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A study on metal objects of the Iron Age in Masjed-e-Kabud located in Tabriz

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Abstract

Excavation of the archaeological site of Masjed-e-Kabud (blue mosque) is important regarding time. It is related to a time period which is more ambiguous than other time periods in the whole archaeological period of Iran and the Middle East. The present paper attempts to compare the metal objects found in the archaeological site of Masjed-e-Kabud with those of regions such as Hasanlu, Dinkhah Tepe, Lorestan (first millennium), Qaleh Kuti I of Deylaman, Talish, and Jamshid abad in order to determine their cultural relations. Moreover, understanding the method of making metal objects dating back to the late second-early first millennium could clarify the history and civilization of this period. The research follows library studies and it has acquired information on the archaeological sites of Masjed-e-Kabud and other contemporary sites. The metal objects found during five periods of Masjed-e-Kabud excavation have also been studied, categorized, and compared with the metal objects found in the present sites.

Key words: Masjed-e-Kabud of Tabriz, Iran archaeology, Iron Age, burial practices, Tomb

Introduction

Excavation of the archaeological site of Masjed-e-Kabud is important from several aspects. First, it is located where there I no valid evidence about its pre-Islamic existence. Second, regarding time, it is related to a time period that is more ambiguous than other time periods in the archeological period of Iran and the Middle East(Malek Shahmirzadi, S., 1932).

Definitely, the most precious and important objects identified in this site are the tombs(Pour Faraj, A., 1952). All of the tombs belong to the Iron Age (Petruff, M., 1932). The burial practices of the Iron Age were influenced by people's religious beliefs among which the belief in life after death was one of the important ones (Azadegan, J., 1994). Therefore, through specific practices, they buried food and other things needed for everyday life with the dead one in order to provide him the necessities for the life after death (Talaei, H., 1952). As a result, many different objects were discovered from the tombs of the Iron Age and they shared common characteristics with one another. The squatting position of corpse reminded the fetus in the womb; in fact, it was a symbol of the birth and death worlds as two significant phenomena occurring in human's lifetime(Tavakoli Moqadam, H., 1992). Moreover, the geographical direction of tomb was always considered by the pre-historic societies because the sunrise and sunset indicates the east and the west(Majidzadeh, Y., 1938).

The skeletons discovered from the tombs around Masjed-e-Kabud were buried in a squatting position and objects such as the pottery, bones of animals such as sheep, metal objects, and decorative objects were also buried with them regarding the burial practices of the Iron Age(Tabrizi, M.,1940).

Metallurgy in the old Persia

The broad plateau of Iran was located among many mountains where there were many copper mines(Khub Nazar, H., 1932). Moreover, the population was concentrated in the western part of the plateau. The oldest cultural objects of Iran were found in this part of the plateau. Though the eastern lands of Iran were not well recognized archaeologically, there were few objects that indicated one of the oldest centers of copper smelting was located in Kerman in a region called Tal-I-Iblis(Haeri, Y., 1932).

Today, the undeniable evidence found from different areas of Iran, especially Dasht-e-Qazvin in Tepe Qabrestan clarified that the blacksmiths living in Iran were the pioneers of copper smelting discovery in the ancient world(Khamachi, B., 1992). This issue probably resulted from the availability of many copper mines in Iran. Whether in Tepe Qabrestan or Tal-I-Iblis or anywhere else where there was evidence of copper smelting, certainly, there were copper mines in the surroundings(Belli, O, 2011).

Moreover, the archaeological evidence proved the existence of one of the oldest centers of copper smelting in a region located in the Asia Minor Peninsula called Chayanu Tepe Si. The oldest discovered copper piece was an oval pendant which was found in Shanidar cave located in Zagros Mountains of Iraq(Caldwell, Y.R, 1973). The inhabitants of the central lands of Iran (close to the desert of Iran) were the first ones who discovered technique of smelting metals. In fact, the central plateau of Iran has been the oldest and richest cultural area of Iran(Vahdati, A., 1952).

