



Original Article

Study and Investigation of Fibulae from the Western region of Iran in the First half of the First Millennium BC

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Abstract

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Relative chronology in archaeology is determined by various methods, which depend on the nature of the artifacts, that is, the type of data available to the archaeologist. In most cases, the basis of dating is relative and based on comparative studies. Objects that are effective in dating always have a special place. One of these ancient data that is still used in contemporary times is the safety pin. This cultural data is considered a standard for relative chronology and, apart from its application to ancient peoples, provides archaeologists with more information. Safety these pins were invented in the early Iron Age (around 1400 BC) of the Mediterranean basin and became common in different regions around 800 BC, and their use by different cultures has continued in various forms to this day. The research was conducted using a descriptive-analytical method and library tools, and its aim is to study the history and types of uses of safety pins in the western half of Iran in the first half of the first millennium. The results obtained showed that safety pins after The invention in the Mediterranean region gradually spread to other regions. In the late 8th century BC and especially during the 7th century BC in Iran, safety pins in the form of various types and subspecies became common for fastening clothing, personal decoration, votive gifts and in some cases as amulets and magic. This data can be used as a chronological index in ancient sites, considering the time of their emergence.

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Introduction

Undoubtedly, the early examples of fibulae were made of bone and wood and were made and used in various forms, but due to the short shelf life of the materials used, no traces of them have survived. The use of these metal and in some cases non-metal structures in prehistory has been mostly for the purpose of connection or retention, and they are divided into different groups in terms of shape, application and typology, including types of barbed, decorative and ritual or symbolic lock pins, which have been found in abundance among the archaeological finds of Iran in the first half of the first millennium BC and neighboring regions. The documents related to the civilization of Ilam, which covers more than three millennia, have several important breaks in between, and the history of the New Ilam period begins with such a break (the New Ilam I period around 1000 to 744 BC) and until the middle It takes the 8th century BC for Akkadian and Ilamite sources to provide any important information about the political situation (Waters, 2000:25). As we can see from the Babylonian calendar, the government of Ilam does not reappear on the stage of history until 742 BC, when "Shah Humban-Nikash" ascended the throne. This new dynasty of the kingdom of Ilam reigned for a little more than a century. The history of this dynasty was characterized by two events: the first feature was the effort of Ilam against Assyria, which had recently become the dominant power in Mesopotamia and its conquest had turned the traditional rivalry between Ilam and Babylon into a close alliance, and the second event was the emergence of the Medes and Persians. It was in the mountains of Iran. Two events, the continuous attacks that Ilam made against Assyria and the gradual capture of its eastern territory by the Persians, weakened the late kingdom of Ilam to such an extent that it eventually surrendered to Assyria under Banipal in 646 BC. (Hintz, 2007:163) Considering the artistic fields, probably the Ilamites, especially the middle Ilam metalsmiths, were among the pioneers of this art during the 14th to 13th centuries BC in Khuzestan. Also, the nobles and rulers of Hasanlu during the time period of Hasanlu VI (714/800-1000 BC) and Marlik officials were related to the major centers of metalwork, especially the master craftsmen

of the golden patterns technique (Negahban, 1999: 126-138). One of the independent and self-governing local governments in the south of Lorestan, the land of Samatura and its rulers (the kings of Samatura, the owners of the Kalmakareh treasure) who were independent states in the Neo-Ilam period, which were known to us through the inscriptions on the treasure objects of the Kalmakareh cave. The treasure of their kingdom was accidentally discovered in Kalmakareh Cave, which contained hundreds of unique items of silver and gold in 1989 in Poldakhtar, Lorestan, and a large number of them were smuggled out of the country. (Map 2) The construction technique and the presence of inscriptions in the script and language of New Ilam on some objects reveal their connection with the cultural horizon of New Ilam. The reading of the carved inscriptions on these objects by Mr. Rasul Bashash, François Vala and Lambert revealed the name of an unknown local dynasty. Samatoreh is the name of one of the Ilamite kingdoms in the area of the Simre River in the south of Lorestan, which was ruled by the local kings of Samatoreh during the 7th and early 6th centuries BC. The names of five generations of these rulers are engraved on these objects. The heads of this family gave the title of the king of Samatura to the second generation (Amprish) and most of the objects belonging to this king belong to this dynasty. Probably, Samatura was the name of one of the small kingdoms of Lorestan, which existed during the seventh and early sixth centuries BC. It was ruled by the local kings of Samati, which at that time had a privileged position among the numerous political territories of Zagros. (Calmeyer, 1983:138) François Valla mentions them as Samati rulers. However, their land is considered in a broad material sense. While they were Ilamites, they had friendly relations with the Assyrians. (Vallat, 1996: 3) The discovery of the Kalmakareh treasure and the study of these works led to the revelation of the name of an unknown Iranian local dynasty, which created a new field in the archeology studies of the historical era. "Ampirish", whose name is engraved on most of the Kalmakareh dishes, was one of the kings of Ilam and the king of the Samti land.

