

BĪR-KOṬ-GHWANḌAI INTERIM REPORTS, XI
ACT-FIELD SCHOOL PROJECT REPORTS AND MEMOIRS
SPECIAL VOLUME 7

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



International alliance
for the protection
of heritage
in conflict areas



ACT FIELD SCHOOL REPORTS AND MEMOIRS, SPECIAL VOLUME, 7

BKG INTERIM REPORTS, XI

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

Presentation by Adriano V. Rossi

Edited by Alice Casalini

English revision by Klara-Maeve O'Reilly

“SAVE THE ARCHAEOLOGICAL SITE OF BAZIRA” PROJECT



**International alliance
for the protection
of heritage
in conflict areas**



ACT FIELD SCHOOL REPORTS AND MEMOIRS, SPECIAL VOLUME, 7

BKG INTERIM REPORTS, XI

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

Contributions by

Nala Arcuri, Balage Balogh, Alessandra Bagnera, Marco Baldi, Stefan Baums, Pierfrancesco Callieri, Alice Casalini, Natalia Cecchini, Fabio Colombo, Omar Coloru, Rita Dal Martello, Anna Filigenzi, Susanna Forlivesi, Agnese Fusaro, Hong Li, Emanuele Lant, Naghmeh Mahzounzadeh, Cristiano Moscatelli, Nasir Muhmood, Roberto Micheli, Michela Prota, Mubariz A. Rabbani, Kaiser Rahman, Roberto Sabelli†, Giuseppe Salemi, Matteo Sesana, Ehsan Shavarebi, Ingo Strauch, and Massimo Vidale

Drawings by Alice Casalini and Francesco Martore†

Archaeological maps and sections by Michele Minardi

Topography by Kashif Essa (EssaNoor)

Videos by Kashif Iqbal and Umbrella Brands

“SAVE THE ARCHAEOLOGICAL SITE OF BAZIRA” PROJECT



**International alliance
for the protection
of heritage
in conflict areas**



“Save the archaeological site of Bazira” is a project of ALIPH (International Alliance for the Protection of Heritage in Conflict Areas), ISMEO International Association for Mediterranean and Oriental Studies, and Directorate-General of Archaeology and Museums, Govt of Khyber Pakhtunkhwa (DOAM KP).

The project has been implemented by the Italian Archaeological Mission in Pakistan (Swat) of ISMEO and Ca' Foscari University of Venice (DSAAM, Dept of Asian and North African Studies), under the framework of the MoU with DOAM KP and annual licenses issued by the latter.



**International alliance
for the protection
of heritage
in conflict areas**



Università
Ca' Foscari
Venezia

BĪR-KOṬ-GHWANḌAI INTERIM REPORTS XI

2025

Published by
Afzaal Ahmad
Sang-e-Meel Publications
Lahore.

Published by ISMEO
International Association for Mediterranean and Oriental Studies



ISMEO

Print

ISBN-10: 9 69 - 35 - 3726 - 2

ISBN-13: 978-969-35-3726-0

Digital (ebook)

ISBN-10: 9 69 - 35 - 2246 - X

ISBN-13: 978-969-35-2246-4



Sang-e-Meel Publications

25 - Lower Mall, Lahore 54000, Pakistan.
www.sangemeel.com - email: smp@sangemeel.com

BĪR-KOṬ-GHWANḌAI INTERIM REPORTS

Publication Plan

Interim Reports I-XII

BKG Interim Report I – *The survey of the Bīr-koṭ hill. Archaeological map and photographic documentation* / by Luca Maria Olivieri. ISIAO Reports and Memoirs, Series Minor, VI. ISIAO: Rome, 2003.

BKG Interim Report II – *Imported artefacts from Bīr-koṭ-ghwanḍai* / by Maurizio Taddei. *A catalogue of coins from the excavations at Bīr-koṭ-ghwanḍai 1984-1992* / by David W. MacDowall and Pierfrancesco Callieri. ISIAO Reports and Memoirs, New Series, III. ISIAO: Rome, 2004.

BKG Interim Report III – *I manufatti metallici del sito di Barikot (Swat, Pakistan). Studi tecnico-diagnostici e tassonomici* / by Luca Colliva, with contributions of others. ISMEO. BraDypUS Communicating Cultural Heritage: Bologna, 2012.

BKG Interim Reports, IV = *The last phases of the urban site of Bīr-koṭ-ghwanḍai (Barikot). The Buddhist sites of Gumbat and Amluk-dara (Barikot)* / by Luca M. Olivieri and others. ACT Field School Reports and Memoirs, II. AICS-PIDSA. Sang-e-Meel Publications: Lahore, 2024.

BKG Interim Report Va = *Ceramics from the excavations in the historic settlement at Bīr-koṭ-ghwanḍai (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.

BKG Interim Reports, Vb = *Ceramics from the excavations in the historic settlement at Bīr-koṭ-ghwanḍai (Barikot) Swat, Pakistan (1985-2017). The early historic phases* / by Elisa Iori. ACT Field School Reports and Memoirs, Special Volume, 2.3. ISMEO/Ca' Foscari University of Venice. Sang-e-Meel Publications: Lahore, 2024.

BKG Interim Reports, VI – *Terracotta figurines from the excavations in the historic settlement at Bīr-koṭ-ghwanḍai (Barikot) Swat, Pakistan (1977-2019)* / by Gennaro Altiero and Giuseppina Esposito. Ed. by Roberta Gooni. ACT Field School Reports and Memoirs. ISMEO/University of Naples, L'Orientale. Special Volume, 3, Sang-e-Meel Publications: Lahore, 2025.

BKG Interim Reports, VIII – *Stelae and stone sculptures from the excavations in the historic settlement at Bīr-koṭ-ghwanḍai (Barikot) Swat, Pakistan (1984-2022)* / by Cristiano Moscatelli ACT Field School Reports and Memoirs, Special Volume, 4. ISMEO/University of Naples, L'Orientale. Sang-e-Meel Publications: Lahore, forthcoming.

BKG Interim Reports, VIII – *Beads from the excavations in the historic settlement at Bīr-koṭ-ghwanḍai (Barikot) Swat, Pakistan (1984-2022)* / by Mubariz A. Rabbani. ACT Field School Reports and Memoirs, Special Volume, 5. ISMEO/Ca' Foscari University of Venice. Sang-e-Meel Publications: Lahore, 2025.

BKG Interim Report IX – *A Numismatic History of Barikot. Catalogue and Analysis of the Coin Finds from the Excavations at Bīr-koṭ-ghwanḍai (Barikot), Swāt, Pakistan (1984-2022)* / by Ehsan Shavarebi. Österreichische Akademie der Wissenschaften/ISMEO: Vienna, 2025.

BKG Interim Reports, X – *Arrowheads from the excavations in the historic settlement at Bīr-koṭ-ghwanḍai (Barikot) Swat, Pakistan (1984-2022)* / by Naghmeh Mahzounzadeh. ACT Field School Reports and Memoirs, Special Volume, 6. ISMEO/Ca' Foscari University of Venice. Sang-e-Meel Publications: Lahore, forthcoming.

BKG Interim Reports, XI – *Vajirasthāna. Archaeology of the Barikot hilltop (Swat, Pakistan)* / by Luca M. Olivieri and others. ACT Field School Reports and Memoirs, Special Volume, 7. ISMEO/Ca' Foscari University of Venice. Sang-e-Meel Publications: Lahore, 2025 [this Volume].

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).

TABLE OF CONTENTS

<i>PRESENTATION</i> – Adriano V. Rossi	7
<i>FOREWORD</i> – Abdul Samad	9
<i>EDITORIAL NOTE</i> – A. Casalini	11
0 – INTRODUCTION	
PREAMBLE (L.M. Olivieri) 0.1	17
THE CITY OF VAJRA (L.M. Olivieri) 0.2	25
<i>Geography</i>	25
<i>Legends</i>	26
<i>Placenames</i>	28
Bazira/Beira	28
Seeing Bazira as Alexander saw it (O. Coloru)	28
Vajirasthāna.1	30
Vajirasthāna.2	31
Wajīra (M. Sesana)	33
<i>The second Barikot</i>	34
<i>Conclusions</i>	35
<i>A note on 2007-2012</i>	36
I – ACTIVITIES ON THE HILLTOP (1992-2024)	
1. ARCHAEOLOGICAL OUTLINES (L.M. Olivieri) (PLATE I) I.1	41
<i>Funding institutions</i>	41
<i>The work on the hilltop</i>	41
<i>Legal contexts</i>	42

<i>Periods and Macro-phases</i>	42
<i>Topography and structural periods</i>	43
<i>Phases and interphases</i>	44
Terminology	44
Interphases at work	45
<i>The religious context</i>	46
<i>The material culture</i>	46
2. THE SURVEY (1992-1993) (L.M. Olivieri; Plates by R. Sabelli) (PLATES II-IV) I.2	
<i>Objectives</i>	51
<i>The Plain Area</i>	52
<i>Sector 9</i>	52
<i>The Hill Area</i>	53
Sector 1	53
Sector 2	54
Sector 3	54
Sector 4	55
Sector 5	56
Sectors 6-7	57
Sector 8	58
3. THE CONSERVATION PROJECT 'SAVING THE ARCHAEOLOGICAL SITE OF BAZIRA' (2022-2024) I.3	
<i>Methodology</i> (L.M. Olivieri)	61
Sustainability	61
Community engagement	62
<i>Progress Phases Spring 2022-Autumn 2024: Overview</i> (L.M. Olivieri, M. Pinelli, E. Iori)	64
Conservation	64
Archaeology	65
Landscape	65
<i>Phase I I.3.1</i>	66
Season 1 (M. Pinelli, E. Iori and L.M. Olivieri)	66
Season 2 (E. Lant, E. Iori and L.M. Olivieri)	70
Season 3 (E. Lant, E. Iori and L.M. Olivieri)	72

Season 4 (F. Colombo, E. Iori, M. Minardi and L.M. Olivieri)	73
Season 5 (M. Pinelli, E. Iori, M. Minardi, L.M. Olivieri)	75
Season 6 (E. Iori, M. Sesana and L.M. Olivieri)	80
<i>Phase II I.3.2</i>	85
Seasons 7-8 (M. Pinelli, K. Essa, E. Iori, M. Sesana, L.M. Olivieri)	85
Season 9 (M. Pinelli, E. Iori and L.M. Olivieri)	85
<i>Phase III I.3.3</i>	88
Seasons 10-11 (E. Iori, M. Minardi, L.M. Olivieri)	88
Season 12 (M. Pinelli, E. Iori, M. Minardi, L.M. Olivieri)	88
<i>Thermography: Climate change and management sustainability</i> (G. Salemi) (PLATES V-VII)	92
Climate effects on historical structures	92
Thermographic camera surveys at Barikot	93
Conclusions and further developments	94
<i>Budget and Administrative Reports</i> (M. Baldi, E. Iori)	95
<i>The Local Staff</i> (Photos by M. Minardi) I.3.4	98
<i>Graphic Documentation</i> (K. Essa, EssaNoor team) (PLATES VIII-XV)	99
PLATE VIII – Barikot: general map (updated December 2024)	99
PLATE IX – Hilltop: general map (updated December 2024)	99
PLATE X – Terrace E, Side E: prospect with Macro-phases and interventions	99
PLATE XI – Terrace E, Side N: Prospect with Macro-phases and interventions	99
PLATE XII – Terrace E: Map	99
PLATE XIII – General Map with sections	99
PLATE XIV – Terrace E, section A-A' Terrace E, section B-B'	99
PLATE XV – Terrace W, section C-C' Terrace W, section D-D'	99

II – ARCHAEOLOGY AND ARCHITECTURE

1. CIVIL AND MILITARY ARCHITECTURE	103
<i>The Monumental Terraces and the Central Fortress</i> (L.M. Olivieri) II.1.1	103
The retaining wall of Terrace E: pre-Śāhi and Śāhi	103
The defence wall of Terrace W: pre-Śāhi and Śāhi	104
The central Fortress: pre-Śāhi and Śāhi	104
The Palatial Area and Temple 2	105

<i>Islamic/Early Medieval Barikot</i> (L.M. Olivieri)	105
The cemeteries	105
Religious affiliations and cemeteries in Islamic/Early Medieval Swat	106
The hilltop	109
Addendum 1: The Ghaznavid fortified centres (L.M. Olivieri, A. Bagnera)	111
Addendum 2: The quarry sources of <i>kañjur</i>	114
<i>The Fortress on the hilltop Trenches BKG 14 and 15</i> (M. Minardi) (PLATES XVI–XVIII) II.1.2	117
Fieldwork on the acropolis	117
The Fortress on the hilltop, the reservoir-related complex and the donjon (BKG 14)	117
The external sides of the Śāhi Fortress (BKG 15)	119
Conclusive remarks	121
<i>Hindu Śāhi Settlements and the Fortified Limes</i> (E. Iori) II.1.3	123
Defensive system: fortresses, forts and watchtowers	123
Fortresses with Brahmanical temples	126
2. RELIGIOUS ARCHITECTURE: TEMPLE 6	131
<i>Trench BKG 6: The Śāhi Temple on Terrace E</i> (L.M. Olivieri) (PLATE XIX) II.2.1	131
Temples of Swat	131
The Turk Śāhi Temple (Macrophase 8a)	132
An unexpected comparison	133
A second Cult Building	133
Temple 6 in Period 2b–2c (Macrophase 8b)	134
Demolition and reuse of Temple 6 (Macrophase 9a)	134
<i>The Architecture of Temple 6: Excavated Materials and Reconstruction</i> (A. Casalini) II.2.2	136
Early excavations (1998–2023)	136
BKG 6.3: 2023 Excavation	136
The stairway of Temple 6	137
The phases of development	138
Cella and superstructure (PLATES XX–XXI)	140
Podium décor	141
The main cult statue (PLATE XXII)	143
Addendum: Decorated sandstone cornices from Macrophases 8a–b (L.M. Olivieri)	145

3. TERRACE W (PLATES XXIII-XXIV) II.3.1	149
<i>Early Excavations on Terrace W (1998-1999)</i> (L.M. Olivieri, R. Micheli)	149
Trench BKG 7	149
Trench BKG 8	150
Trench BKG 9	151
<i>Structural Overlaps in BKG 24</i> (N. Arcuri, M. Prota) (PLATE XXV) II.3.2	153
Addendum: Cup-marks, dot-marks and other artificial rock-cut features (N. Arcuri)	156
<i>Trench BKG 24.1</i> (M. Minardi, M. Prota) (PLATES XXVI-XXVIII) II.3.3	160
The excavation area	160
The graveyard	160
<i>Trenches BKG 24.2 and BKG 24.3-4</i> (N. Cecchini) II.3.4	166
<i>Trench BKG 24.5</i> (Nasir Muhmood, Qaisar Rahman) II.3.5	169
<i>Trench BKG 23</i> (Li Hong) (PLATE XXIX-XXX) II.3.6	170
Podium [30] (2023)	170
Trench BKG 23 N (2024)	170

III – MATERIAL CULTURE

A. SCULPTURES	
<i>Gandhāran stone sculptures</i> (C. Moscatelli) III.A.1	177
<i>Śāhi marble sculptures</i> (A. Filigenzi) III.A.2	184
<i>Late Buddhist rock sculptures</i> (A. Filigenzi) III.A.3	191
Current conditions (L.M. Olivieri, M. Pinelli)	191
B. TERRACOTTA AND CERAMICS	195
<i>Terracotta figurines</i> (S. Forlivesi) III.B.1	195
<i>Zoomorphic spouts</i> (N. Arcuri, M. Prota) III.B.2	198
<i>Pottery</i> (M.A. Rabbani) III.B.3	203
<i>Glazed pottery</i> (S. Fusaro) III.B.4	205
C. BEADS AND ORNAMENTS (M.A. Rabbani) III.C	213
D. COINS (E. Shavarebi) III.D	217
E. ARROWHEADS (N. Mahzounzadeh) III.E	235
F. BARIKOT HILLTOP IN 10 OBJECTS	239

1. <i>Macrophase 1: A prehistoric slab</i> (M. Minardi, L.M. Olivieri, M. Vidale) III.F.1	239
2. <i>Macrophase 5: An enigmatic mahāparinirvāṇa</i> (C. Moscatelli) III.F.2	243
3. <i>Macrophase 7: A Hūṇa gemstone with a portrait</i> (P. Callieri) III.F.3	247
4. <i>Macrophase 7: A Hūṇa sealing</i> (E. Iori, M. Minardi) III.F.4	249
5. <i>Macrophase 8a: The Barikot Śāradā Inscription: preliminary notes</i> (S. Baums, L.M. Olivieri, I. Strauch) III.F.5	251
6. <i>Macrophase 8b: The Three Hares roundel</i> (A. Casalini) III.F.6	253
7. <i>Macrophase 8b: A Hindu-Śāhi portrait</i> (E. Iori) III.F.7	257
8. <i>Macrophase 8b-9a: A Late Buddhist votive tablet</i> (N. Arcuri, A. Casalini, N. Cecchini) III.F.8	261
9. <i>Macrophase 9a: Late Buddhist tsha tshas</i> (S. Baums, M. Minardi, M. Prota) III.F.9	265
10. <i>Macrophase 9a: A Sphero-Conical vessel</i> (L.M. Olivieri) III.F.10	271
G. ARCHAEOBOTANICAL REMAINS (R. Dal Martello) III.G	277

IV – CONCLUSIONS

THE VAJIRASTHĀNA HILLTOP: ICONIC ASPIRATIONS AND OVERLAPPING RELIGIOUS LANDSCAPE (E. Iori)	285
--	-----

V – APPENDICES

INVENTORY OBJECTS (2019–2024): CHARTS (Li Hong) V.1	299
NON-INVENTORY OBJECTS (2019–2024): CHARTS (Li Hong) V.2	303
GANDHĀRAN FRAGMENTS (1999–2024): CHARTS (Li Hong) V.3	307
VIDEO DOCUMENTS V.4	309
1. A Song for Bazira I (K. Iqbal and Umbrella Brand, 2023)	309
2. A Song for Bazira II (K. Iqbal and Umbrella Brand, 2024)	309
3. Bazira: Story of the Project (Umbrella Brand)	309
4. 3D view of Bazira (December 2024) (K. Essa and EssaNoor)	309
5. A Tale of Two Cities (Umbrella Brand)	309
6. Uḍḍiyāna (G. Capriotti)	309
PRESS REVIEW (ONLINE FEATURES)	311
REFERENCES	313

III

MATERIAL CULTURE

1. *Macrophase 1: A Prehistoric slab* (M. Minardi, L.M. Olivieri, M. Vidale)¹⁷⁴

Slab BKG 5838

The slab measures 63 cm in height, 29 cm in width, and is 5 cm thick. It bears an incised pattern measuring 14 cm by 26 cm. Its edges have been retouched with a launched percussion process. The dotted pattern or engraving is in what we believe to be the lower part of the specimen: the phyllite slab is perhaps broken on the upper side, but it looks complete on all other sides, although it may be possible that the fragment recovered was cut out of a larger piece. In fact, the left ‘horn’ of its design seems to be interrupted by a fracture. In any case, we can distinguish its top and bottom parts, and its front and back sides.

