THE BABA JILAN GRAVEYARD NEAR NURABAD, PISH-I KUH, LURISTAN – A PRELIMINARY REPORT

BY

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Abstract: A graveyard at Baba Jilan in Dilfan province, Pish-i Kuh, Luristan, was reportedly looted in 2005. It was investigated by the local branch of the Cultural Heritage, Handicrafts and Tourism Organisation from 2006 to 2008. Cist tombs and jar burials were discovered and isolated objects and sherds were collected from the plundered areas. Noteworthy among these are a Luristan iron mask pom- mel sword, the first ever-provenanced sword of this type, and a bronze fingerring with the image of Ahura Mazda in a winged circle. These finds suggest that the area may have been used as a graveyard from the late Iron Age II onwards.

Keywords: Iran, Luristan, Iron Age, Achaemenid, Seleucid, graveyard, Baba Jilan, radiocarbon dating

The archaeological site of Baba Jilan (Babajian / bābāžīyān; 33°59ʹ33.9ʺN - 47°40’15.8’’E) lies 30 km as the crow flies to the West of Nurabad and is situated on the southern side of the Sar Kashti mountain ridge in Delfan province (fig. 1, Pl. 1-3). Reaching heights of 2800 m AMSL, Sar Kashti is one of the highest and coldest areas in Luristan. Popular beliefs link the mountain to the grounding of the biblical ark and there is a local mausoleum named after Noah. Several villages with houses (used in winter and cold seasons) and black tents (used as summer residence) are found along its southern flank.

1 The authors are indebted to Ahmad Parviz, Fatemeh Delfan and Maria Heydari for their assistance in the publication. The rescue excavations were directed by Ata Hasanpur. The documentation was kindly put at the disposal of the co-authors who were, however, not in the position to study the finds first hand. Z. Hashemi worked on the material in the context of a Ma. dissertation at the Université de Paris 1, Sorbonne-Panthéon under the direction of Dr. R. Boucharlat; B. Overlaet within the context of a Belgian Federal Science Policy project “Greater Mesopotamia – Reconstruction of its environment and History” (IAP –VII).
The site is named after a village that lies 3 km to the SW, locally known as Balavela. This name refers to an area where bala, licorice or sweet wood (Glycyrrhiza glabra Linn) grows, the dried roots and rhizomes of which are widely used in traditional medicine. The villagers stated that the name Baba Jilan refers to a holy man of the Ahl-e Haqq or Yarsan faith who once resided in the village.

The Baba Jilan graveyard is situated at 2060 m AMSL on one of the flanks of the Sar Kashti, locally referred to as Beteheoi, “dead end”. It lies amidst oak forest and to the west of water sources, one at merely 20 meters distance, another at 100 meters distance is, like the village referred to as Balavela.

To the south and just below the graveyard is a plateau used as campsite for seasonal migration and as grazing grounds (Pl. 3). Families and their flocks move from the foot of the mountain to this plateau in mid spring where they reside in black tents until the end of summer. It is one of the highest nomadic camping places in Luristan.

The plundering of the Baba Jilan graveyard was reported upon in 2005 and by the time authorities could take measures, a large part of the graveyard had been destroyed. The Cultural Heritage, Handicrafts and Tourism Organisation of Luristan dispatched Ata Hasanpur to the site in 2006. The area was surveyed in the autumn of 2006 and news about the plundering was soon aired by the international news agencies. Excavations were conducted in the following years 2007 and 2008.

The graveyard covers an area of about 110 by 90 meters. Several soundings and a trench were made during which 11 tombs were studied. Together with items that were left or missed by the looters elsewhere in the graveyard, these 6 cist and 5 jar burials provide important information on the Iron Age and following periods in an otherwise badly known region of Luristan. In this report, the individual tombs will first be discussed, followed by a survey of the burial goods retrieved at Baba Jilan.

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The tombs

Eleven tombs were investigated, five of which were jar burials, and the remainder were cist tombs. Nine tombs were discovered in a 10 by 20 meter trench (tombs 3-11); the remaining two jar burials were located in the plundered area (tombs 1-2; Pl. 1). None of the graves contained complete skeletons, only some bone fragments and teeth (Pl. 15 top left) were retrieved.

Bone from soundings B1, B2 (with tomb 2), B3 and G11 (Pl. 1), to the NE of the main excavation trench, were used for 14C dating (see appendix). Apart from the sample from B2 (to be considered with caution, see appendix), they cannot be linked to the tombs discussed infra but are indicative for the periods when the Baba Jilan area was used for burials.
Three of the calibrated dates fall within the transition period from Iron Age II to III, the fourth (from G11 on Pl. 1) falls within the late Sasanian period (Pl. 22).

