

The Geography of Gandhāran Art

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Finally, and fundamentally, we wish to express our sincere thanks to the Bagri Foundation and to Neil Kreitman, whose generous support has underpinned the Gandhāra Connections project from the outset.

Editors' note

Orthography

The editors have aimed for broad, but not dogmatic, consistency in orthography and use of diacritics, as well as some other conventions, throughout this book. We have endeavoured to apply a reasonable compromise between widely varying practices, embracing inconsistency where appropriate.

Provenance

The Classical Art Research Centre does not normally publish previously unpublished ancient artefacts which have no recorded provenance and have become known since 1970. We seek to avoid adding value and legitimacy to objects whose origins have not been properly documented. We have chosen to make an exception in the case of the heart-shaped lamp reported to have been found in Malakand District, which Stefan Baums interprets in his paper on the basis of a photograph and information provided to him. There are two reasons for this exception. Firstly, the challenges posed by the loss of provenance information are an explicit focus of the paper, which demonstrates how epigraphic evidence may be used to try and mitigate the problem and partially to re-contextualize unprovenanced objects. Secondly, the historical value of the inscription on this object makes it imperative that it should become available to scholarly discussion.

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Muhammad Habibullah Khan Khattak is former Director of Archaeology, Department of Archaeology and Museums, and former Director (Heritage), Ministry of Information, Broadcasting & National Heritage, Pakistan. He is currently Chief Editor of the journal *Frontier Archaeology*. His most recent excavation and conservation project includes the Buddhist site of Takht-i-Bāhī. He is also involved in a research collaboration between Leicester University and Hazara University on the origin of the Kalash people (Black Kafirs) of Chitral.

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Map of the Greater Gandhāra



region (copyright: Jessie Pons).

Regional workshops and small *stūpas* in the Swat Valley: an analysis of the evidence from Gumbat, Saidu Sharif, and Pānṛ

Pia Brancaccio and Luca Maria Olivieri

Examination of this manifold, complex material calls for reconstruction of the various possible art centres, starting from the Butkara I centre, then going on to Swat and the adjacent valleys and from here proceeding in ever widening circles in the region of Gandhara. Each centre should be considered first in itself, in terms of its own production, and then in terms of the synchronic and diachronic connection, taking great care not to impose our own schemes and theories on the individuality of the work [...]. (D. Faccenna 2003: 305)

Introduction

Our understanding of the geography of Gandhāran sculpture is still modest even though we can access a vast amount of artistic evidence dating to the first four centuries of the Common Era. In fact, the presence of a visual language that is relatively consistent across Gandhāra with shared iconographies, materials, and carving techniques does not facilitate the process of singling out stone working centres and workshops. This study focuses on a series of friezes associated with votive *stūpas* uncovered at the Buddhist sites of Gumbat/Balo Kale, Saidu Sharif and Pānṛ in the Swat valley (Figure 1). These centres were located in proximity to the ancient town of Bazira/Vajīrasthāna (Barikot) and were excavated by the Italian Archaeological Mission in collaboration with the Department of Archaeology, Pakistan respectively in 1960-64 (Pānṛ), 1963-66 (Saidu), and 2011-2012 (Gumbat/Balo Kale), the latter with the Directorate of Archaeology and Museums, Government of Khyber-Pakhtunkwa (Faccenna, Khan, and Nadiem 1993; Faccenna 1995; Olivieri et al. 2014). A comparative analysis of sculptural fragments associated with minor monuments erected at these sites reveals that in the surroundings of Barikot existed a regional ‘workshop’ manufacturing sculpture destined for the minor *stūpas* of the nearby sacred areas of Gumbat, Abbasaheb-china, Pānṛ, and Saidu. This paper will also suggest that a zonal workshop of this kind included artists specializing in the representation of themes of classical inspiration for which distinctive carving practices were also occasionally employed.

Gumbat: the archaeological context

The springboard for this study is a small group of fragmentary friezes and cornices uncovered in 2011-12 at the site of Gumbat/Balo Kale located in the central part of the Kandak river valley, a tributary to the Swat. Gumbat is best known for its imposing Buddhist shrine that still stands today (Figure 2). The first report on the site dates back to Sir Aurel Stein who, in 1926, already noticed looting activities around the monument (Stein 1930: 13). In 1938, Evert Barger, Lecturer in Medieval History at the University of Bristol and Philip Wright of the Victoria and Albert Museum (hereafter V&A) conducted a brief archaeological campaign in Swat, in the areas of Barikot and Charbagh. Their main focus at Barikot, where they also established camp, was to explore the remains in the Karakar and Kandak valleys. In Kandak, in addition to the documentation of the Buddhist sites of Amluk and China-bara located the upper valley (Olivieri et al. 2006), they also carried out a quick excavation at Gumbat, located 5 km south of Barikot. The discoveries were announced the same year (Barger 1938), while the archaeological report was published in the memoirs of the Archaeological Survey of India in 1941 (Barger & Wright 1941; Olivieri, forthcoming).