The discovery of the Kalmakareh treasure and the study of these works led to the revelation of the name of an unknown Iranian local dynasty, which created a new field in the archeology studies of the historical era. "Ampirish", whose name is engraved on most of the Kalmakareh dishes, was one of the kings of Ilam and the king of the Samti land. (Bashash, 23:2004) The use of cuneiform inscriptions and Ilamite personal names shows a very close relationship with the cultural horizon of New Ilam. The names of the people who presented the silver cups indicate the fusion of different traditions because some names such as Samatura and Tabala belong to Indo-Iranian languages and another group of names that are descendants of Tabala belong to the Ilamite language. Their specific names allow us to attribute these objects to a treasure trove of precious objects gathered in a local royal family, but the names of these rulers and the location of the land of Samatura are not known correctly to this day, but from the point of view of the wording, it is very similar to the name Sarnataoro is the name of a place in the Caucasus mountains where Cimmerian artifacts were found. Probably, the names Samatauru and Samatura were derived from the same root. These names conjure up one name in the mind, and that is the name of Cimmerian. If we say that the herdsmen of Lorestan were very similar to the Cimmerians, then it is not considered that you have followed the wrong path." Herdout considers them to be the first inhabitants of southern Russia, who call the Bosphorus, the Karaj Strait, and other places after them." In Assyrian sources, they are referred to as Gimira1 and their name is considered the same as Gomer, which is mentioned in the Torah. In Assyrian and Greek documents, the Cimmerians were sometimes identified with the Scythians. (Callican, 1971: 28) According to Annie Cubet, they were most likely descendants of Iranian desert horsemen who gradually conquered the entire region and gave their name to it, and since they did not have a written culture, they referred to other industries, especially the Ilamite industries. They did and got used to the difficulties of the cuneiform line. . (Cubet, 1995:81) Some other Cimmerians made an alliance with the Urartu people in the early 8th century BC. At the same time, a group of them were fighting for the Assyrians as mercenary soldiers. The existence of Cimmerians in Lorestan is accepted as a historical fact. The folds of Zagros, its narrow and separated valleys, made it very unfavorable for the tribes whose main

work was raising horses and sheep to live in this area. There are many similarities between the discovered objects from the Caucasus and Lorestan. Also, common mythological or religious themes can be seen between these two areas. They worshiped the same gods who are the oldest Iranian gods. (Ghirshman, 1967: 42) Therefore, it is not unlikely to find such objects and artefacts in this area, while the name of the old city of Simre and the modern Simre river, evoke the name of the Simree pe The use, manufacturing techniques, and artistic styles of these pins have attracted the attention of many researchers, however, no adequate research has been conducted on these findings. Lock pins are among the most important findings in archaeology and are considered a basis for dating the place wherever they are found. These objects have been found in abundance in the Mediterranean and Middle East regions, and they have both decorative and functional aspects. One of the characteristics of prehistoric humans is the making of tools and the use of personal ornaments. This has contributed to the advancement of technology and man's mastery over the world around him and the creation of artistic creations. Also, various tools are used in various professions, war, and hunting, and the types of ornaments that have been used in different parts of life are of this type. Lock pins are one of the ornaments that have been used by man. Of course, it is obvious that at this historical moment, due to the formation of the Achaemenid Empire and the decline of the government of Ilam and Assyria, the famous name of the local rulers in this region should not be mentioned. and it seems quite logical that the main origin of these rulers is the Samataoro region in the Caucasus, which the ruling class used this name as a title in any land they ruled, without the name and if they apply there, they are referred to the same place. Lock pins first appeared in the Near East in the second half of the second millennium BC and entered the western parts of the Near East from the first half of the first millennium BC (Muscarella, 1965, pp. 233-245). Many of the types found in western Asia are similar. These objects entered Iran in the 7th and 8th centuries BC. In Iran, these pins have been used at least since the Bronze Age, but their main diversity and extent are related to the Iron Age (550-1450 BC). During this age and in various regions of the northwest, west, central plateau and north of Iran, lock pins were made and used or placed as funerary gifts in graves. The questions raised in this study are:

1. What metals were most often used in the manufacture of fibulae? 2. What are the similarities and differences between the fibulae found in the studied sites? 3. What similarities and differences do these fibulae have with foreign examples made before them? The aim of this research is to study the history and types of uses of safety pins in the western half of Iran in the first half of the first millennium. The results obtained showed that safety pins gradually became popular in other regions after their invention in the Mediterranean region. In the late 8th century BC and especially during the 7th century BC in Iran, safety pins in the form of various types and subspecies became common for fastening clothes, personal decoration, votive gifts and in some cases as amulets and magic. This data can be used as a chronological index in ancient sites, considering the time of their emergence.

Research Method

This research is a descriptive-analytical method that is library and field observation, which is used for collection of data using a card-taking tool. The analysis method in this method is qualitative. The conceptual model is the basis on which the overall research plan is based. In the descriptive method, the branches are described and explained to enable conceptual examination and content evaluation, and in its analytical approach, the similarities and differences of the works in the areas in question are compared and compared.

Research background

Blinkenberghe was the first to conduct a comprehensive study of the Near Eastern and Eastern Mediterranean lockets and their typology (Blinkenberghe, 1926). A few decades later, the English archaeologist David Stronach studied the use of safety pins in the eastern Mediterranean, including Iran (Stronach, 1959). The French archaeologist Romain Ghirshman also introduced a number of safety pins from Iran, including the examples in the Foroughi Museum collection (Ghirshman, 1964 & 1977). Oscar White Muscarella, while studying safety pins from the Caucasus region, referred to a number of examples discovered from Hassanlu, Ziviyeh, and Lorestan and discussed their typology (Muscarella, 1964). In another

study, Muscarella studied the Hassanlu safety pin and compared it with other types found (Muscarella, 1965). Continuing his research, he examined the safety pin found in the Marlik cemetery and presented a new chronology for it (Muscarella, 1984). The Metropolitan Museum of Art has studied a number of lock pins (Muscarella, 1988). Belgian archaeologist Louis Vandenberghe was also among those who conducted various excavations in Iran, especially in Lorestan. He studied the lock pins he found in the Posht-Kuh graves of Lorestan and compared them with samples from other regions of Iran. (Vandenberghe, 1978) In later years, Fred Pedde (1999) studied the lock pins of the Near East in the Iron Age, introduced their different types, and presented a more recent chronology. Along with European researchers, Narjes Heydari and Mojtaba Safari (2009) studied the typology of bar pins and safety pins in an article, and Sheikh Shoa'i examined safety pins in archaeological studies (2018), and Kazem Molazadeh and Hassan Salek Akbari (2019) studied bar pins, which are somehow related to safety pins, in an article. The aforementioned studies focused more on the introduction and typology of safety pins, and the techniques for making and using these artifacts have been discussed less. In addition to the aforementioned studies that specifically address clasps, information about the discovered clasps has also been published in the excavation reports of various sites from this period (Curtis, 2014: 63-60; Amelirad and Others, 2007; Rezvani and Roustaei, 2007), which has been used in this study.

