University of
Sistan and Baluchestan

Iranian Journal of Archaeological Studies

Print ISSN: 2251-743X Online ISSN: 2676-2919

Archaeological Sciences
Research Centre

A 1st Millennium BCE Burial-Deprived Ritual Practice: New Evidences from Shahliq Kurgan, Northwestern Iran

Nasrin Tayefeh Ghahremani[1]; Farzad Mafi [*, 1] and Araz Najafi[1]

*Corresponding Author: [1]Department of Archaeology, Abhar Branch, Islamic Azad University Abhar, Abhar, Iran
E- mail: mafi.f@abhariau.ac.ir

Received: 01/ 08/ 2021; Received in Revised from: 29/ 10/ 2021; Accepted: 12/ 11/ 2021; Published: 20/ 12/ 2021

Abstract

Until now, the well-known Kurgans in northwestern Iran were associated with burial mounds containing burial pits; however, discoveries in 2018 revealed mounds lacking human burials indicating still unknown rituals and ceremonies. Shahliq Kurgan, 178 km northeast of Tabriz, is one of such Kurgans. Before the construction of Peygham-Chay Dam by East Azerbaijan Regional Water Authority, the survey and identification of archaeological sites at the dam site was done in 2014 in order to save the historical-cultural monuments at risk of being submerged. The first season of rescue excavation began in 2018. The architecture of the mound, abundant stone tools, sacrificial offerings as well as ash deposits, indicate that the mound had been a place for some special rituals and ceremonies during the early first millennium BCE. The ash material recovered from the site suggested the tradition of cremation, a hypothesis rejected in later anthropological experiments. It may also be one of the first sites where fire was set in an open space for ritual purposes, since the large volume of ash could be evidence for this idea. The evidences for ecological sequence obtained from deposits underneath a stone structure indicate that during the period of establishment of human settlements in Bronze Age, metal extraction and smelting and extensive use of forest resources caused the vegetation to turn from dense forests into scattered shrubs. The present study is based on field excavations as well as library resources to study the function of burial-deprived kurgans following a descriptive analytic approach.

Keywords: Kurgan, Shahliq, Kaleybar, ritual, first millennium BCE.

ArticleType: Research Article

Introduction

The study of the burial practices of communities helps us to learn about their religious beliefs. In social archeology, the various aspects of social organization of a community can be understood by studying the architecture of tombs and the grave goods, although many problems arise from this approach (Dark 2000, 111). Mound-shaped Kurgans are the only structures remained from nomadic communities. Kurgans or burial mounds (aka Tumuli) consist of a rectangular grave with large stones in the middle and a circular arrangement of stones around it; however, we are now certain that some of these kurgans, like Shahliq Kurgan, are devoid of any burials. Two examples of burial-free Kurgans in Iran are those discovered in 2010 in the area of Khodaafarin Dam near the Aras River (Hojabri Nobari 2010). Some believe that these kurgans are likely to be funerary monuments and not burial sites (Hojabrri Nobari, Khatib Shahidi, 2010, pers. comm). The rescue excavation of Shahliq Kurgan began in the autumn of 2018 with the aim of preserving archaeological sites in the area to be submerged by Paygham Chay Dam. The surface features of the mound, later known as Shahliq Kurgan, introduced it for excavation as a potential Kurgan, with the presumption that it has cultural similarities to Khodaafarin and Tu Ali Sofla Kurgans. The site, located in the southwest of Kaleybar city and next to Peygham-Chay Dam, dates back to the first millennium BCE. The site was selected for study out of 45 identified sites from first

© The Author(S).
DOI: 10.22111/IJAS.2021.6856
Publisher: University of Sistan and Baluchestan

