


Patterns of Early Urbanisation in Swat: A Reassessment of the Data from the Recent Excavations at Barikot

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To our friend and colleague René Dittmann

Abstract: The study presents a set of new data, all coming from recent excavations in the ancient urban site of Barikot (Swat, Pakistan), which may allow a new look at phenomena hitherto considered certain, such as the delay of protohistoric phases, the so-called marginalization of Swat, and the beginning of urban phases seen in association with the Indo-Greek colonial power. In our reconstruction, the protohistoric phases end around 800 BCE, while, after a phase of negative interface, i.e. of significant abandonment, towards the middle of the first millennium, there are conditions for the establishment of an urban settlement in Barikot. At this stage, very significantly, for the first time, the local ceramic tradition is replaced by Gangetic and Iranian forms, which are interpreted as markers of a growing process of trans-regional trade relations. In this ongoing process of historical reconstruction, the silence of the archaeological component towards the so-called Mauryan phase, of which field archaeology has not yet managed to provide a clear picture, remains strident.


Keywords: Swat, Early Urbanism, Second Urbanization, Double-Crop Agriculture, Climate Changes, Indo-Greeks, Mauryan, Alexander

Introduction

The area of the ancient city of Barikot (about 20 hectares including the hill) is located in the southern plain at the foot of the ancient acropolis, which marks - a solitary crescent-shaped hill - the centre of the fertile Swat valley in northern Pakistan. The main excavated sectors of the site, the acropolis and the southwest and southeast quarters of the ancient city, have revealed a sequence of occupation from the beginning of the 2nd millennium BCE to the 4th century CE, when the city, partly abandoned, saw its last phase of occupation.¹

Recent field research and studies are gradually changing the picture of the city and its history. We are now in a position not only to recognise in the modern toponym (Barikot) the ancient toponyms of the Alexander's city Bazira or Beira, but also to assess the existence of a clear stratigraphic context for the period involved in the narrative of Alexander's conquest (end of 4th century BCE).

But this is not the main result revealed by the extensive exploration of the site. A series of stratigraphic evidence and absolute dates from our recent excavation projects (at Barikot and in two protohistoric graveyards) led us to challenge (and change) at least two previous assumptions. The first is that Swat underwent a long period of marginalisation throughout the first millennium BCE, associated with the persistence of late protohistoric cultural features. The second point is that the beginning of a true urban environment can only be associated with the 'colonial' context of the Indo-Greek domination. The new data demonstrate that late protohistoric cultural features are absent from the post-800 BCE archaeological record of Swat, that the first phase of historical urbanisation in Swat had already begun in the 5th century BCE, and, finally, that the Swat valley was not marginalised in the wider context of the northern Indus region, and relatively central. At Barikot, from that period onwards, we have documented the markers of a

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true urbanization, such as internal specialization, an exchange network with the countryside and sister-towns, long-distance trade (see Fig. 1), monumental buildings and defences, and – at least from a certain period – a multilingual recording system.² The early evidence of urbanization at Barikot are the focus of the present study.

It is worth saying that the new evidence confirms the chronology hypothesized – *vox clamans in deserto* – by René Dittmann in a seminal and still unchallenged article in *AMIT*, more than 30 years ago. To him this paper is dedicated.³

Absolute dates

The main series of calibrated dates on which the following pages are based, has been obtained from organics (mostly charred seeds) collected after the floatation of a great part the excavated soil during three excavation campaigns (2016–2017) at the site of Barikot (Tables 1, 2) (Olivieria *et al.* 2019). Samples were collected both from outside the urban area (Trench BKG 12W) and from inside (Trench BKG 11-K, that is sector K) (Fig. 2). The overall sequence shows the whole timeline of the early occupation at the site from c. 1200 BCE to c. 50 CE. Another decisive series of



Figure 1. Barikot. Votive terracotta figurines and plaques from Trench BKG 11-K. b and d from pre-Indo-Greek phases; a and c from the Indo-Greek phases. Photographs by E. Iori (Courtesy ACT/ISMEO).

absolute dates has been obtained from materials from the partly coeval Swat Protohistoric Graves complex (SPG) (Table 3).⁴

The names of the city

Besides the continuity of the occupation, the fortune of the place name is another important factor in the history of Barikot, linking the earliest history of the settlement to pre-modern events. While the names of the metropolises of the ‘greater Gandhara’, Pushkalavati (Charsadda) and Taxila (Fig. 3) once deserted, got lost,⁵ the ancient toponym of Barikot shows an interesting persistence. A British officer, in 1912, reports that according to the local elders, a small village located in Upper Dir was founded nine generations earlier by an individual known as Bāria [Bāria Khān].

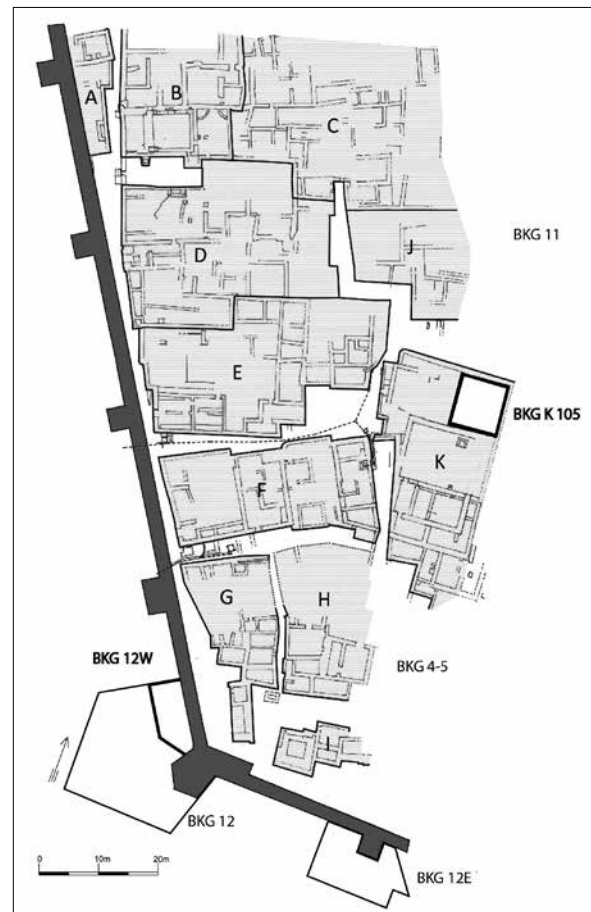


Figure 2. Barikot. Trenches BKG 4–5, 11, 12 (south-western quarters of the ancient city). Drawings by I. Marati/G. Cenchi/E. Iori (Courtesy ACT/ISMEO).

The latter was the chief of a Dardic community that had been forced by the Yusufzai Pashtuns to leave its ancestral settlement, Barikot [Bārikoṭ] in Swat (Fig. 4). Significantly the new settlement in Upper Dir was named as the first one. The story was confirmed to the officer by the Yusufzai Khans of Barikot in Swat (Godfrey 1912: 50).

