TYPLOLOGY OF BRONZE AGE ORNAMENTS IN THE NORTHEASTERN AND SOUTHEASTERN AREAS OF IRAN

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ABSTRACT

This paper presents the types of Bronze Age ornaments identified in the prominent sites of the northeastern and southeastern cultural areas of Iran. This study was put forth to scrutinize the main locations in these cultural areas, namely, Toorang Hill, Shah Hill, Narges Hill, Hessar Hill, the Burnt City, Shahdad, Molla Yahya Hill, and Bampour Hill (Figure 1). Based on the investigation, the following types of jewelry were identified in all of the abovementioned areas in summary: various forms of beads, bead necklaces, bead and metal sheet bracelets, earrings, rings, metal and stone pendants with diverse shapes, coronets with engraved ornamentations, hairpins, shackles, and snoutishes. Each of these types can be classified into different categories.

INTRODUCTION

Based on the archaeological excavations, it has been decaled that in Iran, the art of making ornaments has its root in Iranian ancient civilizations in old days. So far, assorted antiquities belonging to different periods have been dug up in the realms of Archaeology. In the Bronze Age, the use of semiprecious stones such as agate and lapis lazuli, and metals such as bronze, gold, and silver was prevalent. On the other hand, the impact of the prevailing culture on this art is also palpable. In early civilizations, the ornaments not only were utilized for decorative purposes, but also were deemed as something ritual by the people of different societies. The art of making ornaments has had a longstanding bond with metalwork as well. The vast territory of Iran contains numerous metal mines, and this provides a suitable bed for metals (Figure 2). The excavations and exploration done in Yahya Hill, Eblis Hill, Ghabrestan Hill, and other prehistoric sites in Iranian Plateau indicated that owing to being near the metallic deposits especially copper, people in these regions have been familiar with making metallic objects, especially copper ones and with the methods of using them to meet their daily requirements since seven thousand years ago. Evidently, human beings can only figure out the usefulness of metals if they live in a land where metals and their minerals exist (Yavari, 2001: 7). The Bronze Age in Iranian Plateau is an era of profound and wide-ranging interactions and communications. In this era, abundant communication paths all over the plateau, passing through the edges of the deserts, link different parts together. People were on the move in all directions, from North to South and East to West. The purpose of some travels was to transport the imported materials, such as lapis lazuli and agate from the eastern extremity of the plateau to the center of big cities located in the bank of the rivers in flat lands such as the Burnt City, Shahdad, and the southwestern areas. People traveled inside the plateau as well in order to transport raw materials and manufactured products, and to pass on thoughts and cultures across the plateau (Pittman, 2004: 9). Generally speaking, due to these established conditions in this era, the fabrication of ornaments had particular distinguishing features, in comparison with all previous eras. The wide variety of raw materials used and the diversity in the type and form of the ornaments are regarded as their most conspicuous features in the Bronze Age.

Various types of ornaments in the northeastern and southeastern cultural areas of Iran

Bountiful objects have been discovered from the explored parts of Bronze Age sites in the northeastern parts of Iran. Bronze Age, which is characterized by the appearance of gray clay, indicates the expansive unity in the Plains of Gorgan. It is so broad that it extends to Hessar Hill in Damghan as well. Some of the objects obtained from the graves of people lived in that culture include beads made of copper, gold, silver, and agate, and a clay statuette of a female goddess found in Toorang Hill. The only clothing the goddess had was six necklaces hanging up from the neck and six bracelets in each of her wrists. In the graves of bodies buried on Toorang Hill in prehistoric and early Bronze Age, in addition to the aforementioned statuettes, several thick stone pendants in the shape of humans, which bear a lot of similarity to the contemporary modern
sculptures, have been found as well. Moreover, silver pendants in the form of a crescent moon or a small bird were also among the excavated objects. In Hessar Hill, which is deemed as one of the most outstanding sites in this cultural area in the late third and fourth millennia, copious decorative objects and antiquities have been discovered both in the settlements and cemeteries, which is indicative of the flourishing community of Hessar (Gheibi, 2012: 104-103). The silver and golden objects excavated from Hessar Hill were made since period II. By and large, these objects did not exist in period I, and in period II, such objects were very rare and mostly of the ornament type. Silver objects are as follows: ((Paired helix)) pendants, a pair of earrings, a ring, a long bead, and a bizarre pendant in the form of a ladle. Except for the last one, the copper samples have been found for all the other ornaments. A handful of golden objects have been found only in the form of simple ornaments (Schmidt, 2012: 172). Generally, in terms of typology, Bronze Age ornaments discovered in Hessar Hill bears striking resemblance to the samples dug up from Toorang Hill and other archaeological sites in the northeastern areas including Shah Hill, Narges Hill, and Yariam Hill. Some objects with decorative functions have also been excavated from other prominent sites in this cultural area, like Narges Hill and Shah Hill. All of these will be elaborated later in this paper.

