



Investigating and Introducing Signs of Achaemenid Shekel Coins, from the Collection of Mazandaran Museum

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(59-86)

Abstract

The present paper involves the investigation and identification of the insignia of 240 Achaemenid shekels, from the collection of the Mazandaran Museum. Investigation of law enforcement indicates that the collection was seized from looters in the Asalooyeh region (ambiguous locality). Subsequent preliminary work suggests these are typical coins of seven kings who reigned for around 184 years between 522 BC to 338 BC. Some 195 coins of the total 240 have signs, mostly with one sign, while rare samples present up to 9 signs. Numismatists and archaeologists have assigned them various functions, including mint sign, finesse, and weight affirmation. Do the definitions include the studied collection? Why do some of the coins have no signs? The investigations led to the discernment of 567 signs, typically from plain to geometrical and zoomorphic ones. There are many signs in the collection that are similar to known samples in many ways, however, there are unique signs unsimilar to any other marks thus far identified, which are not necessarily mint marks, because they are more obvious than the king's figure that is eroded in most of the cases. Obviously, they are later engravings, whereas, 45 coins lacks any signs. The other conclusion is the transition of concepts of the signs as hidden mysterious messages such as a king death and reign of a new king.

Keywords: Achaemenid, Coin, Shekel, Signs, Mazandaran Museum.

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Introduction

The four primary types of coins minted during the Achaemenid era consist of 1) royal coins 2) satrapy coins 3) provincial coins with a king figure 4) local or non-Iranian coins under Persian domination (Mahmoodabadi and Haratian 1388: 147). The coins are minted as “Daric”, i.e., gold, and “Shekel”, i.e., silver. The gold coins, Daric, are 8.4g (Dandamaief 1358: 41), probably after “Dara” or “Darius” (A’zami Sangsari 1349: 41), and the silver coins are 5.6g thick lentiform pieces, which were minted following Darius the Great. The coin was named “Shekel”, following the Greek “Siglos” (Mahmood Abadi & Haratian 1388: 148), weight units (Ivanof 1359: 90), and weight division according to the Persian “Maneh” (Bayat 1365: 77).

The case study coins, as Achaemenid coins, are part of a collection of 276 silver coins of the so-called Shekel type with an average weight of 5.6g weight that were seized from looters, probably from the Asalooyeh area. There is a figure of an archer king, or armed king with a dagger or spear, on the obverse, and a concavity on the reverse. The concavities tend to extend across the width or length of the coins, indicating the bulging part of the anvil that prevented any coin to slide after the hammer hit (Lenormant 1873: 259). Sometimes, there are various designs on both sides, in some cases only on one side, that was impressed via 2-3 mm dies. Some scholars have suggested that the small abbreviations and signs were used as designs or mysterious signs (Bablon 1388: 21), abbreviations and icons (*ibid*: index), signs (Bayani 1370: 187), monograms (Eftekhari 1393: 70), or surcharge and countermarks (Jafari Dehaghi 1391: 25). The present paper introduces the designs simply as “signs.”

Numismatists usually focus, in the main, on the overall designs of coins and rarely work to identify signs; classifications and analysis of the semiotic content of coins is therefore a lacuna in numismatic studies. For a more detailed study, 240 coins of higher quality were separated from the whole collection. Through documentation, preliminary investigations indicated that 45 coins were bare of any signs, while the other 195 specimens have signs. In total, this study recognized 567 signs (Table 1). The engraved designs and signs on the coins of the collection vary from plain, for example circle depressions, to complex designs including wheel of the sun or broken cross, crescent moons, probable rings of power, anchors, and zoomorphic designs such as camels, turtles, ducks, chickens and roosters. Statistically, most of the signs appears on the coins of Artaxerxes II, while the lowest rate is on the Cyrus the Younger’s coins.

The creation of a database of the designs is one of the most important achievement of the present research, to be used as a reference resource toward more comprehensive descriptive data and fuller recognition of Achaemenid coins. The most significant question in this research concerns the reason of minting such signs and icons. Considering that some

of the signs are directly engraved on the king's figure, who ordered the distortion of the king's figure? If these signs are engravings that appeared during his lifetime, was it a violation or an offensive action against supremacy of the king? If they are the emblems of different mints, why do some coins depicting the same king lack any sign? Does this mean that some mints did not require engraving the same signs?

It appears some of the signs are in fact mint marks, while the other engravings directly on the king face are countermarks that new monarchs, minted in order to continue the use of coinage authorized by earlier kings. Therefore, the signs provide a context to convey a hidden and mysterious message including kingly death and sign of the reign of new king, or it could be the signature or endorsement of the financial manager that certified earlier coins through the succession of new economic cycles, i.e., an indication of reassessment of finesse and weights. The present paper addresses these questions, considering the problems and ambiguities.

