

Early-historic Data from the 2016 Excavation Campaigns at the Urban Site of Barikot, Swat (Pakistan): A Shifting Perspective

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INTRODUCTION

The site of Bīr-koṭ-ghwaṇḍai (henceforth Barikot) is located on the left bank of the Middle Swat valley, west of the modern village of Barikot, and is marked by a steep hill (*ghwaṇḍai*), dominating the Swat River flowing to the north. Now, after several years of research¹ carried out by the Italian Archaeological Mission – more recently within the framework of the joint Pak-Italian ACT-Field School Project – a good portion of the ancient city has been uncovered. The area of the ancient town (c. twelve hectares including the acropolis) lies on the southern plain at the foot of the hill (the ancient acropolis) and is encompassed within an imposing defensive wall with massive rectangular bastions every 28 metres, the equivalent of 100 Attic feet. The defensive wall, dated on numismatic evidence and radiocarbon data to circa 150 BCE, so far represents the only excavated Indo-Greek urban defensive structure in South Asia.

The major excavated sector of the city, about one hectare corresponding to the south-western quarters of the ancient city, is formed by three adjoining trenches BKG 4-5, 11, and 12 (1990-1992, 2011-2016) (Fig. 1). Digs there have revealed an occupation sequence which runs from the second quarter of the second millennium BCE to the fourth century CE.

A PREAMBLE: THE NAMES OF THE CITY

Two towns according to the classic sources were conquered and garrisoned by Alexander the Great in the valley of Swat (Autumn 327 BCE), Ora/Nora and Bazira/Beira. The first is certainly Udegram, the second is Barikot; both Aurel Stein and Giuseppe Tucci proposed the identification of the site with the city known as Beira, “*urbs opulenta*” in Q. Curtius Rufus (*Historiae Alexandri* VIII 10, 22) and Bazira in L. Flavius Arrianus (Arrian) (*Anabasis*, IV, 27).³

Archaeological investigations have proved that the two sites were again occupied by the Indo-Greeks two centuries after Alexander,⁴ Ora and Bazira/Beira were totally neglected by the sources.

Some unexpected information is contained in a much later source. ‘Vajirasthāna’ (*vajira(sthā)ne*), as a place name,⁵ is mentioned in a Brāhmī-Śāradā inscription of the time of King Jayapāladeva (tenth century CE)⁶ found on the hill-top at Barikot (now in the Lahore Museum), recently re-studied by O. von Hinüber.⁷ Already in 1958 Tucci had convincingly associated the toponym ‘Vajirasthāna’ with Bazira/Beira.⁸ The toponym can be interpreted as ‘the strong place’ or better as ‘the *sthāna* ([fortified] place) of Vajra/Vajira’, on which, by analogy, Bir-kot, ‘the *koṭ* (castle) of Bīr’, might have been modelled by later Pashto-speakers (post-sixteenth century). If *Vajra* was really the original name of the site (‘Strong’), the diglossia ‘Bazira’/‘Beira’

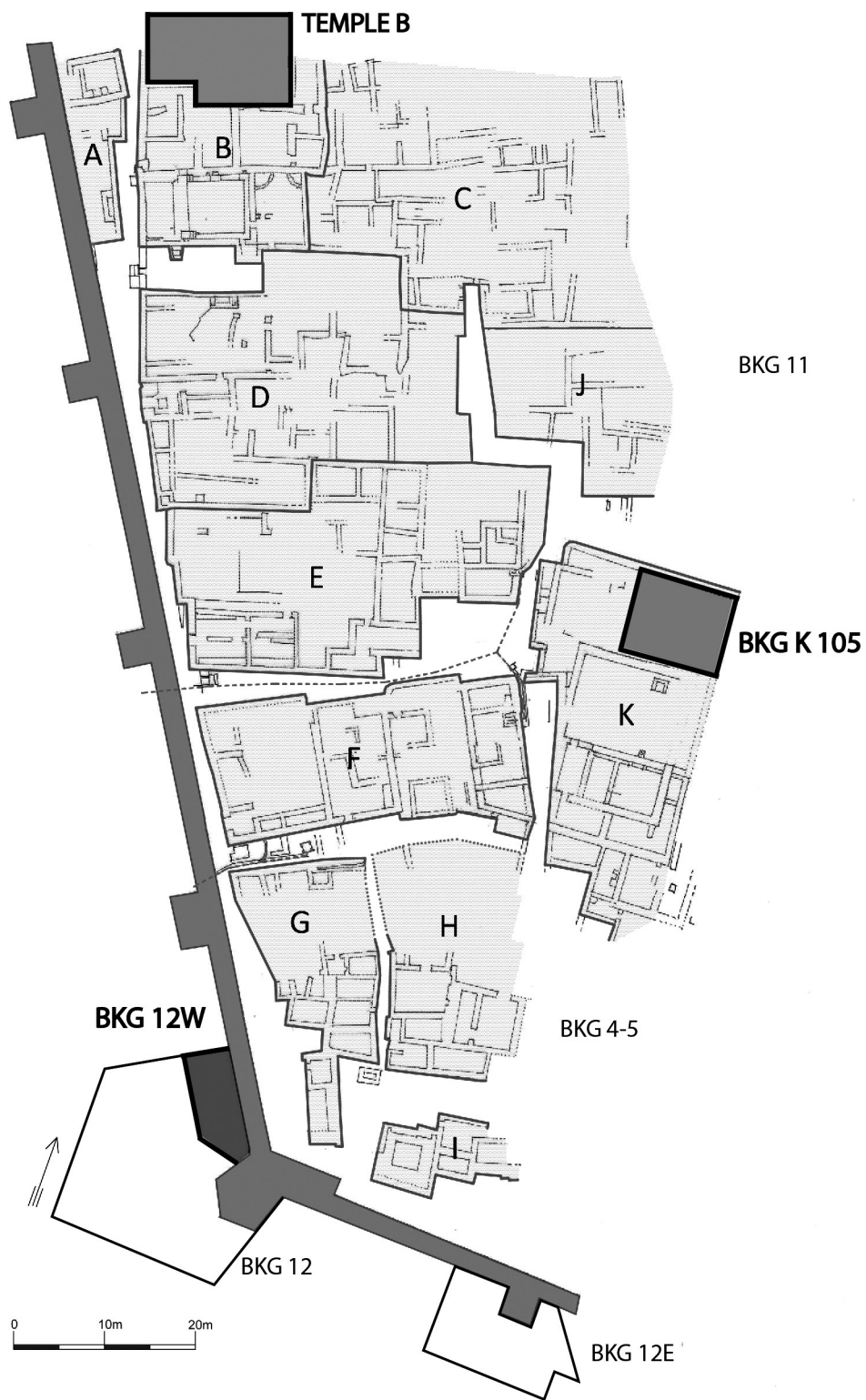


Figure 1: The SW quarters of the ancient settlement at Barikot: general plan of the archaeological area. The areas discussed in this paper are highlighted.

might echo two distinct linguistic traditions: one, *Bazira-vajra*, Sanskritic and preserved until medieval times; the second, *Beira-va(y)ira*, vernacular and local. S. Baums provided the key to contextualise the latter form, as the form *vayira* is positively attested in Gāndhārī⁹ (for example in line 5d of the inscription of Senavarma, c. first century CE).¹⁰ Since in Gāndhārī neutral vowels before [j] (using IPA notation) are usually palatalised, the pronunciation of Gandhari *va(y)ira-* was probably close to [ve(j)irə], which makes Curtius' information (and sources) on the local name of the city (*'Beira incolae vocant'*, VIII, 34) very precise indeed.¹¹

Until 2015, these elements would have entailed a mere linguistic exercise, since no evidence whatsoever of the pre-Indo-Greek town (i.e. ante-150 BCE) had ever been found at Barikot. The archaeological sequence accepted until then was that the city was founded as a fortified centre towards the end of the second century BCE directly on the remains of a protohistoric village, and that the major earlier evidence of the city was the massive defensive wall surrounding the city and its acropolis.¹² Unfortunately in the excavation areas selected in the past, the superimposition of structures of later phases was so thick that one could only carry out a blind test on the few early-historic protohistoric structures. Nevertheless, the overlap was so evident and recurrent that it left us with no option but to interpret the physical sequence in terms of cultural events.¹³

Meanwhile, however, one of the authors of this article had carried out some trial sondages at the Buddhist site of Saidu Sharif I where a physical superimposition between a Buddhist sanctuary (first century CE) and a late-protohistoric graveyard had been documented in the past.¹⁴ The results of these sondages were surprising (see below) and led us to reconsider with greater care the impact of major negative interfaces in stratigraphy, especially wherever large building processes had occurred. However, the necessity of understanding whether the protohistoric village was already in ruins or whether it was alive at the time of the construction of the city, pushed us to investigate specific areas of the main excavated portion of the city. The results of this fieldwork went far beyond our expectations.

THE CHRONOLOGICAL GAP

In their works on the Achaemenian/Mauryan horizon in Gandhara, R. Dittmann (1984) and W. Vogelsang (1988) noted several problems involved in the reconstruction of a shared chronology from the data of the Italian excavations in Swat, and of those carried out by the Pakistani and British teams. The Swat sequence was essentially established by G. Stacul on the reconstruction of the cultural phases of his excavations at the rock-shelter of Ghalegai, as well as on his chronology of the Late Bronze-Early Iron age graveyards.¹⁵ In his reconstruction these late protohistory phases (= Ghalegai periods V, VI, and VII) were placed between c. 1500–1400 to 500/400–300 BCE. The physical overlapping of the last of these phases with the Indo-Greek structural evidence from Barikot forced him to suppose the existence of a further period VIII, that would have coincided with a supposed - and not better defined - 'Mauryan phase'.¹⁶ An analogous solution was applied to the protohistoric settlement of Aligrama (Swat).

R. Dittmann noted that most of the diagnostic pottery types of Charsadda IIB-IIC/D were not represented in the 'Mauryan phase' of Aliagrama (Aligrama VI): 'Therefore it is perfectly clear that there is no Mauryan occupation at Aligrāma'. When discussing the Ghalegai periods VI and VII he proposed an earlier chronology for both, and concluded: 'Thus, at Bīr-kōt-ghuṇḍai there is a gap in the sequence covering Čārsaḍḍa IIA-IID phases'.¹⁷

W. Vogelsang in 1988 was slightly more elaborate on this aspect. Not only did he agree with Dittmann that the 'Mauryan' levels of Aligrama were much older but highlighted the linking of the 'gap' with the problem of the chronology of the graveyards, which - in accordance with the dates proposed in Müller-Karpe, 1983,

should be set to the eleventh-eighth centuries BCE.¹⁸ This was actually the case, as the new chronology of the graveyard recently excavated by the Mission at Udegram and Gogdara have proved.¹⁹

In the 2016 excavation campaigns at Barikot we found evidence that has not only radically changed the entire sequence of the site, but, can possibly help filling the ‘chronological gap’ (Tabs. 1-2). We found evidence of an urban settlement already established before the Indo-Greek contact phase, and evidence confirming the early first millennium chronology of the so-called ‘period VI-VII’ cultural material phase (LMO).

