

NATUR UND KULT IN ANATOLIEN

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Herausgegeben von
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Prehistoric Sacred Landscapes in the High Mountains: The Case of the Vishap Stelae between Taurus and Caucasus*

Pavol HNILA – Alessandra GILIBERT – Arsen BOBOKHYAN

Abstract

This paper deals with prehistoric stone stelae called »vishaps« or »dragon stones«. Vishaps are impressive basalt stelae sculpted with animal reliefs. They originally stood upright in secluded, water-rich, high-altitude meadows in the mountains of East Turkey, Armenia, Georgia, and the Azerbaijani exclave Nakhichevan. Since 2012 an Armenian-German-Italian team has been conducting field research in modern Armenia, primarily in the Geghama Mountains and on Mount Aragats, in order to understand who produced these monuments in a seemingly remote and hidden setting, when and why. Though cardinal questions related to vishaps remain open, it is argued in this paper that dragon stones were monuments integrated into prehistoric sacred landscapes bestowing specific significance to mountain peaks and water springs, certainly pre-dating the Late Bronze Age and perhaps going back as early as the Chalcolithic period.

Introduction

Vishaps are 2–5 m high basalt stelae, unique among the stone stelae of the ancient world because of their unparalleled animal iconography and peculiar locations. Vishaps are either sculpted in the form of a fish (the *piscis* kind) or carved as if a bovine hide with head and horns were draped over them (the *vellus* kind); rarely but significantly, sometimes both iconographies are combined (the *hybrida* kind) (*Fig. 1*)¹. As we shall discuss in detail

* This paper builds upon and updates two contributions presented by Pavol Hnila during the 4th scientific network »Natur und Kult in Anatolien« at the German Archaeological Institute in Istanbul between March 2014 and October 2016. The vishap project gratefully acknowledges funding by the Fritz Thyssen Stiftung, by the Freie Universität Berlin, by the Ca' Foscari University Venice and by the Academy of Sciences, Yerevan. The English text was proof-read by Karsten Schoellner.

¹ For a definition of the three types see Gilbert *et al.* 2012, 94–98. Motifs of antithetic bird pairs sometimes accompany the main hide and horns iconography on the *vellus* type.

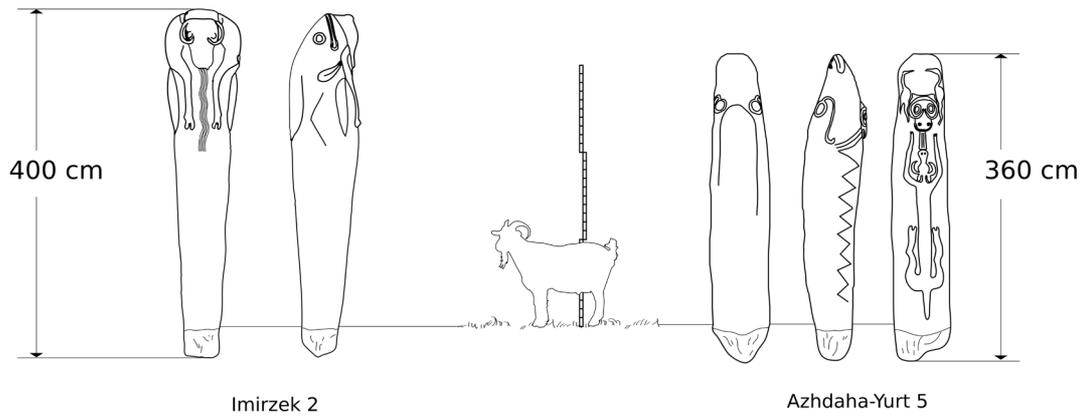
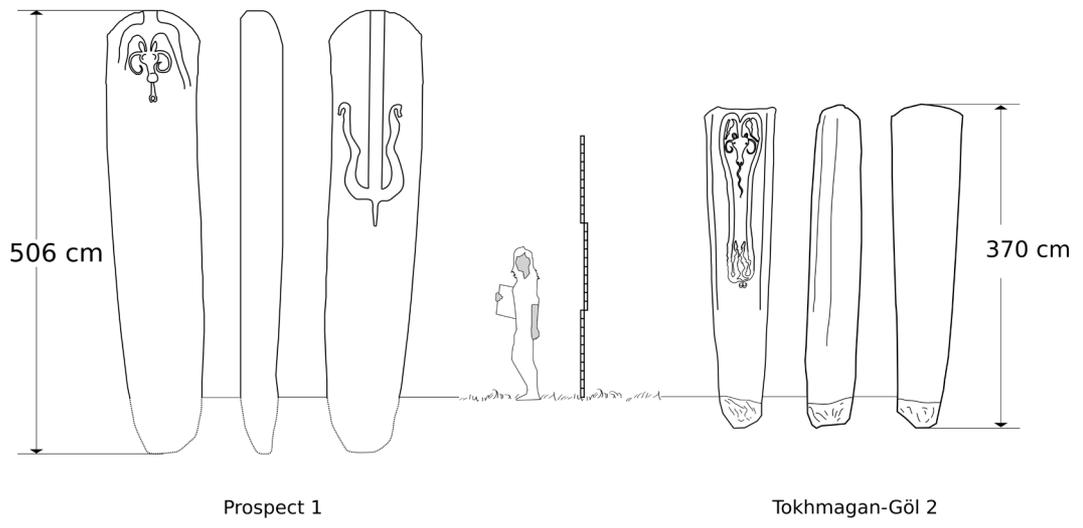
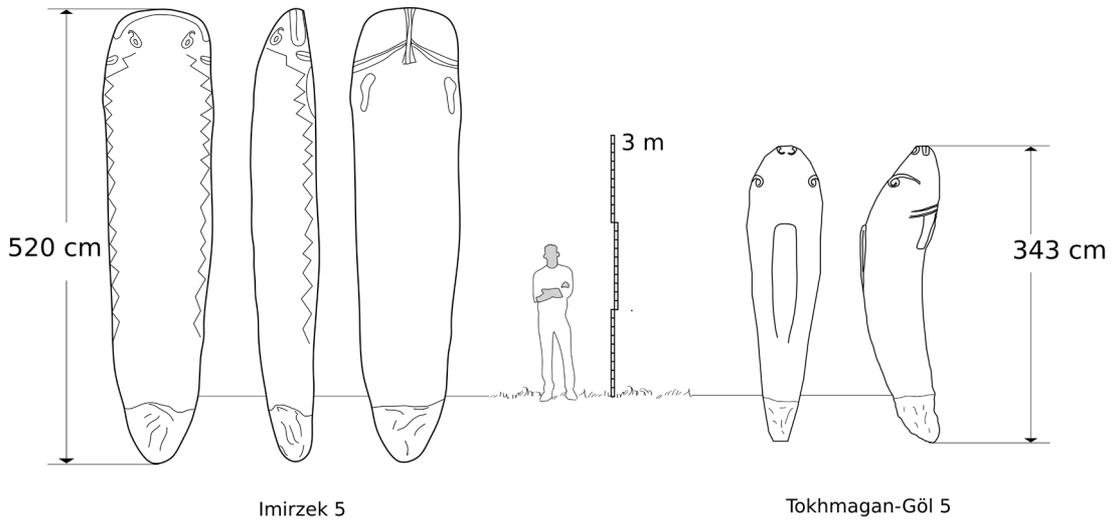


Fig. 1 Typology of vishaps: A) piscis, B) vellus, C) hybrid (Drawing: A. Gilibert)

below, their location is almost exclusively limited to secluded, water-rich, high-altitude meadows in the unforested mountains. This fact has long hindered scientific research and favoured much speculation concerning their meaning and their date, though the 1963 chance discovery of an Urartian inscription secondarily carved upon the face of a vishap at Garni has at least made it incontrovertibly clear that vishaps are a phenomenon pre-dating the Iron Age².

