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# THE GRAECO-BACTRIAN AND INDO-GREEK WORLD

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CHAPTER 16

# GANDHĀRA AND NORTH-WESTERN INDIA

*Luca M. Olivieri*

## PREAMBLE

For many years, trying to figure out how to quantify the impact of the political presence of the Indo-Greeks in Gandhāra and North Western India, I imagined a situation comparable to the early years of the East Indian Company, with scattered, quantitatively negligible self-defended installations all but lost in the vastness of the Indian subcontinent.

Nowadays, I am inclined to think that the impact of Indo-Greek rule along the major economic corridors of ancient India (along the axis of its major rivers, the Kabul, Indus and the rivers of Punjab) was a major one, and an intentional one, with a crucial local component. With their power in India detached from the Central Asian motherland, the Indo-Greeks apparently pursued a systematic political plan involving major urban foundations, patronage of religious communities, organization of power and resources, monetary reform, intense diplomatic activity and warfare. The chronological evidence provided in this chapter connects these activities to the first successors of Menander, who perhaps began to realize fully a project originally planned by their celebrated predecessor. The impact of this activity was not only important for their subjects and for Indic culture, but also moulded and oriented the future expression of power by the dynasty of Azes, the second wave of Sakas, who basically imitated the same politics as the Indo-Greeks, acting—like their forerunners—as reformers, patrons and founders of cities.

## THE LIABILITY OF THE ARCHAEOLOGIST

What changed my perspective was the recent fieldwork at Barikot, a relatively remote and diminutive town in the Swat valley, where a fortification wall and sherds with Greek graffiti had been discovered in the past. But much more important, and informative, than such discoveries is the extremely archaeologically reliable sequence of the site (see Table 16.1). The implications of this sequence, when compared with sites and sequences excavated in the past, prove to be particularly significant.

Even without archaeology, the presence of Greek rulers in India, documented by a remarkably large quantity of coins, would have been undeniable. But their actual archaeological traces are so faint that one might be tempted to consider them

**Table 16.1** Barikot: archaeological sequence.

| *Macrophases* | *Periods* | *Best statistic chronologies* | *Definition* | *Acculturation phase* | *Dominant material culture* | *Macro-events* |
|---|---|---|---|---|---|---|
| 3b | 3b | 111 BCE - CE 53 99.7% 2σ cal. | **Mature Urban Phase** | Saka-Parthian | Saka-Parthian (first appearance) Hellenistic (disappearing), Indic pottery forms (continuity) development of Local Historic pottery tradition Kharosthi script | reconstruction of the stone city wall |
| 3a | 3a4 | - | | Indo-Greek | Indo-Greek pottery forms (first appearance) | stone city wall and ditch |
| | 3a3 | 182–45 BCE 100% 2σ cal. | | | Indic (continuity) Greek, Brāhmī (and Aramaic) scripts | construction of the stone city wall and ditch stone drainage system |
| | 3a2 | - | | | | built-up quarters |
| | 3a1 | 210–94 BCE 81.2% 2σ cal. (end) | | Maurya | Indic and Graeco-Bactrian pottery forms (first appearance) | iron, bead and glass production |
| 2b | 2b | 369–201 100% 2σ cal. | **Initial Urban Phase** | - | Indic pottery forms (continuity) (Iranic disappears) | construction of the earthen rampart with ditch |
| 2a | 2a2 | 403–307 BCE 100% 2σ cal. (intermediate) 543-403 91.4 % 2σ cal. (beginning) | | Achaemenid | Iranic and Indic pottery forms (both first appearance) | street network iron, bead and glass production |
| | 2a1 | 654-541 BCE 61.9% 2σ cal (intermediate) | | - | - | bead and glass production |

characters of legend rather that real players in the field of history. Onomastics, titles, names of months, specific terms,[1] along with the few but influential literary sources, and that deluge of coins, all together spoke of a cultural presence which was—frustratingly—imperceivable at the archaeological level. While other specialists—especially numismatic—were busy constructing complex and chronologically precise schemes of successions, lineages, and dynasties, archaeologists were not able to compete with comparable discoveries in the field. In other contributions on this topic (most recently Olivieri 2018) I have had occasion to point out that the key decision affecting the archaeology of Gandhāran and the north-western region was the deliberate choice not to focus on settlement and urban archaeology. The implications of this policy have materially affected the evolution of research, resulting for example in the outdated condition of archaeological methodologies in the region, and above all making archaeology a *de facto* ancillary discipline for numismatists and epigraphists.[2]

In an entire century of research (1912–2018), the list of archaeological projects dedicated to early-historic settlement and urban excavations in the region comprises the following sites only: Taxila-Sirkap (Marshall 1951, Ghosh 1947–1948); Taxila-Bhir Mound (Marshall 1951, Sharif 1968, Bahadar Khan et al. 2002); Charsadda-Bala Hisar (Wheeler 1962, Coningham and Ihsan Ali 2007); Charsadda-Shaikhan-dheri (Dani 1965–1966); Udegram (Gullini 1962); Barama (Faccenna 1964–1965); Barikot (see ref. below). The first two sites are in the Taxila valley (in the trans-Indus territories); the two sites at Charsadda are near the junction of the Swat and Kabul rivers in Gandhāra proper; and the three remaining sites are in Swat, in Northern Gandhāra.

To the list one can also add the sites of Gor-khuttree (Peshawar City) (Durrani et al. 1997), Aziz-dheri (Swabi) (Nasim Khan 2010), Mra-dherai (Charsadda; Qasim Jan 2001), Pir Manakrai (Hazara) (Dar 2015), Hayatabad (Peshawar) (Khan, Durrani and Samad 2019), and Tulamba in Lower Punjab (Mughal 1967).[3]

Only the relatively recent dig at Barikot can be considered a major extended project (1984 – still ongoing), while all the others were either short-term projects (like those at Charsadda), or interrupted and never resumed after 1945 (like the one at Taxila-Sirkap). Barikot is also the only one where modern stratigraphic excavation systems have been tested and applied on a large scale, since the only other modern project (at Charsadda) was limited to trial trenches (Coningham and Ihsan Ali 2007). The dig carried out at Barama was meticulous, but short and small scale. The work at Udegram was based on an old-fashioned methodology and was inadequately published. The excavations directed by M. Wheeler at Charsadda were extremely carefully done, but his overall system reveals inconsistencies that make the results emerging from the excavation less than completely reliable, as we will see.

## THE STATE OF RESEARCH: MATERIALS

The state of archaeological knowledge about the Greek and Indo-Greek acculturation phase in the region was assessed in a great deal of detail by P. Callieri, the pioneer and first director of the Barikot project in Swat. He dedicated two major studies to the topic (Callieri 1995, 2007), and they would still accurately capture the state of the discipline were it not for the recent results at Barikot. Apart from coins and inscriptions (see Rougemont 2012), the main elements of material culture

gathered by Callieri built up a coherent but necessarily faint picture of the Greek and Indo-Greek acculturation phase in our region. His list did not include gridiron town planning and temples, as there was already a consensus among scholars on the later chronology both of the 'Greek' grid-plans of Sirkap and Shaikhan-dheri (see Mairs 2009), and of the *extra muros* temples of Jandial-Sirkap (Callieri 1995: 299; Rapin 1995) and Chakdara (see K. Behrendt in Olivieri 2015b).[4] Callieri's list comprises instead mostly luxury objects from India and Greece found in different chronological contexts both at Sirkap and Ai Khanoum. Among the latter Callieri cites Hellenistic bronze inkpots, phial stoppers, spoon handles, and other tools, as well as bronze decorations (Callieri 1995: 298, figs. 7–17). Unfortunately, the majority of the materials from Sirkap listed above, although Hellenistic in character, come from the Saka-Parthian and later levels of the city.[5] Among engraved gems and seals, a class of material mostly without archaeological context, Callieri isolated a certain number of Hellenistic objects (Callieri 1995: 304), including the so-called calcedony 'Graeco-Persian' seals (Callieri 1997: 235–237). The materials revealed by the excavations at Charsadda include a terracotta moulded handle of a jug with the possible representation of Alexander as Herakles (Wheeler 1962: pl. XXXVI.b) (from disturbed layers of Charsadda III), an alabaster statuette of Herakles (ibid.: pl. XLI) (from Ch. IV, associated with a tetradrachm of Menander). To the list should be added (besides pottery) the 'Hellenistic' terracotta figurines, and some other rarer occurrences of material linked to the introduction of Western technologies (pyramidal loom-weights and *lásana* (λάσανα) pot stands).[6] Particularly important are the figurines in terracotta—a relatively short-lived domestic material—whose chronological value should not be underestimated. The 'Hellenistic Ladies' (single-moulded figurines), although dominant in the Saka-Parthian phases, were already present in Indo-Greek times (see Fig. 17).[7]

With regards to pottery, unfortunately, this is handled in an uneven way by the various excavation projects in Gandhāra and North-Western India. As we have seen, only a few well-conducted excavations have been carried out, and only a very few of them have been published. But even when these two requirements have been satisfied, pottery is treated inconsistently in the excavation reports. Initially pottery was restricted to the presentation of selected data, complete forms at Sirkap (Marshall 1951) or representative selections at Charsadda-Shaikhan-dheri (Dani 1965–66) and Charsadda-Bala Hisar (Wheeler 1962).[8] A major and positive exception is represented by the work by Javed Husain for Shaikhan-dheri (Husain 1980). The pottery of Barikot has been presented in several studies (Callieri 1990, 2000, etc.), including two general catalogues (Iori 2018, Callieri and Olivieri 2020.).

However, even if evidence were more abundant and coherent, the main issue would in any case remain the chronological one, in particular with reference to the main sites of the region, Taxila-Sirkap and Charsadda.

