- 8 -

A Protohistoric Grave from Aligrāma, Swat (KP). Funerary goods and chronological implications

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To the memory of Sebastiano Tusa (1952-2019).

Abstract

The protohistoric site at Aligrāma (Swat, KP, Pakistan) discovered by G. Tucci, was excavated from 1966 to 1983 by G. Stacul and S. Tusa and other scholars. In the last year of fieldwork, the mission rescued a grave exposed during construction works, which so far remained unpublished. Comparing the grave furnishings here published with those from other graves recently excavated at Gogdara and Udegram, dated in a systematic way by radiocarbon, it is possible to date this funerary assemblage from the 11th to the 9th centuries BCE. This grave is relevant for the presence of two iron objects and a chlorite vessel, very rare in the inventories of the graveyards so far published.

Keywords: Swat, Aligrama, Swat Protohistoric Graves, Iron age

1. Introduction

The site of Aligrāma in Swāt (henceforth: Aligrāma/Swāt) – one of the best dig of the 70-80s in South Asia – is unfortunately disappearing. Meanwhile very little has been published. As a site, Aligrāma is literally obliterated by the over-expansion of the urban settlements around the city of Mingora. Still, there are few free areas, where we hope we will be able to dig in the near future.

In 2017, the Italian Mission and the Directorate of Archaeology and Museums, Government of Khyber-Pakhtunkhwa, planned a study project aiming the inventorying of registered materials from the Mission's house at Saidu Sharif, in order to give them a proper dedicated space in one of the galleries of the new Swāt Museum.

Fig. 1 – The baskets with the materials of Grave 36 in the warehouse of the Italian Mission in Saidu Sharif (Photo by E. Lant).

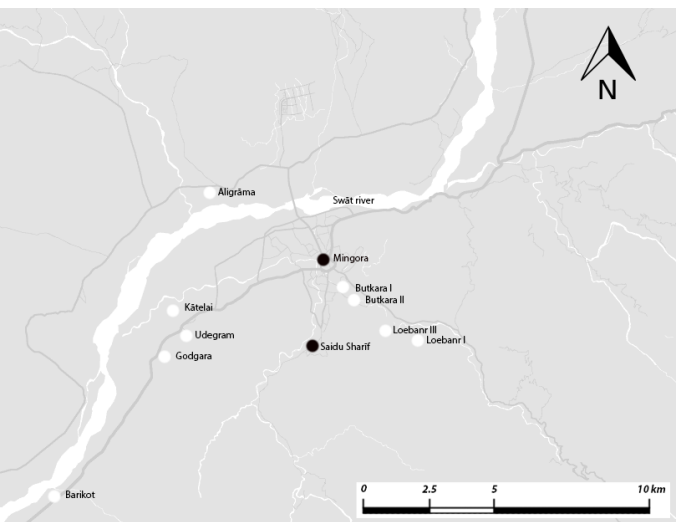

Fig. 2 – A map of the Middle Swat valley, with the locations of the protohistoric graveyards and settlement. Archaeological sites are marked with white dots, modern villages are marked with black dots. Grave 36 was found in the outskirts of the Aligrāma (Drawings by E. Lant).

The project had just started and a new publication plan launched, when Sebastiano Tusa the principal investigator at the site, tragically died in 2019 in the dramatic air crash in Ethiopia. Before this tragic event, we had already inventoried 36 objects from Tusa's dig ("Aligrāma" series = A), 11 objects from the site ("Varia" new series = VNS), and studied several assemblages of potsherd (Tusa et al. forth.). Amongst the latter, noteworthy were the funerary goods from an un-numbered grave found in a basket of non-recorded artefacts. From the latter originated the following study, which we, and the ISMEO Mission, intend to dedicate to the memory of Sebastiano Tusa, the excavator of Aligrāma.

The new Aligrāma study project started in 2017, thanks to the Italian Archaeological Mission in Swāt Valley directed by Luca Maria Olivieri (ISMEO) and the Directorate of Archaeology and Museums, Government of Khyber-Pakhtunkhwa with the collaboration of the Department of Cultural Heritage of the University of Padua, represented by Massimo Vidale. The aim of the project was to study the non-inventoried materials from the Aligrāma site, to propose a new ceramic typology and to analyze other finds stored in the Mission house (Saidu Sharif). During this season we came across an unpublished grave assemblage from the graveyard's area of the settlement, recovered in 1983, including twenty objects (Fig.1). There is no specific information about the localization of the discovery. We only know that the grave was found during some construction works in 1983. The two potential areas could be northern part of the hilltop or the area near the southern street of the modern village (Fig. 2).