Context

In 2020, L.M. Olivieri and M. Minardi excavated the remains of a Śāhi fort and a later Ghaznavid watch-tower from the seventh to tenth centuries) in Trench BKG 14 (see Minardi, this volume). The excavation proved that the Śāhi structures of the acropolis of Barikot were built on the top of earlier buildings that were demolished for the occasion (cf. *ibid.*). Such imposing earlier structures essentially constituted, and still do, the substruction necessary to terrace the sloping phyllite rocky outcrop of the hilltop, which descends at 45° to the north, plunging over 200 metres down to the bank of the Swat River along the northern side of the hill. The terrace on the hilltop formed the base of what we can define a lost pre-Śāhi acropolis, whose imposing remains still mark the northern flank – these were explored in autumn 2021. From the foundations of this pre-Śāhi acropolis, at the base of its stone fill below the Śāhi fortification, we recovered sherds and other materials, including a terracotta figurine, and the phyllite slab under discussion, all from to Macrophase 1.

Technique

The engraving marks are dot-marks made by percussion, delicately finished, so that some are very shallow and thus barely visible (Figs 1-3). The same technique was used for other slabs with similar percussion designs (Olivieri, Vidale 2004; Fig. 4).¹⁷⁵ The use of dot-marks to define linear compositions is known from several examples. The choice of dot-marks over incised lines can be explained by the greater certainty afforded by the former in the management of the décor form and composition, but also perhaps by the associated use of chromatic features that are now lost to us.¹⁷⁶ In any case, slab BKG 5838 clearly showcases the effect of a hammering process in which the lower part of the drawing is so dense that the definition of the dot-marks disappears in favour of an almost continuous line.

The drawing shows an incomplete circle of twelve dot-marks, bisected by a partial vertical diameter of five-to-six dot-marks. The partial circle rests on two oblique lines converging into an open triangle, with the vertex pointing upwards where the vertical diameter ends. The triangle is composed, as already mentioned, of several thicker hammer marks. Three closely spaced horizontal dot-marks are visible just below the vertex. A poorly preserved sub-vertical line of dot-marks (perhaps in number of five), slightly curved to the left, seems to depart from the central one.

The dot-marks (possibly) depict a maskoid. Bearing this in mind, the object becomes legible as the remnant of a stele with a distinctive type of anthropomorphic image. The maskoid, at first glance, gives us the impression of being roughly etched, however, closer scrutiny reveals that some of the details were quite refined. The round ‘face’ was made with a

¹⁷⁴ This text is a revised and updated version of a note published by the authors in 2022 (Olivieri, Minardi, Vidale 2022).

¹⁷⁵ See Olivieri, Vidale 2004 for a distributional analysis of these artefacts and the compositional significance of the dot-marks.

¹⁷⁶ Other elusive components in the manufacture of this object are the production of sounds and smells, caused by the percussion and combustion of mineral microparticles.

sequence of five points on the left, and six on the right, interrupted by a vertical median line of five-to-six other points. The few short oblique incisions in the two symmetric fields are not sufficient to define ‘eyes,’ but they might suggest their presence. An inverted triangular field, on top of this line and on the maskoid’s forehead, is light-hammered, and ends in three deeper vertical parallel marks. From the same triangular feature two symmetric appendixes or ‘horns’ depart, likewise created by a sequences of four-to-five dots of decreasing size. As already stated, the left ‘horn’ originally extended beyond the present limits of the slab.

These iconographic features qualify this image as part of the maskoid group and thus suggest important comparisons with the world outside Swat – in particular, with the abundant inventory of similar images from Siberia to the Upper Indus. These maskoids, albeit quite different from each other, often show features that may be compared to the Barikot specimen: a) a round contour; b) projections on the middle forehead; c) an inverted triangular field under the forehead, that in the Upper Indus specimens clearly results from the crossed, X-like partition of the face (Fig. 5).

Comparanda

Maskoids are well known in the Upper Indus Valley (Hauptmann 1997; Bandini-König 2011), as far as Ladakh (Francfort et al. 1990, 1992; Francfort 2003; Vernier 2007; Bruneau et al. 2010–2011; Bruneau 2012; Devers et al. 2015; Vernier 2016; Bellezza 2017) and Upper Tibet (Bruneau, Bellezza 2013). These patterns are also commonly reported for the early Bronze Age Siberian Okunevo Culture (Jettmar 1982a, 1982b, 2003; Francfort et al. 1990), dated to the third to second millennium BCE (Kubarev 2001; Parzinger 2006), and more generally in the rock art repertoires and sculpted stele of Inner Asia (Devlet 1999), including southern inner Mongolia and the lower Amur and Ienisseï basins.

Maskoids are often cautiously dated to early Bronze Age horizons, around the late third to early second millennia BCE. Some scholars (for example Ashfaque 2021: 194; Kilunovskaya 2010) propose a similar generic chronology, while grouping the maskoids of northern Pakistan together with other images of demon and giants, as well as ibexes, markhors, and other wild goats.¹⁷⁷

As far as chronology is concerned, it is possible that facial designs like the maskoids on some steles from Minusinsk basin, Tuva and the Altaï, might date back to an earlier Chalcolithic phase of the late fourth to the first half of the third millennium BCE, and generically referred to Afanasievo population groups (Bruneau, Bellezza 2013: 41).

In terms of interpretation, maskoids and their design remain quite ambiguous, although the available bibliography regarding this class is impressive. Any hypotheses on the meaning of the image are quite speculative, and this means that the interpretation of maskoids, in such a wide and diversified cultural space, remains an unsolved issue to date. On that, we fully agree with Francfort (2015: 31). Although the question remains open, the discovery of the Barikot specimen provides further, although indirect, evidence on the complex network of shared features which linked the Swat Valley with different regions of Central Asia during the Bronze Age.

Conclusions

The partial remains of an engraving on a stone slab found in a secondary deposition, reused as building material, can hardly be considered as key evidence for definitive conclusions on the meaning and use of maskoid imagery. However, some aspects are noteworthy. Typically, maskoids are engraved on boulders or open cliffs, less frequently on slabs, as is the case in Barikot. The maskoid of Barikot shares some its features with the facial details of a set of mysterious anthropomorphic figures characterised by long pointed hats and lines crossing their face engraved on stone slabs from

¹⁷⁷ In the impressive rock-art complex of Gogdara I, not far from Barikot, bi-triangular animals were dated from the same chronological threshold to the early Iron Age (Olivieri 1998).

the Tas-Khazaa burial ground in southern Khakassia (the early phase of the Okunevo culture, 25th –23rd centuries BCE): namely, the partitioned face (cf. Savinov 2019: figs 2.5 and 6, figs 4.3 and 9), or the ‘antennae’ (ibid.: fig. 3.3 and fig. 6.6). One of the best-known examples is possibly the stele from the Tuim River, Khakassia (Esin 2009). We can also consider the painted and engraved slabs from the Karakol, Jalal-Abad Province, Kyrgyzstan (dated to the second millennium BCE; Kubarev 2001: fig. 6), and the stone slab found in the Kurgan 2 at Arzhan in the Russian Republic of Tuva (Čugunov, Parzinger, Nagler 2010: 138, fig. 117.2).¹⁷⁸

It appears that maskoid slabs relate to funerary architecture. These maskoids are usually interpreted (with all the caveats mentioned above) as images of spirits, deities or as representations of souls of the dead, who rank differently in the hierarchy of supernatural characters accompanying the deceased to the other world. They are usually connected to shamanistic contexts (Devlet 2004) or to specific deities (Kyzlasov 1990). Following this, we cannot rule out the possibility that the Barikot slab also came from a dismantled burial. Whatever structure it might have belonged to (a burial or even a ritual ensemble?), the slab was originally located on the Barikot hilltop and was dismantled and reused in situ for the stone fill of the pre-Šāhi acropolis. We know that Barikot has been, since antiquity, a primary node in the routes from the Indus Valley to the Hindukush. Therefore, the discovery of the slab with a maskoid on the highest and most segregated point of the Barikot hill, dominating the valley and only accessible via a steep slope – and furthermore restricted (in later periods) for monumental sacred installations belonging to the various religions that followed each other’s in the region – leaves the possibility that Barikot’s peak might have been sacred even in prehistoric times open. Apart from the evidence yielded by the 1999 excavation campaign (Trench BKG 9), evidence of open-air prehistoric rock engravings is also documented on the acropolis just below its hilltop (Fig. 6).

As far as the chronology of slab BKG 5838 is concerned, the most direct comparisons include the two specimens from Swat mentioned above: the cover slab from a grave of Kandak (Olivieri et al. 2006: 79, fig. 3), and the reused lower slab of Grave 10 from Udegram (Olivieri 2016b). Based on the latter evidence, we may assume a Macrophase 1 chronology for the Barikot slab, that is a terminus not later than the end of the second millennium BCE, maybe corresponding with the earliest phases of the Swat Protohistoric Graveyards.

¹⁷⁸ The slab of Arzhan 2 was reused, meaning that its maskoid was carved before the erection of the kurgan (early first millennium BCE). However, apart from the fact that both these specimens are engraved stone slabs, there is very little in common between the one of Arzhan 2 and the one from Barikot (as confirmed by Parzinger, pers. comm).



Figs 1-2 – Protohistoric phyllite stele (BKG 5838)

[Figs 1-2 – 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 – a) Grave 10, basal slab. 3D restitution by GS, University of Padua; b) Grave 19, basal slab; 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 Hauptmann 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)

REFERENCES

Abbreviations

Arr. *Anab.* = Arrian, Ἀλεξάνδρου Ἀνάβασις

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

SAA = *South Asian Archaeology Conference*

SAAA = *South Asian Archaeology and Art Conference*

* * *

* * *

ARA = *Archaeological Research in Asia*

AION = *Annali dell'Istituto Orientale di Napoli*

AUON = *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'Études Tibétaines*

SAS = *South Asian Studies*

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

- Abraham, S.A. (2013) In Search of Craft and Society: The Glass Beads of Early Historic Tamil South India. In S.A. Abraham, P. Gullapalli, T.P. Raczek, U.Z. Rizvi, eds, *Connections and Complexity: New Approaches to the Archaeology of South Asia*. New York: Routledge, pp. 223–238.
- Abraham, S.A. (2016) Glass beads and glass production in early South India: Contextualizing Indo-Pacific bead manufacture. *ARA*, 6: 4–15.
- Agrawala, R.C. (1968) Ūrdhvaretas Gaṇeśa in Afghanistan. *EW*, 18, 1–2: 166–168.
- Ahuja, N.P. (2018) *Art and archaeology of ancient India: Earliest Times to The Sixth Century*. Oxford: Ashmolean Museum.
- Ali, I., Rahman, L. (2005) Survey and Exploration in Bajaur–Mohmand region, Pakistan. *Frontier Archaeology*, 3: 55–90.
- Allan, J. (1936) *Catalogue of the Coins of Ancient India*. London: British Museum Press.
- Allen, T. (1989) Notes on Bust (Continued). *Iran*, 27: 57–66.
- Alram, M. (1986) *Nomina Propria Iranica in Nummis. Materialgrundlagen zu den iranischen Personennamen auf antiken Münzen* (Iranisches Personennamenbuch IV). Vienna: ÖAW Verlag.
- Alram, M. (2003) Three Hunnic Bullae from Northwest India. *Bulletin of the Asia Institute*, 17: 177–184.
- Alram, M. (2016) *Das Antlitz des Fremden: die Münzprägung der Hunnen und Westtürken in Zentralasien und Indien*. Vienna: Kunsthistorisches Museum Wien / ÖAW Verlag.
- Ambily, C. S. (2020) A Brief Discussion on the Recently Explored Temple Ruins from Pamba River Basin, South Kerala. *Heritage: Journal of Multidisciplinary Studies in Archaeology*, 8, 1: 730–749.
- Amiet, P. (1972) *Glyptique susienne des origines à l'époque des perses achéménides. Cachets, sceaux-cylindres et empreintes antiques découverts à Suse de 1913-1967*, 2 vols., MDAFI 43, Paris: P. Geuthner
- Annucci, A. (forthcoming) Hindu Shahi Coinage. In N. Kimmet, N. Verdon, ed., *Exploring the Contributions of the Shahi Kingdoms to Inner and South Asia*. Vienna: ÖAW Verlag.
- Antonetti, C. (2020) Beira e Bazira: Paesaggi urbani di contatto. *Geographia Antiqua. La geografia a Teatro*, 29: 97–110.
- Alterio, G., Esposito, G. (2020) Terracotta Figurines from the Urban Site of Barikot/Bīr-Koṭ-Ghwaṇḍai (Swat, Pakistan): Some Observations on the Anthropomorphic and Zoomorphic Figurines and their Contexts of Finding. *JAC*, 43, 2: 285–296.
- Arjun, R., Shekhar, H. (2014) Game board (Mancala) on the basalt exposures and the Khandoba Temple of Deccan College Campus. *Bulletin of the Deccan College*, 74: 67–78.
- Arman, H., Kouhestani, H., Zareie, A. (2020) Sphero-Conical Vessels in Islamic Pottery Survey and Explaining of Function. *Journal of Archaeological Studies*, 12, 2, 22: 41–59.
- Ashfaque, S.M. (2021) The Cultural Dynamics of the History of Asia in Petroglyphs along the Karakoram Highway. *AP*, 16: 181–197.
- Ashraf Khan, M., Bahadur Khan, M., Azeem, A. (1999) A Newly Discovered Image of Durga from Gandhāra. *Ancient Pakistan*, 13: 7–10.
- Avdelidis, N. P., Moropoulou, A. (2004) Applications of infrared thermography for the investigation of historic structures. *Journal of Cultural Heritage*, 5, 1: 119–127.
- Aydin, M., Ozturk, S. (2021) *Thermography in Cultural Heritage: Applications and Challenges*. *Journal of Cultural Heritage*, 45: 234–245.
- Azad, A. (2016) Living happily ever after: fraternal polyandry, taxes and “the house” in early Islamic Bactria. *Bulletin of the SOAS*, 79: 33–56.
- Bagavac, P., Krstulović-Opara, L., Domazet, Ž., Grebo, A. (2022). Application of infrared thermography as a non-destructive testing method: feature extraction. In *Proceedings of the 10th International Congress of Croatian Society of Mechanic (ICCSM 2022)*, pp. 87–88.
- Bagnera, A. (2004) Note sulle modalità di sepoltura nelle necropoli di rito musulmano della Sicilia medievale (X–XIII secolo), in Bagnera, A. & Pezzini, E. I cimiteri di rito musulmano nella Sicilia medievale. Dati e problemi. In A. Molinari, A. Nef 2004 (eds) *La Sicile à l'époque islamique. Questions de méthode et renouvellement récent des problématiques*. Mélanges de l'Ecole Française de Rome, Moyen Age, 116, 1. Ecole française de Rome: Rome, pp. 259–302.

- Bagnera, A. (2006) Preliminary Note on the Islamic Settlement of Udegram, Swat: The Islamic Graveyard (11th–13th century AD). *EW*, 56, 205–228.
- Bagnera, A. (2015) *The Ghaznavid Mosque and the Islamic Settlement at Mt. Raja Gira, Udegram*. ACT RepMem, V. Lahore: Sang-e-Meel Publications.
- Bagnera, A., Manna, G. (2006) Recipienti da fuoco e da dispensa provenienti dall'abitato islamico sul monte Raja Gira (Udegram, Swat, Pakistan). *Atti – XXXIX Convegno Internazionale della Ceramica, Savona 26–27 maggio 2006*. Savona: Centro ligure per la storia della ceramica, pp. 319–328.
- Bakker, H.T. (2017) *Monuments of Hope, Gloom, and Glory in the Age of the Hunnic Wars: 50 Years that Changed India (484–534)*. 24th J. Gonda Lecture 2016. Amsterdam: J. Gonda Fund Foundation of the KNAW.
- Bandini-König, D. (2011) *Die Felsbildstation Thalpan V: Kataloge Ziyarat, Thakot, Khomar Das, Gichoi Das, Dardarbatı Das, Bearbeitung der Inschriften von Gérard Fussman, Oskar von Hinüber, Nicholas Sims-Williams (Herausgegeben von H. Hauptmann)*. MANP, 10. Mainz: Verlag Philipp von Zabern.
- Baldick, J. (2000) *Animal and shaman: Ancient religions of Central Asia*. New York: New York University Press.
- Ball, W. (2019) *Archaeological Gazetteer of Afghanistan: Revised Edition*. Oxford: Oxford University Press.
- Barger, E., Wright, Ph. (1941) *Excavations in Swat and Explorations in the Oxus Territories of Afghanistan*. MASI, 64. Calcutta: Government of India Press.
- Barrett, D. (1961) Sculptures from Kashmir. *The British Museum Quarterly*, 23, 2: 49–51.
- Baums, S. (2013) Inscribed Buddhist Tablets from Merv. *Bulletin of the Asia Institute* 23: 21–31.
- Baums, S. (2019) A survey of placenames in Gāndhārī inscriptions and a new oil lamp from Malakand. In W. Rienjang, P. Stewart (eds) *The Geography of Gandhāran Art*, Oxford: Archaeopress, pp. 167–174.
- Beal, S. (1906) tr., *Si-yu-ki. Buddhist Records of the Western World. Chinese Accounts of India Translated from the Chinese of Hiuen Tsiang*, vols 1–2, London: Trübner & Co. (1st ed. 1884).
- Beck, H. C. (1941) *The Beads from Taxila*. MASI, 65. Calcutta: Government of India Press.
- Bellezza, J.V. (2017) The Rock Art of Spiti. A General Introduction. *RET*, 41: 56–85.
- Bellina, B., Glover, I. (2004) The Archaeology of Early Contact with India and The Mediterranean World. From the Fourth Century BC to The Fourth Century AD. In I. Glover, P. Bellwood, eds, *Southeast Asia: From Prehistory to History*. New York: Routledge/Curzon, pp. 68–88.
- Bendezu-Sarmiento, J. (2022) Archaeological Survey and First Preliminary Results of the Site of Shahr-i Gholghola (Afghanistan). The Bamiyan Valley as a Centre of Trade and Cultural Exchange. In Ch. Baumer, M. Novák, S. Rutishauser (eds) *Cultures in Contact. Central Asia as Focus of Trade, Cultural Exchange and Knowledge Transmission*. Schriften zur Vorderasiatischen Archäologie, 19. Harrassowitz Verlag: Wiesbaden, pp. 421–442.
- Bentor, Y. (1996) *Consecration of Images and Stūpas in Indo-Tibetan Tantric Buddhism*. Leiden: Brill.
- Bernard, P., Grenet, F. (1981) Découverte d'une statue du dieu solaire Surya dans la région de Caboul. *Studia Iranica*, 10, 1: 127–146, pls. XIII–XVI.
- Bhattacharyya, D.C. (2002) *Gandhāra Sculpture in the Government Museum and Art Gallery, Chandigarh: In the Light of the International Colloquium Held in 1998 at Chandigarh*. Chandigarh: Government Museum and Art Gallery.
- Biddulph, J. (1880) *Tribes of the Hindoo Koosh*. Calcutta: Office of the Superintendent of the Government Printing.
- Boardman, J. (2001) *Greek Gems and Finger Rings*. London: Thames and Hudson.
- Bopearachchi, O. (1991) *Monnaies gréco-bactriennes et indo-grecques. Catalogue raisonné*. Paris: Bibliothèque nationale.
- Boucher, D. (1991) The *Pratīyasamutpādagāthā* and Its Role in the Medieval Cult of the Relics. *The Journal of the International Association of Buddhist Studies* 4: 1–27.
- Brooke, C. (2018) Thermal imaging for the archaeological investigation of historic buildings. *Remote Sensing*, 10, 9: 1401–1419.

