16. The Shahi Temple on the East Terrace of the Acropolis: The Two Phases (ca. 700–1000 CE)

Alice Casalini Luca M. Olivieri

Published on: May 31, 2026

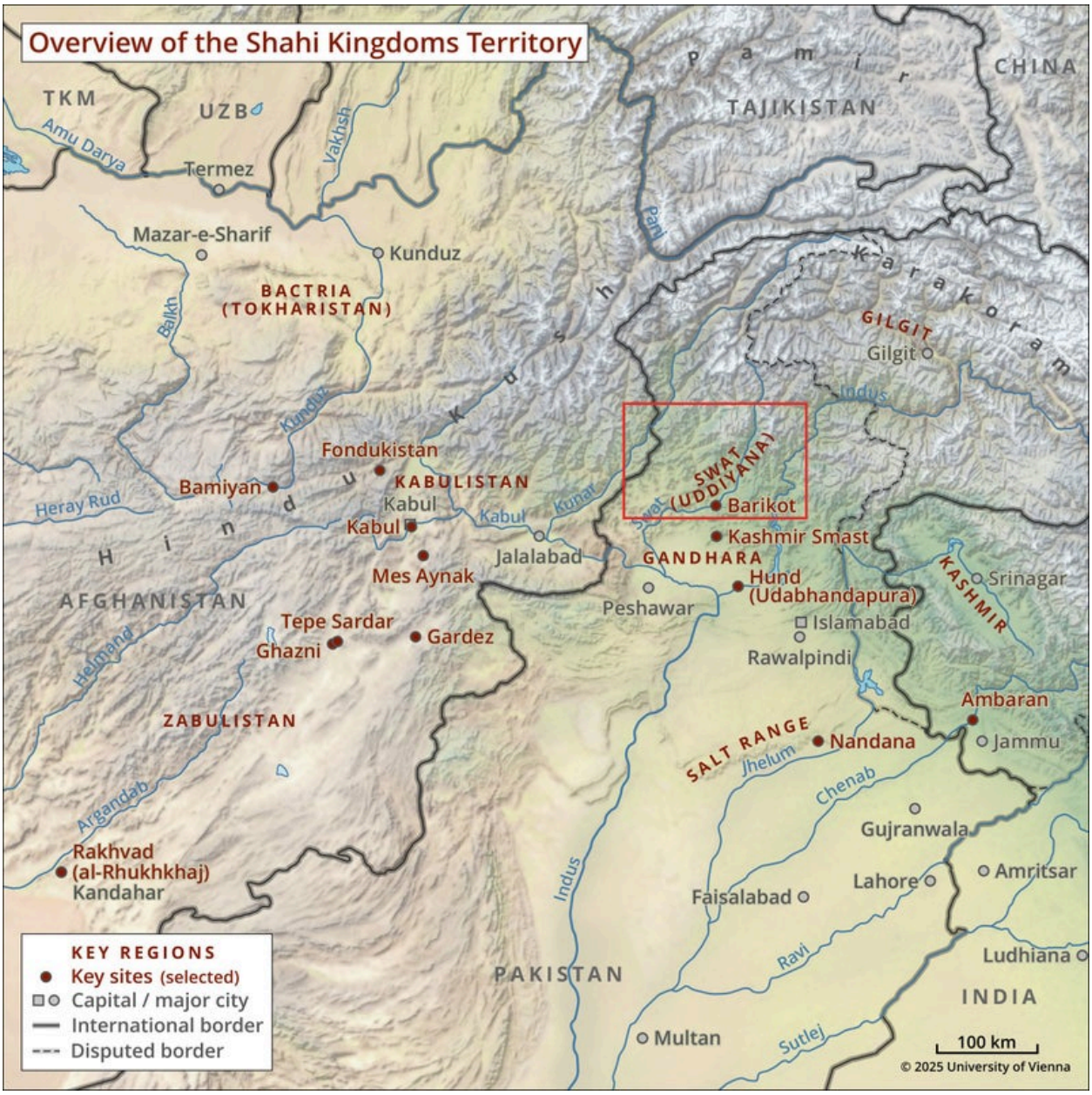
URL: https://shahi.pubpub.org/pub/6f9oukvf

Exploring the Contributions of the Shahi Kingdoms to Inner and South Asia

Final publication of the Austrian Science Fund (FWF) project (P-31246) "Cultural Formation and Transformation: Shahi Art and Architecture from Afghanistan to the West Tibetan Frontier at the Dawn of the Islamic Era."

Chapter 16. The Shahi Temple on the East Terrace of the Acropolis: The Two Phases (ca. 700–1000 CE)

Author(s): Alice Casalini and Luca M. Olivieri



Map 13–19. Key regions of the Shahi territories discussed in chapters 13–19 (University of Vienna, Department of Geography and Regional Research, 2025, with annotations, CC BY-NC-ND 4.0)

TEMPLES OF SWAT

(Luca Maria Olivieri)

Xuanzang reported the existence of ten Hindu temples in Swat, a region traditionally known for its strong monastic communities from different Buddhist schools. The information is interesting because it refers to a very early phase of Brahmanical architecture in Swat that archaeology has not yet documented.[1] The

earliest discovered and documented so far is Temple 6, built on the top of the East Terrace at Barikot at the end of the seventh or very beginning of the eighth century—more than a century after Xuanzang's visit to Swat. According to the available archaeological information, all the other temples documented in the region are coeval or later than the one discovered at Barikot. A temple was documented by Foucher (1901) at Zalamkot at the gates of the Swat Valley along an ancient road (see Morgan and Olivieri 2023; Shavarebi 2022 with refs.). A second temple was reported at Manyar (near Barikot) by Deane (1896) (see Filigenzi 2006, 2010, 2011; Olivieri 2023b; also Morgan and Olivieri 2023 with refs.); a third, Gumbat, was documented by Stein in the Talash Valley near or inside the site of Gumbatuna (see Iori, chapter 15; Stein 1921; Olivieri 2023b with refs.).[2] The "stupa" of Damkot (Rehman 1968) should almost certainly be added to the list (see below).

The condition of the temple at Barikot allows only a partial reconstruction. For the upper part of the podium, a detail lost at Barikot, we should refer to the temple of Zalamkot (**Fig. 41**). For the shrine elevation we may refer to the now lost temple of Gumbat (see Casalini below). Both temples can be considered coeval to the Phases 2b of Barikot (9th–10th century CE). A more detailed comparison could be made in the future with the Middle Indus and Salt Range examples (Meister 2010a) (see Casalini, below; Hardy, chapter 12).

Fig. 41. Zalamkot: view and detail of the north side of the podium (IAMP, CC BY-NC-ND 4.0)

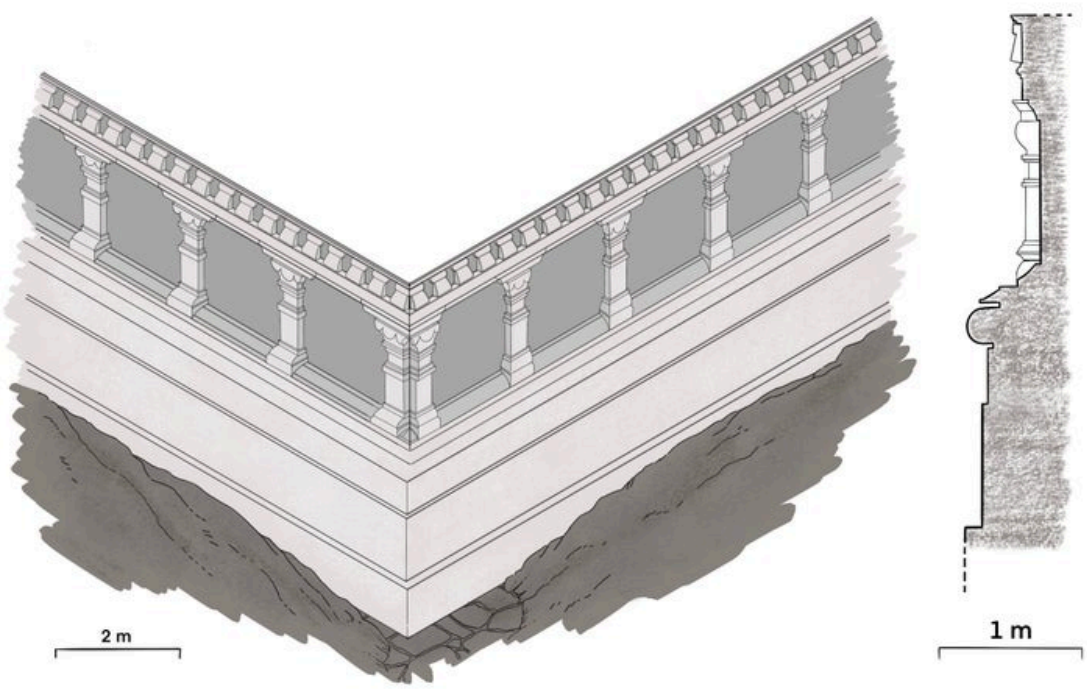


Fig. 42. Zalamkot: isometric restitution and section of the podium (lower part) (Francesco Martore/Alice Casalini/IAMP, CC BY-NC-ND 4.0)

In Zalamkot, the masonry and decorations are made of a very compact black phyllite, without the use of stucco (Iori, chapter 15). Like Barikot, the stairway (now collapsed) was located to the east. The podium (approx. 14 x 21 meters) features a large torus on a stepped plinth, surmounted by a projecting fillet followed by an inverted cyma. The partition of the podium (max. 3.80 meters in height) features false pilasters (**Fig. 42**). The latter spring from a floral base and bear a short inverted trapezoidal capital, which originally may have been decorated with two volutes, surmounted by a modillion whose ends form two small volutes. The entablatures show a row of false brackets in the shape of slightly projecting, truncated Corinthian pilasters (cf. Salt Range temples of Katas and Mari Indus). On the front, at the sides of the body of the stairway, there were projecting panels with composite decorative motifs. Collapsed lintels bear trefoil arch features.

The shrine of Gumbat[3] (built of soft gray/whitish weathered granite blocks) had a square plan (ca. 7 meters, each side) with a projecting vestibule to the east. The vestibule featured a trefoil arch sustained by false pilasters. Each side, excluding that with the entrance, featured deep side niches. The total height of the shrine can be calculated at above 9 meters. Materials from the temple were reused in the nearby cemetery (see Iori, chapter 15). There are several fragments of floral bases of false-pilasters, flamboyant capitals with central full-blown half-lotus and elaborated volutes, elements of entablatures with protruding Corinthian pilasters alternated to metopes representing full-blown lotuses, and so forth.