The first graves of Aligrāma were discovered by G. Stacul and S. Tusa in season 1972. Five graves (G1-G5) were uncovered in trench B[1]. In 1981 P. Zolese started a new excavation campaign of the protohistoric necropolis near the village, recovering 35 graves, re-starting numeration from 1 (G1-G35). Therefore, the total amount of the graves from Aligrāma is 40. We called the new assemblage, re-discovered in 2017, G36, following the counting proposed by P. Zolese.

Before studying the grave's furnishing, we considered the possibility that the assemblage could include objects which came from two different burials, even though from the same final funerary space.

In fact, during the latest excavations of Gogdara IV and Udegram by M.

[1] Silvi Antonini and Stacul 1972: fig. 14, north-east from the hill.

Fig. 3a – The furnishings of Aligrāma Grave 36 (Photos by E. Lant).

Vidale, R. Micheli and L.M. Olivieri in 2011-2013, was documented a scheme involving manipulation and spatial resetting of both skeletal remains and offerings. These components expressed a complex behavior, resulting from an elaborated flow of symbolic and social actions.

For the grave here discussed we lack contextual and stratigraphic data; but in the light of the mentioned recent studies (Vidale et al. 2016), and given their relatively high number (as discussed below), we may take into account the chance that the grave underwent one or more phases of re-opening.

2. Description of the grave furnishings (with Inv. Nos.)

The assemblage rescued in 1983 is composed of fifteen well preserved vessels, two iron objects, two spindle whorls and a chlorite vessel; all are described in detail below. All the measures are in cm. (Fig. 3a and b).

A/2062
Small cooking pot with a truncated cone-shaped neck, everted rim and large mouth. Height 11.3, max. diam. 13. Medium-fine red ware (2.5YR6/6), well fashioned, with smooth surfaces and a rounded base. The base seems to have been moulded, while the wall was made by coils or slabs, modified in a second time on the potter's wheel. This cooking pot contained a terracotta spindle whorl (A/2081).

A/2063
Miniature squat globular pot with a vertical pointed rim. Height 5.5, max. diam. 6.7. Fine red ware (2.5YR6/8). Wheel-thrown. The interior of the foot seems to be trimmed on with a blade.

A/2064
Sub-cylindrical carinated beacker on a ring base with a vertical rim. Decorated with a horizontal ridge in relief over the maximum diameter. Height 7.4, max. diam. 7.1. Fine ware with a grayish slip (5PB5/1). Wheel-thrown.

Fig. 3b – The furnishings of Aligrāma Grave 36 (Drawings by I. Caldana).

A/2065
Bi-conical low carinated beaker with an everted rim. One horizontal ridge is visible on the shoulder while a second notched one runs along the carination. Height 5.4, max. diam. 6.8. Fine grey ware (5YR5/1). Wheel-thrown.

A/2066
Carinated pear-shaped beaker with a strongly restricted, truncated-cone shaped neck. The vessel is decorated with a series of oblique lines. Height 13.2, max. diam. 13.2. Fine red ware (2.5YR6/8). Wheel-thrown.

A/2067
Bottom of a carinated pear-shaped beaker, strongly restricted in the upper part. It bears on the carination a series of parallel oblique lines. Preserved height 6.8, max. diam. 10.2. Fine grey ware (7.5YR6/1). Wheel-thrown. On the fracture are visible signs of abrasion, probably aimed to the purpose of re-creating a rim. The lost part might have been similar to A/2066 or, more probably ended with an out-turned rim.

A/2068
High stemmed cup, with a restricted mouth, underlined by two horizontal parallel ridges alternating with shallows grooves. Preserved height 24.5, max. diam. 13.8. Fine ware with red slip (2.5YR6/8). Foot, stem and cup were separately made on the potter's wheel and later joined.

A/2069
Small cylindrical beaker with concave sides, low stem and pedestal. Height 10.4, max. diam. 6.1. Fine ware with red slip (2.5YR5/8). Wheel-thrown.

A/2070
Beaker with concave sides, low stem broken. Preserved height 8, max. diam. 7.1. Fine ware with a grey slip (10YR5/2). Wheel-thrown.

A/2071
Miniaturistic hemispherical cup on a solid high foot. Height 7.5, max. diam. 8.1. Fine ware with a yellowish red slip (5YR6/6). Wheel-thrown.

A/2072
Small ovoidal cup on conical high foot and a disk-like base. Height 10.2, max. diam. 7.7. Fine ware with greyish brown slip (2.5Y5/2). The vessel was made in two distinct parts on a potter's wheel (cup and foot), later joined together.

A/2073
Sub-globular cup on a high foot with a strongly restricted mouth. Height 8.9, max. diam. 8.1. Fine yellowish ware (10YR7/8). The vessel was made in two distinct parts on a potter's wheel (cup and foot), later joined together. The foot is coarsely trimmed on the interior with a blade.

