case of the Tapakeshwar cave, near Dehradun, which, probably in post-Gupta times, was turned into a Śivaitic temple.



*Barabar site, a rock shelter.*

(After FALK 2006a: fig. 6)

Finally, you cannot fail to mention the use of rock shelters in related contexts of purification at the end of the season of summer pastures in the mountains in the culture

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<sup>104</sup> ID. 1975: 39-40.

of one of the Dardic tribes of Ladakh, the Brok-pa. These practices, well documented, show the importance of seclusion practices in a Dardic culture akin to that once-diffused also in Swat (see below, the Conclusions).<sup>105</sup> To these data should be briefly mentioned the vast number of shelters paintings from Central Asia, the Pamir and Altay. From memory I recall the number of shelters of Zarautsai (Zaraut-kamar) in Uzbekistan, and Dugat in Xinjiang, for which it is assumed a function ceremonial.<sup>106</sup> Some of these areas have a long history of attendance: for some paintings in the shelters Zaraut-kamar was proposed an interpretation that hypothesized their role in the ritual context of the recent Tajik ritual of the Nouruz.<sup>107</sup> The continuity in the sacralization of certain physical spaces in this case is not surprising, it is only one of several frequent cases.<sup>108</sup> The famous rock sanctuary/hermitage of Akbaur in Kazakhstan, by the peculiar *yurta* shape, has been interpreted a sacral object in itself and a ceremonial site where the role of painting in the physical context of the shelter was secondary, but this time based on a more thorough consideration of landscape setting.<sup>109</sup>



<sup>105</sup> See ref. in BENASSI/SCERRATO 2008.

<sup>106</sup> Respectively in KHUZHANAZAROV 1999 (11; s. also Id. 2001: 92) and WANG BINGHUA 2005.

<sup>107</sup> ROZWADOWSKI 2001.

<sup>108</sup> LYMER 2004. See also the last lines of the Conclusions, and fn. 147 (below).

<sup>109</sup> SAMASHEV 1993: 62-64.

### *Distribution chart of the major themes or groups of figures per site*

Map No.	Site	Horse. riders	Warriors	Hunt.	Anthr.	Body Modif.	Wild Animals	Livestock	Buddhist Architecture or Struct.	Geom. Patterns
24	Busus-smast									
25	Kwar-patai									
26	Thakht-gat									
27	Lal-kamar 1									
28	Lal-kamar 2									
29	Lala-kamar 3									
30	Bara Loe-banda									
31	Gweluno-ghar									
32	Banj-smast									
33	Lal-kamar-china 1									
34	Lal-kamar-china 2									
35	Lal-kamar-china 3									
36	Loe-banda									
37	Chowra-dab									
38	Dab 1									
39	Dab 2									
40	Dab 3									
41	Palangai 1									
42	Palangai 2									
43	Palangai 3									
44	Haji-smast-banda									
45	Saffar-kandao									
46	Khaista-kamar 1									
47	Khaista-kamar 2									
48	Drema-palangai									
49	Dwoqumbo-jai									

*Distribution chart according to the physical site features:*

*Site cells in dark gray indicate 'sanctuaries, those in light gray indicate 'hermitages'*

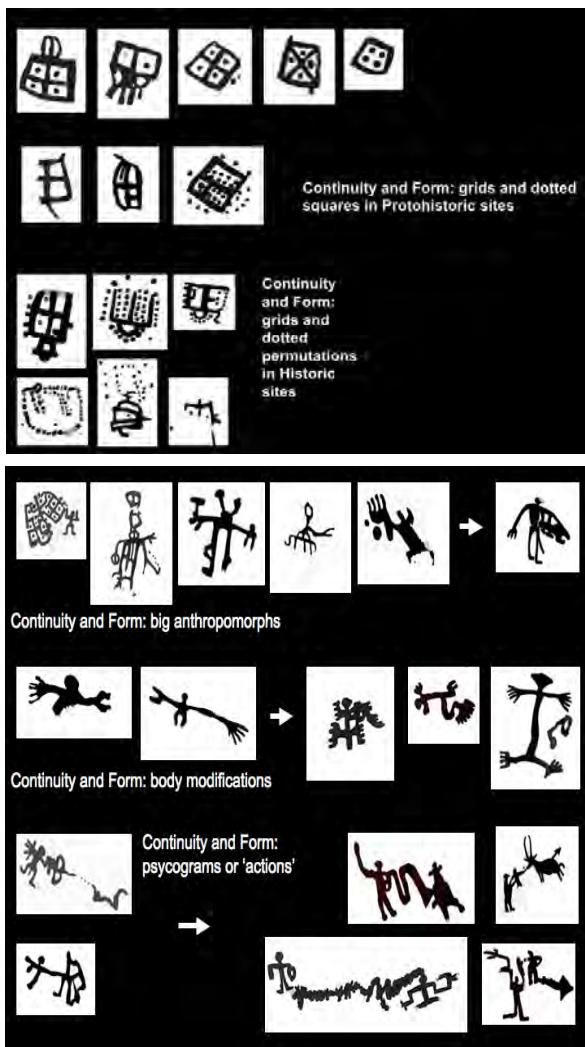
Map No.	Site	Shelter	Niche	Wall	Cave	Number of signs	Optical range (m)	Difficult access	Difficult set	Landmark	Pass	Spring
01	Dwolasmane -patai 1					<10	<1					
02	Dwolasmane -patai 2					<10	<1					
03	Kakai-kandao					>10	<3					
04	Sargah-sar					>20	<3					
05	Kamal-china					>20	<1					
06	Badze 1					<10	<1					
07	Badze 2						3					
08	Dandi-sar 1					>10	<1					
09	Dandi-sar 2					<10	3					
10	Malak-ziarat					<10	5					
11	Gwarejo-patai					<10	1					
12	Palwano-gata					>20	3					
13	Kafir-kot 1					>20	1					
14	Kafir-kot 2					<10	<1					
15	Marano-tangai					<10	3					
16	Shamo					<10	<1					
17	Hinduano-hatai					<10	<1					

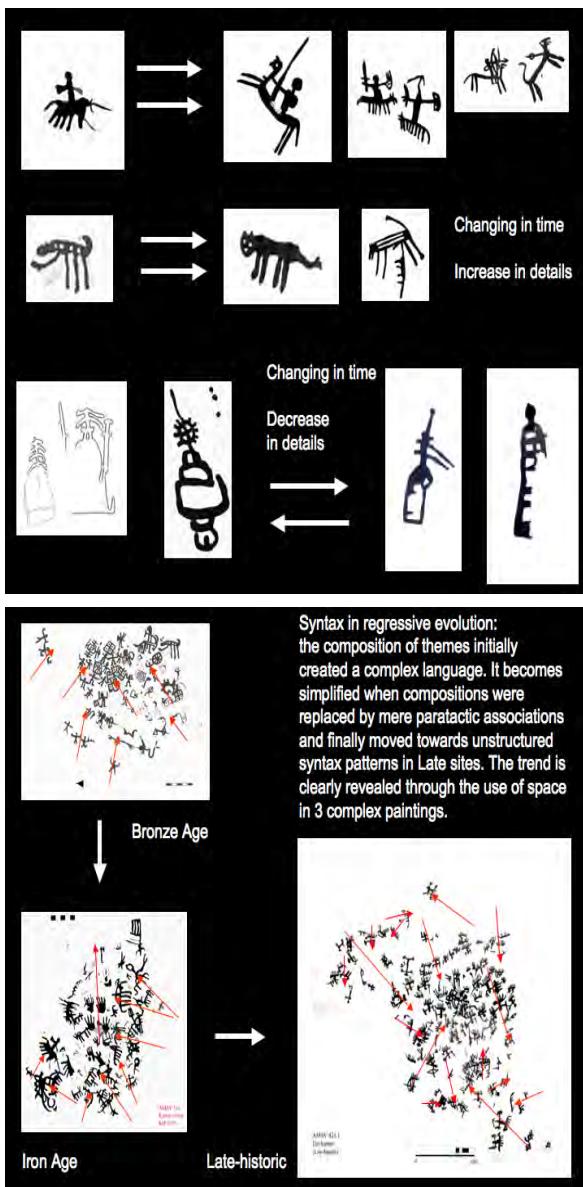
Map No.	Site	Shelter	Niche	Wall	Cave	Number of signs	Optical range (m)	Difficult access	Difficult set	Landmark	Pass	Spring
18	Talang						3					
19	Churkhai (Kabbal-dab)					>20	<1					
20	Ram-dunai 1					<10	3					
21	Ram-dunai 2						<1					
22	Ram-dunai 3						1					
23	Bacha-kot					<10	1					
24	Busus-smast					>20	3					
25	Kwar-patai					>10	<1					
26	Thakht-gat					<10	1					
27	Lal-kamar 1					>50	<1					
28	Lal-kamar 2					<10	>1					
29	Lala-kamar 3					<10	>1					
30	Bara Loe-banda					<10						
31	Gweluno-ghar					<10	5					
32	Banj-smast					<10	1					
33	Lal-kamar-china 1					<10	1					
34	Lal-kamar-china 2					<10	1					
35	Lal-kamar-china 3					<10	1					
36	Loe-banda					>10	<1					
37	Chowra-dab					<10	3					

Map No.	Site	Shelter	Niche	Wall	Cave	Number of signs	Optical range (m)	Difficult access	Difficult set	Landmark	Pass	Spring
38	Dab 1					<10	1					
39	Dab 2					<10	1					
40	Dab 3					<10	1					
41	Palangai 1					>10	<1					
42	Palangai 2					<10	<1					
43	Palangai 3					>10	1					
44	Haji-smast-banda					<10	1					
45	Saffar-kandao					>20	<1					
46	Khaista-kamar 1					<10	3					
47	Khaista-kamar 2					<10	<1					
48	Drema-palangai					>20	3					
49	Dwoqumbojai					>20	5					

*Lexical and syntactical continuity/discontinuity.*

(After OLIVIERI 2010: figs. 10-14)





## CONCLUSIONS

All these painted shelters display coherent features in terms of style, technique and physical setting. The majority of them are executed in simplified linear-style, with red-ochre pigment, and are housed in shallow gneiss shelters. Despite their coherency, major stylistic changes can be detected: from an early simplified linear-style similar to a late evolved linear-style showing a significant enrichment of details. Syntax and spatial organization progress from an early well-structured structure toward a less ordered one. Notwithstanding the paintings show a reduced capacity of osmosis toward the main Swat valley cultures, during relevant contact-phases a progressive enrichment, integration and/or mutation of the lexical heritage occurred.

One notes the use of a recurrent lexicon consisting mainly of specific ideograms, pictograms and psychograms. Earlier paintings feature the dominant presence of grid-like ideograms. Major iconic scenes are: (a) agricultural rituals, (b) cultic role of the ibex, (c) heroic figures/anthropomorphs in isolated position or dominant role with body-modifications, (d) hunting scenes and wild animals, (e) farming scenes. These categories can be traced to self-representations produced by the culture that produced the painted shelters. The first two categories are uncontaminated self-representations of their authors' ideology and they are never associated to lexical items attributable to elements of the main valley cultures. The latter three categories are also commingled with representations of alien icons, like warriors on horseback and representations of Buddhist architecture.

Despite their omogeneus physical setting, the painted shelters display a gradation of isolation and visibility. It has been possible to establish that some paintings are housed in rock-shelters which could be 'sanctuaries', others paintings in shelters defined as 'hermitages'. The major self-representative paintings are found in these two types of shelters in Kotah's central valley.

The rock-art phenomenon, in time, physically shifted from the middle valley of Kotah, toward the head of the valley, and then again, in a later phase, to the S slopes of the watershed that divides Swat from the plains of Mardan. This shifting was accompanied by a progressive de-ritualization of the shelter as a physical place, and it is contemporary to the progressive movement of the Buddhist communities towards areas of high altitude. Its peak falls in the second half of the 1st millennium CE.

If the most ancient paintings have been dated to a pre-(Buddhist) contact phase (end-2nd – mid-1st millennium BCE), then all other elements represent indicators of post-contact phases. The later contact phase occurs simultaneously with the diffusion of Brahmanistic forms in lower Swat, and can be roughly placed at approximately the 7th century CE.<sup>110</sup>

#### MARGINALITY AND ACCULTURATION: SPACE AND TIME

Therefore, it appears possible that, even if our paintings do not properly represent a 'culture' in itself (a 'Painted Shelters Culture'), they none-the-less represent a coherent widespread phenomenon in time. It is found to be parallel to or to fall within a chronological arc characterized by a series of cultural macro-phenomena, all of which have been archeologically documented: (a) the existence of the of small agricultural settlements and centers of exchange, which relate culturally to a period contemporary to the Late Harappan phase (Localization Era; Ghalegai Period IV c. 2nd millennium BCE); (b) the so-called 'Gandhara Grave Culture' (henceforth: the 'graveyards'; end-2nd millennium BCE - mid-1st millennium BCE); (c) the progressive intrusion of Buddhism with its cultic foundations, from 3rd century BCE, that reached its peak, both in quantitative terms and spatial distribution from the 1st to the 3rd-4th century

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<sup>110</sup> This Conclusions were partly anticipated in an article published in 2011 (OLIVIERI 2011).

CE;<sup>111</sup> (d) urban settlements created and linked to the same local power system described above (end-2nd century BCE - 4th century CE);<sup>112</sup> (e) the foundation of Brahmanic temples under the Turki Shahi and Hindu Shahi (7th century-10th CE).<sup>113</sup> All these macro-phenomena had an evident and recognizable impact on the social history of the antiquity of the Swat valley and represent phases of acculturation. Acculturation phases interspersed with phases of cultural marginality (or the late persistence of earlier cultural forms), which may however coexist with the former in remote areas of Swat.<sup>114</sup>

The major components of the macro-phenomenon (d) (see above) were the foundations of urban centers (initially fortified, then at least at Barikot, from 2nd century CE, demilitarized), the diffusion of organized forms of social interactions (currency and writing as well, Indian and foreign, e.g. Greek), and intensive agriculture. The

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<sup>111</sup> This progress locally occurred under the patronage linked to the power of various foreign dynasties, first the Sakas, the Parthians, then the Kushans and finally the Kushano-Sasanians. In a later period, after the 4th century CE, the distribution of the active Buddhist foundation narrows progressively, principally in the valley off the left bank, to the N of Barikot (OLIVIERI, VIDALE ET AL. 2006; OLIVIERI 2010b).

<sup>112</sup> The most important settlements are the well-known sites of Barikot, Udegram and Mingora/Barama I; see ref. in OLIVIERI 2006b; see also ACTREP MEM II.

<sup>113</sup> The cultic centers remained in use through the arrival of Islam in the 11th century with the Ghaznavids, and connected to system of organized power, first under the Turki Shahi rulers, then under the dynasty of Hindu Shahi (OLIVIERI/VIDALE ET AL. 2006; FILIGENZI 2006; Id. 2010; OLIVIERI 2010b). The Hindu Shahi phase is characterized by a system of fortifications that covered the N ridges (right bank) of the Swat River as far in Dir and Buner (ISIAOREP MEM VI).

<sup>114</sup> TUSA 1979. On the question see also RATNAGAR 1998: 39. Compare these five macro-phenomena to the four 'Tidal Waves of Indian History' described in FALK 2006b. These are the four major historical phases into which "The time from the Mauryas to the Guptas can be broadly divided [...]" The macro-phenomenon (c) can be compared to the first phase ('Mauryas proper'), (c) and (d) to the third phases ('intruding Westerns'); the macro-phenomenon (e) can be compared to the fourth phase ('Indian resurrection') (*ibid.*: 145). See also the 'four periods' described in WITZEL 2006 (470-474).

progressive religious dominancy of Buddhism is closely linked to the evolution of the urbanization phase.<sup>115</sup>

The painted shelters retain very few iconographic traces of these macro-phenomena, mainly the icons of horses and felines, the Buddhist architecture, and, icons of the Brahmanism in late antiquity. It is therefore evident that the painted shelters are an expression of communities, which were, in various degrees, peripheral or subordinate to those macro-phenomena; however gradually segregated to the remote living space. Their ecological space available coincides with the economic areas dedicated to hunting and gathering, pastoralism/sheep-farming, and subsistence farming: in fewer words, with the wild.

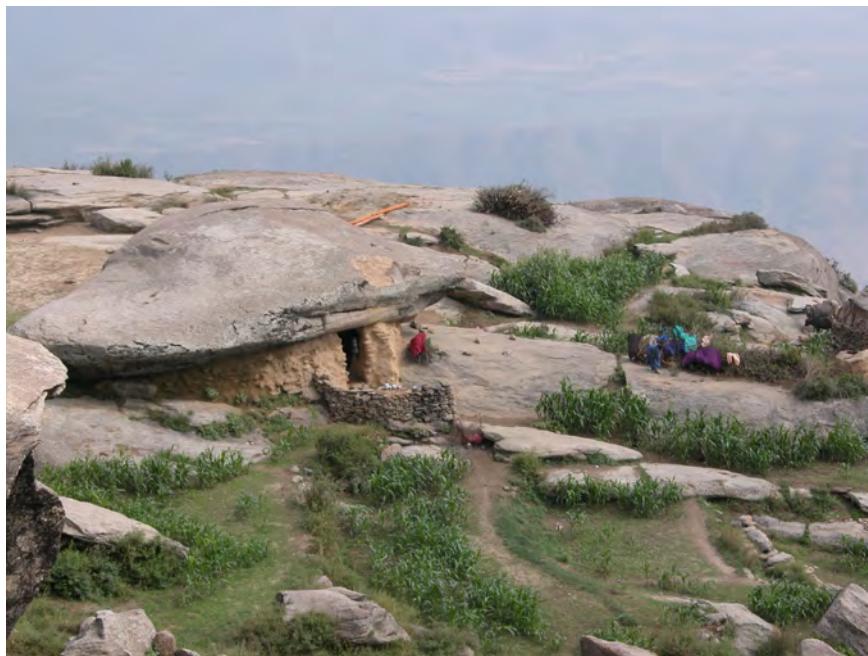
This situation, *mutatis mutandis*, is similar to that present in Swat until the 80s. The most privileged agricultural lands are those owned by ethnic Yusufzai landlords (*khans*). The right of possession is legitimated by the 16th century Yusufzai military conquest, and the permanent distribution of the lands amongst the khans during the Miangul rule in the first half of the last century (Yusufzai State of Swat). Khans and the affiliated farmers live mainly in the main valley, as they have means of communication and mobility; they speak Pashto and have access to the principal market towns (in the study area the center of Barikot). The off-center lands (i.e. mountain meadows and conifer forests), are a valuable common pool resources and patrimony of the khans.