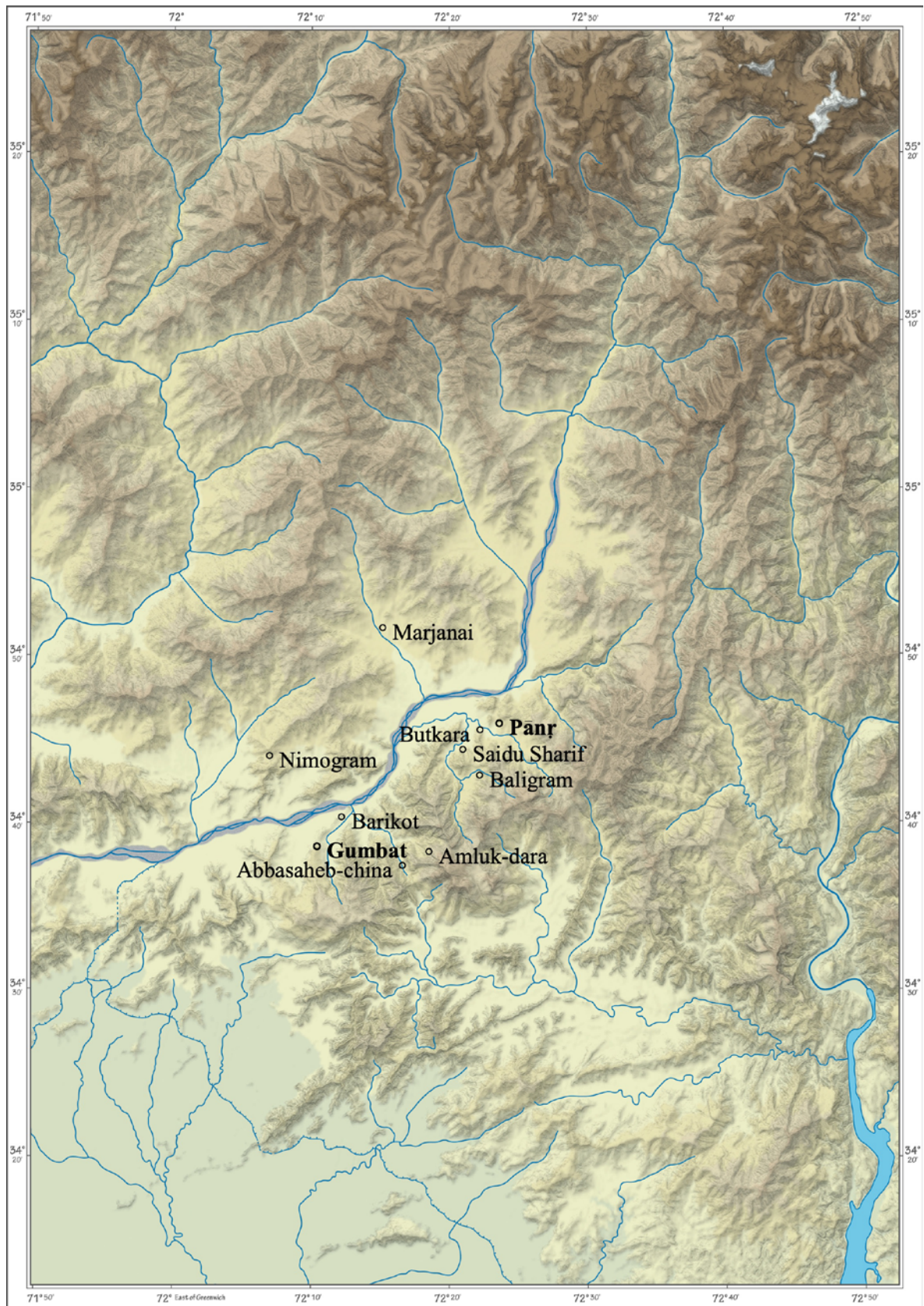


Figure 1. Map of Swat. (Courtesy ISMEO Italian Archaeological Mission in Pakistan; Map by K. Kriz and D. Nell, University of Vienna, Department of Geography and Regional Research.)



Figure 2. A view of Gumbat and Kandak valley from east. (Courtesy ISMEO Italian Archaeological Mission in Pakistan; Photo by E. Loliva.)

Several sculptures were uncovered at this time: Barger and Wright brought to England forty pieces from Gumbat, sixteen of which are currently in the holdings of the V&A. The latest archaeological investigation at Gumbat was conducted in 2011-12 by Luca M. Olivieri within the framework of the ACT Project (Meister 2011; Meister & Olivieri 2012; Olivieri et al. 2014; Meister, Olivieri & Vidale 2016; Olivieri & Filigenzi 2018). During the two campaigns, Olivieri and his Pakistani collaborators conserved the monumental shrine at Gumbat referred to in the archaeological reports as the Great Shrine, conducted technical analysis on the wooden elements still embedded within the architectural structure of the monument, and excavated the terrace on which the shrine was erected. In the sector of the terrace a N-S trench measuring 10 by 50 meters revealed a partly disturbed archaeological sequence (Olivieri et al. 2014: 269). The excavation confirmed the existence of two large *stūpas* flanking the Great Shrine, a feature previously suggested by Barger and Wright in 1938 (Figures 3-4); in addition, twenty small *stūpas* erected in proximity of the Great Shrine were documented. In 1938, Barger and Wright already commented on the large number of sculptural pieces uncovered at Gumbat; the artistic richness of the site was confirmed by Olivieri who recorded hundreds of fragments of gray schist sculpture during the latest excavation campaigns. Most of the pieces, however, were found in extremely fragmentary conditions and were uncovered in disturbed archaeological contexts due to extensive illegal diggings.

[PB]

An archaeological overview of the monuments at Gumbat/Balo Kale

In order to understand better the chronology of the artistic material uncovered at Gumbat, one must address the structural periodization of the site (Olivieri et al. 2014: 300-303). All the archaeological remains from Gumbat rest on three terraces stepping southwards on a ridge of phyllitic outcrops