Tepe-Hesar and Tepe Qabrestan are the other cultural centers of Iran and one of the oldest copper samples shaped by humans has been discovered from Tepe Ali Kosh located in Deh Luran(Dibaj, E., 1932).

Copper smelting in Iran

Tal-I-Iblis in the mountainous region of Dare-Bardsir located in Kerman was one of the most important cultural regions of the plateau of Iran whose inhabitants were the pioneers of copper smelting discovery in the Middle East. The evidence related to the copper smelting in Tal-I-Iblis consists of copper objects, pieces of metal ores, broken fragments of metal smelting furnaces, and a small furnace for smelting copper related to the Zero Dynasty(Asgaraf, A. 1992). The presence of copper ore in this area and also the discovered metal smelting furnace during excavation of Tal-I-Iblis proved the presence of copper smelting industry in this area. In fact, the cultures of Copper and Stone Age of Iran which averagely included the middle 5^{th} millennium B.C. - the late 1111 millennium B.C. were common in the many areas of the plateau of Iran(Ehsani, M., 1952).

The real metallurgy approximately began from 1111B.C. which was simultaneous with the historical times of the Near East. Discovering many copper artifacts such as weapons and farm tools in the ruins of the famous city of Ur located in the south of Iraq indicated that skillful blacksmiths lived in this area and they knew how to make alleys of copper and tint from the very beginning(Tohidi, N., 1932).

Use of copper in Iran

The archaeological studies in the plateau of Iran indicate the humans' using of copper via extracting and smelting it since the late 5^{th} millennium B.C. The excavations done in Tepe Qabrestan in the 9^{th} layer shows the existence of copper production and smelting(Moory , P,R.S., 1933). There are many small copper resources in the hills of the third age of geology in the west of Tehran, Karaj, Saveh, and the south of Qom. Some of the resources are mined in a small scale. Via categorization, the ore containing metal gets flexible and copper reaches the minimum degree of 70 percent(GENITO, B., 1933).

The Copper Age refers to the IV and V layers of Tepe Sialk III period and Tepe Hesar IB period. During the excavation, the first samples of copper smelting furnaces and a number of clay

molds have been discovered and they indicate the use of molds for shaping the smelted metals. Moreover, in the IV layer of Sialk II there have been residues of smelting and molding copper(Maxwell – Hyslop, K,P., 1931).

Use of iron in Iran

The Iron Age

In the archaeology of Iran, the Iron Age is one of the most ambiguous ages. Archeologists determine the chronological range of this Age from the second half of the 2nd millennium BC.(around 3111BC.) up to the formation of the first kingdom of Iran (around 550 BC.). The Iron Age is classified into three periods of the old period (1000-800 BC.), the new period (800-550 BC.), and the IV Iron period that includes the Achaemenid and Parthian period(Pigott, V.C. and Howard, s.m. and Epstein, s.m., 1933).

Regarding the study of cultural evolutions of the Iranian plateau, the origins of Iranian tribes, and the unique culture of Iran, the Iron Age is very significant for the archaeological research studies. In fact, the Iron Age is one of the most evolutionary ages of the history and civilization of Iran and the surrounding countries(PLEINER .R. 1999).

The discovery of Iron caused the greatest industrial revolution in the history of humanity; however, the use of the iron tools has a very slow process. The Iron Age was the last age of the classical classification that includes the Copper Age, the Bronze Age, and the Iron Age. Just like the previous ages, the Iron Age resulted from the development of the technique of extracting mines in the east(Young.T.C. 1973).

In fact, the discovery of iron which is a metal whose resistance is more than copper and bronze resulted in the changes of culture and civilization and the emergence of an 1111 year old civilization which has experienced many evolutions up to the present time.