Culture of the first half of the first millennium BC in western Iran

The historical background of the areas under the influence of the Ilam government and the discovery of the exquisite and valuable treasures of Arjan, Kalmakareh and Ramhormuz from the Neo-Ilam era in recent years is an important issue that should be given special attention by researchers. The Ilamites were a group of tribes that ruled a large part of the southwestern regions of Iran from the fourth to the first millennium BC. The extent of the Ilam state included Khuzestan, present-day Lorestan, the Ilam foothills and the Bakhtiari mountains.

The Ilam state consisted of two parts, the mountainous and the plain, which were administered in a federal manner and independent and self-governing governments were formed around its major cities. But whenever the power of the central government increased, it united these independent states and brought them under its command. It is worth mentioning that our incomplete information about the historical geography of Elam, especially during the Neo-Ilam period, is due to the lack of documents, written records, and lack of familiarity with all the lands of this kingdom, and it is still not possible to determine the exact location of a small number of Elamite cities mentioned in some ancient texts. On the other hand, in ancient sources and texts, the geographical extent of Elam has not always been mentioned uniformly, due to the political conditions and the approach of the writers of that period, and the boundaries of this territory have been mentioned differently. The mountainous regions of Ilam, including modern-day Lorestan and the Bakhtiari Mountains, are not as well known as Susa because systematic and scientific research has not been conducted in these areas. In the first half of the second millennium BC to the first half of the first millennium BC, there were numerous shahs and khanates in the Zagros Mountains and the western regions of the Iranian plateau, from which the Assyrian kings collected tribute and tribute in their campaigns to these regions and sometimes allied with them against their enemies. The documents related to the Elamite civilization, which spans more than three millennia, have several important breaks in between, and the history of the Neo-Ilamic period begins with such a break (Neo-Ilamic period I, ca. 744-1000 BC), and it takes until the middle of the 8th century BC for Akkadian and Elamite sources to provide any important information about the political situation (Waters.2000.25). As we know from the Babylonian calendar, the Elamite kingdom does not reappear on the scene of history until 742 BC, when "King Humban-Nikash" ascended the throne. This new dynasty of the Elamite kingdom reigned for little more than a century. The history of this dynasty was marked by two events: the first was the Elamite effort against Assyria, which had recently

become the dominant power in Mesopotamia and whose conquest transformed the traditional rivalry between Elam and Babylon into a close alliance; and the second was the rise of the Medes and Persians in the mountains of Iran. The two events, the continuous attacks that Elam made against Assyria and the gradual conquest of its eastern territory by the Persians, weakened the late Elamite kingdom to such an extent that it finally surrendered to Assyria in 646 BC (Hintz 2007, 163) (Map 1). Samatura was probably the name of one of the small kingdoms of Luristan, which was ruled during the 7th and early 6th centuries BC by local Semitic kings who at that time held a privileged position among the numerous political realms of the Zagros. (Calmeyer, 1983: 138) François Vallat refers to them as Semitic rulers. However, their land is considered in a broad material sense. While they were Elamite, they had friendly relations with the Assyrians. (Vallat, 1996: 3) The discovery of the Kalmakreh treasure and the study of these works led to the revelation of the name of an unknown local Iranian dynasty, which created a new field in the archaeological studies of the historical period. "Ampiris", whose name is engraved on most of the Kalmakreh vessels, was one of the kings of Elam and the king of Semitic land. Samatura is probably the name of a small land in southern Lorestan that was annexed to the Persian kingdom during the reign of Darius I. Of the 22 Elamite names extracted from the Kalmakreh inscriptions by Lambert, only four were read as Shah Samti, as follows: Ampirish, Ani Shilhak, Onzi Kilik, On Sak (Bashash, 23:2004) (Map 2) Northwest Iran witnessed the emergence of a state called Manna in the first half of the first millennium BC. Assyrian written sources indicate that the Manna people lived in the southern and eastern parts of Lake Urmia with an almost semi-independent government alongside the powers of Ashurno, Urartu, Saka, Media, and Babylon. Field surveys and scientific archaeological excavations show that the central core of this state coincided with the surrounding area of the present-day cities of Saqqez and Bukan, and that famous and prominent Mannaeen sites such as Ziviyeh, Qalaichi, and other sites are located there.

Perhaps the most important question for a reader who is newly acquainted with Manna is the geographical extent of this civilization. In 815 BC, when the Aryans poured from Parsva in the west of Lake Urmia toward the Zagros valleys in Ilam, they found a new homeland northeast of Susa, a short distance from the Elamite land of Anzan, and they called their new location Parsumas in memory of the land they had abandoned. In Azerbaijan and western Iran, the Medes and other newly arrived Iranians encountered a majority of natives who spoke a non-Indo-European language, such as the Urartians, Mannaeans, Hurrians, and others. These latter peoples spoke a language that seemed to be related to Old Caucasian or the modern Japhetic language spoken by a group in the Caucasus. It can be assumed that there was a strong racial and cultural connection between all the peoples inhabiting Iran in the second millennium BC. The discovery of pottery of the same shape at Nahavand and Tepe Silk in Kashan may indicate that at least a similar and uniform culture existed in these areas. (Behzadi, 1992:1045-1046) The Manna Kingdom was a state that continued its cultural and political life for 300 years in the first millennium BC. This civilization was first mentioned in Assyrian inscriptions in 834 BC, but there were many more than that (Barnett, 1956:188). Manna had a royal system of government in which the son succeeded the father. The king did not rule the country alone, but sought cooperation from local rulers, nobles, and elders. The land of Manna was divided into states, a few of which had a semi-independent status. (Boehmer, 1973:95) (Map 3)

Introduction to the research areas

Ziviyeh Castle: Ziviyeh Castle is located 45 km southeast of Saqqez County, north of the village of the same name. During scientific excavations conducted by Dyson and Crawford in 1964 and by Motamedi in AH, a castle was revealed; Motamedi described this castle as a manna. Architecturally, Ziviyeh has a three-story building (Goff 1978:42).