The name of the clan (Bāria) and of its chief (Bāria Khān), who led his clan to resettle in Dir, clearly echoes the early-Medieval toponym of Barikot in Swat: ‘Vajirasthāna’ (*vajira(sthā)ne*). This name is mentioned in a Brāhmī-Śāradā inscribed slab found on the hill-top at Barikot (late-10th century). The slab (now in the Lahore Museum) was recently re-studied by Oskar von Hinüber (in Callieri and Olivieri 2021). The same place-name is mentioned in a 15th century Tibetan text (*deb-ther sngon-po* or *The Blue Annals*). According to the latter, the Buddha himself refers to a king Indrabhuti, whose seat was located ‘In

the northern quarter, in Śīrī-Vajrasthāna, Oḍḍīyāna’ (Roerich 1976: 361). The mediaeval toponym Vajirasthāna can be interpreted as ‘the *sthāna* ([fortified] place) of Vajra/Vajira’. Vajra/Vajira was the actual toponym, on which, the Dardic family name Bāria and the associated toponym Bārikoṭ, might have been later moulded. Giuseppe Tucci, and later Oskar von Hinüber (in Callieri and Olivieri 2021), convincingly associated the toponym Vajra/Vajira with Bazira/Beira, a fortified town of the Swat valley, which was sieged, conquered and garrisoned by Alexander of Macedonia in Autumn 327 BCE.⁶

Beira is mentioned by Curtius Rufus as ‘urbs opulenta’ (a significant adjective as we will see). The Roman historian adds a revealing detail: ‘Beira incolae vocant’ (Cur. *Hist.* 8, 10, 22). He refers thus to a rich and opulent city whose name is pronounced ‘Beira’ by its inhabitants. The same town is recorded by Arrian as Bazira (*An.* 4, 27, 1-3), which is described as a ‘polis’, a real city.

Our colleague Stefan Baums has been extremely clear on the form ‘Beira’ used by Curtius: ‘Given that the best approximation for the pronunciation of va(y)ira is [ve(j)irə], the information provided by Curtius Rufus on the pronunciation of the local name [...] seems extremely precise, thus revealing that the source that he used was particularly reliable on this point’ (Tribulato and Olivieri 2017: 129) (see in particular Baums 2019). As we shall see later, there is sufficient archaeological and chronological data to support what the toponymy suggests, namely that the city of Beira/Bazira/Vajirasthāna can be identified with the archaeological site of Barikot in Swat.

LMO

The Proto-Urban Phase (c. 1200-800 BCE) and its dissolution (c. 800-600 BCE)⁷

The definitions adopted here follow and partly modify the proposed sub-division of the proto- and early-historic archaeological periods of South Asia (Smith and Mohanty 2016: 688-689). The Proto-Urban phase, which partly overlaps the Swat Graves Complex (c. 1200-900 BCE), conceptually corresponds to the



Figure 3. Map of the Swat valley and neighbouring territories with the sites mentioned in the text. Map by K. Kritz and D. Nell. Elaborated by E. Iori (Courtesy ÖAW/ACT/ISMEO)

Table 1. Barikot. Modelled C14 calibration sequence of samples from BKG 12 W – Protohistoric phases (above) and BKG 4–5 – Indo-Greek phases (below). Courtesy CIRCE/ISMEO.

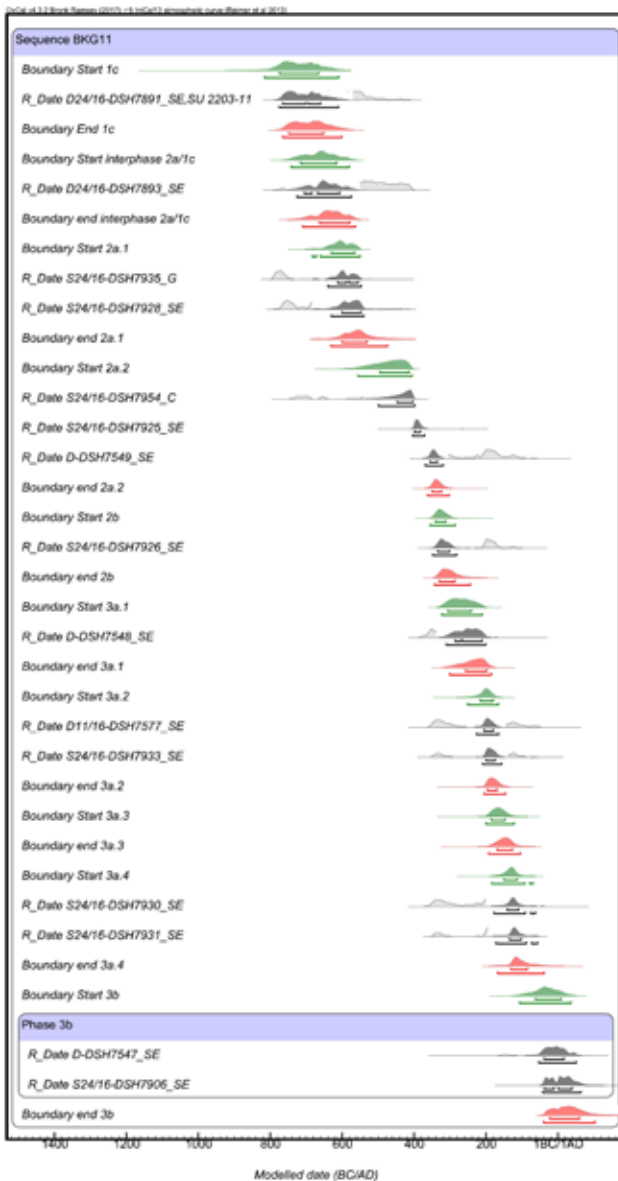
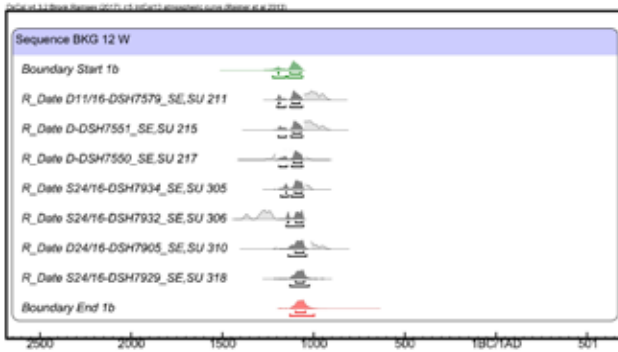


Table 2. Barikot. Modelled C14 calibration sequence of samples from BKG 12 W – Protohistoric phases (above) and BKG 11-K – whole sequence (below). Courtesy CIRCE/ISMEO

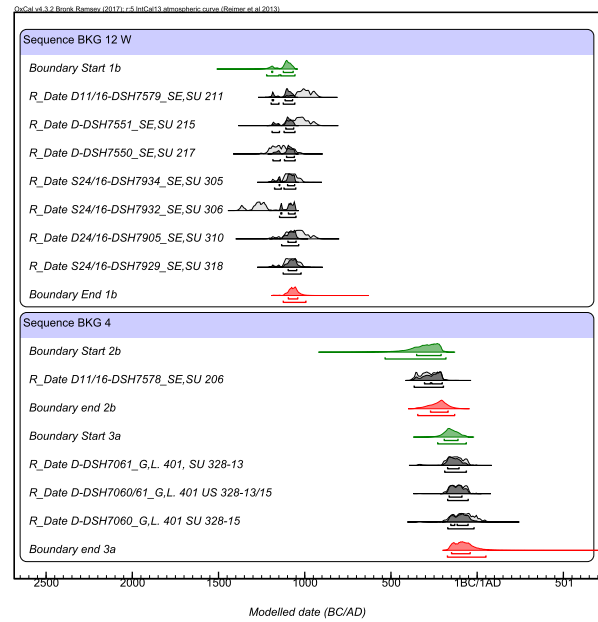


Figure 4. Barikot. View from the East of the south-western corner of the city in April 1930. The asterisk marks the south-western bastion. Photograph by H. H. Miangul Jahanzeb (Courtesy Miangul Archives)

Table 3. Above: Swat Protohistoric Graves (SPG), list of calibrated dates; below: non-SPG features, list of calibrated dates. Courtesy ISMEO/Harvard HMS.