For the first time, the iron objects appeared among the archaeological objects at the early 3rd millennium BC. One of the objects one an ax discovered from Ur archaeological cemetery in Mesopotamia and also objects found in Pyramid of Cheops located in Egypt(Stornach, D., 1999).

The use of iron for making decorative objects shows that iron had been very valuable. Moreover, finding 91 blades of sickles reveals the important role of iron tools in agriculture and economy(Herzfeld, e,. 2000).

The wide use of iron and architectures such as defensive castles and houses of masters reflect the social changes. It should be mentioned that there are deep structural changes between the societies of Iron Age I and the societies of the Iron Ages II and III(Genito, b. 2001).

Probably, the Iron Age I indicates a period of technical experiences. During this period, the new comers of the west of Iran were in contact with the indigenous people who had previously developed the metallurgy in the rich mines of Zagros Mountains, and then the iron industry emerged in the Iron Age II. Those who were skillful to work in bronze began to produce iron objects as well. In fact, there is no evidence to show that this technology had entered Iran in a developed form; however, one cannot ignore the interactions between the cultures of the north-west of Iran and states such as Ashur and Orator(Maxwell – Hyslop, K.R., 1971).

The discovered objects from the royal cemetery of Ur revealed the importance of metals and other imported luxuries such as lazulite in the economy of upper social classes of Sumerian people. Therefore, during the 3rd millennium, the tin-bronze was merely used in the regions of the south-west Asia especially Anatolia that helped Akkadian and Sumerian peoples(Edvards,M.R., 1987).

A speculative period around Masjed-e-Kabud was done by Javad Qandgar- the manager of Azerbaijan museum- in 1992. However, the purpose was to recognize the elements of Masjed-e-Kabud, moreover, the objects related to the cemetery of the 1st millennium BC was not recognized,

as a result, the speculation could not be considered as the background of studies in the archaeological site of Masjed-e-Kabud.

The building of Masjed-e-Kabud belongs to Timurid dynasty and the surrounding of it at a lower depth consists of the things related to the Iron Age cemetery. In fact, there are two different phenomena related to two different times(Cleuziou, S. 1958).

All of the tombs belong to the Iron Age II. During this period, the dead people were not buried under the floors of the homes. Beliefs in spirit, belief in life after death, leaving gifts in the tombs, and the squatted position of the skeleton in the tomb were the main indices of the burial practice at the Iron Age. The indices had a ritual aspect related to the burial practice. The mentioned burial practices continued up to the 3rd millennium BC (the beginning of Bronze Age in Iran). In this period, the burial practice of burying the dead under the floors of homes was abandoned and the dead ones were buried in cemeteries located out of the living places(Talaei, H., 1954).

The present paper has attempted to determine the cultural relation between the metal objects of the archaeological site of Masjed-e-Kabud and regions such as Hasanlu, Dinkhah Tepe, Lorestan (1st millennium), Qaleh Kuti I of Deylaman, Talish, and Jamshidabad. Moreover, it studies the techniques used to make the metal objects during the late 2nd millennium and the early 1st millennium in order to clarify the history and civilization of this period. Excavation of the archaeological site of Masjed-e-Kabud regarding time is very important, because Masjed-e-Kabud belongs to a period that is very ambiguous for many reasons related to archaeological periods of Iran and the Middle East. Therefore, the aforementioned comparison and studies help to clarify the history and civilization of the Iron Age.

Methodology

The research follows library methods and it has also obtained information on the archaeological sites of Masjed-e-Kabud and other contemporary sites of it. In the next step, the metal objects found during five excavation periods of Masjed-e-Kabud have been studied and categorized. Finally, they have been compared with the metal objects found in the contemporary sites.