The term *vishap* was introduced into the scholarly world by Nikolai Marr and Yakov Smirnov, who adopted it from the herders they met in the summer pastures above the site of Garni, Armenia, where the two scholars conducted archaeological excavations in 1909–1910³. When referring to monumental decorated stone stelae laying around in the high alpine meadows, the local Armenians used the term *vishap* and the local Turks and Kurds used the term *azhdahak*, both with a meaning corresponding to »dragon« in English⁴. Dragons figure prominently in the folk heritage of the South Caucasus, and scholars often straightforwardly assume that the fact that the term »vishap« is used to identify prehistoric stelae is an index of the alleged prehistoric roots of surviving folk myths⁵. However, we must keep in mind that we know very little about the terminological history of the vishap stelae. In reality, as already sketched above, the imagery of vishap stelae has little to do with mythological dragons as we imagine them today. In particular, the iconography of the *piscis* stelae is remarkably realistic, to the point that it may even be possible to identify different fish species such as sheatfish/catfish and barbel⁶. Marr argues that, in the Early Middle Ages, the term *vishap* had a broader meaning and used to designate not only snake- and sea-monsters but also big fish and whales as well⁷. Thus, in the Early Middle Ages, monumental fish statues would have been called *vishaps*, as was the whale who, according to the well-known Biblical episode, swallowed the prophet Jonah⁸. However, we still have no clues about what these stelae were called before the Middle Ages, and likewise we lack information about how their earlier meanings, including their original meaning, might have echoed through history to become classified as »dragons«. We do not even know whether, in medieval times, stelae of the *vellus* kind were also called vishaps, and whether the designation *vishap* was used outside the Garni area at all. In fact, the earliest mentions of Georgian vishaps refer to them simply as »tik-kar«, »tikmatash«, »tikil-tash« – all simply meaning »standing stones«; in one case, a *vellus* vishap was called »milk stone« and venerated for its perceived capacity to support breastmilk production in lactating mothers and interpreted as a phallus by early scholars⁹. Also in Turkey these stone stelae

² Arakelyan – Arutyunyan 1966.

³ Marr 1912, 77; Marr – Smirnov 1931.

⁴ Marr – Smirnov 1931, 62. 68. 90.

⁵ Conclusion in Petrosyan 2015a, 9; see also Petrosyan 2015b.

⁶ Noted already in Marr 1912, 77; Marr – Smirnov 1931, 90; see also Manaseryan 2003, 103.

⁷ Marr – Smirnov 1931, 74.

⁸ For an early medieval depiction of the whale from the Jonah story as a vishap/dragon/monster see Curatola 1978, tab. 2.

⁹ Tokaishvili 1909; Melikset-Bekov 1947, 27. 32.

were often referred to with an adjective »tik/dik(-ma)« meaning »upright«¹⁰. In conclusion, all currently or recently used terms, including »vishap«, indicate that the stelae underwent local re-significations during the Middle Ages or later, and that these processes varied according to the regions. However, the name »vishap« bears a traceable testimony to the early local perception of the stelae and it continues to be a useful conventional means to distinguish this specific class of monuments from other types of stone stelae. Since it was swiftly and universally adopted by scholars of different languages and cultural heritage¹¹, we recommend using it alongside the translated form »dragon-stones«.

Macro-regional Distribution of Vishaps

Vishaps occur in varying concentrations in the highlands of East Turkey, Armenia, in South Georgia and in the Azerbaijani exclave Nakhichevan¹². In the course of our studies, we collected information about the existence of ca. 130 vishaps. According to our present knowledge, the outermost limits of their macro-regional distribution are the Lake Van region in the South, the Trialeti mountain range in the North, the Erzurum region in the West and the Sevan mountain range in the East. So far, the highest concentration of vishaps has been detected on the northern margins of the Ararat plain, specifically on Mount Aragats and in the Geghama mountains in Armenia (*Fig. 2*). However, remote high-altitude environments are difficult to access and only rarely prospected archaeologically, therefore the current pattern of macro-regional distribution is still markedly influenced by the state of research. Vishaps can be expected to occur also in comparable geographic environments – high mountain grasslands, for example in northwest Iran, to the north of the Urmia Lake. The fact that none of them have been reported from there or elsewhere in adjacent regions so far is probably due to the lack of apposite archaeological prospections. In modern Armenia, where the presence of vishaps has been known to the scientific community since the beginning of the 20th century, our specifically tailored archaeological prospections have nearly doubled the quantitative evidence in a very short time¹³. In Georgia, recent surveys¹⁴ have reassessed and complemented the previously available evidence¹⁵. In Nakhichevan, a single potential vishap stela is known: it looks like a variant of the *piscis* type and it was found near the Batabat Lake in the Shahbuz district¹⁶. The fish body is rendered in an unusual coarse manner and the tail appears to be shaped into a regular tenon apparently to be inserted into a corresponding stone mortise, as is often the case with Urartian stelae. The Batabat stela was considered lost at the end of

¹⁰ Etymological evidence collected between ca. 1880 and 1915 by Atrpet but interpreted differently by him: see Bobokhyan in print.

¹¹ Armenian, Russian, Georgian and French publications of Meshchaninov 1925; Berbérian 1927; Mikhankova 1931; Melikset-Bekov 1938; Melikset-Bekov 1947; Piotrovskiy 1939; Kalantar 1994; later followed also in Turkish (Tanyu 1968, 178) and Azerbaijani (Avsharova 2010).