Swat Protohistoric Graves		
Udegram (UDG)	Grave 1, Individual 1	1044-830 cal BCE
	Grave 1, Individual 2	901-792 cal BCE
	Grave 3, Individual 1	1400-1126 cal BCE
	Grave 5, Individual 1	1044-922 cal BCE
	Grave 5, Individual 2	1376-1041 cal BCE
	Grave 7, Individual 1	1011-909 cal BCE
	Grave 10, Individual 1	1192-939 cal BCE // 1001-824 cal BCE
	Grave 10, Individual 2	1027-848 cal BCE // 1107-840 cal BCE
	Grave 26, Individual 1	976-832 cal BCE
	Grave 28, Individual 1	921-831 cal BCE // 1416-1214 cal BCE
	Grave 28, Individual 2	992-830 cal BCE
	Grave 29, Individual 1	1195-978 cal BCE
Gogdara 4	Grave B, Individual 1	1372-1027 cal BCE
Loebanr I	Grave 73, Individual 1	831-796 cal BCE
	Grave 77, Individual 1	906-820 cal BCE
	Grave 135, Individual 1	895-801 cal BCE
	Grave 135A? (cremation)	971-834 cal BCE
	Grave 63, Individual 3	894-798 cal BCE
	Grave 170, Individual 1	927-831 cal BCE
Katelai I	Grave 36, Individual 1	904-817 cal BCE
	Grave 53, Individual 1	968-833 cal BCE
Barikot	Grave 2, Individual 1	921-831 cal BCE
	Grave 2, Individual 3	974-836 cal BCE

Burial features other than "Swat Protohistoric Graves"		
Early Historic Graves		
Saidu Sharif I	Grave 5, Individual 1	403-360 cal BCE
	Grave 11, Individual 1	431-381 cal BCE
	Grave 12, Individual 1	406-353 cal BCE
Historic Period Graves		
Butkara IV	Grave 51a	41 cal BCE - 57 cal CE
	Grave 51ab	167-46 cal BCE

‘Regionalisation Era’ (Coningham and Young 2015). In Swat, this phase is defined on the basis of the evidence from the coeval sites of Barikot and Aligrama (Stacul and Tusa 1975, 1977). The available archaeological information for the proto-urban phase at Barikot allows assuming a large settlement, which was larger than the future urban establishment, 15 to 20 hectares. The early settlement, which traces were found on the plain also beyond the limit of the later Indo-Greek city wall, was possibly surrounding an inner stronghold (Figs. 5-7) connected to the acropolis. In fact, the lowest proto-urban levels reached in 2017 yielded the evidence of a stretch of a large earthen rampart, a portion of the base of an inner stronghold roughly positioned at the centre of the settlement. The rampart’s height is preserved up to 1.23 m, with a visible width of more than 5 m. The structure collapsed twice: the first time it was reconstructed, the second time abandoned.⁸ The material culture associated to this period between



Figure 5. Barikot. The protohistoric rampart (2017). Photograph by L.M. Olivieri (Courtesy ISMEO).

1200-800 BCE finds direct comparanda with the phases of Aligrama and materials from the Swat Graves Complex (the so-called ‘periods V–VII’)⁹, but also with materials from the plains: the lower course of the Swat River (Pushkalavati: Charsadda I),¹⁰ and the trans-Indus (Taxila: at Hathial and Bhir Mound).¹¹

During the 11th to 9th century BCE, the settlements of Aligrama and Barikot had articulated clusters of permanent structures (habitation units) built with masonry foundations and mud bricks elevations,¹² inner strongholds and top-hill defence,¹³ associated extensive graveyards¹⁴ and even possible cultic areas (ISMEO Activities 1981: 176.). The wealth of these settlements was associated to agriculture and farming, thanks to the extraordinary fertility of the valley and without doubt to the export of the surplus food.

The decline of this regional identity occurred in Swat during the so-called ‘period VIII’. Previously, it was thought that ‘period VIII’ occurred in Swat around 300 BCE, and – therefore – that Swat maintained its cultural identity longer (Tusa 1979), while the sites of the plain - Taxila and Pushkalavati - underwent a progressive ‘Indic influence’.¹⁵ This model should now be reviewed. Firstly, ‘period VIII’ can be now more confidently dated between 800 and 600 BCE. Secondly, it was only at Taxila (Bhir Mound) that Indic material became dominant from that phase onwards.¹⁶

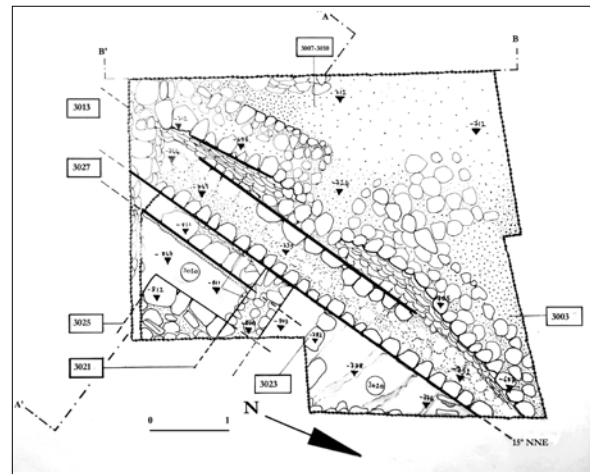


Figure 6. Barikot. The protohistoric rampart (plan). Drawings by L.M. Olivieri (Courtesy ISMEO).

Materials of 'period VIII' are instead well represented both in the highlands at Aligrama, Kalako-dherai, and Barikot and in the plain, at Pushkalavati (Charsadda I, layers 36-29).¹⁷ The question of the early 'Indic influence' at Charsadda I was postulated mostly on the basis of the presence of the 'dishes with incurved sides'¹⁸ in grey ware and the 'carinated bowls',¹⁹ shallow bowls with carinated sides and S-shaped rim. Both forms, on the basis of the data from Swat ('period VIII'), can be considered rather local forms,²⁰ or local production of Iranian shapes, but certainly not Indic.²¹

The Initial Urban Phase (c. 450-150 BCE)²²

The concept of 'Initial Urban Phase' is said to be 'reflective of the increased social complexity of

cities and political entities (e.g. *Mahājanapadas* in Northern India)' (Smith and Mohanty 2016: 688), and it is comparable to the term 'Integration Era' utilized in a recent monographic study (Cunningham and Young 2015).²³

However, the chronology proposed by Smith and Mohanty for this phase (8th century BCE-4th century CE) encompasses – in the whole Gandhara, not only at Barikot – several distinct macro-structural and historical phases. Therefore, we prefer to limit the extension of the 'Initial Urban Phase' here to the 2nd century BCE. The subsequent development of the city in the Indo-Greek times (with the new fortification) is associated to the evidence of a 'mature' Urban Phase, which lasted until the crisis of urbanization in the region (c. 300 CE).²⁴ The early stages and further development of this phase, besides

