BĪR-KOṬ-GHWAṆḌAI INTERIM REPORTS, XI

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VAJIRASTHĀNA

ARCHAEOLOGY OF THE BARIKOT HILLTOP (SWAT, PAKISTAN)

Volume 1



Luca M. Olivieri
In collaboration with Elisa Iori, Michele Minardi and Marco Pinelli

Foreword by Abdul Samad

Edited by Alice Casalini

"SAVE THE ARCHAEOLOGICAL SITE OF BAZIRA" PROJECT

ALIPH International alliance for the protection of heritage in conflict areas

ISMEO

Università Ca' Foscari Venezia

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English revision by Klara-Maeve O'Reilly

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BKG Interim Report Va = *Ceramics from the excavations in the historic settlement at Bīr-koṭ-ghwaṇḍai (Barikot) Swat, Pakistan (1984-1992)* / by Pierfrancesco Callieri and Luca M. Olivieri. ACT Field School Reports and Memoirs, Special Volume, 2.1-2. ISMEO/Alma mater University of Bologna. Sang-e-Meel Publications: Lahore, 2020.

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BKG Interim Reports, XII – *Apsidal Temple H. Archaeology of early Buddhism at Barikot (Swat, Pakistan)* / by Luca M. Olivieri, Elisa Iori and Michele Minardi (forthcoming).

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PRESENTATION

Adriano V. Rossi

President of ISMEO – International Association for Mediterranean and Oriental Studies

I am particularly pleased to introduce *Vajirasthāna. Archaeology of the Barikot Hilltop (Swat, Pakistan)*, a collective effort due to the ISMEO Italian Archaeological Mission in Swat. It reports about the recent discoveries and restorations by one of the oldest of the Italian missions still in operation among those established by Prof. Giuseppe Tucci and IsMEO in the 1950s, and it is being conducted since some years now in collaboration with the University of Venice Ca' Foscari.

The work in the field was in fact started in 1956 following the first visit to the Swat by Prof. Tucci during the previous year; and since then the mission has seen some of the leading Italian scholars in the field, such as Domenico Faccenna, Pierfrancesco Callieri, and Luca Maria Olivieri, take turns in its direction. We can undoubtedly say that it represents one of the most prestigious legacies to the Italian archaeology in Asia.

The present book, edited by Professor Olivieri and his collaborators, takes its title from the toponym Vajirasthāna, occurring in a Śāradā inscription found at Barikot and transferred to the Lahore Museum in 1898: it has been identified since many years with Barikot/Bazira, a pivotal site in the area and primary center of archaeological research. The book focuses its attention on the recent three-year period 2022-2024, during which the mission found the fundamental support of The International Alliance for the Protection of Heritage (ALIPH) Foundation through the project "Saving the archaeological site of Bazira". The project provided for the restoration of the structures in the Barikot area, allowing the conservation of the monumental artificial terraces of the acropolis, the valorization of the ancient religious and military monuments, and the creation of a buffer zone around the acropolis for the safeguard of the historical site.

As can be clearly seen from this publication, the implementation of the specific ALIPH/ISMEO project and, more generally, the work of the ISMEO/Ca' Foscari Mission, have benefited from a well-balanced international scientific network under the direction of Professor Olivieri, made up of expert scholars and younger researchers and students of an excellent level. This made it possible to carry out accurate research inspired by the criteria of

multidisciplinarity that are essential for modern archaeology, combining the excavation data with the detailed study of the construction methods and materials of artistic and artisan work, also through the contribution of archaeometry.

All this symbolizes one of the cornerstones of ISMEO's mission, which since its foundation has undertaken protocols and agreements for joint research projects with Italian, Pakistani and foreign universities, academies and cultural institutions, as well as with international organizations in the areas of its institutional activities. In this sense, the ALIPH/ISMEO Project has also further highlighted a peculiar aspect of the Archaeological Mission in Swat, which has been continuously promoting training projects for Pakistani, Italian and international students, with excellent results.

In the framework of the ALIPH/ISMEO project, another aspect very much felt by the contemporary scientific community is highlighted: that of the communication of research achievements, which must not be limited to a small circle of specialists, but must find innovative languages that allow its dissemination within a wider audience. Although the book itself represents a valuable and irreplaceable tool for dissemination, it is now appropriate to also turn to those tools that modern technologies make available. In this sense, I am pleased to underline how the project in question has been able to exploit this potential, too: in particular, an efficient Pakistani company has implemented detailed 3D reconstructions, which represent an important scientific and cognitive tool at the same time; and the production of documentaries, visible through links contained in the book and which refer to specific ISMEO platforms.

A decisive role in the most recent phases of the Mission has certainly been played by the ALIPH Foundation; I would like to thank Director Valery Freland and his collaborators for a consolidated and fruitful relationship, a collaboration which outside Pakistan has led to the important restoration of ancient vestiges at the UNESCO Heritage Site of Hatra. A grateful mention must be made of the Italian Ministry of Foreign Affairs and International Cooperation and the Italian Embassy in Islamabad for the essential logistical and economic support continuously provided to the Mission.

Finally, special thanks must be addressed to the Directorate General of Archaeology and Museums and the Provincial Government of Khyber Pakhtunkhwa, without whose contribution and generosity no activity in the Swat valley would be possible.

Foreword

Abdul Samad

Director-General Archaeology and Museums, Government of Khyber-Pakhtunkhwa (Pakistan)

The story of *Vajirasthāna*, a name synonymous with both mystique and historical intrigue, has been the object of extensive discussion, claim, and reclaim for centuries. However, much of the scholarship surrounding it has been based on literary evidence and has thus frequently been (re-)interpreted and revised. Only in recent decades, through the tireless work of Italian and Pakistani archaeological teams in Swat, has tangible evidence begun to shed light on this enigmatic place, offering a more comprehensive understanding of its significance. Among these efforts, the Italian Archaeological Mission's work in Swat over the past seventy years stands as a monumental achievement—one that has significantly advanced our knowledge of the region and its role in the broader history of Buddhism.

The roots of the Italian archaeological mission in Swat trace back to the pioneering scholar, Giuseppe Tucci, who initially had studied the origins of Tibetan Buddhism. Tucci's journey led him, almost serendipitously, to Swat, a region that, unbeknownst to many, held crucial connections to the early spread of Buddhism, especially the Vajrayāna school. His work laid the foundation for what became a legacy of cross-cultural collaboration between Italy and Pakistan, a partnership that has flourished through the generations.

Over the years, this collaboration has evolved into a vibrant, international endeavour, with scholars from the United Kingdom, Germany, Austria, France, China, Korea, USA, Japan, and beyond regularly contributing to the ongoing excavation and research. What began as a focused study on Tibetan Buddhism now spans multiple fields, from archaeology to religious studies, and has enriched our understanding of the cultural and historical tapestry of Swat.

In particular, the past decade has seen a surge of new archaeological findings in Swat, particularly from Barikot. Many of these directly correspond to the ancient Buddhist literature—revealing the deep historical layers of this once-thriving cultural hub. One of the most significant discoveries is the identification of Barikot with a site frequently mentioned in Tibetan literature as the ancient *Vajirasthāna.* Having saif this, the importance of Barikot extends beyond its association with Vajrayāna Buddhism; it was a centre of vibrant multiculturalism, serving as a crossroads for various dynasties, belief systems, and cultural influences. The layers of history evident in Barikot's archaeological remains reveal a rich tapestry of ancient civilizations that have long since faded but whose stories continue to resonate in the present.

Yet among the many remarkable discoveries, one inscription found at Barikot is particularly noteworthy. This inscription, now housed in the Lahore Museum, is one of the key pieces of evidence that affirms Barikot's role as the ancient *Vajirasthāna*, a place revered in Tibetan Buddhist literature as the birthplace of Vajrayāna Buddhism. Together with the recent excavations and conservation efforts on the Barikot hilltop, the inscription has provided invaluable insights into the region's spiritual and cultural significance.

This book, then, represents a significant step forward in the scholarly understanding of *Vajirasthāna*. It carefully and thoughtfully combines archaeological evidence with literary sources, offering a nuanced exploration of this ancient city and its profound influence on the development of Buddhism, particularly Vajrayāna Buddhism. By drawing on the rich history of archaeological research in Swat and the ever-growing body of discoveries, this work seeks to resolve the ambiguities and misconceptions that have surrounded the history of *Vajirasthāna*.

The Directorate of Archaeology and Museums, along with the Provincial Government of Khyber Pakhtunkhwa, takes immense pride in its ongoing collaboration with the Italian Archaeological Mission. This partnership stands as a testament to the enduring bonds between two countries, as well as the broader international community of scholars dedicated to uncovering and preserving the ancient history of Swat and Pakistan. It is our hope that this collaboration will continue to thrive, as future generations of researchers and archaeologists join hands in the quest to explore the hidden treasures of Swat—an area rich in historical, cultural, and spiritual heritage that has shaped the course of human civilisation for millennia.

May this book serve as both a record of our collective achievements thus far and a beacon guiding future discoveries, ensuring that the ancient history of *Vajirasthāna* is not forgotten but celebrated, shared, and understood by all.

Editorial Note

Alice Casalini

Editing such a prominent volume, both in terms of significance and sheer size, is both an honour and a great responsibility. The many contributions in this book are from a group of scholars, friends and colleagues, at different stages in their academic career – we have both seasoned academics with years of experience under their belt, and young scholars who are at the very start of their (hopefully long and successful) career, and everything in between. My editing interventions have strived to bring all contributions together in a cohesive whole that would do justice not only to the laborious work of our team and to that of our predecessors – who laid the solid foundation for the success of such work at the Italian Archaeological Mission in Swat – but also to the great monument of Bazira-*Vajirasthāna*.

…

The volume includes several contributions by the same author(s), and several intertextual references occur. To avoid cumbersome and confusing repetitions, we have decided to assign a number to each contribution by the same author, which is reported in superscript, according to the following scheme (here presented in alphabetical order):

Arcuri, Prota[1] = *Structural Overlaps in BKG 24* in Terrace W.

Arcuri, Prota[2] = *Macrophase 8b: Zoomorphic Spouts in* Terracotta and Ceramics.

Casalini[1] = *The Architecture of Temple 6: Excavated Materials and Reconstruction* in Religious Architecture: Temple 6.

Casalini[2] = *Macrophase 8b: The Three Hares Roundel* in The Barikot hilltop in 10 Objects.

Filigenzi[1] = *Śāhi Marble Sculptures in* Sculptures.

Filigenzi[2] = *Late Buddhist Rock Sculptures* in Sculptures.

Iori[1] = *Hindu Śāhi Settlements and the Fortified Limes* in Civil and Military Architecture.

Iori[2] = *Macrophase 8b: A Hindu-Śāhi Portrait* in The Barikot hilltop in 10 Objects.

Iori[3] = The Vajirasthāna Hilltop: Iconic Aspirations and Overlapping Religious Landscape

Minardi, Prota[1] = *Trench BKG 24.1* in Terrace W.

Minardi, Prota[2] = *The Islamic Graveyard Outside the Terrace W (BKG 24.1)* in TERRACE W.

Moscatelli[1] = *Gandhāran Stone Sculptures in* SCULPTURES.

Moscatelli[2] = *Macrophase 5: An enigmatic* Mahāparinirvāṇa in THE BARIKOT HILLTOP IN 10 OBJECTS.

Olivieri[1] = THE CITY OF VAJRA.

Olivieri[2] = ARCHAEOLOGICAL OUTLINES.

Olivieri[3] = THE SURVEY (1992–1993).

Olivieri[4] = *Methodology* in THE CONSERVATION PROJECT "SAVING THE ARCHAEOLOGICAL SITE OF BAZIRA" (2022–2024).

Olivieri[5] = *The Monumental Terraces and the Central Fortress* in CIVIL AND MILITARY ARCHITECTURE.

Olivieri[6] = *Trench BKG 6: The Śāhi Temple on Terrace E* in RELIGIOUS ARCHITECTURE: TEMPLE 6.

Olivieri[6.1] = The quarry sources of *kañjur* [Addendum 1 to Olivieri[6]]

Olivieri[6.2] = Decorated sandstone cornices from Macrophases 8a–b [Addendum 1 to Casalini[1]]

Olivieri[7] = *Macrophase 9a: A Sphero-Conical Vessel* in THE BARIKOT HILLTOP IN 10 OBJECTS.

Rabbani[1] = *Common Pottery* in TERRACOTTA AND CERAMICS.

Rabbani[2] = BEADS AND ORNAMENTS.

The names of authors and other contributors are abbreviated to the first letters of their name/middle name/surname (e.g., LMO = Luca Maria Olivieri; MP = Marco Pinelli, etc.) in the chapter THE CONSERVATION PROJECT "SAVING THE ARCHAEOLOGICAL SITE OF BAZIRA" (2022–2024), as this section includes several in-text references to the many people who have worked on the conservation and excavation of the hilltop. This style of abbreviation is also used whenever an author intervenes with a brief text within the larger text by another or others and in the captions. The full name is used for non-contributors in the image captions.

Individual contributions, at the APA level 1 and 2 (i.e. the headings both in small caps and italics in the table of contents), have their own numbering of footnotes and figures.

In the body of the text, the following typographic rules are followed to signal the different nature of every element: structures, such as walls, drains, etc. are within square brackets: e.g., [200]; layers are within round brackets: e.g., (150); cuts, pits, razed surfaces (negative stratigraphic units) are within angle brackets: e.g., ⟨320⟩; finally, cup-marks and similar features are written within curly brackets: e.g., {5}. Structures that are underlined within squared brackets refer to those surveyed in the 1990s (i.e., Olivieri[3] THE SURVEY) [<u>23</u>]). This is done to graphically separate the structures surveyed at the time from those excavated and documented in later excavation campaigns.

A parenthesis system is also used for epigraphic translations: [ ] mark uncertain readings, ( ) lost material, and ⟨ ⟩ material omitted by the author.

We have chosen to keep the terminology given to structures and areas used in the fieldwork documentation. For example, we refer to Terrace E (emphasis on 'E') rather than E Terrace (emphasis on 'terrace'), Terrace W rather than W Terrace. Words indicating architectural and/or archaeological features (e.g., terrace, trench, bastion) are capitalised

when followed by their specific designation (e.g., Terrace E, Trench 6.3, Bastion H). Walls and other common structural units are left in lowercase.

Cardinal directions are usually shortened and capitalised (e.g., N, S, E, W) in surveys, technical reports and stratigraphic studies for the sake of readability (namely, THE SURVEY (1992–1993); THE CONSERVATION PROJECT …; *The Monumental Terraces and the Central Fortress*; *The Fortress on the Hilltop [Trenches BKG 14 and 15]*; *The Architecture of Temple 6* …; TERRACE W). Directions are spelled out in all other contributions, especially when they are part of known phrases (e.g., the northwestern regions).

Stylistic choices for the images in each contribution have been left within the remit of individual authors. This accounts for slight discrepancies in the formatting of some graphic signs (e.g., N arrow, scale, etc.). These have been edited only for consistency in relation to the internal structure of each author's contribution. Figures and tables are capitalized in the text whenever they refer to images and illustrations from the present volume and are left in lowercase whenever they refer to images, plates and tables from other works. A special case is that of TABLE 1, TABLE 2 and TABLE 3 in Olivieri[2], which are in small caps in the whole text, as they refer to macrophases and chronological data that are valid for all contributions. Plates relative to this text are always formatted in small caps; all others are in lowercase.

All images are property of the Italian Archaeological Mission/ISMEO, unless otherwise noted in the captions. Objects in the inventory are marked by the label of the site (BKG = Barikot), followed by their individual number.

Catalogue entries the last part of the volume (MATERIAL CULTURE) follow the format:

Inv. No. – Fig./Figs

Location/museum.

Stratigraphy; year of discovery (if needed)

Material; Dimensions

Conditions, Joints and special marks (if present)

Bibliography, if available.

This information is followed by a brief comment on each object. In the catalogue, all measures are in centimetres, unless otherwise noted. Generally, measurements are expressed in metres when we are discussing buildings and/or areas of space, and in centimetres when we are dealing with individual objects. The catalogue of coins by E. Shavarebi follows criteria and format that are specific to numismatics. They are explained by the author in the contribution.

The following abbreviations are used throughout the text. Bibliographic abbreviations are listed at the beginning of the section REFERENCES.

a.s.l.	above the [mean] sea level
av.	average
cf.	see
cm	centimetre(s)
d.	diameter

Dept.	Department
DG	Director General
DOAM	Directorate of Archaeology and Museums, Government of Khyber Pakhtunkhwa
DoAM	Department of Archaeology and Museums, Government of Pakistan
dp.	depth
DR	Departmental Representative
DSAAM	Dipartimento di Studi sull'Asia e l'Africa Mediterranea [Department of Asian and North African Studies]
Fig., Figs	figure, figures
fn	footnote(s)
Govt.	Government
h.	height
ha	hectares
KP	Province of Khyber Pakhtunkhwa
l.	length
max.	maximum
m	metre(s)
N, S, E, W	north, south, east, west
pers. comm.	personal communication
Pl., Pls	plate, plates
ref./refs	reference, references
sqm	square metre(s)
SRO	Sub-Regional Office (DOAM KP)
t.	thickness
tr.	translated/translation
w.	width

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INTRODUCTION

Luca M. Olivieri

Preamble

This book is the fruit of a collective effort. My name as main author stands out by virtue of the scientific and legal role I played in managing the project so generously funded by the ALIPH Foundation and ISMEO. My most sincere thanks go to the ISMEO President, Prof. Adriano V. Rossi, to Marco Baldi and Beniamino Melasecchi, to Maja Kominko, Andrea Balbo (ALIPH 2022-2023) and Adonis ElHussein (ALIPH 2023-2024).

Yet not a single page could have been written had it not been for the contributions of all those involved. We need to change our mindset on the supposedly solitary nature of archaeology – and we should stress that archaeology only exists as a collaborative discipline, both in the field and at the desk. Gérard Fussman, whose memory I fondly recall here, already noted this with acumen in the 1990s.[1]

The very idea of the project, that is to study and restore the great monumental acropolis of Barikot, came to my mind on the first day I visited the hill on Friday, 25 September 1987, with M. Aurel Stein's photo in hand. It was the first day-off during my first week of excavation in Barikot: Pierfrancesco Callieri had graciously allowed me to participate given my experience of stratigraphic excavation on the Palatine and at the Meta Sudans, even though at the time I was but a novice in South Asian archaeology. I had been introduced to Pierfrancesco and Domenico Faccenna only a few months earlier by Patrizio Pensabene.

The great monument of the Barikot acropolis was first 'archaeologically' seen and described by Stein, who immediately recognised its importance. His photos, taken in the spring of 1926, not only guided us in our initial research. They were also helpful in understanding the resilience of its most delicate point, the great NE spur, whose partial collapse occurred only in 2022, after the second most dramatic flooding of the Swat River in this millennium. I remember that Domenico Faccenna, the never forgotten 'Direttore' of the Mission, always urged us to follow Stein's photos and take new ones from the same viewpoints, as an exercise in studying and reading the structures. This advice was never more useful than after the flood, a fact that should not surprise us, as Domenico was a true master of the archaeological arts, a first-rate excavator, and a studious and precise reconstructor of architectural volumes and decorations. In 1998, when Maurizio Taddei took over as director of the Mission, and in agreement with Pierfrancesco, I was given permission to finally tackle the excavation of the hill, which we had been renting since 1996. It was during that campaign, carried out together with Roberto Micheli and Abdul Nasir[2], that we discovered that instead of a stupa, as Stein had hypothesised, the ruins on the hilltop were those of a Śāhi temple. That campaign was marked by many notable things, including a total solar eclipse on August 22.

[1] 'One last observation should be made for those interested in the sociology of archaeology. On the cover of Faccenna 1980, despite the great number of drawings and their usefulness, only one name appears. On the cover of Faccenna 1993, seven names are printed' (Fussman 1996: 256).

[2] Dept Representative of the Department of Archaeology and Museums, Govt of Pakistan (DoAM), whose DG was Saidurahman, a dear friend and a colleague.

Two years later, Maurizio passed on (2000), and eight years later it was Domenico's time (2008). The direction of the Mission remained in the hands of Pierfrancesco, with my assistance, and when I became director in 2011, I also started the ACT project. The rest is narrated in the following pages.

Going back to what I said at the beginning, I want to reiterate that, although the idea and management of things were my own, nothing would have been possible without the contribution of all those gathered in this volume. First and foremost, Elisa Iori, who is now a researcher in my department at Ca' Foscari University of Venice. Elisa, my former PhD student and now close collaborator, will continue my work as a lecturer on the archaeology of the region when I inevitably retire. At that point Elisa, now deputy director of the Mission, will also take over its management, with the task of bringing this 70-year-old enterprise to its 100th birthday and beyond. Then there is Michele Minardi, my companion during the COVID years. Together, we faced a journey that was just short of alienating, and an excavation on the hill amidst the surrounding void of a world that had seemingly stopped. I remember an episode from that autumn of 2020, when during an electrical storm, the top of the hill was enveloped by St. Elmo's fires. Marco Pinelli – the descendant of a family well-known in Pakistan for the mountaineering exploits of his great-uncle Betto – was recommended to me by the latter, when Marco was a student in conservation and restoration at the Brera Academy in Milan. After a first season in 2019, in 2020 he distinguished himself to the point of flanking and then replacing Fabio Colombo, the Mission's historic restorer (we worked together also in Afghanistan), as the latter was busy with other commitments. Marco Pinelli has been the faithful hand in this complex restoration project, which he was able to carry out with a mastery that exceeded all expectations. I must also mention his humanity and compassion in teaching and training, qualities that brought a team of willing workers to an enviable technical level.

Nothing would have been possible without the great support of two friends, each according to their own character and skills. I have already mentioned Arshad Khan in the dedication of this volume: quite simply, without him nothing would have been possible, and today the hill would be marred by a hotel, a large villa, or, at best, a mobile repeater tower. The other friend is Abdul Samad, who wrote the *Foreword* to this volume. One might say his support should be obvious, since he is the Director-General of Archaeology of the Khyber Pakhtunkhwa Province (DOAM KP). But there are many ways of interpreting the role of Director. Since archaeology became a matter of provincial control in 2011, eight people have succeeded one another in the executive chair and, yet, none can compare to the current Director for the care he always put in following the work, his benevolent attention to us, and his vision of Barikot as the nerve centre for the future of Swat and KP archaeology, but also for the sincere friendship he has always brought to me and to us all.

Among the DOAM staff I must also thank Bakht Mohammad (Asst Director) for his official support from the head office in Peshawar, Nawazuddin and before him Faiz-ur-Rehman (in-charge Malakand Sub-Regional Office: SRO; Curator Swat Museum) for legal matters and everything related to the Swat Museum, and Nasir Muhmood (DR; in-charge Reserve Collection Swat Museum). The latter was with us continuously for the duration of the project and replaced other historical DRs in Barikot, Amanullah Afridi (now in-charge SRO Malakand Division) and Niaz Ali Shah (now in-charge SRO Hazara Division). In Italy and Pakistan, we were supported by the Italian and Pakistani Embassies, as well as the Pakistani Consulate General in Milan. Several ambassadors succeeded one another over the years, and we remember them all with gratitude.[3] The Italian Ministry of Foreign Affairs (MAECI) has always looked with benevolence upon our work, while the Italian Cooperation (AICS) and their directors in Pakistan have always given us impetus and encouragement to reframe and re-employ our skills and successes towards new and more ambitious

[3] From 2008 to date: HEs Vincenzo Prati, Adriano Chiodi Cianfarani†, Stefano Pontecorvo (now Chairman of the Board of FinMeccanica), Andreas Ferrarese, Marilina Armellin. Among the ambassadors from Pakistan: HEs Tasnim Aslam (later Foreign Office Spokesperson), Tehmina Janjua (later Foreign Secretary), Ali Javed, Nadeem Riaz, Jahuar Saleem (later Acting Foreign Secretary), Ali Javed. Consuls General in Milan from 2020 to the present: Manzoor Chaudhry, Aqsa Nawab.

projects. The untiring support of the Federal Department of Archaeology and Museums (DoAM, Govt of Pakistan), and his DG, Abdul Azim was also fundamental to us.

The Ca' Foscari University, its current Rector Tiziana Lippiello, and the previous Rector Michele Bugliesi, and above all my Department (DSAAM) with its current Director Laura De Giorgi and the previous Director Marco Ceresa†, are to be thanked here for the foresight and patience with which they have welcomed the Mission to the university, and have accommodated the *cafoscarini*'s fieldwork within the framework of the didactic and administrative commitments of the academic semesters.

I also want to speak about the workers on site. Although it has become fashionable to honour them as the true protagonists of this enterprise, it is but the truth. Appropriate space will be given to them and their contributions later, but I want to especially mention now Azim 'Spinda' Khan (site foreman), Rahimzada (head custodian), Shafiq Ahmad (accountant and secretary), Rustam (field officer), Ali Khan (chief driver), Yusuf Khan (major-domo), as well as Wasim Sajjad (chief operator acrobatic restorers), Abdul Khaliq (chief carpenter), Saheb Shah (chief wall restorer), and Kashif Iqbal (chief drone operator).

Among those who have been with us in recent years, I must mention one of the seniormost and most promising scholars who joined the Mission, Alice Casalini (University of Chicago) who has patiently edited this volume, filed down errors – including linguistic ones – and to whom we owe some of the best drawings published here. I cannot but dedicate a few words to Agnese Fusaro (Università per Stranieri di Siena), who for years has been working on the large-scale excavation of the ancient port city Banbohre in Sindh. This is now a joint project between ISMEO and the Catholic University of Milan (I act as the scientific co-director for the archaeological aspects).

Our colleague Omar Coloru has been following us in the field for many years now: it has been a great pleasure to see historians of the Greek world, especially Claudia Antonetti, and of the Roman world, especially Federico De Romanis, not only take an interest in our work in Barikot, but even, like Omar, take part in it. Among the few Islamic archaeologists who have continued to look at the peripheries of their historical geography is Alessandra Bagnera, who has staked her career on this courageous choice of field.

I should also remember other members of our team like Moizza Elahi (University of Toronto), who did not participate here as she focused on the excavation of the lower city trenches, and Subhanigul (Director, Dept of Archaeology, Jahanzeb College, Saidu Sharif), who mainly focused on Elisa Iori's new excavation at Butkara I. Among our friends in Swat we cannot but praise the help we always received from the Miangul Family: Miangul Aurangzeb, the Crown Prince or *Walii-'ahd*, his sons Hassan and Adnan Aurangzeb who tragically passed away on May 30, 2022, and the latter's wife Princess Zenab Gohar Ayub, who on many occasions has taken care of us in such a motherly and efficient manner. We also thank Xuan Yali of the *Waksaw Uddyana Archaeological Alliance* for her support and benevolence. Amongst the members of civil society who participated and helped us, I would like to mention Kashif Essa of EssaNoor Associates, our Torwali friends of UmbrellaBrand, my dear friend Ali Kamran of Sang-e-Meel Publications, and Fazal Khaliq of *Dawn*, one of the most innovative among the Pakistani journalists who also write about archaeology and heritage. A special thanks goes to the artist Balage Balogh who followed and carefully illustrated our work on his website https://archaeologyillustrated.com/.

Among my direct or indirect students, present or past, who have collaborated here, I cannot fail to mention Michela Prota (whom I also praise for her dedication and precision) and Naghmeh Mahzounzadeh (Ca' Foscari), Li Hong (University of Rome 1, La Sapienza), Ehsan Shavarebi (University of Vienna), Cristiano Moscatelli (formerly Ruhr Universität, Bochum), Emanuele Lant (formerly University of Padua), and Mubariz Rabbani (formerly University of Reading). Matteo Sesana (formerly University of Naples 'L'Orientale') deserves special praise for following the work in my absence with surprising competence for a philologist who had only taken only two MA courses with me at Ca'

Foscari. Among my colleagues here I remember the steady presence and competence of Rita Dal Martello, palaeobotanist at Ca' Foscari; Stefan Baums, renowned epigraphist from the University of Munich for epigraphy; Ingo Strauch, also an epigrapher, but at the University of Lausanne; and Massimo Vidale of the University of Padua, one of my closest companions in many scientific adventures. Also at Padua is Giuseppe Salemi, whom I thank for his work with the digital humanities component of our work. I have already mentioned Pierfrancesco Callieri. Let me only add here that my utmost and sincerest devotion goes to him. To Anna Filigenzi goes a special thank for her unwavering support, but also and especially for having opened and paved the way for the study of the late antique and early medieval period in a geographical area still dominated by the obsession with Gandhāran sculpture, which has often obscured so much else.

For the structure of this volume, I have taken inspiration from what I consider an unparalleled example of precision, detail and editorial care, an exemplary publication of an equally exemplary archaeology and conservation project (which has so much in common with our way of practicing archaeology). I refer here to the the three volumes of the *Ancient Herat* series edited by Ute Franke with other authors.[4] I hope that the final result offered to readers here may be on a par with this example, and reflects the great collective effort behind the success of the last 32 months of work on the Barikot hill.

* * *

Questo libro è il frutto di uno sforzo collettivo. Il mio nome come autore (o meglio come autore principale) spicca in virtù del ruolo che scientificamente e giuridicamente ho rivestito nella gestione del progetto che la Fondazione ALIPH e l'ISMEO hanno voluto finanziare così generosamente e sostenere con attenzione. Il mio ringraziamento va al Presidente dell'ISMEO Prof. Adriano Rossi, a Marco Baldi e a Beniamino Melasecchi (ISMEO), a Maja Kominko, Andrea Balbo (ALIPH 2022-2023) e Adonis ElHussein (ALIPH 2023-2024).

Eppure, non una singola pagina avrebbe potuto essere scritta se non ci fossero stati i contributi di tutti i coinvolti. Si tratta di cambiare attitudine su questo e riconoscere e far conoscere sempre più chiaramente che l'archeologia esiste solo come disciplina collaborativa: sul campo e nella scrittura. Ne aveva già scritto con acume Gérard Fussman, la cui memoria qui ricordo con affetto.[5]

Va detto però che l'idea stessa del progetto, ovvero lo studio e il restauro della grande acropoli monumentale di Barikot, mi sovvenne il primo giorno che, foto dello Stein alla mano, visitai il colle in un venerdì di settembre del 1987 (25 settembre 1987). Era il primo giorno festivo della mia prima settimana di scavo a Barikot, dove Pierfrancesco Callieri mi aveva permesso di partecipare, in virtù della mia esperienza di scavo stratigrafico sul Palatino e alla Meta Sudans, sebbene allora fossi digiuno di archeologia del Sudasia. Pochi mesi prima ero stato introdotto a Callieri e Domenico Faccenna da Patrizio Pensabene. Pochi giorni prima di quel venerdì di settembre era venuto meno il Wāli dello ex Swat State (1917-1969) Maggiore Generale Miangul Jahanzeb (5 giugno 1908-14 settembre 1987).

La grande acropoli monumentale di Barikot era stata dapprima veduta e descritta da M. Aurel Stein, che ne capì l'importanza. Le sue foto, prese nella primavera del 1926 (Stein 1930), oltre a guidarci nelle prime ricerche, sono state utili anche a capire la capacità di resistenza del suo punto più delicato, il grande sperone NE, il cui crollo parziale avvenne

[4] See Franke, Müller-Wiener 2016; Franke, Urban 2017; Franke, Urban, 2025.

[5] "One last observation should be made for those interested in the sociology of archaeology. On the cover of Faccenna 1980, despite the great number of drawings and their usefulness, only one name appears. On the cover of Faccenna 1993, seven names are printed" (Fussman 1996: 256). Per il lettore italiano aggiungo che ancora oggi in Italia nelle valutazioni della ricerca dei settori concorsuali di ambito archeologico i lavori collettivi, indipendentemente dal fatto che sono spesso il risultato di un grande impegno collaborativo, sono penalizzati. La situazione è esattamente all'opposto negli altri Paesi, dove invece, sulla scorta dell'esperienza delle cosiddette "scienze dure", lavori collaborativi sono incoraggiati e premiati.

solamente nel 2022, dopo la seconda drammatica inondazione del fiume Swat in questo millennio. Ricordo che Domenico Faccenna, il mai dimenticato "Direttore" della Missione, ci spingeva a seguire le foto dello Stein, e prenderne di nuove dagli stessi punti di vista, come esercizio di studio e lettura delle strutture: mai consiglio fu più utile. La cosa non ci deve meravigliare, essendo stato Domenico un vero maestro della scienza archeologica, uno scavatore di prim'ordine, e un puntiglioso ricostruttore di volumi e decori architettonici. Nel 1998, quando Maurizio Taddei prese la direzione della Missione, ebbi il permesso, d'accordo con Pierfrancesco, di affrontare finalmente lo scavo del colle, che avevamo affittato dal 1996. Fu in quella campagna, condivisa con Roberto Micheli e Abdul Nasir,[6] e che incluse un'eclissi solare totale il giorno 22 agosto, che scoprimmo che sulla Terrazza E, invece di uno stupa – come pensava Stein – v'era un tempio Śāhi. Due anni dopo Maurizio ci lasciò (2000), poi otto anni dopo fu il momento di Domenico (2008). La direzione dello Missione venne assunta dapprima da Pierfrancesco, prima con la mia assistenza, poi da me prima persona, quando contestualmente nel 2011 iniziai il progetto ACT. Il resto è narrato nelle pagine che seguono.

Tornando a quanto anticipato al principio, voglio ribadire che, seppure l'idea e la gestione delle cose mi abbia visto all'opera in prima persona, nulla di quello che è stato fatto sarebbe stato possibile senza il contributo di chi ha anche partecipato a questo Volume. Dapprima Elisa Iori, che ora è ricercatrice nel mio stesso dipartimento all'Università Ca' Foscari di Venezia. Elisa, mia collaboratrice e da me seguita come studentessa di dottorato, proseguirà il mio lavoro di docente dell'archeologia della regione quando inevitabilmente andrò in pensione. A quel punto, Elisa, oggi vicedirettrice della Missione, prenderà anche l'onere della sua direzione, con il compito di portare questa (che oggi ha 70 anni di vita) ai suoi cent'anni e oltre. Poi v'è Michele Minardi, che mi è stato vicino negli anni del COVID, quando insieme affrontammo un viaggio straniante e uno scavo sul colle nel vuoto di un mondo che sembrava essersi fermato. Ricordo un episodio di quell'autunno del 2020, quando nel corso di un potentissimo temporale secco, la cima del colle fu avvolta per mezz'ora dai fuochi di sant'Elmo. Marco Pinelli, rampollo di una famiglia ben nota in Pakistan per le gesta alpinistiche del prozio Betto, mi fu da questi segnalato per la sua qualifica di studente di restauro all'Accademia di Brera a Milano. Dopo un anno di prova nel 2019, dal 2020 si è distinto al punto di affiancare e poi sostituire, per i suoi impegni, Fabio Colombo, restauratore storico della Missione con cui ho condiviso anche i cantieri in Afghanistan. Marco Pinelli è stato la mano fedele di un disegno di restauro complesso, che egli ha saputo portare ben oltre le mie stesse aspettative. In aggiunta va menzionata la grande umanità del suo insegnamento agli operai, che ha portato una squadra di volenterosi ad un livello tecnico invidiabile.

Nulla sarebbe stato possibile se due amici non mi avessero sostenuto, ciascuno secondo il proprio carattere e le proprie competenze. Di Arshad Khan ho già lasciato memoria nella dedica di questo volume: semplicemente senza di lui nulla avrebbe visto la luce, e oggi sul colle vi sarebbe un albergo, un villone, o alla meglio una torre di trasmissione telefonica. L'altro amico è Abdul Samad, che ha voluto generosamente scrivere il *Foreword* di questo Volume. Si dirà che essendo il Direttore generale dell'archeologia della provincia del Khyber Pakhtunkhwa (DOAM del KP), ovvero il "padrone di casa", ciò sarebbe atto dovuto. Ma c'è modo e modo di interpretare il ruolo di direttore. Da quando l'archeologia è divenuta materia di controllo provinciale (nel 2011), si sono succedute otto persone sulla sedia dirigenziale. Nella mia esperienza, nessuno di questi può essere paragonato all'attuale Direttore, per la cura con cui ha seguito i lavori, l'attenzione benevola che ci ha sempre dedicato, la sua visione di Barikot come centro nevralgico per il futuro dell'archeologia dello Swat e del KP. Tra il personale del DOAM KP ve ne sono altri che hanno lavorato al suo successo, taluni anche fra gli autori: Bakht Mohammad (Asst Director) per il supporto ufficiale dalla sede principale di Peshawar, Nawazuddin, e prima di lui Faiz-ur-Rehman (in-charge Malakand Sub-Regional Office: SRO; Curator Swat Museum) per le questioni legali e le cose legate allo Swat Museum, Nasir Muhmood (Dept Representative: DR; in-charge Reserve Collection Swat Museum). Quest'ultimo è stato con noi continuativamente per tutta la durata del progetto, e ha

[6] Dept Representative del Department of Archaeology and Museums del Governo del Pakistan (DoAM), il cui Direttore Generale era l'alto funzionario e caro amico oggi scomparso Saidurahman.

sostituito due altri DR storici di Barikot, Amanullah Afridi (oggi in-charge SRO Malakand Division) e Niaz Ali Shah (oggi in-charge SRO Hazara Division). In Italia e in Pakistan ci hanno sostenuto le rispettive Ambasciate italiana e pakistana, nonché il Consolato Generale di Milano. Più ambasciatori e consoli si sono succeduti per ricordare solo gli ultimi senza far torto ai loro predecessori.[7] Il Ministero degli Affari Esteri italiano (MAECI) ha sempre guardato con benevolenza al nostro operato, mentre la Cooperazione Italiana (AICS) ci ha sempre dato lo spunto e l'incoraggiamento per rilanciare le nostre competenze e i nostri successi in nuovi e più ambiziosi progetti. Molto importante per tutti noi è stato l'immancabile supporto del Federal Department of Archaeology and Museums (DoAM, Govt of Pakistan), e il suo ultimo DG, Abdul Azim.

L'Università Ca' Foscari e la sua Rettrice Tiziana Lippiello, il precedente Rettore Michele Bugliesi, e soprattutto il mio Dipartimento (DSAAM) e l'attuale direttrice Laura De Giorgi e il precedente direttore Marco Ceresa†, vanno qui ringraziati per la lungimiranza e la pazienza con cui hanno saputo accogliere la Missione nell'Ateneo, e accomodare l'impegno sul campo dei cafoscarini, nel quadro degli impegni didattici ed amministrativi dei semestri accademici.

Mi verrebbe spontaneo a questo punto parlare degli operai, ma non vorrei sembrare di essere troppo alla moda nell'affermare che loro sono stati i veri protagonisti di quest'impresa. Eppure, va detto proprio questo. A loro e al loro contributo verrà dato spazio più avanti, ma non posso non ricordare qui Azim "Spinda" Khan (capocantiere), Rahimzada (capocustode) Shafiq Ahmad (amministratore e segretario) Rustam (responsabile dei cantieri), Ali Khan (capo autisti), Yusuf Khan (maggiore di casa), Wasim Sajjad (capo-operatore restauratori acrobatici), Abdul Khaliq (capo carpentiere), Saheb Shah (capo dei restauri murari), Kashif Iqbal (capo-operatore droni).

Dicevo in principio che il mio nome appare come autore principale: dei collaboratori principali ho detto. Tra i ricercatori più giovani che da pochi anni fanno parte della Missione, non posso che citare Alice Casalini (University of Chicago), che ha anche editato il Volume e limato gli errori anche linguistici e alla cui mano felice dobbiamo forse i più bei disegni pubblicati in questo Volume. Non posso non dedicare qualche parola ad Agnese Fusaro (Università per Stranieri di Siena), che lavora da anni al grande progetto di scavo dell'antica città portuale Banbohre (in Sindh). Questo progetto dal 2025 è finalmente un progetto coordinato tra ISMEO (con me come co-direttore scientifico per la componente archeologica) e Università Cattolica di Milano.

Il collega Omar Coloru ci segue sul campo ormai da molti anni: è stato con grande piacere vedere storici del mondo greco (Claudia Antonetti) e di quello romano (Federico De Romanis) non solo interessarsi ai nostri lavori di Barikot, ma addirittura, come Omar, prenderne parte. Tra i pochi archeologi islamici che hanno continuato a guardare alle periferie della loro geografia storica, va menzionata Alessandra Bagnera, che su questa scelta coraggiosa di campo ha speso la sua carriera. Cito volentieri anche Moizza Elahi (University of Toronto), che ha partecipato di meno ai lavori sul colle, essendosi concentrata sullo scavo delle trincee della città bassa, e Subhanigul (Direttore Dept of Archaeology, Jahanzeb College, Saidu Sharif), che si è focalizzato principalmente sul nuovo scavo di Elisa Iori a Butkara I. Tra i nostri amici in Swat non possiamo non ringraziare l'aiuto che abbiamo sempre ricevuto dalla Casa dei Miangul: Miangul Aurangzeb, il principe ereditario o Walii-'ahd, tra i suoi figli Hassan Aurangzeb e in particolare Adnan Aurangzeb, tragicamente scomparso il 30 maggio 2022. Va ricordata anche la moglie di Adnan, principessa Zenab Gohar Ayub, che in modo materno ed efficiente (due avverbi che qui si sposano bene) si è presa cura di noi in molte occasioni. Non si può dimenticare infine il nome di Xuan Yali della *Waksaw Uddyana Archaeological Alliance* per il suo sostegno e la sua benevolenza. Tra i membri della società civile che hanno partecipato voglio ricordare Kashif Essa di EssaNoor Associates, i fratelli torwali di UmbrellaBrand, il caro amico Ali Kamran di Sang-e-Meel Publications, e Fazal Khaliq

[7] Dal 2008 ad oggi: LL.EE. Vincenzo Prati, Adriano Chiodi Cianfarani†, Stefano Pontecorvo (oggi Presidente del CdA di FinMeccanica), Andreas Ferrarese, Marilina Armellin. Tra gli ambasciatori del Pakistan: LL.EE. Tasnim Aslam (poi Foreign Office Spokesperson), Tehmina Janjua (poi Foreign Secretary), Ali Javed, Nadeem Riaz, Jahuar Saleem (poi Acting Foreign Secretary), Ali Javed. Consoli Generali a Milano dal 2020 ad oggi: Manzoor Chaudhry, Aqsa Nawab.

del *Dawn*, uno dei più innovativi tra i giornalisti pakistani che scrivano anche di archeologia e patrimonio. Un ringraziamento a parte va all'artista Balage Balogh che ha seguito e illustrato i nostri lavori con attenzione sul suo sito https://archaeologyillustrated.com/.

Tra i miei studenti diretti o indiretti, presenti o passati, che hanno qui collaborato, non posso non citare Michela Prota (ricordata anche per la sua dedizione e precisione) e Naghmeh Mahzounzadeh (Università Ca' Foscari), Li Hong (Università di Roma 1, La Sapienza), Ehsan Shavarebi (University of Vienna), Cristiano Moscatelli (già Ruhr Universität, Bochum), Emanuele Lant (già Università di Padova), e Mubariz Rabbani (già Università di Reading). A Matteo Sesana (finissimo persianista, già Università di Napoli "L'Orientale") va un plauso speciale per aver seguito i lavori a Barikot in mia assenza con una competenza sorprendente per un filologo che aveva seguito a Ca' Foscari solo due miei corsi di MA. Tra i miei colleghi più costanti ricordo qui Rita Dal Martello, paleobotanica in forza a Ca' Foscari, Stefan Baums dell'Università di Monaco di Baviera per l'epigrafia, Ingo Strauch anch'egli epigrafista ma all'Università di Losanna, e Massimo Vidale dell'Università di Padova, compagno di tante avventure scientifiche. Sempre incardinato a Padova è Giuseppe Salemi, che ringrazio per la componente di *digital humanities*. Di Pierfrancesco Callieri ho già parlato: aggiungo solo che a lui va la mia più sincera devozione. Ad Anna Filigenzi va il mio ringraziamento per il sostegno, ma anche per aver avuto il merito di aver aperto la strada dello studio del tardo-antico e del primo medioevo in un ambito geografico dominato dall'ossessione per la scultura gandhārica, che tutto il resto ha fatto spesso dimenticare.

Per la struttura di questo volume mi sono ispirato a quello che considero un esempio inarrivabile di precisione, dettaglio e cura editoriale, esemplare pubblicazione di un altrettanto esemplare progetto di archeologia e conservazione (che tanto ha in comune con il nostro modo di fare archeologia). Mi riferisco ai tre volumi della serie *Ancient Herat* curata da Ute Franke con altri autori.[8] Spero che il risultato finale offerto ai lettori sia, per qualità, all'altezza di quell'esempio editoriale, ma rifletta anche il grande sforzo collettivo che v'è stato dietro il successo di questi ultimi 32 mesi di lavoro sul colle di Barikot.

* * *

Saidu Sharif, 25 November 2024

Postscript

Condensed versions of some of reports in this volume (those by Olivieri[1-2, 5-6] and those by Iori[1], Minardi[1], Casalini[1], Filigenzi[1], and Shavarebi) will be published in the forthcoming volume *Exploring the Contributions of the Shahi Kingdoms to Inner and South Asia*, edited by Natasha Kimmet and Noémie Verdon, and planned for 2026. The dual-format (print and digital) publication is the result of Austrian Science Fund Project P-31246 'Cultural Formation and Transformation: Shahi Art and Architecture from Afghanistan to the West Tibetan Frontier at the Dawn of the Islamic Era', directed by Deborah Klimburg-Salter in cooperation with Michael Alram (https://shahi.pubpub.org/)

Fig. 1 – Terrace E, N side and E side [130] as it appeared in 1926 (after Stein 1930: figs 20-21)

Fig. 2 – SW sides [136] and hilltop (BKG 14) as it appeared in 1926 (after Stein 1930: figs 22-23)

[Fig. 3 – Map of the ruins at Barikot in 1926 (after Stein 1930: pl. 5)]

[8] Franke, Müller-Wiener 2016; Franke, Urban 2017; Franke, Urban 2025.

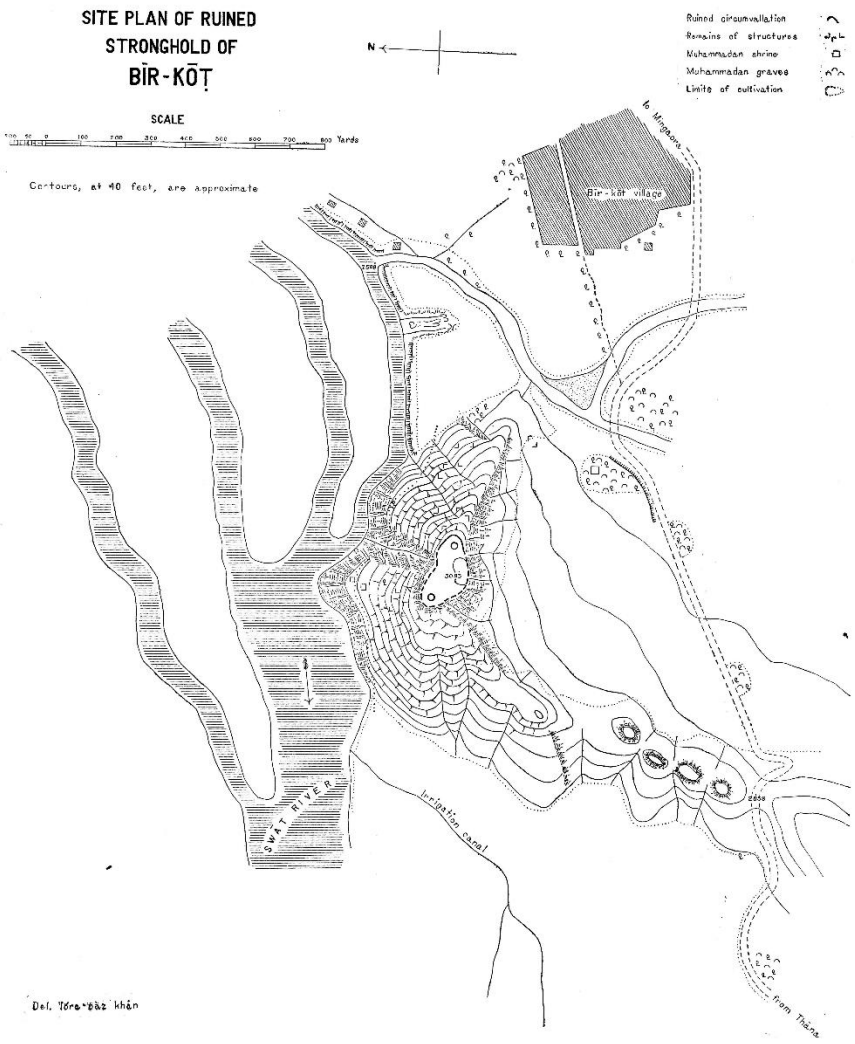


Fig. 3– Map of the ruins at Barikot in 1926 (after Stein 1930: pl. 5)

The City of Vajra

Geography

The Swat Valley is a large mountainous valley of the Hindukush/Karakaoram, uniquely oriented east-west, i.e. transversely to the mountain ranges. The reason for this anomaly is quickly stated: 'A major fault, the Main Mantle Thrust (MMT) strikes east-west across the Swat Valley, separates regions of markedly differing fission-track age regimes, and may be a suture zone separating an extinct island arc terrane on the north from the Indian plate to the south.' (Zeitler et al. 1982: 227).

The valley is therefore a closed environment, with no natural outlets other than those created by the strain of its waters as the Swat River flows through extremely narrow gorges. These special conditions, like those of a closed basin, have allowed loess deposits, rich in nitrogen, salts and minerals, to grow in situ instead of being washed away. In this way, a kind of time capsule was created that preserved geological and human history in a way not possible elsewhere. In addition to this, the combination of long sunshine, incredibly fertile and naturally irrigated soils, and special microclimatic conditions created the conditions for an agricultural paradise.

The city of Barikot (Bīr-koṭ; c. 800 m a.s.l.) lies in the Middle Valley of the river Swat, the ancient region of Oḍiyāna or Oḍḍiyāna (Fig. 1). The site is marked by a hill (*ghwaṇḍai* in Pashto; 942 m a.s.l.) that stands isolated like a diamond in the fertile water-rich valley of the Swat River (Iori 2023a: 103) (Fig. 2). Barikot's *ager* comprises three side valleys – Karakar, Kotah, and Kandak – and includes fertile areas on the opposite left bank. The other large plain stretches are Kabbal, Damghar and Matta on the right bank, Thana and Mingora on the left bank. Bordered on all sides by mountains, the Swat Valley is large and secluded, akin to a highland plain comparable to Kashmir rather than a mountain valley, as the celebrated Pashtun poet Kushal Khan Khattak (1613-1689) wrote in the 17th century:

> The pleasant climate of Swat is as good as that of Kashmir, but the pity is that Kashmir valley is wide open, whereas Swat is comparatively narrower. (Khattak, *Swātnāma*, 1.13).

He also observed that

> Small rivulets flow from house to house in every village of Swat and, due to this abundance of water, there is ample crop-yield to suffice for their own consumption as well as for export in all directions. (Khattak, *Swātnāma*, 1.16).

Likewise,

> There is no natural feature of the country [*i.e.,* Swat] which has not been turned to advantage. The immense flats are flooded periodically as of old and produce a rice harvest second to none in India. (Alexander E. Caddy Esq.

> on special duty to the Chief Secretary of the Government of Bengal. Dated Camp Chakdara [Swat], May 13th, 1896. Document no. 42, cf. Olivieri 2015a: 52-53).

Barikot is located at the crossroad of several important routes: the major one connects Swat to the Peshawar plain through the pass of Shah-kot, while on the southeastern side the Karakar pass connects the valley to Buner and the Ambela pass (Ecbolima) links it to Swabi and the Indus). Other paths link Swat to Inner Asia:

> One route leads to Turkistan via the Hindukush mountains, while another goes to Chitral and Badakshan onwards. Another route leads from Pattan [on the Upper Indus] to Kashgar, while yet another takes one via Moorang [Morah] downhill to the plain. (Khattak, *Swātnāma*, 1.44-45).

The strategic position of Barikot along this road network is mentioned in a folk tale where a Jin terrifies travellers on a 'highway […] near Bir-kōṭ [Bīr-koṭ], Swāt.' It was only when Āthim Khān, a local chieftain, grappled with the Jin and discovered it was but a man and his son in disguise, that traffic could resume as usual (Inayat-ur-Rahman 1968: 14).

Legends

The Swat Valley is rich in water resources, as it benefits from the monsoons and from the seasonal melting of high-altitude glaciers. Given that water is an essential component of Swat landscape, as well as its economy and society, many legends in the region are associated with the river and the surrounding mountains. Processes of taming and controlling the wild forces of nature feature prominently. A relevant set of legends, for example, relate to the nearby Mt. Ilam, which dominates the southern landscape of Barikot. Mt. Ilam, a true *sacra petra* of Middle Swat, is known by many names in several cultural and religious traditions: it is the Indian Aornos of Alexander the Great's biographers, the Ram Thakht of the Hindu tradition, and the Jogiano-sar of the Yusufzai Pashtun folklore. It is also the Varana of Pāṇini, i.e., the Varaena of the Pahlavi texts, through the identification of the latter with the Aornos of the Graeco-Macedonians – the toponym survives in the placename Buner, the large lower valley at the foot of the southern flanks of Mt. Ilam.[9] In all these traditions, the mythological characters associated to the toponyms resemble each other: a hero holding a club and vying with a water creature, such as a snake or dragon-like entity, for water control. Echoes of this epic battle can be traced back to the *ṚgVeda*. There, Indra, armed with his *vajra* (lightning or thunder) defeats the dragon Vṛtra, who had been holding the river waters captive (*ṚgVeda* 10, 32; cf. Iori 2024).

A famous Buddhist story recounts the taming of the ambivalent snake-deity (*nāga*) Apalāla, who controlled the waters in the region and was thus both creator of great wealth and dispenser of destructive floods. Apalāla's taming occurred when the Buddha's attendant Vajrapāṇi, the king of the *yakṣa*s turned Bodhisattva in the Buddhist tradition, wielded his powerful *vajra*-club against the snake and forced him to convert to the Buddha's teaching.[10] The legend, which was locally collected by the Chinese monk-pilgrim Xuanzang (602-664 CE) in the early seventh century, is imbued with deep agricultural symbolism, and connects Swat agricultural richness to Buddhism (Beal 1906: 122-123).[11]

Other forms of the same story survive in Swat folklore and refer to powerful snakes and magicians controlling the waters (Inayat-ur-Rahman 1968: 24-25, 40). The Yusufzai Pashtuns, for example, still associate the peak – called in Pashto both Ilam and Jōgiano-sār ('the *yogin*s' peak') – to snake-like creatures and the magic powers they could bestow. One account tells of a *yogin* who knew how to fly thanks to a secret potion made of snake blood. When his disciple tried to imitate his master, he sadly fell from the mountain and died – a turn of events that closely resembles that of the

[9] The identification of Mt. Ilam with the ancient Aornos was proposed at the earliest by G. Tucci (1977: 52-55); more recently, cf. Olivieri 1996a; Coloru, Olivieri 2019: 93-106, Iori 2024.
[10] Vajrapani is often represented as Heracles by Gandhāran artists (Coloru, Olivieri, Iori 2024: 191).
[11] A reasonable etymology of the Sanskrit name Apalāla is 'without straw, sprout'.

tragic tale of Icarus and Daedalus.[12] In another story, a magician by the name of Ormaigh lived on the summit of Mt. Ilam. It is said that he used to live in a cave surrounded by dragons (Inayat-ur-Rahman 1968: 36-37). One of these tales is set in Barikot and features the king and magician Upāla (the Śāhi king Jayapāla Deva?), the *yogin* Padmānī (a Vajrayāna Buddhist whose name echoes Padmasambhāva), and the goddess-serpent Kupal as protagonists. The king's palace-fortress was located on the hill of Barikot:

> It was in old times that there lived in Swāt a Rāja named Upāla. His forefathers had been great magician, and Rāja Upāla had also inherited magic powers. He was a powerful man and used to fly in a wooden cradle from one end of the state to the other.
>
> According to the legend, the Rāja's great-grand-father had by magic powers overpowered a mighty goddess known as Kupal, whose head was in the shape of a woman's and the rest of the body like a python. This goddess held a sway over the people of Swāt because it was through her good will only that people could lead a peaceful life. And if she became offended, she would inflate her body; her size would become so enormous that she would form a sort of dam on the Swāt river which would cause floods in the whole country. Now, because the people of Swāt knew that the Rāja Upāla had inherited this power, they feared that he would have also, if angered, cause floods.
>
> Upāla was not good to his subjects and cared little for the welfare of the people.
>
> One day Rāja Upāla was annoyed with one of his Viziers who had conspired to overthrow him. Strangely enough, that very day a terrible earthquake took place causing the destruction of many villages. People were terrified, for they thought that because of this earthquake must be the Rāja's anger. News spread all over the state that it was dangerous to go counter to the wishes of the Rāja.
>
> By that time, it is said a certain Jōgī Padmānī had heard about the Rāja's tyranny. The aged Jōgī began his march toward Bir-kōṭ [Bīr-koṭ], where stood the Rāja's palace. Jōgī Padmānī had a staff in his hand and his clothes were tattered. When he approached the palace, he asked one of the guards to be allowed to enter the palace. The guard said, "Old man, whom do you wish to meet?" Jōgī Padmānī replied, "I have come from a distant place only to meet your Rāja. Tell him that I want his audience".
>
> A messenger entered the palace and informed the Rāja that an old man wanted to meet him. The Rāja commanded that he be brought to his presence. The Jōgī entered the palace which was in the shape of a huge fort. The Rāja asked him, "Old man, what brings you here?" The Jōgī replied, "Your tyranny".
>
> The Rāja looked at the aged man with wonder, for in all his life he had never known anyone to defy him. The Rāja said, "Old man, do you know what magic powers I wield? There is no magician in this age who can overpower me". Padmānī said, "What magic powers do you have? Let me see what you can do".
>
> The Rāja closed his eyes, and in the twinkling of an eye he rose from the ground and remain in the midair. Then turning to Jōgī Padmānī he said, "Are you now satisfied that I have unusual powers?" The Jōgī asked, "Wherefrom do you derive these powers?" The Rāja said, "From the goddess Kupal". The Jōgī said, "But I have many pupils like the goddess Kupal". The Rāja grew wrathful and said, "If you are really greater than the goddess Kupal, then prove it". The Jōgī looked into his eyes, spat at him and muttered some magic words. The guards turned pale with fear and started shivering. The Rāja himself turned red in his

[12] I collected this tale at Barikot.

face, then blue, and then his colour became deathly white. A few moments later the Rāja, his family and guards where no more in life and they were turned into stone. (Inayat-ur-Rahman 1968: 24-25).

Placenames

Bazira/Beira

Barikot is identified with Bazira/Beira, a town defined as *póleis* or *urbs opulenta* by the ancient sources related to Alexander the Great (Stein 1930: 28-29, 40-41; Tucci 1958: 288, 296, 327 fn. 28; Olivieri, Tribulato 2017; De Chiara 2020: 79-81; Coloru, Olivieri 2019, Iori 2024). Both names, Bazira in Arrian (*Anab.* IV 27-28) and Beira in Curtius Rufus (see below), are the phonetic transcription of a toponym known in Sanskrit and Prakrit respectively as *vajra* and *vaïra* (*vajra*/*vəira*), 'diamond' or 'thunderbolt' (Baums 2019: 169-170). This is how the ancient name of the urban settlement was locally pronounced, according to Curtius Rufus (*Beira incolae vocant*: Curt., VIII 10, 22). This is one of those important (and generally overlooked) pieces of first-hand information that punctuate Curtius' text, making it so valuable. Recent archaeological discoveries confirm the existence of an urban settlement enclosed by a defensive earthen rampart and moat possibly dating back to the end of the fourth century BCE (Macrophase 2a; see TABLE 2, no. 28; cf. Olivieri, Iori 2020: 82). Combining these data with those of the placename analysis, the identification of Barikot with Alexander's Bazira/Beira and the 'city of Vajra' can now be considered certain (Baums 2019: 169-170).[13]

Seeing Bazira as Alexander saw it (O. Coloru)

In his account of the campaign of Alexander, Arrian reports that in the summer of 327 BCE, the Macedonian king arrived in Swat and concentrated his efforts on the siege of Massaga, the capital of the Assacenian kingdom. Meanwhile, he dispatched detachments to seize control of other significant settlements in the region.[14] Attalus, Alcetas, the hipparch Demetrius, and Polyperchon were charged with securing Ora (Udegram), while Coenus was ordered to besiege Bazira. In this case, however, the version reported by Curtius Rufus seems more reliable, who claims that Alexander first arrived in Bazira where he left Coenus in charge of the siege before proceeding to Massaga.[15]

The Macedonian officer encountered considerable resistance from the Bazirenes. What, then, was the appearance of Bazira at this time? Arrian's narrative provides us with a general impression:

[13] In later periods the name Bazira (because of the placename, or for the metonymic value of the term *vajra*?), was used as a personal name by an Alchon king: 'Following Mihirakula, there were at least two other kings whose coins can definitively be assigned to this series, and perhaps a third. Coin 19 (Göbl [1967] type 108) is a coin of the king (or Bazāra, Vazāra or Bazira). The legend on this coin reads *jayatu baysara khota laka*. It is worth remembering that the conjoined letter *ysa* stands for the sound *za*, so the king's name would be Bazara. One coin has a diacritic that renders the name *baysāra*. On another example of type 111, Göbl read the name as *vaysāra*, which would yield a name of Vazāra, and Harry Falk has argued for *baysira* on philological grounds, which would make the name Bazira [pers. comm.; in Pfisterer 2013: 160, the king is named Baysira]. Regardless of the exact name, it is quite clear that these coins belong in the Toramana series, as they have all the distinctive characteristics: the round-top crown with prominent brim, the Brāhmī legend running continuously over the king's head, the two prominent symbols, and the lack of the bull/lunar *tamgha*. The coin also has the shoulder lunar crescents seen on Mihirakula's coins. The symbols here are a fire altar at right, reminiscent of a symbol seen on the coins of Mehama […] and a crescent topped swastika at left. Coin 20 (Göbl [1967] type 110) is another coin of the same king and has all the characteristics of the series, except for one: this coin has only one prominent symbol. The symbol at left has been eliminated here. The symbol at right is now a sun or wheel type symbol mounted on a stand' (Tandon 2013: 29-30; Fig. 3a-b). We have so far, no concrete evidence of a link between the king's name and the Barikot/Bazira site. In 2023 an interesting Buddhist monument, a large late circular stupa, was uncovered in Trench BKG 19. The stupa, which seems to imitate the plan and decorative apparatus of the coeval Great Stupa of phase 5 at Butkara I, was built after the abandonment of the lower town by reoccupying part of the ruins. Hūṇa coins were found among the materials.

[14] According to Arrian (*Anab*. IV.27.5), Alexander laid siege to Massaga and sent Coenus to Bazira immediately after the conquest of the capital of the Assacenians. On the other hand, Curtius Rufus (VIII.10.22) reports that Coenus was sent to Bazira before the siege of Massaga. On the military operations of Alexander in Swat see Coloru, Olivieri 2020: 93-106.

[15] Curt. VIII.10.22.

> Κοίνῳ οὐ προχωρεῖ τὰ ἐν τοῖς Βαζίροις, ἀλλὰ πιστεύοντες γὰρ τοῦ χωρίου τῇ ὀχυρότητι, ὅτι ὑπερύψηλόν τε ἦν καὶ πάντῃ ἀκριβῶς τετειχισμένον, οὐδὲν ξυμβατικὸν ἐνεδίδοσαν. (Arr. *Anab.* IV.26.7).
>
> The situation in Bazira did not progress favourably for Coenus. The inhabitants relied on the natural defensive advantages of the place, which was situated at a high elevation and surrounded by fortifications on all sides, and showed no indication of willingness to surrender. (Transl. by the Author)

Arrian's words suggest that the settlement was situated on the hill and was completely fortified (πάντῃ ἀκριβῶς τετειχισμένον).[16] Moreover, a review of the subsequent military operations suggests that there is no clear evidence to suggest the existence of a genuine lower town, as will be the case in the Indo-Greek period. Alexander did indeed summon Coenus to assist him in the conquest of Ora. However, he ordered him to construct a well-fortified stronghold 'opposite the city of Bazira' and to garrison it with troops capable of preventing the Bazirenes from moving freely in the surrounding area. [17] Upon realizing that Coenus had withdrawn most of his troops, the Bazirenes advanced and launched an assault against the remaining Macedonians in the open plain.[18] The Bazirenes suffered significant losses because of the assault. Of the total force, five hundred were killed, while seventy were captured. Arrian's narrative suggests that the clash occurred in a spacious open area devoid of structures, apart from the Macedonian fort. This impression is further supported by what happened next. Because of the setback they incurred, the Bazirenes were compelled to withdraw to their town, and the Macedonian garrison effectively prevented any potential for a counterattack into the plain.

It can be inferred from a strategic perspective that there was a flat stretch between the Macedonian fort and the settlement. The available archaeological evidence suggests that the flat space between the hill and the Macedonian fort was initially occupied by a sparsely built-up area intended for craft production, and a small sanctuary. This is the so-called 'archaic sanctuary' that a century later would be transformed into an apsidal Buddhist monument (Temple H in Trench BKG 16, cf. Olivieri 2024a).[19] After all, it would have been impractical for the Macedonians to construct a stronghold near the fortifications of Bazira, as the soldiers engaged in the construction would have been vulnerable to attack from the besieged forces. It can be surmised, therefore, that this construction had to be erected at an adequate safe distance from the town.

It is only on the eve of the attack on the Indian Aornos that Alexander ordered Ora and Massaga to be transformed into the region's strongholds, while also issuing directives to encircle Bazira with fortifications (τὰ μὲν δὴ Ὦρα καὶ τὰ Μάσσαγα φρούρια ἐποίησεν ἐπὶ τῇ χώρᾳ, τὰ Βάζιρα δὲ τὴν πόλιν ἐξετείχισε).[20] Since Bazira already possessed fortifications on the hill, it can be assumed with a high degree of plausibility that Alexander had a new wall built that also contained the flat area between the hill and the fort of Coenus. Archaeological investigations in Barikot have provided suggestive evidence for the existence of such a fortified structure, which was razed to the ground at the end of the second century B.C., when the Indo-Greek fortification system was built.[21] A surviving portion of a large earthen structure, dated to the phase consistent with historical events (see again TABLE 2, no. 28), has been documented in trench BKG 12W. Interestingly, the collapsed portion of the structure covers the upper edges of the trench, which is therefore contemporary with the earthwork fortification and subsequently used for the Indo-Greek fortification wall.

[16] In *Metz Epit.* 46 the Bazira episode is merged with that of the conquest of the Indian Aornos. (*Hinc profectus †bagasdaram† oppidum devenit, quod dicebatur Hercules expugnare non potuisse*). However, Bazira is labelled as *oppidum*, a term that prior to the generic sense of 'town', primarily signifies 'stronghold', 'fortified settlement'.
[17] Arr. *Anab.* IV.27.7.
[18] Arr. *Anab.* IV.27.7-8.
[19] See in general Olivieri et al. 2022.
[20] Arr. *Anab.* IV.28.4.
[21] See Olivieri, Iori 2020: 82; Olivieri, Iori 2021: 45.

The data provided by Arrian, combined with archaeological data, thus offer an intriguing interpretative lens for the archaeological evidence unearthed during the excavation of the Indo-Greek walls.

The Indo-Greek ruler Menander I (ca. 165-130), who is credited with the new fortification program for the site in the second half of the second century BCE, seems to have built the new walls along the trajectory of the moat of the Alexandrian fortifications. This suggests a continuity in the policies of territorial control and defence of urban settlements in Swat.