Findings

In the majority of tombs located in the surrounding of Masjed-e-Kabud related to the Iron Age, tomb-gifts such as the buff pottery, gray pottery, iron objects, bronze objects, bone and stone beads, and pastern-bone of sheep were found. The bronze objects were found in many of the tombs. The objects were located beside the skeletons. There were golden objects among the found metal objects, however, no silver objects were found. Moreover, there were few iron objects in the tombs. Generally, the metal objects found in the site of Masjed-e-Kabud consisted of jewelry, armament, and tools. According to the burial practice of the Iron Age in Iran, the dead ones were buried in a position that their faces faced the east.

The following objects were found in the archaeological site of Masjed-e-Kabud:

Number of needles: 37, number of awls: 1, number of daggers: 1, number of arrowheads: 37, number of bayonets: 3, number of swords:3, number of barrettes and brooches: 33, number of earrings:33, number of rings: 31, number of bracelets:11 number of beads: 99, and number of buttons: 1.

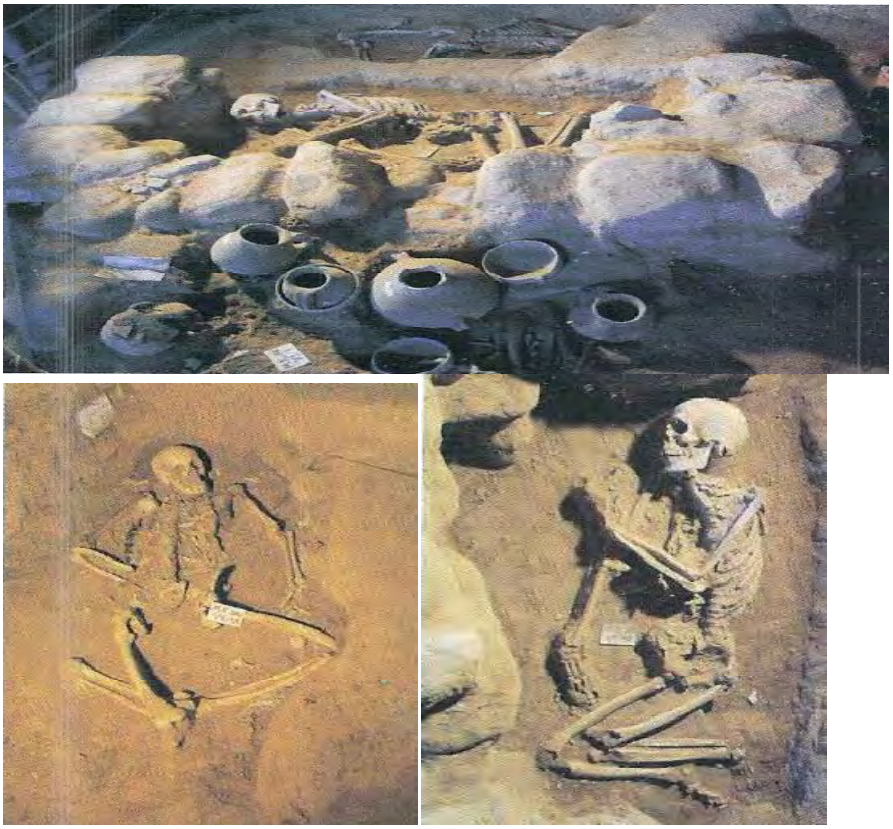

Figure 1: Cemetery of the archaeological site of Masjed-e-Kabud at the Iron Age(Khalatbari, M., 1952)

Figure 2: A hook found during excavation of Masjed-e-Kabud (Khalatbari, M. 1952)

Figure 3: A sword found during the excavation of Masjed-e-Kabud of Tabriz(Khalatbari, M. 1952)

Figure 4: a bronze rod found during the excavation of Masjed-e-Kabud of Tabriz(Khalatbari, M. 1952)

