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## Decline or Transformations: Patterns of Change in Swat at and after the end of the Kushan Era (3rd-6th Century AD)<sup>1</sup>

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#### **Abstract**

In the last years the ISMEO/ACT teams were busy in excavating the late-Kushan and Kushano-Sasanian stratigraphy and urban religious complexes at the Bir-kot-ghwandai site (Swat, Pakistan). The ancient city started declining around mid-3rd century and was abandoned by early 4th CE. Its crisis and abandonment matches the general crisis of urbanization in the northern regions of the Sub-Continent, following the collapse of the Kushan system of power and the rise of non-urban/non-Buddhist elites. In the phase that saw the abandonment of the urban site(s), in Swat, Buddhist complexes in the countryside managed to survive. Though, major changes are documented in that phase, e.g. at Amluk-dara: radical reconstructions, massive introduction/import of stucco and kanjur (the first is the byproduct of the second; the second is not a local lithotype), and progressive decline of both the schist quarry areas the stone sculptors' workshops.

## A preamble on methodology

"A typically neglected phase in oriental archaeology is that of abandonment. The archaeologist is often looking for a confirmation of a previous hypothesis, and is tempted to go straight to the 'good' levels, neglecting the superficial phases, which are deemed to be relatively uninteresting. This is an error of both method and substance. [...] In essence it would be like denying that the circumstances of the death of

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<sup>&</sup>lt;sup>1</sup> The present article reproduces almost verbatim the text I presented in London at the Courtald Institute of Art at the Conference *From Gandhāra to Gupta* on 13 May 2017. The Conference was organized by the SOAS – University of London, and by the "Robert H.N. Ho Family Foundation Centre for Buddhist Art and Conservation". I do acknowldege these Institutions, and in particular Christian Luczanits of SOAS, for having kindly allowed the publication of the text in this Journal.

an individual are of any biographical value. The final phases can instead tell us much about the preceding ones. [...] Trying to understand the abandonment means studying the technical reasons behind the death of a human spatial agglomeration" (Olivieri 2014: 75-77)<sup>2</sup>. The latter sentence pictures the kind of archaeology that we actually implemented in the Swat valley and especially at Barikot, in the last five years (Fig. 1)<sup>3</sup>.

### The late city of Barikot

During the final urban phases at Barikot (i.e. during the 3rd century) two earlier residential units were entirely dedicated to worship purposes (Olivieri 2011 [2015], 2012 [2017], 2018). Plans and elevations at both units were restructured anew in order to house public cultic buildings. These buildings look a bit unusual if compared with the mainstream religious architecture of the Buddhist complexes in the countryside (Figs. 2, 3)<sup>4</sup>.

Unit B features a large cultic complex organized into two main buildings. One of them is a rectangular shrine which opens on to a walled courtyard with niches decorated by stelae, and an altar (Olivieri et al. 2014: 106-114 (Fig. 4). A few metres to the North, is a second building, 'Temple B', rectangular in plan, open to the East and facing a large courtyard, where a small stele representing Hariti was found (Moscatelli et al. 2017) (Fig. 5).

The second unit dedicated to cultic activities is Unit K (Fig. 6). It consists of a rectangular enclosure with a central courtyard and with a building (or 'Temple K') open to the north. In the courtyard stands a small shrine, which was originally provided with stucco decorations and wooden hinged doors and housed a miniature stupa. In a later

<sup>&</sup>lt;sup>2</sup> I do apologize for having started this contribution with a long self-quotation, but this theme has been very rarely touched upon by Oriental archaeologists. Amongst the very few who stressed the importance of abandonment phases there is Giovanni Verardi (2011: 309; 330, fn. 255).

<sup>&</sup>lt;sup>3</sup> Fieldwork at Barikot is directed by the Author of these notes in a joint archaeological program carried out by ISMEO Italian Archaeological Mission and Directorate of Archaeology and Museums, Government of Khyber-Pakhtunkhwa.

<sup>&</sup>lt;sup>4</sup> Besides a specific comparison between "Temple K" and Mohra Maliaran (Sirkap), Central Asian antecedents have been hypothesized for these complexes (see Olivieri 2012 [2017]: 8-9).

phase the shrine, almost completely reconstructed after an earthquake, housed a Buddhist stele (Olivieri 2012 [2017]).