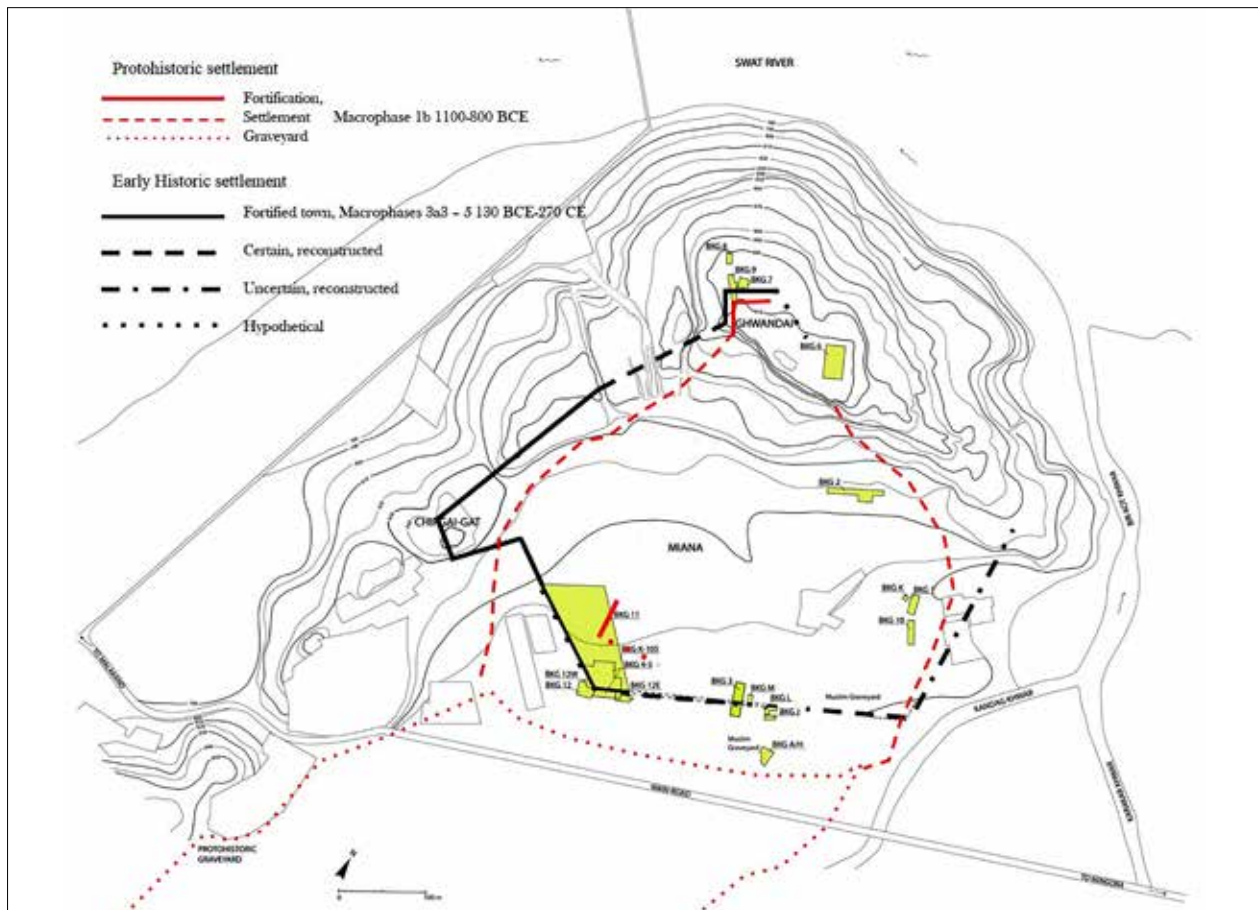


Figure 7. Barikot. Archaeological map. Drawings by R. Sabelli. Elaborated by E. Iori (Courtesy ISMEO / University of Firenze, Italy).

Barikot, find analogies at Ora (Udegram) in Swat, and in the plains at Taxila II-III (Hathial/Kacchakot/Sirkap) and Pushkalavati (Shaikhan-dheri).²⁵

At Barikot, the end of the protohistoric settlement is characterized by a phase of abandonment. The earliest evidence of the following 'Initial Urban Phase' is documented only inside the later urban area, as there is a continuous stratigraphy (Trench BKG 11-K, Fig. 2), while the stratigraphy is interrupted all along the limits and outside the urban area, because of the negative interventions carried out at the time of the construction of the Indo-Greek period wall.²⁶

The recent excavations carried out in Sector K revealed a complete untouched structural and stratigraphical sequence 8m deep, from the

Kushan structural periods (Mature Urban Phase) down to the Proto-Urban levels (Fig. 8). From the layers tentatively dated to the early-4th century CE (Initial Urban Phase)²⁷ and onwards (Tables 2, 3), the cultural material assemblage illustrates the evidence of a wealthy urban environment with ornaments and luxury objects, and with diversified working activities: besides pottery-making, which was extremely advanced from early phases, there is quantitatively striking evidence of glass, copper²⁸ and iron workshops.²⁹

Iranic and Indic markers

While almost no pottery evidence was recovered from the layers dated between the 7th and 6th century BCE, the rich ceramic material ascribable to the occupation phase dated from the early 5th



Figure 8. Barikot. Trench BKG 11-K. The asterisks mark the two drainage channels (to the right: Saka-Parthian, c. 50 BCE–50 CE; to the left: after 150 BCE). Photograph by E. Iori. Elaborated by L.M. Olivieri (Courtesy ISMEO).

to 4th century BCE (see note 33; Tables 2, 3) represents a very distinctive ceramic assemblage which features elements of both Iranian and Indic origin (Fig. 9). Interestingly, both fabric and temper suggest that the new pottery assemblage was largely produced in Swat. That means that shapes and functions might have been imported from outside Swat, but not the vessels (see Olivieri 2018b).

The Iranian pottery tradition is mainly represented by the ‘tulip bowls’ or ‘Achaemenid bowls’ (Figs. 9a, b; 10e, f).³⁰ Its introduction may be dated to the proper Achaemenid period, rather than to the post-Achaemenid period, as previously suggested.³¹ Other vessel forms with possible Iranian connection are convex bowls with flat contiguous bases, slight carination and projecting rims (Fig. 9c)³² and medium to small size convex bowls with clubbed rims (Fig. 9d).³³ Also, in this period a black-on-red painting on the external surface of closed and open vessel forms was introduced (called by Dittmann ‘Eastern Triangle Ware’). Its decorative patterns, mainly triangles filled with parallel oblique wavy lines and leaves, are coherent with the painted motifs attested at Pushkalavati (Charsadda I).³⁴

While the Iranian component is mainly confined to luxury vessel forms, the Indic tradition is detectable in common ware, such as carinated cooking pots, pear-shaped (water) jars/jugs (Figs. 9g, 10a), truncated-conical cups and lids (Figs. 9f, 10b), and *thālīs* with sharp carination and vertical sides (Fig. 9e).³⁵ All these have parallels at Pushkalavati (Charsadda I) and Taxila (Bhir Mound) (Iori 2018). Therefore, we can infer that the first introduction of Indic forms to Gandhara occurs in a moment when the region was possibly part of a larger political entity, and when, by consequence, the demand of goods increased and transregional trade expanded.³⁶

EI

Climate barriers and the reasons to build a city up there

The development of the transregional trade might have had a direct implication on the supply needs of the cities established along the ‘Northern Road’ leading to the Indus. The road, following the course of the River Kabul, crosses a semi-tropical landscape. The area of Charsadda and Swabi was (and still partly is) a semi-arid