millennium BCE, due to its location within dam reservoir limits. Due to the large area of the mound (45 m in diameter), 9 test trenches were excavated down to a depth of approximately 7 m from the bench mark (i.e., Locus 127, see below). In the study area, the intermontane valley southwest of Kaleybar, a thorough survey had not been conducted until 2014 when the construction of Peygam Chai Dam, south of Kaleybar city, necessitated to send a group to the area to record endangered archaeological sites (Tayefe Ghahremani 2014). Among the researches on the sites identified by rescue surveys in 2014 are the excavations of Jafarabad (Irvani 2012 and 2013) and Larijan-Khodaafarin Kurgans (Nobari 2007, 2010); excavation of Behrooz Tapesi (Hojabri 2007); excavation of Kohne Tapesi in Khoda Afarin (Zalaghi, Aghalari 2007); excavation of Kohne Pasgah Tape behind Khoda Afarin Dam (Babapiri, 2007); excavation of Khorramabad Dam in Meshkinshahr (Rezalu 2014); excavation of Abellu Kurgan (Feyzkhah 2017); archaelogical survey in Hurand area (Abtahi, Salmanpour 2013); ethnoarcheological studies in Qara Dagh region (Asgarpour, Tirandazi 2016); and excavation of late bronze and iron sites in Varzeqan (Hojabri Nobari 2017). As far as research methodology is concerned, the salvage archaeological survey and excavations within the reservoir area of Peygham-Chay Dam in East Azerbaijan province were carried out with the aim of rescuing cultural heritage at risk of submergence. The present study has a descriptive-analytical approach; Data collection and analysis has been done based on filed observations and library resources. We have followed locus-based system of excavation and documentation.

The Research Hypothesis

After the salvage archaeology project was completed, the mission identified 72 cultural heritage sites, out of which 37 were Kurgans, including Shahliq Kurgan located within dam reservoir limits. Kurgans are among the less-studied topics in archeology of northwestern Iran. The discussion of population movements due to climate change or war, etc. is one of the important topics of population changes in the first millennium BCE and since kurgans contain important historical, cultural, architectural and genetic information, they are of foremost importance in this respect. On the other hand, the Kurgan in question was the largest identified Kurgan among others (45 meters in diameter), and, it was not clear whether it was for a local ruler or represents a mass grave. The Shahliq Kurgan was located within reservoir limits of the dam and considered as a rescue and research priorities.

Research Background

The survey for identification of cultural heritage sites in the region was conducted in 2014 before the construction of Peygham Chay Dam by East Azerbaijan Regional Water Authority in order to supply drinking water to the Kaleybar city and the irrigation network of arable lands. Prior to this date, no field surveys had been conducted in the region. Some 28 cultural heritage sites were identified by the rescue survey (Tayefeh Ghahremani 2014). The second season of the survey led to the identification of 44 more sites and a total number 72 sites (Tayefeh Ghahremani 2017). The third season was carried out under license number 97103455 on 2018/10/21 without signing a contract with East Azerbaijan Regional Water Authority to equip the workshop, provide accommodation, and provide workers with food for three months (Tayefeh Ghahremani 2018). In 2019, the fourth season of the survey lasted for two months, and the present study is the result of the third season of rescue studies in Shahliq Kurgan (Tayefeh Ghahremani 2019).

Geographical Location

Kaleybar city, with an area of 3072 square kilometers (4.5% of the East Azerbaijan area), is located 178 km northeast of Tabriz bordering Khodaafarin city to the north, Ardabil province to the east, Varzeqan city to the west and Ahar city to the south (Figure. 1).

Field Excavation

The excavation of Kurgan Shahliq was initiated on 27/10/2018 in the northeast of Peygham Chay Dam according to the permit No. 9710345 dated 21/10/2018 (Figure. 2) This kurgan with an almost circular plan and a diameter of 45 meters was the largest kurgan identified in the 2014 surveys. Shahliq Korgan is located 23 km southwest of Kaleybar city on Peygam-Ainanloo side road and in the south of Nojeh Deh Karimi village. The coordinates are 38°44′30.5″N, 47°01′31.7″E (Figure. 3).

The height of the kurgan is 1.70 cm from the surrounding area with a north-facing slope of 10-20 degrees, south-facing slope of 60-70 degrees, west-facing slope of 40-50 degrees and east-facing slope of 50-60 degrees. An illegal excavation measuring 2.5 x 1.5 m in the center of Kurgan and a smaller