The off-center lands are inhabited by semi-nomadic communities, tenants and clients of the khans: Gujars (semi-sedentary) and Ajars (semi-nomadic). These communities have been in the area for several centuries and have come and gone during their various phases of displacement from Kashmir and Punjab. Without doubt their

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<sup>115</sup> OLIVIERI 1996, 2007. A brief *résumé* on the currency systems in ancient India is in FALK 2006b: 153-154. Regarding the role of writing between urban centers and Buddhist communities in peninsular India, see RAY 2004.

presence (e.g. in the study area) is associated to conditions of economic stability and safety.<sup>116</sup>



*Gujari shelter (banda) in the S slopes of the study area.*

The Gujars live in small groups affiliated by kinship in hamlets isolated from each other; the villages consist of one to five houses (*bandai*), which are single-unit dwellings with adjoining stables, or rock shelters that have been closed or enlarged utilizing walls in stone or clay. Traditionally Gujars are tied to the khans by a

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<sup>116</sup> For instance in the period following the formation of the Yusufzai State of Swat (1917); see the description by M.A. Stein of the Gujarati settlements in Swat (STEIN 1930: 72).

relationships characterized by patronage and corvées, from which rises their freedom to utilize the land in exchange for services, among other things the sale of bush products (such as timber, fruit, and berries – wild grapes as well as medicinal herbs), of milk (and butter) and lamb, wild honey, etc.<sup>117</sup>

Returning to our paintings, we cannot easily imagine what the relationship was between the community of the painted shelters and, say, the people who settled in Barikot and other centers, who traded or produced valuable painted pottery and cultivated rice, barley and wheat in the fertile soils of the main valley throughout the Bronze age. We do not know if these groups were akin to the communities of the rock painters. In any case, the two groups have apparently shared some of the icons painted both on the black-on-red pottery of the plain, and on the rock of the mountains (felines, horses, anthropomorphs, i.e. representations that may arise from the same religious context).

There are only few elements of cultural contiguity between our earliest paintings and the culture of the graveyards. Vice versa one may suggests that the two phenomena coexisted and that the rock painters became accustomed to typical of the second one (horses and battle-axes). The presence of small graveyards in remote areas could be explained by an attempted intrusion, the temporary occupation of grazing areas, such as during the summer season, carried out by small groups associated with the communities of the main valley, or as an expression of the process of acculturation to the new burial customs on the part of small groups.<sup>118</sup> In both cases, this could explain the reduced size of the mountain areas graveyards (in Kandak), as well as the

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<sup>117</sup> On the relationship between the different part of the present-day Swat society see BARTH 1956 and 1959; see also INAM-UR-RAHIM/VIARO 2002 (104 ff.); on the modern history of Swat, see SULTAN-I-ROME 2008.

<sup>118</sup> OLIVIERI/VIDALE ET AL. 2006: 121-22. According to TUSA 1979 (690), the passage from Ghalegai Period IV to Period V was slow and progressive, and it did not imply the obliteration of the earlier cultural forms.

simplicity of the cysts, sometimes of a megalithic character, as well as the scarcity of the burial assemblage.<sup>119</sup>

This complex relationship can be explained if we return to the more solid ground of the long period of contact between the painters' communities and the Buddhist communities. We may infer that the first group was not composed of Buddhists, from the fact that representations referring to the world of Buddhism are depicted solely through the use of the architecture of buildings, while the icons of the cult, or representations of the Buddha and Bodhisattvas, are completely absent from the graphic repertoire of the paintings. In their language, architecture represents an exterior representation, we would call it documentary, as it refers to physical evidence; their inner purpose, their psychological meaning is not at first clear. It could be something more than a mere description (see below). However, we never find representations of Buddhist architecture in contexts defined as sanctuaries or hermitages, but only in minor shelters. Moreover: in general, one may have the impression that the painted sites correspond to the only available free areas left by the spatial expansion of the Buddhist communities. In some cases the paintings are located just on the outskirts of the area occupied by a Buddhist foundation. This marginalization (*reductio ad silvam*) occurred, other than in Swat, also in Swabi and Manshera Districts.

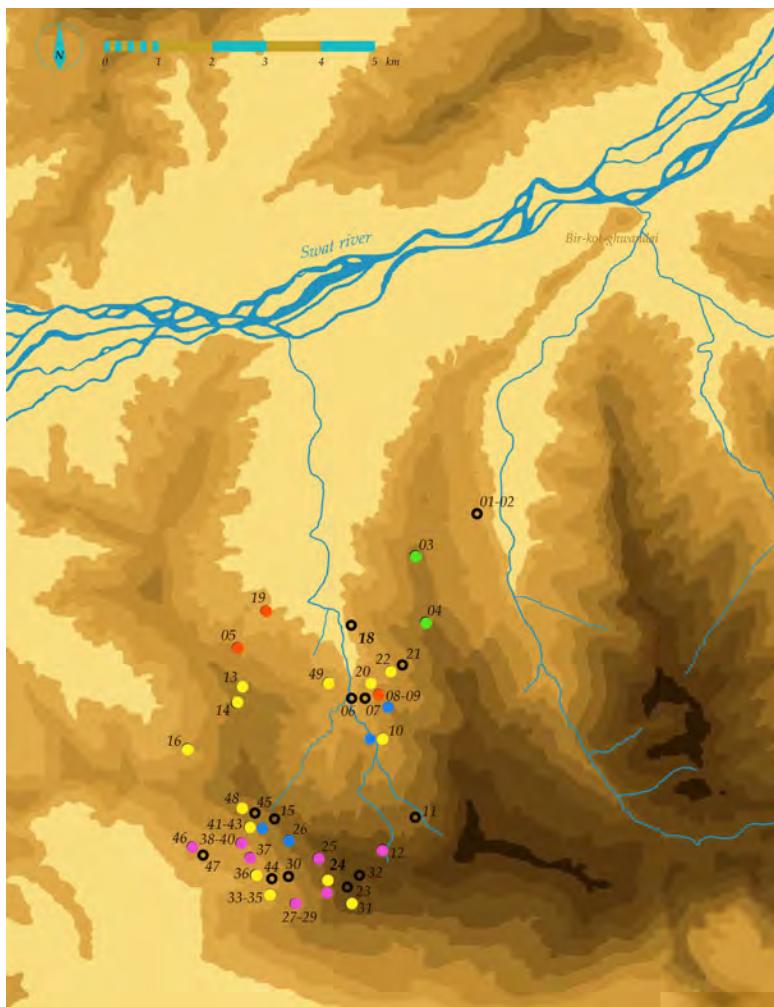
It is evident that at a later moment the Buddhist communities intruded into the ecological space of the painted shelters' people, following a process of acquisition of visual and vital space, which at this point included mountain tracks and passes, water springs and reservoirs, summer pastures, meadows and forests.

It is possible that this phase of contact, not unlike other stages defined in rock-art as 'post-contact phases', has had some form of conflict.<sup>120</sup>

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<sup>119</sup> Megalithic cysts have been found in the graveyard of Adina, Swabi, in Buner and in Dir, and always in remote or secluded areas; see OLIVIERI 1998.

<sup>120</sup> OLIVIERI/VIDALE ET AL. 2006: 133-4.



*Distribution Map (1):*

*Green: Agriculturalist icons; Red: Protohistoric horsemanship icons; Yellow: Buddhist Architectures; Blue: Brahmanical symbols; Violet: Pastoralist icons.*

At this point, the competition for the control of the most favorite mountain areas, between the Buddhist communities and the 'natives', was over.<sup>121</sup>

Later, when we can assume that the mountain communities welcomed elements of Brahmanism (due to a common religious substratum?), the paintings were already shifted towards S, outside the valley of Kotah, in the barren terrains of SE Malakand.

#### ABOUT THE EXISTENCE OF A TRIBAL BELT

It is clear that the painted shelters' phenomenon refers to something that might be synthesized in a non-scientific language as 'tribal'. Therefore, we should briefly discuss the presence, extension and role of a 'tribal belt' in these areas of ancient Swat.<sup>122</sup>

The existence of ancient Indian tribes of the NW has become known through Greek sources.<sup>123</sup> Typically in these there is no clear differentiation between tribes organized as chiefdoms and those organized in groups/bands or clan. With regard to ancient Swat, this is true with the exception of the Assakenoi (identifiable in the area between Mingora and Barikot in the 4th century BCE), whose social structure recalls more a chiefdom rather than a real monarchy.<sup>124</sup>

The perception of the 'others' offered by early Sanskrit Indian sources is more detailed, even if their anthropology is clearly confined to the two categories of 'civilization' and 'non-civilization': the civilians are also those people who live in cities or that contribute to their livelihood (farmers and shepherds); but in general, they are the people whose role falls within the order of the ritual and its hierarchy or *dharma*. The *dasyu* people

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<sup>121</sup> The most favorite economic areas were (and still are) those facing the Swat river.

<sup>122</sup> In current Indian archaeology there is a very interesting trend, which recently introduced the concept of 'Indigenous Archaeology' or better 'Archaeology of the Subalterns', according to the brilliant definition molded by PRATAP 2009. See also RATNAGAR 2004.

<sup>123</sup> See Megasthenes, Frg. LVI A.

<sup>124</sup> OLIVIERI 1996.

(non-civilians) are regarded as degraded because of the oversight or neglect of the correct rites and eugenic prescriptions: as in the case of the 'fallen/decayed *ksatriyas*' described by Pāṇini (who, by the way, was born in Gandhara), i.e. the mountain people of NW India, such as Darada and Kamboja.<sup>125</sup> In literature, the land inhabited by these people is called *mleccha-deśa*, but this, more than the forest or the mountains, is the land of foreigners or degraded people. In *Manu*, X, 45-56, one sees how the lowest anthropological category is not expressed as relating to peoples or nations (only the groups referred to a *varṇa* have a name), but human types. These were apparently coined due to the perception of the inhabitants of the wild, as sub-human symbols of being: the 'terrible', the 'tribal', or 'wild rooster/grouse' (living in mounds, trees, mountains, and woods), or the 'wild', the 'cooker of dogs' (living outside the village). In general, Brahamic India lacks a true anthropology of the 'others' unless they in some way have a role in the national and religious epic. Therefore, they are likely to search in vain for possible literary traces of the communities as elusive as ours, unless they are among those recognized or until they play a somehow recognizable role: like during the Buddhist contact-phase.

In the Buddhist literature, one finds a new approach based on three factors. First, the *mleccha-deśa* was going to be the land of expansion of Buddhism (as it was of the

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<sup>125</sup> TUCCI 1977: 37-38; see also ERDOSY 1989. For the role of the 'blood' in the aristocratic genealogy, amongst local and foreign dynasties, in historic India, see FALK 2006b: 147-153. A digression: one may not notice the curious coincidence between the early list of the 'decayed *ksatriyas*' and the British list of the 'martial races', a concept introduced in the military rules of British India. By the way the Kamboja[s] are mentioned in both lists. An interesting list of of people degraded to the lowest rank is provided in *Manu*, X, 44; among these are the Kamboja, the Yavana, the *kirata* (or 'mountain people') and the *darada*, a term that has been translated as 'people of the cliffs' (i.e. the Darada of Panini). The role of the border people or *mlecchas* in early Sanskrit texts (*Manu* and *Arthaśāstra*, amongst the others) has been recently analyzed (WITZEL 2006: 482-486).

Mauryan Empire) especially towards NW India.<sup>126</sup> Secondly, in doctrinal terms, Buddhism attaches less importance to the eugenic issue, than the ethical one, since the decadence is reversible. Lastly, it should be noted that Buddhism was involved with the acquisition of power by the *mleccha* dynasties, Sakas, Parthians, and Kushans in the ancient NW India.<sup>127</sup> These three issues largely explain the reasons for the new Buddhist approach to the problem of the tribes and specifically and also specifically explains why the Buddhist communities, as we shall see, tended, if not to integrate, to symbiotically interact with mountain tribes in our area of interest.

That said, Buddhism continued moving in the line of the tradition, and to search for traces of these 'others' it is necessary to look within the characterization and portrayal of genre. The 'other' is taken as a symbol, and the man of the tribe becomes character in the tales, a type of *homo selvaticus* or *Wilde Mann*, who is both the protagonist of a story and symbol of an ethical category.<sup>128</sup>

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<sup>126</sup> In the Maurya era, in *Arthaśāstra* one finds a first form of recognition other than the *mlecchas*, the people which speak different languages and the people deprived of rank, of the *aranyakāraḥ*, the populations of the forests, towards them it was said to be useful to follow a paternalistic policy; the same recognition and the same approach was seen, obviously in Aśoka. This is explained both by the tradition and the political necessities of an empire, and with greater elasticity of the Buddhist approach. For the references, see fn. 56 and fn. 57 in THAPAR 1971.

<sup>127</sup> THAPAR 1971: 418-19.

<sup>128</sup> A good example, among the few, is the story of Aṅgulimāla and the 'The Taming of the Forest' (BRANCACCIO 1999). Aṅgulimāla represents an anthropological category that becomes part of a mythical story of conversion, linked on one side to the events of previous lives of Aṅgulimāla, and on the other to the critic of the false asceticism. Also here the 'other' is assimilated to recognizable categories and, in this way, eventually tamed. This story has been rightly viewed as "as one of the few instances where members of jungle tribes are incorporated in the Buddhistic milieu", and put in connection with the ancient NW India, for it is common in the Gandharan representations (by the way, Aṅgulimāla himself is said to be a native of Taxila). In general for the role of the subalterns in ancient India, see the seminal THAPAR 1971.

### *Substincence and Role of the Tribal Belt*

What can we say regarding the spatial expansion of the Buddhist foundations in Swat and especially in the area of Barikot? Since the beginning of our era, and for approximately four centuries, the archaeological data display a building boom, with more than 100 sacred areas identified within about 100 sq km.<sup>129</sup>

As mentioned, the Buddhist territorial expansion was not uniquely related to the individual appearance of buildings, but to the acquisition of agricultural land and to its control, exploitation and irrigation, by means of canals, pits, dams, etc. The many ruined evidence of these infrastructures prove that the Buddhist communities had an elaborated control of the territory, which included also mountain passes, springs, pastures, and forests and their products.<sup>130</sup>

Certainly between the 2nd century BCE and the 4th century CE, the territories in question were under the political control of local aristocrats (e.g. the Houses of Odi and Apraca). These should be the original legal owners of the lands acquired over the time (by way of donations or transactions) by the Buddhist community. Once the land became part of the monastic properties, we must expect that the monasteries managed the properties and were active in their economic improvement (OLIVIERI/VIDALE ET AL. 2006).

An interesting post-2nd century CE inscription from Malakand shows that also hydraulic/irrigation infrastructures could become part of the system of donations and

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<sup>129</sup> Amongst the entries of the Sites List published in OLIVIERI/VIDALE ET AL. 2006: 98-115, only 24 are the sites labelled as 'Settlements'.

<sup>130</sup> There are examples of spring management in the study area, e.g. the spring of Gumbat, Kandak, that displays two tanks, one – probably protohistoric - carved onto a small flat granite boulder, the second one in masonry work (1st-4th CE) (OLIVIERI/VIDALE 2004: figs. 18, OLIVIERI/VIDALE ET AL. 2006: 131-135, figs. 54).

liberality towards Buddhist community.<sup>131</sup> This fact fits perfectly with the picture suggested by the conclusion of the AMSV work in the Barikot area of Swat in 2006.<sup>132</sup> According to this model the Buddhist territorial expansion not only must have eroded the living space of mountain communities, but must have also forced them to a certain extent to be involved in agricultural work, and other related activities. Even if it resulted in their conversion, it is not possible to know, as there is no evidence. We believe that we can say that Buddhism, inasmuch as it had a popular character, did not have universalist ambitions: at least in contexts such as these, its main target would have been to have on its side the political elites, the local landed aristocracy, merchants and craftsmen: in other words, the residents of the cities (the civilized world). But if even in the cities, as the evidence at Barikot shows, forms of popular religion persisted, we can imagine that the communities of mountains or forests, although involved in the activities of the monasteries, were not converted.<sup>133</sup>

In this sense, the evidence offered by the painted shelters in our area is extremely interesting. In general, all the representations of Buddhist architecture appear, as mentioned, to represent something alien, something 'other' than the world of the authors of the paintings. Therefore, the presence of these representations of Buddhist architecture, although not absolutely indicative of a conversion to Buddhist, may indicate rather a situation of coexistence, certainly subordinate, and apparently, positively oriented. The presence of Buddhist architecture in the paintings' lexicon could be explained by the fact that, despite the loss of the vital space of the mountain

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<sup>131</sup> FALK 2003: 79-80. About the donations of *vihara* and monastic building in site of Kashmir-smast, see ID. 2008. The water and land management in the Sanchi area is now well known thanks to seminal work carried out by Julia Shaw (e.g. SHAW 2000, 2001); for the relationship between Buddhist communities, agriculture and land ownership in ancient India, see also RAY 2004, FOGELIN 2004, and their references.

<sup>132</sup> OLIVIERI/VIDALE ET AL. 2006: 131-35.

<sup>133</sup> On the coexistence of different religious creeds even within areas dominated by Buddhist communities in ancient India, see RAY 2008: 248-250, with ref. On the recent discovery of icons of non-Buddhist local deities at Barikot see ACTREPMEM II.

communities, these were partly integrated at the borders of the monastic life, perhaps through the performance of semi-servile corvées, i.e. procuring goods necessary for the monastic – not necessarily autarkic - economy (timber, fruit, honey, etc). In short, the mountain community may have found in the Buddhist community a natural market, for the skills and products of their natural world. Their activities could be regarded as analogous to those practiced today by Gujars.<sup>134</sup> Amongst these activities, we can consider also the extraction of quartzite stones used as a flint (today called *bakrai*), and the production of oil for the miriads of lamps found by the archaeologists in the Buddhist monasteries and coeval settlements.<sup>135</sup>

According to this model the presence of the Buddhist architecture may be explained as they were perceived by the mountain communities as related to their welfare, and as such - like a beneficent spirit – are to be recognized through their reproduction in the painted shelters. In this sense, it might also be possible that for the painters' communities, the image of the Buddhist architecture have been credited with being endowed with a sort of spiritual power.<sup>136</sup>

The presence of semi-forced labor related to the activities of the monasteries is well known. Perhaps less known is the network of collateral activities that could be

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<sup>134</sup> A similar relationship between the Buddhist monasteries and the tribes (Dards) is recorded until modern times in Ladakh (Zanskar).

<sup>135</sup> One may record also the cultivation of mustard plants, typical in Swat at this altitude, from which in the recent past oil was extracted for lighting and cooking. It is possible that the also fuel for the monastic lamps, used also for ritual purposes, was extracted from mustard seeds (cultivated in the Sub-Continent since protohistoric times) or obtained from butter. On the economy of a Kohistani village see ALFORD ANDREWS 2000.

<sup>136</sup> A paragraph of OLIVIERI 2008 read: "[In post-contact rock art production] 'alien' pictograms such as auto vehicles, firearms, European soldiers and ships are frequent. Leaving aside the issue of chronology, chariots and mounted warriors [*and Buddhist architecture*] in Swat may also be interpreted as indicators of a cultural disparity rather than signs of acculturation. Ultimately, they might represent a kind of psychological response of the rural communities facing fast transformations affecting the most privileged areas of their territory" (23). See also OLIVIERI/VIDALE ET AL. 2006: 134 and fig. 79.

associated with this people in the countryside, just as agricultural work, maintenance of the water infrastructures, mountain passes and springs, and various other corvées or duties related to the forest activities.<sup>137</sup>

One of these activities could be the harvest of wild grapes and their crushing or pressing. Interesting data regards the documentation of 20 infrastructures for pressing grapes found in areas of high altitude in the valleys of Kandak and Kotah. These infrastructures, if considered contemporary, could have produced up to 6-8.000 hl of wine per year.<sup>138</sup> The majority of these presses are concentrated in an area of approximately 50 hectares. There are two types of structures are well known in the 'Kafir'-Dardic environment, where the production of wine was, and still is, common and ritualized.

