

Sepideh Jamshidi YEGANEH * (University of Oxford, United Kingdom)

Cremation in Elamite period (Sukkalmah): Hirbodan site

<https://doi.org/10.34739/his.2023.12.02>

Abstract: *Every region and period have its own characteristics when it comes to burial, which is considered a part of spiritual and material culture. Since burial practices are influenced by society's thoughts, beliefs, and culture, studying them can help reconstruct the evolution of ancient culture. Large parts of Iran were considered the territory of the Elamite civilisation from about 2700 BCE until the beginning of the Achaemenid empire. While various studies have been conducted on the cultural materials of this period, burial methods, especially in the old Elamite period, remain unknown. The evidence of cremation is one of a unique range of features that can be observed among burying ritual in a society. Based on the findings, this article describes the evidence for cremation in the Old Elamite period in south of Iran. In Hirbodan, a corpse was buried in a crouching position and burned with wood sticks. It can be concluded from the burn marks on the skeleton and the soil beneath the body, that the body had been burned inside the grave before being covered in soil. This burial is associated with the old Elamite civilization and with the reign of the Sukkalmah dynasty based on the analysis of pottery and C14 results.*

Key words: Archeology, History, Iran, Elamite, Anshan, Cremation, Funeral Archaeology

Introduction

Throughout history, people have buried the dead according to their ideas and beliefs. The practice of burial was and continues to be one of the most tangible human activity associated with facing the inevitable phenomena of death.¹ Studies of cemeteries and archaeology of death contribute significantly to our understanding of past societies' beliefs. In the last two centuries, when archaeology has gained a place in human knowledge, it is perhaps the study of cemeteries that has been the most common method by which scholars have attempted to understand the structure and social characteristics of past societies.² Research in archaeology shows that various methods of burial have been used in different periods of history, among them cremation; this

* Corresponding Author. ORCID ID: <https://orcid.org/0000-0002-7647-3619>.
sepideh.jamshidiyeganeh@wolfson.ox.ac.uk

¹ Khanipour & Kavosh, 2022.

² Dark, 1995.

research is referred to as archaeology of cremation. Different parts of the world practice cremation, and archaeologists have always dealt with it.³

Cremation is a term used to describe a variety of rituals involving fire in which the dead are mourned, transformed, and commemorated. In prehistory and history, cremation practices have appeared in very different prehistoric and historical societies, operating in environments with very different cultural, religious, political, economic, and environmental conditions. Therefore, cremation plays an important role in human history as a means of living and dying.⁴ The earliest recorded evidence of ceremonial burning is found in Australia and dates to c. 24000 BCE.⁵ From around c. 8000 BCE, cremation appears to have become a major mortuary ritual.⁶ A transition between the mourners, the soul, and the body occurs in many cultures⁷ and has ontological, social, and cosmological dimensions.⁸ During excavations at Sialk, the oldest evidence of cremation was found in Iran. Roman Ghirshman⁹ reported several Neolithic burials at Tape Sialk and noted, with caution, some evidence of human cremation. Cremation evidence was found at Hirbodan site during recent excavations.¹⁰ However, since the old Elamite period, there has been no evidence of cremation in Iran. During the author's excavation in Hirbodan, 70 human burials were excavated, and one of them showed evidence of cremation. Since several stages of the cremation process can be documented using archaeological evidence, including the preparation of the body, the building of the pyre, the burning of the body, the sorting, selection, and treatment of the ashes, burial of the cremated remains, and raising of monuments to the dead,¹¹ the cremation in Hirbodan followed the first step of this method and simply involved burning the body inside the grave. In this article, the importance of cremation is emphasized by introducing new evidence of it dating back to the 2nd millennium BCE, which corresponds to the Elamite period.

Darab county

Darab is located in Fars province and is a valley in the south of Zagros mountains. This county includes two main plains, namely Darab plain and Forg plain. The first archaeological studies in this region were conducted by Stein in 1933,¹² after

³ Smits, Iregren & Drusini, 1997; Parsons, 2005; Hadder, 2013; McKinley, 2014; Cataroche & Gowland, 2015; Ulguim, 2015; Garrido-Varas & Intriago-Leiva, 2015.

⁴ Cerezo-Román & Williams, 2014: 240.

⁵ Lange, *et al.*, 1987: 17.

⁶ Davies & Mates, 2005: 455–573.

⁷ Hertz, 1960; Metcalf & Huntingdom, 1991.

⁸ Vitebsky, 1993; Oestigaard, 2013.

⁹ Ghirshman, 1938.

¹⁰ Sołtysiak & Fazeli Nashli, 2016.

¹¹ McKinley, 1994.