<table>
<thead>
<tr>
<th>tomb</th>
<th>type</th>
<th>inside W × L × H m.</th>
<th>finds</th>
<th>Pl.</th>
</tr>
</thead>
<tbody>
<tr>
<td>t.1</td>
<td>Jar</td>
<td>-</td>
<td>Iron sword</td>
<td>1, 20</td>
</tr>
<tr>
<td>t.2</td>
<td>Jar</td>
<td>-</td>
<td>Bronze buttons, spiral beads, bracelet and rings; finger ring with man in winged disk</td>
<td>1, 6-7, 22</td>
</tr>
<tr>
<td>t.3</td>
<td>Cist</td>
<td>0.68 × 1.08 × 0.51</td>
<td>Painted &amp; plain sherds, ca. 30 chert arrowheads, iron fragments, 2 bronze buttons, spiral, bead</td>
<td>1, 4-5, 8</td>
</tr>
<tr>
<td>t.4</td>
<td>Cist</td>
<td>0.71 × 1.26 × 0.52</td>
<td>4 bronze buttons, 2 beads, 23 chert arrowheads</td>
<td>1, 4-5, 9-10</td>
</tr>
<tr>
<td>t.5</td>
<td>Cist</td>
<td>0.55 × 0.98 × 0.66</td>
<td>Chert arrowheads, bronze buttons, striped whelk beads</td>
<td>1, 4-5, 10</td>
</tr>
<tr>
<td>t.6</td>
<td>Cist</td>
<td>0.64 × 1 × 0.54</td>
<td>Painted sherds, ca. 20 chert arrowheads, perforated shell fragment, 2 bronze spirals, tubular bead</td>
<td>1, 4-5, 11</td>
</tr>
<tr>
<td>t.7</td>
<td>Jar</td>
<td>-</td>
<td>Shell beads</td>
<td>1, 4-5, 12</td>
</tr>
<tr>
<td>t.8</td>
<td>Cist</td>
<td>0.46 × 0.8 × 0.54</td>
<td>Pottery sherds; chert arrowheads</td>
<td>1, 4-5, 12</td>
</tr>
<tr>
<td>t.9</td>
<td>Jar</td>
<td>ca. 0.71 × 0.81</td>
<td>Pottery, shell &amp; bone ornaments, iron pin, frit beads</td>
<td>1, 4-5, 12-15, 19</td>
</tr>
<tr>
<td>t.10</td>
<td>Jar</td>
<td>0.45 × 0.52</td>
<td>Painted pottery</td>
<td>1, 4-5, 16, 18</td>
</tr>
<tr>
<td>t.11</td>
<td>Cist</td>
<td>0.75 × 1.13</td>
<td>Shell &amp; bone beads</td>
<td>1, 4-5, 15</td>
</tr>
</tbody>
</table>

The Belgian research in the Pusht-i Kuh region provided a survey of the different types and the evolution of the Iron Age tombs in Luristan (Overlaet 2003: 62-70, fig. 41-48; 2005) and the Baba Jilan tombs fit well within this framework. The most common type of tombs in Luristan were the cist tombs, mostly rectangular to horseshoe shaped underground chambers, that were entered from one side and roofed with slabs of stone and/or beams, matting and earth like the local zemgas (Overlaet 2003: 63-64, fig. 42-43). After the burial had taken place, this entrance was closed with stones or wooden beams and the entrance shaft was filled with earth. The three remaining sides of the tomb chamber were either earth or were wholly or partially constructed with stone boulders or slabs. None of the Baba Jilan tombs seems to have had stone slabs as roof construction.
Jar burials are often mentioned in reports on plundered Luristan graveyards (Godard 1931: 26-27) but without detailed information, it cannot be ascertained to what extent they belong to the Iron Age and not to another era. The same reservation must be kept regarding the Iron Age II date suggested for two jar burials and one cist tomb from Shaffe B in Pish-i Kuh (Schmidt, van Loon & Curvers 1989: 45, 48, 554, Pl. 135r, 139f, 231). Nothing of the (very limited) burial goods is significantly diagnostic but the presence of glass beads would altogether be exceptional in an Iron Age II Luristan context and rather suggests a later date is possible. One securely dated jar burial was, however, discovered at Djub-i Gauhar, an Iron Age III graveyard in Pusht-i Kuh. It was located in an excavation square amidst 50 Iron Age III tombs and contained diagnostic Iron Age III grey ware (Haerinck & Overlaet 1999: 8-9, ill. 3, Pl. 14, 50). Although jar burials existed in Iron Age Luristan—like in earlier and later periods—there is no information as to what extent they were used or were popular and whether there were regional preferences for the use of this type of burial. The five jar burials at Baba Jilan—and the many sherds of large jars that were found in the plundered area suggesting that more were present—can thus be an important addition to the corpus. For at least one of these jar burials an Achaemenian/Seleucid date can be advanced in view of an associated find (tomb 2, see infra). Bronze Age jar burials were e.g. found at Kamtarlan (Schmidt, van Loon & Curvers 1989: 15-18, Pl. 11). Large jar fragments with openings of 45 to 52 cm in the Kalmakarreh cave are likely to have been from jar burials but in view of the metal finds and the (tentatively) Achaemenian dated other pottery, may very well post-date the Iron Age (Motamedi 1371/1992: 7, 12; Henkelman 2003: 106; Overlaet 2012: 124-126). Louis Vanden Berghe and Yolande Maleki witnessed the excavation of a child’s jar burial at Cheshmeh Mahi in the Hulailan valley in the winter of 1959, but again its Iron Age date cannot be corroborated (Maleki 1964; Overlaet 2003: 33). Godard’s report on the 1932 commercial excavations at Zalu Ab, Pir Gheib and Khushk-Kal’a, some 30 km to the NE of Kirmanshah, mentions the use of cist tombs as well as of 1 to 2 meters high pithoi that were buried in a vertical position and closed with a stone slab. It is not established, however, which finds were associated with these jar burials (Godard 1933: 129-130; Overlaet 2003: 56-57). Their date remains problematic.