A very important fact concerns the discovery of one of these wine-presses inside a shelter at the base of the wall that houses a painting (Site 11) It is therefore possible that the community (or tribe), which produced these paintings, also picked the grapes and squeezed them to produce the wine. But who were to be the recipients of the production? Was the wine produced only for use within the community or was it also

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<sup>137</sup> About the presence of forced labor in the Buddhist monasteries, see SCHOPEN 1994b.

Several ancient axe-sharpener stations, have been found in Kandak and Kotah valley (e.g. OLIVIERI 2006a: figs. 21, 22; OLIVIERI/VIDALE 2004: fig. 35; OLIVIERI/VIDALE ET AL. 2006: fig. 27).

Our recent survey of the Tanawal painted shelters has revealed in two sites a new interesting element: pictograms depicting a tree (a pine-tree for its shape). In one site, these kind of pictograms are always represented inverted, while some of the human figures are depicted holding an axe. These pictograms are always associated to representations of Buddhist architecture. It is evident that we are in front of representation of forest cut and timber activity: the cut pine-trees, were probably the highly valuable *cedrus deodara*. Their repetition might be interpreted as iconic scenes. Therefore, it is possible that timber was a relevant economic activity for the communities of Upper Manshera in Buddhist times (PAYR 2012).

<sup>138</sup> See OLIVIERI/VIDALE ET AL. 2006: 142-46. A palette-type infrastructure was found at the same altitude in the Jambil valley, while other tank-like infrastructures have been documented in the upper Saidu valley (ibid.: figs. 42, 43, 83).

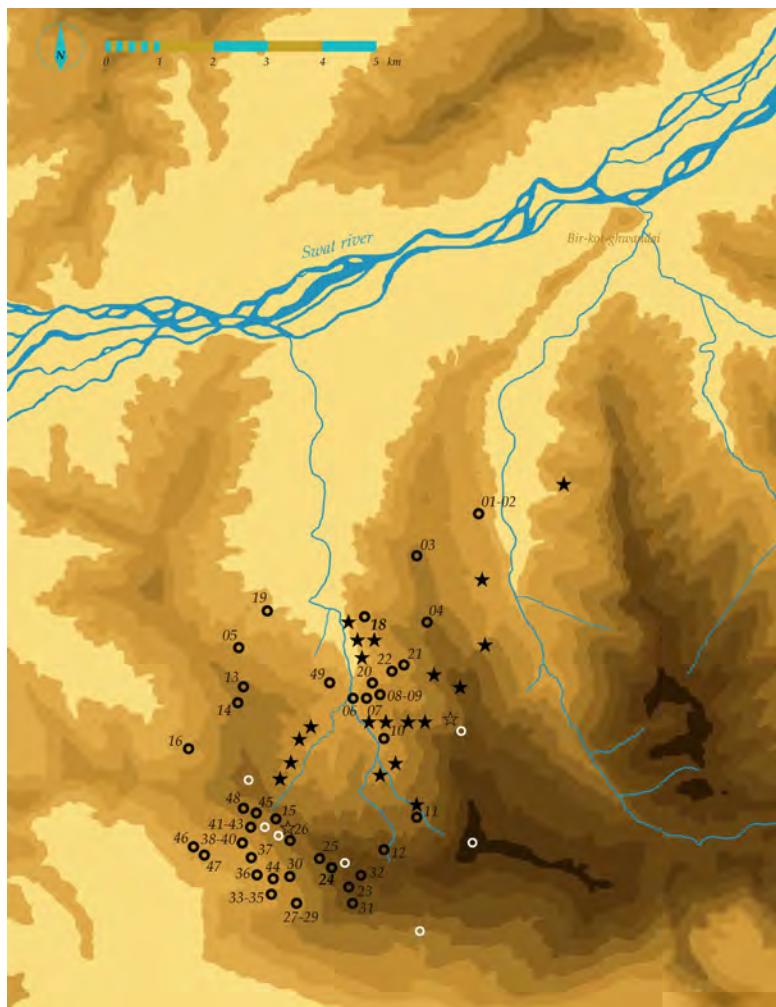
sold? One fact deserves to be noted: similar tanks, except for the presence of the exit hole, have been documented within or near the Buddhist complexes in this area.<sup>139</sup> The latter might have been used as vats for fermentation of the grape juice, similarly to the rougher vat structures documented in 'Kafir'-Dardic environment.<sup>140</sup>

If that is confirmed by further analysis, it does mean that the possible final recipients of the wine production were (also) the monastic communities (see the recent FALK 2009). This finding would seem to indicate that the grape harvest took place in the mountains, where the grapevines probably grew, semi-wild, as they still grow today, along with holly oaks and other local species. The grapes could have been pressed inside the cultivation/harvest areas and the juice transported to the Buddhist foundations, where the fermentation took place in complex work-stations. These were composed of a multiple series of tanks, or surfaces with tanks posts utilized to set-up tripods to suspend sieves. What is quite interesting is that the spatial range of the wine-presses corresponds approximately to the area of the painted shelters contemporary to the Buddhist presence, while they are not found to the S, in the Mardan watershed, where later pictures prevail. If this point is correct, we therefore may hypothesize that wine production, as an economic activity, was concentrated essentially during a precise historical period, i.e. those corresponding to the golden age of Buddhism in Swat.

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<sup>139</sup> Photographic documentation is available in OLIVIERI/VIDALE 2004: 156-57, figs. 23, 32 ; OLIVIERI 2006a: 148-49, figs. 18, 19, 20. OLIVIERI/VIDALE ET AL. 2006: fig. 11. Other tanks have been found in a similar ecological context at Ranigat, well-known Buddhist site on the mountains between Buner and Swabi. Ranigat has a lot of elements in common with Amluk: the pseudo-isodomic granite blocks masonry technique, the presence of tanks and excavated basins, rock hermitages and cells.

<sup>140</sup> EDELBURG 1965: fig. 3.



*Distribution Map (2): ★: wine-presses; ☆: vats; white ○: high-mountain Buddhist site.*

## WHO WERE THE PAINTERS OF THE PAINTED SHELTERS?

The cultural features of the painted shelters of Swat-Malakand as outlined in the previous pages, do not fall specifically into any of the descriptions of the people of the mountains, to the 'inhabitants of the cliffs', the caste of 'decayed' warriors, and so on. The painted shelters' features and lexicon speak of hierarchically structured tribal communities, living in an ecologically undisturbed area. Their rituals are expressed mostly through the worship of agriculture, and possibly the cult of the ibex; the production of wine had some ritual character too. It appears that the first two activities are represented in a highly representative context, i.e. within two shelters defined as 'sanctuaries'. These activities were carried out by an upper rank individuals ('U-like' individuals = priests?). Relevant or recurrent local deities have not been identified: the representation of the anthropomorph in a cultivated field and the binomial leopard-ibex appear only once, but again in a highly representative context, in a sanctuary-type shelter. However, dominant anthropomorphs are recurrent. Self-representative symbols, such as axes or handprints, are only seen once, but also in this case, in a particularly significant context. The community is for the most part permanent, and carries out a series of recurrent tasks which are of great importance for the social life in this mountainous area. The community participates in agricultural activities (subsistence), hunting, and harvesting (grapes). It is a non-literate society, which nevertheless possesses a significant mythopoetic patrimony. The community also has a strong sense of rock landscape symbolism and psychic dynamics, the latter revealed not only through the use of color (red), but also by the presence of psychograms. It is not inconceivable that the community's religiosity was characterized by forms of shamanic or magical asceticism, as suggested by the presence of a dominant anthropomorph and the diffusion of body modification representations. In these religious formats, the role represented by rock shelters as a place of isolation at particular moments assumes a significant role, and the painting is an expression of

such moments. Finally, it appears that the painted shelters were visited several times and the paintings altered, possibly on the occasion of holidays or seasonal celebrations. It is assumed that this community engaged in a funerary cult which left no evident taphonomic traces.

In a nutshell, the fundamental cultural aspects of the painted shelters in Malakand-Swat are the following:

- 1) agricultural rites;<sup>141</sup>
- 2) production of grape wort for wine production;
- 3) ibex sacrifice/ritual hunting;<sup>142</sup>

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<sup>141</sup> These rituals might find their direct reference in a R̄gvedic environment (think of Kṣetrapati, the deity of cultivated fields, in RV IV 57). Recognizing this as the correct interpretation, would imply attributing an antique character to this paintings (Site 04). As already said (see above fn. 72) the painting might therefore be considered the earliest representation of a R̄gvedic rite performance not only in the NW Sub-Continent (much clearer than the fragment BKG 500, s. STACUL 1983; ID. 1987: 109), but more generally in whole area of India. Forms of these rituals has been documented by the ethnographers in Hindu Kush, like the ritual sowing of a field (*Barinzink*) performed in Hindu Kush by high-ranking individuals amongst the Jashi (who are considered by ethnographers as the 'aborigines' of the Gawardesh area): this ritual is found in various forms throughout the 'Kafir'-Dardic area as far as Hunza and Gilgit. In Yasin and Chitral this ritual is called *bi nisik* ('seed-planting') and is officiated (or it is expected to be) by the ruling dynasties. In some areas of Chitral, the rite is officiated by members of a specific lineage, who "are mostly the descendants of an ancient people and who are called *bumki* 'aboriginals'" (ISIAOREPMEM V s.m.: 211). This interpretation, as amply demonstrated by other studies, does not preclude a R̄igvedic substrate: with reference to the ancient Indian substrate of the Hindu Kush mountain cultures see FUSSMAN 1977.

<sup>142</sup> As already said (fn. 76), apparently the ibex did not play a major role in the dominant culture of Swat in the antique Bronze Age, while towards the end of the first millennium, the animal appears very frequently (OLIVIERI 1998). The ritual slaughtering of the ibex (like in Site 04? See OLIVIERI 2012) is officiated by the *zhaban* amongst the 'Kafir' tribes: the priest, the only men allowed in the shrine of the goddess Murkhum, kills the ibex and hangs its horns on the branches of the Sacred Tree (JETTMAR 1975: 210-211; s. ref. in OLIVIERI 1998: 83).

- 4) the presence of shamanistic roles (anthropomorphs with body modifications = states of pre-death or trance?);
- 5) the dynamic-magical character of actions, even pictorial;
- 6) the hierarchical distinction of roles;
- 7) the presence of places of seclusion;
- 8) the rock symbology;
- 9) the use of paintings in holy places (see fn. 143, below);
- 10) the use of painted dots to represent 'seeds' or a generative force.<sup>143</sup>

Now, the consideration of these factors would seem to lead toward an early form of the otherway defined as 'Kafir'-Dardic environment. At this moment, we choose not to enter into a discussion regarding the linguistic and cultural differences between the two contexts, nor their chronological correlation<sup>144</sup> Certainly there is an agreement as

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This form of worship has been associated with the symbol of a Sacred Tree. This icon is always in association with cultures in which hunting has a prevalent value, not necessarily economic, but certainly ritual (see again fn. 76).

<sup>143</sup> Amongst the 'Kafir' tribes, dots represent the *peshayak*, the male-ibex's fertile droppings (OLIVIERI 2001: 432). The series of black ibex which are surrounded by dots, painted on the white areas on the walls within the *Jestakan*, are renovated each year on the occasion of the rites connected to the winter solstice (ISIAOREPMEM V s.m.: fig. 23). It is worthwhile pointing out that the custom of painting the walls of houses with white dots for apotropaic purposes is still frequent among the populations in the more remote areas of Kandak, Buner and neighboring areas. On all these aspects see also the conclusive chapters in OLIVIERI, VIDALE ET AL. 2006, and VIDALE/OLIVIERI 2002, For the 'Kafir' religion, we refer to JETTMAR 1961, ID. 1975, FUSSMAN 1977, WITZEL 2004, ISIAOREPMEM V s.m.

<sup>144</sup> According to A. Parpola, the population utilizing Dardic languages (Early-Proto-Rgvedic = Early Proto-Dardic; corresponding the the culture of Ghalegai Period IV) preceeded the arrival of the those utilizing the spoken Nuristani ('Kafir' or Proto-Nuristani = Late Proto-Dardic; corresponding to the culture of the fields of urns in Ghalegai Period V) (PARPOLA 1998: 243-48). From the Indological point of view, the 'Kafir' or Nuristani/Dardic background (let aside their distinction) have been recently studied according two main models. The first one thinks that this complex echoed the traits of the Indo-Iranian "myths, ritual and society, and [...] many aspects of Rgvedic [religion]" (WITZEL 2004: §1.5.6;

to the presence of these ancient languages in ancient NW India, possibly as early as 2nd millennium BCE. At various stages, the 'Kafir'-Dardic cultures have been gradually marginalized until they filled an area coinciding with the Hindu Kush-Karakorum mountains and their piedmont. In Swat, the existence of these cultures is positively attested until modern times in Middle and Upper Swat (see e.g. the late-17th century testimony provided by Kushal Khan Khattak in his *Swāt-nāma*).<sup>145</sup>



*Zoomorphic rock near Palwano-gata.*

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see also PARPOLA 2009). The second one considers the complex of myths, ritual and society, as a partial echo of the post Rgvedic religion (FUSSMAN 1977).

<sup>145</sup> The English translation of the *Swāt-nāma* was recently re-published (SHAKEEL 2006). On the earlier presence of Dards in Swat, see TUCCI 1977; BAGNERA 2006. For their presence in after 12th century CE, see TUCCI 1940, JETTMAR 1995; OLIVIERI, VIDALE ET AL. 2006: 138-142; ISIAOREPMEM V s.m.: 35.



*Headstone from Manglawar: traditional ancient icons (solar shield, dagger, torque) associated to an Arabic inscription attesting the conversion to Islam. (Photo by E. Loliva)*

At one point, which has been identified as by the end of the 1st millennium AD, the phenomenon of the painted shelters in the study area ceases. We do not know whether this is due to the area being abandoned, a migration or other reasons.

During the restoration work carried out

by the ACT-Field School Project at the Buddha of Jahanabad (a colossal 7th century rock relief) in 2012, we visited the old graveyard of Manglawar (OLIVIERI 2012). In the graveyard we documented seven ancient headstones, whose decorative pattern is different from the elaborate floral designs typical of most of the later grave stones. Quite interestingly, these old stones bear symbols related to the role of the deceased: in one case it is represented a solar shield with a dagger and a torque, accompanied by a (poorly written) Arabic inscription (the *Shahada* or testimony of Faith). Abstract symbols are also present, like labyrinth as well as motifs and patterns similar to the ideogrammatic patrimony of our paintings, like grids and crossed circles. It is possible that these grave stones refer to an early Islamization phase of non-Yusufzai, most probably Dardic (Torwali?), communities (17th century?).

Our painted shelters do not present evidence of habitual visitation after their abandonment, nor even traces of reuse of a disruptive nature (leave aside the recent Gujari adaptation of some of these as shelter for sheeps and goats). We do not know if the shelters remained abandoned until the Gujars arrived to settle the mountain areas, (certainly between the 19th and 20th century - we owe to them the few traces of recent re-intervention, as at Site 46 and in the Fundstelle 2 of Tanawal shelters; see PAYR 2012) - or whether the shelters were occasionally visited. Certainly, after the arrival of the Yusufzai, the painted shelters perpetuate their uncommon character until present days through their Pashto toponyms (see DI CHIARA, Appendix 1, this volume). Some names, attributed after 16th century by the new occupants and rulers of the Swat valley, are merely descriptive, but others reveal a certain degree of respect for the painted places. These toponyms can connote both sacred and cursed spaces; they can also display a sort of naïve admiration for the paintings, regarded as connected or to the fairy world, either to the Hindu imagery. In one case, Sargah-sar, the Pashto toponym decodes perfectly the meaning attributed by the aboriginal community to this outstanding natural sculpture.

In Tanawal, Hazara, another area which hosts painted shelters, there was a large influx of people from Swat in the 16th century: these were the Swati from Hazara, who had been driven out from Swat to Hazara with the arrival of the Yusufzais. There are testimonials regarding the ceremonial re-use of at least one shelter: within the shelter the mullahs celebrate benediction ceremonies, they carry out the ritual slaughtering of animals for the Eid festivity, as well as popular rituals of a more antique flavor. The description of one of these ceremonies provided by a modern witness, tells us how little we in fact know regarding the function and the original significance of our painted shelters, and how everything said so far is nothing but an honest attempt to provide a response to the many questions on the basis of a bank of data which, in comparison to a living reality, is nothing but, alas, a mineral fossil, a skeleton.

"Beneath the protection of one rock, collective congregational prayers take place for the rains during the drought season. One part of the prayer is also performed by the mullahs in the pool of the adjoining *nullah*. In this ceremony the youth of the area throw water on the mullahs, completely drenching them. Once the mass prayers of nearly 1,000 participants are completed, some 25-30 stay behind and continue praying under the rock until it begins to rain".<sup>146</sup>

Not surprisingly, the prayers are reported to have been successful.<sup>147</sup>

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<sup>146</sup> AYAZ KHAN 1998: 282-83.

<sup>147</sup> This description recalls what Xuangzang wrote about a site located more or less in the same area: "North-west of the capital about 70 li [approx. 30 km] is the tank of the Naga-raja Elapatra (I-lo-po-to-lo); it is about 100 paces round, the waters are pure and sweet; lotus flowers of various colours, which reflect different tints in their common beauty (*garnish the surface*); this Naga was a Bhikshu who anciently, in the time of Kashyapa Buddha, destroyed an Elapatra tree. Hence, at the present time, when the people of that country ask for rain or fine weather, they must go with the Shamans [*Śramaṇas*] to the side of the tank, and then cracking their fingers (*or*, in a moment), after praying for the desired object, they obtain it." (XUAN ZANG, Book III).

*Distribution chart of the Sites with a recognized cultural horizon*

Map No.	Contact Phase Late Horsemanship	Late Pastoralim (Kafir-Dardic)	Contact Phase Brahmanical Milieu (6th-9th cent.)	Contact Phase Buddhist Milieu (1st-3rd cent.)	Early Horsemanship (1st Mill. BCE)	Agriculturalist Milieu (end-2nd Mill. BCE ?)
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Map No.	Contact Phase Late Horsemanship	Late Pastoralim (Kafir-Dardic)	Contact Phase Brahmanical Milieu (6th-9th cent.)	Contact Phase Buddhist Milieu (1st-3rd cent.)	Early Horsemanship (1st Mill. BCE)	Agriculturalist Milieu (end-2nd Mill. BCE ?)
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APPENDIX 1  
TOPONOMASTIC LEXICON  
MATTEO DE CHIARA

*Bacha-kot*: children fort (*kot*, also 'castle').

*Badze*: bad (*bad*) place (*zay*).