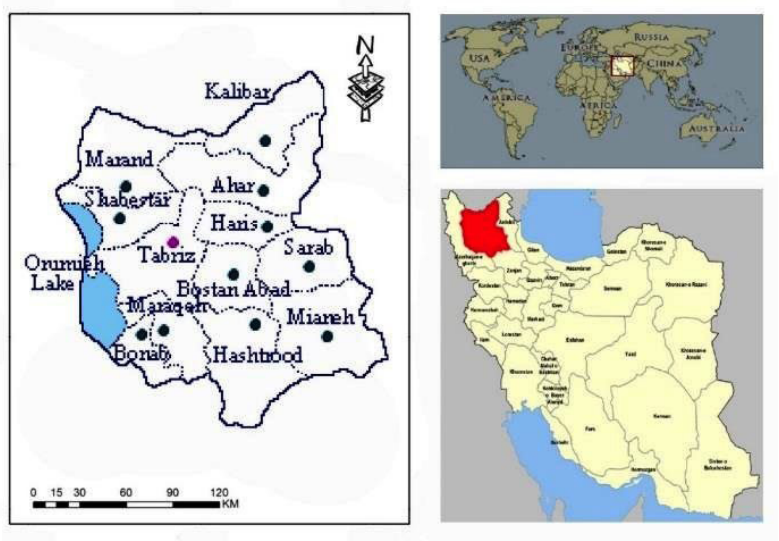


Figure. 1: *Location Map of Kaleybar/Kalibar city in East Azerbaijan province (Modified after: Google, 2019)*



Figure. 2: *Satellite image of the location of Shahliq Kurgan (After: Google Earth, Depicted on 10/05/2019)*



Figure. 3: *View of Shahliq Kurgan before excavation*

one to the north of it can be seen (Figure. 4)

Due to the large size of the kurgan, 30 × 45 meters, a trench and 9 sondages were considered for the first season. The area of the trench, in which sondages were dug within and around it was 20 x 13 meters. The sondages were numbered from T.T.1 to T.T.9 consisting of loci and features. The largest sondage was 8 × 14 meters.

Construction materials

The materials used for the construction of the Kurgan include rubble stones and river stones, in small and large sizes (the dimensions of one of the stone were 35 × 25 × 95 cm), trampled soil and lime mortar.

Architectural Features of Shahliq Kurgan

The first stage of excavation down to a depth of one meter included the removal of surface soil and sediments exposing a cover of surface rocks on top of the mound surface followed by river stones arranged in regular rows parallel to one other (Figure. 5).

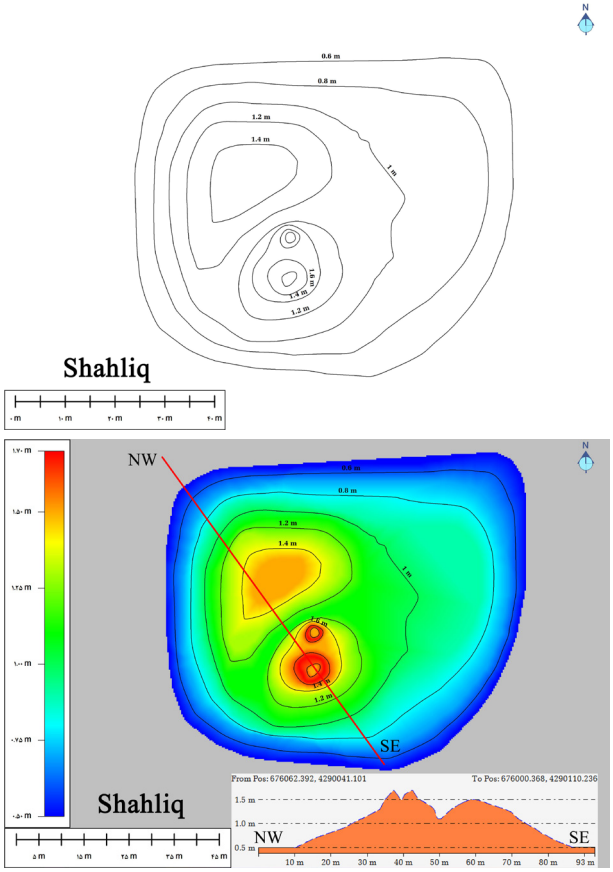


Figure. 4: *Two-dimensional topographic map, color-coded, and topographic profile of Shahliq Kurgan site.*

The most important find at Locus 106 at a depth of one meter was an assemblage of pottery and animal bones enclosed by a circular stone structure (Figures. 6, 7).

In addition to sacrificial pottery and animals in Locus 112, abundant ash along with an arrowhead and two pieces of pottery handle were among the finds in this place (Figure. 8; Locus 112). Ash was initially thought to be part of the cremation tradition, but this hypothesis was rejected by anthropologists at the University of Warsaw. However, the presence of large volumes of ash probably proves the sanctity of fire and ritual practices.