Hassanlu Site: This site is located 12 km southwest of Lake Urmia and 9 km northeast of Naqadeh County between the villages of Aminloo and Hassanlu and is named after it. Dyson, based on the remains found in the layers of Hassanlu Hill, has identified a settlement period in this site. It has continued from the Neolithic period with pottery

to the Islamic period. Period X is the oldest and Period I is the latest of these periods (Dyson and Muscarella, 1989:199:20).

Kol Tarike Cemetery: Located one kilometer southwest of the village of Yuzbash Kandi. This village is located 5 kilometers from the Karfto Cave and 50 kilometers north of Divan Darreh County. Kol Tarike Cemetery was identified during the first season of field research around the Karfto Cave in the fall of 2000 (Rezvani and Roustaei, 2007:184). The researcher suggests a date for Kol Tarike Cemetery in the first half of the first millennium BC and the period of the presence of the Mannae.

Tomb of Jobaji: A tomb that was accidentally discovered and largely destroyed was hidden in the heart of an ancient hill north of the village of Jobaji. The tomb of Jobaji is a rectangular stone structure that was covered with stone slabs of various sizes dating back to the Neo-Ilamic period, and many metal artifacts of various types were discovered in two coffins of this tomb (Shishehgar, 2015: 21-28).

Kalmakareh Cave: Located in Lorestan Province, 20 kilometers northwest of the central part of Pol-e-Dokhtar (Ghazanfari, 1997:26). In addition to the discovered metal objects, evidence such as handmade Chinese walls made of stone, plaster, mud, and scattered pieces of pottery in this cave indicate works related to the Samaturah government (Khosravi, 2013:20).

History of the fibula

The origin of these pins was western Syria and Palestine, the Aegean and Cyprus. (Stronach.1959.182) The first examples were found in the Mediterranean region, in Italy and Greece in the 14th century BC. These pins later reached other regions, including Asia. The emergence of the safety pin in the Near East can be directly related to the increase in Mycenaean trade in the 13th century BC, which seems to have reached the new inhabitants of Cyprus and some of the nearby coasts of Asia by 1200 BC. (Ibid.) Safety pins are among the decorative objects that have been obtained in large numbers from the Mediterranean region to the Middle East. (Map 4). Archaeologists such as Muscarella, Stronach, Bellingberg and Vandenberghe have conducted research on the safety pin. In the ancient world, such objects were mostly used for women and as part of jewelry, and if they were used as gifts, they were decorated with

many techniques and qualities. In the Apadana reliefs of Persepolis, such pins can be seen on the clothes of the Cappadocian, Phrygian and sometimes Median tribes. (Muscarella.1988.46)

Classification of fibulae based on shape and form

Classification of fibulae by Mascarella:

1. Thick bow with protrusions in the center (found in Karmir-Bulur, Topraq-e Qale and Hasanlu)
2. Thick bow that becomes thinner around the edges (found in Karmir-Bulur, Topraq-e Qale and the Laivar site)
3. Smooth semicircular bow with geometric decorations (found in Karmir-Bulur, the Laivar site, North Caucasus and Georgia)
4. Bowl-shaped bow with flat bottom and carved decorations (found in Ziviyeh and Lorestan)
5. Disc-shaped bow with raised dot decorations (northwest of the Caspian Sea)
6. Crescent-shaped bow with smooth vertical decorations (North Caucasus).

A number of pins have a simple head and other types have decorations. These pins have been found from many sites such as Hassanlu (Muscarella.1965.234), Babajan (Goff.1978.63) and the western regions of Iran, especially Lorestan (Ghirshman.1964.65). The Hasanlu recurve bow types are made of bronze. Their bow is also in the form of a simple rod with a plate on it. In some examples, this plate is decorated

with a circle. Hasanlu pins are dated between the Iron Age II and the 4th century BC. The Ziviyeh examples are made of precious metals including gold and silver. The Lorestan and Ziviyeh pins are attributed to the Iron Age II. In Iran, pins with a recurve bow disappeared in the late 7th or early 6th century BC (Muscarella.1965.46). Other types of pins are triangular. These pins have a triangular bow, the bow of which forms two sides of the triangle and the spring forms the third side. This type also has a great variety and has its own characteristics in each region. Triangular pins have been found in Iran from Hassanlu, Ziviyeh, Babajan and the Duruyeh cemetery of the Lorestan, Pasargadae sites (Stronach, 1990:250). Bow pins were obsolete in the Iron Age III, but triangular types continued in the Achaemenid period (Ibid: 252). In Mesopotamia, these pins have also been obtained from the Neo-Assyrian and Neo-Bulbul sites (Overlate.2005.65).

Stronach's classification of fibulae:

- 1-Sanjak with a semicircular bow
- 2-Sanjak with a curved bow
- 3-Sanjak with a triangular bow
- 4-Sanjak with a triangular bow whose tip is highlighted by an additional frame.

Although this division is general, it can be generally accepted. The first examples of the third and fourth types appeared between the 7th and 8th centuries BC, respectively (Stronach.1959.182).



Figure1.
Locketts found in the palace of Sargon II in Khorsabad (Allen. Wilson.1965.59).