*Banj-smast*: Cave of the *banj*; *banj*, *Quercus dilatata*, fam. *fagaceae*.<sup>148</sup>

*Bara Loe-banda*: big (*loi*) upper (*bara*) shepherd hut (*banda*).

*Buso-smast*: cave (*samist/smac*) of the bran, cf. *bus* 'bran, cheff': probably a place where brans were stored by a Gujarī family.

*Chowra-dob*: dark (*čura*) meadow (*dab*: see below *Dob*).

*Churkai*: ruin; cf. *čur* broken, scattered, etc.; fragment; dust; ruin; sack, pillage + suff. *-kai* (cf. *palān-kai* 'un tel', *khuṭ-kai* 'bouillonnement', *khpas-kai* 'cauchemar', etc.).<sup>149</sup>

*Dandi-sar*: peak of the pool: *dand-e* ('pool') + *sar*, s. *sargah-sar*.

*Dob*: meadow. See also 'dipped' (*qub*); or 'hollow, depression' (*dab*).

*Dwolasmane-patai*: field (*paṭay*) worth 12 (*dwolas*) *mane*, i.e. 'a rich, productive field'; *mane* is a weight unit; *mane* could be also read as 'apples'.

*Dwo-qumbojai*: two *qumbojai*: the suff. *-ojay*, according to Darmesteter, is one of the "suffixes d'appellatifs et de qualifications", e.g. *ast-âzai*, *ast-ôdzai* 'apôtre'.<sup>150</sup> *Qumb-*, could be interpreted following Urdu omophonemes like *kumbā* 'family, tribe', *kambu* 'conch, shell', *kumbha* 'water-pot, jar'; see *kumbha-ja*, vulg. *kumbhaj*, adj. (f. *-ā*) 'Born in a water-pot'.<sup>151</sup>

*Gwarejo-patai*: field (*patay*) of the blossoms (*γwarejo*).

*Gweluno-ghar*: mountain (*yar*) of the flowers (*gweluno*).

*Haji-smast-banda*: shepherd hut of the Haji's cave. Haji is a person who has performed *hāji*, the holy pilgrimage.

*Hinduano-hatai*: mound (*xat*) of the Hindu.

<sup>148</sup> IBRAR/HUSSAIN/SULTAN 2007: 329-37.

<sup>149</sup> DARMESTETER 1888-1890: CXXXVI.

<sup>150</sup> IBID.: CXXXII (*ôdzai*).

<sup>151</sup> PLATTS 1884: 847.

*Kafir-kot*: fort (*kot*) of the infidels.

*Kakai-kandao*: *kakai*'s (wife's paternal uncle) pass (*kandao*).<sup>152</sup>

*Kamal-china*: beautiful/perfect (*kamāl*) spring (*čina*).

*Khaista-kamar*: very beautiful (*xaista*) rock.

*Kwar-patai*: grape's (*kwar*) field'.

*Lal-kamar*: red (deep crimson)/ruby's rock.<sup>153</sup> *Kamar* ~ *sar* are terms that indicate parts of the human body and are frequently used as connotative in topographical names.<sup>154</sup>

*Lal-kamar-china*: spring of *Lal-kamar*.

*Loe-banda*: big shepherd hut.

*Malak-ziarat*: sanctuary (*ziyārat*) of the angel (*malak*).

*Marano-tangai*: defile (*tangai*) of the snakes (*marāno*).

*Palangai*: alcova; cf. Urdu *palang* 'bed'.

*Palwano-gata*: boulder of the giant.<sup>155</sup>

*Ram-dunai*: bonfire (*dunai*) of Ram (?).

*Saffar-kandao*: pass of the journey (*safar*).

*Sargah-sar*: peak of the head: *sarya* means the place of the head, or face, while the suffix *-sar* indicates any peak or hill top. See above *Lal-kamar*.<sup>156</sup>

*Shamo*: pavilion.

*Talang*: quarter; from *tal* 'quarter, group of houses' + suff. *-ang*.<sup>157</sup>

*Thakht-gat*: boulder, rock, of the throne.

*Trema-palangai*: muddy (*trama*) *palangai*.<sup>158</sup>

<sup>152</sup> Cf. BARTH/MORGENSTIERNE 1958: 125 (*kandów* 'pass').

<sup>153</sup> Cf. EILERS 1954: 371 ff. ("*Kamar* 'Kreuz, Rücken' (Gürtelgegend) —> 'Berg; Terrasse, Steilhang' ~ *sar* 'Haupf, Kopf' —> 'Gipfel', auch 'Vorgebirge'").

<sup>154</sup> Cf. also BARTH/MORGENSTIERNE 1958: *kámer* 'rock/cliff'.

<sup>155</sup> Cf. IBID. (*gáṭa* 'rock/pebble').

<sup>156</sup> See also EILERS 1987: 25 (*saxt(e)-sar* 'difficult pass').

<sup>157</sup> See DARMESTETER 1888-1890: CXXIII (*gar-ang* 'abîme', like *gar-andai* 'rapide', in the Category 'Suffixes abstraits de noms d'action').

<sup>158</sup> In the two volumes *Pashto Qāmus* published in Kabul in 1952-54, *trama* is translated in Dari as 'soft mud, wet clay'.

## APPENDIX 2

### NOTE ON THE DISTRIBUTION OF *GUMBATS*

MICHAEL W. MEISTER

Rock-shelter paintings, as are other archaeological remains scattered through Swat and the Northwest, are palimpsests, erased and written-over memories of histories we strive to recover. Luca M. Olivieri recently spoke at a workshop in Philadelphia on "Beyond the Buddhist Communities: Subalternity and Dominancy in Ancient Swat".<sup>159</sup> As windows to a social landscape, traces of pigment may suggest more plural and fluid worlds than texts, inscriptions, and written histories. In asking me to respond as an architectural historian to buildings shadowed in these paintings, Olivieri also set a frame. Buildings seem part of landscape in this ethnic/tribal world, signs rather than symbols - unaccompanied by Buddhist or Shaiva cult icons - among marvelous animals and magical men.<sup>160</sup> Yet they do specify a reality, birds, animals and riders move among them. The many *gumbats* — topes, towers, chapels, and temples - remnant in Swat are carefully observed.

At Palangai, a structure above the head of a 'bi-triangular' horse rider, like other representations here and at other sites, seems like a small Buddhist *stūpa*, a cubical base supporting a globular dome (Fig. 2); at Kafir-kot, similar structures have determinant umbrellas above. But the process of recovering the palimpsest makes reading these buildings difficult. Are 'tubular' towers solid topes or '*vihāra*' chapels, the one at Kafir-kot bending with the rock's curvature? Much like buildings represented on early coins these traces titillate but rarely illustrate.<sup>161</sup>

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<sup>159</sup> "At the Foothills of the Hindukush: Art and Archaeology of the Swat Valley, Pakistan", Workshop, Drexel University, Philadelphia, 7 May 2011. My presentation at Drexel was titled 'Shadow-covered' *devālayas*, Swat'.

<sup>160</sup> OLIVIERI 2011: 128, 133, has referred to "commingled [...] representations of 'alien' icons, like warriors on horseback and representations of Buddhist architecture" but also suggested "a common religious substratum". For some related problems, see MEISTER 2007.

<sup>161</sup> HANDA 2009

In my presentation at the Drexel symposium, I cited a passage in the *Si-yu-ki* describing a *vihāra* and temple "of the same height" standing side-by-side; the temple '*devālaya*' "has received the name 'Shadow-covered' because when the sun is in the west, the shadow of the *vihāra* of the Lord of the World covers the temple of the heretics; but when the sun is in the east, the shadow of the latter is bent to the north, and does not overshadow the chapel of the Buddha".<sup>162</sup> The tribal artists of Palangai and Kafir-kot were more dispassionate, but no less observant of the social constructs of their landscape. We should not too quickly rub the edges off their differences.

As example, I might compare profiles of a sketchy tower drawn at Palangai and a tower represented on a sandstone crossbeam at Mathura of the Kushan period, showing Indra's visit to Buddha (Fig. 1, upper left and right). Structures that are called *gumbats* in Swat survive from different periods. They can be *stūpas*, structures like the 'Great Vihāra' near Balo-kalai, Kandak Valley, Swat, or a ruined temple at Gumbat, Talash Valley, Dir (Fig. 1, lower left and right).<sup>163</sup> Any or all could be represented in the painters' imaginaries.<sup>164</sup> Most suggestive of such a possibility is a hard-to-reconstruct building cluster to the right of the rider with trident at Palangai (Fig. 2).<sup>165</sup> Is this a single monument or overlays? In different lights different things appear. What might be a 'dome' seems faintly limned in a darker red; the base, in brighter orange, seems bi-level and offset. *Vihāra*-chapels and Shahi temples in the Northwest both had domed interiors, referencing a legacy of earlier monastery cells. Towers built over these domed cellas differed, the temple adopting a lofty offset curvilinear tower, represented in the 10th century by remains of Gumbat, Dir (Fig. 1, lower right) and Temple A at Nandana in the Salt Range.<sup>166</sup>

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<sup>162</sup> BEAL 1906: xvii.

<sup>163</sup> MEISTER 2010a.

<sup>164</sup> *Oxford English Dictionary*: "a fancy; something imagined". On Balo-kalai, see OLIVIERI/MEISTER 2012, and ACTREPMEM II.

<sup>165</sup> See above fn. 160; for other reflections on the features of the "mixed Buddhist/Brahmanic religious symbolism", see OLIVIERI 2010: 20.

<sup>166</sup> Nagara temples with *āmalaka* crowns began to be built in the Northwest in the 6th c., evolving by the 10th century into a unique variety with double-level walls and interior domed chambers on two levels (MEISTER 2010b).

Another story told in the *Si-yu-ki* might make such architectural complexity more visible: "[...] Buddha commissioned Rahula to assume his appearance and manifest himself [...] in the air. The king prostrated himself on the ground in adoration, and at once made arrangements for founding a *temple* and *vihara*. [...] Then he caused to be carved an image of Rahula; and lest suddenly it should perish [...] the king constructed a *chapel* for its special preservation. At present it is carefully protected by a sort of *shade* that covers it. But [...] the shadow of the figure constantly removes itself outside the building, so that those who behold it cannot help paying it religious service".<sup>167</sup>

From such religious niceties these painters may have remained aloof; but the sanctity of the shared landscape shines through their representations of it.

Whether Palangai's palimpsest does represent a non-Buddhist temple as I suggest, referencing a site of shared pilgrimage such as Katas-raj in the Salt Range, depends on questions of period, approach, and intention not easily resolved. Yet the naked eye of imagination makes it possible to envision what these artists might have encountered in the landscape around them.



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<sup>167</sup> BEAL 1906: lxxxviii. Emphasis added by the Author.



*Figs. 1-2*

## APPENDIX 3

### GRIDS, DOTS, LINES AND BODY MODIFICATIONS

#### *Geometric patterns and Grid-like designs*

These designs are not immediately recognizable in rock art. In our corpus they are present in 15 sites, and with a large number of variables, they compose as much as 40% of the representations of structures. However, a possible interpretation can be put forward. One of the few cross-cultural generalizations which seems to hold true in rock art is that figures enclosing square or rectangular grids or rows of points recall and often openly symbolize land tenures and specifically plowed fields.<sup>168</sup>

Points may symbolize stones or poles. However, points located within grid-like designs may represent seeds, cultivated plants or rain fertilizing the plots. Consequently, 'plowed fields' filled with dots were interpreted as 'plowed/sown fields'.<sup>169</sup> Several examples of similar

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<sup>168</sup> In the Indo-Pakistani Sub-Continent, the earliest plowed fields (dated to the 2nd millennium BCE) were plowed following precise grid-like orthogonal patterns (cross-plowing; Kalibangan: TUSA 1990: 359-62, fig. 13). For the Swat valley, see TUSA 1990.

<sup>169</sup> VIDALE/OLIVIERI 2002. At an elementary, proto-lexical level one might recognize the value of non natural or artificial elements in signs formed by parallel and/or orthogonal lines: this is also suggested by the elements rendering the '*stūpa*' pictograms (for instance at Gichi Nala, MANP 6: 27:2, 87:2 128: 3 and others, IBID. Taf. 68; see BANDINI-KÖNIG/ BEMMAN/HAUPTMANN 1997: 47, fig. 1). Grids, partitioned squares and rectangles, stand out as very peculiar in the context of a naturalistic (although schematic) figuration, distinguished by human and animal figures (not everywhere, see MANP 6: 63.2 – ibex-associated to 63:4 – grid). An interesting comparison could be made with a grid-like square from the Elangash region (Altaj, CSI) placed at the center of a scene dominated by wild and domestic animals. This ideogram appears to have the value of 'structure' or 'field', in any case having some relationship with an artificial element (OKLADNIKOV 1979: pl. 20.1). The relationship of this type of ideogram with a non-natural or artificial context of significance, are clear in hunters' culture rock art, where the predominant figures are zoomorphic. There is a very interesting Neolithic composition at Bajkal Lake where squares are associated with human figures, large anthropomorphs and maskoids: here the cup

designs regularly associated with 'complex societies', may be cited to support this semantic value.<sup>170</sup>

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holes have replaced the painted dots (OKLADNIKOV 1969-70: 204). Lastly, in a similar cultural horizon, let us consider the pictograms related to the structures from the area of Ulug-chem (Upper Jenisei, Tavinskaja, CSI; DÈVLET 1976: fig. 16, pls. 29-32). These different dotted grid-like designs are dated to the last 5000 years, and therefore document more of a convergence in psychological adaptation than a chronological trend (s. IBID. n. 12). A different type of square which possibly brings to mind a building is from Shing Nala; they are associated with dots and a labyrinth (in addition to a star and shield) (MANP 6: 68:A); see also Thakot (Thalpan V) in MANP 10: 46:26.

In one case row of dots may also represent garlands, or circles made of perishable materials, like flowers, as in the *stūpa* representations in Site 13 (ABDUL NASIR KHAN ET AL. 1995).

<sup>170</sup> The identifications of these designs with artificial structures has been clearly demonstrated by ARCA 2004. In the Shang writing system, for example, *tian*, the sign for 'field' is a square with an inscribed cross (CHEN ZAO FU 1987: 183); in the rock carving complexes of Mount Bego (France) simple and complex grid patterns (3rd-2nd millennium BCE) have been interpreted as plowed fields, and inner incised points as fertilizing rain (LUMLEY 1995: 241 ff.); in some examples of large rock carving compositions in Valcamonica (late 2nd millennium BCE, N Italy) groups of squares and rectangles, sometimes with inner partitions, filled with rows of dots, are interpreted as cultivated fields, and the whole composition as a large 'topographic map' (see ARCA 2004). Squares and rectangular enclosures have been noticed in Tanawal paintings (Fundstellen 1, 2 and 3; see PAYR 2012). More elaborated and regular square grids are depicted at Kala-tassa; these designs possibly represent various building typologies of a Buddhist complex (central court-monastery, hermitages and cells): here the identification is made easier thanks to the presence of representations of the monks inside the geometric enclosures (NASIM KHAN 2000: figs. 25-27).

Squares with dots have been documented in the Upper Indus area (for example at Shatial, s. MANP 2: pl. 37; at Hodar, s. MANP 3: pls. 92 and 94), and even in the Ghinzar valley (E Hindu Kush, Pakistan) (DESIO 1985: pl. XI.a). Grids have been recently documented in Bajaur, in a cultural context distinguished by animal husbandry and horseback riding (SAEED-UR-REHMAN/ASHRAF KHAN/AZEEM 1996: fig. 34). The grids from the Upper Indus, Hindu Kush and Bajaur cannot be interpreted with certainty, but in an example (possibly modern) from Noh (Yasin) a square with 5 dots is connected to a human figure. Following the interpretation suggested here, one could suggest that the meaning regards 'land possession' (TSUCHIYA 1994: fig. 8).

On a purely hypothetical basis, one can reiterate paradigmatically that it is possible that the geometric language is interested in non-natural objects; at an elementary, proto-lexical level one might recognize the value of artificial elements in signs formed by parallel and/or orthogonal lines. This, in brief, is the result of a preliminary recognition of the Eurasian rock repertoire, in the broadest sense.<sup>171</sup> The iconic typology where architectural or artificial representations are integrated or modified with anthropomorphic elements could also lead to very interesting suggestions.<sup>172</sup>

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<sup>171</sup> According to this reading, signs of this type should, however, refer to terms such as 'building' (MMAFAC 6: fig. 1007), 'enclosure' (IBID.: figs. 983, 986-7, 1029), 'field' (s. above), 'village', and so on. NASIM KHAN 2000 also reaches this conclusion due to the interpretation of the painted circle at Svarai-gata (Khanpur-Shikaoli, Mardan): "On the left side a large circle is shown. A line is drawn downwards from the circle. The circle might represent a village or a town because all the riders and animals seem to be leaving or coming out from the circle" (IBID.: 21). Even the tectiform figure at Salatak-o-Lamghan (BOURGEOIS/BOURGEOIS 1971: fig. 7) is indeed interpretable as a building; moreover, the lateral diagonal termination (comb-like) may be the projecting representation of an equine in relief, which characterizes the Mahandeo shrines or those of goats at *Jeshtakhan*. A confirmation of the validity of that hypothesis may come from two coeval engraved slabs recovered in the regular excavations at Burzahom, (Srinagar, Kashmir) and dated to the local Neolithic Phase II, in the first megalithic *facies* (3rd-2nd millennium BCE), both slabs are connected to a regular rectangular structure. The first slab represents a hunting scene with two men hunting deer: one is armed with a bow, the other with a spear and accompanied by a dog. Two suns shine above the scene (PANDE 1971). The linear, simplified style of the first slab is maintained in the second, whereas the second slab does not present the same type of clear drawing. Instead, it is characterized by an abstract scheme which is difficult to interpret; it represents a 'tectiform' figure, which undoubtedly represents a man-made object, an idea which this Author sustains utilizing P. Graziosi's thesis as to analogous figurations interpreted as tents, traps for animals, or even shelters for ghostly beings (PANDE 1972: 176).