## A GEOGRAPHICAL DIVIDE (FIGURE 16.1)

The ancient human geography of Gandhāra and North-Western India was essentially defined by the courses of the major rivers. The Indus river represented a true east-west cultural divide between the trans-Indus (North-western India) and cis-Indus territories (Gandhāra), i.e. between the Indo-Gangetic and Eastern

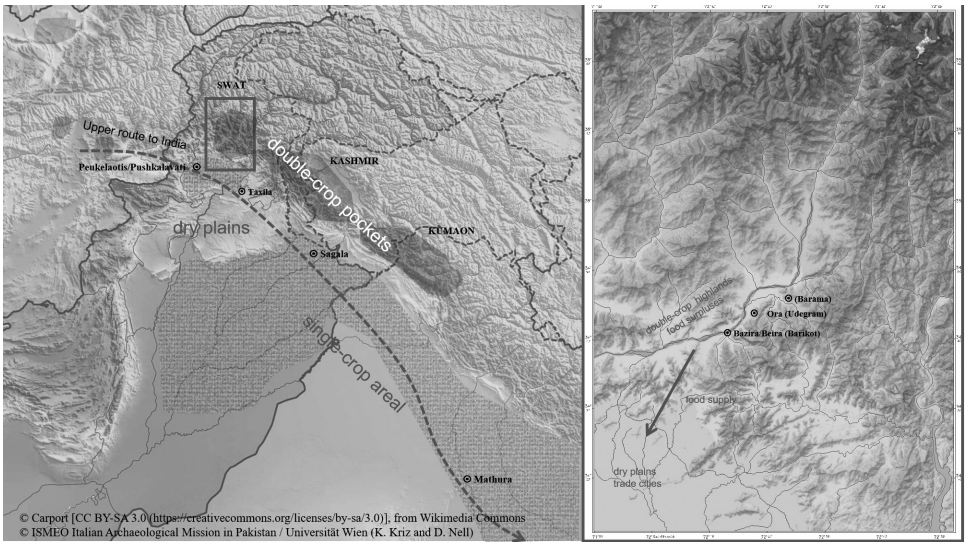



**Figure 16.1** Geographical setting of Gandhāra and NW India.

Iranic spheres. These were two sides of the same world which from time to time enjoyed close contact and interaction, but in general they followed separate cultural destinies. Gandhāra itself was divided into two major ecological zones, those north of the Kabul River, sparsely irrigated by the tributaries flowing through the piedmont of the Hindukush-Karakoram, and the territories to the south, mostly formed, though not exclusively, of rougher arid steppe. Along the Kabul River from Warsak to Attock, where the river joins the Indus, runs the major trade route, the ancient *uttarapātha* linking Gandhāra to Hastinapura and Pāṭaliputra through Pushkhalavati (Puṣkalāvatī) and Taxila. It is a 'winter road', typically used when river levels are at their lowest point, so that they can be easily forded (see Arrian, *An.* 5.9.3; *Bāburnāma* fol. 131 in Thackston 2002). Along the Kabul river from Charsadda to Attock one can still see today a series of small or medium-sized mounds, ancient settlement zones, marking the river's bank especially on the left or northern side (e.g. the sites of Mra-dheri and Aziz-dheri).

This transregional trade road and the cities and settlements established along it had supply needs for which the surrounding territories were not sufficient. Before the irrigation system established by the British in the early 20th century (the Lower Swat Canal), the territories to the west of the Indus river were by and large uncultivated. Local agriculture was not enough to feed the regional capitals, as their production would have totally depended on the monsoon crop (*kharif* crop). Instead, the naturally irrigated Swat valley offered conditions for a steady double-cropping production.[9] Cities like Puṣkalāvatī, and later Puruṣapura (Peshawar; Gor-khuttree), thus partly depended for their subsistence on the double-cropped pockets of the highlands (Coninghan and Ihsan Ali 2007: 244). Apart from minerals, forestry and animal husbandry, the surplus of food resources was the 'green gold' offered by Swat that made it a crucial economic pool, rather than the peripheral land it was once believed to be.

## THE STATE OF THE RESEARCH: THE SITES

### Taxila

G. Fussman, with the frankness that characterizes his research work, when discussing the diffusion of Buddhism in Gandhāra, wrote as follows: "Il sera par contre assez peu fait allusion à Taxila malgré le halo de prestige qui entoure ce nom: Taxila n'a guère livre des documents portant directement sur le sujet ici traité" (Fussman 1994: 19). The very same wording could be applied to Taxila (Takṣaśilā) with regard to our subject. It is now clearly established that the visible part of the city of Sirkap (Figure 16.2), with its massive urban circuit featuring square bastions linked by berms, was built from the time of the first Saka kings of the lineage of Azes. The existence of an earlier and larger 'Greek' town was hypothesized in a postscript by M. Wheeler to Ghosh 1947: "There are thus *two* successive Sirkaps, essentially distinct from each other" (Ghosh 1947–1948: 83–84). Wheeler identified in an area on the north side of Sirkap known as Kaccha-kot the northern quarters of the Indo-Greek city defended by a brick and stone wall with earthen ramparts (Ghosh 1947–1948: 42, n.4), abandoned when the Saka-Parthian fortification of Sirkap was built (Figure 16.3).[10] The problem of chronology exposed by Wheeler, successor of J. Marshall as director of the Archaeological Survey of India and critic of his work, was re-opened by R. Allchin. In his article entitled 'How old is the city of Taxila?' (Allchin 1982) he reported a possible trace of the pre-Saka Parthian defensive wall

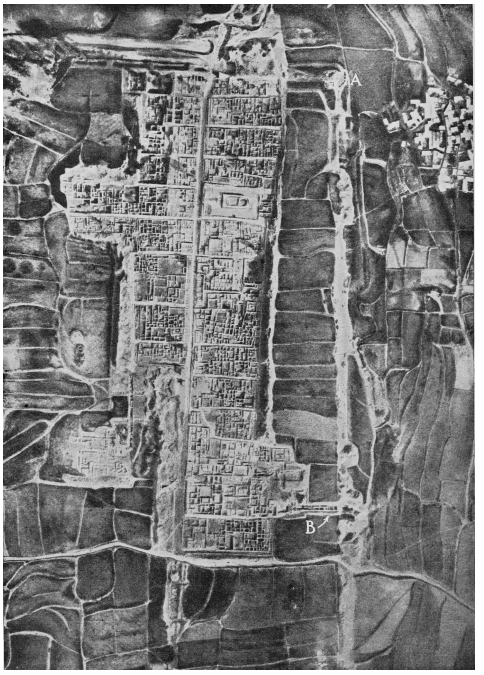



**Figure 16.2** Aerial photograph of Sirkap (R.I.A.F.) showing the location of A. Ghosh trenches (after Ghosh 1947–1948: pl. I) (Courtesy DOAM).

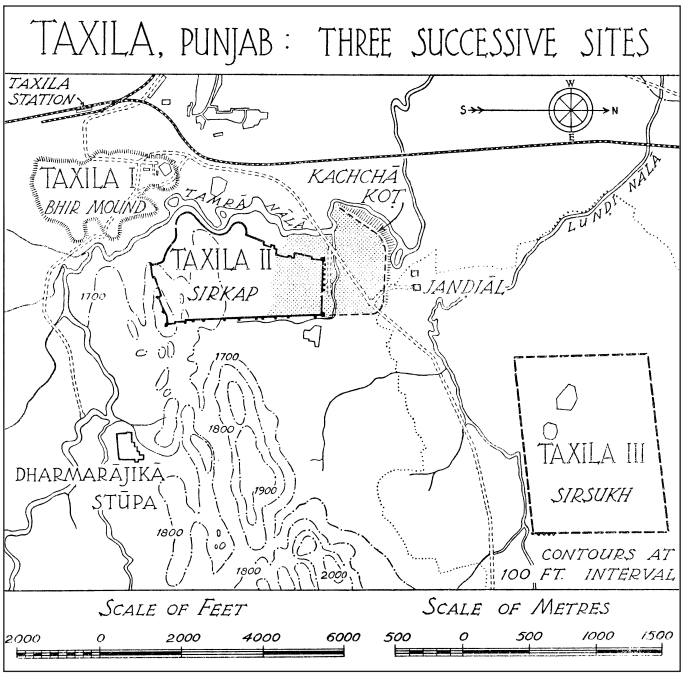



**Figure 16.3** Three Taxilas (after Ghosh 1947–1948: fig. 1) (Courtesy DOAM).

in the Hathial (south-southwest of Sirkap), while he played down the importance of Kaccha-kot ("might well be of later age", ibid.: 75). Overall, there is a general consensus that the original (Indo-Greek) city of Sirkap was larger than the second city of Sirkap, stretching from north to south from Kaccha-kot to the spur of Hathial for a total surface area of c. 56 hectares (Fussman 1993: 91).[11] But in all honesty the amount of information used for these large-scale spatial reconstructions—although extremely precious—is severely limited. The results of the Hathial work are published in a very preliminary form (Khan 1983), while the exploration of Kaccha-kot never advanced beyond the level of a surface reconnaissance. According to the revision of the excavation sequence of Sirkap, as established by Ghosh and later confirmed by G. Erdösy (1990), only a few fragmentary structures (Stratum VII in Marshall = 'pre-structural' in Ghosh) can be dated to Indo-Greek times. The other strata, starting from Stratum VI (= Phase I of Ghosh), which is contemporary with the construction of the defensive wall, belong to the Saka-Parthian and later periods (Figure 16.4). In practical terms, therefore, Sirkap cannot be taken into account for the reconstruction of a detailed picture of the Greek and Indo-Greek phase. However, a few important hints lead us to determine that—although not yet discovered—there was a major town there, certainly a regional capital, whose extension can for the time being only be inferred. The last layers of the 'first city of Taxila', Bhir Mound, were certainly part of the same urban Greek Ur-Taxila. Evidence of Hellenistic materials (Callieri 1995: 297) come both from the late (Stratum I) as well as from earlier levels (Stratum III), a very interesting fact that can be explained when analysed in light of the pottery data from the Mauryan levels at Barikot.[12]

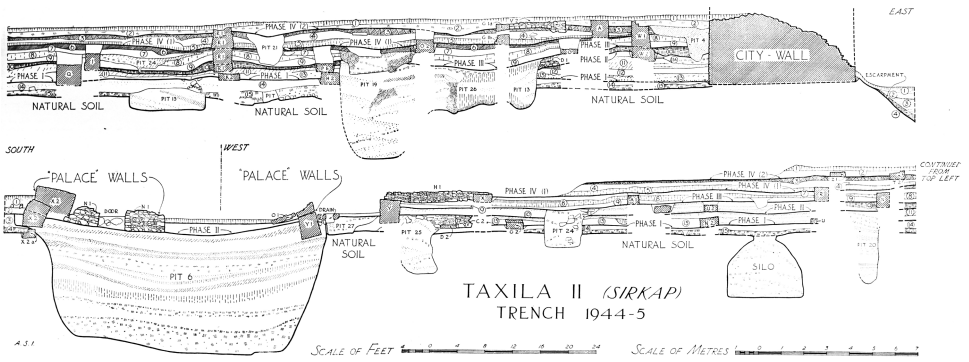



**Figure 16.4** Trench B (after Ghosh 1947–1948: pl. IX) (Courtesy DOAM).

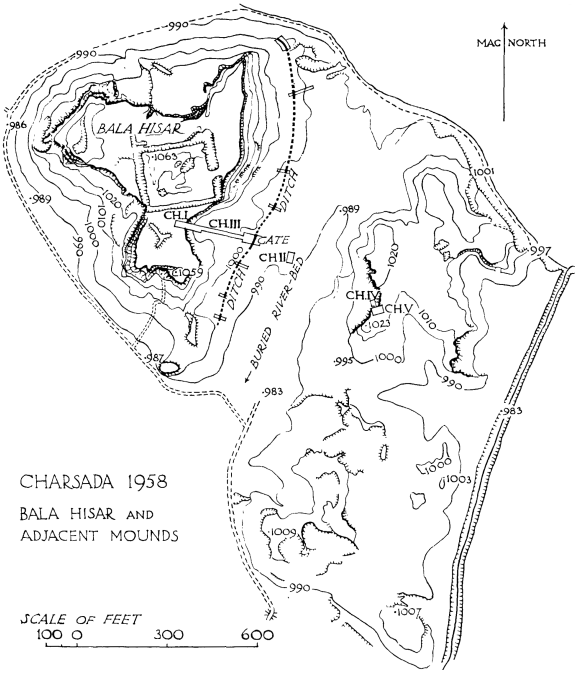



**Figure 16.5** Charsadda, Bala Hisar (after Wheeler 1962: fig. 3) (Courtesy DOAM).

## Charsadda

Once the contribution of Sirkap, the 'Greek' city *par excellence*, is ruled out, a great deal of responsibility rests on the second most important archaeological site of our region, Charsadda, identified with Puṣkalāvatī/Peukelaotis, the ancient regional capital of Gandhāra. The site was the last fieldwork undertaken by M. Wheeler, where he was probably expecting to find what Marshall had failed to demonstrate at Taxila (Figure 16.5). In actual fact, Charsadda, although considered for decades a model of stratigraphic and cultural sequence, is not the best example of Wheeler's admirable fieldwork strategy. Stratigraphy and cultural sequence are two terms which do