The capitals documented at Barikot, Zalamkot, Ziarat/Gumbat, in Kunar, and in the Middle Indus temples at Kafirkot (North) can be considered a formalized simplification of earlier Gandharan-Corinthian capitals. However, the emphasis given to the helices' volutes rather than to the acanthus gives the impression of a pseudo-Ionic hybrid capital, as can be seen in the wooden capital from Kashmir Smast at the British Museum (BM 1889.0703.8) (**Fig. 43**).

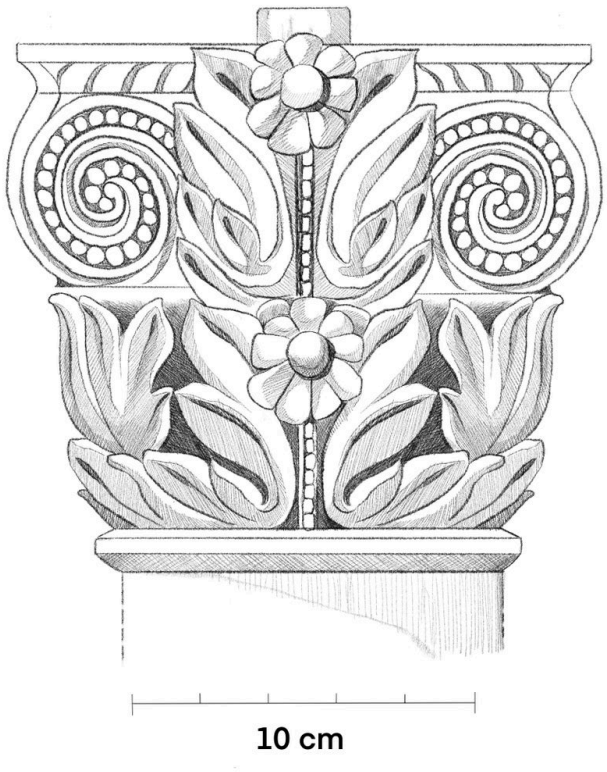


Fig. 43. Kashmir Smast: Ionic-Corinthian hybrid column (detail of the capital), 9th–10th century CE. Wood. British Museum, BM 1889.0703.8 (Francesco Martore/Alice Casalini/IAMP, CC BY-NC-ND 4.0)

Fig. 44. Map of the East Terrace and Temple 6 (EssaNoor Associates/IAMP, CC BY-NC-ND 4.0)

Of all these temples in the Swat region, the only one excavated is Temple 6, built on top of the East Terrace in Barikot (**Fig. 44**).

TEMPLE 6

Excavations at Temple 6 (1998–2023)

(Alice Casalini)

The area was first investigated and excavated in the late 1990s. The campaign in 1998, conducted under Olivieri's supervision, opened a trench at the northeast corner of Temple 6 (BKG 6.1), where clandestine excavations had exposed part of the building. On that occasion, looters' pits on both sides of the temple were emptied. In 1999, also under the supervision of Olivieri (in summer) and Callieri (in autumn), the team opened Trenches BKG 6.2 and BKG 6.3, the west half of the south side of the temple and the central section of the east side of the temple, respectively. The results of these campaigns, including a preliminary overview of the decoration and relevant material culture, were published in Callieri et al. 2000.

The 2000 campaign, led by Callieri, opened a new trench (BKG 6.4) in the southeast corner of the terrace around Temple 6 and explored the lowest layers in BKG 6.2 to study the situation relative to the expansion of Terrace E and the building of Temple 6 on a base of beaten earth over layers of clay and slabs. The staircase in Trench BKG 6.3 was partly exposed on this occasion, but the volumetry had not been fully understood. The trench was later partially refilled. Dwellings dating to the Early Islamic period that had disturbed the staircase profile were also identified and cleaned during this excavation. The results of this campaign were published in Callieri et al. 2000–1 and Callieri 2005.

In November 2023, the Italian Archaeological Mission resumed work on Terrace E with the goal of exposing the profile of the monumental stairway of Temple 6.

Temple 6 in Period 2a

(Luca Maria Olivieri)

Temple 6 features clear evidence of three major building phases (**Fig. 45**).

Fig. 45. Map of the East Terrace with periodization (EssaNoor Associates/IAMP, CC BY-NC-ND 4.0)

The early temple is associated with a phase attested to the late seventh century, that is, to the historical period associated with the Turk Shahi (see **Table 2**: nos. 67–68). This phase corresponds to the earliest terrace floor documented above the razed surfaces of two stupas. The floor is associated also with the earliest floor of the entrance of the East Terrace (Gate 1).

During the cleaning of the monument's podium, we found two looters' pits that had been badly filled in by clandestine diggers. Once these pits were emptied, we could see that inside the podium, there was an

older podium. Only at that point did we realize that this evidence was also perfectly visible from the outside. At the same point as the outer podium (north and south; **Figs. 46–47**), the podium molding in fact presents a clear break that shows the point where the podium was lengthened at a second stage.

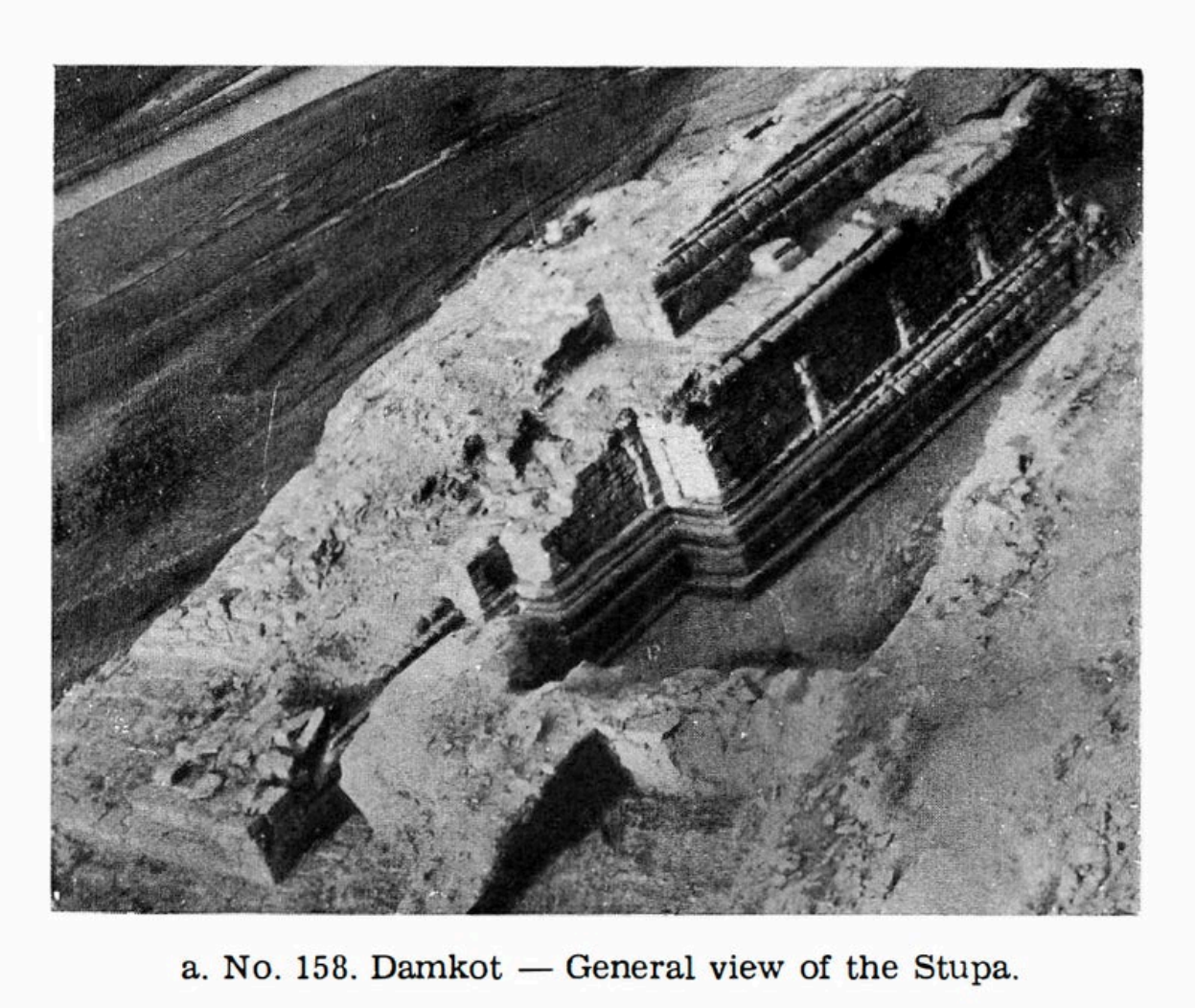
Fig. 49. Temple 6, south side of the podium: evidence of the podium of the temple of Period 2a (IAMP, CC BY-NC-ND 4.0)

Fig. 50. Temple 6, south side of the podium: evidence of the upper podium floor of the temple of Period 2a (IAMP, CC BY-NC-ND 4.0)

In Period 2a, the early Temple 6 thus had a square plan (ca. 14 x 14 meters), with a long, monumental stairway accessible from the east. The early podium was decorated with a flat band (plinth) followed by a slightly protruding torus followed by a cavetto. At the outer corner of the front of the monument (which is visible only on the north side) was a corner false pillar on a torus-shaped molded base (again: plinth-torus-cavetto) (**Fig. 48**). This corner false pillar may imply that the upper part of the podium had a partition of false pilasters. The front side of the upper podium is plain until it meets (at about one meter from the outer corner) a rectangular body projecting toward the east. This is certainly to be understood as the body of the landing of the stairway. That that body was elongated and horizontal is proven by the evidence of stuccoed floors surfacing from the cleaning on the south side of the temple (**Figs. 49–50**). Below this, on the flanks of the stairway body, there is a floor or, more correctly, a walking surface (better preserved on the south side) from which both the body of the stairway and the body of the upper podium departed, thus starting from the same plane. Based on our reconstruction, we can imagine that there were two raised and recessed platforms on either side of the stairway. This feature is not new in Shahi architecture. One might think of the "platform extensions" discussed by Meister with reference to the Kafirkot temples: the chambered (?) side extensions of temples A and B (Meister 2005: pl. 6), the raised platforms flanking the stairway in phase 1 of Temple E of Kafirkot (Meister 2010a: figs. 81–82). Temple E at Kafirkot features two platforms with two miniature votive chambers. At Barikot we have no trace of this, although nothing

excludes the possibility that similar niches were located there at a higher elevation. Furthermore, one can consider the hypothesis, suggested by the observation of the wall alignments, that the body of the stairway was very long and reached all the way to the corners of the front landing, which were revealed by the excavations. Collecting all the scattered evidence, we can propose that Temple 6 in Period 2a was shorter in plan, featuring a square podium, with a prolonged indented frontal stairway body. A smaller square upper podium with a stairway bearing an elongated landing stands atop the podium. A cella once stood on top of the upper podium.