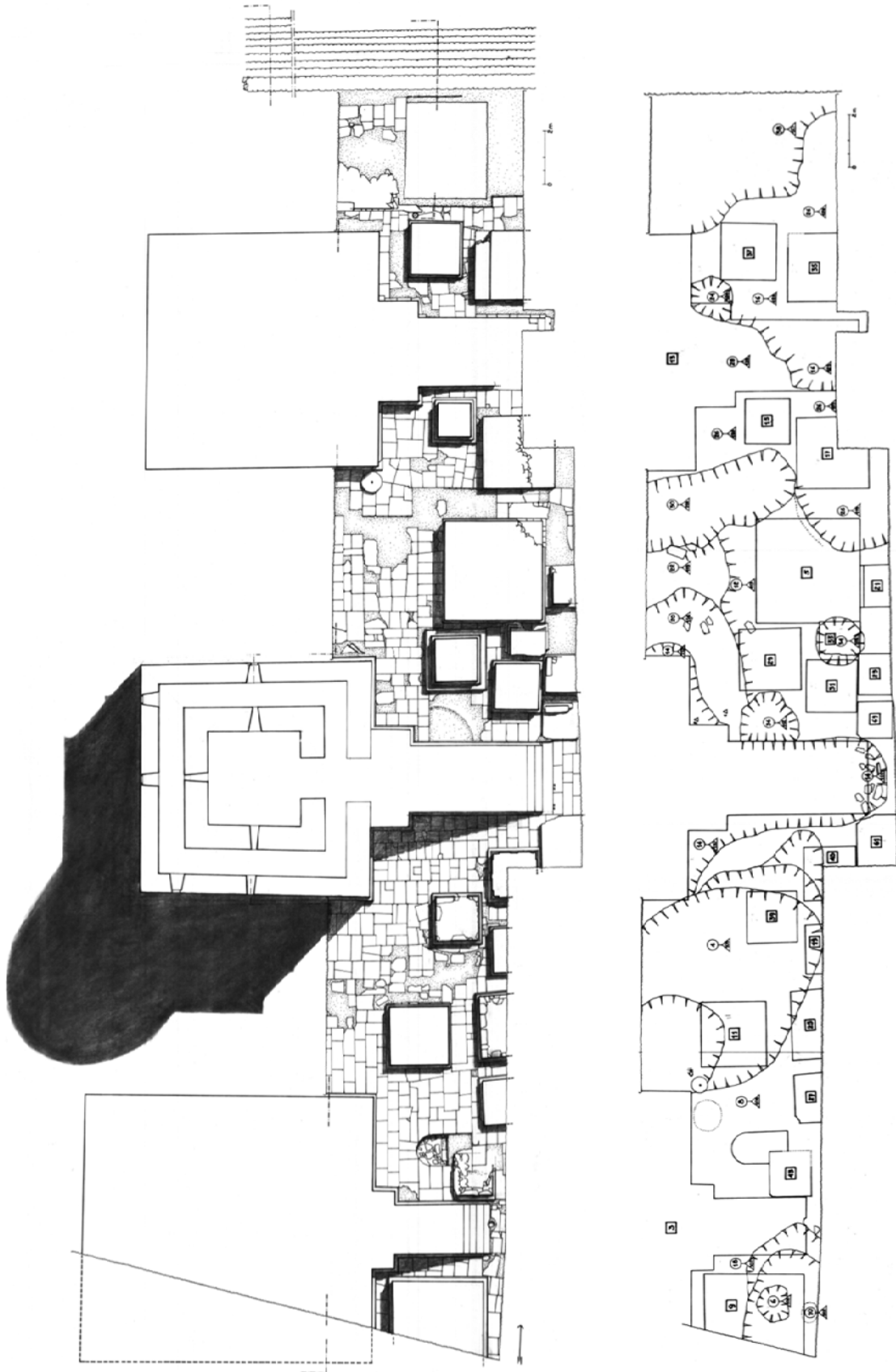


Figure 3. Plan of the excavated area (top) and robbing pits (bottom). (Courtesy ISMEO Italian Archaeological Mission in Pakistan; Drawings by F. Martore.)

