

**PROOFS**

Proceedings of the 11<sup>th</sup> International  
Congress on the Archaeology  
of the Ancient Near East  
Volume 2

Field Reports

edited by Adelheid Otto, Michael Herles and Kai Kaniuth

Islamic Archaeology

edited by Lorenz Korn and Anja Heidenreich



2020, Harrassowitz Verlag Wiesbaden

**PROOFS**

# The Place of “Dragon Stone” Sanctuaries in Context of Cultic Areas of Ancient Armenia

Arsen Bobokhyan<sup>1</sup> – Alessandra Gilibert<sup>2</sup> – Pavol Hnila<sup>3</sup>

## Abstract

Since 2012, a joint project of the Armenian Academy of Sciences, the Freie Universität Berlin and Ca’ Foscari University Venice investigates “dragon stones” in the territory of the Republic of Armenia. Dragon stones are megalithic basalt stelae decorated with animal imagery. Between one and five meters high, these stelae are solitary monuments sometimes shaped in the form of a fish, sometimes decorated as if the prepared hide of a horned animal had been draped on them; rarely, additional animals such as birds or snakes are added to the composition. Such stelae represent the most ancient examples of the monumental art in the Caucasus. The present article reflects upon the problems concerning the importance of dragon stones and their archaeological contexts in the frames of diachronic developments of sanctuaries in ancient Armenia.

## Introduction

In early societies, cultic areas and places of religious worship are identified by special equipment suggesting a cultic purpose or ritual activity. In the literature, various means to categorize cultic places circulate, from those accentuating form (e.g. domestic shrine, separate temple, enclosure, cave - spring - groove - peak) to those more based on location and access (private and public, urban and rural, natural and built). Some categories are well-attested archaeologically, ethnographically or historically, meanwhile others are simply less clearly defined, often mixing formal, contextual and functional traits (cf. Renfrew 1985). In the present article, we touch upon the problem of cultic areas of ancient Armenia (Fig. 1 and 2), trying to discuss possible classifications and frame the important sanctuaries connected to the cult of the “dragon stones” within the wider context of sanctuaries in Armenia.

## The Phenomenon of “Dragon Stones”

“Dragon stones” (Arm. *vishapakar*) are ca. 150–550 cm high stelae of basalt, carved with animal imagery and found in the territory of modern Armenia as well as neighboring regions. Their name is connected to local folk tales where dragons are monstrous giants living in the mountains. The “habitat” of dragon stones is between ca. 1300–3000 m above the sea level. As far as now, we know about 150 examples of such monuments, mostly located in modern Armenia. Based on their shape and iconography, we identify three main classes of dragon stones: *piscis* (fish shaped), *vellus* (carved as if the hide of a bovid had been draped

---

1 Institute of Archaeology and Ethnography, Armenian Academy of Sciences,

2 Ca’ Foscari University Venice, Dipartimento di Studi Umanistici,

3 Freie Universität Berlin, Institut für Altorientalistik,

on them), *hybrid* (combines the iconographies of both types) (Fig. 3–5). The majority of dragon stones still *in situ* lie collapsed on the ground. As a rule, dragon stones are found near cromlechs and barrows packed in close groups in well-defined and water rich secluded meadows (originally perhaps satellite volcanic craters). A small number of dragon stones in lower zones appear not in groups but isolated.

The most significant example of a high-altitude sacred site with dragon stones is Karmir Sar (Arm. “Red Mountain”) on the south slopes of Mt. Aragats. Karmir Sar is a meadow which extends over 40 hectares, at a mean altitude of 2850 m above sea level (Fig. 6). At the core of the meadow and next to the rivulets and pools, our team recorded twelve dragon stones *in situ* or immediately near their original position. This is the highest concentration of these monuments registered so far at a single site, which was the reason why our expedition began excavations just here. In the course of six excavation seasons at Karmir Sar (2013–2018), we investigated archaeological contexts of five dragon stones, all of which appear set horizontal in the ground, either within or by circular stone structures, or as a stand-alone feature not far away from the barrows (Fig. 7–8). We also identified at least two foundation pits for the stelae, which were originally standing stones. Around the dragon stones, obsidian splits and flakes from different geological sources and pottery fragments are the most widespread finds. Inside the barrows, pottery was ritually deposited, a precise index of the cultic significance of the area. The obsidian finds outside the barrows comprise cores, instruments, splits and flakes, and may indicate that some sort of cutting and/or scraping activities took place while the structures were being built and in the period immediately following. The circular form of the structures, evidently identical to that of the standard Bronze Age tombs, point to a connection with memorial rites. Based on the preliminary observations, we favour an interpretation of dragon stones as a specific form of commemorative monument, to be dated at least to the end of the 3<sup>rd</sup> and the first half of the 2<sup>nd</sup> millennium BC and possibly also earlier (cf. Gilibert *et al.* 2012; Bobokhyan *et al.* 2018).