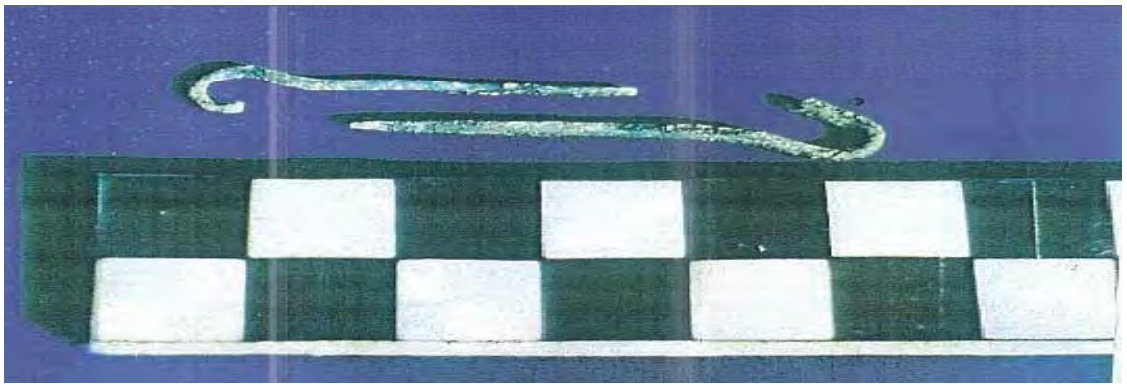

Figure 5: bronze barrettes found during the excavations of Masjed-e-Kabud of Tabriz(Khalatbari, M. 1952)

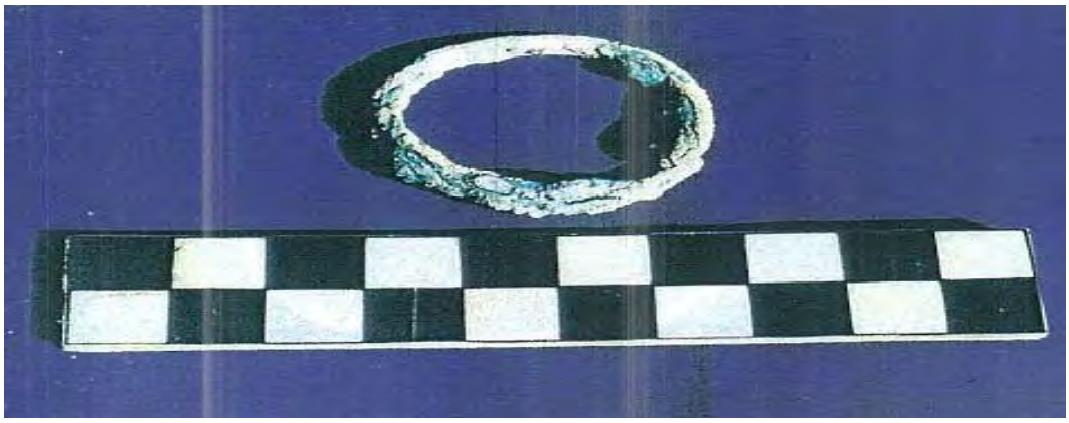

Figure 6: decorative objects found in Masjed-e-Kabud of Tabriz(Khalatbari, M. 1952)

Bronze arrowheads were found in the site of Masjed-e-Kabud. The found samples from Masjed-e-Kabud were comparable with the found arrowheads of the third and fourth groups of Lorestan. The arrowheads of the third group had a long and wide shaft, a short blade, and a round point. Bronze needles were found in Lorestan from different regions such as Baikal, Shuraba, and Bordbal. The needles related to the Iron Age found in Poshtkuh were similar to the needles of the Iron Age found in Masjed-e-Kabud.

Figure 7: Buttons found during the excavation of Masjed-e-Kabud of Tabriz(Khalatbari, M. 1952)

Figure 8: Bronze needles of Lorestan(Khalatbari, M., 1952)

The earrings of Kordlor Tepe were comparable with the earrings of Masjed-e-Kabud. Moreover, the simple and spiral rings and the bronze barrettes and brooches found in both sites were comparable with one another. The barrettes and brooches had a spherical point with some decorations on them.