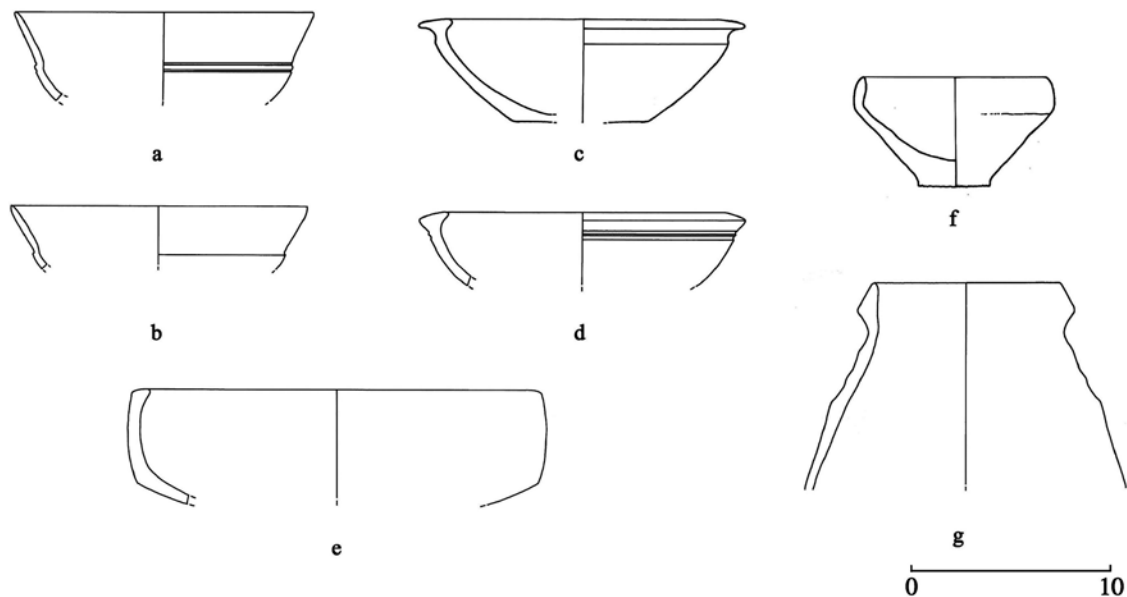


Figure 9. Barikot. Pottery from Trench BKG 11-K. a–d: Iranian forms from initial urban phases; Indic forms from initial urban to early Indo-Greek phases. Drawings by E. Iori (Courtesy ISMEO/University of Bologna, Italy).

savannah, a hunting ground for big game, even at the beginning of the 16th century (see e.g. *Bāburnāma* fol. 222b [Thackston 2002]). It would remain so until the British diverted the waters of the River Swat into a large irrigation system at the end of the 19th century. Of course, sparse agricultural fields were there even before, but their annual production was totally depending on the monsoon (single crop/*kharif* crop). The situation is completely different in Swat, where naturally irrigated fields have the conditions for a steady double cropping production (*Bāburnāma* fol. 131; 220; 236b [Thackston 2002]).³⁷ The same habitat and the same differences can be hypothesised for our study period both in Swat and Gandhara, since the available indirect data seem to point to a pretty stable climatic condition over the last three millennia.³⁸ There should have been important exceptions in this trend though, as our ongoing research on the paleoclimate of Swat will hopefully demonstrate.

However, while evidence of Swat, and particularly Barikot (Stacul 1987) is extremely rich, early archaeobotanical evidence at Charsadda is meagre and apparently points to a semi-arid environment characterized by acacia and wild olive-trees (Young 2007: 242). Broadly

speaking it can be assumed that cities like Pushkalavati (Charsadda/Shaikhan-dheri), and later Purushapura (Peshawar) were like caravan-cities, depending on the double-cropping climate of the highlands for staple agricultural products (Young 2007: 244). Besides food staples, also copper, iron, precious chlorite stones, and precious timber resources like North Indian rosewood (*Dalbergia sissoo*), mulberry and Himalayan cedar (*Cedrus deodara*) were probably imported from the upper valleys (see Stacul 1987: 10). Herds were also important: mention must be made here of the ‘large herds of superior quality’ seized by Alexander in Swat and sent from there to Macedonia.³⁹

The Chinese sources, in particular the *Luoyang Qielan ji* (6th century CE), confirm the exceptional agricultural richness of the Swat valley (see Kuwayama 2006: 65-66). The Swat valley, geographically a mountain plain, strategically a cul-de-sac, is – as already said – a naturally irrigated land, where domesticated rice was already cultivated in the early 2nd millennium BCE (Stacul 1987). The surplus of food resources, along with minerals and forestry, was enough to make the Swat Valley a crucial economic pool, rather than a marginalised land, as was believed



Figure 10. Barikot. Pottery from Trench BKG 11 and L. a: ‘Indic’ pear-shaped jar; b: Indic truncated-conical cups and lids; c–d: ‘Achaemenid bowls’; e: thālī from the Indo-Greek period; f: fish-plate. Photos by E. Iori (Courtesy ISMEO/University of Bologna, Italy).

in the past. (Tusa 1979). In this context the foundation of a city at Barikot can be possibly understood as a centre of control, collection of food resources and maybe even taxes, in any case as a colony functional to the life and economy of the ‘caravan-cities’ on the plain.

Political control

Concerning the duration of the Achaemenid control in northern Gandhara a possible suggestion also comes from Barikot. Achaemenid pottery forms disappeared quite abruptly at the same time as the archaeological deposits impoverished between 350 and 250 BCE.⁴⁰ That suggests that the city underwent a phase of temporary contraction. In terms of pottery forms only the Indic ones survived, but the average quantity of sherds and minor finds drops significantly in this phase. The precise chronology of this phase is uncertain. Historical sources may though help interpreting the archaeological data.

At the time of Alexander (327 BCE), Barikot (Bazira/Beira) now part of the Assakenian kingdom, is described by a possible first-hand source of Curtius Rufus as *opulenta* (a term clearly indicating agricultural wealth) (Cur. *Hist.*, 8, 10, 22). So, even though we can imagine a temporary decline of the role of the city in this phase of political fragmentation, Swat should still have been an important source of food. The only difference is that – according to the sources – Swat was now independent. The historians of Alexander describe the area of the Swat Valley and surroundings, as a parataxis of petty kingdoms.⁴¹ The Assakenians ruled in the highlands of Swat, whose major ally was not Pushkalavati, but – according to the sources – the Indian kingdom of Abisares, which should be found a little farther to the East.⁴² Also in the plains there are no traces of the ‘Achaemenids’ (apart from a few inferences: see Briant 1996: 756, 776-778). Even the siege of Pushkalavati is treated like it was a military operation against a ‘free city’, a ‘state-city’, rather than a major metropolis of a satrapy. Therefore, it is possible to infer that at the time of Alexander the Achaemenid satrapy of Gandara was already lost. Despite that, the strategical and logistic importance of the highlands did not change.

The march of Alexander towards the Indus took place in the best time of the year, when the water level of the rivers was fordable (Arr. *An.* 5, 9, 3; *Bāburnāma* fol. 131 [Thackston 2002]), and after the harvesting and storing of seasonal crops (see *Bāburnāma* fol. 220-221 [Thackston 2002: 268]). Arr. *An.* 5, 9, 3; *Bāburnāma* fol. 131 (Thackston 2002).

The need for controlling people and resources in the northern valleys was certainly behind the military strategy undertaken by Alexander in 327 BCE, so as to guarantee supplies and safe control of the Indus road. As already said, Swat is a cul-de-sac, certainly not a major transit road, in the best case just a logistically complicated shortcut leading to the upper passes linking Swat to the plain (Shahkot, Cherat, Karakar, etc.; Olivieri 1996: 73-74). In a few words, one goes to Swat, only if one wants to go there.⁴³ Therefore, the otherwise exceptional and incomprehensible detour made by Alexander in Bajaur, Swat and Buner, as well as the establishment of garrisoned towns, can – in fact – only be explained by the necessity of providing his army, at that time and in the future, with a secure rear zone, both strategically and logistically. In fact, we know from Arrian (*An.* 4, 28, 4) that Alexander built fortresses [*phrouria*] at Ora and Massaga, and fortified the city of Bazira (τὰ μὲν δὴ Ὠρα καὶ τὰ Μάσσαγα φρούρια ἐποίησεν ἐπὶ τῇ χώρᾳ, τὰ Βάζιρα δὲ <τὴν> πόλιν ἐξετείχισε) (Callieri 2007; Capdetrey 2012: 325 note 47). It is therefore plausible that the Alexandrian fortification of Bazira might have had the function of protecting a kind of *katoikia*, an agrarian colony with a strong local component (Capdetrey 2012: 322).