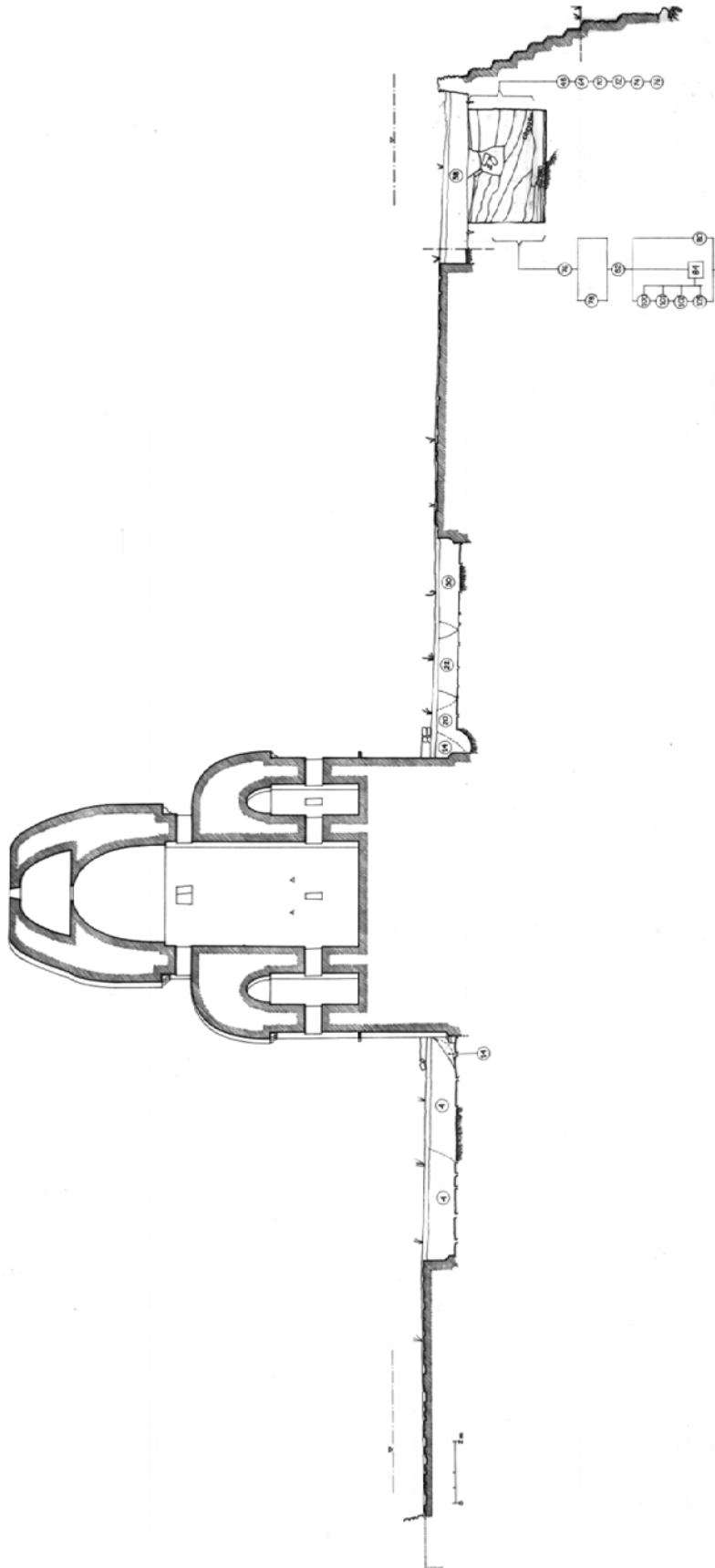


Figure 4. Section of the excavated area. (Courtesy ISMEO Italian Archaeological Mission in Pakistan; Drawings by F. Martore.)

flanked to the north by a perennial stream. The rocky area still carries extensive traces of ancient quarrying for the extraction of building material. Traces of what must have been the main *stūpa* were detected on Terrace II located in the southern part of the site on a flat plateau supported to the east by three retaining walls. The monastery was located a bit uphill on Terrace III, in the south-western area of the site, while the lower part of Terrace I, literally projecting over the Kandak valley like a balcony (in Pashto *balō*), is the place where the impressive Great Shrine still stands today. While the area excavated at Gumbat corresponds only to 1/3 of the ancient terrace, one can still get a sense of the original monumentality of Terrace I and its three buildings. The following is the periodization sequence, i.e. the sequence of major artificial interventions or building phases of the Buddhist sacred area (Periods II-IV).

Excavations of Terrace I conducted in 2011-2012 revealed that the Great Shrine was built during Period II of activity at Gumbat. The building was erected on top of an abandoned artificial surface sealing the remains of an earlier protohistoric settlement (Period I = c. 1200-900 BC). During Period II the walls supporting the north and the east side of the artificial terrace were raised and a platform was created by filling the space with layers of pounded earth (Figure 5). The ancient filling included earlier protohistoric waste materials. During Period III the first stone floor of Terrace I was completed¹ and three large buildings were erected, each with a frontal stairway facing east. The three buildings, from the south, are identified as Building [3], [30], [13]. They were similar in size, with the central one being only slightly taller. ² The Great Shrine (Building [30], c. 9x9 m), the central one on the terrace, still stands today while the features of the two flanking buildings remain unknown as only the podia of these structures are preserved; Building [3] to the south of the Great Shrine was rectangular in shape (w: 10.34 m; l: 11.34 m)³ while Building [13] to the north was square (w: 8.9 m).⁴ A similar architectural set up has been documented at the sites of Nimogram (Raducha 2009-),⁵ Baligram (Ashraf Khan 1993), and Marjanai (Shah Nazar Khan 1995) in Swat. It is likely that both Building [3] and Building [13] were *stūpas* (see Olivieri and Filigenzi 2018: fig. 17);⁶ we may hypothesize the existence on Terrace III of a layout consisting of *stūpa*-shrine-*stūpa* pattern.⁷ Lastly, it should be mentioned that on the same terrace a small *stūpa* was erected in Period III between Building [13] and the Great Shrine, identified in the excavation report as Building [5] (w.: 3.73 m).⁸

Most of the small *stūpa* monuments crowding the space around the three major buildings were built during Period IV (Figures 6-7) while a new paved floor (layer 91), a few minor structures, and the re-building of the dome of the Great Shrine, were set in place during Period V. Later pits and cuts almost completely obliterated the paved floor (91), and only a few square centimeters of it are visible today in proximity to Monument [31]. Period VI corresponds to the late occupation of the site (post-Buddhist? fourteenth to fifteenth century AD) and is represented by pit <58> and its contents (for its radiocarbon dating, see Olivieri et al. 2014: 314). This period was followed by the abandonment of the site. Unfortunately, the original stratigraphy at Gumbat has been partly destroyed by looting that had started

¹ Layer (47) still visible today across the excavated surface.

² Based on the length of the staircases attached to Buildings [3] and [13] (respectively 5 and 6 m vs. 6.6 m of the Great Shrine) one can surmise that the podia of these two buildings were slightly lower than the central monument (h.: 3.7 m). Since Building [13] is rectangular in plan and has a pronounced landing, it is possible that it also had a second stairway and had a height comparable or bigger to the one of the Great Shrine (see the 'shadow-temples' discussed in Meister 2011).

³ The base is decorated with plinth, torus and cavetto and shows traces of plaster.

⁴ The base is decorated with plinth, two tori and cavetto and shows traces of plaster.

⁵ Here the excavations also documented three square major monuments, aligned and facing WSW; from N: a *stūpa*-chapel (I), a *stūpa* (II), a shrine (III).

⁶ At Nimogram the sequence (from N.) is shrine-*stūpa*-shrine. The monument at Nimogram is open to W.

⁷ Note also the recovery of an alm/offering pottery jar fixed at the right of the staircase of Building [3] (Olivieri et al. 2014: 305, figs. 45-46) like at Saidu Sharif I (Main *Stūpa*) (and Pānṛ I, *Stūpa* 1) (ibid. for ref.). The association of jars at the sides of the staircase of shrines is rarer but also attested (Great Vihara 57 at Butkara I, ibid. for ref.).

⁸ The base is decorated with plinth, scotia, carinated (?) torus and cavetto, with traces of plaster.

before Stein's visit to the site in 1926 (Stein 1930: 13), and lasted until 2009.⁹ Pits <119>, <120>, <121>, <123>, <126> and their fillings (layer 26) represent the early excavations conducted by Barger and Wright in 1938 to the north of the Great Shrine (Figure 8).