Evidence of cultic activity was found inside the inhabitation blocks as well. For example the central courtyard of Unit D housed a small Buddhist shrine (Olivieri 2011 [2015]) (Fig. 3). In the collapse debris of the second earthquake, we found part of its decorative assemblage: an assortment of reused sculptural materials. I would like emphasize that the decorative assemblage of the shrine, housed in an otherwise particularly wealthy mansion - was a pastiche of ill-matching reused material. Instead, as in Unit B, the sculptural material, which seems to have been produced anew for the cult was formed only of small-size stelae. Several more stelae were recovered in situ in various loci at Barikot. All these pieces belong to the same chronological horizon (*post*-200 AD), and – most likely - to the same chain of late Gandharan sculptural production. A production, which finds a sound chronological framework in the late archaeological sequence of Barikot.

Some of these stelae appears quite unusual if viewed from a classic "Gandharan" perspective. For example, from the abandonment layers of Unit F (post-300 AD) comes a very interesting miniature stele (h. cm. 11.2) representing Maitreya "as Buddha", which is - to the best of my knowledge – a *unicum* in Gandhara (Olivieri et al. 2014: fig. 119) (Fig. 7)<sup>5</sup>. More interestingly, the stele is associated with bright red terracotta figurines, including a figurine probably representing a "Sivaite ascetic", quite common in post-Kushana/Gupta phases farther east in India (Fig. 8)<sup>6</sup>.

## The end of the City

The seismic history of Barikot is well known. The first documented earthquake occurred in c. 40 AD, followed by a very destructive seism less than a century later. Ample traces of two major earthquakes have been clearly documented in this last century of life of the city: the first at c. 240 and the second at c. 270 AD. After the latter, the city was abandoned and the ruins were briefly re-occupied by subaltern groups,

<sup>&</sup>lt;sup>5</sup> I owe to Christian Luczanits the identification of the iconography (pers. comm., 2012)

<sup>&</sup>lt;sup>6</sup> On the "Sivaite ascetics" figurines, see Verardi 2011: 145; 146, fig. 1.

who turned the area into a sort of slum.

The urban elites apparently had a reduced financial power or political interest to support the maintenance of the complex urban system. Possible clues to a social and economic crisis are the following:

- (1) The appearance of small local coin issues, the socalled sub-Kushan coins, probably minted locally as convertible metal values, which were equivalent to 1/8 of the Late Kushan<sup>7</sup> issues and to a quarter of the Kushano-Sasanian issues (McDowall and Callieri 2004). These three types together represent the overall numismatic assemblage of these late phases.
- (2) The failure of the hydraulic network of the city. The entire drainage system had already collapsed before the city itself was abandoned. Drains and pit-wells, two strategic infrastructures in an urban complex, were found in a totally clogged and disrupted state. One must bear in mind that if in an ancient urban society the maintenance of such infrastructures was the task of the lowest segments of society, their collapse might well adumbrate the downfall of a social system<sup>8</sup>.
- (3) A complex series of political events may lie behind the abandonment of the city. Rather, we should use the plural, since a phase of definitive abandonment after the reassessment of old archaeological data is documented also at two coeval urban sites of Swat Udegram and Barama (Faccenna and Gullini 1962, Faccenna 1964-65). One of the major elements of crisis might have been the failure of the traditional ruling urban elites, compromised with the Kushana, and the rise of new elites (a new landed gentry?) who sided with the Kushano-Sasanians, and were less interested in maintaining the urban network alive.

<sup>&</sup>lt;sup>7</sup> Both J. Crib and R. Bracey confirmed to me during the *From Gandhāra to Gupta* Conference that these Late Kushan issues are imitations of Vasudeva coins minted under the Kushano-Sasanians in Bactria or central Afghanistan already in the second quarter of 3rd century AD (pers. comm., 2017). See also Jongeward, Cribb and Donovan 2014 (p. 13).

<sup>&</sup>lt;sup>8</sup> See the analoguous conclusions for the abandonment phases at Mery (Simson 2008).

## The city and its countryside

The fall of the cities, in a moment of major crisis of urbanism all over northern India (Verardi 2011: 106), thus represented a radical change in the cultural landscape of Swat, as well as the collapse of a long-standing social pattern, which had been firmly established since the Integration Era, almost a thousand years earlier.

Recent studies on the landscape geography of the Barikot area have highlighted the many changes that followed the decline of the landed gentry vis-à-vis the rise of a new middle class after the annexation of Swat by Pakistan in 1969 (Qasim et al. 2013). Bearing this in mind, one can easily imagine what might have been the outcomes of the de-urbanisation and the collapse of the associated system of power from the 4th century onwards.

In terms of historical landscape, Swat underwent a radical change - a passage from city to village, or following Giovanni Verardi, from what he calls 'the open society' to the *grama* polarity<sup>9</sup>. Traces of Late Kushan and post-Kushan villages with farming terraces have been documented in the valleys south of Barikot (Olivieri, Vidale et al. 2006). Generally small (6,000 square meters on average), these few villages are scattered along the edge of the alluvial land of the two dead-end valleys of Kandak and Kotah. It is worth noting that, in the valley of Karakar, which possesses the most important regional route, linking Swat to Taxila, all the settlements are monastic.