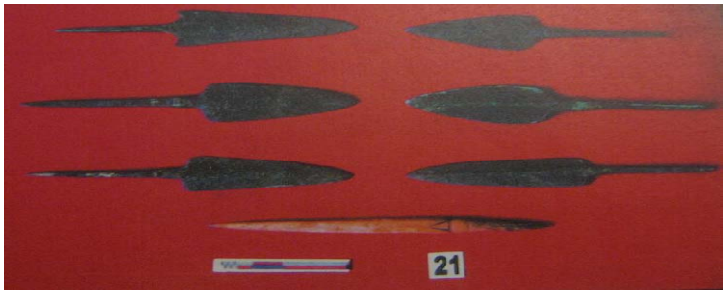

Figure 9: The bronze arrowheads found in Talish(Egami, N. and S.Fukai, S.Masuda., 1931)

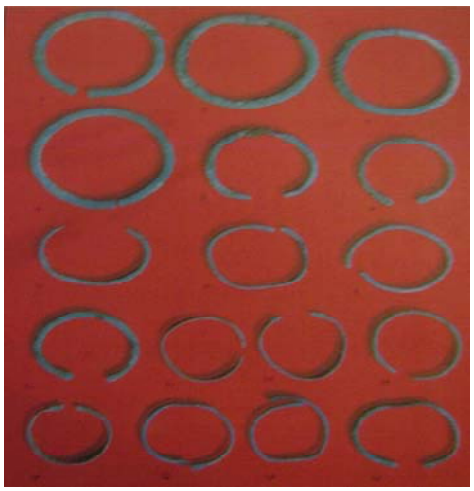

Figure 10: bronze bracelets and rings found in Talish(Egami, N. and S.Fukai, S.Masuda., 1931)

Figure 11: barrettes and needles found in Talish(Egami, N. and S.Fukai, S.Masuda., 1931)

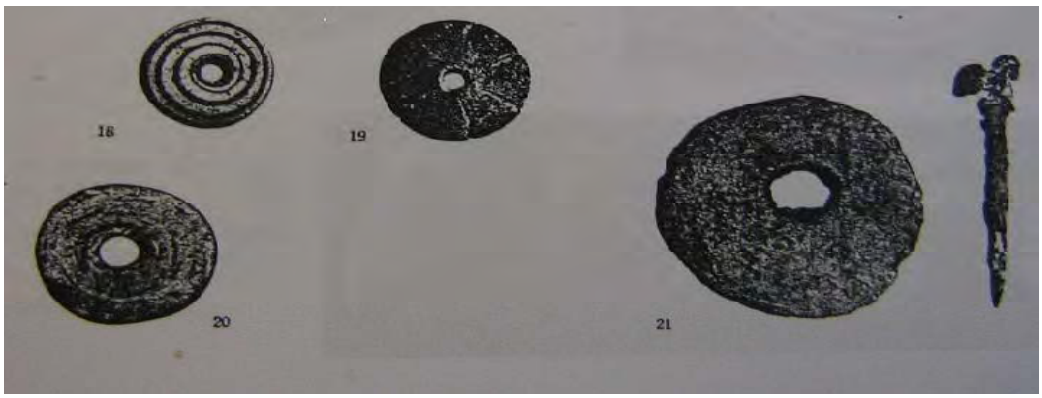

Figure 12: barrettes and buttons found in Deylaman (Egami, N. and S.Fukai, S.Masuda., 1931)

Results and Discussion

During the excavations, 17 bronze needles were found and all of them had a hole. They had a round part and they were mostly found in women's tombs. Three of the needles were found in women's tombs, while only 1 needle belonged to a man's tomb. There were also bronze needles in Tepe Sagz Abad and they belonged to the 9th BC. The needles were long and thin with a hole at the end of them. In fact, the needles found in the mentioned site were comparable with the bronze needles found in Dinkhah Tepe II and III, and also Iron Age I and II.