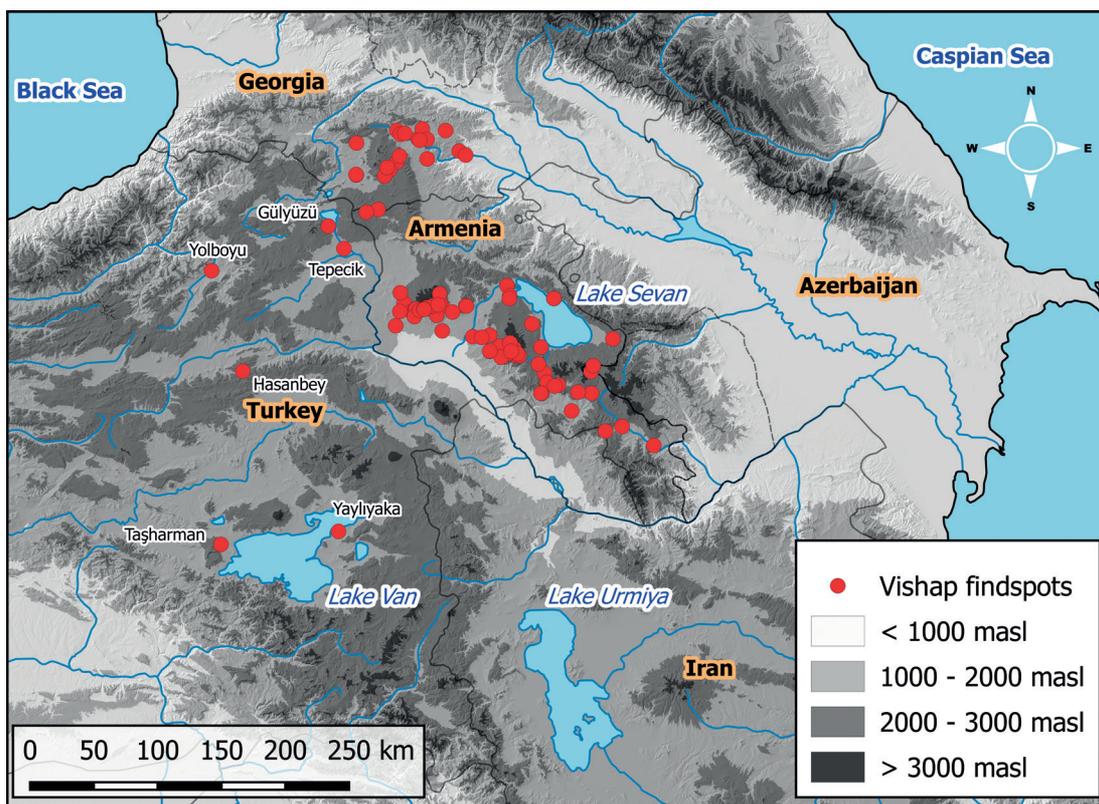
¹² Gilibert *et al.* 2012; Gilibert *et al.* 2013.

¹³ Gilibert *et al.* 2012; Bobokhyan *et al.* 2012; Bobokhyan *et al.* 2015.

¹⁴ Narimanishvili *et al.* 2015a; Narimanishvili *et al.* 2015b.

¹⁵ Melikset-Bekov 1938; Melikset-Bekov 1947.

¹⁶ Ayyazyan 1990, fig. 5.



Map: P. Hnila, Catalogue: A. Bobokhyan/A. Gilibert/P. Hnila, Topography: GMTED2010 and Natural Earth

Fig. 2 Macro-regional distribution of vishaps
(Map: P. Hnila, Catalogue: A. Bobokhyan – A. Gilibert – P. Hnila)

1990s¹⁷. However, judging from later publications¹⁸, it was simply moved to the regional capital and is currently on display in the museum garden of the Momine Khatun Mausoleum in the city of Nakhchivan.

In Turkey, two *piscis* vishaps, two *vellus* vishaps and two stelae reminiscent of vishaps have been documented. We have treated the evidence in more detail elsewhere¹⁹, thus we will offer only a brief overview here. The two *piscis* vishaps were found in Tepecik²⁰ and in Gülyüzü (old Pekreşin)²¹ respectively, both villages in the Kars province. The *vellus* vishaps come from Yolboyu near Oltu²² and from Hasanbey near Horasan²³, both in the Erzurum

¹⁷ Belli – Sevin 1999, 64.

¹⁸ Figures in Belli 2007, 113. 115.

¹⁹ Hnila in print.

²⁰ Kılıç Kökten 1953, 205 f. documented a fish-shaped stela built up in a house wall in Tepecik during a survey in 1952. This fish stela was correctly interpreted as a vishap by Hamit Zübeyir Koşay (Tanyu 1968, 178).

²¹ Belli 2007; Güneri 2013 when referring to the findspot of the vishap currently exposed in the garden of the Kars Museum. According to an earlier publication by Özbek – Yükmən 2001, 151 the vishap in the Kars museum is the Tepecik vishap.

²² Belli 2005; Yıldırım 2007, 87 f. Recognized as a vishap in Güneri 2013.

²³ Interpreted differently in its primary publication by Ceylan 2015, 300 f. We thank Oktay Özgül for bringing this stela to our attention.

province. Of the two stelae with shapes reminiscent of *vellus* vishaps, one was discovered near the Taşharman village in the Bitlis province²⁴ and the other near the Yaylıyaka village (old Adır) on the eastern shore of Lake Van²⁵. The former looks like a *vellus* vishap transformed into a cross-stone, the latter is unclear since one face is still hidden in the soil.

In addition to the above-mentioned documented finds, numerous vishaps from Turkey are only attested in writings of the Armenian author Sargis Mubayejian, known under his pen name Atrpet. In the published recollections of his journeys through the Çoruh basin²⁶ and in various unpublished archived manuscripts, he claimed to have seen numerous vishap stelae in the summer mountain pastures on at least sixteen different sites in what are today the Bayburt, Erzurum and Kars provinces²⁷. His journeys were taken on multiple occasions between the 1880s and 1915. Atrpet's claims are still unverified to this day, yet he is unlikely to have mistaken the stelae for something else. He had first-hand knowledge of the vishaps in the Aragats and Geghama mountains. Furthermore, recent verified reports of vishap finds from Yolboyu and Hasanbey in the Erzurum province (see the paragraph above) increase the chances that Atrpet's indications are reliable.

The macro-regional distribution of vishaps is all the more striking if we take into account their limited variation in terms of iconography and stylistic traits. Generally speaking, and bearing in mind the incomplete state of research, we observe a provisional distribution pattern among the three identified basic kinds of vishaps. The *vellus* vishaps are by far the most numerous ones (62 out of 95 exemplars that can be ascribed with certainty to a specific iconographic class) and are distributed more or less equally across the macro-region. Vishaps of the *hybrida* kind are rarest (6) and they are so far confined to the south-west of the Geghama Mountains in Armenia. Vishaps of the *piscis* kind (so far 27 in total) are currently lacking in the westernmost parts of the macro-region, though the data are almost certainly distorted by the state of research, since only few vishaps are documented from the neighbourhoods of Erzurum and Van²⁸. Since both the *vellus* and the *piscis* iconographies are unique, standardized and very specific, their large-scale distribution pattern must correlate with the existence of a symbolic and religious common ground shared by social groups across the whole region at the time of their erection.

Vishap Landscapes

Microgeographic information on the location of the vishaps is largely missing in many recorded cases. For example, nearly all vishaps from Turkey are chance finds, whose original locations in the landscape cannot be reconstructed. Even when the generic provenance is known, as is sometimes the case for vishaps found in Georgia, Nakhichevan and Armenia,

²⁴ Appeared on a publicly available Facebook profile (Taşharman 2012). We thank Ertekin Özcan from the Taşharman village for sharing this information with us.

²⁵ Kılıç 2006, 100. We thank Sinan Kılıç for bringing this stela to our attention.

²⁶ Atrpet 1929.

²⁷ Bobokhyan in print.

²⁸ For the plausible existence of *piscis* vishaps in this region, see the reports of Atrpet discussed in Bobokhyan in print.

specific locations were not treated in the level of detail necessary for a proper landscape analysis. In the cases mentioned, for example, it remains unclear exactly where within a given site the vishaps actually stood and which direction they faced. In order to attempt to identify whether or not vishaps were erected at certain categories of landscape spots, we turn to the results of our surveys and excavations in the Republic of Armenia.