In post-urban layers at Barikot we can see how the new polarity is reflected in the household technology. The complex rotary querns (Fig. 9) – a technology probably imported from the West to India in the first centuries AD - were replaced by saddle querns, a traditional single-handedly operated device, which had disappeared at Barikot in early Kushan times (De Chiara, Micheli and Olivieri, forth.) (Fig. 10). In terms of production, the gritty flour produced by the saddle querns should have had implications for diet and cooking ware. We refer to the simultaneous reappearance of another long-neglected tool, the large parath type plate, a cooking device for a kind of pancake, which does not require refined flour. Another change in the post-urban pottery tradition are karela type pots, which are ethnographically associated with milk and late sheep-farming (Fig. 11), and mangai, a typical

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<sup>&</sup>lt;sup>9</sup> See Verardi 2011: Chapters II and III.

water-pot with an average capacity of 10 liters (Fig. 12). At Barikot *mangai* are typically associated with post-urban phases: i.e. with a village economy and with a logistic situation in which water-sources are not available inside the settlement<sup>10</sup>.

Conversely, the Buddhist communities managed to cope with the general crisis, although not everywhere nor in equal degrees. Significantly, some urban sanctuaries like Panr I and Saidu Sharif I were soon abandoned, while others, like Butkara I, became a famous pilgrimage destination, or those in the rich hinterland of Barikot, survived for a long time. In fact, there, Buddhist communities over time managed not only to thickly occupy the countryside but, as documented at Sanchi by J. Shaw<sup>11</sup> in other regions, were busy in controlling resources and trade routes.

In the more fertile agricultural lands of Karakar and Najigram, all the major hydraulic infrastructures, dams, aqueducts and pit-wells, are in the vicinity of Buddhist complexes. Or - better - the other way round (Olivieri, Vidale et al. 2006).

In the 100 square kilometre hinterland of Barikot, we have an astonishing ratio of 1 Buddhist complex per square kilometre, and only very few villages. Not all the complexes were coeval, but pottery data confirm that almost all overlapped the post-Kushan phase<sup>12</sup>.

What kind of agriculture was performed at that time? At Barikot, the excavation yielded mostly charred seeds of rice, barley, wheat, mustard seeds, wild grapes and berries. That means that all the available agro-lands were exploited: from paddy fields to the wild.

<sup>&</sup>lt;sup>10</sup> During the urban phases water was available from public masonry pit-wells (each 2,000 square meters or two/three dwelling blocks) and conserved in one or two  $(p\bar{a}nik\bar{a})$ -kunda or large jars, partly interred, each one with an average capacity of 200 liters (Callieri and Olivieri, forth.).

<sup>&</sup>lt;sup>11</sup> See Shaw 2013, with post-2003 Shaw, and Shaw and Sutcliffe references.

<sup>&</sup>lt;sup>12</sup> Based on current equivalent data - each square kilometre might have been able to provide food for circa 500 people. If the population size in these zones was far lower, as hypothesized by Monica Smith and others in a recent work (Smith et al. 2016), we can suppose that the farmlands managed by or associated with the Buddhist communities were also able to produce and market food surpluses, as part of their economic system. A very interesting piece of information on the late demography of Swat is provided by the Chinese pilgrim Huichao (c. 720) "[There are] plenty of monasteries and plenty of monks, [and there are even] a little bit more monks than laypeople [...] (Max Deeg, pers.comm.).

Particularly important is the role of rice both as staple food and exported commodity. Swat, with its particular microclimate that had always allowed double crop agriculture, has been producing rice since the Neolithic, and with Kashmir was the main regional production area in ancient times (Stacul 1987).

The role of wild grapes in ancient Swat has recently been reassessed by Harry Falk (Falk 2009) especially after our discovery of dozens of wine-presses and fermentation vats in the countryside south of Barikot (Olivieri, Vidale et al. 2006: 142-46). If all these infrastructures had been used at the same time, their annual production of fermented juice could well have been above 7,000 hectoliters. Mustard seeds may be linked to the production of fuel for oil lamps, a market sector to which also the production of ghee might have contributed. Since early times, Swat was traditionally home to abundant livestock<sup>13</sup>. The latest evidence from Barikot's dump areas shows that cattle and sheep farming was widespread, but we documented also game and wild animals, including non-edible precious animals like big felines and rhinos. Again, all terrains were exploited, from the lower grazing lands to the upper rangeland, and the wilds, both the savannahs of the lower valleys and the mountain forests. Part of these protein-based resources, were used to produce collagen. The study of this aspect is still in progress on samples from Amlukdara. Collagen was apparently used not only as a binder for colours, but also to make stucco layers more stable and weather resistant 14.