In conclusion, the urban space and defensive structures of the Assakenian Bazira seem to have been mostly limited to the hill of Barikot and its slopes. The fortified position allowed Bazira to control the rich surrounding agricultural plain, thereby establishing the town as a centre for collecting and storing foodstuffs. This corroborates Curtius Rufus' definition of *urbs opulenta* for this urban settlement.[22]

Vajirasthāna.1

The form *vajira* reappears in the name Vajirasthāna ('the fortified place of *vajra*') in a Śāhi-era inscription found at Barikot in 1899, now in the Lahore Museum (LM 119; cf. von Hinüber 2020: 54-55; Morgan, Olivieri 2022) (Fig. 4). The inscription (27 × 22 cm) is listed with entry No. LXIV in Documents 19-20 (in Olivieri 2015a):

> Inscribed stone from a hill to the north of the village of Barikot in Upper Swat (by Lachman Das) [Supervisor of the Works Department] (cf. Callieri, Olivieri 2020: 1, 54).

The text of the inscription is extremely fragmentary. However, the name of the Śāhi king Jayapāla Deva (late tenth century CE), the placename Vajirasthāna, and the mention of a religious building are clearly readable. More importantly, the linguistic relation between the placename Vajirasthāna and the ancient toponym Bazira, already proposed by Giuseppe Tucci (1958), has been recently reconfirmed by Oskar von Hinüber (2020: 53). Considered together, the recovery of the stone at Barikot and the identification of the ancient toponym with Barikot confirm the conclusion that Vajirasthāna is Barikot.

The inscription LM 119 states that three individuals (whose names are lost) at the time of Jayapāla Deva performed and completed a donative (re)construction of a religious building or donated something for the benefit of an already existing religious building (locative: '*devakule*').[23]

> The original of this inscription is a rectangular slab, $10^{3/4}$" wide by 9" [27,3 × 22,86 cm] high of dark grey slate stone, which was found on a hill to the north of Bari Kot in Upper Swat and is now preserved in the Lahore Museum (No. 119). The whole of the inscription is very badly obliterated and the only portions that can be read with certainty are the first two hues of the document. Elsewhere only stray words or syllables can be made out. The inscription begins with *ōm svasti* 100, followed by the words meaning "in the reign of the supreme sovereign, the superior king of great kings and the supreme lord, the illustrious Jayapāladēva". […] This inscription is the first epigraphical document which mentions the name of the Shāhi king Jayapāladēva, who was the successor of Bhīmadēva and contemporary of Amir Sabuktigin and Maḥmūd of Ghazni. The existing portion contains no date. (Sahni 1938: 301).

It has been argued in the recent past that the inscription bears a date (+00 according to Rodziadi Khaw 2015). However, the possibility was ruled out by the first scholar who read the inscription Daya Ram Sahni 1938 (see above), who was

[22] Curt. VIII.10.22. On the urban landscape of Bazira see also Antonetti 2020: 97-110.

[23] (*meśvara*) *śrī jayapāladevarājye śrī vajira*(*sthā*)*ne* (line 2: von Hinüber 2020: 53). The locative '*devakule*' is in line 3. Line 9 mentions the adjective *pratiṣṭhā* (consecrated) and past participle *karāpitaḥ* (completed) (in Rodziadi Khaw 2015: 98-99).

well aware of the numeral 100 in line 1.[24] In any case, any possible date either 100 or 200, etc., would present a major anachronism,[25] if linked to the Śāhi Era, whose beginning is fixed to 822 CE (Shavarebi, Strauch 2022; Strauch, Olivieri 2024). So, let us conclude, in agreement with D.R. Sahni, that the 'existing portion contains no date'.[26]

Vajirasthāna.2

The 15th-century Tibetan text *The Blue Annals* (*deb-ther sngon-po*) mentions the city of Vajirasthāna as the capital of the seventh-century king Indrabhuti (Roerich 1988 [1949]: 361; cf. Olivieri 2022: 220-221 fn. 7). The Buddha himself gives a prophecy on the king:

> And the Devī asked: "Who will understand and explain this great hidden Tantra?" The Blessed One replied: In the northern quarter, in Śrī-Vajirasthāna Oḍḍīyāna, a king named Indrabhūti will understand it, will teach it and will expound it to living beings.' And again the Devī asked: "O blessed One! What stage of the path has king Indrabhūti reached? Pray state it!" And the Blessed One said: "The Vajirapāṇi king mentioned by me in the Śrī-Jñānatilakayogīnitantrarāja (*dPal Ye-ses thig-le'I gryuid-kyi rgyal-po, Kg. rGyud-'bum*, No. 422) is this Indrabhūti." (Transl. by Saerji).

King Indrabhuti's importance in the history of Buddhism cannot be underestimated: he was the tutor and mentor of the tantric Buddhist master Padmasambhava who is credited with the introduction of Buddhism into Tibet. Vajirasthāna was thus identified as the seat of an important lineage of Tantric teaching, the Vajradharma.[27]

It seems that Orgyan pa had received information about the location of the Uḍḍiyāna as one of the *Vajrayāna pīṭha*s from his master Götsangpa (1189-1258), who had visited all the sacred places of Jālandhara (Sutlej River area). Orgyan pa initially followed his master's footsteps and then travelled further north-west until he reached the Uḍḍiyāna (cf. Huber 2008: 100-108).

Besides the topographical information, the text of Orgyan pa is extremely important in order to understand the vague religious affiliation of the communities living in Swat in mid-13th century. 'Although this formerly Buddhist region exhibited a mixture of Islam, local cult, and perhaps remnant Hindu influences at the time, it is striking that Orgyenpa

[24] If it were a year, it should be noted that neither the month (*māse*) nor the fortnight and day are indicated, which is unusual; even the presence of the numeral is uncertain (Ingo Strauch, personal communication. In any case, the numeral may refer to a year from an unknown non-calendar event (the inscription is unfortunately largely illegible). The study currently being conducted by Ingo Strauch and his team on this inscription will soon clarify these points. Daya Ram Sahni was Director General of the Archaeological Survey of India from 1931 to 1935.

[25] Year 100 is forty-two years before Jayapāla Deva's accession to the throne, while Year 200 falls some twenty years after his downfall, as he reigned between 964 and 1002 CE.

[26] All the dated inscriptions of the later Hindu Śāhi dinasty clearly refer to the Śāhi Era (see Rodziadi Khaw 2016 nos 3.5.10, 3.5.12, 3.5.13, 3.5.15, 3.5.16). All the dated inscriptions referring to the Śāhi Era (the Mir Ali inscription should not be considered) are dated with years successive to *saṃvat* 100 (922 CE). Since, so far, the Śāhi Era is used only in inscriptions referring either to Bhīma Deva or Jayapāla Deva, the establishment of the era should not antedate the reign of Bhīma Deva (r. *c.* 950-964). Probably Bhīma Deva and Jayapāla Deva were related (Rahman 1979: 131-132). A Jayapāla Deva inscription from Hund (Rodzadi Khaw 2016: no. 3.5.15) presents a passionate eulogy of Bhīma Deva (line 7: 'Therein dwelt the chief of kings Bhīma, of terrible valour (or with valour like that of Bhīma, the legendary hero), by whom, having conquered his enemies' troops, the earth was protected'; line 11 recites: 'The king of that (country) is (now) Jayapāladeva, who, through his body, origin, and birth, has become the sole hero, whose very pure fame, having left heaven, has attained the eternal abode of Brahman' (Rodziadi Khaw 2016: 119-120, who follows Rahman 1978: 32-33).

[27] Had it not been for Tucci (1958) people would still be following the interpretation that sees Vajirasthāna as 'Waziristan' (Sahni 1938: 301). Surprisingly, however, Tucci failed to reinforce his view with the reference of the same toponym in a text he had at hand in the translation of Roerich (1988 [1949]), and of which he had asked Turrell Wylie (in 1957) to draw up an index of names in the same years of his first surveys in Swat, 1955-1956. Wylie missed the term Vajirasthāna, and consequently Tucci did as well. If Tucci had known about this reference, he would have stated in clearer terms that Bazira/Beira was indeed 'the city of *vajra*,' and had been since at least the fourth century BCE. Despite its small size, the importance of Vajirasthāna for the history of Buddhism in these western regions must have been far greater than we can imagine.

[Orgyan pa] once again readily interprets all he experiences there in terms of the symbolism and practice of the *Saṃvara-tantra*. In particular, he considers all local women to be Buddhist *ḍākinī* or *yoginī*, and that their every mundane action has some "secret" underlying level of Tantric significance […]. In addition to these early Tantric itineraries, we can also mention a later pilgrimage undertaken between 1612–13 and 1615 by another wandering Tibetan Drukpa yogin, Taksang Repa Ngawang Gyatso (1574–1651), which was inspired by and thus closely followed the earlier itinerary of Orgyenpa" (Huber 2008: 104-105).

Strangely though, the name of the city is not mentioned in the travelogue of the Tibetan pilgrim Orgyan pa. In my reconstruction, Orgyan pa took a north-eastern route for practical reasons, without descending the Karakar pass through which he entered Swat:

> Why then the omission of Vajrasthāna/Vajirasthāna, i.e. Barikot, in Orgyan pa? The explanation for this lies in the route he chose; from the Karakar pass, he proceeded North-East following an ancient mountain track, still in use today and quite comfortable up to Udegram/Gogdara. We can also add that the traveler might also have been a little reluctant to pass near military centers controlled by the "Hor". He therefore did not descend into the Karakar valley until Barikot. In addition to that, it should be kept in mind that Orgyan pa should have arrived in Swāt in spring (the blossoming described on the Karakar pass is clear evidence of this), when the course of the Swāt River is at its maximum water regime. We know from archaeological evidence and the narratives contained in local folklore that Barikot even in pre-modern times, due to the higher water regime, was enclosed by water on three sides at certain times of the year, especially in spring. The Swāt riverside route, which today can be travelled all year round, was in the past only used during low water periods; for example, in autumn, when Alexander's army travelled it. After Barikot, continuing towards Udegram and Mingora, the riverside route is interrupted by the Manyar cliff, which, in ancient times, could only be negotiated during low water periods. The same situation occurs further upstream between Mingora and Manglawar, because of the Faizagat cliff. In fact, even in 1926 Aurel Stein (Stein 1930), in order to reach Manglawar from Mingora in spring, had to follow the mountain route that bypassed that cliff from upstream (see also Raverty 1862: 236). (Olivieri 2024b: 150-151).

The name Vajirasthāna has a long legacy. Passed on from the Śāhis to the Ghaznavids, it remained in use through Ghurid times. The district of Wajīrastān and its capital, the fortified citadel of Wajīra that is quoted in coeval Persian sources, can be securely identified with Barikot and its surroundings (Olivieri, Sesana 2024; see Sesana, below).[28] In this case, too, no other hypothesis is as valid as that of Barikot. Many factors converge in this respect such as the toponymic consonance and the presence of a wealthy Ghaznavid fortress on the hilltop in this strategic region. The Ghaznavids also ruled a nearby city provided with a congregational mosque and cemetery in Udegram (Bagnera 2015). Sesana (pers. comm.) also notes that the local form of the toponym, *bir* (of Bir-kot), related to the Prakrirt form *vəira*, means 'lightning' in medieval Persian.[29]

[28] Persian presence has been attested in Swat since at least the eleventh century CE thanks to the Zalamkot inscription (Shavarebi, Strauch 2022).

[29] The Avestan equivalent of the Sanskrit *vajra* is *vazra*.

Wajīra (M. Sesana)[30]

Apparently the placename Vajirasthāna was still used in Ghaznavid and Ghurid times, when the toponym Wajīrastān/Wajīra is cited as an important administrative centre in Medieval Persian sources (12th/13th century). In *Minhāj Sirāj Jūzjānī'sṬabaqāt-i Nāṣirī* (*The Nāṣirian Tables*, 1259-1260) – perhaps the most comprehensive chronicle of the Ghurid period – the author, while describing the Indian campaigns of the Ghurid sovereign Quṭb al-dīn Ḥasan (r. 1080-1100), mentions the district of Wajīrastān , "*wilāyt-i W.jī.r.stān*" multiple times (Jūzjānī 1963-1964: vol. 1, 333, 346; Jūzjānī 1873: 334, 366), as well as its principal centre, the fortified citadel of Wajīra, "*qalʿa-yi W.jīr.h*" (Jūzjānī1963-1964: vol. 1, 366, 351, 353, 380; Jūzjānī 1873: 357, 369, 447, 492).

From the geographical indications given by the text, it can be assumed that the district Wajīrastān and its centre Wajīra were located somewhere NE of Kabul and, hence, in an area which could *grosso modo* correspond to present-time Swat (see also Jūzjānī 1963-1964, vol. 1, 333, fn. 6).

The following six summaries from Ḥabībī's *Ṭabaqāt-i Naṣīrī* (vol.1) refer to Wajīrastān and Wajīra during the 11th-13th century.[31]

1 – The tribal revolts during the reign of the Ghurid Qutb al-din Hasan (r. 1080-1100)

> During the reign of Qutb al-din Hasan, the inhabitants of Tāgāb [?] in the district of Wajīrastān, rebelled. Qutb al-din Hasan and other Ghurid leaders went to that citadel/castle [*Kūshk*] and ordered the inhabitants to surrender. They refused. As an unexpected sign of fate, on that occasion Qutb al-din Hasan was hit in the eye by an arrow shot by the rebels and died. The episode convinced the supporters of the ruler even more to fight against the rebels and in a short time they were defeated and the place was completely destroyed. Until the time of the last Ghurid ruler and the end of the rule of the Shansabanids [Ghurid emperors], no ruler gave permission to rebuild the citadel or the areas near it. With the exception of one ruler, Amir Kharnak, who went to that Āb-i tang [valley with water] and the people there were obedient to him. When Qutb al-din Hasan died, he was succeeded by his son Amir Husain. (Jūzjānī1963-1964 = Ḥabībī *Ṭabaqāt-i Naṣīrī*: 333/ Raverty's translation: 334, fn. 8).

2 – The accession to the throne of Ala al-Din Husain (r. 1149-1161), a Ghurid ruler.

> [...] When Ala al-Din Husain ascended the throne of Firuzkuh, he ordered his nephews Ghyas al-Din Muhammad bin Sam and Muizz al-Din Muhammad bin Sam to be imprisoned in the fortress of Wajīra (*Qal'a-yi Wajīra*). (Ibid: 336/ Raverty's translation: 357, fn. 1).

3 – The ascent to the throne of Ala al-Din Husain's son, Sayf al-Din.

> [...] One proof of his [Sayf al-Din's] goodness was to release Ghyas al-Din Muhammad bin Sam and Muizz al-Din Muhammad bin Sam from the fortress of Wajīrastān. (Ibid.: 346/ Raverty's translation: 366).

4 – This passage repeats what was said in point 2.

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[30] This and the following sections are revised and updated versions of texts originally published in Olivieri, Sesana 2024. Matteo Sesana and I would like here to thank the editors of the source volume, Al. and Aug. Cacopardo, as well as ISMEO, for granting permission to reproduce two parts of that article in this Volume (see below).

[31] All these are summaries elaborated following both Jūzjānī 1963-1964 and H.G. Raverty (Jūzjānī 1873). Raverty's translation is outdated and art times not very accurate: a future study will not only complete the reconnaissance of the recurrences of the toponym but will also provide new translations of the passages considered here. The reading of the toponym Tagab is uncertain here. There are at least two occurrences of the same name in Eastern Afghanistan: in Ghor and in Kapisa: the meaning is properly "valley of/with water", which may be applied to many places.

> [...] When Ala al-Din Husain ascended the throne of Firuzkuh, he ordered that his grandsons Ghyas al-Din Muhammad bin Sam and Muizz al-Din Muhammad bin Sam be imprisoned in the fortress of Wajīra [*Qal'a-yi Wajīra*] when the ruler died, his son Sayf al-Din, who succeeded him, ordered that Ghyas al-Din Muhammad bin Sam and Muizz al-Din Muhammad bin Sam be freed from the fortress. (Ibid.: 351/ Raverty's translation: 369).

5 – The following passage repeats what is said in point 3 about the release of the sons of Sam.

> [...] When Ala al-Din Husain departed from this world, his son Sayf al-Din ascended the throne of Firuzkuh and ordered that Ghyas al-Din Muhammad bin Sam and Muizz al-Din Muhammad bin Sam be released from the fortress of Wajīra [*Qal'a-yi Wajīra*]. (Ibid.: 353/ Raverty's translation: 447).

6 – A list of the rulers of the Turkish-Afghan Khalij dynasty (13th century) is given. The list includes a certain:

> 'Malik Asad al-Din Shir Malik of Wajīra'. (Ibid.: 380/ Raverty's translation: 491).

From a preliminary survey of the relevant literature, it seems that the presence of the toponym Wajīrastān/Wajīra is not only confined to Jūzjānī's Ṭabaqāt-i Nāṣirī, but it is recurrent in coeval Medieval Persian chronicles. For example, in Niẓāmīʿ Arūḍī Samarqandī's *Chahār Maqāla* (*Four Discourses*, 1155-1157), while describing the reign of the Ghaznavid Sulṭān Ibrāhīm – the son of Masʿūd of Ghazna – the author mentions the imprisonment perpetrated by the Sulṭān himself against his rebellious son and his followers. Among them was the renowned Ghaznavid poet Masʿūd-i Saʿd Salmān (b. c. 1046c-d. 1121-1122) in 'the fortress of Nāyat Wajīrastān' (Samarqandī 1940: 38).[32] The fortress of Nāy (or Nāy-Lāmān) is known to us as it is mentioned by another Ghaznavid Persian source, Gardīzī's Zayn al-Akhbār (*The Ornament of Histories*, eleventh century), as one of the castles plundered by Amir Maḥmūd of Ghazna during his military campaigns in northern India (Gardīzī 2011: 111). Archaeology has documented an important fortress on top of the Barikot hill dated precisely to the Ghaznavid and Ghurid periods and superimposed over a Śāhi Brahmanic cult centre (Minardi, this volume). These findings coincide with the philological information collected. Therefore, if the Hindu Śāhi inscription found in Barikot attests the usage of the toponym Vajirasthāna during the eleventh century, the presence of the same toponym among the Medieval Persian sources would testify the continuity of the placename in the following two centuries.[33]

The second Barikot

A local story I collected many years ago in Barikot *bazaar* speaks of the hilltop that towers over the city as a 'place of a hundred castles'. It also recounts the existence of a mysterious tunnel that just so happened to connect Barikot with the valley of Tal, in the Upper Dir (Fig. 5). The Yusufzai Pashtuns claim that the ancestral Dardic (*kafir*) people of Barikot used this very tunnel to escape to Dir after the Pashtun conquest of Middle Swat in the late 16th century. The newly established settlement in Dir was called Beri-kot, which later was standardised in the modern toponym Barikot (in Pashto *Bir-*, in Urdu *Bari-*). The pre-modern name of this village is preserved in the toponym of the hill above it, which is still called Beri-dheri.

The Barikot in the Tal Valley – which we call Barikot 2 – is but a tiny hamlet which shares only the name with the Barikot in Middle Swat, and none of its complexity and grandeur (Fig. 6). The earliest mention of Barikot 2 (as 'Berikoot' and 'Berikout') dates to the 1840s, in a short account by General Claude-Auguste Court, a high-ranking

[32] The passage, according to the English editor/translator, is not very clear: the reading from the manuscript is uncertain (see in transl.: 72, fn.2). I note, however, that the Persian editor reads 'Wajīristān' without hesitation.

[33] Further analysis is needed to fully understand occurrences of the toponym in Medieval Persian sources, its identification with the Sanskrit Vajirasthāna (Vajira), and its association with the site of Barikot. Here, I have only reported the preliminary results of a recent philological survey.

French officer in the service of Ranjit Singh (1780–1839) (Court 1836; 1840; cf. Cacopardo, Pellò 2021: 369). While reporting on the Tal valley and its surroundings, Court described 'a basin situated to the east of Dhyr in the district of Tal, where a fire exists under a cupola maintained from time immemorial, and kept up at present by a Guebrian woman' (Court 1840: 307). The terms here are revealing: by the term 'basin' Court meant a narrow valley, and with 'cupola' he always referred to a stupa. The term Guebrian is 18th-century British jargon for Zoroastrians or pagans.[34] What we glean from this account is Court's description of a cult monument in a narrow valley east of Dir, which can be only the valley of Tal, and a stupa or *caitya* in or near which a sacred fire was lit.[35]

A stupa is also mentioned by Harold Deane at Barikot 2, but by the time he was there in the 1890s it had been demolished: 'at Barikot near Patrak, district ruins are said to exist, and a stupa is said to have existed there which was overthrown by one Ilias Akhund about two generations ago' (Deane 1896: 663).[36] This event, obviously related to the Islamisation of Dir Kohistan, should be placed in the first half of the 19th century. The 'one Ilias Akhund', however, can only be identified with the 17th-century Akhund Ilias, who was the ancestor of the Khans of Dir (Cacopardo, Cacopardo 2001: 36). Attributing this feat to him is an example of the popular metonymic practice of using the names of apical ancestors as a collective designation of all their descendants (ibid.: 127).[37]

Despite their reports, neither Court nor Deane saw Barikot 2 in person. The first person to visit the site in 1908 was Colonel Stuart Hill Godfrey, who left us a vivid description in an article published in *The Geographical Journal* (Godfrey 1912). Thanks to Godfrey we have a first-hand account of the foundation of Barikot 2. According to the locals, eight generations earlier (i.e., around the 16th century), their ancestors – led by their chief Baria [Baira] – arrived in Dir as exiles from Barikot in Swat, which had just been occupied by the khans of the Yusufzai Pashtuns. Godfrey then went to Swat, where he gathered the other side of the same story from the khans of Barikot (ibid.: 50). In both Barikots, I was told about the passes that almost directly join the two areas by a three to five day march.

Thus, the continuity of the toponym Beira/Bir between the Barikot of Swat and the Barikot in Dir is more than mere coincidence: it tells a story of displacement, conquest, and historic memory.

Conclusions

The structure of the village, in tower-houses, clings around the hill of Barikot. John Biddulph's words describing a Bushkarik village fit perfectly with the archaeological reality: 'Their villages are built in a peculiar fashion for safety. A hillside with a suitable slope is selected, against which the houses are built in a succession of terraces rising one above the other, so that the flat roof of each house is on a level with the floor of the one above it' (Biddulph 1880: 71). The Barikot village was abandoned at the time of the Yusufzai arrival around mid-16th century, quite exactly 'eight generations' earlier, as Godfrey reported (Godfrey 1912: 50; cf. Olivieri 2009: 59–64) – these are dates we can accurately

[34] The term '"Gueber' is derived from the Persian word *gabr*, which was used as a pejorative term to describe the Zoroastrians. Several etymologies have been proposed, but none of them is fully convincing. Some have suggested that the word derives from the Arabic *kafir* (infidel). The term entered British colonial jargon to describe pagans in general (Pellò 2009: 97–98; Shaki 2012) [MS].

[35] 'The inhabitants [of the Talash valley, located near the Swat Valley, on the road to Dir] […] were either Hindus or Zoroastrians […]. Meah Sahib Gul, one of my companions, relates that he once passed the night in the Tálásh valley in the house of an aged man ["calling himself Mahomedan"], who after the evening's repast proudly pointed out some live embers, which he stated had been kept alight without intermission for several years past, and further added that his father was of a persuasion that held fire in veneration.' (McNair 1885: 18). I would like to thank Al. Cacopardo here for bringing McNair to my attention.

[36] A critical edition of Deane's note, which is based on a manuscript found in 2008 in the Malakand Fort, was recently published as part of a substantial archival collection (Olivieri 2015a; Morgan, Olivieri 2022). Deane was the first Political Agent of the Malakand Agency, whose jurisdiction also covered Dir, Bajaur and Chitral. The Agency was established in 1895 during the operations triggered by the *casus belli* of the siege of the British garrison at the Chitral Fort (Morgan, Olivieri 2022: 9–17).

[37] I owe this information to Al. Cacopardo (pers. comm.).

determine thanks to the radiocarbon analyses of the final phases of occupation.[38] The area of the ancient settlement was never occupied again (Fig. 7).

The Yusufzai established a check-post along the lower communication route that also controlled the road to Buner and the Indus. A *bazaar* arose here, giving rise to the modern village. Of the ancient village of Barikot, only the name was transferred to the new *bazaar*, while the hill was mostly abandoned; until a few decades ago only a few fakirs frequented its caves. This was the situation Italian archaeologists faced in the 1990s. Having leased the hill in its entirety, many teams throughout the years have safeguarded it against new construction projects, excavated it and studied it since – this work is reported in this volume.

A note on 2007-2012

An important aspect of the hill's recent history, which should not be forgotten, is its recent use as a military post during operations against the Swat Taliban (Tehrik-i Taliban Swat) during the first and second Swat campaigns (respectively Operation Rah-e-Haq, in 2007, and Operation Rah-e-Rast, which began in May 2009). During this period and until 2012, excavation and archaeological survey operations on the hill were suspended for obvious reasons. The 2020 excavations on the summit (Trenches BKG 14 and BKG 15) and later those of 2023 and 2024 (Trenches BKG 23 and BKG 24.1) also involved the cleaning and demolition of small casemates, machine-gun nests, the remains of demolished camps and barracks, as well as the collection and disposal of numerous items including fragments of tent poles, boots, strips of used bullets and large quantities of cartridge cases.

[Fig. 1 – The valley of Swat with the hill of Barikot (N to the left). Photo by C. Biagioli/ISMEO, April 2018.]
Fig. 2 – The hill of Barikot in 1938. Photo by T.D. Weatherhead (Neg. 663/2(17), British Library).
Fig. 3a – Kunsthistorisches Museum, Vienna (Göbl 1967 type 108): *jayatu baysara khota laka* (after Tandon 2013: table 3, coin 19).
Fig. 3b – British Museum, 1912.1214 (Göbl 1967 type 109): *jayatu baysara* (after Tandon 2013: table 3, coin 20).
Fig. 4 – Vajirasthāna inscription, L 119 (Photo CM)
Fig. 5 – The upper valley of Tal from the hill of Barikot 2 (N to the left). Photo MM, October 2021.
Fig. 6 – The hilltop of Beira-dheri at Barikot 2. Photo MM, October 2021.
[Fig. 7 – The hilltop of Barikot seen from ESE in 1938 (after Barger and Wright 1941: Fig. 2)]

[38] The samples (more than a metre of ash and charcoal of Himalayan pine, *pinus roxburghii*) were retrieved from a circular hollow stone structure. We do not know the exact function of this pit, however, the presence of a large amount of ashes makes it likely that it was linked to fire cultic activity (just as both Court and McNair mentioned in their reports). The radiocarbon analysis of the charcoal gave the following results: 1σ = 1517-1594 80%; 2σ = 1484-1644 AD 100% (CIRCE Innova 2020) (see TABLE 2, No. 80).



Fig. 1 – The valley of Swat with the hill of Barikot (N to the left). Photo by C. Biagioli/ISMEO, April 2018.



Fig. 7 – The hilltop of Barikot seen from ESE in 1938 (after Barger and Wright 1941: Fig. 2)

REFERENCES

Abbreviations

Arr. *Anab.* = Arrian, Ἀλεξάνδρου Ἀνάβασις

Curt. = Q. Curtius Rufus, *Historiae Alexandri, libri qui supersunt*

* * *

ARA = Archaeological Research in Asia

AION = Annali dell'Istituto Orientale di Napoli

AIUON = Annali dell'Istituto Universitario Orientale di Napoli

AMIT = Archäologische Mitteilungen aus Iran und Turan

BAVA = Beiträge zur Allgemeinen und Vergleichenden Archäologie

EA = Eurasia Antiqua. Zeitschrift für Archäologie Eurasiens

EI = Epigraphia Indica

EMSCAT = Études mongoles et sibériennes, centrasiatiques et tibétaines

EW = East and West

JA = Journal Asiatique

JIABS = Journal of the International Association of Buddhist Studies

JAC = Journal of Asian Civilizations

JRAS = The Journal of the Royal Asiatic Society of Great Britain and Ireland

ONS = Journal of the Oriental Numismatic Society

RET = Revue d'Etudes Tibétaines

SAS = South Asian Studies

SAA = South Asian Archaeology Conference

SAAA = South Asian Archaeology and Art Conference

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ACT = Archaeology Community Tourism - Field School Project

ACT RepMem = ACT Reports and Memoirs

ANP = Antiquities of Northern Pakistan: Reports and Studies

ANU = Australian National University Press

ICCROM = International Centre for the Study of the Preservation and Restoration of Cultural Property

IGNA = Indira Gandhi National Centre for Arts

IsMEO RepMem = IsMEO Reports and Memoirs

IsIAO RepMem = IsIAO Reports and Memoirs

KNAW = Koninklijke Nederlandse Akademie van Wetenschappen

MANP = Materialien zur Archäologie der Nordgebiete Pakistans

MASI = Memoirs of the Archaeological Survey of India

MDAFA = Mémoires de la délégation archéologique française en Afghanistan

ÖAW = Österreichische Akademie der Wissenschaften (Verlag)

SOAS = School of Oriental and African Studies

SOR = Serie Orientale Roma

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ARCHAEOLOGY OF THE BARIKOT HILLTOP (SWAT, PAKISTAN)

Volume 2



Luca M. Olivieri
In collaboration with Elisa Iori, Michele Minardi and Marco Pinelli

Foreword by Abdul Samad

Edited by Alice Casalini

"SAVE THE ARCHAEOLOGICAL SITE OF BAZIRA" PROJECT

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by Luca M. Olivieri and others

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Volume 2 – Illustrations (Figs)

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N.B.: Some figures are intentionally left without captions; see descriptions in Volume 1.

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INTRODUCTION



Fig. 1 – Terrace E, N side and E side [130] as it appeared in 1926 (after Stein 1930: figs 20-21)

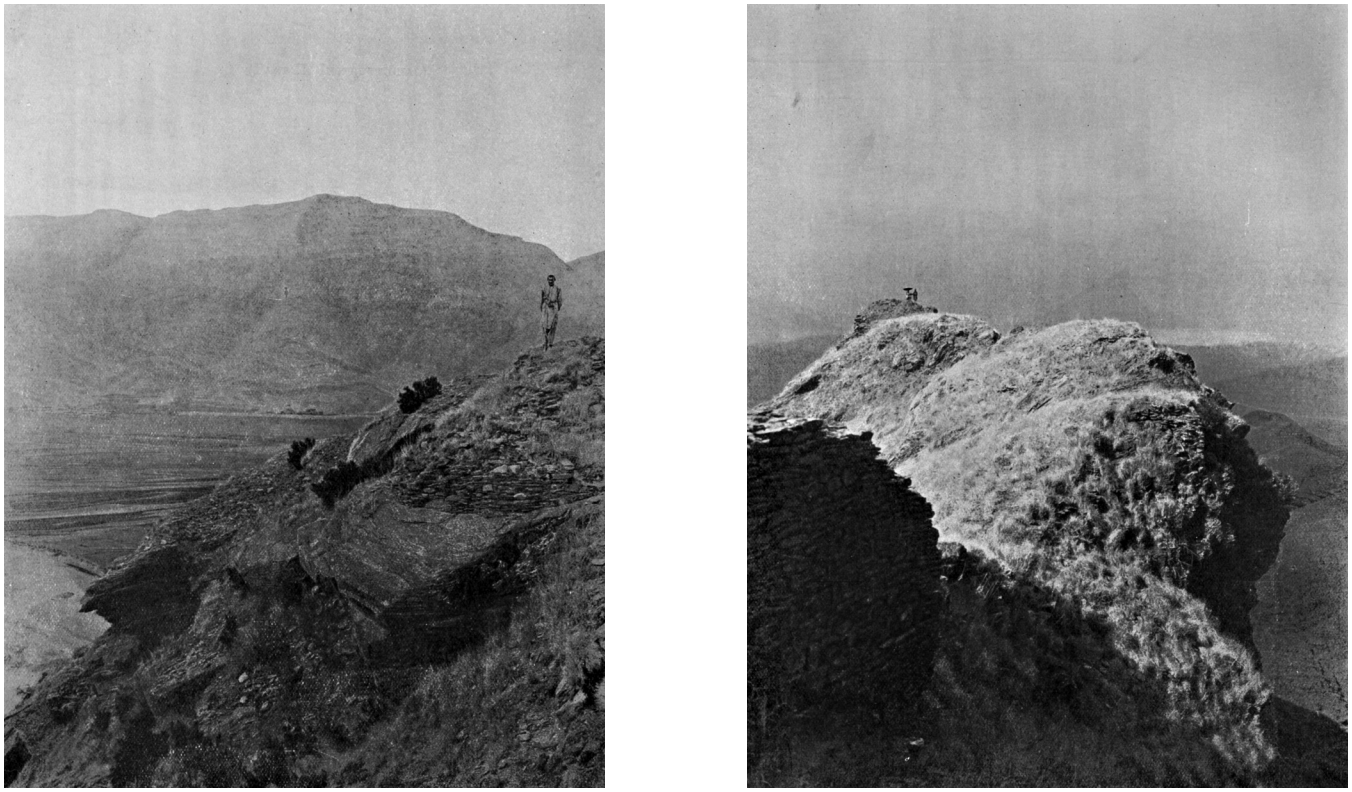


Fig. 2 – SW sides [136] and hilltop (BKG 14) as it appeared in 1926 (after Stein 1930: figs 22-23)

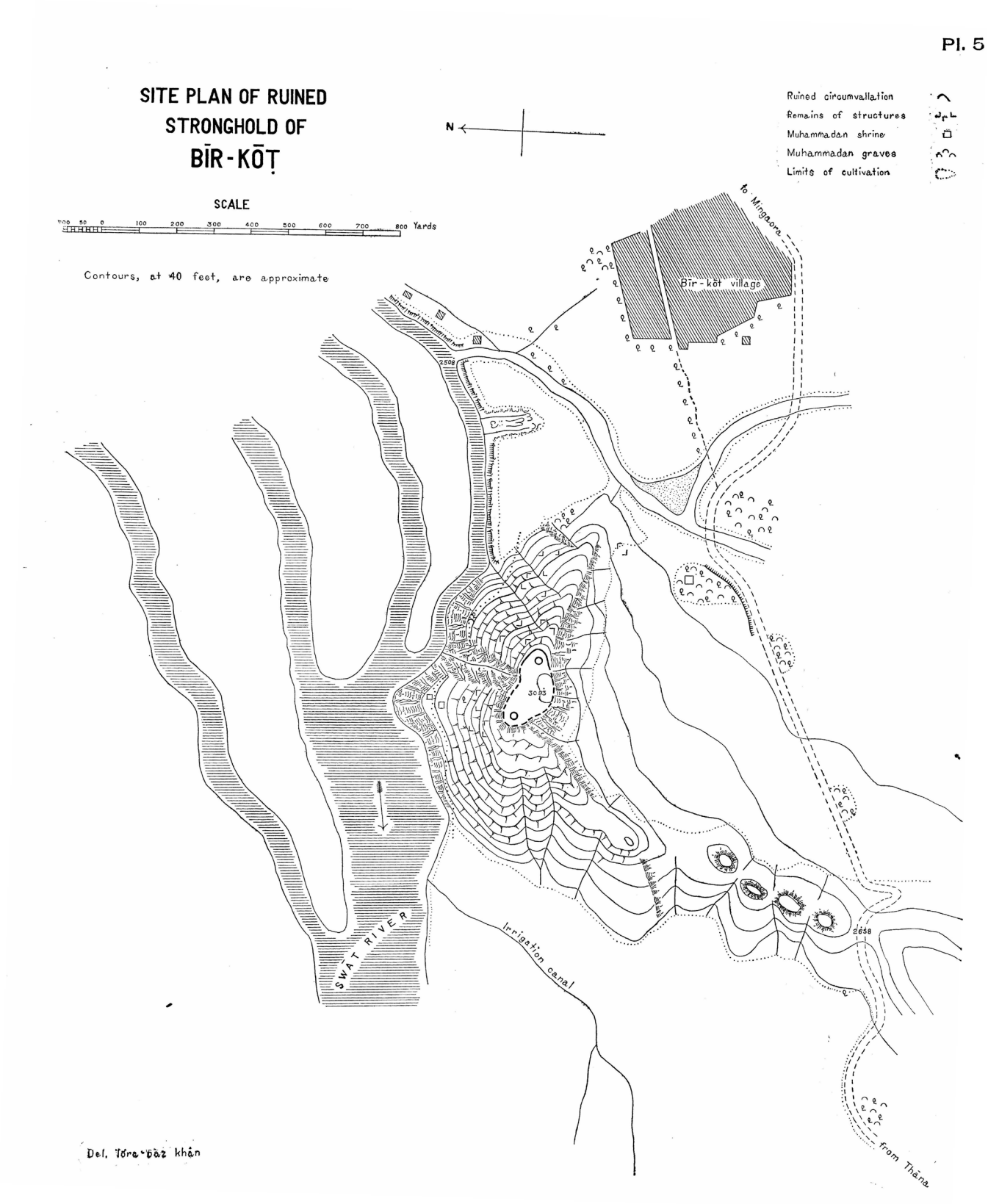


Fig. 3 – Map of the ruins at Barikot in 1926 (after Stein 1930: pl. 5)

0.2 - THE CITY OF VAJRA (L.M. Olivieri)



Fig. 1 – The valley of Swat with the hill of Barikot (N to the left). Photo by C. Biagioli/ISMEO, April 2018.

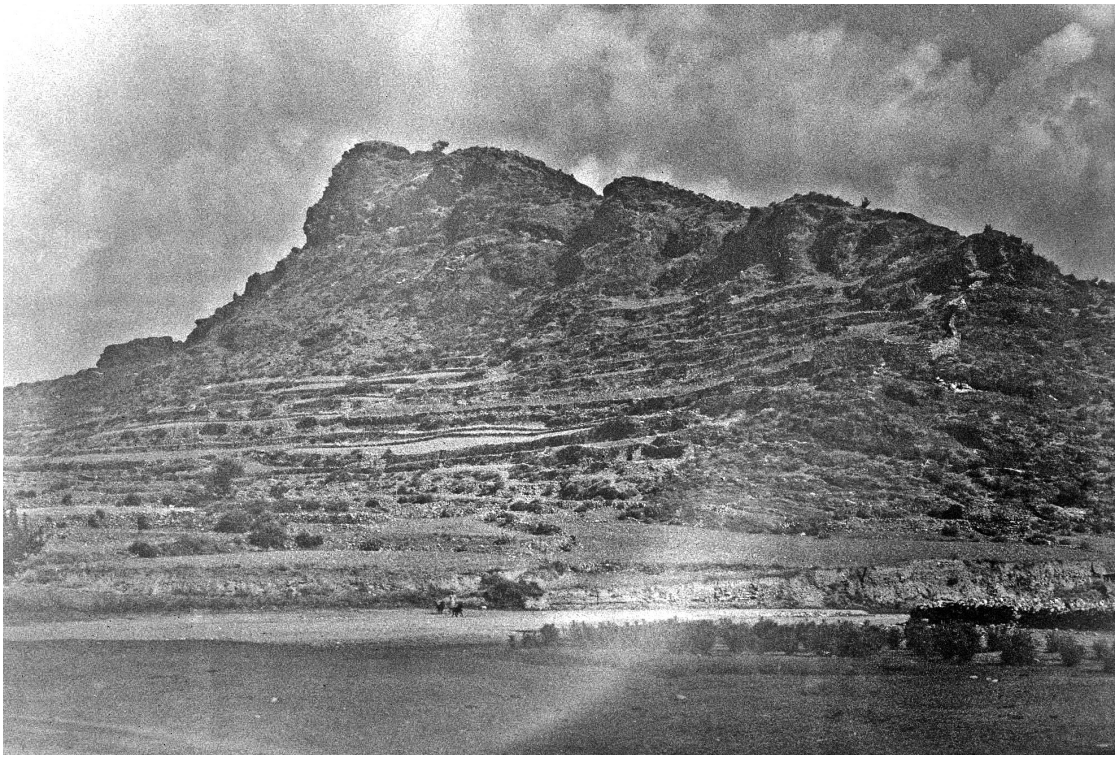


Fig. 2 – The hill of Barikot in 1938. Photo by T.D. Weatherhead (Neg. 663/2(17), British Library).



Fig. 3a – Kunsthistorisches Museum, Vienna (Göbl 1967 type 108): *jayatu baysara khota laka* (after Tandon 2013: table 3, coin 19).



Fig. 3b – British Museum, 1912.1214 (Göbl 1967 type 109): *jayatu baysara* (after Tandon 2013: table 3, coin 20).



Fig. 4 – Vajirasthāna inscription, L 119 (Photo CM)



Fig. 5 – The upper valley of Tal from the hill of Barikot 2 (N to the left). Photo MM, October 2021.



Fig. 6 – The hilltop of Beira-dheri at Barikot 2. Photo MM, October 2021.

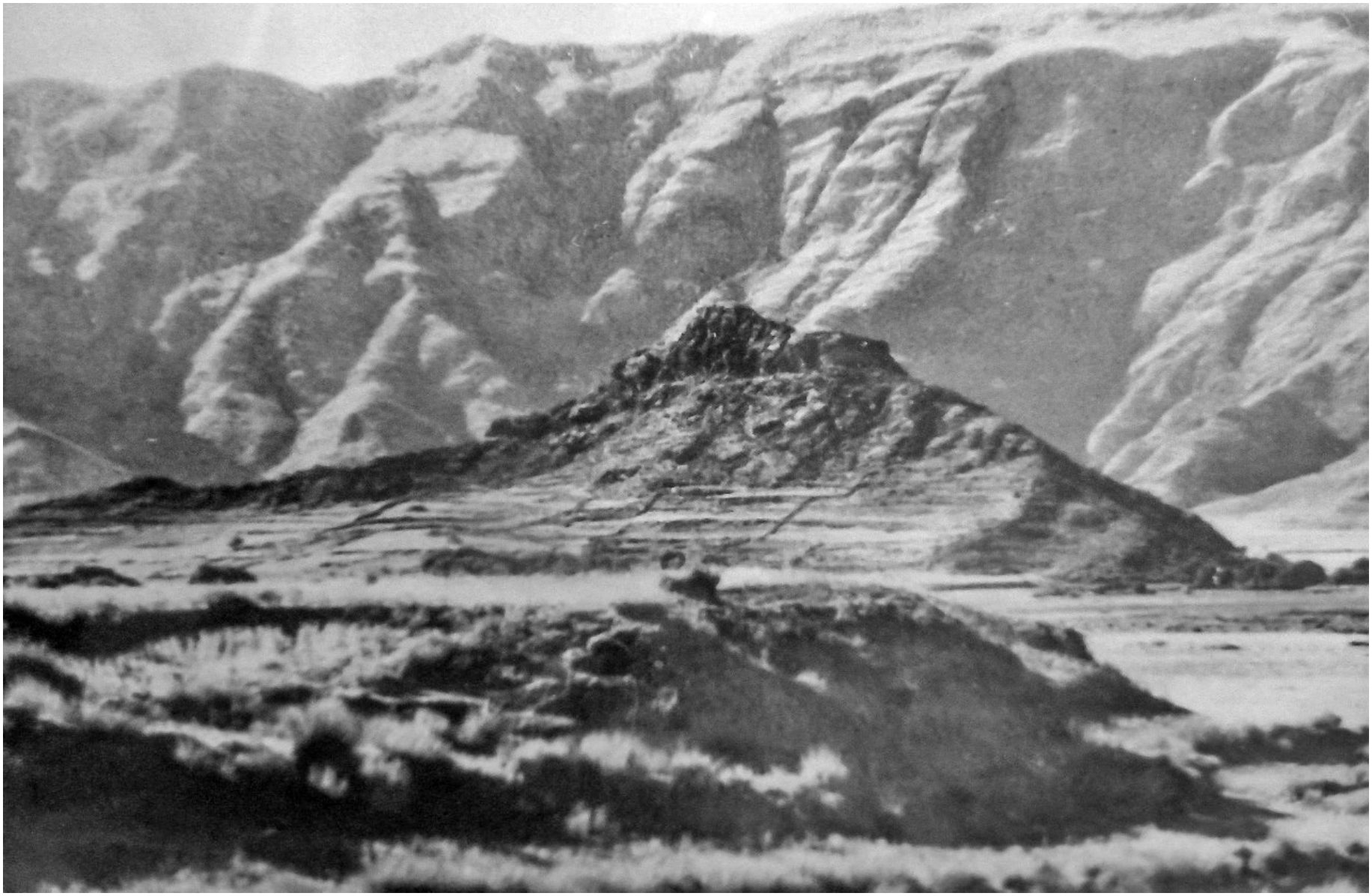


Fig. 7 – The hilltop of Barikot seen from ESE in 1938 (after Barger, Wright 1941: Fig. 2).

Chapter I

ACTIVITIES ON THE HILLTOP (1992-2024)



Fig. 1 – Aerial view of the archaeological site of Barikot: location of the excavated trenches (filled trenches in red).



Fig. 2a – Barikot archaeological site viewed from E.



Fig. 2b – The same viewed from NW

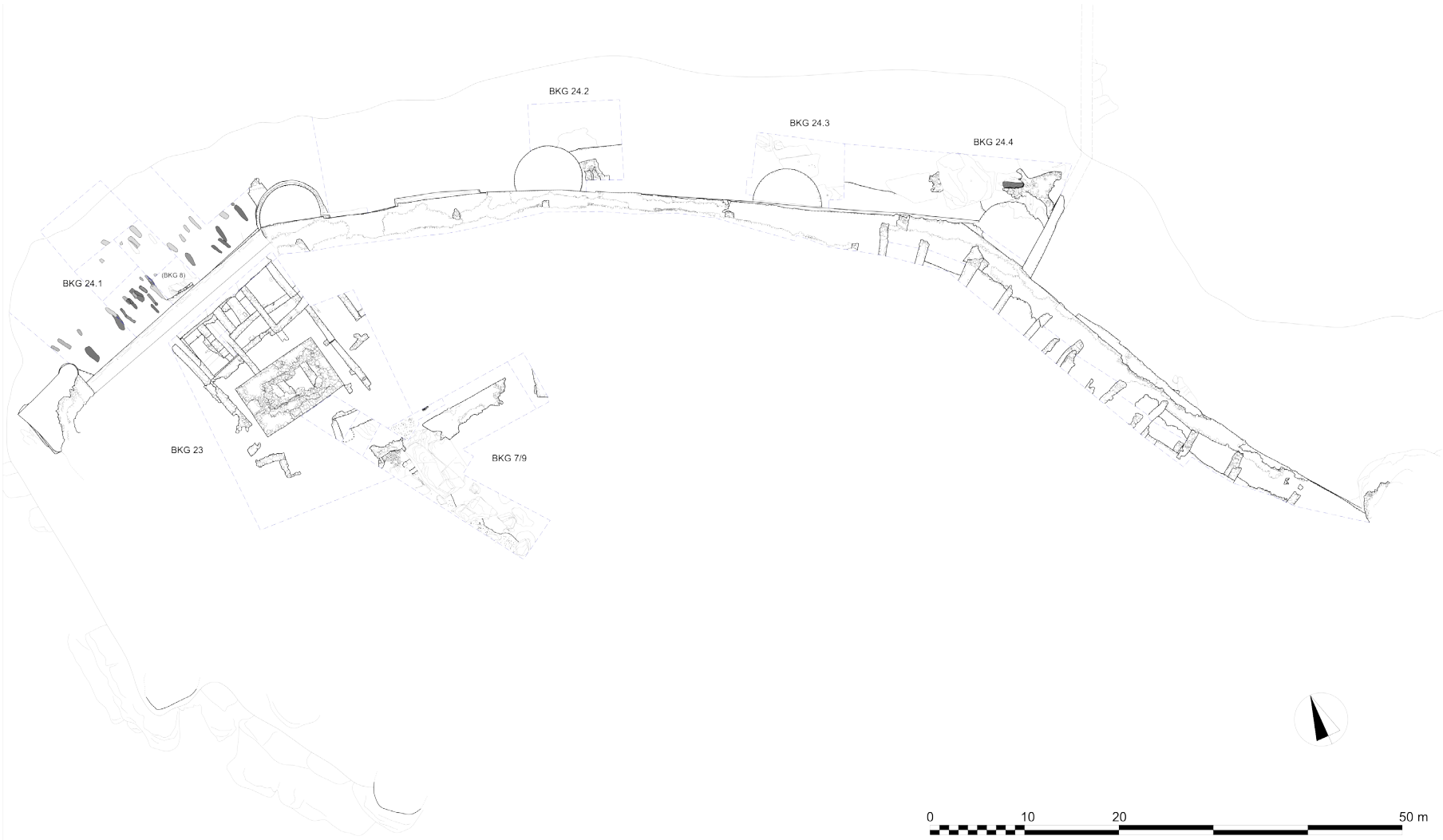


Fig. 4 – Upper hill of Barikot: Terrace W (cf. PLATE XXIII).



Fig. 3 – Electric storm at Vajirasthāna (cf. Minardi, this volume)



Fig. 5 – Upper hill of Barikot: Terrace E (cf. PLATE XII)



Fig. 6 – Barikot, S side of the hill: Trench BKG 2-13 seen from the W.



Fig. 7 – Temple 2 (view from the SE) (BKG 2)

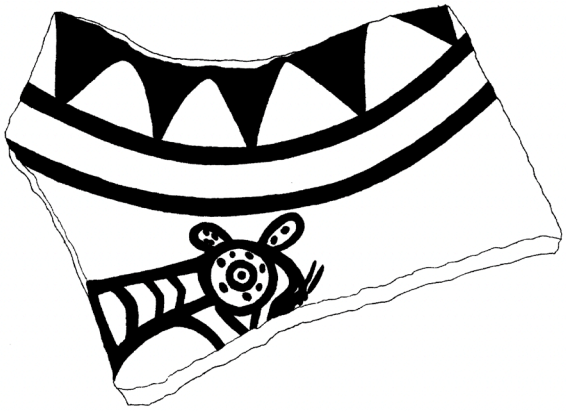


Fig. 8 – Bronze age sherd BKG 1903 from Trench BKG 8 (Macrophase 0; w. max. 18.6 cm).



Fig. 9 – Figurine with incised triśula. BKG 4767.

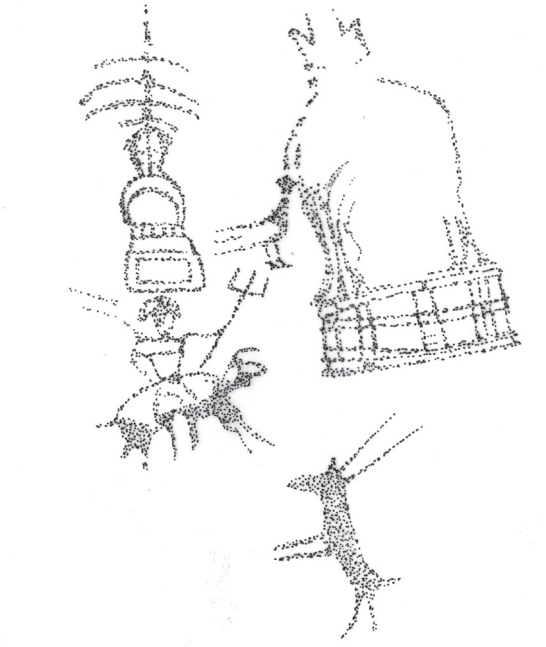


Fig. 10 – Thakt-Gat rock painting. Drawing by LMO.



Fig. 11 – Palangai 1 rock painting. Drawing by LMO.

TABLE 1 – Concordance between the Macrophases of Barikot and the Periods/Phases of individual Trenches (compiled by LMO).

Macrophase	Lower Town														Acropolis/Hill								Chronology (relative / absolute) *Toponym*	Representative coin finds		Climatic conditions
	BKG 4-5	BKG 11-22	BKG 12	BKG 1	BKG 3 outside	BKG 3	BKG 18	BKG 16-21	BKG 19	BKG 17	BKG 10	BKG 2-13	**Structural macro-events**	BKG 7-9	BKG 9-23	BKG 8-24	BKG 20	BKG 14	BKG 15	BKG 6	**Structural macro-events**	**Cultural phase**	coinage	
10											Per. IV	Per. VII	**construction of a *thana* (BKG 10) in early 20th cent.** ↑ Pashtun village from 16th cent. ↑ abandonment of Dardic settlement (clan of Baira or Baria) in 16th cent.			Per. 4	Per. 4	Per. 4		Per. 4	agricultural use hermitage place for local *fakirs*	**Yusufzai / Miangul** (16th to early 20th cent. CE) *Berikout / Bir-kot*		COOLING LITTLE ICE AGE (LIA)
9b-c				Per. X	Per. VII	Ph. 5				[?]		Per. VI	**Islamic occupation and graveyard (BKG 3 and BKG 17 [?]) at least from 13th cent.**	Per. VII	Per. VIII BKG 9 Per. 3 BKG 23	Per. 3	Per. 3	Per. 3	Per. 3	Per. 3b	**fortification of the *kot*** **establishment of a cemetery (BKG 24.1)**	**Dardic / Timurid** (13th to 15th cent. CE) *Qal'a-ye Wajīra (?)*		MEDIEVAL WARMING (MW)
9a												Per. V		Per. VI		Per. 2	Per. 3			Per. 3a	**podium (BKG 23)** ↑ **construction of a military watchtower (BKG 14) Fortification (BKG 24)** ↑ destruction of the Hindu Temple	**Ghaznavid / Ghurid** (11th to 12th cent. CE)	Ghaznavid	
8b												Per. IV	**construction of the turreted Temple (BKG 2)**		Per. VII BKG 9 Per. 2 BKG 23	Per. 1	Per. 2			Per. 2b	**reconstruction of the Hindu Temple (BKG 6) (Period 2b)**	**Hindu Śāhi** (9th to 10th cent. CE) *Vajirasthāna*	Hindu Śāhi	
8a		Per. X		Per. IX	Per. VI	Ph. 4						Per. III	**construction of the foothill palatial area (BKG 13)**	Per. V	Per. VI BKG 9 Per. 1 BKG 23		Per. 1	Per. 2	Per. 2	Per. 2a	hilltop fortified settlement **construction of the HinduTemple (BKG 6) (Period 2a)** **construction of a tank and Fortress on the hilltop (BKG 14, 15)** **Modification of the artificial Terraces E and W (BKG 20, 24)** demolition of the Buddhist sacred area (?) hilltop 'urban' phase	**Turk Śāhi** (7th to 9th cent. CE)	Turk Śāhi	LESS COOL DRY
Interphase C																						536-660 CE		COOL DRY LATE ANTIQUE LITTLE ICE AGE (LALIA)
7								Per. 9	Per. VII				**foundation of a Buddhist stupa upon the ruins of the abandoned city (BKG 19)**								abandonment phase sporadic human presence	**Kidarite / Alkhan** (5th to 7th cent. CE)	Kidārite Alkhan	STABLE WARM WET GANDHARAN OPTIMUM END
6	Per. X	Per. IX		Per. VIII	Per. V	Ph. 3	Per. 6	Per. 8	Per. VI				temporary non-urban re-occupation							Per. 1		**Early Kidarite** (mid/late 4th cent. CE)	Late Kušān Kušāno-Sāsānian small *aes*	

Macrophase	Lower Town													Acropolis/Hill							Chronology (relative / absolute) *Toponym*	Representative coin finds		Climatic conditions
	BKG 4-5	BKG 11-22	BKG 12	BKG 1	BKG 3 outside	BKG 3	BKG 18	BKG 16-21	BKG 19	BKG 17	BKG 10	BKG 2-13	**Structural macro-events**	BKG 7-9	BKG 9-23	BKG 8-24	BKG 20	BKG 14	BKG 15	BKG 6	**Structural macro-events**	**Cultural phase**	coinage	
5b	Per. IX	Per. VIII b	Ph. 8	Per. VII	Per. IVB	Ph. 2b	Per. 5	Per. 7	Per. V		Per. III		*earthquake* abandonment of the drainage system **pottery production area (BKG 1)**									**Kushano-Sasanian** (late 3rd / early 4th cent. CE)	Kušāno-Sāsānian	STABLE WARM WET GANDHARAN OPTIMUM END
5a	Per. VIII Per. VII	Per. VIIIa Per. VII	Ph. 7			Ph. 2a	Per. 4	Per. 6			Per. II		Modification of the Apsidal Temple (BKG 16) *earthquake* reconstruction	Per. IV-III BKG 7	Per. V-IV BKG 9				Per. 1	demolition of the Defensive Wall expansion of Terrace W construction of Terrace E	**Late Kushan** (3rd cent. CE) **Late Kushan** (3rd cent. CE)	Late Kušān Late Kušān	
4	Per. VI Per. V	Per. VI Per. V	Ph. 6 Ph. 5	Per. VI Per. V	Per. IVA	Ph. 1b	Per. 3		Per. IV		Per. II		intense building activity abandonment of the Defensive Wall initial abandonment of the Defensive Wall Re-construction of the Apsidal Temple (BKG 16)					Per. 1	Per. 1		**Buddhist sacred area (BKG 6) on Terrace E** **massive stepped structure (BKG 14 -15)**	**Kushan** (1st to 2nd cent. CE)	Kušān	MONSOON INTENSIFICATION
3b	Per. IV	Per. IIIB	Ph. 4	Per. IV	Per. III	Ph. 1a	Per. 2	Per. 5	Per. III	Per. 1	Per. I		*earthquake* rehabilitation of the Defensive Wall **pottery production area (BKG 19)**	Per. II	Per. III						construction of the new **Defensive Wall on the Acropolis Hill (BKG 8)**	**Saka-Parthian** (mid-1st cent. BCE to late 1st cent. CE) **Oḍirāja**	Indo-Scythian	GANDHARAN OPTIMUM PEAK
3a4		Per. IIIA 4		Per. III									fortified urban phase											LESS COLD DRY GANDHARAN OPTIMUM BEGINNING
3a3	Per. III	Per. IIIA 3	Ph. 3	Per. II Per. I	Per. IIB Per. IIA		Per. 1	Per. 4.2	Per. II				demolition of the previous structures and stratigraphy for the construction of the urban **Defensive Wall (BKG 11-12) with southern gate (BKG 18)**								construction of the earlier **Defensive Wall on the Acropolis Hill (BKG 9 & 7)**	**Indo-Greek** (mid-2nd to mid-1st cent. BCE) late post-Mauryan - unknown (early to mid-2nd cent. BCE)	Indo-Greek Taxila-Gandhāra Mauryan	
3a2		Per. IIIA 2											urban ↑occupation phase											
3a1		Per. IIIA 1																				**Late / post-Mauryan** (mid-3rd to early 2nd cent. BCE)	Taxila-Gandhāra Mauryan	
2b		Per. IIB	Ph. 2b					Per. 4.1	Per. I				**construction of the Apsidal Buddhist Temple (BKG 16)**									**Mauryan** (end-4th to mid-3rd cent. BCE)		
2a2		Per. IIA2						Per. 3					**earthen rampart and moat (BKG 12W)**								**Achaemenid - Assakenian** (5th to 4th cent. BCE) Macedonian conquest *Bazira / Beira* ↑		
2a1		Per. IIA1											urban ↑occupation phase								**Early or pre-Achaemenid** (6th to 5th cent. BCE)		

MACROPHASE	LOWER TOWN													ACROPOLIS/HILL								Chronology (relative / absolute) *Toponym*	Representative coin finds		Climatic conditions
	BKG 4-5	BKG 11-22	BKG 12	BKG 1	BKG 3 outside	BKG 3	BKG 18	BKG 16-21	BKG 19	BKG 17	BKG 10	BKG 2-13	**Structural macro-events**	BKG 7-9	BKG 9-23	BKG 8-24	BKG 20	BKG 14	BKG 15	BKG 6	**Structural macro-events**	**Cultural phase**	coinage	
													construction of a non-Buddhist Temple (BKG 16)											
Interphase B		Per. IC																							COLD DRY
1b	Per. II (?)	Per. IB	Ph. 1b BKG 12		Per. I			Per. 2					final collapse and abandonment of the fortified cluster Settlement/ reconstruction of the inner citadel (BKG 11-K) Graveyard	Per. IB	Per. II (BKG 9)	Per. II (BKG 8)					Settlement	**Iron Age** (*c.* 1000–900 BCE) = Period VII of the Ghalegai sequence (?) **Iron Age** (*c.* 1200–1000 BCE) = Period VI of the Ghalegai sequence		COOLING
1a		Per. IA	**Ph. 1a** BKG 12										Settlement **Fortified inner citadel (BKG 11-K)** Graveyard								Settlement	**Late Bronze Age / Early Iron Age** (*c.* 1300–1200 BCE) = Periods V–VI of the Ghalegai sequence		COOL DRY
Interphase A (?)																									COLD [?]
0	Per. I (?)		Ph. 0 (only in BKG 12)		Per. 0			Per. I					Settlement	Per. IA	Per. I (BKG 9)	Per. I (BKG 8)					Settlement	**Chalcolithic** (*c.* 1700–1400 BCE) = Period IV of the Ghalegai sequence		COOLING
-1 / - 3													sparse anthropic presence								sparse anthropic presence	Prehistoric phases (*c.* 3000 –1700 BCE) = Period III-I of the Ghalegai sequence and **Northern Neolithic**		HOLOCENE OPTIMAL NORTHERN NEOLOTHIC OPTIMUM
Holocene 2													loess capped landscapes alternated with erosion phases								loess capped landscapes alternated with erosion phases	(*c.* 5000 –3000 BCE)		COOL DRY MONSOON INTENSIFICATION PEAK
Holocene 1																						(*c.* 9000 –5000 BCE)		
Late Pleistocene													silt/loess deposits [?]								silt/loess deposits [?]	(*c.* 15000 –10000 BCE)		

MACROPHASE	LOWER TOWN													ACROPOLIS/HILL							Chronology (relative / absolute) *Toponym*	Representative coin finds		Climatic conditions
	BKG 4-5	BKG 11-22	BKG 12	BKG 1	BKG 3 outside	BKG 3	BKG 18	BKG 16-21	BKG 19	BKG 17	BKG 10	BKG 2-13	**Structural macro-events**	BKG 7-9	BKG 9-23	BKG 8-24	BKG 20	BKG 14	BKG 15	BKG 6	**Structural macro-events**	**Cultural phase**	coinage	
Philladic bedrock													*phylladic bedrock*								*phylladic bedrock*	——		

TABLE 1 – Concordance between the Macrophases of Barikot and the Periods/Phases of individual Trenches (L.M. Olivieri)

*The climatic data are all hypothetical and based on available information (see also Olivieri 2025b with refs)
**For radiocarbon data see TABLE 2.

Key:

upper limit of the archaeological deposit

uncertain limits

lower excavated limit of the archaeological deposit

gap in the archaeological evidence

1

TABLE 2 – List of radiocarbon measurements (compiled by LMO).