The potteries obtained from this kurgan belongs to the Iron Age red and gray wares and are comparable to the potteries from the Jafar Abad Kurgans (Irvani *et al.* 2012: fig. 87; Iravani 2010: K7 / 02; Jafar-abad, Iravani, 1392: K13 / 03, K8 / 013, K4 / 012: 157; Varzeqan, Hojabri Nobari 2017: N: 18, 8; N: 18,10,28: 163, 104,163; Shahiri, Ebtehaj 2004: fig78, 105: 305, 332; Buini Yoghun, Pourfaraj 2012, Table 1, Figure 8; Levant, 2001, 105/1, Zagros Cemetery of Sanandaj 2015, Tohidi, Azarshab, 2014: Figure 3, G9, G13: 112).

Ritual stones

Following the excavation in the southwestern part of the mound, a sondage measuring 14 × 8 meters was carried out, showing clear evidence of a ritual place (Figure. 9). The structure of the place consists of stones with lime mortar; one piece of stone clearly shows abrasion features (Figure. 10); all the stones were firmly fixed to each other by lime mortar.

Among important features are holes deliberately made on some rocks (Figure 11). It seems possible to hypothesize that the holes were used in two ways: 1- Sanctification of water and accumulation of water inside the holes; 2- Inhalation of materials sprayed on these holes. "*... Some hemp is sprayed on hot stones from which smoke rises immediately, and so much smoke rises from it that no Greek bath has such an effect. The Scythians rejoice and shout for joy"* (Talbot Rice 2009, 97). It appears that creating smoke and inhaling it was not for purification, but for intoxication. Smoke may have been used to bring the inhaler into a trance world, like a drug addict; Perhaps, this is also true for southern Russia where people joy using these materials; *"The Scythians were extremely superstitious and believed in magic and the effect of amulets and spells like all primitive*



Figure. 5: *Locus 103; exposing the plan of Kurgan consisting of a large stone and earth structure*



Figure. 6: *The location of an assemblage of pottery and animal bones within a circular structure*

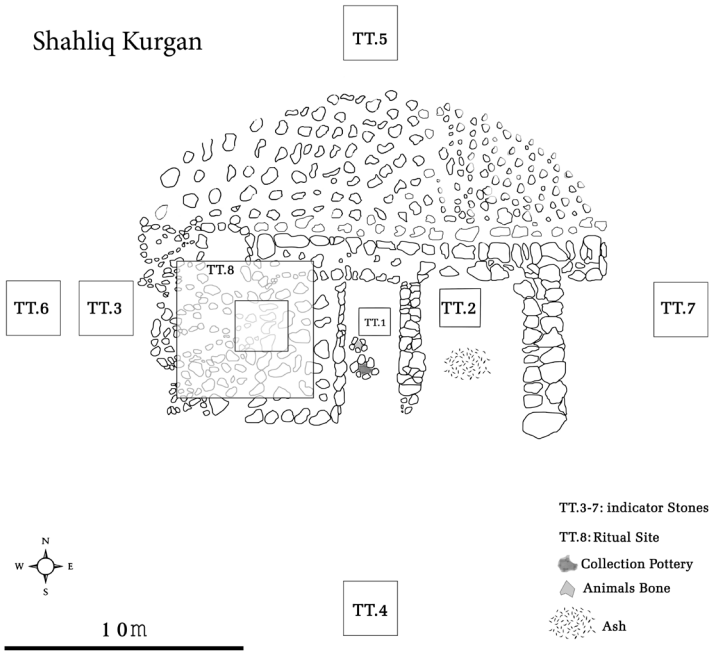


Figure. 7: *Plan of Shahliq Kurgan.*



Figure. 8: *Sherds obtained from the offerings pit, arrowhead, and a special pottery handle called "Nakhjavan handle" (Hojabri Nobari pers. com, 2010).*



Figure. 9: *The layer so-called as "Shrine layer" with special ritual stones*

tribes" (Talbot Rice 2009, 91). Some lithic tools and stones with unspecified use were found (Figure. 12, 13); perhaps these stone tools can be considered as part of the ritual tools of the Scythians.