A/2074
Miniaturistic sub-globular cup on a high foot with a strongly restricted mouth. Height 5.6, max. diam. 4.9. Fine grey ware (10YR3/2). The vessel was made in two distinct parts on a potter's wheel (cup and foot) later joined together.

A/2075
Miniaturistic cylindrical beaker set on a low stem and pedestal. The lower edge of the foot slopes in wards. Height 7.2, max. diam. 5.2. Fine grey ware (2.5YR6/1). Wheel-thrown.

A/2076
Small bottle with a globular body, elongated neck and everted rim. The base is disk-like. Height 9.2, max. diam. 7.4. Fine ware with a grey slip (10YR6/1). Wheel-thrown.

A/2077
Tanged iron blade (a knife, or following Silvi Antonini and Stacul 1972: pl. LV.d, a spearhead), swollen at the centre. Length 19.2 (blade 13.4, tang 5.8), max width 2.7, max thickness 0.4.

A/2078
Flat rectangular axe-like tool (?) with a cutting edge at one of the short sides. On the opposed side, what looks like a restricted, rectangular tang is flat and has a rectangular section. Length 15.6 (blade 12.1, tang 3.5), max

width 2.9, max thickness 0.6. The tool or weapon is corroded, thus the precise form of the cutting edge cannot be defined with certainty, but part of this edge, in its present condition, look toothed. The object, in its unusual spatula-like form, is not a unicum, because another quite similar specimen was found by G. Stacul in one of the graves at Kātelai (TMb18, Kātelai 189/11; see below (Fig. 8). For the moment being, we consider it an axe in absence of diverse or better definitions.

A/2079
Cylindrical chlorite vessel with slightly convex walls and a simple flat base. The mouth has an irregular contour and appears slightly damaged. Height 5.3, max. diam. 8.9. Some vertical traces of chisel are visible on the interior; they end in a rounded stop. On the inner edge are visible other signs, oblique and thinner, made with a smaller tool, probably while trimming the mouth. Finally, over the external surface, there are horizontal and oblique abundant traces left by some other kind of tool. The colour of the stone is grey (GLEY5/N).

A/2080
Biconical ceramic spindle-whorl with cylindrical hole. Diam. 2.7, height 1.7, hole diam. 1, weight 11.7 g. Brown (7.5YR5/2).

A/2081
Biconical ceramic spindle-whorl with cylindrical hole. Diam. 2.9, height 1.8, hole diam. 1.1, weight 10.8 g. Dark brown (7.5YR3/2).

Inv. No.	Comparisons	Calibrated absolute BCE date (2σ) from protohistoric graveyards of Swāt
A/2062	Silvi Antonini and Stacul 1972 type VTf68, Loebanr 127/7; Vidale, Micheli and Olivieri 2016 Fig. 43c G. C/3, Fig. 43d G. C/8, Fig. 63b G.2/8, Fig. 63b G. 2/12, Fig. 69 G. 7/3, Fig. 163a G10/3 e G10/4, Fig. 194b G28/2 e 28/3, Fig. 201 G26/1, Fig. 209 G29/1, Fig. 217 G27 1/10; Castaldi 1968 Tav. XIII/7 G.53, Tav. XIV/3 G.58, Tav. XVI/2 G.63, Tav. XIX/1 G.70.	1011-909 Grave 7 Udegram; 1192-939 Grave 10 Udegram (Ind.1); 1027-848 Grave 10 Udegram (Ind. 2); post (pit 1) 921-831 Grave 28 Udegram (Ind.1); post (pit 1) 992-830 Grave 28 Udegram (Ind.2); 976-832 Grave 26 Udegram (Ind. 1); 1195-978 Grave 29 Udegram (Ind. 1); 1200-800 Grave 27 (c.d.)[2]; 968-833 Grave 53 Kātelai; 1011-909 Grave 127 Loebanr Ind. 2
A/2063	Silvi Antonini and Stacul 1972 type VT15, Loebanr 49/1, 63/3, 140/20, Kātelai 2/7, 3/5,	894-798 Grave 63 Loebanr (Ind. 3); 1006-904 Grave 63 Loebanr (Ind. 2?); 1000-800

[2] N.B.: c.d. = context date.