THE EXCAVATION ON THE AREA OUTSIDE THE DEFENSIVE WALL

The earlier occupation phases²⁰ have been uncovered outside the southern stretch of the Indo-Greek Defensive Wall, close to its south-western bastion (trench BKG 12 W).²¹ Here, a portion of the protohistoric settlement has been revealed.

Phase 1b: Late Bronze-Early Iron Age (1123-1036 cal 2σ BCE to 1089-922 cal 2σ BCE). The excavation structural Phase 1b is preceded by another one (Phase 1a) represented by a portion of a stone wall, which cuts the poorly preserved collapsed remains of an earlier clay structure (unbacked bricks) with pits (Phase o). These earlier phases are currently under excavation by M. Vidale and will be reported in the near future. Phase 1b is documented through the discovery of the portion of a building with two adjoining rooms. The eastern part of the building features the presence of a large dressed-stone disk, grindstones and several other stone and metal tools. Complete miniature vessels were recovered around the disk, as well as close to the inner corners of the room. The remains of two kilns were also uncovered in the outer area, to the south of the building. The building is built upon low dry masonry walls, the elevation of which was formed by unbaked clay bricks (a recurrent technique in this phase at Barikot). The ceramic material related to the building of Phase 1b can easily be identified with types of vessels characteristic of the Ghalegai period VII, and materials from the second and third phase of the Udegram graveyard. The chronology obtained for Phase 1b is perfectly in line with the dates obtained from the Udegram and Gogdara graveyards (ref. in fn. 19).

Phase 2b: Early-Historic pre-Indo-Greek (369-201 2σ cal BCE). The collapse of the Phase 1b building was sealed by a thick depurated clayish deposit which extended all over the area. The latter not only testifies that this portion of the settlement had already been abandoned when the Indo-Greek defensive wall was constructed, but also may hint at the collapse of some large pre-Indo-Greek clay structure (a mud rampart?). A small digression can help to detail this point. The excavation area BKG 12 W lies at the edge of a steep artificial slope, which features one side of the ditch of the urban defenses. The majority of the layers excavated and documented in the previous excavations (see fn. 4 and 21) actually corresponded to the filling of the depression, mostly caused by natural collapses and artificial deposits. Once the filling was excavated, the profile of the ditch was exposed, along with the structural remains of earlier phases clearly visible in the ancient artificial cut. The aforementioned thick clayish deposits were found to cover all the upper edges of the slope. If this is correct, it may mean that the ditch was already cut when the upper area was further disturbed by the construction of the Indo-Greek fortification. This may be a point in favour of the existence of a pre-Indo-Greek fortification.²²

Phase 3: Indo-Greek (conventional date c. 150 BCE: see fn. 25). Considering with care the impact of negative interfaces on the stratigraphy, we now understand that the construction of the Indo-Greek defensive wall certainly involved massive levelling work, and deeper soil excavated for the foundation trenches was brought up and laid on top of later layers. Traces of this negative intervention are confirmed

Table 1: Correspondence chart showing Ghalegai Late Bronze-Early Iron age periods according to Stacul (1969), Dittmann (1984), Vogelsang (1988), Müller-Karpe (1983), and Olivieri and Iori (this paper).

Years	STACUL 1969#	MÜLLER-KARPE 1983	DITTMAN 1984	VOGELSANG 1988	BKG
100 CE			Aligrama historic phases		Macrophase 4 Early Kushan
100 BCE	Historic phases	Historic phases	BKG historic phases	Historic phases	Macrophase 3b Saka-Parthian
200 BCE			GAP = Ch II B-J/D		Macrophases 3a2-4 Indo-Greek
300 BCE	Ghalegai VIII				Macrophase 3a1 Graeco-Bactrian
400 BCE			GAP = Ch II A-I/C	GAP	Macrophase 2b Maurya/Assakenoi
500 BCE	Ghalegai VII	GAP	Aligrama VI		Macrophase 2a2 Achaemenid
600 BCE				Aligrama VI	Macrophase 2a1 pre-Achaemenid
700 BCE			Ghalegai VII		Macrophase 1c = Ghalegai VIII
800 BCE	Ghalegai VI	Ghalegai VII	Ghalegai VI	Ghalegai VII-VI	Macrophase 1b = Ghalegai VII
900 BCE					
1000 BCE		Ghalegai VI			
1100 BCE	Ghalegai V		Ghalegai V	Ghalegai V	Macrophase 1a = Ghalegai VI-V
1200 BCE		Ghalegai V			
1400 BCE					



 Uncertain limit
 Gaps in the archaeological evidence

Table 2: Chronology correspondence chart amongst the BKG trenches.

Cultural phase	Lower Town						Macro-events	Acropolis			Macro-events	Relative Chronology		
	BKG 4-5	BKG 11	BKG 4-5 outside the urban Wall BKG 12	BKG 1	BKG 3 outside the urban Wall	BKG 3		BKG 7	BKG 9	BKG 8 outside the Wall		Absolute Chronology		
												Coin assemblage		
9							Per. VII	Ph. 5				Abandonment phase. Sporadic human presence	16th-early 20th CE	
							From 16th century Pashtun village; early-20th century <i>thana</i> (check-post in BKG 10). Dardic settlement (clan of Baira or Baria) abandoned in 16th century			Per. VII	Per. VIII	Per. VI	Earthquake. Destruction of the Temple. Construction of a Ghaznavid and successors (Timurid?) fortified outpost	13th-15th CE
			Per. VI											
					Per. VII	Per. V		11th-12th CE Ghaznavid						
8										Re-occupation of the terraces for the building of a Brahmanic Temple (BKG 6)	7th-9th CE Shahi			
										Abandonment phase	5th-7th CE			
7										Construction of a turreted Sacred Building (BKG 2)				
			Per. X			Per. IX				Up-hill fortified settlement (Dardic?) (unexcavated)				
6			Per. X			Per. V	Ph. 3				Temporary non-urban re-occupation	4th CE Kushano-Sasanian; sub-Kushan		
	Per. X			Per. IX						Fortified dwellings				
5	Per. IX	Per. VIIIb			Per. IVB	Ph. 2b				Earthquake. Abandonment of the drainage system	3rd CE (second half) Kushano-Sasanian; sub-Kushan; late Kushan			
	Per. VIII	Per. VIIIa	Ph. 8	Per. VII				Per. IV	Per. VI	Per. IV		Abandonment phase. Sporadic human presence		

Cultural phase	Lower Town						Macro-events	Acropolis			Macro-events	Relative Chronology
	BKG 4-5	BKG 11	BKG 4-5 outside the urban Wall BKG 12	BKG 1	BKG 3 outside the urban Wall	BKG 3		BKG 7	BKG 9	BKG 8 outside the Wall		Absolute Chronology
												<u>Coin assemblage</u>
5	Per. VII	Per. VII	Ph. 7		Per. IVB	Ph. 2b	Earthquake. Reconstruction		Per. V			3rd CE (first half) <u>late Kushan</u>
4	Per. VI	Per. VI	Ph. 6	Per. VI	Per. IVA	Ph. 2a	Intense building activity	Per. III	Per. IV		Demolition of the Defensive Wall and construction of a substructured terrace. Buddhist sacred area	2nd CE <u>Kushan</u>
	Per. V	Per. V	Ph. 5									Per. V
3b	Per. IV	Per. IIIB	Ph. 4	Per. IV	Per. III	Ph. 1a	Earthquake. Retrofitting of the Defensive Wall				Acropolis Defensive Wall	1st BCE-1st CE <u>Saka/Parthian</u>
3a4		Per. IIIA4		Per. III								
3a3	Per. III	Per. IIIA3	Ph. 3	Per. II	Per. IIB	Per. I	Fortified urban phase. Demolition of the previous structures and stratigraphy for the construction of the urban Defensive Wall	Per. II	Per. III	Per. III		end-2nd BCE <u>Indo-Greek Local Coins</u>
3a2		Per. IIIA2		Per. IIA								
3a1		Per. IIIA1					Urban occupation phase. Probably fortified (traces of earthen rampart and moat/ditch)					mid-3rd - early-2nd BCE
2b		Per. IIB	Ph. 2b									

(Contd.)

(Contd.)

Cultural phase	Lower Town						Macro-events	Acropolis			Macro-events	Relative Chronology
	BKG 4-5	BKG 11	BKG 4-5 outside the urban Wall BKG 12	BKG 1	BKG 3 outside the urban Wall	BKG 3		BKG 7	BKG 9	BKG 8 outside the Wall		Absolute Chronology
2a2		Per. IIA					Urban occupation phases					5th - mid-4th BCE
2a1												
1c		Per. IC					Final collapse and abandonment of the fortified cluster					Iron Age = period VIII Ghalegai sequence?
1b	Per. II (?)	Per. IB	Ph. 1b (only in BKG 12)		Per. I		Settlement/ Reconstruction of the fortified inner cluster/ Graveyard	Per. IB	Per. II	Per. II	Settlement	Iron Age = period VII Ghalegai sequence (1000-800 BCE)
1a		Per. IA	Ph. 1a (only in BKG 12)				Settlement/ Fortified inner cluster/ Graveyard				Settlement	Late Bronze-Iron Age = periods V-VI Ghalegai sequence (end-2nd /Beginning-1st Millennia BCE)
0	Per. I (?)		Ph. 0 (only in BKG 12)		Per. 0		Settlement	Per. IA	Per. I	Per. I	Settlement	Chalcolithic = period IV Ghalegai sequence (1700-1400 BCE)

Upper limit of the archaeological deposit



Uncertain limits



Lower excavated limit



Absence of archaeological evidence

by accumulation layers of sand and clay left unused after the construction phases of the defensive wall. Therefore, it is highly likely that the intensive levelling work actually caused the total obliteration of the post-Iron Age stratigraphy all along the defensive wall sectors (both inside and outside). A situation which is pretty similar to the one recently documented at Saidu Sharif I (see above). There, some large-scale levelling work performed at the time of the construction of the Buddhist complex (first century CE) radically removed all the previous stratigraphy, also partly cutting the upper layers of a late-protohistoric graveyard (fourth century BCE), which appeared to the archaeologists as though it was directly cut by the foundation walls of the monastery. Instead, the recent study of a long section outside the monastery area revealed that the graves were covered by burial mounds, as well as by a subsequent stratigraphy, which was artificially removed inside the monastery area (see ref. in fn. 14). An analogous situation – *mutatis mutandis* – appeared to have happened at Barikot too.

ARCHAEOLOGICAL DATA FROM THE INNER AREA

A different but consistent picture emerges from the contemporary excavations carried out inside the urban area in sector K 105 (Fig. 2).²³ We had the chance of excavating an area of about 30 square metres which remained almost as wide over a depth of more than 7 metres from the surface. Here, the stratigraphy is marked by a huge Kushan building²⁴ with massive walls 1.20 metres thick, preserved up to 5 metres from their foundation pits cutting the Saka-Parthian (Period IV = Macrophase 3b) and Indo-Greek layers (Period IIIA2-4 = Macrophase 3a2-4). Below the Indo-Greek layers are another five occupation phases (Periods IIA1-2, IIB, and IIIA1-2), the association of which, with the continuous use and reconstruction of the same building confirms the continuity of occupation.²⁵ The building faces an external area, a ground surface, or rather a wide street, provided with a side drain in Period IIIA3. Wheel-traces have been documented on its Period IIA1 main surface. The ceramic material from the ‘pre-Indo-Greek’ phases is definitively alien to the late protohistoric tradition, largely attested outside the city (Phase 1b, see above). This evidence attests that the town of Barikot was already well established when it was fortified by the Indo-Greeks in the second half of the second century BCE, also confirming that the chronological gap revealed outside the defensive wall was due to specific reasons, as we have seen.