We do not know exactly where the stairway ended, but it certainly could not have been as long as that of Temple 6 from Period 2b. Looking at the spaces in terms of architectural congruence, in Period 2a the monument is better placed in the space defined by the East Terrace. The Period 2b temple's stairway is instead disproportionately close to the edge of the terrace. Considering the top of the east side of the East Terrace, there would have been no more than 3 meters between the first step and the edge—too little for an architectural optimum. As I see it, in fact, the first temple is the one that was planned with the renovation of the East Terrace. The temple modified in Period 2b presents an architectural gigantism that is slightly out of place in the overall architectural picture. Size was favored over the balance of the parts and, probably, over functionality. If we follow the chronology proposed by Kuwayama (1976), it is to this phase that the rich marble sculptural production (described in Filigenzi, Casalini, and Iori, chapter 17; see also Filigenzi 2005, 2023) may be assigned.



a. No. 158. Damkot — General view of the Stupa.

Fig. 51. The Damkot monument (after Rehman 1968: fig. 158)

An Unexpected Comparison

A building with comparable features was excavated by Rehman at Damkot and identified as a “stupa” (Rehman 1968) (**Fig. 51**). Considering the evidence from Barikot and the better knowledge of the material culture of these phases between Late Antiquity and the Early Middle Ages, we can attribute Damkot Period 4 and associated phases to the Early/Turk Shahi phase of the site. The “stupa” (Middle Peak, area B) is not only a stupa, but it is a completely different monument: it shows in fact a square podium (analogous to Temple 6 in Period 2a) with a molded plinth-torus-cyma base decorated with false pilasters and molded capitals, with a long projecting landing and a double-recessed stairway facing southeast. Above the podium stand the remains of the molded base (plinth-torus-cyma) of the square cell or upper podium. Note that the upper square podium is not centered in the lower one: the upper building (cell?) is set back from the lower podium. This feature convinces us, among others, that the monument was not a stupa but might be part of the temple typology of these Early Shahi phases, of which Temple 6 in Period 2a is

another example. Moreover, the Damkot archaeological data I have reviewed (stratigraphic information and material culture, including a fragment of a marble statue), all apparently point in this direction (see Casalini below and Iori, chapter 15).[4]

Fig. 52. Minor shrine to the north of Temple 6 (Period 2a) (IAMP, CC BY-NC-ND 4.0)

On the north side of Temple 6, parallel to this, a second building has been documented (**Fig. 52**). This monument is built upon a larger low pediment. The elevation is square in shape, with one side projecting to the east, which is the body of its stairway. The small building, whose stairway was later elongated, can be considered a minor shrine, probably analogous to the larger one, and certainly associated with Period 2a. It cannot be ruled out, however, that the building was constructed by modifying a Period 1 minor stupa: the orientation and the height of the foundation make it coeval with the Period 2a temple (see Olivieri, chapter 19).

Temple 6 in Period 2b–2c

A great part of the rich stucco architectural decoration presented in these pages (see also Filigenzi 2005) should be assigned to Period 2b.

In Period 2b, the podium was elongated lengthwise (ca. 24 x 14 meters) (BKG Macrophase 8b.1 = Hindu Shahi, ca. 900 CE). The new podium continued the same molding as that of Period 2a. The elevation of the podium preserves the same thick torus plinth with a partition of pilasters. It was built in stone masonry with all the molded parts in stuccoed travertine (*kanjur*). Most of it has been lost, but there is enough to visualize the magnificence (and naivety) of the original architecture. The podium pilasters—ornamented with central vertical cornices decorated (in no discernible order) with various schematic plant designs—depart from a plinth-torus-cave base and were topped by hybrid capitals surmounted by modillions ending in volutes (see below). The upper entablature probably had rows of false brackets of the cyma reversa type with pseudo-Corinthian capitals. At the top of the podium was a second one, on top of which was the shrine (cella). This second podium was similar to the first, but of smaller proportions, whose existence is revealed by architectural elements analogous to those of the first podium, but smaller (see Casalini, below).

The renovation recorded in inscription LM 119 (see above) certainly refers to one of the renovation events that took place during Period 2b.

According to our calculations, the total elevation of the temple would have exceeded 15 meters, of which about 5 meters corresponded to the height of the double podium, and greater than 10 meters for the elevation of the cella. As for the elevation, and also the location of the shrine, one can only refer to contemporary architectural comparisons from the Indus and Salt Range (Meister 2010a), including the elevation of the cella of the Gumbat temple described by Stein (1921; cf. Olivieri 2023b).

The collapse of the temple (the second podium, the elevation, part of the staircase, part of the first podium, etc.) left no debris, so it was clearly the result of an intentional demolition, the chronological context of which we know precisely (first half of the 11th century). The debris was not taken away but burnt on site: it is a mixture of kanjur blocks, marble fragments, and stucco accumulations, which were burnt in a gigantic lime kiln to obtain new stucco. The evidence of the stratigraphy of the lime kiln with

layers of heat-modified stucco nodules and kanjur with a lot of ash, fragments of ironwork and charcoal, is over a meter high and surrounds the entire podium on all four sides.

As said, the debris associated with the final phase of demolition of Temple 6 provided a large amount of burnt wood and pieces of iron (carpentry hardware). In the same lime kiln, a large quantity of wooden parts and iron elements of hardware were also found. These were part of the superstructure of the shrine, which would have had large parts made of wood (apparently both in Period 2a and 2b). Seven fragments of charcoal and one fragment of wood were C-14-dated and gave an average date between 750 and 1015 CE (see **Table 2**: nos. 72–74, 104–105, 106–108, 110; also 105 and 109). These dates prove that the woodwork of the shrine (both Period 2a and 2b) was dismantled and used as fuel for the kiln.

Wood structures were important elements in Shahi architecture, as demonstrated for example at Kafirkot (see Meister 2005: 42), and by the architectural and sculptural wooden pieces found by H. Deane (Olivieri 2023b: 270) perfectly preserved in the guano of the Kashmir Smast cave, now in the British Museum (cf. Hardy, chapter 12).

At a very late stage of the monument, the scale is further modified and reconstructed slightly offset from the orientation of the plan. It cannot be excluded that this Period 2c stairway may be pertinent to the demolition phase (Period 3a), which will be addressed by Casalini in the next part of this contribution.

Architecture of Temple 6: Materials for a Reconstruction

(Alice Casalini)

The Staircase of Temple 6

The stairway itself had been partially exposed in the previous excavation campaign: the south shoulder with its square projection (at wall no. 453) and part of the plaster still attached to these elements was visible in 1999 (Callieri et al. 2000: 222). However, the width and total length of the stairs was unknown: the length was excavated up to 4 meters in addition to the square projection, for a total of approximately 6.20 meters, but the first step of the stairs was not exposed (Callieri et al. 2000: 207). Additionally, later structures like BKG 658 that were built on top of the stairs were not removed in 1998–99 and made it difficult to see the profile and volume of the stairway.

Fig. 53. Restoration of the elevation of the podium of Temple 6 in Period 2b (Alice Casalini/IAMP, CC BY-NC-ND 4.0)

The remains of the first steps, albeit scant, allowed us to reconstruct the total length of the stairway to a maximum of 5.90 meters from the lateral projections and 7.20 meters from the front wall of the temple in the Hindu Shahi period (Period 2b; **Fig. 53**). The inclination of the stairway is approximately 30 degrees. The number of steps can be reconstructed to eighteen to twenty in total, if we assume the "Gandharan step" as the standard measurement (run: 28–32 centimeters x rise: 18–20 centimeters).[5]

As hypothesized during the 1998–99 campaign, the approach to the temple was via a set of stairs on the east revetment wall of the terrace. This means that, at the top of this flight of stairs, the path would make an almost 90-degree sharp turn toward the temple (Callieri et al. 2000: 207–208). As established in the 2023 excavation, the monumental stairway of the temple started indeed quite close to the revetment wall of the terrace, giving it less space to breathe.

The monumentality of the temple was thus based on its looming presence from above: as one climbed the stairs on the terrace and turned to enter the sacred enclosure, they were presented with a sudden vision of the massive architectural volume and could not enjoy a sustained vision of the whole monument upon approaching it. The total elevation of Temple 6, probably more than 12 meters from the floor level, strongly contributed to the creation of this towering appearance. A similar sense of top-heavy monumentality, with the architectural structure imposing from above over a relatively small access route, is seen at the Hindu complex of Katas in the Salt Range, which was built on a series of successive terraces. This was already commented on by Stein when he visited the site in 1931 and mentioned that the

temples were “massively built” on “successive terraces [...] of much greater antiquity” (quoted in Meister 2010a: 15–17).

The stairway inherited Gandharan construction techniques: it was made of a rubble core supported by two retaining walls with a semi-diaper technique visible at the front in which large rectangular blocks of stones are flanked by smaller thin slabs to hold them in place and are topped by a line of ashlars.[6] The lower part of these walls was originally plastered, even though only a portion of it, 15 to 20 centimeters tall, survives today on the south shoulder (**Fig. 54**). The portion below was damaged and fell off when the later structures connected to the Early Islamic era dwelling were built and the floor level was raised. The plaster is better preserved in other areas of the temple, such as the north and south sides, where part of the pilasters that once decorated the podium are also visible over the base molding.

Fig. 54. South shoulder of the staircase in BKG 6.3 (IAMP, CC BY-NC-ND 4.0)

Temple 6 during the Turk Shahi Period (Period 2a)

The Turk Shahi-era temple (Macrophase 8a; 7th–9th century) is no longer fully visible, but some elements allow us to reconstruct, at least in part, its original plan and advance some hypotheses about its original appearance. In this phase, the temple was smaller and had a square plan, rather than the current rectangular one, with *avant-corps* projecting east. On the basis of the Olivieri’s above report, it is evident that the Turk Shahi-era temple developed over at least two levels: the cella at the top was accessible through a staircase (part of its landing is still visible today in the emptied looters’ pits). The cella was the

religious center of the complex: the sacred icon of the main deity of the temple resided in the inner sanctum of this cella. The sculptural remains of the temple in this period include a marble icon identified as Vishnu in the form of Vaikuntha/Chaturanana, accompanied by his personified attributes (*ayudhapurusha*) (cf. Filigenzi in Filigenzi, Casalini, and Iori, chapter 17). It is, therefore, accepted that the temple itself was the seat of a Vaishnavite cult (Filigenzi 2005; 2011: 204–205). I will return to this sculptural group at the end of this chapter.