Tomb 1 was located to the S.W. of the excavation trench (Pl. 1). It had been looted, only sherds of the burial jar and a 36 cm iron dagger / short
sword were left. The sword has a flanged hilt of a type that first appears at the very end of the Iron Age II in Luristan (Overlaet 2003: 163-164, fig. 131).

Tomb 2 was located to the N.E. of the excavation trench (Pl. 1). The tomb was looted and only some fragments of the jar remained. Nevertheless, some small bronze items were found around and in the disturbed soil: a simple bronze bracelet, some bronze buttons, spiral beads, rings made of bronze foil and cast and hammered strips (Pl. 6-7). The large number of spirals and rings suggests they were used for hair adornment. The 20 “buttons” have various sizes and have either a convex or a flat surface with folded back rim. All have central loops or pierced knobs at the back for attachment. The most remarkable find is a cast bronze finger ring with a large oval bezel displaying a crudely executed figure in a winged ring.

The dating of this ring is under discussion. The 14C analysis of bones from the tomb suggests a calibrated date of 808 BC (95% probability / report see infra & Pl. 22). In view of this, the excavator Ata Hasanpur, considers this ring to be the earliest representation of this symbol in the Iranian context, reflecting the influence of Assyrian imagery in the area (see e.g. Assyrian cylinder seals, see Collon 2001: 79-81) as a result of neo-Assyrian incursions.

One of the present authors, on the other hand, considers this ring to be Achaemenid or Seleucid, emphasizing the uncertainties of the disturbed context and the inherent problem of relying on the 14C dating. An Achaemenid/Seleucid date takes into consideration that the two tendrils, pointing obliquely downwards from the ring, end in an upwards curve or hook. In Assyria such tendrils occur from the reign of Ashurnasirpal II onwards but always end in double or triple prongs. The Achaemenian tendrils end like the Assyrian examples either in three prongs or in open or closed spirals (Roaf 1983: 137-138, fig. 135-145). The shape of the tendrils on the finger ring thus opposes a pre-Achaemenid date. Michael Roaf also pointed out that the first reliably dated Iranian figures of Ahura Mazda in a winged disk only occur on Achaemenid royal monuments from the time of Darius I onwards (Roaf 1983: 133-138, fig. 133-147). The shape of the ring itself rather points to a Seleucid date. It is unknown in the Assyrian and Achaemenid repertoire but is documented in Hellenistic contexts at e.g. Uruk (Van Ess & Pedde 1992: nrs. 475-476, 510). The presence of a Seleucid type ring would indicate the long continued use of the Baba Jilan graveyard, something already suggested by the late 14C date from trench G11.
Tomb 3 (Pl. 1, 4-5, 8): the walls of this NE-SW oriented, rectangular to horseshoe shaped tomb were constructed with large slabs that were placed on edge. The entrance (SW side) was closed with two large slabs. There were no slabs covering the tomb chamber, suggesting a covering with wooden beams, matting and earth. It is a relatively small tomb measuring on the inside merely 0.68 by 1.08 and a depth of 0.51 m. It seems the tomb had been plundered since some painted and some plain sherds as well as bone fragments were found around the tomb. Nevertheless, some burial goods remained inside, there were about 30 stone arrowheads, some iron fragments, two bronze buttons, a bronze spiral and a bead.

Tomb 4 (Pl. 1, 4-5, 9-10): the walls of this NE-SW oriented horseshoe shaped tomb were partially constructed with stone slabs placed on edge. The entrance (NE side) was closed with two stone slabs. There were no slabs covering the tomb chamber. It is a relatively small tomb measuring on the inside merely 0.71 by 1.26 with a depth of 0.52 m. It seems the tomb had been plundered; there were no ceramics, merely 23 chert arrowheads, 4 bronze buttons and two tubular bronze beads. The arrowheads were found at the SW end of the tomb chamber, opposite the entrance.

Tomb 5 (Pl. 1, 4-5, 10): this small tomb had walls constructed with stone slabs placed on edge. The entrance may have been at the NE side where one large slab is placed. There were no slabs covering the tomb chamber. The inside measures ca. 0.55 by 0.98 m with a depth of 0.66 m. The limited number of burial goods and the absence of ceramics suggest it had been looted. There were some chert arrowheads, bronze buttons and pierced striped whelk (Engina Mendicaria) that may have been sewn on to clothing or strung to be used in e.g. bracelets or necklaces. It is an imported salt-water shell that was widely used as embellishment (Overlaet 2003: 224-225, Pl. XXX-XXXI).