From a very preliminary study of the ceramic material some observations can be drawn.

Period IIA1 (Macrophase 2a1): pre-Achaemenid (?) (684-475 cal 2σ BCE): Almost no pottery evidence was recovered from these layers. Nevertheless, it is worth noticing a potentially very important discovery from this Period: a well-fashioned terracotta ram’s head with circular eyes and curling horns with hollow body (Fig. 4).²⁶ The object can be tentatively interpreted as the tip of a conical rhyton-like vessel, hand-moulded around a wicker structure (the impressions of which are clearly visible inside).

Period IIA2 (Macrophase 2a2): Achaemenid (557-304 cal 2σ BCE).²⁷ The ceramic material ascribable to this occupation phase represents a very distinctive ceramic assemblage never previously documented at Barikot. The most characteristic form is the so-called ‘tulip bowl’ (Fig. 3, a-c) which, on the basis of a preliminary analysis (still in progress), represents the second most frequent shape of this assemblage. Its fabric is very fine, including only a few vegetal inclusions as temper. All the examples in red ware, have a red or dark-red slip both outside and inside and thin walls. The typical carination of the tulip bowls, pronounced to varying degrees, is sometimes stressed by a horizontal groove or by a ridge. Tulip bowls, or ‘Achaemenian bowls’,²⁸ are the most distinctive pottery feature in Achaemenian sites, from Lydia to Bactria, whose presence as luxury ware is attested at Barikot again in Indo-Greek times and until the Saka-Parthian phases.²⁹ Another characteristic form with the same fabric as the tulip bowls is a small sized red bowl with



Figure 2: Four views of Trench K 105 from NNW, a: excavation of the Indo-Greek layers in progress; b: Indo-Greek period; c: Mauryan period; d: pre-Mauryan period and excavation of trial trench.

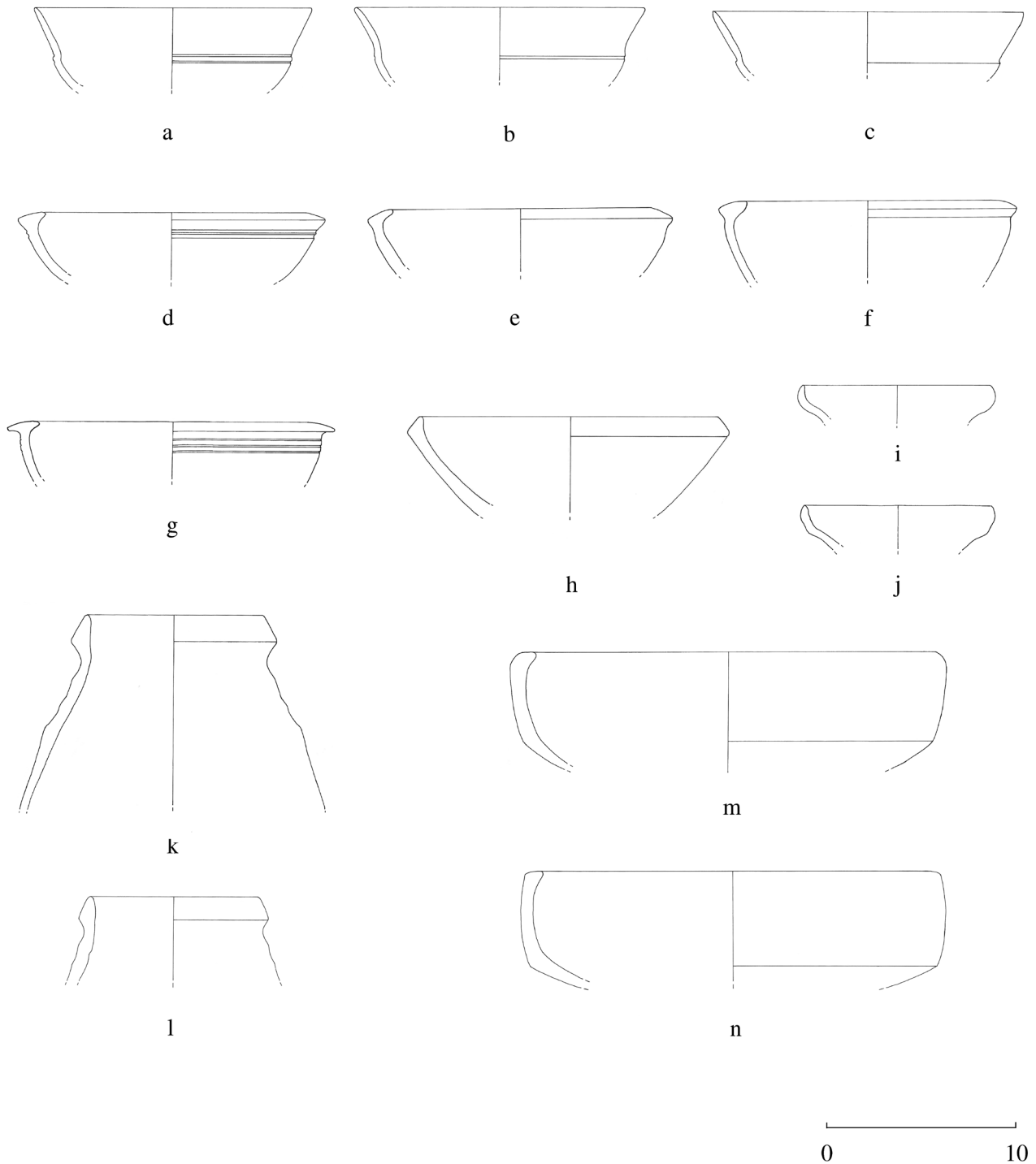


Figure 3: Selected distinctive ceramic forms of the 'Achaemenid' phase from BKG K 105 (IIA2).

convex walls and an inflected (and sometimes bi-everted) rim (Fig. 3d-g).³⁰ Some of these vessels feature a dark red slip, both externally and internally. Less frequent is a red bowl with convex wall and upright pointed rim (Fig. 3h).

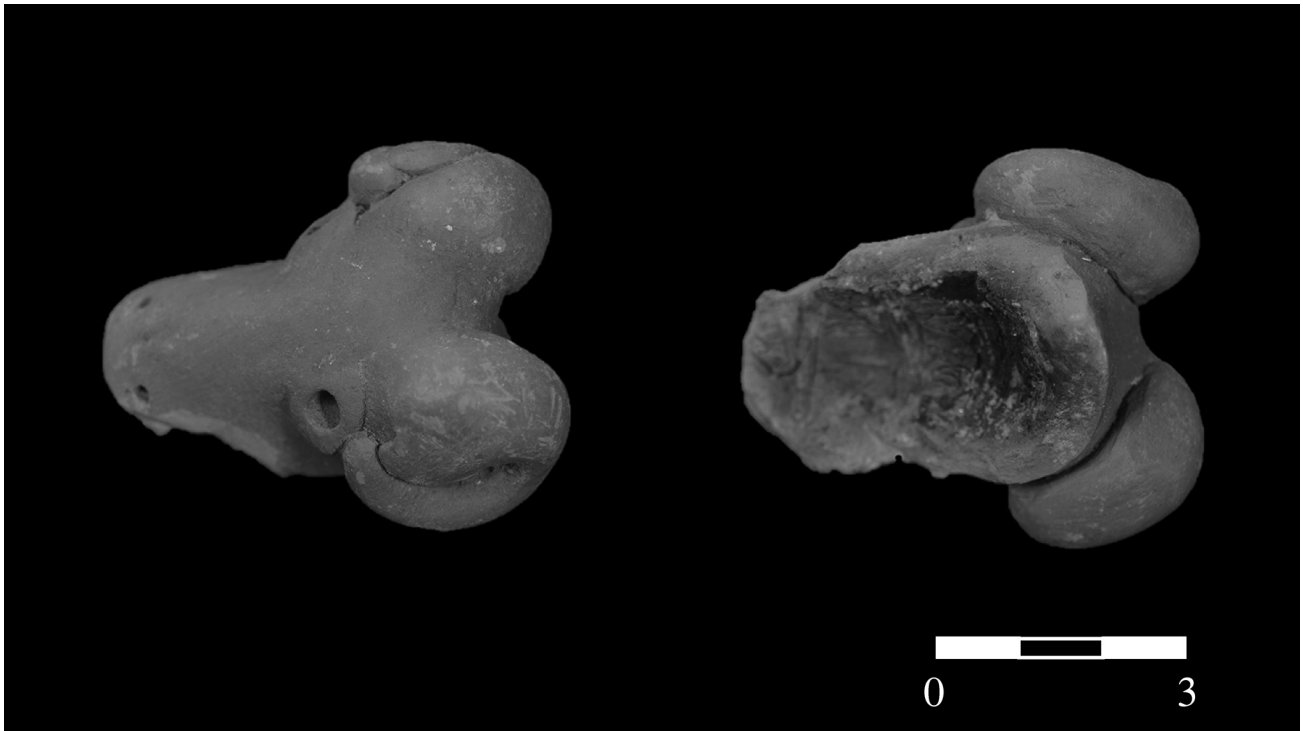


Figure 4: *Terracotta ram's head (Period IIA1)*.

An Indo-Gangetic component may be recognised in some vessel forms: an unslipped pear-shaped jar with a thin section characterised by a buff dull-red colour and a great quantity of vegetal inclusions (attested in negative) also evident on the surface's texture (Fig. 3 *k-l*); and a large open bowl in red ware with a concave bottom, carinated sides and upright walls (*thālī*), represent the most frequent forms (Fig. 3 *m-n*). Possibly of Indo-Gangetic origin, also a small sized bowl in buff ware and unslipped, with flat base, oblique walls and an upright pointed rim the production of which will continue at least until the Indo-Greek period (Fig. 3 *i-j*). The pear-shaped jars have been known since c. mid-first millennium BCE in several sites of the Ganges plain, for example: from Hastinapura,³¹ Kauśambi,³² Atranjikhhera,³³ and Sonkh and Taxila in "Mauryan" contexts.³⁴ Bowls with oblique walls and vertical rims appear in the same levels of Atranjikhhera,³⁵ at Hastinapura³⁶ and at Sonkh.³⁷ Apart from some small fragments (Fig. 7 *b-e*), black-on-red painted ware is attested by a large pot with a thick dark red slip outside, decorated on the shoulder by a row of parallel oblique leaves and a row of cross-hatched triangles pointing downwards, the latter pattern repeated also on the lower body (Fig. 7 *a*).³⁸

Period IIB (Macrophase 2b): Regionalization/Mauryan (356-244 cal 2σ BCE). The upper phase is dated to the mid-fourth to early third century BCE, confirming the reliability of the recovery of a Mauryan coin in the latest layer of this phase (Fig. 5 *d*). Apart from the appearance of terracotta baroque lady figurines and the significant disappearance of tulip bowls, the pottery material studied so far shows a significant continuity with Period IIA. The most frequent form continues to be the *thālī* with a tendency towards an incurved rim. Fundamentally, local/Indo-Gangetic tradition appears to prevail. In this phase chronologically falls the episode of Alexander (327 BCE).