### **Cultic Areas of Ancient Armenia**

The phenomenon of dragon stones can be interpreted only in common context of cultic sites and cultic procedures of ancient Armenia. Below we present a diachronic view on traits of development of sacral areas in Armenia (cf. Fig. 2) with the aim to place the dragon stones into a concrete context.

The *Neolithic* and *Chalcolithic Ages* (ca. 10000–3500 BC) in Armenia are the periods of gradual establishment of a productive lifestyle, and mark the beginning of pottery production and the development of metallurgy. In and in the close neighbourhood of modern Armenia, during this period we trace the appearance of cultic areas. Some of these areas have a “public” character, often with steles and accompanied by human and animal bone depositions (sacrifices) within or by the settlements (Göbekli, Çayönü) (Lichter 2007: 50–65) as well as beyond them, others are secluded in caves (Areni, connected to production and storage) (Gasparyan 2014), where the habitat of the living and the dead overlap. Also mid- and high-altitude sacred landscapes by the settlements (Godedsor) and beyond them (Syunik and Geghama mountains) could be visited by the human groups during this very long period, as reflected in the phenomenon of rock-carvings (cf. Martirosyan 1981: 16–19; Avetisyan *et al.* 2006).

The *Early Bronze Age* (ca. 3500–2500 BC) is the period of formation of a large-scale unified cultural region, with a typical red-black burnished pottery in the entire Fertile Crescent and with centres between the Kura and Araxes rivers. In the Caucasus, this is the period of establishment of early complex societies. During this time span, shrines that are centrally disposed and clearly separated from living areas appear for the first time. They are public, open-air, tower-like (Mokhrablur, Jrahovit) or rectangular in plan, roofed (Harich, Shengavit) shrines, connected to basalt pillars and hearth-altars (Areshyan 1978: 90–91). However, it is clear that cultic procedures were realized mainly in domestic contexts, as especially reflected in the unprecedented quantity of ritual hearths (Gnuni 2004a; for hearth models cf. Sardaryan 2004: 272). During the Early Bronze Age, we have a wide distribution of open-air rock-cut public complexes with ritualistic platforms and cup-marks; stepped structures led to these platforms within or beyond the settlements (Metsamor, Agarak, Kakavadsor) (Avetisyan 2003). Also ritual platform-structures appear situated beyond the settlements and/or within the cemeteries (Talin) (Avetisyan *et al.* 2010). An important key-feature for this period is the development of burial architecture and the appearance of the first barrows outside the settlements (Tiratsyan 1996: 67).

The *Middle Bronze Age* (ca. 2400–1500 BC) is a period of cultural diversity, with presence of different cultural traditions and a dominance of nomadic or semi-nomadic lifestyles. During this time-span, we clearly trace the process of the final separation of settlements and cemeteries. Moreover, evidence of settlements is scanty, while cultic areas begin to be concentrated around cemeteries, veritable “towns of the dead” with huge barrows or the so-called “houses of giants” (Tiratsyan 1996: 70). In this period, the tomb itself becomes an object of cult or place for cult, a separate unit of ritualistic action, with sacrifices and funeral feasts taking place by the tombs, as well as at altars near them (Verin Naver, Lori Berd, Maisyan; Simonyan, Gnuni 1998: 84). For the first time, ritual roads lead to barrows, suggesting that ritual processions took place (Karashamb, Trialeti; cf. Melikyan 2015).

The *Late Bronze Age* (ca. 1500–1200 BC) and the *Early Iron Age* (ca. 1200–900 BC) essentially belong to a single cultural phase, although the first period is characterized by the full integration of the South Caucasus in the global processes of the Near East, and the second through a marked militarisation of society. During these periods, traditional domestic cultic areas connected to hearths are still in use (Karmir Blur, Horom: Martirosyan 1964: 179–180; Badalyan *et al.* 1994: 17–18), but we encounter the appearance of various shrines with altars, fire-places, rock-cut constructions, as in Gegharot (Badalyan *et al.* 2005; Smith, Leon 2014), Metsamor (Khanzadyan 1972; Khanzadyan 1980), Dvin (Kushnareva 1977), and Shirakavan (Torosyan *et al.* 2002: 69–77). These intramural cultic units with similar find-sets are connected both to complex ritualistic and to productive activities (Smith, Leon 2014: 554–560). All these settlements are either “fortress-temples” or “temple-towns” (cf. Diakonoff 1968: 45–47). Beyond the settlements, cultic areas are represented by cemeteries, dominated by a clear hierarchisation (cf. the priestly tombs in Lori Berd and Metsamor: Devejyan 1986; Khanzadyan 1997), alignments of menhirs (Zorats Karer, Hartashen, Shamiram: Kushnareva 1977: 49), rock-cut platforms and stepped structures (Metsamor, Agarak, Armavir, Byurakan: Gevorgyan, Petrosyan 1993; Karapetyan *et al.* 2004: 264; Avetisyan 2003), tower-like constructions on the top of the hills (Aghavnatun, Aghtamir, Kosh: Simonyan, Gnuni 1998: 84), and rock-carvings (Martirosyan 1981: 22–25).