¹² Stein, 1936.

him Mirosheedji investigated the prehistoric settlements of Darab and Fasa between 1971-1972.¹³ Alamdari and Shirvani also investigated Rostaq district.¹⁴ After these studies, as the first season in 2019, a comprehensive systematic survey was conducted in this plain by Khanipour, as a result of which about 400 ancient sites were identified in a small area of this county.¹⁵ Hirbodan site was identified in this season and was excavated in 2021 by author.¹⁶

Hirbodan

The Hirbodan site is located 1100 meters northwest of Hirbodan village, and 2 kilometres south of Darabgerd [Fig. 1]. In total, the site consists of three parts, the central part of which reaches a height of about 2 meters from the surface of the plain, has dimensions of 210 by 200 meters, and has an area of 33400 square meters. This part named Tol-e Hirbodan. The southern part of the site, southern Hirbodan, is not very high, and its surface has been destroyed by agriculture in recent years. Today cultural materials are scattered there over a 150×300-meter area. Hirbodan's western part is about half a meter higher than the surrounding land and measures 33×30 meters [Fig. 2]. There are cultural materials scattered between these three parts, and on the east and northeast sides of the Tol-e Hirbodan, a large spread of cultural materials can be seen up to about 400 meters.

Excavation at Hirbodan site

The first season of excavation at Hirbodan site was done by the author in 2021 with the aim of reconstructing the chronological sequence of this site, and understanding the cultural, social and political characteristics of the region during the Elamite period. In this season, three soundings (A, B and C) and three trenches (D, E and G) in the Tol-e Hirbodan were excavated. In the excavation carried out, the context method was used in excavation, and the Harris diagram was used to show the priorities and different contexts. Except sounding A, human burials were found in other soundings and trenches. The most complete stratification sequence of Hirbodan site was obtained from the excavation of operation DG. As a result of the excavation in this operation, four phases including human burials, kiln structures, architectural structures, and cultural deposits were identified.

¹³ de Mirosheedji, 1973.

¹⁴ Alamdari, 2009.

¹⁵ Khanipour, 2018; 2022.

¹⁶ Yeganeh, 2021.



Fig. 1. Geographical location of Hirbodan site (S.J. Yeganeh)



Fig. 2. Aerial photo of Hirbodan site; Hirbodan village on top; southern Hirbodan middle; and Tol-e Hirbodan on bottom (S.J. Yeganeh)

Trench E

According to the goals of excavation and recognition of the cultural layers of the northern part of the Tol-e Hirbodan, the trench E with dimensions of 4×5 meters was created with the west-east direction. Due to the location of two burials, one in the eastern part of the northern wall, and the other in the western part of the southern wall, two trenches with dimensions of 2×2 meters were added to the trench E in the two corners of the northeast and southwest. In the northeast side, after the excavation of the grave, the excavation was stopped, but the excavation in the southwest section was continued to the virgin soil. During the excavation of this trench, two heated structures, probably hearth, and 15 human burials were found at different levels [Fig. 3].