Evidence obtained from archaeological excavations in the eastern part of Iran supports the fact that from the late fourth millennium to the mid-second millennium B.C., in the east of Iran, there was a close and strong cultural relationship among the residential areas (an area of approximately 1.5 million square kilometers). The aforesaid areas had no reliance or had minimal dependence on outsiders for providing the raw materials or agricultural products, and they produced all their necessities on their own. Numerous makings in their cultural infrastructure, such as architectural techniques, house designs, the drawings and shapes of pottery, sculpture, seals stone, industry, and funerals, had their own distinguishing characteristics. The deep cultural assimilation in this wide region of the east of Iran can most likely be attributed to the probable strong cultural relationship via an extensive system of economic transactions (Mjydzadh, 1989: 157). In addition, in the archaeological excavations in the eastern parts of Iran, a large number of stone artifacts have been unearthed. Such objects had been obtained in Sumerian sites before. In the excavations done in Yahya Hill, Shahdad, the Burnt City, and Jiroft, abundant soapstone, marble, diorite, lapis lazuli, agate, turquoise, and many other metals have been discovered. Based on the obtained evidence, it was proved that these items were exchanged in a two-way trade between the east and west of Iran in the third and fourth millennia B.C. Soapstone dishes found in Yahya Hill from periods IVB and IVC, have also been unearthed from Susa C, Shahdad, Bampour IV, the Burnt City, Mesopotamia, and the innermost layers of Mohenjodaro. In the Burnt City, numerous pieces of stone artifacts such as limestone and lapis lazuli have also been discovered. Lapis lazuli was extracted from Sarsang Badakhshan mines and imported to these areas (Tosi, 1989, p. 24).

Due to the numerous pieces of lapis lazuli excavated from the eastern parts of Iran and the ancient hills of Mesopotamia, owing to the fact that the lapis lazuli mines
could not be identified near any of these locations, and since the mine of this stone are located in Badakhshan in Afghanistan, it can be concluded that the lapis lazuli found in these places might have been imported to these areas via trans-regional trades. As mentioned before, lapis lazuli has been found in most of the major settlements of the third and fourth millennia B.C. in Iran. Beads, which were made of lapis lazuli, and flint drills, on which the powders of lapis lazuli were seen, have been excavated from Susa I and its Jemdet Nasr period, VC Gyan Hill, IVC-IVB Yahya Hill, III and IV1 Silk Hill, III-IIIA Hessar Hill, Milian Mound in the middle Banesh period, II and III Burnt City, and Hessar Hill. In the excavations of the Burnt City, countless incomplete lapis lazuli pieces of artifacts have been found in various parts of this city. Small fragments of lapis lazuli scattered all over the city, and it can be claimed that about 90% of the remains of lapis lazuli in the Burnt City were the debris of larger pieces (Sajjadi, 1995, p. 235). In Shahdad excavations, in addition to marble dishes and numerous pieces of soapstone, lapis lazuli has been detected in large quantities. It seems that in Iran, the greatest amount of lapis lazuli has been found in Shahdad (Kabuli, 1986, 56). There were dozens of necklaces and bracelets made of lapis lazuli. These strings either were just made of lapis lazuli, or were in combination with other stones such as beads made of agate, Gypsum, or shale stone, or with other metals such as gold, silver, lead, bronze, and copper (ibid, 59). In addition to the ornaments made of semiprecious stones, there were ornaments made of a variety of metals including copper, bronze, lead, gold, and silver. On the whole, the ornaments found in both the northeastern and southeastern parts of Iran encompass a variety of beads, necklaces, bracelet, earrings, rings, pendant necklace, coronets, hairpins, shackles, and snoutish, each of which will be expounded here.