In the *Middle Iron Age* (ca. 900–700 BC), we see the development in Armenia of an Ancient Near Eastern administration, the Kingdom of Urartu, which coexists in a complex entanglement with local Bronze–Iron Age traditions. Urartian cuneiform sources testify to the existence of a state religion with standard cultic areas and structures; archaeological evidence is represented by monumental temples located in administrative centres (cf. Erebuni, Argishtikhinili), as well as by rock-cut constructions (niches, cellas, chambers, staircases, doors: cf. Bayazet, Agarak) and basalt stelae called *pulusi* in the texts (cf. Echmiadzin) which can be connected to or be far from settlements. Grooves and gardens (especially vineyards) become an essential part of the sacred landscape (Hmayakyan 1990). Some cultic centres of the local Late Bronze–Early Iron Age cultures, such as Metsamor or Dvin, are destroyed by the Urartian expansion at the beginning of the 8th century BC and disappear, but other cultic complexes bear testimony to a coexistence of both Urartian signature features (as in the monumental buildings at Erebuni and Argishtikhinili, clearly connected to Urartian ritual practices) and cultic artefacts, particularly connected with private or domestic settings, reflecting local traditions (e.g. the hearths and stone phalli at such sites as Karmir Blur, Aragats, Aramus, and Oshakan: Esayan 1981; Avetisyan 2002).

During the *Late Iron Age* (ca. 600 BC–300 AD) we can identify three main trends in the organization of cultic sphere: the continuation of local traditions of the earlier periods, the presence of Iranian influences transported by the expansion of the Achaemenid empire, and the Hellenistic impact beginning with the 2nd century BC. Generally speaking, the hallmarks of the period are syncretism, royal ancestry cult, theocracy, and a developed state pantheon (Tiratsyan 1985; Vardumyan 1991). Along with parts of a wider sacral landscapes (including caves, gorges, grooves, mountain tops), it is now possible to identify and differentiate three cultic units reflected in Armenian written sources: *mehyan* = the temple, *bagin* = the shrine, and *patkern* = the statue. Temples were situated within or by administrative urban centres (Armavir, Artashat, Vagharshapat), in fortified temple-towns (Arm. *avan*/Greek *komopolis*: e.g., Garni, Tordan, Bagavan; also archaeologically attested in Shirakavan, Hoghmiq, Astghi Blur), as well as far beyond them on mountain tops, at peak cultic areas (e.g., Karke, Tirinkatar, Paghat: Tiratsyan 1985: 63; Tiratsyan, Koshelenko 1985: 38, 69; Vardumyan 1991; Hakobyan 2003; Karapetyan 2003: 20–23). For archaeological evidence of sacred sites situated in high-altitude summer pastures, a point of reference is the site of Astghaber, dating to the 6th–4th centuries BC (Karapetyan 2003: 21). The royal ancestry cult is reflected in *hiérathesions* such as in Nemrut, with statues as important elements of the sacred landscape (Khachatryan 1998). Popular religion is attested by the continuity of domestic practices and the existence of sacred hearths (Karapetyan 2003: 23), suggesting that communities continued to find in domestic religion an important element of long-term regional identity. At the same time, the urban temple organizations practiced Iranized and Hellenized cults (Krkyasharyan 1963). The influences of Zoroastrianism was important in Armenia in this period, and Zoroastrian open-air cultic areas outside the settlements (also in high-altitude places) are known (cf. Dandamaev, Lukonin 1980: 329). These cultic places were integrated with the temples within the settlements (as attested at Erebuni and Oshakan: Tiratsyan 1996: 203).

### Discussion: Placing the Dragon Stones

How do dragon stones fit into this complex diachronic development of cultic areas and practices?

*Temporal attribution.* Among the problems concerning the dragon stones, chronology is the most difficult and, of course, the most essential one. In the literature, datings have been proposed ranging from the Neolithic to the Late Iron Age. As a result of our excavations and corresponding C14 data as well as survey materials (ceramics, obsidian) during 2012–2018, we can now understand that high-altitude landscapes connected to dragon stones were not always regularly visited by organized social groups. Rather, we have evidence for their use in the Chalcolithic period, in the Middle Bronze Age, in the Early Iron Age, and in the Middle Ages, but so far, we have no evidence for human presence in the Early Bronze Age and Middle to Late Iron Age. This is especially noteworthy considering that these periods are characterized by capillary urbanization of society, as opposed to periods where settlements are few.