Table 1. the case studies and the statistics of the engravings on the coins of the Mazandaran Collection.

| Number and statistics of Signs | | | | | | |
|--------------------------------|----------------------|------|-----------------|----------------------|---------------------|------------------|
| line | The name of the king | type | Number of coins | Coins with the signs | Number of the signs | Number of plates |
| 1 | Darius I | III | 5 | 5 | 18 | 1 |
| 2 | Xerxes | II | 43 | 34 | 103 | 2 |
| 3 | Artaxerxes I | - | 6 | 5 | 19 | 3 |
| 4 | Darius II | - | 3 | 3 | 9 | 4 |
| 5 | Cyrus the younger | - | 4 | 3 | 8 | 5 |
| 6 | Artaxerxes II | I | 8 | 5 | 14 | 6 |
| | | II | 74 | 68 | 269 | 7 |
| | | III | 77 | 59 | 81 | 8 |
| 7 | Artaxerxes III | I | 5 | 4 | 12 | 9 |
| | | II | 6 | 3 | 6 | 10 |
| 8 | unrecognizable coins | - | 9 | 6 | 28 | 11 |

Research method

The first stage of the research is classification of the coins from the Mazandaran Collection, because despite of uniformity and similarity of the Achaemenid coins, they reveal numerous variations. However, a few samples remained inscrutable and, to some extent, unsimilar to any known examples. Already in the 19th century the numismatist Barkley Head faced this problem and acknowledged the difficulty of stylistic uniformity and the lack of inscriptions (Head, 1887: 28). Different types of coins from a given king, probably from different mints, doubled the difficulty. Carradice suggests this variation can be attributed to “fundamental stylistic differences indicat[ing] that coins [were] minted in more than one place,

however, it has remained unproven.” Classification of the coins within the present paper, was performed according to references to the earliest and latest numismatists, evidence including the coins of Darius I that were discovered at Persepolis, their weight, erosion rate, the kings’ garments, the simplicity or complexity of designs that indicate development of coinage, the crown (Kidaris) or a symbol of the royal power (Pope 1387:508), the clothing of a bronze statue that wears a skirt (Ghirshman 1964: 55), and/or various historical reports including the reference of Sandanice from Lydia to leather trousers and clothing, and bodysuit forms (Modi 1937: 173), number of pleats (Thompson 2002: 30), sleeve forms compared to objective instances (Shapour Shahbazi 2012: 60), armaments and bows that the Achaemenids significantly used (Roshan Zamir 1355: 33), daggers or so-called “Achinach” short-swords (Zoka 1350: 69), the short Persian sword or light Persian sword (Walser 1965: 106), and another efficient armor as “Arashtayasha” spear [Arashti] (Pordavood 1382: 46).

Considering earlier references, coins of seven Achaemenid kings were recognized, except for “Arses” (338-336 BC) and “Darius III” (336-330 BC), i.e., the latest Achaemenid kings. In the collection, there is only one type of Darius I, of whom we know of at least three types of coins; one type of Xerxes, of whom we know of two types of coins; respectively, one types from Artaxerxes I, Darius II, and the Young Cyrus; three types of Artaxerxes II; and finally, two types of Artaxerxes III. The timespan ranges from 522-338 BC, covering 184 years of the history of Achaemenid dynasty. However, variations in signage appeared on the Achaemenid shekels, except for the satrapy coins. According to Eimhoff, Bablon suggests that the engraving signs on the Satrapy coins, including coins of Cilicia, only appeared from the reign of Artaxerxes II onward (405-395 BC). For example, there is a honey bee on one the coinages of Maloos, at the same time, the letter “T”, a broken cross, a cluster of wheat, and a seal appear on the coins. Later, there are many signs and Greek words on the coins of Maloos, during the reign of Artaxerxes III (359-338 BC), Arses (338-337 BC), and Darius III (337-330 BC). During the dominance of the Achaemenids, there were many letters on the coins of Nagidoos and Soli that functioned as judges’ emblems. During the reign of Artaxerxes II and III, Greek letters appeared on the Aramaic coins of Mazes. The Greek signs, minted on the reverse of the dirham of the Satrap Aryarat, before 331 BC, and there were appeared Greek letters and weight indices on many coins of Taxis (Babylon 1388: 21).

Various Achaemenid numismatic sources rarely present a table or even a few simple images, and even when they do, they go through it quickly, usually summarizing the signs and never present the icons and signs. For example, when Babylon introduces figures of the coins, presents a table of 77 signs as “abbreviations and icons” without any reference to the case study coins (Fig. 1).



Fig. 1: Signs and icons on the coins of Achaemenid kings and subsidiary kinglets (Babylon 2009).

Bayani introduces 6 signs on the shekels of the Iranian National Museum Collection, respectively, for 1-Xerxes, 2-Unknown king, 3-Darius I, 4-Darius II, 5, 6- and again Xerxes, while she does not define her reasons. (Bayani, 1991: 187) (Fig. 2). In another example, George Hill (1919) in “Notes on the Imperial Persian Coinage” in *the Journal of Hellenic Studies* published 187 signs in the catalogue of the British Museum and the Iranian volume (Hill 1919: 126), which republished again as “Royal coins of Iran” 1977.