Beads

Beads found in the northeastern parts have been discovered in most of the important Bronze Age sites in this cultural area. Mainly, the beads of Hessar Hill have been detected in the cemetery, inside the grave, around the bones, and usually around the corpse’s neck or wrist, and in rare cases, around ankles (Figures 3 and 4). The beads unearthed from Hessar are the same in periods I and II. Therefore, Hessar’s beads of period I are, in fact, representative of Hessar’s beads of period IV. In Hessar IIB, the personal ornaments were less. In Hessar II, in addition to the typical materials, some new materials were also utilized used for making beads including crystal, lapis lazuli, turquoise, silver, and gold (Schmidt, 2012: 174). The conspicuous feature of the beads of Hessar III is the variety of their shapes and the meticulous selection of attractive raw materials, which doubles its decorative effect. The glittery white agate and amber are the significant new raw materials. Ivory and lead have not been seen in the layers prior to Hessar III. Although crockery was sometimes seen in Hessar II, they were very abundant in Hessar III. The mixed beads can only be found in Hessar IIIIC. In spite of being rare, the agate beads adorned with white designs are deemed as the features of Hessar III’s ornaments; it seems that these designs were created via engravings, and then, painted with white pigments. The beads dug up from Narges Hill were mostly made of stone and metal. The stone beads were made of lapis lazuli and the metal beads were made of bronze with simple shapes (Abbas, 2011: 108). In totality, in Shah Hill, 310 beads made of different materials have been found, and 248 of these beads have been excavated from 15 graves and around human skeletons. 24, 60, 60, and 83 necklace beads have been unearthed from four of these graves respectively. Being made of baked clay, 37 beads with gray, black, or red colors have been detected. Approximately 31 hollow beads were made of bird bones with a length of 2cm; however, at least 28 of them were broken (Arne, 1945).

The decorative beads discovered in the southeastern parts of Iran have been found in the major sites of this cultural area such as the Burnt City, Shahdad, Yahya Hill, and Bampour. The decorative beads of the Burnt City have been dug up from both the residential areas and the cemeteries; however, the number of beads discovered in the cemeteries exceeds those found in the residential areas. The beads of the Burnt City have been identified in all four periods; nonetheless, in periods II and III, the number of them noticeably boosted, which has a direct correlation with the increase in regional and transregional exchanges. In this settlement, a wide variety of decorative beads, typically made of metal and stone, have been excavated (Sajjadi, 2009). In a classification, the beads of the Burnt City have been categorized into 11 different groups as follows: annular, cylindrical, conical, oval, spherical, cylindrical oval, bi-conical, triangular with flat cross section, conical with flat cross section, Rhombic with lentiform shapes. The distribution of these beads is different in four periods of the Burnt City (Sajjadi, 2007: 301). Among the objects discovered in the excavations in Shahdad, a considerable number of ornamental objects such as beads, necklace and bracelet beads made of agate, lapis lazuli, metal, and gypsum in various shapes and sizes have been identified. Obviously, some of these objects were engraved dexterously and artistically. In some graves, beads, necklaces, or bracelets made of freshwater shells, have been found. These shells had lived in the areas replete with water around Shahdad, which indicates the existence of a lot of water in Shahdad areas in prehistoric periods. Furthermore, in some graves, four cylindrical beads, and in some other tombs, large quantities of metal beads on which mythological and decorative designs were carved have been discovered. These discoveries have been very helpful for the studies investigating the ancient culture of Shahdad (Hakemi, 2006: 147). The metal beads dug up in Shahdad are made of lead, bronze, a mixture of lead and silver, silver, and gold. Except for a few instances, their shapes are quite similar to the stone beads, meaning that local bead makers utilized the typical forms of that time. Of course, several examples of innovative beads attributed to ancient Khabis jewelers have been found. These novel beads are deemed to be artistically very significant. The metal beads were not usually mixed with agate and lapis. Some rare examples are the carrion (Solomon) agate beads with golden cap or golden necklace mixed with small stone beads (ibid., 150). Very few beads, which were made of
clay and shells in the spherical shapes as their typical form, have been discovered in Bampour.