Among the total of 91 vishaps mapped in the course of our surveys, 69 of them can be reasonably linked to their original findspot. The majority of them are not solitary monuments but are found clustered in small groups. We observed a number of regularities and repetitive patterns in the location of these clusters (Fig. 3, 4). As a rule, the clusters are located high on unforested grassland mountain ridges, and never in the nearby

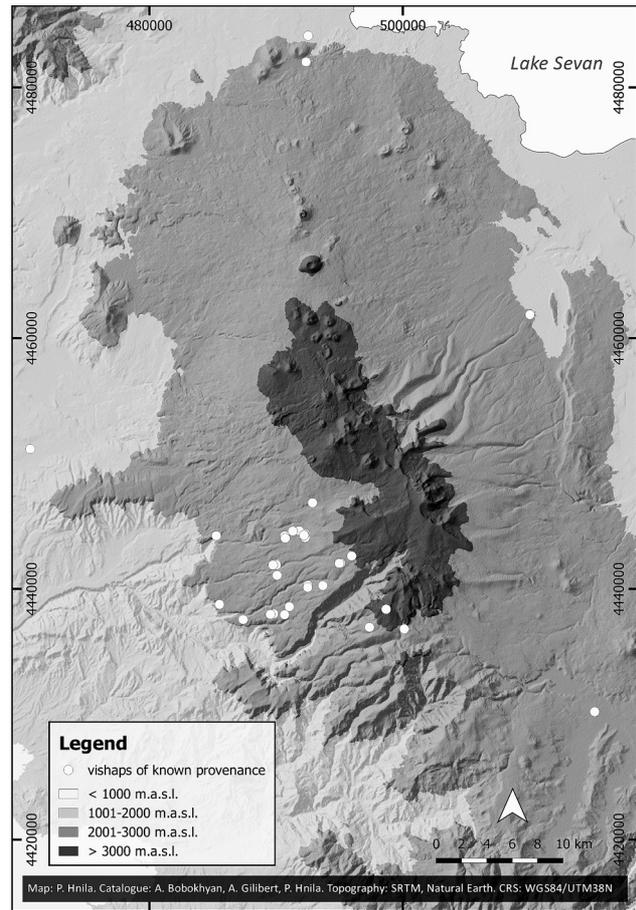


Fig. 3 Clusters of vishaps in the Geghama Mountains (Map: P. Hnila, Catalogue: A. Bobokhyan – A. Gilbert – P. Hnila)

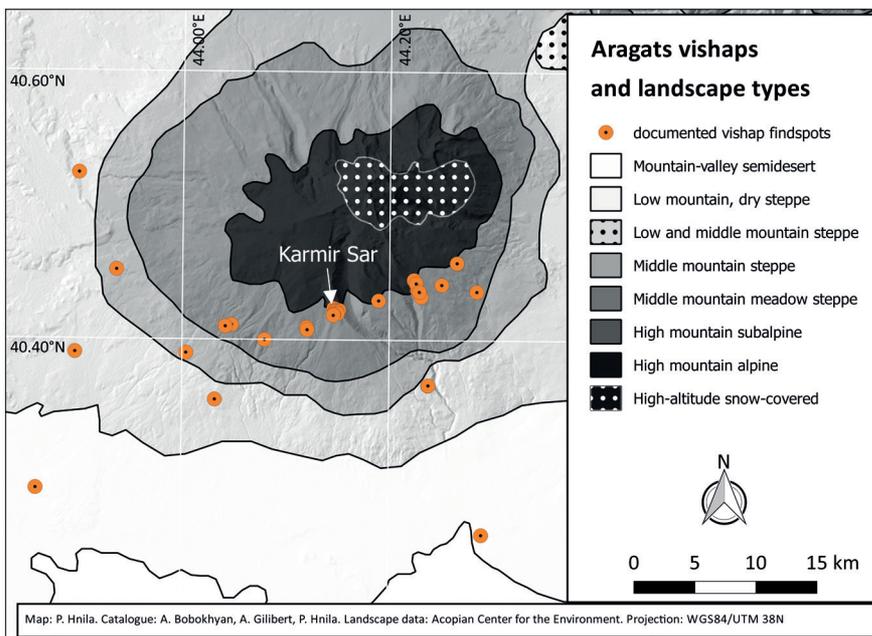


Fig. 4 Landscape types and vishap clusters on Mount Aragats (Map: P. Hnila, Catalogue: A. Bobokhyan – A. Gilbert – P. Hnila)



Fig. 5 View of Karmir Sar and its concave meadow topography type. Mount Ararat is visible in the background (Photo: A. Bobokhyan).

valleys. The second observation was that their location on the ridge is not one of enhanced visibility. On the contrary, the clusters are strikingly »hidden«, with a pronounced preference for concave meadows, invisible from the wider surroundings (Fig. 5). Remarkably, there is no intervisibility between the vishaps clusters, even when the ridges themselves are adjacent and easily identifiable as landscape forms. Our third observation, specific to the Aragats mountain, is that the majority of vishap clusters occur within a conspicuously narrow band on the south slope of the mountain, in the altitudes between ca. 2600 and 2800 m.a.s.l. This band is close to the upper limits of the high mountain subalpine zone, and on the transition to the high mountain alpine zone (Fig. 4). On Aragats, the subalpine zone manifests itself through vast undulated grass areas, whereas the alpine zone is considerably rockier. Thus the transition between the landscape types often goes hand in hand with a transition among differing geological substrates – predominantly erosion accumulations and soil formations in the subalpine zone as opposed to the frequent presence of naked volcanic rocks in the alpine zone.

We interpret all these patterns as a preference of the vishap builders for a specific landscape: the concave, water-rich, high-altitude meadow. Although GIS analyses are still in process, it appears that a significant common denominator of these mountain meadows is the recurrent presence of mountain springs, sometimes as a point of origin of water streams²⁹. Mountain springs tend to form at the transition between different geological substrates, and they are especially common in concave meadows that were originally shaped by a combination of volcanic and later glacial action. Significantly, these water springs are different from the water springs that ultimately supply the larger streams in the valleys. The streams on the valley-bottoms are abundant and water-rich, but they are difficult to access, because the valleys often cut very deep into the landscape. The mountain

²⁹ A specific geographical connection of vishaps to water based both on the *piscis* iconography and on their location has been repeatedly suggested early on in the history of research: Atrpet, for one, claims that he saw the vishaps laying by the shores of lakes and promoted site reconstructions with lakes figuring prominently (Bobokhyan in print). Indeed, the Gülyüzü vishap and Yaylyaka/Adır stela were found in the territory of villages located at large lakes and placements near lakes is evident also in Georgia, Nakhichevan, and Armenia, although we do not know where exactly in relation to the lakes the vishaps were observed. It was also suggested very early that vishaps are placed near streams and springs, as well as artificial lakes and canals (Marr – Smirnov 1931, 90; Kalantar 1994, 30–35; Piotrovskiy 1939, 18). Our observations confirm that vishaps occur in water-rich environments, but a straightforward connection with lakes, streams, or artificial canals is not given.

springs on the ridges, on the contrary, are smaller, but readily available for the people who use the mountains – even today.