Tomb 6 (Pl. 1, 4-5, 11): the NE-SW oriented tomb had walls constructed with stone slabs placed on edge and a row of flat laid stones around the rim. The inside of the tomb measures ca. 0.64 by 1.00 m with a depth of 0.54 m. The tomb was looted since objects and sherds were dispersed in and around the tomb. There were some painted sherds, about 20 chert arrowheads and jewellery. These included a lengthwise-perforated shell fragment, two bronze spirals and part of another such spiral stuck in a tubular bronze “bead”.

Tomb 7 (Pl. 1, 4-5, 12): this jar burial was disturbed. Only half of the base of the jar was preserved. It still contained some bone fragments and two lengthwise perforated shell beads, one made from the central spiralling core of a conus shell, the other of the wall of a similar shell.

Tomb 8 (Pl. 1, 4-5, 12): this somewhat irregular NE-SW oriented cist tomb had only a few stones along the walls, suggesting it was largely destroyed by looters. The recorded inside measured 0.46 by 0.80 m with a depth of 0.54 m. Only some sherds and stone arrowheads were found.

Tomb 9 (Pl. 1, 4-5, 12-15, 19): jar fragments covering an area of about 0.71 by 0.81 m contained some bone fragments, pottery and various types of beads and other ornaments. Among the pottery are a large common ware open bowl (Pl. 13 nr. 123), a painted vessel (Pl. 13 nr. 107), fragments of second similar one (Pl. 13 nr. 106; painted?) and finally a painted zoomorphic spout with a relief band at the base. There was also a large group of jewellery items (Pl. 13-15). Among these were blue frit beads, shell elements and an iron pin. The cylindrical blue frit beads are of varying size. Such beads were mass-produced and are found in many Iron Age III tombs along the Zagros (compare Rezvani & Roustaeei 2007: 149, 166, Pl. 8; Amelirad, Haerinck & Overlaet 2012: 98, Pl. 39). Among the shell ornaments was one conus whorl that was horizontally pierced by an iron pin. Since the shell elements were found mixed with the above-mentioned blue frit beads, it seems probable that they are to be considered as jewellery. There are small plates with double perforations, possibly to sew on to clothing, lengthwise-perforated cores of (conus?) shells and the conus whorl with its small iron pin. Conus whorls were popular throughout the Iron Age and were worn as beads on a string, could be sewn on clothing etc. The present find suggests that it may have been used as a sort of toggle pin, maybe to secure strings of beads to clothing.

Tomb 10 (Pl. 1, 4-5, 16, 18): this jar burial measured approximately 0.52 by 0.45 m. The jar’s opening was apparently directed side wards in NE direction where a few stones and a painted vessel were found. Stones used to close the opening of jar burials were documented at Zalu Ab, Pir Gheib and Khushk-Kal’a to the NE of Kirmanshah (Goddard 1933: 129-130; Overlaet 2003: 56-57).
Tomb 11 (Pl. 1, 4-5, 15): the structure of this NE-SW oriented horse-shoe shaped tomb seems to have been disturbed by the looters. It had part of its walls constructed with stone slabs placed on edge. There are no stones at the NE entrance. However, two large slabs, visible on the plan, may once have been part of the entrance, the roof construction or the walls. It seems some stones had also fallen into the tomb chamber. The inside measures ca. 0.75 by 1.13 m. It was plundered, only some bone and shell beads remained.

**Burial Goods and Burial Jars from Baba Jilan**

The following survey of the Baba Jilan burial goods includes the above-mentioned material, as well as finds that were made in the soundings and in the rubble left by looters. All sherds of large storage jars will tentatively be considered as of jar burials. Although much of the information is lost, the Baba Jilan provenance is in itself an important element; too few “Luristan” finds have a known provenience. The material as a whole provides an insight into the phase during which the graveyard remained in use.

**Pottery:**

Our knowledge of Pish-i Kuh Iron Age and Achaemenid pottery is still very incomplete, the only substantial stratified information being provided by the Baba Djan excavations. The Western Iranian Achaemenid pottery as a whole remains badly known, with only a few shapes and decorations, as in festoon and triangle wares, acting as key references (Boucharlat & Haerinck 1991: 302-304). A detailed study of the Baba Jilan pottery remains to be made but the limited information at hand allows us to distinguish several groups.

*Storage jars:* Large jars were used for burials but none was preserved intact, although enough remains of t.9 to allow a reconstruction and drawing for future research. Its size was estimated by the excavator as 0.71 by 0.81 m. Fragments of thick-walled storage jars with the characteristic raised cordons, often decorated with herringbone incisions, impressed circles or pointed ovals, occurred throughout the graveyard and suggests that many more jar burials were present (Pl. 17). Similar bands on pithoi are known from Baba Djan levels III to I (e.g. “Baba Djan III Pithos ware” /
Goff 1968: 121, Fig. 6; 1978: 33, fig. 11, Pl. IIc; 1985: fig. 8) but are essentially of a too general nature to provide useful dating criteria.