#	Macrophase	Sample ID	Source	Cal Date	relative probabilities (%)	1 σ	2 σ	Laboratory	Year	Material
80	**Macrophase 9c-10**	INNOVA-17	BKG 13 (26)	1517-1594 CE	80.0	x		INNOVA	2019	charcoal
79	**Macrophase 9c**	ENEA-185	BKG 2 (17)	1300-1330 CE	27.1			ENEA	2008	charcoal
				1340-1400 CE	41.1					
77	**Macrophase 9b-9c**	PSUAMS-6205	BKG 11 <1002>	1287-1393 CE	*t.*			PSU	2019	bone
78		PSUAMS-4427	BKG 308 <139>	1276-1390 CE	*t.*			PSU	2019	bone
75	**Macrophase 9a**	BETA - 664153	BKG 2_13_3	1113 – 1156 CE	32.3	x		BETA An.	2023	soil
				1075-1108 CE	24.2	x				
				1028-1172 CE	95.4		x			
76		PSUAMS-6206	BKG 11 W (46)	1021-1154 CE	*t.*			PSUAMS	2019	bone
85		FTMC-NS41-5	BKG 17 <F2> (17)	1083-1151 CE	56.6	x		VILNIUS RC	2024	bone
				1025-1160 CE	95.4		x			
97		BETA - 726618	BKG 6.3 (1846)	1026-1158 CE	95.4		x	BETA An.	2025	seed
98		BETA - 726619	BKG 6.3 (1803)	1116-1219 CE	61.2		x	BETA An.	2025	seed
				1042-1107 CE	34.2		x			
99	**Macrophase 8b**	BETA - 726622	BKG 24.1 (21)	951-1034 CE	84.5		x	BETA An.	2025	charcoal
				896-923 CE	10.9		x			
69		ENEA-183	BKG 2 (344)	770–900 CE	55.6			ENEA	2008	charcoal
				920-960 CE	12.6					
70		ENEA-184	BKG 2 (365)	789-900 CE	47.7			ENEA	2008	charcoal
				910-960 CE	20.5					
71		DSH9629_CH	BKG 2 TT1E	873 CE	100.0	x		INNOVA	2019	charcoal
				894 CE	96.0		x			
106		DSH9646_CH	BKG 6.5 (38)	969-1018 CE	100.0	x		INNOVA	2019	charcoal
				942-1024 CE	84.0		x			
107		DSH9642_CH	BKG 6.5 (25)	886-991 CE	100.0	x		INNOVA	2019	charcoal
				944-975 CE	53.0		x			
108		DSH9574_WO	BKG 6.5 (25)	949-995 CE	70.0	x		INNOVA	2019	wood
				939–1018 CE	71.0		x			
109		DSH9575_SO	BKG 6.5 (55)	950-985 CE	62.0	x		INNOVA	2019	coprolyth (small mammal)
				891-994 CE	100.0		x			
110		DSH9635_CH	BKG 6.5 (23)	882-970 CE	100.0	x				
				856-982 CE	86.6		x			
100		BETA - 726623	BKG 235 (48)	871-992 CE	81.5		x	BETA An.	2025	charcoal
				828-860 CE	8.5		x			
				775-787 CE	5.4		x			
101		BETA - 726624	BKG 23.1 (218)	874-993 CE	88.2		x	BETA An.	2025	charcoal
				830-852 CE	3.9		x			
				775-786 CE	3.3		x			

#	Macrophase	Sample ID	Source	Cal Date	relative probabilities (%)	1 σ	2 σ	Laboratory	Year	Material
67	**Macrophase 8a**	Sapienza (Callieri 2005: 423)	BKG 6.2 (477)	605-685 CE	*t.*			ENEA	2005	charcoal
68		DSH9644_CH	BKG 6.5 (33)	690-750 CE	86.0	x		INNOVA	2019	charcoal
				670-778 CE	93.0		x			
74		DSH9647_CH	BKG 6.5 (41)	791-826 CE	34.0	x		INNOVA	2019	charcoal
				764-882 CE	78.0		x			
72		DSH9643_CH	BKG 6.5 (30)	774-884 CE	100.0	x		INNOVA	2019	charcoal
				800-872 CE	93.0		x			
73		DSH9645_CH	BKG 6.5 (35)	802-844 CE	52.0	x		INNOVA	2019	charcoal
				774-886 CE	100.0		x			
112		DSH9633_CH	BKG 6.5 (15)	802-844 CE	47.0	x		INNOVA	2019	charcoal
				770-895	97.0		x			
111		*DSH9634_CH*	*BKG 6.5 (17)*	*802–844 CE*	*51.0*	*x*		*INNOVA*	*2019*	*charcoal*
				773-888 CE	*100.0*		*x*			
65	**Macrophase 7b**	DSH9630_CH	BKG 13 (275)	693-746 CE	74.0	x		INNOVA	2019	charcoal
				688-752 CE	55.0		x			
66		DSH9631_CH	BKG 13 (294)	664-694 CE	71.0	x		INNOVA	2019	charcoal
				660-720 CE	72.0		x			
64	**Macrophase 7a**	DSH9632_CH	BKG 13 (299)	488-533 CE	67.0	x		INNOVA	2019	charcoal
				410-536 CE	100.0		x			
56	**Macrophase 6**	LTL12768A	BKG 11 W 7-8 68 (30)	250-350 CE	62.6	x		CEDAD	2012	bone
				220-420 CE	95.4		x			
57		LTL12772A	BKG 11 W 5-6 54 (393)	130-250 CE	68.2	x		CEDAD	2012	bone
				120-340 CE	94.2		x			
58		LTL12774A	BKG 11W 3-4 53 (226)	130-260 CE	59.5	x		CEDAD	2012	bone
				120-350 CE	95.4		x			
59		LTL12776A	BKG 11 W 7-8 63 (101)	125-230 CE	68.2	x		CEDAD	2012	bone
				70-260 CE	94.3		x			
60		LTL13055A	BKG 11 W 3-4 28 (600)	380-440 CE	46.0	x		CEDAD	2013	bone
				330-540 CE	95.4		x			
61		LTL13056A	BKG 11 W 3-428 (592	320-310 CE	45.7	x		CEDAD	2013	bone
				250-300 CE	22.5	x				
				240-410 CE	95.4		x			
62		LTL13057A	BKG 11 W 3-428 (597)	480-540 CE	36.5	x		CEDAD	2013	bone
				410-470 CE	31.7	x				
				380-550 CE	95.4		x			
63		LTL12775A	BKG 11 W 3-4 37bis (256)	130-240 CE	68.2	x		CEDAD	2013	bone
				280-330 CE	1.0	x				
				70-260 CE	89.4		x			

#	Macrophase	Sample ID	Source	Cal Date	relative probabilities (%)	1 σ	2 σ	Laboratory	Year	Material
	Macrophase 5b	*t.*								
53	**Macrophase 5a (H)**	DSH11289_CH	BKG 168 (428)	156-237 CE	87.0	x		INNOVA	2022	seed
				116-252 CE	93.0		x			
54		DSH11248_CH	BKG 168 (428)	118-210 CE	96.0	x		INNOVA	2022	seed
				60-236 CE	99.0		x			
55		DSH11249_CH	BKG 168 (455)	110-250 CE	87.9	x		INNOVA	2022	seed
				8-362 CE	99.6		x			
105	**Macrophase 5b**	DSH12607_CS	BKG 2110 (1499)	127-203 CE	68.3	x		ISOCORE	2025	seed
				114-220 CE	91.0		x			
106		DSH12649_CS	BKG 2110 (1487)	154-206 CE	53.3	x		ISOCORE	2025	seed
				120-231 CE	95.4		x			
52	**Macrophase 4b-5a**	DSH11245_CH	BKG 16 (165)	203-414 CE	96.0	x		INNOVA	2022	seed
				64-538 CE	100.0		x			
	Macrophase 4b	*t.*								
51	**Macrophase 4a**	DSH11285_CH	BKG 160 (452)	3-84 CE	68.0	x		INNOVA	2022	seed
				54-204 CE	99.0		x			
46	**Macrophase 3b**	BKG 19.1-915	BKG 191 (915)			*t.*		OXFORD	2023	seed
				BCE 56 - 20 CE	87.8		x			
47	Macrophase 3b (H)	DSH11290_CH	BKG 16 (332)	BCE 4 - 78 CE	76.0	x		INNOVA	2022	seed
				BCE 54 - 130 CE	99.0		x			
48		DSH9648_CH	BKG 13 (350)	BCE 40-20 CE	100.0	x		INNOVA	2019	charcoal
				BCE 48-52 CE	100.0		x			
49		PSUAMS-6207	BKG 12 E (48)	BCE 47-52 CE	*t.*			PSUAMS	2019	bone
50		DSH7906_SE	BKG 3 (592)	23-77 CE	100.0	x		INNOVA	2017	charcoal
				1-94 CE	90.0		x			
104		DSH12606_ CS	BKG 21104 (1457)	BCE 49-11 CE	68.3	x		ISOCORE	2025	seed
				BCE 59-32 CE	82.8		x			
43	**Macrophase 3a4**	DSH7931_SE	BKG 11-K (1676)	BCE 204-164	86.8	x		INNOVA	2017	seed
				BCE 208-109	82.8		x			
44	**Macrophase 3a4 (out cella H)**	FTMC-RF53-8	BKG 16 E (731)	BCE 156-91	49.3	x		VILNIUS RC	2023	seed
				BCE 147-92	95.4		x			
45		FTMC-RF53-9	BKG 16 E (715)	BCE 178-97	56.1	x		VILNIUS RC	2023	seed
				BCE 202-51	88.3		x			
84		FTMC-NS41-1	BKG 16 SE (725)	BCE 174-96		x		VILNIUS RC	2024	seed
				BCE 201-48			x			
42	**Macrophase 3a3-3a4**	DSH7930_SE	BKG 11-K (2113)	BCE 208-109	76.4	x		INNOVA	2017	seed
				BCE 235-53	72.8		x			
102		DSH7612_SE	BKG 11-K (1687)	BCE 356-285	55.2	x		INNOVA	2017	seed

#	Macrophase	Sample ID	Source	Cal Date	relative probabilities (%)	1 σ	2 σ	Laboratory	Year	Material
				BCE 235-171	43.9	x				
				BCE 369-106	100		x			
103		DSH7615_SE	BKG 11-K (1680)	BCE 297-228	61.1	x		INNOVA	2017	seed
				BCE 385-352	31.0					
				BCE 330-204	68.7					
				BCE 395-334	31.3					
35	**Macrophase 3a3**	D-DSH7060	BKG 401 (328)	BCE 117-36	68.8	x		INNOVA	2016	bone
				BCE 193-28 CE	98.7		x			
36		D-DSH7061	BKG 401 (328)	BCE 174-91	92.1	x		INNOVA	2016	bone
				BCE 202-45	100.0		x			
37		D-DSH7060	BKG 401 (328)	BCE 163-128	40.0	x		INNOVA	2016	bone
				BCE 182-45	100.0		x			
38		ENEA-181	BKG 310 (592)	BCE 200-40 CE	68.2			ENEA	2005	charcoal
39		ENEA-182	BKG 302 (449)	BCE 180-70 CE	68.2			ENEA	2005	charcoal
40	Macrophase 3a3 (H)	FTMC-RF53-10	BKG 1615 = TT SW (924)	BCE 200-107	58.5	x		VILNIUS RC	2023	seed
				BCE 209-51	78.2		x			
41		FTMC-RF53-11	BKG 16 TTC (33)	BCE 176-97	57.7	x		VILNIUS RC	2023	seed
				BCE 201-51	88.9		x			
32	**Macrophase 3a2**	DSH7577_SE	BKG 11-K (1912bis)	BCE 210-156	51.5	x		INNOVA	2016	seed
				BCE 236-89	64.1		x			
33		OxA-38260	BKG 11-K (2131)			r.		OXFORD	2019	seed
				BCE 359-214	95.4		x			
34		DSH7933_SE	BKG 11-K (2117)	BCE 204-161	75.9	x		INNOVA	2017	seed
				BCE 210-94	81.2		x			
	Macrophase 3a1	r.								
29	**Macrophase 2b (H)**	BETA - 650199	BKG 16 (8) 2022	BCE 281-232	37.5	x		BETA An.	2023	charcoal
				BCE 389-355	30.7	x				
				BCE 311-206	59.1		x			
				BCE 395-349	36.3		x			
30		DSH11243_CH	BKG 1615 (473)	BCE 290-209	66.0	x		INNOVA	2022	seed
				BCE 400-196	99.0		x			
83	**Macrophase 2b (out cella H)**	FTMC-NS41-2	BKG 16 SE (745)	BCE 357-278	39.7		x	VILNIUS RC	2024	seed
				BCE 233-101	53.2		x			
31	Macrophase 2b	DSH7926_SE	BKG 11-K (2153)	BCE 206-173	62.1	x		INNOVA	2016	seed
				BCE 214-156	53.2		x			
28		DSH7578_SE	BKG 12 W (206)	BCE 260-205	50.4	x		INNOVA	2016	seed
				BCE 369-201	100.0		x			
19	**Macrophase 2a-2b (Shrine 16-H)**	FTMC-RF53-1	BKG 16 TTC (40)	BCE 356-280	45.2	x		VILNIUS RC	2023	seed

#	Macrophase	Sample ID	Source	Cal Date	relative probabilities (%)	1 σ	2 σ	Laboratory	Year	Material
				BCE 367-171	95.4		x			
20		FTMC-RF53-2	BKG 16 TTC (37)	BCE 355-281	45.8	x		VILNIUS RC	2023	seed
				BCE 365-170	95.4		x			
21		FTMC-RF53-4	BKG 16 TTC (21)	BCE 351-290	41.5	x		VILNIUS RC	2023	seed
				BCE 361-241	52.2		x			
22		FTMC-RF53-6	BKG 16 TTC (1000)	BCE 397-359	48.7	x		VILNIUS RC	2023	seed
				BCE 403-351	54.2		x			
				BCE 293-208	41.2		x			
23		FTMC-RF53-10	BKG 16 TTC (41)	BCE 355-281	68.3	x		VILNIUS RC	2023	seed
				BCE 365-170	95.4		x			
81		FTMC-NS41-3	BKG 160 (2012)	BCE 375-290	15.2	x		VILNIUS RC	2024	bone
				BCE 290-209	53.1	x				
				BCE 389-342	24.2		x			
				BCE 321-201	71.2		x			
82		FTMC-NS41-4	BKG 160 [2000]	BCE 381-351	18.2	x		VILNIUS RC	2024	bone
				BCE 290-209	50.1	x				
				BCE 391-342	25.9		x			
				BCE 322-201	69.5		x			
24	**Macrophase 2a-2b (16-H)**	DSH11288_CH	BKG 1614 (414)	BCE 316-272	39.0	x		INNOVA	2022	seed
				BCE 384-195	99.0		x			
25		DSH11250_CH	BKG 1615 (278)	BCE 404-378	76.0	x		INNOVA	2022	seed
				BCE 413-358	61.0		x			
26		DSH11246_CH	BKG 1615 (483)-(485)	BCE 288-227	56.0	x		INNOVA	2022	seed
				BCE 322-200	66.0		x			
27		DSH11286_CH	BKG 1615 (483)	BCE 407-361	88.0	x		INNOVA	2022	seed
				BCE 422-384	67.0		x			
15	**Marcophase 2a.2 (H)**	DSH11247_CH	BKG 1615 (415)	BCE 540-362	99.0	x		INNOVA	2022	seed
				BCE 570-348	75.0		x			
16	**Macrophase 2a.2**	DSH7925_SE	BKG 11-K (2167)	BCE 399-385	100.0	x		INNOVA	2017	seed
				BCE 403-370	100.0		x			
18		DSH7954_C	BKG 11-K (2175)	BCE 494-410	89.5	x		INNOVA	2017	seed
				BCE 543-403	91.4		x			
12	**Macrophase 2a1**	DSH7928_SE	BKG 11-K (2182)	BCE 642-556	73.8	x		INNOVA	2017	seed
				BCE 654-541	61.9		x			
13		DSH7935_G	BKG 11-K (2184)	BCE 792-754	74.5	x		INNOVA	2017	bone
				BCE 608-595	13.8					
				BCE681-670	11.7					

#	Macrophase	Sample ID	Source	Cal Date	relative probabilities (%)	1 σ	2 σ	Laboratory	Year	Material
				BCE 795-747	56.8		x			
				BCE 642-658	24.3					
				BCE 685-666	11.5					
				BCE 585-555	7.4					
				BCE 642-586	24.3					
11	**Interphase B**	DSH7891_SE	BKG 11-K (2203)	BCE 651-544	66.0	x		INNOVA	2017	seed
				BCE 777-487	100.0		x			
14		DSH7893_SE	BKG 11-K (2196)	BCE 555-471	41.8	x		INNOVA	2017	seed
				BCE 747-385	33.9	x				
				BCE 597-411	55.8		x			
				BCE 755-680	27.0		x			
8	**Macrophase 1b**	DSH11244_CH	BKG 1614 (426)	BCE 930-832	100.0	x		INNOVA	2022	seed
				BCE 996-820	100.0		x			
9		PSUAMS-2786	BKG T1 (= Tucci)	BCE 921-831	*t.*			PSUAMS	2019	bone
10		PSUAMS-2787	BKG T2 (= Tucci)	BCE 974-836	*t.*			PSUAMS	2019	bone
4	**Macrophase 1a-1b**	OxA -38259	BKG 11-K (3016)-(3017)	BCE 1161-1056	95.4			OXFORD	2019	seed
5		OxA-38258	BKG 11-K (3014)	BCE 1125-926	95.4			OXFORD	2019	seed
6		DSH7579_SE	BKG 12 W (211)	BCE 1045-973	84.1	x		INNOVA	2016	seed
				BCE 1089-922	98.4		x			
7		DSH7929_SE	BKG 12 W (318)	BCE 1117-1044	100.0	x		INNOVA	2017	seed
				BCE 1129-1008	94.8		x			
1	**Macrophase 1a**	DSH7932_SE	BKG 12 W (306)	BCE 1291-1224	96.1	x		INNOVA	2017	seed
				BCE 1309-1209	82.2		x			
2		DSH7934_SE	BKG 12 W (305)	BCE 1122-1046	100.0	x		INNOVA	2017	seed
				BCE 1131-1011	90.0		x			
3		DSH7905_SE	BKG 12 W (310)	BCE 1114-1002	100.0	x		INNOVA	2017	seed
				BCE1131-929	94.2		x			
90	*= Interphase A (?)*	*BETA - 664158*	*BKG 2,13_16*	*BCE 1546 - 1511*	*33.0*	*x*		*BETA An.*	*2023*	*soil*
				BCE 1623 - 1501	*95.4*		*x*			
96	*= Macrophase 0*	*BETA - 664164*	*BKG 2,13_21*	*BCE 2569 - 2521*	*46.0*	*x*		*BETA An.*	*2023*	*soil*
				BCE 2499 - 2475	*22.2*	*x*				
				BCE 2581 - 2465	*94.0*		*x*			
88		*BETA - 664156*	*BKG 2,13_19*	*BCE 2102 - 2036*	*49.3*	*x*		*BETA An.*	*2023*	*soil*
				BCE 2150 - 2019	*82.1*		*x*			
93		*BETA - 664161*	*BKG 2,13_18*	*BCE 1972 - 1888*	*65.4*	*x*		*BETA An.*	*2023*	*soil*
				BCE 2027 - 1877	90.6		x			
92		BETA - 664160	BKG 2,13_10	BCE 2027 - 1941	68.2	x		BETA An.	2023	soil
				BCE 2040 - 1891	89.8		x			

#	Macrophase	Sample ID	Source	Cal Date	relative probabilities (%)	1 σ	2 σ	Laboratory	Year	Material
86		BETA - 664154	BKG 2,13_12	BCE 2806 - 2754	38.3	x		BETA An.	2023	soil
				BCE 2815 - 2671	68.4		x			
				BCE 2895 - 2843	27.0		x			
87		BETA - 664155	BKG 2,13_13	BCE 2936 - 2897	40.9	x		BETA An.	2023	soil
				BCE 3021 - 2891	95.4		x			
95	**Holocenic deposits**	*BETA - 664163*	*BKG 2,13_32*	*BCE 6368 - 6304*	*68.2*	*x*		*BETA An.*	*2023*	*soil*
				BCE 6383 - 6230	*95.4*		*x*			
91		BETA - 664159	BKG 2,13_14	BCE 6775 - 6651	66.4	x		BETA An.	2023	soil
				BCE 6831 - 6644	85.8		x			
94	**Pleistocenic deposits**	BETA - 664162	BKG 2,13_29	BCE 16215 - 16028	68.2	x		BETA An.	2023	soil
				BCE 16257 - 15928	95.4		x			
89		BETA - 664157	BKG 2,13_34	BCE 14952 - 14721	68.2	x		BETA An.	2023	soil
				BCE 15033 - 14630	95.4		x			

Legend – *Italics*: potentially contaminated/less reliable layers.
Samples from contaminated/unreliable layers <u>are excluded</u> from the list.
v. = vacat
% relative probability – confidence refers to value 1s

TABLE 3 – Matrix of the interconnections of Macrophases and Interphases.

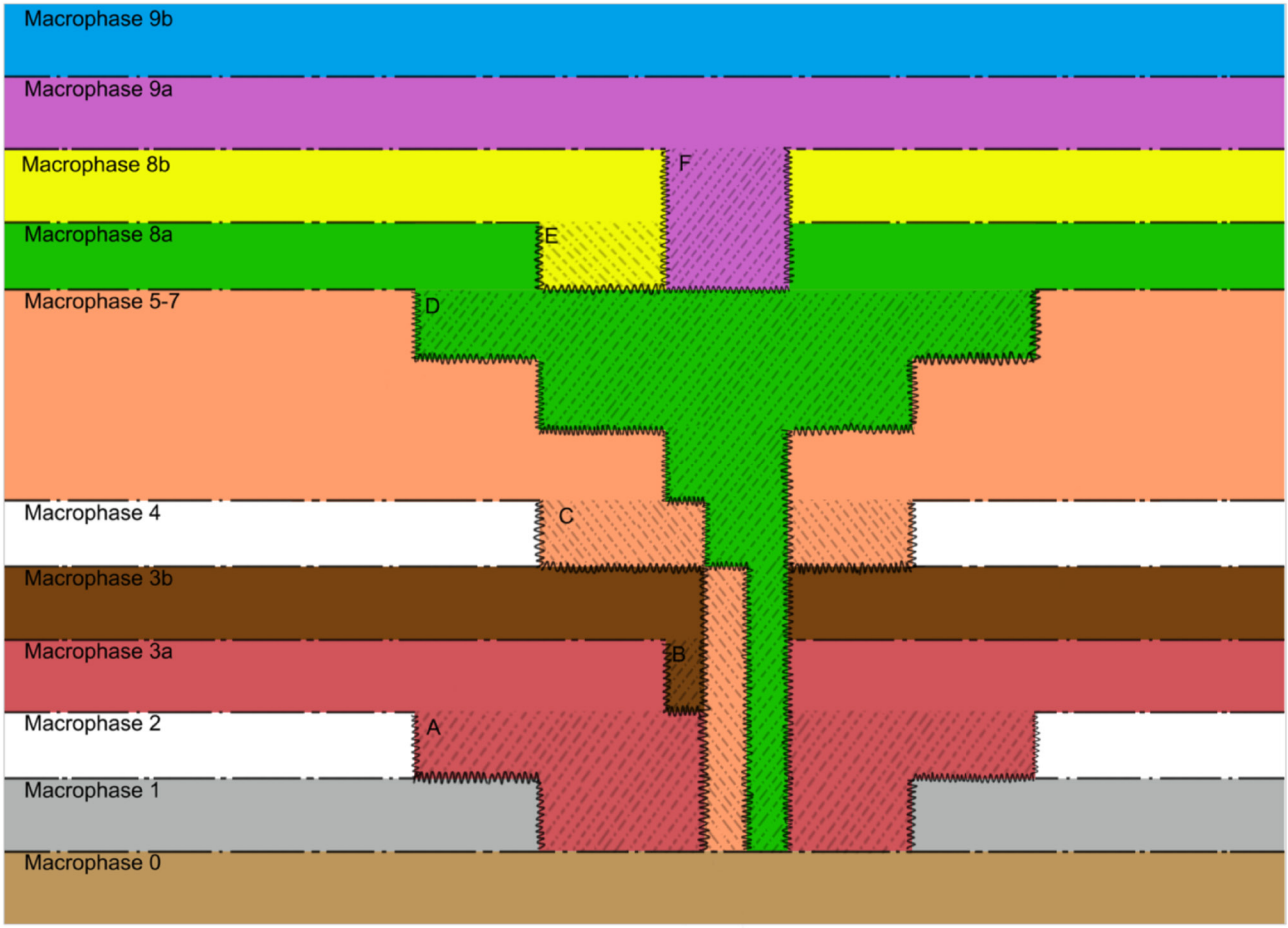




Fig. 1 – Survey sectors 1-9

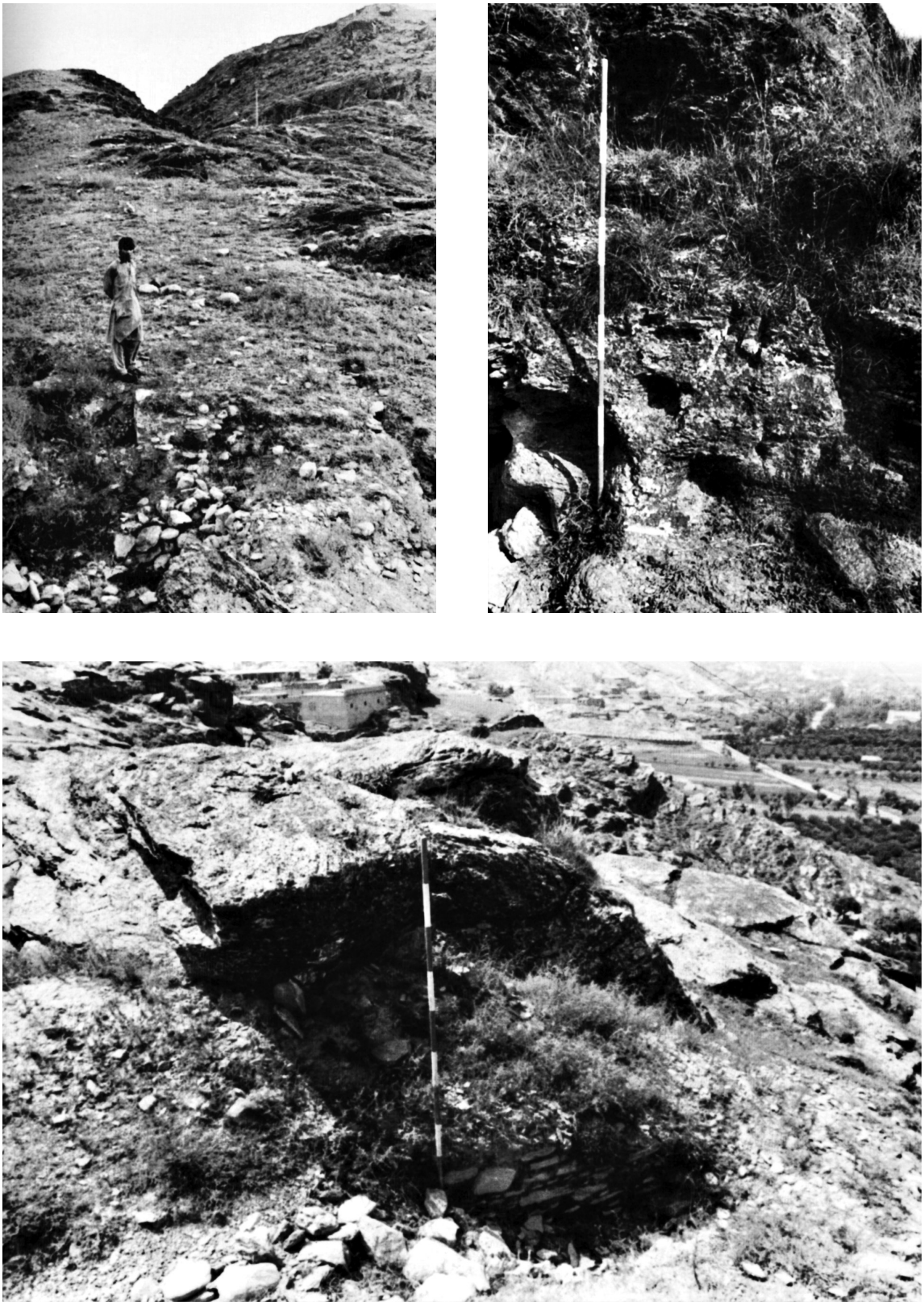


Fig. 2 – Olivieri 2003a: pl. I

N.B.: Fig. 3 is positioned on page ....together with Fig. 20

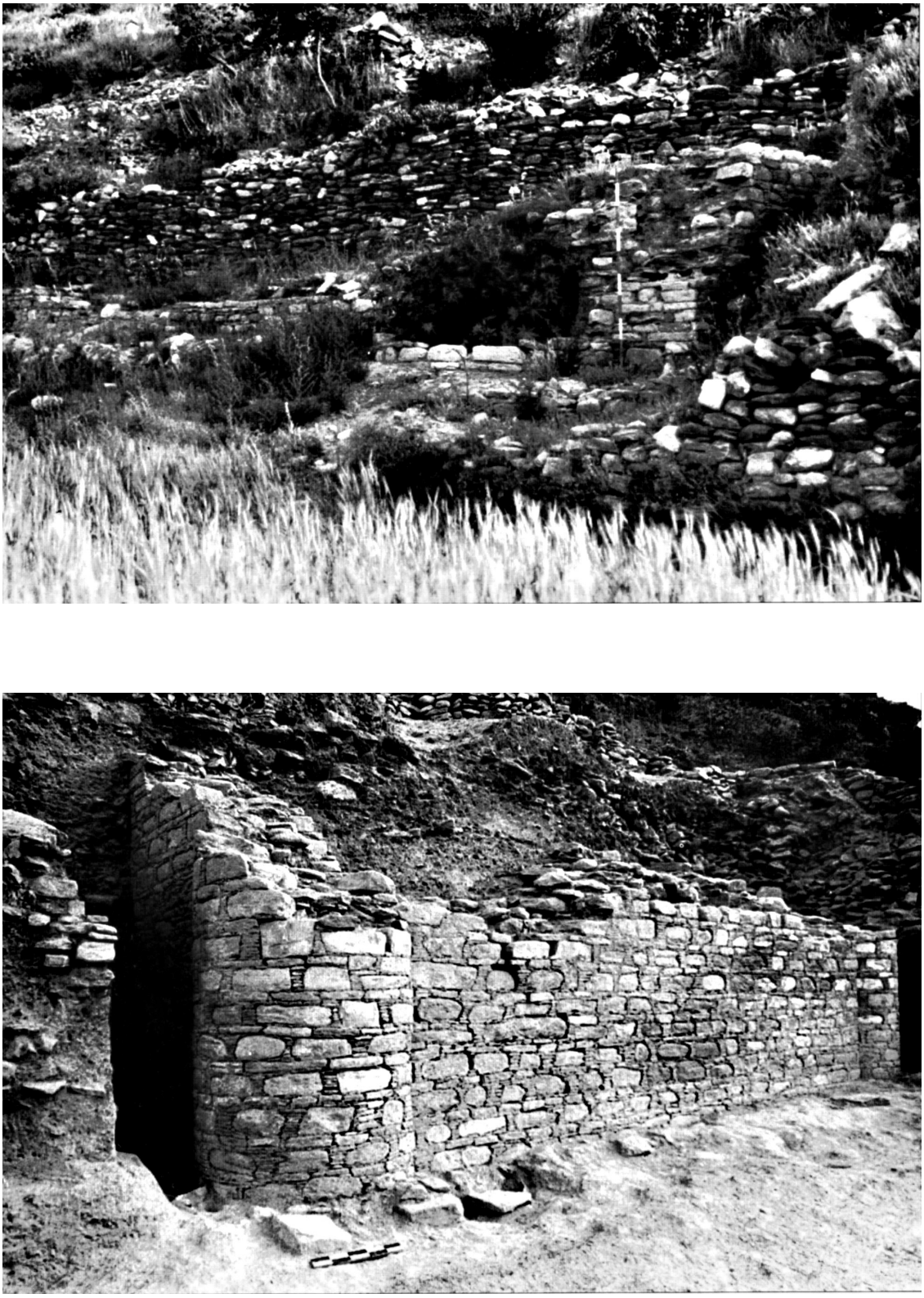


Fig. 4 - Olivieri 2003a: pl. VI



Fig. 5 – Olivieri 2003a: pl. XXIV

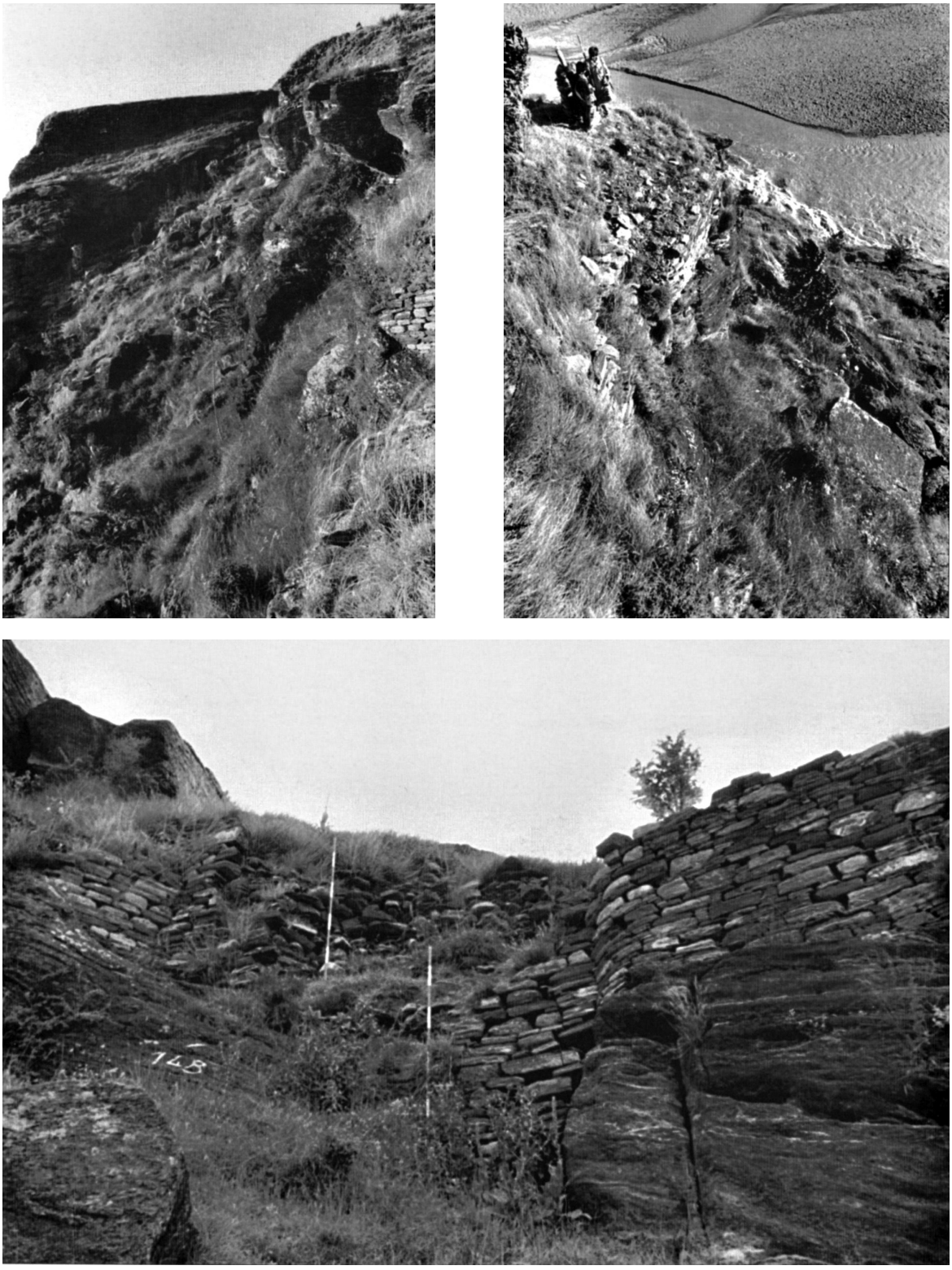


Fig. 6 - Olivieri 2003a: pl. XXV

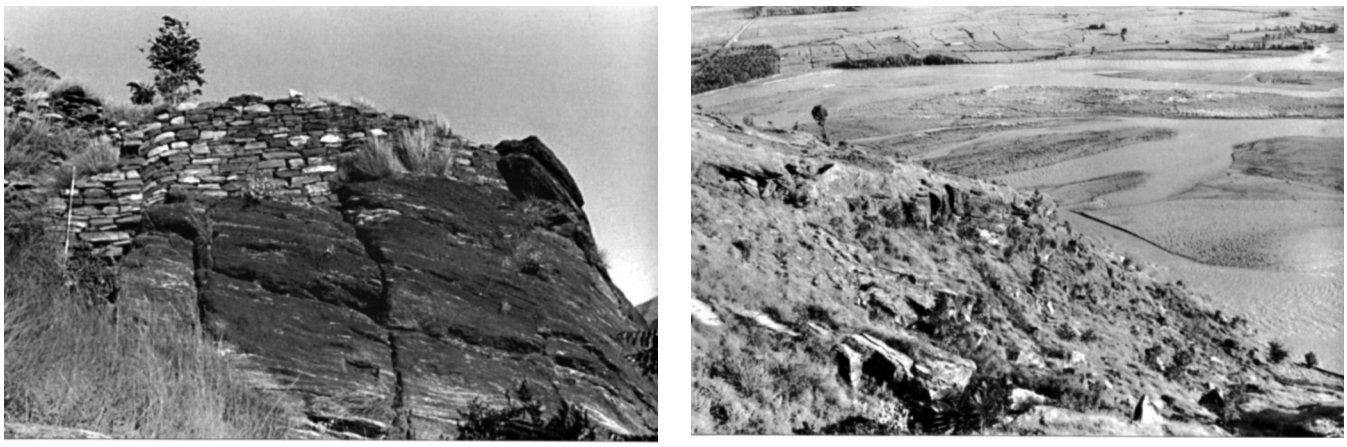


Fig. 7 - Olivieri 2003a: pl. XXVI

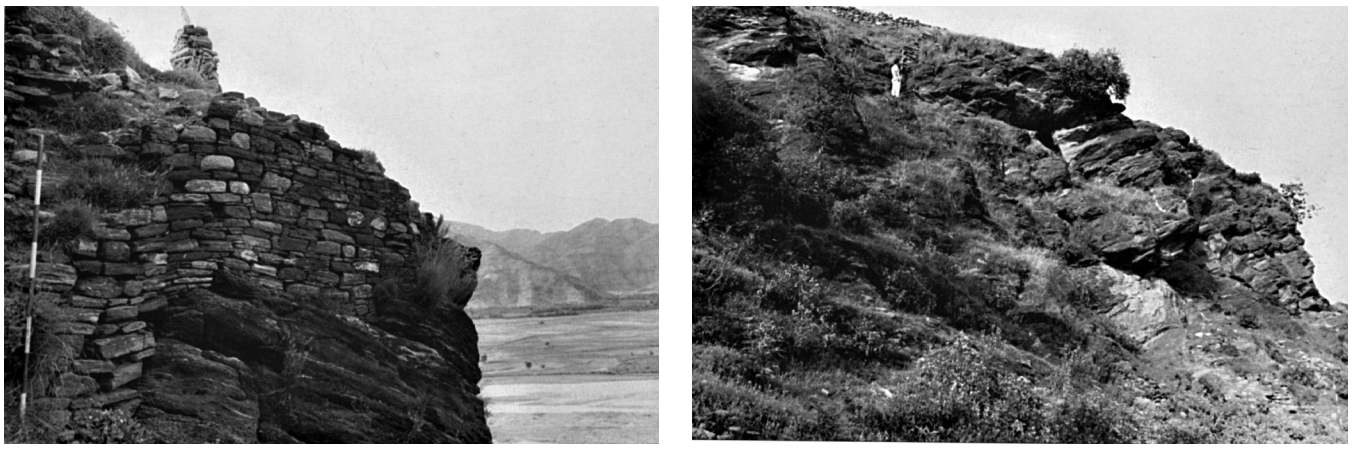


Fig. 8 - Olivieri 2003a: pl. XXVII



Fig. 9 - Olivieri 2003a: pl. XXVIII

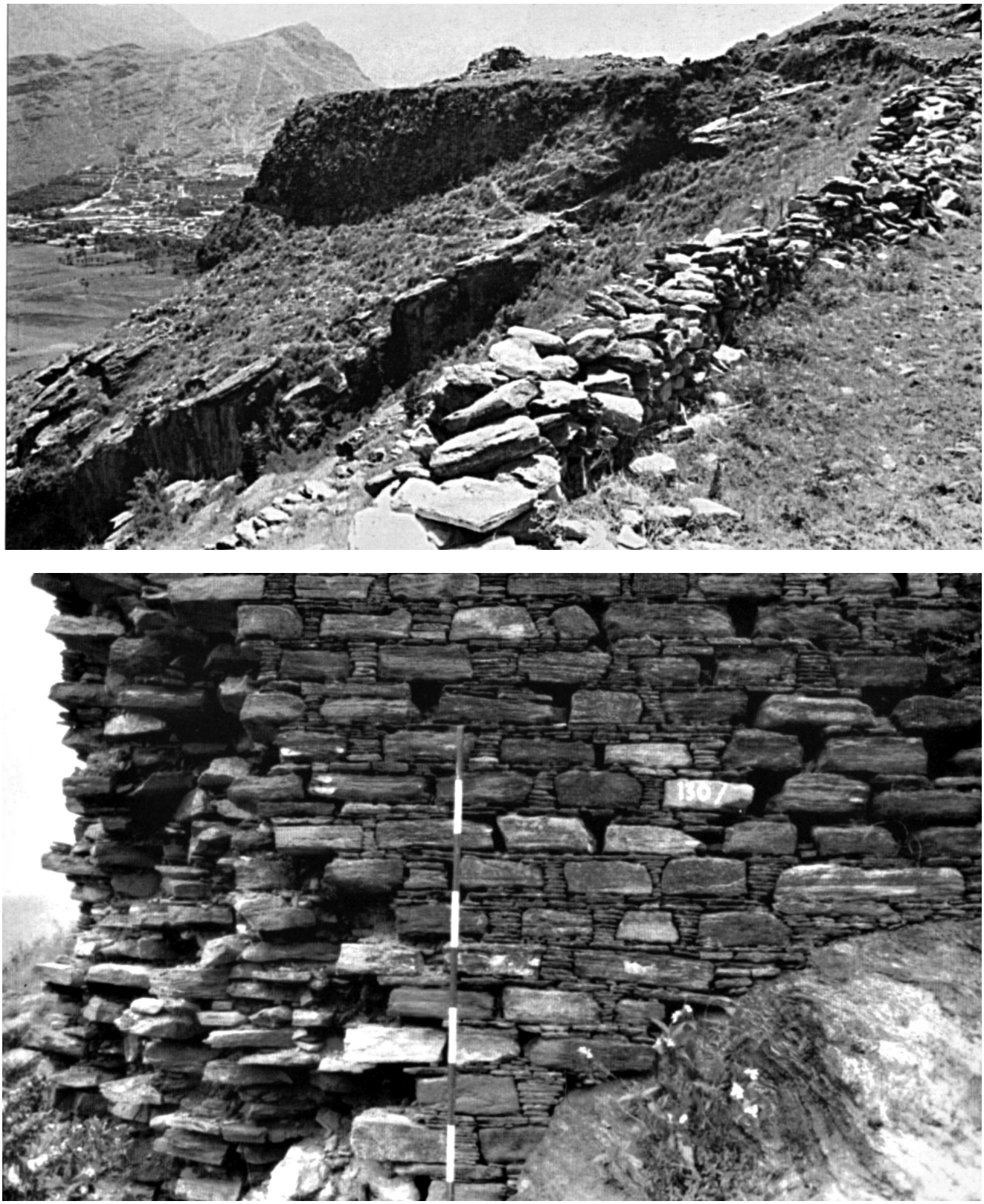


Fig. 10 - Olivieri 2003a: pl. XXIX

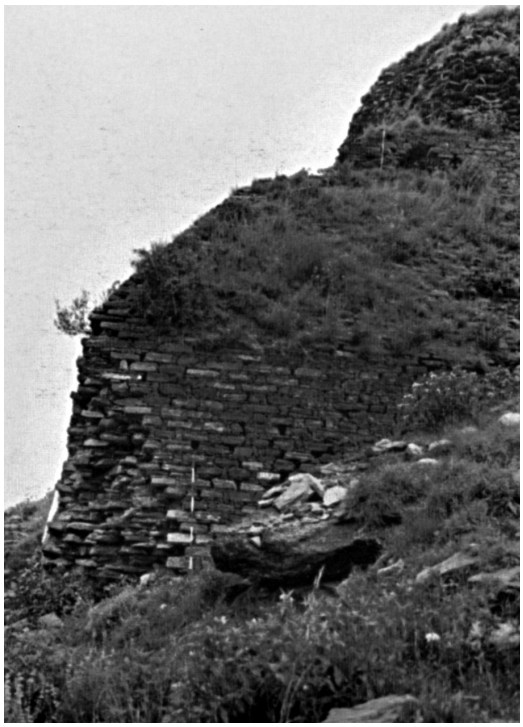






Fig. 11 - Olivieri 2003a: pl. XXX



Fig. 12 - Olivieri 2003a: pl. XXXI

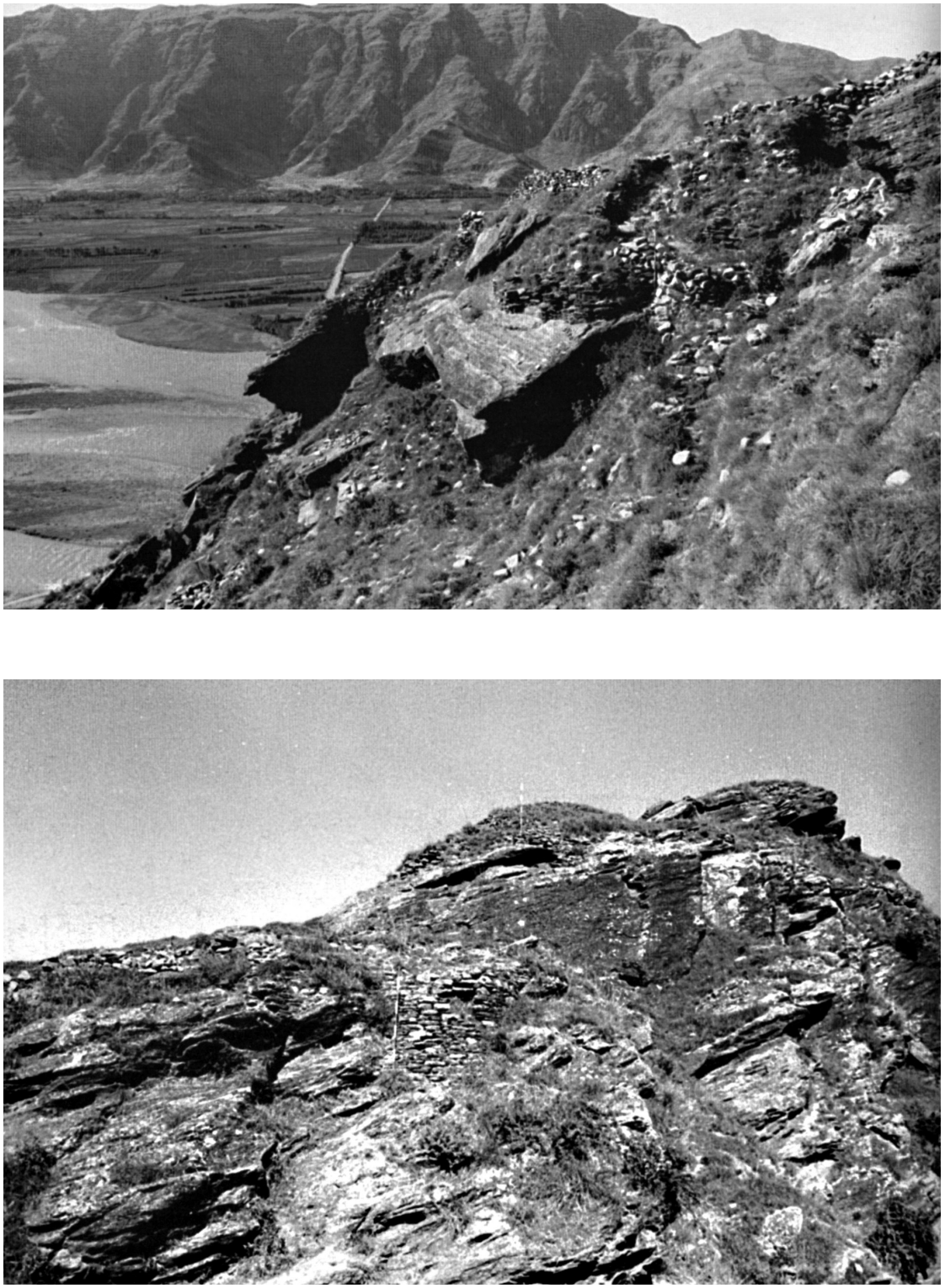


Fig. 13 - Olivieri 2003a: pl. XXXII



Fig. 14 - Olivieri 2003a: pl. XXXIII

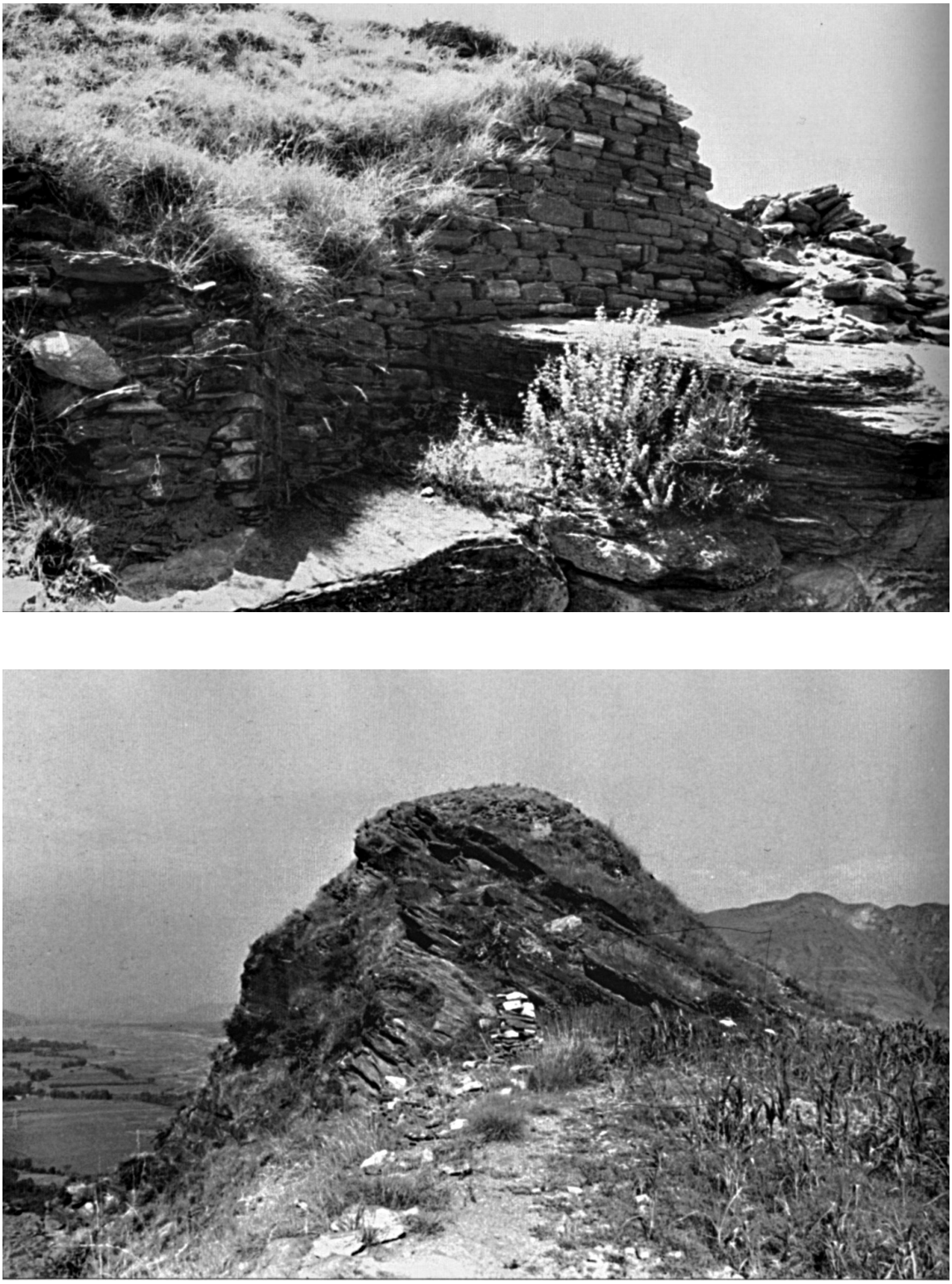


Fig. 15 - Olivieri 2003a: pl. XXXIV

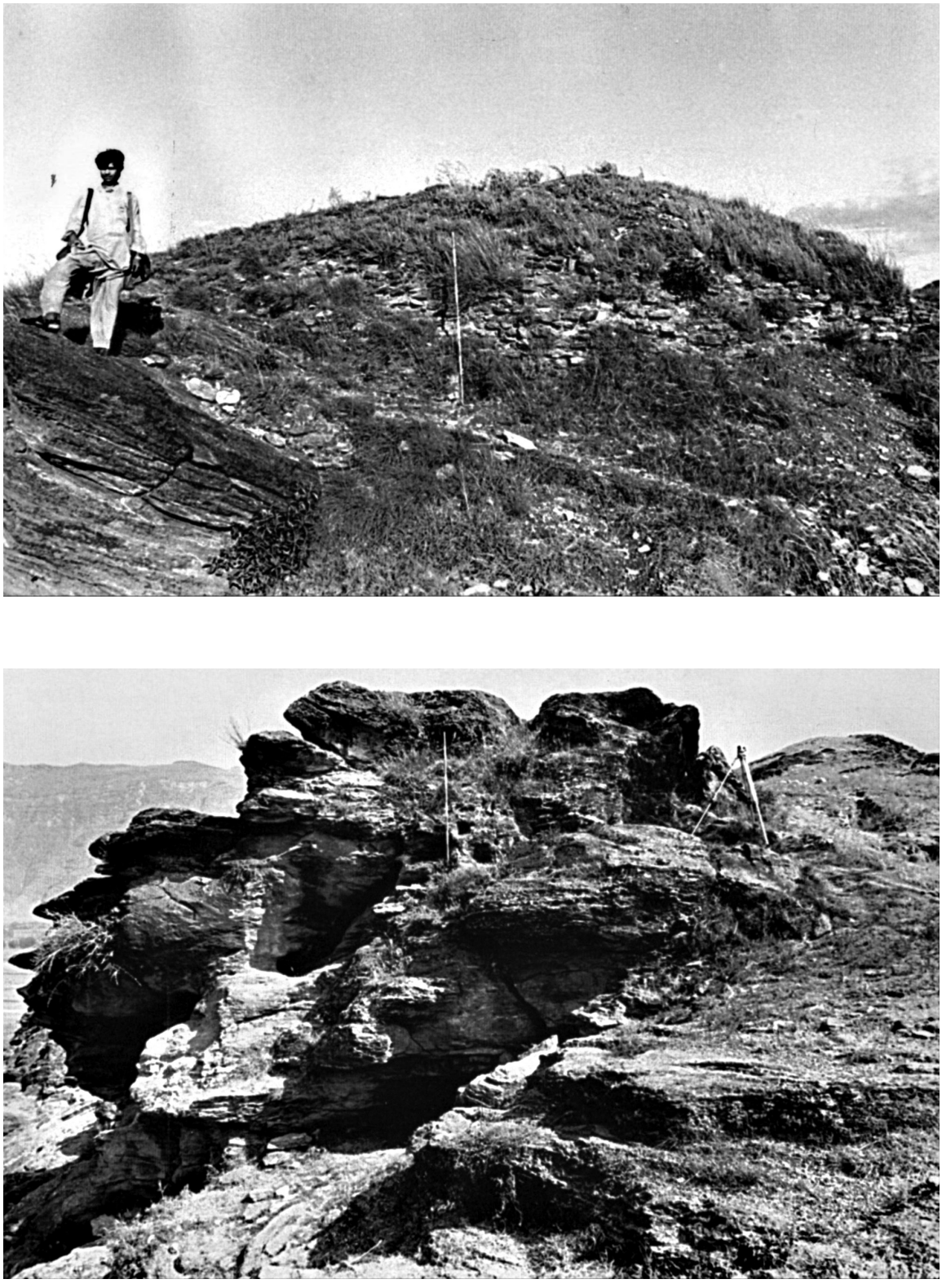


Fig. 16 - Olivieri 2003a: pl. XXXV

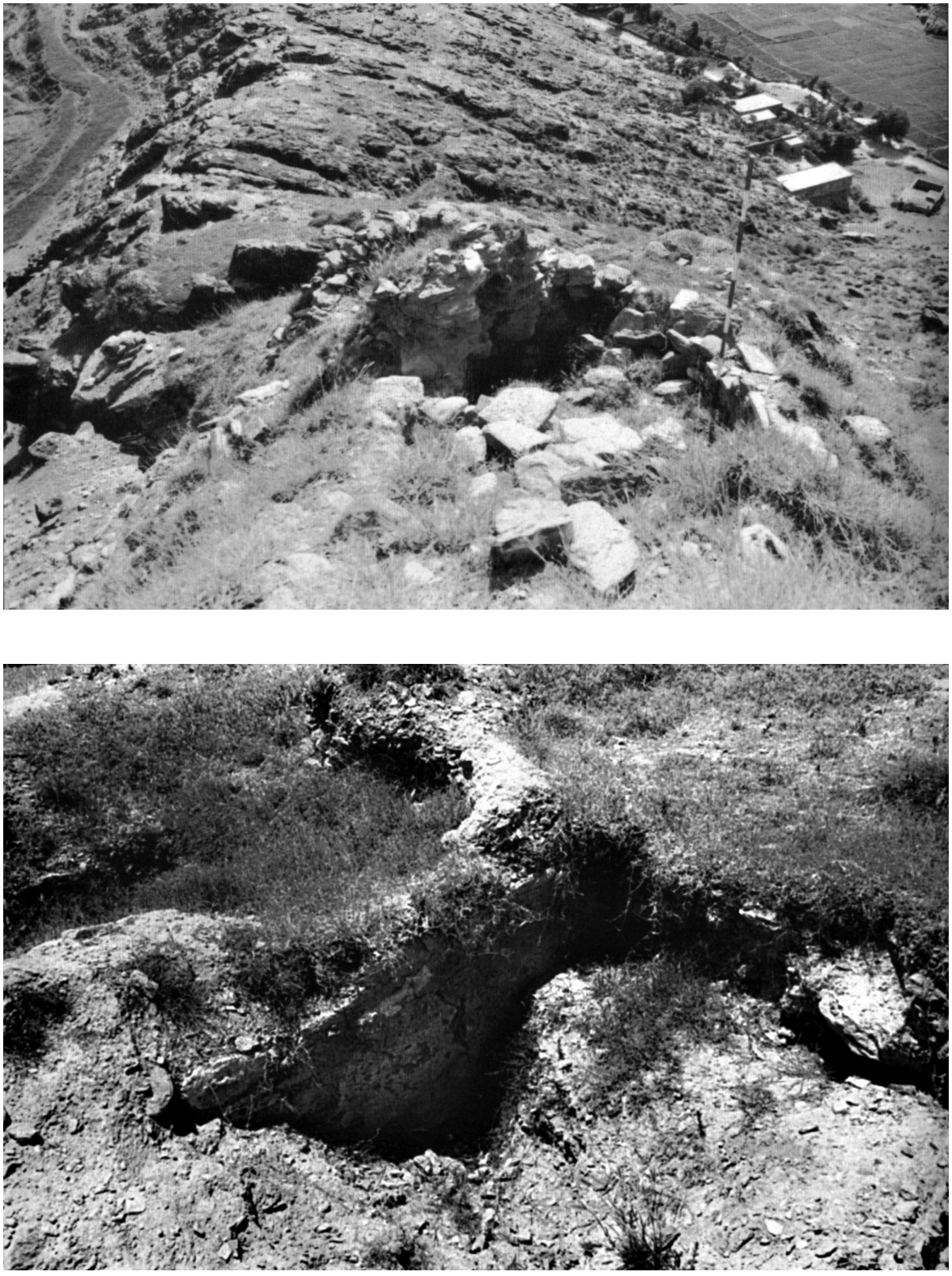


Fig. 17 - Olivieri 2003a: pl. XXXVI

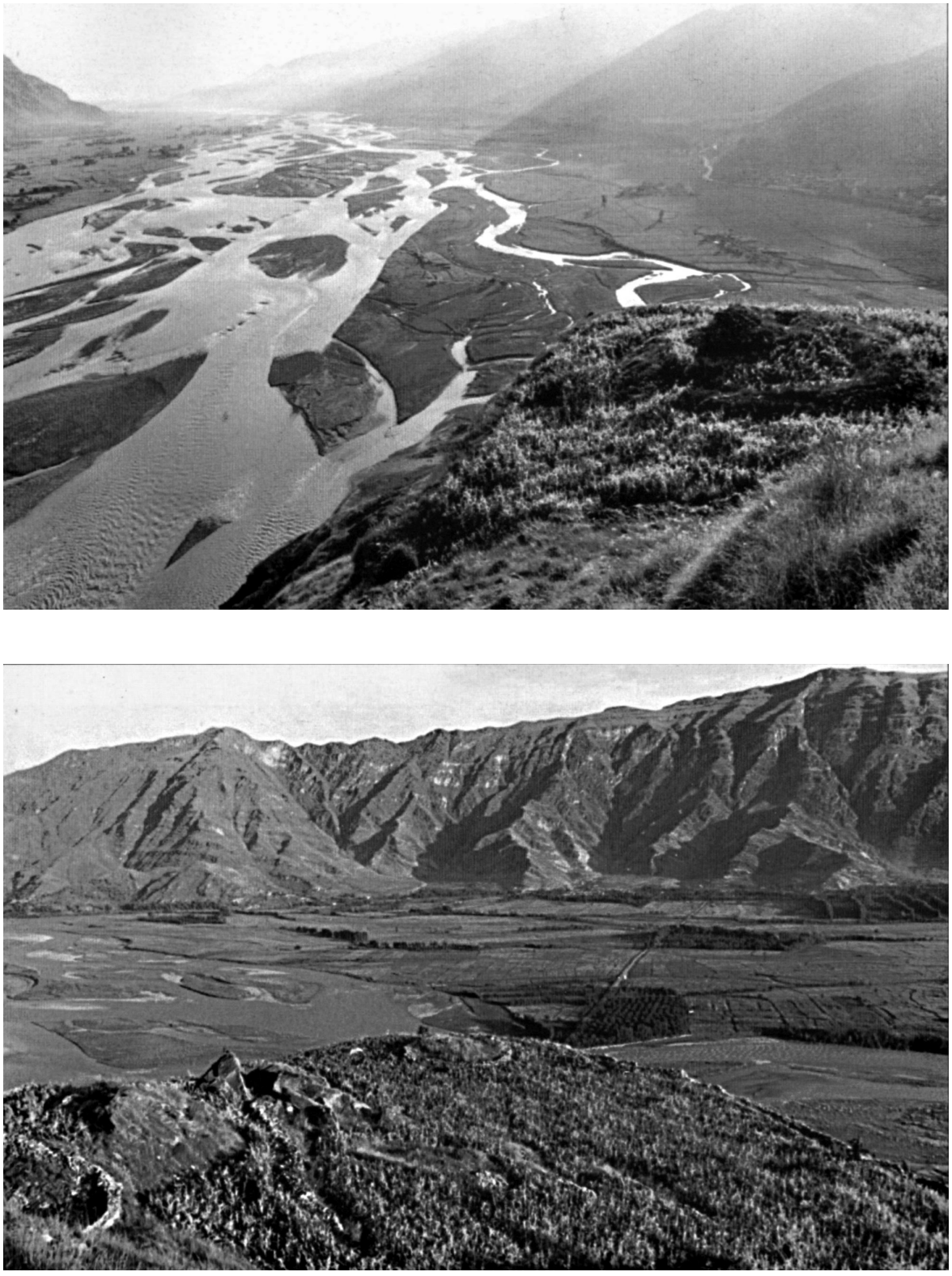


Fig. 18 - Olivieri 2003a: pl. XXXVII

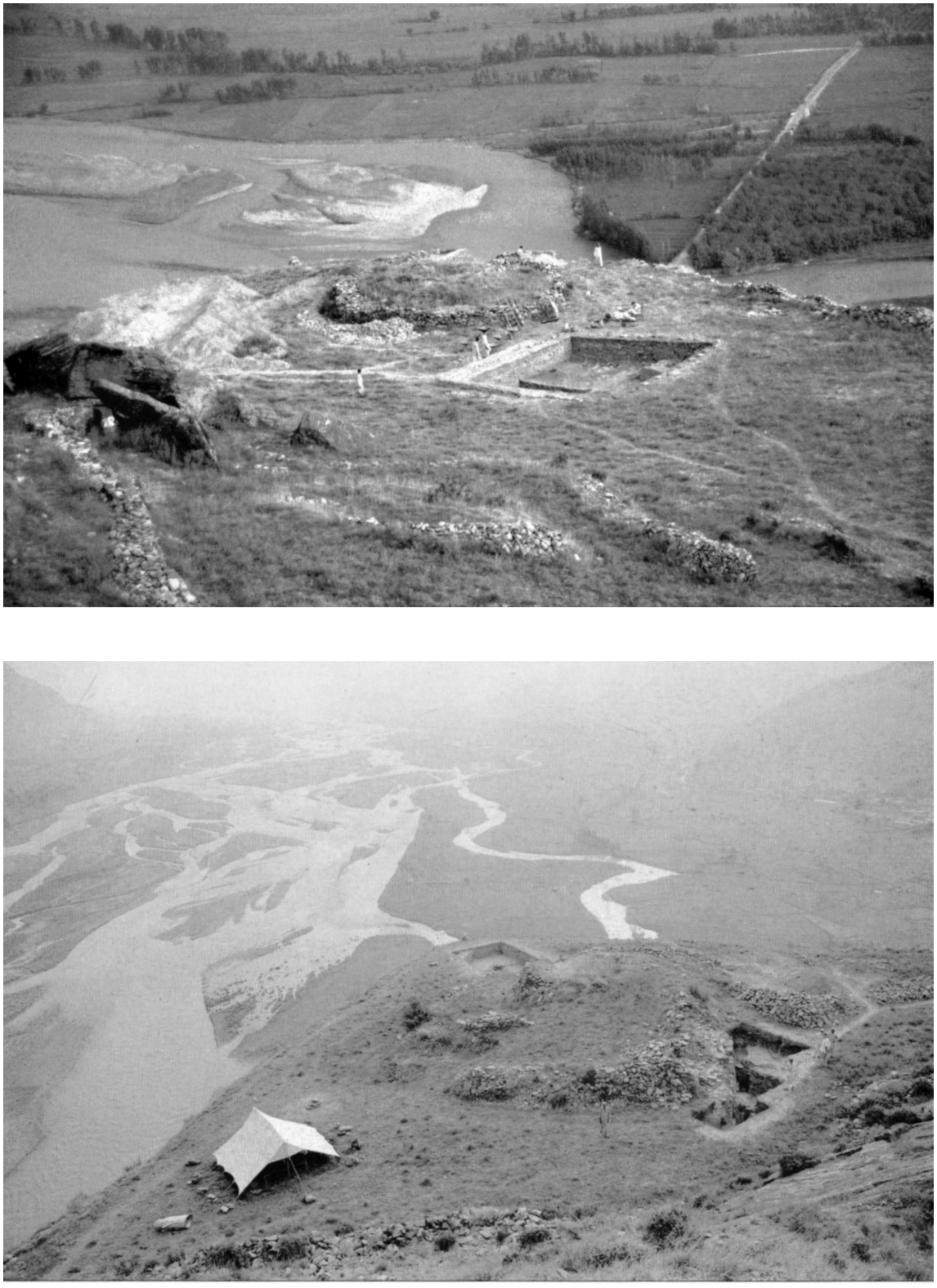


Fig. 19 - Olivieri 2003a: figs 25-26

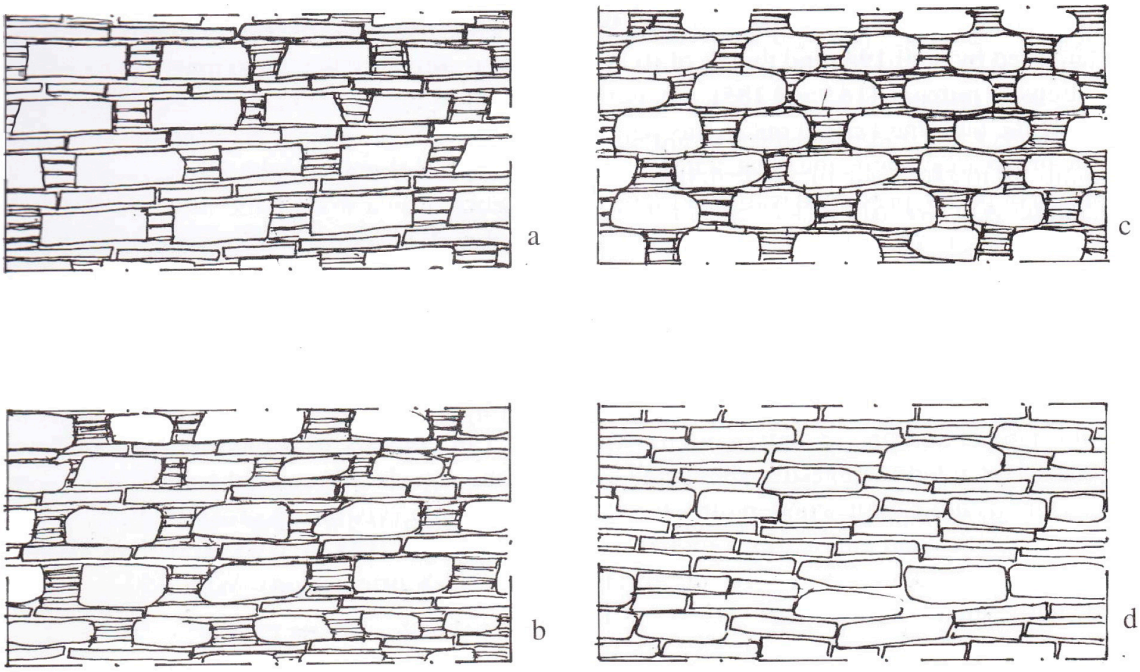


Fig. 3 - Typology of the masonry techniques.

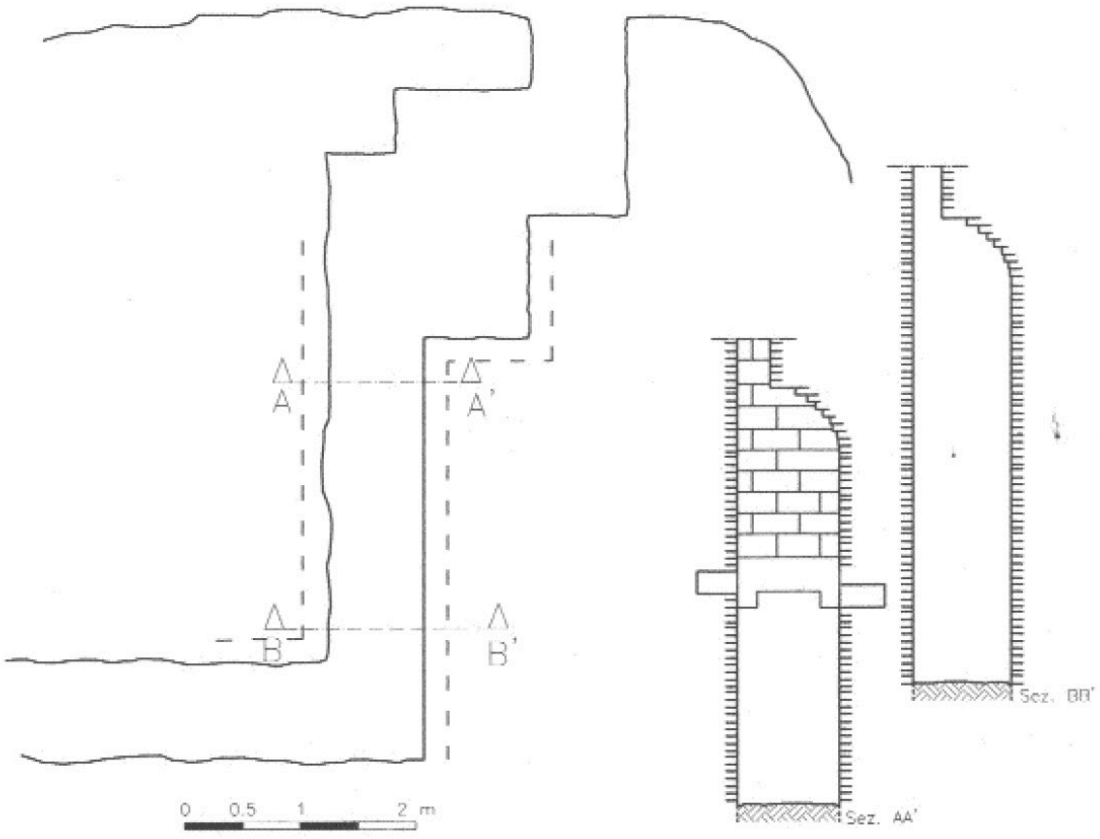


Fig. 20 - Olivieri 2003a: fig. 54 (R. Sabelli†).