Period IIIA1: Graeco-Bactrian (324-186 cal 2σ BCE);

Periods IIIA2, 3, 4: Indo-Greek (251-146 cal 2σ BCE; 201-106 cal 2σ BCE; 185-39 cal 2σ BCE).

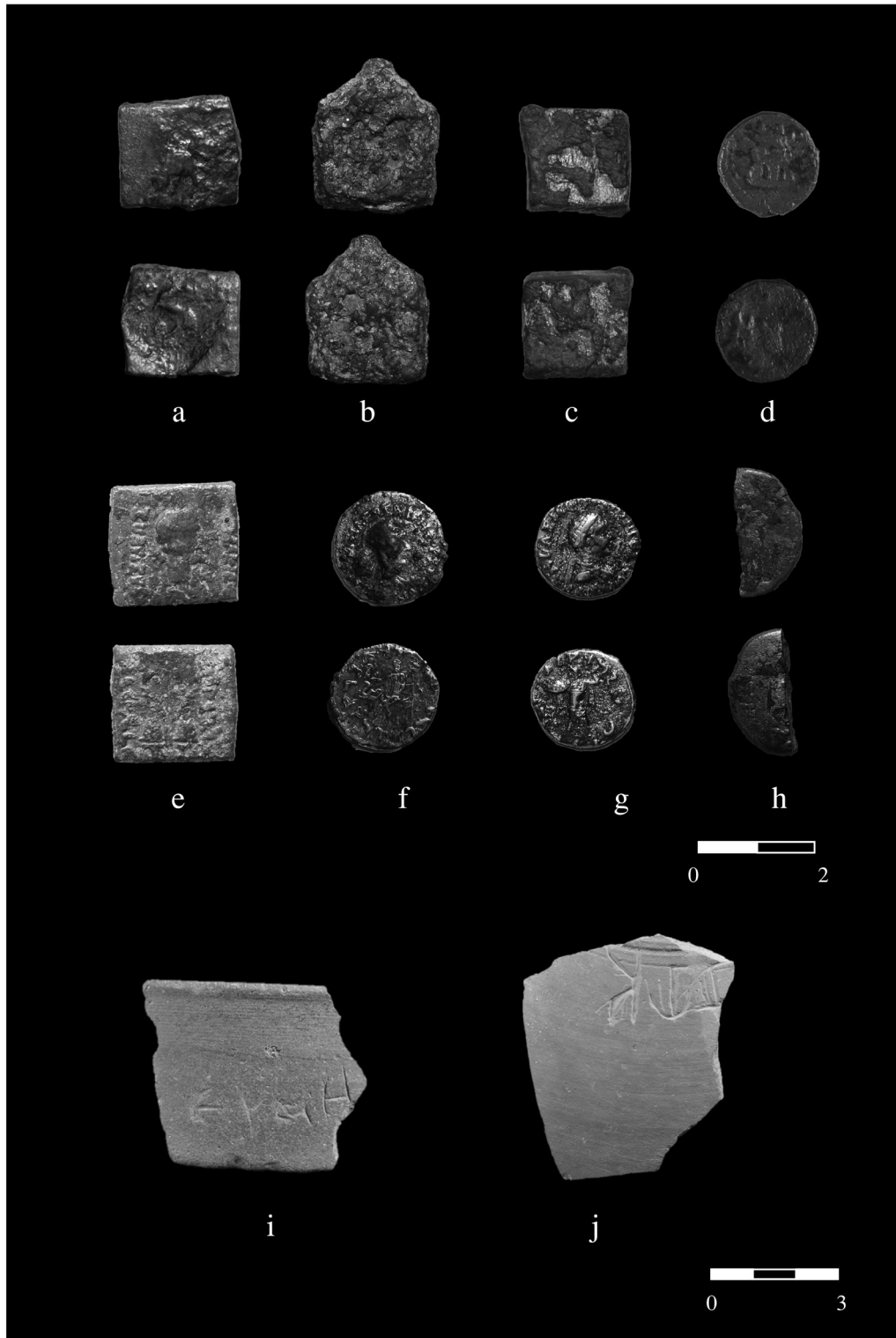


Figure 5: a-c: square local coins (a: Inv. BKG 3398; b: Inv. BKG 3535; c: Inv. BKG 3598); d: Mauryan coin (Inv. BKG3814); e: Antialkidas (Inv. BKG 3487); f: Antialkidas (Inv. BKG 3534); g: Menander I Soter (?) (Inv. BKG 3482); h: Apollodotus (Inv. BKG 3483); i: Greek inscription (Inv. BKG 3985); j: Brahmi inscription (Inv. BKG 3634).

The dates not only confirm the structural continuity with the previous Period, but indeed underline that pottery of the Hellenistic tradition is well-represented already in the 3rd century CE. We hypothesise that the pottery materials of Period IIIA₁ feature a Graeco-Bactrian acculturation phase (see in particular Fig. 6 *c-d, f, m-n, p*, and Fig. 7 *f-i*).

The following three Periods IIIA₂₋₄ represent a phase of acculturation that may be positively associated with the Indo-Greek historical phase. The construction of a drain in Period IIIA₃ is tentatively associated with the erection of the defensive wall (BKG 12, Phase 3a₃). The overall chronology of the coins recovered in these three Periods perfectly matches the proposed reconstruction.³⁹

Several variants of fish-plate with flat, concave or ring-foot bases are the most frequent forms⁴⁰ in both Periods IIIA₁ and IIIA₂₋₄ (Fig. 6 *a-d*) together with hemispherical bowls having flat everted, sometimes painted, horizontal rims (Fig. 6 *e*)⁴¹ and a small deep bowl with flat base and everted horizontal rim (Fig. 6 *f*). The plates can sometimes be unslipped with a central depression on the inner bottom, red slipped, and in a few cases they also bear a talc-based golden slip⁴² internally or on both sides (Fig. 6 *b*). Some of them, mainly those from the upper layers, are in a very hard fabric (“clinky”). The rim is triangular, elongated (Fig. 6 *a-b*) or vertical (Fig. 6 *c-d*), sometimes slightly concave (Fig. 6 *c*), all featuring close parallels with Graeco-Bactrian assemblages.⁴³ Also the variant with rounded (rolled) rim⁴⁴ is attested, usually in a pinkish-red ware and in one case with a talc-based golden slip (see above) inside. Deep goblets with convex sides and ring-foot base in a pinkish-red colour are also attested (Fig. 6 *j*).⁴⁵

The repertoire of black-on-red painted motifs on the flat everted rim/walls of bowl/dish (or *krater*-like vessel, Fig. 7 *f*) includes geometrical (mainly hatched or cross-hatched triangles and triangle patterns filled with parallel wavy lines) and vegetal motifs (Fig. 6 *k-l*; Fig. 7 *f-n*).⁴⁶ The diverging leaf pattern between painted lines and comb-like pattern on the neck of pots attested up to the Saka-Parthian layers in BKG 12E,⁴⁷ according to the latest data, find their antecedents in Indo-Greek times (Fig. 7 *g, m*).

Two examples of the so-called ‘Lotus bowls’ (Fig. 7 *p-q*) backdate the introduction of this kind of stamped decoration at Barikot to the second century, in accordance with Shaikhan Dheri.⁴⁸ Although it is impossible to reconstruct the profile of the bowl it is worth noting that the example shown in Fig. 7 *p* in very fine red ware, probably made by moulding, is of the same type as the specimens from Ch.IV illustrated by Wheeler,⁴⁹ with thin walls, an internal stamped lotus and external grooved circles on a rounded base. The coeval fragment (Fig. 7 *q*), belonging to a flat-bottomed bowl in light red and less depurated fabric,⁵⁰ has a more stylised lotus on the inner bottom and no impression outside. The formal variety of bowls on which stamps of lotus or flowers of different styles are applied, tallies with the observations made by Callieri.⁵¹

On the subject of Indo-Greek assemblages it is worth mentioning a grey ware (black slipped) *krater*-type vessel (BKG 1013, Fig. 7 *o*, max. d. 23 cm) from one of the layers coeval to the Indo-Greek wall in trench BKG L excavated in 1985.⁵² Unlike *kraters* from Ai-Khanoum, which are all wheel-turned and in red ware, usually with a red slip,⁵³ the example from Barikot is mould-made and then wheel-turned. In Athens these distinctive mould-made *kraters* (figured) are documented only from the end of the third century to the early second century BCE.⁵⁴ Even if the upper part of the vessel is missing (a flared rim with handles?), on the basis of comparisons, the ‘relaxed profile’ of the foot suggests a second BCE chronology.⁵⁵ Another interesting discovery was that of a small copper bowl with rolled rim (Fig. 6 *s*) found on the inner floor of the building K-1900.

The Indo-Gangetic component emerges both from the continuity in production of terracotta figurines depicting baroque ladies and from the appearance of some terracotta female figurines and clay plaques with embossed figured decoration with a clear Indo-Gangetic flavour. Regarding pottery, buff pear-shaped jars (Fig. 6 *m-n*), unslipped bowls with oblique walls and vertical rims (Fig. 6 *i*)⁵⁶ and *thālīs* persist. The latter often feature incurving rim (Fig. 6 *o*), and, in one case, convex wall (Fig. 6 *q*).⁵⁷