Defining the character of the typical landscape favoured for the erection of vishaps is, as already demonstrated during our surveys, useful for predicting where more vishaps might be located. Additionally, if we combine the bipolar iconography of the vishaps with their locations, we may gain insights into the cultural horizon of their creators. On the one hand, the imagery revolves around an iconic and powerful standing fish, seemingly very much alive and evidently testifying to a strong symbolic preoccupation with water and its nurturing power. On the other hand, vishaps are decorated with the image of a cult practice, the display of a bovid hide, indicating a ritual involving slaughtering and butchering the animal, and then scraping and treating the hide, revealing intimate familiarity with these practices. Vishaps of both kinds are found within a single cluster and sometimes share common stylistic traits, for example in the rendering of the animal eyes. Furthermore, as mentioned above, a small number of *hybrida* found in the Geghama mountains mix both iconographies. Clearly, both iconographies were significant within a single cultural horizon, defined, among other aspects, by familiarity with bovids. Considering furthermore the nature of the vishaps' locations, the limited seasonal availability of the high-altitude meadows, which are only free of snow in summer, together with the additional preference for large pastures with small but important water springs, we may reasonably expect the people who erected the vishaps to fit the profile of a population engaging in pastoralist activities.

The Archaeological Context of Vishaps: Excavations at Karmir Sar

In order to gather information about the function and dating of vishaps, surveys must be complemented with archaeological excavations. During our survey on the southern slopes of Mount Aragats in 2012, we identified the site of Karmir Sar as the site with the highest known concentration of vishaps and selected it as the place to conduct an in-depth field study. In 2012, our team was working with the hypothesis that vishaps were integral parts of unrecognized high-altitude funerary monuments³⁰. This hypothesis was based both on first-hand observations of a number of vishaps evidently embedded into graves and on previous archaeological reports from Armenian surveys. The same pattern was also hinted elsewhere: for example, it is reported that the Yaylyaka/Adır and the Nakhichevan stelae were originally erected on small tumuli. Today, after four excavation seasons at Karmir Sar, we need to revise the funerary monument hypothesis, since it appears to apply only to cases of secondary use.

Karmir Sar (Arm. »Red Hill«) is the vernacular name for an impressive site of over 60 ha, located on the south slope of Mount Aragats, at an altitude of around 2850 m.a.s.l. This high-mountain, concave meadow is the point of origin for two smaller water streams.

³⁰ Gilibert *et al.* 2012.

Remains of at least ten different vishaps are visible in and above the ground (Fig. 6)³¹. Among them, we identified six *vellus* vishaps and four *piscis* vishaps, with the *piscis* vishaps concentrated in the northern part of the site, closer to the water springs.

With a team of German, Armenian and Italian students and specialists, we excavated five vishaps during the campaigns 2013–2017. In two cases (Operations G and F), the excavated vishaps turned out to have been secondarily moved before their final deposition, so that their original context must have been located outside the excavated areas. In three other cases, we identified and excavated the foundation pits for the erection of the vishaps: this happened in Operations A, C, and D. At present, these are the only three known archaeological contexts that may produce information relevant to the original function and primary dating of vishaps in general.

Operation A was begun around a somewhat untypical *piscis* stone. This vishap was laid horizontally into a circular, flat stone tumulus tomb of the kind commonly called »cromlech« in Caucasian archaeology (Fig. 7). The cromlech with the vishap is part of a group of five closely related cromlechs laying next to each other, of which we excavated four in total (the fifth and the biggest one has been localized by geomagnetic prospection and left untouched). In the excavated cromlechs adjacent to the vishap we found stone cists with jewellery and pottery dating to the beginning of the Middle Bronze Age. Radiocarbon dates of charcoal samples obtained from the cromlech chambers date to 2200–1985 calBC and are thus in line with the Middle Bronze Age dating implied by the pottery³². Neither animal nor human bones were found, but we infer from their overall absence on the site that due to the extreme temperature changes and wetness differences of the high-mountain

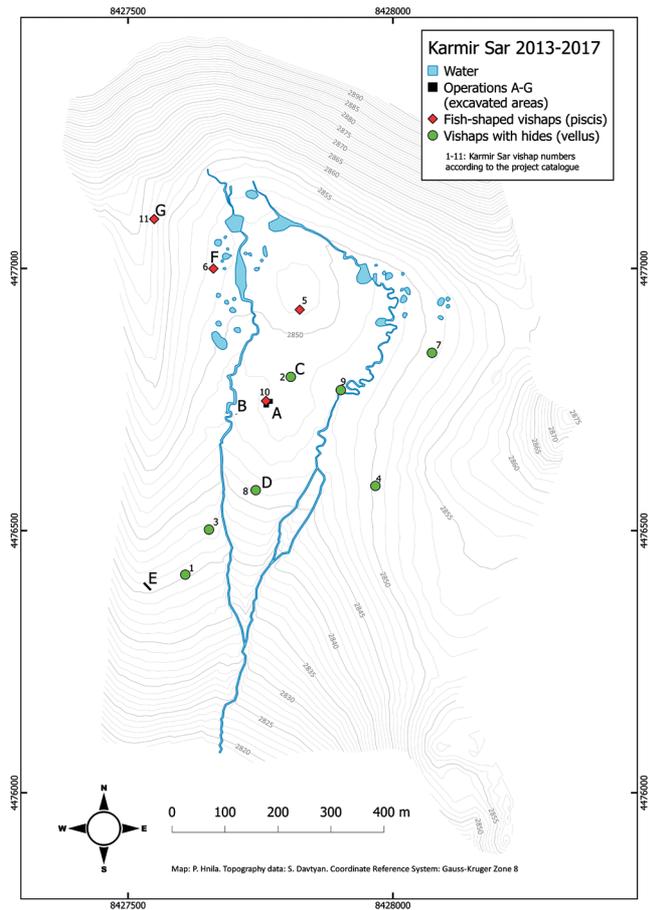


Fig. 6 Topographic plan of Karmir Sar (with vishaps differentiated according to kinds) (Map: P. Hnila)

³¹ Vishap fragments nos. 7 and 9, found ca. 186 m from each other; both could have originally belonged to the same stela.

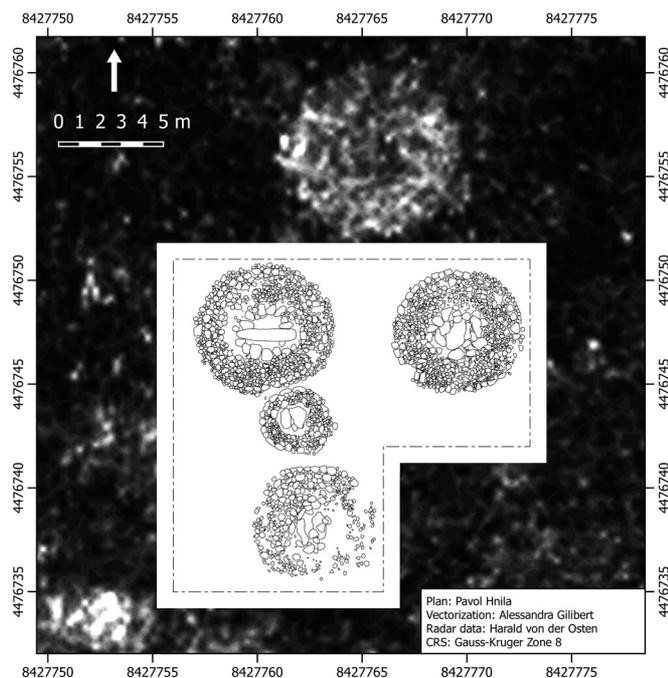
³² MAMS 25322: 3723±22 BP (= ca. 2200–2036 calBC with > 95.4 % probability) and MAMS 30124: 3685±19 BP (= ca. 2138–1985 with 95.4 % probability). Wood species not identified.