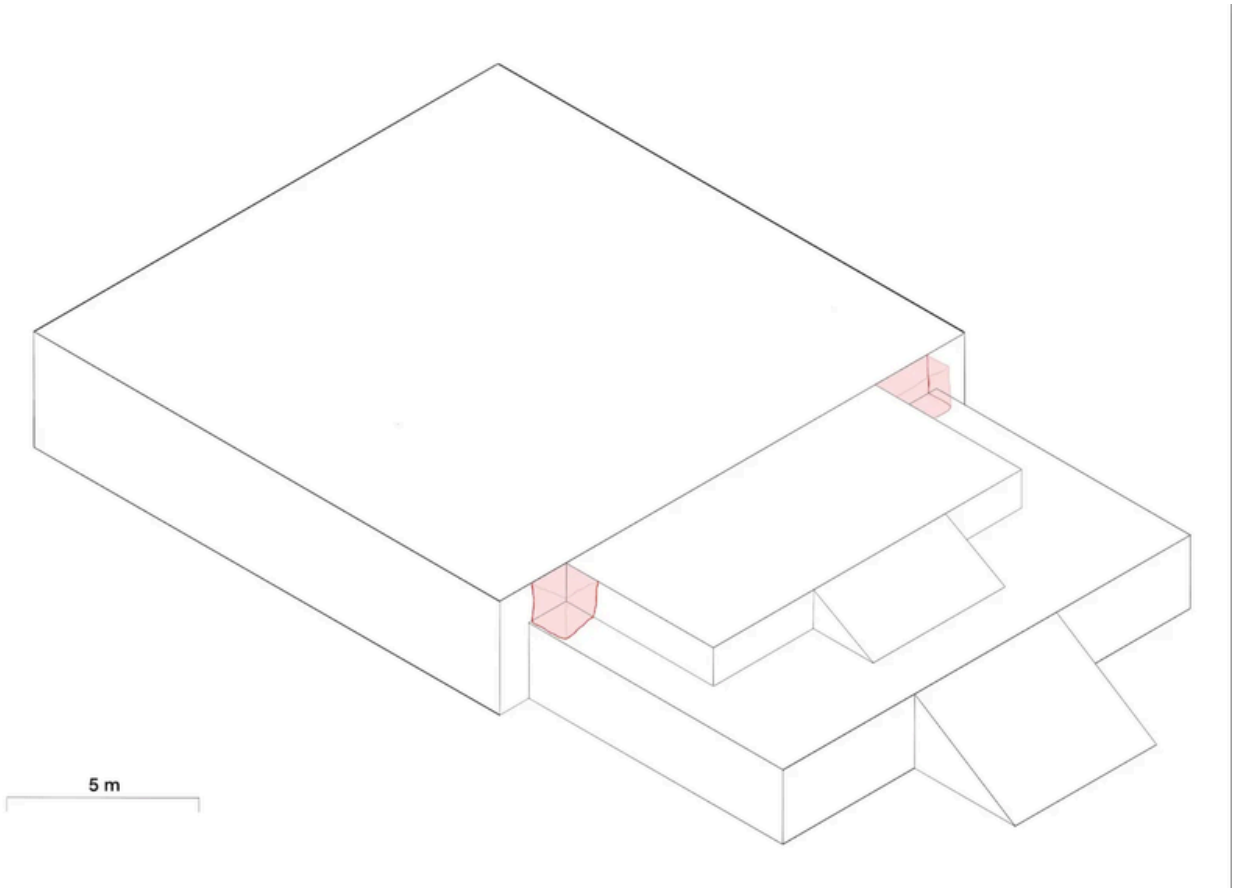


Fig. 55. Isometric restitution of the podium elevation of Temple 6 in Period 2a (Alice Casalini/IAMP, CC BY-NC-ND 4.0)

The upper staircase in turn reached down to a lower landing. From there, another staircase touched the current floor level. Both walking surfaces on the two levels are visible today, one plastered at the top and one flanking the upper staircase landing (Olivieri, above). A possible reconstruction of the Turk Shahi temple volume is drawn in **Fig. 55**.

We do not know exactly how far eastward the *avant-corps* of the Turk Shahi temple projected, nor do we know much about the original dimension of the Turk Shahi staircase. It is possible that it was quite long, in a configuration not too dissimilar to that of the "stupa" of Damkot (cf. Olivieri, above). The staircase, however, was without a doubt shorter than the one we see today for several reasons. I agree with Olivieri that the dimensions of Temple 6 in this phase, as well as its position, are better suited to the terrace: the

square body of the podium stands at an ideal center of the religious enclosure on the terrace, and a shorter stairway would have allowed the temple to inhabit the space more comfortably. Additionally, were the stairway to be as long as the later one in phase 2b, it would reach a length of more than 14 meters, dramatically overturning the proportions of the whole monument—no surviving Shahi temple had a stairway of such enormous proportions with respect to the podium (cf. the temple ground plans in Meister 2010a). Furthermore, had the stairway been that long, the incline of the total rise would be extremely low. Even the monument in Damkot, which had a very long projecting body toward the east, had a relatively short stairway to preserve a functional rise (Rehman 1968: pl. 81a). Even if we accept the presence of an additional landing that changed the incline halfway up the stairs, the overall rise would still be quite incongruous with respect to the *comparanda* at our disposal.

A small building from the north of the temple, which replicates the shape and form of Temple 6 at a smaller scale belongs to this phase. The stairway of this building was elongated too, certainly following the renovation of Temple 6.

Temple 6 during the Hindu Shahi Period (Period 2b)

In Period 2b, Temple 6 underwent a massive renovation. The monument was enlarged by raising the lower podium and filling in the remaining volume. The overall planimetry was changed from square to rectangular. The expanded podium preserved the molding of the earlier building (torus-fillet) but was replastered. Several stucco fragments found scattered around the temple suggest the monument was decorated with *cyma reversa* and phytomorphic brackets, zoomorphic masks (Filigenzi 2005, 2011), festoons tied with ribbons, pilasters with various geometric designs, and other motifs. These elements were all once painted in bright colors: pigments of warm red and orange survive on many pieces retrieved from the excavations.

The original stairway of the Turk Shahi was almost completely engulfed by the structural addition of the podium, and a new stairway was built. The total length of this stairway was 7.20 meters from the front wall of the temple. Lateral projections were added in this phase to create extra volume and expand the top landing of the stairway, only to be razed at a later moment. The upper podium was raised: part of the short staircase leading up to the cella at the top is visible, allowing us to gauge that both staircases had a similar inclination (approximately 30 degrees). Based on our scant remains, and in comparison with the remains of the Zalamkot temple, it is clear that the upper podium was pushed slightly backwards with respect to the overall plan. The heart of the complex, the cella, was at the top and center of the upper podium, just as it was during the Turk Shahi era.

This expansion and enlargement of the podium is not unique to Temple 6. Meister (2010a: 39–50) has collected several examples from the Salt Range where a similar process happened: in Kafirkot Temple C, for example, the podium was made rectangular by covering two small chambers on the east façade of the monument, in a process not too dissimilar from that of Temple 6. Kafirkot Temple E, too, underwent a

similar process in which the lower base below the stairs was completely enclosed by a new elongated podium, and came to light only after excavation (Meister 2010a: 47).

This long phase of dramatic renovations would have required substantial resources and manpower, both in terms of workers and specialized artists and artisans, demonstrating that this endeavor was supported by and paid for by the ruling class (Filigenzi 2015a: 38). It is to this major work, or at least to part of it, that the inscription of Jayapala Deva (964–1002 CE), found in Barikot and now in the Lahore Museum (LM 119), may refer to when it speaks about the consecration of a deity-house (loc. *devakule*) at Vajirasthana (see the note of von Hinüber in Olivieri 2020b: 54–55).

Cella and Superstructure

The cella of the Hindu Shahi temple was at the top and center of the upper podium. Nothing survives of this structure; however, its general position is suggested by the presence of two drains running east-west parallel to each other at a distance of about 3 meters apart (**Fig. 56**). Wall no. 1900 is ca. 5.30 meters long, while wall no. 1901 is preserved only to a length of ca. 3.50 meters, but it once probably reached the same length of its northern counterpart. These drains were certainly used to discharge lustration fluids poured on the cult statue(s) in the cella, as is the case at many Hindu temples even today (Kojima et al. 2022), so they must have connected the inside of the sanctum to the outside. Their initial point, therefore, would be located just inside the shrine and their end point just outside its external walls.

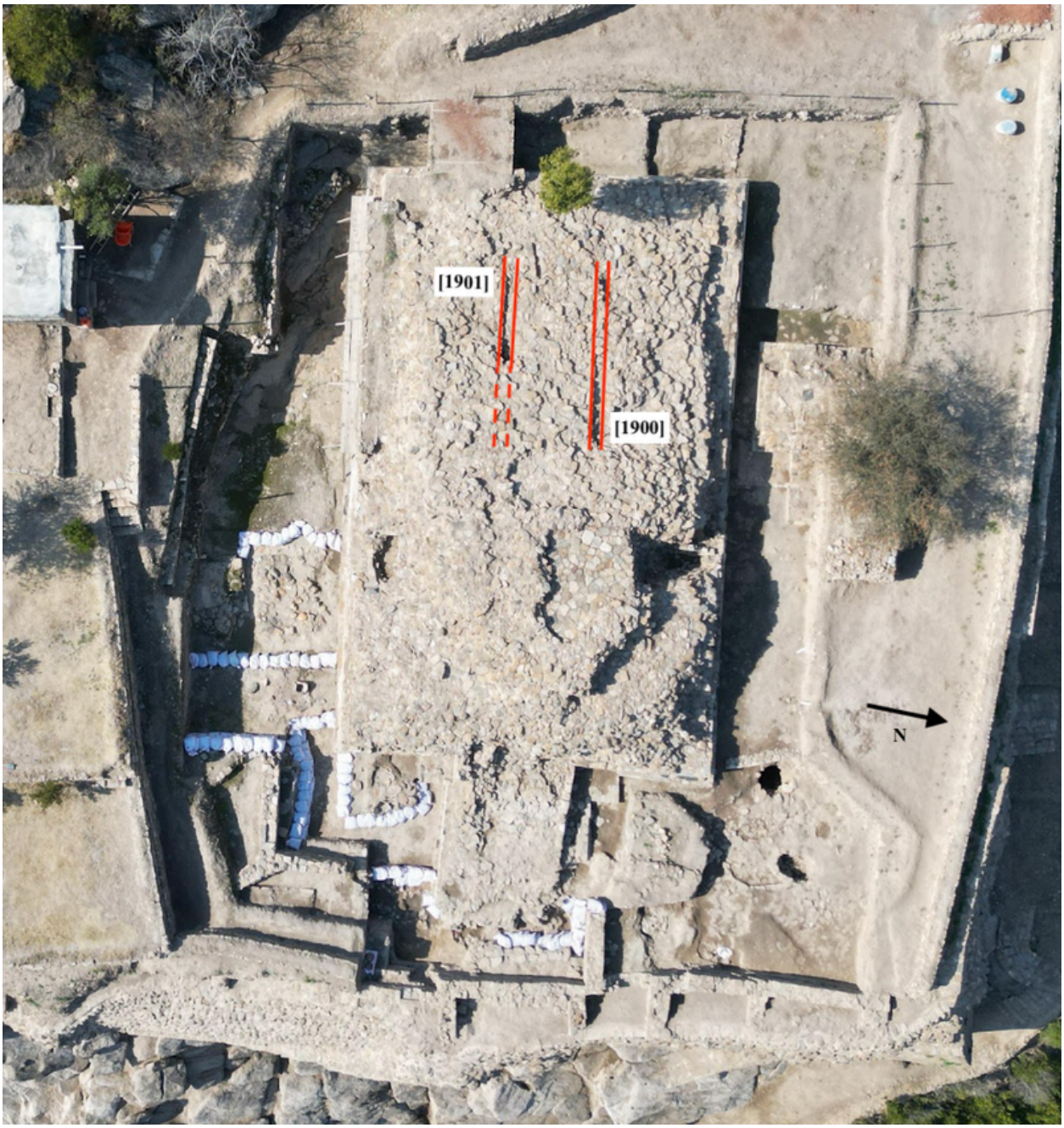


Fig. 56. Temple 6: the drains (IAMP, CC BY-NC-ND 4.0)