- Bruneau, L. (2007) L'architecture bouddhique dans la vallée du Haut Indus: un essai de typologie des représentations rupestres de stūpa. Paris: *Arts Asiatiques*, 62, 1: 63–75.
- Bruneau, L. (2012) Étude thématique et stylistique des pétroglyphes du Ladakh (Jammu et Cachemire, Inde). *EA*, 18: 69–88.
- Bruneau, L., Bellezza, J.V. (2013) The Rock Art of Upper Tibet and Ladakh: Inner Asian cultural adaptation, regional differentiation and the Western Tibetan Plateau Style. *RET*, 28: 5–161.
- Bruneau, L., Devers, Q., Vernier, M. (2010–2011) Rock art research in Murgi Tokpo, Nubra Valley in Ladakh. *Purakala* 20–21: 91–98.
- Byrne, D. (1995) Buddhist Stupa and Thai Social Practice. *World Archaeology*, 27, 2: 266–281.
- Byrne, D. (2008) Heritage as social action. In G. Fairclough, R. Harrison, J.H. Jameson, J. Schofield, eds, *The Heritage Reader*. Abingdon: Routledge, pp. 149–173.
- Byrne, D. (2013) The WCPA's Natural Sacred Sites Taskforce: A critique of conservation biology's view of popular religion. In D. Byrne, S. Brockwell, S. O'Connor, eds., *Transcending the Culture–Nature Divide in Cultural Heritage: Views from the Asia–Pacific region*, 36. Canberra: ANU, pp. 157–170.
- Bullion, E., Maksudov, F., Henry, E.R., Merkle, A., Frachetti, M. (2022) Community practice and religion at an Early Islamic cemetery in highland Central Asia. *Antiquity*, 96, 387: 628–645. <https://doi.org/10.15184/aqy.2021.106>
- Burton, A. (1996) Itinéraires commerciaux et militaires entre Boukhara et l'Inde. Dossier: Inde-Asie centrale. Routes du commerce et des idées. *Cahiers d'Asie centrale*, 1–2: 13–32.
- de Blois, F. (2006) Du nouveau sur la chronologie bactrienne post-hellénistique: l'ère de 223–224 ap. J.–C. *Comptes rendus des séances de l'Académie des Inscriptions et Belles-Lettres*, 150, 2: 991–997.
- Cacopardo, A.M., Cacopardo, A.S (2001) *Gates of Peristan. History, Religion and Society in the Hindukush*, IsiAO RepMem, Series Minor V. IsiAO: Rome.
- Cacopardo, A.M., Cacopardo, A.S. (2011) Anthropology and Ethnographic Research in Peristan. *JAC*, 34, 1: 311–320.
- Cacopardo, Al., Pellò, S. (2021) Whose Past and Whose Future: Free Love and Love Marriage among “Kafirs” of the Hindukush in an Early Nineteenth-Century Persian Ethnography. *Iran and the Caucasus*, 25, 4: 366–378.
- Callieri, P. (1989) *Saidu Sharif I (Swat, Pakistan). Vol. 1: The Buddhist sacred area. The monastery*. Roma.
- Callieri, P. (1993) Excavations of the IsMEO Italian Archaeological Mission at the Historic Settlement of Bīr-kot-ghwaṇḍai, Swat, Pakistan: 1990–91 Campaign. In A. Gail, G.J. Mevissen, eds, *SAA 1991*, pp. 339–348
- Callieri, P. (1997) *Seals and Sealings from The North-West of The Indian Subcontinent and Afghanistan (4th Century B.C.–11th Century A.D.)*. Dissertationes, 1. Istituto Universitario Orientale di Napoli: Napoli.
- Callieri, P. (2000) Decorated Pottery from the IsIAO Excavations at Bīr-koṭ-ghwaṇḍai (Swat, Pakistan, 2nd cent. B.C.–15th cent. A.D.). In M. Taddei, G. De Marco, eds, *SAA 1997*. SOR, XC, 2. IsIAO: Rome, pp. 857–876.
- Callieri, P. (2005) Excavation of the IsIAO Italian Archaeological Mission in Pakistan at Bīr-koṭ-ghwaṇḍai, Swat: The Sacred Building on the Citadel. In C. Jarrige, V. Lefèvre, eds, *SAA 2001*, Paris: Recherche sur les civilisations, pp. 417–425.
- Callieri, P. (2010) *Bīr-koṭ-ghwaṇḍai in the Post-Kushan Period*. In M. Alram, D. Klimburg-Salter, M. Inaba, M. Pfisterer, eds, *Coins, Art, and Chronology*, II. Vienna: ÖAW, 371–388.
- Callieri, P., Filigenzi, A., Stacul, G. (1990) Bir-Kot-Ghwandai, Swat: 1987 Excavation Campaign. *Pakistan Archaeology*, 25: 183–192.
- Callieri, P., Brocato, P., Filigenzi, A., Nascari, M., Olivieri L.M. (1992) Bir-Koṭ-Ghwaṇḍai 1990–1992. A Preliminary Report on the Excavations of the Italian Archaeological Mission, IsMEO. *AION*, 52, 4 (Suppl. 73): 1–48.
- Callieri, P., Colliva, L., Micheli, R., Nasir, A., Olivieri, L.M. (2000) Bīr-koṭ-ghwaṇḍai, Swat, Pakistan. 1998–1999 Excavation Report. *EW*, 50, 1–4: 191–226.
- Callieri, P., Colliva, L., Nasir, A. (2000–2001) Bir-kot-ghwandai, Swat, Pakistan. Preliminary Report on the Autumn 2000 Campaign of the IsIAO Italian Archaeological Mission in Pakistan. *AION*, 60: 215–233.

- Callieri P., Olivieri L.M. (2020) *Ceramics from the Excavations in the Historic Settlement at Bīr-koṭ-ghwaṇḍai (Barikot), Swat, Pakistan (1984-1992)*, vols 1-2. ACT RepMem, Special Volume, 2 / SOR (n.s.), 22. Lahore: Sang-e-Meel Publications.
- Carter, A.K. (2013) *Trade, Exchange, and Socio-Political Development in Iron Age (500 BC - AD 500) Mainland Southeast Asia: An Examination of Stone and Glass Beads from Cambodia and Thailand*. PhD dissertation (unpublished). University of Wisconsin-Madison.
- Carter, A.K. (2016) The Production and Exchange of Glass and Stone Beads in Southeast Asia from 500 BCE to the early second millennium CE: An assessment of the work of Peter Francis in light of recent research. *ARA*, 6: 16-29.
- Carpani, B., Marghella, G., Marzo, A., Candigliota, E., Immordino, F., Bergamasco, I. (2016) A methodology for the safety assessment of protective roofs covering archaeological sites: the case of the “Villa dei Misteri” at Pompeii. In F. Peña, M. Chávez, eds, *International Journal of Architectural Heritage, Special Issue. SAHC2014—9th international conference on structural analysis of historical construction, Mexico City*, 10, 2-3: 1-12.
- Cecil, E.A. (2019) Architectures of Intimidation: Political Ecology and Landscape Manipulation in Early Hindu Southeast Asia. In N. Staring, H. Twiston Davis, L. Weiss, eds, *Perspectives on Lived Religion: Practices, Transmission, Landscape*. Leiden: Sidestone Press, pp. 225-241.
- Chen, S., Phillips, S. (2006) *Echinochloa*. Z., Wu, P. Raven (eds). *Flora of China*, 22. Beijing: Science Press, pp. 515-518.
- Cherian, P., Tomber, R., Abraham, S., Giunlia-Mair, A., Kelly, G., Navar, P. (2016) Items of Personal adornments from Pattanam. *Journal of Indian Ocean Archaeology*, 12: 34-63.
- Chopra, P. (2017) *Vishnu's Mount: Birds in Indian Mythology and Folklore*, Notion Press.
- Choskyi, J. (1988) Symbolism of Animals in Buddhism. *Buddhist Himalaya*, 1: 259-286.
- Collinet, A. (2004) *Sehwān Šarīf: The Islamic Period. Chronology and Ceramics. 2nd-12th century AH/8th-18th centuries AD*. Article based on a lecture given to the Sind Workshop, AFEMAM 18th Congress, Lyon, July 2, 2004.
- Coloru, O., Olivieri, L.M. (2019) Mount Aornos and the Operations of the Macedonian Army in Swat. Sources and Archaeological Data. *Pakistan Heritage*, 11: 93-106.
- Coloru, O., Olivieri, L.M., Iori, E. (2024) Wine in Gandhāra. Notes on a Mythical and Economical Geography. In C. Antonetti, B. De Notariis, M. Enrico, eds, *Wine Culture: Gandharan Crossroads*. Antichistica 40(10), Venice: Edizioni Ca' Foscari, pp. 167-213.
- Coningham, R., Ali, I. (2007) *Charsadda. The British-Pakistani Excavations at the Bala Hisar*. Archaeopress: Oxford-London.
- Court, C.A. (1836) Extracts Translated from a Memoir on a Map of Peshawar and the Country Comprised between the Indus and the Hydaspes, the Peucelaotis and Taxila of Ancient Geography, by M.A. Court [Sic], in the Service Maha-Raja Ranjit Singh. *Journal of the Asiatic Society of Bengal*, 5: 468-482.
- Court, C.A. (1840) Collection of Facts Which May Be Useful for the Comprehension of Alexander the Great's Exploits on the Western Banks of the Indus (with Map). *Journal of the Asiatic Society of Bengal*, 8: 304-313.
- Court, S., Wijesuriya, G. (2015) *People-Centred Approaches to the Conservation of Cultural Heritage: Living Heritage*. Rome: ICCROM.
- Cowie, W.G (1867) *Notes on Some of the Temples of Kashmir, Especially those not Described by General A. Cunningham, in his Essay Published in the Journal of the Asiatic Society of Bengal for September, 1848*. *Journal of the Asiatic Society of Bengal*, 35, 1: 91-123.
- Crowden, J. (2016) *Chasing Hares*. Ilminster: The Flagon Press.
- Cribb, J. (1990) Numismatic Evidence for Kushano-Sasanian Chronology. *Studia Iranica*, 19/1: 151-193.
- Csapo, E. (1993a) Deep Ambivalence: Notes on a Greek Cockfight. Part I. *Phoenix*, 47/1: 1-28.
- Csapo, E. (1993b) Deep Ambivalence: Notes on a Greek Cockfight. Parts II-IV. *Phoenix*, 47/2: 115-124.
- Csapo, E. (2006) Cockfights, Contradictions, and the Mythopoetics of Ancient Greek Culture. *Arts: The Journal of the Sydney University Arts Association*, 28: 9-41.
- Čugonov, K.V., Parzinger, H., Nagler, A. (2010) Der skythenzeitliche Fürstenkurgan von Aržan 2 in Tuva. Mainz: Mainz: Verlag Philipp von Zabern. *Archäologie in Eurasien* 26, *Steppenvölker Eurasiens*, 3.
- Cumont, F. (1942) Le coq blanc des Mazdéens et les Pythagoriciens. In *Comptes rendus des séances de l'Académie des Inscriptions et Belles-Lettres*, 86^e année, N. 4-6: 284-300.

- DAFA-MAFOUZ-2019 [S-G Final Report] (2019) *Historical and archaeological Research at the Shahr-i Gholghola Site in Bamiyan Valley* - DAFA, MAFOUZ, January 2019 (UNESCO Report).
- Daffinà, P. (2004) India, Ceylon e Nepāl nell'opera di Luciano Petech. *Rivista degli Studi Orientali*, n.s., 78, 1-2: 11-24.
- Dani, A.H. (1965-1966) Shaikhan Dheri Excavation (1963 and 1964 Seasons). *Ancient Pakistan*, 2: 17- 214.
- Dani, A.H. (1968-1969) Archaeology of the Hindu Shahi Period. *AP*, 4: 27-32.
- Dar, S. (2007) Kuza-i-Fuqqa's or Huqqa-i-aatish. A neglected collection of some ceramic vessels of early Muslim period in Pakistan. *AP*, 13: 49-93.
- Davidson, R.M. (2002) *Indian Esoteric Buddhism: A Social History of the Tantric Movement*. New York: Columbia University Press.
- Deane, H. A. (1896) Note on Udyāna and Gandhāra. *JRAS*, 28: 655-675.
- DeAndreis, P. (2022) Pakistan Set to Become Olive Council Member. *Olive Oil Times*, February 11, 2022, <https://www.oliveoiltimes.com/business/pakistan-to-become-olive-council-member/105121>.
- De Chiara, M. (2020) *Toponymy of the Swāt Valley: Linguistic Archaeology*. ACT RepMem, Archival Studies, 2 / SOR, 25, Lahore: Sang-e-Meel Publications.
- DeCaroli, R. (2004) *Haunting the Buddha. Indian Popular Religions and the Formation of Buddhism*. New York: Oxford University Press.
- Dehejia, V., 2009. *The body adorned: sacred and profane in Indian art*. New York: Columbia University Press.
- de la Vaissière, E. (2018) L'ère kouchane des documents bactriens. *JA*, 306, 2: 281-284.
- Devers, Q., Bruneau, L., Vernier, M. (2015) An archaeological survey of the Nubra Region (Ladakh, Jammu and Kashmir, India). *EMSCAT*, 46.
- Devlet, M.A. (1999) Felsbilder von Aldy-Mozag. Tuva. *EA*. 5: 595-651
- Devlet, M.A. (2004) *Kamenny kompas v Sayanskom kanone Eniseya kamen s izobrazheniem dorogi u podnozhiiya gory Ustyu Mozaga* [The Stone "Compass" in the Sayan Canyon of the Yenisei River. The rock with the picture of the "road" at the foot of the Ustju-Mozaga mountain]. Moscow.
- De Wet, J., Rao, K., Brink, D. (1983). Domestication of mawa millet (*Echinochloa colona*). *Economic Botany*, 37, 3: 283-291.
- Dhaky, M.A. (1982) The "Prajñāla" in Indian, South-Asian and South-East Asian Sacred Architecture. In B. Bäumer, ed., *Rupa Pratirupa: Alice Boner commemoration volume*. New Delhi: Biblia Impex, pp. 119-166.
- Dhaky, M.A. (2004) Javanese pīthikās of Śivalingas. *SAS*, 20, 1): 1-7.
- Di Maio, R., Meola, C., Grimaldi, M., & Pappalardo, U. (2012) New insights for conservation of Villa Imperiale (Pompeii, Italy) through nondestructive exploration. *International Journal of Architectural Heritage*, 6, 5: 562-578.
- Di Castro, A.A. (2015) Goat Heads and Goddesses in Swāt, Gandhāra and Kashmir and Connected Problems. In A.A. Di Castro, D. Templeman (eds) *Asian Horizons. Giuseppe Tucci's Buddhist, Indian, Himalayan and Central Asian Studies*, Monash University Publishing: Melbourne, pp. 263-295.
- Di Florio, M.R., S. Lorenzoni, L.M. Olivieri, E.Z. Lorenzoni (1993) Evidence of Ancient Quarrying in Middle Swat, N.W.F.P., Pakistan. A Geo-archaeological Study. *Science and Technology for Cultural Heritage*, 2: 63-74.
- Dikshit, M. (1949) *Etched Beads in India Decorative Patterns and the Geographical Factors in Their Distribution*. n.p.: Deccan college, Postgraduate and research Institute.
- Divino, F. (2023) The Lion and the Bull: Inquiry on two Animal Symbols in Early Buddhism, in *Journal of International Buddhist Studies*, 14, 2: 20-43.
- Dorjay, P. (2010) Penetration of Buddhist Ideology in Ladakh: A study through early Rock Sculptures. In L.M. Olivieri ed. (with L. Bruneau and M. Ferrandi), *Pictures in Transformation. Rock Art Research between Central Asia and the Subcontinent*. SAA 2007, Special Session 2. Oxford: Archaeopress, pp. 43-58.
- Dorso, S., Lagaron, A. (2023) The Medieval Muslim Cemeteries of Tigray (Ethiopia). Preliminary Remarks on their Materiality (Architectural and Lapidary Aspects). *Revue des mondes musulmans et de la Méditerranée*, 153: 83-114.