Fig. 7
Plan of Operation A and the adjacent fifth cromlech detected by a ground-penetrating radar prospection (Plan: P. Hnila, Vectorization: A. Gilibert, Geophysical prospection: H. von der Osten)

environment, bones degrade and dissolve rapidly³³. The cromlech with the vishap had no stone cist. Instead, under the centre of the vishap was a pit filled with stones. A charcoal from this pit yielded a Final Neolithic/Early Chalcolithic date – ca. 5216–5037 calBC (95.4 % probability)³⁴. Apparently, the vishap originally stood vertically. We have no indication of instal-

lations connected to it at this phase. Later on, the vishap was taken down and, in the Middle Bronze Age, it was carefully embedded into the centre of the stone circle, positioned almost precisely east-west, and partially covered with stones – as if buried on purpose.

Operation C was opened around a *vellus*-type vishap (Fig. 8). The vishap bears a number of secondary incisions, including a horizontal line superimposed onto the original relief at half-height, as if it were a sort of belt (Fig. 9). In contrast to Operation A, in this case there was no cromlech around or near the vishap, only a very loose and irregular accumulation of stones. However, two pits have been located under or immediately next to the vishap – Locus 12 and Locus 13. Locus C12, a circular pit that contained obsidians and tiny charcoals, was found under the tail of the fallen vishap. Three radiocarbon samples obtained from charcoal bits and barley seeds date unanimously to the Middle Bronze Age, though ranging between the 23rd and 17th centuries calBC³⁵. A rectangular pit, Locus C13, was found one and half meters to the south-east of the circular one. It was loosely filled with middle-sized loose stones, including a hammering and grinding instrument that was presumably used for finishing the vishap surface (Fig. 10). From this pit a single charcoal fragment was retrieved and radiocarbon-dated to the Chalcolithic period, with > 95.4 % probability to ca. 4225–3970 calBC³⁶. The early radiocarbon date, the possible instrument found inside the pit and the position of the pit very close to the vishap open up the



³³ We thank Dr. Sherry Fox for suggesting this very plausible idea.

³⁴ Fragment of *Betulaceae* (botanical identification by Valentina Caracuta) RTD-8866: 6171±28 BP.

³⁵ Charcoal from *Pinus silvestris* (botanical identification by Werner Schoch) MAMS 32632: 3765±23 BP (= ca. 2283–2060 calBC), unidentified charcoal RTD-9214: 3389±26 BP (= 1745–1625 calBC), barley (botanical identification by Dr. Roman Hovsepian): MAMS 32868: 3420±20 BP (= 1860–1660 calBC). All calibrated dates are quoted according to 95.4 % probability.

³⁶ RTD-9215: 5229±29 BP. Wood species not identified.

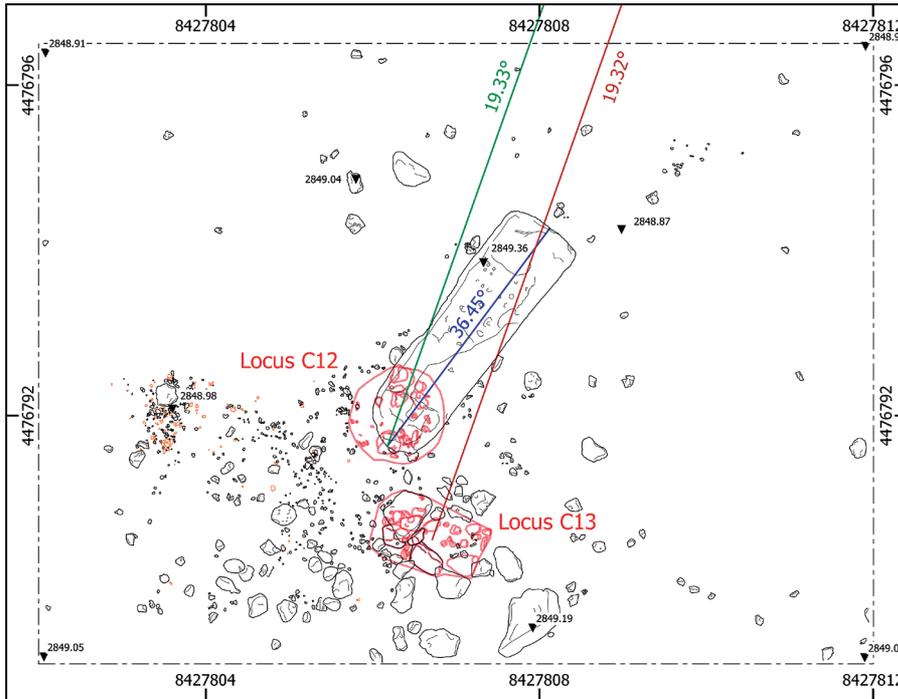


Fig. 8
Plan of Operation C showing the position of the fallen vishap and its axis to Aragats (Plan: P. Hnila, Vectorization: J. Elicker).

Karmir Sar, Operation C

- Stone
- Pottery
- Prehistoric pits
- Axis of the fallen vishap
- Azimuth from Locus C12 to Aragats
- Azimuth from Locus C13 to Aragats

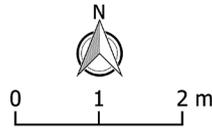
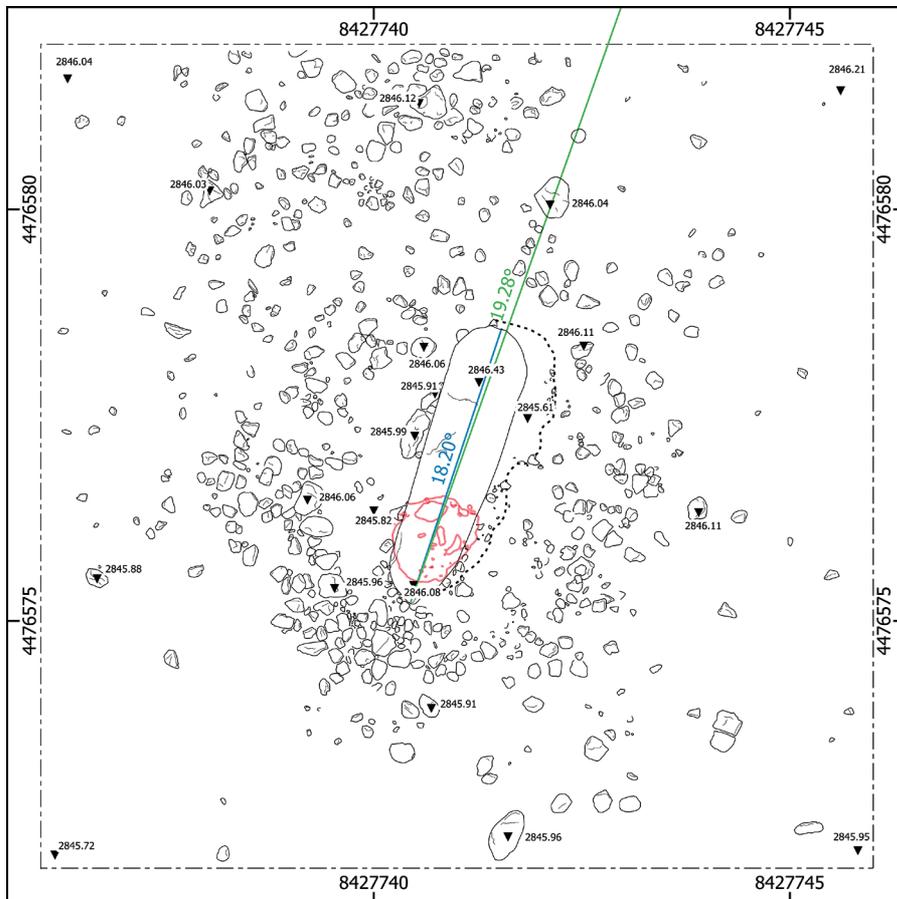