Artifacts found outside Iran

Examples from Baghz-e-Kuy and Büyük-e Qala have also been found, but cannot be mentioned due to the lack of clarity of their photographs. The regions where fibulae were common in the ancient world include the North and East Caucasus and Urartu. Examples of fibulae with a flat bow have also been found in sites

in the North Caucasus such as Manta, Kambolta, Ratka, and Algir (Figure 2). Examples found from the North Caucasus such as Chetan-Dagh, Musi-Pari, and Georgia are of two types. The first type has a decorated flat bow of geometric shape, and the second type has a semicircular bow that narrows at the corners. These two types were common in the North Caucasus, especially in the Kuban region and culture (Muscarella.1965.234).

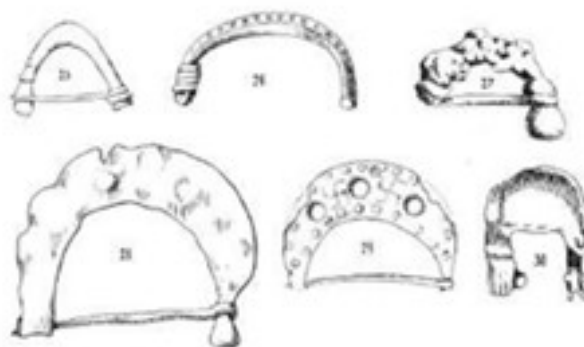


Figure2.
Lockets found from the North Caucasus (Muscarella.1965.234).

The older or purer orders are mostly Syro-Palestinian and Cilician and are regular and regular. The orders with masks in the form of goblins and female bodies are purely Assyrian in style. (Figs. 3 and 4) In other

cases the rams' heads that form the bases of the safety pins correspond to the Assyrian way of combining animal figures (Kalmeyer, 1997: 161).



Figure3.
Examples from Syria, from right to left: Fern 10-9 BC and Fern 8-7 BC (Kallmeyer, 1997: 160).

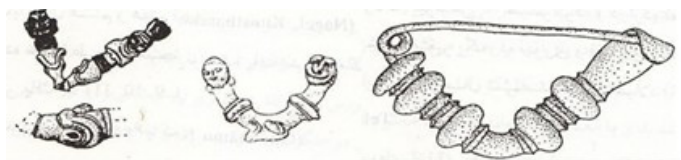


Figure4.
Examples of Assyrian lockets, from right to left: 6th century BC and late 7th century BC (ibid.: 160).

Fibulae were also used in the rule of Urartu. There are two sites in Urartu where fibulae have been found, one is Karmir-Blor and the other is Topraq-e Qale, of which two of the samples found from these areas belong to Topraq-e Qale and three belong to Karmir-Blor. Cham-Sul-Mome, Ben-Kulkan and sometimes types of lock pins have been found. Fibulae found from Hasanlu are similar to the samples from Workbod and Cham-Sul-Mome in Lorestan. The Hasanlu fibulae were found from its layer II. Some fibulae were also found from unauthorized excavations in Lorestan, which have an approximate date of the Iron Age (Muscarella.1988.46).

Artifacts found in western Iran

Hasanlu

During excavations in northwestern Iran at Hasanlu

Hill by the University of Pennsylvania and the Metropolitan Museum of Art, a bronze fibula was recovered from among the Hassanlu artifacts. A fragment of this fibula was missing and was found in the same layer, inside a clay bowl, which, when put together, completed the fibula. This was the only fibula found during the 1963 excavations at Hassanlu and was one of the only non-pottery objects found in Hassanlu Layer IV (Figure 5). In visual art from western Iran, including Hassanlu, women are always depicted with identical clothespins (Marcus, 2007: 45-59). A small ivory statuette from Hassanlu itself apparently depicts the same type of pin (Muscarella.1965.233). scene on a golden Hassanlu cup, two women and a man can be seen wearing pinned clothes (Winter.1989.14).



Figure5.
Bronze fibula found from Hasanluy IV (Muscarella.1965.20).

The upper part of the fibula is U-shaped, 3.5 cm high and 4 cm wide, with a significant protrusion in the middle. The pin is also made of a bronze sheet, and at the end of the pin there is a rounded part that the pin is fastened inside (Muscarella.1965.235). In general, the dating of the fibulas has been considered to be around the 7th-6th century BC. No exact date has been given for the fibulas found in Hasanlu, except for the one obtained from layer

iv. The fibulas were found in garbage dumps where the objects next to them cannot give an exact date for them. Of course, in the sample mentioned above, which was discussed, a clay bowl was found with the fibula. The fibulas from Hasanlu have been dated to the late 7th and early 6th centuries BC. The following sample can be mentioned among other samples found in Hasanlu (Muscarella.1988.50). (Figure 6)

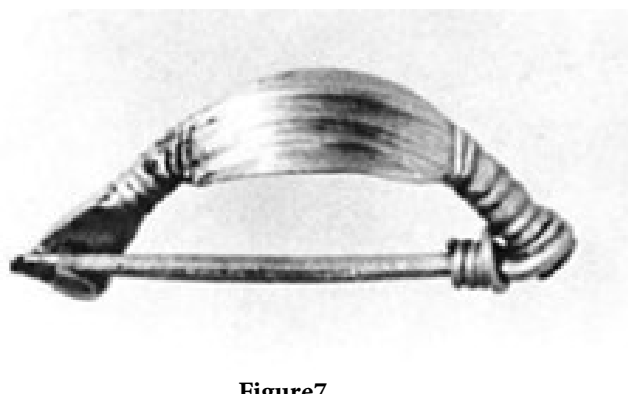
**Figure6.**

Bronze Hassanlu IV-B. Length 5.2 cm. - Place of preservation: Metropolitan Museum (Muccarella.1988.52).