LMO

Mauryan ‘invisibility’ vs. Hellenistic ‘visibility’

A striking aspect at Barikot, and in Gandhara in general, is the invisibility of the Mauryan archaeological horizon.⁴⁴ Besides the Aśokan rock edicts at Mansehra and Shahbazgarhi,⁴⁵ to the east of Swat, only few elements of the material culture (e.g. coins and ‘Baroque Ladies’ votive terracotta figurines) represent the evidence of the Mauryan culture in Gandhara (Fig. 1b, d).

As regards to ceramics, at Barikot, the post-300 BCE assemblage does not show any new distinctive element and its main feature is represented by the continuity of Indo-Gangetic pottery traditions. In macroscopic terms, the most tangible trace left by Maurya domination in these highlands, may have been the introduction of Buddhism, as possibly evidenced by the early phase of the *dharmarājika stūpa* at Butkara I,⁴⁶ a sanctuary at the periphery of what seems to have been already a larger urban settlement.⁴⁷ The establishment of the sanctuary at Butkara I should *per se* be interpreted as a major political choice/investment of the central power and a clear evidence of the Mauryan acculturation.

Significantly, in a structural phase dated certainly before the 2nd century BCE (Table 2),⁴⁸ the ceramic assemblage of Barikot, alongside the continuity of Indic ware, shows a clear change with the introduction of a Hellenistic pottery tradition (e.g. fish-plates, *krater*-like vessels).

At the moment we cannot be more specific on the initial phase of the first direct transmission of this material in Swat. However, the explanation

for the presence of such materials can be linked to the existence of a trade network managed by the Mauryans and their Hellenised neighbours.⁴⁹ Again, this pottery is also locally produced, proving that local ceramic workshops were able to evolve and catch up with the introduction of new shapes and needs.⁵⁰ Such new pottery – as earlier with the Achaemenid tableware – is represented mostly by open forms, and only in serving vessels and tableware (Figs. 10f, 11a-c). On the other hand, pottery containers and cooking pots, mostly closed forms, belong to the Indic tradition.

The same trend is observed in the following structural phases, which are clearly associated to the Indo-Greek acculturation phase. In that phase, the archaeological data feature a social context where élites lived in a multi-lingual and probably multi-ethnic community.⁵¹ This is the picture offered by the small corpus of Greek⁵² and Brāhmī inscriptions on sherds,⁵³ and by a sherd with a few painted letters, probably Aramaic.⁵⁴

In total, in the Indo-Greek acculturation phase, Greek and Brāhmī scripts are equally represented at Barikot (with three fragments

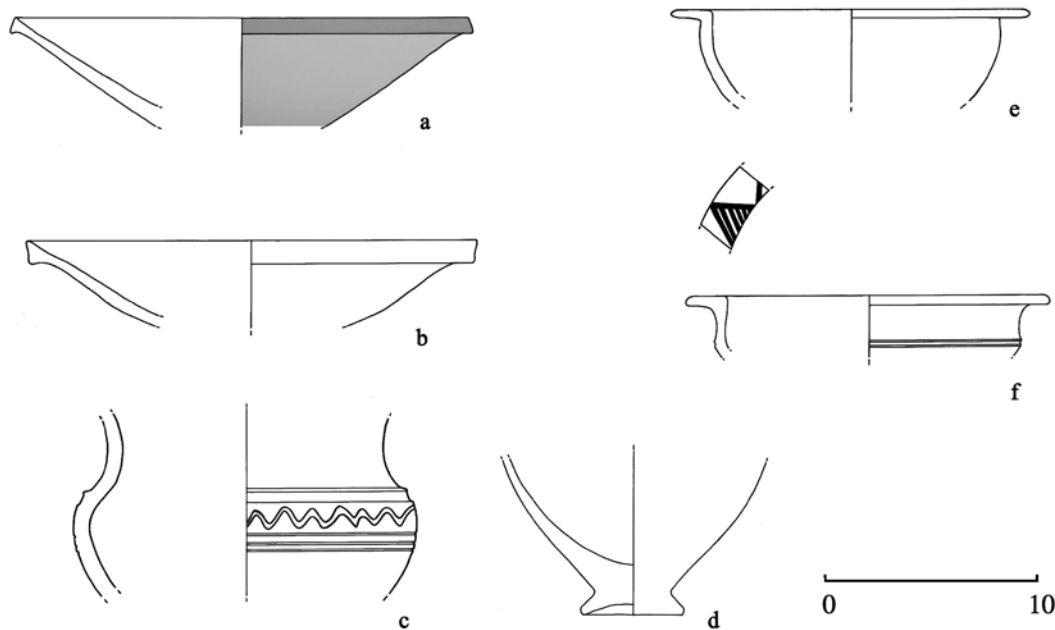


Figure 11. Barikot. Pottery from Trench BKG 11-K. Hellenistic forms from pre Indo-Greek and Indo-Greek phases. Drawings by E. Iori (Courtesy ISMEO/University of Bologna, Italy).

each) but, interestingly, are incised on different types of vessel forms. While Greek inscriptions are confined to small drinking cups/bowls, Brāhmī appears on sherds from typical Indo-Gangetic vessel form. This dichotomy, which may reflect a social and ethnic stratification, is even striking once one looks at the ceramic materials from Ai-Khanoum in Bactria.⁵⁵ There, most of the published material has open forms and belongs to serving vessels and tableware.

It is evident that the utilitarian dimension linked to storage and food production, and to groups in charge of it, was – at the Graeco-Bactrian Ai-Khanoum differently from Indo-Greek Barikot – sharply separated from the residential dimension.⁵⁶

EI

The new fortification, and why it was built

Outside the city (Trench BKG 12W), the remains of the protohistoric settlement were sealed by a thick silty clayish deposit, which may hint at the levelling of a large rammed earth structure on which the Indo-Greek defensive wall was built. This thick deposit (layer 206, dated 369-201

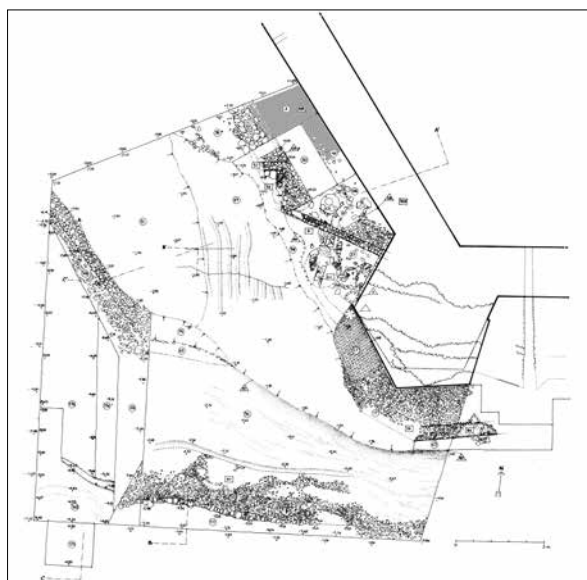


Figure 12. Barikot. Trench BKG 12 and 12W. The asterisk marks the position of layer 206. Drawings by F Martore (Courtesy ACT/ISMEO).