Due to the extent of the Kurgan and time constraint, it was not possible to continue using locus-based system; Excavation continued by opening three test trenches numbered T.T.1, T.T.2 and T.T.8. (Figure. 7); The excavation in the test pits yielded no cultural finds and encountered a hard mud layer followed by virgin soil or bedrock at a depth of 6.50 cm. Shahliq Kurgan is unique in that no burial-free kurgans were found it has in Iran just used for ritual purposes. Such ritual site, with similar architecture, was reported by Kimball on Bayram Mound in the Altai Mountains (western Mongolia). Kimball introduces the mound as a ritual and religious place (Kimball 2000: 223). The complex structure of the mound consisting of very large to medium-



Figure. 10: *A stone block with two abraded parts which seems to be used for worship; the abraded parts are likely caused by frequent touching with hands or feet*



Figure. 11: *Stone blocks with holes found during excavation of the Kurgan*



Figure. 12: *Lithic finds with unknown use*



Figure. 13: *Special ritual stones in the Shahliq Kurgan*

sized river stones, the presence of four prominent stone blocks on four sides of the mound, lithic finds without a specified use, pits containing offerings and animal sacrifices, the presence of worship stones and a ritual place in the southwest of Kurgan, and spending a lot of time constructing the Kurgan all shows the importance of it in terms of ritual practices (Figure. 14). It seems that the nomads of the Iron Age had chosen this place to perform some unknown ritual and possibly seasonal ceremonies in the special landscape of the surround plain.

The so-called Islamic burial indicates that burial rites continued on the mounds at least until the early Islamic period. Although no reliable dating is available, the corpse lying on the right-side facing south (i.e., towards Mecca) suggest Islamic funeral traditions (Figure 16).

By close examination of stratigraphic layers delineated during excavation, it is possible to reconstruct the ecological succession for a period of about two thousand years. The lowermost layers mark a period before human settlement in the region represented by natural deposits containing soil and humus. These deposits bear evidence for a transition from Mediterranean forest to grassland ecosystems due to climate changes (Figure. 17). During the period of establishment of human societies coincident with the Bronze Age, the use of forest resources was intensified and accelerated the ecosystem change. As a result of excessive use of forest resources, biological diversity was diminished and the forest vegetation was replaced by grasslands with a scatter of bushes; the region became uninhabited due to consecutive floods as a result of widespread human-induced land use change of landscape. A better understanding of the ecological succession and vegetation changes requires more detailed studies. It should be said that attention to how ancient rituals were performed has drawn interest of both archaeologists and anthropologists since the beginning of the twentieth century because these rituals constitute the common heritage of humankind. Recently, these ancient rituals are considered not only as a religious phenomenon but also as a secular experience. Religion is a powerful force that causes the gathering of people in the heart of society where the ceremonies take place (Halbwachs 1992: 84-119). Following this point of view, ritual practice should be seen as a process that revives a memory and connects the present to the ancient past. Roy Rappaport, in his detailed analysis of the ceremony in the book “Ritual and Religion in the making of Humanity”, tried to summarize different aspects of a ceremony as follows (R.A. Rappaport 1999: 32-50):

1. Executors follow the orders issued by others,

2. Ceremonies are performed on specific subjects because they are repeated at regular intervals in terms of time or calendar and often take place in specific places.

3. The way ceremony is performed is more or less consistent,

4. There is no ritual without a performance,



Figure. 14: *Four prominent stone blocks uncovered on four corners of the mound.*

5. Ritual actions do not necessarily have practical results

In this view, adherence to certain rules seems to be the most important element that plays a role in the performance of ritual (Laneri 2008, 2-10) and one could imagine these special rules when features and structures were exposed excavating the layers of the kurgan at the issue. Archaeological sites with cultural similarities to Shahliq Kurgan have been reported in the Altai Mountains (western Mongolia) on the Bayram mound in southern and eastern Kazakhstan, as well as in the Gorny Altai in southern Siberia. Kimball acknowledges Bayram Kurgan as a ritual kurgan given the lack of human burial in and many evidences for votive offerings (Kimball 2000, 89). Likewise, Shahliq Kurgan with architectural traces possibly related to some religious aspects, the occurrence of special stone blocks, and sacrificial offerings can be considered as a ritual burial-free kurgan as well. Although we have little information about the nomadic people of the Altai Mountains, it is certain that they had a well-organized society, and that their chief (the secular authority but also the spiritual leader of that society) had the power to get its people to construct such structures in a systematic way (Firoozmandi & Labaf Khaniki 2006: 73-74).