1.3.1 - THE CONSERVATION PROJECT “SAVING THE ARCHAEOLOGICAL SITE OF BAZIRA” (2022-2024) - Phase I (Figs 1-166)



Fig. 1 – Terrace E from the NE



Fig. 2 – Terrace E from above



Fig. 3a-b – Conservation status of the N wall at the start of the work. Soil deposits



Fig. 4 – a) N wall before general cleaning; b) N wall during general cleaning; c-d) donkeys transporting water and other materials; e) new path leading to the hill.



Fig. 5 – Two twin pits to extinguish lime



Fig. 6 – Making lime







Fig. 7 – Scaffolding on N wall: various views





Fig. 8a-b – Biocide testing on small pieces of masonry and application to the wall





Fig. 9a-b – Third cleaning on N wall






Fig. 10a-b-c-d – Masonry conservation




Fig. 12a-b – Mortar tests under preparation (N.B.: Fig. 11 on the next page).

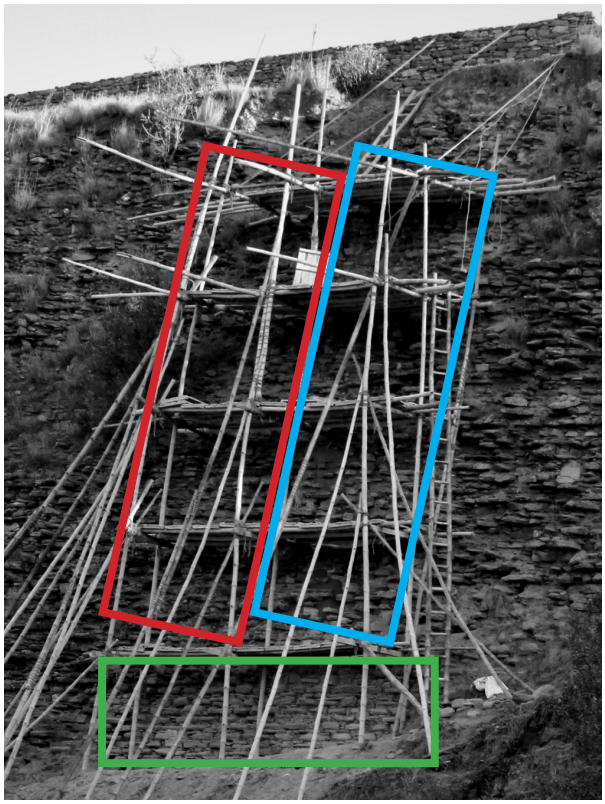


Fig. 11 – Different conservation areas





Fig. 13 – Restoration work on the lower floor of the scaffolding







Fig. 14a-b-c – Upper protection wall made of mortar and anchored to the topsoil deposit: various views



Fig. 15 – Grafting of olive trees



Fig. 18 – Scaffolding on N wall



Fig. 16 – N Bastion and conservation work





Figs 17a-b – N Bastion and conservation work



Fig. 19 – Scaffolding on N wall



Fig. 20a-b-c-d – Details of fastening system of the various scaffolding elements.



Fig. 21 – System for transporting mortar to the scaffolding shelves



Fig. 22 – Work progress on the W part of N wall.



Fig. 23 – W profile of the newly re-emerged rampart



Fig. 24 – W profile of the newly re-emerged rampart



Fig. 25 – Reconstruction on the E part of N wall



Fig. 26 – Bamboo scaffolding on N wall



Fig. 27 – Conservation work on the top shelf




Figs 28-29 – Earlier wall running NS




Fig. 30a-b – Cleaning of the NE corner of N wall



Fig. 31 – Progressive cleaning and restoration on N wall



Fig. 33 – Clearance operations at the bottom of the wall with the exposure of the lower part of the wall



Fig. 32



Fig. 35



Fig. 34



Fig. 36



Figs 37



Figs 38



Fig. 39



Fig. 40



Fig. 41 – Drill of the rocky outcrop



Fig. 42 – Placement of the rebar reinforcement



Fig. 43 – Placement of the rebar reinforcement



Fig. 44



Fig. 45



Fig. 46



Fig. 47



Fig. 48



Fig. 49



Fig. 50



Fig. 51



Fig. 52



Fig. 53

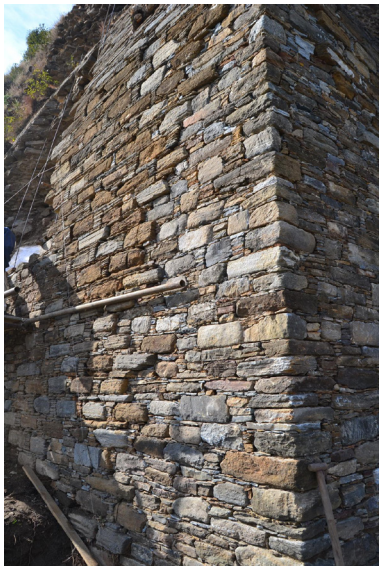


Fig. 54



Fig. 55



Fig. 56



Fig. 57



Fig. 58



Fig. 59



Fig. 60



Fig. 61



Fig. 62



Fig. 63



Fig. 64



Fig. 65



Fig. 66



Fig. 68



Fig. 67



Fig. 69



Fig. 70



Fig. 71



Fig. 72



Fig. 73



Fig. 74



Fig. 75



Fig. 76



Fig. 77



Fig. 78



Fig. 79



Fig. 80



Fig. 81



Fig. 82



Fig. 83



Fig. 84



Fig. 85



Fig. 86



Fig. 87



Fig. 88



Fig. 89



Fig. 90



Fig. 91



Fig. 92



Fig. 93



Fig. 94



Fig. 95



Fig. 96



Fig. 97



Fig. 98



Fig. 99



Fig. 100



Fig. 101



Fig. 102



Fig. 103



Fig. 104



Fig. 105



Fig. 106



Fig. 109



Fig. 107



Fig. 110



Fig. 111

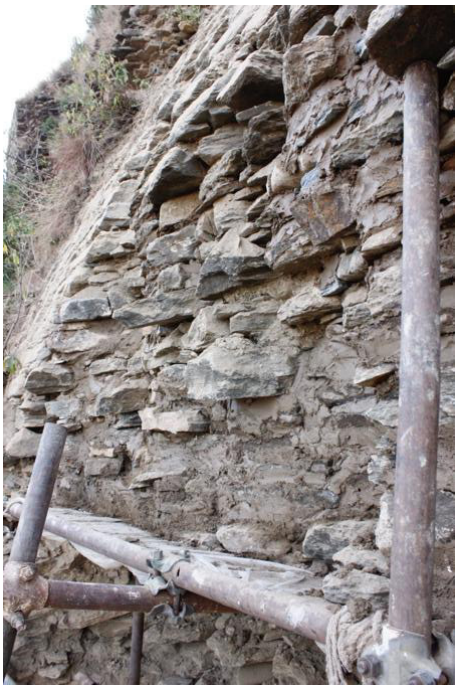


Fig. 112



Fig. 113



Fig. 114



Fig. 115



Fig. 116



Fig. 117



Fig. 119



Fig. 118



Fig. 120a



Fig. 120b



Fig. 121



Fig. 122



Fig. 123



Fig. 124





Fig. 125



Fig. 127



Fig. 128



Fig. 129



Fig. 130





Fig. 131





Fig. 132a-b



Fig. 133



Fig. 134



Fig. 135



Fig. 136



Fig. 137



Fig. 138



Fig. 139



Fig. 140



Fig. 145 – Detail of the stair to access the cell



Fig. 141



Fig.142



Fig. 143



Fig. 148 – Zenith view of the temple during the cleaning. Drains (left) and stairs of access (right) are also visible.



Fig. 144 - Temple 6 during the 2000 excavation campaign (photo courtesy of Andrew Glass).



Fig. 146 – View from S of the earlier Temple with traces of plastered floor



Fig. 147 – N side of the Temple after the cleaning



Fig. 149 – Detail of the stair to access the cell



Fig. 150



Fig. 151

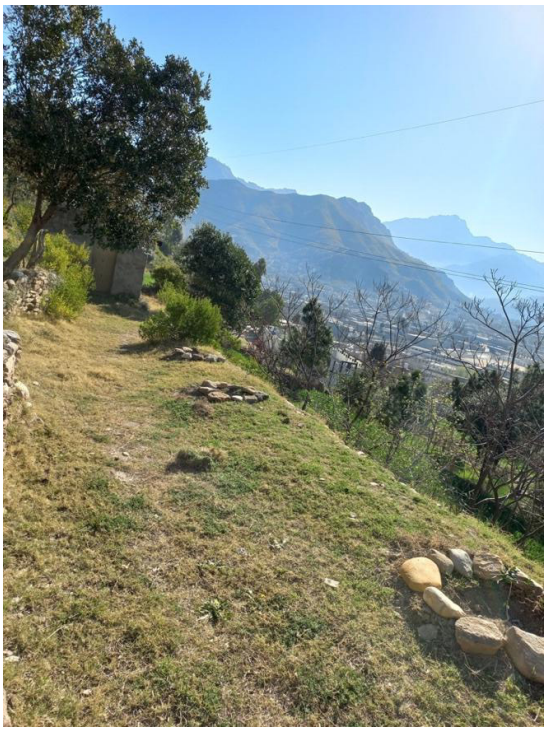


Fig. 152



Fig. 153



Fig. 154



Fig. 156



Fig. 155 – Grafted wild olive trees along the path that lead to Trench BKG 13 below the Barikot hill



Fig. 157



Fig. 158



Fig. 159



Fig. 160



Fig. 161



Fig. 162



Fig. 163



Fig. 164



Fig. 165

1.3.2 - THE CONSERVATION PROJECT "SAVING THE ARCHAEOLOGICAL SITE OF BAZIRA" (2022-2024) - Phase II (Figs 1-47)



Fig. 1



Fig. 2



Fig. 4



Fig. 5



Fig. 3



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10



Fig. 13



Fig. 11



Fig. 12



Fig. 14



Fig. 15



Fig. 16



Fig. 17



Fig. 18



Fig. 19



Fig. 20



Fig. 21



Fig. 22



Fig. 23

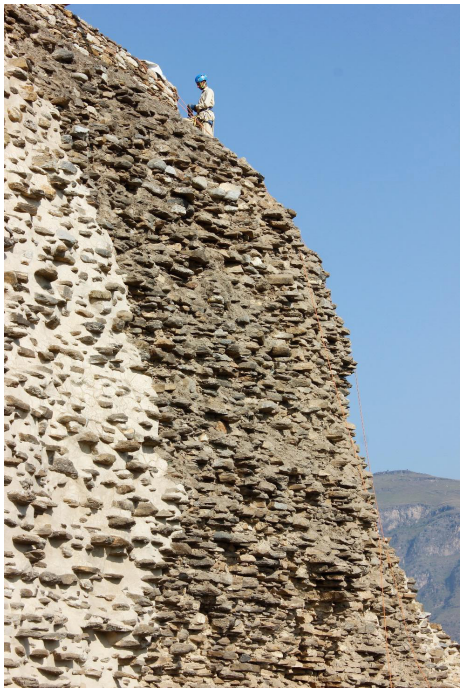


Fig. 24



Fig. 25



Fig. 26



Fig. 27



Fig. 28



Fig. 29



Fig. 30



Fig. 31



Fig. 32



Fig. 33



Fig. 34



Fig. 35



Fig. 36



Fig. 37



Fig. 39



Fig. 39



Fig. 40



Fig. 41



Fig. 42



Fig. 43



Fig. 48



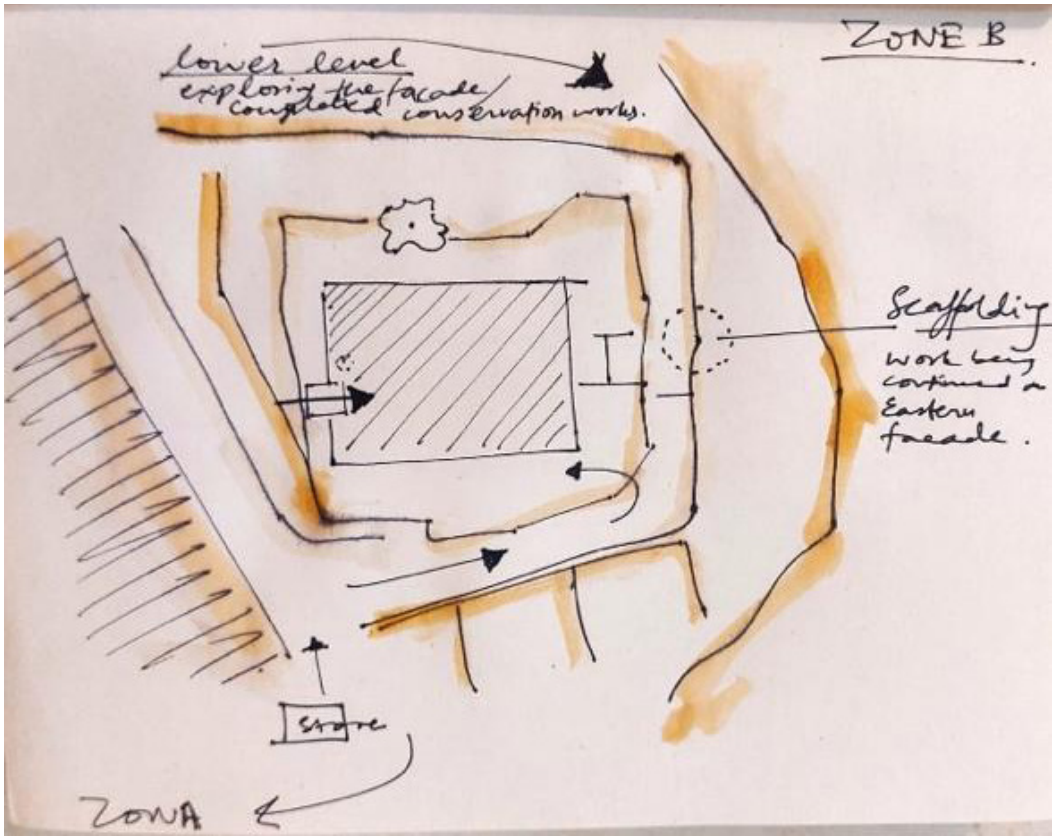
Fig. 49



Fig. 50



Fig. 51


ZONE B
lower level
exploring the facade
completed conservation works.
Scaffolding
work being
continued on
Eastern
facade.
Store
ZONA


ZONE A
store
ZONE B

Fig. 52a-b

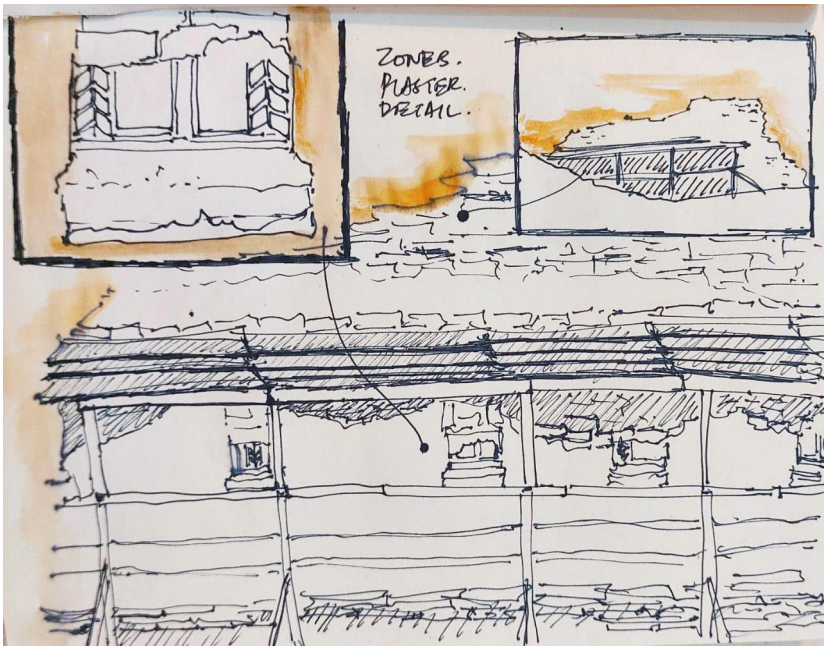


Fig. 53

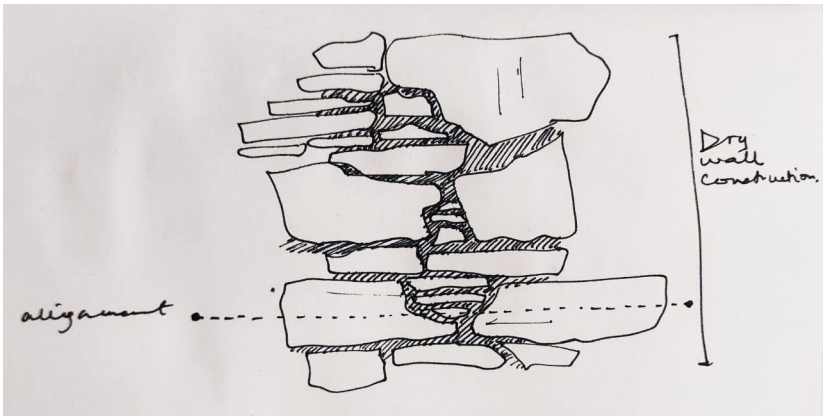


Fig. 54

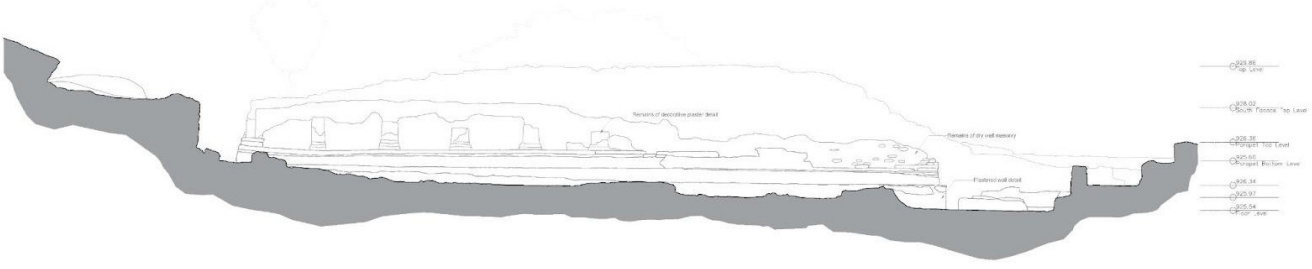


Fig. 55



Fig.56



Fig. 57


Germplasm Unit Olive
Agricultural Research Institute
Tarnab Peshawar
Area : 2.7 Acre
March-2013 : Arbequina, Arbosana, Koroneiki, Frantoio
Leccino, Coratina, Chetoui
May-2014 : Pendolino, Kalamata, Megaron
February-2016 : Picual, Oliana, Nabali
Financial Assistance : Government of Italy









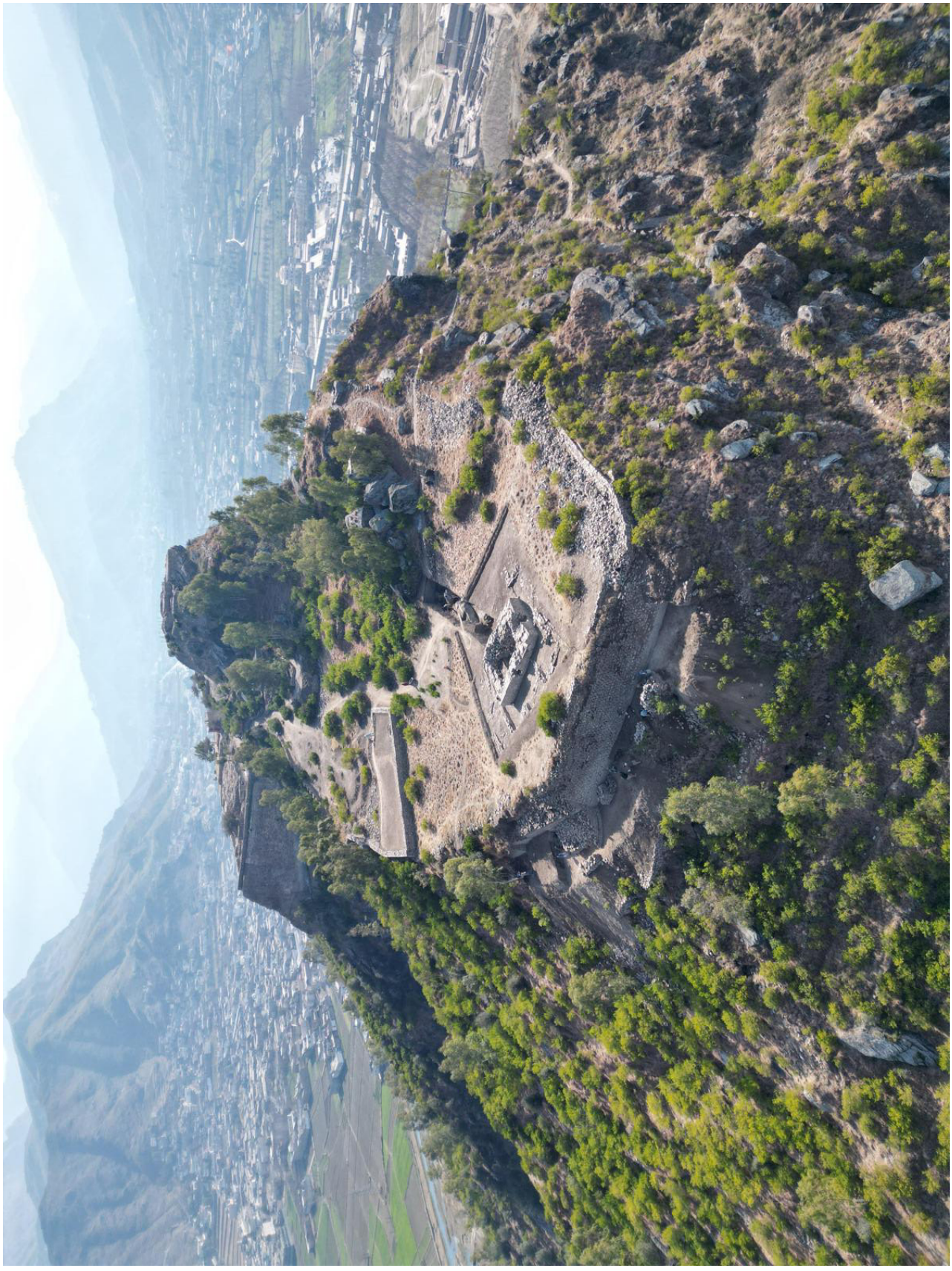


Fig. 58-63



Fig. 64

1.3.3 - THE CONSERVATION PROJECT "SAVING THE ARCHAEOLOGICAL SITE OF BAZIRA" (2022-2024) - Phase III (Figs 1-18)



Figs 1- View of the site from above Terrace W (August 2024).



Fig. 2 – Terrace E, ENE top side: front of Temple 6 after the rain.



Fig. 3 – Terrace E, ENE top side: red lines mark the underground connection between two trenches at the sides of Temple 6.



Fig. 4 – Terrace E, NE top side: bedding of the stones on mortar for the realisation of a waterproof surface.



Fig. 5 – Terrace E. E side: preparation of the custom pipe following the morphology of the wall.



Fig. 6 – Terrace E. E side: camouflaging of the pipe



Fig. 7 – Terrace E, E side: fixed pipe with 90° joint and iron hooks



Fig. 8 – Terrace E, E side, bottom: the tank seen from top



Figs 9 – Terrace E, E side, bottom: faucets exitinng the water tank close to the olive trees.



Fig. 10 –Specialised operators carrying on preservation of the N side of Terrace E



Fig. 11 –Terrace W, N side: before removal of soil deposit



Fig. 12 –Terrace W, N side: after removal of soil deposit



Fig. 13 – Consolidation with mortar of the surface's stone of the wall (Terrace W, side E).



Fig. 14 – A serene day begins over the valley



Fig. 16 – Work in progress at the new *chowkidar kotāgai* (watchkeeper's barrack)



Fig. 17 – The new *chowkidar kotāgai* (watchkeeper's barrack)



Fig. 15 – Solar system installed at the tool warehouse (*saman godown*)



Fig. 18 – Anchorage points for the rope descent system (acrobatic conservation) located along the edge of terrace E (see PLATE XXIV).

1.3.4 - THE CONSERVATION PROJECT "SAVING THE ARCHAEOLOGICAL SITE OF BAZIRA" (2022-2024) - The local staff (Photos by M. Minardi)



Ajab Khan



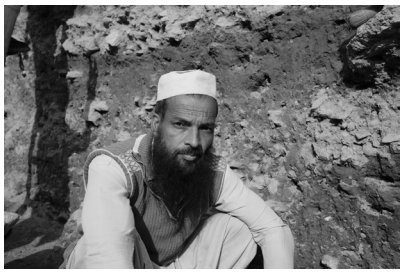
Fazal Azim



Momin Khan



Bakht Wahid



Saheb Shah



Bakht Gual



Arshad Ali



Hussain Zada



Sajjid Khan



Dil Nawab



Khan Muhammad



Muhammad Farooq



Adnan Khan



Sanah Ullah



Fawad 2



Muhammad Rashad



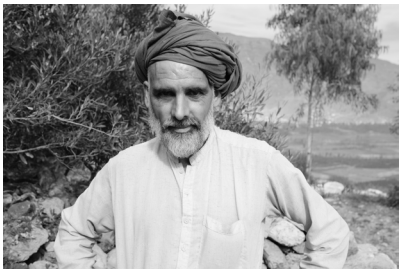
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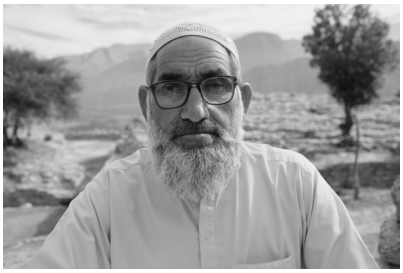
Fawad 1



Jawad Khan



Ayub Khan



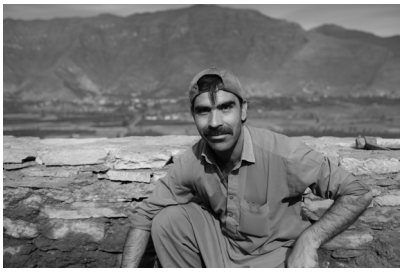
Abdul Khaliq



Arshad Ali



Fazal Hayat



Asif Khan



Asghar Ali



Kelim Ullah



Adnan Khan



Bakht Hussain



Maaz



Sana Ullah



Furqan



Haji Nawab



Imad Khan



Fazal Kerim



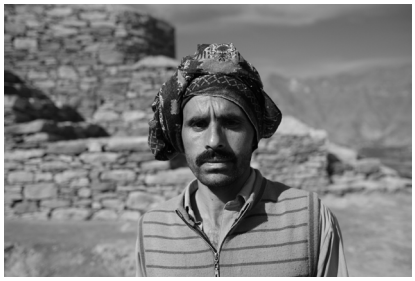
Raza Khan



Afsar Khan



Muhammad Nawab



Faqir Said



Umar Wahid



Rezwan



Fazal Amin



Hazrat Rahman



Kaisar Rahman



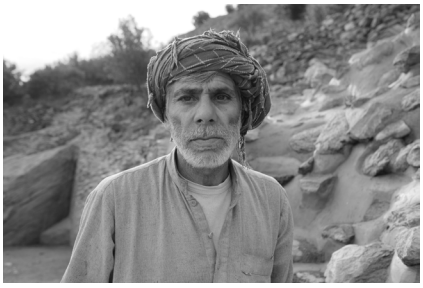
Mohammad Ibrahim



Mohammad Wahid



Momin Dregira



Momin Kohistane



Muhammad Kalim



Naik Muhammad



Rahimzada



Razia Khan



Wahid Khan



Wasim Sajjad

Chapter II

ARCHAEOLOGY AND ARCHITECTURE

II.1.1 - THE MONUMENTAL TERRACES AND THE CENTRAL FORTRESS (L.M. Olivieri)



Fig. 1 – Terrace E: plan with periodisation. Key: purple = Period 1; = Period 2a; yellow = Period 2b; green = Period 3 // Period 3 = Macrophase 9a; Period 2b = Macrophase 8b; Period 2a = Macrophase 8a; Period 1 = Macrophases 5-7 (= Pl. XIX).

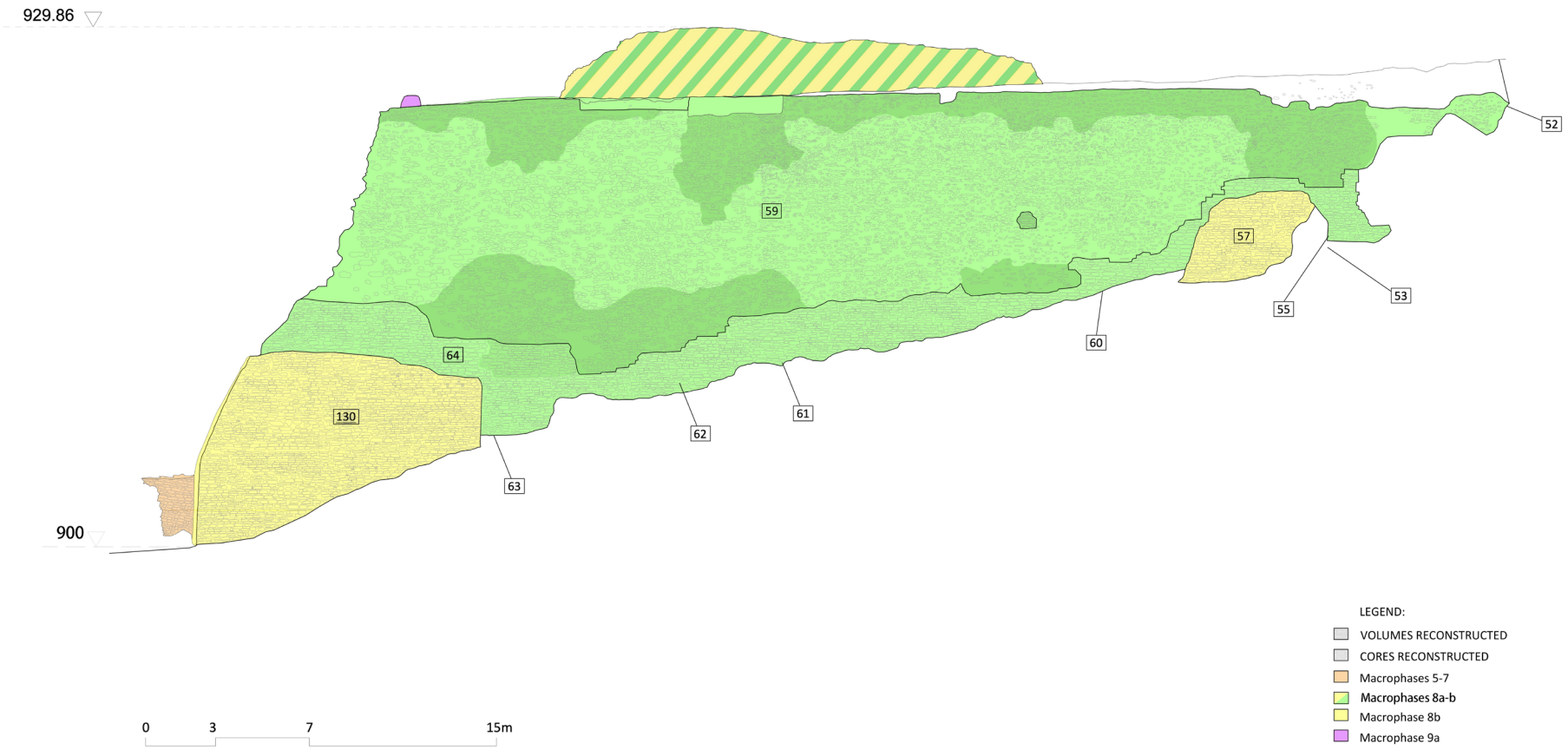


Fig. 2a-b – Terrace E: Elevations a) from N (=Pl. XI); b) from S (= Pl. X) Key as above.

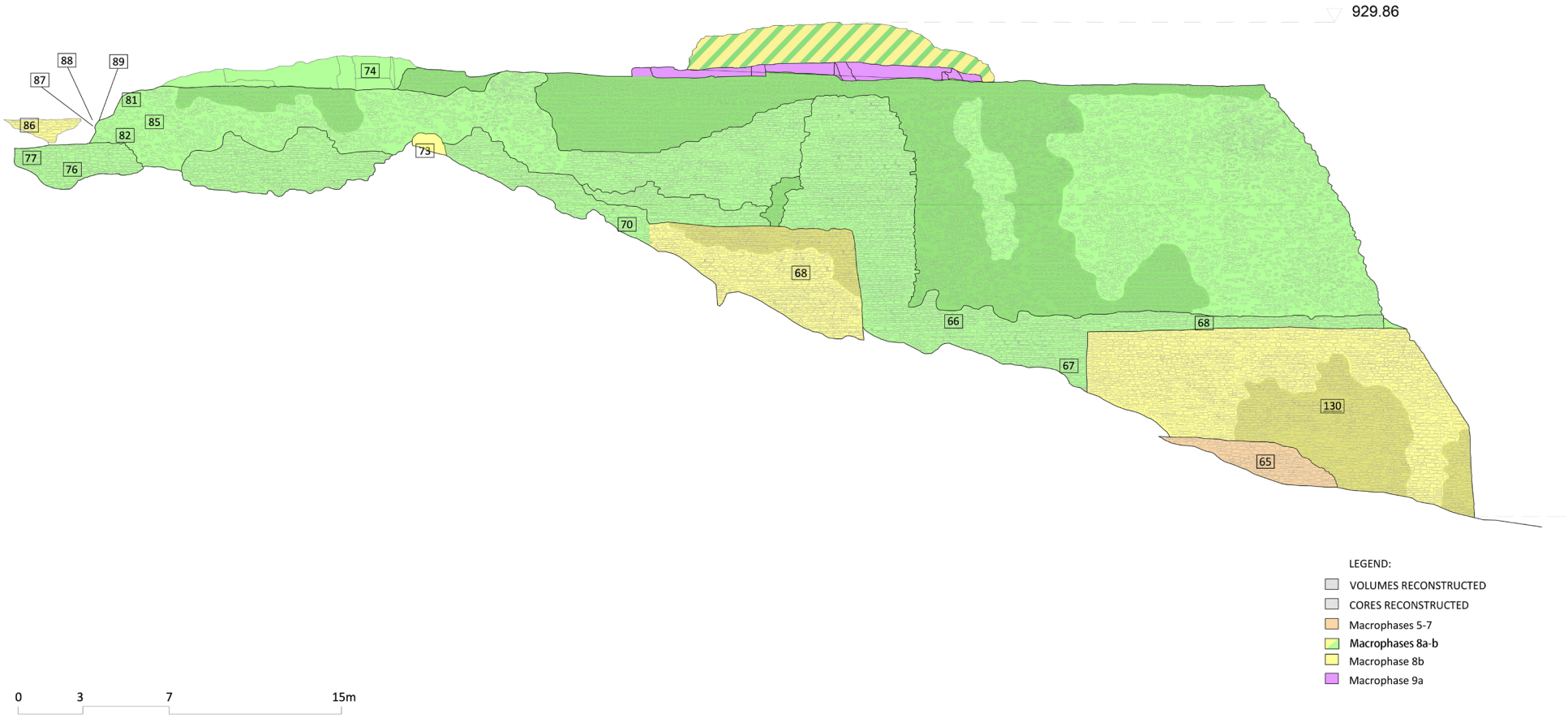


Fig. 2a-b – Terrace E: Elevations a) from N (=Pl. XI); b) from S (= Pl. X) Key as above.



Fig. 3 – Terrace E: NE corner during the restoration works.



Fig. 4 – Terrace E: gap E during the restoration works.



Fig. 5 – Terrace E: gap E during the restoration works: the overlap of walls from Period 1, Period 2a (1-2) is visible.



Fig. 6 – Terrace E, BKG 6: evidence of stupas from Period 1



Fig. 7 – Terrace E, N side: bastion or retaining wall from Period 2b



Fig. 8 – Terrace W: view towards the N (Period 1 wall; Period 2b and 3 bastions)



Fig. 9 – Terrace W: view facing WNW (Period 1 wall; Period 2b and 3 bastions)



Fig. 10 – Udegram 'Castle' (1962) . Photo IsMEO.



Fig. 11 – Shahr-e-Gholghola (2019). Photo by D. Rosati



Fig. 12 – Stone from Trench BKG 23 (13)

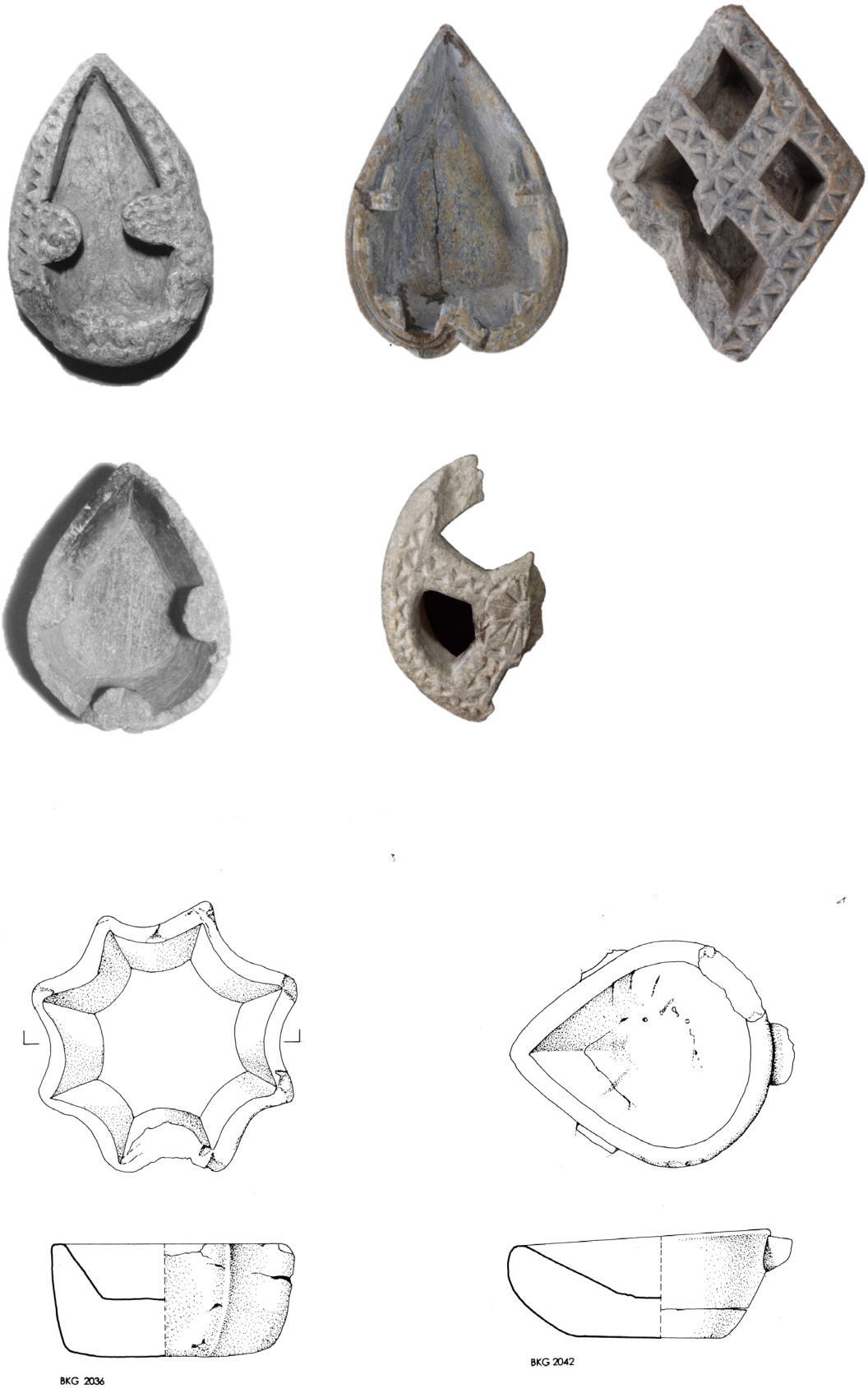


Fig. 13 – Lamps from Udegram (RGM) and Barikot: From top to bottom, left to right: RGM 319, BKG 9771, BKG 9772; UDF 317, BKG 11473; BKG 2036, BKG 2042 (av. l. 9 cm)



Fig. 14 – BKG 9702



Fig. 15 – Nishapur, calligraphic ware bowl, tenth century; d. 25.5 cm. The Metropolitan Museum of Art, MMA_ 40.170.25. Courtesy of The Metropolitan Museum of Art



Fig. 16 – Shergahr: wall stratigraphy: kanjur blocks + stone slabs \\ fired bricks



Fig. 17 – Shergahr: British era building: wall stratigraphy: kanjur blocks \\ fired bricks



Fig. 18 – Shergahr: wall stratigraphy: kanjur blocks \\ fired bricks \\ plastered cement blocks



Fig. 19-20 – Shergahr: kañjur cliffs



Fig. 19-20 – Shergahr: kañjur cliffs



Fig. 21-24 – Shergahr: kañjur outcrops for terraced quarry cultivation



Fig. 21-24 – Shergahr: kañjur outcrops for terraced quarry cultivation



Fig. 21-24 – Shergahr: kañjur outcrops for terraced quarry cultivation



Fig. 21-24 – Shergahr: kañjur outcrops for terraced quarry cultivation

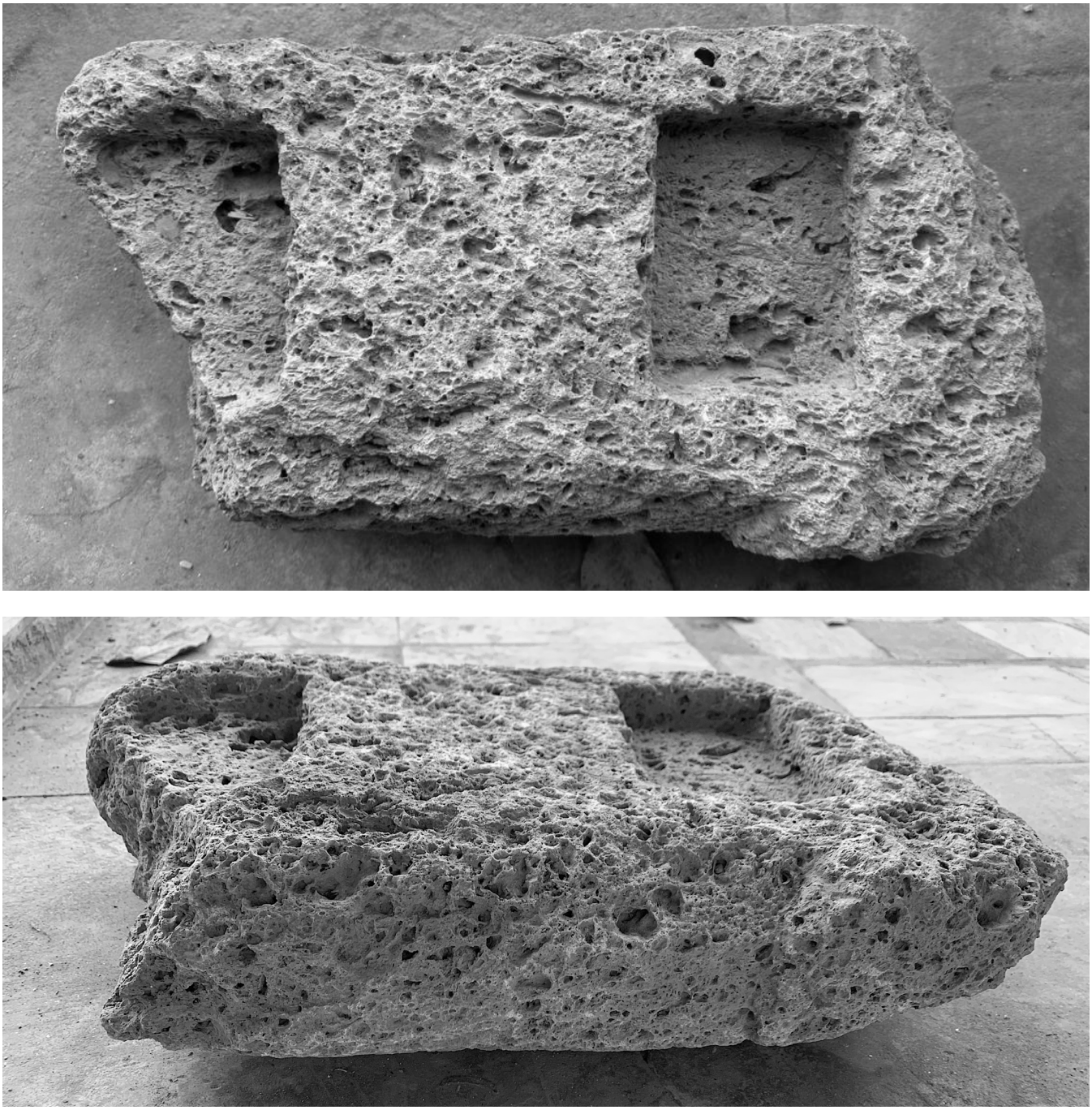


Fig. 26 – BKG 14, water tank: kanjur cover stones with tenons for vedikā posts (l. 41,5 max.; h.11,43 cm).

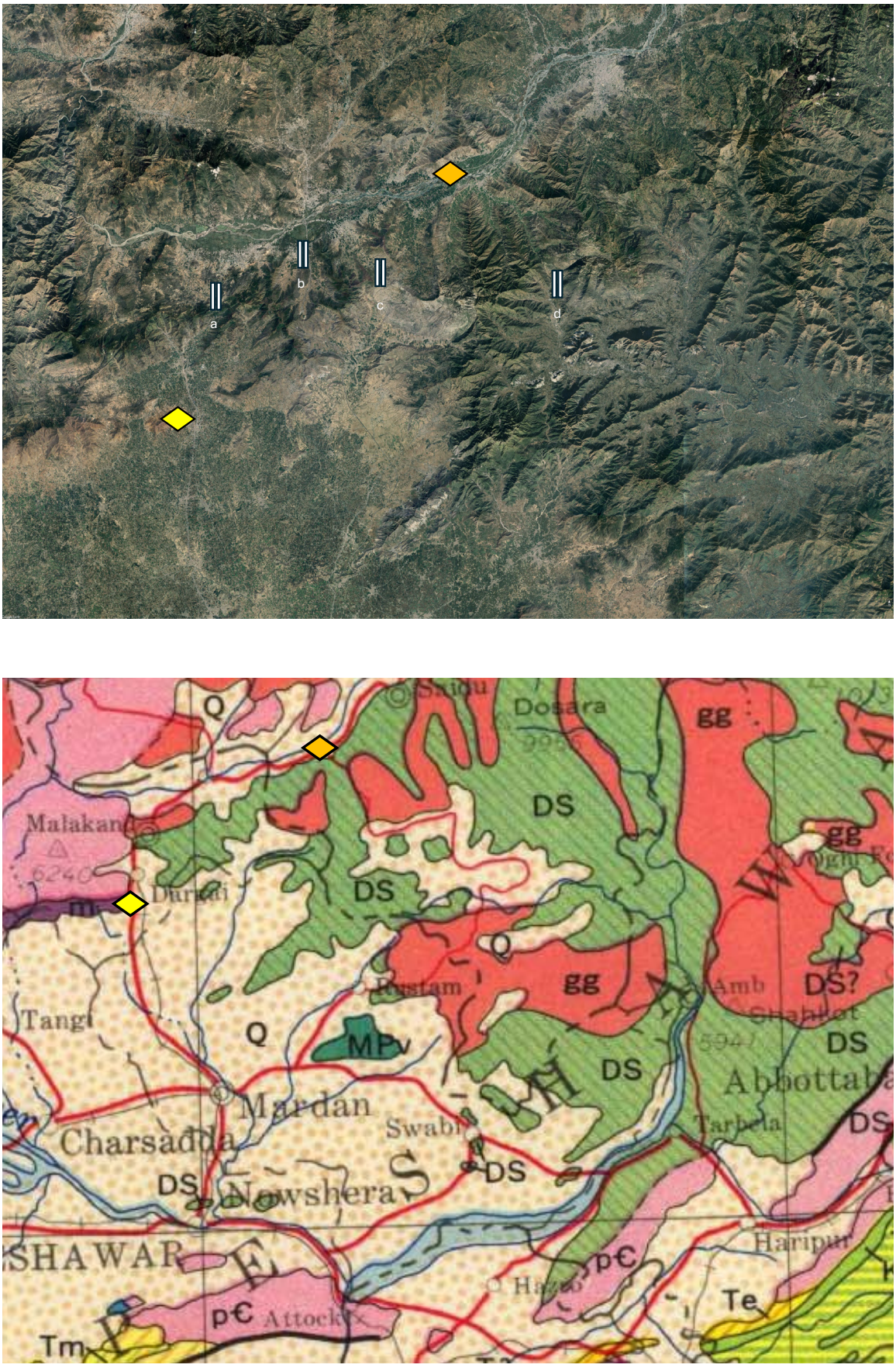


Fig. 25 – Map of the study area with major passes: a) Malakand, b) Shahkot, c) Gunyar-Cherat-Saffar, d) Karakar; yellow lozenge = quarry area; orange l. = Barikot (Credits: Google Earth; Geological Survey of Pakistan).

II.1.2 - THE FORTRESS ON THE HILLTOP (Trenches BKG 14 and 15) (M. Minardi) (PLATES XVI-XVIII)

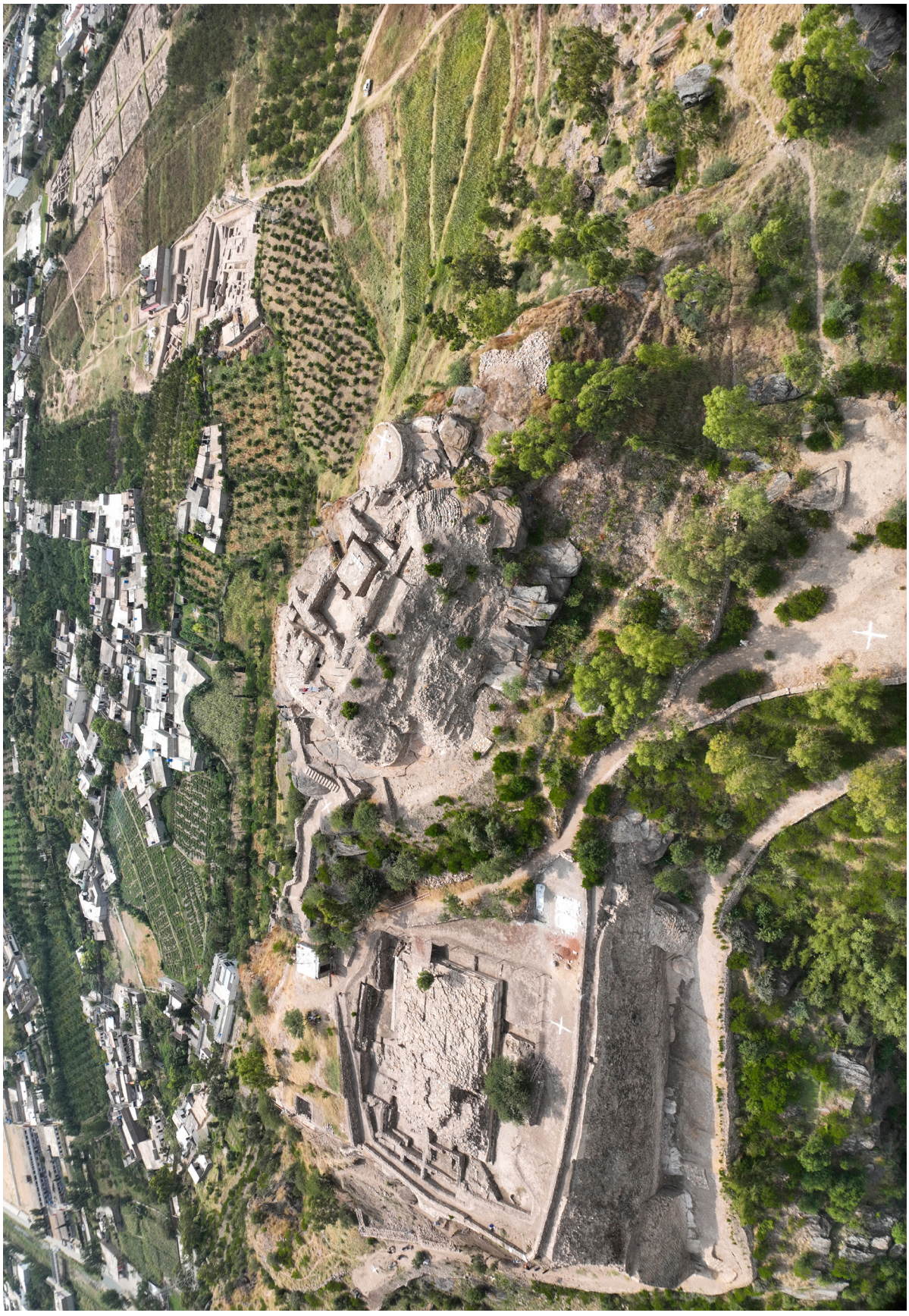


Fig. 1 – The acropolis from N



Fig. 2 – The Fortress BKG 14-15.



Fig. 3 – One of the two *tshas* (BKG 5667)



Fig. 4 – Part of a vessel: appliqued lion/Narasiṃha. (BKG 5767)



Fig. 5 – BKG 4767



Fig. 6 – The rock of the acropolis from S



Fig. 7 – Counterfort 2 of the NE tower



Fig. 8 – Detail of the ceramic piping system of the Period 2 tank drainage

Fig. 1 – Map of northern Gandhāra showing the distribution of Hindu Śāhi sites (base map Google Earth). 1, Sure Tangai; 2, Damghar, 3, Qala Tir; 4, Udegram;
5, Manyar; 6, Amluk-dara; 7, Barikot; 8, Bar Tangai; 9, Parrai; 10, Zalamkot; 11, Palai; 12, Cherat; 13, Torwarsak; 14, Girrai,; 15, Bampokha; 16, Nansar; 17, Kingargai; 18, Kashmir Smast; 19, Damkot; 20, Kamal-khan-china; 21, Kala-dheri; 22, Katkala; 23, Gumbatuna; 24, Mane-tangai; 25, Kamala; 26, Tauda-china; 27, Qala; 28, Kalungai; 29, Doda.



Fig. 2 – Sure Tangai. The area of the Swat Valley protected by the fortress.



Fig. 4 – Sure Tangai.



Fig. 3 – Sure Tangai. Defensive wall with semicircular bastions



Fig. 5 – The watchtower of Parrai



Fig. 6 - Amluk-dara.: general view of the Hindu Śāhi complex from NW



Fig. 7 – Amluk-dara: details of the western side.



Fig. 8 – Watchtower at the Cherat pass



Fig. 9– Kamala: general view of the fort



Fig. 10– Kalungai



Fig. 11 – Tauda-china



Fig. 12 – Udegram: view of the E side of the 'Castle'



Fig. 13 – Udegram: view of the N side of the terraced wall later occupied by the courtyard of the Ghaznavid Mosque of the citadel



Fig. 14 – Gumbatuna: decorated architectural element reused in the retaining wall of the road leading to the archaeological site.



Fig. 15 – Gumbatuna: decorated architectural element reused in the retaining wall of the road leading to the archaeological site



Fig. 16 – Ziarat graveyard: architectural elements reused in a grave: āmalaka from the decoration of the suprastructure of a Hindu temple is visible on the top, below is another architectural piece decorated with volutes.



Fig. 17– Ziarat graveyard: decorated architectural element (upside-down) bearing two candraśālās with rosetta sided by volutes





Fig. 18 – Ziarat graveyard: decorated architectural elements from the bases of pilaster bearing a leaf with two lateral volutes (cf. Zalamkot).



Fig. 19 – Gumbatuna: citadel



Fig. 20 – Gumbatuna: terraced system of the citadel



Fig. 21 – Zalamkot area: structures on the way to the temple



Fig. 22 – View of the ruins of the Zalamkot temple



Fig. 24 – Zalamkot: the upper part of the false pilaster



Fig. 27 – Zalamkot: decorated architectural element reused as step (front)



Fig. 23 – Zalamkot: the podium decorated with pilasters. On the bottom left, close up of the base of the pilaster (cf. Fig. 18)



Fig. 25 – Zalamkot: decorated architectural element with a *gaṇa* between columns



Fig. 26 – Zalamkot: decorated architectural element with a *candraśālā* sided by columns



Fig. 28 – Zalamkot: decorated architectural element in Fig. 26: Left side, with tenon for halving joint



Fig. 29 – Zalamkot: decorated architectural element in Fig. 26: Right side, with tenon for halving joint.



Fig. 30 – Zalamkot: decorated architectural element in Fig. 26: Top side.



Fig. 31 – Zalamkot: circular element with projecting feature



Fig. 32 – Zalamkot: exagonal pillar with flat back and tenon reused in a retaining wall in the village

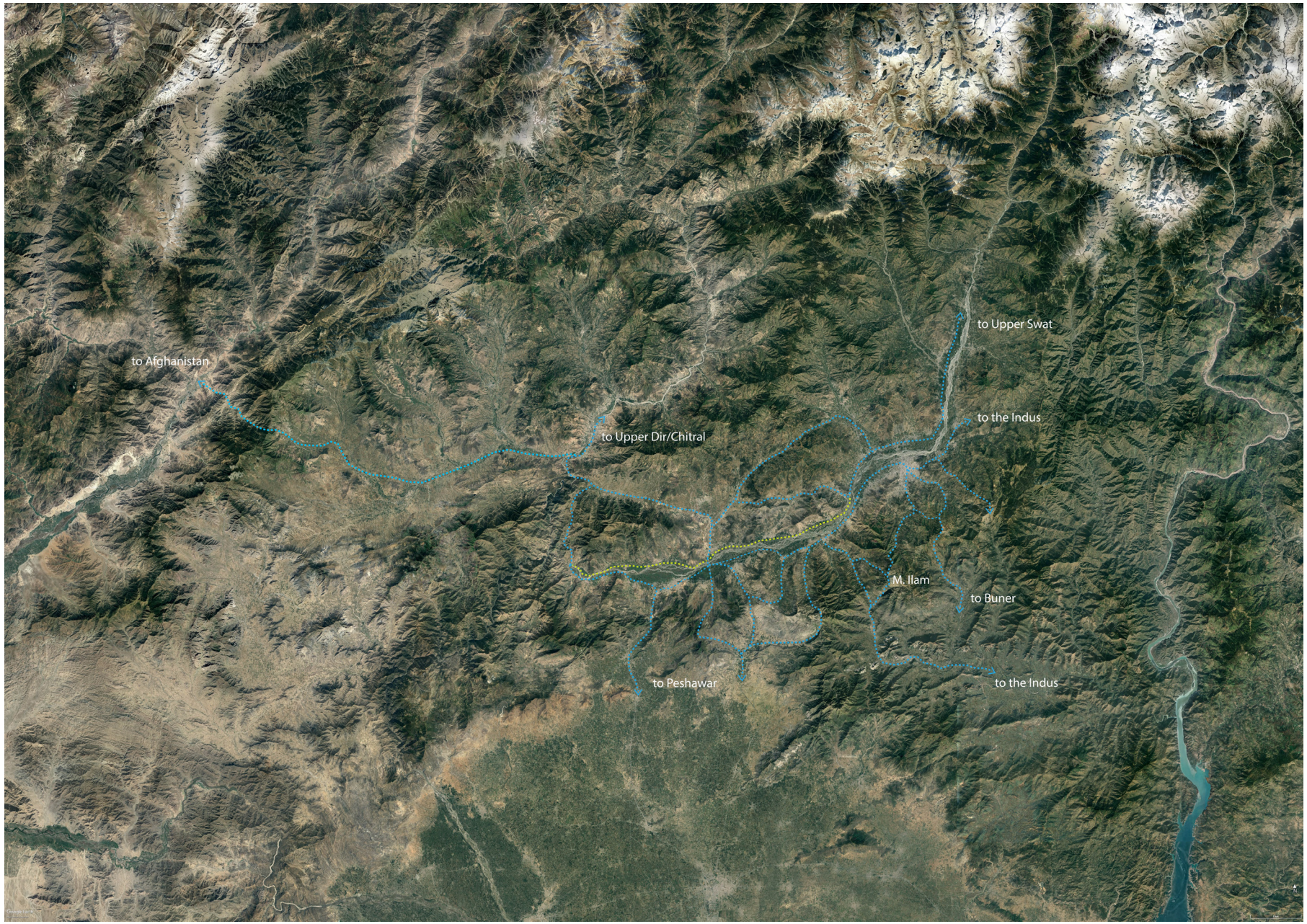


Fig. 33 – Map of northern Gandhāra showing the main routes (base map Google Earth)

II.2.1 - TRENCH BKG 6: THE ŚĀHI TEMPLE ON TERRACE E (L.M. Olivieri)



Fig. 1 – Terrace E, BKG 6, Temple 6 (N to the right)

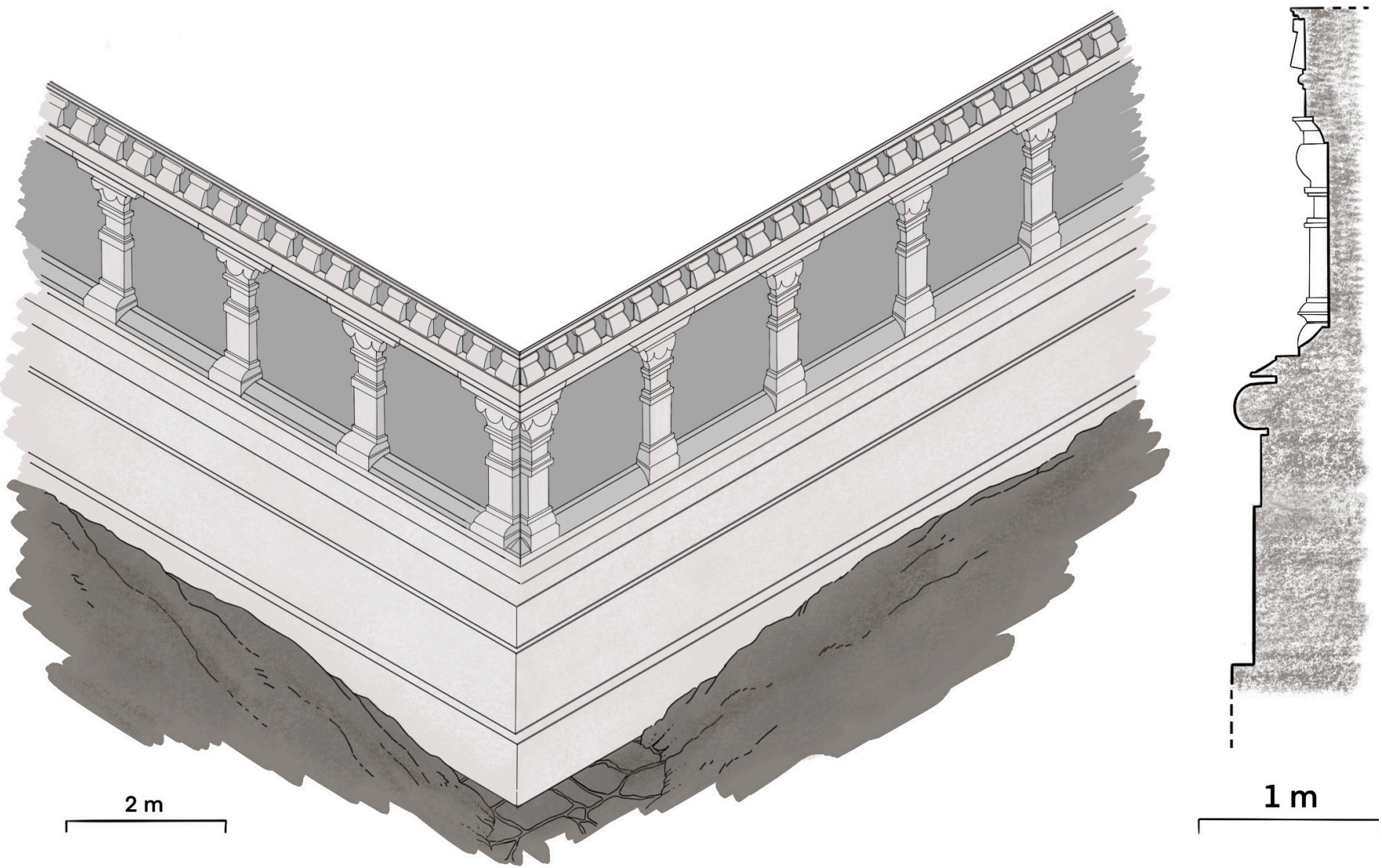


Fig. 2 – Details of the mouldings and entablatures of the Zalamkot temple. Drawings by AC after FM†.

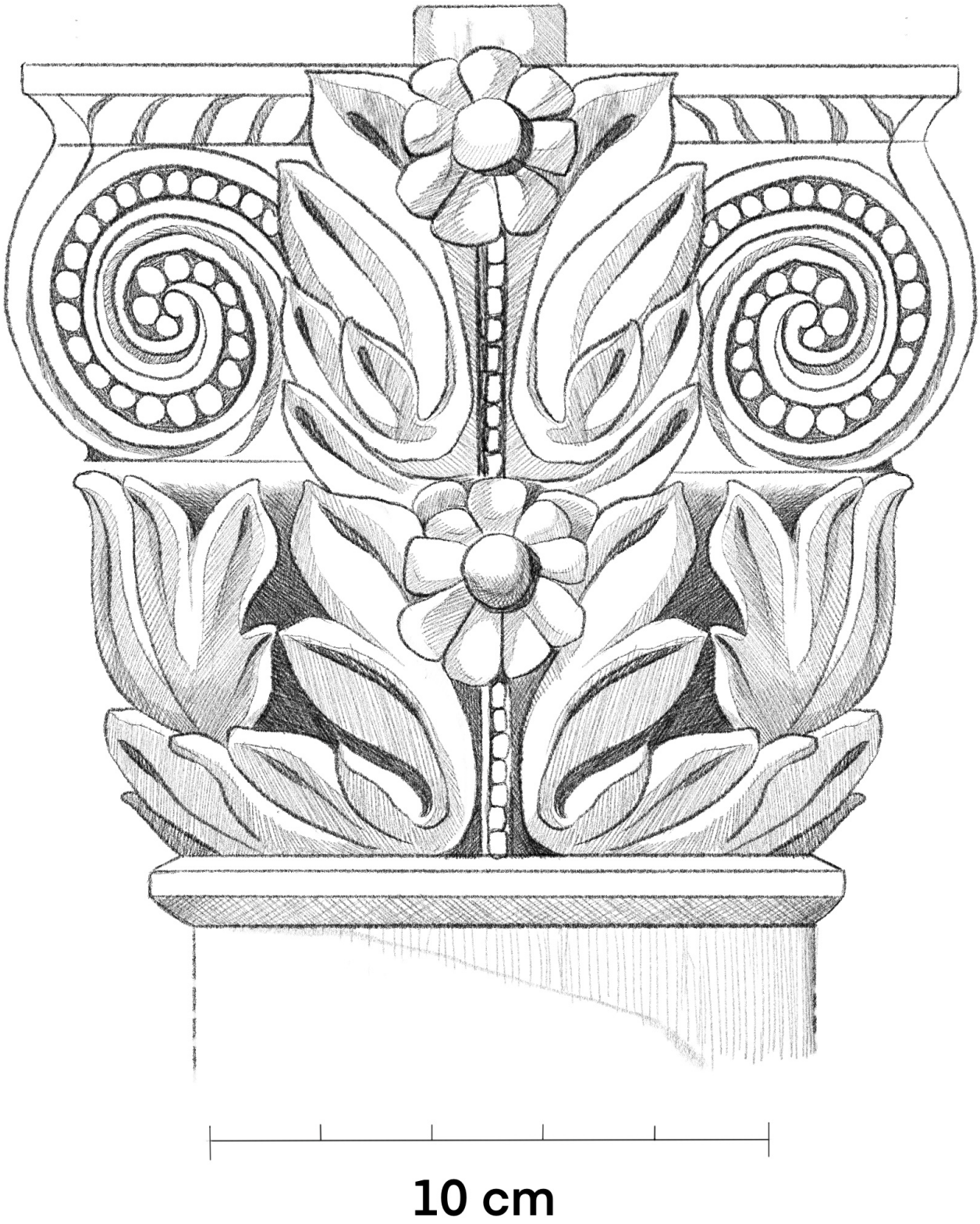


Fig. 3 – Ionic-Corinthian hybrid column (detail of the capital). From Kashmir Smast. 9th-10th century CE. Wood. 133 × 33 cm. British Museum, BM 1889,0703.8. Drawing by AC after FM†.