The architectural context and its chronology

Barger and Wright proposed a date of the second century AD for the Great Shrine (ibid.: 35),¹⁰ while Faccenna suggested that the Great Shrine at Gumbat and the so-called 'Great Vihāra' of Butkara I (i.e. Great Stūpa Phase 3) were contemporary, both dating to the early first century (Faccenna 2006: 189-190, n. 4). On the basis of the available data, it appears that the Great Shrine had two building phases (Olivieri et al. 2014: 302).¹¹ The Great Shrine and Buildings [3] and [13] (= Period III) were erected in the early second century AD as suggested by conventional 14C analysis of the wooden lintel of the upper south clerestory window of the Great Shrine (1840 +/-30 BP = AD 110).¹² A second phase (= Period V) which should have included the reconstruction of the Great Shrine double dome took place in the middle part of the third century.¹³

As far as the sculptural material from Gumbat is concerned, it should be remarked that in Swat the schist sculptural production drastically diminished by the end of the third century, especially in the Barikot area but also at Pānṛ, Saidu Sharif and Butkara I (Olivieri & Filigenzi 2018). Coeval evidence (dating to the mid/end of third century AD) from Amluk-dara, the Buddhist shrines at Barikot, and Butkara I (Olivieri & Filigenzi 2018) suggests



Figure 5. The filling of the terrace. At the bottom, traces of protohistoric structures and original rocky outcrops. (Courtesy ISMEO Italian Archaeological Mission in Pakistan; Photo by M. Vidale.)

⁹ To which may be ascribed the pits <110> and <111>.

¹⁰ H.C. Ackermann came to a similar conclusion: six reliefs were attributed by him to an early 'Hellenistic group' dated to around mid-1st century AD, and four to a 'late Hellenistic group' he dated to the 2nd half of the 1st century AD (Ackermann 1975: 19, 23).

¹¹ We refer here to the chronology and data presented at the First International Workshop of the Gandhāra Connections Project (see Olivieri and Filigenzi 2018).

¹² M. Meister, L.M. Olivieri and M. Vidale agree that 'the clerestory's wooden beam is structurally consistent with erection of the masonry structure and would seem to belong to the earliest phase of construction' (Meister, Olivieri, and Vidale 2016: 555). Of course, theoretically, both the wooden lintel used in the upper south clerestory window, and the crossing corner planks, could have been reused older timbers (*Acacia modesta*: see Olivieri et al. 2014: 315-319), which might even have been utilized in the same moment (which means post-240 AD). However, on the basis of the overall archaeological and chronological data, it is likely that the building of the Great Shrine occurred not later than mid-second century AD, and that the double-dome – rather than in Period IV (as previously thought) – was probably rebuilt in Period V (dated to mid-third century AD), when other major interventions occurred on Terrace I (i.e. the layering of a new paved floor, see above).

¹³ According to R.E. Hatfield (Beta Analytic) the identical 2σ statistics of the three surviving planks of the lower dome mean that they appear to represent the same time (median age c. 240 AD; Olivieri et al. 2014: 311; Meister, Olivieri, and Vidale 2016: 556). The dating suggests the possibility that the dome might have been reconstructed after one of those two destructive earthquakes that shook Barikot and Amluk-dara (see Olivieri and Filigenzi 2018: 80).



Figure 6. Terrace I: S. side and Building [3]. (Courtesy ISMEO Italian Archaeological Mission in Pakistan; Photo by E. Loliva.)



Figure 7. Terrace I: N. side and Building [13]. (Courtesy ISMEO Italian Archaeological Mission in Pakistan; Photo by E. Loliva.)



Figure 8. Fragments excavated by Barger and Wright at Gumbat, now in the Victoria and Albert Museum, London.
(After Barger and Wright (1941) pl. II.)

that by this time stucco had largely replaced schist in the sculptural production. Therefore, it is highly possible that the material excavated by Barger and Wright and re-excavated in 2011-2012 belonged to small *stūpas* erected in the northern section of the terrace during Period IV. Dimensions here clearly speak of small decorative assemblages. For example, the elements of friezes GBK 4-6 and GBK 7, if complete, might not have exceeded 40 cm in length. We can imagine here an average sequence of 4-8 elements which, including the corner elements, would have been fitting *stūpas* of an average width of 2.5-4 m and smaller. The decorative material discussed in this article seems to belong to the beginning of Period IV: the smaller *stūpas* were erected around the larger monuments sometime after the AD 110.

The larger and earlier monuments at Gumbat were decorated with pieces sculpted using a different type of stone (that is greenish in color), and altogether show a different kind of workmanship. They also display very different decorative patterns from the smaller architectural fragments discussed in this paper. These are illustrated by the rather plain panels decorated with almost rigid vegetal motifs (e.g. GBK 52 and 54 in Olivieri et al. 2014: fig. 61-62) or by the fragment of a panel depicting a throne GBK 42 fallen in front of Building [3] (Olivieri et al. 2014: fig. 60) (Figures 16-18).

[LMO]

The sculptures

The present study will focus only a small selection of sculptures from Gumbat excavated in 2011-12. These are friezes originally decorating small *stūpas* erected by individual donors in proximity to the three main monuments. The pieces in questions are:

- A. GBK 4, 5 and 6 (Figure 9) – fragments of linear friezes depicting a series of two male figures dressed in classical garb, framed by Corinthian columns. The pieces were found near votive *stūpa* 3 and probably belonged to the same small monument.
- B. GBK 7, 10 and 11 (Figure 10) – fragments of linear friezes depicting series of two male figures dressed in classical garb, this time framed by Corinthian pillars. These friezes were reported as being surface finds.
- C. GBK 22 (Figure 11) – a multi-tiered curvilinear frieze depicting scenes from the life of the Buddha. The bottom register depicts scenes from the life of the Buddha, the middle register has a running vine scroll, while the top register, the best preserved today, depicts a series of male figures dressed in western garb interacting with each other. This multi-register piece was found to the SE of the monumental shrine.