In the course of our excavations, we could document episodes of re-contextualization of dragon stones dating to the end of the third millennium / beginning of the second millennium BC: this time-span is now a safe terminus ante quem for the production of dragon stones. Our field observations also broadly fit the fact that, beginning with the Early Iron Age, zoomorphism in plastic art of Armenia drops dramatically, while monumental anthropomorphic (Metsamor, Harzhis, Dvin) and phallic (Shamiram, Oshakan, Aghtamir) plastic art is a hallmark for the period (Israelyan 1973: 153–155; Gnuni 2004b). The Urartian inscription of Garni, dating to the Middle Iron Age, is made on an earlier dragon stone (Arakelyan, Arutiunyan 1966), and speaks of the arrival of the Urartians and the last stage of using of the local cult or their essential transformation.

*Social attribution.* Our large-scale surveys of dragon stones indicate that there was a systematic choice and organization of special landscapes by creators of dragon stones. This fact implies an organized early complex society, probably with emergent elite predating the powerful state formations of the Iron Age. Societies of this kind are typical for the local Middle and Late Bronze Age. However, the presence of C14-data indicating Chalcolithic dates make it possible that dragon stones, or at least the idea of their creation, may date back into the period of early agricultural societies. The complex history of use and re-use documented in our excavations has not yet delivered incontrovertible dating proof. In these regard, especially important is to note that the Chalcolithic and the Middle Bronze societies appear to have shared important key traits: both were based on mobile modes of subsistence and both used the high altitude zones, as opposed to what happens in Early Bronze, Middle Iron and Late Iron periods, when urban societies focused their economies on foothills and lowlands, optimizing time/efforts by implementation of high engineering techniques.

*Spatial attribution.* Most of the dragon stones are extra urban cultic units situated in the mountains, far from the settlements. However, a minority are located on lower places, where the settlements are, and could be reckoned as suburban and even intraurban monuments.

*Morphological attribution.* Dragon stones are clearly shaped monuments. However, they are connected with natural (springs) and—as recent excavations demonstrate—also with built cultic objects. Particularly, as a rule, they appear within cromlechs.

*Functional attribution.* Such monumental stelae as dragon stones required a community effort and cannot be connected with private or domestic cults. Clearly they were intended to be landmarks known at an at least microregional level. The fact that several social units of modern Armenia, Georgia and East Turkey used similar models to organize the sacred landscape indicates that, with the dragon stones, we are on the eve of a creation of an inter-regional value system or perhaps even a kind of “proto or pre-state religion”.

*Behavioral attribution.* All three categories underlined by us in Fig. 1 are applicable for dragon stones. Excavations demonstrate that dragon stones are objects of concrete ritualistic actions such as sacrifices, perhaps libations, gatherings, feasting, adoring. They are areas of memorizing rituals and possibly also areas of syncretic actions.

## Conclusions

The diachronic approach helps us to decipher possible invariant traits in long-term developments of cult places and practices of ancient Armenia, as reflected in the organization of sacred and social landscapes, in the continuity of location of cultic centres or single cultic places, in the special attitude to rock cult and rock-cut constructions, in the use of hearths and cultic object models, in the tradition of stone stelae, in the symbolic system, as well as in cultic practice.

Dragon stones with their special high-altitude sanctuaries must be understood within this context of developments and long-term invariants in cult and its procedures. They had a long life and an even longer echo, with active and passive periods of use. We know now that they were created before the Early Iron Age, when the anthropomorphism becomes the religious rule, but their life went on for long, and they were used, manipulated and transformed until the Middle and Late Iron Ages. More difficult is to trace their precise beginning. Clearly, a flourishing period of these monuments is the Middle Bronze Age. However, our present data do not exclude that the roots of formation of ideas concerning these monuments could go back to the early agricultural societies.

## Bibliography

Arakelyan, B.N., Arutiunyan, N.V.

1966 Urartskaya klinoobraznaya nadpis' iz Garni (Urartian Cuneiform Inscription from Garni). *Istoriko-filologicheskii zhurnal (Historical-Philological Journal)* 2, 290–297.

Areshyan, G.E.

1978 *Iskusstvo kuro-araksskoy kul'tury (Art of the Kura-Araxes Culture)*. In: R. Zaryan (ed.), *Vtoroy mezhdunarodniy simpozium po armyanskomu iskusstvu (Second International Symposium on the Armenian Art)* I (Yerevan), 88–97.

Avetisyan, H.G.

2002 Aragatsi ev Aramusi pashtamunkayin karuytsnern u karakotoghneri (Cult Structures and Stelae of Aragats and Aramus). *Banber Yerevani hamalsarani (Herald of the Yerevan University)* 2, 52–56.

Avetisyan, P.

2003, Srbazan landshafti norahayt pastagrumner Hayastanum (New Evidences of Sacred Landscape in Armenia). In: Sh. Achemyan (ed.), *Aragatsotn: hovevor ev mshakutayin zharangutyun (Aragatsotn: Spiritual and Cultural Heritage)* (Oshakan), 53–55.