- Duturaeva, D. (2022) *Qarakhanid Roads to China: A History of Sino-Turkic Relations*. Leiden: Brill.
- Dvurechensky, O.V., N.D. Dvurechenskaya (2019) Iron arrows of the Uzundara Fortress from III-II BCE to common era. In Balakhvantsev, Makkaveev: 114-125.
- Edelberg, L. (1957) Fragments d'un stūpa dans la vallée du Kunar en Afghanistan. *Arts Asiatiques*, 4, 3: 199-207.
- Esin, Y. N. (2009) Stone Stele Bearing a "Sun-Headed" Deity on the Tuim River, Khakassia. *Archaeology Ethnology & Anthropology of Eurasia* 37, 3: 85-94.
- Ettinghausen, R. (1965) The Uses of Sphero-Conical Vessels in the Muslim East. *Journal of Near Eastern Studies*, 24: 218-229.
- Faccenna, C., S. Lorenzoni, L.M. Olivieri, E.Z. Lorenzoni (1993) Geo-Archaeology of the Swat Valley (NWFP, Pakistan) in the Chārbāgh-Barikot Strecht. A Preliminary Note. *EW*, 43: 257-270.
- Faccenna, D., Spagnesi, P. (2014) *Buddhist Architecture in the Swat Valley, Pakistan: Stupas, Viharas, a Dwelling Unit*. Lahore: Sang-e-Meel.
- Faccenna, D., Tusa, S. (1986). Pakistan-1: The Italian Archaeological Mission in Pakistan. *EW*, 36, 4: 473-511.
- Faccenna, D. (1980-1981) *Butkara I (Swāt, Pakistan), 1956-1962. IsMEO Reports and Memoirs III, Volume 2*. Roma: IsMEO.
- Fairservis, W.A. Jr. (1956) *Excavations in the Quetta Valley, West Pakistan*. Anthropological Papers of the American Museum of Natural History, 48, 2. American Museum of Natural History: New York.
- Fairservis, W.A. Jr. (1961) *Archaeological Studies in the Seistan Basin of South-Western Afghanistan and Eastern Iran*, Anthropological Papers of the American Museum of Natural History, 48, 1. American Museum of Natural History: New York.
- Falser, M. (2010) From Venice 1964 to Nara 1994—changing concepts of authenticity? In *Conservation and preservation: interactions between theory and practice: in memoriam Alois Riegl (1858-1905): proceedings of the International Conference of the ICOMOS International Scientific Committee for the Theory and the Philosophy of Conservation and Restoration, 23-27 April 2008, Vienna, Austria*. Firenze: Polistampa, pp. 1000-1018.
- Farooq Swati, M., Bacha, M.N. and Mulk, J. (2002) Note on Exploration in the Shāngla District and the Swāt Valley. In M. Farooq Swati, ed, *Ancient Pakistan*, 15, Professor P.A. Durrani Commemoration Volume: 217-252.
- Fawad Khan (2018) Reused Hindu-Buddhist Panels in a Muslim Graveyard at Ziarat, Talash Valley, Lower Dir. *Pakistan Heritage*, 10: 191-197.
- Figueiredo, G., Silva, R. (2020). Infrared Thermography for Monitoring the Condition of Historical Buildings. *Building and Environment*, 165: 106421.
- Filigenzi, A. (1984) Trench BKG 2 (in IsMEO Activities. Pakistan – 1. Excavations and Researches in the Swāt Valley). *EW* 34, 4: 493-500.
- Filigenzi, A. (1990) Trench BKG 2 (in Excavation at Bīr-koṭ-ghwaṇḍai, Swat: 1987). *Pakistan Archaeology* 25: 183-192.
- Filigenzi, A. (2003) The Three Hares from Bīr-koṭ-ghwaṇḍai: Another Stage in the Journey of a Widespread Motif. In M.V. Fontana, B. Genito (eds.) *Studi in onore di Umberto Scerrato per il suo settantacinquesimo compleanno*. Università degli Studi di Napoli 'L'Orientale': Series Minor, 65, 2, pp. 327-346.
- Filigenzi, A. (2005) Stone and Stucco Sculptures from the Sacred Building of Bīr-Koṭ-Ghwaṇḍai, Swat, Pakistan. In C. Jarrige, V. Lefèvre (eds) *SAA 2001*. Paris, pp. 453-461.
- Filigenzi, A. (2006) Sūrya, the solar kingship and the Turki Śāhis. New Acquisition on the Cultural History of Swat. *EW*, 56, 1-3: 195-203.
- Filigenzi, A. (2010). The Śāhi Period: Archaeological and Art Historical Evidence from North West Pakistan. In M. Alram, D. Klimburg-Salter, M. Pfisterer, I. Minoru, eds, *Coins, Art and Chronology II. The First Millennium C.E. in the Indo-Iranian Borderlands*. Vienna: ÖAW, pp. 407-427.
- Filigenzi, A. (2011) Post-Gandhāran Swat. Late Buddhist Rock Sculptures and Turki Śāhi's Religious Centres. *JAC*, 34, 1: 186-202.
- Filigenzi, A. (2012) *Le immagini epifaniche nell'arte buddhistica del Gandhāra. Studio sulle triadi e su alcune iconografie affini*. Bologna: I libri di Emil.
- Filigenzi, A. (2015) *Art and Landscape. Buddhist Rock Sculpture of Late Antique Swat/Uḍḍiyāna*. Vienna: ÖAW.

- Filigenzi, A. (2019) Non-Buddhist Custom of Buddhist People: Visual and Archaeological Evidence from North-West Pakistan. In B. Kellner (ed.) *Buddhism and the Dynamics of Transculturality. New Approaches*. Berlin/Boston: de Gruyter, pp. 53-84.
- Filigenzi, A., (2020) A Space of Mobility. *EW*, (60), 1, 1: 205-224.
- Filigenzi, A. (2023) Il tempio brahmanico di Barikot: nuovi dati archeologici e qualche riflessione sul paesaggio identitario. In L. Colliva, A. Filigenzi, L.M. Olivieri, eds, *Le forme della città: Iran, Asia centrale e Gandhāra*. ISMEO, pp. 555-568.
- Fischer, C.E.C. (1934) Gramineae. Gamble, J. S. (ed). *Flora of the Presidency of Madras*, 10, pp. 1690-1864.
- Fischer, K. (1969) Preliminary remarks on archaeological survey in Afghanistan. *Zentralasiatische Studien*, 3: 327-408.
- Fishman, A.M., Todd, I.J. (2018) *The Silver Damma: On the Mashas, Daniqs, Qanhari Dirhams and Other Diminutive Coins of India, 600-1100 CE*. Mumbai: IIRNS Publications.
- Flood, F.B. (2009) *Objects of Translation: Material Culture and Medieval "Hindu-Muslim" Encounter*. Princeton and Oxford: Princeton University Press.
- Fontana, M.V. (1999) An Islamic Sphero-conical Object in a Tuscan. Medieval Marble. *EW*, 49, 1-5: 9-33.
- Foucher, A. (1901) *Sur la frontière indo-afghane*. Paris: Librairie Hachette.
- Francfort, H.-P. (2003) Les pétroglyphe d'Asie Centrale: limites des interpretations Indo-Iraniennes et chamaniques. In J. Guilaine (ed.), *Arts et symboles du Néolithique à la Protohistoire*. Paris: Séminaire du Collège de France, pp. 189-216.
- Francfort, H.-P. (2015) The Cheonjeon-ri Petroglyphs in Ulsan: A Naive Art Historical View. In J. Kim (ed.), *Petroglyphs of Cheonjeon-ri in Ulsan, Korea, in the Context of World Rock Art*. Seoul: World Petroglyphs Research, 3, pp. 23-49.
- Francfort, H.-P., Klodzinski, D., Mascle, G. (1990) Pétroglyphes archaïques du Ladakh et du Zanskar. *Arts Asiatiques* 45: 5-27.
- Francfort, H.-P., Klodzinski, D., Mascle, G. (1992) Archaic Petroglyphs of Ladakh and Zanskar. In M. Lorblanchet (ed.) *Rock Art in the Old World. Papers presented in Symposium A of the AURA Congress, Darwin (Australia)*, 1988. New Delhi, pp. 147-192.
- Francis, P. (1989) Glass Beads in Asia: Part One. Introduction, *Asian Perspectives*, 28, 1: 1-21.
- Francis, P. (1990) Glass Beads in Asia Part Two. Indo-Pacific Beads. *Asian Perspectives*, 29, 1: 1-23.
- Francis, P. (2002) *Asia's maritime bead trade: 300 B.C. to the present*. Honolulu: University of Hawaii Press.
- Franke, U., Müller-Wiener, M. (2016) *Herat Through Time - The Collections of the Herat Museum and Archive*. Ancient Herat 3. Staatliche Museen zu Berlin, Preußischer Kulturbesitz: Berlin.
- Franke, U., Urban, T. (2017) *Excavations and Explorations in Herat City*. Ancient Herat 2. Staatliche Museen zu Berlin, Preußischer Kulturbesitz: Berlin.
- Franke, U., Urban, T. (2025) *Documentation of Sites and Monuments in Herat Province*. Ancient Herat 1. Staatliche Museen zu Berlin, Preußischer Kulturbesitz: Berlin.
- Fusaro, A. (2014) *Studio del corpus ceramico di età islamica dagli scavi italiani a Ghazni, Afghanistan (X-XIII secolo): contributo alla ricostruzione storica del palazzo sultanale e della 'casa dei lustri'*. PhD dissertation (unpublished). Roma: Università Sapienza, vols 1-3.
- Fusaro, A., Esparraguera, J.M., Ariño Gil, E., Uribe Agudo, P., Angás Pajas, J., Pidaev, S.R. (2022) Islamic ancient Termez: An active and long-established ceramic manufacturing centre along the silk road. *ARA*, 31 (100375): 1-25.
- Fussman, G. (1996) Southern Bactria and Northern India before Islam: A Review of Archaeological Reports. *Journal of the American Oriental Society*, 116, 2: 243-259.
- Fussman, G., O. Guillume, D. Quignon (1990) *Surkh Kotal en Bactriane*. 2. MDAFA, Tome XXXII. Paris.
- Fussmann, G., Bandini-Köning, D. (1997) *Die Felsbildstation Shatial*. MANP, 2. Philipp von Zabern: Mainz
- Gaber, N., (2024) The Knot decoration in the Islamic art of Khorasan province from 10th to 13th centuries. *Egyptian Journal of Archaeological and Restoration Studies*, 14, 1: 129-141.
- Gail, A. J. (1983) On the Symbolism of Three-and Four-faced Viṣṇu Images: A Reconsideration of Evidence. *Artibus Asiae*, 44, 4: 297-307.
- Gardin, J.-C. (1957) *Céramiques de Bactres*. MDAFA, XV. Librairie Klincksieck: Paris.

- Gardin, J.-C. (1963) *Lashkari Bazar. Une résidence royale ghaznévide. II Le trouvailles. Céramiques et monnaies de Lashkari Bazar et de Bust*, MDFAFA, XVIII. Diffusion de Boccard: Paris.
- Gardīzī = Abū Saʿīd ʿAbd al-Ḥayy Gardīzī (2011) *The Ornament of Histories: A History of the Eastern Islamic Lands AD 650–1041* (transl. C.E. Bosworth). Persian Studies Series, n.s., 4. London–New York: I.B. Tauris & BIPS.
- Gaur, A.S., Sundaresh, Patankar, V. (2005) Ancient shell industry at Bet Dwarka Island. *Current Science*, 89: 941–946.
- Geary, D., Shinde, K. (2021) Buddhist Pilgrimage and the Ritual Ecology of Sacred Sites in the Indo–Gangetic Region. *Religions*, 12, 385: 1–21. <https://doi.org/10.3390/rel12060385>
- Geological Map of Pakistan* (1964). Geological Survey of Pakistan/USAID: Karachi.
- Geological Map of NWFP* (2006). Geological Survey of Pakistan: Islamabad.
- Ghirshman, R. (1946) *Bégram Recherches archéologiques et historiques sur les Kouchans*. MDFAFA, Tome XII. Paris.
- Gleize, Y., Mendisco, F., Pemonge, M.-H., Hubert, C., Groppi, A., Houix, B. et al. (2016) Early Medieval Muslim Graves in France: First Archaeological, Anthropological and Palaeogenomic Evidence. *PLoS ONE* 11, 2: e0148583. <https://doi.org/10.1371/journal.pone.0148583>
- Göbl, R. (1967) *Dokumente zur Geschichte der iranischen Hunnen in Baktrien und Indien*. Otto [von] Harrassowitz: Wiesbaden.
- Göbl, R. (1984) *System und Chronologie der Münzprägung des Kušānreiches*. Vienna: ÖAW Verlag.
- Göbl, R. (1993) *Donum Burns. Die Kušānmünzen im Münzkabinett Bern und die Chronologie*. Vienna: ÖAW Verlag.
- Godfrey, S.H. (1912) A Summer Exploration in the Panjkora Kohistan. *The Geographical Journal*, 40, 1: 45–57.
- Gombrich, R. (1966) The Consecration of a Buddhist Image. *The Journal of Asian Studies*, 26, 1: 23–36.
- Gooni, R. ed. (2024) *Terracotta Figurines from the Excavations in the Historic Settlement at Bīr-koṭ-ghwaṇḍai (Barikot), Swat, Pakistan (1977–2019)*. ACT RepMem, Special Volume 3. BKG Interim Reports V. Lahore: Sang-e-Meel Publications.
- Gray, D. (2007) *The Cakrasamvara Tantra (The Discourse of Sṁ Heruka): A Study and Annotated Translation*. New York: The American Institute of Buddhist Studies at Columbia University in New York, Columbia University’s Center for Buddhist Studies, and Tibet House U.S., pp 329–332.
- Grenet, F., Minardi, M. (2021) The image of the Zoroastrian god Srōsh: new elements. *Ancient Civilizations from Scythia to Siberia* 27/1: 154–173.
- Gullini, G. (1962) *Reports on the campaigns 1956 – 1958 in Swat (Pakistan)*. Udegram. IsMEO RepMem 1. Rome: IsMEO.
- Gulmini, M., Giannini, R., Lega, A.M., Manna, G., Mirti, P. (2013) Technology of production of Ghaznavid glazed pottery from Bust and Lashkar-i Bazar (Afghanistan). *Archaeometry*, 55/4: 569–590.
- Haim, O. (2019) What is the “Afghan Genizah”? A short guide to the collection of the Afghan Manuscripts in the National Library of Israel, with the edition of two documents. *Afghanistan*, 2.1: 70–90.
- Hans, B., Shah, S., Areshian G.E., Faull, K.F. (2016) Chemical insights into the function of four spherico-conical vessels from medieval Dvin, Armenia. *Muqarnas* 33: 409–19.
- Hardy, A. (2016) Hindu temples and the emanating cosmos. *Religion and the Arts* 1-2: 112–134.
- Hardy, A. (2019) Kashmiri temples: a typological and aedicular analysis. In C. Wessels, G. J. R. Mevissen, eds, *Indology’s Pulse: Arta in Context*. New Delhi: Aryan Books International, pp. 262–286.
- Hauptmann, H. (1997) *The Indus Cradle and Crossroads of Civilizations. Pakistan–German Archaeological Research*. Islamabad: Embassy of the Federal Republic of Germany.
- Hauptmann, H. (2024). *Lords of the Mountains. Pre-Islamic Heritage along the Upper Indus in Pakistan*. Ed. by L.M. Olivieri. Heidelberg: Heidelberg University Press.
- Henshaw, C. M. (2008) *Early Islamic Ceramics and Glazes from Akhsiket, Uzbekistan*. PhD dissertation (unpublished). University of Central London.
- Heo, J. (2018) *Urbanism and Polity Interaction at Mahan: A study of Early State Formation in the Proto-Three Kingdoms Period (c. 100 BCE–300 CE), South Korea*. PhD dissertation (unpublished). University of Wisconsin–Madison.

- Heritage, A., Copithorne, J., eds, (2018) *Sharing Conservation Decisions: Current Issues and Future Strategies*. Rome: ICCROM.
- von Hinüber, O. (2004) *Die Palola Sahis: Ihre Steininschriften, Inschriften auf Bronzen, Handschriftenkolophone und Schutzzauber, Materialien zur Geschichte von Gilgit und Chilas*. ANP, 5. Mainz: Verlag Philipp Von Zabern.
- von Hinüber, O. (2020) The Barikot Śāradā inscription no. 119. In Callieri, Olivieri 2020, pp. 54–55.
- Houal, J.-B. (2020) *La céramique antique et médiévale de Termez et de Khaitabad (Ouzbékistan). Regards sur l'Asie centrale du IIIe siècle av. J.-C. au XVIIIe siècle*. Paris: Hermann.
- Høisæter, T.L. (2024) Forms of Mobility in the Southern Tarim Basin in the 7th to 10th Centuries. *Medieval Worlds*, 20: 17–36.
- Huber, T. (2008) *The Holy Land Reborn. Pilgrimage & the Tibetan Reinvention of Buddhist India*. Chicago/New York: The University of Chicago Press.
- Huntington, S.L. (1985) *The Art of Ancient India, Buddhist, Hindu, Jain*. New York–Tokyo: Weatherhill.
- Hussain, A., Chaudhary, M.N., Jafri, S.Z.H., Malik S., Ali N., Awan D. (2022) Climate Change and Its Impacts on Pakistan, *Journal of Positive School Psychology*, 6, 8: 9195–9217.
- Huysecom-Haxhi, S. (2015) Du coq au canthare. Images de l'initiation masculine dans la coroplastie béotienne à l'époque classique. In Huysecom-Haxhi, S., A. Muller, eds., *Figurines grecques en contexte: Présence muette dans le sanctuaire, la tombe et la maison*. Villeneuve d'Ascq: Presses Universitaires du Septentrion: pp. 71–89.
- Inayat-ur-Rahman (1968) *Folk Tales of Swāt*. Reports and Memoirs, XIII,1. Rome: IsMEO.
- Iori, E. (2023a) An Urban Approach to the Archaeology of Buddhism in Gandhāra: The Case of Barikot (Swat, Pakistan). *SAS*, 39, 1: 100–125.
- Iori, E. (2023b) Releasing Urban Religion Beyond the City Wall: The Spatial Capital of Early Buddhist Monasticism in NW South Asia. *Numen* 70, 2–3: 184–219.
- Iori, E. (2024) Overlapping landscapes at the city of the Vajra. In M. Zin, E. Franco, C. Ramble, eds, *Kucha and Beyond: Divine and Human Landscapes from Central Asia to the Himalayas, Proceeding of the 6th SEECHAC Conference, Leipzig 2021*. New Delhi: Dev Publishers & Distributors.
- Jettmar, K. (1967) The Middle Asiatic Heritage of Dardistan (Islamic Collective Tombs in Punyal and Their Background). *EW*, 17, 1–2: 59–79.
- Jettmar, K. (1982a) *Rock carvings and Inscriptions in the Northern Areas of Pakistan*. Islamabad: Institute of Folk Heritage.
- Jettmar, K. (1982b) Petroglyphs and Early History of the Upper Indus Valley: The 1981 Expedition – A Preliminary Report'. *Zentralasiatische Studien*, 16, 293–308.
- Jettmar, K. (2003) *Beyond the Gorges of the Indus: Archaeology Before Excavation*. Karachi: Oxford University Press.
- Jettmar, K., Thewalt, V. (1987) *Between Gandhāra and the Silk roads. Rock Carvings along the Karakorum Highway*. Mainz: Philipp von Zabern.
- Jongeward, D., J. Cribb (2015) *Kushan, Kushano-Sasanian, and Kidarite Coins. A Catalogue of Coins from the American Numismatic Society*. New York: The American Numismatic Society.
- Jūzjānī = Minhāj al-Sirāj Jūzjānī (1963–1964) *Ṭabaqāt-i Naṣīrī*, ed. ('A.Ḥ. Ḥabībī, ed.) vols. 1–2. Kabul.
- Jūzjānī = Minhāj al-Sirāj Jūzjānī (1873) *Ṭabaqāt-i Naṣīrī*, (transl. H.G. Raverty). London: Gilbert & Rivington.
- Kak, R.C. (1933) *Ancient Monuments of Kashmir*. Lahore: Verinag Publishers.
- Kashani, N.B., Roustaei, K., Stöllner, T. (2011) Iron Age Amber Beads from Vešnave/Iran. *AMIT*, 43: 71–78.
- Kazmi, A.H. (1995) Gemstones. In F.K. Bender, H.A. Raza, eds. (1995) *Geology of Pakistan*, pp. 281–290. Berlin.
- Keller, S. (2021) Cloistering Water: Technological Rupture, Religious Continuity in Sixteenth Century Western India. *SAS*, 37, 1: 26–50.
- Keller, S. (forthcoming) *Water Urbanities. Materiality and Meanings of Water Spaces in urban South Asia (Western India, 10th–16th century)*. Berlin/Boston: de Gruyter.