Fig. 10
Stone grinding and pecking instrument presumably used for sculpting the vishap surface (Photo: P. Hnila)

Fig. 9
Vishap Karmir Sar 2, Operation C (Photo: P. Hnila).

possibility that the rectangular pit may have served as the original foundation pit for the vishap, where part of the stones used during the preparation and decoration of the vishap were discarded. Again, there is no evidence for any additional installation around the vishap. At an as yet unknown point in time, we assume that the vishap fell down, or was made to collapse. A considerable time after this event, the stela would have been secondarily re-erected in a new pit. This tentative reconstruction also accounts for the evidence of at least two decorative events during the use-life of that particular vishap: first the typical *vellus* decoration was applied in relief, and at some later point a prominent horizontal line was deeply incised through the relief decoration. Similar horizontal lines or »belts« have also been observed on three other vishaps – in Tokhmagan göl (Armenia), Gandza (Georgia) and Yolboyu (Turkey). Such actions may have been motivated by an attempt to resignify the vishap as an anthropomorphic statue.

The third and last relevant excavated context was exposed in Operation D and it shows evident similarities with the context exposed in Operation C. Operation D was opened around a vishap of the *vellus* type. A circular pit was located under the tail of this vishap (Fig. 11). This pit yielded the most convincing evidence so far for the prior fixation of the



Karmir Sar, Operation D

- Stones
- Axis of the fallen vishap
- Limits of modern disturbance
- Pit under the vishap
- Azimuth angle to Aragats

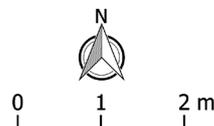


Fig. 11
Plan of
Operation D
showing the
position of the
fallen vishap
and its axis to
Aragats (Plan:
P. Hnila,
Vectorization:
J. Elicker)

vishap: middle-sized stones were found still in situ, leaning against the pit walls and covered with patches of basalt dust. The dust was evidently produced when the vishap surface abraded against the fixing stones during the erection and/or fall of the vishap. A charcoal fragment was retrieved from this pit and yielded a chalcolithic date, ca. 4320–4005 calBC (> 95.4 % probability)³⁷.

If we sum up the dating evidence from the excavated contexts, two groups of radiocarbon dates stand out: a group from the Chalcolithic period (5th Millennium BC) and the other from the Middle Bronze Age (2200–1600 BC). We still cannot prove incontrovertibly in which of these two periods the vishaps were made, since the interpretation of the tiny charcoal fragments found in the pit fills is open to debate. The tiny charcoal bits can either be viewed as genuine remains from vishap-building activities dating to Chalcolithic period or they can be viewed as residual pieces that were laying around for millennia and found their way to the fills only by chance during the digging of vishap pits in the Middle Bronze Age. Until a substantial sample is found in a sealed construction context, we can only operate with probabilities. Since in all three excavated areas we found pits that yielded Chalcolithic dates and a presumable working instrument was found in one of those pits, the probability of dating the vishaps to the Chalcolithic period is significant. The Middle Bronze Age datings would then belong to contexts in which the vishaps started to be secondarily reused – a process that continues until today.

What can we say about the original social framework of the vishaps? The finds from the immediate vicinity of vishaps leave us very little to work with. Most finds are small obsidian flakes and bladelets. Although this category of finds is generally difficult to date, we can identify a group of microblades datable on typological grounds to the Chalcolithic period and produced off-site by specialists. The rest of the assemblages are ad-hoc instruments produced locally by non-specialists and are not diagnostic for dating. The shape and wear-uses of the ad-hoc instruments are consistent with activities connected with the preparation and elaboration of meat and leather and suggest that the groups who produced them were herders³⁸.

Preliminary XRF analysis of the obsidians with a handheld portable device indicates that specialists and non-specialists alike used raw material brought from at least eight different sources. Six identified sources are close to Aragats and most easily reachable for people in the Ararat plain – Gegham, Gutansar, Hatis, Pokr Arteni, Mets Arteni, and Tsakhunyats (*Fig. 12*). Two or three other geochemical groups are only very rarely represented on the site and their origin has not been satisfactorily identified to date. This result can be used as an argument for the local origin of the populations visiting Karmir Sar throughout the prehistoric period – it is a strong point in favour of people practising a local vertical transhumance rather than nomadic movements over large distances. Furthermore, the preliminary results of the pXRF analyses correlate with the distribution map of vishaps in Armenia, which highlights a disparity among slope orientations: nearly all Geghama

³⁷ *Aceraceae* family (botanical identification by Valentina Caracuta) RTD-8868: 5323±43 BP.

³⁸ Purschwitz 2018.

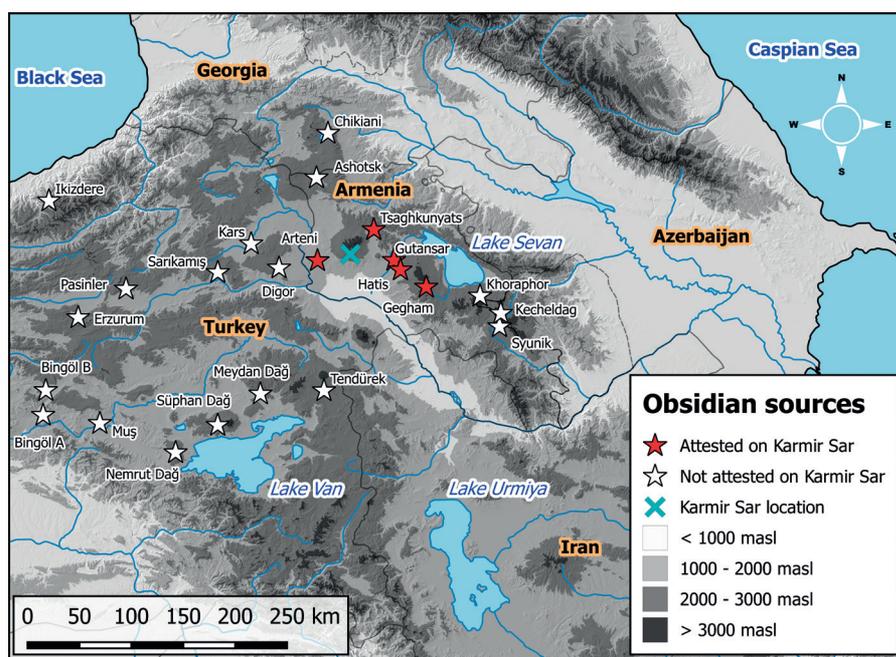


Fig. 12
Map of obsidian sources used by prehistoric groups visiting Karmir Sar (Map: P. Hnila, Obsidian sources: B. Varoutsikos, Ch. Chataigner)

Map: P. Hnila, Obsidian sources: B. Varoutsikos, Ch. Chataigner (obsidabase), Topography: GMTED2010 and Natural Earth

vishaps are concentrated in the south-west part of the range, while all known Aragats vishaps are located in the southern slopes of the mountain. In other words, the vishaps clusters are arranged along the northern perimeter of the Ararat plain, suggesting that the vishap-building groups of the Aragats and Geghama mountains gravitated in one way or another around the Ararat plain. This interpretation does not rule out the structural existence of additional long-haul exchange. In fact, as we already pointed out above, the close iconographic similarities among vishaps distributed from Erzurum to Lake Sevan clearly bespeak a shared cultural koiné over a vast area.