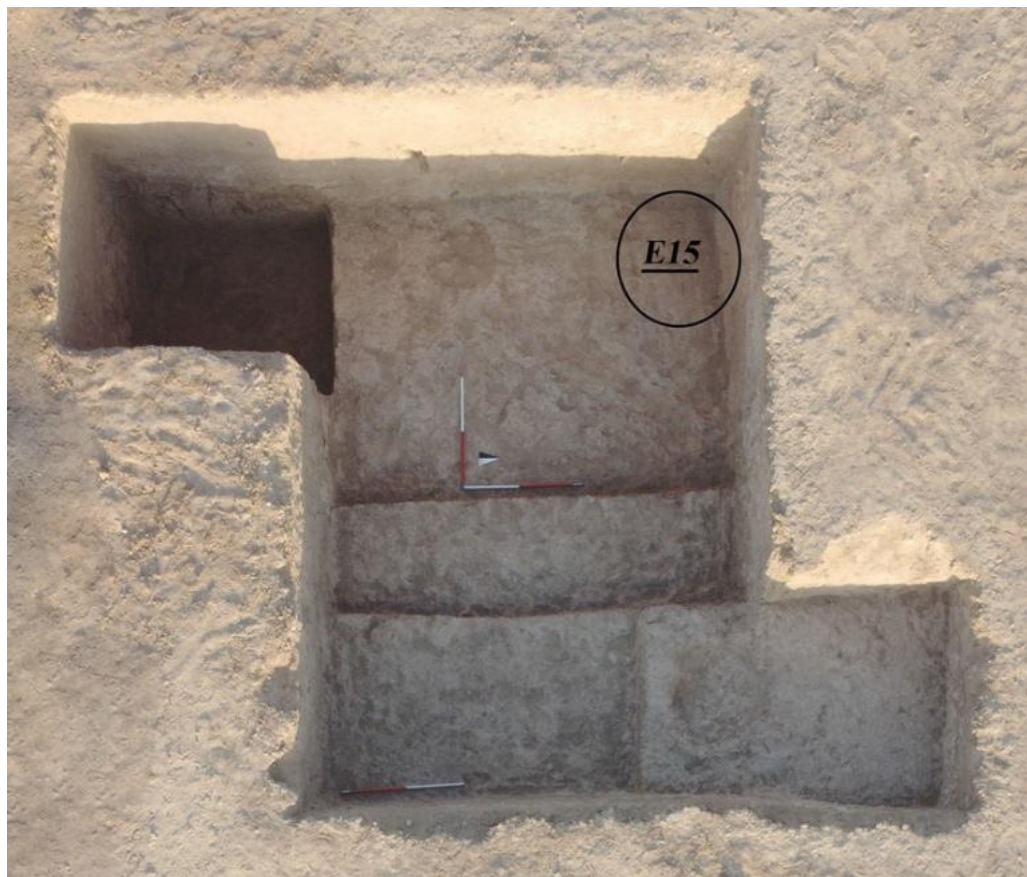


Fig. 3. Overview of trench E (S.J. Yeganeh)



Fig. 4. Cremated body in grave E15 (S.J. Yeganeh)

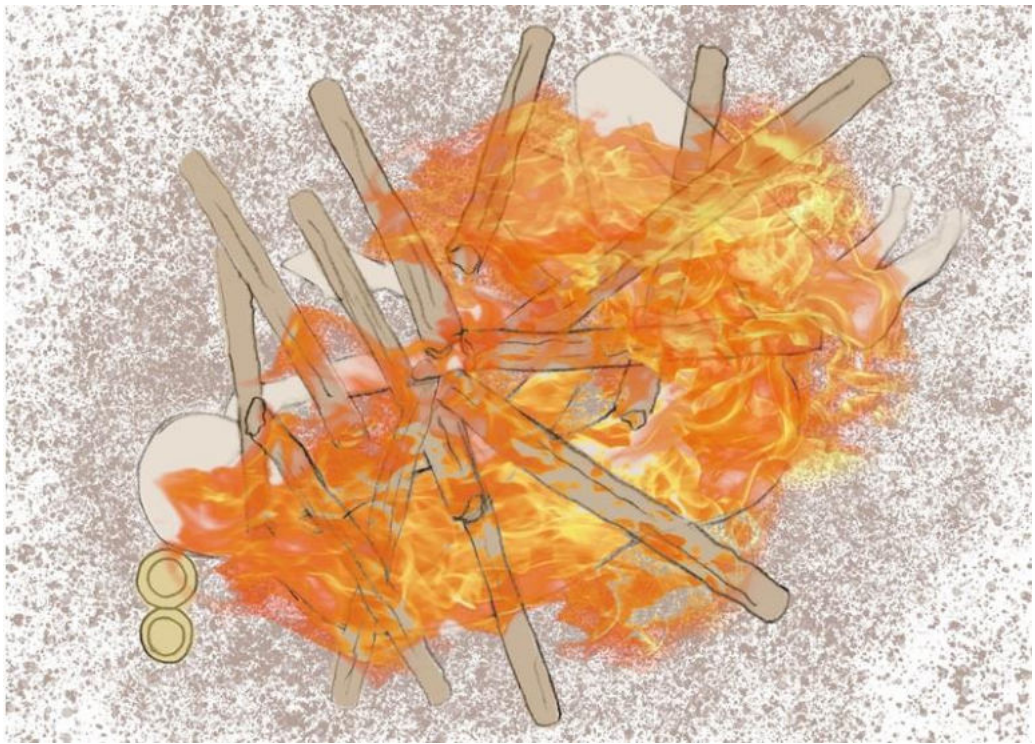


Fig. 5. Reconstruction of the cremation in Hirbodan (S.J. Yeganeh)

Cremated burial

Burial E15 was located in the northwest part of trench E and was attached to the northern and western walls of the trench, the structure of the grave was a simple pit, so that the soil with dimensions of about 130×120 cm was dug at first, after placing and cremating the body, the pit was filled with soft soil. The burial direction was northeast-southwest, and the head was in the northeast and facing the southwest. The burial was carried out in the crouched position on the left shoulder, the right hand is bent from the elbow and lie in front of the chest and the left hand is also bent and the fingers are placed next to the face. The legs are completely folded from the hips and knees to the stomach and the right foot is on the left. The remarkable thing is that effects of burning are evident on the bones. According to the effects of burns on the bones and the grave soil, it seems that after the burial, wooden sticks was placed on the body and then the body was set on fire [Fig. 4; 5]. This burial is the only evidence of cremation among the burials obtained from the excavation of Tol-e Hirbodan. According to the size of the bones and skull, the above skeleton belongs to an adult. Behind the skull, there were two ceramic vessels along each other [Fig. 6; 7; Tab. 1], and animal bone were also found next to this burial.