	21/2, 25/2, 27/1, 30/3, 31/3, 31/6, 39/5; Vidale, Micheli and Olivieri 2016 3/uninventoried, 8/8.	Grave 140 Loebanr (c.d.); 1000-800 Grave 30 Kātelai (c.d.)
A/2064	Silvi Antonini and Stacul 1972 type VT18, Loebanr 21/8, 51/11, 53/4, Kātelai 112/5, 116/3; Castaldi 1968 Tav. XVII/5 G68.	1000-800 Ind. 2 Grave 68 Kātelai (c.d.); 1000-800 Grave 112 Kātelai (c.d.)
A/2065	Silvi Antonini and Stacul 1972 type VTc32-33, Loebanr 17/10, 44/6, 48/15, 63/5, 70/7, 121/11, Kātelai 9/10, 16/12, Butkara 21/9; Vidale, Micheli and Olivieri 2016 28/7, 29/10; Castaldi 1968 Tav. XIV/2 G58.	1200-800 Grave 4 Udegram (c.d.); 1200-800 Grave 12 Udegram (c.d.); 921-831 Grave 28 Udegram (Ind.1); 992-830 Grave 28 Udegram (Ind.2); 1195-978 Grave 29 Udegram; 1200-800 Grave 27 Udegram (c.d.); 894-798 Grave 63 Loebanr Ind. 3; 1006-904 Grave 63 Loebanr Ind. 2?
A/2066	Silvi Antonini and Stacul 1972 type VTc28/29 Loebanr 73/10, 75/5, Kātelai 16/3, 144/6, Butkara II 17/11, Vidale, Micheli and Olivieri 2016, Fig. 107 3/1, Fig. 163b G10/7, 28/6; Castaldi 1968 Tav. XIV/6 G.58; *infra* A/2067.	1192-939 Grave 10 Udegram (Ind.1); 921-831 Grave 28 Udegram (Ind.1); 992-830 Grave 28 Udegram (Ind.2); 831-796 Grave 73 Loebanr (Ind.1)
A/2067	Silvi Antonini and Stacul 1972type VT33 Loebanr 41/4, 63/4, 135/11, Kātelai 16/8; Castaldi 1968 Tav. XIV/2 G.58 *infra* A/2066.	895-801 Grave 135 Loebanr (Ind. 1); 971-834 Grave 135 Loebanr (Ind. 1?); 894-798 Grave 63 Loebanr (Ind. 3); 1006-904 Grave 63 Loebanr (Ind. 2?)
A/2068	Silvi Antonini and Stacul 1972type VT5 Loebanr 12/6, 55/5, 172/1, Kātelai 210/17, Butkara 25/3; Vidale, Micheli and Olivieri 2016 Fig. Fig. 63a G. 2/9, Fig. 69 G. 7/2, Fig. 153 G. 9/4, Fig. 201 G26/2, Fig.209 G29/12; Castaldi 1968, Tav. XVII/2 G.68, Tav XIX/4 G.70.	1011-909 Grave 7 Udegram (Ind.1); 976-832 Grave 26 Udegram (Ind. 1); 1195-978 Grave 29 Udegram (Ind.1); 1000-800 Grave 68 Kātelai (c.d.); 1000-800 Butkara 25 (?) (c.d.)
A/2069	Silvi Antonini and Stacul 1972, type VTd40, VTd36 Loebanr 17/2, 48/5, Butkara II 26/6.	1000-800 Grave 26 Butkara II (Ind.2?, 3) (c.d.)
A/2070	Silvi Antonini and Stacul 1972, type VTa79 Loebanr 41/6, 119/14, Kātelai 39/6.	
A/2071	Silvi Antonini and Stacul 1972 type VT6I Loebanr 48/10, Kātelai 16/9, 58/10, Butkara 30/17; Vidale, Micheli and Olivieri 2016 Fig. 194b G28/8; Castaldi 1968 Tav. XIV/10 G.58.	Post (Pit 1 north) 921-831 Udegram Grave 28 (Ind.1); post (pit 1 north) 992-830 Udegram Grave 28 (Ind.2)
A/2072	Silvi Antonini and Stacul 1972 type VT8, Loebanr 15/4, 30/7, Kātelai 38/6, 165/2; Vidale, Micheli and Olivieri 2016 Fig. 125 G. 4/1 (with longher foot); Castaldi 1968 63/7, 70/2.	1200-800 Grave 4 Udegram (c.d.)
A/2073	Silvi Antonini and Stacul 1972: type VT8, Loebanr 44/10, 45/5, 139/18, Kātelai 1/2, 39/13, Butkara II 14/11, 28/8; Vidale, Micheli and Olivieri 2016 2016 Fig. 33 G. B/2, Fig.134 G5/5, Fig.201 G. 26/5; *infra* A/2074.	1044-922 Grave 5 Udegram (Ind.1); 976-832 Grave 26 Udegram (Ind.1)
A/2074	Silvi Antonini and Stacul 1972: type VT8 Kātelai 1/12, 5/2; *infra A/2073*.	
A/2075	Silvi Antonini and Stacul 1972 type VTa36 Kātelai 165/2; Castaldi 1968 Tav.XVI/7 G.63.	
A/2076	Silvi Antonini and Stacul 1972: type VT50, Loebanr 30/9, Kātelai 210/20, 242/23, Butkara II 1/6, 1/4, 1/12, 28/19, 28/21, 31/5; Vidale,	1044-922 Grave 5 Udegram (Ind.1); 1195-978 Grave 29 Udegram (Ind.1)