<sup>172</sup> At Chilas II, in Karakorum, we may also consider a representation dated to the 1st century CE. Here we see the association between the *stūpas* ideogram (not the *stūpas* pictogram that presents more emphasized descriptive features, such as those at Kafir-kot) and a composite pictogram of an anthropomorph (JETTMAR/THEWALT 1985: pl. 12). This ideogram is relevant both because it may be viewed as an anthropomorphic cult pillar, and because a nearby inscription defines the figure as a divinity (Hariti). Note also that in the case of a large anthropomorph inserted in a grid-like ideogram at

### Dots

These signs are produced utilizing fingertips and appear in various contexts in several Sites (04, 09, 10, 11, 12, 13, 14, 16, 19, 20, 49).<sup>173</sup>

Site 04, the position of the legs ('U-like' type) is reminiscent of the sitting posture of that deity. In the Hariti from Chilas II the triangular symbol visible between its legs, besides suggesting a sexual attribute, might also be an ideogram which represents a 'bunch of grapes', an attribute of the goddess. The practice of transforming of pictographs, with the probable value of 'structures' into anthropomorphs is well known in Karakorum rock art of the Buddhist period (see for example some '*stūpa* derivates'), as well as the late non-Buddhist production (JETTMAR/ THEWALT 1985: pl. 23; IBID.: 27; MANP 8: 373:31). The binomial aspect of 'structure/anthropomorph' is rather evident in the so-called 'schematic females' from Kalbak-Tash I (MMAFAC 3: XIII-XVI, figs. 188-196). The comparison of a set of carvings from Thalpan II, is of possible relevance, where plowed fields are modified by pairs of long, closed wavy lines, repeated in the nearby ibex carvings: in this latter case, the lines are open and emphasize the obvious pictogram 'horns'. The close correlation between the horns and wavy lines possibly underlines an ideological association between the animal and farmland, probably after the fertility value sometimes given to the ibex icon (TUCCI 1963: 127-28; OLIVIERI 1998: 82-84). The same association is found in a more ancient context at Gogdara I, in figure 17: here we see the transformation of a square divided by diagonals and marked with inner dots utilizing a nearby ibex pictogram: the composite ideogram thus created is further transformed into a standard (IBID.). We propose a final comparison within a presumably much older context (possibly the 3rd-2nd millennium BCE): the rock carvings at Thalpan Ziyarat (Upper Indus; JETTMAR/THEWALT 1985: pl. 3). Here, a square divided by diagonals with points near the intersection is transformed into an anthropomorph with theriomorphic features: the hands, held away from the body, have outstretched fingers, and the legs are upturned (possibly representing 'dance' or 'genuflection'). Above the square, which forms the head of the figure, there is a series of straight lines suggesting hair. In this light, some of the associations we have seen in our paintings might be quite old, and may have survived until relatively recent periods. This is also supported by the dating of a figure of a 'giant' with similar features (outstretched fingers and raised hair) to the Buddhist period at Chilas IV (IBID.: pl. 22).

<sup>173</sup> E. Anati (1992) considers them to be psychograms utilized for emphasis. This might hold true for many cases in Swat-Malakand as well (in Site 04, above the hero figure, for instance); but in some of cases we have suggested the pictographic interpretation as 'seed' (again at Site 04). Among the Upper Indus figuration complexes published so far, important comparisons may be found at Hodar (MANP 3). When points are depicted surrounding the blade of an axe, they may serve to suggest a toothed edge

At Site 04, a single dot appears between the legs of a 'U-like' type human, emphasizing its genital region, while two more points are symmetrically placed, and highly visible, above the head of the hero.<sup>174</sup> At Site 03, in addition to the dots painted within the squares, an occasional dot appears on the paw of the monkey. At Site 01, isolated dots or pairs of dots fill the square partitions of the main aggregate of geometric elements; above the central figure, a rosette

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(MANP 3: 56, figs. 41, 42); when they appear together with a shield they could be pictograms indicating leather appliques (MANP 3: 26, figs. 19, 20); while together with wheel-like 'sun symbols' or crossed disks they might have different, non pictographic meanings. On the other hand, they (always in regard to the sun symbols) are probably pictographic points like those in 35:96 (appearing above a *stūpa*) (MANP 3: pl. 6), 60:63 (MANP 3: pl. 11). I now find convincing the interpretation of human figures with 2 points aside the chest as 'women' (group 110: C; MANP 3: pl. 114; MANP 6: at Shing Nala, 68:53, 71:17; at Gichi Nala, 27:1; a similar form from south Siberian Tagar culture, MMAFAC 4: fig. 18.1). Points associated with important animal figures such as the ibex should doubtlessly be considered devices used for emphasis. S. for example figure 103:6 (MANP 3: pl. 112), where the interpretation of dots = blood is not always convincing (MANP 3: 366; see also 4:11 and 34:17 in MANP 3: pl. 27, 40; on the contrary, this interpretation is apparently acceptable in MANP 6: 6:1. Points are present all the most relevant designs, such as 'sun wheels' (see the extraordinary case of figure 4:34 in MANP 3: pl. 69), axes, ibex, *stūpa* designs, abstract or anthropomorphic symbols (like in 12:3 and 12:15 in MANP 3: pl. 1; MANP 6 68:A), dominating anthropomorphs: human figures with raised arms and dots are also relevant, as seen in 97:B and 97:C (Fig. 15; MANP 3: pl. 110; s. below). In one specific case we found an 'antropomorphic symbol' utilizing four dots at Shing Nala (MANP 6: 37:1). The use of dots to emphasize individuals (as in our Site 04) is clear in the Bronze age carvings from Semirech'e (Kazachstan) (MMAFAC 5: figg. 1-9), but also in the late protohistoric Tagar culture (S Siberia; MMAFAC 4: 69). Points are here associated with grids and squares: but in the second case here, we will not propose the meaning of 'plowed/sown fields'. Interestingly, in a quite different context (Tuul and Bogd uul, Mongolia; s. also similar Neolithic depictions around the Baikal lake in OKLADNIKOV 1969-70: 204; ANATI 1995: 31) squares and dots have been interpreted, after a structuralistic analysis of archaeological data, as pictograms representing collective megalithic burial fields (NOWGORODOWA 1980: figs. 70-72; see also MAZIN 1986: tab. 59.23).

<sup>174</sup> One should also take into consideration another example from Parlai-dab (Swabi) where a human figure touches a point placed above his head with his raised arm (SHAH NAZAR KHAN 1995: pl. VIIa).

composed of five dots appears between two human figures. Similar rosettes (of four dots) appear above the *trisūla*-like sign in Site 10, while other dots emphasize the ideogram.

The semantic background of some of the elements - the designs at Site 04 in particular - may be the association, conscious or unconscious, between the concept of male organs/seeds/rain drops.<sup>175</sup> It is clear that in some cases dots represent seeds (when they are inside a grid-like design they may represent sowed fields), in other cases they may represent row of stones or poles, e.g. enclosures, or garlands, or may be used to compose decorative icons, such as rosettes. When and if associated with figures of humans or animal, dots, especially if isolated and not used in a pattern, may represent ideas, words, sounds, and rhythmic gestures, which the painters ascribed to their subjects, and are better conceived of in terms of psychograms.<sup>176</sup> On the other hand, we can hypothesize that these graphic complexes have been 'revived' at recurrent intervals of time, by touching the pre-existing figures anew with red-splashed fingertips. In this way, the painters might have been meant to retell specific events, sentences and a historical recollection of the tribe. Thus, the complexes might easily assume the value of psychograms while connecting the painter, the figures and the onlookers in a unified context of psychic information.

#### *Association lines*

Other psychograms consist of wavy lines, which connect some of the figures; these association lines are present in almost all the sites. They clearly serve to semantically connect pictograms or pictographs to ideograms. Sometimes the lines are real, and sometimes they are simple tangents; in many cases, the pictograms have been modified: among the most common cases is one where an arrow or an arm holding a bow is stretched to the point where it reaches the target itself (when the arm is utilized we refer more specifically to body modification). Instead, when two human figures or a hunter and his prey, for example, are connected utilizing lines or modifications of weapons, it is clearly a solution intended to dynamically depict the

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<sup>175</sup> As already said, amongst the 'Kafir' tribes, dots represent the *peshayak*, the male-ibex's fertile droppings (OLIVIERI 2001: 432) (see above fn. 143).

<sup>176</sup> See ANATI 1992.

concept of action, in other words a verb ('to hit' 'to kill', etc.) (see examples in Sites 26, 33, 34, 04).<sup>177</sup>

In other words, association lines are primarily used to represent actions which develop over time or in space. They are used to represent actions whose cause and effect are not ubiquitous or contemporary, precisely as in the case of the trajectory of an arrow from archer A to the target (human or animal) B. In this case the association line can be created through the modification of the object which crosses the spatial gap, as an arrow does, or by that which causes the crossing, for example, the arm holding the bow or the shield. Another value of association lines is to precisely indicate a logical or semantic association (such as the ownership or possession of property), a capacity or value (such as the accuracy of an arrow or the force of a blow), a human relationship (such as an alliance, friendship or union); in short, in all cases where a relationship is not physically represented.

In other cases, such as actions involving direct contact (real or symbolic), there is less of a need to use this graphic ploy. This fact is exemplified in two depictions of bestiality or mating

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<sup>177</sup> In this light, we may observe that similar body extensions (or association lines) moving towards important ideograms or figures are rare but present in Middle Indus. For instance, they can be found at Mandori (PATERSON/DRUMMOND 1962: fig. 57) and probably at Adina (SHAH NAZAR KHAN 1995: fig. 1). Association lines are not infrequent in late period carvings in Hindu Kush and Karakorum (for example in the rock complexes of Thalpan III; MANP 8: 367:A), as well as in the Neolithic context in Kashmir (see the Burzahom stone slab in PANDE 1971; see above fn. 171). Other examples may be found in the carvings found in Ladakh, which date to historical times. In one case, a duel between two archers is emphasized through the use of a psychogram: a sinuous line joining the two warriors (OROFINO 1990: fig. 24). A very important comparison, in terms of syntactic value, could be done for instance, with Bronze Age carvings from northwest Mongolia, where these association lines sometimes become redundant and/or dominant (s. MMAFAC 6: figs. 1131, 1193, 1212, 1214, 1262, 1309, for instance, or MMAFAC 7: 1071; other examples: MMAFAC 6: figs. 8, 28, 65, 124, 424, 499, 549, 552, 598, 718, 721, 744, 832, 975, 1009, 1092, 1098, 1123, 1189, 1313, 1314; MMAFAC 7: figs. 173, 174, 184, 239, 263, 331, 405, 505, 681, 697, 705, 981, 1029, 1070, 1202). The examples from the Bronze Age carvings in Kazakhstan are also interesting (MMAFAC 5: figs. 21, 85, 86, 88, 89, 90, 91, 101, 105, 106). It is noteworthy to mention that these association lines occur most frequently in scenes regarding hunting and fighting. This type of syntax is not infrequent in analogous scenes, also in the Saka period (MMAFAC 5: fig. 153) and early Turkic period (MMAFAC 5: figs. 56, 59).

(Site 38 and Site 46), and in representations of the ownership of cattle (once again Site 38, where the figure holds the animal, and Site 05).

#### *Body modifications*

In our pictures we have observed several instances where the human body was modified. In light of what has been outlined with regard to the value of certain changes, which may then function as association lines, it is understandable that all other types of bodily changes must have a relevant semantic value as well. If we add to this semantic value, their quantitative redundancy, multiform variety, frequency, and not least, their impact on the central or dominant figure, one can only consider such signs as among the most important in the vocabulary of the paintings of Swat-Malakand. More than 156 body modifications have been counted with 35 variations, and present in 22 shelters. The modifications were differentiated according to the part of the body concerned. In general, hand modifications are the most frequent (35), followed by those involving the head (23), feet (19), lower and upper limbs, etc. In general, particular attention has not been paid to this type of sign in specialized literature, although, judging from a preliminary compilation, it is widely represented category. Above all, these signs are very important to the interpretation of the scenes as they often descriptively indicate elements, characters, non-physical or not physically describable attributes.

Heavily modified figures are characterized not only by modifications involving the limbs, torso, etc., but also by their being included in complex clusters of association of lines and/or rows of dots.

Moreover, it is to be noted that only anthropomorphic figures experience any alterations of the head; it can be said that this is a specific feature of these figures. A triangular-shaped face is a modification which is particularly important in terms of semantics; in one case, this feature is seen combined with a filiform trunk, when together they are representative of a particular type of anthropomorphism tied to a state of trance or pre-death (Site 27 and Site 49).<sup>178</sup>

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<sup>178</sup> In regards to the examples from the Upper Indus, we know, thanks to the depiction of the sex, that anthropomorphs with such body modifications are all males, and some have an inverted 'U-like' body; many have a torso depicted as a ladder, or made up of bands, and in others the head has animal features. For example, an interesting carving discovered at Oshibat in Upper Indus seems to indicate a 'shaman' or

Modification of hands (with variants of outstretched fingers, comb-like, pincer-like or trident-like hands) is always associated with figures in a central role; it is also a variant that human figures share with anthropomorphic figures. In this sense it appears clear that it is a graphic ploy (in a psicogrammatic sense) used to render apparent an altered mental state or higher, semi-divine being.



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a 'spirit-guide': a triangle-shaped face, visible ribs (an indication of fasting or of a *post mortem* condition; a similar carving from south Siberia, MMAFAC 3: fig. 265), genitals and a stick, might be attributes of such a status (MANP 1: 52:1). It is hardly necessary to remember how/that these representations underlie a clear foundation of shamanic ritual, connected here with the skeleton costume documented in Inner Eurasia (ELIADE 1968, it. ed. 1974:182-4; see also DÈVLET 2001). This type of stick-like anthropomorphic representation is typical of representations of spiritual beings in the rock art of the Neolithic from the Helanku Valley (Ninxia) (ANATI 1995): G. Stacul made reference to the latter cultural context in commenting on the only representation of an anthropomorph in a painted sherd from Barikot of the Ghalegai Period IV (ISMEOREPMEM XX: 109, fig. 47k). This type of anthropomorph has a clear leading role in some south Siberian carvings (MMAFAC 2: pl. 78; MMAFAC 3: figs. 156, 333, 338, 340; MMAFAC 4: fig. 29). Other interesting examples are from Gichi Nala (MANP 6: 60:1, 112:8, 112:10, 112:1, 112:13, 112:14). In the group 112 this anthropomorph is associated with a *stūpa*, with another interesting antropomorph (modified) (112:9) and an ibex (IBID.: taf. 87). Other examples come from the neighbouring site of Shing Nala (MANP 6: 68:53 – with outstretched feet – 3:4, 68:52, 2:1, 8:1, 68:34, 68:42 and 70:1; the latter is interpreted as a supernatural being also due to the enlarged oval head).



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XXXVII - Churkai (Kabbal-dab; Site 19): detail of the paintings (photo by LMO, processed by CP).

XXXVIII – The shelter of Ram-dunai 1 (Site 20) seen from N (with Mr. Akhtar Munir) (photo by LMO).

XXXIX – Dandi-sar 1 (Site 20): the paintings (photo by LMO, processed by CP).

XL – The shelter of Bacha-kot (Site 23) seen from N (with Mr. Akhtar Munir, Mr. Azim and Mr. Fazal Malik) (photo by LMO).

XLI – The shelter of Busus-smast (Site 24) seen from E (with Mr. Akhtar Munir) (photo by LMO).

XLII – Busus-smast (Site 24): details of the paintings (photo by LMO, processed by CP).

XLIII - Busus-smast (Site 24): details of the paintings (photo by LMO, processed by CP).

XLIV - Busus-smast (Site 24): details of the paintings (photo by LMO, processed by CP).

XLV – The shelter of Khwar-patai (Site 25) seen from E (with Mr. Akhtar Munir) (photo by LMO).

XLVI – Kwar-patai (Site 25): detail of the paintings (photo by LMO, processed by CP).

XLVII- Thakt-gat (Site 26): the paintings (photo by LMO).

XLVIII- Pl. XLVII after processing (photo by LMO, processed by CP).

XLIX – The boulder of Lal-kamar (Sites 27-29) seen from S (photo by LMO).

L – The shelter of Lal-kamar 1 (Site 27) from inside, E side (in the foreground, Mr. Azeem) (photo by LMO).

LI – Lal-kamar 1 (Site 27): details of the paintings (photo by LMO, processed by CP).

LII - Lal-kamar 1 (Site 27): details of the paintings (photo by LMO, processed by CP).

LIII - Lal-kamar 1 (Site 27): details of the paintings (photo by LMO, processed by CP).

LIV - Lal-kamar 1 (Site 27): details of the paintings (photo by LMO, processed by CP).

LV - Lal-kamar 1 (Site 27): details of the paintings (photo by LMO, processed by CP).

LVI - Lal-kamar 1 (Site 27): details of the paintings (photo by LMO, processed by CP).

LVII - Lal-kamar 1 (Site 27): details of the paintings (photo by LMO, processed by CP).

LVIII - Lal-kamar 1 (Site 27): details of the paintings (photo by LMO, processed by CP).

LIX - Lal-kamar 1 (Site 27): details of the paintings (photo by LMO, processed by CP).

LX - Lal-kamar 1 (Site 27): details of the paintings (photo by LMO, processed by CP).

LXI - Lal-kamar 1 (Site 27): details of the paintings (photo by LMO, processed by CP).

LXII – The shelter of Lala-kamar 2 (Site 28) seen from S (photo by LMO).

LXIII – The shelter of Lala-kamar 3 (Site 29) seen from E (photo by LMO).

LXIV - Lal-kamar 3 (Site 29): the paintings (photo by LMO, processed by CP).

LXV – The boulder of Gweluno-ghar (Site 31) seen from S (photo by LMO).

LXVI – Gweluno-ghar (Site 31): the paintings (photo by LMO).

LXVII – The shelter of Banj-smast (Site 32) seen from S (photo by LMO).

LXVIII – Banj-smast (Site 32): the painting (photo by LMO).

LXIX – The boulders of Lal-kamar-china 1-3 (Sites 33-35) seen from N (photo by LMO).

LXX – The shelter of Loe-banda (Site 36) seen from E (with Mr. Azeem) (photo by LMO).

LXXI – Loe banda (Site 36): the paintings (photo by LMO, processed by CP).

LXXII – The boulder of Chowra-dab (Site 37) seen from S (photo by LMO).

LXXIII – The boulder of Dab 1-3 (Sites 38-40) seen from W (photo by LMO).

LXXIV – Dab 1 (Site 38); the paintings (photo by LMO, processed by CP).

LXXV – Dab 3 (Site 40); the paintings (photo by LMO, processed by CP).

LXXVI – The pinnacle of Palangai 1-3 (Site 41-43) seen from N (photo by LMO).

LXXVII – Palangai 1 (Site 41): details of the paintings (photo by LMO, processed by CP).

LXXVIII - Palangai 1 (Site 41): details of the paintings (photo by LMO, processed by CP).

LXXIX - Palangai 1 (Site 41): details of the paintings (photo by LMO, processed by CP).

LXXX - Palangai 3 (Site 43): the paintings (photo by LMO, processed by CP).

LXXXI – Khaista-kamar 1 (Site 41): the paintings (photo by LMO, processed by CP).

LXXXII – The shelter of Khaista-kamar 1 (Site 41) seen from SE (with Mr. Faiz-ur-Rahman) (photo by LMO).

LXXXIII – Saffar-kandao (Site 45): the paintings (photo by LMO, processed by CP).

LXXXIV – Drema-palangai (Site 48): details of the paintings (photo by LMO, processed by CP).

LXXXV - Drema-palangai (Site 48): details of the paintings (photo by LMO, processed by CP).

LXXXVI - Drema-palangai (Site 48): details of the paintings (photo by LMO, processed by CP).

LXXXVII - Drema-palangai (Site 48): details of the paintings (photo by LMO, processed by CP).

LXXXVIII – The paintings of Drema-palangai (Site 48) during the tracing (photo by CP).

LXXXIX – The shelter of Dwoqumbo-jai (Site 49) seen from NE (photo by LMO).