not necessarily neatly coincide. R. Dittmann noted some 30 years ago the intrinsic weakness of the 'ergological approach' according to which physical superimposition is interpreted in terms of cultural evolution.[13] Such an approach does not take into proper consideration events that modern archaeology calls 'negative interfaces', which may break or even invert the physical sequence (Olivieri and Iori 2019). Wheeler, who basically interpreted the excavation on/by wall sections (which are incidentally the portions of the dig which are 'not yet excavated'), built a system of pottery types, which were incorporated in the nomenclature of the 'cultures' as though they were fossils dating the *continuum* of an evolutionary process. The excavation of the deep (c. 17 metres) and narrow trench across the mound of Bala Hisar (Ch. I) (Figure 16.6), and its interpretation, was a typical example of the 'ergological approach', whose results were first challenged by G. Stacul (Stacul 1990) and subsequently by recent fieldwork at the site (Coninghan and Ihsan Ali 2007; Petrie 2013).

With reference to Bala Hisar, on the basis of the Barikot materials, Wheeler's Ch. I layers (50)-(39), as suggested by Stacul 1990 and confirmed by Coningham and Ihsan Ali 2007, belong to a *facies* that is coeval with the Barikot late Bronze–early

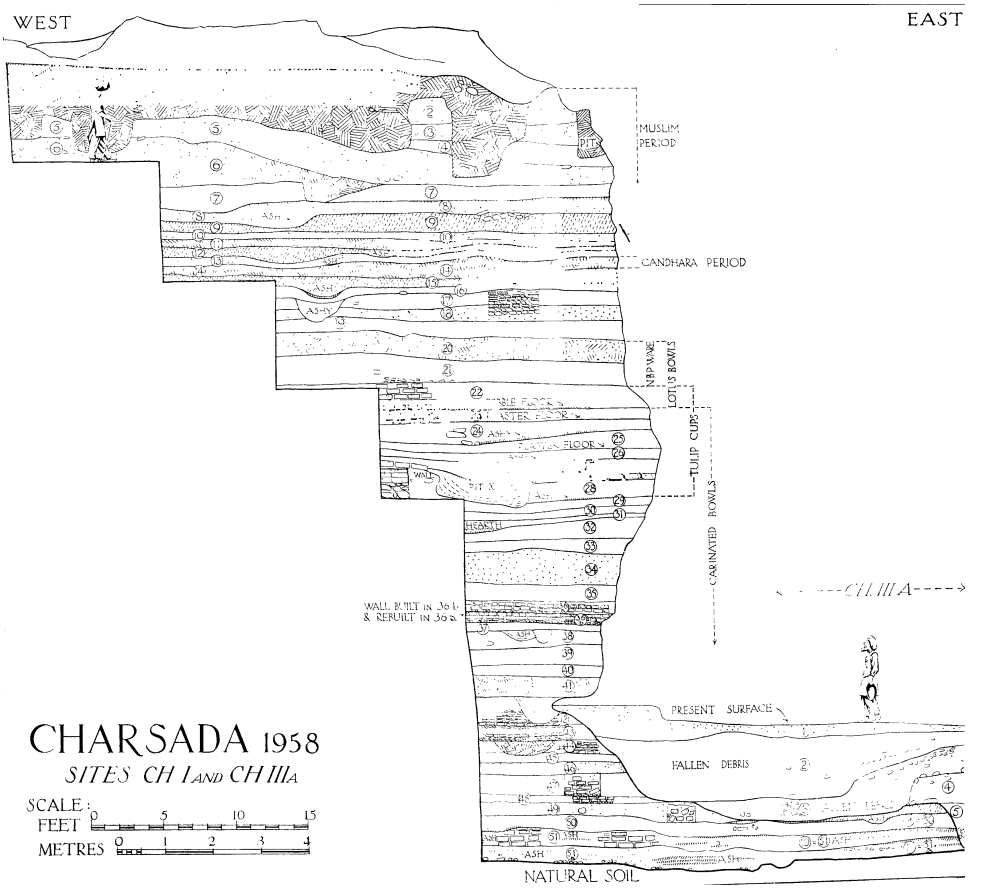



**Figure 16.6** Charsadda, Bala Hisar, section of trench Ch. I (after Wheeler 1962: pl. II) (Courtesy DOAM).

Iron Age (thus earlier than Wheeler's chronology). Layers (38)–(35) are relatively unrepresentative, and I am inclined to envisage the possibility of a substantial gap in the cultural sequence, or the presence of a major negative intervention, which was possibly not detected by the excavators. This gap, which corresponds to the chronological phase between 8th and 6th centuries BCE, is present at Barikot as a long period of abandonment. In contrast, layers (34)–(25) exhibit materials comparable to Barikot Macrophase 2. This phase might start a bit earlier (5th–4th century BCE) and end a bit later than was proposed by Wheeler (late-4th/3rd BCE). We might then have expected another gap in terms of the cultural and/or physical sequence. In fact, layers (24)–(19) exhibit material that is roughly comparable with the horizon of Barikot Macrophase 3a (Indo-Greek) (including pyramidal loom weights), and might therefore be tentatively dated to a slightly later chronology (mid-2nd century BCE). Moreover, the idea that the lower trench Ch. III had exposed the ditch of the ancient Puṣkalāvatī, associated with the siege of Alexander's army, has been ruled out as its filling is dated to the middle of the 1st millennium BCE (Coningham and Ihsan Ali 2007: 48, 96–98). The postholes complex identified by Wheeler as the palisade and bridge of a postern gate, was rejected as a later feature (ibid.). The true 'Indo-Greek' *facies* at Charsadda is represented only by the other two trenches excavated by Wheeler, Ch. IV and Ch. V., whose materials, although coherent, are relatively scarce.

More information is forthcoming from the 'second Puṣkalāvatī' excavated at the site of Shaikhan-dheri, slightly north of Bala Hisar, in 1963 and 1964 (Dani 1965–1966) (Figure 16.7). This fortified 'grid-planned' city (whose wall ramparts were

**Figure 16.7** Aerial photograph of Shaikhan-dheri (after Wheeler 1962: pl. XV) (Courtesy DOAM).

not excavated; see ibid.: 22) yielded an archaeological sequence which is by and large compatible with the one revealed at Barikot. What is important to note is that although the exposed structural evidence of the Indo-Greek period is extremely scarce, and the information is basically coming from deep trial trenches, the numismatic assemblage of the site makes it possible finally to determine a point which will have direct implications for the history of the site at Barikot. In fact, on the basis of numismatic finds, Shaikhan-dheri phase 1 (= Period VI) can be dated certainly after Menander, but *before* Antialkidas, that is after 130 BCE and before 115 BCE (see Allchin 1979: 756; Dani 1965–1966: 37–38) (Figures 16.11–16.13).

## BARIKOT AND THE EVIDENCE FROM SWAT

Before analysing in detail the evidence from this site, and its connections with the nearby settlements of Udegram and Barama, I would like to anticipate some points concerning the major chronological and structural links between Barikot and Shaikhan-dheri, as part of the spatial dialectic between mountains and plains in early historic times. From the 2014–2017 excavation at Barikot (Figures 16.8–16.9) we know that the city, founded during a very well defined Achaemenid acculturation phase (c. 6th–5th century BCE; Olivieri and Iori 2019), was fortified at least four