Drainage systems have been documented at Hindu temples throughout South and Southeast Asia. An early description of these elements is given by William G. Cowie, a British Army chaplain in Kashmir in the 1860s, who wrote that the Vishnu temple at Buniyar (8th century) had "a stone drain or water-spout, open at the top, for carrying off the water used for the service of the temple" (Cowie 1867: 93). He wrote similarly about temples in Lidar (Lidder), Wangath, and Payech (Payar). Some of Buniyar temple's dimensions are similar to Temple 6 in Barikot: the shorter, front side of the lower podium is approximately 14 meters, while the upper podium is about 10.50 meters wide. Taking these

measurements as guidelines, we can estimate that Temple 6's cella could have been around 8 meters per side, while the walls must have been between 1.90 and 2 meters thick. Positioning the cella according to the drains' location and these measurements, the structure would have been located approximately at the center of the upper podium.

Unfortunately, the superstructure over the cella has been lost to time, and it is impossible to tell with certainty how it might have looked. As it draws heavily on the previous architectural tradition, as mentioned above, it is likely that the superstructure had a form closer to the typical experimentations of this local style of architecture that Meister (2010a: 21) calls the "Gandhara-Nagara style." This style included a variety of tower-like roof shapes, some resembling quite closely the sloping *shikharas* of the northern Indian tradition. A small piece of stucco found in the debris around the temple can be recognized as a miniature *amalaka* stone, which suggests the presence of a typical superstructure decoration reproducing the image of the temple itself on its own architectural body (see **Fig. 12**; cf. Hardy 2016: 119–120). The closest comparison, at least in geographical terms, is the temple of Gumbat, in the Talash Valley, whose reconstruction is published in my section of Olivieri et al. 2025: pl. XXI.

Podium Decoration

The base molding of the Barikot temple is in line with the Gandhara-Nagara style. It has a high plinth, a large torus (41 centimeters tall), followed by a thin fillet (5 centimeters) and a thick fillet (12 centimeters). On top of the thick fillet lie the bases of the pilasters, made of plinth-torus-straight cavetto (**Fig. 57**). Each pilaster is on average 20 centimeters thick and 55 centimeters wide, and they are 2.30 meters from each other (axis to axis) (**Fig. 58**).[7] The configuration of pilasters at a regular distance from each other around the podium of a monument is typical of the earlier Gandharan architecture of the region—it is seen for example, on the podium of the stupa of Amluk Dara (Olivieri 2019a). A similar configuration also appears in the podium of the Zalamkot temple, but the molding there is somewhat more complex (see above **Fig. 42**). The base molding of Damkot is also similar (Rehman 1968: pl. 81). The pilasters—some of them partially survive *in situ* on the south and west face of the temple—were decorated with two alternating patterns: one with plain sides and a decorated raised band in the middle filled with two types of phytomorphic designs; one with a projecting cornice and central band with an incised ribbed pattern (Callieri et al. 2000: 207).

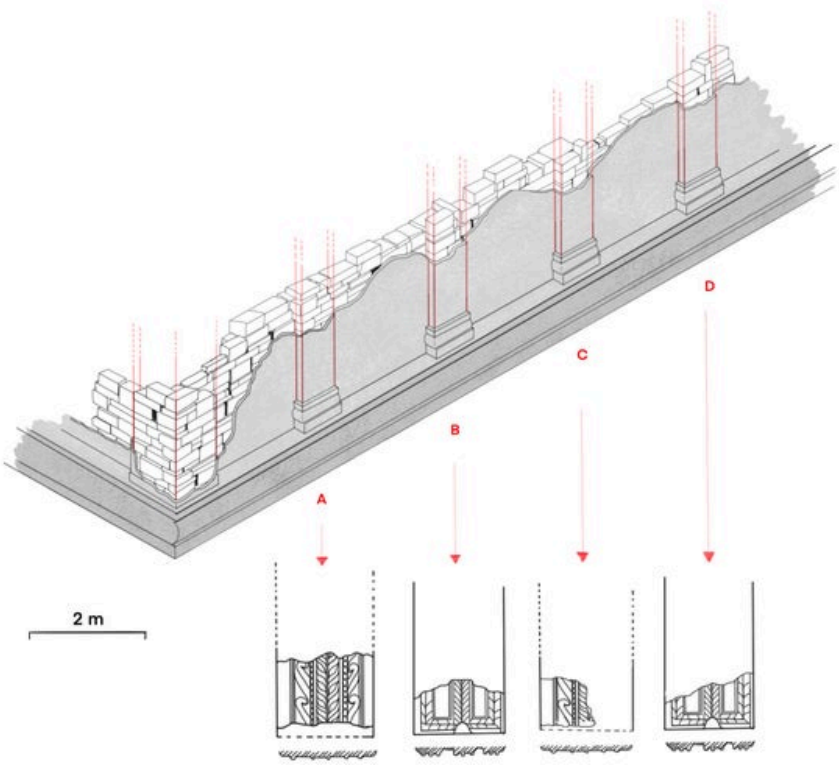
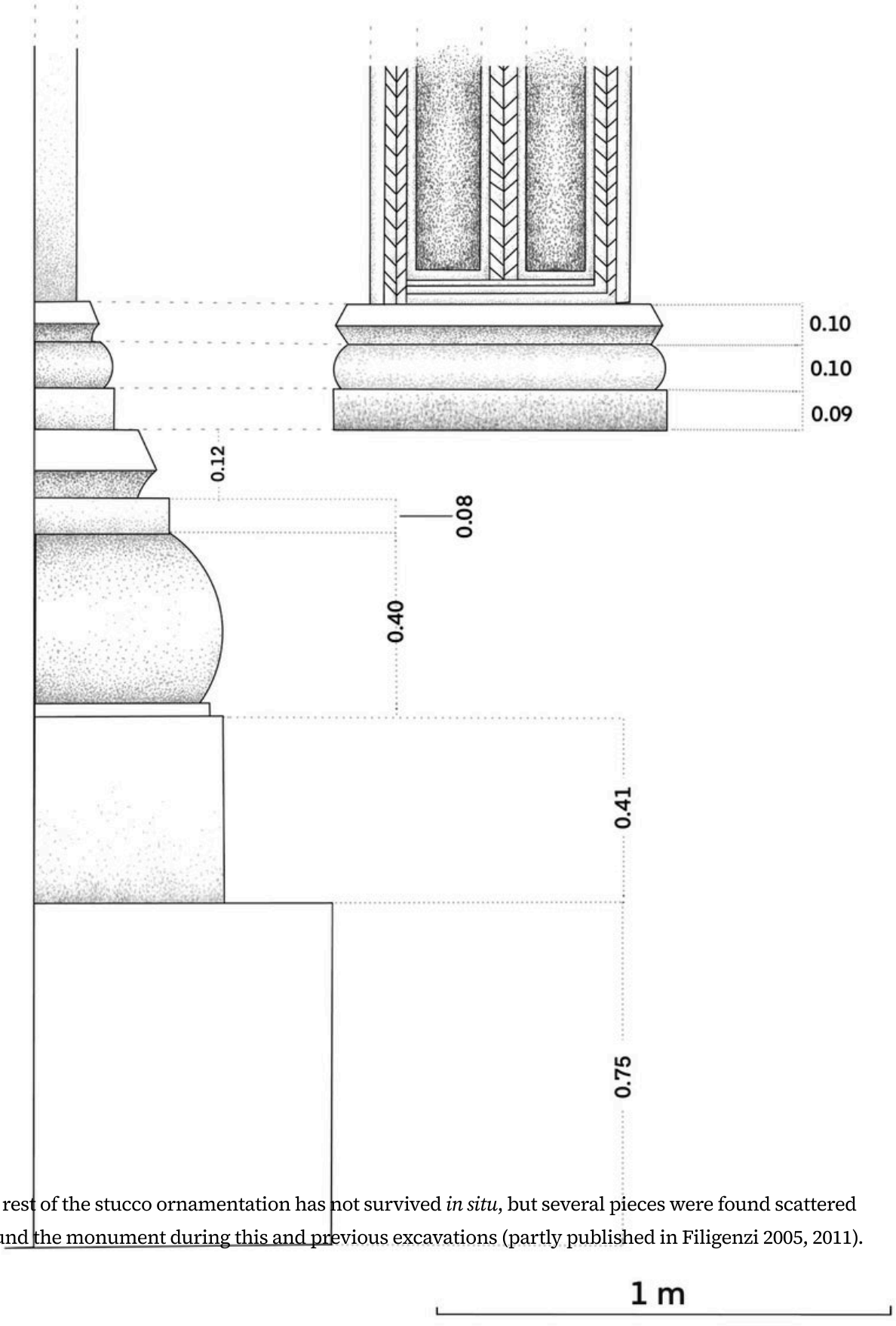


Fig. 57. Temple 6: isometric restitution and section of the podium (lower part) (Francesco Martore/Alice Casalini/IAMP, CC BY-NC-ND 4.0)



The rest of the stucco ornamentation has not survived *in situ*, but several pieces were found scattered around the monument during this and previous excavations (partly published in Filigenzi 2005, 2011).

Zoomorphic and theriomorphic masks make up a conspicuous portion of the figurative stucco finds. Although none of the finds are complete, the fragments allow us to recognize at least five typologies on a formal basis, which I will discuss later (**Fig. 79**).

When looking at all the finds together, it becomes apparent that there are at least two orders of decoration based on their different size. Zoomorphic and theriomorphic masks of the same type, for example, appear in a larger and a smaller size; a section of a pilaster (BKG 9845) recalling those *in situ* was retrieved, but its width (21 centimeters) is less than half that of the temple podium's pilasters (55 centimeters); identical vegetation designs were modeled in both sizes. The double order of similar elements responds to the need of decorating two podiums, which followed a similar ornamental pattern but were of two different sizes.