Figure. 15: *Virgin soil of the mound in a test pit at a depth of 6.50 m from the benchmark.*



Figure. 16: *Kurgan-style burial from Islamic period in the center of the mound.*

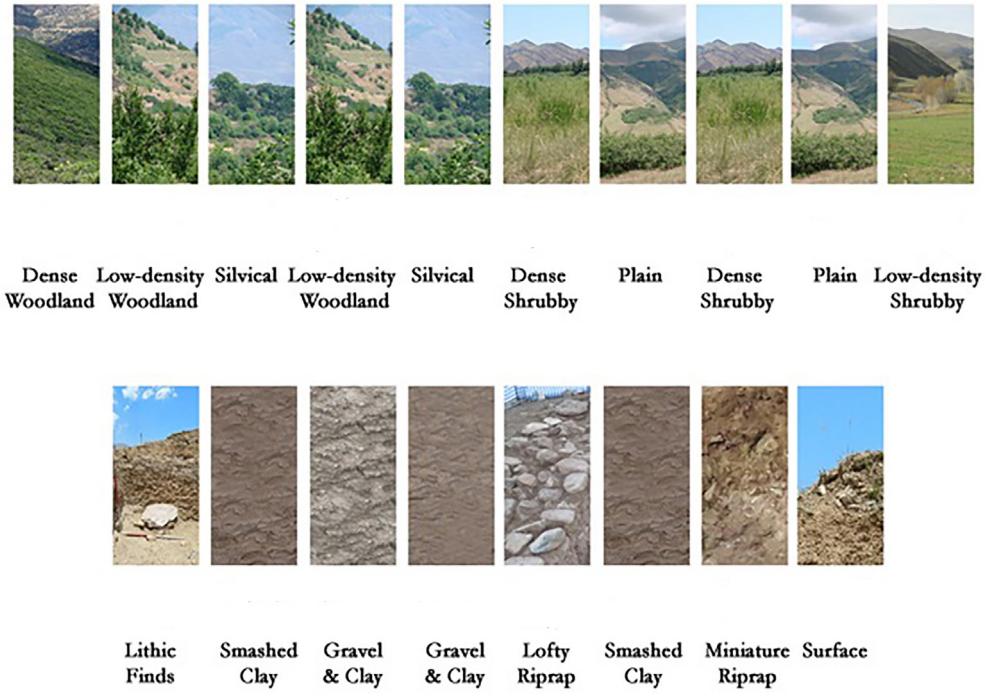


Figure. 17: *The Cross section of Shahliq Kurgan mound and the respective ecological sequence of Kurgan (After: Rokni 2018)*

Conclusions

Three seasons of excavations in the area of Peygham Chay dam have shown for the first-time evidence of those three kurgans (including Shahliq Kurgan) without human burial. The apparent lack of burial in the Shahliq kurgan (as resulted from nine sondages or test trenches) indicates that some of these kurgans were possibly used only for ritual ceremonies. Shahliq Kurgan is assumed to be contemporaneous with a kurgan at a distance of one kilometer from it where horse teeth were brought to light together with the same Iron Age II potteries; The horse teeth probably indicate that horses had a special sanctity among these communities; The architectural features of the kurgans suggest a date in the early first millennium BCE; According