	Micheli and Olivieri 2016 Fig.134 G. 5/7, Fig. 209 G29/3, G29/8, G29/11.	
A/2077	Silvi Antonini and Stacul 1972 type TMb15 Kātelai 230/10; BKG 12 W, SU (218) = (217)	1223 - 1031 BKG 12 W SU (218) = (217), unpublished
A/2078	Silvi Antonini and Stacul 1972 type TMb18 Kātelai 189/11.	
A/2079		
A/2080	Silvi Antonini and Stacul 1972 type TT1; *infra* A/2081.	
A/2081	Silvi Antonini and Stacul 1972 type TT1; *infra* A/2080.	

Table 1 – List of Grave 36 inventoried materials and comparisons.

3. Discussion

The objects still retained soil coming from the burial context, and had to be excavated internally and cleaned. While cleaning the vessels we found an intact ceramic spindle whorl (A/2081) against the inner wall of the cooking pot (A/2062), see Fig. 4. The same association, as stated above, was noticed in other graves from Udegram and Gogdara (Vidale et al. 2016: 209-210) in the context of a probable female-related ritual [3]. The cooking pot also containing a miniature beaker. The microstratigraphic dig of Grave C of Gogdara, in particular, allowed to distinguish a multi-phase funerary cycle of two subsequent depositions. The grave, visible on surface for long, thanks to a wooden fence, was re-opened in order to manipulate and remove the remains of the first occupant (and probably the furnishings) and to bury another individual.

The authors of the report tried to subdivide the offered objects found in the final assemblage in two similar groups, as suggested by a partial duplication of the functional types. The same association was found in other protohistoric graves of the Swāt Valley: at Loebanr, in 18 graves

[3] We have noted that the only graves with the association cooking pot - spindle whorl of which genetic sex of the individual in primary deposition has been determined, are graves 80 and 85 of Loebanr. In both cases individuals were females.

Fig. 4 – A detail of the discovery of the spindle-whorl, during the cooking-pot's emptying process (Photo by E. Lant).

Fig. 5 – The iron artefacts (Photos by E. Lant).

out of 183; less frequently at Kātelai, in 7 graves out of 243; and in Butkara II, in 4 graves out of 48 [4]. Reviewing the list of materials found in the graves excavated in 1981 at Aligrāma, we identified another Grave (25) with the association cooking pot-spindle whorl. Not all the cooking pots were in primary context of deposition. About these, there is a preferential location, in the funerary space, near the lower part of the skeletons (see above).

The assemblage also contains two well preserved iron artefacts (Fig. 5), quite uncommon in the graves' inventories of the Swāt valley. Until recently, the earlier ^{14}C dating related to iron objects in the north-western regions of the Subcontinent was from Bala Hisar (Charsadda): c. 1200-900 BCE (Mc Donnel and Coningham 2007: 155). It was commonly accepted that iron technology in Swat valley appeared later, in Stacul's Period VII (800-400/300 BC). More recently, another reliable date was provided by two iron pins found in Grave 19 at Udegram, 928-802 BCE, therefore ascribed to Stacul's Period VI (Vidale and Micheli 2017). An important comparison for the dagger A/2077 (our Grave 36) comes from the protohistoric settlement of Barikot - BKG 12 W, SU (218) = (217), ^{14}C 2 σ 95.4 (100 % prob.), 1223-1036 cal BC (Olivieri et al. 2019).

These blades have relevant implication for the debate about the origin of iron technology in South Asia: from well-known earlier diffusionist models assuming a spread from west-north west (from Iran and Central Asia) around mid-first millennium BC, to theories of earlier indigenous developments in South Asia in the course of the second millennium BC[5]. The presence of the two iron weapons in our unpublished grave, as we shall see, support, of course, the second viewpoint.

The small chloritoschist pot A/2079, sub-cylindrical, is almost an *unicum*. The pot has a very rough surface and plain walls (Fig. 6). We tried to find possible matches, focusing both on inventories from Oman and Turkmenistan, but nothing similar was found in the literature[6].