On the lower podium, the capitals of the pilasters were an extreme stylization of the Gandharan-Corinthian capital whose focus on lateral volutes recalls the Ionic order (or a pseudo-Ionic hybrid order). Part of the volutes (e.g., BKG 10857) were found during excavation (see Olivieri 2022a: 270). Their large dimensions fit the scale of the lower podium pilasters. The presence of voluted capitals has been documented in other coeval sites, such as in Zalamkot, Gumbat, and Kafirkot (see Olivieri above; cf. Olivieri 2023b; on Zalamkot, cf. Shavarebi 2022). It is unclear what the rest of the capital elements might have been, but the row of abstract phytomorphic design of BKG 9844 might have served as the collar, since it seems to be related in terms of proportions and dimensions. It must also be pointed out that the find of two pieces of cascading vegetation (BKG 10354; BKG 10353) could suggest the presence of a pot-and-foliage type of capital, typical of Gupta and Post-Gupta architecture (Meister 2010a: 25).

Many of the larger animal masks were probably part of the architrave as protomes, interspersed with cyma reversa brackets. The zoomorphic protomes follow a tradition that goes back to at least the first century BCE in Swat—some examples are seen in the much earlier monuments 14 and 17 in Butkara I but also in the Dharmarajika stupa in Taxila (Olivieri 2022a: 105–108)[8]—but that also survive in later Kashmiri Hindu architecture: both in leonine form or depicted in the act of devouring, protomes are part of the entablature of temples at Parihasapura (8th century CE) and Avantiswami (9th century CE). Following this long-standing tradition, it is not too far-fetched to locate the stucco protomes of the Barikot temple in the cornice above the pilasters, together perhaps with other elements, such as rows of dentils, ribboned festoons, and/or rows of phytomorphic design—all these elements have been found among the stucco fragments scattered around and below the East Terrace.

Fig. 59. The west gate of the Vishnu temple in Deogarh, Uttar Pradesh, India (Ismoon, December 30, 2020, CC BY-SA 4.0)

At the same time, zoomorphic masks are also a common sight in the architectural language of Hindu temples as part of the superstructure—either in the leonine form or depicted in the act of devouring. Since both forms are associated with thresholds, limits, and boundaries, these types of masks often appear above doors and entrances. One example of this phenomenon is the Vishnu temple at Deogarh in Uttar Pradesh (6th century CE), where lion heads are disposed in a row above the entrance (**Fig. 59**). It cannot be excluded that the stucco lion heads, especially those of a smaller size (like BKG 9833 or BKG 9681; see below), were in a similar position in the Barikot temple.

Fig. 60. Temple 6: part of a pilaster on the upper podium, *kanjur* and stucco (IAMP, CC BY-NC-ND 4.0)

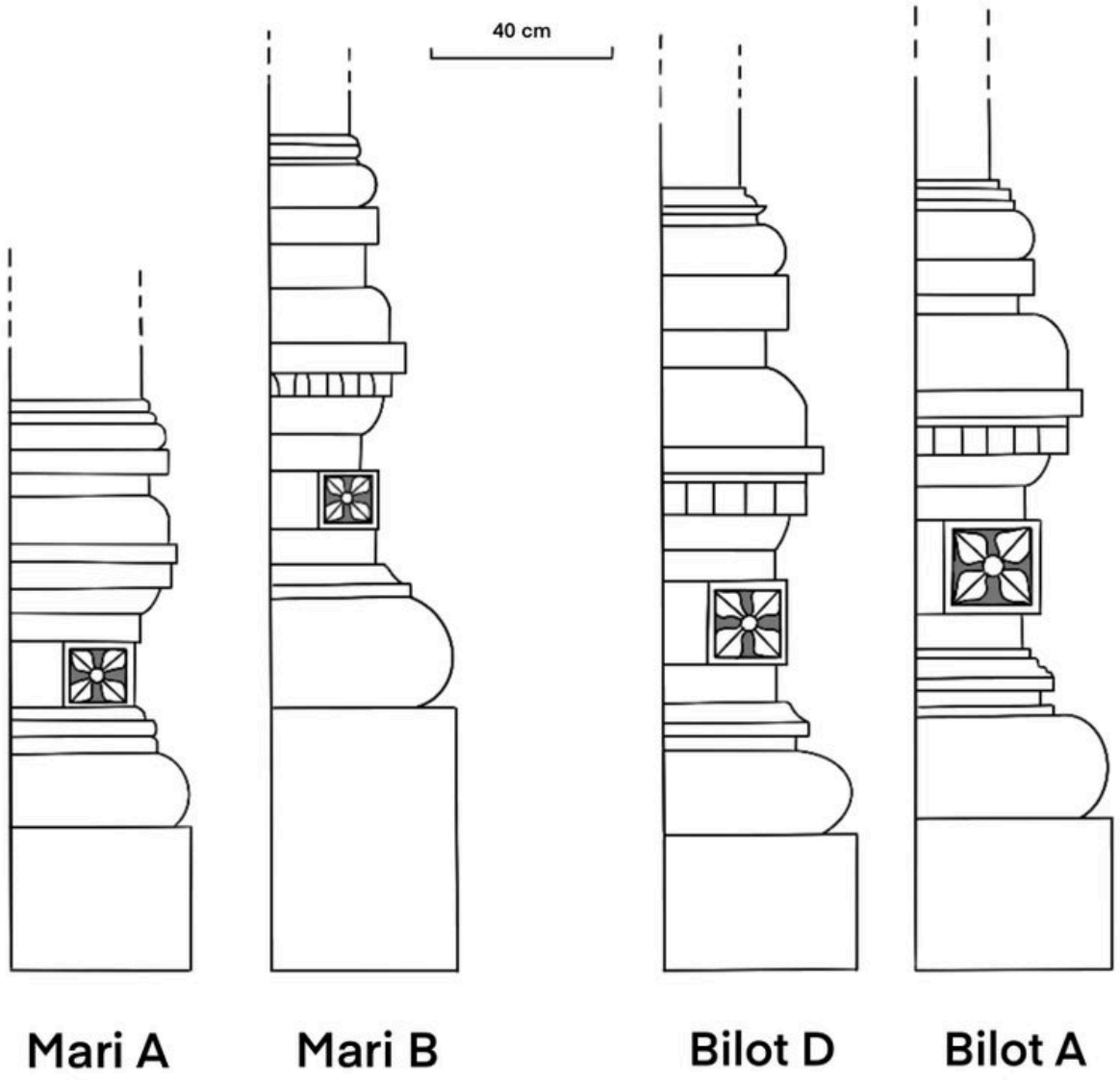


Fig. 61. Salt Range temple moldings with the rosette element (Alice Casalini, modified from Meister 2010: fig. 107)

The upper section of the temple is heavily damaged; therefore, none of the upper podium's decoration survived *in situ*. The piece of pilaster BKG 9845 in **Fig. 60** gives us a glimpse of what the pilasters there might have looked like, but further inferences about its original appearance are hindered by the lack of additional finds. The torus-cavetto type base, retained from the Turk Shahi era for pilasters on the lower podium (cf. Olivieri, above), was probably replicated on the upper podium as well. However, a small piece of decoration, a rosette inscribed in a square (BKG 10348) suggests that the upper podium might have had a more complex base molding: similar elements are seen in the moldings in Temple C in Kafirkot, Temple A and D in Bilot, and Temples A and B in Mari Indus, below the base of the pilasters (**Fig. 61**). Small pieces

like this one were also part of the superstructure decoration, inserted in the cornices above pilasters—see once again the examples from the Avantiswami temple in Kashmir—so this and similar pieces might have been inserted there as well (cf. Filigenzi 2005: 458).

The capitals of the pilasters of the upper podium are of an unknown order. As mentioned above, during the excavation smaller pieces of cascading leaves or branches were found, very similar to BKG 10354. This suggests the presence of smaller pot-and-foliage capitals on the upper podium. Another option is that the capitals were of a variation or development of the Gandharan-Corinthian type typical of the region recalling the hybrid Ionic style of those found at Kashmir Smast, as suggested by very few fragments that seem related to that capital form. The stucco apparatus, once painted in bright colors (reds and oranges as well as perhaps deep blues and blacks, as evidenced by some fragments) was certainly complemented by wooden decorative elements, which, unfortunately, have not survived in the archaeological record.

The Main Cult Statue

Only five pieces of the statue of Temple 6 survive (**Fig. 62**).[9] The fragments are mostly from the lower part of the statue and collectively indicate an identification of the icon as Vishnu: a small female figure (BKG 2047); a piece from the lower part of a leg (BKG 2044); part of the head of a small male figure (BKG 5869); a right hand holding a halo or *chakra* (BKG 12018); and, from the upper section of the figure, part of a left hand holding a conch shell (BKG 6379) (see detailed descriptions by Filigenzi in chapter 17). The small female figure can be identified with certainty as Gadadevi, the anthropomorphic form of Vishnu's mace (*gada*); the tapering pillar behind her is meant to represent the shaft of the mace (Filigenzi 2005: 453–453). The conch shell is the attribute Vishnu commonly holds in his primary left hand. The small male figure, despite missing his face, can be identified as Chakrapurusha, the anthropomorphic form of Vishnu's war discus or wheel (*chakra*).[10]

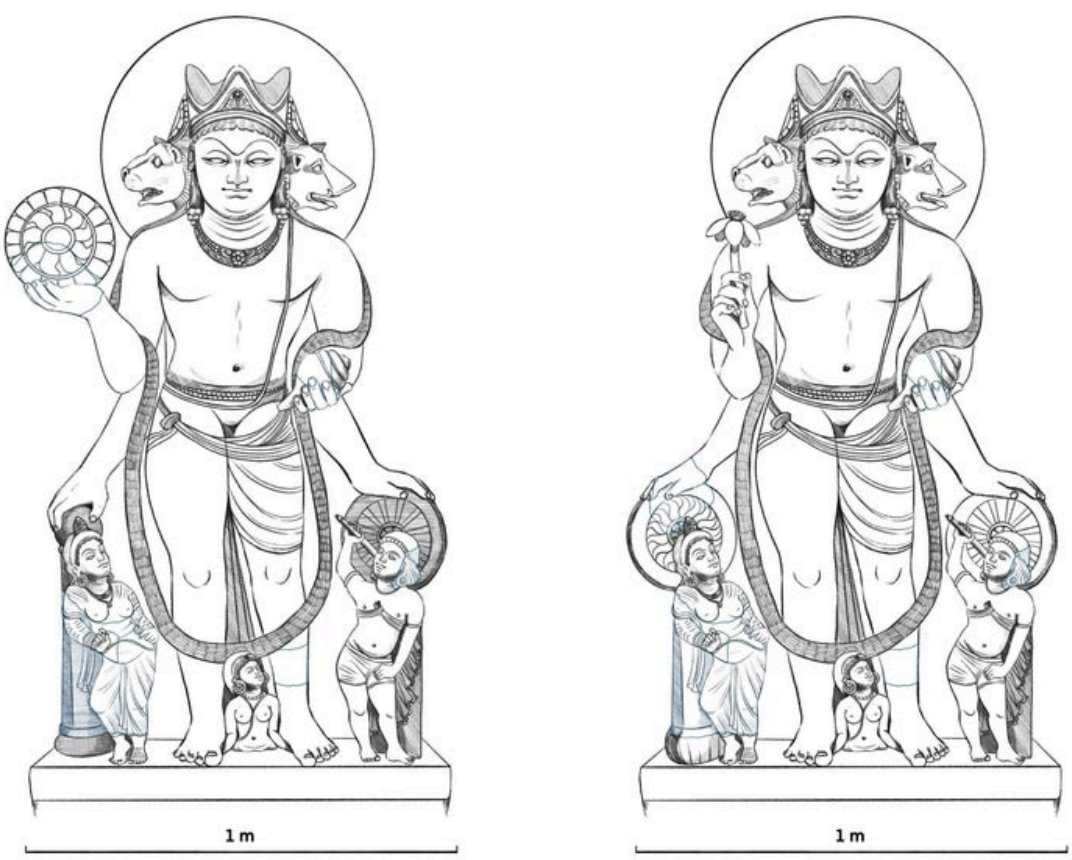


Fig. 62. Two reconstructions of the main sculptural group of Temple 6 (Alice Casalini/IAMP, CC BY-NC-ND 4.0)