**Painted ware:** Among the painted vessels are a number of buff and white slipped jars with red to dark brown painted patterns. There are pending triangles on the shoulder, sometimes combined with horizontal dotted bands and wavy lines around the neck (Pl. 16, 18-19), metopes with hatched cross-shaped lines (Pl. 19 nr. 27) and dotted circles (Pl. 18 nr. 105). These shapes and patterns are comparable to some of the Baba Djan III painted ware, particularly the horizontal undulating lines around the neck (Goff 1978: fig. 1-2; Overlaet 2003: 40-41, fig. 27 nrs. 13-14; compare also Iron Age III Tattulban: Vanden Berghe 1971: 266) and the pending triangles on the shoulder (Goff 1978: fig. 5:2, 6:5, 8:16, 9:18, Pl. IIa, IVb; Overlaet 2003: 40-41, fig. 27 nr. 3). Metopes with hatched cross-shaped lines (Pl. 19 nr. 27) are found on Iron Age II vessels and the dotted circles (Pl. 18 nr. 105) on an Iron Age III jug from Baba Djan (Goff 1968: fig. 11 nrs. 6 and 8). Lacking in the Baba Jilan repertoire, however, is the characteristic Baba Djan III kite shaped pattern (Goff 1978: fig. 5-6, 8-9, Pl. IIa, IVb), also familiar from nearby Nurabad (Sajjadi & Samani 1999: Pl. 18) and Mauyilbak tepe (Stein 1940: 294-297; Overlaet 2003: 42-44, fig. 29-30). The pending triangle pattern is chronologically and geographically less limited than the related kite shaped pattern and continues to be widely used well into the Achaemenid period as part of the Western and Classic Triangle Ware tradition (Kroll 2000). An unusual item is a painted animal shaped spout (Pl. 13 & 19 nr. 124). There is an applied collar around the base, just above the break, and there are two perforations in the roughly bird head shaped end. Its general shape and the wavy painted pattern, possibly imitating feathers, suggest this spout may have been part of a bird shaped vessel. The applied collar at the base of the neck may point to a vulture’s a characteristic collar of plumes at the base of its long neck. Since only this fragment is preserved, the original positioning and shape of the vessel remains uncertain.

**Bronze vessels:**

Noteworthy among the bronze vessels are a fragmentary vase with a globular body, a neck fragment of a vessel and a so-called “inkpot/ink-well vessel” (Pl. 21). This is a squat jar with broad splayed, concave neck and a profiled, constricted body. This type of vessel was particularly popular
during the Iron Age III in Pusht-i Kuh, Luristan (e.g. 7 at War Kabud, Haerinck & Overlaet 2004: 61, fig. 20-13, Pl. 142-143; 5 at Chamahzi Mumah, Haerinck & Overlaet 1998: 28, Pl. 64; 2 at Djub-i Gauhar, Haerinck & Overlaet 1999: 30-31, ill. 15: 10-11, Pl. 78). Such vessels are also commonly encountered in “Luristan collections” (e.g. Moorey 1971, 264-265, n° 503-504; Muscarella 1988: 260-262) although their distribution was not limited to this province. Specimens were also discovered at Sarriz (Sanandaj museum, not published) and Sanandaj in Kurdistan (Amelirad, Overlaet & Haerinck 2012: 47, Pl. 6-8, 34) and at Uruk/Warka in S-Iraq (Pedde 1992: 22, Taf. 22 & 25).

Arms and armament:

Chert and iron arrowheads: Five of the cist tombs contained groups of chert arrowheads (t.3: 30 / t.4: 23 / t.6: ca. 20), apart from these, only two iron arrowheads with tang were found. One of these is 6.7 cm long and had a massive tip with round section (Pl. 20). Stone arrowheads are very common in Iron Age tombs in Luristan and occur throughout the period. They are often found together with bronze or iron ones and may simply have been a less costly version. From the Pusht-i Kuh graveyards, it appeared that iron only started to be used for arrowheads at the very end of the Iron Age II and fully replaced bronze in the Iron Age III. In the Iron Age I and II, the chert arrowheads far exceed the number of bronze ones, usually, a grave did not contain more than two bronze arrowheads. During the Iron Age III, however, when iron was more readily available, the number of metal arrowheads increases and less chert ones are deposited in graves (Overlaet 2003: 231-232). The iron arrowheads from Baba Jilan thus point to a late Iron Age II, Iron Age III or later context whereas the stone ones do not provide sufficient dating criteria. The chert or flint is mostly plain, rarely spotted or banded and varies in colour from light brown to reddish-brown and from opaque white to dark grey. Such varieties are common in Luristan and resemble the material from known sources in the Kermanshah region. An extensive raw material survey to locate possible chert procurement zones in Luristan remains to be made, however, without which the exact provenience cannot be determined (see Heydari 2004: 124-127, fig. 1-4; Biglari 2004).