The second most significant category of finds are very fragmented and poorly fired pottery sherds. Among the few diagnostic sherds, most belong to the Middle Bronze Age. We must keep in mind, however, that neither pottery sherds nor obsidians are necessarily related to the primary use of the vishaps, except for the very few undiagnostic ones that were buried under the fallen vishaps. The vishaps remained visible for millennia after their fall. Since the high-mountain paedogenesis process is very slow and uniform, it precludes the formation of different strata. As a result, the finds next to the vishaps reflect the multimillennial history compacted into very few centimetres of nearly homogeneous humus soil. Generally speaking, the paucity of finds, the absence of typical offerings among them and the absence of any kind of additional installation indicate that no detectable ritual activity took place around the vishaps. If there were any rituals, they must have involved predominantly organic material that did not survive the harsh high-mountain conditions over millennia. The presence of stone instruments, however, reminds us that the creation of vishaps in itself must have been a significant communal event.

A further significant result of the excavation concerns the orientation of the vishaps. In Operation C and D, both vishaps have a carved front and an uncarved back. Both vishaps

were found fallen in a very similar position and oriented along more or less the same axis, pointing northeast, with their carved face fallen against the ground. This fact implies that orientation was originally a meaningful variable and that both vishaps were at a certain point intentionally overthrown face down. Is there a detectable reason for a northeast orientation? In terms of significant landscape features, the carved face seems to have been oriented towards the summits of Mount Aragats (*Fig. 8. 11*). Of course, an observer in front of the carved face would look in the opposite direction, seeing the Ararat plain far below, and Mount Ararat looming off-axis in the background. In terms of sun exposure, the northeast orientation indicates that the carved face of the two vishaps was shrouded in shadow and thus the reliefs were poorly visible throughout most of the day.

Sacred Mountain Sites

Many aspects of Karmir Sar and its vishaps are still unclear, but the symbolism materialized by the stelae themselves and their specific natural setting make it evident that Karmir Sar was some sort of natural sanctuary. Interestingly, religious beliefs and an aura of sacredness linked to the site of Karmir Sar transcend different epochs and religions. Today, they are present in the form of a syncretic Christian-Yazidi shrine, but they also resonate in the site's old name, Kızıl Ziyaret (Turkish/Iranian »Red shrine/place of pilgrimage«). They may even go back to pre-Christian times, as evidenced by the alternative Armenian name of the site: Tirinkatar, or »Throne of Tir«³⁹. Tir was the god of wisdom and the arts in the Armenian Zoroastrian pantheon.

Given the current state of research and taking into account iconography, location and the results of our archaeological investigations, we interpret the vishaps of Karmir Sar as solitary monuments erected by groups based on the Ararat plain and practising a vertical transhumance either in the Chalcolithic period or in the Middle Bronze Age. We assume that a similar scenario must be imagined for vishaps in general. In fact, it is perhaps not by chance that, so far, no indications of human presence at Karmir Sar in the Early Bronze Age (Kura-Araxes-culture) has been detected⁴⁰. Apparently the pastoralist use of the high mountains was abandoned or at least it was not used by the Kura-Araxes population of the Ararat plain as a significant subsistence strategy⁴¹.

From the symbolic point of view, several attempts to identify vishaps with particular divinities through fish, bird, dragon, ram and bull symbology have been undertaken, but vishaps and their contexts remain fascinatingly enigmatic⁴². As discussed above, they do seem to express a preoccupation with animals and the forces of nature. The absence of anthropomorphic figures is striking and probably significant. The dual tension between

³⁹ Bobokhyan *et al.* 2018, 268.

⁴⁰ Except perhaps a single arrowhead of typical Late Chalcolithic - Early Bronze Age type (Purschwitz 2018, Fig. 7o).

⁴¹ This fact can contribute to the discussion on Kura-Araxes subsistence strategies (for current views see Sagona 2017, 273–280).

⁴² Piotrovskiy 1939; Abeghyan 1941; Kapantsyan 1952; Xnkikyan 2002, 114–119 (offering also a good English summary of previous views); Petrosyan 2015b. For the earliest views expressed by Atrpet, see Bobokhyan in print.

the image of a standing fish – an untamed animal living in water – and the image of the sacrifice of a bovid – embedded into pastoralist everyday life – may point to a religious discourse concerning the limits of wilderness and human control of nature. This constellation stands alone in the iconographic world of the South Caucasus. It evokes in a sense the faraway hybrid iconographies of Mesopotamia, particularly the *apkallu*-priests and the goat-fish symbols of the wisdom god Enki/Ea⁴³, but we must keep in mind that the *hybrida* vishaps are a superimposition of two separate iconographies – the fish as the presumable worship symbol and the bovid hide as a sacrifice on top of it – rather than the representation of a dual *Mischwesen*.

We shall conclude with some remarks on the cultural anthropological significance of vishaps as stone monuments. The very fact of producing, transporting and erecting monumental decorated stelae in remote mountain meadows implies a considerable investment in terms of labour and resources, and a strong will to fashion a sacred landscape. Judging from the total number of vishaps, these undertakings were initiated on an infrequent basis. The vast macro-geographical distribution of the phenomenon in combination with the evidence for local vertical transhumance implies that the creators belonged to different regional groups. The concentration of vishaps into discrete clusters, separated by mountain valleys, suggests that each cluster may be linked to a different community within a larger regional group.

In all probability, vishaps were commemorative stelae erected upon the occasion of special events that were rare but repeated. The character of the commemoration must have been closely related to social aspects, if only because a relatively large group of people and a communal effort was needed to create them. The choice of a cross-regional and markedly standard iconographic palette suggests that both the occasion and the overall symbolic overtones of creating a vishap were socially inclusive and reinforced intergroup solidarity: they could not function as tribal totems of individual markers but rather expressed a universal belonging. The choice of low-visibility meadows may have served well in case of festive gatherings of numerous people. If this scenario is correct, we may speculate that the vishaps were an expression of times when resources were limited and conflict was latent, hence the need for creating mountain sanctuaries where social relationships could be negotiated on a symbolic and monumental level, perhaps during festive gatherings⁴⁴. Yet apart from basic behavioural considerations, the possible spectrum of historically specific social situations is broad, particularly as long as the dating remains uncertain between Chalcolithic and Middle Bronze Age.

⁴³ Black – Green 1998, 93.

⁴⁴ On the role of stone stelae in Hittite festival activities, see Cammarosano in this volume.

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