This primary sculptural group was complemented by at least three others of which we can recognize the subject (with various degrees of certainty)—all relate to a Vaishnavite environment (see Filigenzi, Casalini, and Iori, chapter 17). Particularly important is a piece that was discovered in 2024, a fragment of a small stele depicting Durga Mahishasuramardini (BKG 11360), of which only part of the buffalo's horns under the goddess' foot and traces of drapery survive. This latter subject was known in northern Pakistan and eastern Afghanistan, and it seemed to enjoy particular favor, as several examples depicting Durga Mahishasuramardini and similar goddesses survive (e.g., Tucci 1963; Taddei 1973; Kuwayama 1976; Srinivasan, Olivieri, and Salemi 2018). The recent find of a *shivalingam* (BKG 11235) adds complexity to a Hindu horizon that otherwise appears fully Vaishnavite.

We cannot know with certainty whether these smaller groups were installed with the central image in the cella of Temple 6 or in the side niches of the temple, or whether they were part of the decoration of the second, smaller cultic building to its north side (Casalini in Olivieri et al. 2025).

Addendum 1: Decorated Sandstone Cornices from Macrophases 8a–b

(Luca Maria Olivieri)

A series of square gray sandstone blocks were found reused in the masonry of Macrophases 9a and 9b. The lithotype is neither local nor attested otherwise in Barikot. The long side of these blocks, which should have been laid horizontally, is decorated with geometric or phyto-geometric motifs. These are basically frames that were intended to mark specific parts of an elevation. For example, if isolated: the upper beam of an opening or niche, sills, or bases of the same; if in series: a stringcourse. The chronological collocation of these pieces—albeit in the absence of *in situ* finds, as they were always found reused as building material—is certainly in Macrophases 8a or 8b. The length of the pieces varies according to condition (none came to us whole), while the height of the frame is always around 8–10 centimeters.

Fig. 63. Sandstone architectural pieces (friezes) from the phase of Temple 6 Period 2a (IAMP, CC BY-NC-ND 4.0)

Among the documented materials, BKG 6101 is particularly interesting. It was found in Trench BKG 1415 (west of Trench BKG 14), embedded in the outer masonry of the water reservoir's corridor in Macrophase 9a. It shows a well-executed decoration of continuous horizontal lozenges with four-petaled rosettes (**Fig. 63**). Additionally, a number of other pieces (BKG 4845, BKG 11382, BKG 12019) are decorated with three incised horizontal lines interrupted by an asterisk-like pattern; the points of six of the asterisks connect to the horizontal lines, while the two vertical points (the upper and lower) are free. BKG 12019, which is one of the longest and best preserved (length max. 33 centimeters) was found reused in wall no. 110, one of the structures attributed to Macrophase 9b in Trench BKG 24. In addition to these pieces, other sandstone pieces with the same general characteristics (type of workmanship, chronological location, chronology of reuse) have also been documented: BKG 8807—molded element (?), BKG 10020—vertical molded element (?), BKG 10063—acroterion (?).[11]

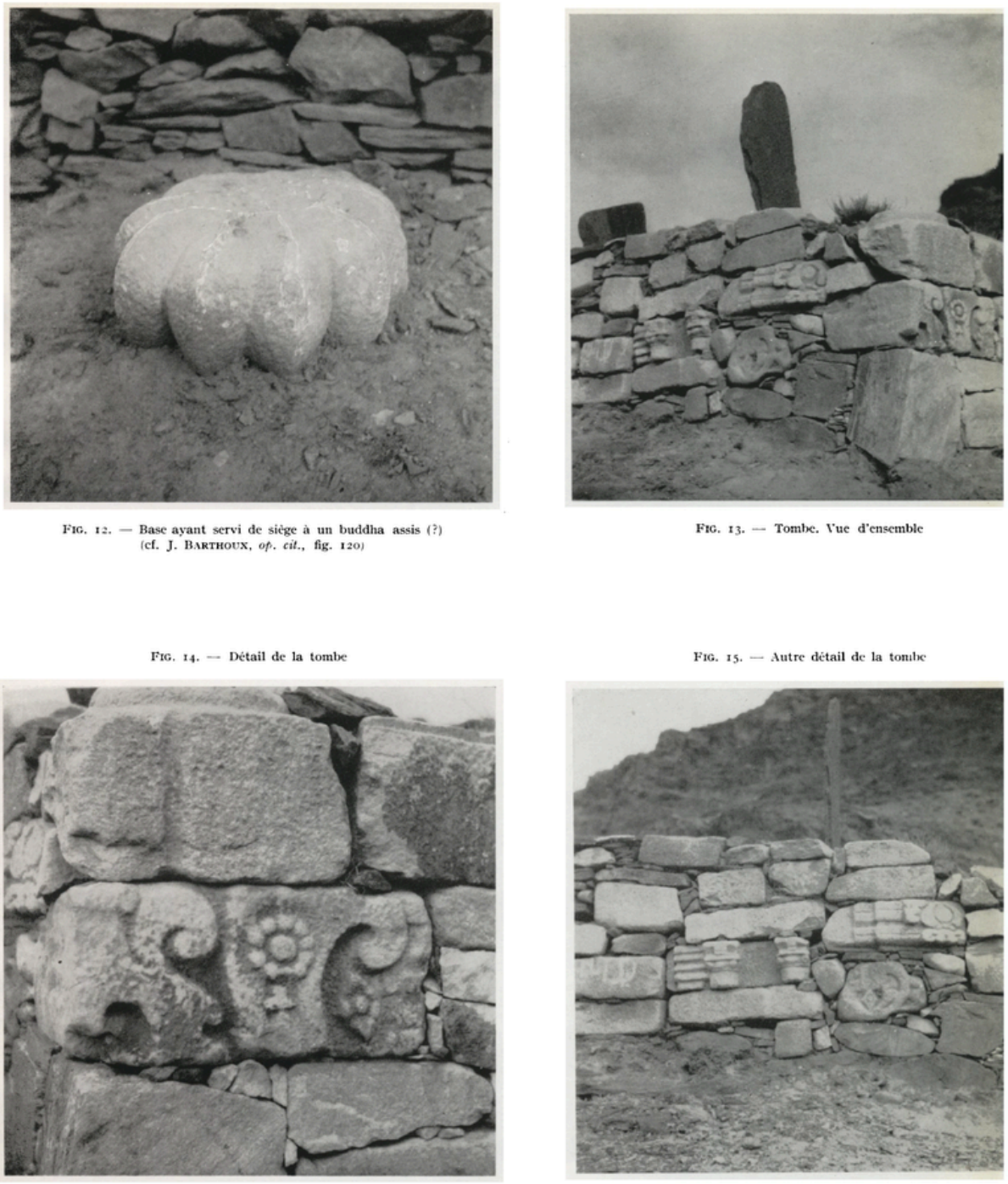


Fig. 12. — Base ayant servi de siège à un buddha assis (?) (cf. J. Barthoux, *op. cit.*, fig. 120)

Fig. 13. — Tombe. Vue d'ensemble

Fig. 14. — Détail de la tombe

Fig. 15. — Autre détail de la tombe

Fig. 64. Reused stones at Chiga Sarai (after Edelberg 1957: 205)

The materials share certain features, especially the stone type, with those documented at Chiga Sarai (Kunar, Afghanistan) (Lentz 1939; Edelberg 1957; van Lohuizen-de Leeuw 1959; Fischer 1969; **Fig. 64**) and Ziarat (Talash, Dir) (cf. Iori, chapter 15). These materials can be chronologically associated with the much

higher quality production of architectural stone elements from the Shahi period, which are, however, rarely attested in Swat.[12]

Addendum 2: The Quarry Sources of *Kanjur*

(Luca Maria Olivieri)

The Material

The presence of *kanjur* in the late antique architecture and decoration of Swat, and especially at Barikot, is a small and intriguing mystery: we have known for a long time that *kanjur* sources must be sought outside of Swat, but they were not identified with certainty until November 2024, as will be addressed below.

Kanjur (or *kankar*) is an organogenic limestone, visually similar to tufa, that can be easily cut and shaped.[13] It is not a stone native to Swat—only small isolated rocky outcrops have been found south and southwest of Swat. The use of *kanjur* dates back to the third century CE in Buddhist sacred areas (at Barikot and neighboring sites) where it was used for masonry facing, moldings, and architectural elements. It was also an ideal base for stucco (lime molding, both decorative and figurative), which was certainly a by-product of *kanjur* stone workmanship (Olivieri 2019). After the fourth century, the use of *kanjur* is attested again from the late eighth until the eleventh century, but it rapidly declines after that. Today, *kanjur* is used in buildings in Upper Mardan, Swabi, Lower Hazara, and Margalla/Taxila, which coincidentally are also its sourcing areas.

The use of this material is clearly linked to specific and limited chronological horizons, as well as to specialized craftsmanship, which includes stucco. The material had to be imported, and its presence in Swat stands out for its strangeness and (apparent) uselessness in an area where stone resources are abundant and unlimited and had been masterfully used by local schools and ateliers for centuries.[14] We may guess, therefore, that the shift to *kanjur* implied a major change in the economic and political geography of the region. Interestingly, in Macrophase 8a–b, the use of *kanjur* and stucco is associated with political entities (the Shahi) controlling Swat from the south, having their capital in Hund (Kimmet 2020; Verdon 2021).