- Avetisyan, P., Chataigner, Ch., Palumbi, G.  
2006 The Results of the Excavations of Nerkin Godedsor 2005–2006: Preliminary Report. *Aramazd* 1, 6–18.
- Avetisyan, P., Muradyan, F. and Sargsyan, G.  
2010 Early Bronze Age Burial Mounds at Talin. In: S. Hansen, A. Hauptmann, I. Motzenbäcker and E. Pernicka (ed.), *Von Maikop bis Trialeti: Gewinnung und Verbreitung von Metallen und Obsidian in Kaukasien im 4.–2. Jt. v. Chr., Beiträge des Internationalen Symposiums in Berlin vom 1.–3. Juni 2006* (Bonn), 161–166.
- Badalyan, R., Avetisyan, P. and Smith A.  
2005 Svyatilishche pozdnego bronzovogo veka Gegharota (The Late Bronze Age Sanctuary of Gegharot). *Kul'tura drevney Armenii (Culture of Ancient Armenia)* XIII, (Yerevan), 109–115.
- Badalyan, P., Kohl, Ph., Stronach, D. and Tonikian, A.  
1994 Preliminary Report on the 1993 Excavations at Horom, Armenia. *Iran* 32, 1–29.
- Bobokhyan, A., Gilibert, A. and Hnila, P.  
2018 Karmir Sar: New Evidence on Dragon Stones and Ritual Landscapes on Mount Aragats, Armenia. In: A. Batmaz, G. Bedianashvili, A. Michalewicz and A. Robinson (eds), *Context and Connection: Essays on the Archaeology of the Ancient Near East in Honour of Antonio Sagona. Orientalia Lovaniensia Analecta* 268 (Leuven – Paris – Bristol), 255–270.
- Dandamaev, M.S. and Lukonin V.G.  
1980 *Kul'tura i ekonomika drevnego Irana (Culture and Economics of Ancient Iran)*, Moscow.
- Devejian, S.  
1986 Lori-Berdi krmī dambarany (Priestly Tomb of Lori-Berd). *Patmabanasirakan handes (Historical-Philological Journal)* 3, 108–124.
- Diakonoff, I. M.  
1968 *Predystoriya armyanskogo naroda (Prehistory of the Armenian People)*, Yerevan.
- Esayan, S.  
1981 Oshakani palati peghumnery ev tnayin pashtamunki mi kani dseveri masin (Excavations of the Palace of Oshakan and Towards Several Forms of Domestic Cult). In: B. Arakelyan (ed.), *Hayastani Hanrapetutiumum 1979–1980 tt. Dashtayin hnagitakan ashkhatankneri ardyunknerin nvirvats nstashrjani zekutsumneri tezisner (Theses of Reports of the Session Dedicated to the Results of Archaeological Field Works in the Republic of Armenia during 1979–1980)* (Yerevan), 10–11.
- Gasparyan, B.  
2014 Areni-1 karayri usumnasirutyān himnakan ardyunknery (The Main Results of Study of the Cave Areni-1). In: Y. Suvaryan (ed.), *Hayagitutiuny ev ardi zhamanakashrjani martahravernery (Armenology and the Challenges of the Modern Period)* (Yerevan), 183–187.
- Gevorgyan, A. and Petrosyan, L.  
1993 Byurakani hnaguyin pashtamunkayin hushardsany (Ancient Cult Monument of Byurakan). *Hnagitakan ashkhatanknery Hayastani norakaruitsnerum (Archaeological Works in the New Buildings of Armenia)* 1 (Yerevan), 20–25.
- Gilibert, A., Bobokhyan, A. and Hnila, P.  
2012 Dragon Stones in Context: The Discovery of High-Altitude Burial Grounds with Sculpted Stelae in the Armenian Mountains. *Mitteilungen der Deutschen Orient-Gesellschaft* 144, 93–132.
- Gnuni, A.  
2004a Shengavtyan mshakuyti ojakhnery ev drants hamalirny (Hearths of the Shengavit Culture and Their Complexes). *Patmabanasirakan handes (Historical-Philological Journal)* 1, 203–223.
- Gnuni, A.  
2004b Haykakan lernashkharhi falik hushardsanneri tipern u tsisakan gortsaruitnery (Types and Ritual Functions of Fallic Monuments of the Armenian Highland). *Banber Yerevani hamalsarani (Herald of the Yerevan University)* 2, 122–130.

Hakobyan, H.

2003 Hoghmijskiy khramoviy kompleks (The Temple Complex of Hoghmi). *Arkheologiya, etnologiya i fol'kloristika Kavkaza (Archaeology, Ethnology and Folkloristic of the Caucasus)* 1 (Echmiadzin), 130–136.

Hmayakyan, S.G.