XC - The shelter of Dwoqumbo-jai (Site 49) seen from E (photo by LMO).

XCI - The shelter of Dwoqumbo-jai (Site 49) seen from N (note the presence of some cup-marks) (photo by LMO).

XCII – Dwoqumbojai (Site 49): details of the paintings (photo by LMO).

XCIII - Dwoqumbojai (Site 49): details of the paintings (photo by LMO).

XCIV - Dwoqumbojai (Site 49): details of the paintings (photo by LMO).



## LIST OF ABBREVIATIONS

AA: *Ars Asiaticae*

ACTREPMEM: ACT-Field School Reports and Memoirs (I-V; Series Minor: 1-2)

ACTRepMem II: L.M. OLIVIERI (with contributions of others), *The last phases of the urban site of Bir-kot-ghwandi (Barikot). The Buddhist sites of Gumbat and Amluk-dara (Barikot)*, Lahore 2014.

ACTREPMEM 1: L.M. OLIVIERI, *Digging up. Fieldwork guidelines for archaeology students*, Lahore 2014 (Series Minor).

ALRAM ET AL.: M. ALRAM, D. KLIMBURG-SALTER, M. INABA and M. PFISTERER, eds., *Coins, Art and Chronology II. The First Millennium CE in the Indo-Iranian Borderlands*, Wien 2010.

AMIT: *Archäologische Mitteilungen aus Iran und Turan*.

Annali: *Annali dell'Istituto Universitario Orientale di Napoli*.

ANP: *Antiquities of Northern Pakistan. Report and Studies* (1-6).

ANP 4: ed. by K. JETTMAR in collaboration with M. BEMMAN and E. KATTNER, Mainz 2000 = P. ALFORD ANDREWS and K. JETTMAR (with a contribution by G. BUDRUSS), *Sazin. A Fortified Village in Indus-Kohistan*.

ANP 6: ed. by H. HAUPTMANN and L.M. OLIVIERI (forth.) = OLIVIERI, L.M. (with contributions by K. BEHRENDT, P. BRANCACCIO and M. DE CHIARA), *M. A. Stein and the 'Lord of the Marches'. The beginning of archaeology in and around Swat in the documents of the Malakand Fund*.

AP: *Ancient Pakistan*.

AURANET: Australian Rock Art Research

AVA-Materialien: Materialien zur Allgemeinen und Vergleichenden Archäologie.

BAI: Bulletin of the Asia Institute

BAR: British Archaeological Reports

BRANCACCIO/BEHRENDT: P. BRANCACCIO and K. BEHRENDT (eds.), *Gandhāra Buddhism*, Vancouver 2006.

CALLIERI: P. CALLIERI (ed.), *Architetti, Capomastri, Artigiani. L'organizzazione dei cantieri e della produzione artistica nell'Asia ellenistica. Studi offerti a Domenico Faccenna nel suo ottantesimo compleanno*, SOR, C, Roma.

CHIPPINDALE/NASH: C. CHIPPINDALE and G. NASH (eds.), *The Figured Landscapes of Rock-Art*, Cambridge 2004.

EFEO: École Française d'Extreme-Orient

EW: *East and West*.

GHANI-UR-RAHMAN/OLIVIERI: GHANI-UR-RAHMAN and L.M. OLIVIERI (eds.), *Italian Archaeology and Anthropology in Northern Pakistan*, Special Issue of *Journal of Asian Civilizations*, 34, 1, 2011.

INORA: *International newsletter on Rock Art*.

ISMEOREPMEM: Reports and Memoirs (IsMEO, Centro Studi e Scavi Archeologici in Asia).

ISIAOREPMEM: Reports and Memoirs (Series Minor, New Series) (IsIAO, Centro Scavi e Ricerche Archeologiche in Asia).

ISMEOREPMEM I: D. FACCENNA and G. GULLINI, *Reports on the Campaign 1956-58 in Swat (Pakistan)*, Rome 1962

ISMEOREPMEM III: D. FACCENNA, *Butkara I (Swāt, Pakistan) 1956-1962*, 1-5.2, Rome 1980-81.

ISMEOREPMEM VII: C. SILVI ANTONINI and G. STACUL, *The Proto-historic Graveyards of Swāt (Pakistan)*, 1-2, Rome 1972.

ISMEOREPMEM XX: G. STACUL, *Prehistoric and Protohistoric Swat, Pakistan (c. 3000-1400 B.C.)*, Rome 1987.

ISMEOREPMEM XXIII: D. FACCENNA, *Saidu Sharif I (Swat, Pakistan). The Buddhist sacred area and the stūpa terrace*, 1-2, Rome 1995.

ISMEOREPMEM XXV: D. FACCENNA, A. NABI KHAN and I.H. NADIEM, *Pānr I (Swāt, Pakistan)*, 1, Rome 1993.

ISIAOREPMEM IV s.m.: L.M. OLIVIERI, *The Survey of the Bir-kot Hill. Bīr-kot-ghwāndai* Interim Reports I, Rome 2003.

ISIAOREPMEM V s.m.: A.M. CACOPARDO and A.S. CACOPARDO, *Gates of Peristan. History, Religion and Society in the Hindu Kush*, Rome 2001.

ISIAOREPMEM V n.s.: D. FACCENNA and A. FILIGENZI, *Repertory of Terms for Cataloguing Gandharan Sculptures Based on Materials from The IsIAO Italian Archaeological Mission in Swat, Pakistan*, Rome 2007.

JA: *Journal Asiatique*.

JAC: *Journal of Asian Civilizations*.

JCA: *Journal of Central Asia*.

Lincei: *Atti della Accademia nazionale dei Lincei. Memorie, Classe di Scienze morali, storiche e filologiche*.

LUCZANITS/JANSEN: C. LUCZANITS and M. JANSEN (eds.), *Gandhara. Das buddhistische Erbe Pakistans. Legenden, Klöster und Paradiese*. Mainz 2009.

MANP: *Materialien zur Archäologie der Nordegebiete Pakistans* (1-11).

MANP 1: (H. HAUPTMANN, ed.), M. BEMMAN and D. KÖNIG, *Die Felsbildstation Oshibat*. Mainz 1994.

MANP 2: (H. HAUPTMANN, ed.), G. FUSSMAN and D. KÖNIG, *Die Felsbildstation Shatial*. Mainz 1997.

MANP 3: (H. HAUPTMANN, ed.), BANDINI KÖNIG, D., *Die Felsbildstation Hodar*. Mainz 1999.

MANP 4: (H. HAUPTMANN, ed.), D. BANDINI-KÖNIG, and O. VON HINÜBER, *Die Felsbildstationen Shing Nala und Gichi Nala*. Mainz 2001.

MANP 6: (H. HAUPTMANN, ed.), D. BANDINI-KÖNIG, *Die Felsbildstation Thalpan I. Kataloge Chilas-Brücke und Thalpan (Steine 1-30)*. Mainz 2003.

MANP 8: (H. HAUPTMANN, ed.), BANDINI-KÖNIG, D., *Die Felsbildstation Thalpan III. Katalog Thalpan (Steine 196-450)*. Mainz 2007.

MANP 9: (H. HAUPTMANN, ed.), BANDINI-KÖNIG, D., *Die Felsbildstation Thalpan IV. Katalog Thalpan (Steine 451-811)*. Mainz 2009.

MANP 10: (H. HAUPTMANN, ed.), D. BANDINI-KÖNIG, *Die Felsbildstation Thalpan V. Katalog Zyarat, Thakot, Komar Das, Gichoi Das, Dardarbari*. Mainz 1994.

Mesopotamia: *Monografie di Mesopotamia*

MDAFA: *Mémoires de la Délegation Archéologique Française en Afghanistan*.

MMAFAC: *Mémoires de la Mission Archéologique Française en Asie centrale. Répertoires des pétroglyphes d'Asie Centrale* (5.1-5.6).

MMAFAC 3: (H.-P. FRANCFORTE, ed.), V.D. KUBAREV and E. JACOBSON, *Sibérie du Sud: Kalbak – Tash (République de l'Altai)*. Paris 1996.

MMAFAC 4: (H.-P. FRANCFORTE, ed.), J.A. SHER and D. SAVINOV, *Sibérie du Sud: Cheremush Log, Ust'. Stèles de Khakassie*. Paris 1999.

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MASI: *Memoires of the Archaeological Survey of India*.

NTS: *Norsk Tidsskrift for Sprogvitenskap*, Oslo.

OLIVELLE: P. OLIVELLE (ed.), *Between the Empires: Society in India 300 B.C.E. to 400 C.E.*, South Asia Research, New York 2006.

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PA: *Pakistan Archaeology*.

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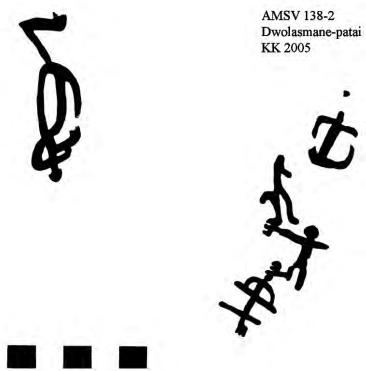
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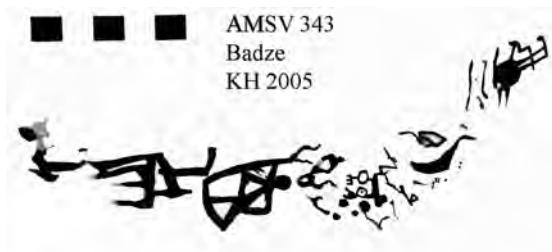




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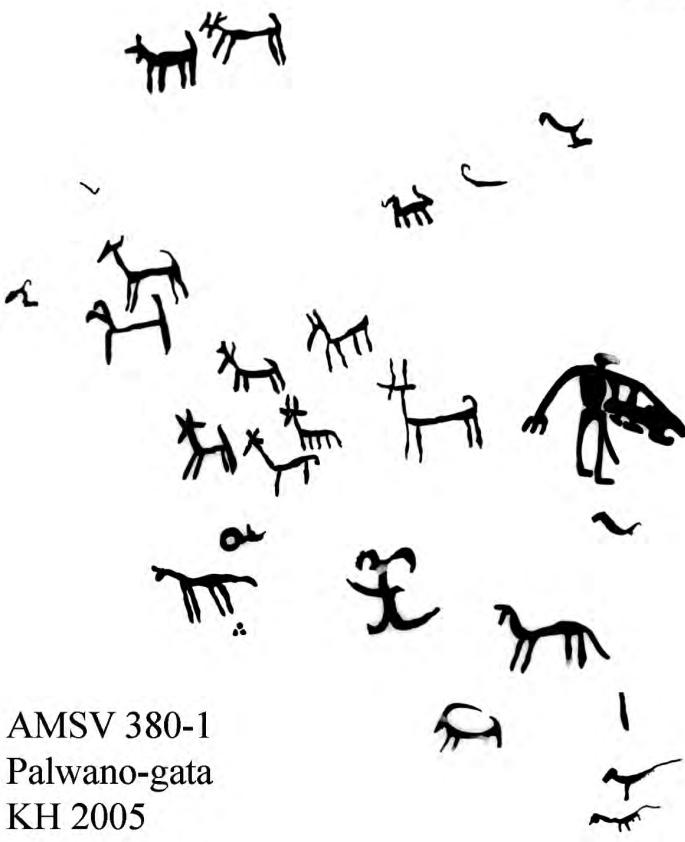
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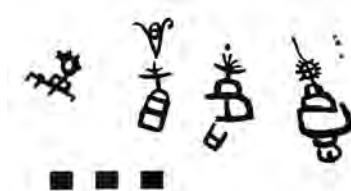
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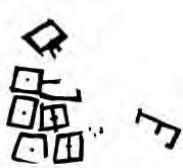
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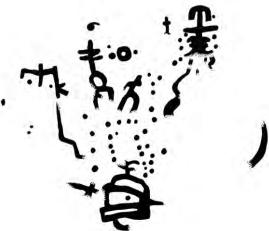


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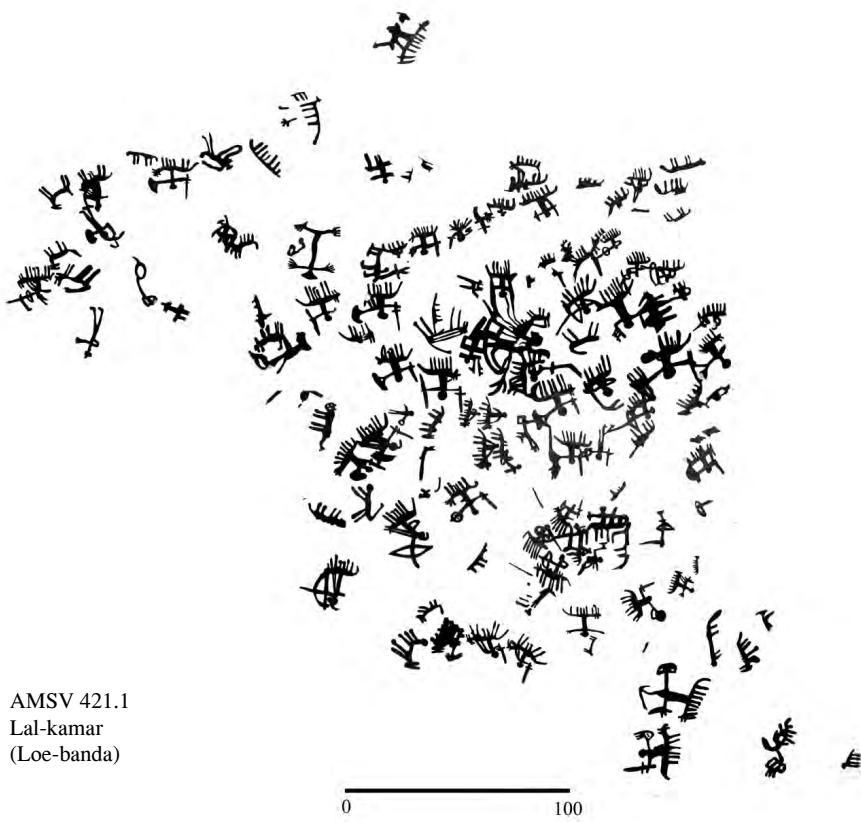
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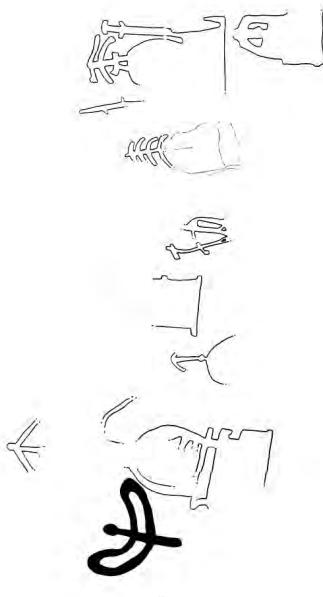
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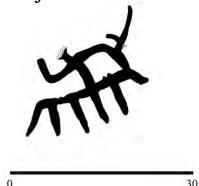
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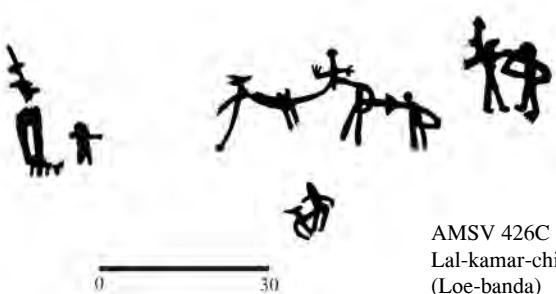
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AMSV 428  
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AMSV 441C  
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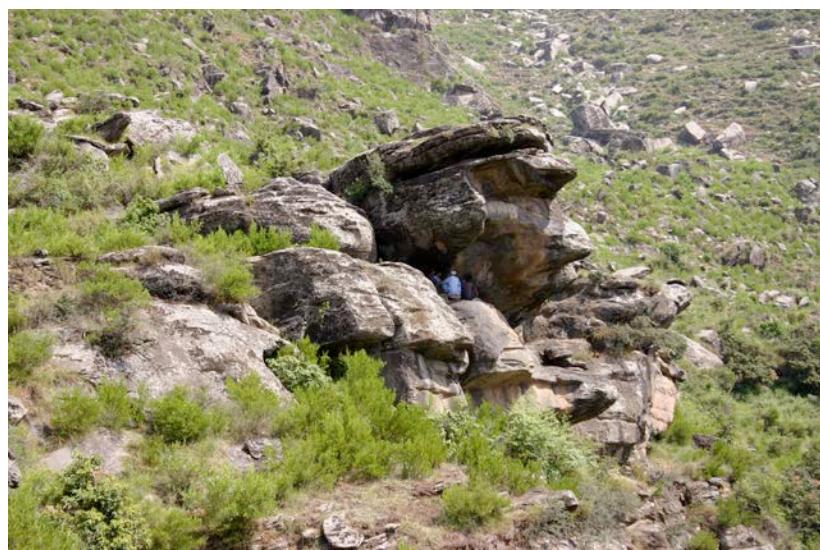
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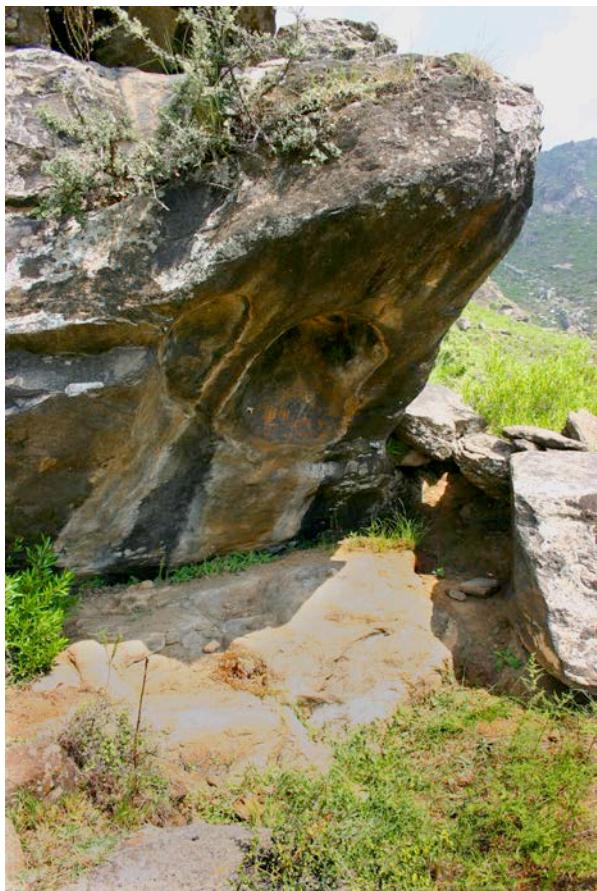