In Macrophase 9a, when the use of stucco (but not that of *kanjur*) was widespread especially in the Ghaznavid centers, the production of this material involved perhaps not only quarrying and working *kanjur* but also, and especially, the reuse of material from earlier buildings, such as Temple 6 in Barikot (see Olivieri, chapter 13). It is interesting to note that the stucco produced by the kiln area on Terrace E was not used in either Barikot[15] or Udegram, nor in the coeval settlements and towns but was probably exported to the capitals of political power in the southern districts of Peshawar/Hund, or to Ghazni and the Kabul area.

The Quarry Areas

Thanks to the collection of oral information, we finally identified an area where a *kanjur* quarry had been in use from at least the pre-modern era until the beginning of the twentieth century—this is at Sherghar in the Mardan District, at the base of the Malakand Pass and not far from the military fort of Dargai. The site (34° 25’ 4’ N, 71° 51’ 12’ E, 400 meters a.s.l.) is located 40 kilometers as the crow flies and 60 kilometers overland from Barikot. The area is not far from previously reported Shahi archaeological sites like Diggar and Haryan-kot.

Today, the quarry is abandoned. Its last documented use (in the form of material reused in village buildings) dates to the beginning of the last century (**Figs. 16–18**). As things stand, this is the only documented quarry in the area around Swat, without considering the more distant districts where *kanjur* is available: Swabi and Taxila in particular, where *kanjur* was used as the main building material from the early stages of Bhir Mound, and for sculpture from the mid-first century BCE at Sirkap. We cannot say with certainty that this is the quarry from which the Barikot (and Amluk Dara) *kanjur* was quarried, and only isotope analysis will prove or disprove this hypothesis (the analysis will be carried out by C. Faccenna). We can say, however, that this is certainly the nearest and most available ancient quarry on both logistical and geographical grounds. Autoptic analysis of the material collected so far shows an absolute similarity between the material quarried in Sherghar and that used in Barikot.

The quarry area outcrops in Quaternary alluvial deposits (silt, sand, and gravel) feature extensive horizontal and sub-horizontal outcrops exploited with terraced cultivation for the extraction of parallelepiped blocks (**Figs. 65–67**).[16]

Figs. 65–67. Shergahr: *kanjur* outcrops for terraced quarry cultivation (IAMP, CC BY-NC-ND 4.0)

Import Routes

Possible access routes into Swat for the import of *kanjur* were the Malakand Pass or the Shahkot Pass (*Hatilar*) and the Karakar Pass (**Fig. 68**). The latter must have been preferred to the first because of its proximity to Barikot, whereas at Shahkot, the Shahi temple of Zalamkot (cf. Iori, chapter 15 and Olivieri,

chapter 13) does not make use of this material. By analogy, one might suppose that the first and very new use of this material (*kanjur* and stucco) in Macrophase 5b at Amluk Dara (in the Sasanian Kushanshahr phase) happened at a time when the control of the agricultural and strategic resources of Swat came from the southern plains between the course of the Kabul and the Indus (Peshawar first and foremost), or possibly even from Taxila (Sirsukh).

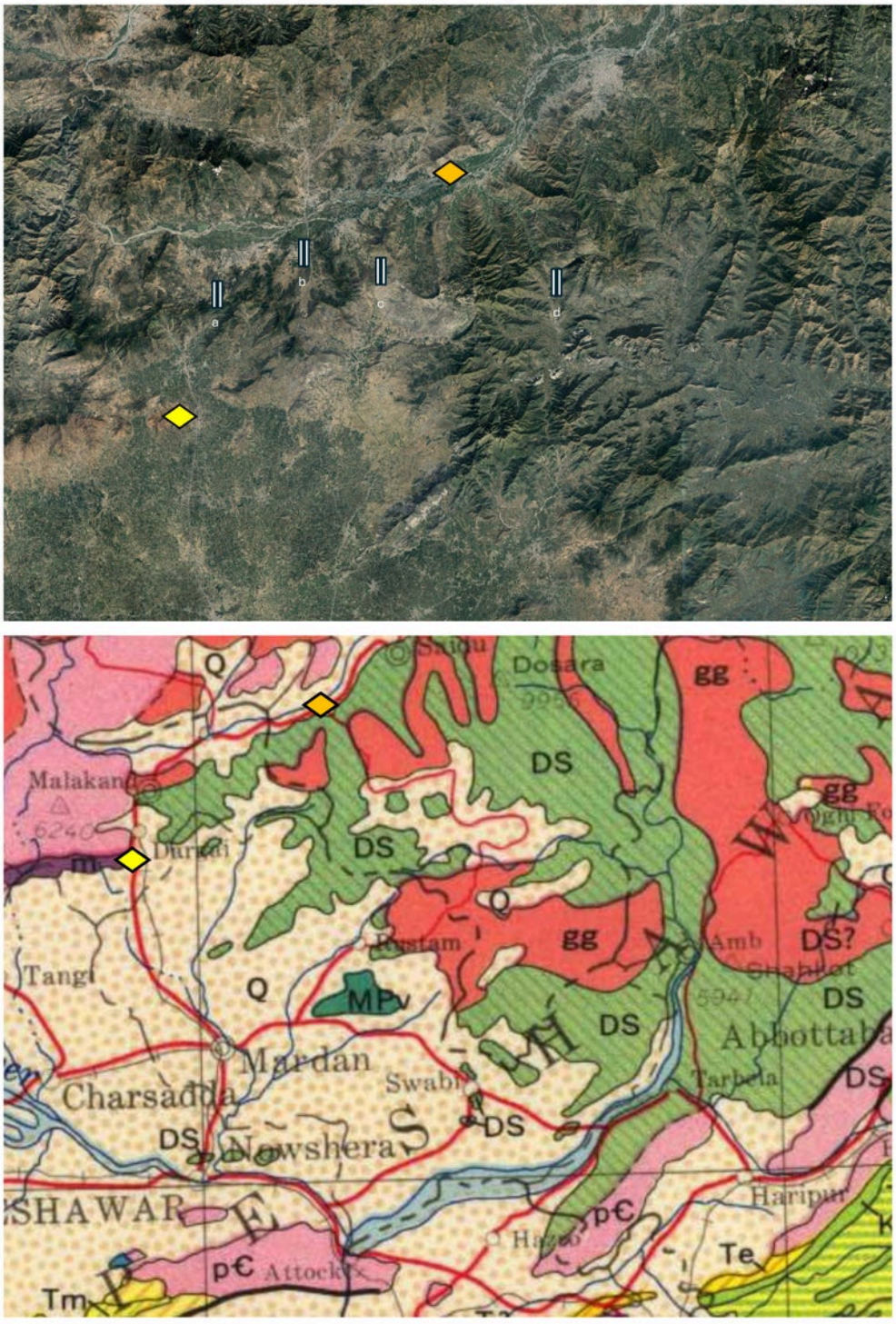


Fig. 68. Map of the study area with major passes: a) Malakand, b) Shahkot, c) Gunyar-Cherat-Saffar, d) Karakar (IAMP, CC BY-NC-ND 4.0)

Footnotes

1. See M. Meister's short but incisive contribution on this subject (Meister 2015). ↩

2. For the correct location of the Gumbat temple, see Iori, chapter 15. For the evidence from Udegram, see Iori, chapter 15. Another coeval temple was documented to the west of Swat, at Chiga Sarai in the valley of Kunar in Afghanistan (Lentz 1939; Edelberg 1957; Lohuizen-de Leeuw 1959; Fisher 1969). ↩
3. On Zalamkot, see chapter 19 *Addenda* (Addendum 2). This shrine's position within the citadel of Gumbatuna is now definitively clarified: see Iori, this chapter. For the reconstruction of the elevation see Casalini in Olivieri et al. 2025. ↩
4. Judging from the pottery, terracotta figurines, and so forth, practically the excavation report gave the Shahi phases as pre-Shahi and the Islamic phases as Shahi. In practice (one can tell from the stone lamps, which are all Post-Shahi) the report mixes periods 3, 4, 5, and 6 (i.e., Kushan, Post-Kushan, Shahi, and Post-Shahi). As for the water tank ceramics, these are Shahi and Post-Shahi materials. For the molded and painted spouts (Shahi and Post-Shahi, respectively), the report provides an attribution to Period 3. For the Fashion Ware (Period 1 and 2 = beginning of the 1st century CE) the report is not wrong in terms of stratigraphy, but certainly in terms of the chronological starting point, which should be shifted to at least the mid-third century CE. ↩
5. These measurements are reconstructed on the surviving decoration of stupa stairways from Gandhara such as string elements and stair risers surviving from the region and dated to an earlier time (3rd–4th century CE; see Olivieri 2022a; on stairways in Gandhara, see Olivieri and Iori 2021b). ↩
6. The connection between the Gandharan masonry of earlier times and Hindu temple architecture has already been noted and briefly discussed by Meister (2010a: 21). ↩
7. All data are from Callieri et al. 2000: 205–206. ↩
8. For the representation of zoomorphic protomes in later Gandharan art, see the examples provided in Luczanits 2013. ↩
9. For a complete reconstruction of the statue and the related hypothesis, refer to Casalini in Olivieri et al. 2025. ↩
10. Pal (1975: 64) notes that in slightly earlier images from Mathura, Vishnu is almost invariably represented with three heads rather than four, as is a sixth-century bronze sculpture from Swat now in the Museum für Asiatische Kunst (inv. no. I 24). Pal advises that the four-headed variation of Vaikuntha is a later Kashmiri development created to suit the *chaturvyuha* ("four emanations") concept; see Srinivasan 1979. ↩
11. Cf. also BKG 4845 and BKG 6101. ↩
12. An example of a unique lintel from Shakorai, Manglawar, is now at the Museo delle Civiltà, Rome (cf. Scerrato and Taddei 1995: fig. 91). ↩

13. From the petrographic viewpoint, "[*kanjur*] is an organogenic limestone, mainly composed of calcite. A prominent feature of this rock is a porous microstructure. [...] The rock was probably originated by a colony of calcareous porifera or calcareous algae in a marine environment (ancient Tethis sea). Such a rock may be classified as a biocalcarenite" (Rosa, Theye, and Pannuzi 2019: 24). ↩

14. "Schist is the rock of Swat, its petrographic and artistic signature. It was the main stone material quarried and used for architectural decoration and sculptures in Swat especially in the 1st–3rd century CE [...]" (Olivieri 2019: 126). ↩

15. Apart from the plastered surface of a few walls of the Macrophase 9a building on the east side of the Central Fortress (cf. Minardi in Olivieri et al. 2025). ↩

16. The outcrops belong to the biocalcareous component of the Swabi-Chamla sedimentary group and/or the "Lower Swat-Buner schistose group" (*Geological Map of Pakistan* 1964: Northern Montane Area, DS) or "Kashala-Nikanai Ghar and Saidu formations undivided" (*Geological Map of NWFP* 1962: mm) (for updates see Malkani and Mahmood 2017; see also the official SPG website). ↩