- Kenoyer, J.M. (1983) *Shell Working Industries of the Indus Civilization: An Archaeological and Ethnographic Perspective*. Ph.D. Thesis. University of California-Berkeley.
- Kenoyer, J.M. (2020) Bleached carnelian beads of the Indus Tradition, 3rd millennium BC: origins and Variations. In I.L. Finkel, St.J. Simpson, eds., *In Context: The Reade Festschrift*, Oxford: Archaeopress, pp. 169–182.
- Kenneth, D. (2024) Chapter 4. The Brick Temples in Trench A. In D.Kennet, J. Varaprasada Rao, M. Kasturi Bai (eds) *Excavations at Paithan, Maharashtra. Transformations in Early Historic and Early Medieval India*. Beyond Boundaries, 5. Berlin/Boston: de Gruyter.
- Khan, M. N. (1985) A Ghaznavid Historical Inscription from Uḍegrām, Swāt. *EW*, 35, 1–3: 153–166.
- Khan, I. (2017) *Exploring the settlement archaeology of the Hindu Śāhi dynasty (c. 822 CE to c. 1026 CE) in north-western Pakistan*. PhD dissertation (unpublished). University of Leicester.
- Khan, I., Zahir, M., Fazal, M., Ali, I. (2021) Investigating the Hindu Śāhi Kingdom in North-western Pakistan Through Systematic Landscape Survey. *JAC*, 44, 1: 135–170.
- Khan, F. (2018) Reused Hindu-Buddhist Panels in a Muslim Graveyard at Ziarat, Talash Valley, Lower Dir. *Pakistan Heritage*, 10: 191–197.
- Khan, M.A. (2019) Fresh discoveries at the Buddhist Monastic Complex Bādālpur, Taxila valley. In W. Rienjang, P. Stewart, eds, *The Geography of Gandhāran Art*. Oxford: Archaeopress, pp. 71–80.
- Khan, Z., Wahab, S. (2012) Fresh Archaeological Discoveries in Swat: A Preliminary Report (Campaign 2011). *AP*, 23: 55–83.
- Khattak, M.H.K. (1997) *Buner: The Forgotten Part of Ancient Uddiyana*. Karachi: Noble Art Press.
- Khaw, N. R., Saidin, M. M. (2013) The Votive Tablets of Perlis Deciphered and their Parallelism with the Hund Votive Tablets from Gandhāra. *Gandhāran Studies*, 7: 23–43.
- Kilunovskaya, M. E. (2010) Graphic complexes of Central Asia. *MARQ, Arqueologia y Museos*, 4: 9–22.
- Kimmet, N. (2020) What Archaeological Evidence is there for the Śāhi Political Center at Hund (Udabhāṇḍapura)? In N. Kimmet, D. Klimburg-Salter, eds, *Sourcebook for the Shahi Kingdoms*, Austrian Science Fund (FWF) 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, <https://shahimaterialculture.univie.ac.at/sourcebook/>.
- Klimburg-Salter, D. (1989) *Kingdom of Bāmiyān: Buddhist Art and Culture of the Hindu Kush*. Naples and Rome: Istituto Italiano per il Medio ed Estremo Oriente.
- Klimburg-Salter, D. (2010) A Case Study in Cultural Mobility. The Crowned Buddha of the Kabul Shah. In M. Alram, D. Klimburg-Salter, M. Inaba, M. Pfisterer, eds., *Coins, Art and Chronology II. The First Millennium CE in the Indo-Iranian Borderlands*. Vienna: Austrian Academy of Sciences Press, pp. 389–406.
- Klimburg-Salter, D. (2022) “Now people honoured him as a being of miraculous origin”. Royal Imagery of the Turk Shahi. In G. Fingarova, F. Gargova, M. Mullett, eds, *Illuminations. Studies Presented to Lioba Theis*. Vienna: Phoibos Verlag, pp. 75–91.
- Knott, K., Krech, V., Meyer, B. (2016) Iconic Religion in Urban Space. *Material Religion*, 12(2): 123–136.
- Kojima, Y., Mikami, K., Shiokawa, H., Shigeeda, Y., & Agatsuma, H. (2022) Relationship between drainage capacity and foundation settlement at Pre Rup Temple: Basic study on Khmer architecture drainage systems Part 1. *Japan Architectural Review*, 5, 1: 77–93.
- Kragh, U.T. (2011) Appropriation and Assertion of the Female Self. Material for the Study of the Female Tantric Master Lakshmi of Uddiyana. *JFSR* 27.2: 85–108.
- Kragh, U.T. (2017) Determining the Corpus of South Asian Female-Authored Buddhist Texts of the Ninth to the Eleventh Centuries. In K. Sheel, C. Willemen, K.G. Zysk, eds, *From Local to Global: Papers in Asian History and Culture, Prof. A.K. Narain Commemoration Volume*. Delhi: Buddhist World Press, pp. 627–644.
- Kragh, U.T. (2018) Chronotopic Narratives of Seven Gurus and Eleven Texts: A Medieval Buddhist Community of Female Tāntrikas in the Swat Valley of Pakistan. *Cracow Indological Studies*, 20: 1–26.
- Kubarev, V.D. (2001) Der Altai als Verkehrsweg «der großen Wanderer». Entdeckungen, Forscher, Themen und Probleme der sibirischen Archäologie. *Antike Welt*, 32: 121–137.
- Kurita, I. (2003) *Gandhāran Art*. 2 vols. Tokyo: Nigensha.

- Kuwayama, S. (1976) The Turki Śāhis and Relevant Brahmanical Sculptures in Afghanistan. *EW*, 26, 3–4: 375–407.
- Kuwayama, S. (1991) The Horizon of Begram III and Beyond. A Chronological Interpretation of the Evidence for Monuments in the Kāpiši-Kabul-Ghazni Region. *EW* 41: 79–120.
- Kuwayama, S. (2007) Kanjur Ashlar and Diaper Masonry. Two Building Phases in Taxila of the First Century AD. In D. Srinivasan, ed., *On the Cusp of an Era, Art in the pre-Kuṣāṇa World*. Leiden: Brill, 201–231.
- Kyzlasov, L.R. (1990) Die ältesten Heiligtümer im mittleren Jenissei-Tal. *BAVA*, 9–10: 25–81.
- Law, R.W. (2008) *Inter-regional interaction and urbanism in the ancient Indus valley: A geological provenience study of Harappa's rock and mineral assemblage*. Ph.D. Thesis. University of Wisconsin-Madison.
- Law, R. W. (2011) Inter-Regional Interaction and Urbanism in the Ancient Indus Valley: A Geologic Provenience Study of Harappa's Rock and Mineral Assemblage, Occasional Paper 11. In T. Osada, H. Endo, eds, *Linguistics, Archaeology and the Human Past*. Kyoto: Research Institute for Humanity and Nature.
- Le Berre, M. (1970) Le monument de Danestama en Afghanistan. *Revue des Etudes Islamiques*, 38: 43–53.
- Lentz, W. (1939) Sprachwissenschaftliche und völkerkundliche Studien in Nuristān. In Scheibe, A., ed., *Deutsche im Hindukusch. Bericht der Deutschen Hindukusch-Expedition 1935 der Deutschen Forschungsgemeinschaft*. Berlin: Karl Siegismund Verlag in Kommission, pp. 247–284.
- Lerner, M., Kossak, S. (1991) *The Lotus Transcendent: Indian and Southeast Asian Art from the Samuel Eilenberg Collection*. New York: Metropolitan museum of art.
- Lesoon, C. (2022) The Sphero-Conical as Apothecary Vessel: An Argument for Dedicated Use. *Muqarnas*, XXXVIII: 317–331.
- Le Strange, G. (1905) *The Lands of the Eastern Caliphate*. Cambridge University Press: Cambridge.
- Lévy, J. (2003) Cospatialite. In J. Lévy, M. Lussault, eds, *Dictionnaire de la géographie et de l'espace des sociétés*. Paris: Belin, pp. 236–237.
- Lévy, J. (2021) Co-Spatiality: An Introduction. In S. Rau, J. Rüpke (eds), *Religion and Urbanity*. Berlin/Boston: de Gruyter.
- Lian, H. (2015) *Rice harvesting, processing, storage and charring at Mojiaoshan site, Liangzhu Culture*. MA thesis (unpublished). University College London.
- Litvinskij, B.A. (2001). *The Temple of Oxus in Bactria (South Tajikistan): Volume II: Bactrian Arm and Armour in the Ancient Eastern and Greek Context*. Moscow.
- Luczanits, C. (1999) The Life of the Buddha in the Sumtsek. *Orientalia* 30, 1: 30–39.
- Luczanits, C. (2013) The Buddha Beyond: Figuration in Gandharan Cult Imagery. In F. Ehrhard and P. Maurer, eds, *Nepalica-Tibetica: Festgabe Für Christoph Cüppers*. International Institute for Tibetan and Buddhist Studies GmbH, pp. 1–22.
- McNair, W.W. (1885) *Report on the Explorations in Part of Eastern Afghanistan and in Kafiristan*. Trigonometrical Branch, Survey of India. Dehra Dun [Dehradun].
- MacDowall, D.W. (1968) The Śāhis of Kabul and Gandhāra. *Numismatic Chronicle* (7th series), 8: 189–224.
- MacDowall, D.W., Callieri, P. (2004) *A Catalogue of Coins from the Excavations at Bir-kot-ghwandai 1984–1992. Bir-kot-ghwandai Interim Reports, II*. ISIAORepMem, New Series, III Rome: ISIAO, pp. 27–90.
- Magnatta, S. (2024) Marking Impermanence: The Life of the Object (and Index) in Sonam Dolma Brauen's Art. *Himalaya-The Journal of the Association for Nepal and Himalayan Studies*, 43, 2: 64–80.
- Mahzounzadeh, N. (2023) A Chrono-Typology Study of Metal Arrowheads at Barikot (Bīr-koṭ-ghwaṇḍai), Swāt, Pakistan. *JAC*, 46, 2: 87–105.
- Mahzounzadeh, N., Bortolini, E. (2020) Beyond Shape. A New Perspective on the Classification of Arrowheads from the Historical Pre-Islamic Period in Iran. *EW*, (60), 1, 2: 285–300.
- Malla, B.L. (1996) *Vaiṣṇava Art and Iconography of Kashmir*. New Delhi: Abhinav Publications.
- Malkani, M.S., Mahmood, Z. (2017) *Stratigraphy of Pakistan*. Geological Survey of Pakistan: Islamabad.
- Manassero, N., 2005. Riflessioni su un rhyton del Miho Museum. *Parthica*, 7: 93–112.

- Manna, G. (2006) Some Observations on the Pottery from the Islamic Settlement of Udegram, Swat. *EW*, 56, 1-3: 229–235.
- Marshall, J.H., Vogel, J.Ph. (1904) *Excavation at Charsadda in the Frontier Province. Archaeological Survey of India Annual Report 1902-1903*. Calcutta: Office of the Superintendent of Government Printing, pp. 141–184.
- Marshall, J.H. (1916) *Archaeological Survey of India Annual Report 1912-13*. Calcutta: Superintendent Government Printing.
- Marshall, J.H. (1936) *A Guide to Taxila*. Delhi: Government of India Publication.
- Marshall, J.H. (1951) *Taxila: an illustrated account of archaeological excavations carried out at Taxila under the orders of the Government of India between the years 1913 and 1934*. Cambridge: Cambridge University Press.
- Matheson, C.D., Vickruck, C.R., McEvoy, C.J., Vernon, K.K., Mason, R. (2022) Composition of trace residues from the contents of 11th–12th century sphero-conical vessels from Jerusalem. *PLoS ONE* 17, 4.
- Martínez Ferreras, V., Fusaro, A., Gurt Esparraguera, J.M., Ariño Gil, E., Pidaev, Sh. and Angourakis A. (2020) The Islamic Ancient Termez Through the Lens of Ceramics: a New Archaeological and Archaeometric Study. *Iran. The Journal of the British Institute of Persian Studies* 58-2: 250–278. <https://doi.org/10.1080/05786967.2019.1572430>
- Meister, M.W. (2005) The Problem of Platform Extensions in Kafir Kot North. *AP*, XVI: 41–48.
- Meister, M.W. (2010) *Temples of the Indus: Studies in the Hindu Architecture of Ancient Pakistan*. Leiden and Boston: Brill.
- Meister, M.W. (2011) Shadow-Covered Devalayas. *Pakistan Heritage*, 3: 113–121.
- Meister, M.W. (2020) New Architecture in Old Pakistan: Mari-Indus, Zalamkot, and Katas. In E. Myrdal, ed., *SAAA 2014*. New Delhi: Dev Publishers & Distributors, pp. 215–222.
- Meister, M.W. Olivieri, L.M., Vidale, M. (2017) Gumbat Balo-Kale (Swat): Architectural Analysis, Conservation, and Excavation (2011–2012). In V. Lefèvre (ed.) *SAAA 2012*. Indicopleustoi, vol. 12.2. Turnhout: Brepols, pp. 553–566.
- Micheli, R. (2007) Ancient Earplugs from the Bir-Kot Hilltop. A Neglected Class of Ornaments from Swat, Northern Pakistan. *EW* 57, 1-4: 101–112.
- Micheli, R. (2014) Gifts of the sea in the mountains: The shell bangles. In L.M. Olivieri, ed., *The Last Phase of the Urban Site of Bir-kot-ghwandai (Barikot). The Buddhist Sites of Gumbat and Amluk-dara (Barikot), ACT-Field School Reports and Memoirs, II*, Lahore: Sang-e-meel, pp. 223–247.
- Micheli, R. (2020) Shell bangles, body adornment and ‘Indianization’ process: some insights from the late Kushan phase at Bīr-koṭ-ghwaṇḍai (Khyber Pakhtunkhwa, Pakistan). In E. Myrdal (ed.) *SAAA 2014*. New Delhi: Dev Publishers and Distributors, pp. 243–258.
- Minardi, M. (2021) Notes on the elaboration and transmission of iconographic elements in Central Asia and India before the Kushans: the Zoroastrian ‘bird-priests’, *kinnaras* and sirens. *EW* 61, 1: 81–113.
- Mitchiner, M. (1975–1976) *Indo-Greek and Indo-Scythian Coinage*. 9 vols. London: Hawkins Publications.
- Monier-Williams, M. (1851) *Sanskrit-English Dictionary*. London: W.H. Allen and Company.
- Morgan, L., Olivieri, L.M. (2022) *The View from Malakand: Harold Deane’s ‘Note on Udyana and Gandhāra*. Oxford: Archaeopress.
- Moscattelli, C., Filigenzi, A. (2023) Non-Buddhist Customs of Buddhist People II: a Shifting Perspective on Wine, Goat Deities and Connected “Dardic” Themes in Gandhāran Art. In Al. Cacopardo, Aug. Cacopardo (eds) *Roots of Peristan. An International Interdisciplinary Conference on the Pre-Islamic Cultures of the Hindukush-Karakorum. Rome 5-7 October 2022*. SOR, n.s. 37. ISMEO: Rome, pp. 703–726.
- Müller-Wiener, M., Franke, U. (2016) Monochrome Glazed Earthenware. In U. Franke, M. Müller-Wiener, eds, *Herat Through Time. The Collections of the Herat Museum and Archive*. Ancient Herat, 3. Stuttgart: Staatliche Museen zu Berlin – Preußischer Kulturbesitz: Berlin, pp. 319–337.
- Murphy, C., Fuller, D.Q (2016) Food Production in India: South Asian Entanglements of Domestication. In G. Shug, S. Walimbe (eds). *A Companion to South Asia in the Past*. Oxford: Wiley Blackwell, pp. 344–357.
- Murphy, C., Fuller, D.Q (2017) The Agriculture of Early India. In H. Shugart (ed). *Oxford Research Encyclopedia of Environmental Science*. Oxford: Oxford University Press.