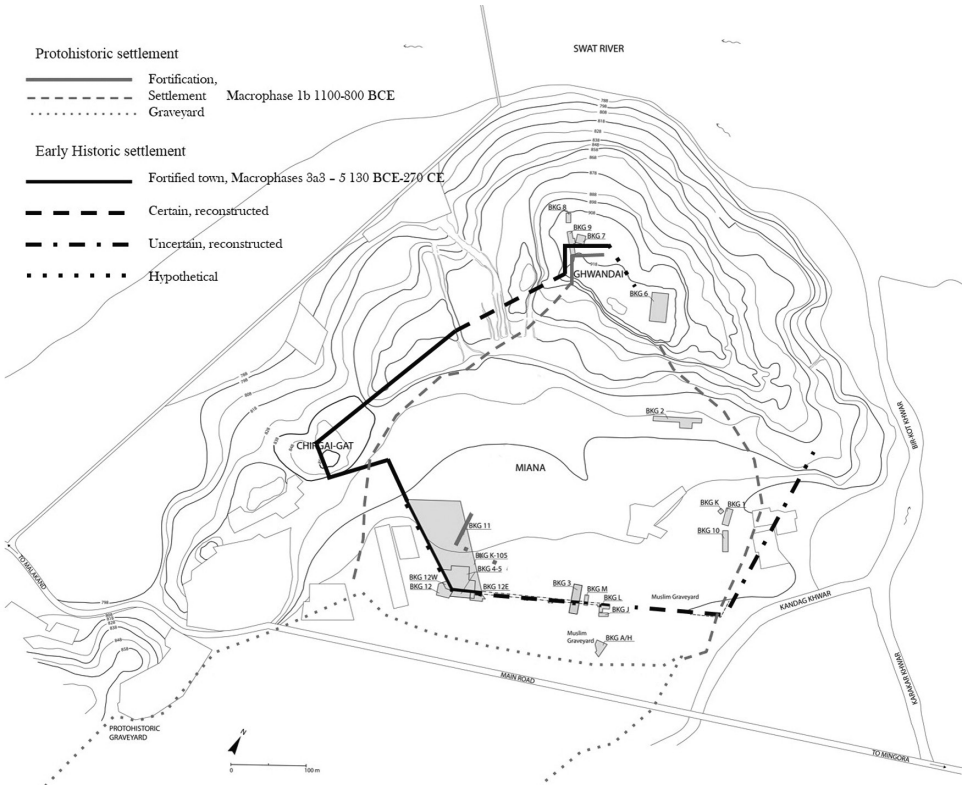



**Figure 16.8** Barikot, general map (Courtesy ISMEO).

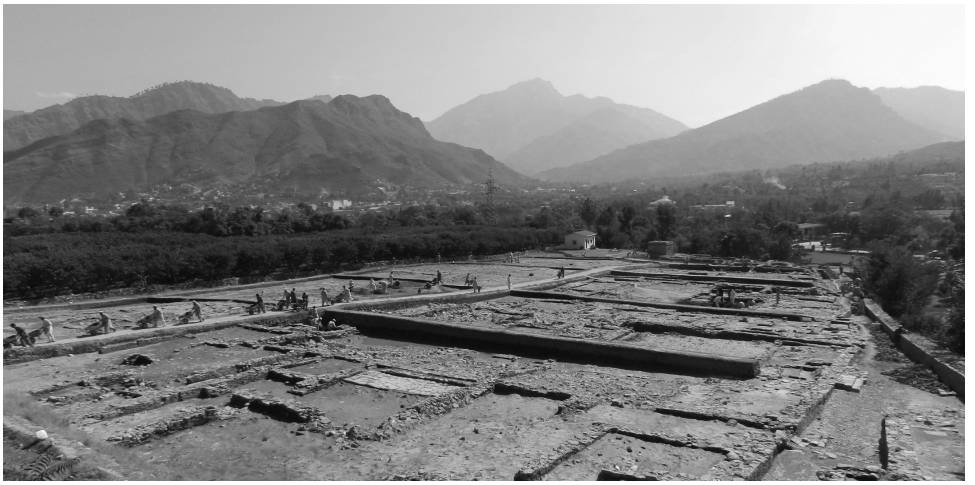


**Figure 16.9** Barikot, trench BKG 11 seen from N (Courtesy ISMEO).

times, before the urban circuit fell into disrepair and was abandoned during the so-called *pax kusanica* in the mid-2nd century CE.

The first fortification is revealed by a large inner earthen rampart with an upper palisade dated to the early Iron Age (last phase and abandonment: 1251–1056 and 1125–926 95.4% 2σ cal BCE). In the outer sector of the excavation, the remains of the early Iron Age settlement were sealed by a thick silty clayish deposit, which has been interpreted as the levelling of a large rammed earth structure upon which the Indo-Greek defensive wall was built. This thick deposit, dated 369–201 100% 2σ cal BCE, covered the upper edges of the defensive ditch, proving that the ditch was already cut, i.e. the area was already fortified, when the area was further disturbed by the construction of the Indo-Greek fortification.[14] Is this proof of the fortification of the polis Bazira (Βάζιρα) built by the Macedonians (see below)?

In one of the structural phases associated with Indo-Greek material (Macrophase 3a3) the massive stone masonry city wall (Figure 16.10) was built. The lower city and the acropolis were enclosed by a massive defensive wall with rectangular bastions every 28 meters, the equivalent of 100 Attic feet, 1 *pléthron*. To date, the urban wall represents the only excavated Indo-Greek urban defensive structure in South Asia (Callieri 2007). The foundation of the wall is associated with a burial pit which was dug in the external trampling surface immediately *ante* the erection of the city wall a few meters from the south-western corner bastion. The pit contained the remains of a young human female and of a small mammal, probably a dog, along with a vessel found almost intact (Callieri et al. 1992; Ricci et al. 2000; Iori, forthcoming). At first sight, one may think of a φαρμακός ritual, which is extensively—albeit controversially—reported in the Hellenistic and early Roman world (Hughes 1991). The weighted average date of the samples of the human remains is 182–45 BCE 100% 2σ cal (163–128 BCE 40% 1σ cal) (Figures 16.11– 16.13).

The combined archaeological data suggest that with the construction of the urban circuit important structural events took place after 150 BCE, and that either Menander or his successors (Zoilos I, Antialkidas, Lysias) may have had a role in it.