[4] Silvi Antonini and Stacul 1972, at Loebanr, graves 12, 14, 24, 35, 39, 40, 41, 42, 45, 54, 80, 85, 91, 115, 136, 139, 154, 159; at Kātelai, graves 58, 133, 160, 161, 162, 187, 210; and in Butkara II, graves 7, 21, 28, 42. We have counted also spindle whorls mixed with potsherds from broken cooking pots.

[5] Among others, Chakrabarti 1976, 1977, 1982; Mc Donnel and Coningham 2007; Stacul 1979; Ali et al. 2008; Callieri et al. 1992; Olivieri 2014.

[6] David 1996, 2001, 2002, 2011; David and Phillips 2008; Harrower et al. 2016; Potts 2008.

Fig. 6 – Chisel marks on the inside of the chlorite pot A/2079, and the same marks on the rim, (Photo by E. Lant).

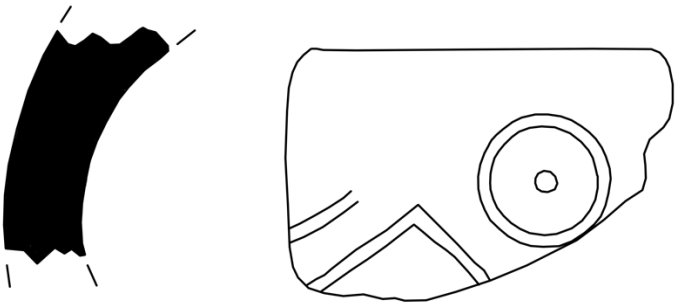

Fig. 7 – The small fragment of a decorated chlorite vessel found in Aligrāma settlement, Trench K, layer 4a (after Stacul and Tusa 1977: fig. 100).

Another tiny fragment of a vessel of the same stone comes from Aligrāma settlement, Trench K layer 4a (Fig. 7), decorated with *chevron* and the "dot and circle" pattern, comparable to one of the most common decorative design on chlorite of the Wadi Suq period of the Arabian Peninsula (David 1996, fig. 6/3), commonly dated between ca. 2000-1300 BC[7].

[7] Some of these vessels from Oman present more complex or quadrangular shapes, and dot-like patterns absent in vessel A/2079. Dates about Wadi Suq period according to

In Grave 189 of Kātelai (Fig. 8), a single burial with a poorly preserved skeleton, was found a quadrangular schist or chlorite vessel (189/9, Silvi Antonini and Stacul, type VSa85, PL. XLV f), the only one recovered, until now, from Swāt graveyards. The chlorite container has a raw surface and chisel traces similar to those visible on A/2079. In this context, near the skull, there was also an iron "axe" of the same type of A/2078[8]. This grave is a peculiar match also because it has a high number of offerings (nine pots, one stone vessel, three iron objects and a stone pebble). The rich assemblage and the co-occurrence of stone and iron objects are not very common. Perhaps both graves, in the two separate communities, belonged to leading figures. Four of the nine pots from Kātelai Grave 189 are certainly comparable with as many vessels from Aligrāma Grave 36.

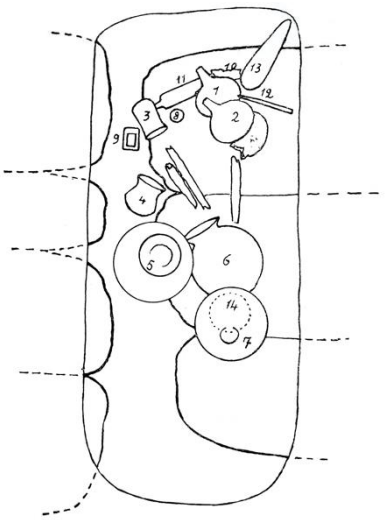

Fig. 8 – Grave 189 of Kātelai
(Silvi Antonini and Stacul 1972: 376, pl. CLXXXIX.a, b).

Cleziou and Tosi 2007: 261.
[8] Silvi Antonini and Stacul 1972, type TMb18, Fig. 22g; PL. LV d.

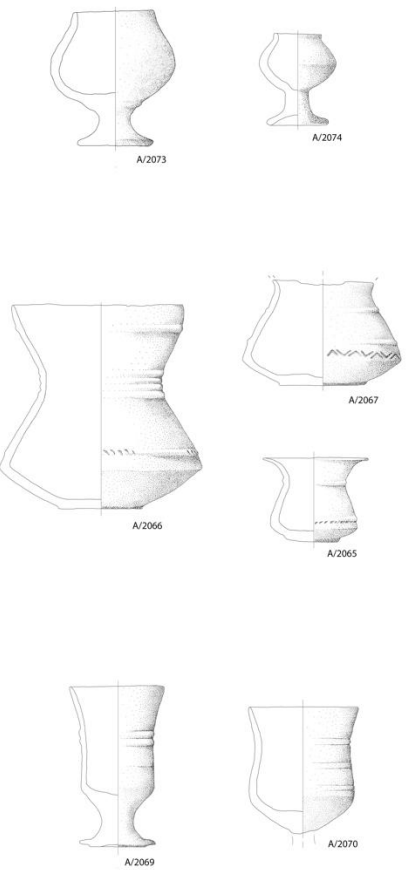

Fig. 9 – Vessels from Grave 36 grouped according to their shape and possible functions (Drawings by I. Caldana).