The upper part of the bow of this clasp is flat and disc-like and has two narrower tabs around it, one of which has a tab to hold the pin and the other has a clip to fasten the pin. This type of clasp is one of the most well-known examples of this type of object. There is another type of fibula that has a thin and small bow and has been found in the Urartian region (such as Bastam and Kavash Tepe, etc), and Hasanlu, and their date is not more than the late 8th century BC. In the second type, fibulas with a disc-like bow, as shown above and in the example in photo 9, were found in Hasanlu IV, and it can be said that these examples are very similar to the examples found in the excavation of the grave of 5 Challe Kuti, whose date cannot be attributed to more than the late 8th century BC (Muccarella.1988.47).

Ziviyeh Hill

A number of fibulae found in gold and silver are attributed to the Ziviyah treasure (Figure 7), although there is still some doubt about their belonging to this collection. These fibulae are very artistically made and probably date from the 7th century BC. (Muccarella.1988.47). Among the special examples in the Metropolitan Museum, made of gold and attributed to the Ziviyah treasure, we can mention one that has hand decorations with finger and fingernail details and is attributed to the 6th and 7th centuries BC. However, André Godard attributed it to the 9th-8th centuries BC and Ghirshman attributed it to the year 625 BC. (Muccarella.1965.235). During scientific excavations carried out in Ziwiye by Dyson and Crawford in 1964 and by Motamedi in 1976 AH, a fortress was revealed; Motamedi described this fortress as a manna. Architecturally, Ziwiye has a three-story building (Goff 1978:42).

**Figure7.**

Silver fibula - found from Ziv - Metropolitan Museum (Muccarella.1965.88).

Ornamental fibulae, most of which have feminine characteristics. Includes (four gold fibulae, 21 silver fibulae and 15 bronze fibulae), and lock fibulae (four gold lock fibulae and 38 silver). Several hundred gold objects are related to the decoration of the clothes of those who were of the upper class. But in fact, they did not all belong to the same king; the variety of metals used in them indicates the different social status of the conquerors of this treasure (Ghirshman, 1997: 40). Breast fibulae are another decoration used

for clothes in Zivieh. One of them represents the upper part of the body of a bird of prey similar to a parrot with a curved beak and round eyes, which is one of the great themes of Scythian art, other fibulae also have motifs. Another fibula is in the form of a lion, which here is an animal that does not belong to the Assyrian lion family, which has sevenfold beauty, but its like is seen in Scythian art (Ghirshman, 2002: 143-144). (Figure 8-9).



Figure8.
Fibula from Zivier (Stierlin 2006, 58) .



Figure9.
Fibula with a lion motif (Ghirshman, 1992: 107).

Kul Tarikheh

Fibulae were used to hold parts of clothing and replaced the fibulae and pins that were previously used for this purpose. A number of bronze fibulae were found in

the Kul Tarikheh cemetery, all of which are made of bronze and were found in different graves. They do not have any special decoration and all of these fibulae are functional and simple. (Rezvani and Roustaei, 2007, 180-199). (Figures 10-11).



Figure10.

Bronze fibulae from the Kul Tarikheh site (Rezvani and Roustaei, 2007-180).

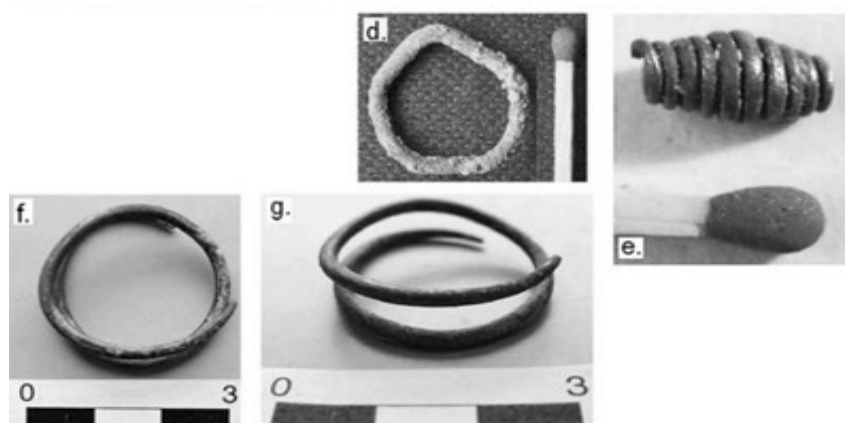


Figure11.

Bronze fibulae from the Kul Tarikheh site (Rezvani and Roustaei, 2007-189).

Kalmakre

In these areas, cemeteries were mainly located around hills or on small hills and rarely below valleys or in wide plains. Nomadic cemeteries are all limited and very small, even if a particular place has been used for a relatively long time, its cemeteries are separate from each other and sometimes the graves are separated

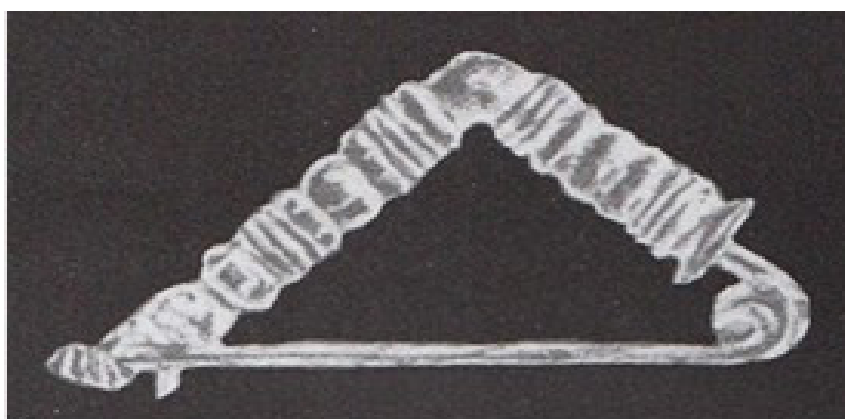
from each other by a short stone wall. In this way, a number of graves form a complex in which various utensils, votive offerings, burial goods, saddles, tools, decorative items such as bracelets, necklaces, rings, earrings and pins (Figure 12), and cosmetic items have been seen (Moameddi, 1986: 33).