Starting from before the post-urban phases the Buddhist communities expanded in the upper mountain territories following a process of acquisition of economic space, including mountain passes, springs, summer pastures and forests (Olivieri, Vidale et al. 2006: 131-38).

It is evident that the Buddhist communities progressively intruded into the ecological space of the rural tribes, communities as we know from their amazing rock-art that were never properly converted to Buddhism (Olivieri 2015)<sup>15</sup>.

<sup>&</sup>lt;sup>13</sup> Arrian (*Anab.* IV, 25, 4-5) reports that some extremely strong and beautiful bulls were captured between Bajaur and Malakand, and sent by Alexander to Macedonia.

<sup>&</sup>lt;sup>14</sup> Ilaria Bonaduce, University of Pisa, pers. comm. (2017).

<sup>&</sup>lt;sup>15</sup> Despite the loss of the vital space, the mountain communities were apparently

### An epilogue on late sculptural production

Two of these Buddhist complexes in the hinterland of Barikot have been recently excavated: Gumbat and Amluk-dara. Both founded between the 1st and the 2nd century AD, they not only survived the crisis of the 3rd century but underwent extensive renovation (Olivieri et al. 2014)<sup>16</sup>.

The stupa of Amluk-dara is undoubtedly one of the most majestic and best conserved in Gandhara, it evidences a complex sequence of building and reuse phases spanning a long period of time, from the 2nd to the 10th century AD (Fig. 13). Towards the end of the 3rd century the monumental staircase was radically modified, and a considerable part of the original schist decoration was removed and was either reused or discarded. In this phase the Main Stupa was probably decorated with a false gable of colossal size, certainly of stuccoed limestone, which likens the monument to the nearby coeval stupa of Tokar-dara (Faccenna and Spagnesi 2014: 331-76). Pilasters, modillions, and figured decorations at Amluk-dara were remade in kanjur (organogenic limestone) and copiously and repetitively stuccoed and painted<sup>17</sup>.

integrated at the fringes of monastic life. Apart from hunting, the extraction of quarzite stones used as flint, and the production of butter, used as fuel for lamps, were important. The comparison with the modern Gujars, who started settling in Swat from Kashmir only after the establishment of a Swat State in 1916, reminds us that also vertical transhumance people need stable conditions. The long-standing presence of these ancient communities on the outskirts of the "civilized world" in Swat is an indirect marker of political and juridical stability that means security and certainty of contracts and land ownership. Such stability, which was originally symbolized by the city, was later represented by the Buddhist monasteries, which must have inherited the role of economic and political pivots in Swat after the 3rd century AD.

<sup>16</sup> For details and archaeological data on these two sites, see the excavation reports published in 2014 (Olivieri et al. 2014).

<sup>17</sup> Cf. the Kushano-Sasanian phases at Old Termez (Ferreras Martínez et al. 2014). Amluk-dara, although partly buried and collapsed, continued to be used, as shown by the very late stucco-covered floors on which worship continued to be practised. Radiocarbon analyses date this phase to the 6th-7th century. The radiocarbon datings of the final phase lie between the 7th and 10th century. A later earthquake, which caused the collapse of the chattravali of the Main Stupa, marked the definitive abandonment of the sacred area.

On the basis of the above data, three conclusions may be drawn:

- (1) Schist is widely available and quarried in Swat. Previous research has clearly demonstrated the local origin of the stone material utilized for the decoration of the Buddhist stupas in Swat. For example, the green chloritoschist of Saidu Sharif I was quarried 1 kilometer away from the site.
- (2) Kanjur is not a local stone. Very limitedly available in Swat, kanjur can instead extensively quarried in the calcareous reliefs south and south-east of Swat (Buner, Swabi and Taxila). Therefore, we may guess that the shift to kanjur implied a major change in the local economy. The appearance of kanjur might support the hypothesis that the local schist quarry areas of Swat were working at an unusually very low pace for their standard, maybe just for the only surviving contemporary production, i.e. the stelae that we have found in plenty at Barikot.
- (3) The shift to kanjur, owing to the nature of the latter, implies a massive role of stucco modelling. Kanjur and stucco appear together in Swat. Petrographic analyses of samples of both kanjur and stucco from Amluk-dara have proved that the two materials are chemically compatible, thus supporting the hypothesis that the stucco was largely produced as a by-product of kanjur stone workmanship.