Grave 36 Aligrāma	Grave 189 Kātelai	Stacul type
A/2076	189/1, 189/2	VT50
A/2066	189/4	VTc28/29
A/2079	189/9	VSa85
A/2078	189/11	TMb18

Table 2 – Comparison of four vessels found in Aligrāma Grave 36 with similar materials from of Kātelai Grave 189 (after Silvi Antonini and Stacul 1972).

In our case, unfortunately, there is no information about the human remains and the vases' arrangement inside the tomb. But from the abundance of offers and the evidence of pairs of vessels with analogous shapes and presumably the same ritual use (Fig. 9), we can assume a similar sequence of events, as reported in Grave C of Gogdara IV. It is also possible to follow recurring links between globular cooking pots and high stemmed cups, often buried together in the graves: at Loebanr it is encountered in 65% of the cases, at Kātelai in about 30%, at Butkara in not less 73% and in Aligrāma the 77%[9]. In the graveyards of Loebanr, Kātelai and Butkara we observed a recurrent depositional pattern in the furnishings: cooking pots are almost regularly put near the feet of the deceased, while, for example, high stemmed cups may be found near the head[10], the basin or even the feet.

Getting back to the lifespan of our Grave 36, an Oxcal diagram, based on radiocarbon dates of graves from Swat, shows the most convincing typological comparisons with one or more vessels of Aligrāma Grave 36 (the results are displayed on the left side of Fig. 10)[11]. On the right of the table appears the proposed chronology of the furnishings, between 1223 and 795 cal BCE. Quantitatively speaking, since two-thirds of the comparisons fall between 1050 and 850 BCE, this is the most likely chronological range. But the dagger A/2077 (that has the oldest dating) could have its own important chronological implications. In fact, it is the third specimen known to date, after those found in Kātelai Grave 230 and in the excavations of Barikot (BKG 12). Given its formal identity to the previously known specimens, and the precise absolute date available for the Barikot dagger, it may be ascribed to 1150/1100 and 850 BCE; admittedly, a large time span. Because of the simple shape of the dagger, moreover, the weapon could have been a long-lasting type.

[9] For the time being, only the information about the furnishings are available.

[10] Vidale et al. 2016: 33-34. The presence of the high stemmed cup near the skull was interpreted as "the performance of a socially accepted representation".

[11] In this work we have considered only the radiocarbon datings recently published by *Science* (Narasimhan et al. 2019). There are previous dates published on Vidale et al (2016); these dates, known with the code CEDAD-LTL, have differences of 100-200 years compared to the same ones published on *Science*.