to Herodotus, people in that period set up temples similar in architecture to the Kurgans. The circular stone structure and architectural style of the Shahliq Kurgan are similar to those of other Kurgans. Importantly, the vastness of Shahliq Kurgan indicate that this place had been important as a ritual place for a long time, as both Late Bronze Age and Iron Age wares have been recovered from the site. The results of experiments at the University of Warsaw suggest that the ashes found in this kurgan were not, contrary to what was previously thought, the result of cremation tradition and rather the product of setting fire outdoors. The results of excavations show that the area was probably the site of ritual ceremonies, and the ashes found are probably evidence for these rites and a proof of the sanctity of fire among the inhabitants of the area. According to other evidences, such as animal sacrifice, offerings, and special stones with unknown function, it seems that a special ceremony used to take place in the kurgan. The architectural construction of the Shahliq Kurgan, consisting of large stones, is very similar to the Scythians burial sites. It seems that construction of some stone structures took several seasons. The results of these excavations show that not every circular pile of stones is necessarily a grave and it is now admitted with caution that some of them had been used to perform rituals. This type of architecture, with special attention to the element of stone, was common among these communities, either used as a place for ritual ceremonies or burial tombs as in Khoda-afarin and Tuali Kurgans. Similar sites in the Altai Mountains (western Mongolia) on the Bayram Mound in southern and eastern Kazakhstan, as well as in the Gorny Altai in southern Siberia, had been identified as places for ritual ceremonies. In these rituals, igniting a fire, offerings and sacrifices, are also of special importance. Ecological succession studies on natural deposits, containing soil and humus, beneath stone structures, show several phases which indicate a shift from Mediterranean forest ecosystem towards open grassland ecosystem with scatter of shrubs due to climate change during three thousand years before the establishment of human settlements in the area. During the establishment of human societies in the Bronze Age, the exploitation of forest resources for metal extraction and smelting caused the loss of biological stability and dense forest vegetation turned into lands with scattered bushes that was uninhabitable due to successive rains and floods, causing human-induced land use change of the landscape; a deeper understanding of this ecological succession and widespread change in ecosystems requires detailed studies in future.

References

Asgarpour, Vahid. Tirandazi, Arash and Bahram Ajorlou. 2016. An Introduction to the Archaeological Ethnography of the nomadic people of Central Karabakh, *Anthropological Research of Iran,* Vol. 6, NO.1.

B, Yusuf. 1394. Scythians in the Land of Mannea, translated by Kamyar Abdi, *Zagros Research Quarterly*, second year / second and third issues. Pp. 75-79.

Babapiri, Javad. 2007. *Report of the Rescue Excavation of the Tape Kohne Pasgah behind the Khoda-Afarin Dam*, the Archive of the Reports of the Archaeological Research Institute.

Bakhshaliyev, V. 1997. *Nahçıvan Arkeolojisi/The Archaeology of Nakhichevan.* Istanbul: Arkeoloji ve Sanat Yayınları.

Belli, O. & V. Bahşaliyev. 2001. *Nahçıvan Bölgesi'nde orta ve son tunç çağı boya bezemeli çanak çömlek kültürü: Middle and late bronze age painted pottery culture in the Nakhichevan Region.* Arkeoloji ve Sanat Yayınları.

Belli, Oktay, Konyar, Erkan. 2003. *Dogu Anadolu Bolgesinde, Erken Demir Cagi Kale ve Nekropolleri,* Arkeolojive Sanat Yayinlari.

Brown-Burton, T. 1951. *Excavation in Azarbaijan, 1948*, John Murrary London.

Burney, C. A. 1962. The excavations at Yanik Tepe, Azerbaijan, 1961 second preliminary report. *Iraq*, 24(2), 134-152.

Burney, C. A. 1964. The Excavations at Yanik Tepe, Azerbaijan, 1962: Third Preliminary Report. *Iraq*, 26(1), 54-61.

Burney. Charles. 1979. Meshkinshahr Survey, *Iran*, Vol XVII, PP 155-156.

Dark, Ken, R. 2000. *Theoretical Archeology,* translated by Kamyar Abdi, Tehran: University Publishing Center, First Edition.

Davis Kimball J.; V.A Bashilove & L.T. Yablonsky,

1995. *Nomads of the Eurasian Stepps in the early Iron Ages,* In: Petrenko. V.G, Melyukova. A. I, Olkhovsky V.S. Bokovenko. N.A, Zinat Press: Berkeley.

Davis Kimball, J. 2000. *The Beiram Mound a Nomadic Cultic Site in the Altai Mountains (Western Mongolia) Center for the study of Eurasian Nomads*, Berkeley, California.

Davis-Kimball, J., 1997. A Nomadic Cultic Site in the Altai Mountains (Western Mongolia) In *Archaeology*, Vol. 50, No.1 (February/May 1997) pp. 89-95.

Dyachenko, A. N; A. S Skripkin; A. I. Klepikov & Kubyshkin. 2000. *Excavations of the Aksai Kurgans in the Vollga-Don Region (Russia), Kurgans, Ritual Sites and Settlements, Eurasian Bronze and Iron Ages*, Oxford: Archaeopress.

Ebtehaj, Vida. 2004. *Study of the Architectural Structure of Megalithic Tombs in the Iron Age of Iran: a case study of shahar-yeri in Ardabil,* Master Thesis in Archeology, Supervisor: Alireza Hojbari Nobari, Tehran: Tarbiat Modares University (unpublished).