**Necklaces**

In the cultural area of the northeastern parts, the necklaces were mainly made of beads and had simple design. This kind of necklaces has been found in different quantities in various areas under investigation. Most of these necklaces have been dug up from the excavation of Hessar Hill in layers II and III (Figure 5). The beads were mainly made of semiprecious stones such as agate, lapis lazuli, limestone, gypsum, rock crystal, marble, and crockery, as well as metals like gold and silver (Shmidt, 1937). The necklaces found in Hessar Hill are largely in a simple ruff-like shape. The necklaces found in Shah Hill were made of bird bones, in a hollow cylindrical shape with two conical ends. Some of the necklace beads in this part were made of stones such as white marble, gypsum, or alabaster stone, in a disc or drum form (Arne, 1945). In general, the shape of the necklaces in Shah Hill is simple and ruff-like. The necklace beads in Toorang Hill are also in disk, drum, and cube forms with two conical ends, and were mainly made of stones like lapis lazuli, carnelian, and silver (Deshayes, 1969).

The necklaces discovered in the southeastern cultural area have been found in major sites of this part such as the Burnt City and Shahdad. The necklaces of the Burnt City have mostly been detected in the cemetery and were made of a wide variety of stone (Figure 6). These necklaces have mainly been obtained from all four periods of this area. The necklaces of the Burnt City were made of semiprecious stones such as cairon (Solomon) agate, Yemen agate, limestone, gray stone, white stone, and lapis lazuli. Furthermore, some of the necklace beads were gilded; however, the number of them is very few. Mainly, eleven shapes of these necklace beads, which were mentioned before, have been identified. In Shahdad site, a considerable number of necklace beads have been detected. They were found in Shahdad’s cemetery, and usually were made of agate stones, lapis lazuli, gypsum, and freshwater shells. Besides, some lead, bronze, silver, and gold beads were mixed with them as well (Hakemi, 2006: 147). Regarding the shapes, the beads of Shahdad’s necklaces are comparable to the beads found in the southeastern areas of Iran, particularly, the Burnt City.

**Bracelets**

The bracelets found in both northeastern and southeastern cultural areas were in both metal and bead forms. The metal bracelets of the northeastern cultural area could mainly be seen in Hessar Hill and were in the wire-like form. The bracelets found in Narges Hill were made of wires or bronze rods. These wires and rods had been bent via heating, and at the end of them, the traces of hammering could be seen. Some samples had simple geometric designs (Abbasi, 2011: 109). In Shah Hill, in its oldest prehistoric layer, about seven bracelets or armlets has been found, and in its Period II, only one piece with broken and incomplete pieces has been discovered (Arne, 1945).

The bracelets discovered in the southeastern cultural areas of the Burnt City and Shahdad were in both form of metal wires and beads. These bracelets have mostly been found in the cemeteries of both areas. The bracelets of the Burnt City were made of agate, lapis, Solomon Whitestone, Whitestone, limestone, and turquoise beads. The number of beads in various bracelets was different. In some cases, they were made of two or three beads, and in some cases, more than 15 beads were utilized. The bracelets found in Shahdad area were in a wire-like form, and made of metals such as copper and silver. The bead bracelets of this part were made of metal, mainly copper and sometimes silver. The stone beads of Shahdad were also made of lapis lazuli, Solomon agate, and Whitestone.