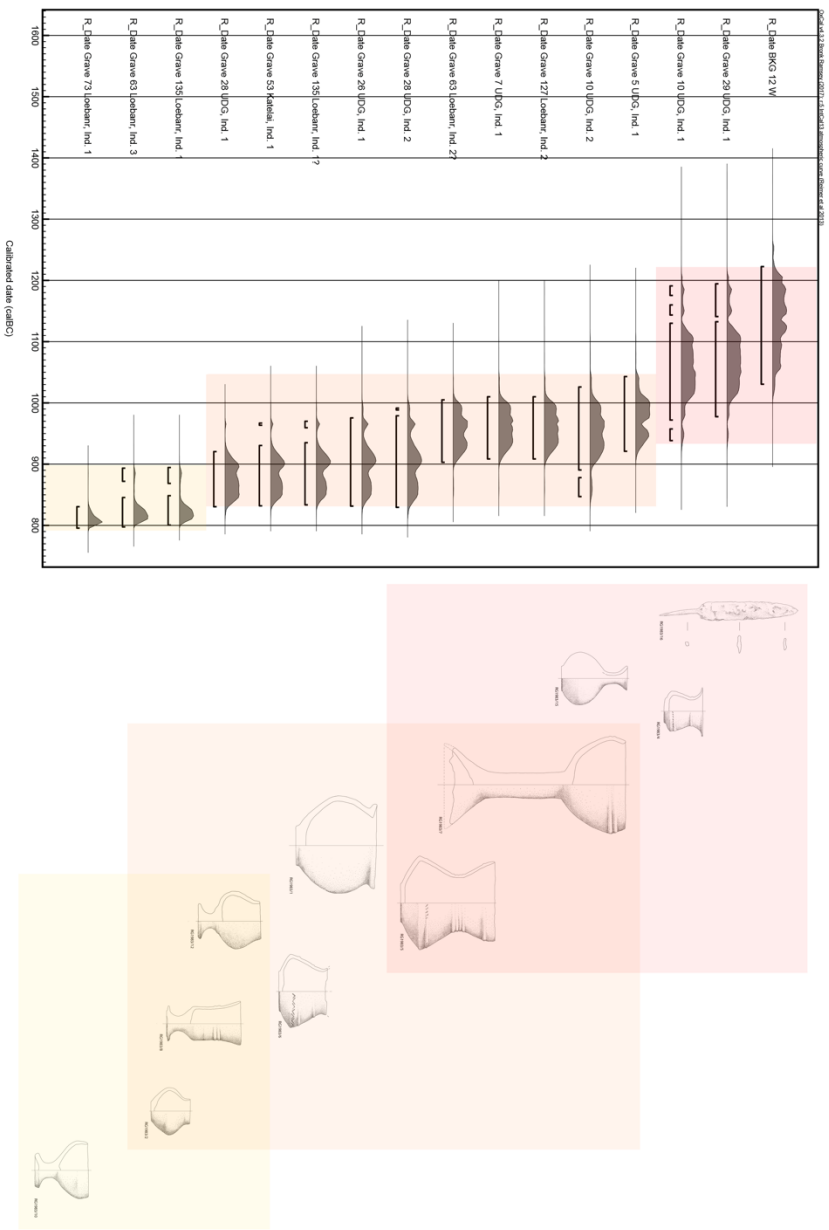

Fig. 10 – To the left: calibrated 14C dates of features with materials comparable to Grave 36. To the right: the chronological spread of the furnishings of Grave 36. (Elaborated by I. Caldana).

4. Conclusions

Since Aligrāma's Grave 36 was quite likely an inhumation, we wonder whether the Grave contained the remains of more than one burial, as observed in Grave C of Gogdara and Grave 7 of Udegram (Vidale et al. 2016: 38-43, 67-71). From a technological viewpoint, there is a perceptible difference between some vases of the same general forms: some are fine wares, with a more resistant slip, in which it is possible to recognize more care and attention in forming and clear traces of smoothing (belong to this group A/2065, A/2066 and A/2068). Others are rougher, preserving the spiral-shaped trace of the detachment from the wheel and a badly preserved or totally absent slip (like A/2063, A/2071 and A/2073). However, it is hard to say how far this evidence is function of time. In favor of the hypothesis of depositions prolonged in time, there is also the presence of A/2076, a small bottle with globular body, elongated neck and everted rim, probably a container for perfumes: a type common, at Udegram, in deeply manipulated re-exhumed burials (Vidale et al. 2016: 112 and 125).

We believe that the large amount of finds (a total of 20) of Grave 36 could be the sum of more furnishings belonging to more individuals. In fact, by comparing the average number of objects for burial in all the published protohistoric graves of Swat, we come to a value of six to ten objects for each buried individual[12]. For the graveyard of Aligrāma we were able to recover only some parts of the excavation reports; of all the graves excavated, only three have furnishings with more than twenty objects, and among these, the only one on which we have information is Grave 29: a double burial with an assemblage of fifty objects, dated to 818-789 BCE (Narasimhan et al. 2019: 162).

Observing the complex furnishing of Grave 36, the peculiarity of some objects (like the iron axe, the iron dagger and the chlorite vessel) could suggests that in this grave could have been buried eminent individuals, as in the already mentioned Grave 189 of Kātelai.

In conclusion, we believe that this tomb could be considered a multiple burial and we also believe, thanks to the presence of the two iron

[12] For this analysis we take in to account only the graves with intact assemblages, which do not show disturbances or evidence of erosion, and only those which are for certain an inhumation type.

objects, to considered as *terminus post quem* the beginning of Period VI (ca. 1100 BCE, possibly the earliest date for the appearance of the iron technology); moreover, as we saw in Fig. 10, the end of Stacul's Period VI (c. 800 BCE) is the *terminus ante quem*. The chronological range is ultimately quite compatible with the two radiocarbon dates of Aligrāma's graveyards: Grave 2, Ind.1 dated to 974-836 cal BCE and the same Grave 29 dated to 818-789 cal BCE.

With this initial work we have tried to demonstrate the complexity and potential of Aligrāma's record and unpublished reports; it is in fact the first step to a more complete and organic study of the unpublished graveyard and the settlement of Aligrāma, while we are trying to recover further documentation and materials from the old excavation campaigns.

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