- Murphy, C., Weisskopf, A., Bohingamuwa, W., Adikari, G., Perera, N., Blinkhorn, J., Horton, M., Fuller, D.Q, Boivin, N. (2018) Early agriculture in Sri Lanka: New Archaeobotanical analyses and radiocarbon dates from the early historic sites of Kirinda and Kantharodai (Kandarodai). *ARA*, 16: 88-102.
- Namgyal-Lama, N. (2013) Tsha tsha inscriptions: a preliminary survey. In K. Tropper, C. Scherrer-Straub, eds, *Tibetan Inscriptions*. Brill: Leiden, pp. 1-41.
- Namgyal-Lama, K. (2014) Du sacré produit en masse : les tsha tsha du monde tibétain. *Revue Histoire de l'art*, 73: 43-50.
- Narasinhham, V., et al. [including in this order the ff. Authors: LMO¹², MV¹⁴, AB⁴⁹] (2019) The formation of human populations in South and Central Asia. *Science*, 365: 6457. <https://www.science.org/doi/10.1126/science.aat7487>
- Nasim Khan (2023) Images, Inscriptions and Viṣṇuism. The Story of the Archaeological site of Hund, Gandhāra, pp. 1-6. (unpublished: <https://doi.org/1013140/RG.2.2.31105.74077>)
- Nekrasova, E. (1999) La citadelle de Bukhārā de la fin du 9e siècle au début du 13e siècle. *Archéologie Islamique*, 8-9: 37-54.
- Neelis, J.E. (2001) *Long-distance Trade and the Transmission of Buddhism through Northern Pakistan, primarily based on Kharosthi and Brahmi Inscriptions*. Ph.D. Thesis. University of Washington.
- Noori, N.A., Olivieri, L.M., Iori, E. (2019) Fashion ware in Mes Aynak, Logar: Chronology and comparison (with an appendix on a single specimen of tulip-bowl from Site MA-100). *Afghanistan*, 2, 1: 91-114.
- Olivieri, L.M. (1993) Excavation at Bir-kot-ghwandai (Swat) 1992. Preliminary Report. *Pakistan Archaeology* 28: 103-116.
- Olivieri, L.M. (1996a) Notes on the Problematical Sequence of Alexander's Itinerary in Swat. A Geo-Historical Approach. *EW*, 46, 1-2, 45-78.
- Olivieri, L.M. (1996b) Indagine preliminari su strutture civili e militari tardo-antiche nell'area dello Swat (Pakistan). In L. Marino (ed.) *Restauro Architettonico. Lezioni ed esercitazioni*. Firenze, pp. 95-102.
- Olivieri, L.M. (1998) The Rock-Carvings of Gogdara I (Swat): Documentation and Preliminary Analysis. *EW* 48, 1-2: 57-91.
- Olivieri, L.M. (2003a) *The Survey of the Bir-kot Hill. Architectural Comparisons and Photographic Documentation. Bir-kot-ghwandai Interim Reports I*. ISIAORepMem, Series Minor, VI. Rome: ISIAO.
- Olivieri, L.M. (2003b) La fase di occupazione islamica del colle di Bir-kot. Le evidenze della ricognizione e dello scavo. In M.V. Fontana, B. Genito, (eds.) *Studi in onore di Umberto Scerrato per il suo settantacinquesimo compleanno*. Università degli Studi di Napoli 'L'Orientale'- ISIAO, Dipartimento di Studi Asiatici, Series Minor, LXV, 2. Firenze, pp. 593-608.
- Olivieri, L.M. (2009) *Swat. Storia di una frontiera*. Rome: ISIAO.
- Olivieri L.M. (2010) Late Historic Cultural landscape in Swat. New data for a tentative Historical Reassessment. In M. Alram, D.E. Klimburg-Salter, M. Inaba, M. Pfisterer, eds, *Coins, Art and Chronology II. The First Millennium C.E. in the Indo-Iranian Borderlands*. Vienna: ÖAW, pp. 357-370.
- Olivieri L.M. (2011a) Coat Scales and Correlated Finds from Bir-kot-ghwandai Stratigraphic Context (Swat, Pakistan). *SAS*, 27: 1-24.
- Olivieri, L. M. (2011b) Behind the Buddhist Communities: Subalternity and Dominancy in Ancient Swat. *Journal of Asian Civilization* 34.1: 123-151.
- Olivieri, L.M. (2014a) *Digging Up: Fieldwork guidelines for Archaeology Students*. ACT RepMem, Series Minor 1. Lahore: Sang-e-Meel.
- Olivieri, L.M. (2014b). *The last phases of the urban site of Bir-kot-Ghwandai (Barikot) The Buddhist sites of Gumbat and Amluk-dara (Barikot)*. Lahore: Sang-e-Meel Publications.
- Olivieri, L.M. (2015a) *Sir Aurel Stein and the 'Lords of the Marches': New Archival Materials*. ACT RepMem, Archival Studies, 1. Lahore: Sang-e-Meel.
- Olivieri, L.M. (2015b) *Talking Stones. Painted Rock Shelters of the Swat Valley*. ACT RepMem, Series Minor, 2. Lahore: Sang-e-Meel Publications.
- Olivieri, L.M. (2016a) Restauro conservativo e mobilitazione sociale in siti archeologici della valle dello Swat (Pakistan). *Restauro Archeologico*, 22, 1: 57-77.

- Olivieri, L.M. (2016b) Appendix 3. The carvings on the bottom slab of Grave 10 (UDG 155): chronological and semantic evidence regarding a much-debated aspect of ancient Swat culture. In Vidale, Micheli, Olivieri, 2016, pp. 220-221.
- Olivieri L.M. (2016c) The Last Phases at Barikot: Urban Cults and Sacred Architecture Data from the Spring 2013 Excavation Campaign in Swat. *Journal of Inner Asian Art and Archaeology*, 6: 7-30.
- Olivieri, L.M. (2017a) Archaeology from below in Swat, Pakistan: Heritage and Social Mobilization in a Post-Conflict Reality. In P. Newson, R. Young, eds, *Post-Conflict Archaeology and Cultural Heritage. Rebuilding Knowledge, Memory and Community from War-Damaged Material Culture*. New York: Routledge, pp. 217-237.
- Olivieri, L.M. (2017b) A note on the Swat 'Fashion Ware', its origin and diffusion. *AP*, XXVIII: 105-117.
- Olivieri, L.M. (2018a) Amluk-dara (AKD 1) A Revised Excavation Report. *JAC*, 41, 1: 1-106.
- Olivieri, L.M. (2018b) Una breve nota in ricordo di Harald Hauptmann. La lastra BI 3818 da Butkara I. *JAC*, 41, 1: 195-200.
- Olivieri L.M. (2019) A short note on contexts and chronology of the materials from Saidu Sharif, Amluk-dara, Gumbat and Barikot (Swat). *Restauro Archeologico*, 1: 112-131.
- Olivieri, L.M. (2020) The Problem of Negative Interfaces in Stratigraphic Excavations. Two Case Studies from Swat. *AP*, XXXI: 27-37.
- Olivieri, L.M. (2022) *Stoneyards and Artists. The Buddhist Stupa of Saidu Sharif I*. Marco Polo Series (Studies in Global Europe-Asia Connections), 1. Venice: Edizioni Ca' Foscari.
- Olivieri, L.M. (2023a) Temples of Swat. The Śāhi archaeological landscape of Barikot. In H.P. Ray, S. Kulshreshtha, U. Suvrathan (eds) *The Routledge Handbook of Hindu Temples Materiality, Social History and Practice*. New York: Routledge, pp. 354-377.
- Olivieri, L.M. (2023b) A Note on the Sphero-conical Vessels: New Evidence from Swat, Pakistan. *AP*, XXXIV: 319-331.
- Olivieri, L.M. (2024a) Barikot's apsidal temple. An early Buddhist urban shrine in Outer Gandhara. *The Historian*, 161: 47-53.
- Olivieri, L.M. (2024b) The Itinerary of Orgyan pa (ca. 1230-1293). In L.M. Olivieri, G. Vignato, eds, *Swāt Archaeology. From Tucci to Present*. Harmoniae Mundi, 1. Rome: ISMEO-Museo d'Arte Cinese ed Etnografico, Fondazione Saveriana, Parma [Scienze e Lettere Srl], pp. 147-154.
- Olivieri, L.M. (2025a) The ACT and ALIPH Projects in the Swat Valley (Pakistan). From Public Archaeology to Community Archaeology Practice. In S. Mithen, M. Rabbani, M.A. Rabbani, eds, *Cultural Heritage, Community Engagement and Sustainable Tourism Case Studies from Archaeological Sites in the Global South*. Contemporary Geographies of Leisure, Tourism and Mobility. London/New York: Routledge.
- Olivieri, L.M. (2025b) Double-crop Pocket Zones and Empires: The Case of Swat. In Fabian, L. et al. eds, *Frontier Zone Processes at Regional, Imperial, and Global Scales (300BCE- 300 CE)*. Heidelberg: Heidelberg University Publishing, pp. 45-80. <https://doi.org/10.17885/heiup.1582.c22721>
- Olivieri L.M.; Filigenzi A. (2018) On Gandhāran sculptural production from Swat: recent archaeological and chronological data. In W. Rienjang, P. Stewart, eds, *Problems of Chronology in Gandhāran Art Proceedings of the First International Workshop of the Gandhāra Connections Project, University of Oxford, 23rd-24th March 2017*. Oxford: Archaeopress Publishing Ltd, pp. 71-92.
- Olivieri, L.M., Vidale, M. (2004) Beyond Gogdara I. New Evidence of Rock Carvings and Rock Artefacts from the Kandak Valley and Adjacent Areas (Swat, Pakistan). *EW* 54, 1-4: 121-180.
- Olivieri, L.M., Vidale, M., Khan, A., Saheed, T., Colliva, L., Garbini, R., Langella, L., Micheli, R., Morigi, E. (2006) Archaeology and Settlement History in a Test Area of the Swat Valley: Preliminary Report on the AMSV Project (1st Phase). *EW*, 56, 1-3: 73-150.
- Olivieri, L.M., Tribulato, O. (2017) Writing Greek in the Swat Region: A New Graffito from Barikot (Pakistan). *Zeitschrift für Papyrologie und Epigraphik*, 204: 128-135.
- Olivieri, L.M., Iori, E. (2020) Early-historic Data from the 2016 Excavation Campaigns at the Urban Site of Barikot, Swāt (Pakistan): A Shifting Perspective. In L. Rose Greaves, A. Hardy, eds, *Religion, Society, Trade and Kingship. Art and Archaeology in South Asia and along the Silk Road (5500 BCE - 5th Century CE)*, SAAA 2016. New Delhi: Dev Publishers & Distributors, pp. 79-103.

- Olivieri, L.M., Iori, E. (2021a) Monumental Entrance to Gandhāran Buddhist Architecture. Stairs and Gates from Swat: *Annali di Ca' Foscari*, Serie Orientale, 57: 197-240.
- Olivieri, L.M., Iori, E. (2021b) Patterns of Early Urbanisation in Swat: A Reassessment of the Data from the Recent Excavations at Barikot. *AP*, XXXII: 33-55.
- Olivieri, L.M., Minardi, M. (2021) Acropoli di Barikot: un microcosmo di riflessi asiatici. *Archeologia Viva*, 206: 40-51.
- Olivieri, L.M., Filigenzi, A., Noori, N.A., Vidale, M., Alberti, L. (2021) *Fieldwork guidelines for Archaeology Officers* (Pashto, English and Dari editions). Kabul: UNESCO/ISMEO/Afghan Institute of Archaeology.
- Olivieri, L.M., Iori, E., Minardi, M., Lant, E., Samad, A., Vidale, M. et al. (2022) Barikot, Swat: Excavation Campaign 2021-2022, Preliminary Report. Trenches BKG 16, BKG 17, and BKG 18. *EW* (62), 3, 2: 67-194.
- Olivieri, L.M., Minardi, M., Vidale, M. (2022) A Note on the Discovery of a Prehistoric Maskoid on the Barikot Top-Hill (Bir-kot-ghwandai, Swat). *AP*, XXXIII: 65-75.
- Olivieri, L.M., Filigenzi, A. (2023) No. 11: Bodhisattva Bhaishajyaraja, "The Healing King". Intertwined Religious Cultures: Buddhism, and Hinduism. In Debreczeny, K., Pakhoutova E., eds, *Himalayan Art in 108 Objects*. New York: Scala Arts Publishers, pp. 68-71.
- Olivieri, L.M., Minardi, M. (2023) Scavare a Bīr-koṭ-ghwaṇḍai. Le fasi tardo-antiche. In L. Colliva, A. Filigenzi, L.M. Olivieri con M. Baldi, eds, *Le forme della città: Iran, Asia centrale e Gandhāra*. SOR, n.s. 34. ISMEO, pp. 601-636.
- Olivieri, L.M., Sesana, M. (2024) A Tale of Two Cities. Notes on the two Barikot in Dir and Swat. In Al. Cacopardo, Aug. Cacopardo (eds) *Roots of Peristan. An International Interdisciplinary Conference on the Pre-Islamic Cultures of the Hindukush-Karakorum. Rome 5-7 October 2022*. SOR, n.s. 37. ISMEO: Rome, pp. 743-758.
- Olivieri, L.M., Vignato, G., eds (2024) *Swāt Archaeology. From Tucci to the present*. Harmoniae Munidi, 1. ISMEO: Rome.
- Pal, P. (1973-1974) A Brāhmanical Triad from Kashmir and Some Related Icons. *Archives of Asian Art*, 27: 33-45.
- Pal, P. (1975) *Bronzes of Kashmir*. New Delhi: Hacker Art Books.
- Pal, P. (1986) *Indian Sculpture: Circa 500 BC-AD 700*. Vol. 1. Berkeley: University of California Press.
- Paladino, I. (1986) Il gallo e i riti di passaggio in Grecia. In U. Bianchi (1986) *Transition Rites. Cosmic, Social and Individual Order*, pp. 237-249. Roma.
- Panaino, A. (2015) Mimesis e Rito. I Preti alati del cerimoniale mazdaico. *Bizantinistica. Rivista di Studi Bizantini e Slavi*. Serie Seconda, anno XVI: 41-62.
- Paul, P. G. (1981) Some Terracotta Plaques from the Swāt-Indus Region: A Little-known Phase of the post-Gandhāra Art of Pakistan. In H. Härtel, ed., *SAA 1979*. Berlin: Dietrich Reimer, pp. 411-428.
- Paul, P. G. (1986) *Early Sculpture of Kashmir: (before the Middle of the Eighth [sic] Century A.D.): an Approach to Art History and Epigraphy of the Jhelum Valley and Its Peripheral Regions*. PhD dissertation. Leiden University.
- Parkes, P. (1987) Livestock Symbolism and Pastoral Ideology among the Kafirs of the Hindu Kush. *Man*, 22, 4: 637-660.
- Parzinger, H. (2006) *Die frühen Völker Eurasiens. Vom Neolithikum bis zum Mittelalter*. München: CH Beck.
- Pellò, S. (2009) Massoni o Manichei? Immaginario etnografico sui Kafiri dell'Hindukush. *Hiram*, 2: 95-104.
- Petech, L. (1964) Note su Kāpīsi e Zābul. *Rivista degli Studi Orientali*, XXXIX: 287-294.
- Pfisterer, M. (2013) *Hunnen in Indien: Die Münzen der Kidariten und Alchan aus dem bernischen historischen Museum und der Sammlung Jean-Pierre Righetti. Mit typologischen Zeichnungen von Theresa Eipeldauer*. Veröffentlichungen zur Numismatik, 57. Wien: ÖAW Verlag.
- Phuntsho, D. (2021) Buddhist Stupas and Their Symbols in Vajrayana Buddhism in Bhutan. *IJESIR*, 2, 7: 4-24.
- Piacentini Fiorani, V., Fusaro, A. (2022) Eleventh-twelfth century — political and economic balances in the western Indian Ocean in the light of historical and ceramic evidence from the site of Banbhore/Daybul. *Proceedings of the Seminar for Arabian Studies* 51: 247-270.
- Piotrovsky, B. (1986) *Scythian Art*. Leningrad: Phaidon Press Ltd.

- Piracha, U. (2022) *Potential of Olives and Olive Oil in Pakistan*. The Pakistan Business Council, <https://www.pbc.org.pk/wp-content/uploads/Potential-of-Olives-and-Olive-Oil-in-Pakistan-PBC-Study.pdf>.
- Pozzi, S. (2013) *Preliminary report on the 2013 field work at Vardanzeh*. The Society for the Exploration of EurAsia / www.exploration-eurasia.com
- Pozzi, S., Mirzaachmedov, D. K., and Iskanderova, A. (2017) *Preliminary Report on the 2017 Field Work at Vardanzeh*. The Society for the Exploration of EurAsia / www.exploration-eurasia.com
- Pradines, S. (2016) The Sphero-conical Vessel: A Difficult Interpretation between Historical Sources and Archaeology. In Pradines, S. (ed.) *Journal of Islamic Archaeology. Special Issue. The Sphero-Conical Vessel: Name, Object and Usage*, 3, 2: 153-162.
- Putinjia, I. (2018) Pakistan Plants More Olive Trees. *Olive Oil Times*, March 19, 2018. <https://www.oliveoiltimes.com/business/pakistan-plants-more-olive-trees/62551>.
- Qasim Jan, M., Nasim Khan, M. (2011) Archaeological Survey of Charsadda District in the Peshawar Valley. *AP*, XXII: 17-97.
- Qamar, M.S. (2004) A Preliminary Report on the Excavation of a Buddhist Site of Nawagai Tehsil Barikot, Swat. *EW*, 54, 1-4: 181-221.
- Qamar, M.S., Ashraf Khan, M. (1991) Preliminary Report on the Archaeological Excavations of Buddhist Sites in Swat, N.W.F.P., 1989-90. *Journal of Central Asia*, 14, 1: 173-234.
- Rabbani, M.A. (2020a) The typology, production and adornment of Gandhāran beads during the mid-3rd century BCE – 1st century CE: Preliminary results from Barikot, Swat, Pakistan. *ARA*, 24: 1-20.
- Rabbani, M.A. (2020b) Barikot Beads and Gandhāran Art Ornaments: A Critical Study of Adornment Practices during the Kushana Period of Pakistan. *BEADS: Journal of the Society of Bead Researchers*, 32: 25-40.
- Rabbani, M.A. (2022a) *Barikot beads (13th century BCE – 15th century CE): Typology, Iconography, Technology and Chronological Variation*. Ph.D. Thesis. University of Reading.
- Rabbani, M.A. (2022b) Beads. In L.M. Olivieri, E. Iori, M. Minardi, eds, Barikot, Swat: Excavation Campaign 2021-2022, Preliminary Report. Trenches BKG 16, BKG 17, and BKG 18. *EW* (62), 3, 2: 160-166.
- Rabbani, M.A. (2025) *Beads from the Excavations in the Historic Settlement at Bīr-koṭ-ghwaṇḍai (Barikot), Swat, Pakistan (1984-2022)*. ACT RepMem, Special Volume 4. BKG Interim Reports VII. Lahore: Sang-e-Meel Publications.
- Raheem, A., Tahir, M.A. (2008) Mughal architecture under the cloud of demolition. Environmental effects on monuments. *Journal of Building Appraisal*, 4, 2: 103-114.
- Rahman, A. (1968-1969) Excavations at Damkot. *AP*, 4: 103-250.
- Rahman, A. (1978). An inscription of Jayapāla Śāhī. *JRAS*, 110, 1: 31-37.
- Rahman, A. (1979) *The last two dynasties of the Śāhīs: an analysis of their history, archaeology, coinage, and palaeography*. Islamabad: Centre for the Study of the Civilizations of Central Asia, Quaid-i-Azam University.
- Rahman, A. (1993) Shnaisha Gumbat: First Preliminary Report. *Ancient Pakistan* 8: 1-124.
- Rahman, A. (1998) The Zalankot Bilingual Inscription. *EW*, 48, 3-4: 469-473.
- Ram Chandra, K. (1991 [1933]) *Ancient Monuments of Kashmir*. Lahore: The India Society.
- Rante, R., Collinet, A. (2013) *Nishapur Revisited. Stratigraphy and Ceramics of the Qohandez*. Oxford and Oakville: Oxbow Books.
- Rasul, G., Afzal, M., Zahid, M., Bukhari, S.A.A. (2023) *Climate Change in Pakistan Focused on Sindh Province. Technical Report*. Islamabad: Pakistan Meteorological Department.
- Raverty, H.G. (1862) An account of Upper and Lower Suwāt, and the Kohistán, to the source of the Suwāt River; with an account of the tribes inhabiting those valleys. *Journal of the Asiatic Society* III: 227-281.
- Raza, S.J. (2011) Hindus under the Ghaznavids. *Proceedings of the Indian History Congress*, 71: 213-225.
- Rehman, S., Khattak, H.K., Rehman, F. (1996) The Archaeological Explorations in Buner. In Saeed-ur-Rehman, ed., *Archaeological Reconnaissance in Gandhāra*. Karachi: Department of Archaeology & Museums, Ministry of Culture and Sports, Government of Pakistan, pp. 96-106.