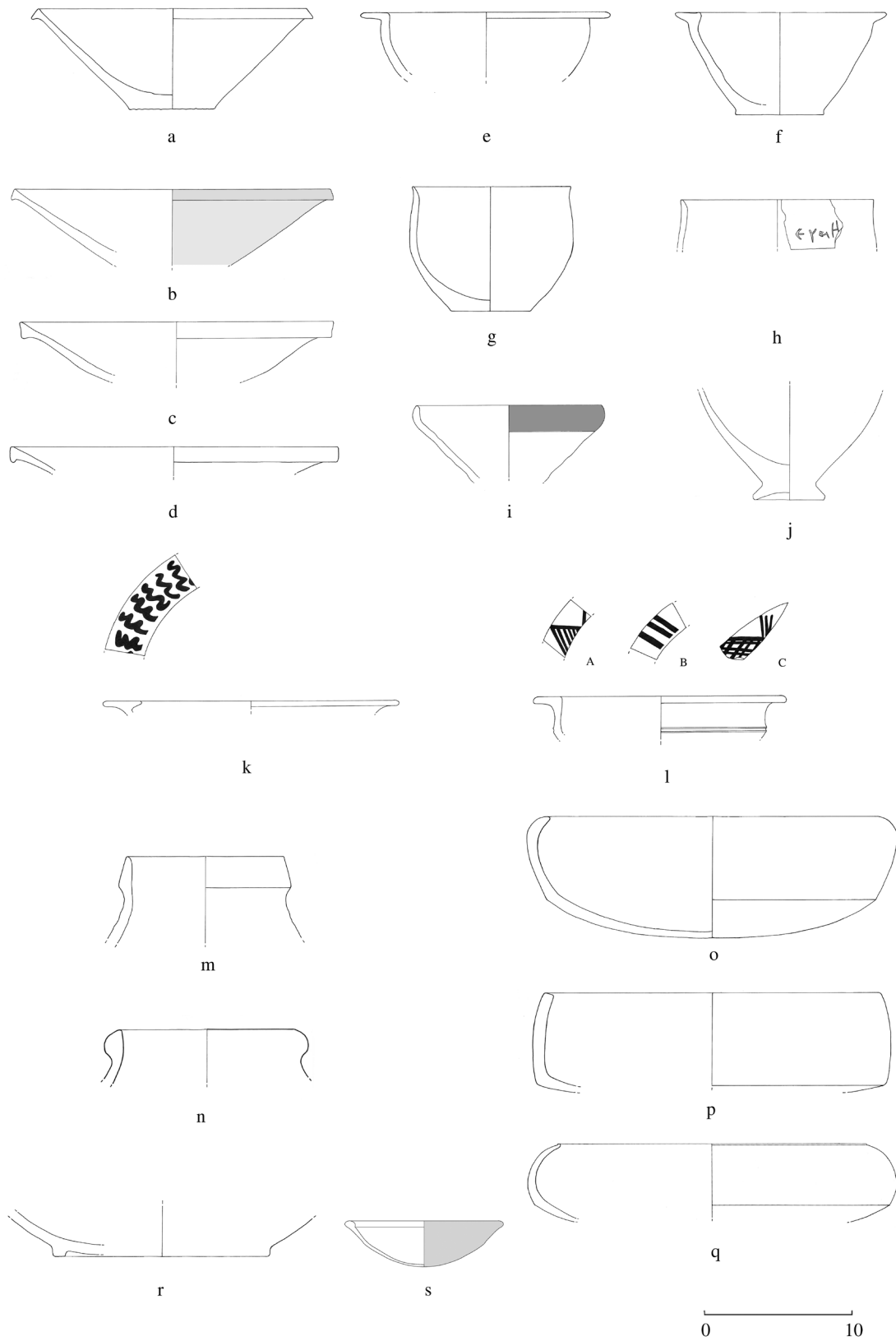


Figure 6: Selected distinctive ceramic forms from BKG K 105, Period IIIA₁ (c-d, f, m-n, p) and Period IIIA 3-4 (a-b, e, g-l, o, q-r); s: copper bowl (Inv. BKG3568).

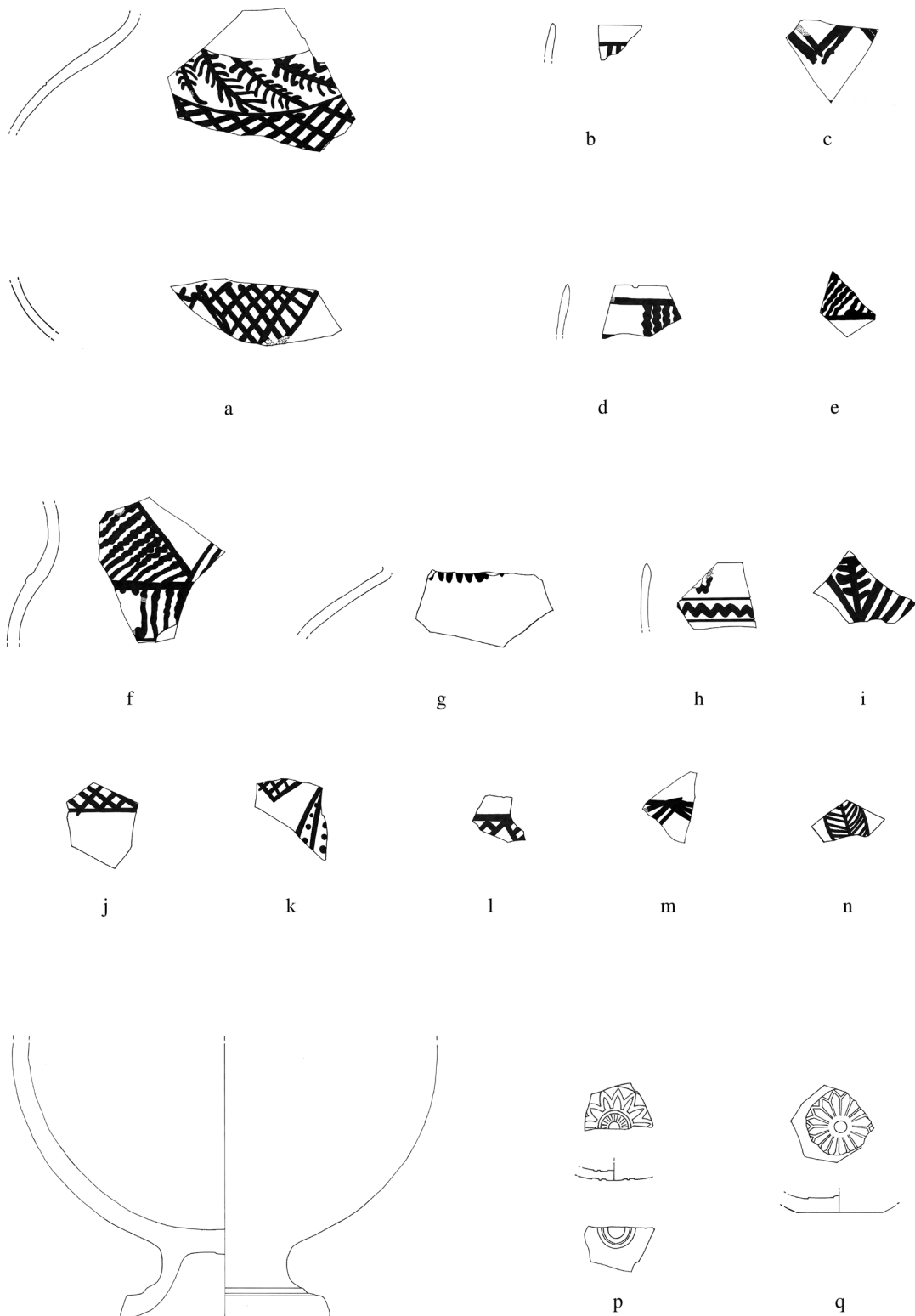


Figure 7: Decorated potsherds from Periods IIA (a-e) IIIA₁(f-i) and IIIA₃₋₄ (j-n, p-q), and the krater from trench BKG L (o). Drawings not in scale.

To the other two Greek inscriptions on sherds previously found at Barikot (Indo-Greek phase), we add a sherd of cup with a Greek inscription (Fig. 5 *i*; Fig. 6 *h*) (Period IIIA2), along with an incised Brahmi inscription on the shoulder of a pot (Fig. 5 *j*), an overwritten inscription (most probably Brahmi) on *thāli* (Fig. 6 *o*) (both from Period IIIA4) and a sherd with few painted Aramaic letters (Period IIIA4).⁵⁸

A PRELIMINARY CONCLUSION

On the basis of the data presented, we can conclude that the marginality of the Swat area during the second half of the first millennium BCE was only presumed.⁵⁹ The contraction of the chronological span of the Swat protohistoric sequence on the basis of new dates obtained from Gogdara/Udegram and Barikot, along with the new evidence related to the mid-first millennium BCE phases at Barikot, may have a domino effect on a series of assumptions related to the material culture and the history of the ancient Gandhara region. In fact, if the excavations carried out at Charsadda and Taxila and the following re-interpretations of their sequences⁶⁰ had the merit of having raised several questions related to the early-historic phases, it is clear that the data obtained from them did not allow us to solve these issues. At the present stage, the latest excavations at Barikot are offering the opportunity to fill the gap of the second half of the first millennium BCE in the Gandhara region. Barikot, investigated in accordance with updated scientific methodology and featuring a chronological *continuum* of occupation, definitely represents the key site for our understanding of the economic and socio-cultural picture of the early-historic phases, thus becoming - as defined by one of the authors of this article - 'the "new Charsadda" for the 21st century'.⁶¹

The overall data collected at the site during the last two campaigns allow us to reconstruct a new picture. First of all, the new chronological data allows some important elements of the Indo-Greek Barikot to be contextualised. For the first time it has been possible to define a proper pottery phase with direct parallels in Hellenised Bactria. In this ceramic horizon the widespread presence of Indo-Gangetic material culture may be taken as proof that the annexation of Swat by the Indo-Greeks occurred in a mature phase of their history (c. 150 BCE).

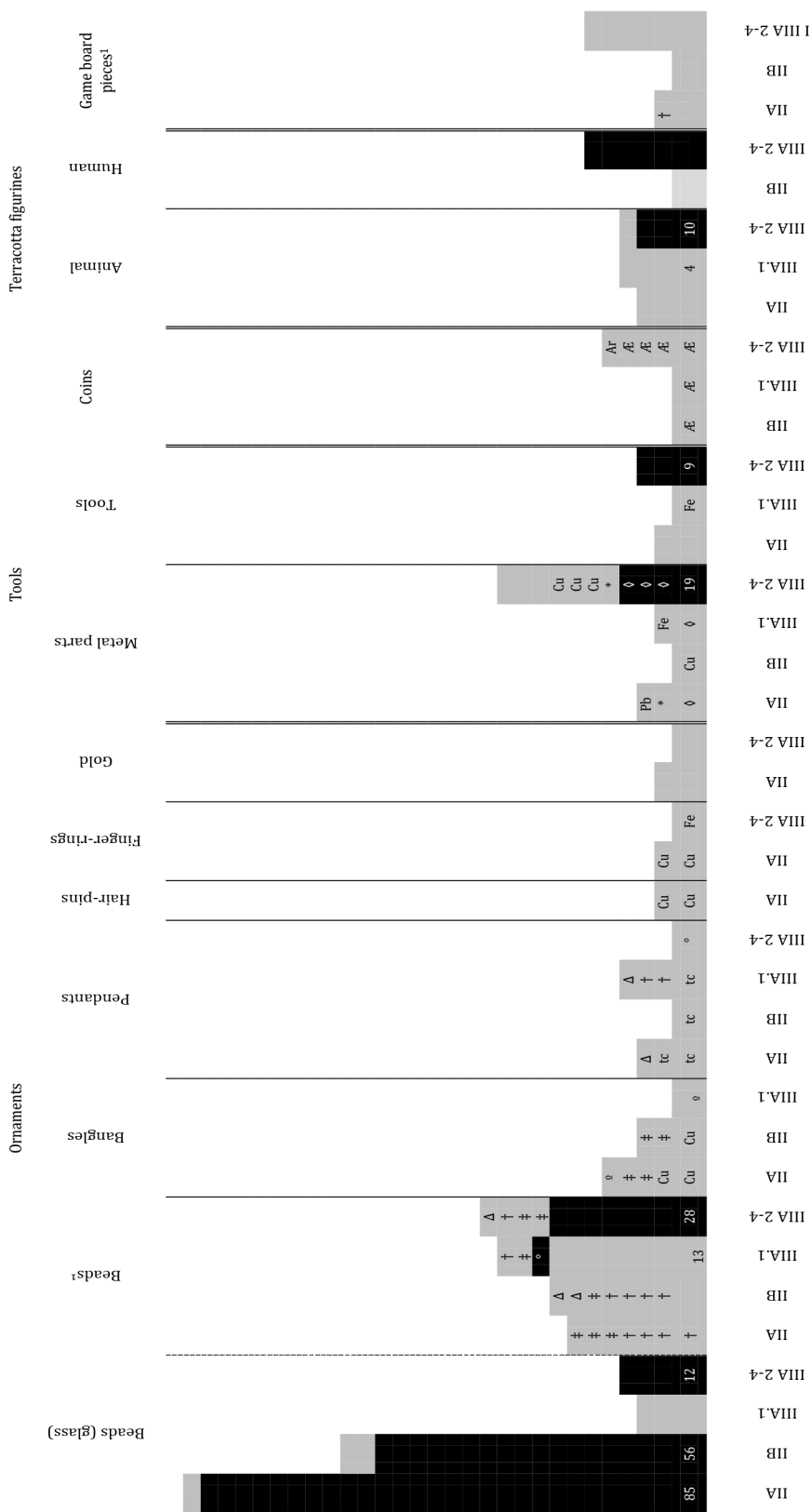
Secondly, it is evident that before the establishment of the Indo-Greek fortifications, there was already a major urban area (defended by a moated vallum?) and apparently spread all over the same surface as was occupied in the later phases (i.e. 12 hectares). The cultural material assemblage illustrates the evidence of a rich urban environment with ornaments, and luxury objects (Tab. 3), and diversified working activities (including glass and iron workshops, see Tab. 4).