Fig. 6. Ceramic vessel number 5117
from grave (S.J. Yeganeh)

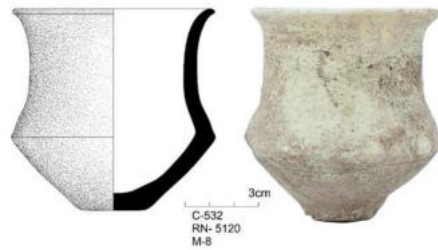


Fig. 7. Ceramic vessel number 5120
from grave (S.J. Yeganeh)

Tab. 1. Information of the two vessels in grave E15

	Vessel 5117	Vessel 5120
Height	97 mm	86 mm
Rim diameter	81 mm	57 mm
Base diameter	29 mm	23 mm
Rim thickness	5 mm	5 mm
Fire	Sufficient	Sufficient
Temper	Mineral	Mineral
Technic	Wheel made	Wheel made
Color	2.5Y6/4 light yellowish brown	2.5Y8.2 pale yellow
Surface color	2.5Y6/4 light yellowish brown	2.5Y8.2 pale yellow
Explanation	Everted rim, carinated body, and button base	Everted rim, carinated body, and button base

Chronology

In general, the pottery obtained from Hirbodan can be divided into three groups based on the colour, red, buff, and grey, and can be divided into two groups based on decoration, plain and painted, including geometric motifs, carved motifs and appliques motifs. In order to classify the pottery, two options of colour and pattern were used, and according to this, the pottery of this site can be divided into different groups including: plain buff, painted buff, buff with carved pattern, buff with red slip, plain red, painted red, red with slip, and grey. Pottery is made by two techniques, wheel and hand, and although some pottery has insufficient firing, most of the pottery was fired sufficiently. The surface of some potteries is well polished, and some are covered with slip [Fig. 8]. Some of the samples of pottery obtained from this site, especially the painted pottery, are somewhat different from the known pottery of the Kur River basin, but some of them, like the pottery with red slip, are similar to those from Tol-e Malyan,¹⁷ Tol-e Nokhodi,¹⁸ Tol-e Nurabad and Tol-e Spid¹⁹ and Tol-e Gap Kenareh²⁰ which was obtained from Kaftari period. Also, for absolute chronology, 10 charcoal samples were sent to the Poznań Radiocarbon Laboratory in Poland, which show that the different settlement phases of this site are related to the first half of the 2nd millennium BCE.²¹ A charcoal sample was also analysed from the burnt burial, which shows the date of around 1687 BCE [Tab. 2].

¹⁷ Sumner 1972; 1974; 1989; Nickerson, 1983.

¹⁸ Goff, 1964: 46-8.

¹⁹ Potts, & Roustaei, 2006.

²⁰ Khanipour, Naseri & Nouruzi, 2017; Khanipour, *et al.*, 2015.

²¹ Yeganeh, (in press)



Fig. 8. Pottery collection from trench E (S.J. Yeganeh)

Tab. 2. C14 burial E15

No.	TR	Context	Phase	Date	Sample	
Hirb-10	E	532	IV	68.3% probability	1620 BC (68.3%) 1536 BC	charcoal
				95.4% probability	1687 BC (95.4%) 1507 BC	

Discussion: burial in Elamite period

Between the middle of the third millennium BCE and before the Achaemenid empire, the Elam civilisation existed in large areas of south and southwest of Iran, the beginning of which is not exactly known. The first time, the name of Elam mentioned is in cuneiform texts from the time of Enmebaragesi, the first ruler of the first dynasty of Kish. There he mentions that he attacked Elam, but the area he attacked is not exactly known.²² The Elamite period is divided into three sub-periods: Old Elamite, Middle Elamite and New Elamite.²³ There is no consensus among researchers about the geographical scope of this civilisation. But we know that Anshan and Susa were the two main states of the Elamite period, so that in some periods the king called himself the ruler of Anshan and Susa. During the excavations in Susa,²⁴ Choghazanbil,²⁵ Haft Tape,²⁶ Arjan,²⁷ Tape Sanjar,²⁸ Jobaji,²⁹ Balanjan,³⁰ Kalantar 4,³¹ Dehno³² various burials from the Elamite period were identified.

The excavations carried out in Khuzestan show that different methods and structures were used for burial in this region during the Elamite period, including tombs, crypts, simple pit graves, coffins, and jar burial. Also, the Haft Tape excavations show burial is done in group or individually.³³ In Kohgiluyeh and Boyer Ahmad provinces, burials from the Elamite period were identified from Lama,³⁴ Deh Dumen,³⁵ and Taj Amir³⁶ cemeteries. Graves were identified with stone and mudbrick structures. In Chaharmahal and Bakhtiari, an Elamite tomb was also found from tape Boldaji.³⁷

The discovery of Elamite inscriptions in Malyan and their decipherment led to the identification of this site as an important Elamite city of Anshan,³⁸ before that important inscriptions from Tol-e Pey Tol Bushehr,³⁹ Tol-e Spid of Nurabad,⁴⁰

²² Potts, 1999.

²³ Potts, 1999; Abdi, 2017.

²⁴ Ghirshman, 1965: 5; Carter, 1980.

²⁵ Ghirshman, 1968.

²⁶ Negahban, 1991.

²⁷ Stronach, 2003; 2005.