1990 *Vani tagavorutyanyan petakan krony (The State Religion of the Van Kingdom)*, Yerevan.

Israelyan, H.R.

1973 *Pashtamunkn u havataliknery ush bronzedaryan Hayastanum (Cult and Beliefs in the Late Bronze Age Armenia)*, Yerevan.

Karapetyan, I.A.

2003 *Hayastani nyutakan mshakuity m.t.a. VI–IV dd. (Material Culture of Armenia in the 6th–4th Centuries BC), Hayastani hnagitakan hushardsannery (Archaeological Sites of Armenia)* 19, Yerevan.

Karapetyan, I.A., Khachatryan, Zh. and Kanetsyan, A.

2004 Dourartskiy Armavir. III – nachalo I tys. do n.e. (Pre-urartian Armavir: The 3<sup>rd</sup> – Beginning of the 1<sup>st</sup> Millennium BC.) *Istoriko-filologicheskij zhurnal (Historical-Philological Journal)* 2, 255–275.

Khachatryan, Zh.D.

1998 Urarta-haykakan pashtamunkayin arnchutiunnery (Urartian-Armenian Cultic Relations). *Banber Yerevani hamalsarani (Herald of the Yerevan University)* 3, 61–76.

Khanzadyan, E.V.

1972 Metsamori pashtamunkayin hushardsannery (Cult Monuments of Metsamor). *Lraber hasarakakan gitutyunneri (Herald of Social Sciences)* 8, 52–65.

Khanzadyan, E.V.

1980 Kultanlagen in Metsamor im Armenischen Hochland. *Das Altertum* 26/1, 34–40.

Khanzadyan, E.V.

1997 Krmi dambaran Metsamorum (A Priestly Tomb in Metsamor). *Patmabanasirakan handes (Historical-Philological Journal)* 2, 239–248.

Krkyasharyan, S.M.

1963 Ditoghutyunner hin Hayastani tacharayin kaghakneri arajatsman masin (Remarks on the Origin of Temple-Towns of Ancient Armenia). *Teghekagir hasarakakan gitutyunneri (Proceedings of Social Sciences)* 9, 55–66.

Kushnareva, K. Kh.

1977 *Drevneyshie pamyatniki Dvina (Ancient Monuments of Dvin)*, Yerevan.

Lichter, C. (ed.)

2007 *Vor 12000 Jahren in Anatolien: Die ältesten Monumente der Menschheit: Ausstellungskatalog, Badisches Landesmuseum Karlsruhe*, Stuttgart.

Martirosyan, H.A.

1964 *Armeniya v epokhu bronzy i rannego zheleza (Armenia in the Bronze and Early Iron Ages)*, Yerevan.

1981 *Geghama lerner i zhayrapatkernery (Rock Carvings of the Geghama Mountains). Hayastani hnagitakan hushardsannery (Archaeological Sites of Armenia)* 11/III, Yerevan.

Melikyan, V.

2015 Newly found Middle Bronze Age Tombs of Karashamb Cemetery: Preliminary Report. *Aramazd IX/1*, 1–28.

Renfrew, C. (ed.)

1985 *The Archaeology of Cult. The Sanctuary of Phylakopi*, London.

Sardaryan, S.

2004 *Hayastany kaghakakrtutyanyan orran (Armenia - Cradle of Civilization)*, Yerevan.

Simonyan, H. and Gnuni, A.B.

1998 Kul'tovye sooruzheniya Armyanskogo Nagor'ya i ikh evolutsia VIII–I tys. do n.e. (Cult Structures of the Armenian Highland and their Evolution during the 8<sup>th</sup>–1<sup>st</sup> Millennia BC). In: L.K. Galanina, A.A. Ierusalimskaya and Y.Y. Piotrovskiy (eds.), *Ermitazhnye chteniya pamyati B.B. Piotrovskogo, Tezisy dokladov (Hermitage Readings in Memoriam of B.B. Piotrovski, Theses of Reports)* (S. Peterburg), 81–85.

Smith, A.T. and Leon, J.F.

2014 Divination and Sovereignty: The Late Bronze Age Shrines at Gegharot, Armenia. *American Journal of Archaeology* 118, 549–563.

Tiratsyan, G.

1985 Voprosy preemstvennosti ofitsial'nogo kul'ta v antichnoy Armenii (Problems on Continuity of Official Cult in Armenia of the Classical Period). *Vestnik obshchestvennykh nauk (Herald of Social Sciences)* 10, 58–65.

Tiratsyan, G. (ed.)

1996 *Hay chartarapetutyun patmutyun (History of Armenian Architecture)*, vol. I, Yerevan.

Tiratsyan, G. and Koshelenko, G.A.