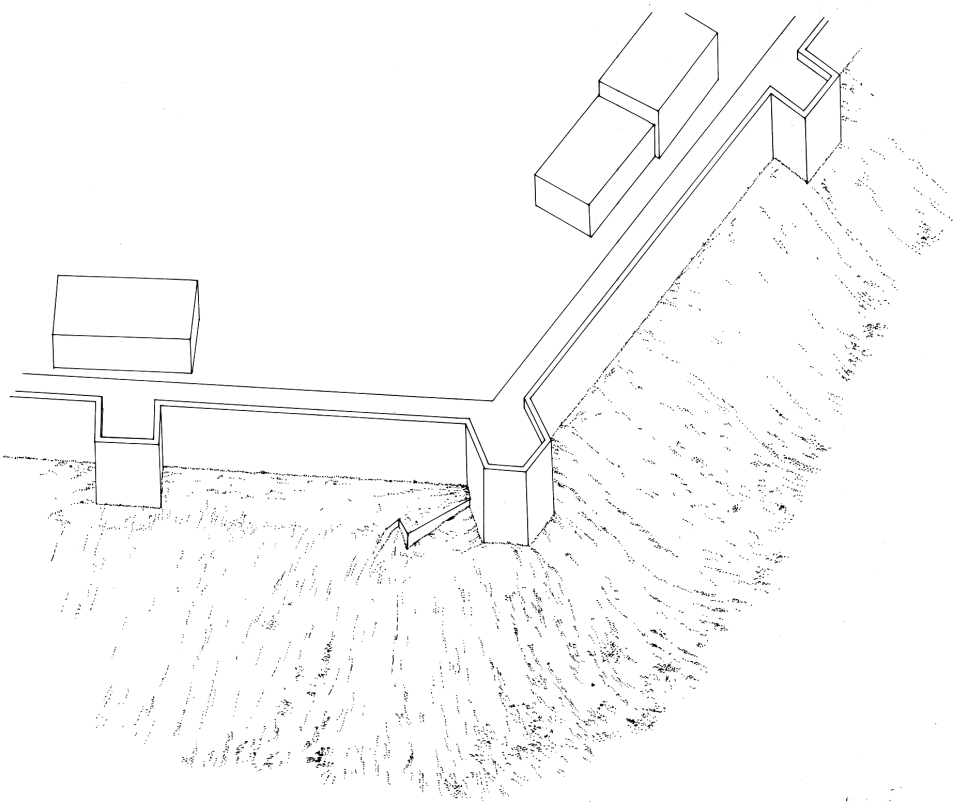


**Figure 16.10** Barikot, Indo-Greek wall, SW corner (Drawings by F. Martore) (Courtesy ISMEO).

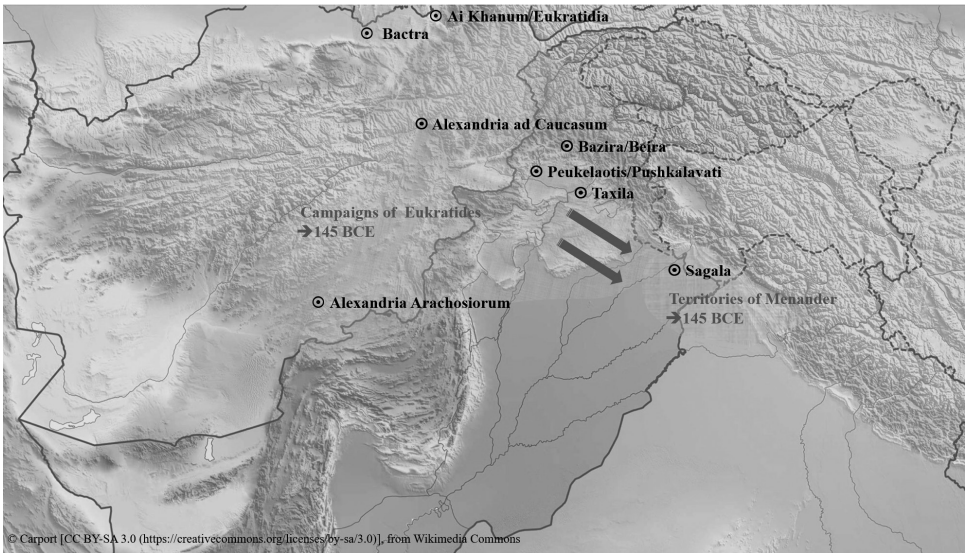



**Figure 16.11** Historical maps of Gandhāra and NW India c. 150–130 BCE.

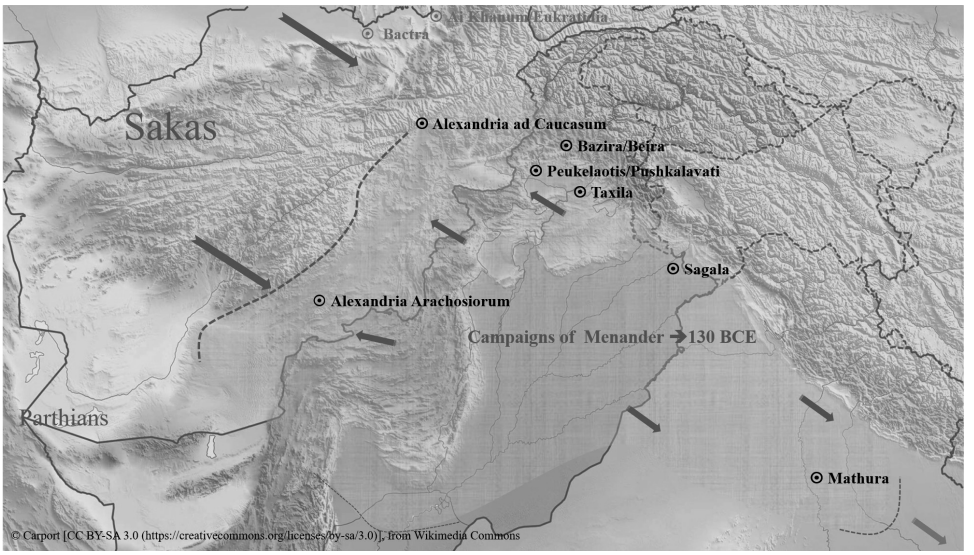



**Figure 16.12** Historical maps of Gandhāra and NW India c. 150–130 BCE.

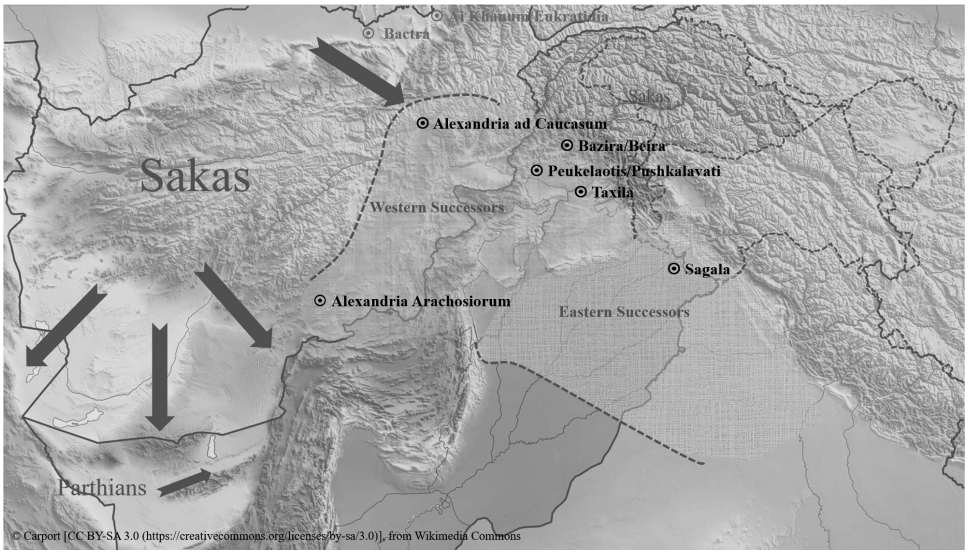



**Figure 16.13** Historical maps of Gandhāra and NW India post 130 BC.

The fortification was later rebuilt and ameliorated following a destructive earthquake at the time of the Saka-Parthians, c. 50 BCE–50 CE according to the weighted average of the C14 evidence (Olivieri 2015a, Iori et al. 2015).

The political decision and the associated financial investment related to the Indo-Greek fortification can be only understood in the framework of a major political event, possibly the same as was behind the foundation of the new city of Puṣkalāvatī

at Shaikhan-dheri. The new masonry urban fortification at Barikot was certainly the marker of a newly established system of power. Even when one considers the event simply as the reinforcement of an existing stronghold, the scale of such reinforcement and the economic implications of such a decision have a magnitude that cannot be explained by an ordinary maintenance programme.

Possible proof that a larger programme of power consolidation had been launched is the coeval reconstruction of the Dharmarājika stupa at one of the most important Buddhist sanctuaries of Gandhāra at Butkara I, c. 20 kilometres north-east of Barikot (see below).

On the basis of the archaeological data, we can thus now date the fortification to the second half of the 2nd century BCE, most probably *before* the reign of Antialkidas. When trying to contextualize the numismatic assemblage from Barikot, among 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 after the construction of the defensive wall. The first is a coin of Zoilos I (Æ, MacDowall and Callieri 2004, 54, fn. 4; 84; c. 130–120 BCE). It was found on the surface of a floor c. 0.84 metres above the filling of the foundation trench of the fortification inside the city. The second coin belongs to Antialkidas (Ar, BKG 3534; 2016). The latter is the earliest coin found in a context associated with the fortification wall (when the latter was *already* functioning).

The relative scale of the two sites, Barikot and Shaikhan-dheri, is pretty uneven. In the latter case we are dealing with a regional capital (c. 48 hectares) dominating the Gandhāran stretch of the 'Northern Route' to India, while Barikot was a local stronghold (c. 12 hectares) whose role can only be understood when one analyses the special economic role that it played in the spatial strategy of Indo-Greek kings (Figure 16.1).

## The Greek antecedents of Barikot

The name of the ancient city, Vajirasthāna, is mentioned in a Brāhmī-śāradā inscription (c. 10th century CE) found on the hill-top at Barikot (studied by O. von Hinüber in Callieri and Olivieri 2020, Olivieri and Iori 2019). The medieval toponym can be interpreted as 'the *sthāna* ([fortified] place) of Vajra/Vajira'. The first to associate Barikot with Βάζιρα/Beira the polis or *urbs opulenta* besieged and conquered by Alexander in the autumn of 327 BCE (Arrian, *An.* 4.27.5–9; Cur. *Hist.* 8.10.22) was Aurel Stein (Stein 1930: 28–29). Later on it was Giuseppe Tucci who convincingly associated the early toponym 'Vajirasthāna' with the Greek form Βάζιρα.[15] The missing element for the association between Barikot and Βάζιρα/Beira was provided by Stefan Baums: "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 [Beira] seems extremely precise, thus revealing that the source that he used was particularly reliable on this point" (Tribulato and Olivieri 2017: 129; see also Baums 2019: 169–170).

According to Arrian (*An.* 4.28. 4) "[Alexander] built fortresses [*phrouria*] at Ora [modern Udegram, see below] and Massaga for the defence of the region, and fortified the city of Bazira" (τὰ μὲν δὴ Ὦρα καὶ τὰ Μάσσαγα φρούρια ἐποίησεν ἐπὶ τῇ χώρᾳ, τὰ Βάζιρα δὲ ⟨τὴν⟩ πόλιν ἐξετείχισε) (see Callieri 2007; Capdetrey 2012, 325 fn. 47). On the basis of the economic importance of the Swat valley, the detour of Alexander in Swat

can be explained primarily by the necessity of providing his army with food resources. He entered Swat at the time of the second harvest, and we know from a first-hand source (Ptolemy [I Soter]), that c. 230,000 oxen were seized in Swat by the Macedonians (Arr., *An*., 4.25.4).[16] He wanted to deprive his enemies of resources, and create a secure rear zone, both strategically and logistically, for the establishment of Macedonian control, which in his mind was not going to be ephemeral. Thus, the Alexandrian fortification of Βάζιρα may have had the function of protecting an agrarian colony with a strong local component (perhaps a kind of *katoikía*) (See Capdetrey 2012: 322, fn. 17). Moreover, if one considers that the information on Beira/Βάζιρα contained in Curtius's *Historiae* is potentially first-hand, the definition of *opulenta* (Cur., *Hist*., 8.10.2), a term clearly indicating agricultural wealth, acquires particular value. The Curtius thesaurus shows that the term *opulenta* is attributed three times to a region (conveying the abundance of resources), Bactria (twice) and Persis, and four times to a city, Tarsus, Babylon, Persepolis and Beira (Therasse 1976).[17] The mention of Beira/Βάζιρα among the major metropoleis of the ancient world is undoubtedly surprising!

In summary, if our reconstruction is correct, Swat was placed under Indo-Greek control by the successors of Menander during the consolidation of their Indian territories, not long after the fall of Ai Khanoum (145 BCE; see Callieri 2000: 159). The reason for their huge military investment (the fortification at Barikot) was the necessity of creating a strategic bulwark to protect a crucial economic pool for the new Puṣkalāvatī. The importance of the ancient city at Barikot can be explained by its exceptionally wealthy natural environment, within the economic/strategic space of a macro-regional political power, and the associated high demand for resources.

## A digression on chronology

A thick series of C14 dates (24 samples) helped to create at Barikot a statistically stable chronological sequence (for conventional radiocarbon ages see Figures 16.14-16.15 [68% confidence level, 1σ cal.]. Due to the presence of 'wiggles', in particular, in the periods 700–400 BCE and 350–200 BCE, the calibration curve displays flat behaviour, which make the single absolute determination quite uncertain. These plateaux, well known to anyone working on these chronologies, are due to solar activity and oscillation of the helio-geomagnetic field. But close interaction between archaeologists and physicists at Barikot may have contributed to mitigating this problem. The compact sequence of samples allowed us to construct a calibrated Bayesian model utilizing known anteriority/posteriority relationships, grouping of samples belonging to the same phase (Olivieri et al. 2019). The stratigraphic and archaeological data together with the absolute dates obtained from organics (mostly charred seeds) generated a cultural sequence organized per macrophases, i.e. groups of structural periods which share a coherent cultural assemblage (see section in Figure 16.16). The evidence from the early city 6th century BCE–1st century CE) is summarized in Table 16.1.

## The non-Greek component: pottery

A red line throughout the whole early historic phases is represented by the continuity of Indic materials, pottery, including cultic terracotta figurines, both human and