- Rodziadi Khaw, N.B. (2015) Study and Analysis of the Proto-Śāradā and Śāradā inscriptions in the Lahore Museum (Pakistan). *Gandhāran Studies*, 9: 77–83.
- Rodziadi Khaw, N.B. (2016) *Study and analysis of the Proto-Śāradā and Śāradā inscriptions from Gandhāra: Its impact on religious, cultural and historical landscape of the region*. PhD dissertation (unpublished). University of Peshawar.
- Roerich, G. (1988 [1949]) *The Blue Annals*. Calcutta: Motilal Banarsidass.
- Rosa, C., Theye, T., Pannuzi, S. (2019) Geological overview of Gandharan sites and petrographical analysis on Gandharan stucco and clay artefacts. *Restauratio Archeologica* 27.1: 12–39.
- Rowland, B., 1949. The Iconography of the Flame Halo. *Bulletin of the Fogg Art Museum*, 11(1): 10–16.
- Rtveladze, E. (2000) *Materialy Tokharistanstanskoĭ ėkspeditsii. Arkheologicheskie issledovaniya Kampyrtepa*. Tahskent: San'at.
- Rugiadi, M. (2015). Ghaznavid art and architecture. In K. Fleet, G. Krämer, D. Matringe, J. Nawas, D. J. Stewart (eds), *Encyclopaedia of Islam Three Online*. Brill. https://doi.org/10.1163/1573-3912_ei3_COM_27452
- Rugiadi, M., Ghouhani A., Keyghobadi, R. Allegranzi, V. (2024) *Mavizāb and Fuqqā*: An Ilkhanid-Period Dispute as Evidence in the Sphero-Conical Vessels Debate. *Muqarnas Online*, 40(1), 449–476. https://doi.org/10.1163/22118993_0040_014
- Rydh, H. (1959) *Rang Mahal. The Swedish Archaeological Expedition to India 1952-1954*. Lund: CWK Gleerup Publishers.
- Sachau, E.C. (1888) *Alberuni's India*, I-II. London: Trübner & Co., Ludgate Hill.
- Sahni, D.R. (1938) Six inscriptions in the Lahore Museum. *EI*, 21, 44: 293–301.
- Salomon, R. (2018) What Happened to Buddhism in India? (Presidential Address, IABS XVIII, Toronto, August 20, 2017). *JIAS* 41: 1–25.
- Samad, A., Khan, Z.H. (2016) Archaeological Survey of District Buner (2014–15): Preliminary Report. *Frontier Archaeology*, 6: 1–74.
- Samad, A., Waliullah, M., Ashraf, M., Sajjad, A. (2021) *Amlukdara Swat. Excavation and conservation report 2019-2020*. Peshawar: Directorate of Archaeology and Museums Khyber Pakhtunkhwa.
- Samarqandī = Nizāmī 'Arūḏī Samarqandī (1940) *Chahār Maqāla* (M. Qazwīnī, ed.). Teheran.
- Sarker, A. (2020) The *kirtimukha* in Ancient Indian Art and its Association with the 'grotesque'. *Chitrolekha International Magazine on Art & Design*, 4, 2: 1–12.
- Sarfaraz, S., Faisal, N. (2024) Climate Change and its Impacts across Pakistan: Climate Change and its Impacts across Pakistan. *International Journal of Economic and Environmental Geology*, 14, 4: 28–39.
- Sato, T. (2007), The Sufi Legend of Sultan Ibrāhīm b. Adham. *Orient*, 42: 41–54.
- Savinov, D.G. (2019) 'Houses of Spirits' in Engraved Images on Stone Slabs from the Tas-Khazaa Burial Mound. *Journal of Historical, Philological and Cultural Studies*, 2, 64: 156–182.
- Seyrig, H. (1959) Flacons? Grenades? Eolipiles? [Antiquités syriennes]. *Syria*, XXXIX, 1-2: 81–89.
- Scerrato, U. (1972) Oggetti metallici di età islamica in Afghanistan. IV – Su un tipo di amuleto del XII secolo. *AIUON*, 32: 287–310.
- Scerrato, U., Taddei, M. (1995) A Possible Hindu-Shahi Lintel from Swat. In J. Guy, ed., *Indian Art & Connoisseurship: Essay in Honour of Douglas Barret*. Middleton, NJ-New Delhi: IGNA, pp. 52–61.
- Schädler, U. (2018) Game boards and counters from Amluk-dara. *JAC*, 41, 1: 173–176.
- Schindel, N. (2011) The Era of the Bactrian Documents: A Reassessment. *Gandhāran Studies*, 5: 1–10.
- Schlumberger, D. (1955) Le marbre Scorretti. *Arts asiatiques*, 2, 2: 112–119.
- Schmidt, E.F. (1942) Excavations at Ravy. University of Chicago. The Oriental Institute. https://isac.uchicago.edu/sites/default/files/uploads/shared/docs/ravy_expedition.pdf.
- Shaki, M. (2012) GABR. In *Encyclopaedia Iranica*, <https://www.iranicaonline.org/articles/gabr->.
- Sharvit, J. (2008) The sphero-conical vessels. In V. Tzaferis, S. Israeli (eds) *Panias II: Small Finds and Other Studies*, 101–112, Israel Antiquities Authority Reports, 38, pp. 101–112.

- Shavarebi, E. (2025) *A Catalogue and Analysis of Coin Finds from the Excavations of the Italian Archaeological Mission at Barikot (Swāt Valley, Pakistan) from 1984 to 2022*. Vienna: ÖAW/ISMEO.
- Shavarebi, E., Annucci, N. (forthcoming) Coin Finds of the Shahi Kingdoms in the Indo-Iranian Borderlands. In N. Kimmeth, N. Verdon, eds, *Exploring the Contributions of the Shahi Kingdoms to Inner and South Asia*. Vienna: ÖAW.
- Shavarebi, E., Strauch, I. (2022) The Mosque of the Forgotten City: The Bilingual Inscription of Zalamkot Revisited. *EW* (62), 3, 2: 195–210.
- Shekhar, H. (2020) Cup Marks in Jharkhand: An Ethnographic Observation. *Heritage: Journal of Multidisciplinary Studies in Archaeology* 8.2: 242–257.
- Shishkina, G.V. (1979) *Glazurovannaja keramika sogda*, 80 p. FAN, Tashkent.
- Shishkina, G.V., and Pavchinskaja, L.V. (1992) *Terres secrètes de Samarcande. Ceramiques du VIIIe au XIIIe siècle, Institut du Monde Arabe, Paris, 26 juin–27 septembre 1992; Musee de Normandie, Caen 23 octobre 1992 – 25 janvier 1993; Musee des Augustins, Toulouse 4 mars – 7 juin 1993*. Paris: Institut du Monde Arabe.
- Silvi Antonini, C. (2005) Considerations on the Image of Mahiṣāsūramardīnī of Tapa Sardār. *EW*, 55, 1–4: 313–328.
- Siméon, P.M. (2009) *Étude du matériel de Hulbuk (Mā wārā'al-nahr-Khuttal), de la conquête islamique jusqu'au milieu du XIe siècle (90/712–441/1050)*. Contribution à l'étude de la céramique islamique d'Asie centrale, BAR International Series 1945. Oxford: Archaeopress.
- Sims-Williams, N., 2004. The Bactrian inscription of Rabatak: A new reading. *Bulletin of the Asia Institute*, 18: 53–68.
- Sims-Williams, N. (2020) The Bactrian Documents as a Historical Source. In R.E. Payne, R. King, eds, *The Limits of Empire in Ancient Afghanistan. Rule and Resistance in the Hindu Kush, circa 600 BCE–600 CE*. Wiesbaden: Harassowitz Verlag, pp. 231–244.
- Sims-Williams, N., de Blois, F. (2018) *Studies in the Chronology of the Bactrian Documents from Northern Afghanistan*. Vienna: ÖAW.
- Sircar, D.C. (1963–1964) Three Early Medieval Inscriptions. *EI*, 35: 44–54.
- Siudmak, J., 2013. *The Hindu-Buddhist sculpture of ancient Kashmir and its influences*. Leiden: Brill.
- Sivaramamurti, C. (1955) The Weapons of Vishṇu. *Artibus Asiae*, 18, 2: 128–136.
- Skilling, P. (2005) "Buddhist Sealings": Reflections on Terminology, Motivation, Donors' Status, School-Affiliation, and Print-Technology. In C. Jarrige, V. Lefèvre, eds, *SAA 2001*, Paris: Recherche sur les civilisations, pp. 777–685.
- Skilling P. (2008) Buddhist sealings and the ye dharmā stanza. In G. Sengupta, S. Chakraborty, eds, *Archaeology of the Early Historic South Asia*, pp. 503–524.
- Smith, M.L., 2024, Urban Spaces and Dilemmas of Perception in the Ancient Indian Subcontinent. In S. Rau, J. Rüpke (eds) *Religion and Urbanity Online*. Berlin/Boston: de Gruyter.
- Snodgrass, A. (1964) *Early Greek Armour and Weapons. From the End of the Bronze Age to 600 B.C.* University of Edinburgh Press: Edinburgh.
- Soper, A.C., 1949. Aspects of light symbolism in Gandhāran sculpture. *Artibus Asiae*, 12: 252–283.
- Spengler, R.N., Tang, L., Nayak, A., Boivin, N., Olivieri, L.M. (2021) The southern Central Asian mountains as an ancient agricultural mixing zone: new archaeobotanical data from Barikot in the Swat valley of Pakistan. *Vegetation History and Archaeobotany*, 30, 4: 463–476.
- Srinivasan, D. (1979) Early Vaiṣṇava imagery: Caturvyūha and variant forms. *Archives of Asian Art*, 32: 39–54.
- Srinivasan D., Olivieri, L.M., Salemi, G. (2018) The Eight-Armed Devi from Guligram, Swat (c. 8th century CE) A study in three parts dedicated to the memory of Harald Hauptmann. *Gandhāran Studies* 12: 105–134.
- Stacul, G. (1969) Excavation near Ghalegai and Chronological Sequence of Protohistorical Cultures in the Swat Valley (W. Pakistan). *EW* 19, 1–2: 44–91.
- Stacul, G. (1993) Kalako–deray, Swat: 1989–1991 Excavation Report. *EW*, 43, 1–4: 69–94.
- Stadtner, D.M. (1999) Śāhi Sculpture Revisited. *Orientalia* 30, 8: 68–73.

- Stănică, A.D., Szmoniewski, B. S. (2016) The sphero-conical vessels from the Lower Danube in the light of new discoveries from Isaccea, Tulcea county, Romania. *Sprawozdania Archeologiczne*, 68: 327–344.
- Stein, A. (1898) *Detailed Report of an Archaeological Tour with the Buner Field Force*. Lahore: Punjab Government Press.
- Stein, A. (1921) *Serindia. Detailed Report of Explorations in Central and Westernmost China*, vols I–V. Oxford: Clarendon Press.
- Stein, A. (1930) *An archaeological tour in Upper Swāt and adjacent hill tracts*. MASI, 42. Calcutta: Government of India Central Publication Branch.
- Strauch, I. (2000) Zwei Stempel aus Swat (Pakistan). *Berliner indologische Studien* 13/14: 215–230.
- Strauch, I, Olivieri, L.M. (2024) The Proto-Sharada Rock Inscription at Talang, Kotah Valley, Swat (Pakistan). *EW* 64: 115–133.
- Taddei, M. (1970) Inscribed clay tablets and miniature stūpas from Ġaznī. *EW*, 20, 1–2: 70–86.
- Taddei, M. (1973) Una Kaumodakī-gadā di arte Śāhi nella raccolta dell'Istituto Universitario Orientale di Napoli. *Arte Orientale in Italia III. Scritti miscellanei del Museo Nazionale d'Arte Orientale*. Roma, pp. 61–71.
- Taddei, M. (1985) K.M. Varma, Myth of the So-called 'Tribhaṅga' as a 'Pose' (Proddu, Santiniketan 1983, xvi–90). *EW*, 35, 1–3: 287.
- Taddei, M. (1987) Non-buddhist Deities in Gandhāran Art. Some New Evidence. In M. Yaldiz, W. Lobo, eds, *Investigating Indian Art: Proceedings of a Symposium on the Development of Early Buddhist and Hindu Iconography Held at the Museum of Indian Art Berlin in May 1986*. Berlin: Staatliche Museen Preussischer Kulturbesitz, pp. 349–362.
- Taddei, M. (1992) The Jewelled Buddha and the Mahiṣāsūramardīnī: Religion and Political Ideology in Pre-Muslim Afghanistan. In C. Jarrige, ed., *SAA 1989*. Wisconsin-Madison: Prehistory Press, pp. 457–464.
- Taddei, M. (2004) *Imported Artifacts from Bīr-koṭ-ghwaṇḍai', Bīr-koṭ-ghwaṇḍai Interim Reports II, IsIAO Reports and Memoirs, New Series, III*. Rome: IsIAO, pp. 9–24.
- Tanabe, K. (1996) Sasanian “Apron-Shirt” and the Date of the Two Marble Statues of Sūrya from Khair Khaneh. In *La Persia e l'Asia Centrale da Alessandro al X secolo*. Atti dei Convegni Lincei 127. Accademia Nazionale dei Lincei: Roma, pp. 489–514.
- Tandon, P. (2013) Notes on the evolution of Alchon coins. *ONS*, 216: 24–34.
- Tarzi, Z. (2006) Bāmiyān 2006: The Fifth Excavation Campaign of Prof. Tarzi's Mission. *The Silk Road*, 4, 2:10–26.
- Tarzi, Z. (2007) Bāmiyān (Afghanistan): récentes fouilles françaises (2002–2006) par la Mission Z. Tarzi. *Comptes rendus des séances de l'Académie des Inscriptions et Belles-Lettres*, 151.2: 877–925.
- Tarzi, Z. (2012) Les fouilles strasbourgeoises de la mission Z. Tarzi à Bāmiyān (2002–2008), in Ducœur G. (ed.), *Autour de Bāmiyān. De la Bactriane hellénisée à l'Inde bouddhique, Actes du colloque de Strasbourg (19–20 juin 2008)*. Publication de l'Association pour la protection de l'archéologie afghane (APAA) *Archaeologia afghana*, série scientifique I. De Boccard: Paris, pp. 27–72.
- Tilley, C. (1994) *A Phenomenology of Landscape Places, Paths and Monuments*. Oxford/Providence USA: Berg Publishers.
- Tosi, M. (1969) Excavations at Shahr-i-Sokhta. Preliminary report on the second campaign, September–December 1968. *EW*, 19, 3–4: 283–386.
- Tucci, G. (1932) “Mc-od rten” and “T'sa r'sa” nel Tibet Indiano ed Occidentale. Contributo allo studio dell'arte religiosa tibetana e del suo significato. *Indo-Tibetica*, I. Reale Accademia d'Italia, Studi e Documenti, 1: 7–109.
- Tucci, G. (1940) Travels of Tibetan Pilgrims in the Swāt Valley. In L.M. Olivieri, G. Vignato, eds, *Swāt Archaeology. From Tucci to Present*. Harmoniae Mundi, 1. Rome: ISMEO-Museo d'Arte Cinese ed Etnografico, Fondazione Saveriana, Parma [Scienze e Lettere Srl], pp. 75–141.
- Tucci, G. (1949) *Tibetan Painted Scrolls* (3 vols.). Roma: La Libreria dello Stato.
- Tucci, G. (1958) Preliminary report on an archaeological survey in Swat. *EW*, 9, 4: 279–328.
- Tucci, G. (1963) Oriental Notes II. An Image of a Devi Discovered in Swat and some Connected Problems. *EW*, 14, 3–4: 146–182.
- Tucci, G. (1970) Oriental Notes V: Preliminary Account of an Inscription from North-Western Pakistan. *EW*, 20, 1–2, 103–104.
- Tucci, G. (1977) On Swāt. The Dards and Connected Problems. *EW*, 27, 1–4: 9–85.