Remarkably a few pieces uncovered by Barger and Wright in 1938, now in the holdings of the Victoria and Albert Museum (Ackermann 1975), seem to be segments of the same friezes uncovered by Olivieri about seventy years later, in 2011-12 (Olivieri et al. 2014: 306).

1. IM 87-1939 appears to be part of the same frieze as GBK 4, 5, 6 (Figure 12). All of these fragments may have formed the decoration of votive *stūpa* no. 3 (see above A.).
2. IM 88-1939 appears to be part of the same frieze as GBK 7 (Figure 13) (see above B.).
3. IS 136-1961 and GBK 22 were probably part of the same *stūpa* frieze; they can also be stylistically compared to sculptures I.M. 78-1939 and 79-1939 from Kanjar Kote also given by Barger and Wright to the Victoria and Albert collection (Figure 14) (see above C.).
4. The frieze IM 86-1939 and A-1939 in the V&A (Ackermann 1975: pl. Va) and the fragments GBK 24, 28, 30, 31 (Olivieri et al. 2014: figs. 53-56) may come from the same monument (Figure 9).
5. The friezes IM. 90-1939 and GBK 88 both decorated with flying amorini belonged without doubt to the same cornice (Figure 15 and cf. Figure 8).



Figure 9 a, b, and c. GBK 4, 5, 6. Fragments excavated at Gumbat by the Italian Archaeological Mission in Pakistan (2011-2012), Swat Museum. (Courtesy ISMEO Italian Archaeological Mission in Pakistan; Photo by E. Loliva.)



Figure 10 a, b, and c. GBK 7, 10, 11. Fragments excavated at Gumbat by the Italian Archaeological Mission in Pakistan (2011-2012), Swat Museum. (Courtesy ISMEO Italian Archaeological Mission in Pakistan; Photo by E. Loliva.)



Figure 11. GBK 22. Fragment excavated at Gumbat by the Italian Archaeological Mission in Pakistan (2011-2012), Swat Museum. (Courtesy ISMEO Italian Archaeological Mission in Pakistan; Photo by E. Loliva.)



Figure 12. Fragment excavated at Gumbat by Barger and Wright in 1938, V&A Museum, IM 87-1939 (Copyright Victoria and Albert Museum, London).



Figure 13. Fragment excavated at Gumbat by Barger and Wright in 1938, V&A Museum, IM 88-1939 (Copyright Victoria and Albert Museum, London).

To this list can be added other three pieces, whose integration with some pieces in the V&A are for the time being just presumptive:

6. IM 89-1939 (Ackermann 1975: pl. Vc) with GBK 4, 5, 6 (Olivieri et al. 2014: 306) (see above A.).
7. IM 111-1939 (Ackermann 1975: pl. XXII a-b) with GBK 19 (Olivieri et al. 2014: 306).
8. IM 79-139 (Ackermann 1975: pl. XIIb) with GBK 22 (Olivieri et al. 2014: fig. 52) (see above C.).



Figure 14. Fragment excavated at Gumbat by Barger and Wright in 1938, V&A Museum, IS 136-1961 (Copyright Victoria and Albert Museum, London).



Figure 15 a and b. Fragments excavated at Gumbat by the Italian Archaeological Mission in Pakistan (2011-2012), Swat Museum, GBK 88, and by Barger and Wright in 1938, V&A Museum, IM 90-1939. (Courtesy ISMEO Italian Archaeological Mission in Pakistan; Photo by E. Loliva; copyright Victoria and Albert Museum, London).

The art and the artists

The friezes and cornices presented here were all part of the decoration of minor monuments like votive *stūpas*; linear friezes decorated square *stūpa* podia while curvilinear friezes such as GBK 22 encircled the lower part of the domes. Among the many sculptural fragments collected at the site, it appears that subjects inspired by the classical repertoire were most popular at Gumbat. The individual patrons of votive monuments at the site seem to have favoured non-Indic genre scenes and the carvers responsible for such commissions were surely well versed in the depiction of classically inspired themes. Good examples are the cornices IM. 80-1939 and GBK 88 depicting a series of flying amorini. The motif, clearly lifted from the iconographic repertoire of Roman sarcophagi, is represented at Gumbat with such fluidity and naturalism that it appears to capture the stylistic form of the original prototypes. Reliefs with similar decorations from Butkara I show how the carvers who worked at Gumbat were very conversant not only with the classical repertoire but also with western carving modes (Faccenna 1980-1981).



Figures 16-18. Fragments excavated at Gumbat by the Italian Archaeological Mission in Pakistan (2011-2012). Swat Museum, GBK 52, 54, and 42. (Courtesy ISMEO Italian Archaeological Mission in Pakistan; Photo by E. Loliva.)



Figure 19. Fragments found at Abbasah-china (Rome, Museo Nazionale ‘Giuseppe Tucci’, V 739) and excavated at Gumbat by the Italian Archaeological Mission in Pakistan (2011-2012), Swat Museum, GBK 22. (Courtesy Museo Nazionale ‘Giuseppe Tucci’/ISMEO Italian Archaeological Mission in Pakistan; Photos by P. Brancaccio and E. Loliva.)



Figure 20 a and b. Fragments found at Pānṛ by the Italian Archaeological Mission between 1960-64 (Rome, Museo Nazionale ‘Giuseppe Tucci’, V 411) and by Barger and Wright at Gumbat in 1938 (IM 89-1939, V&A Museum). (Courtesy Museo Nazionale ‘Giuseppe Tucci’/ISMEO Italian Archaeological Mission in Pakistan, photo by F. Bonardi; copyright Victoria and Albert Museum, London.)