In 1996 the other author of this article noted that the archaeological data available at the time was not yet sufficient to prove that Barikot actually corresponded to the city mentioned by Alexander's historians.⁶² Twenty years later, the perspective has changed radically. The latest excavation data, reported in this paper, has finally proved the existence of a rich urban phase prior to the construction of the Indo-Greek fortifications, matching the description of an *urbs opulenta* given by Curtius, and marking a point in favour of a definitive association of the site with the ancient toponyms surviving in the written records (EI).

ADDENDUM: A LATE KUSHAN CULTIC AREA

Two late cultic areas were unearthed in the northern sectors of trench BKG 11. The first (Sacred Precinct B) was discovered in 2013; the second one (Temple B) was excavated in 2016. The two buildings are coeval (Barikot Periods VII/VIII, Macrophase 5, third century CE),⁶³ connected to each other, and probably part of

Table 3: Frequency chart with ornaments, luxury items, metal object, coins and figurines (Periods IIA-III A 1-4).



N.B.: Black cells count x3 (with totals indicated at the bottom of each column).

1 = terracotta (tc) if not otherwise indicated

◊ = vitreous paste

Δ = ivory

= shell

† = semi-precious stone (and cloritoschist)

◊ = bone

* = coat plates (scales)

◊ = weapons (arrow-heads, blades, etc.; only certain)/Æ

Table 4: Frequency chart with major evidence of working activities (Periods IC-III A 1-4).

Iron slags				Glass slags				Glass crucibles				Period/ Macrophase
Sector	Locus	Layer	Quantity (gr.)	Sector	Locus	Layer	Quantity (gr.)	Sector	Locus	Layer	Inventory	
K	105	2193	8.5									IC/1
K	105	2184	23.5									IIA/2a1
K	105	2177	45.5					K	105	2177	-	IIA/2a1
K	105	2176	4.5									IIA/2a2
K	105	2167	105					K	105/1690	2167	3899	IIA/2a2
K	105	2161	14	K	105	2161	4					IIA/2a2
K	105	2161	80 (Pb)									IIA/2a2
								K	105	1926	-	IIA/2a2
K	105	2154	38									IIIB/2b
K	105	2153	25.5									IIIB/2b
K	105	2152	22									IIIB/2b
K	105	2149	131.5									III/3a1
K	105	2148	41									III/3a1
K	105	2147	106.5									III/3a1
K	105	2146	69									III/3a1
K	105	2144	28.5									III/3a1
K	105	2143	100.5									III/3a1
K	105	2142	201									III/3a1
K	105	2141	179.5									III/3a1
K	105	2139	8									III/3a1
K	105	2138	55									III/3a1
K	105	2137	137									III/3a1
K	105	2134	24	K	105	2134	64					III/3a1
K	105	2133	63.5									III/3a1
K	105	2132	29.5	K	105	2132	22					III/3a1
K	105	2131	64.5	K	105	2131	48.5					III/3a2
K	105	2124	54.5									III/3a2
K	105	2122	12.5									III/3a2
K	105	2119	121									III/3a2
K	105	2118	216.5	K	105	2118 E	19					III/3a2
				K	105	2118	7.5					III/3a2
K	105	2117	32.5									III/3a2
K	105	2116	500									III/3a3
												III/3a3
K	1900	1919	70									III/3a3
K	1900	1917	240									III/3a3
K	1900	1904	23	K	1900	1904	31.5					III/3a3
K	105	1680	-	K	105	1680	-	K	105	1680	only pot-stand	III/3a4
K	105	1676	356					K	105	1676	with pot-stand	III/3a4
K	105	1667	5									III/3a4
K	105	1663	132	K	105	1663	4.5					III/3a4

the same cultic complex (Fig. 8). Temple B, constructed in diaper-masonry technique, features a rectangular space, open to the East to Court 1710. The façade features a raised podium with moulded base, on which stands a row of four quadrangular stone pillar bases. A short flight of steps in the southern corner of the platform leads to a lower walled space (Court 1710). During the excavation of Court 1710 a stele representing Hārītū (BKG 3636; Fig. 9) was recovered from the debris of the southern wall which had collapsed inside the courtyard. Court 1710 was provided with a low rectangular tank (an almost complete condenser, was

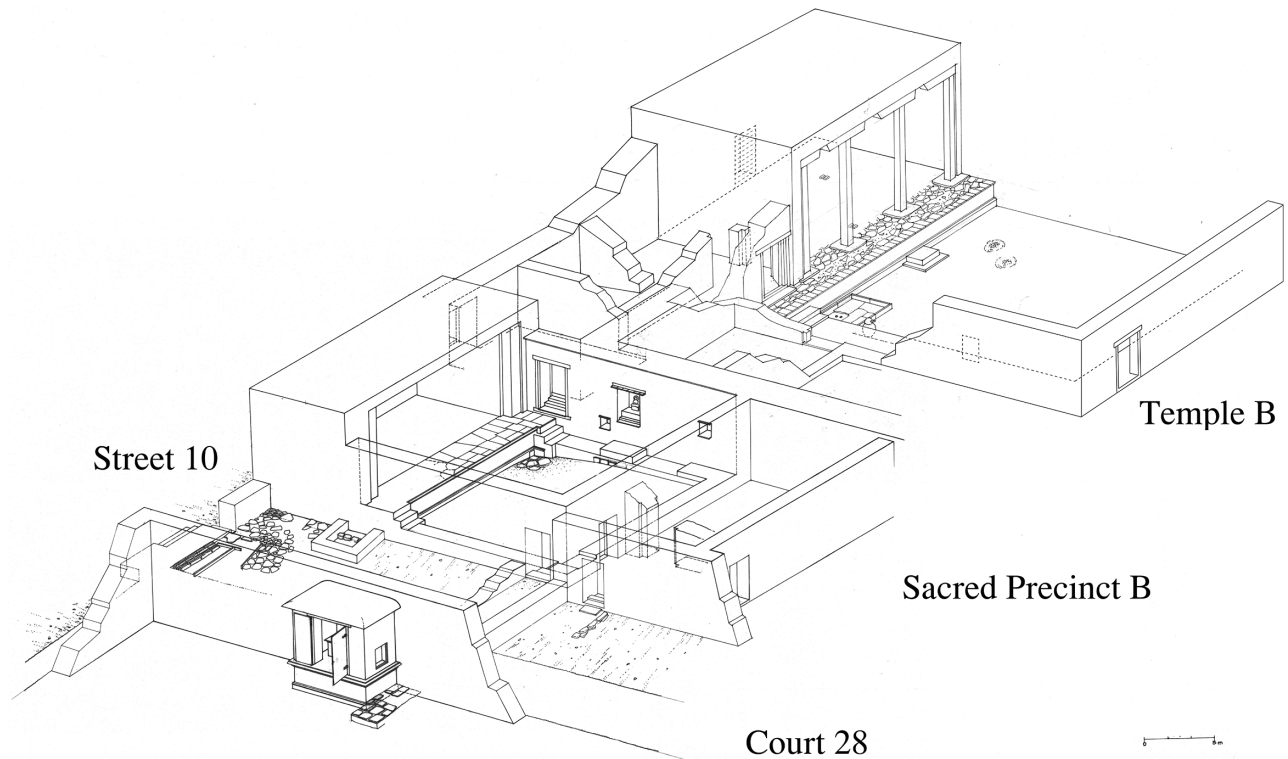


Figure 8: *Graphic restitution of Temple B in its context (Drawings by Francesco Martore).*

found *in situ* near the tank), and a fireplace. At the centre, in front of the façade, is a stone altar, roughly rectangular in shape.

As documented in the previous excavation campaign, ample traces of two successive earthquakes in the space of less than 50-70 years have been clearly documented in the third century CE stratigraphy. This fact, alongside the political upheaval represented by the collapse of the Kushan empire, would conceivably have led the city to its abandonment in the second half of the third century CE (LMO).⁶⁴

ACKNOWLEDGEMENTS

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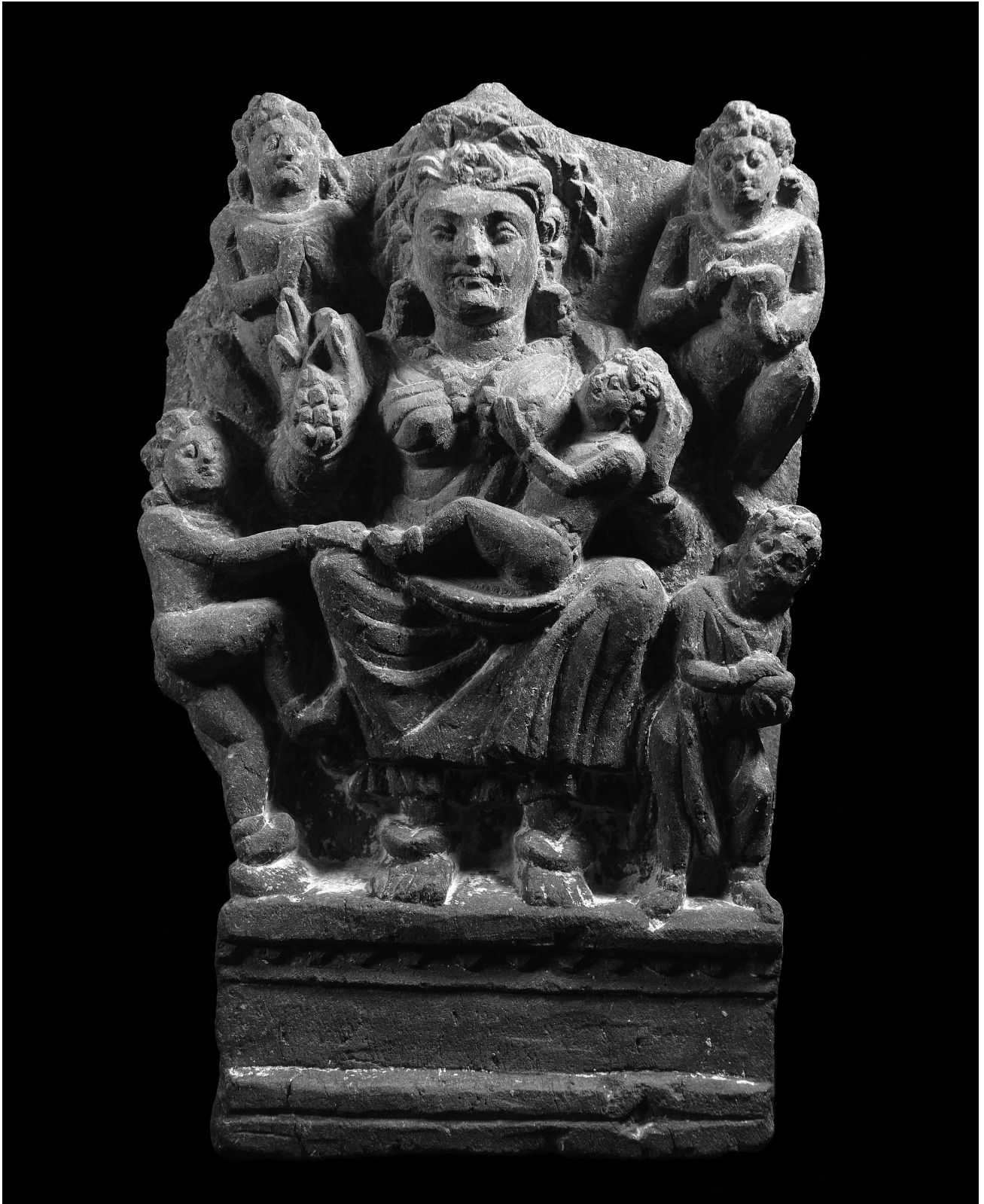