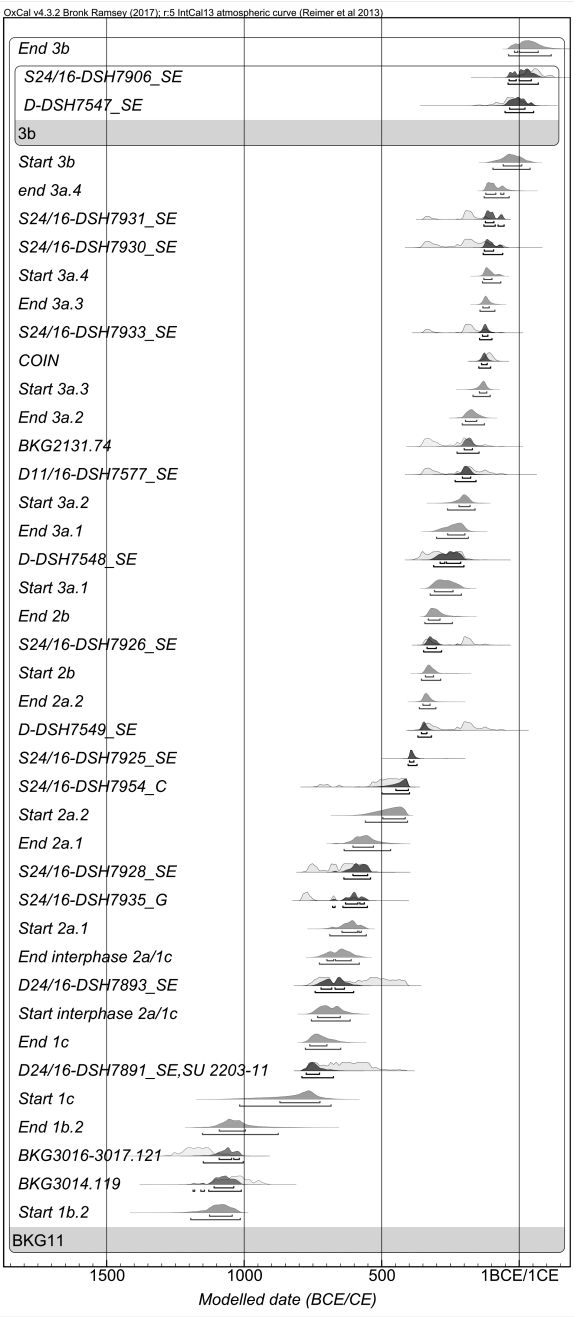



**Figure 16.14** Barikot: modelled radiocarbon sequence trench BKG 11 (Courtesy ISMEO/CIRCE).

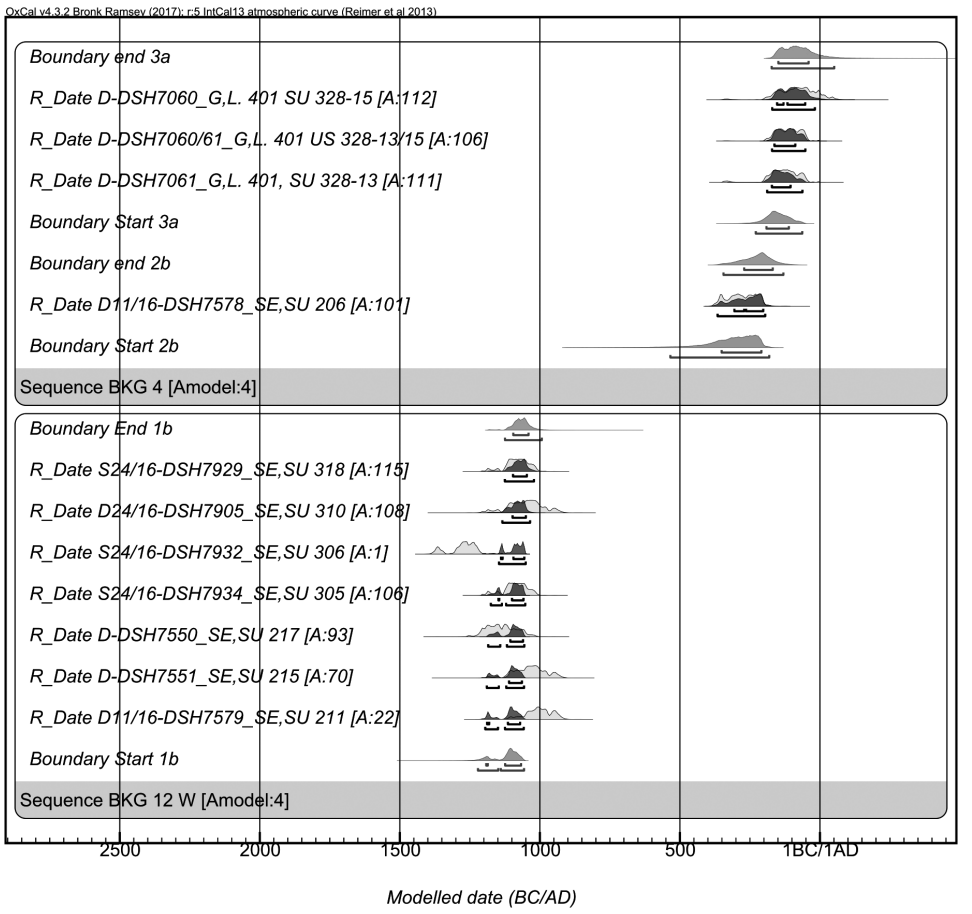



**Figure 16.15** Barikot: modelled radiocarbon sequence trench BKG 12 (Courtesy ISMEO/CIRCE).

animal, that was already present at Barikot in the urban phases prior to the establishment of the mid-2nd century BCE fortification. Interestingly, such material is already present during the Achaemenid acculturation phase (Macrophase 2a), when the ceramic assemblage features elements of both Iranic and Indic origin. The Iranic pottery tradition is mainly represented by tableware ('Tulip bowls'), and, later, by a black-on-red painted ware also known as 'Eastern Triangle Ware' (Dittmann 1984, Iori 2018). On the other hand, the Indic tradition is detectable in a rich accumulation of common ware, such as carinated cooking pots, pear-shaped water jugs, truncated-conical cups, and carinated *thālīs*.

The first introduction of Indic forms in Gandhāra thus seems to have occurred at a moment when the region was part of a larger political entity, the Achaemenian Empire, and when, as a consequence, the demand for goods had increased and transregional trade had expanded. It is worth noting that this is the first time that Indic pottery material, the same types as were documented in the early levels of Taxila-Bhir Mound, has been positively documented in the territories of the cis-Indus.

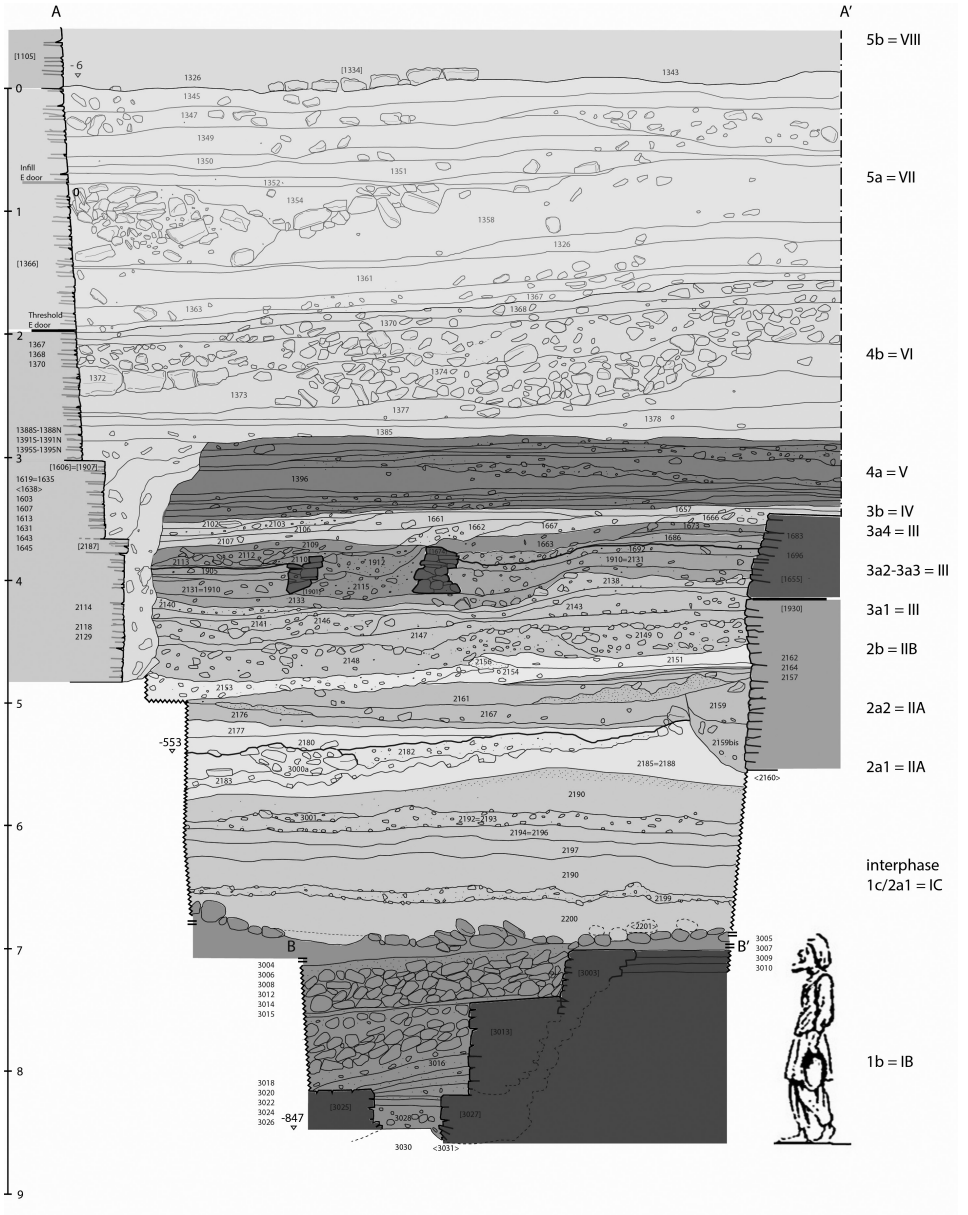



**Figure 16.16** Barikot, section of trench BKG 11, sector K (Courtesy ISMEO).

In Macrophase 2b (mid-4th–3rd century BCE), apart from the appearance of Indic terracotta figurines, and the effective disappearance of Iranic vessels, the post-300 BCE assemblage features a continuity of Indic pottery forms.

## The Greek component: pottery

Rather significantly, in a structural phase securely dated ante-2nd century BCE (Macrophase 3a1), thus in a pre-Indo-Greek context, the ceramic assemblage of Barikot shows, alongside the continuity of Indic ware, a clear change marked by the introduction of some Hellenistic pottery forms (such as fish-plates, krater-like vessels), strongly suggesting the existence of a trade network between the Mauryas and their Hellenized neighbours, the Graeco-Bactrians. The same trend is confirmed at Taxila-Bhir Mound, where, as we have seen, Hellenistic pottery material is documented as early as Stratum III (see above).

As clearly highlighted by Callieri (2007), the Indo-Greek period at Barikot, while showing a continuity of Indic ware (and rare occurrences also of Indic terracottas), also marks a sharp change in terms of the relative quantity through the massive introduction of Hellenistic forms along with the 'Hellenistic Ladies' terracotta figurines (Figure 16.17) and related materials (see above). Fish-plates are the most frequent forms along with hemispherical bowls with flat everted (sometimes painted) horizontal rims.[18] Fish-plates are made in fine 'clinky' ware, with triangular to sub-triangular rims, and are normally red-slipped (rarely golden-slipped) (Maritan et al. 2018).[19] Deep goblets and black-on-red painted bowls/dishes (mainly

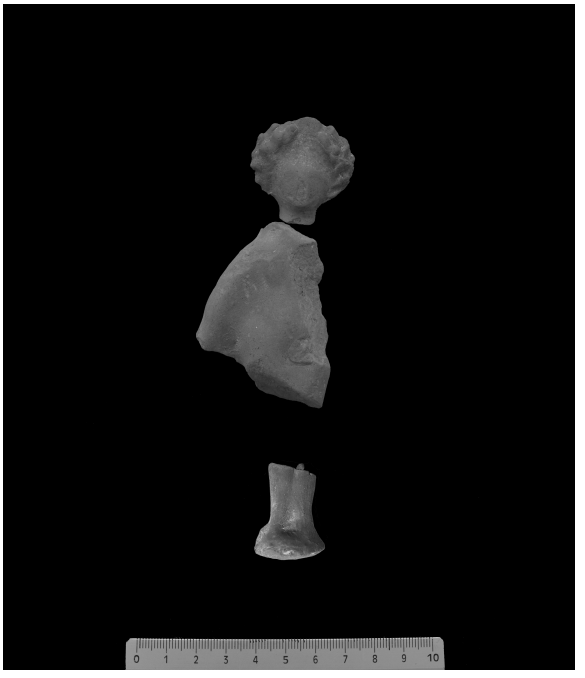



**Figure 16.17** Barikot, Indo-Greek period, parts of a 'Hellenistic Lady' terracotta figurine (Courtesy ISMEO).

hatched or cross-hatched triangles and triangle patterns filled with parallel wavy lines) and vegetal motifs are also attested.[20] Interestingly, 'lotus bowls', a typical and well-established class of stamped ware, can be backdated by the Barikot evidence, in accordance with Shaikhan-dheri, to the Indo-Greek phases.[21] A unique grey ware (black-slipped) *krater*-type vessel, unlike *kraters* from Ai Khanoum, which were mostly red ware and wheel-turned (Lyonnet 2013: figs. 96–100), was mould-made and then wheel-turned.[22]

## The multi-lingual community

Since Macrophase 2a we have noticed an interesting trend in the pottery assemblages. Exotic forms—starting with the Iranic pottery—are represented mostly by open forms, serving vessels and tableware, while pottery containers and cooking pots, mostly closed forms, belong to the Indic tradition.