Iron socketed spearhead: A single ca. 27.5 cm long iron socketed spearhead with mid-rib and prominent shoulders was found at Baba Jilan but it
is not associated with a specific tomb (Pl. 20). The stem at the base of the blade has a square cross-section and evolves into a slit socket. Socketed spearheads were not attested at Iron Age I and II graveyards in Pusht-i Kuh Luristan but iron specimens are familiar from Iron Age III graveyards (Djub-i Gauhar: Haerinck & Overlaet 1999: 26-27, ill. 12; War Kabud: 2004: 47, Fig. 14, Pl. XXII; Bala Dasht Seh Pa and Lingah-Gauri-Tadjarian, publication forthcoming), as well as from sites in the Pish-i Kuh (Surkh-i Dum: Schmidt, van Loon & Curvers 1989: 257-258, Pl. 177d; Tepe Guran: Thrane 2001: 123-127, fig. 99-100, Pl. 70; Sangtarashan, not published). Other examples from late Iron Age II—Iron Age III context are known from Hasanlu IVB (Muscarella 1989: 26, fig. 2a; Thornton, P. & Pigott, V.C., 2011: 146-152, fig. 6.16-19), Sanandaj (Amelirad, Overlaet & Haerinck 2012: 51-52, Pl. 6-8, 33) and Tepe Siyalk (Ghirshman 1939: Pl. LVII, LXVIII, XCII).

Iron blade with tang: An iron 23.5 cm long double-edged blade with a tang to attach a grip could not be linked to a specific tomb (Pl. 20). It is a simple design; such iron blades are common in Luristan and elsewhere from the late Iron Age II onwards (compare Overlaet 2003: 163-164, fig. 131).

Flanged iron sword / dagger: The double edged, ca. 36 cm long dagger or short sword from tomb 1 had a grip that was made of an iron flange riveted between two mountings (Pl. 20). These were usually made of perishable materials such as wood or bone, but occasionally also of bronze or stone (Overlaet 2003: 162-163, fig. 128, 130). The flange still preserves the outline of the grip with its two cross-ridges and triangular pommel. Such iron weapons are documented in the Pusht-i Kuh during the late Iron Age II and Iron Age III periods (Overlaet 2003: 161-166, fig. 128-133).

Iron decorated sword grip: This sword grip belongs to a well-known uniform group of swords, referred to as the “Luristan iron mask pommel swords” (Pl. 20, Fig. 2). Although the Baba Jilan specimen is badly corroded and details of the decoration are lost, the uniformity of the type allows us to recognise the decoration. Two bearded human heads were set on the circular pommel of the hilt. Set against the back of both heads were lion protomes. Two small predators flanked the base of the hilt. These short swords consist of separately forged parts of low-carbon wrought iron and reveal a craftsmanship that is more familiar with bronze than with iron working techniques (Moorey 1991: 3; Rehder 1991). The swords seem to be the translation of contemporary bronze decorations into iron and may
reflect early attempts to produce more complex iron objects. In 1989, Muscarella listed about 90 such swords known from literature but although most of them were claimed to come from Luristan and sometimes specific sites were named as provenance (Maleki 1964), none came from controlled excavations (Muscarella 1989).

Although it is clear that the Luristan iron mask pommel swords belong to the formative stage of the ironworking technology in Luristan, it remains difficult to date them precisely. Based on technological arguments, Moorey and Rehder suggested an 11th. century date (Moorey 1991; Rehder 1991) while Muscarella places them ca. 750-650 BC on stylistic grounds (Muscarella 1989: 354-355). Referring to the iron introduction in Pusht-i Kuh graveyards and in view of the uniformity of the group, Overlaet suggested they might belong to a limited period within the 10th. to early 8th. century B.C. time range (Overlaet 2004: 336, 692, cat. nr. 328; 2013:
The Baba Jilan sword grip is the first Luristan iron mask pommel sword with an ascertained provenance. Although it was a surface find, since none of the other Baba Jilan finds refer to Iron Age I or early II, a late Iron Age II or 9th century date as *datum post quem* for this type of sword seems likely.

**Beads and ornaments:**

*Shell, stone and blue frit beads:* Pierced striped whelks (Engina Menticaria) were encountered in tombs 5 and 9 and were possibly sewn on to clothing or used in necklaces or bracelets. They are a common salt-water shell widely used as embellishment (Overlaet 2003: 224-225, Pl. XXX-XXXI). Larger gastropod fragments were found in tombs 6, 7, 9 and 11. There are lengthwise perforated columella, the central spirally twisting pillar of a gastropod, or moon shaped and pointed oval shaped fragments of the body whorl or spire with one or two perforations to attach them. Columella were widely used as beads since Uruk times (Limper 1988: 25-26, 184-185, Taf. 5, 12, 14, 18). In tomb 9 gastropod beads were found together with two conus whorls and blue frit beads. Conus whorls were widely used since the third millennium and remained popular throughout the Iron Age; they were worn as beads on a string, could be sewn on the clothing etc. (Overlaet 2003: 226, fig. 189, Pl. 2, 3, XXIX). A conus whorl was found in association with a small iron pin, stuck through a perforation on the side. This suggests that it may have been used as a sort of toggle pin, maybe securing strings of beads on clothing. The small cylindrical blue frit beads are of varying size. Such beads were mass-produced and are found in many Iron Age III tombs along the Zagros (compare Rezvani & Roustaei 2007: 149, 166, Pl. 8; Ame-lirad, Haerinck & Overlaet 2012: 98, Pl. 39). Carnelian is one of the most popular materials used for beads in Luristan. More than 50 barrel shaped, cylindrical or globular beads of varying size were found at Baba Jilan.