Pls. III-V

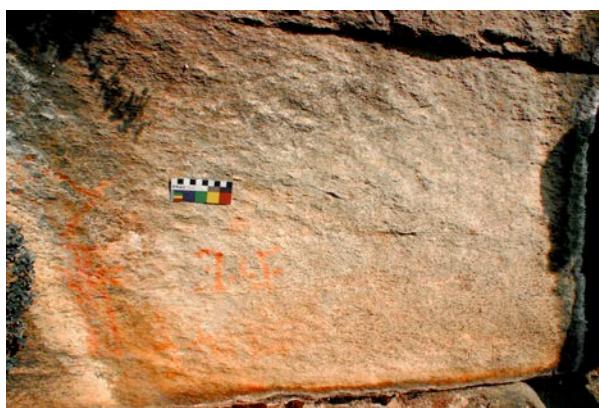
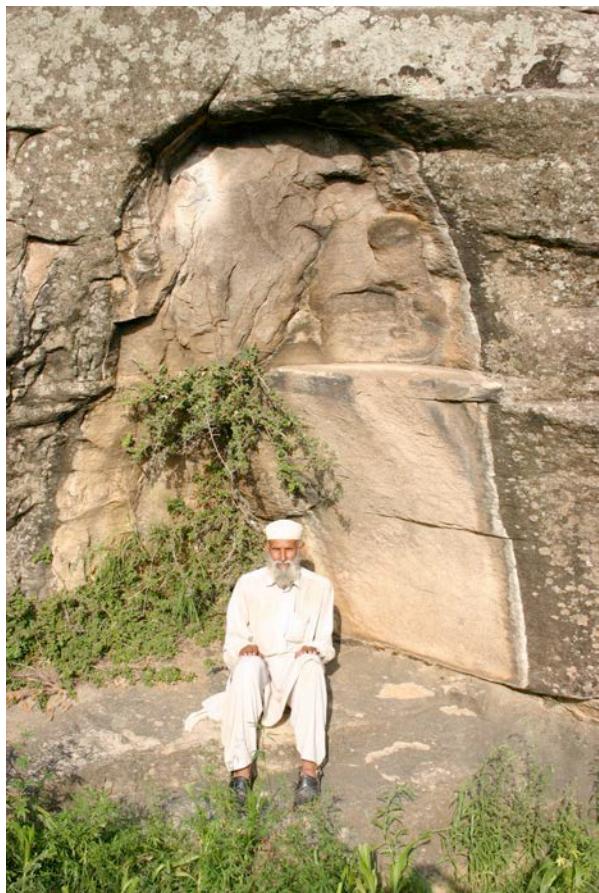




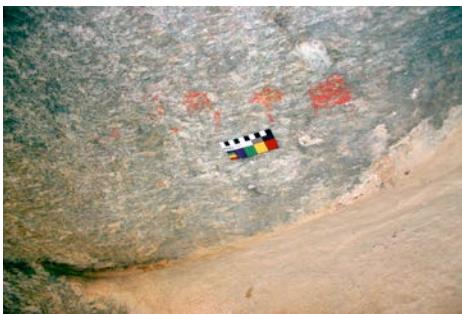


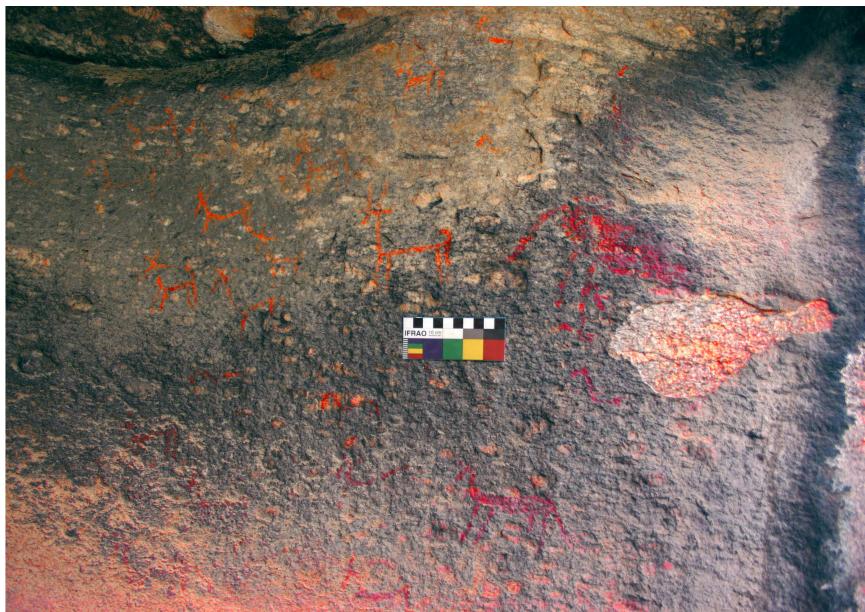


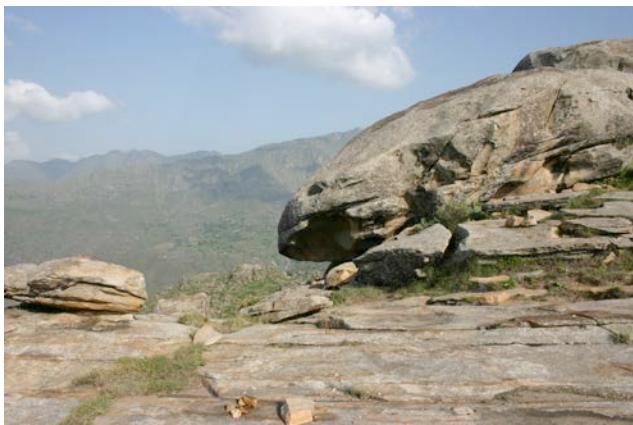
Pls. XVII-XVIII



Pls. XIX-XX







Pls. XXVII-XXVIII

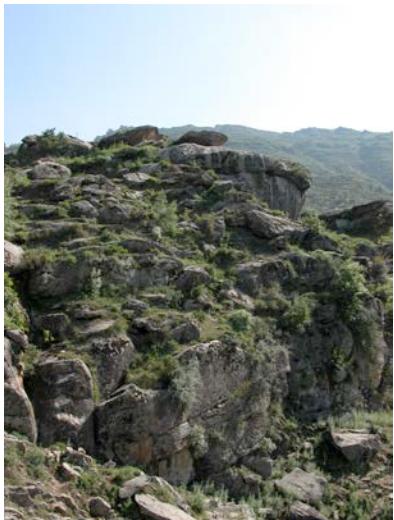




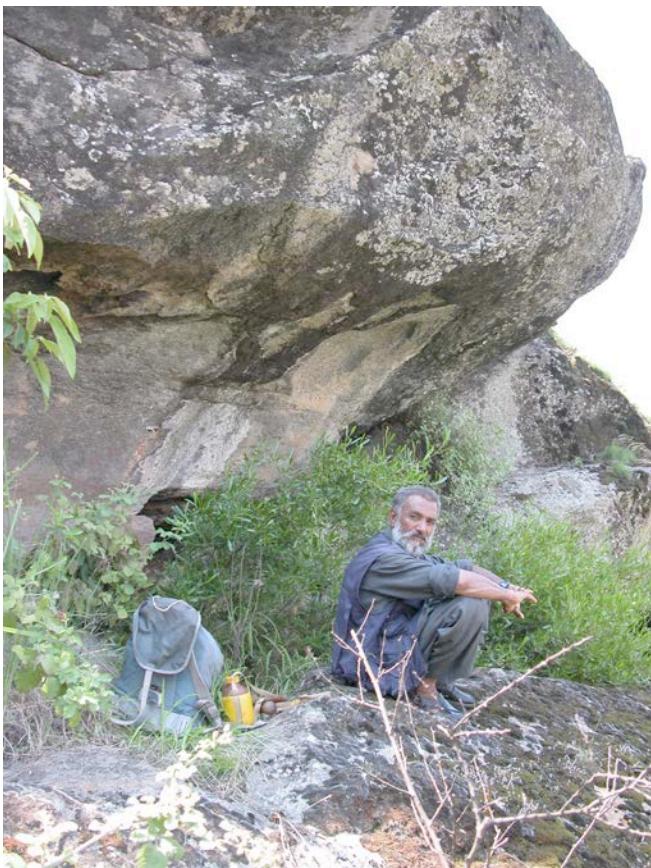
Pls. XXXI-XXXII



Pls. XXXIII-XXXIV



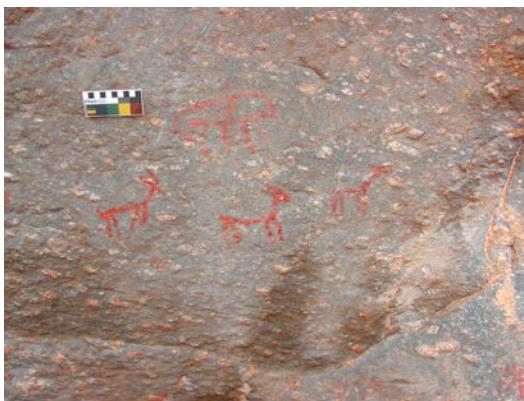
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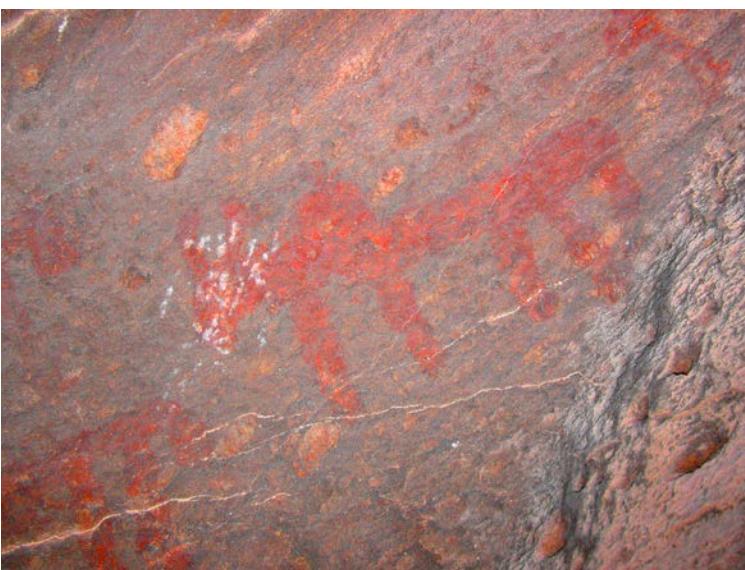
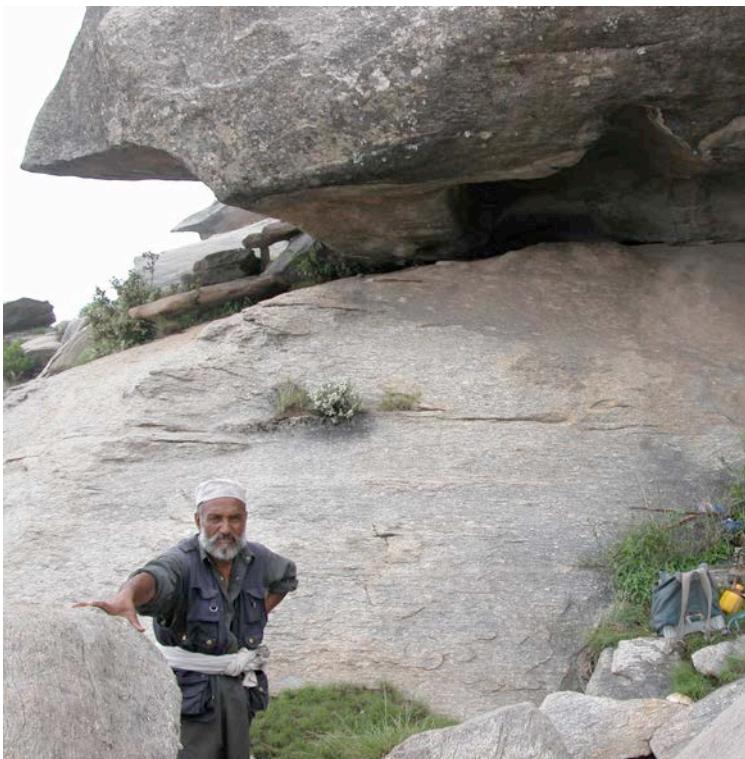


Pls. XXXVIII-XXXIX

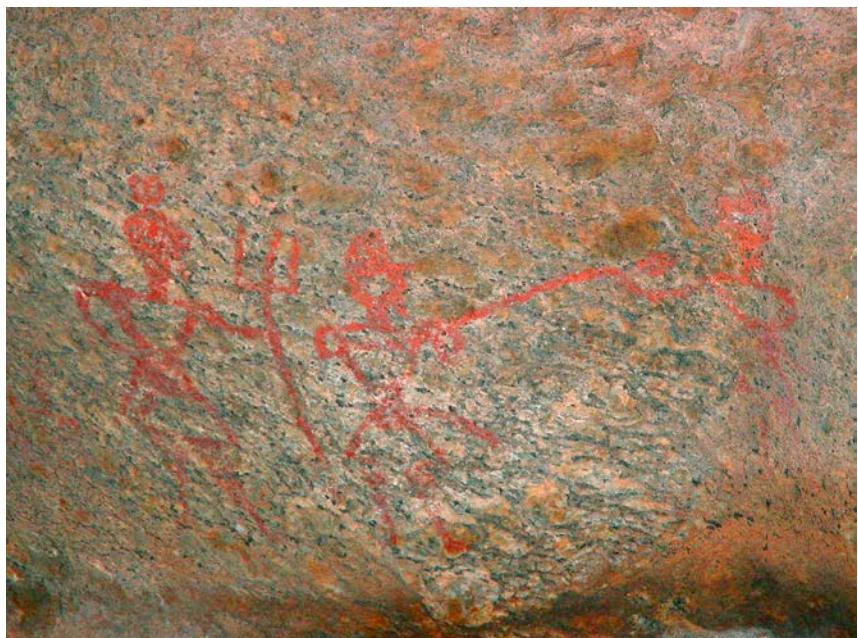


Pls. XL-XLI

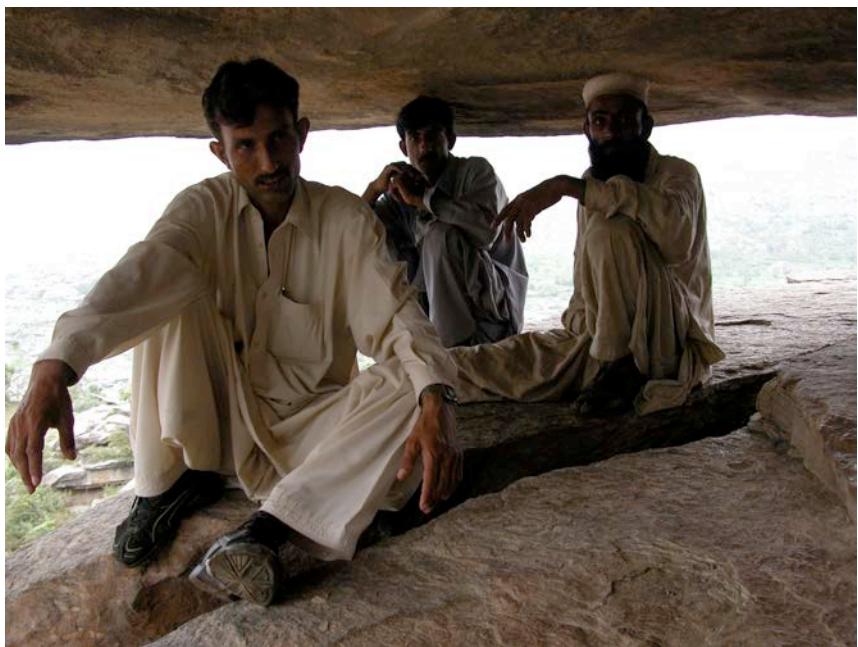


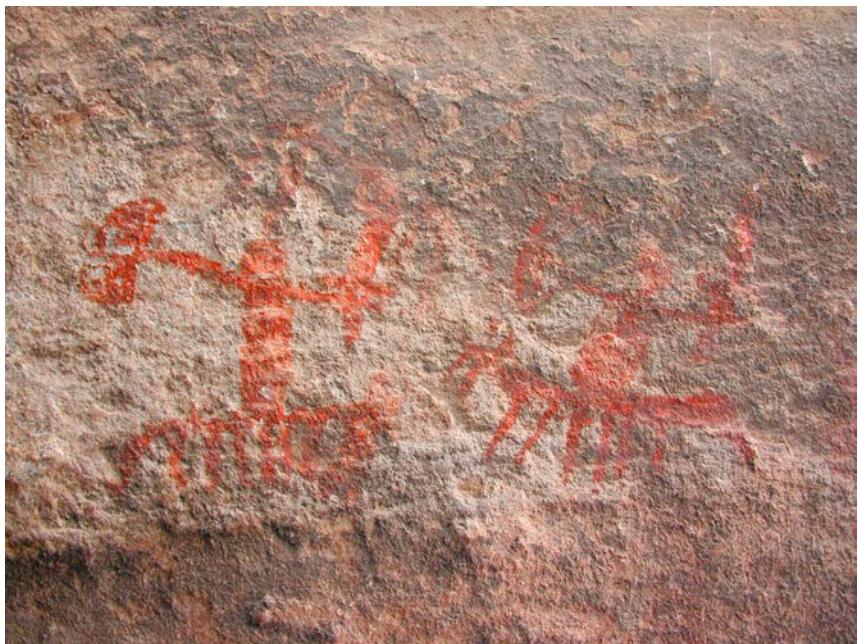


Pls. XLV-XLVi



Pls. XLVII-XLVIII

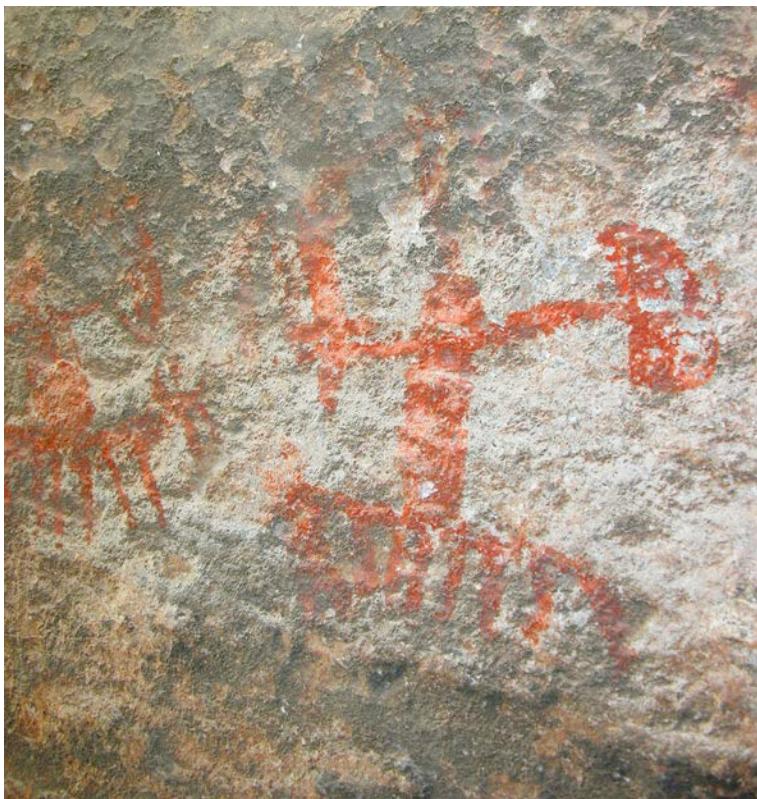




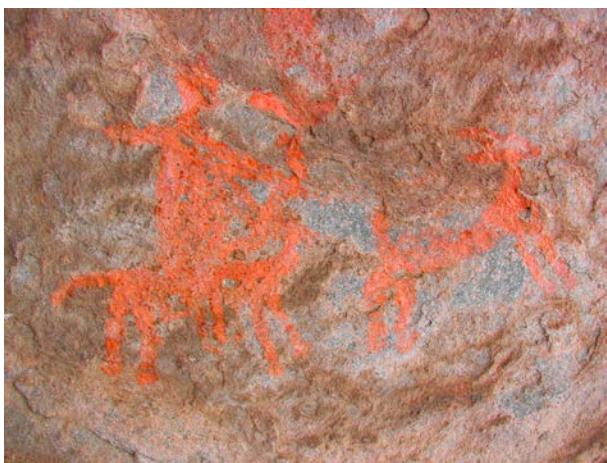
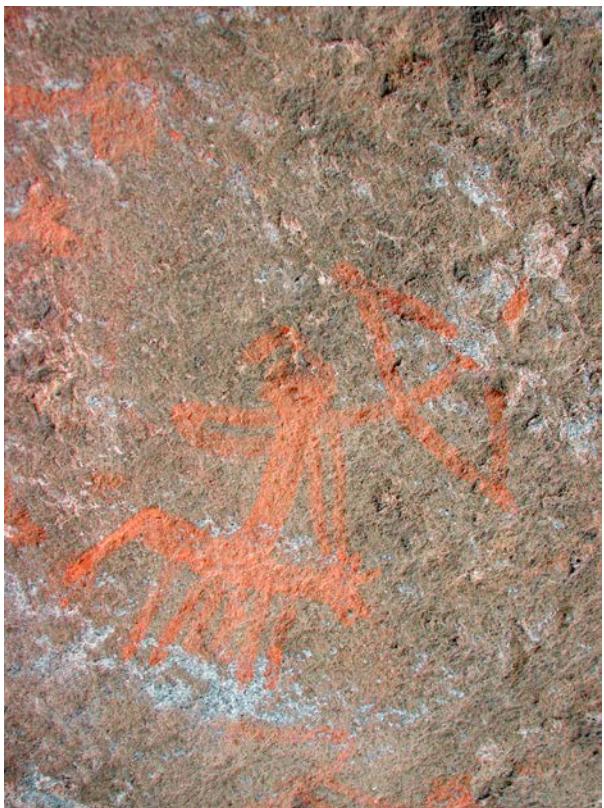
Pls. LI-LII