Figure 9: Stele representing *Hārītī* from Trench 11, Temple B (photograph by Cristiano Moscatelli).

Vidale (University of Padua), the local field-trainers Fazal Azim, Fazal Malik, Ashtamand, Abid, and Umar Wahid with about seventy local trainees (ACT-Field School). C14 analysis was directed by Filippo Terrasi at the CIRCE lab (University of Naples 2), with the support of CISA (University of Naples 'L'Orientale').

NOTES

1. The first sondages were directed by G. Stacul; the research on the historical city was initially directed by P. Callieri (until 2000), then by L.M. Olivieri.
2. The site is also known in archaeological literature as Birkot or Bīr-koṭ Bīr-koṭ-ghwaṇḍai or Bīr-koṭ-ghuṇḍai. The Pashto place name Bīr-koṭ means 'the castle of Bīr'. The official Urdu name is Barikot.
3. Marc Aurel Stein, *An Archaeological Tour in Upper Swāt and Adjacent Hill Tracts* (Calcutta: Memoirs of the Archaeological Survey of India, 42, 1930); Giuseppe Tucci, 'Preliminary Report on an Archaeological Survey in Swat (Pakistan)', *East and West*, 4 (1958), pp. 279-328 (p. 296 and p. 327, fn. 28). According to Stein (cit., p. 29) these names were 'obviously but another attempt to reproduce the indigenous designation **Bajira* or **Bayira*'.
4. See Luca M. Olivieri, 'Notes on the Problematic Sequence of Alexander's Itinerary in Swat. A Geo-Historical Approach', *East and West* 46, 1-2, (1996), pp. 45-78. For the archaeological data on the Indo-Greek fortifications at Bīr-koṭ-ghwaṇḍai see Pierfrancesco Callieri *et al.*, 'Bīr-koṭ-ghwaṇḍai 1990-1992. A Preliminary Report on the Excavations of the Italian Archaeological Mission, IsMEO', *Annali dell'Istituto Orientale di Napoli* 52, 4, Suppl. 73; Luca M. Olivieri *The Survey of the Bir-kot Hill. Architectural Comparisons and Photographic Documentation. Bīr-koṭ-ghwaṇḍai Interim Reports I*, (Rome: IsIAO Reports and Memoirs, Series Minor, IV, 2003); Pierfrancesco Callieri, 'Barikot, An Indo-Greek Urban Center in Gandhāra', in *On the Cusp of an Era. Art in the Pre-Kuṣāṇa World*, ed. by Doris M. Srinivasan (Leiden and Boston: Brill, Inner Asian Library 18, 2007), pp. 133-164; Luca M. Olivieri, 'Urban Defenses at Bīr-koṭ-ghwaṇḍai, Swat (Pakistan). New Data from the 2014 Excavation Campaign', *Ancient Civilizations from Scythia to Siberia* 21 (2015), pp. 183-199; Elisa Iori *et al.*, 'Urban Defences at Bīr-koṭ-ghwaṇḍai, Swat (Pakistan). The Saka-Parthian Phases: Data from the 2015 excavation campaign 2016', *Pakistan Heritage* 7 (2015), pp. 73-94. For reference to the Indo-Greek layers at Udegram, see Giorgio Gullini, 'Uḍegrām', in *Reports on the Campaigns in 1956-58 in Swāt (Pakistan)*, ed. by Domenico Faccenna and Giorgio Gullini (Rome: IsMEO Reports and Memoirs I, 1962), pp. 325-327.
5. According to Matteo De Chiara (personal communication) *vajira-sthāna* can be interpreted as 'strong place' > 'fortified place' (with *vajira-* as a slightly simplified pronunciation of Sanskrit *vajra* 'thunderbolt, diamond', cf. Prakrit *vajja*, *vayara-*, *vāira-*, from √*vaj* 'be strong'). A place name Vajrasthāna (with a different geographical reference) is also attested in some manuscripts of the Indian epic *Rāmāyāna* (G. H. Bhatt, ed., *The Bālakāṇḍa: The First Book of the Vālmiki Rāmāyāna, the National Epic of India* (Baroda: Oriental Institute: 1960), p. 339, passage 1187*, line 1) (personal communication by Stefan Baums).
6. Line 2: (*meśvara*) *śrī jayapāladevarājye śrī vajira(sthā)ne* (personal communication by Oskar von Hinüber).
7. A short note will be published soon by Oskar von Hinüber in Pierfrancesco Callieri and Luca M. Olivieri, *Ceramics from the Excavations in the Historic Settlement at Bīr-koṭ-ghwaṇḍai (Barikot), Swat, Pakistan (1984-1992)* (Lahore: ACT-Field School Project Report and Memoirs, Special Volume 2, forthcoming).
8. Tucci 1958, p. 296, fn. 28.
9. The Middle Indo-Aryan language used in Gandhāra from the third century BCE to the fifth century CE.
10. CKI 249 in Stefan Baums & Andrew Glass, *Catalog of Gāndhārī Texts*, <https://gandhari.org/catalog>. Stefan Baums pointed out that there are two further occurrences of *vayira-* = OIA *vajra-* in Gāndhārī texts: *vayira[stu]ve* 'vajra stūpa' in CKI 52 and the proper name *Vāira* in CKI 367 (personal communication).
11. Personal communication by Stefan Baums.
12. On the evidence from the acropolis see Pierfrancesco Callieri *et al.*, 'Bīr-koṭ-ghwaṇḍai, Swat, Pakistan. 1998-1999 Excavation Report', *East and West* 50, 1-4 (2000), pp. 191-226; Luca M. Olivieri, *The Survey of the Bir-kot Hill. Architectural Comparisons and Photographic Documentation. Bīr-koṭ-ghwaṇḍai Interim Reports I* (Rome: IsIAO Reports and Memoirs, Series Minor IV, 2003).

13. See Olivieri 1996, p. 50. In the central part of the city a few elements belonging to the Early Historic period had already been noted in 1985 (trenches BKG L and M). According to Filigenzi's unpublished report, amongst the material from the last structural phase, preceding the construction of the Indo-Greek defensive wall, the presence of tulip bowls (Inv. no. BKG 935, unpublished), and an important vase with clear Hellenistic features (BKG 1013, see Fig. 6 o, and note 49), is noteworthy.
14. Luca M. Olivieri 'The Graveyard and the Buddhist Shrine at Saidu Sharif I (Swat, Pakistan): Fresh Chronological and Stratigraphic Evidence', *Journal of Ancient History* 76, 3 (2016), pp. 559-578.
15. Giorgio Stacul 'Excavation near Ghāligai (1968) and Chronological Sequence of Protohistorical Cultures in the Swāt Valley', *East and West* 19 (1969), pp. 44-91; Giorgio Stacul, *Prehistoric and Protohistoric Swat, Pakistan (c. 3000-1400 B.C.)* (Rome: IsMEO Reports and Memoirs XX, 1987).
16. Mauryan phases were certainly reached also at Barama I. See Domenico Faccenna, 'Results of the 1963 Excavation Campaign at Bārāma I (Swāt-Pakistan)', *East and West* 15, 1-2 (1964-65), pp. 7-23; Elisa Iori, 'The Early-Historic Urban Area at Mingora in the Light of Domenico Faccenna's Excavations at Barama I (Swat)', *Frontier Archaeology*, 7 (2016), pp. 99-112. The chronology of these phases was confirmed by radiocarbon analysis (M. Alessio *et al.*, 'University of Rome Carbon-14 Dates IV', *Radiocarbon* 8 (1966), p. 409, sample R-195: c. 370 BCE).
17. Reinhard Dittmann 'Problems in the Identification of an Achaemenian and Mauryan Horizon in North-Pakistan', *Archaeologische Mitteilungen aus Iran* 17 (1984), pp. 155-193 (pp. 172-174).
18. Willem Vogelsang, 'A Period of Acculturation in Ancient Gandhara', *South Asian Studies*, 4 (1988), pp. 103-113 (pp. 109-110).
19. The graveyard at Udegram was interpreted according to a model of three phases, c. from 1460 cal BCE to 783 cal BCE. The Gogdara dates range from 1266 to 901 cal BCE; see Massimo Vidale and Roberto Micheli, 'Protohistoric graveyards of the Swat Valley (Khyber Pakhtunkhwa, Pakistan): new light on funerary practices and absolute chronology', *Antiquity* (forthcoming). The excavation report was published in 2016: Massimo Vidale *et al.*, *Excavations at the Protohistoric Graveyards of Gogdara and Udegram* (Lahore: ACT-Field School Project Report and Memoirs 3, 2016).
20. In the following pages we have always indicated the structural sequence with the terms Period (inside the urban area) or Phase (outside the Defensive Wall). Structural Periods/Phases which share a common material culture are grouped in cultural Macro-phases.
 Calibrated C14 dates from the 2016 excavations were presented at the 2017 AMS14 Conference (Ottawa, August 12-20, 2017) with a poster by Filippo Terrasi *et al.* 'New chronology for late protohistory and early historic urbanization phases at Barikot, Swat (NW Pakistan)'.
 Extensive evidence of a protohistoric settlement was discovered and published by G. Stacul in the 70s and the 80s. See the following works by G. Stacul: 'Excavation at Bīr-kōt-ghuṇḍai (Swāt, Pakistan)', *East and West*, 28, 1-4 (1978), pp. 137-150; 'Bīr-kōt-ghuṇḍai (Swāt, Pakistan): 1978 Excavation Report', *East and West*, 30, 1-4 (1980), pp. 55-65; *Prehistoric and Protohistoric Swat, Pakistan (c. 3000-1400 B.C.)*, (Rome: IsMEO [Istituto Italiano per il Medio ed Estremo Oriente] Reports and Memoirs XX, 1987); G. Stacul and A. Filigenzi, 'Pakistan 1. Excavations at Bīr-koṭ-ghwaṇḍai: the Protohistoric Layers/ Excavations at Bīr-koṭ-ghwaṇḍai: the Historical Layers', *East and West*, 35, 4 (1985), pp. 430-500.
21. Here excavations started as early as 2014. Results of the first diggings were published in Olivieri 2015 and in Iori *et al.* 2016.
22. The authors wish to express their thanks to Pierfrancesco Callieri, who - on the basis of the available data - first suggested this point to them.
23. The difference in level between the Period IIIA3 layers of K-105 and the coeval ones at BKG 12 W is +4.9 m, which means - over a distance of about 55 m - a gradient of 8.9% or c. 5.5°. This was presumably the gradient of the city surface in Indo-Greek times, c. 150 BCE. The correspondence in the periodisation of BKG 12 and BKG 11 (sector K) is illustrated in Table 02.
24. On the late-Kushan period of sector K, see Luca M. Olivieri, *The Last Phases of the Urban site at Bir-kot-ghwandai (Barikot)*, (Lahore: ACT-Field School Project Report and Memoirs 2, 2014), pp. 1-252.