- Twist, R. (2018) Images of the Crowned Buddha along the Silk Road: Iconography and Ideology. *Humanities*, 7: 92. <https://doi.org/10.3390/h7040092>
- Tye, R., Tye, M. (1995) *Jitals: A Catalogue and Account of the Coin Denomination of Daily Use in Medieval Afghanistan and North-West India*. Isle of South Uist: Robert Tye.
- Uesugi, A. (2020) Stone Beads from Taxila. *Ancient Pakistan*, XXX: 1-22.
- Uesugi, A. (2021) Stone Beads of the Indian Peninsular Megalithic Culture: Its Characteristics and Significance. In G.S. Abhayan, S.V. Rajesh, P. Nayar, eds, *Iron Age in India. Some More Thoughts*. Kerala: Department of Archaeology, pp. 1-34.
- UNESCO (2023) *Policy Document on Climate Action for World Heritage*. UNESCO World Heritage Convention.
- VV.AA. (2011) *The Artistic Culture of Central Asia and Azerbaijan in the 9th–15th Centuries. Vol. I. Ceramics*. Samarkand–Tashkent: IICAS, SMI ASIA.
- van Lohuizen-de Leeuw, J.E. (1959) An Ancient Hindu Temple in Eastern Afghanistan *Oriental Art*, 5, 2: 61–69.
- Varma, K.M. (1983) *Myth of the So-called 'Tribhaṅga' as a 'Pose'*. Santiniketan: Proddu.
- Verardi, G. (1977) Notes on Afghan Archaeology ii. gaṇeśa Seated on lion: A new Śāhi Marble. *EW*, 27: 277–283.
- Verardi, G. (2012) Buddhism in North-western India and Eastern Afghanistan, Sixth to Ninth Century AD. *ZINBUN* 43: 147–183.
- Vernier, M. (2007) *Exploration et documentation des pétroglyphes du Ladakh 1996-2006*. Fondation C. Leone et M. Montandon, Quad 4. Como.
- Vernier, M. (2016) Zamthang, epicentre of Zanskar's rock art heritage. *RET*, 35: 53–105.
- Vezzoli, V. (2016) Sphero-conical Vessels from Baalbek: A Diverse and Challenging Collection. *Journal of Islamic Archaeology*, 3, 2: 209–232.
- Vidale, M., Micheli, R., Olivieri, L.M. (2011) Iconography of Protohistoric Swat and the Agricultural Intensification of Period IV (2nd Millennium BCE). *JAC* 34/1: 97–126.
- Vidale, M., Micheli, R., Olivieri, L.M. (2016) *Excavations at the Protohistoric Graveyards of Gogdara and Udegram*. ACT RepMem , III. Lahore: Sang-e-Meel Publications.
- Verdon, N. (2021) Wayhind (Modern Hund) in Early Medieval Historical Sources. In N. Kimmet, D. Klimburg-Salter, eds, *Sourcebook for the Shahi Kingdoms*, Austrian Science Fund (FWF) 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, <https://shahimaterialculture.univie.ac.at/sourcebook/>.
- Vigorous, E. (2016) Note on a Use of Sphero-conical Vessels in Mamluk Era Damascus. *Journal of Islamic Archaeology*, 3, 2: 187–193.
- Vondrovec, K. (2014) *Coinage of the Iranian Huns and their Successors from Bactria to Gandhāra (4th to 8th century CE)*. Vienna: ÖAW.
- Wang, S. (2022) Communities in Between: the Silk Road network in the context of trans-Eurasian politics from the 6th to the 8th centuries. *Approaches to Disruptions and Interactions in Archaeology: Proceedings of the Graduate Archaeology at Oxford Annual Conferences in 2017-2019*. Oxford: Archaeopress, pp. 32–44.
- Wheeler, M. (1962). *Chārsada. A Metropolis of the North-West Frontier*. Oxford: Oxford University Press.
- Whitfield, S. (2001) The Three Rabbits. *IDP News. Newsletter of the International Dunhuang Project*, 18: 1–2.
- Whitfield, S. (2010) A Place of Safekeeping? The Vicissitudes of the Bezeklik Murals. In N. Agnew, ed., *Conservation of Ancient Sites on the Silk Road. Proceedings from the Second International Conference on the Conservation of Grotto Sites, August 25– 30 2004*. Los Angeles: Getty Publications, 95–106.
- Wijesuriya, G., Lee, S. (2017) *Asian Buddhist Heritage: Conserving the Sacred*. Rome: ICCROM.
- Wilkinson, C.K. (1973) *Nishapur. Pottery of the Early Islamic Period*. New York: The Metropolitan Museum of Art.
- Winter, T. (2008) Asian destination: Rethinking material culture. In T. Winter, P. Teo, T.C. Chang, eds, *Asia on tour: Exploring the rise of Asian tourism*. Abingdon: Routledge, pp. 52–66.
- Winter, T. (2009) The modernities of heritage and tourism: Interpretations of an Asian future. *International Journal of Heritage Tourism*, 4, 2: 105–115.

- Winter, T. (2014) Beyond eurocentrism? Heritage conservation and the politics of difference. *International Journal of Heritage Studies*, 20, 2: 123–137.
- Winter, T., Daly, P. (2012) Heritage in Asia: Converging forces, conflicting values. In P. Daly, T. Winter, eds., *The Routledge handbook of heritage in Asia*. Routledge: Abingdon, pp. 1–38.
- Yabuno, T. (1962) Cytotaxonomic studies on the two cultivated species and the wild relatives in the genus *Echinochloa*. *Cytologia*, 27: 296–305.
- Yang, B. (2011) The Rise and Fall of Cowrie Shells: The Asian Story. *Journal of World History*, 22: 1–25.
- Yang, B. (2018) *Cowrie Shells and Cowrie Money: A Global History*. Oxford: Archaeopress.
- Zeitler, P.K., Tahirkheli, R.A.K., Naeser C.W., Johnson, N.M. (1982) Unroofing history of a suture zone in the Himalaya of Pakistan by means of fission-track annealing ages. *Earth and Planetary Science Letters*, 57, 1: 227–240.
- Zhang, Z. (2016) *Between China and Tibet: A Documentary History of Khotan in the Late Eighth and Early Ninth Century*. PhD thesis (unpublished), Harvard University.
- Zin, M. (2020) *Representations of the Parinirvāṇa Story Cycle in Kucha*. Leipzig Kucha Studies 2. Dev Publishers & Distributors: New Delhi.
- Zin, M. (2009) Vajrapāṇi in the Narrative Reliefs. In C. Fröhlich, ed., *Migration, Trade and Peoples, Part 2: Gandharan Art, Proceedings of the 18th International Conference of the European Association of South Asian Archaeologists in London 2005*. London: The British Academy, The British Association for South Asian Studies, pp. 73–88.
- Zwalf, W. (1996) *A Catalogue of the Gandhāra Sculpture in the British Museum*. The British Museum: London.

BĪR-KOṬ-GHWAṆḌAI INTERIM REPORTS, XI
ACT-FIELD SCHOOL PROJECT REPORTS AND MEMOIRS
SPECIAL VOLUME 7

VAJIRASTHĀNA

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



**International alliance
for the protection
of heritage
in conflict areas**



ACT FIELD SCHOOL REPORTS AND MEMOIRS, SPECIAL VOLUME, 7

BKG INTERIM REPORTS, XI

VAJIRASTHĀNA

ARCHAEOLOGY OF THE BARIKOT HILLTOP
(SWAT, PAKISTAN)

VOLUME 2

Luca M. Olivieri

In collaboration with Elisa Iori, Michele Minardi and Marco Pinelli
with contributions by other authors

Edited by Alice Casalini

English revision by Klara-Maeve O'Reilly

“SAVE THE ARCHAEOLOGICAL SITE OF BAZIRA” PROJECT



**International alliance
for the protection
of heritage
in conflict areas**



Università
Ca' Foscari
Venezia

Volume 2 – Illustrations (Figs)

TABLE OF CONTENTS

FIGURES FROM CHAPTERS

0 - INTRODUCTION

0.1 - PREAMBLE (L.M. Olivieri)	13
0.2 - THE CITY OF VAJRA (L.M. Olivieri)	15

I - ACTIVITIES ON THE HILLTOP (1992-2024)

1.1 - ARCHAEOLOGICAL OUTLINES (L.M. Olivieri)	21
1.2 - THE SURVEY (1992-1993) (L.M. Olivieri; Plates by R. Sabelli)	39
1.3 - THE CONSERVATION PROJECT (M. Pinelli, L.M. Olivieri et al.)	
1.3.1 - Phase I	57
1.3.2 - Phase II	101
1.3.3 - Phase III	121
1.3.4 - The Local Staff (Photos by M. Minardi)	131

II - ARCHAEOLOGY AND ARCHITECTURE

1. CIVIL AND MILITARY ARCHITECTURE

II.1.1 - The Monumental Terraces and the Central Fortress (L.M. Olivieri)	137
II.1.2 - The Fortress on the Hilltop: Trenches BKG 14 and 15 (M. Minardi) (PLATES XVI-XVIII)	157
II.1.3 - Hindu Śāhi settlements and the fortified limes (E. Iori)	163

2. RELIGIOUS ARCHITECTURE: TEMPLE 6

II.2.1 - Trench BKG 6: The Śāhi Temple on Terrace E (L.M. Olivieri)	175
II.2.2 - The Architecture of Temple 6: Excavated Materials and Reconstruction (A. Casalini)	181

3. TERRACE W

II.3.1 - Terrace W	199
II.3.2 - Structural overlaps in BKG 24 (N. Arcuri, M. Prota)	201
II.3.3 - Trench BKG 24.1 (M. Minardi, M. Prota)	225
II.3.4 - Trenches BKG 24.2 and BKG 24.3-4 (N. Cecchini)	235
II.3.5 - Trench BKG 24.5 (Nasir Muhmood, Kaisar Rahman)	241
II.3.6 - Trench BKG 23 (Li Hong)	243

III - MATERIAL CULTURE

A. SCULPTURES

III.A.1 - Gandhāran stone sculptures (C. Moscatelli)	249
III.A.2 - Śāhi marble sculptures (A. Filigenzi)	259
III.A.3 - Late Buddhist rock sculptures (A. Filigenzi)	259

B. TERRACOTTA AND CERAMICS

III.B.1 - Terracotta figurines (S. Forlivesi)	267
III.B.2 - Zoomorphic spouts (N. Arcuri, M. Prota)	269
III.B.3 - Pottery (M.A. Rabbani)	275
III.B.4 - Glazed pottery (S. Fusaro)	279

C. BEADS AND ORNAMENTS

III.C - Beads and Ornaments (M.A. Rabbani)	285
--	-----

D. COINS

III.D - Coins (E. Shavarebi)	291
------------------------------	-----

E. ARROWHEADS

III.E - Arrowheads (N. Mazounzadeh)	297
-------------------------------------	-----

F. BARIKOT HILLTOP IN 10 OBJECTS

III.F.1 - Macrophase 1: A prehistoric slab (M. Minardi, L.M. Olivieri, M. Vidale)	301
III.F.2 - Macrophase 5: An enigmatic Mahāparinirvāṇa (C. Moscatelli)	305
III.F.3 - Macrophase 7: A Hūṇa gemstone with a portrait (P. Callieri)	307
III.F.4 - Macrophase 7: A Hūṇa sealing (E. Iori, M. Minardi)	309
III.F.5 - Macrophase 8a: The Barikot Śāradā inscription: preliminary notes	311
III.F.6 - Macrophase 8b: The Three Hares roundel (A. Casalini)	313
III.F.7 - Macrophase 8b: A Hindu-Śāhi portrait (E. Iori)	319
III.F.8 - Macrophase 8b-9a: A Late Buddhist votive tablet (N. Arcuri, A. Casalini, N. Cecchini)	323
III.F.9 - Macrophase 9a: Late Buddhist tsha tshas (S. Baums, M. Minardi, M. Prota)	327
III.F.10 - Macrophase 9a: A Sphero-Conical vessel (L.M. Olivieri)	335
III.G - Archaeobotanical remains (R. Dal Martello)	337

V - CONCLUSIONS

IV - The Vajirasthāna Hilltop: ICONIC ASPIRATIONS AND OVERLAPPING RELIGIOUS

LANDSCAPE (E. Iori)	343
---------------------	-----

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

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

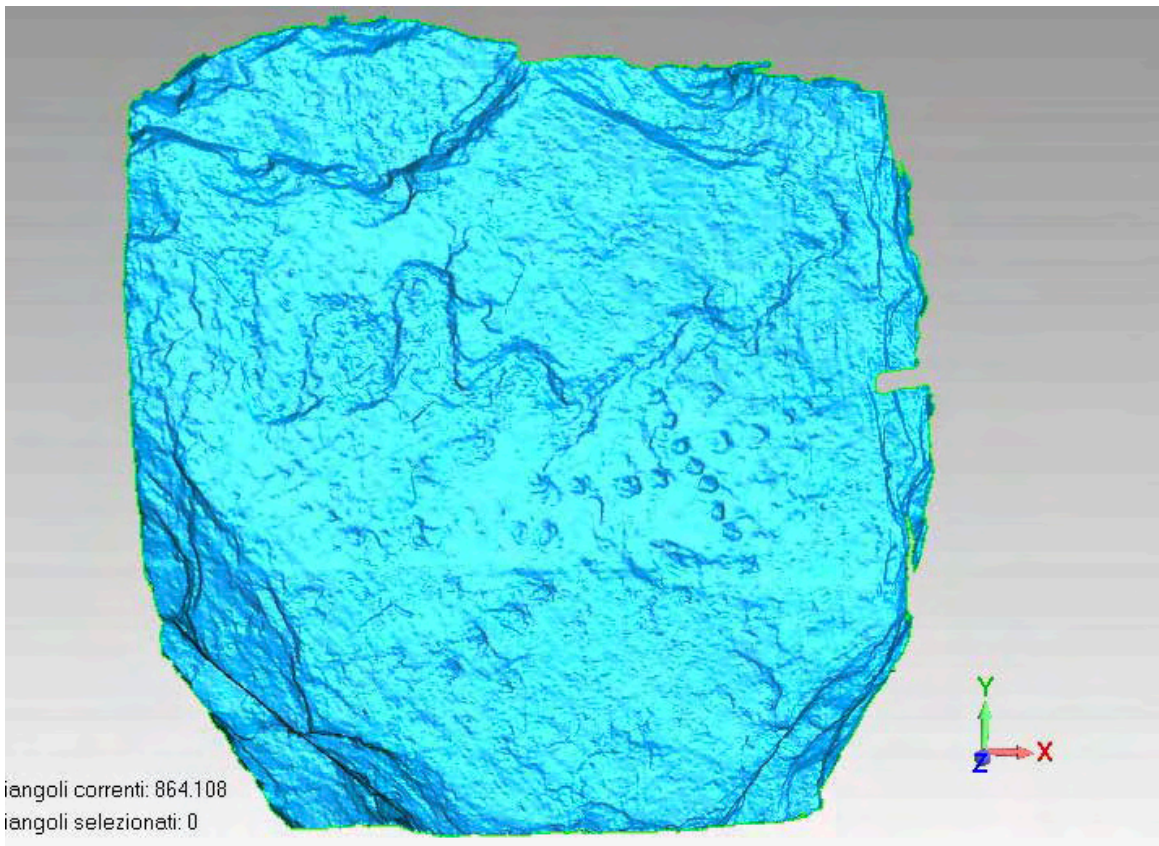


Fig. 4 – b) Grave 19, basal slab



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

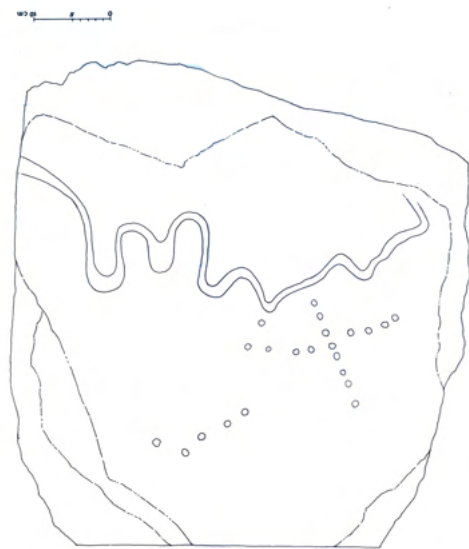


Fig. 4 –c) Grave 19, basal slab. Drawing by FM†

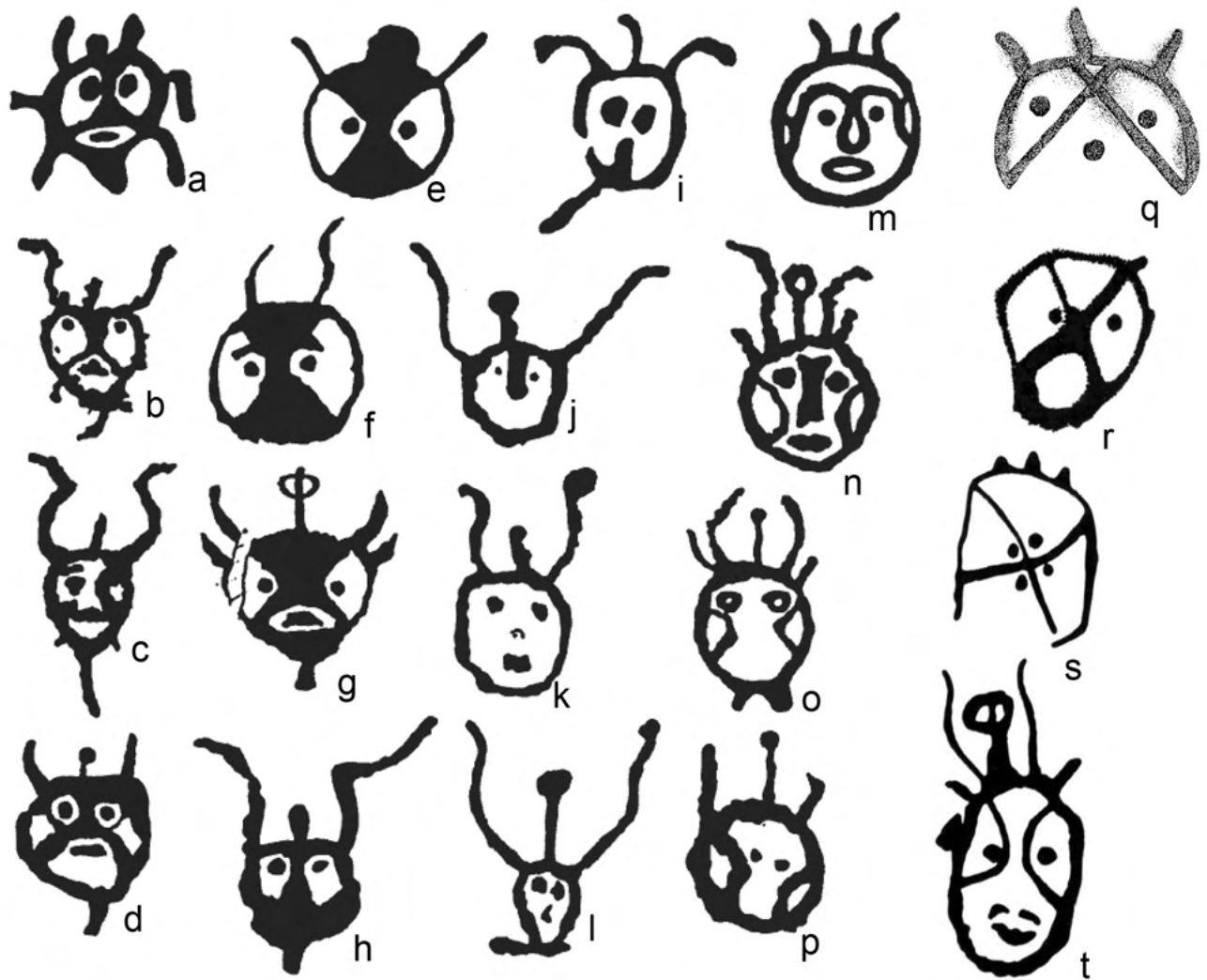


Fig. 5 – Bronze age maskoids from various regions of Central, Inner and Southern Asia. a, Mountain Geram, Siberia; b-d, Ienisseï Canyon; e, Upper Indus (northern Pakistan); f-h, Ienisseï Canyon; i, Inner Mongolia Yinshan; j-l, Ienisseï Canyon; m, Lower Amur, Sakachi-Aljan; n-p, Ienisseï Canyon; q-s, Upper Indus; t, Mugur-Sargol, Siberia (a-p modified from Francfort 2015, Fig. 4b; q, from Hauptmann 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)