100% 2σ cal BCE, was found to cover all the upper edges of the slope of the defensive ditch (see asterisk in Fig. 12).⁵⁷ That means that the ditch was already cut, when the area was further disturbed by the construction of the Indo-Greek fortification. These data are too poor to determine if they refer directly to the Alexandrian fortification, reported in Arrian. But they are enough to confirm that the city was already fortified before the Indo-Greeks.

In one of the structural phases associated to Indo-Greek material (now dated after 150 BCE – see Tables 1, 2) was built the massive stone-masonry city wall built.⁵⁸ The lower city and the acropolis is encompassed within an imposing defensive wall marked by massive rectangular bastions every 28 meters, the equivalent of 100 Attic feet (Olivieri 1996; Olivieri 2003), and by a regular set of drainage channels. The defensive wall so far represents the only excavated Indo-Greek urban defensive structure in South Asia (Callieri 2007).⁵⁹

The city's re-fortification implied a massive work, and the consequent obliteration and removal of the entire thick anthropic deposit all around the urban circuit. The archaeological implications of such large-scale negative interventions – when not correctly interpreted – are analysed in Olivieri and Iori 2020, also in comparison with the analogous feature documented at Saidu Sharif I (Olivieri 2016). R. Dittmann had the right intuition on that aspect when he spoke of the potential errors of a rigid 'ergological approach which claims that a higher layer will always follow a lower immediately in time' (Dittmann 1984: 156).⁶⁰

The fortification and its associated financial investment should necessarily be read as cogent to a major political event, which might have been the same which lay behind the foundation of the new city of Pushkalavati at Shaikhan-dheri.

At Shaikhan-dheri, on the numismatic basis, the fortification phase ('Period VI') can be dated certainly after 130 BCE and before 115 BCE.⁶¹ At Barikot, amongst the various Indo-Greek coins (almost all found in their correct chronological contexts), there are two, which are extremely crucial for their recovery context. Both were found in contexts *post* the construction of the defensive wall. The first is a coin of Zoilos I (Æ , BKG 1474).

It was found on the surface 'of one of the first outer floors pertaining the fortification wall' inside the city (MacDowall and Callieri 2004: 84). The second coin, belonging to Antialkidas Nikephoros (Ar, BKG 3534), was found in Trench BKG 11-K in a context associated to the fortification wall (when the latter was already in function).⁶²

Therefore, on the basis of the reassessment of the archaeological data, we are inclined to date the Barikot fortification to a period slightly later than we thought before,⁶³ i.e. to the second half of the 2nd century BCE (Fig. 13). We are also inclined to interpret the new masonry fortification at Barikot as the marker of a newly [re]organized system of power, rather than simply as the reinforcement of an existing stronghold.

Notwithstanding their relatively uneven scale, both the data from Barikot and Shaikhandheri suggest that important political events took place after 150 BCE, and that both Menander, or his 'western successors' (Zoilos I, Antialkidas, Lysias) can have had a role in it.⁶⁴ In conclusion, the reason for such huge military investment might have been – again – the necessity of creating in Swat a strategic bulwark to protect a crucial economic pool, this time for the new Pushkalavati built at Shaikhandheri.⁶⁵ If our reconstruction is correct, Swat might have been fortified during or after a progressive acquisition of vital space

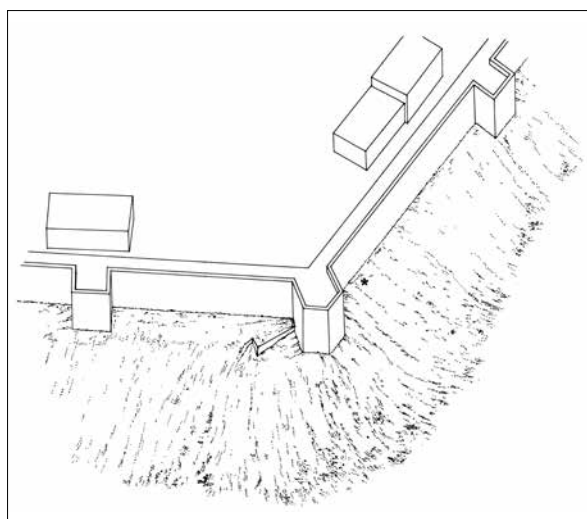


Figure 13. Barikot. Trench BKG 4–5/11, isometric reconstruction of the defensive wall in Macrophase 3a2–3a3. Drawings by F. Martore (Courtesy ACT/ISMEO)

from linking the Gandhara to proper India. That is proved by the continuity of Indic cultic terracotta figurines, both human and animal, and the presence of Indic pottery materials, that was supposed to be imported more or less at the same time of the new fortification of the city.

Conclusion

In conclusion, the birth and the fate of the ancient city at Barikot (Bazira/Beira/Vajirasthāna) (Fig. 14) can be explained with the fortunate circumstance of having been founded (1) at the centre of an exceptionally wealthy natural environment, (2) within the economic/strategic space (νόμος) of a macro-regional political power, (3) which created the conditions for a high demand of resources. Its abandonment around 300 CE was eventually due to the fall of these last two pre-conditions.⁶⁶

LMO



Figure 14. Swat Valley. The location of the ancient city below the hill of Barikot seen from the northern side of Mount Ilam (the ancient 'Aornos' of Alexander). Photograph by L.M. Olivieri (Courtesy ACT/ISMEO)