**Figure12.**

Examples of lockets discovered from Lorestan, National Museum of Iran (Taheri, Hemmati, 2013, page 11).

Three types of safety pins have been observed in Lorestan. The first type has been widely seen in Iran since the late 8th and early 7th centuries BC. (Ghirshman, 2011: 76). It is made in the shape of an elbow with circular protrusions (Figure 13), and the pin of the pin is in the shape of a human hand (Taheri,

2013: 11). The second type of safety pin has no spring and its pointed end is attached directly to the bow by a spiral ring, which is wrapped around a button. This type of pin was rare in Central Asia and has only been found among objects discovered from Ziviya, but is common in the Caucasus region.

**Figure13.**

Fibula in the shape of a human elbow - Lorestan (Ghirshman, 2011: 377).

Three types of safety pins have been observed in Lorestan. The first type has been widely seen in Iran since the late 8th and early 7th centuries BC. (Ghirshman, 2011: 76). It is made in the shape of an elbow with circular protrusions (Figure 13) The third type of these pins is of particular importance among the objects of Lorestan, in some respects; because animal-shaped pins are a characteristic of the art of the Cimmerians, and many of these types of pins have

been found in Europe, especially in the area where the Cimmerians lived (Ghirshman, 2011: 76). Another triangular-shaped pin with a spiral end decorated with ring-shaped protrusions has also been found in the Lorestan region (Taheri, 2013: 11). In general, Lorestan pin pins also have two types: arched and triangular (Figure 14). Arched types have thick arches with prominent beads, and triangular types also have these decorations. (Srtonach.1959.183).



Figure14.
pins found from Lorestan (Ghirshman.1964.28).

Among the works of Kalmakreh, a golden wire with a snake-shaped head is observed, which was probably a wire used as a fibula for hair decoration. This fibula

is decorated with two snake heads at the end and the beginning. This fibula is kept in the Mahboubian collection. (Figure. 15)



Figure15.
Fibula found in Kalamaqara (www.mahboubian.org).

Jubaji

Among the works of Jobji, several gold wires and a gold pin or fibula were found, which came in two

types: wire and hook-shaped fibula, examples of which were found in Susa in the southwestern region of Iran and the Ilam kingdom. (Shishehgar, 2015: 134) (Figure 16).



Figure16.
Fibulae found from the Jouji site (Shishehgar, 2015: 135).

Discussion and Conclusion

Safety pins are a standard for relative chronology in ancient sites, and with this aim, archaeologists have conducted extensive studies on the types of safety pins, classifying and dating them in different forms. This valuable cultural and archaeological data has had a variety of uses, from a simple button to a precious brooch, belt hook, etc. Apart from its daily uses, its votive and spiritual value continues to occupy the minds of archaeologists. The various functions of these pins include: clothing pins, hair pins, votive and symbolic objects, defensive, magical, ritual and other complementary and separate uses, and it is also a tool for dealing with evil spirits and forces and ferocious and annoying animals. In this regard, pins played the role of amulets and charms that kept evil spirits and goblins away from their owner and provided a kind of magical protection. Most of these pins are made of bronze, but bronze-iron, silver and gold examples can also be seen among them, which were mostly made by casting and molding, and in a few cases by hammering or a combination of both. Considering the existing conditions, safety pins or fibulae were relatively valuable objects and were used by both men and women at the same time. The most important use of fibulae, according to archaeological findings, is to connect different parts of clothing to each other. The early examples were probably made of bone and wood and were made and used in various forms, but

due to the short shelf life of the materials used, no traces of them have survived. With the beginning of the Iron Age, a new type of fibula, called the lock pin because of the way the pin and the bow were connected, quickly became widespread. This type of pin appeared in the Mediterranean around 1400 BC and gradually spread to surrounding areas, forming various types. In Iran, clasps with arched and triangular bows have been found mostly from the western half, such as Hassanlu, Noshijan, Ziviyeh, the Durouye cemetery, and sites from Lorestan and Susa. In Mesopotamia, clasps have been found from sites in Neo-Assyrian and Neo-Babylonian. These two types entered the Iranian plateau together in the Iron Age III and spread throughout Iran during this period. All Iranian and Mesopotamian examples are similar in appearance and have common motifs. Research has shown that all of these types date back to the 7th and 8th centuries BC. During this period, the arched bow types became obsolete, but the triangular types continued for 200 years. According to studies, all Iranian Iron Age clasps are within the Iron Age III range (550-800 BC). The different types studied became popular almost simultaneously. This type of safety pin was also used to some extent during the Achaemenid period and was gradually replaced by newer types.

Data Availability

The data underlying the results presented in this paper are not publicly available at this time but may be obtained from the corresponding author upon reasonable request.

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Conflict of Interest

The authors declare that they agreed to participate in the present paper and there are no competing interests.