**Earrings**

In the northeastern and southeastern cultural areas, this ornament could merely be detected in Hessar Hill and Shahdad. The earrings found in Hessar Hill are in the form of loops with two tapering ends which usually have a little overlap; while the earrings discovered in Shahdad area are in the form of thin loops. These earrings were mainly made of metal such as copper, silver, and the alloy of silver and lead (Goudarzi, 2014).

**Rings**

Rings have been discovered in the northeastern areas, i.e., Hessar Hill, Shah hill, Toorang Hill, and Narges Hill. The rings found in Hessar Hill were made of copper and silver, and were in the form of twisted wires or made of thin coterninous sheets. The rings with twisted wires or overlapped straps could only be seen in period III, and were common in all its phases. Different sizes of rings, for both children and adults, have been found (Schmidt, 2012: 280). In Narges Hill, merely one ring made of bronze metal and belonged to mid-Bronze Age was found (Abbasi, 2011: 121). Other rings unearthed from the cultural layers in these two areas were copper and bronze respectively, and were mainly made in the shape of simple loops (Goudarzi, 2014).

In the southeastern parts, these objects were dug up from areas such as Yahya Hill and Bampour Hill, and have a low variety. The rings found in Yahya Hill were mainly made of lead and copper, and in a rare case, of stone. A majority of these rings had a simple shape, and in one ring found in Bampour, some convex ornamentation had been placed on its edge.

**Pendant Necklace**

This type of ornaments has usually a great variety of shapes, and in the areas under investigation, pendant necklaces have been found in different shapes like a crescent moon, paired helixes, ladle, flowers, birds, humans, a crucifix, and a cross. In Hessar Hill, these ornaments first appeared in period II; however, a greater number of them have been discovered in period III. These objects were typically made of wires with rectangular cross section (Schmidt, 2012: 138). The pendant found in Narges Hill is similar to a cross (+), and a rod is adhered to its center. There is a hole in it for passing the thread (Abbasi, 2011: 109). In Shah Hill, this object was made of crockery and is similar to flowers. However, its variety is
much more in Toorang Hill than other locations, and they are in the form of crescents, birds, and humans.

In the southeastern area, the pendants have only been found in Shahdad sites. These objects include various pendants and stone loops. They were often made of stone or shell, and some of them accompanied by different necklaces.

**Coronets**

Among all of the sites under investigation, this kind of ornaments has just been found in Hessar Hill. These objects were in the form of simple straps or had decorations in the form of embossed spotted zigzags or groups of parallel rows., there was one or two holes at the end of most of them, which is indicative of the fact that they were coronets; however, in almost all samples, they had been rolled and laid on the ground or placed in a dish beside the corpses (Schmidt, 2012: 281).

By and large, in the southeastern cultural area, coronets have just been found in Shahdad Hill. These objects have been identified in the cemeteries A and B of this area. The coronets discovered in Shahdad were made in the form of a thin sheet with two holes at its both ends in order to be held on the head.

**Hairpins**

Hairpins in both southeastern and northeastern cultural areas bear a striking similarity to each other. In the northeastern part, these ornaments have been found in sites such as Hessar Hill, Shah Hill., and Narges Hill. These objects were made of copper and bone. The copper pins are in two general forms: 1. simple cylindrical rods with a pyramid-shaped head, 2. the metal pins with a paired helical head formed via twisting its two ends. These hairpins were discovered in all periods of Hessar Hill. The most interesting bone hairpin has heads decorated with engravings and black inlays. Most of these hairpins, maybe all of them, belong to Hessar IIIC (Schmidt, 2012: 296-171). These pins are generally wire-like, and their ends are rarely in the form of a ring. In fact, pins can be deemed to have both the ornamental and instrumental functions. However, they may also be utilized as hair slides or clothes pins. One type of pins discovered has thick ends and lips and it is assumed that they had the mentioned functions. Moreover, some pins have small heads with dome-shaped forms (Abbasi, 2011: 108). In Shah Hill, 14 bone pins or needles were found and four of them belong to the period III of Shah Hill (Arne, 1945).