²⁸ Sardari, 2014: 176.

²⁹ Shishegar, 2015.

³⁰ Abdi, 2011: 43.

³¹ Valipour, *et al.*, 2011.

³² Mofidi Nasrabadi & Mirzaii, 2013.

³³ Negahban, 1991.

³⁴ Jafari, 2014.

³⁵ Sołtysiak, Naseri, & Najafi, 2019.

³⁶ Ghezlbash, *et al.*, 2016.

³⁷ Mohammadifar, Mollazade & Noruzi, 2017: 141-2.

³⁸ Reiner, 1973: 176.

³⁹ Pézard, 1914: PLXI-XIII.

⁴⁰ Herzfeld, 1928.

the Kurangun relief⁴¹ and the remains of the Elamite relief of Naqsh-e Rostam,⁴² had also confirmed the expansion of the borders of Elam in Iran.⁴³ In the Anshan or Fars cultural area, so far only Elamite burials of simple pit graves have been found during the excavations of Tol-e Nokhodi,⁴⁴ Tol-e Malyan,⁴⁵ Tol-e Kamin,⁴⁶ Tol-e Timuran⁴⁷ and Shogha.⁴⁸ Hirbodan is also dated to the Elamite period due to its geographical location and being in the cultural area of Fars and the findings obtained.⁴⁹

As mentioned, 70 burials related to this period were excavated from the most recent phase, the graves of this site, like other known graves of the Elamite period in Marvdasht plain, are all simple pits where the body is placed in the grave along with objects. Probably according to the person's position in society, the number of objects in the grave varies. In Hirbodan, no tomb was identified similar to that of Haft Tape,⁵⁰ and only in one grave do we see two children buried together. The most interesting feature found in this site is therefore the burnt burial, a phenomena which has not been identified in the old Elamite period before. The burnt burials in other periods of Iran's history show that the body was probably burned in one place and then buried in another place. However, the sample obtained from Hirbodan shows that cremation took place inside the grave, and that the burnt bones were not moved. Skeleton in crouching position with signs of fire indicates that the body was fired after being placed in a pit. It is apparent from the grey colour of the bones that the heat was not high, and that this practice was done solely for ritual purposes or as a necessary act toward the deceased.

Conclusion

Burials are a sign of the beliefs and thoughts of humans, and one of the significant burial methods in the world is burning the body after death, which is known as cremation. During excavation at Hirbodan site, evidence of cremation was found in grave E15 of trench E. It seems that the body was initially placed in grave, and two ceramic vessels were placed on top of his head and then wooden sticks were placed on top of the body, and the body has been burned. The effects of burns can be seen on different parts of the skeleton. The traces of burns on the skeleton and the ground show that the cremation took place in the grave. Relative and absolute dating shows that this burial is related to the old Elamite period and coincides with the Sukkalmah

⁴¹ Vanden Berghe, 1986; Potts, 1999.

⁴² Khanipour, Kavosh & Naseri, 2017.

⁴³ Potts, 2013.

⁴⁴ Goff, 1964: 44.

⁴⁵ Carter, 1996: Fig. 46.

⁴⁶ Overlaet, 2007.

⁴⁷ Overlaet, 1997.

⁴⁸ Overlaet & Pincé, 2018.

⁴⁹ Yeganeh, (in press).

⁵⁰ Negahban, 1991.

dynasty. This cremated burial can be considered the first evidence of cremation in the old Elamite period. The reasons for the cremation are currently unknown to us. Further research is needed to explore the historical process leading to the adoption of cremation, its coexistence alongside other burial methods, and possible religious, ideological, and socioeconomic processes bringing about the abandonment of cremation.