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## **Figures**

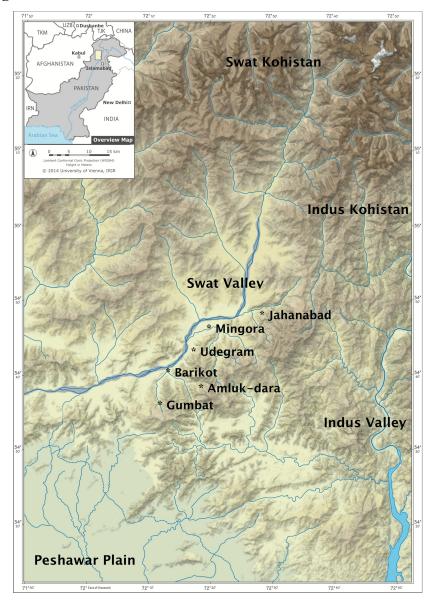


Fig. 1 – Map of the Swat valley (by K. Friz and D. Nell, University of Vienna for ISMEO).



Fig. 2 – The southwestern quarters of ancient Barikot seen from NE (Trench BKG 11) (Photo by E. Iori/ISMEO, 2016).



Fig. 3 – Trench BKG 11 (Drawings by I. Marati and F. Genchi/ISMEO).

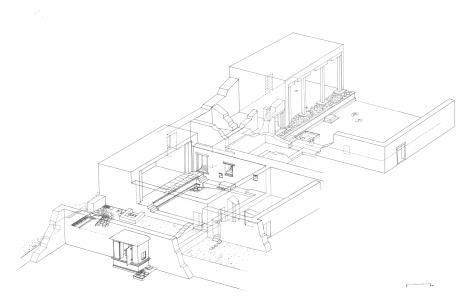


Fig. 4 – Units B and D (axonometric restitution) (Drawings by F. Martore/ISMEO).



Fig. 5 – Stele BKG 3636 (Photo by C. Moscatelli/ISMEO).

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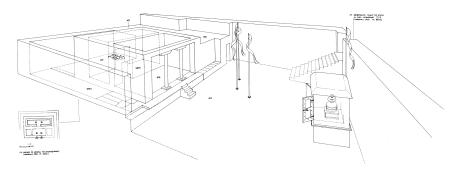


Fig. 6 - Units K (axonometric restitution) (Drawings by F. Martore/ISMEO).



Fig. 7 – Stele BKG 2088 (Photo by Aurangzeib Khan/ISMEO).



Fig. 8 – Figurine BKG 2086 (Photo by Aurangzeib Khan/ISMEO).

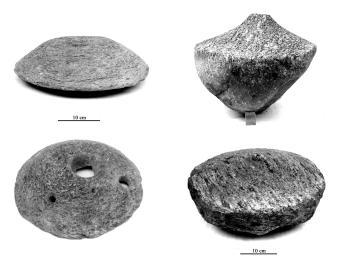


Fig. 9 – Rotary querns from Barikot (Photo by R. Micheli/ISMEO).



Fig. 10 – Saddle querns from Barikot (Photo by R. Micheli/ISMEO).

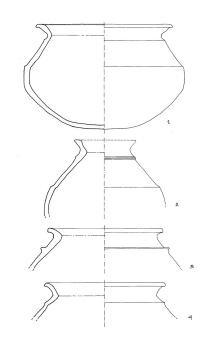


Fig. 11 – Karela pots from Barikot (Drawings by P. Callieri and F. Martore/ISMEO).

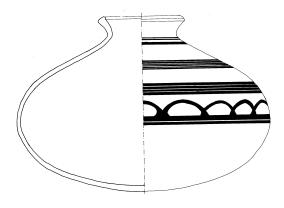


Fig. 12 – Mangai pot from Barikot (Drawings by F. Bellisario and F. Martore/ISM

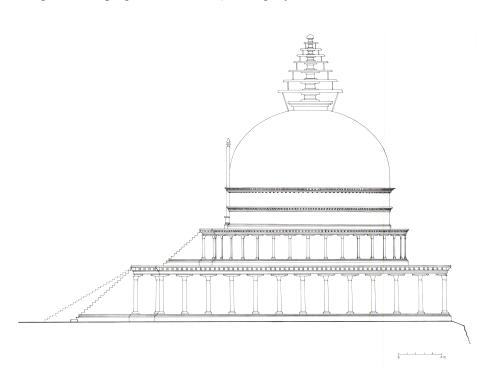


Fig. 13 – Side prospect (N) of Amluk-dara stupa (Drawings by F. Martore/ISMEO).