In the southeastern area, in addition to the Burnt City, these decorative objects have also been found in the areas such as Shahdad, Yahya Hill, and Bampour. The cosmetic rods and decorative needles of the Burnt City were excavated from seven tombs belonging to all four periods. Four rods were owned by four women aged between 18 and 50 years old (the graves numbers are 1400, 1605, 1705 & 1900), and a grave belongs to two men aged between 45 and 47 years old (the grave numbers are 1405 and 1615). Each of these rods accompanied by a stone or clay eyeliner container, and this corroborates their cosmetic Functions. The length of these rods is between 12.5 to 18 cm, and their maximum diameter is 0.5 cm.

Five distinct groups of rods and pins have been found in the graves. One of the groups includes needles with approximately rhombic-shaped heads. The rods with these shapes are comparable to the Bacteria areas (Sajjadi et al., 2007: 310). Some of them also have a rhombic-shaped heads and are similar to the identified rods found in the graves of Namazgah Age in Altin Hill (Masson, 1988, pl. XXXVII, 5).

In Shahdad area, in the cemetery, a number of small and big pins have also been found. Sometimes, these pins were tied together and located beside the corpses. All of the pins discovered in Shahdad were made of copper, and in some cases, were decorated with semiprecious stones such as lapis lazuli. These pins were very delicate and made skillfully and dexterously. They have a wide variety of shapes with or without decoration (ruler, 2006: 90). A few simple bronze pins have also been discovered in period IV of Yahya Hill and Bampour; and on some of them, the trace of rust is evident.

**Shackles**

In the northeastern and southeastern cultural areas, this ornament has only been found in Hessar Hill, Damghan. Copper shackles were first seen in Hessar II; however, the intriguing point is that the ornaments of this kind could not be found in the graves of Hessar II A, while the gray clay emerged in period II. Except for their Spirral designs in some Sapsin samples, the anklets of Hessar II are apparently more similar to those in the next period. These objects were made of thick or thin copper wires which were in the form of a loop with two almost closed ends, with slightly overlapped or spiral design.

The end of the wire was usually tapered, and its tip either was cut, therefore, it had a square cross section, or was sharpened a little. Discovering these objects in Hessar Hill indicates that both children and adults owned such ornaments like anklets of this type (Schmidt, 2011: 171).

**Snoutish**

These ornaments were merely found in Narges Hill in the northeastern area of Iran, in Gorgan, in the Middle Bronze IIIBI. They are Bronze rings with gilded surface, and have five protuberances, two of which are at the end of the ring.

**CONCLUSION**

Based on the investigation undertaken in the southeastern and northeastern cultural areas, 10 major types of ornaments were identified: beads, necklaces, bracelets, earrings, rings, pendant necklaces, coronets, hairpins, shackles, and snoutishes. Most of these types in both cultural areas bear a substantial similarity in terms of both material and shape. The main materials required for making some of the necklace beads in both areas had been provided from the same source, for instance, in the Bronze Age, the required lapis lazuli in both cultural areas was imported to prominent sites of these two areas through East-to-West or North-to-South trade routes. On the other hand, the local available sources were used for making some other ornaments. Regarding the materials
and shapes, the bracelets found in Narges Hill and Shah Hill are very much similar to the bracelets discovered in Shahdad. Earrings unearthed from Shahdad are comparable to those found in Hessar Hill regarding their materials and shapes. The rings in the northeastern areas have a greater diversity in shapes and materials. Coronets also bear a strong resemblance in both cultural areas. The only ornament that could not be detected in the southeastern areas was snoutish.

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