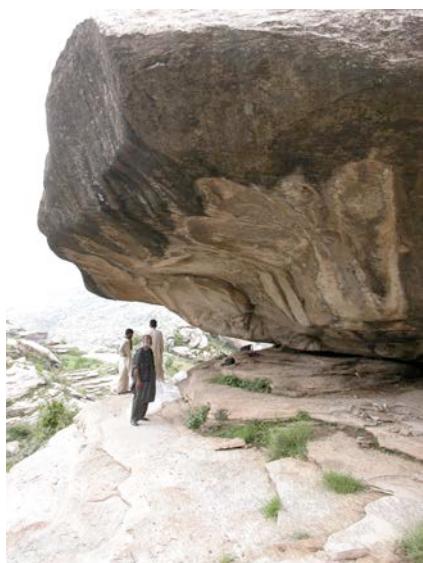


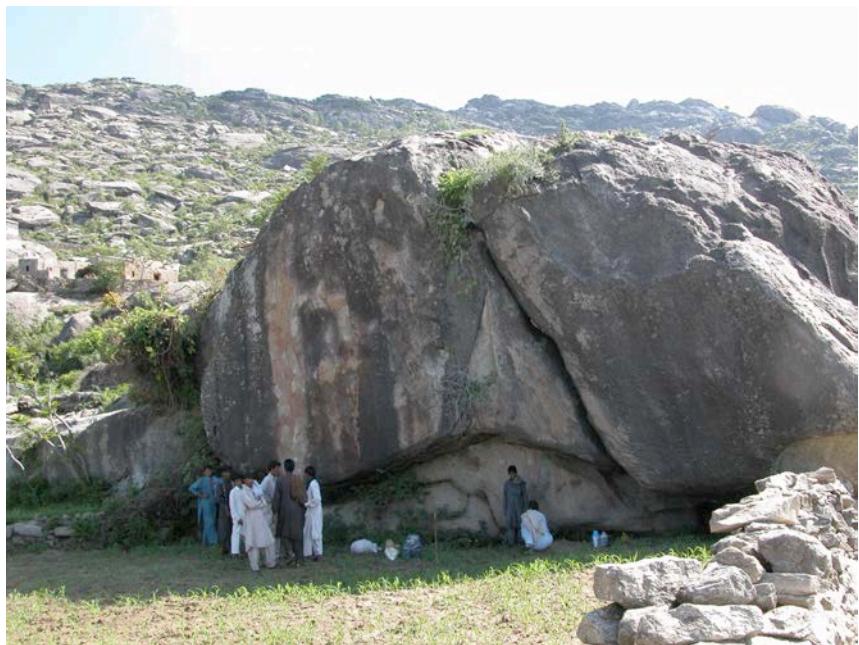


Pls. LVII-LVIII

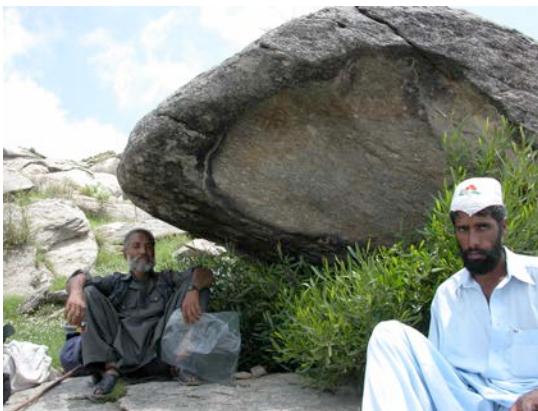


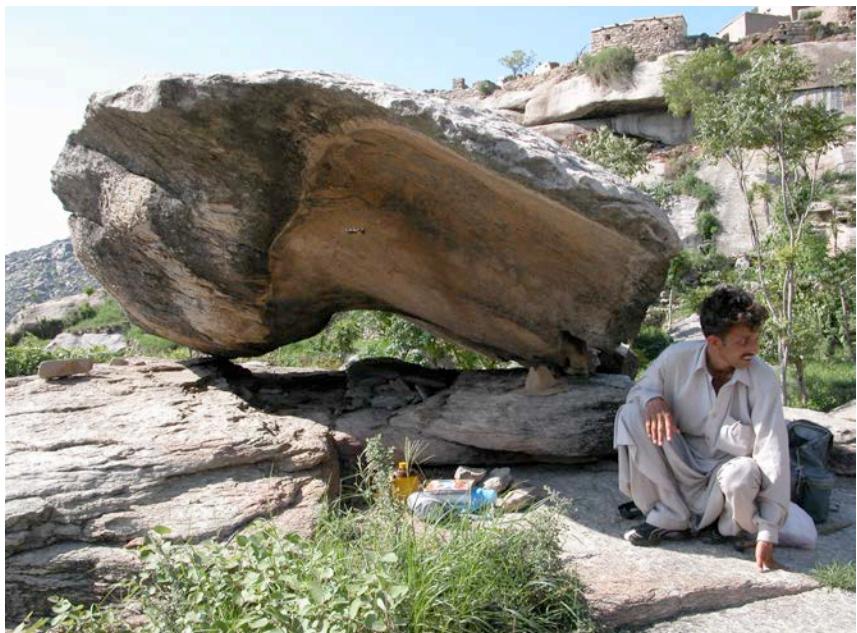




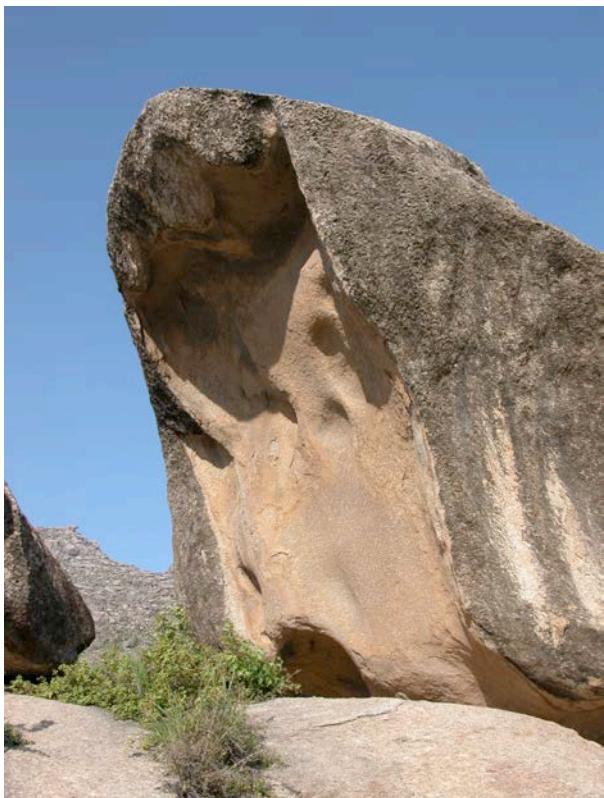


Pls. LXV-LXVI





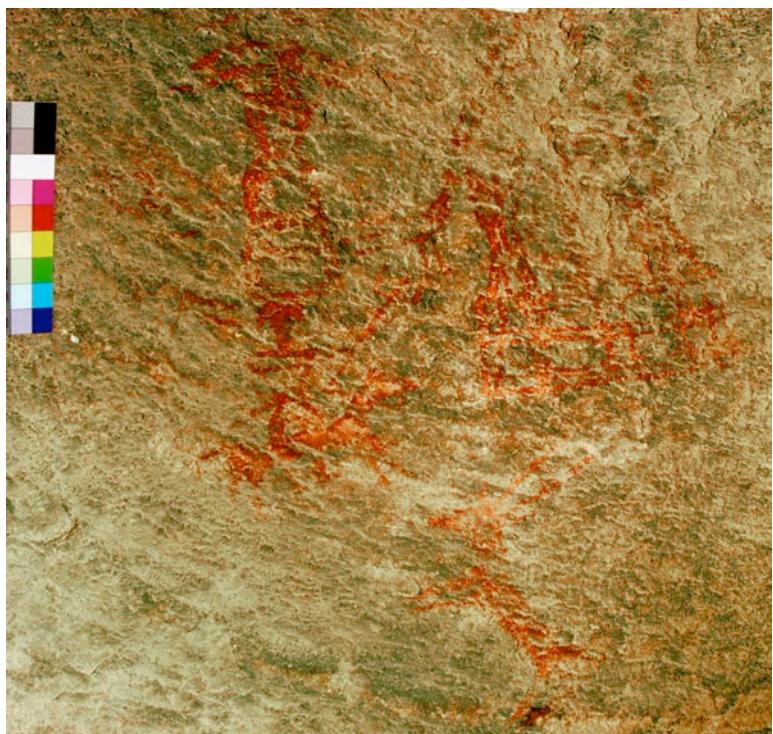
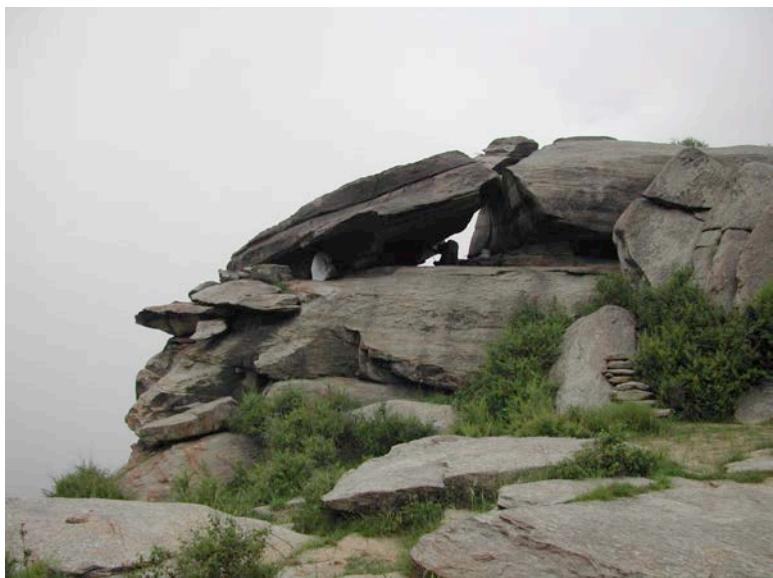
Pls. LXX-LXXI



Pls. LXXII-LXXIII



Pls. LXXIV-LXXV

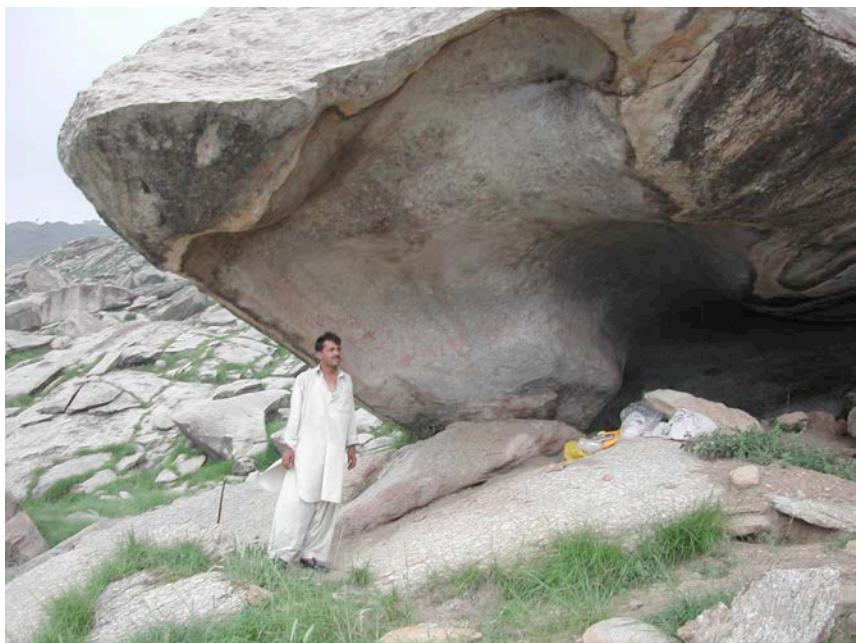


Pls. LXXVI-LXXVII

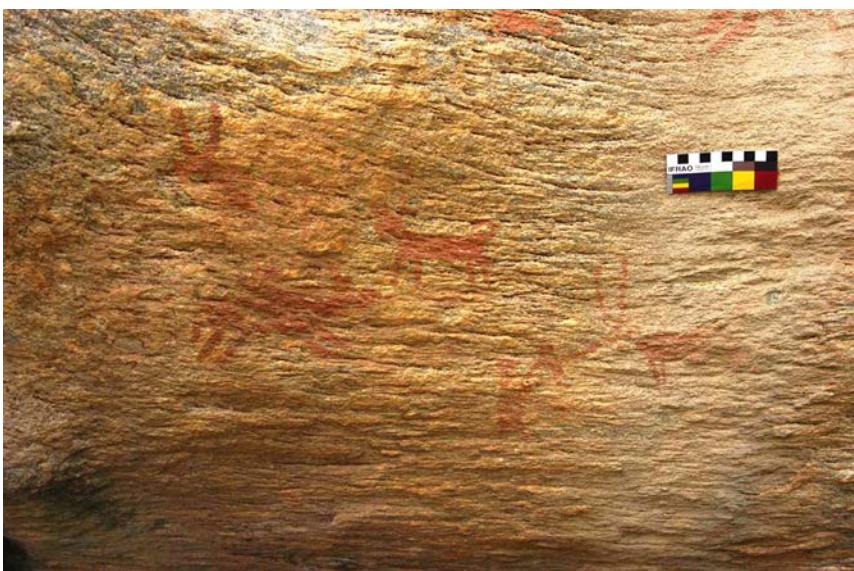
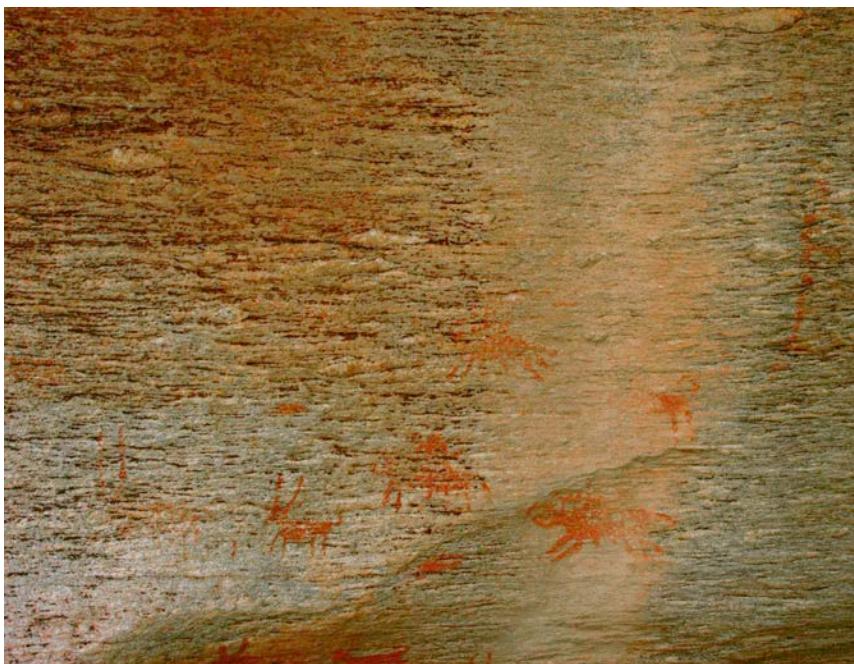




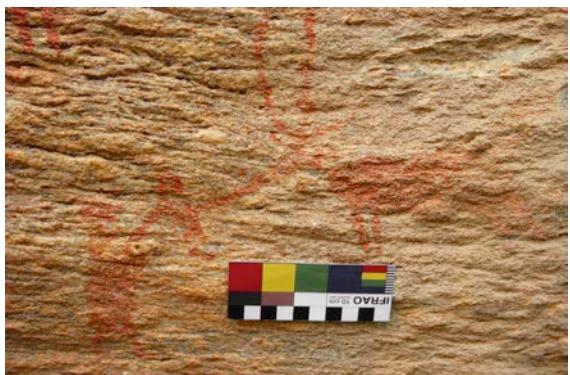
Pls. LXXX-LXXXI



Pls. LXXXII-LXXXIII



Pls. LXXXIV-LXXXV



Pls. LXXXVI-LXXXVIII