Firoozmandi, Bahman & Meysam Labaf Khaniki. 2006. Social Structure of Scythian Communities with an Attitude to Burial Methods, *Journal of Humanities*, University of Tehran, No. 6, pp. 67-91.

Halbwachs, M. 1992. *On Collective Memory*, Edited translated, and introduced by L.A. coser. The Heritage of sociology series. Chicago: University of Chicago press.

Hojabari Nobari, Alireza. 2007. *Report of archeological excavations of the Cemeteries of Larijan and the Sangar in Khoda-afarin Region First Season,* Cultural Heritage and Tourism Research Institute.

Hojabri Nobari, Alireza. 2017. *Report on the Study of Late bronze and iron Age Sites in Varzeqan,* Cultural Heritage and Tourism Research Institute, Tarbiat Modares University.

Hojabri, Ali. 2007. *Preliminary Descriptive Report of Rescue Excavation Pahrooz Tappehsi– Khoda-afarin*, Cultural Heritage and Tourism Research Institute.

Iravani Ghadim, Farshid. 2013. *Archaeological Excavation Report of Jafar-Abad and lower Tuai (Chapter 2)*. Research Institute of Cultural Heritage and Tourism.

Irvani Ghadim, Farshid & Soleyman. Mamizadeh Giglu. 2012. Typology and introduction of Iron Age Ceramics of Jafar-Abad Kurgans (the First Season of Excavation), *Journal of Archaeological Studies,* No. 2, Vol. 4, (Serial No. 6), pp. 33-50.

Kuşnareva, K. K. 1997. *The Southern Caucasus in Prehistory*, the University Museum University of Pennsylvania: Philadelphia.

Laneri, N. 2008. *An Archaeology of Funerary Rituals*, University of Chicago, Second Printing with Minor Corrections.

Özfirat, A. 2001. *Doğu Anadolu yayla kültürleri: MÖ II.* binyıl(Vol. 5).

Pourfaraj, Akbar. 2012. Explaining Iranian North-West Kurgan's Culture based on survey and excavation of Nir Boyni Yoghun Castle. *Journal of Archaeological Studies*. Vol 4. NO 1. Spring and summer 2012. Serial number 5.

Salmanpour, Reza & Seyedeh Zahra Abtahi Foroushani . 2013. *Final Report of Archaeological Survey and Identification of Horand County*, Vol. 1-5, Archive of Archaeological Research Institute Reports.

Talbot Rice, Tamara. 2009. *the Scythian*, Translated by Roghayeh Behzadi, Tehran: Tahoori Publications, second edition.

Tayefeh Qahramani, Nasrin. 2014. *Report on the study and identification of the rescue of cultural and historical monuments in the Peygham Chay Dam area*, Archive of the Archaeological Research Institute.

Tayefeh Qahramani, Nasrin. 2017. *Report of Survey and identification the rescue of cultural and historical monuments in the Peygham Chai Dam area*, Archive of the Archaeological Research Institute.

Tayefeh Qahramani, Nasrin. 2018. *Report on the Study and Identification of the First Season of the Rescue Excavation of Cultural and Historical Monuments in the Area of Peygham ChayDam*, Archive of the Archaeological Research Institute.

Tayefeh Qahramani, Nasrin. 2019. *Report on the Study and Identification of the Second Season of the Rescue of Cultural and Historical Monuments in the Peygham Chai Dam area,* Archive of the

Archaeological Research Institute.

Tayefeh Qahramani, Nasrin; Farzad Mafi & Araz Najafi. 2019. Analysis of the Role of Geographical Factors in the Spatial Distribution of the First Millennium BC Settlements on the Banks of the Peygham Chay River (East Azerbaijan - Kaleybar), *Parseh Journal of Archaeological Studies,* 10 consecutive (Winter 2020), pp. 69-85.

Tohidi, Fayeq & Alireza Azarshab, 2014. Excavation of the Iron Age Cemetery of Zagros, Sanandaj, *Zagros Researches Quarterly*, Second Year, Second and Third Issues, pp. 104-126.

Zalaqi, Ali & Bayram Aghalari. 2007. *The Report of Rescue Excavation of the Old Area of Kohneh Tappeh Si,* Archaeological Research of Archaeological Institute.