A closer look at fragments from Gumbat confirms our impression. The pieces illustrated depict a series of non-Indic figures framed by Corinthian columns and pillars. The characters all dressed in Graeco-Roman tunics appear to engage in different types of confrontations – they may be battling each other, or they may be simply intent on verbal exchanges. One particular fragment shows a figure whose body position reminds us of conventional ways used in Roman art to represent characters involved in dramatic performances. This makes us wonder if the characters illustrated may actually hint at re-enactment of dramatic performances, even where the figures appear to be engaging in armed confrontations. I



Figure 21. Roman mosaic of doves, from Pompeii. First century AD. (Naples, Museo Nazionale Romano, inv. 114281; photo: P. Brancaccio.)

have already discussed elsewhere the relevance that drama may have played within the Gandhāran world (Brancaccio & Liu 2009). Such imagery, often represented in association with drinking scenes, was loaded with connotations of royalty and festivity deemed appropriate for honouring the Buddha. Further, it formed a language system used to refer to the world of the local aristocracy, most likely the patrons of the votive *stūpas*.

In comparing the friezes from Gumbat with fragments V 739 and V 178 now in the holdings of the ‘G. Tucci’ Museum of Oriental Art in Rome (Figure 19; cf. Figure 11), it becomes apparent that the same group of artists responsible for the Gumbat friezes may have worked on the decoration of votive *stūpas* at other Buddhist sites on the left bank of the middle Swat. Pieces collected in the sixties by the Italian

Archaeological Mission at several sacred areas in the surroundings of Barikot (including also Pānṛ) display a surprising formal and technical affinity with the ones uncovered at Gumbat.¹⁴ In addition to the most obvious iconographic similarities, they appear to be so closely related in terms of style that they may have been products of the same atelier, or possibly the same hands. The overall treatment of the figures, their gestural and spatial relationships, the way of carving the heads and especially the tunics with a characteristic handling of the drapery, reflect surprisingly similar designs and carving processes. It should be noted that the two pieces shown here measure exactly the same height and are also made of the same stone type – a common, ordinary grey schist. It is likely that in Swat, around the second century AD, existed a workshop or a group of sculptors who specialized exclusively in carving classically inspired genre scenes. The sculptors worked at various Buddhist sites in the Barikot area on commissions of minor monuments such as votive *stūpas* paid for by the local aristocracy. The proposed hypothesis aims at revising the current interpretive model for the production of Gandhāran art maintaining that the whole sculptural production at any given Buddhist centre was the creation of a specific site workshop. Instead the evidence presented here strongly suggests the existence of specialized regional groups of artists conversant in particular themes working simultaneously at different sites on individual commissions. A comparison between the cornice IM 89-1939 in the V&A museum uncovered by Barger and Wright in Gumbat, originally in two pieces (nos. 62 and 63; Ackermann 1975: pl. Vc) and the V 411 fragment from Pānṛ I now in the Swat Museum seem to confirm this hypothesis (Figure 20). The two pieces share critical iconographic and stylistic features that could well be attributed to the same workshop.

The cornice IM.89-1939 from Gumbat depicts two main scenes: a drinking couple and birds sipping from a vessel, separated by acanthus leaves; the fragment from Pānṛ represents the same birds and vessel motif, this time associated with an amorous couple, while vines are carved to separate the vignettes. Birds drinking from a water basin are also reproduced in the Gumbat frieze IM.87-1939 (Ackermann 1975: pl. Vc.). The birds and basin motif was very popular in the Roman world and is especially well attested in the mosaic tradition. The best known examples come from Hadrian's Villa in Tivoli and from several houses in Pompeii (Figure 21). Pliny the Elder elucidates us on the Hellenistic origin of such an artistic theme: apparently the subject was first represented in the famous 'Unswept House' mosaic from Pergamon attributed to the artist Sosus in the second century BC (Dunbabin 1998: 270). Such a celebrated image-type from the Hellenistic and Roman world came to be assimilated into the Gandhāran tradition and incorporated within the repertoire of classically inspired themes such as wine-drinking, grapes, and satyrs.

This formula appears to be replicated in a consistent way in several sculptures from different sites in Swat. One wonders if the stone-carvers who executed the images were in fact looking at specific models – separate designs of the motif that they then transferred onto stone. The technical study carried out by Peter Rockwell, the study by Faccenna and Filigenzi, and the analysis performed by Vidale and Olivieri on thirty pieces from Swat, are particularly helpful to this regard. Peter Rockwell remarks that 'the carver begins with a carefully worked out pattern. Once this has been carved, however, he works freely and by eye' (Rockwell 2006: 175).¹⁵ This is of special relevance as it argues for a certain degree of artistic freedom on behalf of the sculptor – in essence groups of artists had to have great familiarity with selected types of subjects. While Rockwell remarks the tremendous adaptability of Gandhāran stone workers, the mastery and consistency observed in the representation of genre scene of classical inspiration at selected sites in middle Swat supports the notion that a workshop specializing only in carving these

¹⁴ Also known as the 'Varia Collection' now in the holdings of the Swat Museum and the Museo Nazionale di Arte Orientale 'G. Tucci' in Rome.

¹⁵ Analysis of unfinished materials were also performed by D. Faccenna and M. Taddei in two pioneering studies (Faccenna 1997; Faccenna & Taddei 1997). Recently Luca M. Olivieri addressed again the topic in a paper presented in memory of Harald Hauptmann (Olivieri, forthcoming.).

kinds of subjects may have existed in the region. The information provided by most recent studies gives us a valuable insight into a sculptor's atelier in Swat across the first two centuries AD (Vidale, Olivieri, Ferrari, and Loliva 2015). From the tool and chattering marks analyzed, the study deduced that the range of tools at disposal was the following: a standard series of flat chisels (from <5 to >11 mm), a burin (with arc-shaped edge like a gouge), point chisels (3 mm), caliber/compass, and drill (two types, each with two different metal head: pointed, 2 mm; cylindrical, 4-5 mm).¹⁶ The series of tools confirms the series presented in Faccenna and Filigenzi 2007: pls. 1-6.¹⁷ The presence of the drill has been recognized with certainty in three pieces from Saidu Sharif I (two from the frieze of the Main Stūpa; Vidale, Olivieri, Ferrari and Loliva 2015: 40-41, figures 13-17).¹⁸ That means that drilling is attested in Swat in pieces dated from the mid first century AD (the Main Stūpa at Saidu) to the second century.