25. Inside the city we found a sequence of six structural periods before the Indo-Greek acculturation phase. Phase IC: 817-602 cal 2 σ BCE; Interphase IC/IIA1: 742-565 cal 2 σ BCE; Period IIA1: 684-475 cal 2 σ BCE; Period IIA2: 557-304 cal 2 σ BCE; Period IIB: 356-244 cal 2 σ BCE; Period IIIA1: 324-186 cal 2 σ BCE. The chronology of the defensive wall is associated with Period 3a3: 201-106 2 σ / 186-128 1 σ BCE. Moreover, outside the city, from the layers physically associated with the defensive wall (post construction), we have three dates pointing to 202-45 cal 2 σ BCE. Therefore, we adopted c. 150 BCE as a sound conventional date for the construction of the Indo-Greek fortification.
26. Ram (and ram's head) is a symbol widely used in regional Early Historic contexts. See Mortimer Wheeler, *Chārsada. A Metropolis of the North-West Frontier* (Oxford: Oxford University Press, 1962), pl. XXXIV; Marshall 1951, pp. 457-458.
27. The earlier structural phase (Period IC) was reached in the last days of the second 2016 campaign, revealing a portion of the core of a large structure made of pebbles which will be investigated in Autumn 2017.
28. Elspeth R.M. Dusimberre, 'Satrapal Sardis: Achaemenid Bowls in an Achaemenid Capital', *American Journal of Archaeology* 103, 1 (1999), pp. 73-102. See reference in Cameron A. Petrie et al., 'Emulation at the edge of empire: the adoption of non-local vessel forms in the NWFP, Pakistan during the mid-late 1st millennium BC', *Gandhāran Studies*, 2 (2008), pp. 1-16 (p. 5).
29. Callieri and Olivieri, forthcoming.
30. Some of them have a clubbed rim similar to David Fleming, 'The Achaemenid Pottery', in *Excavations at Kandahar 1974 and 1975*, ed. by Anthony McNicoll and Warwick Ball (Oxford: British Archaeological Reports International Series 641, 1996), pp. 365-389 (fig. 271, No.1).
31. Braj Basi Lal, 'Excavation at Hastināpura and Other Explorations', *Ancient India*, 10-11 (1954-5), pp. 4-151 (p. 59, Type XXXI, fig. 18).
32. Govardhan R. Sharma, *The Excavations at Kausambi (1957-59)* (Allahabad: University of Allahbad, Institute of Archaeology, 1960), fig. 11.
33. Ram C. Gaur, *Excavations at Atranjīkherā. Early Civilization of the Upper Gaṅgā Basin* (Delhi: Centre of Advanced Study, Dept. of History, Aligarh Muslim University, 1983), fig. 97.V-33.
34. Herbert Härtel, *Excavations at Sonkh. 2500 years of a town in Mathura District*, (Berlin: Monographie zur indischen Archäologie, Kunst und Philologie 9: 1993), II.23-24; John Marshall, *Taxila I-III* (Cambridge: Cambridge University Press: 1951), p. 410, fig. 32.
35. Gaur 1983, figs.79-80.
36. Lal 1954-5, 63-65. Type I, fig. 20.
37. Härtel 1993, II.42-44; See also Anthony McNicoll, 'Site H: the Achaemenid Building' in *Excavations at Kandahar 1974 and 1975*, ed. by Anthony McNicoll and Warwick Ball (Oxford: British Archaeological Reports International Series 641, 1996), pp. 233-261 (fig. 192, 11-13).
38. See Wheeler 1962, figs. 21, 118; 22, 128 (Ch. I layers 26-27).
39. As already highlighted by Callieri, the Indo-Greek period at Barikot marks a sharp change in ceramic material in terms of fabrics, vessel shapes and surface treatments through the introduction of the Hellenistic tradition possessing connections with the Graeco-Bactrian area (Callieri 2007).
40. Bertille Lyonnet, in *Fouilles d'Āi Khanoum IX. L'Habitat*, ed. by Guy Lecuyot (Paris: Mémoires de la Délégation Archéologique Française en Afghanistan, Tome XXXIV, 2013), pp. 179-190 (figs. 101-108). Jean-Baptiste Houal 'The Hellenistic Period through the Ceramics of Termez (Uzbekistan) and Balkh (Afghanistan)', in Sarah Japp and Patricia Kögler, eds., *Traditions and Innovations. Tracking the Development of Pottery from the Late Classical to the Early Imperial Periods* (Wien: IARPotHP, I, Phoibos Verlag, 2016), pp. 465-478.
41. See also Pierfrancesco Callieri, 'Decorated Pottery from the IsIAO Excavations at Bīr-koṭ-ghwaṇḍai (Swat, Pakistan, 2nd cent. BC – 15th cent. AD)', in *South Asian Archaeology 1997 II*, ed. by Maurizio Taddei and Giuseppe De Marco (Rome: IsIAO, Serie Orientale Roma XC, 2000b), pp. 857-876 (fig. 1 c-d).
42. Lara Maritan et al. 'Looking like gold: golden-slip ware technology in the Swat Valley (north-western Pakistan)', *Journal of Archaeological Sciences* (forthcoming).

43. In particular for similarities with Fig. 6 *a-b* see Lyonnet 2013, fig. 101, 9-10; fig. 104, 1; for Fig. 6 *c-d* see Lyonnet 2013, fig. 101, 2-5; fig. 102, 1-7. See also Sverchkov Leonid M., 'The Kurganzol Fortress (on the History of Central Asia in the Hellenistic Era)', *Ancient Civilizations from Scythia to Siberia* 14 (2008), pp. 123-191 (figs. 18, 20); Houal 2016.
44. Lyonnet 2013, figs. 105; 106, 1-2; 108, 2-8.
45. Lyonnet 2013, fig. 120, 1-6.
46. See also Callieri 2000b, 861, fig. 1 *a-d*. This distinctive Triangle Ware is attested until the Saka-Parthian phases at Barikot (Iori et al. 2016). For the painted wavy-decoration illustrated in Fig. 6 *k* see also Wheeler 1962: fig. 21. The vessel, in grey ware, was probably meant to be red, and the grey colour was due to insufficient oxidation during firing. Obviously the paint was applied before firing.
47. Iori et al. 2015, p. 77, Inv. BKG 2829, Inv. BKG 2831, Inv. BKG 2835, Inv. BKG 2834.
48. Previous examples came from Saka-Parthian, Kushan and Late Kushan layers, see Callieri 2000b, pp. 867-868, fig. 4.b-g. Callieri 2007, p. 150. For Shaikhan Dheri, see Ahmad Hasan Dani, 'Shaikhan Dheri Excavation, 1963 and 1964 seasons', *Ancient Pakistan*, 2 (1965-66), pp. 17-214; See also Wheeler 1962, pp. 40-1.
49. Wheeler 1962, fig. 10, No. 12; fig. 46, No. 478.
50. See also Dani 1965-6, pp. 213-214.
51. Callieri 2000b, p. 869.
52. Stacul and Filigenzi 1985.
53. Lyonnet 2013, figs. 96-100.
54. Rotroff 1997, p. 139. See Susan Rotroff, *The Missing Kraters and the Hellenistic Symposium: Drinking in the Age of Alexander the Great* (Christchurch, New Zealand: Broadhead Classical Lecture No. 7, University of Canterbury, 1996).
55. Rotroff 1997, p. 139, figs. 607-608. See also Lyonnet 2013, fig. 100, 9-10.
56. The example shown in Table 3 bears a red slip coating on the upper exterior. See also Dani 1965-66: fig.15, No. 5; Sverchkov 2008, fig. 20, No. 2.
57. Dani 1965-66, fig. 13.
58. Reports on these inscriptions are all in press: Olga Tribulato and Luca M. Olivieri, 'Writing Greek in the Swat Region: A New Graffito from Barikot (Pakistan)', *Zeitschrift für Papyrologie und Epigraphik*, forthcoming; Stefan Baums, 'Kharoṣṭhī and Brāhmī – 2', in Callieri and Olivieri, forthcoming; Michael Zellmann-Rohrer and Luca M. Olivieri, 'An Inscribed Sherd in Aramaic Script from Barikot (Pakistan)', *Bulletin of the American Schools of Oriental Research*, forthcoming.
59. Sebastiano Tusa, 'The Swāt Valley in the 2nd and 1st Millennia BC: A Question of Marginality', in *South Asian Archaeology 1977*, 2, ed. by Maurizio Taddei (Naples: Istituto Universitario Orientale, Series Minor 6: 1979), pp. 675-695.
60. In particular we refer to Robert Coningham et al., *The British-Pakistani Excavations at the Bala Hisar*, (Oxford: Society for South Asian Studies Monograph No 5. BAR International Series, 2007) and M. Bahadar Khan et al., *Bhir Mound: the First City of Taxila (Excavations Report 1998-2002)*, (Islamabad: Department of Archaeology and Museums, Government of Pakistan: 2002).
61. Elisa Iori, 'Mind the Gap. Local Persistence and Iranian Legacy in Gandhara: New Evidence from Swat', (forthcoming).
62. Olivieri 1996, pp. 50, 52.
63. See Cristiano Moscatelli, Luca M. Olivieri and Syed Niaz Ali Shah, 'A Late Kushan Urban Temple from Bazira/Vajirasthāna. Data from the 2016 Excavation Campaign at Barikot, Swat', *Pakistan Heritage* 8 (2017), pp. 49-61; Luca M. Olivieri, 'The Last Phases at Barikot: Urban Cults and Sacred Architecture. Data from the Spring 2013 Excavation Campaign in Swat', *Journal of Inner Asia Art and Archaeology* 7 (2012 [2017]), pp. 7-30.
64. Luca M. Olivieri, 'When and why the ancient town of Barikot was abandoned? A preliminary note based on the last archaeological data', *Pakistan Heritage*, 4 (2012), pp. 109-120.