Bibliography

- Abdi, K. (2011). *Baresi Bastanshenasi dar Balenjan* [Archaeological survey in Balenjan]. Tehran: ICAR archive. (unpublished) (in Persian)
- Abdi, K. (2017). The Kingdom of Elām. In T. Daryaei (Ed.), *King of the Seven Climes. A History of the Ancient Iranian World (3000 BCE - 651 CE)* (7–38). Irvine: Samuel Jordan Center for Persian Studies and Culture.
- Almdari, K. (2009). *Baresi Bastanshenasi dar Rostagh* [Archaeological survey in Rodtagh]. Tehran: ICAR archive. (unpublished) (in Persian)
- Carter, E. (1980). Excavations in Ville Royale I at Susa. The Third Millennium B.C. *Occupation. Cahiers de la delegation archéologique française en Iran*, 11, 11–134.
- Carter, E. (1996). *Excavations at Anshan (Tal-e Malyan): the Middle Elamite period*. Philadelphia: University of Pennsylvania.
- Cataroche, J., Gowland, R. (2015). Flesh, fire, and funerary remains from the Neolithic site of La Varde, Guernsey: Investigations past and present. In T. Thompson (Ed.), *The Archaeology of Cremation: Burned Human Remains in Funerary Studies* (pp. 19–42). Oxford: Oxbow Books. <https://doi.org/10.2307/j.ctvh1drsq.7>
- Cerezo-Román, J.I., Williams, H. (2014). Future Directions for the Archaeology of Cremation. In I. Kuijt, C.P. Quinn, G. Cooney (Eds.), *Transformation by Fire, The Archaeology of Cremation in Cultural Context* (pp. 240–56). Tucson: The University of Arizona Press.
- Dark, K.R. (1995). *Theoretical Archaeology*. Ithaca: Cornell University Press.
- Davies, D., Mates, L.H. (ed.) (2005). *Encyclopaedia of cremation*. Ashgate: Aldershot.
- de Miroschedji, P. (1973). Prospections Archéologiques Dans Les Vallées de Fasa et de Darab. In F. Bagherzadeh (Ed.), *Proceedings of the 1st Annual Symposium on Archaeological Research in Iran, 1972* (pp. 1–7). Tehran: Iranian Center for Archaeological Research.
- Garrido-Varas, C., Intriago-Leiva, M. (2015). The interpretation and reconstruction of the post-mortem events in a case of scattered burned remains in Chile. In T. Thompson (Ed.), *The Archaeology of Cremation: Burned Human Remains in Funerary Studies* (pp. 227–42). Oxbow Books. <https://doi.org/10.2307/j.ctvh1drsq.15>
- Ghezelbash, E., Jafari, M.J., Rajabi, N., Mohammadkhani, K. (2016). Kavosh Bastanshenakhti Gourestan Taj Amir Yasouj [Archaeological Excavation at Taj Amir Cemetery, Yasouj]. *Journal of Archaeological Studies*, 8(1), 171–90. <https://doi.org/10.22059/jarcs.2016.59501> (in Persian)
- Ghirshman, R. (1938). *Fouilles de Sialk Près de Kashan 1933, 1934, 1937*. Paris: Librairie Orientaliste Paul Geuthner.
- Ghirshman, R. (1968). *Tchoga Zanbil (Dur-Untash). Volume II: Temenos, Temples, Palais, Tombes*. Paris: Librairie Orientaliste Paul Geuthner.

- Ghirshman, R. (1965). Suse du temps des Sukkalmah. Campagne de fouilles 1963-1964. Rapport préliminaire. *Arts Asiatiques*, 11(2), 3–21. <http://www.jstor.org/stable/43484293>
- Goff, C. (1964). Excavations at Tall-i-Nokhodi, 1962. *Iran*, 2, 41–52. <https://doi.org/10.2307/4299551>
- Hadder, Ch. (2013). Cremation in Norway: regulation, changes and challenges. *Mortality (Abingdon)*, 18(2), 195–213. <https://doi.org/10.1080/13576275.2013.786033>
- Hertz, R. (1960). A contribution to the study of the collective representation of death. In R. Hertz, *Death and the Right Hand* (pp. 27–86). London: Cohen & West.
- Herzfeld, E. (1928). Drei Inschriften aus persischem Gebiet. *Mitteilungen der Altorientalischen Gesellschaft*, 4, 81–6.
- Jafari, M.J. (2014). Gozaresh Fasl Sevom Kavosh Bastanshenakhti da Gourestan Lama, Iran [Report of the Third Season of Archaeological Excavation at Lama Cemetery, Iran]. In M.H. Azizi-Kharanaghi, M. Khanipour, R. Naseri (Eds.), *Proceedings of the International Congress of Young Archaeologists* (pp. 237–56). Tehran: University of Tehran Press. (in Persian)
- Khanipour, M. (2018). Avalin fasl baresi Bastanshenasi Shahrestan Darab [The first season of the archaeological survey of Darab county]. In R. Shirazi (Ed.), *Proceedings of the 17th Annual Symposium on the Iranian Archaeology* (pp. 380–5). Tehran: Research Institute of Cultural Heritage and Tourism. (in Persian)
- Khanipour, M. (2022). Bizdan Pottery: New Evidence from the Neolithic Period at Forg, Southeast Fars, Iran. *Journal of Sistan and Baluchistan Studies*, 3, 1–15. <https://doi.org/10.22034/JSBS.2022.347327.1035>
- Khanipour, M., Kavosh, H., Naseri, R. (2017). The reliefs of Naqš-e Rostam and a reflection on a forgotten relief, Iran. *Historia i Świat*, 6, 55–68. <https://doi.org/10.34739/his.2017.06.04>
- Khanipour, M., Naseri, R., Nouruzi, R. (2017). Stratified Sequence and Relative Chronology at Toll-e Gap Kenareh, Marvdasht plain, Iran. *Iranian Journal of Archaeological Studies*, 7(1), 85–106. <https://doi.org/10.22111/ijas.2017.4310>
- Khanipour, M., Kavosh, H. (2022). Partian and Sasanian Burials at Bavanat River Basin, Fars. *Pazhoheshha-ye Bastan Shenasi Iran*, 33, 181–205. <https://doi.org/10.22084/NB.2021.22504.2202>
- Khanipour, M., Nouroozi, R., Naseri, R., Khosravi, S., Zeraatpishe, M., Emadi, H. (2015). Tabeen Farhanghaye Hezare sevom GH. M Hoze Roud Kur bar asas Kavosh Tol-e Gap Kenareh, Marvdasht [Explaining the 3rd Millennium B.C. Cultures of Kur River Basin Based on the Excavation at Tol-e Gap-e Kenareh, Marvdasht]. *Journal of Archaeological Studies*, 6(2), 39–58. <https://doi.org/10.22059/jarcs.2015.54171>. (in Persian)
- Lange, M., Schutkowski, H., Hummel S., Herrmann, B. (1987). *A bibliography on cremations*. Straßburg: PACT. [tDAR id: 420166].
- McKinley, J. (1994). *The Anglo-Saxon Cemetery at Spong Hill, North Elmham. Part VII: The Cremations*. Dereham: Field Archaeology Division, Norfolk Museums Service.
- McKinley, J. (2014). Cremation in Archaeological Contexts. In C. Smith (Ed.), *Encyclopedia of Global Archaeology* (pp. 1730–8). New York: Springer. https://doi.org/10.1007/978-1-4419-0465-2_153
- Metcalfe, D., Huntingdom, R. (1991). *Celebrations of Death. The Anthropology of Mortuary Ritual*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511803178>
- Mofidi Nasrabadi, B., Mirzaii, A. (2013). Motaleat layenegari dar Tape Dehno (Khuzestan) [Stratigraphy of Deh Nou Archeological Mound (Khuzestan)]. *Journal of Archaeological Studies*, 5(1), 89–108. <https://doi.org/10.22059/jarcs.2013.35946> (in Persian)
- Mohammadifar, Y., Mollazade, K., Noruzi, A.A. (2017). Baresi Savahed Bastanshenakhti Dore Elam Mianeh da Hoze Karoun Olia [Middle Elamite Archaeological Evidence in the Upper Karun Basin]. *Journal of Archaeological Studies*, 8(2), 131–150. <https://doi.org/10.22059/jarcs.2017.61773> (in Persian)
- Negahban, E. (1991). *Excavation at Haft Tepe, Iran*. Philadelphia: University of Pennsylvania.
- Nickerson, J. L. (1983). *Intrasite Variability During the Kaftari Period at Tal-e Malyan (Anshan), Iran*. PhD diss., Ohio State University.