The same trend is observable in the Indo-Greek acculturation phase. In Macrophase 3a the archaeological data depict a social context where an élite bearing Greek names lived in a multi-lingual and probably multi-ethnic community. This is the picture offered by the small corpus of Greek (Tribulato and Olivieri 2017) and Brāhmī inscriptions on sherds (Baums in Callieri and Olivieri 2020.), and by a sherd with a few Aramaic painted letters (Figure 16.18) (Zellmann-Rohrer and Olivieri 2019). In total in the Indo-Greek acculturation phase (Macrophase 3a) Greek and Brāhmī scripts are equally represented at Barikot (with three fragments each) but, interestingly, are incised on different types of vessel forms. While Greek inscriptions are confined to Hellenistic tableware, Brāhmī appears on sherds from typical Indic vessels. This dichotomy might be a reflection of social and ethnic stratification.[23]

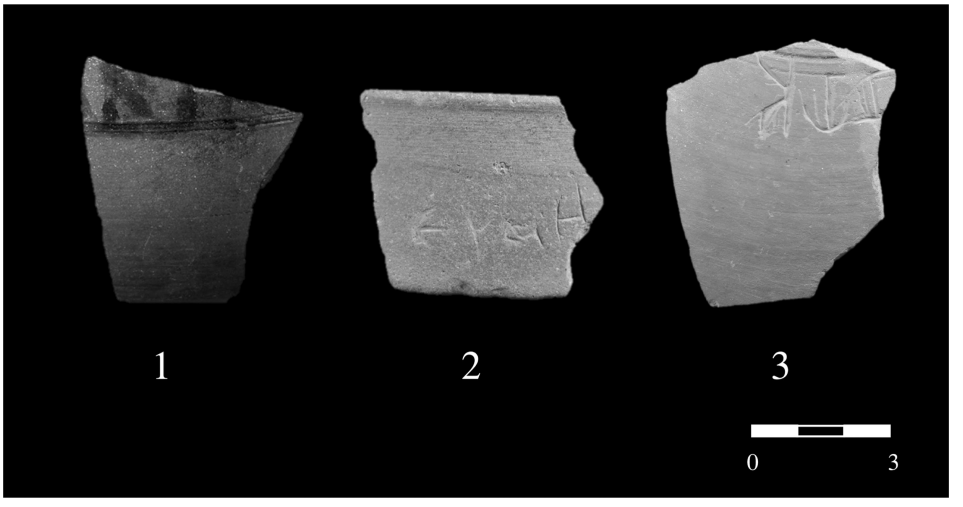



**Figure 16.18** Barikot, Indo-Greek period, three sherds, three scripts (Courtesy ISMEO).

## Udegram[24]

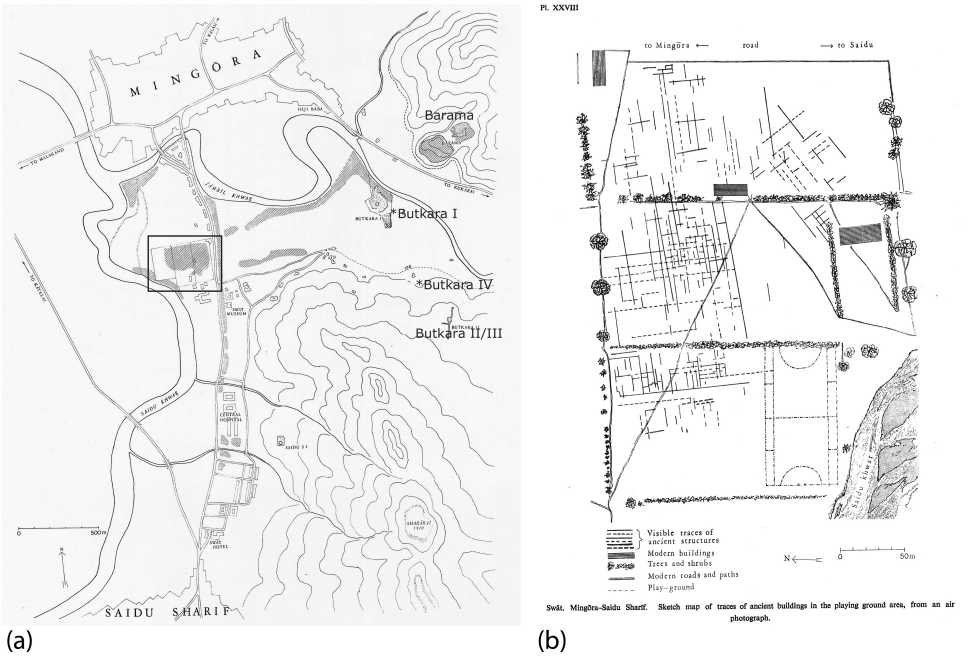
When putting together the scarce information available from the report (Gullini 1962: 236–237), we may hypothesize that the earliest occupation phases at Udegram (Strata VIII and VII) find a parallel in Barikot Macrophases 2a–2b. Strata VI and V are considered 'Indo-Greek', which means that they may overlap Barikot Macrophases 2b–3a. From a floor level of Stratum V, a hoard of 23 punch-marked coins was found inside a small jug (Gullini 1962: 325, fn. 43). In the same stratum (which does not mean the same layer) was recovered a sherd with an incomplete inscribed Greek name NOY$^{vac.}$[ ] (Pugliese Carratelli 1966: 35–36; Rougemont 2012: 87 = *IK* 297; Tribulato and Olivieri 2017). Moreover, it was possible to positively compare a few documented pottery materials with those of Barikot Macrophases 3a (Iori 2018: 74–75).

In any case, we can certainly confirm the existence in the mid-2nd century BCE of an urban settlement at the site, whose extent, based on the orography and the presence of a citadel on the Mount Raja Gira, was of about 35 hectares., far larger than Barikot. In a recent work I have proposed the idea that Udegram was "a larger centre, similar to a subordinate or dependant *polis*" (Olivieri 2018: 187), possibly the seat of a major aristocratic family of the valley, the royal house of Oḍi, on which I will briefly talk in the last part of this contribution.

## Barama and Butkara I

Of a different order is the situation of the pioneering small-scale work done by D. Faccenna at Barama (Faccenna 1964–1965; Iori 2016, Id. 2019). Barama is a large flat artificial mound formed by two terraces separated by a moat or vallum. The site yielded a sequence of six major structural periods (6–1) running – with interruptions – from the late Iron Age (Period 6) to the late Kushan period. Two noncalibrated radiocarbon dates from the site (Period 4: ca. 370 BCE; Period 6: ca. 635 BCE) broadly confirm the early historic occupation of the site. The site, overlooking from the north the course of Jambil river, a left-bank tributary of Swat, is located just opposite the Buddhist site of Butkara I. It has been proposed (in Iori 2016) that Barama was actually the 'upper town' of a larger urban settlement of c.100 hectares and that Butkara I was an urban Buddhist sanctuary located just at the south-eastern outskirts of it. The idea of the existence of a major city exactly under the modern town of Mingora, at the confluence of Jambil, Saidu and Swat, in the larger alluvial zone of the Swat valley, had already been mooted by Faccenna (Faccenna 1980–1981: 727–745, 751–756) (Figure 16.19). The hypothesis was resumed after an initial study of the pottery materials from Period 4 which undeniably present direct comparisons with the materials of Macrophase 3a of Barikot (Iori 2018: 64–73). In a note to Iori 2016 (100–101), I proposed to confirm Faccenna's suggestion of linking the Periods 5–1 of Barama with Periods I–V of Butkara I (Faccenna 1980–1981: 751, fn. 3). The major implication of the reconstruction is the association of Barama 4 with Butkara I G.St. 2, and the associated chronology provided by Barikot 3a, i.e. mid-2nd century BCE.

"G.St. 2" stands for "first reconstruction of the Great Stupa", i.e. the Dharmarājika stupa of Butkara I. The original construction of the stupa is dated by Faccenna to the mid-3rd century BCE (see also Falk 2005), while his first reconstruction (G.St. 2)




(a) (b)

**Figure 16.19** a – Mingora urban area: location of the major archaeological sites. The red box indicates the position of Fig. 19b (after Faccenna 1980–1981: pl. XXVII) (Courtesy ISMEO). b – Mingora urban area: ancient urban gridiron after an aerial photograph (after Faccenna 1980–1981: pl. XXVIII) (Courtesy ISMEO).

with its paved floor F5, is dated by a coin of Menander intentionally deposited "as an act of consecration" under the podium built around the drum of the stupa. Under floor F4, which is the original paved floor of G.St. 3 (the second reconstruction) was laid a coin of Strato I. G.St. 3 is quite coherently dated by a set of coins of Azes II (Faccenna 2003: 279–282; 283–286).

## The local component: names, burial features and DNA

At Barikot, the material culture of the Hellenistic matrix was confined to the limits of the élite's needs and habits, including coinage, writing, military architecture, the system of measurements, luxury items and a few technical implements.[25] Obviously, a major role was played by the local component, the most elusive one. In a splendid article S. Baums (2018b: 40–41, tab. 1.2) has summarized the question from the perspective of the epigraphical record. Greek, Indic, hybrid names and local names are used by individuals within the same family lineage: "We have to conclude […] that although the use of Greek names in Gandhāra bespeaks the continuing historical memory and prestige of the Indo-Greek rulers (especially Menander), we can deduce nothing from it about the ethnicity or cultural self-identification of their bearers […]" (ibid.: 41). The epigraphical records under consideration are mainly the dedicatory inscriptions to Buddhist establishments (i.e. stupas, shrines) by the members of the

houses of Oḍi (Swat) and Apraca (Bajaur?). The former are dated to the first quarter of the 1st century CE, while the latter are slightly earlier (Baums 2012: 64–65).[26] The role of these local princes as 'all-weather' *clientes* of the foreign kings (whether they were Greek, Saka or Kushan) is clearly attested by the inscription of the Oḍi prince Senavarma who, by mentioning his political brotherhood with the scion of Kujula Kadphises, signed the acceptance of a political pact with the new ruling entity. Were these local families Saka, Indian, or admixed with Greek ancestry? None of them. They were not only probably local, but also deep-rooted in Swat.