Notes

1. See Olivieri and Iori 2020; Olivieri 2017 (with previous references).
2. See Olivieri and Iori 2020; Tribulato and Olivieri 2017; Zellmann-Rohrer and Olivieri 2019; Baums 2021.
3. Dittmann 1984. R. Dittmann was the first to propose to substitute the term ‘Gandhara Grave Culture’ with ‘Swāt-Complex or Swāt-Aspect’ (Dittmann 1984: 155 note 1). On the definition ‘Swat Protohistoric Grave complex’ (SPG), see Narasimhan *et al.* 2019.
4. See Vidale *et al.* 2016; Vidale and Micheli 2017; Narasimhan *et al.* 2019.
5. Or echoed *ex-post* in mythological narratives: see Puṣkalāvātī (Pushkalavati) and Takṣaśilā (Taxila) in the *Rāmāyaṇa* 7, 114.
6. See Stein 1930; Tucci 1958; Tucci 1977; Olivieri 1996; Rapin and Grenet 2018: 171-172; Olivieri and Iori 2020; Coloru and Olivieri 2019.
7. Barikot Macro-phases 1a-1c, and interphase 1c-2a (Tables 1, 2). Outside Swat the ‘Proto-Urban Phase’ is documented at Taxila (Bhir Mound), Pushkalavati (Charsadda I) (see Iori 2018), and Old Kandahar (McNicoll and Ball 1996; Helms 1977).
8. The structure was built in Macrophase 1a (c. 1261-1056 95%) and its last phase belongs to Macrophase 1c (1125-926 BCE 95%). Radiocarbon dates (Oxford) of this feature is not included in Table 1. For the previous proto-historic evidence at Barikot see Stacul and Filigenzi 1985; Stacul 1987; Callieri *et al.* 1992; Callieri *et al.* 2000 and Olivieri and Iori 2020.
9. Stacul 1969, 1987; Vidale *et al.* 2016.
10. Wheeler 1962, Coningham and Ali 2007.
11. Allchin 1982; Allchin 1995: 127; Khan 1983; Dani 1986: 37-38, fig. 13s, 52; Khan *et al.* 2002: 29-31, 74-75, pl. 1; Petrie 2013.
12. See Stacul and Tusa 1975: 308 (Aligrama); Callieri *et al.* 1992 (Barikot).
13. See BKG Trenches 7 and 9 in Callieri *et al.* 2000.
14. Both at Barikot and Aligrama (see Narasimhan *et al.* 2019).
15. On the ‘Indic influence’ at Bala Hisar, see Vogelsang 1988: 110-112; Vogelsang 1992: 246; Ali and Coningham 2007: 262 (also Wheeler 1962, 40; Allchin 1995: 131). For a critical overview on the argument see Petrie 2013: 516.
16. Designated for Taxila/Bhir Mound as ‘Period II’ by Khan *et al.* 2002.
17. Stacul and Tusa 1977; Iori 2018.
18. Also labelled as carinated bowl in red/reddish ware, Type 9 (Dittman 1984); open bowl of ‘fairly rough brown fabric’ (Vogelsang 1988).
19. This definition refers to Wheeler 1962, 40. Also labelled as carinated dish Type 10 (Dittmann 1984), carinated bowl of a reddish ware (Vogelsang 1988), S-carinated rim bowl (Magee *et al.* 2005). For examples of this vessel form see Wheeler 1962: fig. 18,82-84,88; Stacul and Tusa 1977: fig. 14 j-k; Stacul 1993: fig. 17 o.
20. In Swat ‘period VIII’ one notices mainly a development of earlier local forms. See Iori 2018.
21. Several scholars (Wheeler 1962: 40; Vogelsang 1992: 246; Coningham and Ali 2007: 262) have argued that these carinated forms reflect a possible ‘Indic’ influence. However, as highlighted by Petrie 2013: 516, the only parallel cited is a single example from an unstratified Period II deposit at Hastinapura. The Iranic origin is confirmed also by Ute Franke (Franke 2001: 258, fig. 8).
22. Barikot Macro-phases 2a-3a2 (Tables 1, 2).
23. On the current status of the studies see also Sawan and Shete 2016 and Smith 2006.

24. Olivieri 2017.
25. See respectively Gullini 1962; Ghosh 1947-1948; Marshall 1951; Fussman 1993; Allchin 1982; Dani 1965-1966.
26. See the methodological note published in the previous issue of this Journal (Olivieri 2020b).
27. A sample from layer (2167) gave an extremely precise dating 399-385 BCE 100% 1 σ cal – 403-307 BCE 100% 2 σ cal.
28. The existence of copper ore zones in Swat has been recently proved by surface surveys carried out by one of the authors (LMO) (see also Law 2011). The ongoing analysis of materials from Barikot confirms the presence of metallurgical activities specialized in copper in the early city.
29. Workshops can be interpreted also as a hint for the presence of craft guilds in the city (see Ray 2008: 8-9). The high-level standard reached since early urban phases by the potters at Barikot (see Maritan *et al.* 2018; Callieri and Olivieri 2021) lead us to think of such a possibility.
30. Magee *et al.* 2005, Khan *et al.* 2000.
31. Wheeler 1962, 40; Dittmann 1984: 189-191; Vogelsang 1988: 104.
32. Possible connections can be drawn with the 'carinated cups' of Dahan-e Gholaman (Scerrato 1966: fig. 58; Genito 1990: 592-593), the 'carinated bowl' from Mundigak (Casal 1961: fig. 124), the 'ledge-rim bowls' from Tepe Yahya (Magee 2004: fig. 5,5.42).
33. Direct comparisons come from Pushkalavati (Charsadda I, layer (26): Wheeler 1962: fig. 22,141-142; Charsadda V: 1962, fig. 50,543.555), which date likely to the Achaemenid period, and from Taxila (Bhir Mound: Periods III, Khan *et al.* 2002: 17.14). These bowls are also attested at Old Kandahar in Achaemenid period (McNicoll and Ball 1996: fig. 271, 1).
34. Dittmann 1984; see also Iori 2019: fig. 4.
35. These forms have direct and unmistakable comparisons with many coeval North Indian sites (see ref. in Olivieri and Iori 2020; Iori 2018).
36. See Henkelman 2017: 210.
37. See Barth 1956: 1080.
38. Coningham and Young 2015: 50-52; Joshi *et al.* 2017, Giosan *et al.* 2018; see also Spate 2019.
39. Arr. An., 4, 25, 4; Stacul 1987.
40. If one takes into account the two samples with best statistics. In fact, the preceding and succeeding phases (2a2 and 3a1) are dated, *inter alia*, by samples with 100% 2 σ cal. statistics: layer (2167), 403-307 BCE and layer (1920), 366-197 BCE.
41. See e.g. Curt. 8, 10, 1: '*gentium finitimarum reguli*' (see also Rapin and Grenet 2018: 157).
42. Probably in the highlands on the right side of the Indus, north of Taxila; see Olivieri 1996: 57 note 18.
43. On the Alexander's itinerary towards India (up to Swat) see Rapin and Grenet 2018.
44. On this theme, see Ray 2008 and Iori and Olivieri 2016.
45. See Smith *et al.* 2016.
46. Great Stupa 1; Faccenna 1980-1981: 167; Petech 1966.
47. See Faccenna 1980-1981: 729-732, 747-750, 756; Iori and Olivieri 2016.
48. Barikot Macrophase 3a1 (Table 1). If one takes into account the two samples with best statistics: layer (1920), 366-197 BCE 100% 2 σ cal; layer (2117), 210-94 BCE 81.2% 2 σ cal).
49. For that reason, we mentioned a 'Graeco-Bactrian acculturation phase', see Olivieri *et al.* 2019. On Seleucids, Mauryan, etc., see Coloru 2009 (with references). See the recent Cribb 2017.

50. Maritan *et al.* 2018; Olivieri 2018b.
51. At Barikot, the material culture of Hellenistic matrix apparently did not exceed the limits of the élites' needs and habits, and remained basically confined to coinage, writing, military architecture, system of measurements, and luxury items.
52. See references in Tribulato and Olivieri 2017.
53. Baums 2021.
54. Zellmann-Rohrer and Olivieri 2019.
55. On this, see Tribulato and Olivieri 2017, 129-130; Olivieri and Iori 2020. For Aikhanoum, see Lyonnet 2013.
56. On that, see Fussman 1993: 91.
57. Barikot Macrophase 2b (Table 1).
58. Barikot Macrophase 3a3 (Tables 1.2).
59. The latest archaeological reports on excavations carried out along the fortification are Olivieri 2015 and Iori *et al.* 2016. A recent re-assessment can be found in Antonetti 2020.
60. See also Olivieri 2020b in this Journal. On the political and archaeological contexts of the Indo-Greek re-fortification of Bazira/Barikot, the fortification of Pushkalavati/Shaikhan-dheri, etc., see Olivieri 2020a.
61. See Allchin 1979: 756; Dani 1965-1966: 37-38.
62. For the comparison of the pottery material between Shaikhan-dheri 1-2 (= 'Periods VI and V') and Barikot Macrophase 3a3-4, see Callieri and Olivieri 2021.
63. See Tribulato and Olivieri 2017: 130; Olivieri 2018a: 187-188.
64. The complete catalogue of the coins from the authorized excavations of the Italian Mission at Barikot (1984-2021) will be published by Ehsan Shavarebi in 2022.
65. The mutual relationship between the two cities should eventually be read as an evolution of what described in Young 2003.
66. See Olivieri 2017, and especially Iori and Olivieri 2020, in this Journal.

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