Fig. 4 – Terrace E, BKG 6, Temple 6, N side: evidence of the Period 2a and 2b infill wall of the lower podium



Fig. 5 – Terrace E, BKG 6, Temple 6, S side: evidence of the infill masonry from period 2a and 2b of the lower podium



Fig. 6 – Terrace E, BKG 6, Temple 6, N side: evidence of the façade of Temple 6 in Period 2a



Fig. 7 – Terrace E, BKG 6, Temple 6, S side: evidence of the façade and raised floor of Temple 6 in Period 2a. Note the presence of the stuccoed landing.



Fig. 8 – Terrace E, BKG 6, Temple 6, S side: close view of the front and raised floor of Temple 6 in Period 2a. Note the presence of the stuccoed landing.

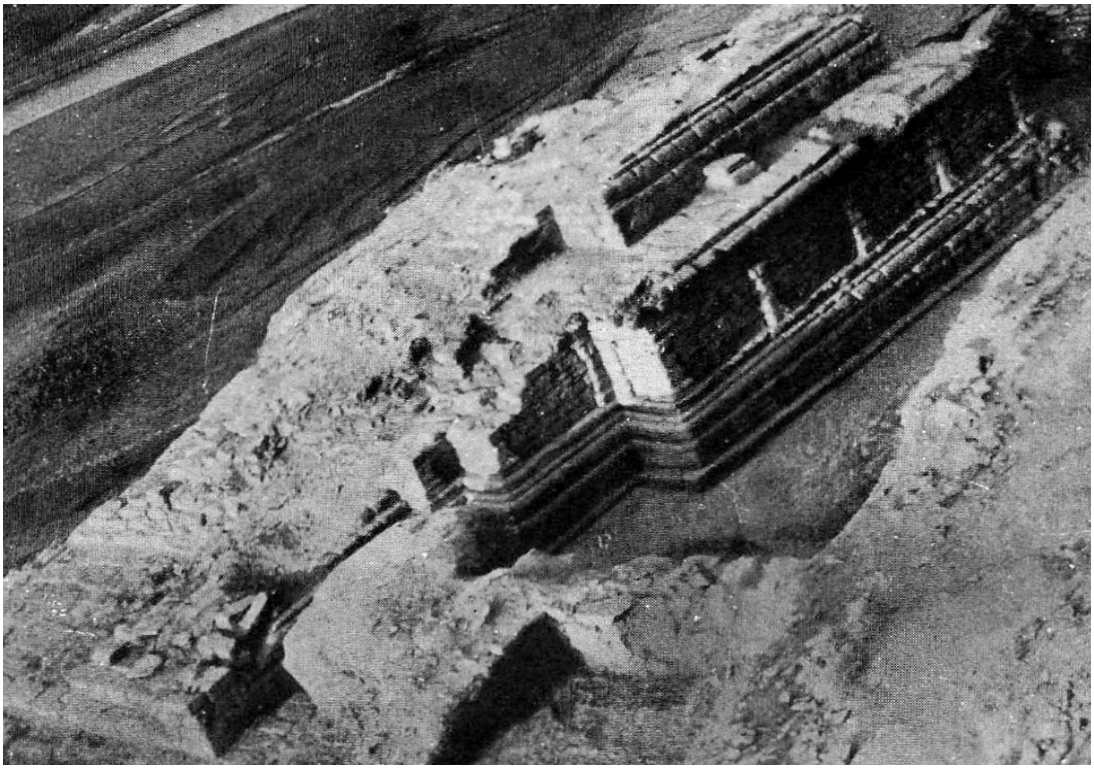


Fig. 9 – The Damkot 'stupa' (after Rahman 1968-1969: fig. 158)



Fig. 10 – Minor shrine N of Temple 6 (Period 2a)

II.2.2 - THE ARCHITECTURE OF TEMPLE 6: EXCAVATED MATERIALS AND RECONSTRUCTION (A. Casalini)

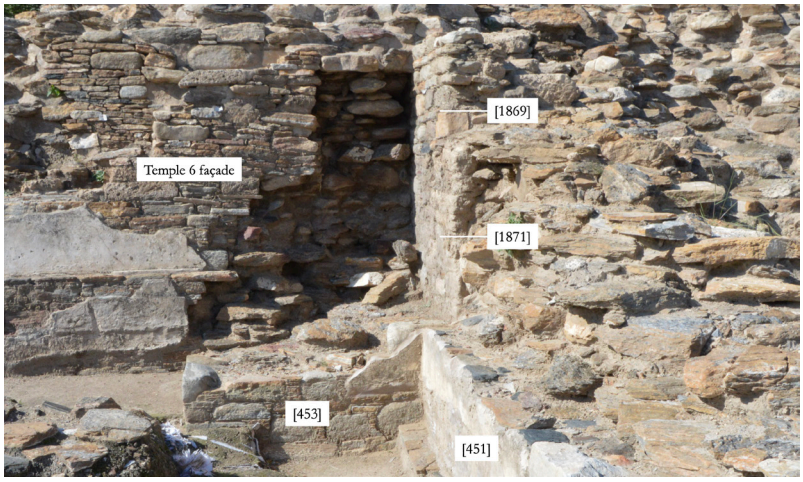


Fig. 1 – The E façade of Temple 6, S side



Fig. 2 – S shoulder of the staircase in BKG 6.3, seen from the S

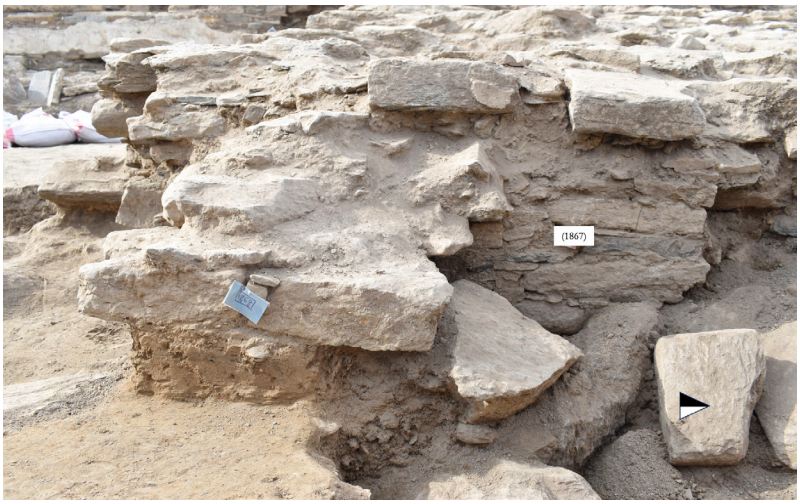


Fig. 3 – The first steps of the staircase. The structure [1867] behind [1868] belongs to an earlier phase of the staircase, which was then enveloped in the volume of the Hindu Śāhi structure.

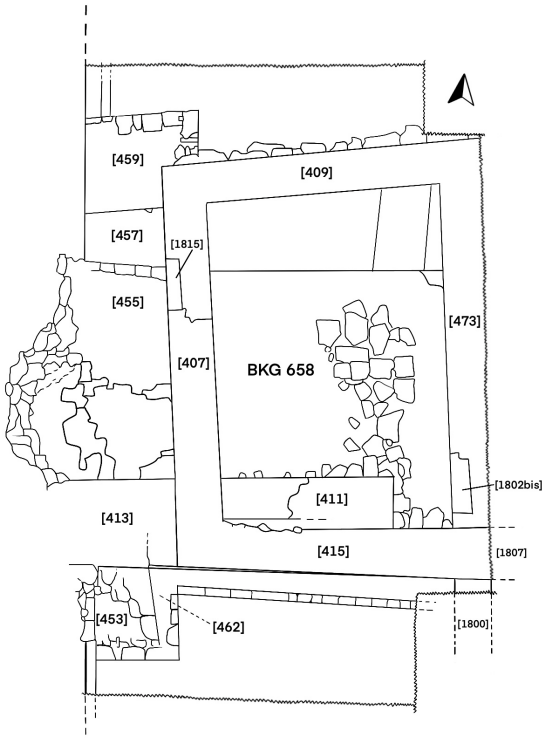


Fig. 4 – Plan of BKG 6.3. Walls [1800] and [1807], as well as thresholds [1815] and [1802bis] were unearthed during the 2023 excavation. Plan modified by AC from FM†'s drawing in Callieri et al., 2000: 223



Fig. 6 – Stairs [1802]+[1804] leading to BKG 658

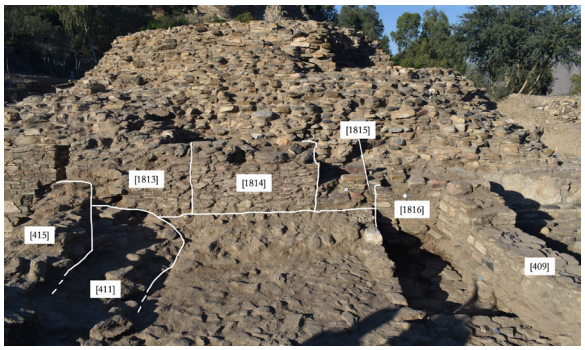


Fig. 8 - Macrophase 9a structures built on top of the staircase, W side

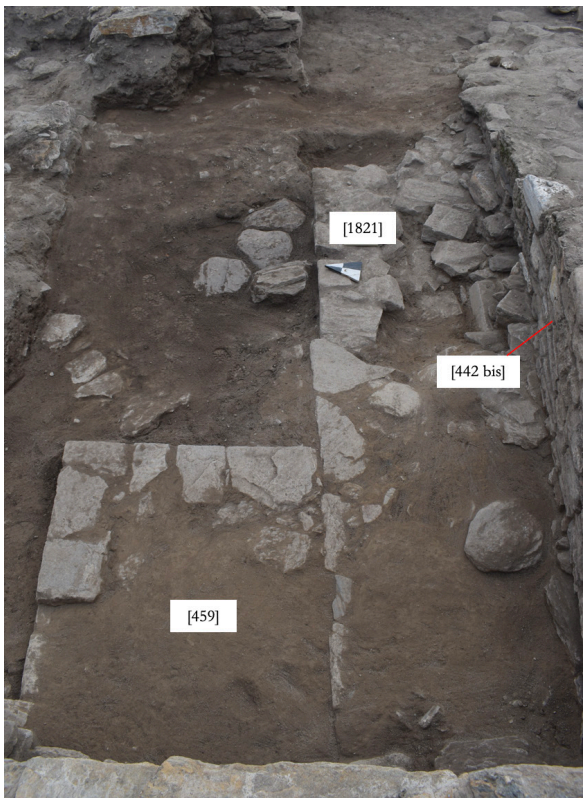


Fig. 5 – The N shoulder of the staircase

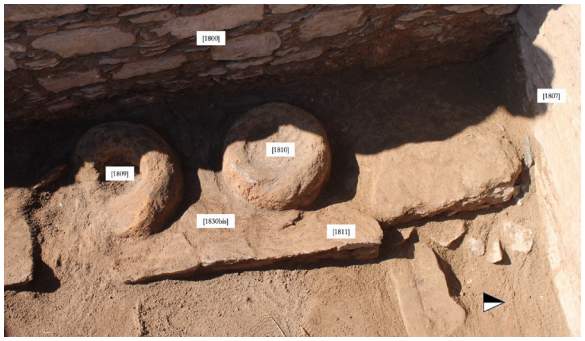


Fig. 7 – Fireplaces [1809] and [1810] in BKG 6.3



Fig. 9 – Reconstructions of the profile of Temple 6 during the Hindu Śāhi period (Macrophase 8b/ Period 2c). Volumetry profile drawn over a photograph taken from the SE corner of Terrace E.

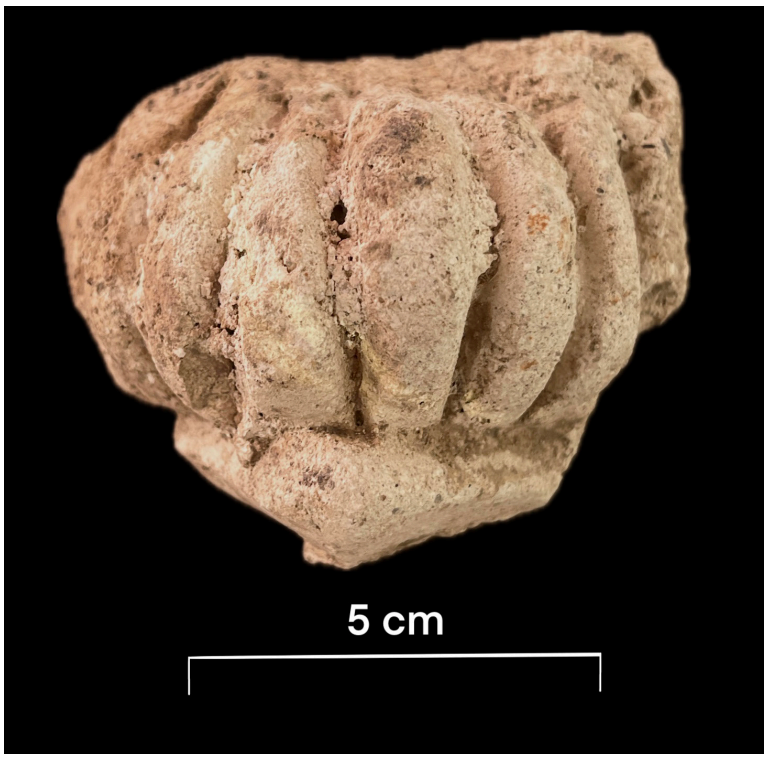


Fig. 12 – Miniature āmalaka stone (fragment) from BKG 20 E (8). Stucco and red pigments; w. 6.8 × h. max. 5.2 × t. 4.6.

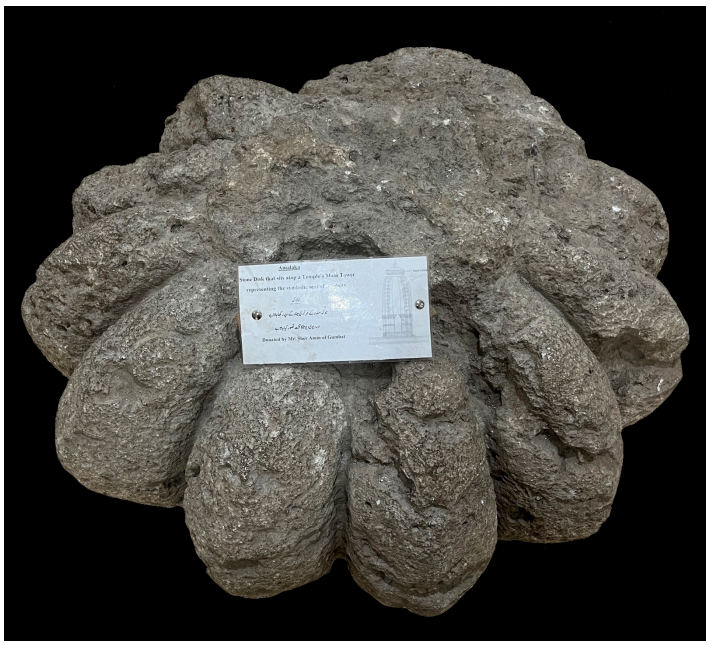


Fig. 13 – The āmalaka stone of Gumbat at the Dir Museum of Chakdara. Photo by AC.

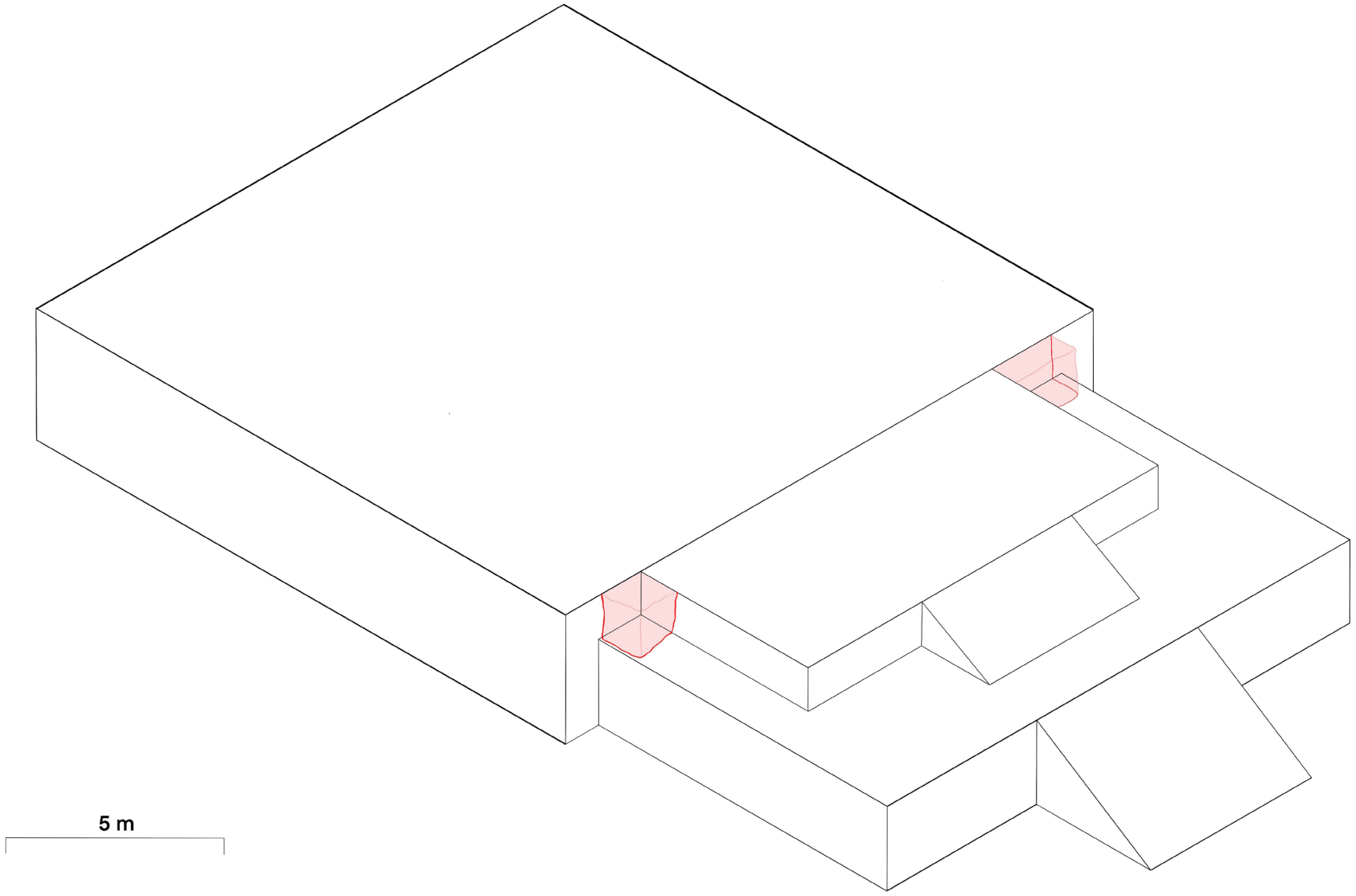


Fig. 10 – Possible reconstructions of the plan of Temple 6 during the Turk Śāhi period (Macrophase 8a/Period 2a). The red areas signal the position of the looter's pits. Drawing by AC.

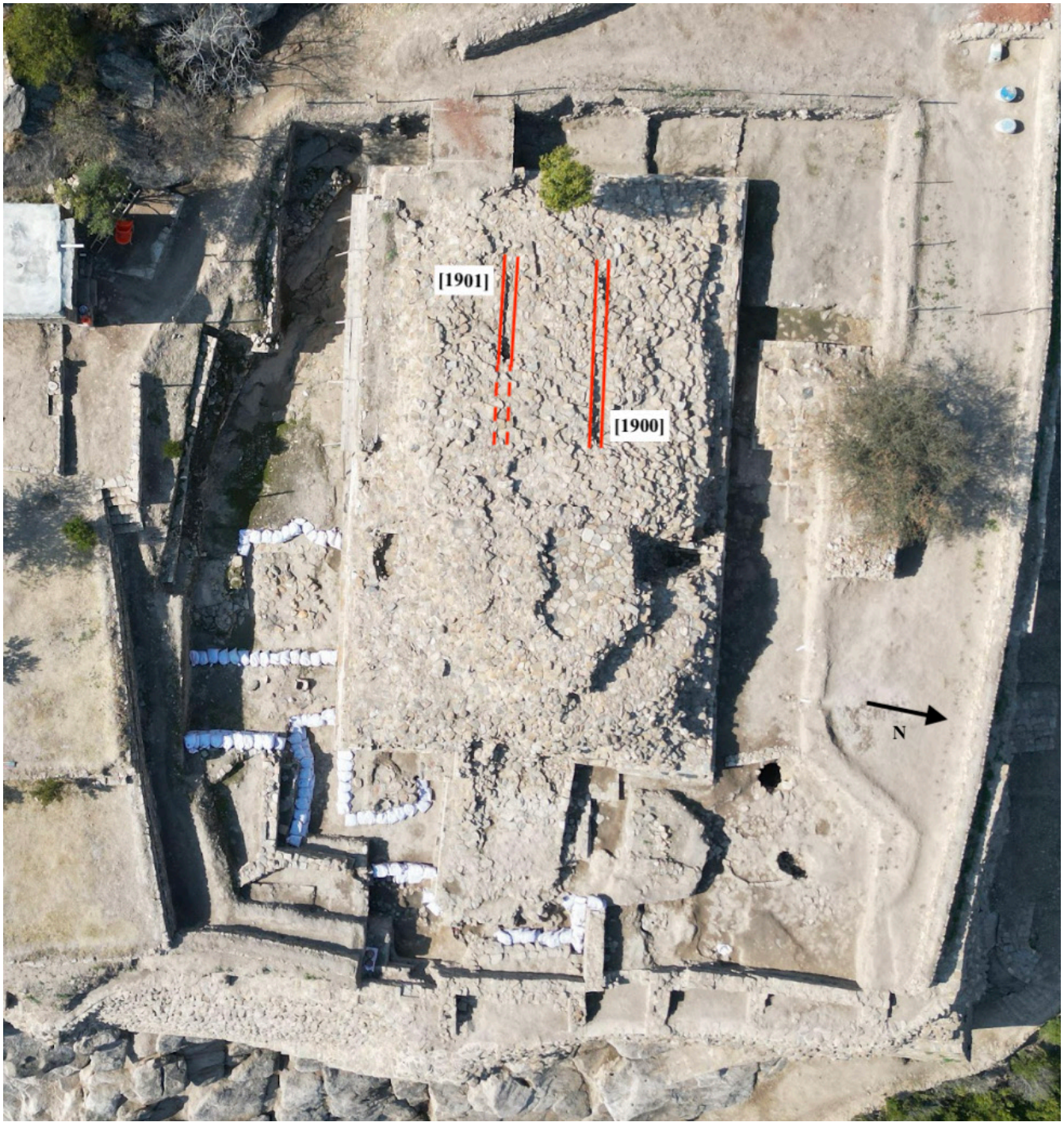


Fig. 11 – Drains [1900] and [1901] on the upper podium

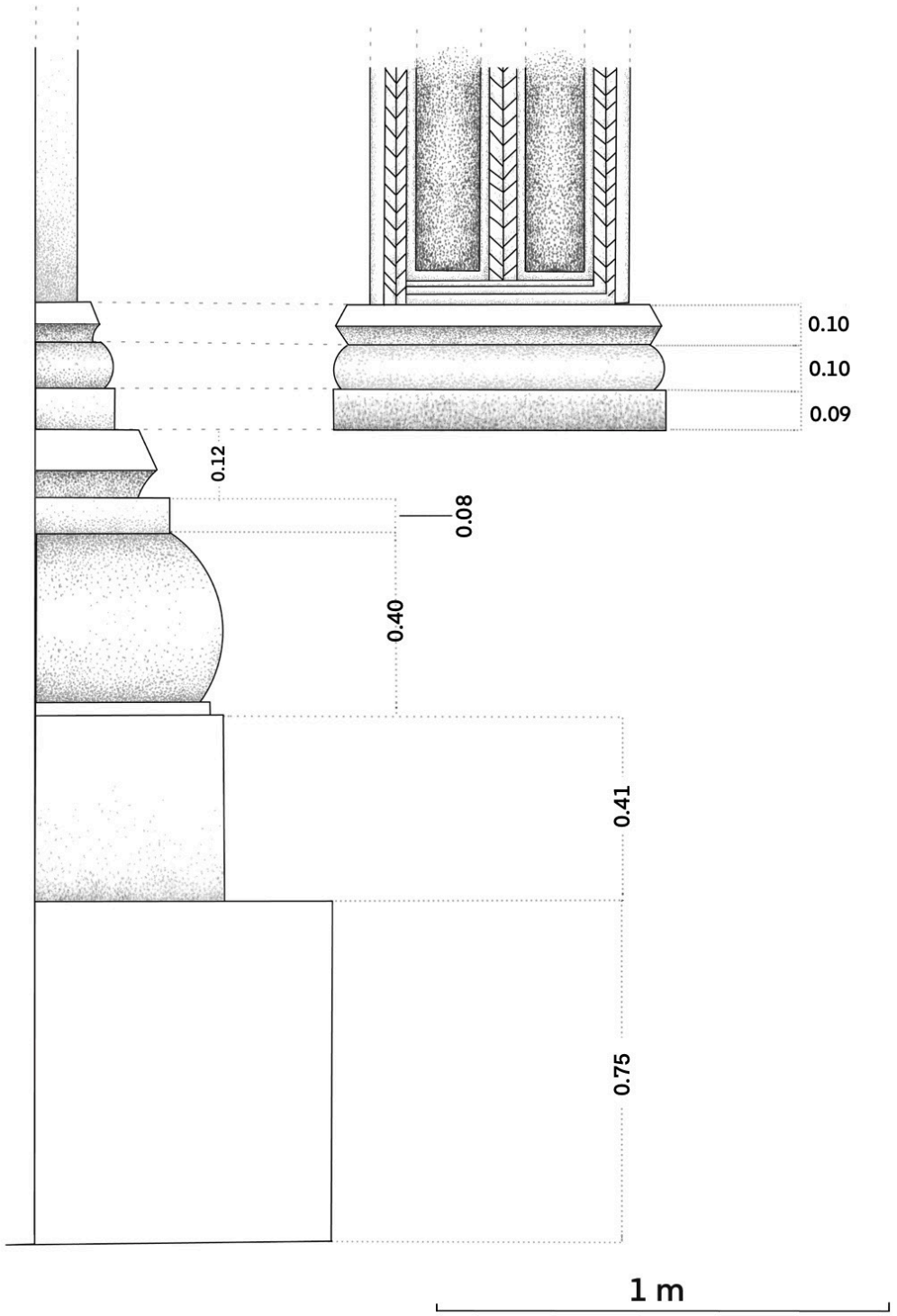


Fig. 14 – Base moulding of the lower podium of Temple 6. Measurements are in m. Drawings by AC.

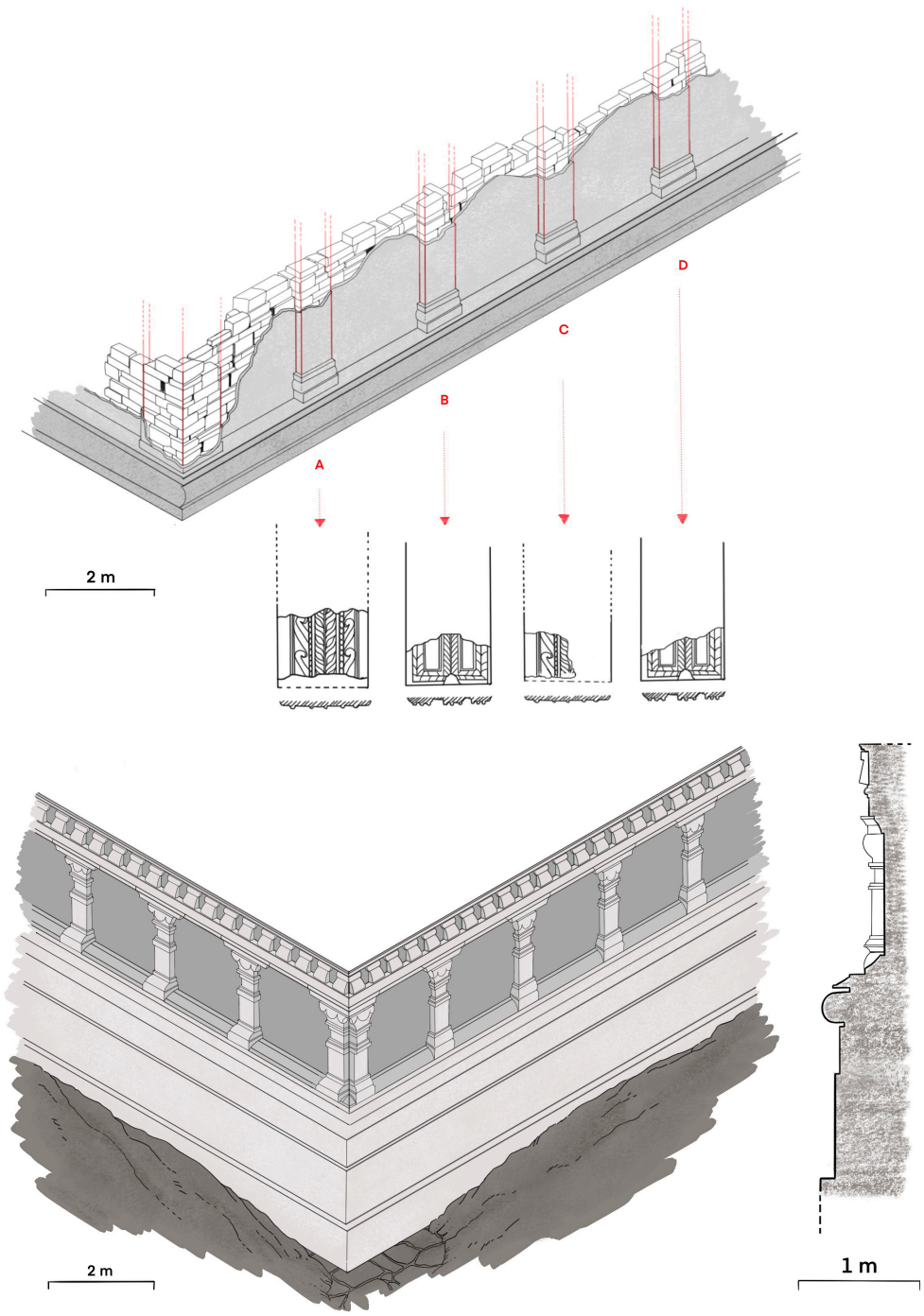


Fig. 15 – The lower podium of Barikot Temple 6 and of the temple at Zalamkot: isometric drawings of Barikot (above) and Zalamkot with moulding (below). Drawing by AC after FM†.

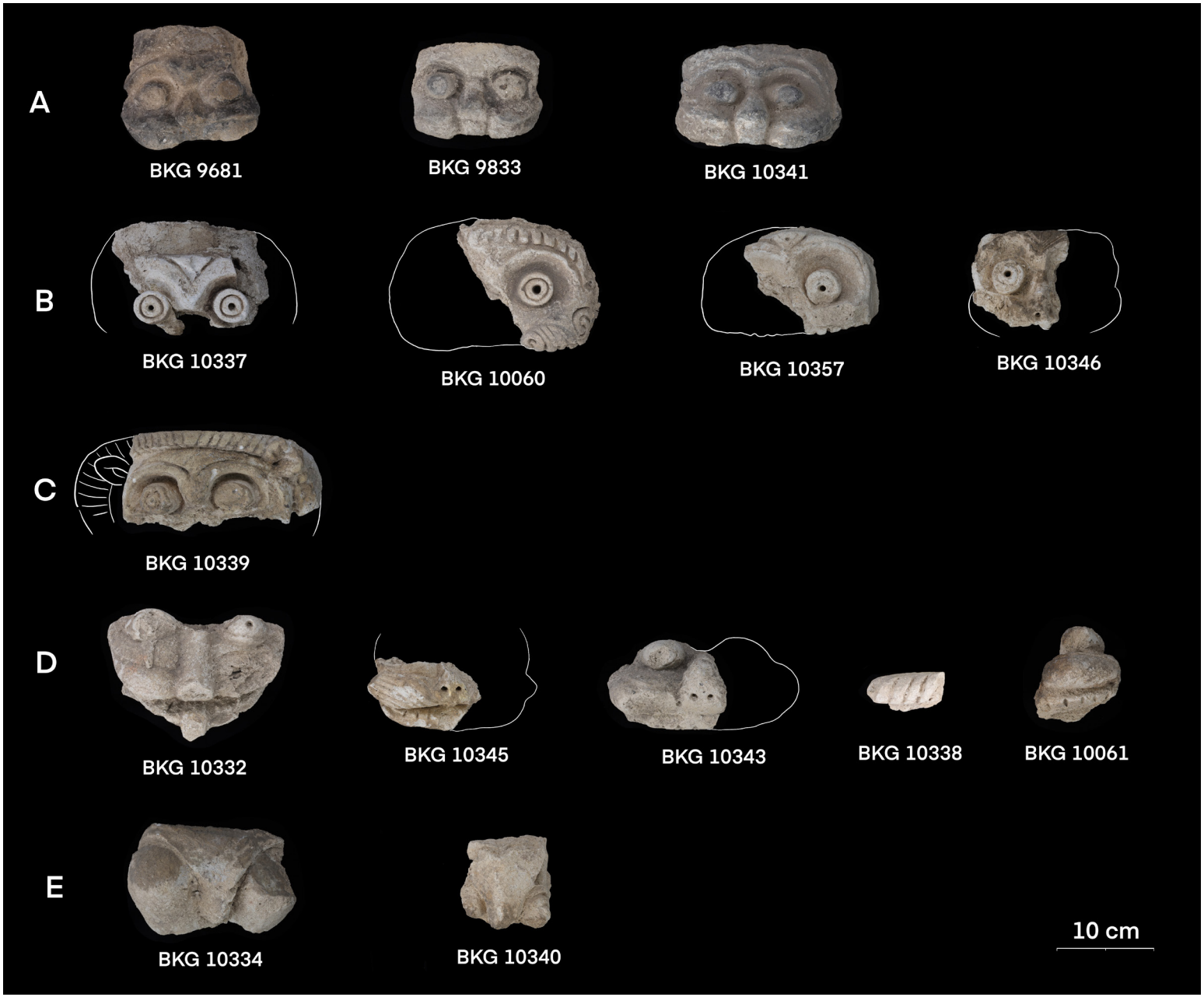


Fig. 16 - Zoomorphic masks from BKG 20 E



Fig. 17 – Elephant trunk (fragment) from BKG 20 E (10). Stucco; l. max. 8.9; w. max. 7.1 × t. max. 4.6



Fig. 18 – Similar stucco elements in two sizes



Fig. 19 – Part of a pilaster on the upper podium, BKG 9845. Kañjur and stucco; l. 21 × h. 11.5 × w. 10.5



Fig. 20 – Capital collar with phytomorphic design, BKG 9844. Kañjur and stucco; l. 16.6 × h. 8.5 × w. 14.5



Fig. 21 – The W door of the Viṣṇu temple at Deogarh, Uttar Pradesh, India. © Ismoon, 30/12/2020. Creative Commons License.

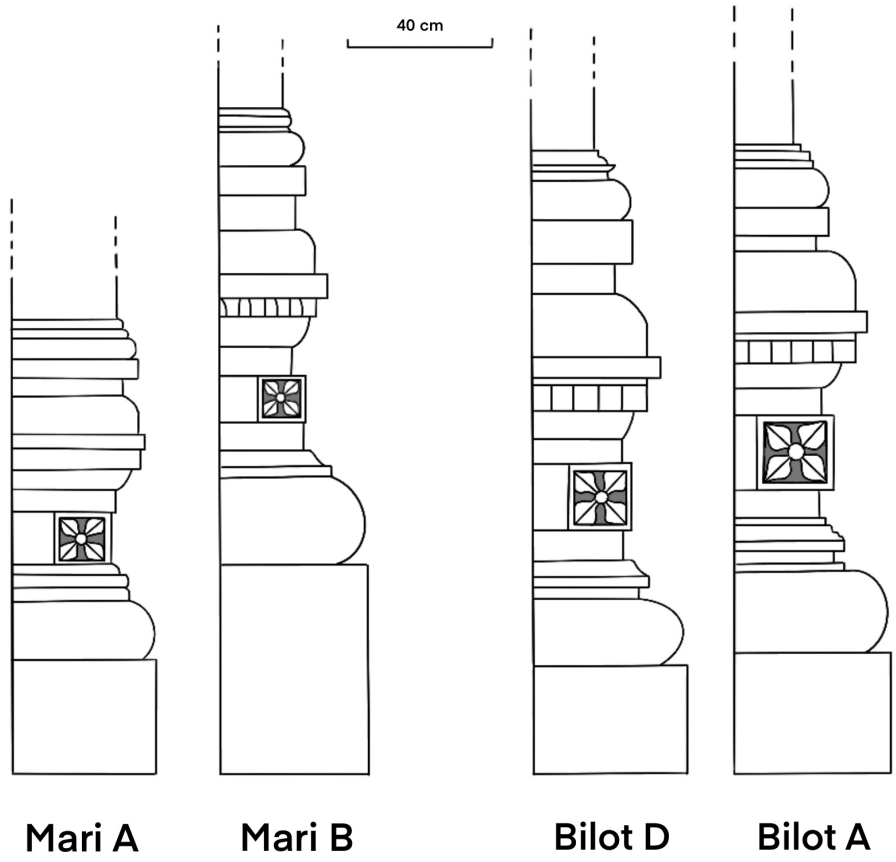
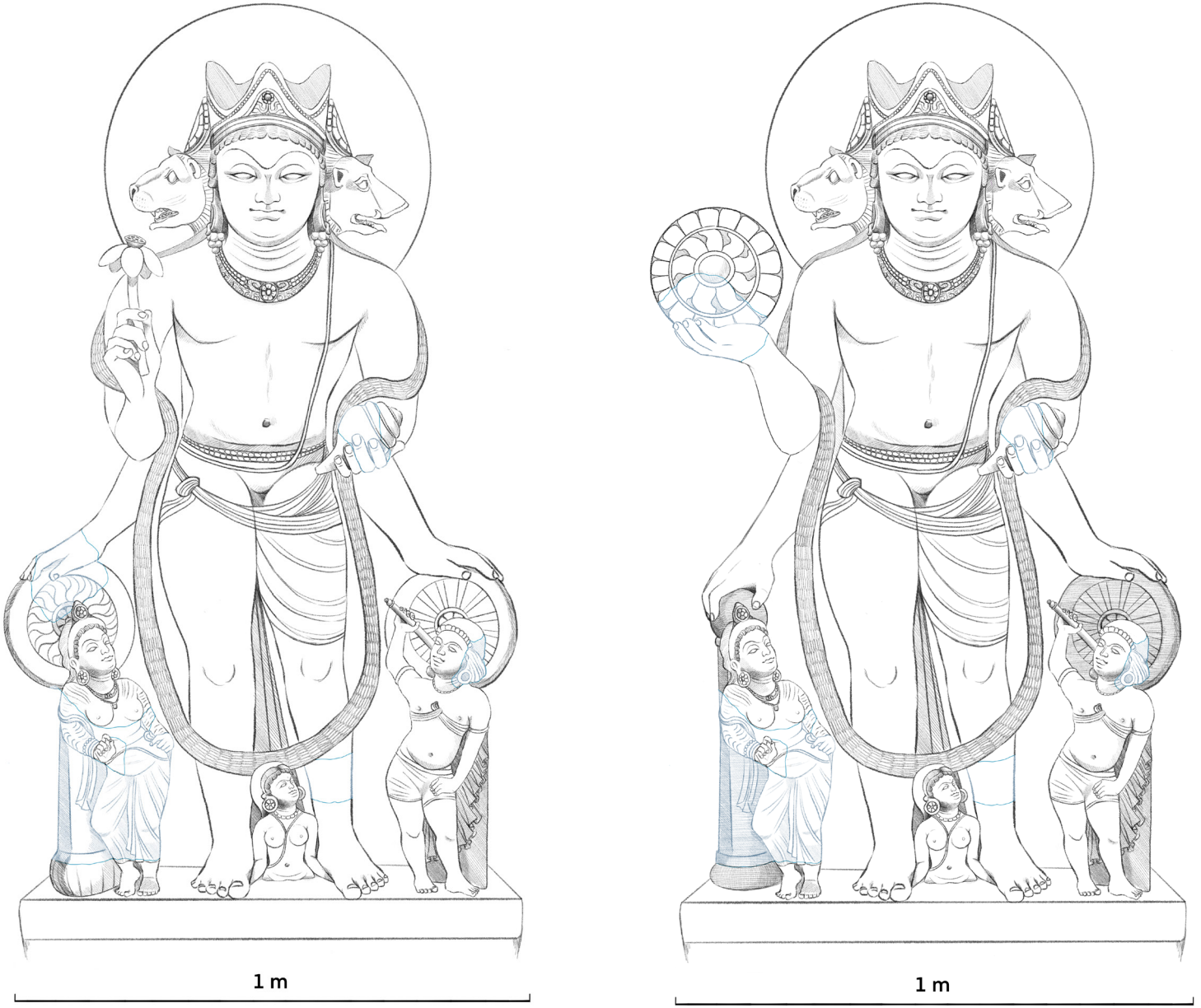


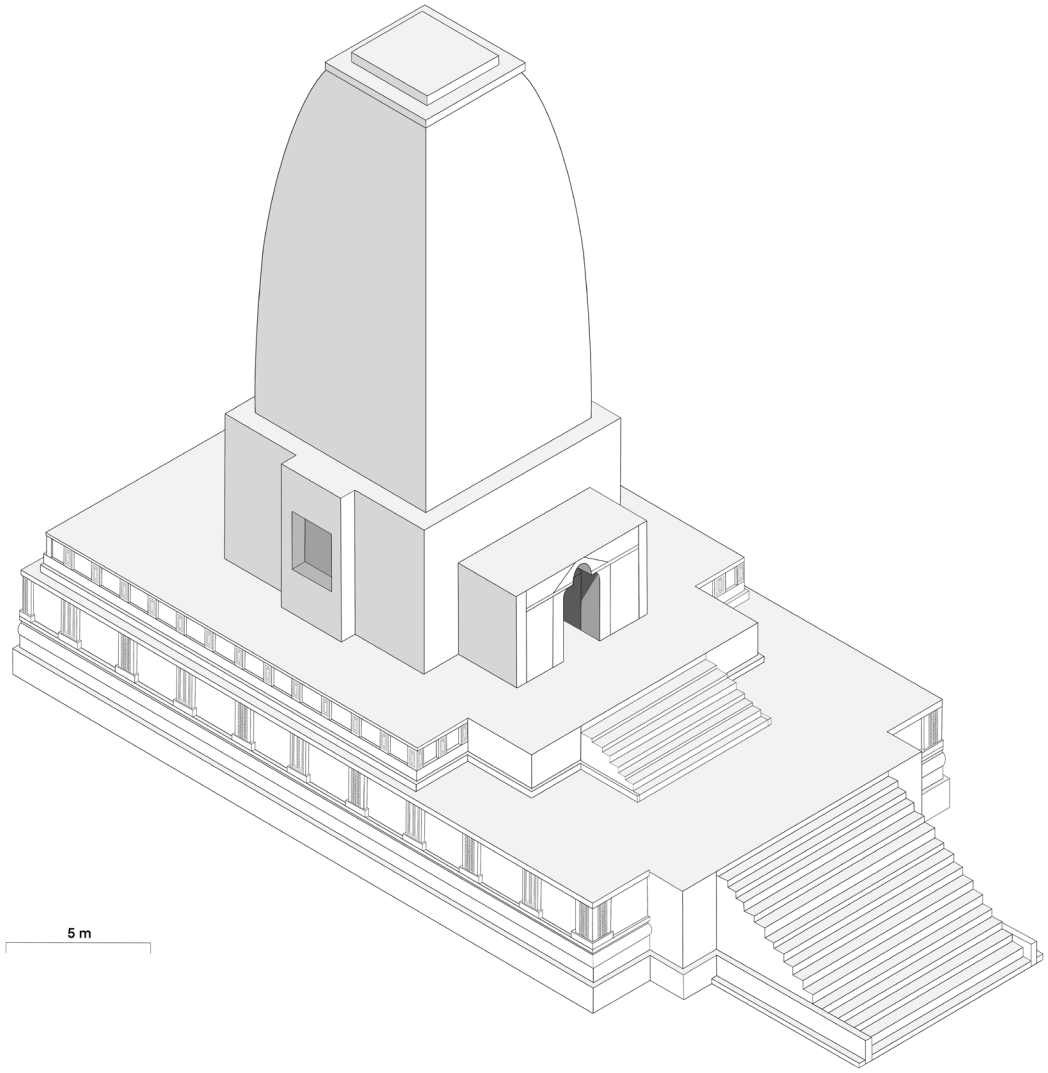
Fig. 22 – Mouldings of Salt Range Temples with the rosette element. Drawing by AC modified from Meister 2011: 45.



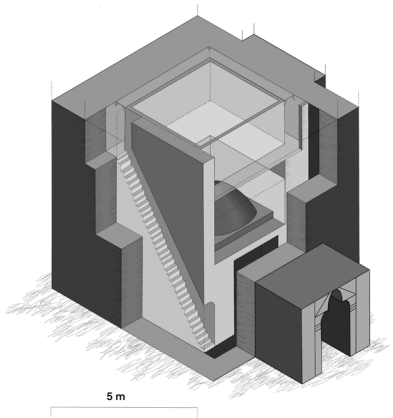
Fig. 23 – Pieces from the main sculptural group of Temple 6



[PLATE XXII – Main sculptural group of Temple 6: Viṣṇu Vaikuṇṭha/Caturānana. Two hypothetical reconstructions (drawing by AC)]



[PLATE XX – Temple 6. Reconstruction. Isometric view from SE corner (drawing by AC).]



[PLATE XXI - The temple of Gumbat. Reconstruction based on Stein's description (1921: 21-24). Exploded view (drawing by AC).]



Fig. 24 – BKG 6101



Fig. 25 – BKG 6101



Fig. 26 – BKG 6101



Fig. 27 – BKG 12019



Fig. 28 – BKG 12019



Fig. 29 – BKG 12019



Fig. 30 – BKG 12019



Fig. 31 – BKG 12019



Fig. 32 – Reused stones at Chigai-sar. After Edelberg 1957: 205



Fig. 33 – Lintel from Swat. After Scerrato, Taddei 1995: fig. 2

II.3.1 - TERRACE W (L.M. Olivieri, R. Micheli)



Fig. 1 – Macrophase 0 pit (1/4 excavated)



Fig. 2– Macrophase 3a: Defensive wall during the dig (view from E; 2024)



Fig. 3 – NW inner corner of Macrophase 3a Defensive wall.



Fig. 1 – W side of Terrace W



Fig. 2 – BKG 24.1, western side. N side of Terrace W



Fig. 3 – BKG 8, in BKG 24.1



Fig. 4 – Detail: springing point of [143]

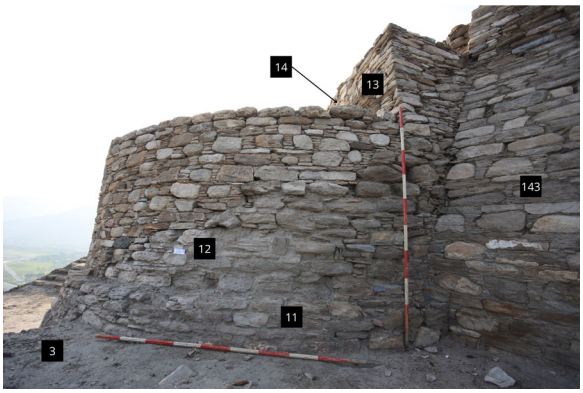


Fig. 5 – BKG 24.1, E side before excavation



Fig. 6 – Detail: [94], BKG 24.1

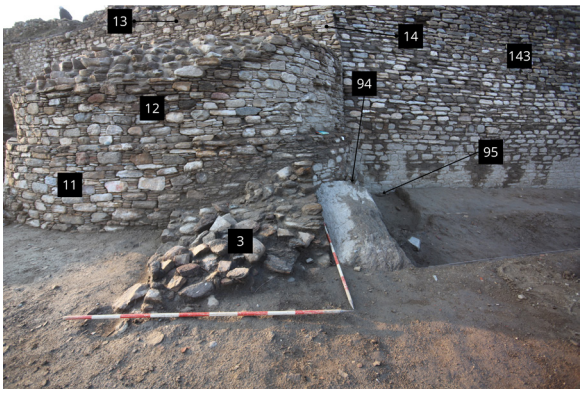


Fig. 7 – BKG 24.1, E side after excavation

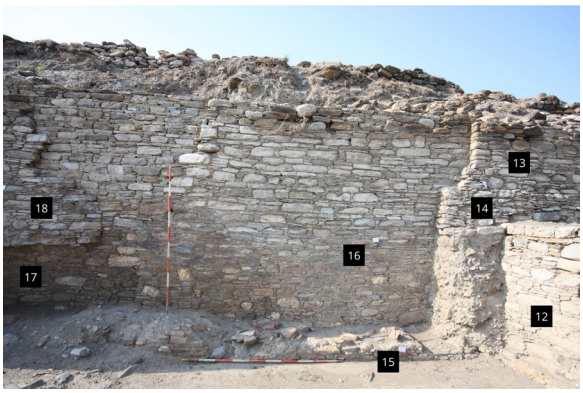


Fig. 8 – E side of Bastion I2 [12]

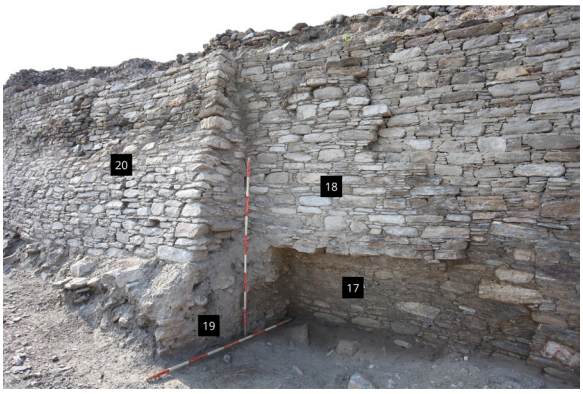


Fig. 9 – W side of Bastion H [22]



Fig. 10 – BKG 24.2, western side



Fig. 11 – Detail: upper part of BKG 24.2

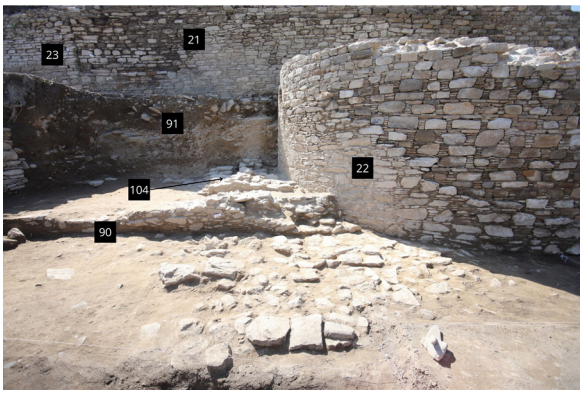


Fig. 12 – BKG 24.2



Fig. 13 – Detail: [92], BKG 24.2



Fig. 14 – Detail: E side BKG 24.2

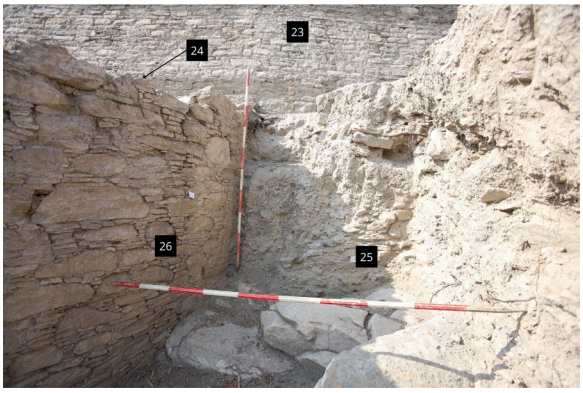


Fig. 15 – W side of Bastion G [26], BKG 24.3



Fig. 16 – BKG 24.3, W side

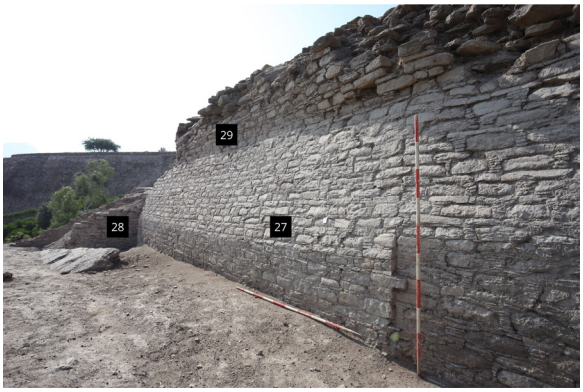


Fig. 17 – BKG 24.4, W side



Fig. 18 – N side of Bastion F [28], BKG 24.4

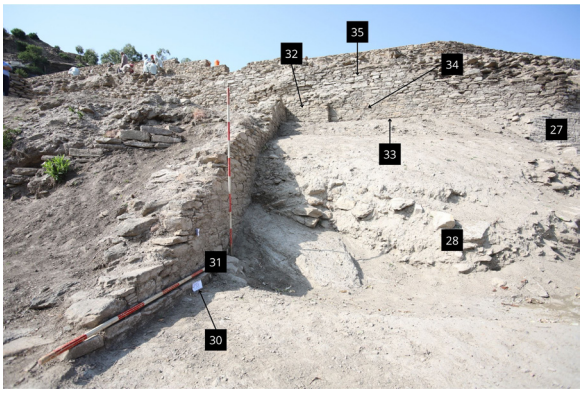


Fig. 19 – BKG 24.4, S-E side



Fig. 20 – Upper part of Bastion F [28], BKG 24.4



Fig. 21 – N side of wall [31], BKG 24.4



Fig. 22 – S side of wall [31], BKG 24.5

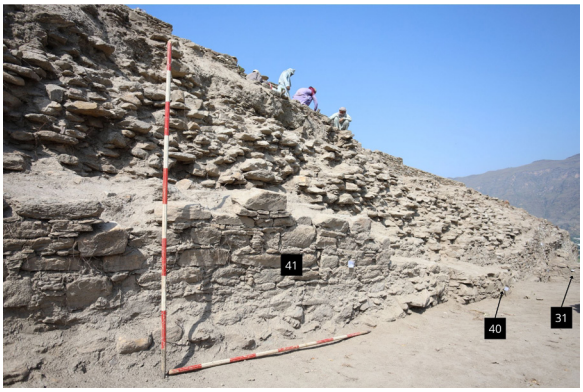


Fig. 23 – BKG 24.5, N side



Fig. 24 – BKG 24.5, central area 1



Fig. 25 – BKG 24.5, central area 2



Fig. 26 – BKG 24.5, S side



Fig. 27 – Bastion E [52], BKG 20 N, N side of Terrace E



Fig. 28 – W side of buttress [57], BKG 20 N



Fig. 29 – E side of buttress [57], BKG 20 N

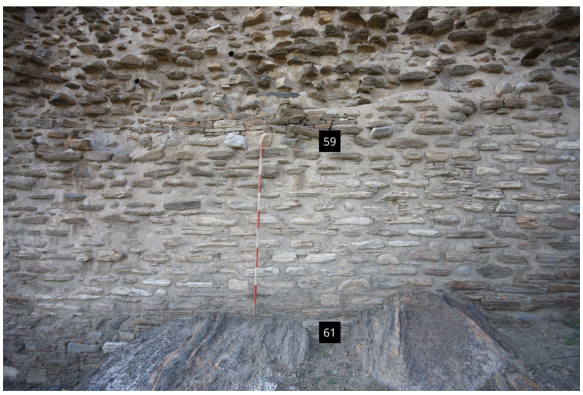


Fig. 30 – Detail: wall [59], BKG 20 N



Fig. 31 – W side of buttress [130], BKG 20 N



Fig. 35 – N side of Buttress [68], BKG 20 E



Fig. 33 – Detail: buttress [130], BKG 20 E



Fig. 34 – S side of buttress [130], BKG 20 E



Fig. 32 – E side of buttress [130], BKG 20 E



Fig. 36 – S side of Buttress [68], E wall, BKG 20 E



Fig. 37 – Bastion C [73], BKG 20 E

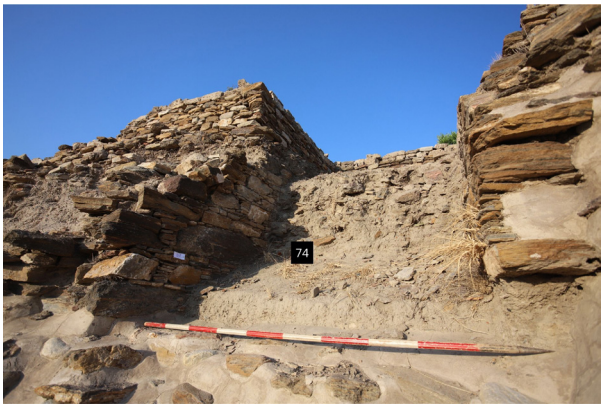


Fig. 38 – Stairway [74], BKG 20 E



Fig. 40 – S-E upper part of E side, BKG 20 E



Fig. 41 – S-E lower part of E side, BKG 20 E



Fig. 42 – Bastions in S-E upper part, BKG 20 E

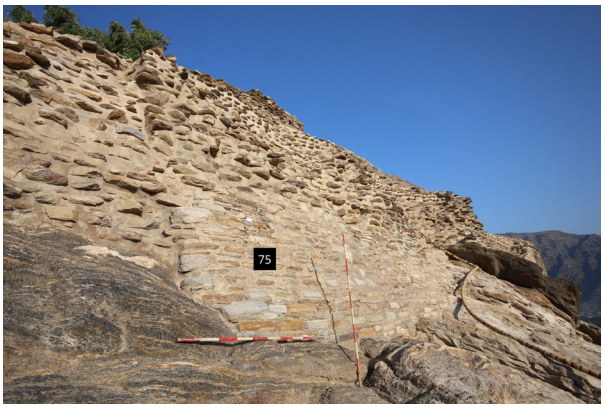


Fig. 39 – Detail: [75] of E side, BKG 20 E

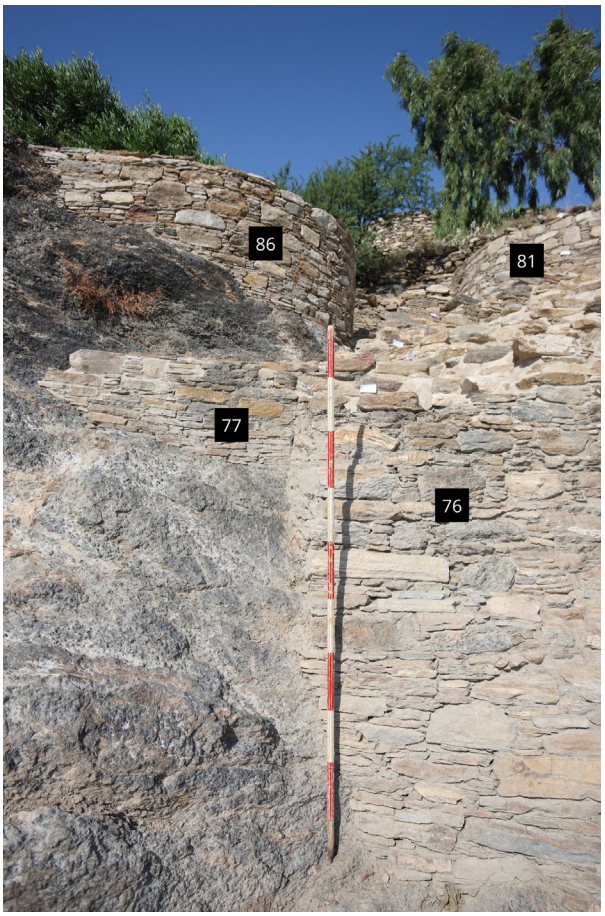


Fig. 43 – Detail: Bastions A-B [86]-[81], BKG 20 E

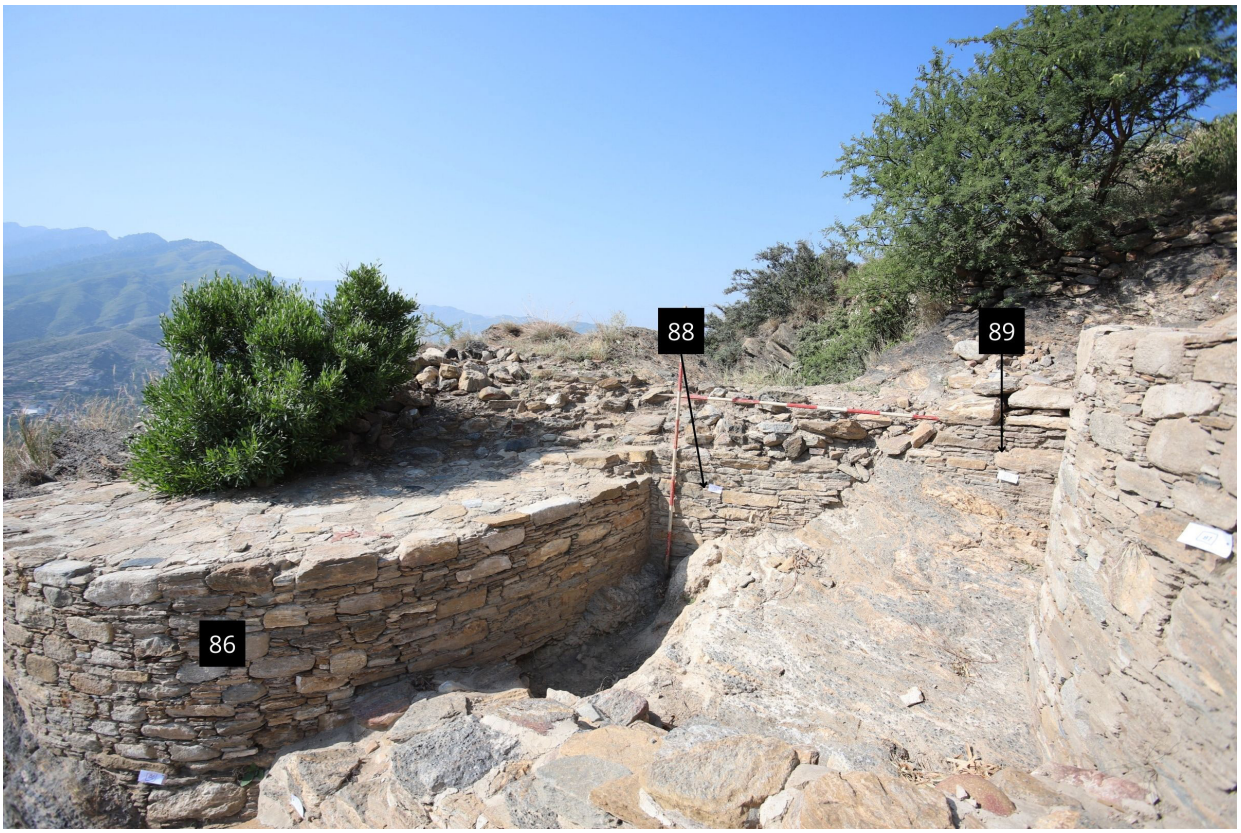


Fig. 44 – Detail: S-E upper part, 1, BKG 20 E



Fig. 45 – Detail: S-E upper part, 2, BKG 20 E

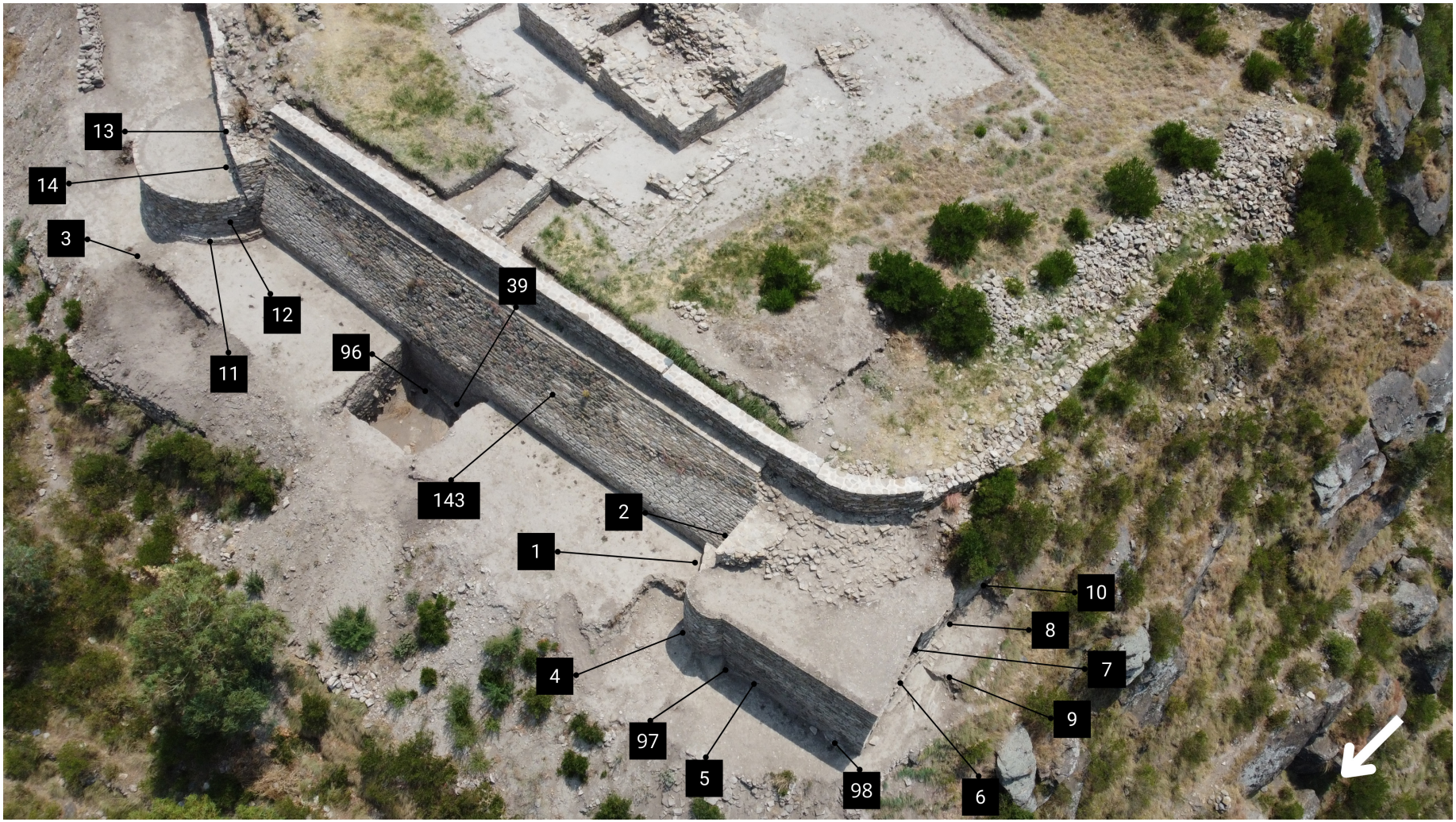


Fig. 46 – Aerial view of Terrace W (W)