1985 Urartu; Armeniya VI v. do n.e. - III v. n.e. (Urartu; Armenia, 6th Century BC - 3rd century AD). In: G.A. Koshelenko (ed.), *Arkheologiya SSSR: Drevneyshie gosudarstva Kavkaza i Sredney Azii (Archaeology of USSR: Ancient States of the Caucasus and Central Asia)* (Moscow), 24–78.

Torosyan, R.M., Khnkikyan, O.S. and Petrosyan, L.A.

2002 *Hin Shirakavan (Ancient Shirakavan). Hnagitakan peggumner Hayastanum (Archaeological Excavations in Armenia)* 23, Yerevan.

Vardumyan, G.D.

1991 *Dokhristianskie kul'ty armyan (Pre-Christian Cults of the Armenians). Armyanskaya etnografiya i fol'klor (Armenian Ethnography and Folklore)* 18, Yerevan.

|                      | 1   | 2  | 3  |
|----------------------|---|--|--|
| <b>Temporal</b>      | Neolithic-Chalcolithic  | Bronze and Early Iron Ages   | Middle and Late Iron Ages  |
| <b>Social</b>        | Early agricultural societies - ideological and social syncretism, i.e. social egalitarianism, coincidence of the living and mortuary places. First visits to high altitude landscapes   | Early complex societies - gradual rise of elite, settlements and burials (cemeteries) as well as sacred and profane areas are clearly separated, sacred landscapes essentially widen the space into the high altitude zones                    | State formations - appearance of state religion, separation of state and folk religions (elite with its temples is concentrated in the lowland, the foothills/mountains are home for the people who keeps on visiting distant pilgrimage places) |
| <b>Spatial</b>       | Intraurban - cultic units (shrines, temples, steles) within the settlements, which were parts or integrals of interior /exterior of structures within those settlements   | Suburban - cultic units (temples, steles, towers, ritual platforms, rock-cut structures, hoards/votives, rock-carvings, tombs, grooves) outside of settlements and next to them  | Extraurban - cultic units (shrines, steles, rock-cut constructions, rock-carvings, tombs, caves, peaks, springs) outside of settlements, and far from them   |
| <b>Morphological</b> | Natural (caves - since CL, peaks - since EB, springs - since MB, grooves - MI, LI)  | Built (shrines - since NL, but especially since - EB-EI), temples (since MI), platforms (since EB), rock-cut structures (since EB, especially in ME), ritual roads (since MB), tombs (since CL, especially in MB and later), towers (since MB) | Shaped (rock carvings - since NL, steles - since EB, widespread since MB until LI, altars - since EB and later, hoards/votives - since EB)   |
| <b>Functional</b>    | For private/domestic (since NL, especially in EB, EI, MI) and for communal (since CL) service   | For regional service (since EB, especially since LB and EI)  | For interregional service (since MI, perhaps also earlier)   |
| <b>Behavioral</b>    | Areas of concrete ritualistic actions such as sacrifice with (since CL) or without (i.e. hoarding/offering since EB) blood, divination (since LB), using of narcotic means for trance (EB, LB), firing in/around hearths/ and incense-burning (since EB), libation (since MB), procession (since MB), feasting (since MB), “theater” playing (since MB), adoring (since EB) | Areas of memorizing (rock carvings, steles, tombs/hierathesions, inscribed units (since NL to LI)  | Areas of syncretic actions where cult was accompanied by production, storing and trading (since CL)  |

Fig. 1: Typology of cultic units of ancient Armenia, according to various traits: NL - Neolithic, CL - Chalcolithic, EB - Early Bronze, MB - Middle Bronze, LB - Late Bronze, EI - Early Iron, MI - Middle Iron, EI - Late Iron