Few daggers were found from Masjed-Kabud during the excavations done in 2000, 2001, 2002, and 2003. The daggers were in men's tombs, while only one dagger was discovered from a woman's tomb, and no daggers were discovered from children's tombs.

The bronze daggers of Iran had an integrated blade and handle. Maksud-Hislop research studies show that in some cases, they were molded separately, and then they were attached to each other.

Therefore, the chemical analysis done on the blade and handle showed different compositions. However, the technical details of this technique are not discovered. The similarities between two sites of Masjed-e-Kabud and Dinkhah Tepe were more than the similarities between two sites of Hasanlu and Masjed-e-Kabud. The similarities indicate the cultural relation between the two mentioned sites located in the north-west of Iran at the Iron Age I and II. The metal jewelry was simple or decorated. The twisted wire, hollow rods, bronze rods, springs, and simple chains were used to make the simple jewelry. The engraving and spots were used to decorate the metal plates. The jewelers made the shapes of animals, plants, geometric designs, and legendary figures on the jewelry. The barrettes and brooches were the most important objects found in the tombs located in the site of Masjed-e-Kabud related to the Iron Age, they were mostly close to the heads and chests of the dead. They had simple rods which were decorated. The barrettes had a curve to tie the hair, moreover, the brooches were simple or decorated. The decorations included geometric lines, annular grooves, mythical figures, and heads of animals such as rams and antelopes. The geometric figures were knobbed or conical and studies showed that the frequency of them increased at the late 2nd millennium BC. However, the majority of them belonged to the early 1st BC. The copper and metal barrettes and brooches related to the 2nd period of Iron Age were also found in Lorestan. The barrettes and brooches of the west of Iran were mostly used for tightening clothes and fastening hair. Moreover, the molded bracelets in the form of open-rings and closed-rings were found. The open-ring samples were decorated by figures of different animals at both sides of the ring, while the closed- ring samples were decorated by accentuated figures of animals.

The bangles found in Masjed-e-Kabud were comparable with the similar samples found in the first and second floors of Hasanlu, Dinkhah Tepe II and III, and in Poshtkuh and Bordbal located in Lorestan related to the Iron Age I and II. Moreover, the bronze wire bangles found in Masjed-e-Kabud were comparable with the bronze wire bangles found in Qaleh Kuti I. The bronze rings of the Iron Age found in Masjed-e-Kabud were single-ringed or spiral. Their diameter approximately equaled 1.5cm. The rings found in Masjed-e-Kabud were comparable with the samples found in Hasanlu IV, Dinkhah Tepe II and III, Lorestan, Kordlor Tepe, and Qaleh Kuti I.

During the excavations related to the site of Masjed-e-Kabud, the bronze beads and buttons at various sizes were found. Some of the beads had a diameter equal to 1 cm and the buttons had a diameter equal to 3 cm. the beads were found in tombs of men, women, and children. The bronze beads of Masjed-e-Kabud were comparable with the samples found in Hasanlu, and Dinkhah Tepe II and III. The headbands found in the tombs of Masjed-e-Kabud were comparable with the samples found in Hasanlu IV and Dinkhah Tepe III.

Few armaments were found in the site of Masjed-e-Kabud and there was not a variety of weapons. This issue indicated the dominance of peace in the region at least for a short period of time. Moreover, it indicated that the weapons were less used for hunting.

Conclusion

Chronologically, there were many tombs at different layers on each other showing the long history of the site used for burial practices. Moreover, the objects found in the tombs were culturally related to the Iron Age I and Iron Age II. Therefore, it could be concluded that in the cemetery of Masjed-e-Kabud there was a cultural continuity between two mentioned ages and its time duration referred to the early Iron Age II. However, the site was abandoned before the development of buff pottery of the Iron Age.

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