Authors' Participation

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References

- Amelirad, Sheler & Overlate, Bruno & Haerinck, Ernic, (2011), The Iron Age Zagros Graveyard Near Sanandaj: Preliminary Report on the first season, *Iranica Antiqua*, Vol.
- Barnett, I R. D. "Vol, Iraq", *Ziwiye of Treasure The*, "1956, 116-111. pp, XVIII
- Bashash, Rasoul (2004) Complete Reading of the Bukan Inscription, Collection of Papers of the First Conference on Language, Inscriptions and Ancient Texts, Shiraz, Cultural Heritage Organization Publications, Tehran
- Behzadi, Roqiyeh (1992) Little-known ancient peoples; *Mannaha, Chista Magazine*, No. 89
- Blinkenberghe, C. (1926) "Lindiaka, v, les Fibules Grecques ET Orientales" (*Historiske-filologiske meddelelser XIII, i*) Copenhagen, Vol. 13, Issue 1.
- Boehmer, R.M., 1973. *Zur lage von Musasir, Baghdader Mitteilungen* 6: 31-41.
- Callican, William 1971. "Medians and Persians". Translated by Guderz Asad Bakhtiar. Tehran: Publication of the Central Council of the Imperial Celebration of Iran.
- Calmeyer. (1983), Calmeyer, P. (1983). "The Persian king in the lions
- Curtis, John. (2014). *Noshijan 3: Small Findings*, translated by Kazem Molazadeh, Hamedan: Abu Ali Sina University Publishing Center.
- Cubet. A. (1995). "Gobelet pre-Achemenide". *revue du louver*. IV.
- Ghazanfari, H. 1997. *Lorestan in the Passage of History*. Tehran. Cultural Heritage Organization Publication.
- Ghirshman, R. (1964), *Fibule En Iran Collection De, M. Forughipar*.
- Ghirshman, Roman, (1992), *Silk Kashan*, translated by Karimi, Asghar, Cultural Heritage Publications, Volume 1
- Ghirshman, Roman, (2011), *Iranian Art in the Median and Achaemenid Periods*, translated by Behnam, Isa, Scientific and Cultural Publications, Tehran
- Ghirshman, Roman. (1997). *Prehistoric Iranian artistic cultures, material art, Achaemenid art, Parthian art*. Translated by Yaqub Ajand. Tehran: Moli Publications.
- Ghirshman, Roman. (2002) *Iran from the beginning to Islam*. Translated by Mohammad Moin.. Tehran: Donyayeh Kitab.
- Goff, Clare, (1978), *Excavations at Baba Jan: The Pottery and Metal from levels and Author(s)*, Source : iran, vol. 19.
- Heydari, Narjes, Safari, Mojtaba. (2009). *Analysis on the use of bar pins and classification*.
- Hintz, Walter, Dariush and the Iranians, translated by Parviz Rajabi, second edition, Mahi Publishing, Tehran, 2007.
- Kalmeyer, Peter, (1997), *Dateable Bronzes of Lorestan and Kermanshah*, translated by Asemi, Mohammad, Cultural Heritage Publications, Tehran
- Khosravi, Leili, Rafifar Jalaluddin Publication: *Journal of Anthropology (Anthology Letter)* Year: 2013, Volume: 11, Issue: 19 Pages: 20
- Marcus, Michel, (2007), *The Deadly Beauty of Women and the Pin in Ancient Iran*, translated by Taheri, Farzaneh, *Journal of Archaeology and History*, No. 21.
- Molazadeh, Kazem and Salek Akbari, Mohammad Hassan. (2019). *Iron Age Rod Pins of Iran and Their Applications*, *Diphsnameh Daneshhai Bomi Iran*, Vol. 6, No. 74-49,
- Motamedi, Nosrat, (1976), *Burial Rituals in Lorestan, First Millennium BC*, *Journal of Archaeology and History*, Year 1, Issue 1
- Muscarella, O. W., (1964) "Ancient Safety Pins Their Function and Significance", *Expedition*, Vol. 6, Issue 2, pp. 34-40.
- Muscarella, Oscar White, (1965), *A Fibula from Hasanlu*, Author(s): source *American Journal of Archaeology*, Vol. 96, No 3.

Muscarella, Oscar White, (1977), Ziwiye and ziwiye, The Forgery of a Provenience Author(s): source Journal of Field Archaeology, Vol.4, No.2.

Muscarella, Oscar White, (1984), Fibulae and chronology, Marlik and Assur, Journal of Archaeology, Vol 11, No 4.

Muscarella, Oscar White, (1988), Bronze and Iron, Ancient Near Eastern Artifacts in the Metropolitan Museum of Art, The Metropolitan Museum of Art, New York.

Negahban, Ezatollah. (1999). The Marlik Excavations (Volume One), Tehran: Cultural Heritage Organization - Country

Overlate, Bruno, (2005), The Chronology of The Iron Age in the Pusht Kuh Lurstan, Iranica Antiqua, Vol. .

Pedde, Friedhelm. (1999). Development and Expansion of the Near Eastern fibula in the Iron Age, Berlin, 23. Bis, 26, November 1999.

Rezvani, Hasan and Kourosh Roustaei. (2007). A preliminary report on two seasons of excavations at Kul Tarike cemetery, Kurdistan, Iran, Iranica Antiqua, Vol. XLII, pp. 139-184.

Sheikh Shoa'i, Fahimeh. (2018). The use and position of the lock pin based on its protective status 133-153, in Archaeological Studies, Iranian Folk Culture, No. 5

Shishehgar, Arman. (2015). Discovery of a tomb

belonging to the family of King Shutur-Nahhunte, son of Indeed. Tehran: Cultural Heritage and Tourism Organization.

Stronach, David, (1990), Pasargadae: A Report of the Excavations Carried Out by the British Institute of Iranian Studies from 1961 to 1963), Translated by: Khatib Shahidi, Hamid, Publications of the National Cultural Heritage Organization, Tehran

Stronach, David, (1959), The Development of the Fibula in the Near East, Author(s): source Iraq, Vol.21, No.2 .

Taheri: Sadraddin and Hemmati, Anita, (2013), Typology and Symbolism of Ornaments in the Bronze and Iron Ages, Journal of Fine Arts and Visual Arts, Volume 18, Number 4

Vallat. F. (1996). "Le royaume Elamite de Samati". Nouvelles Assyriologiques breves et utilitaires. (N.A.B.U).

VandenBerghe, Louis., 1978. Les Fibules Provenant Des fouilles au Pusht-I Kuh Luristan, Iranica Antiqua, Vol.13, Pp.35-76.

Waters, M. A Survey of Neo-Elamite History (SAAS), Helsinki, 2000.

Wilson, Albert and Allen, 1965, Thomas George, The Citadel and The Town, Khorsabad Part, The University of Chicago Oriental Institute Publications.

(www.mahboubian.org)