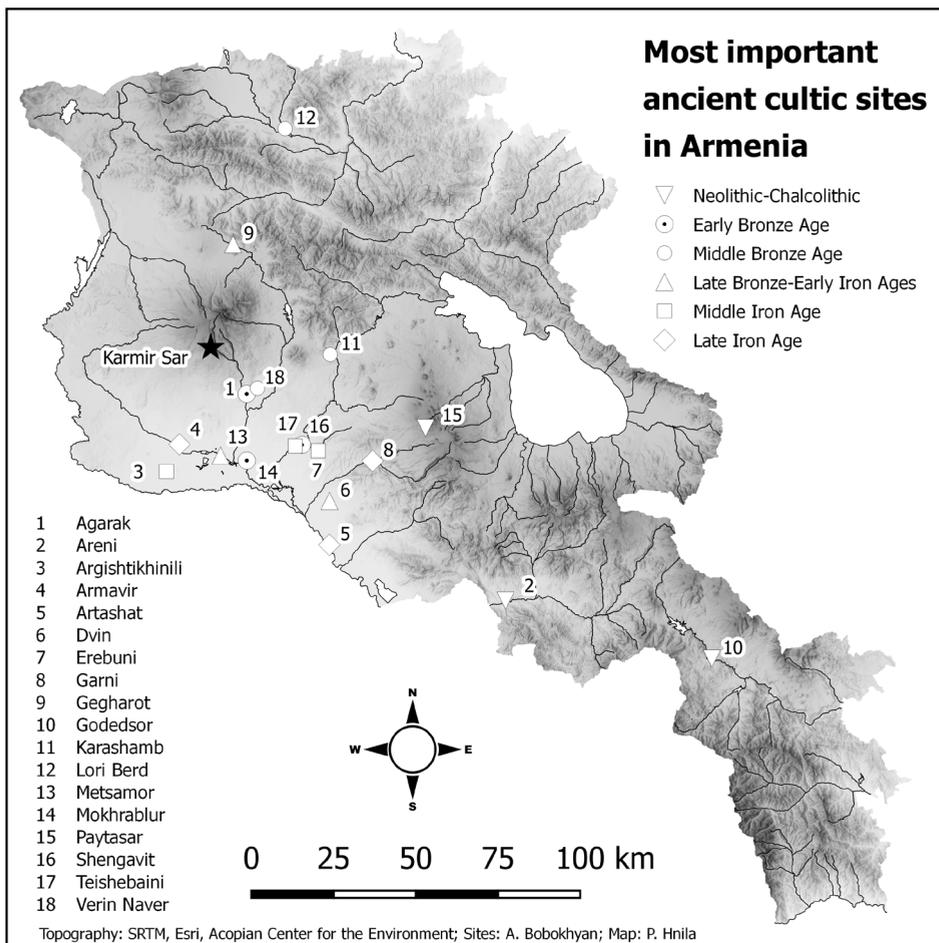


Fig. 2: Most important ancient cultic sites in Armenia (Map by Pavol Hnila, 2018)



Fig. 3: An example of a vishapous landscape: vellus of Attash I, Vardenis mountains (Photo by Arsen Bobokhyan, 2014)



Fig. 4: An example of a vishapous landscape: piscis of Gyoli Yurt I, Geghama mountains (Photo by Alessandra Gilibert, 2014)



Fig. 5: An example of a vishapous landscape: hybrid of Azhdaha Yurt 5, originally in the Geghama mountains, now in front of the Sardarapat Museum (Photo and clarification of original place by P. Hnila, A. Gilibert, A. Bobokhyan, Computer reconstruction by V. Mkrtychyan, 2017)

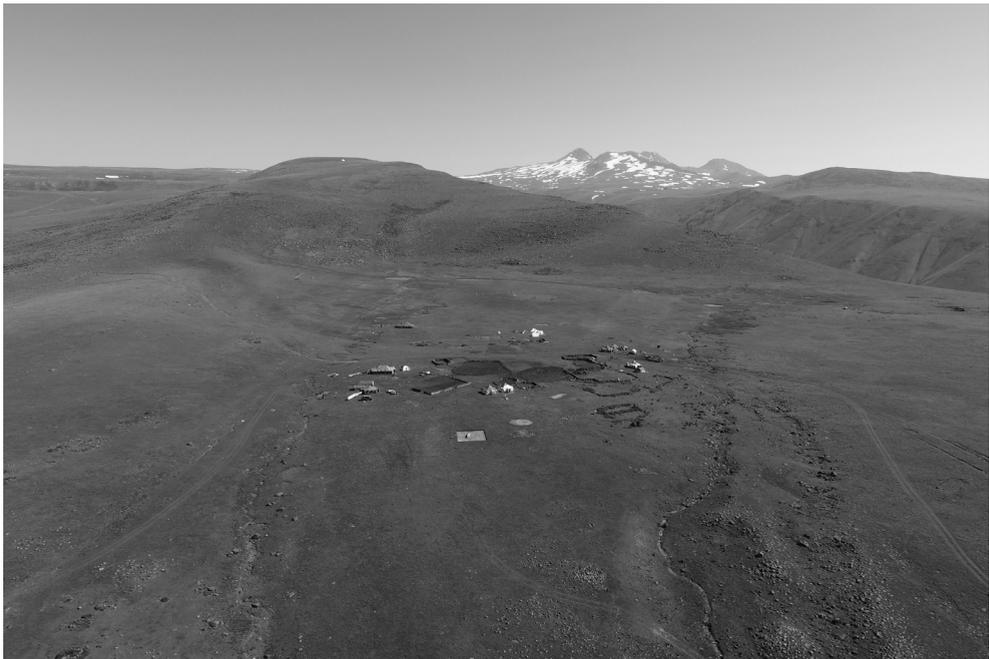


Fig. 6: An example of a vishapous landscape: Karmir Sar, Aragats mountain (Drone photo by Michael Rummel, 2018)



Fig. 7: The complex of Karmir Sar 10, Aragats mountains (Drone photo by Bars Media, 2015)



Fig. 8: Karmir Sar 8, Aragats mountains, during the excavation process (Photo by Pavol Hnila, 2016)