The presence of artists focusing exclusively on the depiction of selected themes is a feature common to many sculptural workshops in antiquity. Unfortunately, we know very little about the organization of sculptural production in ancient Gandhāra. However, we can still envision that specialization formed an important part of the training of Gandhāran sculptors and that familiarity with specific repertoires and in some cases specific carving methods, played an important role in the process of artistic creation. A closer look at the carving techniques employed by Gandhāran artists in a few reliefs depicting genre scenes with grapes and drinking, indicates that direct connections can be traced between the subjects represented and the tools and techniques employed by the carvers. The study of Vidale, Olivieri et al. has *inter alia* demonstrated that, (1) drill at Saidu Sharif was used with parsimony by specialized workers, always when the scenes were in their final stage;¹⁹ (2) that there were separated working chains within the same atelier, based on different degrees of specialization (and associated tools); (3) that there were evident traces of disconnections between the work of the ateliers and the building-yards where the elements were assembled on the architecture. Such evidence of 'discontinuity' between the ateliers and the building yards has been interpreted as a side effect of a serial production (Vidale et al. 2015: 41, 43, 45).²⁰

Two votive *stūpa* reliefs are especially relevant from this perspective – the V545 cornice from the site of Pratangai and the curvilinear frieze S 704 from the sacred area of Saidu Sharif I (Figure 22). One can note the distinctive treatment of the vine-leaves on both reliefs. In particular the area between the protruding parts of the vine-leaf, is rendered by the artists as a perfectly circular hole. The same treatment of the vine leaf is visible also in several cornices from the Wali of Swat collection (Lone 2018). In order to carve this particular feature, the sculptors used a drill, a tool that was employed in Gandhāran sculpture, as it has been said, 'with parsimony'. Not that the drilling technology was unknown in the region – fine bow drills were regularly used in the thriving bead industry, however the drill never became a staple tool in the sculptors' ateliers. The reason, as noted by Vidale and Olivieri, is that drill was considered a highly specialized tool, only used by the masters to give, wherever necessary a finishing touch to the sculpture, or to execute conventional figures like grape leaves (see n. 21). It

¹⁶ Bow-drill and strap-drill were both used as discussed

¹⁷ Rockwell suggested that stone-carvers from Swat used only a small selection of tools consisting of flat chisels of various width; he also maintained that tooth chisels, rasps and drills were not employed (Rockwell 2006: 168-169). While tooth-chisel marks remain absent from the sculptural production from Swat, it is possible that traces of rasps were obliterated by the application of a polishing powder.

¹⁸ Inv. N. SI 246+263+277, SI 1128, SI 704. For the latter see below.

¹⁹ According to L.M. Olivieri, a bow-drill with cylindrical flat head or bit measuring 4-5 mm was used to carve details such as holes on grape leaves on the sculpture once it was completed and before it was set in place (*fuori opera*). A strap-drill was used instead during the final stages of completion of the work once the sculpture was mounted on the monument (*in opera*); this type of drill was used to finish carving details such as small hair curls of the figures so that they could be viewed at the proper angle by devotees circumambulating the *stūpa*.

²⁰ It also appears that some pieces were prefabricated and included a number of sockets larger than needed so that they could be mounted in a variety of architectural settings. This aspect suggests a serial production for some Gandhāran reliefs (Vidale et al. 2015: 41, 43, 45).



Figure 22 a and b. Fragments found at Pratangai by the Italian Archaeological Mission in the 1960s (Rome, Museo Nazionale 'Giuseppe Tucci', V 545), and excavated at Saidu Sharifi in 1964-1966 (Rome, Museo Nazionale 'Giuseppe Tucci', S 704). (Courtesy Museo Nazionale 'Giuseppe Tucci'/ISMEO Italian Archaeological Mission in Pakistan; photo by F. Bonardi).

is possible that amongst the few ateliers that used the drill in Gandhāra, there were some from Swat. Amongst these ateliers we can certainly count the one of the 'Maestro di Saidu' (responsible for the Frieze of the Main Stūpa) (Faccenna 2001), and a few others working in the following decades and specialized in Western repertoires.

What prompted the sculptors to introduce the use of drills in the carving process of these friezes and cornices? It is likely that given the extensive use of drills in Roman sculpture at the beginning of the Common Era, the mechanical innovation presented here could be read as a technical citation enhancing the authenticity of the Graeco-Roman repertoires represented by Gandhāran artists. The specialized carvers who worked in the Barikot area on genre scenes of Classical inspiration were probably aware of this particular Western carving technique; they may have intentionally employed the drill in the final stages of their work to reinforce the non-Indic look and the feel of the subject represented. The drill was first used in Greek sculpture in the fifth century BC, then became widely employed by Roman stone carvers during the first and second centuries but was never employed in Indian sculpture.²¹ Its introduction as a plastic tool in Gandhāra can be most certainly ascribed to exchanges with the Graeco-Roman world. To conclude, this brief comparative analysis of sculptural material from minor monuments erected at Buddhist sites in the Barikot area offers a slightly different viewpoint on the geography of sculptural production in ancient Swat. The model of a regional workshop or group of artists specializing in Western subjects and familiar with western carving techniques, active at different sites in the valley during the second century AD, may be better suited to explain the complexity and coherence characteristic of so much sculptural production from votive *stūpas* in the Swat valley.

[PB]

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²¹ On the use of the drill in the Graeco-Roman world see: Palagia 2006; Hollinshead 1998 and Stewart 1978. For stone-carving techniques in the Indic world see Dehejia 2016.

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