**Bronze beads and buttons:** Solid bronze spirals may have been integrated in necklaces and were found in tombs 1, 3 and 6. In tomb 6 part of such a spiral was stuck into a bronze barrel shaped “bead”, identical to two such beads in tomb 4 (Pl. 10-11). Some of the spirals and rings of tomb 2 may have had the same function but the sheet bronze spirals were possibly used as hair spirals (Pl. 6). The same tomb 2 contained 20 buttons or studs, smaller numbers were found in tombs 3 (2 specimens), 4 (4 specimens), 5 (1 specimen). They are either flat, in one case with a central protuberance,
or domed and all have a central loop or eyelet at the back. Such buttons are common on Iron Age sites in W-Iran (Muscarella 1988: 22, 72-74, 78-79; Haerinck & Overlaet 2004: 63, fig. 22). Their specific function at Baba Jilan cannot be reconstructed. At the Sanandaj “Zagros” graveyard, however, such buttons were found in situ on the head of the deceased indicating that they once decorated a cap or scarf (Amelirad, Haerinck & Overlaet 2012: 49-50, Pl. 14, 16-19). At the Iron Age cemetery of Masjed-e Kabud in Tabriz, such buttons were discovered in a row around the skull, as if they had been sewn on the rim of a headdress or some kind of headband (Azarnoush & Helwing 2005: 218-220, fig. 44-45). Such buttons were also used on horse gear (see e.g. Hasanlu IVB: Fleming, Nash & Swann 2011: 121, Pl. 5.10b & supplement 42-44, Pl. 5.82, 84-90) but the context does not suggest such a use in the case of Baba Jilan.

A unique “double button” from Baba Jilan was unfortunately not found in context and it remains unknown whether it was part of a larger set. It consists of two joined circular buttons, each with its own eyelet at the back (Pl. 21). Identical ones were excavated in Hasanlu IVB where they were used on horse gear as headstall strap decoration (de Schauensee 1989: fig. 19; Fleming, Nash & Swann 2011: 104, Pl. 5.2 left & supplement ch. 5, p. 39, Pl. 5.73)

Finger rings, bracelets and anklets:

There were many simple wire and sheet bronze or iron rings found at Baba Jilan. However, two bronze rings can be identified as finger rings. The first one is the above discussed cast bronze ring from tomb 2 (Pl. 6). The other is a sheet bronze ring (Pl. 21: 64) with a punched and engraved geometric pattern. It can be compared to two, slightly larger sheet bronze bands, identified as bracelets (Pl. 21: 65). They have a simple decoration of lines and dots. Another sheet bronze fragment with raised dots may have been part of a bracelet but it is too incomplete to ascertain (Pl. 21: 18).

Several iron open and overlapping rings were found among the looters spoil. They may have been used as bracelets or anklets. Such iron jewellery is characteristic at the iron Age II Pusht-i Kuh graveyards and is sporadically present during Iron Age III (Overlaet 2003: 194-200). Exceptional was the surface find of a chain of six large interconnected iron rings. Although series of rings were sometimes used as anklets, the fact that they are linked makes it doubtful that they were used in this way.
Bronze ornaments:

Several small bronze decorative elements with eyelets were discovered, unfortunately not in context (Pl. 21 and Fig. 3). The first is a set of two triangular shaped elements with a loop at one end, possibly strap ends that could be tied together with a string. There are small openwork pomegranate-shaped rattle bells with the persistent calyx shaped as a flat button or more realistically as a spiked knob. A bronze rod ending in a small solid globe may be a simplified version of a pomegranate pendant. Three small pomegranate rattle bells were discovered in a tomb at nearby Nurabad (Sajjadi & Samani 1999: Pl. 19:4). A simple rattle bell is known from the Surkh-i Dum sanctuary where pomegranate shaped bells were also used as decorative pinheads (Schmidt, van Loon & Curvers 1989: 260, 269, Pl. 159b, 171a-c, 179a). Large plain and pomegranate shaped openwork rattle bells excavated in Iron Age context at Hasanlu IVB (de Schauensee 1989: fig. 14; Fleming, Nash & Swann 2011: 117, Pl. 5.7 & supplement 41, Pl. 5.78-79 & 81), Siyalk B (Ghirshman 1939: pl. XXV:6) and Marlik (Negahban 1996: Pl. 136-137), demonstrate that the type was widespread and is not limited to Luristan.