- Oestigaard, T., (2013). Cremations in cosmology and culture. In S. Tarlow, L. Nilsson Stutz (Eds.), *The Oxford Handbook of the Archaeology of Death and Burial* (pp. 497–509). Oxford: Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199569069.013.0027>
- Overlaet, B. (1997). A Report on the 1952 and 1954/55 Soundings at Tall-i taimuran (Fars), Iran. *Iranica Antiqua*, 32, 1–51. <https://doi.org/10.2143/IA.32.0.519260>
- Overlaet, B. (2007). Soundings at Tall-i Kamin (Kur River basin), Fars, Iran. *Iranica Antiqua*, 42, 61–103. <https://doi.org/10.2143/IA.42.0.2017871>
- Overlaet, B., Pincé, P. (2018). The ‘Hill of the Jackal’. The 1951 Excavations at Toll-i Shogha, Iran. *Iranica Antiqua*, 53, 1–39. <https://doi.org/10.2143/IA.53.0.3285476>
- Parsons, B. (2005). *Committed to the cleansing flame : the development of cremation in nineteenth-century England*. Reading: Spire Books.
- Pézard, M. (1914). *Mission à Bender-Bouchir: documents Archéologiques et Épigraphiques*. Paris: Ministère de l'Instruction Publique et des Beaux-Arts.
- Potts, D.T., Roustaei, K. (Eds.) (2006). *The Mamasani Archaeological Project: Stage One. A report on the first two seasons of the ICAR – University of Sydney expedition to the Mamasani District, Fars Province, Iran*. Tehran: Iranian Center for Archaeological Research.
- Potts, D.T. (1999). *The Archaeology of Elam: Formation and Transformation of an Ancient Iranian State*. Cambridge: Cambridge University Press.
- Potts, D.T. (2013). In the shadow of Kurangun: Cultural developments in the highlands between Khuzestan and Anšan. In K. De Graef, J. Tavernier (Eds.), *Susa and Elam. Archaeological, Philological, Historical and Geographical Perspectives. Proceedings of the International Congress held at Ghent University, December 14-17, 2009* (pp. 129–37). Leiden & Boston: Brill. https://doi.org/10.1163/9789004207417_008
- Reiner, E. (1973). The location of Anšan. *Revue d'Assyriologie et d'archéologie Orientale*, 67(1), 57–62. <http://www.jstor.org/stable/23297265>
- Sardari, A.R. (2014). Tape Sanjar: Chashmandazi az yek Esteghrar toulani modat dar Dasht Shoushan [Tape Sanjar: a view of a long-term settlement in the Sush plain]. In M.H. Azizi-Kharanaghi, M. Khanipour, R. Naseri (Eds.), *Proceedings of the International Congress of Young Archaeologists* (pp. 169–86). Tehran: University of Tehran Press. (in Persian)
- Shishegar, A. (2015). *Āramgāh-e do bānuy-e ʿilāmi az hāndān-e šutur nahunte, pesar-e indada (dore-ye ʿilam-e no. marhale-ye 3b, ḥodud-e 585 tā 539 p.m)* [Tomb of the two Elamite princesses: Of the house of King Shutur-Nahunte son of Indada. Neo-Elamite period, phase IIIB (ca. 585–539 B.C.)]. Tehran: Research Institute of Cultural Heritage & Tourism. (in Persian)
- Smits, E., Iregren, E., Drusini, A.G. (Eds.) (1997). *Proceedings of the Symposium Cremation Studies in Archaeology : Amsterdam, 26-27 October 1995*. Saonara: Logos.
- Sołtysiak A., Fazeli Nashli, H. (2016). Evidence of Late Neolithic cremation at Tepe Sialk, Iran. *Iranica Antiqua*, 51, 1–19. <https://doi.org/10.2143/IA.51.0.3117826>
- Sołtysiak, A., Naseri, R., Najafi, M. (2019). Human remains from Deh Dumen, Iran, 2019. *Bioarchaeology of the Near East*, 13, 142–6.
- Stein, A. (1936). An Archaeological Tour in the Ancient Persis. *Iraq*, 3(2), 111–230. <https://doi.org/10.2307/4241592>
- Stronach, D. (2003). The tomb at Arjan and the history of southwestern Iran in the early sixth century BCE, In N.F. Miller, K. Abdi (Eds.), *Yeki bud, yeki nabud: Essays on the Archaeology of Iran in Honor of William M. Sumner* (pp. 249–60). Los Angeles: Cotsen Institute of Archaeology, University of California.
- Stronach, D. (2005). The Arjan Tomb: innovation and acculturation in the last days of Elam. *Iranica Antiqua*, 40, 179–96. <https://doi.org/10.2143/IA.40.0.583207>
- Sumner, W. (1972). *Cultural Development in the Kur River Basin, Iran: an archaeological analysis of settlement patterns*. PhD diss., University of Pennsylvania.