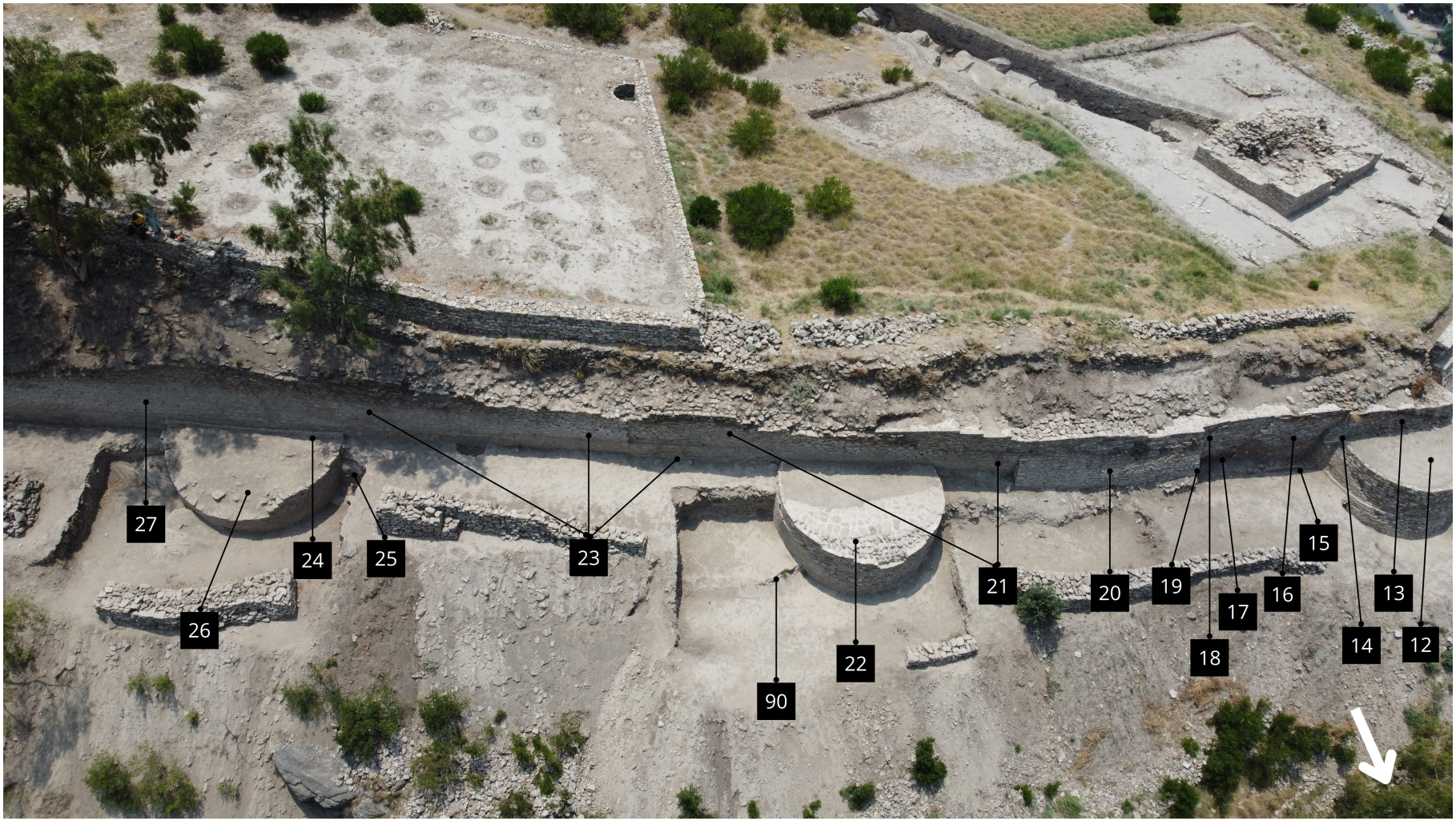


Fig. 47– Aerial view of Terrace W (C)

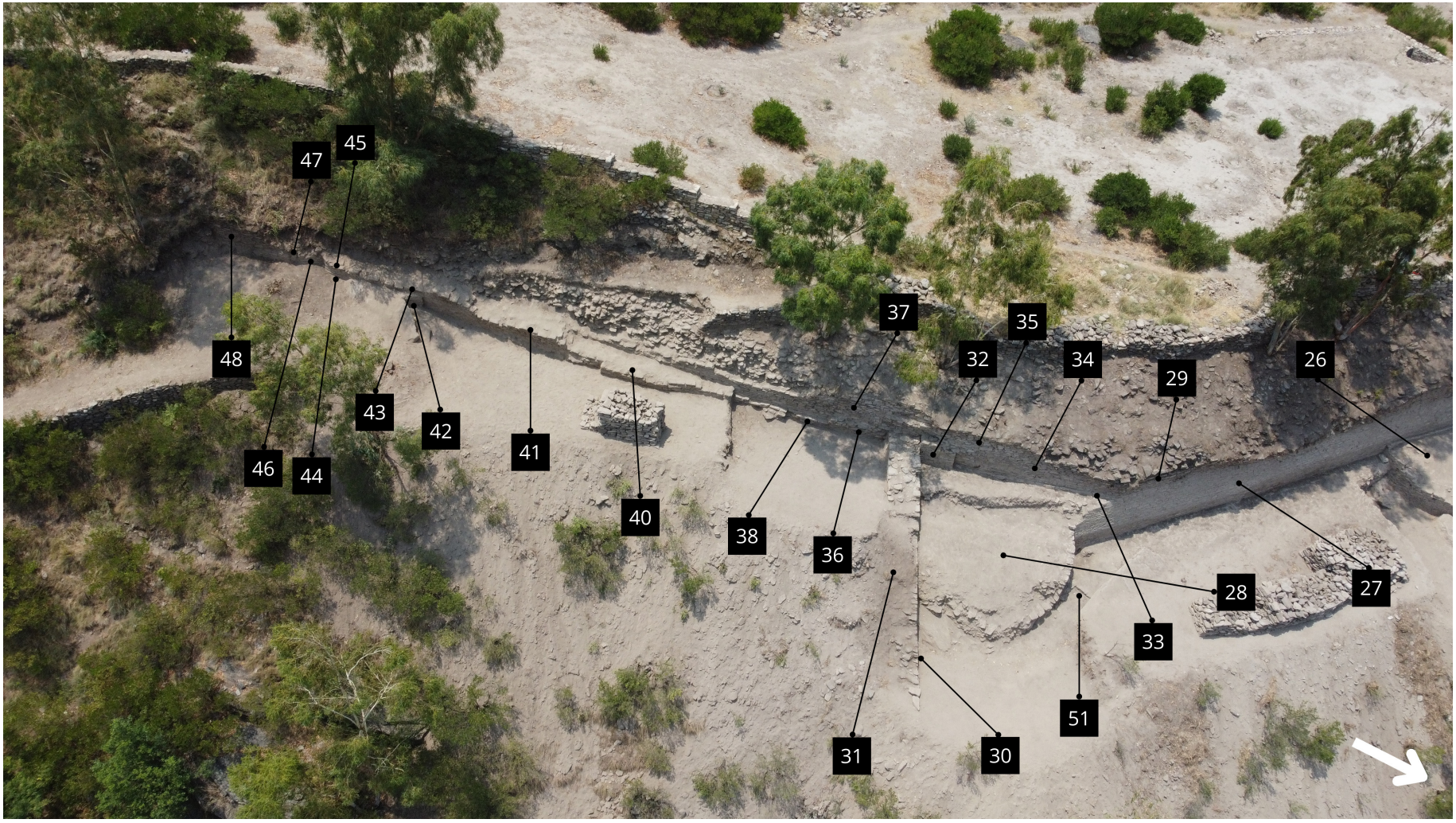


Fig. 48 – Aerial view of Terrace W (E)

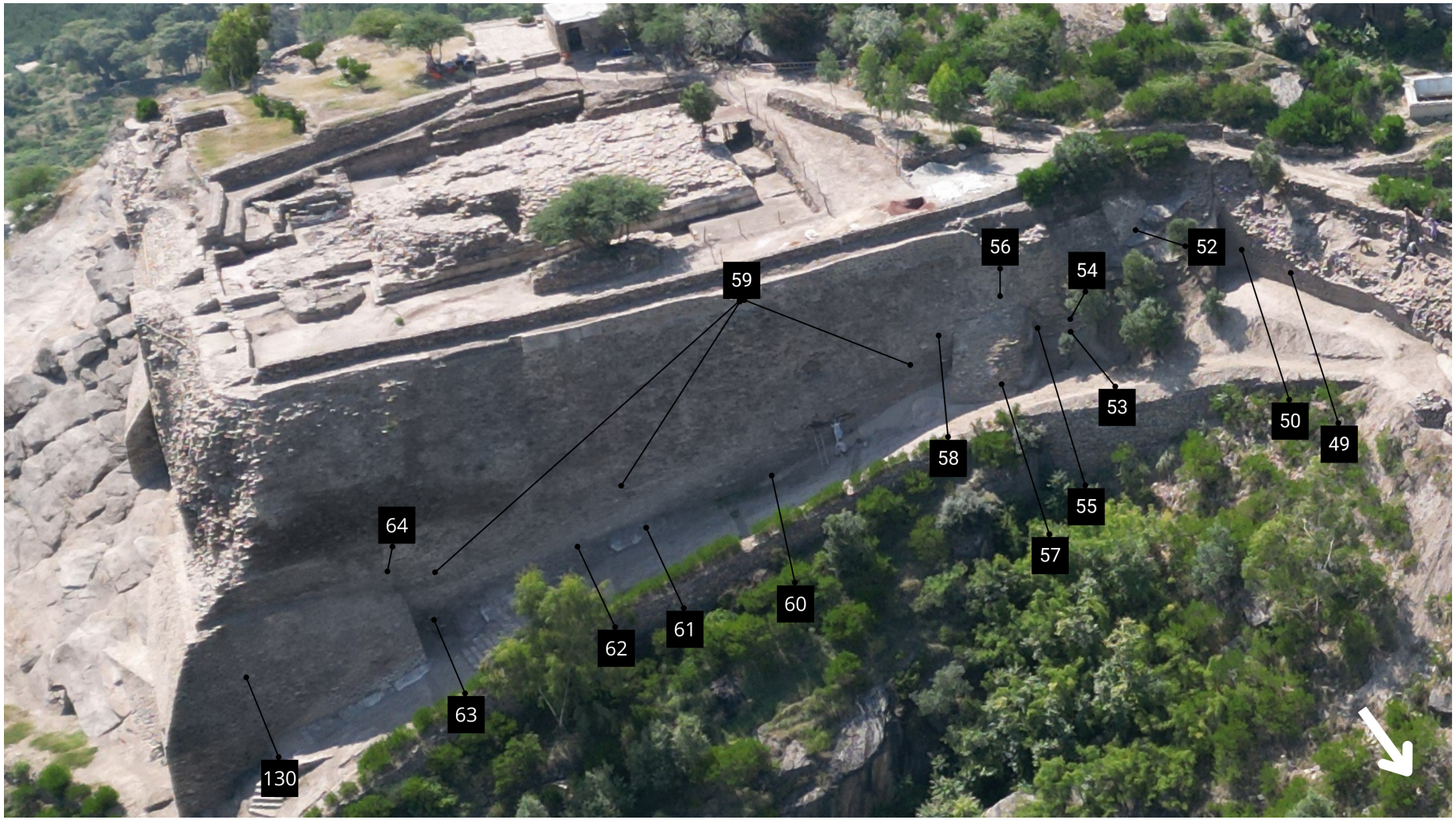


Fig. 49 – Aerial view of Terrace E (N)

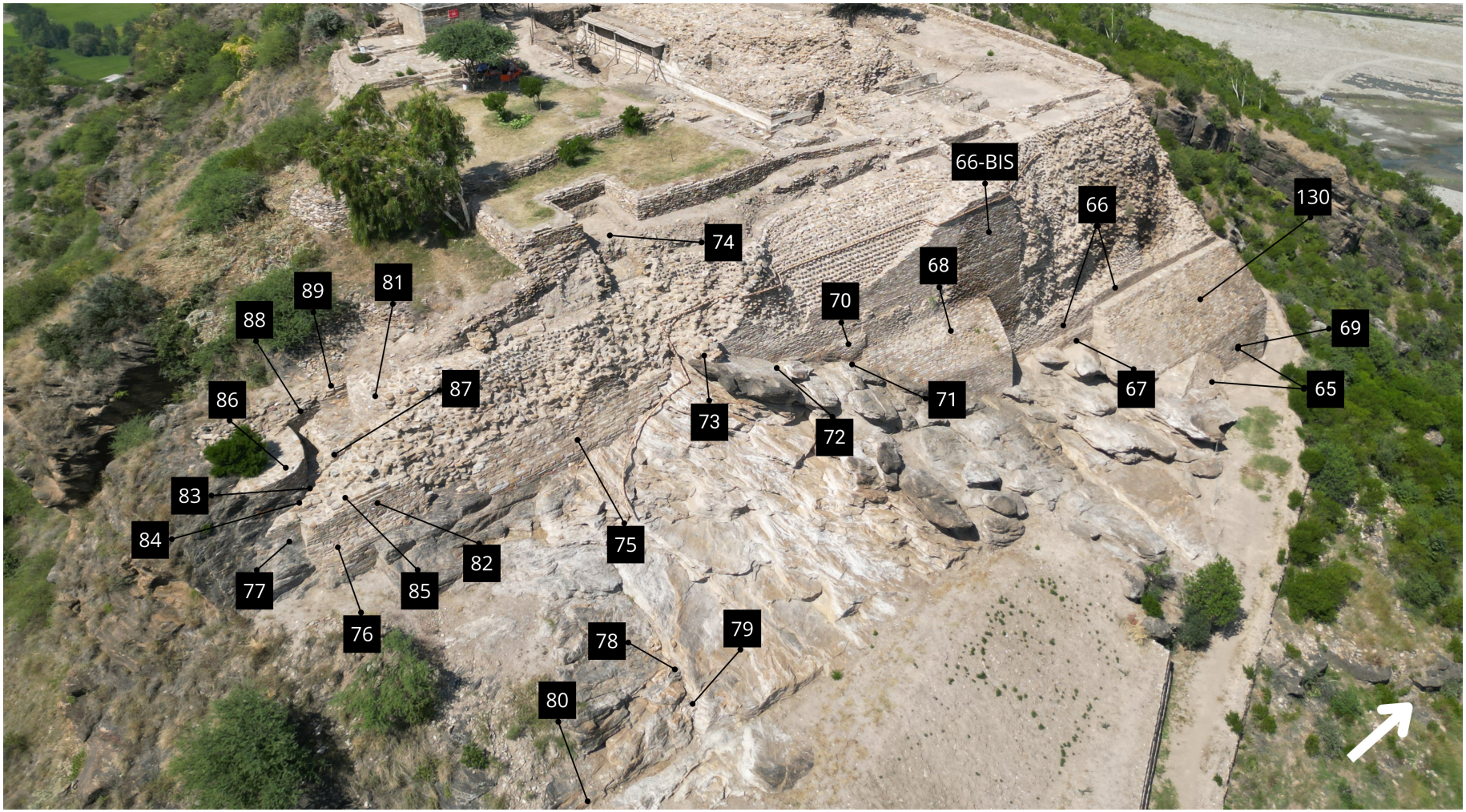


Fig. 50 – Aerial view of Terrace E (E)



Fig. 53 – Location of {2}, BKG 24 W



Fig. 54 – View from the top of {2}, BKG 24 W



Fig. 55 – Location of {3}, from N, BKG 24.1, W side



Fig. 56 – Location of {3}, from S, BKG 24.1, W side



Fig. 57 – View from the top of {3}, BKG 24.1, W side



Fig. 58 – Location of {4}, BKG 24.1, E side



Fig. 59 – View from the top of {4}, BKG 24.1, E side



Fig. 60 – Location of {5}, BKG 24.3, W side

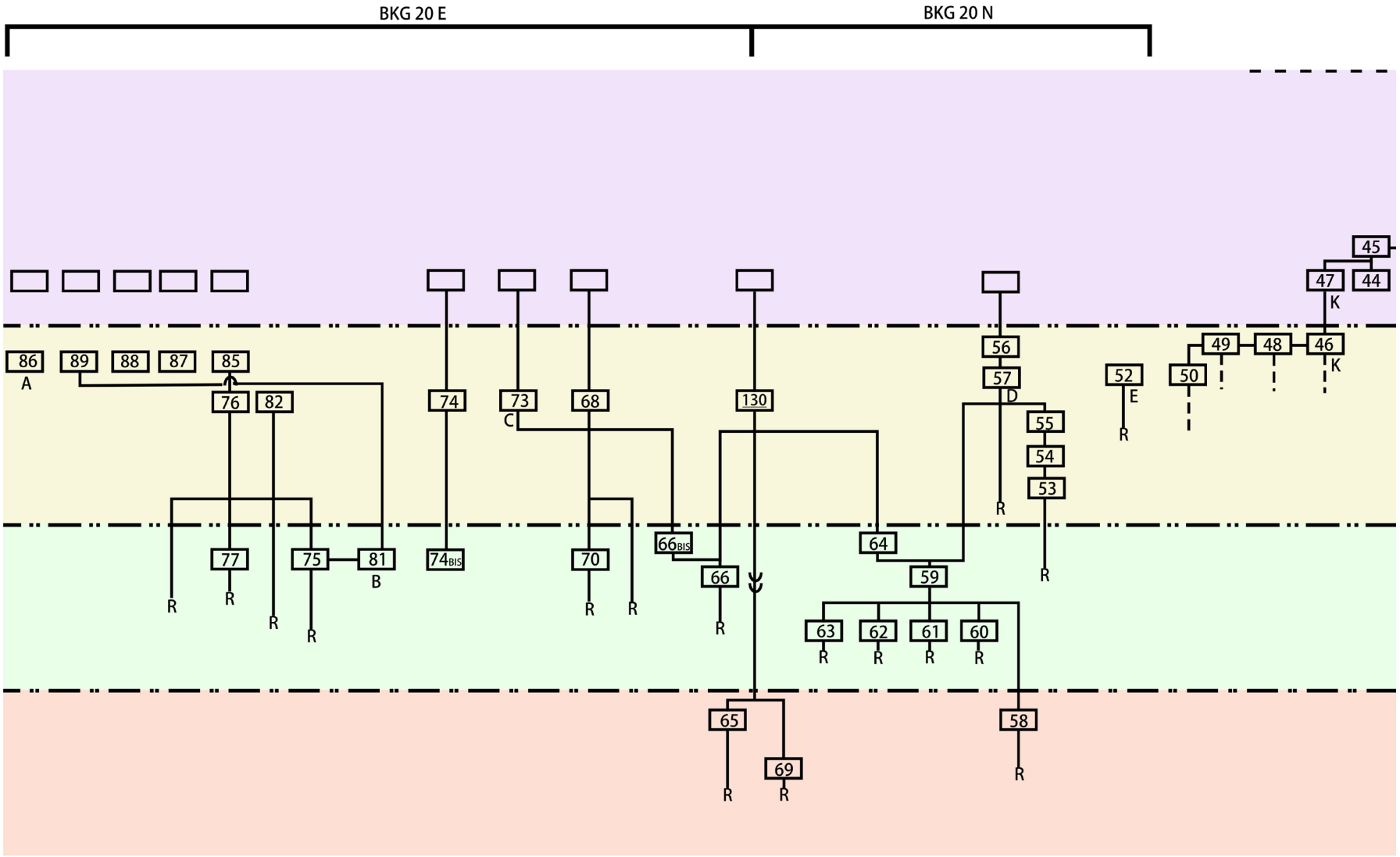


Fig. 51 – Matrix of structures on Terrace W (cf. PLATE XXV)

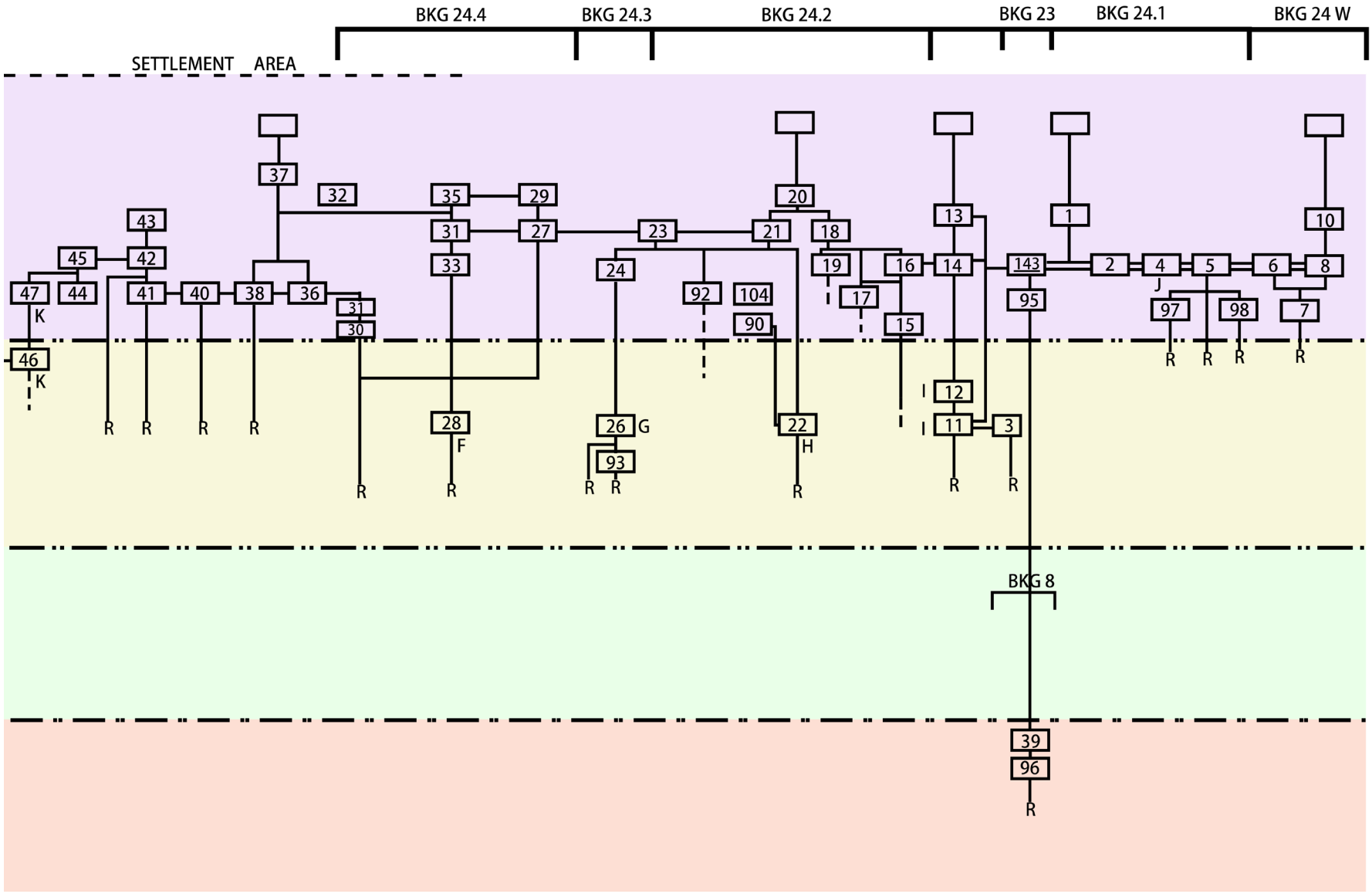


Fig. 52 – Matrix of structures on Terrace E (cf. PLATE XXV)



Fig. 61 – View from the top of {5}, BKG 24.3, W side



Fig. 62 – Location of {6}-{7}-{8}, BKG 24.3, central area



Fig. 63 – View from the top of {6}, bottom of boulder, BKG 24.3, central area



Fig. 64 – View from the top of {7}, BKG 24.3, central area



Fig. 65 – View from the top of {8}, top of boulder, BKG 24.3, central area



Fig. 66 – Location of {9}-{10}-{11}-{12}, BKG 24.3, E side



Fig. 67 – View from the top of {9}, BKG 24.3, E side



Fig. 68 – View from the top of {10}, BKG 24.3, E side



Fig. 69 – Frontal view of {11}, BKG 24.3, E side



Fig. 70 – View from the top of {12}, beside {10}, BKG 24.3, E side



Fig. 71 – Frontal view of {12}, bottom of boulder, BKG 24.3, E side



Fig. 72 – Location of {13.1}, BKG 24.4, N side Bastion F [28]



Fig. 73 – View from the top of {13.1}, BKG 24.4, N side Bastion F [28]



Fig. 74 – Location of {13.2}, BKG 24.4, Bastion F [28] (Aerial view)



Fig. 75 – View from the top of {13.2}, BKG 24.4, Bastion F [28]



Fig. 76 – Location of {14}, BKG 24.5, central area



Fig. 77 – View from the top of {14}, BKG 24.5, central area



Fig. 78 – Aerial view of the boulder on which {15} is



Fig. 79 – View from the top of {15}, BKG 20 E, Terrace E



Fig. 80 – Aerial view of the boulder on which {15} and {16} rest



Fig. 81 – View from the top of {16}, BKG 20 E, Terrace E



Fig. 82 – Aerial view of the boulder on which {17} rests



Fig. 83 – View from the top of {17}, BKG 20 E, Terrace E



Fig. 84 – Aerial view of the boulder on which {18} rests



Fig. 85 – View from the top of {18}, BKG 20 E, Terrace E



Fig. 86 – Location of {19}, BKG 20 E. Bottom of Terrace E.



Fig. 87 – Detail: little-size cup-mark of {19}, BKG 20 E, Terrace E



Fig. 88 – Aerial view of the boulder on which {20} rests



Fig. 89 – View from the top of {20}, BKG 20 E, Terrace E



Fig. 90 – Aerial view of the boulder on which {21} rests



Fig. 91 – View from the top of {21}, BKG 20 E, Terrace E



Fig. 92 – Aerial view of the boulder on which {22} rests



Fig. 93 – View from the top of {22}, BKG 20 E, Terrace E



Fig. 94 – Aerial view of the boulder on which {23} rests



Fig. 95 – View from the top of {23}, BKG 20 E, Terrace E



Fig. 96 – View from the top of {24}, BKG 20 E, Terrace E



Fig. 100 – Location of {25}, on a boulder inside BKG 9, Terrace W



Fig. 101 – Detail: two little cup-marks, BKG 9, Terrace W

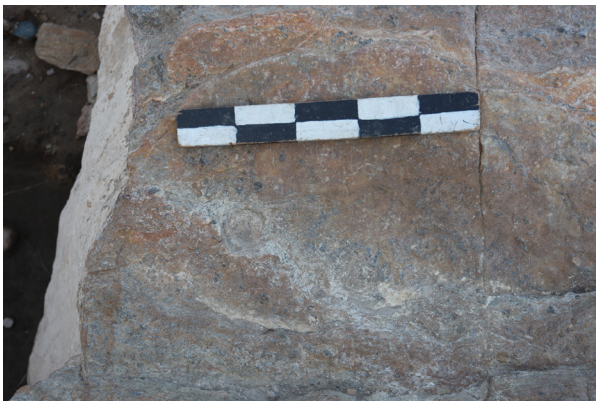


Fig. 102 – Detail: single little cup-mark, BKG 9, Terrace W



Fig. 97 – Location of {174.2}, inside Terrace W



Fig. 98 – View from the top of {174.2}, Terrace W



Fig. 99 – View from N of {174.2}, Terrace W

II.3.3 - TRENCH BKG 24.1 (M. Minardi, M. Prota)



Fig. 1 – General view of Terrace W. In the foreground BKG 24.1 after the clearance of the topsoil.



Fig. 2 – The clearance of the army trench at the bottom of the slope of BKG 24.1



Fig. 3 – General view from NNE of BKG 24.1 and BKG 23, separated by the enclosure wall 143, at the end of the archaeological works at BKG 24.1



Fig. 4 – Tombs T 298 and T 299 viewed from the south of (Phase 0)



Fig. 5 – BKG 11854



Fig. 6 – Tomb T 244/S 247 (Phase 2)



Fig. 7 – Tomb T 92/S 206 during excavation (detail of the 3D model); to note the animal bones placed behind the head (Phase 3)



Fig. 8 – Funerary items associated with skeleton S211 (Phase 3; inv. no. BKG 11632)



Fig. 9 – Skeleton S 242 during excavation (Phase 4); note the animal tooth posed on a stone above the sternum, and a second animal bone close to the head tilted toward the east.



Fig. 10 – Skeleton S 47 (Phase 6b) viewed with the still unopened Tomb T23 (S49) and S 48 of Phase 6. Wall [143] is in the foreground.



Fig. 11 – BKG 11505



Fig. 12 – BKG 12002



Fig. 13 – BKG 11945

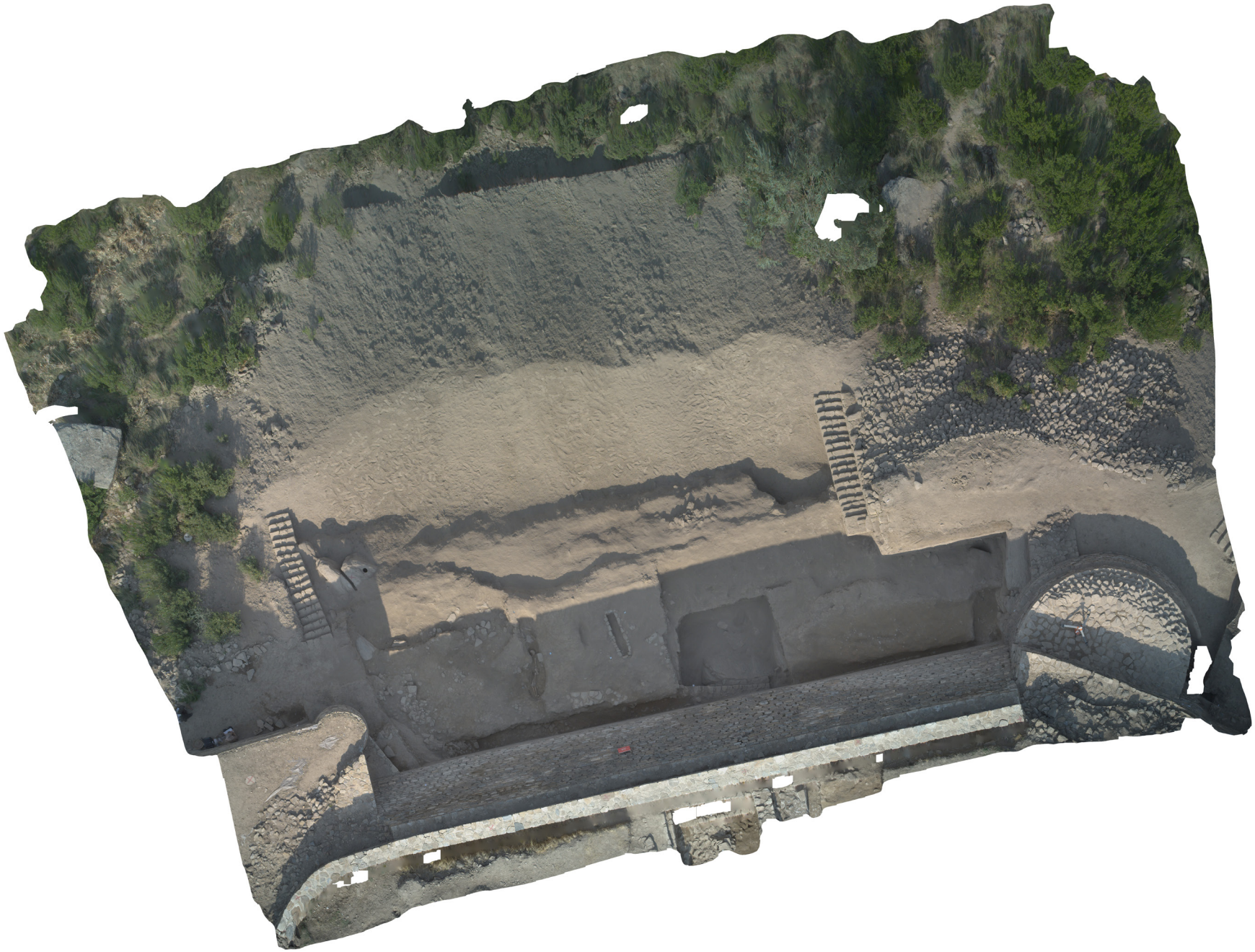


Fig. 14 – BKG 24.1: photomosaic 20 October 2024 (MM)



Fig. 15 – BKG 24.1: photomosaic 22 October 2024 (MM) [N to the top].



Fig. 16 – BKG 24.1: photomosaic 27 October 2024 (MM) [N to the top].



Fig. 17 – BKG 24.1: photomosaic 30 October 2024 (MM) [N to the top].

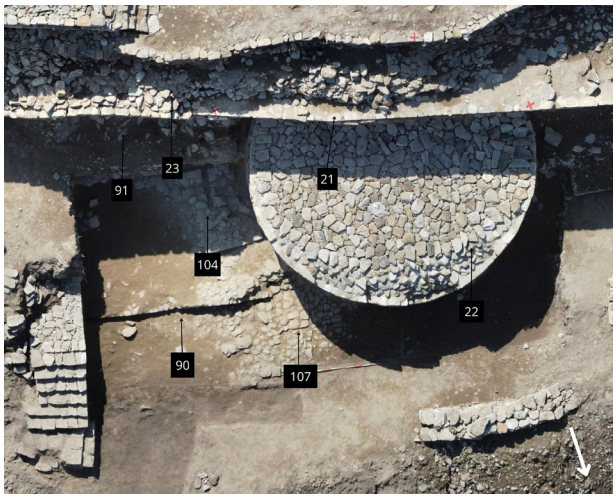


Fig. 1 – Trench BKG 24.2 at the beginning of excavation

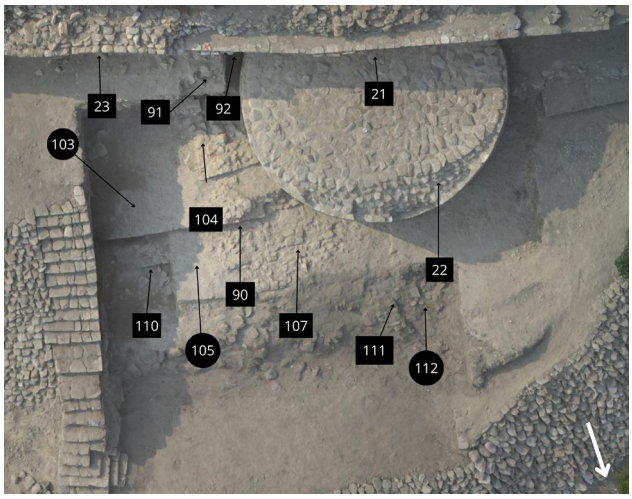


Fig. 2 – Trench BKG 24.2 at the end of excavation

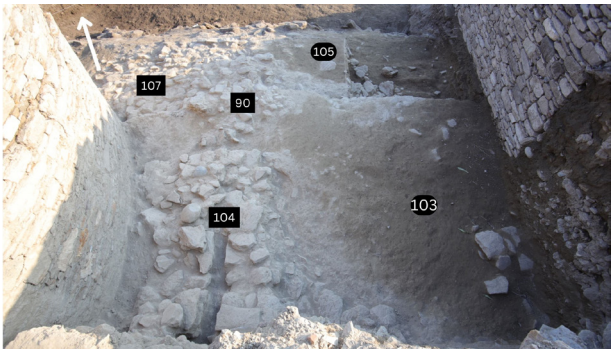


Fig. 3 – Trench BKG 24.2: the drain [104] and related structures

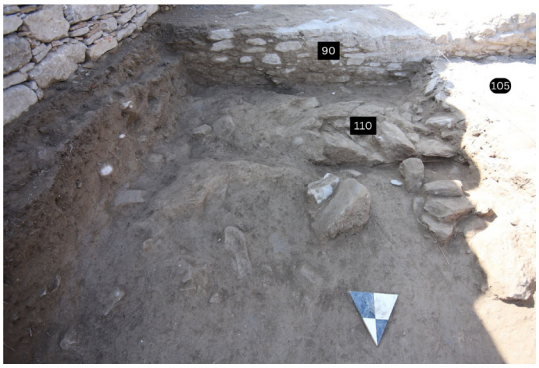


Fig. 4 – Trench BKG 24.2: the wall strand [110]



Fig. 5 – Trench BKG 24.2: settled collapse [111]



Fig. 6 – Trench BKG 24.3 at the beginning of excavation



Fig. 7 – Trench BKG 24.4 at the beginning of excavation



Fig. 8 – Trench BKG 24.3: collapse [115]



Fig. 9 – Trench BKG 24.3: wall [93]



Fig. 10 – Trench BKG 24.3: depression (124)



Fig. 11 – Trench BKG 24.4: layer (126)



Fig. 12 – Trench BKG 24.4: grave [127]



Fig. 13 – Grave T 127

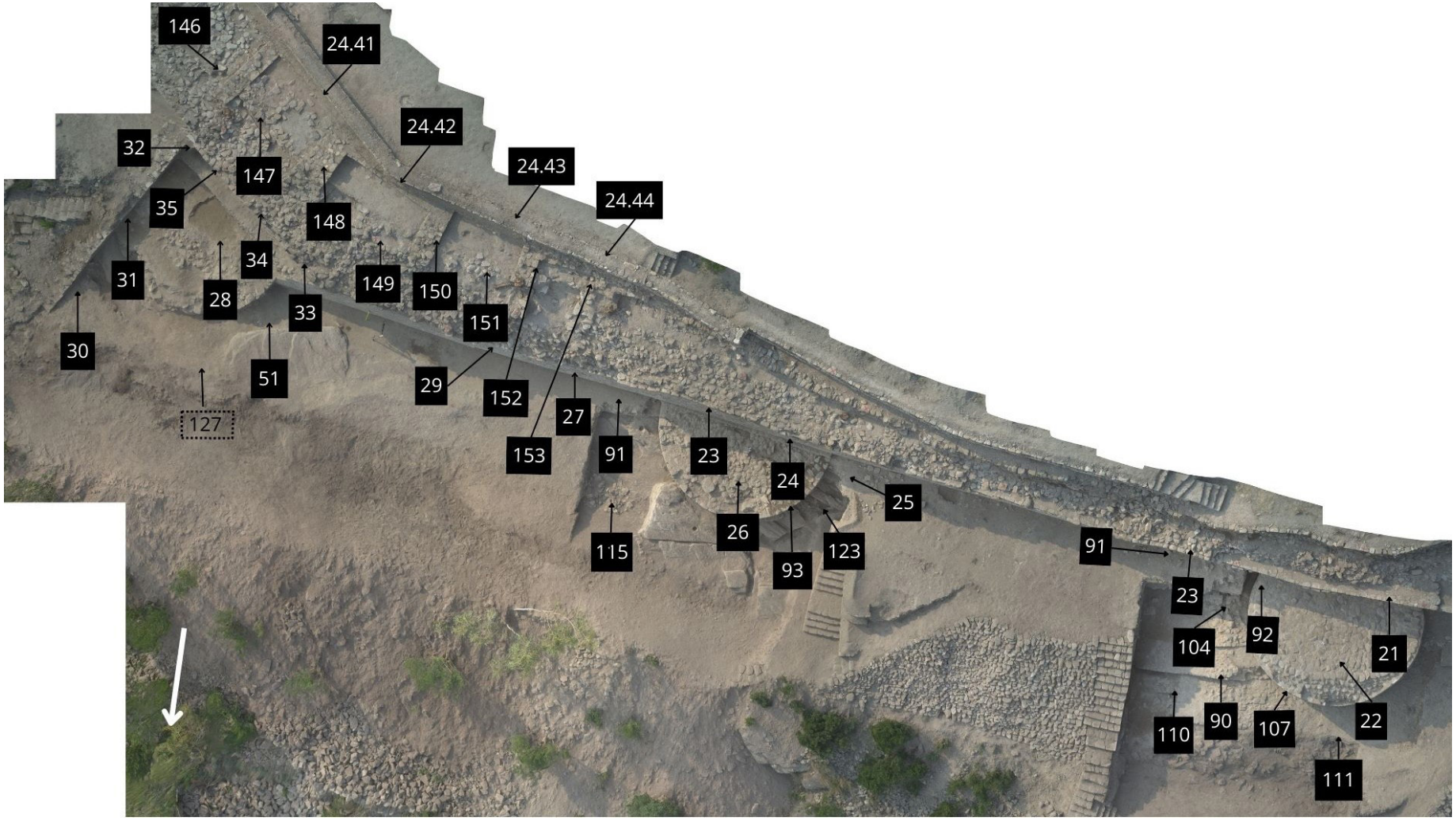


Fig. 14 – Trenches BKG 24.3 – 24.4: final phases of the dig; the end of excavation (with loci BKG 24.41, 24.42, 24.43, 24.44) [N to the bottom].

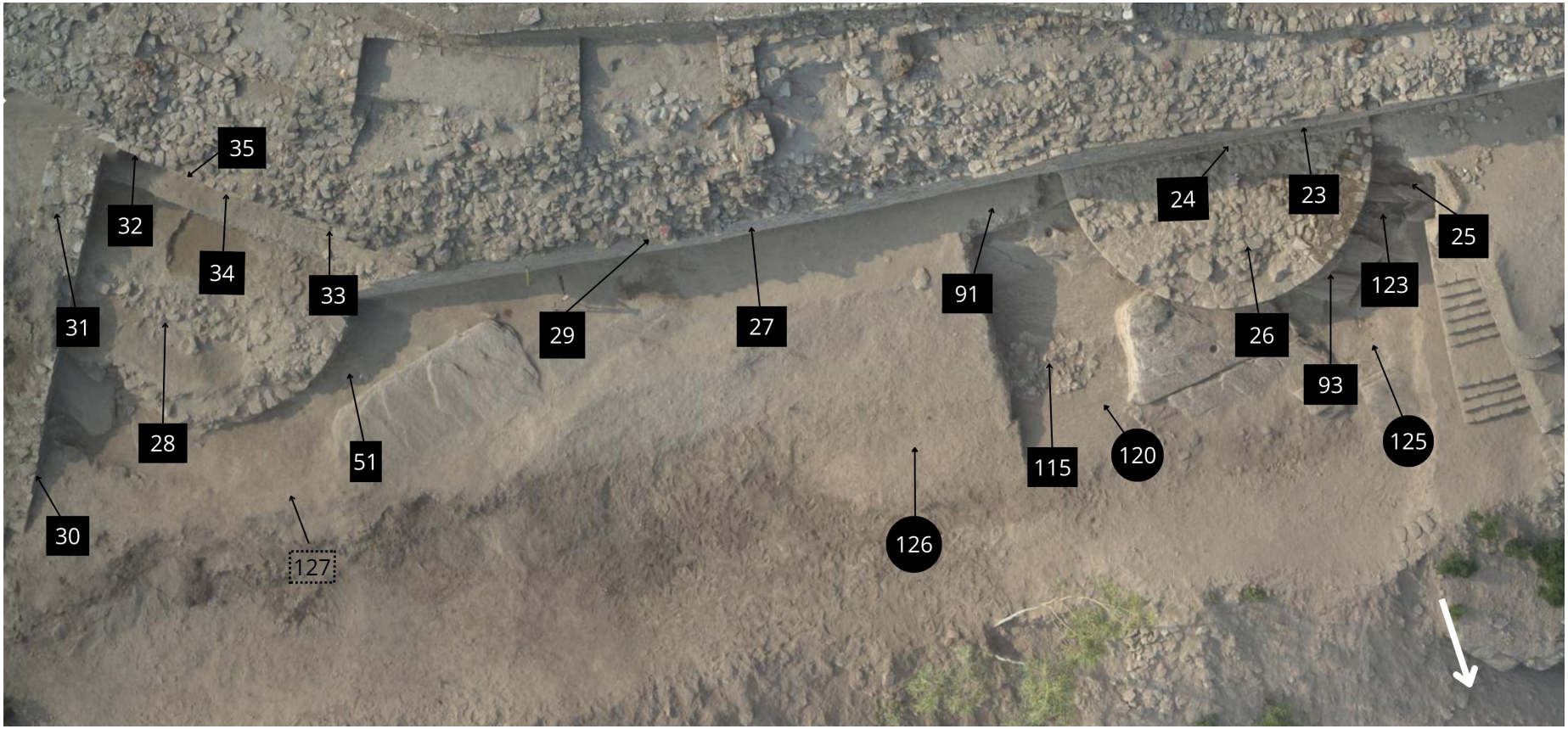


Fig. 15 – Trenches BKG 24.3-24.4 the end of excavation [N to the bottom]

II.3.5 - TRENCH BKG 24.5 (Nasir Muhmood, Kaisar Rahman)



Fig. 1 – TT 24.5



Fig. 2 – Layer (1) and collapse (2)



Fig. 3 – Drain [8]





Fig. 4 – Wall [161] (after Olivieri 2003a: pl. XXIII)



Fig. 5 – Pit 3 in layer (5)



Fig. 6 – The two boulders



Figs 7 – Final situation in TT 24.5



Figs 8 – Final situation in TT 24.5

II.3.6 - TRENCH BKG 23 (Li Hong)



Fig. 1 – BKG 23 N before Excavation



Fig. 3 – The substruction of wall 143



Fig. 4 – TT 235, Period 1

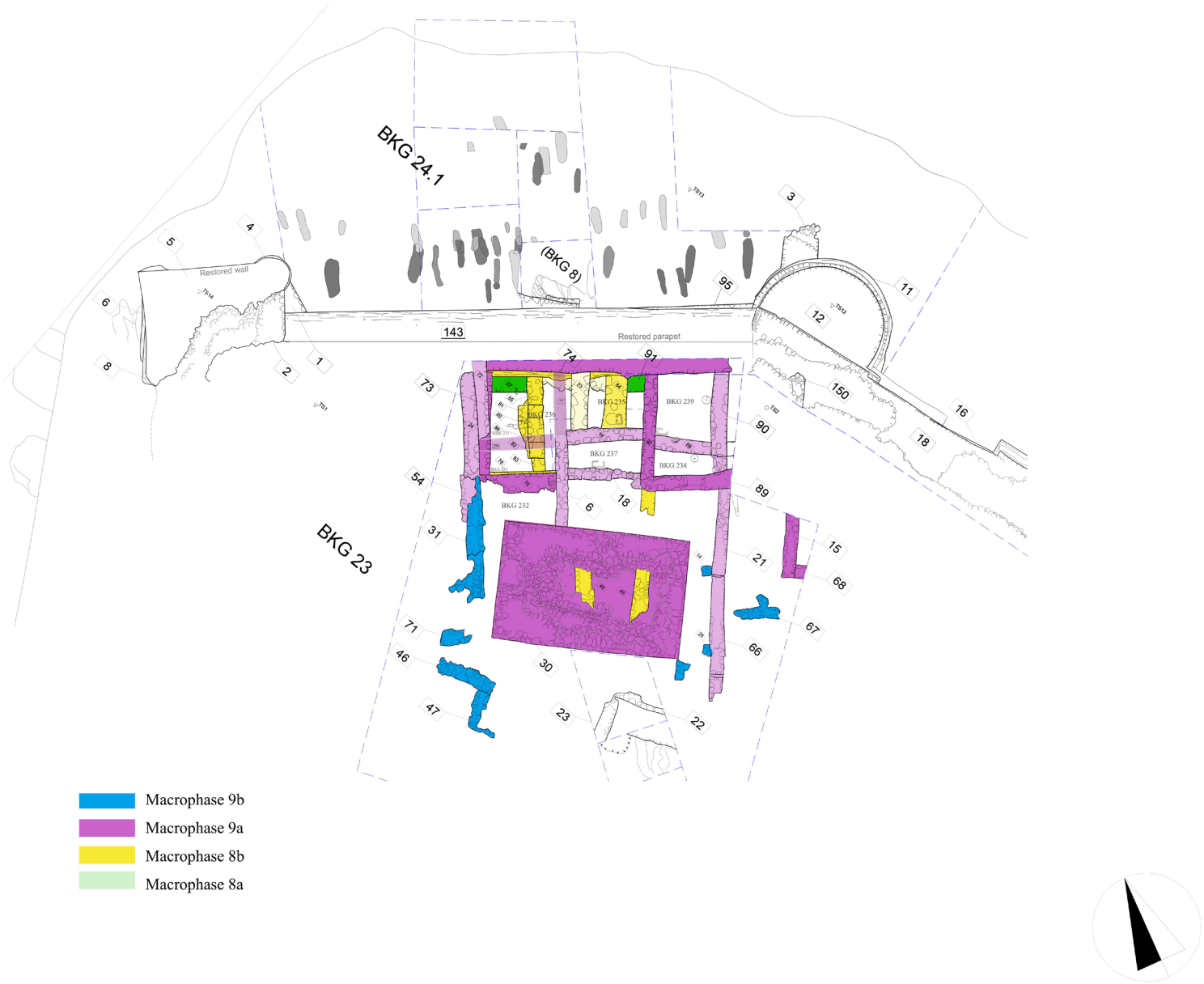


Fig. 2 – BKG 23 N structural plan. Drawing by MM.

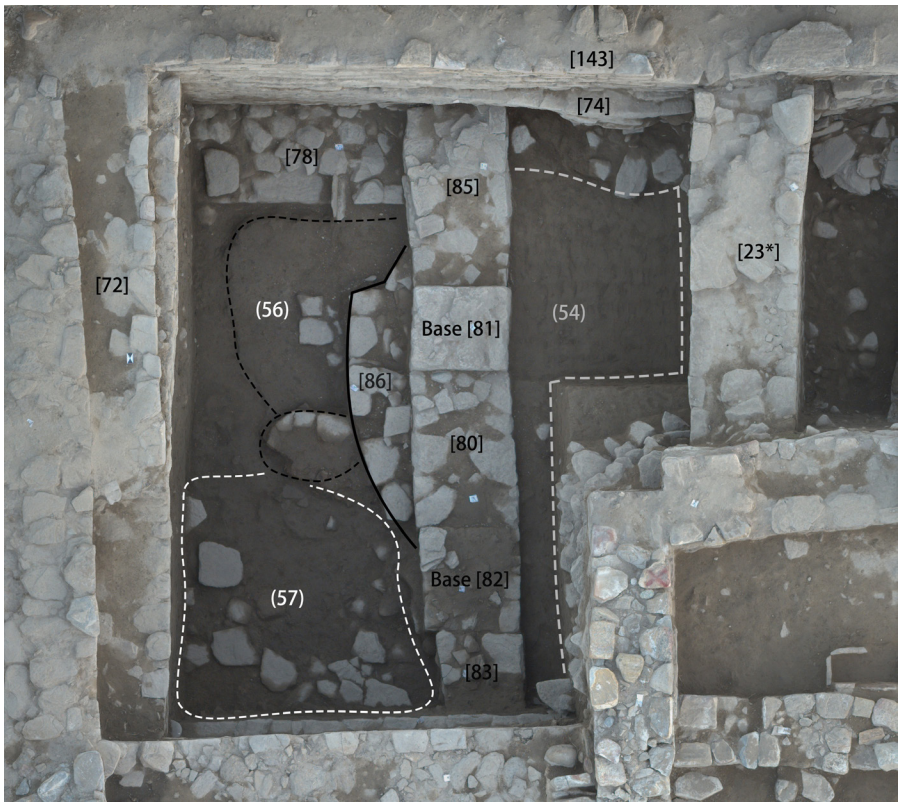


Fig. 5 – BKG 236, Period 3

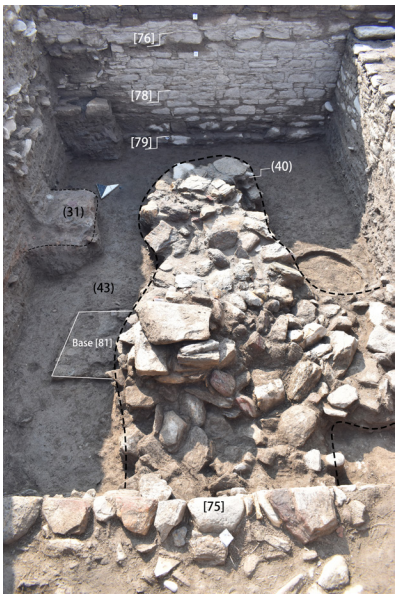


Fig. 6 – BKG 236, Period 5, Stone collapse

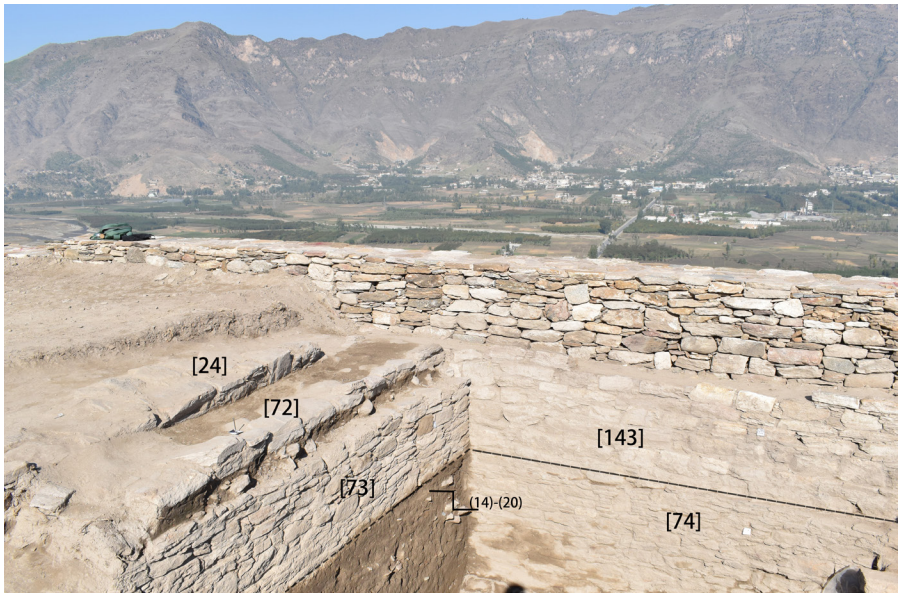


Fig. 7 – BKG 236, Period 7 (walls of Period 7-8)



Fig. 8 – BKG 231 E, the base of wooden pillar



Fig. 9 – BKG 235, Period 6

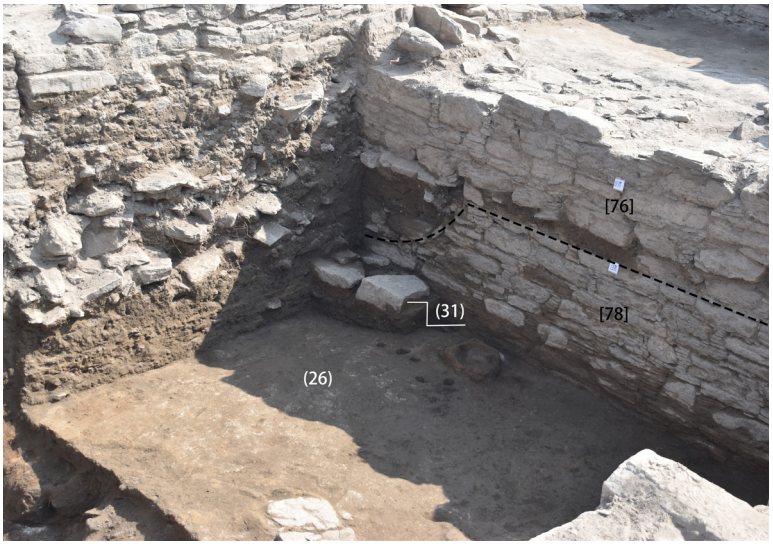


Fig. 10 – BKG 236, Period 7, the doorway of Room BKG 236



Fig. 11 – BKG 235, Period 8



Fig. 12 – BKG 23, Period 9, Platform [30]

Chapter III

MATERIAL CULTURE



Fig. 1 – BKG 4960



Fig. 2 – BKG 5107



Fig. 3 – BKG 5141



Fig. 4 – BKG 5143



Fig. 5 – BKG 5144



Fig. 6 – BKG 5145



Fig. 7 – BKG 5146



Fig. 8 – BKG 5147



Fig. 9 – BKG 5255.

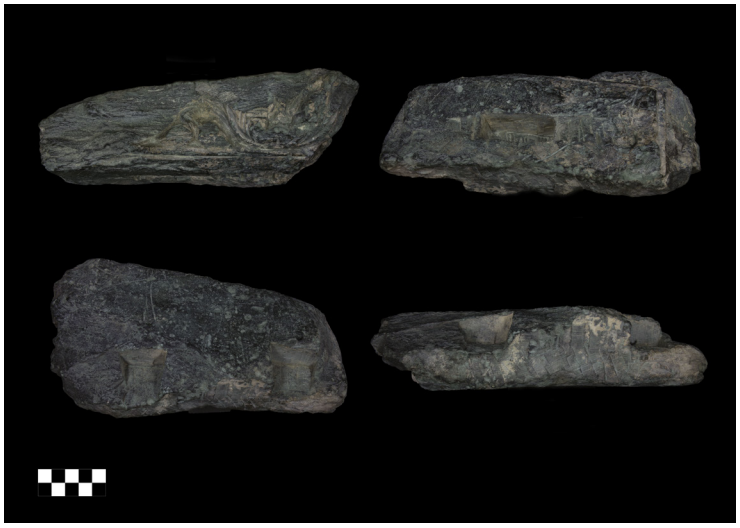


Fig. 10 – BKG 5386

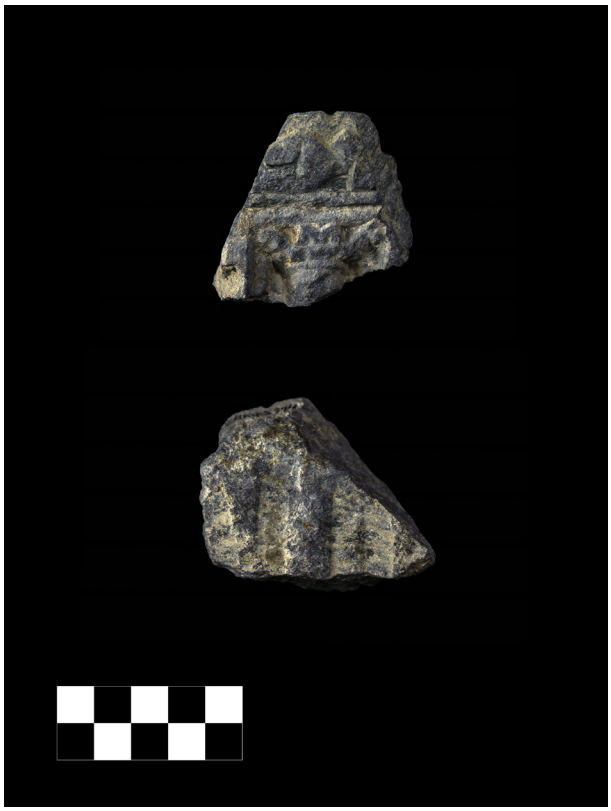


Fig. 11 – BKG 5394



Fig. 12 – BKG 11986



Fig. 13 – BKG 12056



Fig. 14 – BKG 12079



Fig. 15 – BKG 9649 (h. 4.8, l. 4.4., w. 1.8).



Fig. 16 – BKG 10039



Fig. 17 – BKG 11377



Fig. 18 – BKG 11378



Fig. 19 – BKG 11379



Fig. 20 – BKG 11380



Fig. 22 – BKG 11381



Fig. 21 – BKG 11477



Fig. 24 – BKG 11971



Fig. 23 – BKG 11234



Fig. 1 – BKG 2047



Fig. 2 – BKG 2044



Fig. 3 – BKG 6379



Fig. 4 - BKG 12018



Fig. 5 – BKG 5869



Fig. 6 – BKG 5429



Fig. 7 – BKG 5430





Fig. 8a-b – BKG 5430



Fig. 9 – BKG 11359



Fig. 10 – BKG 11360



Fig. 11 – Viṣṇu Anantaśayana. Dashavatara Temple, Deogarh, India, 6th century. Photo by Ismoon. CC BY-SA 4.0



Fig. 12 – BKG 1346.