Rare is a pair of so-called “banjo-shaped” pendants. They consist of a circular disk with a vertical strip on top with double protuberances. On the back, there is a cast loop for attachment. These characteristic pendants are known from several sites. There are two variants, some have an eyelet at the back like the ones from Baba Jilan, while others have a rolled top (Fig. 4). At Hasanlu IVB and at Tepe Siyalk they were found as part of sets of horse gear and were apparently decorating straps or belts (Hasanlu IV: de Schauensee & Dyson 1983: 71, fig. 18 nr. 3; Muscarella 1988: 70-71 nr. 106-107; Fleming, Nash & Swann, 2011: DVD appendix ch. 5, p. 46, Pl. 5.98 / Tepe Siyalk Tomb 15: Ghirshman 1939: Pl. XXV: 2, LVI:
S.589). At Sanandaj, however, a set of two was found in a tomb that did not contain any horse gear, which suggests it was also used for personal adornment (Amelirad, Haerinck & Overlaet 2012: 48-49, 78, Pl. 19). Related pendants that occurred in sets of two (without any horse gear) were excavated at another Iron Age graveyard at Kul Tarike (Rezvani & Roustaei 2007: 147, Pl. 9, 14). Stray examples are found in many collections (Calmeyer 1969: 105-108, Abb. 109; Moorey 1971: 136-137, Pl. 28 nr. 151; Muscarella 1988: 70-71).

**Conclusion**

The Baba Jilan graveyard, located near a traditional nomadic summer camp, had been severely plundered by looters before controlled excavations could take place. Yet, important information was still retrieved from the area. The burial goods from the cist tombs and jar burials indicate that the graveyard was used from at least the late Iron Age II onwards with a strong presence of Iron Age III material. However, a possible Seleucid finger ring and a 14C date referring to the Sasanian period, suggest the area may have remained in use as a burial ground much longer. This warrants continued excavations since these periods are notoriously unknown in these parts of Iran.
Report on radiocarbon analysis by the Research Laboratory for Archaeology and the History of Art, University of Oxford.

<table>
<thead>
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<th>Sample</th>
<th>Material (species)</th>
<th>δ(^{13})C</th>
<th>Date</th>
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<td>bone</td>
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<td>bone</td>
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The dates are uncalibrated in radiocarbon years BP (Before Present - AD 1950) using the half life of 5568 years. Isotopic fractionation has been corrected for using the measured δ\(^{13}\)C values measured on the AMS. The quoted δ\(^{13}\)C values are measured independently on a stable isotope mass spectrometer (to ±0.3 per mil relative to VPDB). For details of the chemical pretreatment, target preparation and AMS measurement see Radiocarbon 46 (1) 17-24, 46 (1): 155-63, and Archaeometry 44 (3 Supplement 1): 1-149. The attached calibration plots, showing the calendar age ranges, have been generated using the OxCal computer program (v4.1) of C. Bronk Ramsey, using the ‘INTCAL09’ dataset (Radiocarbon 51 (4), 2009).
References


STEIN, A., 1940. *Old routes of Western Iran, narrative of an archaeological journey carried out and recorded by Sir Aurel Stein*, London.


Pl. 1. Topographical maps with the location of the Baba Jilan graveyard (Height on the top map is MSL).
Pl. 2. The location of the Baba Jilan graveyard.
Note the extensive traces of illegal excavations.
Pl. 3. The Baba Jilan graveyard before and during the excavations.
Pl. 4. The Baba Jilan graveyard: the 10 × 20 m. trench with tombs 3 to 11.
Pl. 5. The Baba Jilan graveyard: the 10 × 20 m. trench with tombs 3 to 11.
Pl. 6. Burial goods from Baba Jilan tomb 2.
Pl. 7. Burial goods from Baba Jilan tomb 2.
Pl. 8. Tomb and burial goods from Baba Jilan tomb 3.
Pl. 9. Tomb 4 at Baba Jilan.
Pl. 10. Top: burial goods from Baba Jilan tomb 4; bottom: tomb and burial goods from Baba Jilan tomb 5.
Pl. 11. Tomb and burial goods from Baba Jilan tomb 6.
Pl. 12. Tomb and burial goods from Baba Jilan tombs 7, 8 and 9.
Pl. 15. Top: shells, shell ornaments and a tooth from tomb 9; bottom: tomb and burial goods from Baba Jilan tomb 11.
Pl. 16. Tomb and burial goods from Baba Jilan tomb 10.
Pl. 17. “Storage jar” sherds collected at the Baba Jilan graveyard.
Pl. 18. Painted wares from the Baba Jilan graveyard.
Pl. 19. Painted wares from the Baba Jilan graveyard.
Pl. 20. Iron weaponry from the Baba Jilan graveyard.
Pl. 21. Bronze vessels (top), iron rings, bronze jewellery and pendants from the Baba Jilan graveyard.