- Sumner, W. (1974). Excavations at Tall-i Malyan, 1971-72. *Iran*, 12, 155–80. <https://doi.org/10.2307/4300508>
- Sumner, W. (1989). Anshan in the Kaftari Phase: Patterns of Settlement and Land Use. In L. de Meyer, E. Haerincx (Eds.), *Archaeologia Iranica et Orientalis: Miscellanea in Honorem Louis Vanden Berghe* (pp. 135–61). Gent: Peeters.
- Ulgum, P.F. (2015). Analysing cremated human remains from the southern Brazilian highlands: Interpreting archaeological evidence of funerary practice at mound and enclosure complexes in the Pelotas River Valley. In T. Thompson (Ed.), *The Archaeology of Cremation: Burned Human Remains in Funerary Studies* (pp. 173–212). Oxford: Oxbow Books. <https://doi.org/10.2307/j.ctvh1drs.13>
- Vanden Berghe, L. (1986). Données nouvelles concernant le relief rupestre élamite de Kurangun. In L. De Meyer, H. Gasche, F. Vallat (Eds.), *Fragmenta historiae Elamicae: Mélanges offerts à M.J. Steve* (pp. 157–73). Paris: Recherches sur les Civilisations.
- Valipour, H.R., Mostafapour, E., Davoodi, H., Zifar, H., Ghanbari, B., & Karimi, H. (2011). Gozaresh Noghadmati Fasle aval Kavosh dar Mohavete Kalantar 4, Hoze sad Gotvand [Preliminary Report on the First Season Excavations at Kalantar 4 Site, Gotvand Dam Basin, Khuzestan]. *Payām-e Bāstānshenās*, 7(14), 49–76. (in Persian)
- Vitebsky, P. (1993). *Dialogues with the Dead – The Discussion of Mortality among the Sora of Eastern India*. Cambridge: Cambridge University Press.
- Yeganeh, S.J. (2021). *Fasl-e avval-e Kavosh dar mohavateye Hirbodan [Excavation at Hirbodan]*. Tehran: ICAR archive (unpublished) (in Persian)
- Yeganeh, S.J. (in press). Absolute dating of operation DG in Hirbodan site, Darab, Iran.

To cite this article: Yeganeh, S.J. (2023). Cremation in Elamite period (Sukkalmah): Hirbodan site. *Historia i Świat*, 12, 31–46. <https://doi.org/10.34739/his.2023.12.02>



© 2023 The Author(s). This open access article is distributed under a Creative Commons Attribution (CC BY-ND) 4.0 license.