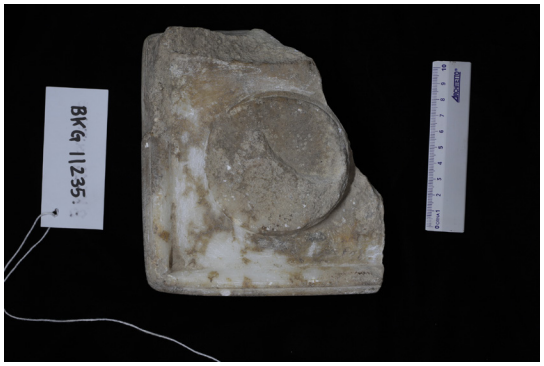


Fig. 13 – BKG 11235

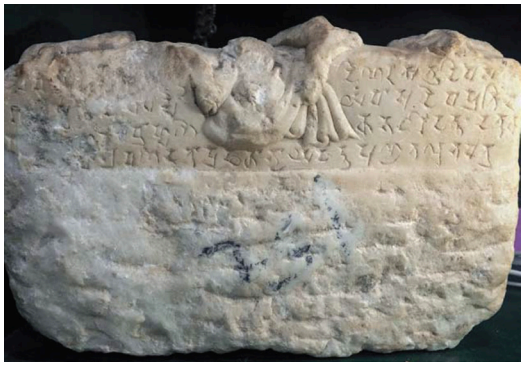


Fig. 14 – Base with Brāhmī inscription (after Salomon 2018: fig. 4)



Fig. 15 – Buddhist rock sculpture with Bodhisattvas and Buddha (Inv. Rep. C117)



Fig. 16 – Buddhist rock sculpture with Padmapāṇi and Maitreya (Inv. Rep. C118)



Fig. 17 – Rock sculpture C117 = DD_025 (Photo courtesy CPF project)



Fig. 18 – Rock sculpture C118 = DD_026 (Photo courtesy CPF project)



Fig. 1 – BKG 5784



Fig. 2 – BKG 5737



Fig. 3 – BKG 1955

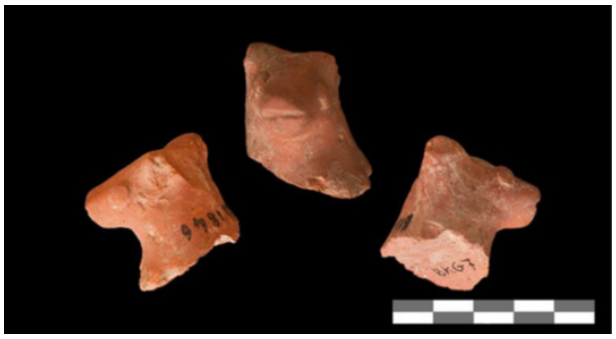


Fig. 4 – BKG 1846



Fig. 5 – BKG 4706



Fig. 6 – BKG 11286



Fig. 7 – BKG 4767



Fig. 8 – BKG 5042



Fig. 9 – BKG 1208



Fig. 10 – BKG 1205



Fig. 11 – BKG 4663



Fig. 12 - BKG 4617



Fig. 13 – BKG 5755



Fig. 14 – BKG 5660



Fig. 15 – BKG 5810



Fig. 16 – BKG 5821



Fig. 17 – BKG 5771



Fig. 18 – BKG 3428

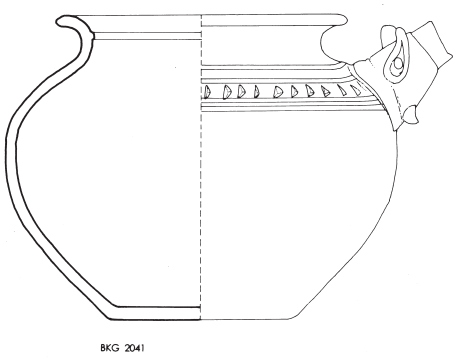


Fig. 1 – Example of CF 2 Śāhi spouted jugs, with zoomorphic spout, not to scale. (BKG 2041; Trench BKG 6; Macrophase 8b)



Fig. 2 – Example of Early Islamic CF 2 spouted jug with schematic spout, impressed decoration, with thumb stop. (BKG 11229; Trench BKG 6; Macrophase 9a)



Fig. 3 – Group a): appliqued circular eyes, pierced at the center



Fig. 4 – Group b): appliqued tear-drop shaped eyes, pierced at the center



Fig. 5 – Group c): Stylized zoomorphic spouts, with or without thumb-stop



Fig. 6 – Group d): Stylized zoomorphic spouts, with incised decoration



Fig. 7 – Group e): Zoomorphic spouts with an oval hole and pointed circular eyes

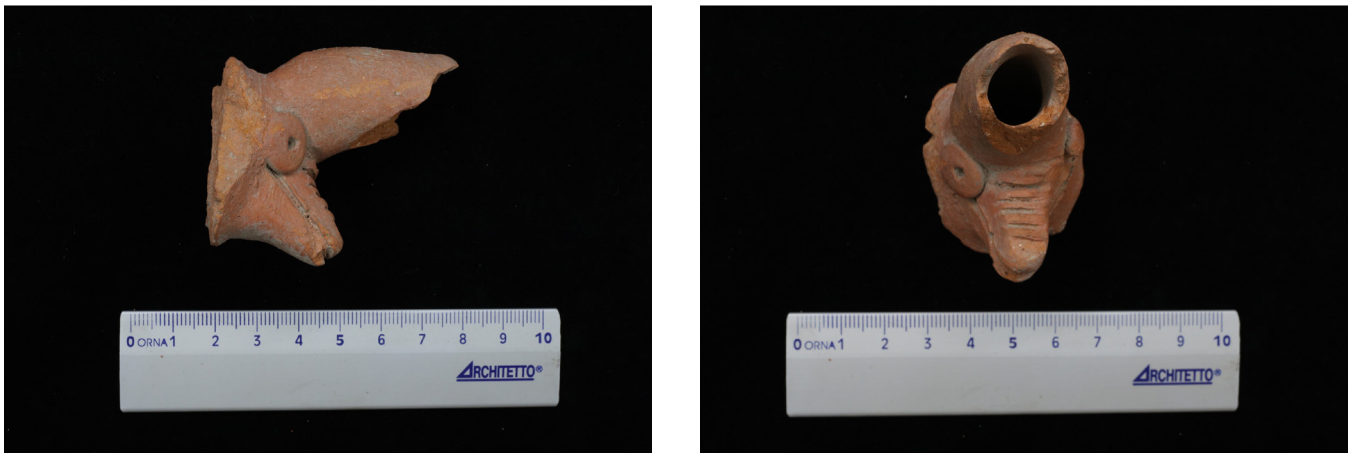


Fig. 8 – BKG 12142. Left: lateral view. Right: view from the top



Fig. 9 – BKG 12140. Left: frontal view. Right: lateral view

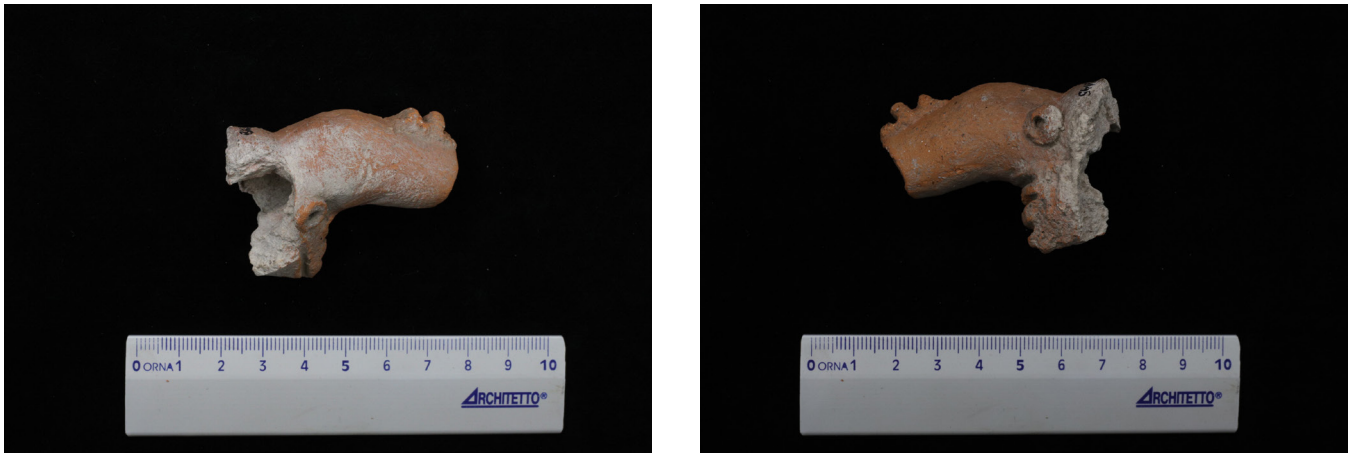


Fig. 10 – BKG 12145. Left: left side. Right: right side



Fig. 11 – BKG 12151. Left: lateral view. Right: view from the top



Fig. 12 – Horse-shaped spouts. From left to right: BKG 12150, BKG 12152, BKG 12153

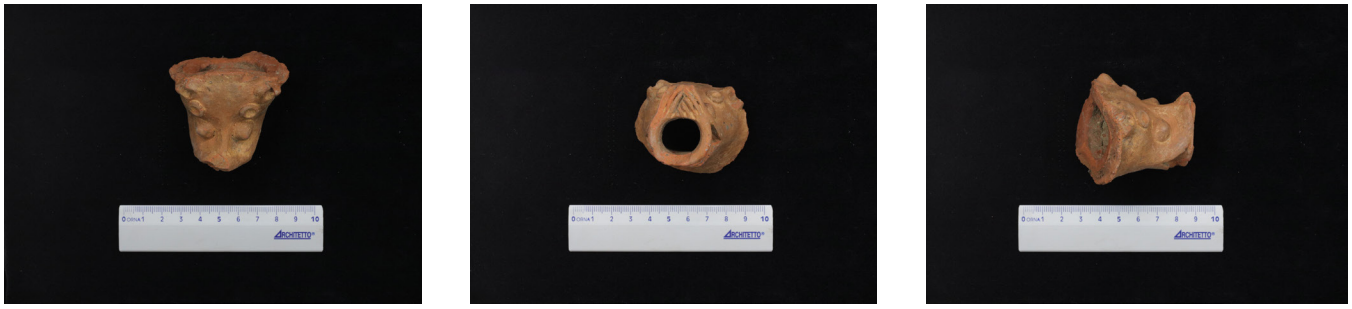


Fig. 13 – BKG 11916. From left to right: aerial view, frontal view, lateral view

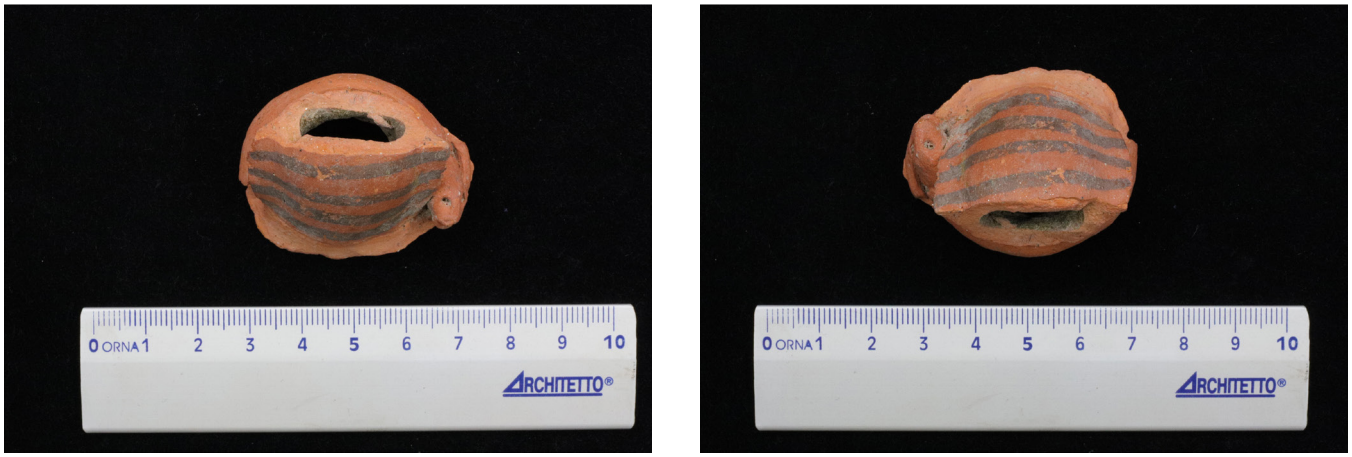


Fig. 14 – BKG 12082



Fig. 15 – BKG 12137. From left to right: frontal view, lateral view, aerial view



Fig. 16 – Terracotta figurine, human: head, BKG 4617

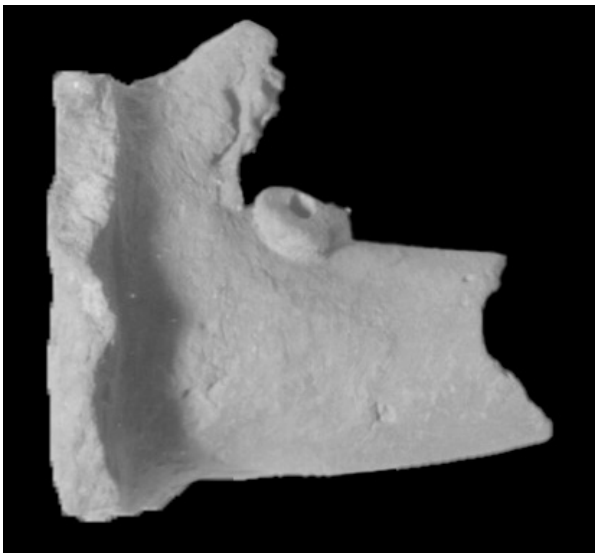


Fig. 17 – RGM 359. Zoomorphic spout of group one, not to scale



Fig. 18 – RGM NON-INV 15342 (a) and RGM NON-INV 15342 (b). Kuza with zoomorphic spouts and impressed decoration, not to scale (Bagnera 2015: fig. 119)

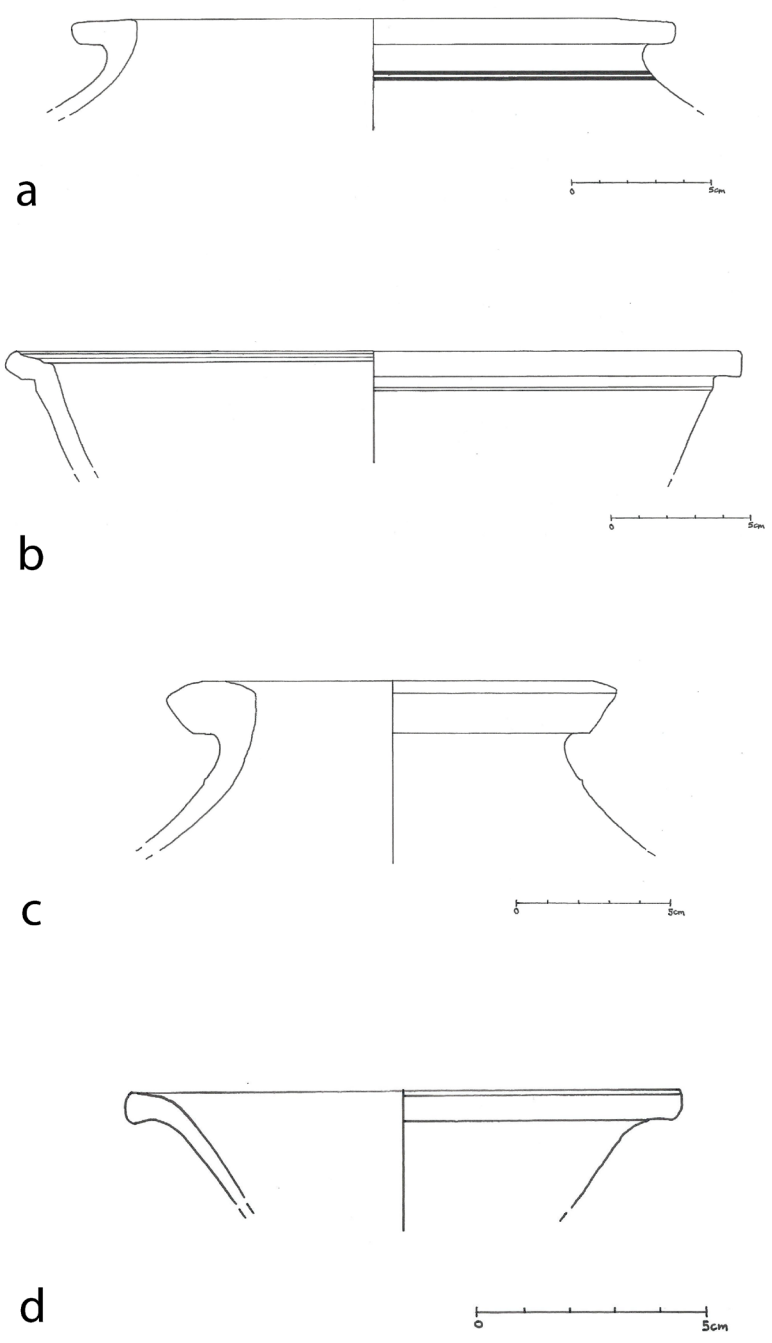


Fig. 1

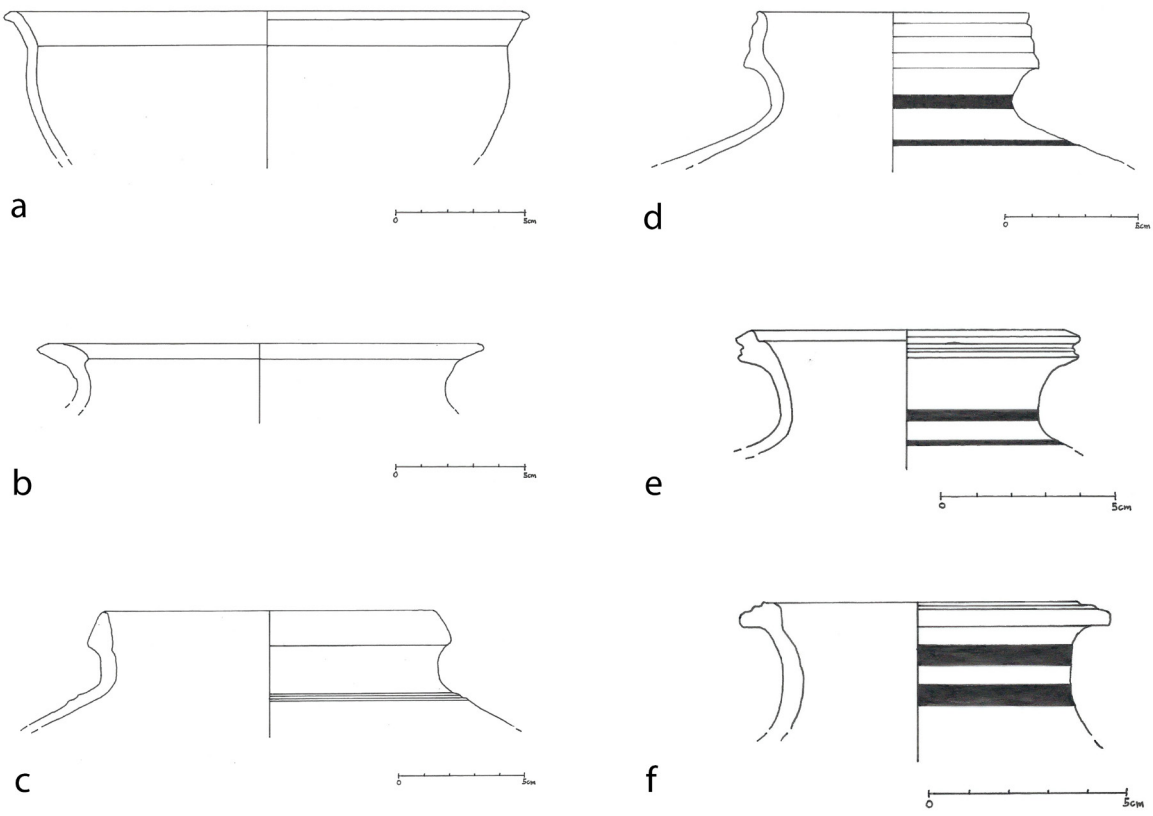

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Fig. 2

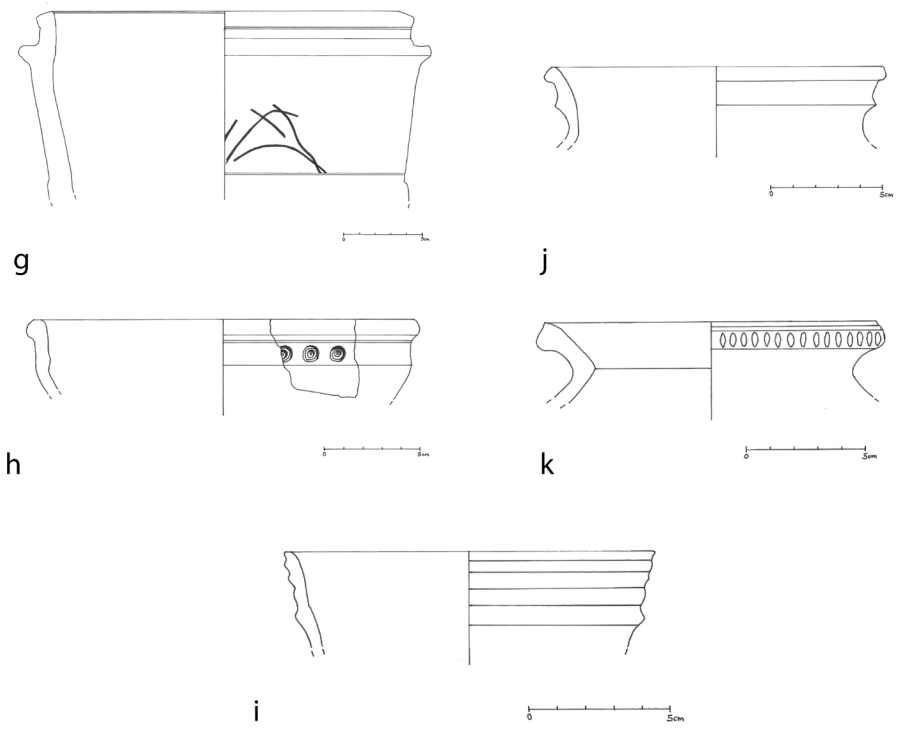

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Fig. 3

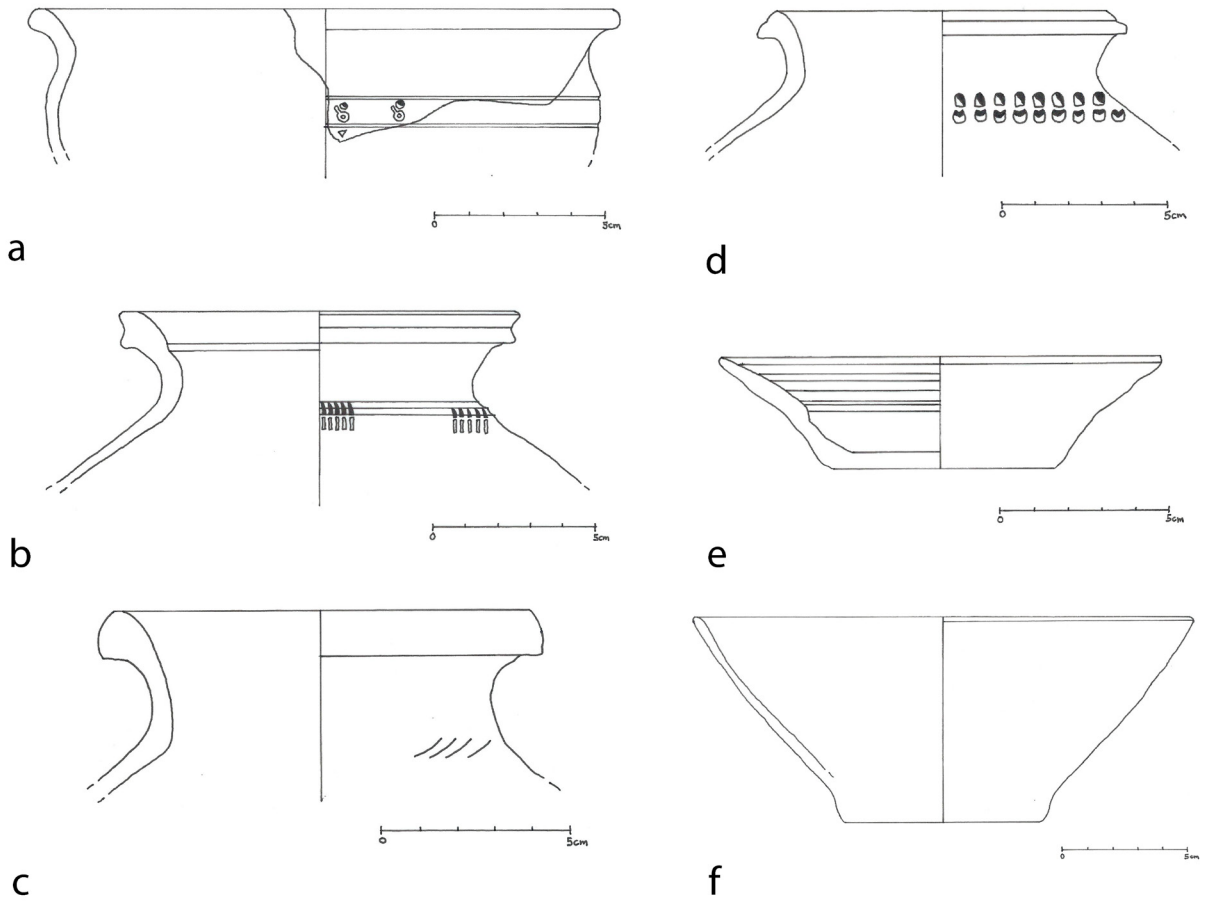
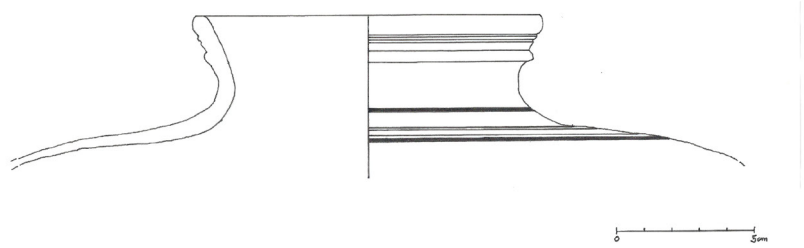
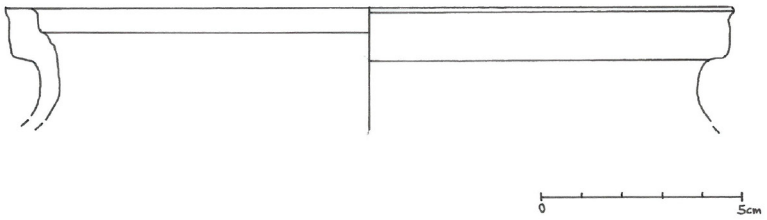


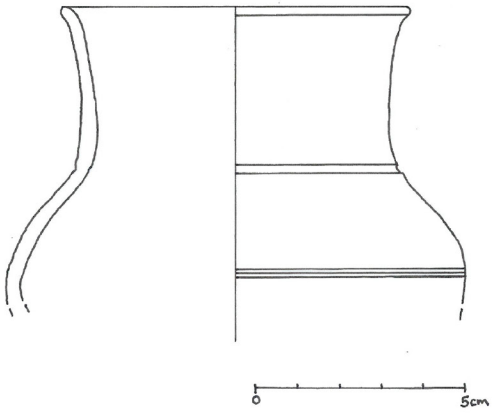
Fig. 4



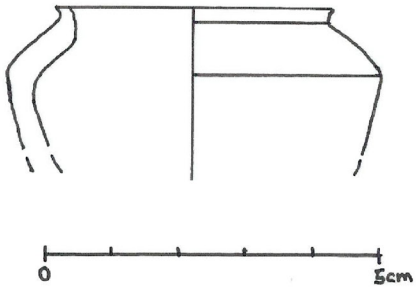
g



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Fig. 5



Fig. 1 – Token reshaped from an underglaze painted bowl, BKG 11365 (photo MP)

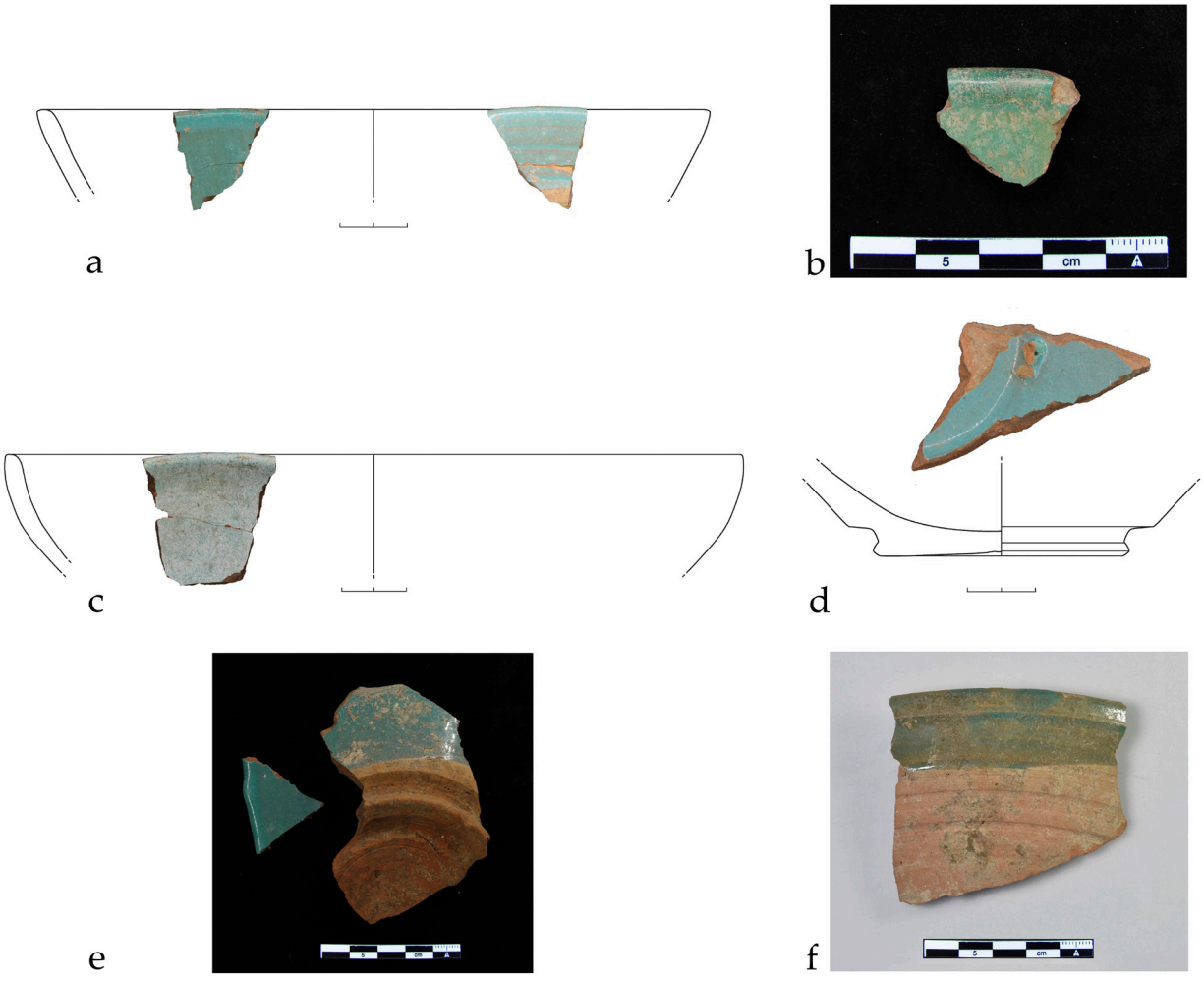


Fig. 2 – Turquoise opaque glazed ware. a) BKG 11636, b) BKG 11388, c) BKG 11633, d) BKG 11768, e) BKG 9577, f) BKG 8529 (drawings AC, photos MP)

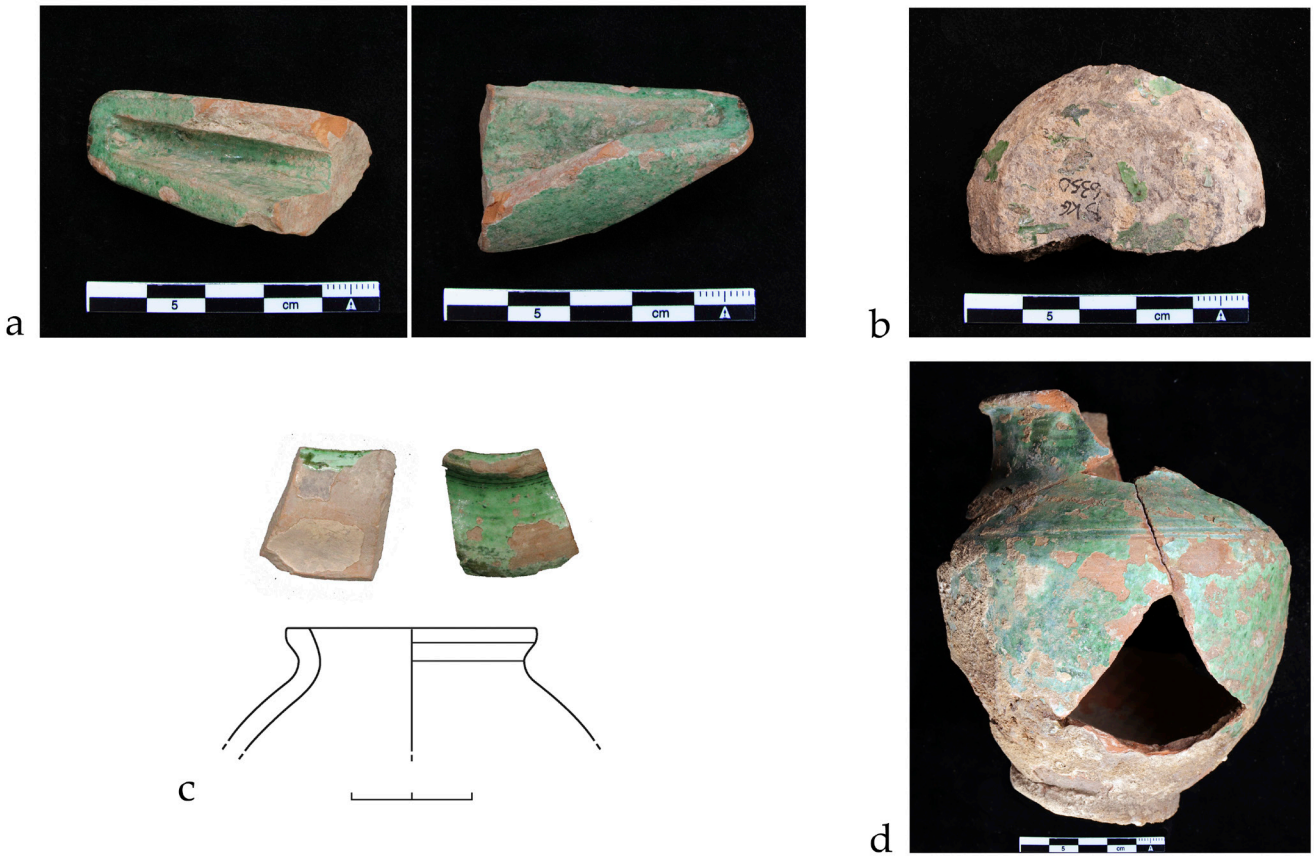


Fig. 3 – Green monochrome glazed ware. a) BKG 11401, b) BKG 6350, c) BKG 11394, d) BKG 6332 ((drawings AC, photos MP)

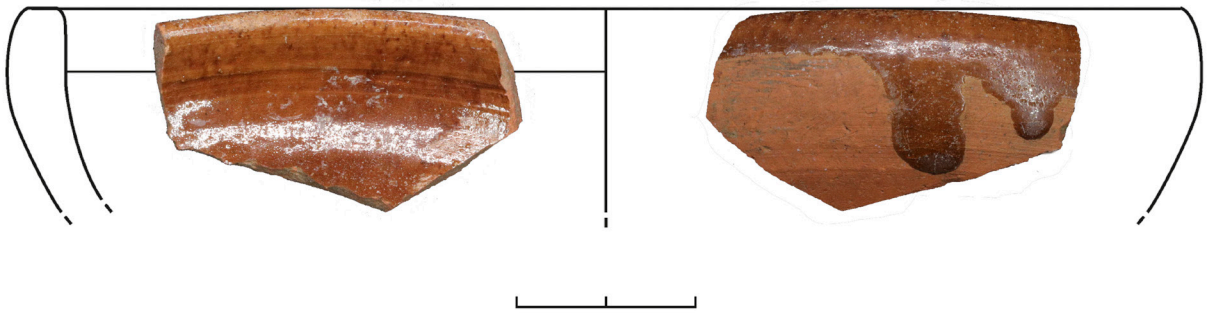


Fig. 4 – Brown monochrome glazed ware, BKG 11797 ((drawings AC, photos MP)

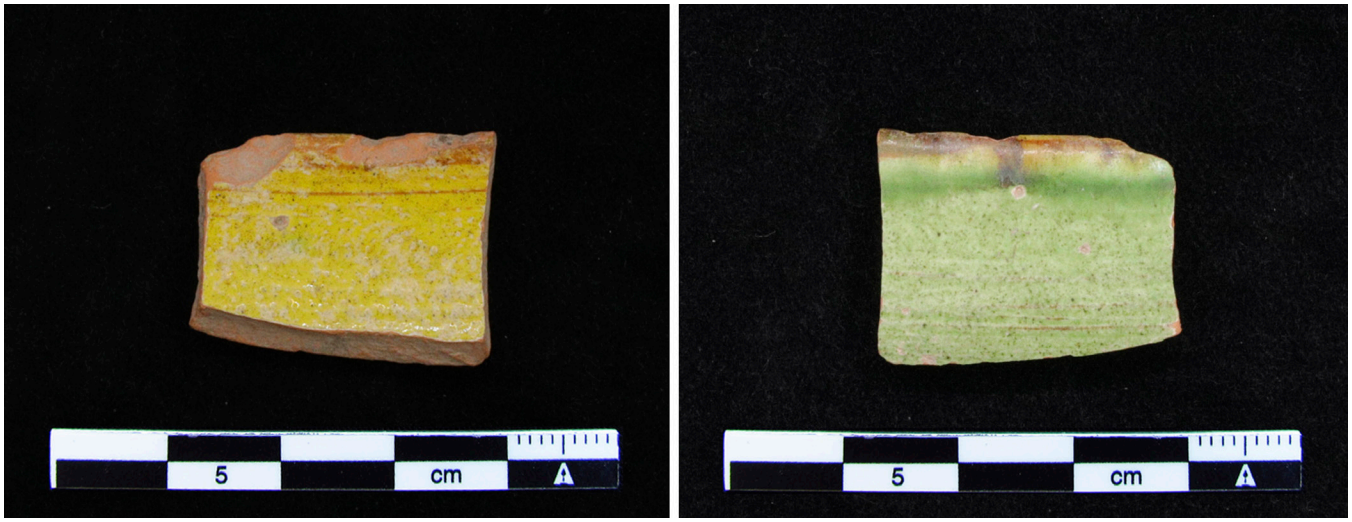


Fig. 5 – Bichrome glazed ware (?), BKG 11395 (photo M. Prota)

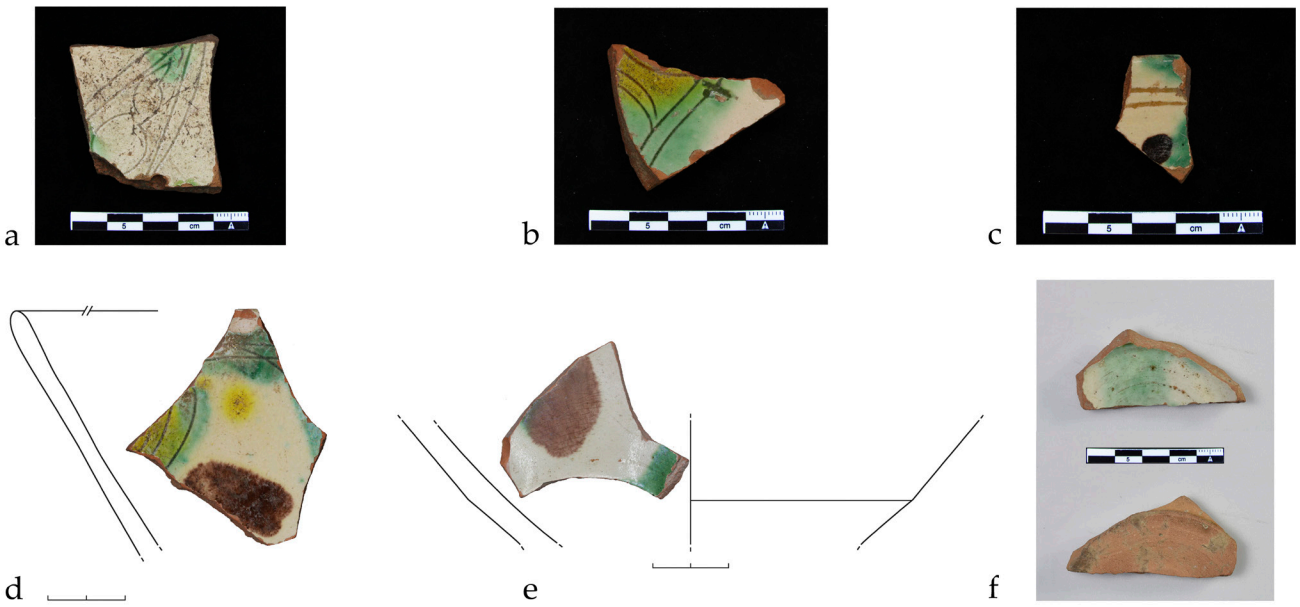


Fig. 6 – Sgraffiato splashed ware. a) BKG 11448, b) BKG 11850, c) BKG 11795, d) BKG 11399, e) BKG 11398, f) BKG 8536 (drawings AC, photos MP)

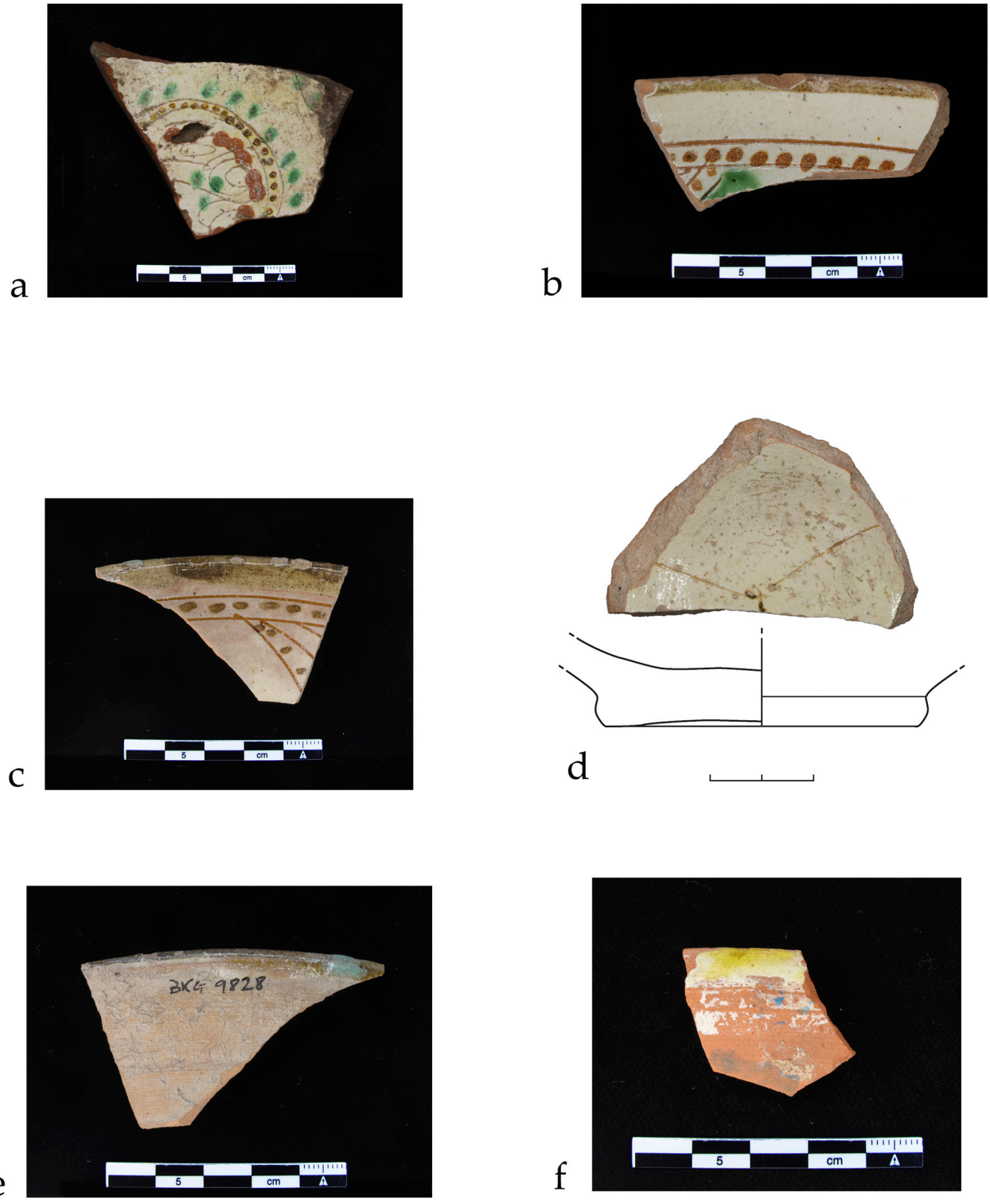


Fig. 7 – Sgraffiato and dot-painted ware. a) BKG 11899, b) BKG 9827, c) BKG 9828, d) BKG 11387, e) BKG 9828, outer surface, f) BKG 11050, outer surface (drawings AC, photos MP)

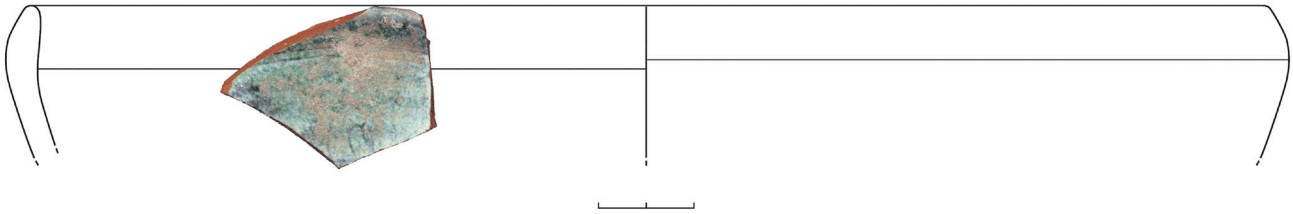


Fig. 8 – Sgraffiato green monochrome ware, BKG 12163 (drawings AC, photos MP)

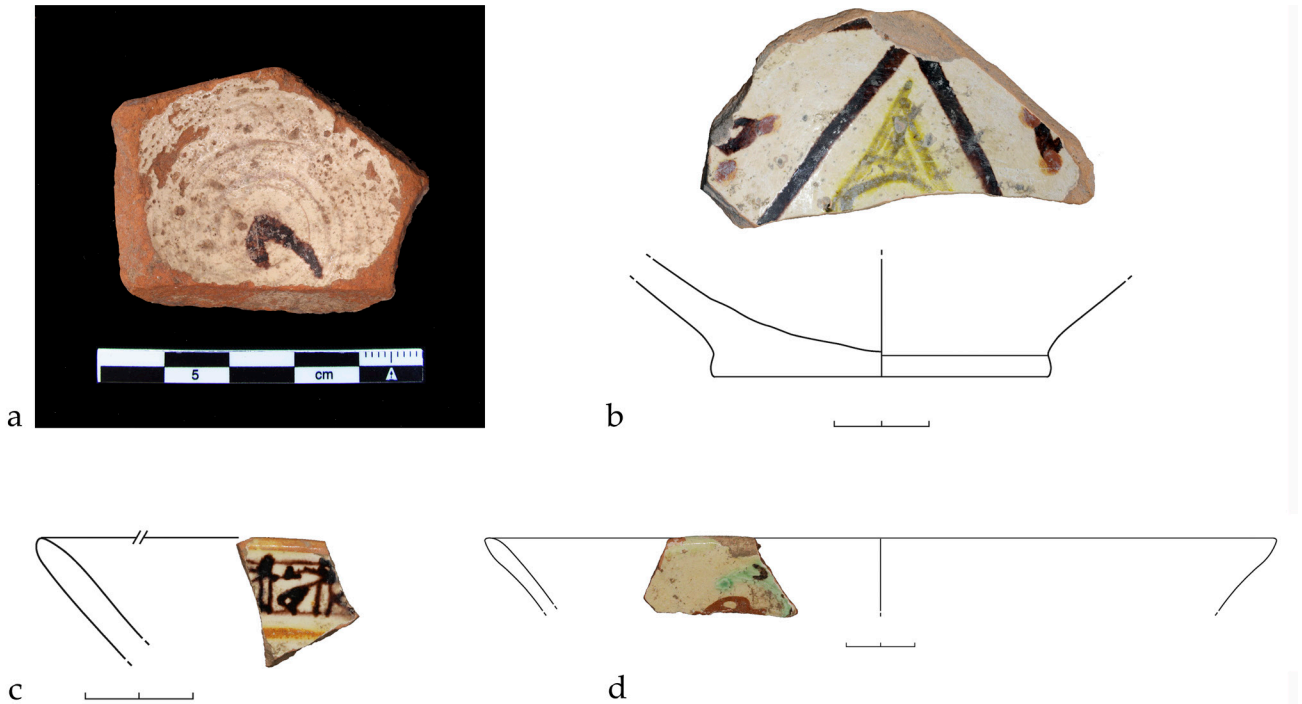


Fig. 9 – Underglaze painted ware. a) BKG 6162, b) BKG 11358, c) BKG 11727, d) BKG 11386 (drawings AC, photos MP)



Fig. 10 – Underglaze painted ware, BKG 10123 (photo MP)

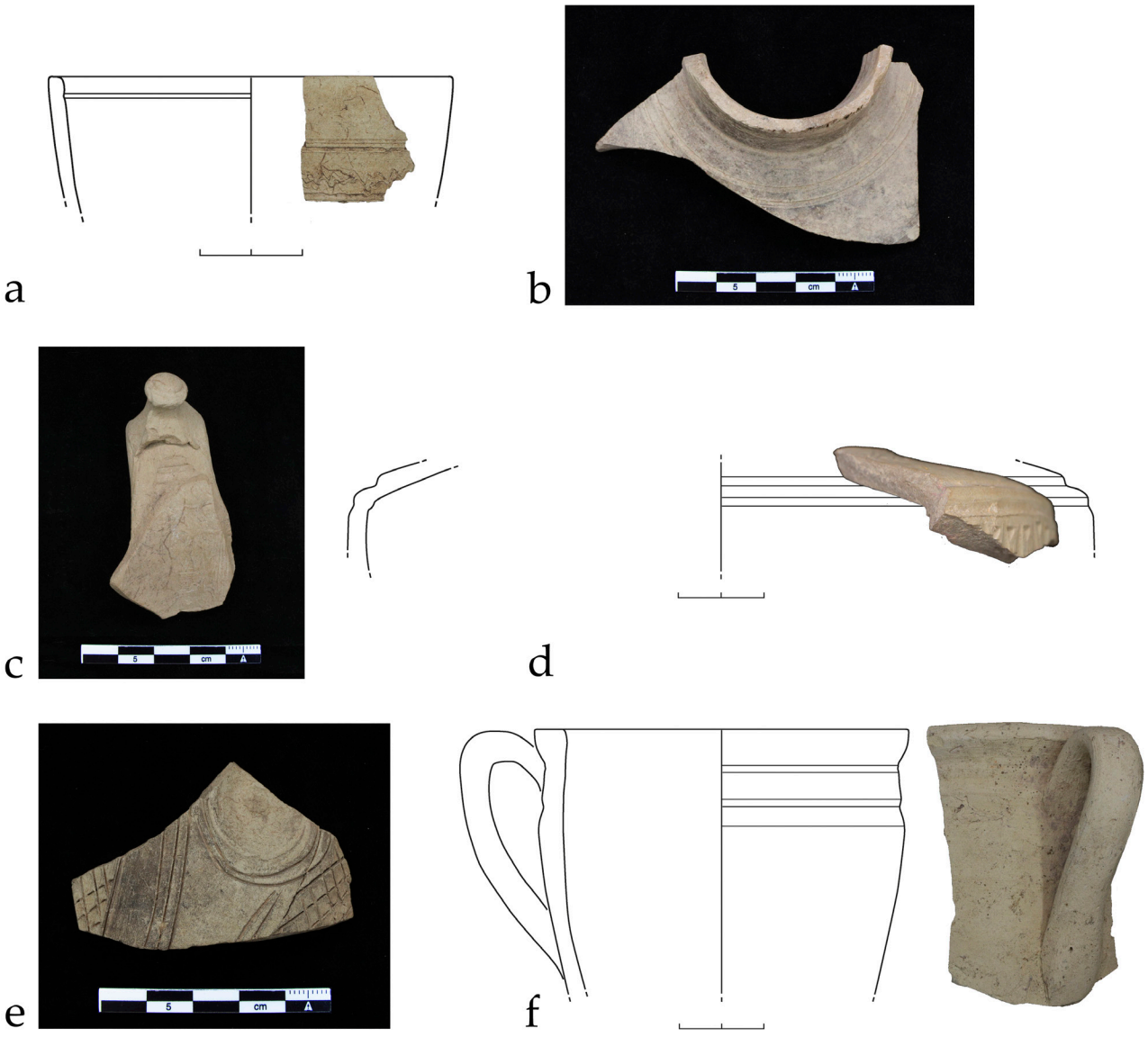


Fig. 11 – Unglazed fine vessels. a) BKG 11412, b) BKG 11397, c) BKG 11400, d) BKG 11939, e) BKG 11425, f) BKG 11396 (drawings AC, photos MP)



Fig. 1 – A bleached short barrel bead of carnelian (BKG 6075)



Fig. 2 – Various irregular short spherical/globular or short barrel-shaped beads of carnelian (not to scale)

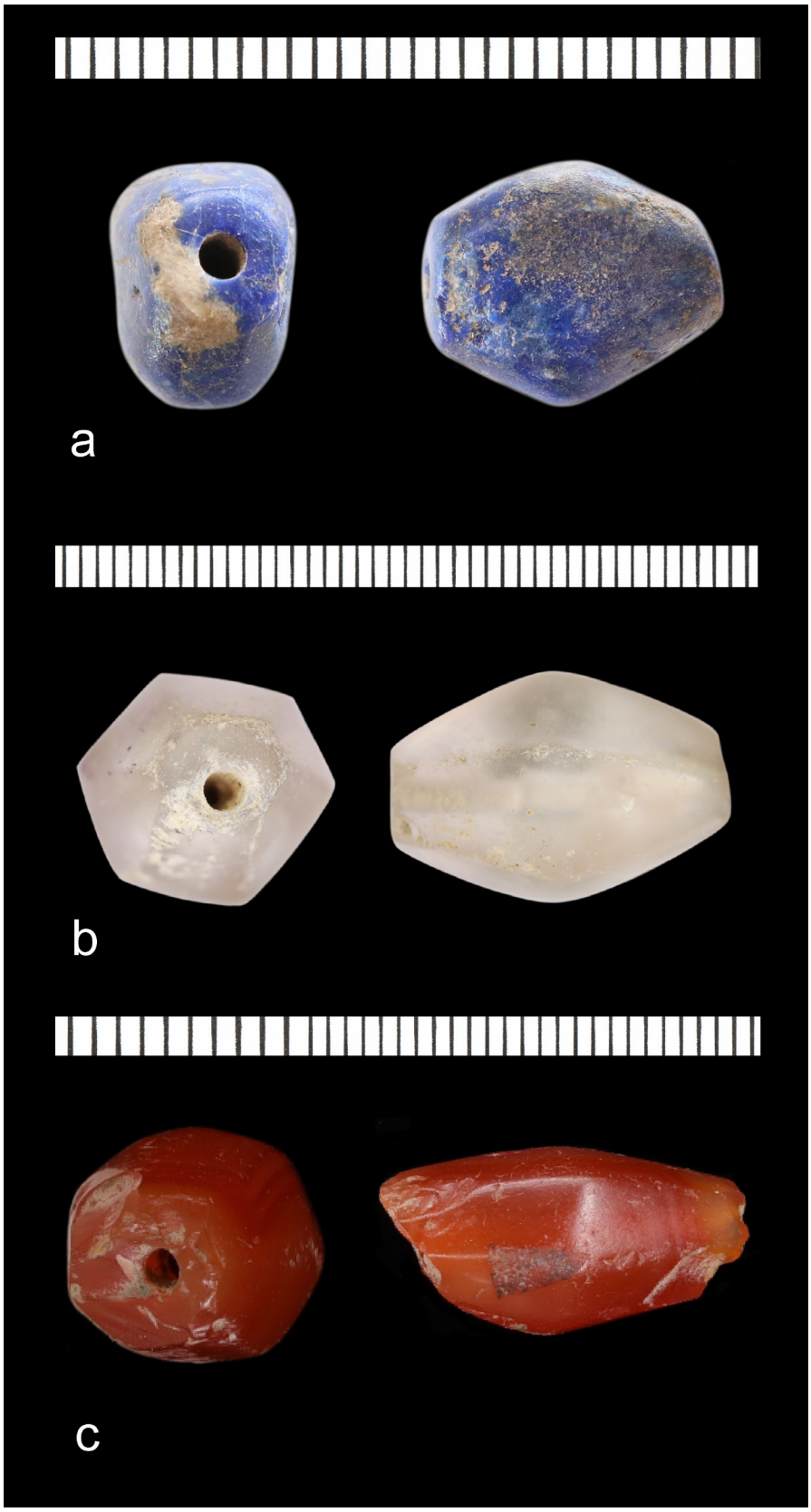


Fig. 3 – A) an octagonal faceted long biconical bead of lapis lazuli (BKG 2057); b) a hexagonal-faceted long barrel bead of rock crystal (BKG 4683); c) a hexagonal faceted long biconical bead of carnelian (BKG 10168).



Fig. 4 – A very short barrel bead of amber (BKG 2055). Photo by MAR.

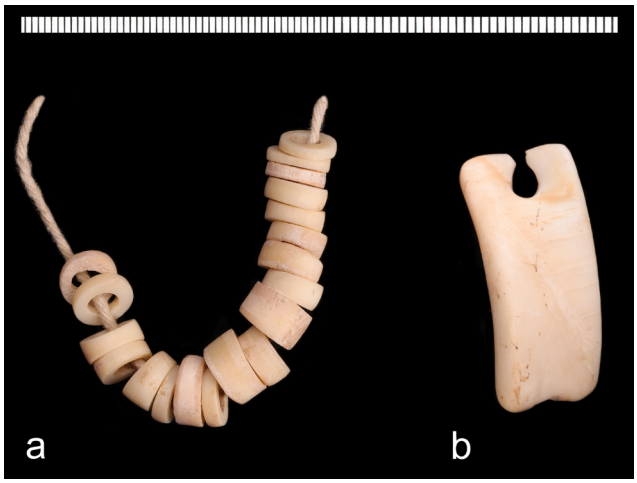


Fig. 5 – a) short cylindrical beads of marine shell (BKG 6267); b) a slightly curved rectangular short cylindrical pendant of marine shell (BKG 6434)



Fig. 6 – Two different cowrie shells (BKG 9959)

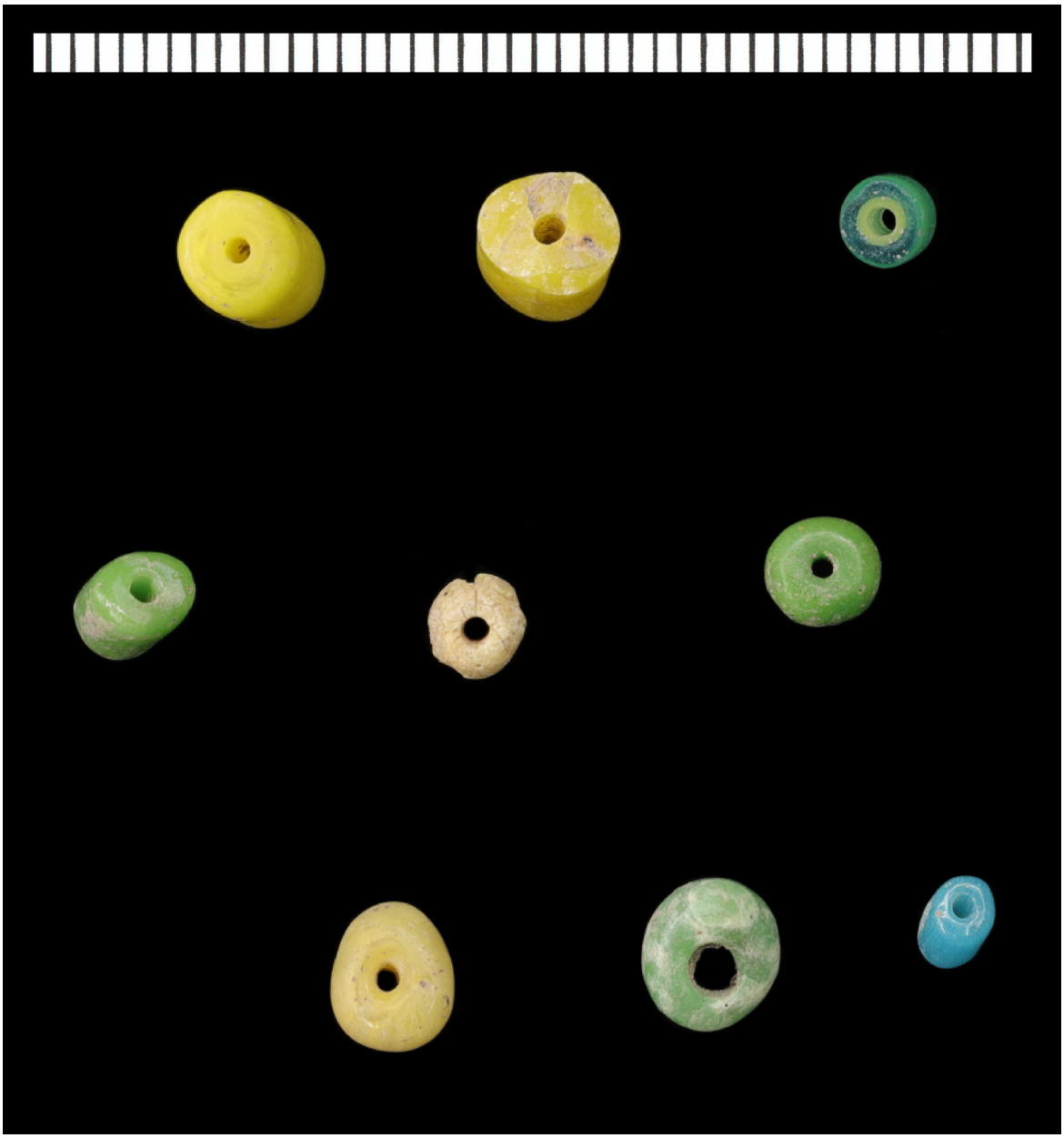


Fig. 7 – Various Indo-Pacific glass beads (BKG 10286)

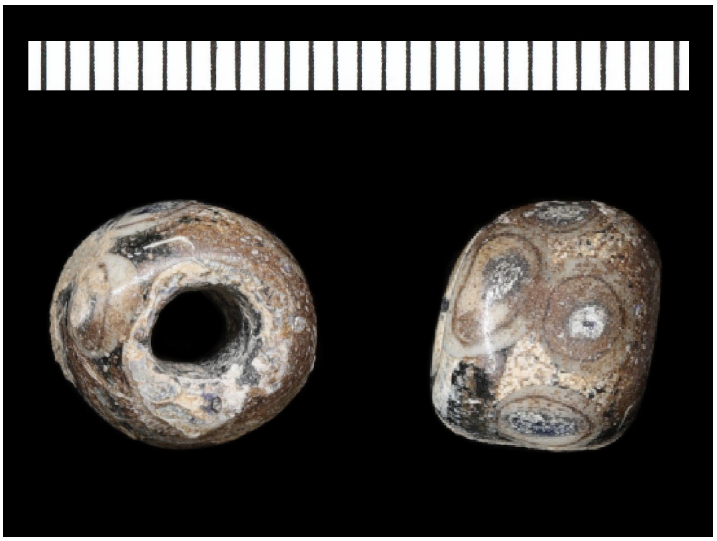


Fig. 8 – Barrel shaped 'eye' glass bead (BKG 11108)



Fig. 9 – a) A ghata-shaped bead of terracotta (BKG 5540); b) a group of terracotta beads (BKG 9870)

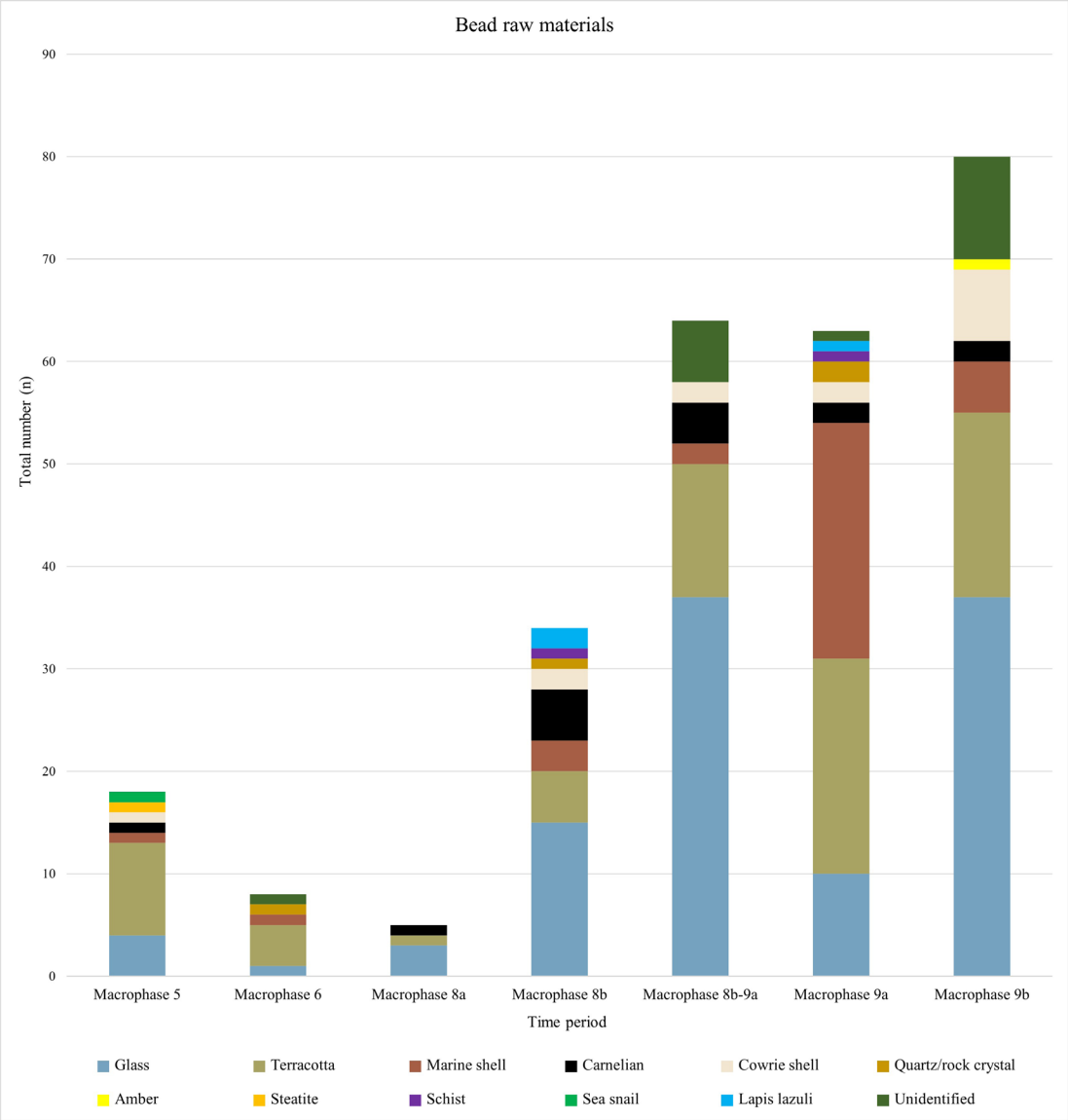


Table 1 – Raw materials of the new collection of beads (Note: Number of beads shown is not representative of the total number of beads in circulation at the site during the individual periods).