I cannot refrain from introducing here the discovery of an aristocratic multiple burial near the sanctuary of Butkara I (Olivieri 2019) (Figure 16.20).[27] It is a burial *ad sanctos*, which includes a tripartite vaulted structure with two double-chambered cells flanking a central what may be a decomposition cell, and at least two square cenotaphs. The DNA of five of the 20 skeletons has been analysed. Three individuals, deposed in the central chamber, show family relatedness: a male individual (167–46 cal BCE 2-σ) has a first-degree relatedness (mother-son) with a female (context date 200–100 BCE), and a second/third-degree relatedness with another male individual (41 BCE–57 CE cal. 2-σ). The DNA results are now

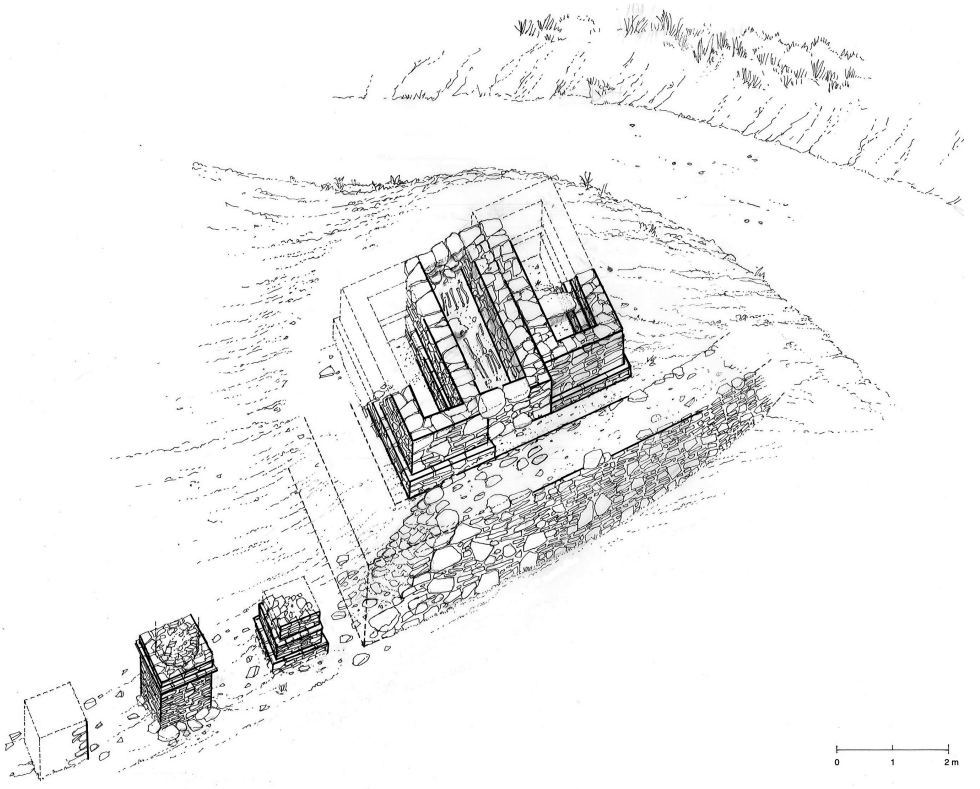



**Figure 16.20** Butkara IV, the tripartite burial monument (Drawings by F. Martore) (Courtesy ISMEO).

available (Narasihman et al. 2019). In synthesis, these individuals have a mixed Iranian-Ancient Steppe-South Asian ancestry. Statistically, the admixture shows a significant increase in indigenous South Asian ancestry in comparison to Swat individuals from late Bronze-early Iron Age, to whom the five analysed individuals nevertheless maintain both a strong genetic relatedness, and, more interestingly, a parallel burial tradition.

## NOTES

1 For onomastic names, titles, and calendrical terminology see Muccioli 2013, Baums 2018a, Id. 2018b.

2 The reasons are also linked to the unavoidable difference in stratigraphic processual behaviour between settlements and cultic complexes, an issue which has been elaborated in Olivieri 2017.

3 With the exception of Hayatabad, which is the most promising site discovered in recent years, data on this period from these sites are infrequent or unpublished (e.g. Gor-khuttree). Therefore, they are not included in the discussion. No data are available from the excavations at Ohind (Hund) near the junction between Indus and Kabul rivers. The impressive harvest of data on the Early Historic settlements of the Peshawar Plain (Ihsan Ali 2003) is unfortunately conditioned for these phases, by a weak chronology. From Pir Manakrai comes an inscribed red ware vessel with a Kharoṣṭhī and Greek onomastic inscription ([B](*u)dha[va]masa Budhaśravaputrasa + ? o, and [H](*e)r[a]maasa) (Dar 2015: 18, pl. XXX; CKI 1169 and 1170). The important site of Akra (Bannu Basin), which is particularly relevant for the Achaemenid acculturation phase, is analysed in detail by C. Petrie in this volume.

4 The list should include the existence of an Indo-Greek mint (Callieri 1995: 298), that others will discuss in this volume.

5 But also from Bhir Mound Strata II and I (see below).

6 Pyramidal loom-weights: Dani 1965–1966: pl. XLII; Ch. III (mixed) and Ch. I, layers (22)–(24). Barikot, trench BKG 7, Period II (Indo-Greek) (Olivieri in Callieri et al. 2000: 194–195, fig. 5). *Lásana* (λάσανα) pot-stands appear at Sirkap, and Aziz-dheri from Saka-Parthian period, but are already represented already in Indo-Greek phases at Barikot, and at Shaikhan-dheri (?). Rotary querns (*machinae*) are present at Barikot only from Saka-Parthian period.

7 Ghosh 1957–1948: pls. XIII–XIV; Wheeler 1962: 104; Dani 1965–1966: pls. XXIII, XXVIII–XXX, XXXIII; Callieri 2000: 150–151. See Menegazzi 2014.

8 The pottery of Barama and Udegram (surviving documentation) has been studied by E. Iori (2015, 2019).

9 For our study period, data obtained by pollen and isotope records seem to point to a semi-arid phase with reduced monsoon activity. Direct data on our region are very scarce if not absent (Coningham and Young 2015: 50–52). For the early-historic agricultural production at Charsadda, see Coninghan and Ihsan Ali 2007 (241–245); for Swat see Stacul 1987 and Spengler et al. 2020; see also Young 2003. For Kashmir, see Spate 2019.

10 Initially Marshall was of the opinion that the urban fortification of Sirkap was built around 50 BCE (Marshall 1929: 62), and only later he attributed it to the 'Greek' period.

11 A hypothesis considered also by Marshall: "The site selected by the Bactrian Greeks for their new city embraced part of the extreme western end of the Hathiāl spur together with a small sharply defined plateau on its northern site [Kaccha-kot]" (Marshall 1960: 61). The issue of Kaccha-kot—after the publication of Ghosh 1947–1948, was liquidated by Marshall with the following words: "[…] such roughly defended suburbs were intended

rather for temporary use of caravans, cattle, etc. […]; but it is likely enough that many lower-caste people made their homes there" (Marshall 1960: 84).

12 In our reconstruction Bhir Mound III is associated to Barikot Macrophase 2b, and Bhir Mound II and I to Barikot 3a (see below).

13 The "ergological approach which claims that a higher layer will always follow a lower immediately in time" (Dittmann 1984: 156).

14 This is one of those 'negative interfaces' that archaeologists may occasionally fail to detect and interpret (visible in Fig. 15). The enormous implications of this specific case on the past reconstruction of the entire Swat sequence, and especially of the transition from early Iron Age and the so-called 'Early Urban Phase', have been extensively elaborated in Olivieri and Iori 2019.

15 See Stein 1930; Tucci 1958; Tucci 1977; Olivieri 1996; Rapin and Grenet 2018, 171–172; see also Olivieri and Iori 2019. I would like to thank here professors Claudia Antonetti (Ca' Foscari, Venice), Stefan Baums (LMU, Munich), Matteo De Chiara (INALCO, Paris), Llewin Morgan (Brasenose College, Oxford), and Luisa Prandi (Verona) for the many fruitful talks on these themes.

16 At the time of Alexander's march in Swat the harvesting and storing of seasonal crops had just started (*Bāburnāma* fol. 220–221 [Thackston 2002, 268]: "It was the end of the year, only a day or two left in Pisces. The lowland grain had all been taken in, and if we went now to Swat the soldiers would not find any grain and would suffer. […] Next year we should come earlier, at harvest time […]."

17 The research was done by L. Prandi, who kindly shared this information with me.

18 Lyonnet 2013: 179–190, figs. 101–108; Callieri 2000: 857–876, figs. 1 c–d.

19 See Lyonnet 2013: fig. 101, 9–10; fig. 104, 1; fig. 101, 2–5; fig. 102, 1–7; figs. 105; figs. 106 1–2; figs. 108 2–8.

20 Goblets: Lyonnet 2013: fig. 120, 1–6. Painted ware: Callieri 2000: 861, fig. 1 a–d; Wheeler 1962: fig. 21 126. The typical leaf and comb-like patterns are attested up to the Saka-Parthian layers at Barikot (Iori et al. 2015).

21 Callieri 2000: 867–868, fig. 4.b–g; Callieri 2007: 150; Dani 1965–66: 17–214; Wheeler 1962: 40–41.

22 See Rotroff 1997: 139, figs. 607–608. See also Lyonnet 2013: fig. 100, 9–10.

23 On this see Tribulato and Olivieri 2017: 129–130. The separation is even more striking when one looks at the ceramic materials from Ai Khanoum. 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 the segment of the population in charge of it, was—at the Graeco-Bactrian Ai Khanoum, in contrast to Indo-Greek Barikot—sharply separated from the residential dimension (see Lyonnet 2013; see also Fussman 1993: 91).

24 For the identification of the toponym (Ora - Oḍi - Udyāna) see Stein 1930, Tucci 1958, Olivieri 1996, and lastly Rapin and Grenet 2018. G. Gullini on numismatic grounds identified Strata VI and V as Indo-Greek (Gullini 1962). The coins from Udegram are not yet published (M. Alram, ongoing study). On Gullini's stratigraphy, see Olivieri 2018: fn. 16. Lastly, see Iori 2018: 26–28.

25 Whose diffusion occurred only from the Saka-Parthian period onwards.

26 All the epigraphical record come from the antiquary collection. The association of the Apraca texts with Bajaur is based on indirect information. Only for two Oḍi inscriptions are the places of provenance known, and both are in Swat (CKI 334 and CKI 401; Baums 2012).

27 The site, now named Butkara IV, was excavated by M. Taddei in 1963, and never published (apart from a detailed mention in Tucci 1977: 23–25). It is located some 600 metres south-east of Butkara I in the extreme periphery of the ancient city.

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