Indo-Greek Coinage



1

Kušān Coinage



2



3



4



5











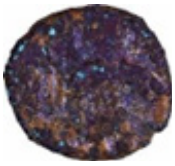
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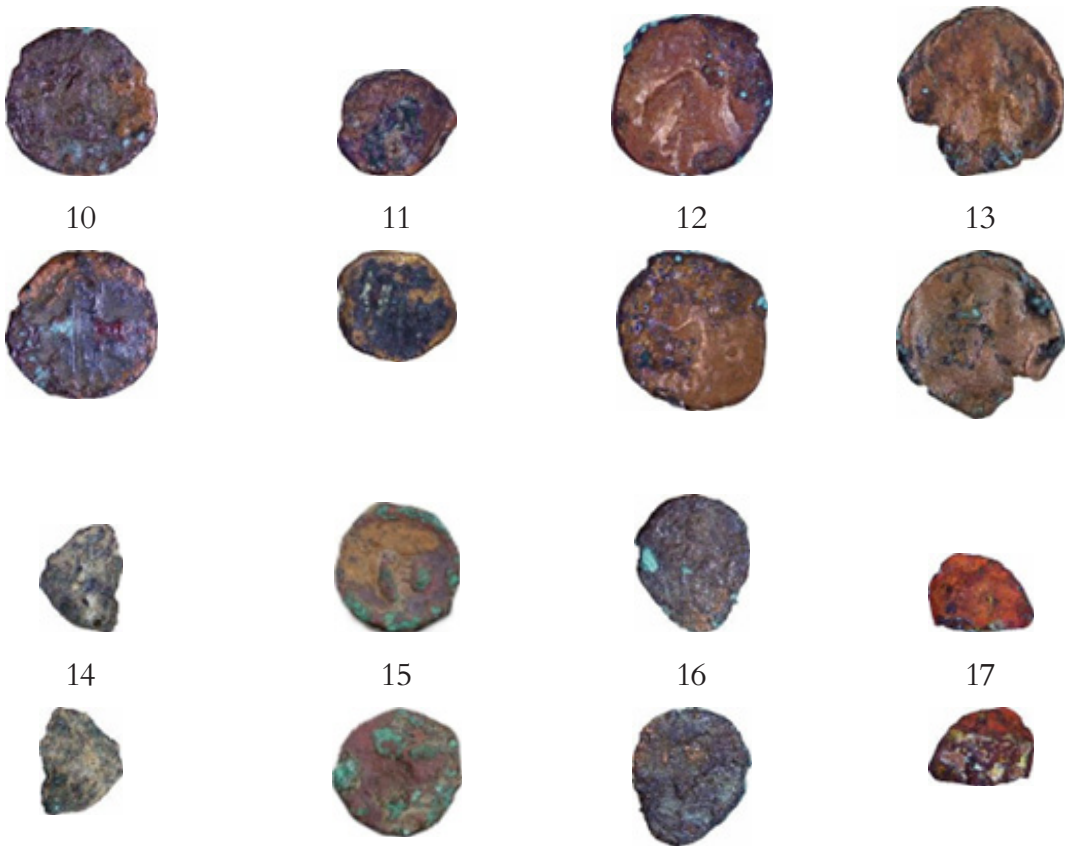
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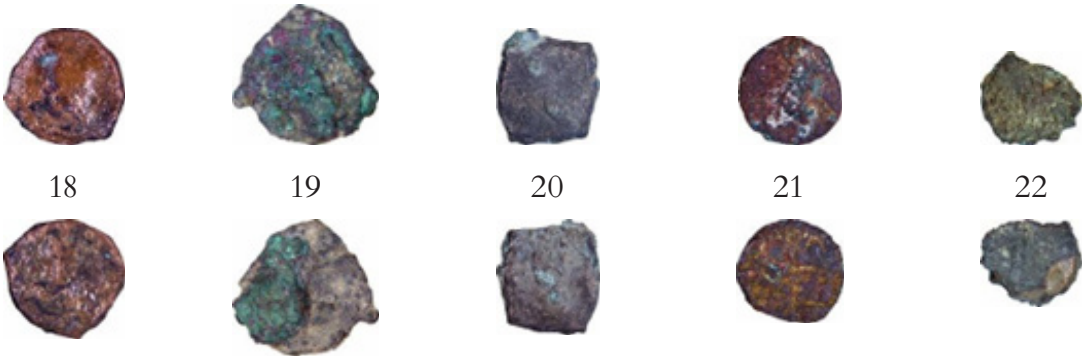




10 11 12 13

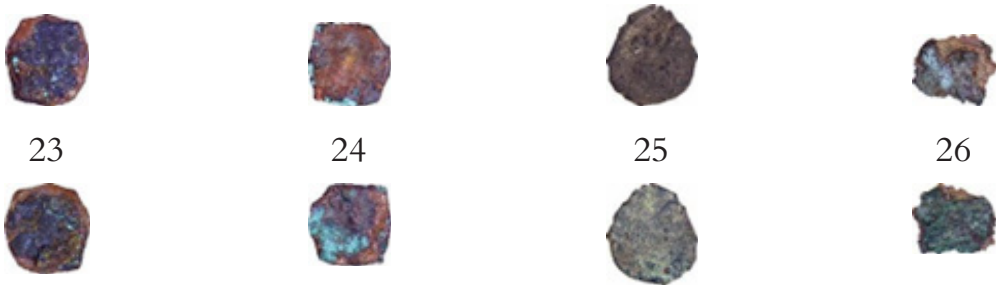
14 15 16 17

Kušāno-Sāsānian Coinage



18 19 20 21 22

Small Copper Coinage of Gandhāra-Uḍḍiyāna



23 24 25 26

Turk-Śāhi Coinage



27

Hindu-Śāhi Coinage



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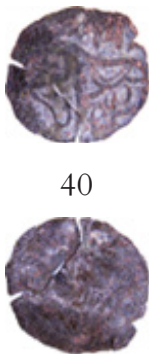
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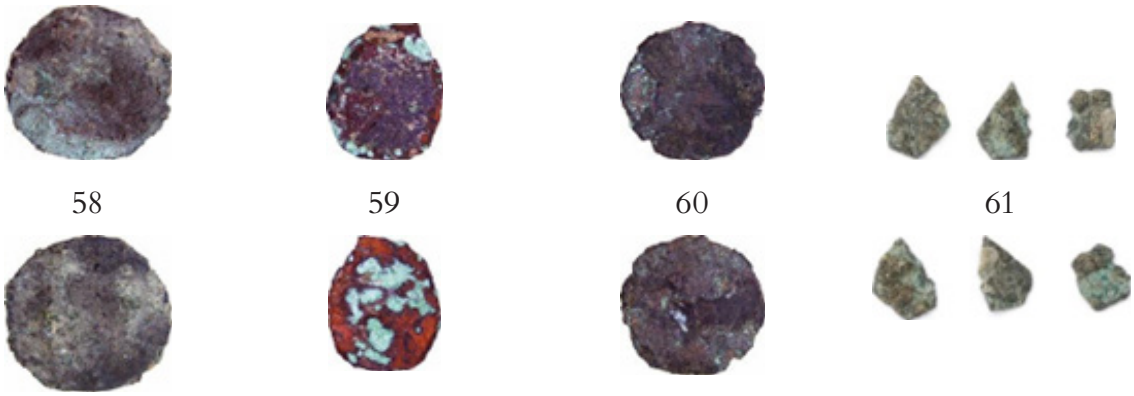


Ghaznavid Coinage



56 57

Unidentified Coins



58 59 60 61

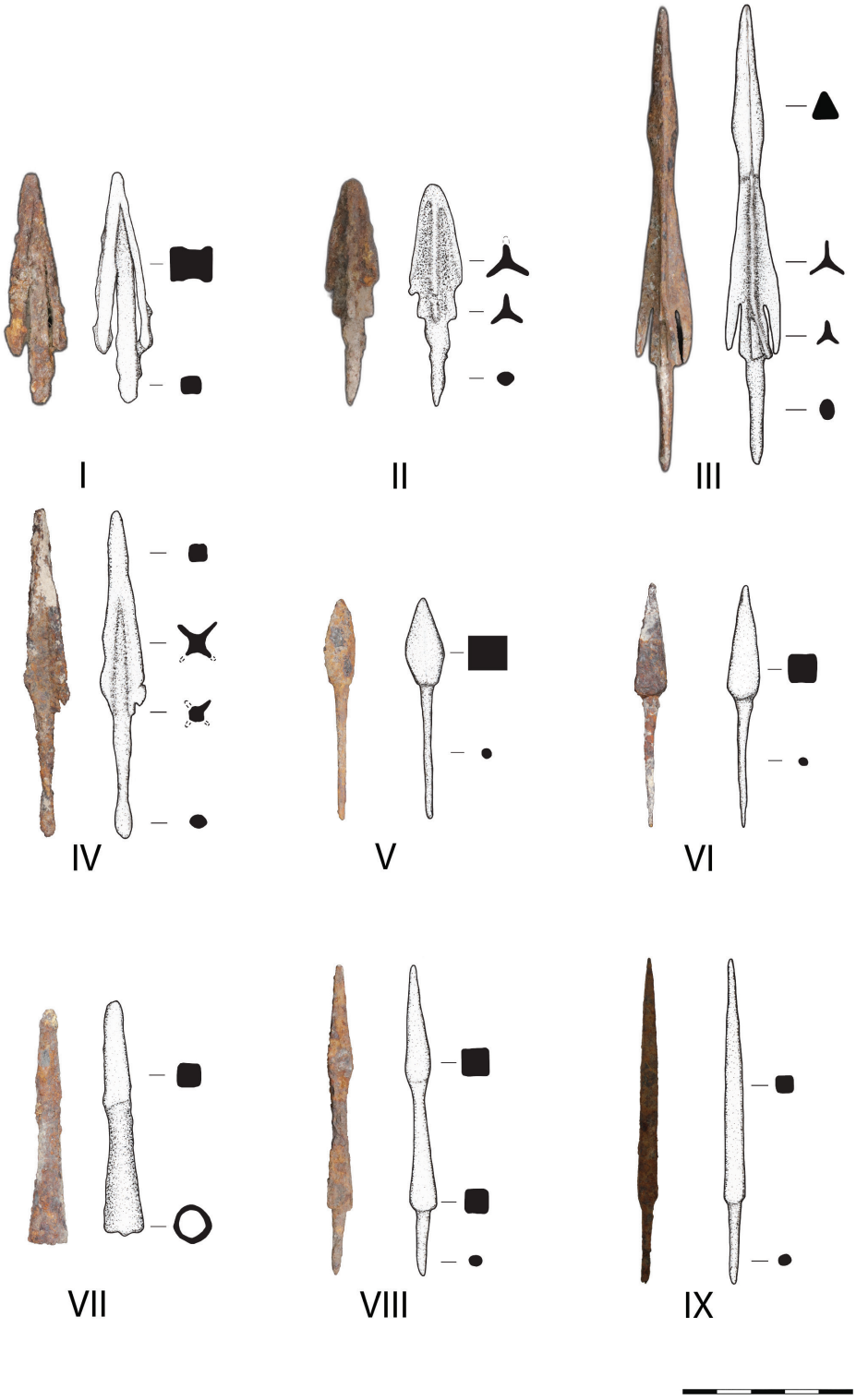


Fig. 1 – Typology of arrowheads from Barikot Hill: BKG 6, BKG 14, BKG 15, BKG 20, BKG 23, BKG 24 (NM)

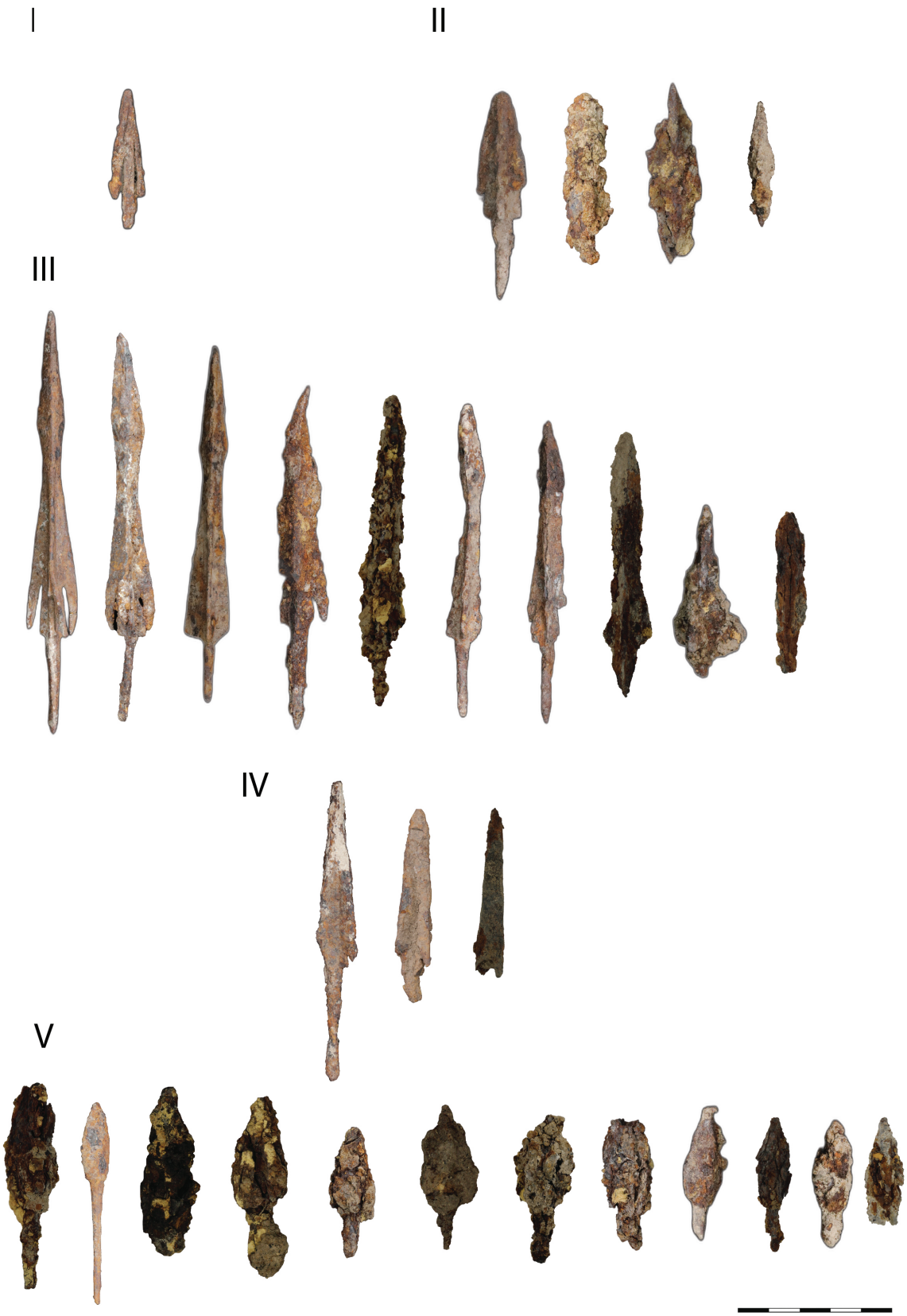


Fig. 2 – Type.I, II, III, IV, V of arrowheads from Barikot Hill: BKG 6, BKG 14, BKG 15, BKG 20, BKG 23, BKG 24 (NM)



Fig. 3 – Type.VI, VII, VIII of arrowheads from Barikot Hill: BKG 6, BKG 14, BKG 15, BKG 20, BKG 23, BKG 24 (NM)

IX



Fig. 4 – Type.IX of arrowheads from Barikot Hill: BKG 6, BKG 14, BKG 15, BKG 20, BKG 23, BKG 24 (NM)

III.F.1 - MACROPHASE 1: A PREHISTORIC SLAB (M. Minardi, L.M. Olivieri, M. Vidale)



Figs 1 – Protohistoric phyllite stele (BKG 5838)



Figs 2 – Protohistoric phyllite stele (BKG 5838)

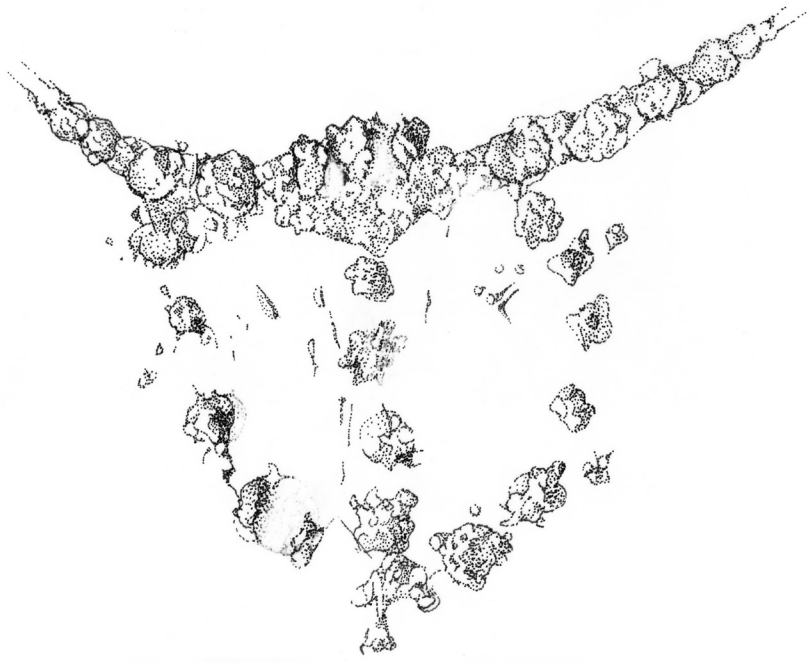


Fig. 3 – Graphic interpretation of the carving in Figs 1-2. The diameter, along the vertical line of dots, measures about 14 cm. Drawing by MV

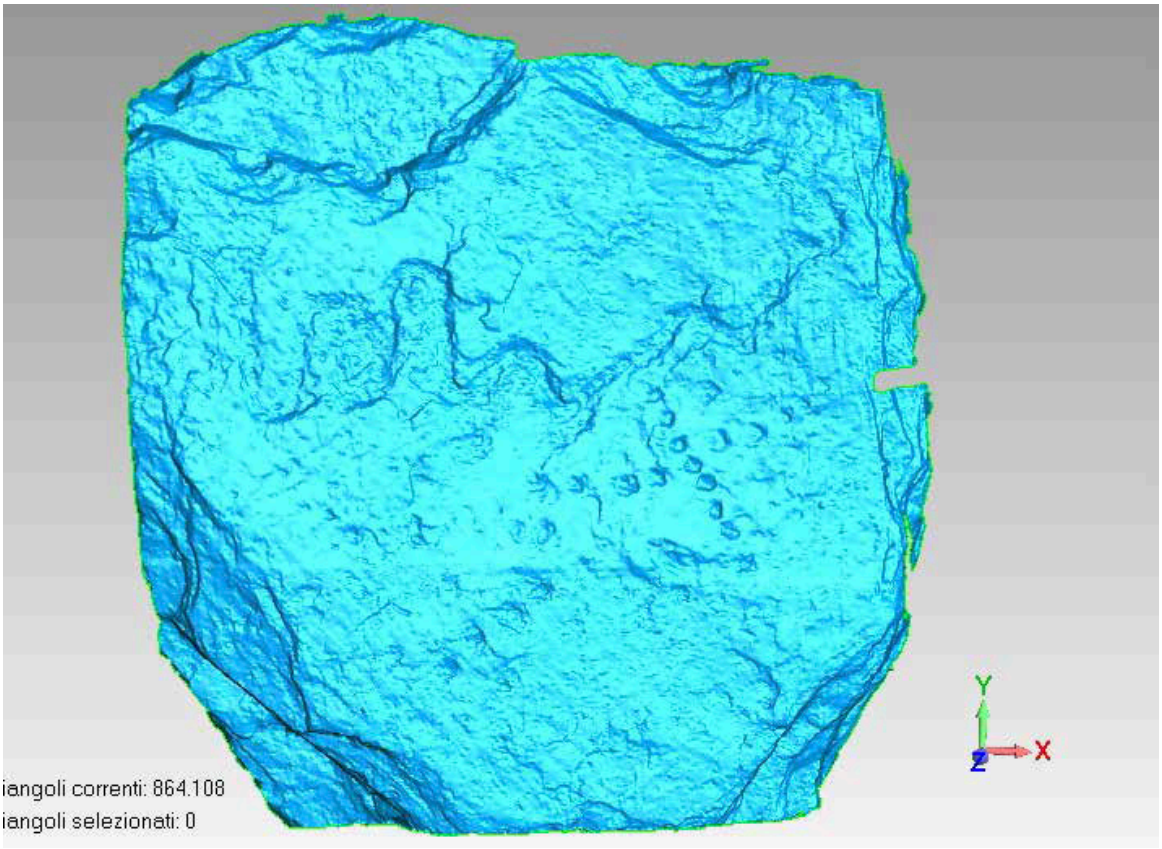


Fig. 4 – b) Grave 19, basal slab

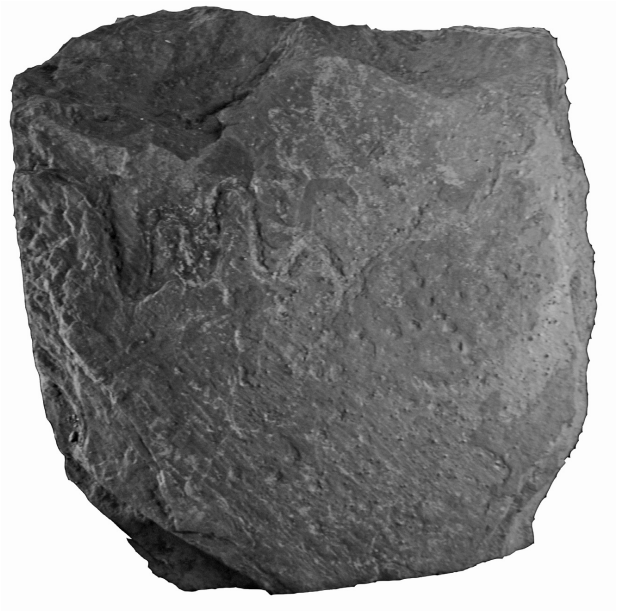


Fig. 4 – a) Grave 10, basal slab. 3D restitution by GS, University of Padua

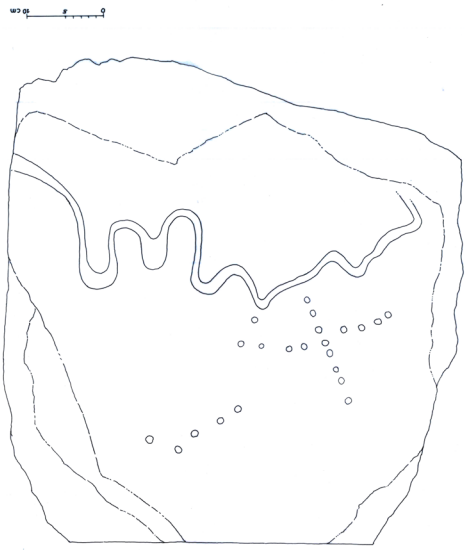


Fig. 4 –c) Grave 19, basal slab. Drawing by FM†

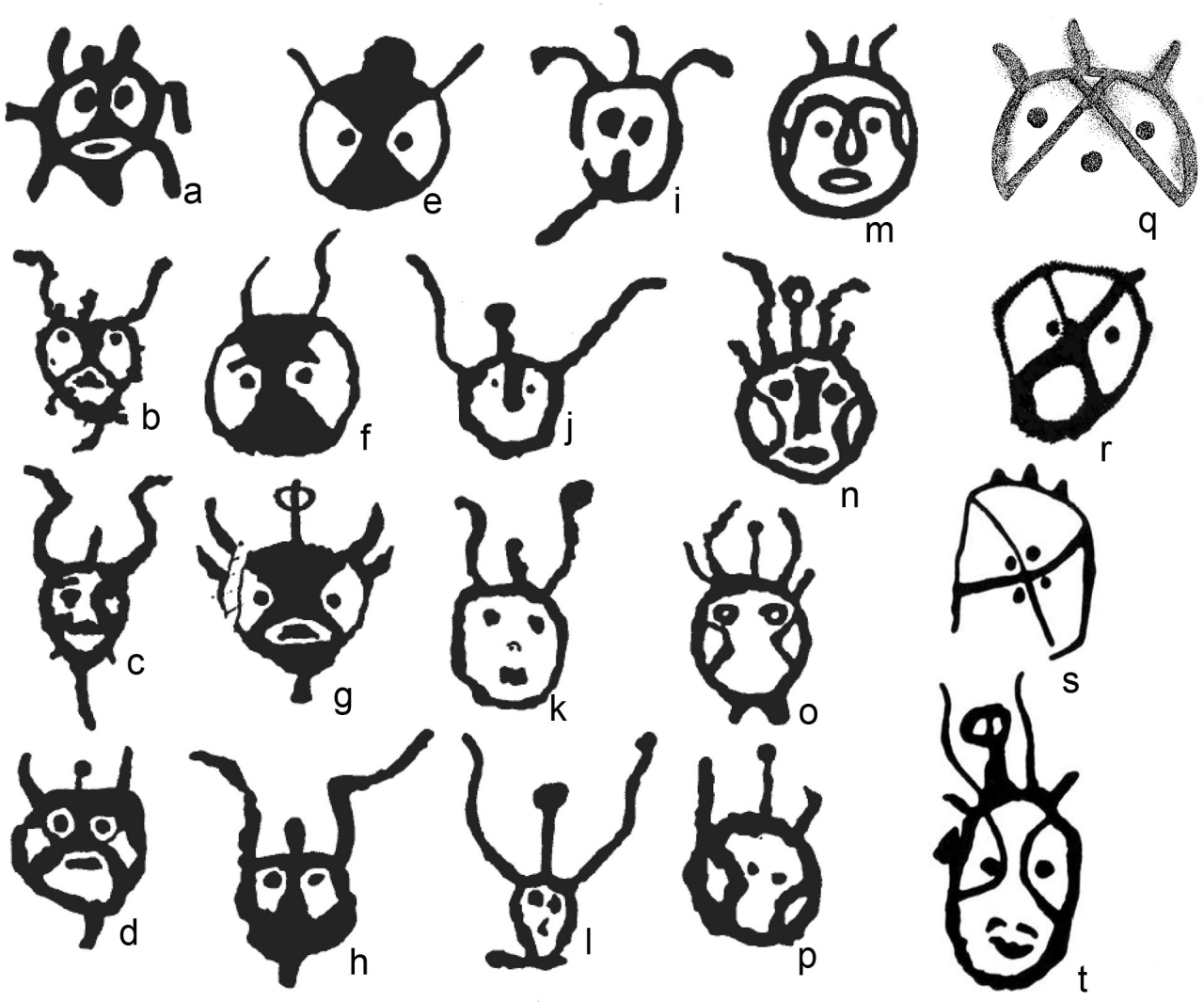


Fig. 5 – Bronze age maskoids from various regions of Central, Inner and Southern Asia. a, Mountain Geram, Siberia; b-d, Ienisseï Canyon; e, Upper Indus (northern Pakistan); f-h, Ienisseï Canyon; i, Inner Mongolia Yinshan; j-l, Ienisseï Canyon; m, Lower Amur, Sakachi-Aljan; n-p, Ienisseï Canyon; q-s, Upper Indus; t, Mugur-Sargol, Siberia (a-p modified from Francfort 2015, Fig. 4b; q, from Hautptmann 1997, 53, 1; r and s, from Jettmar, Thewalt 1987: 12; cf. Francfort et al. 1992)



Fig. 6 – Barikot acropolis: interconnected basins and permutations of cup-marks (cf. Olivieri 2003a: feature 174, pl. XXXVIIa = {1}, Arcuri, this volume)



Fig. 1 – BKG 4960 (photo by MP)



Fig. 1 – BKG 5599, front side



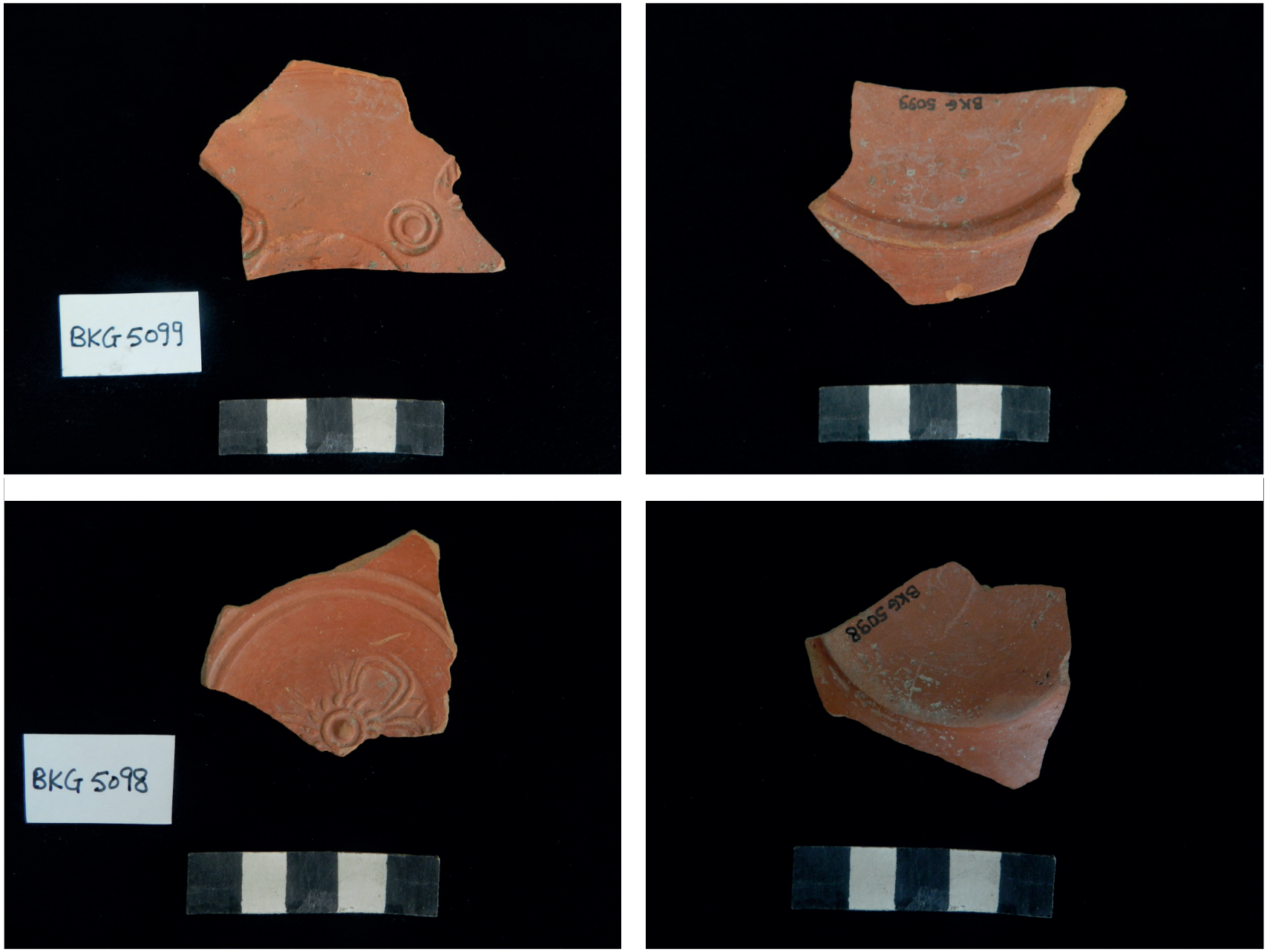
Fig. 2 – BKG 5599, back side



Fig. 3 – BKG 5599, front side with a different angle of light



Fig. 1 – BKG 5111



Figs 2 – Ceramics from Trench BKG 13: BKG 5099, BKG 5098

III.F.5 - MACROPHASE 8A: THE BARIKOT ŚĀRADĀ INSCRIPTION: PRELIMINARY NOTES

(S. Baums, L.M. Olivieri, I. Strauch)



Fig. 1 – BKG 1264 (Swat Museum). Photo by MP.



Fig. 1 – The roundel from Barikot (BKG 1519)

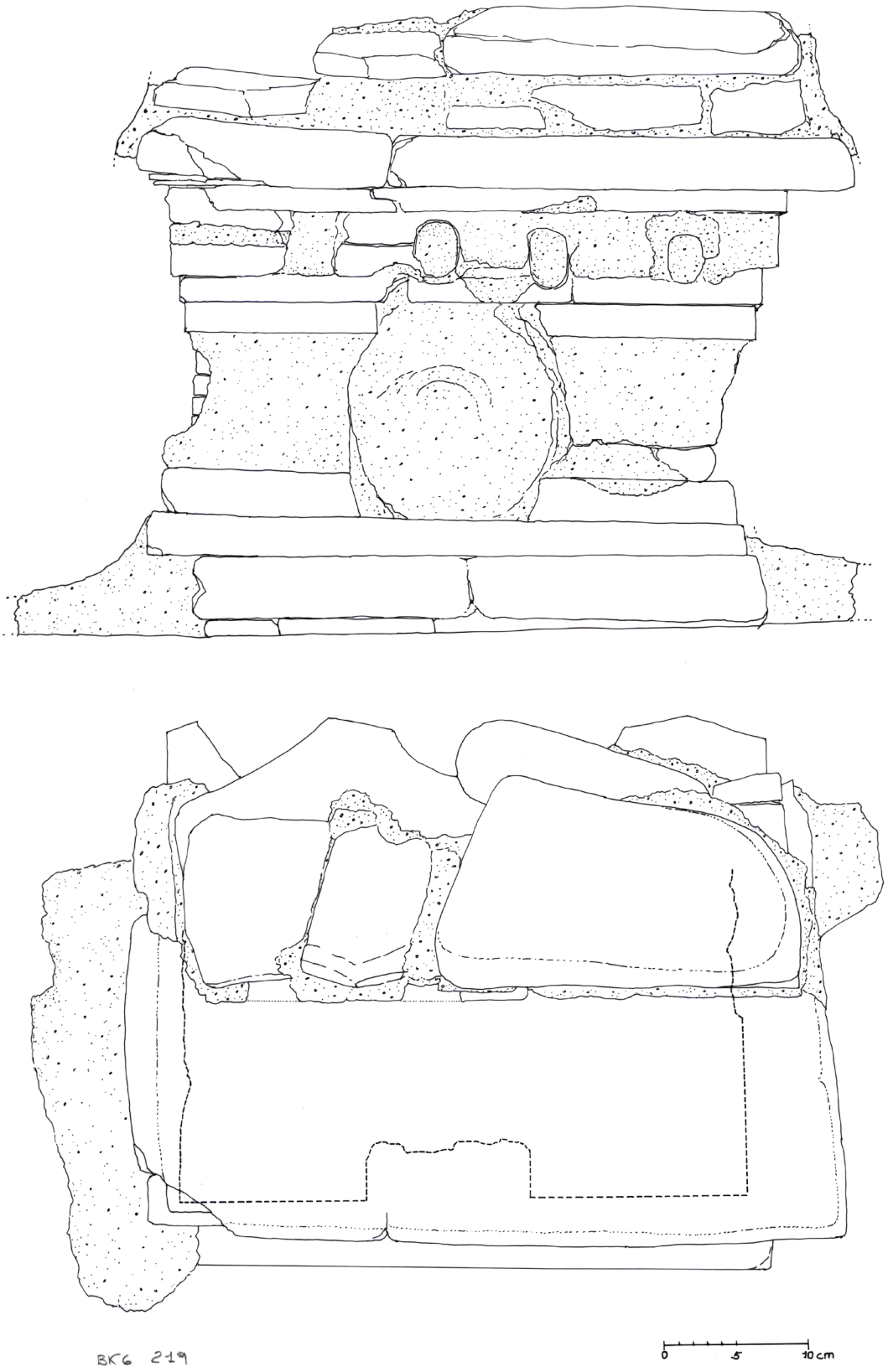


Fig. 2 – The small altar in BKG 2 (BKG 2537). Drawing bt FM†.

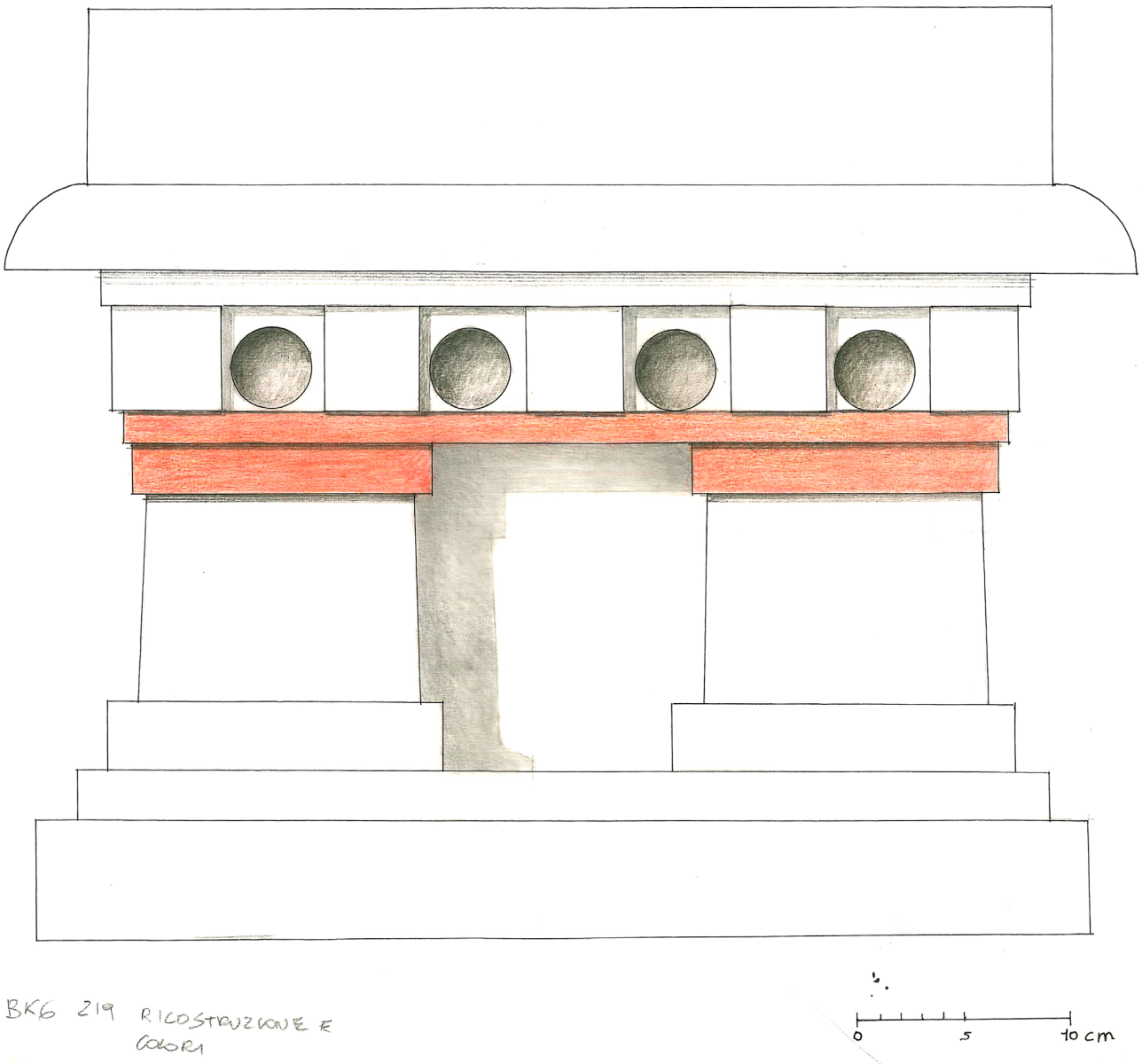


Fig. 2 – The small altar in BKG 2 (BKG 2537). Drawing bt FM†.



Fig. 3 – Jug. Red Ware. From Yotkan (4th Turfan Expedition). Fifth-sixth c. CE. h. 45 × w. 35 × l. 35 cm. Museum für Asiatische Kunst, III 7665. © Staatliche Museen zu Berlin, Museum für Asiatische Kunst / Birgit Angelika Schmidt. CC BY-SA 4.0.

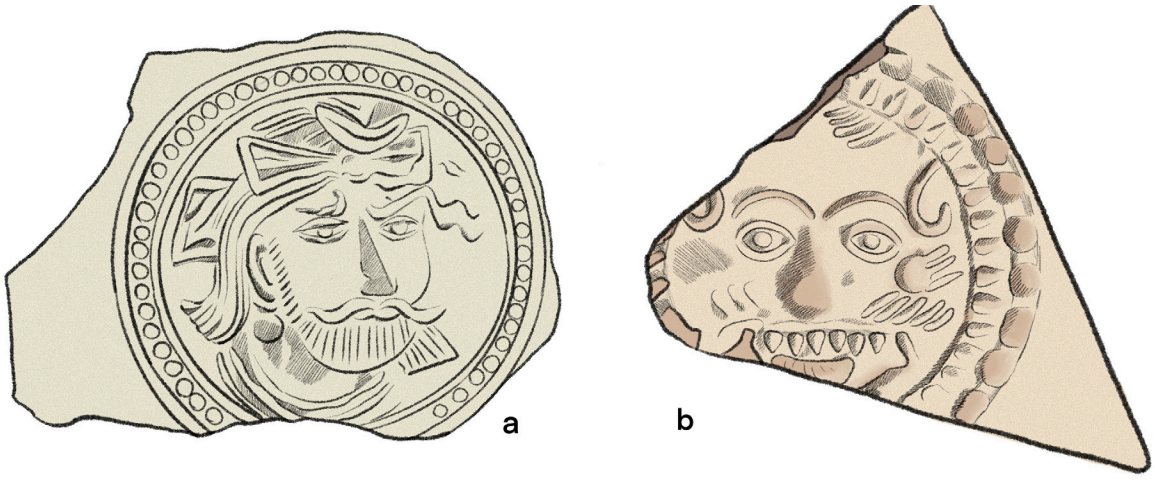


Fig. 4 - Vessels (fragments). Terracotta. From Yotkan. a) Fifth-Sixth c. CE. h. max. 6 × l. max. 8 × t. 1 cm. Ashmolean Museum EA 1984.26. b) Third c. CE (?). h. max. 7.4 × l. max. 6 cm. British Museum, MAS.103. Drawings by AC.



Fig. 5 – Funeral banner of Lady Dai (detail). Silk. Second c. BCE. h 205 × w 92 × w 47.7 cm. The grey areas represent the lacunae in the original banner. Drawing by AC.



Fig. 6 – Disc, perhaps part of a horse harness. Gilded silver. From Takht-i-Kwad (?). Fourth c. BCE (?). D. 9.8 × t. 0.5 cm. British Museum, 123925. Drawing by AC.

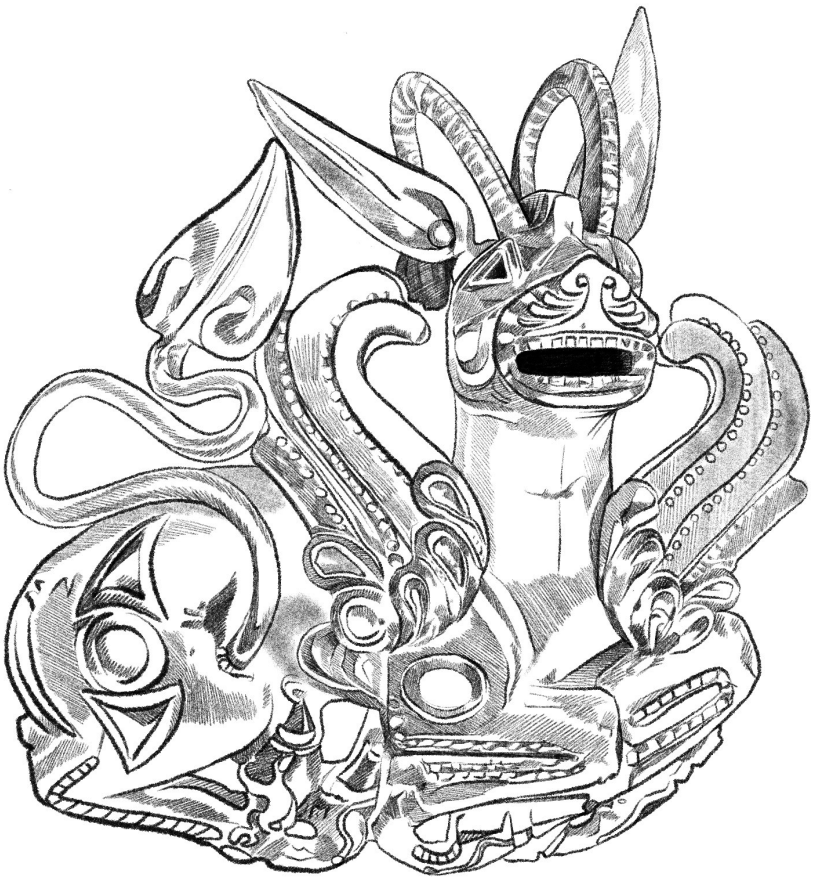


Fig. 7 – Aigrette. Gold. From Takht-i-Kwad (?). Fifth-fourth c. BCE. h. 6.15 cm. British Museum, 123924. Drawing by AC.



Fig. 8 – Patera (detail). Gold. From Ugarit. 1400-1200 BCE. D. 18.8 × h. 3.1 cm. Musée du Louvre, AO 17208. Drawing by AC.



Fig. 1 – BKG 2023 Photo by Luca Colliva.

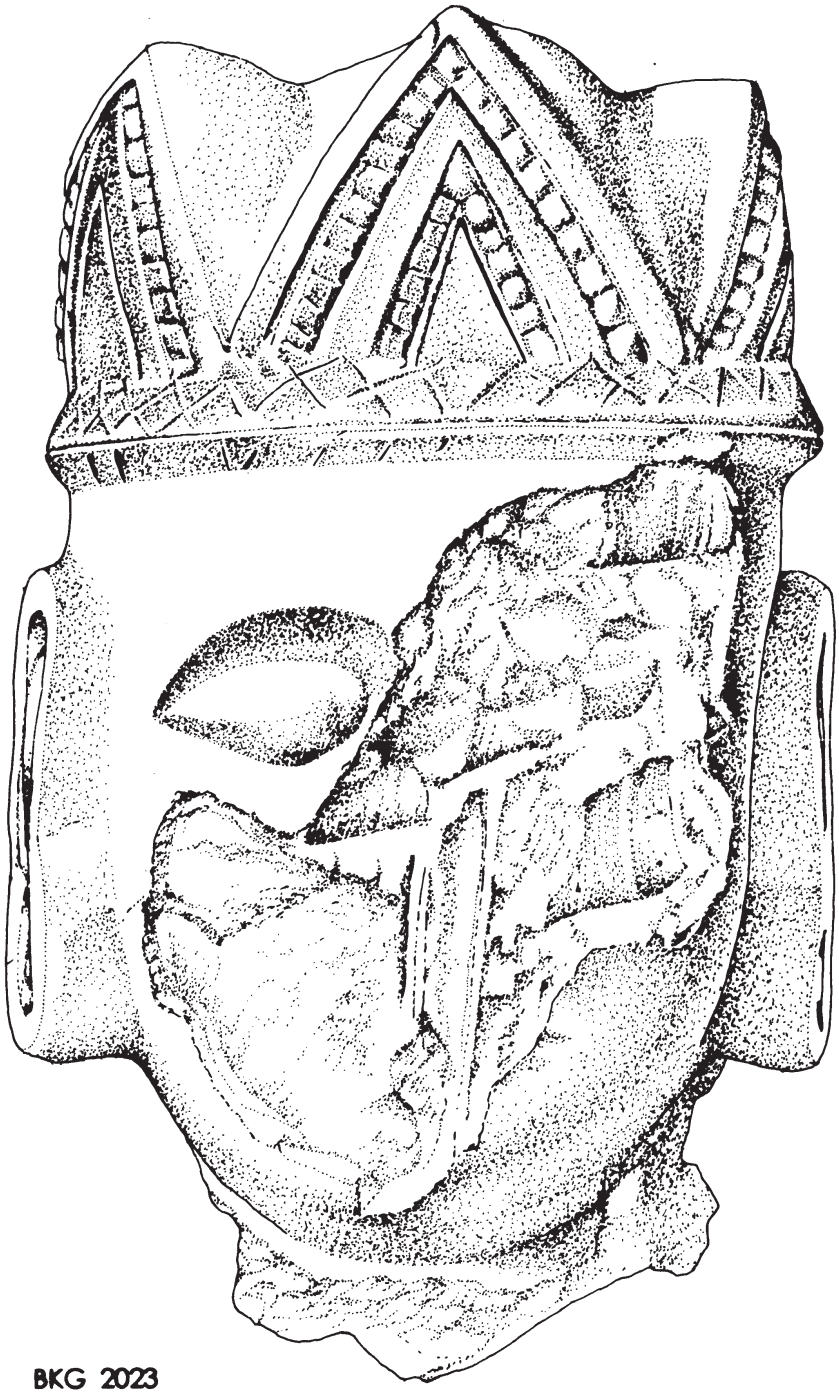


Fig. 2 – BKG 2023. Drawing by FM†.

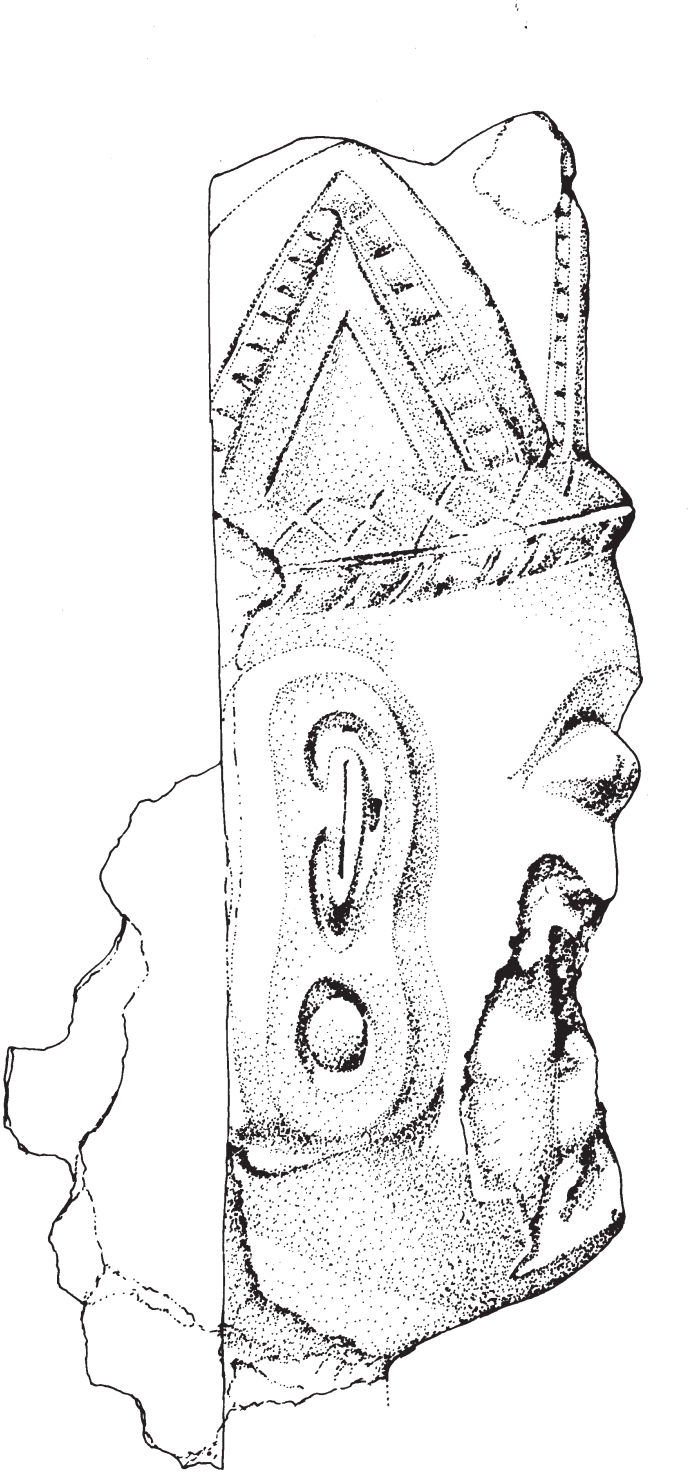


Fig. 2 – BKG 2023. Drawing by FM†.



Fig. 3 – Fragment of a bronze male figurine from Udegram castle (after Filigenzi 2010: fig. 21)



Fig. 4 – Bronze male figure from Jaghuri (after Verardi 1977: figs. 6-8)

III.F.8 - MACROPHASE 8B-9A: A LATE BUDDHIST VOTIVE TABLET
(N. Arcuri, A. Casalini, N. Cecchini)



Fig. 1 – Front side of votive tablet BKG 9649



Fig. 2 – Back side of the votive tablet BKG 9649



Fig. 3 – Avalokiteśvara-Padmapāṇi on a rock throne. Karachi National Museum, Karachi (Pakistan). After Filigenzi 2015: fig. 30a.

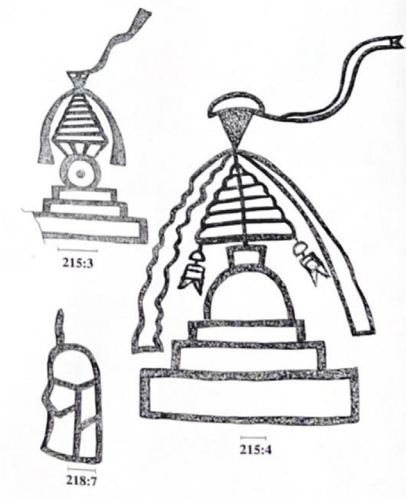


Fig. 4 –Shatial, Upper Hindus (Pakistan): stupa. After Fussmann, Bandini-König 1997: pl. 32.

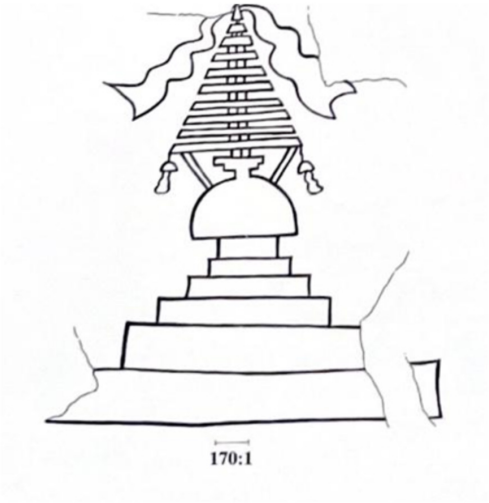


Fig. 5 –Shatial, Upper Hindus (Pakistan): stupa. After Fussmann, Bandini-König 1997: pl. 29.



Fig. 6 –Folādi, Bamyan (Afghanistan): small stupa painted in Cave F. After Bruneau 2007: fig. 13.



Fig. 7 – BI 3818 (plaster cast) (Photo by Claudia Primangeli)



Fig. 8 – Buddhist stelae in Ladakh. Photo courtesy of P. Dorjay.

III.F.9 – MACROPHASE 9A: LATE BUDDHIST THSA TSHAS
(S. Baums, M. Minardi, M. Prota)



Fig. 1 – Bhutan: *tsha tshas*. Photo by LMO.



Fig. 2 – Fragment of BKG 5667 from BKG 14



Fig. 3 – Fragment of BKG 5665



Fig. 4 – Tablet BKG 5666



Fig. 5 – BKG 5665 and 5666 at discovery.



Fig. 6 – BKG 5789



Fig. 7 – BKG 11700 from BKG 24.1

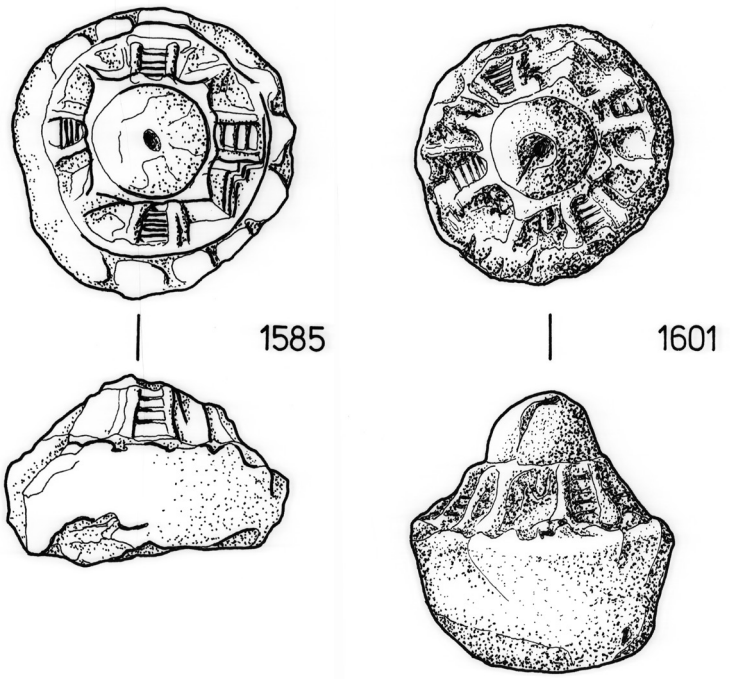


Fig. 8 – *Tsha tsha* from the Buddhist sacred area of Old Kandahar. D. max: 8.3 and 7.6 cm. © Old Kandahar Project – MM.



Fig. 9 – *Tsha tsha* from Manyar, Swat (after Khan, Wahab 2012: 61-62, pls. 18a-b)

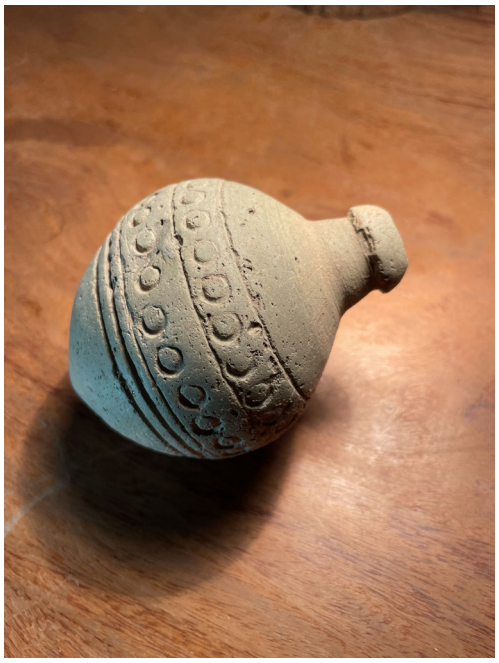


Fig. 1 – 'Sphero-conical' vessel (BKG 10167)

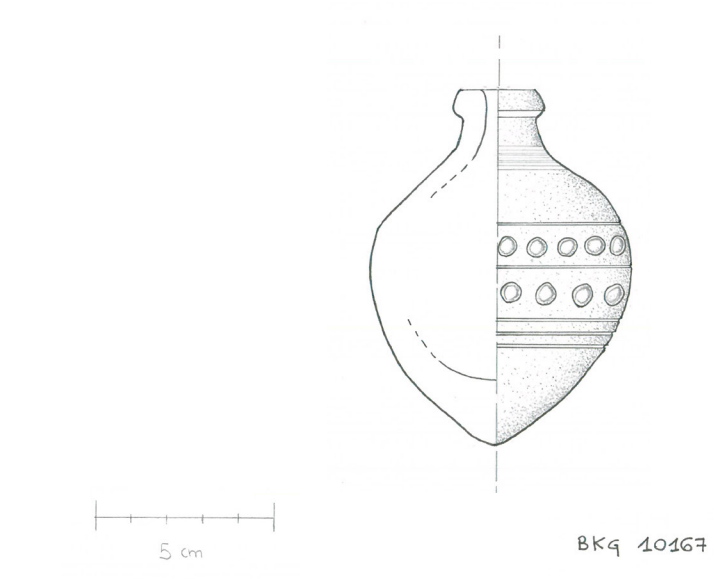


Fig. 2 – BKG 10167. Drawing by AC.



Fig. 3 – 'Sphero-conical' vessel (VSN 80)

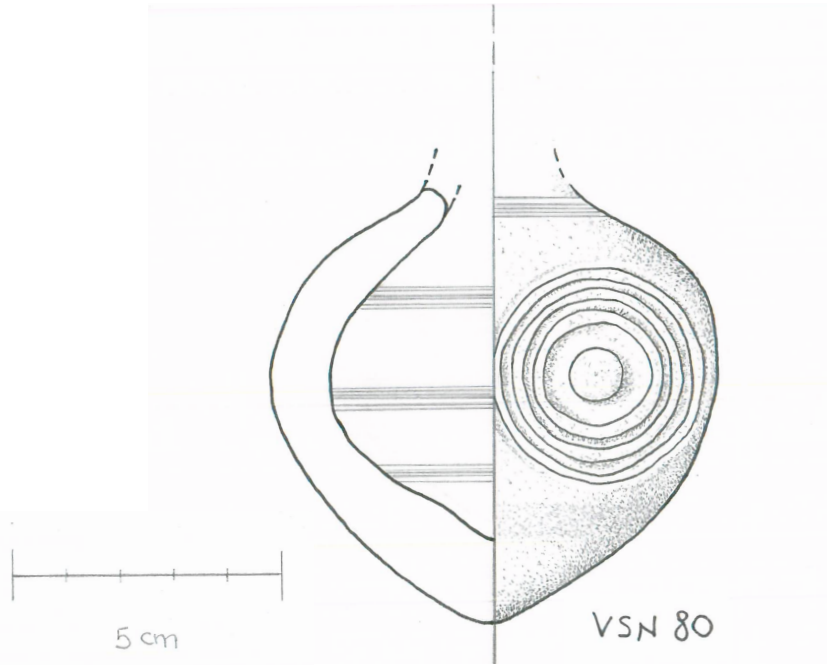


Fig. 4 – VSN 80. Drawing by AC.



Fig. 5 - Metropolitan Museum of Art, New York, No. 40.170.323 (Nishapur, earthenware, 9th-13th century); h. 9.8. Courtesy MMA.



Fig. 7 - Sphero-conical vessel from Iran (?) (glass, dark blue/black; 10th-14th century); h. 10.4; Barakat Gallery, No. LO.891.



Fig. 6 - Vessels from Schmidt's excavations at Ravy, Iran. After Ettinghausen 1951: pl. XLV.A.

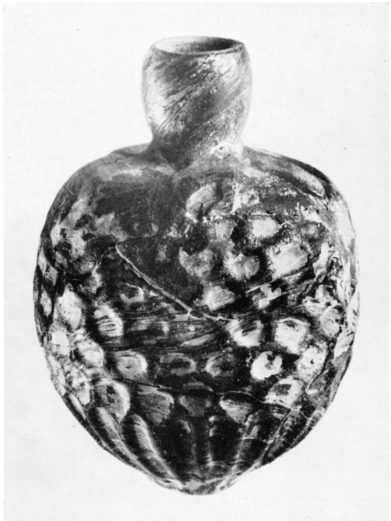


Fig. 8 - Sphero-conical vessel from Iran (glass, dark blue; c. sixth to ninth century); reconstructed h. 10-12. Teheran, Collection of Mohsen Moghadam. After Ettinghausen 1965: pl. XLVII.A

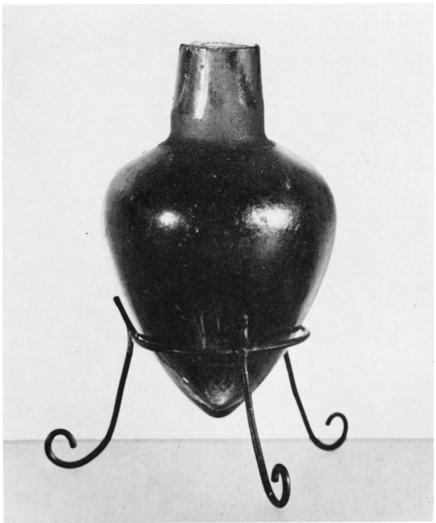


Fig. 9 - Conical vessel from Middle East (?) (glass, amber; c. 12th-13th century); h. 7.7; Corning Museum of Glass, No. 51.1.49 (Corning, New York). After Ettinghausen 1965: pl. XLVI.B.

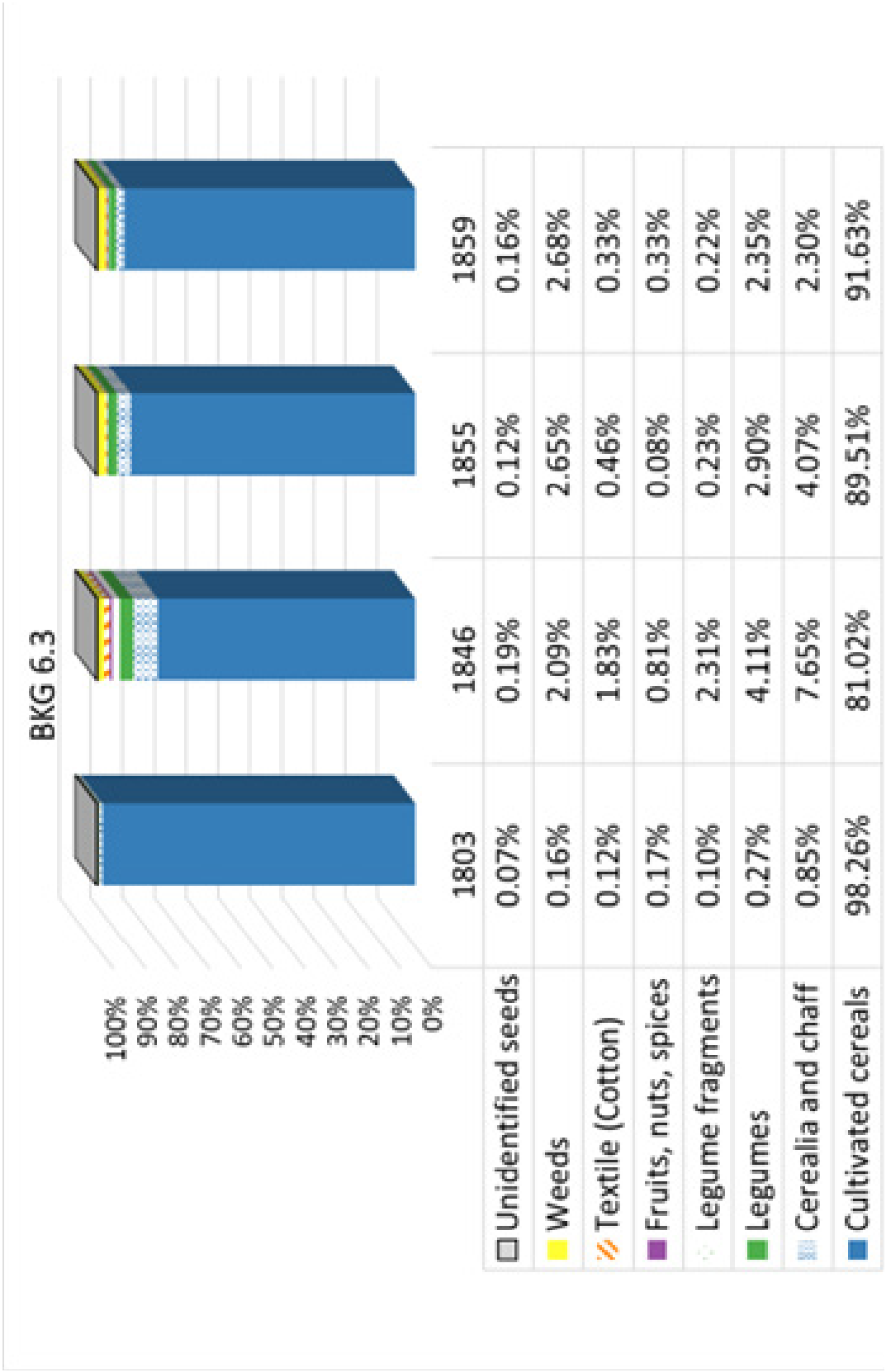


Fig. 1 – Relative ratios of plant categories in BKG 6.3 samples in relation to total count per each sample. Total counts per sample: (1803)= 5786.5; (1846)=3725: (1855)=2606.5; (1859)=1828.



Fig. 2. Rice remains from BKG 6.3. Top left: whole rice grains from BKG 6.3 (1846); top right: half grains from BKG 6.3 (1846): bottom left: one small grain lump from BKG 6.3 (1803); bottom right: rice spikelet bases from BKG 6.3 (1846).



Fig. 3 – Seeds of hulled barley – *Hordeum vulgare var. vulgare* (top row); free-threshing wheat – *Triticum aestivum/durum* (bottom left), and free-threshing wheat compact morphotype (bottom right). All seeds from sample BKG 6.3 (1846).



Fig. 4 – Seeds of sawa millet – *Echinochloa frumentacea*, BKG 6.3 (1846).



Fig. 5 – Seeds of 1. Cotton – *Gossypium arboreum/herbaceum*: 2. Lentil – *Lens culinaris*; 3. Pea – *Pisum sativum*; 4. Horsegram – *Macrotyloma uniflorum*; 5. *Vigna mugno* and 6. *Vigna radiata*. All seeds from BKG 6.3 (1846).

Chapter IV

CONCLUSIONS



Fig. 1a

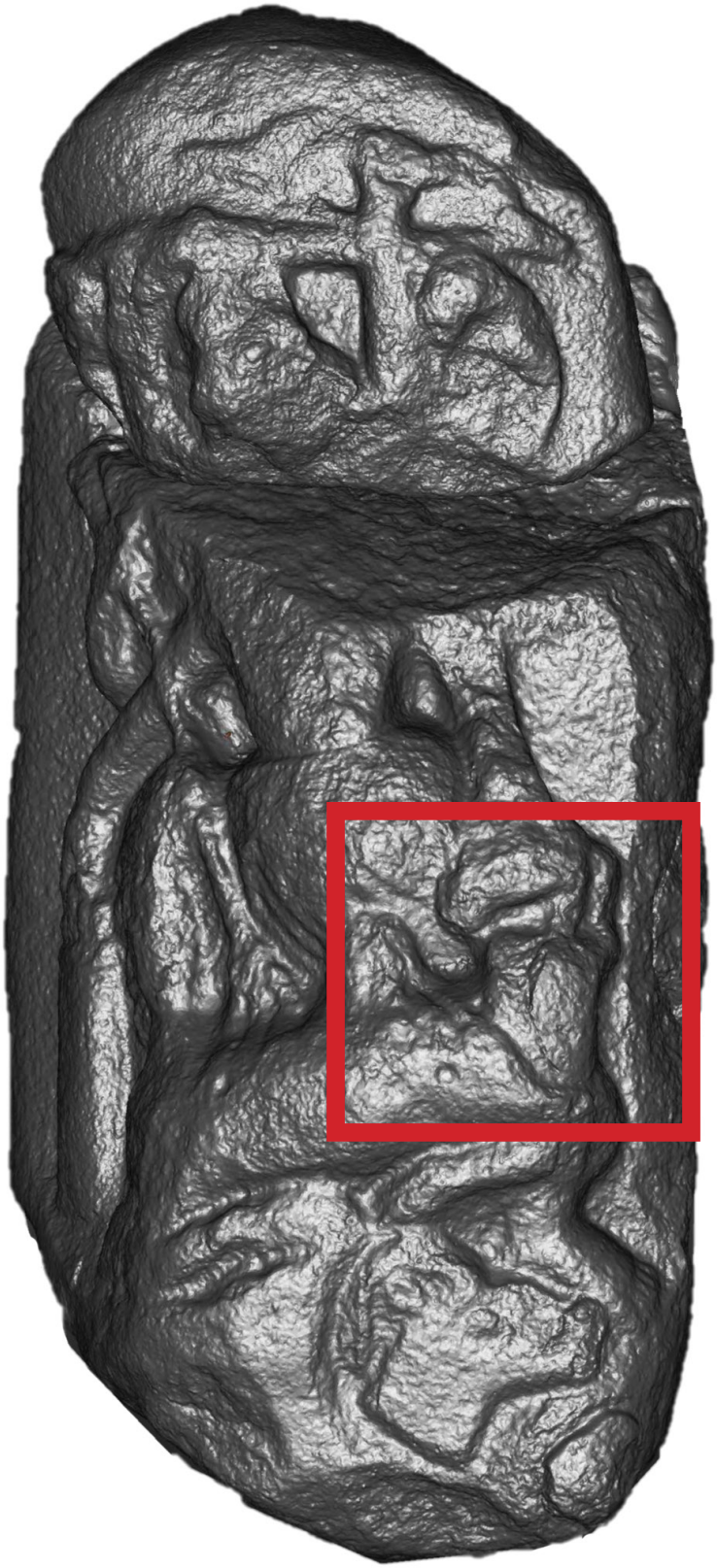


Fig. 1b (the box shows the close up in Fig. 1c).



Fig. 1c

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