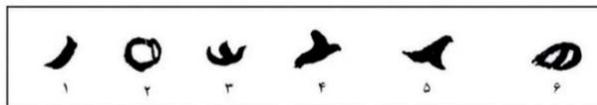


Fig. 2 Signs on coins (Bayani, 1370: 187)

The Following figures, in black, are negative points or concavities of the coined designs on the coins. In the collection, some of the designs are completely involved in the scene, however, they mostly include a composition of negative and outlined elements (Hill 1922: 98). Some of Hill’s presentations are completely comparable and similar to the collection of Mazandaran at Sari (Fig. 3).

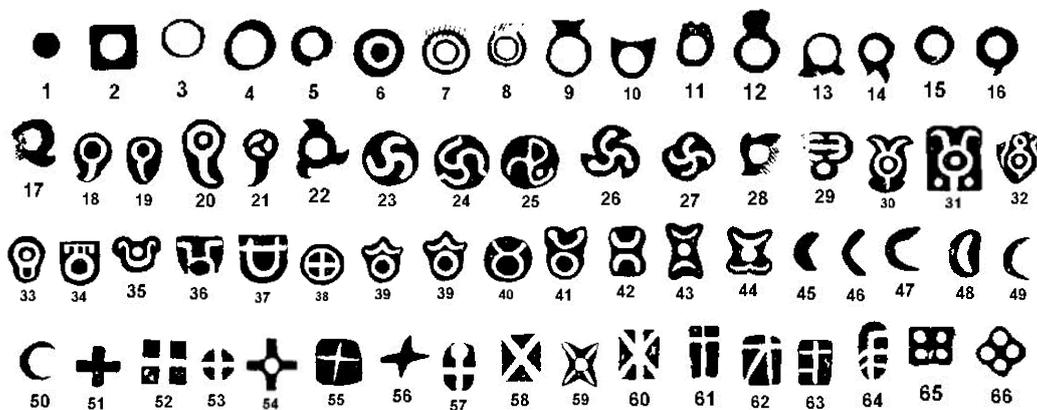




Fig. 3: signs and icons from the catalogue of the British Museum (Hill, 1922: 98).

Methodology

Following deoxidation, weighing, and measurement of a subsample of coins, the authors took images, using a digital camera, then produced a technical diagram with computer and manual skills. Then Photoshop’s Invert filter was applied, produced negative images of dies, which was followed by clear drawings (Fig. 4).

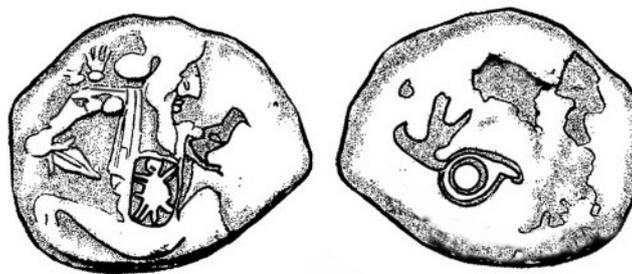


Fig. 4: An example of drawing coin and designs. A coin of Artaxerxes II. (Drawing: Saman Soortiji)

Regardless of the concave designs of simple dies, there are designs that appeared within a framework of difference of the concavities and bulges. Therefore, various lines including thick, thin, and tram point to clarify all concavities and convexities. The authors observed the engravings of the collection as small, medium and large and more obvious than usual. Clockwise, there is an explanation and drawing for each of the designs, including the number of the coin, property number, Roman numeral of the design code, and a brief explanation about location of the designs on the reverse or obverse. Considering the explanations and tables, one can easily recognize the exact position of the signs, on the coin or the king figure, with a certain number.

Introducing the signs of the coins of the Mazandaran Collection, by kings

Tables 1-11 introduce the signs and icons that were engraved on the coins of the Mazandaran Collection for every given king. As mentioned earlier, there are various types of the coins of seven kings, the signs present a high number of variations, so one can find repeated types. It should be noted that the abbreviation of the part includes coin numbers and property numbers, which Roman numerals are documented, and briefly explains clockwise on the obverse and reverse of the coins.

Coins of Darius I (Fig. 5 – Plate 1):

No. 1 (property No.10961) **Obverse:** I- leaning back and on the waist. II- in front of the abdomen and on the left hand. **Reverse:** III- almost in the middle, at 9 o'clock.

No. 2 (property No.10997) **Obverse:** I- back of the waist. II- in front of the shoulder and on the left hand **Reverse:** concavity of the anvil, at the left side next to the edge at 10 o'clock.

No. 3 (property No.11038) **Obverse:** I- in front of the shoulder, on the left hand. **Reverse:** II- right, at 4 o'clock.

No. 4 (property No.11018) **Obverse:** I- on the bow, left hand. II- back, on the right elbow. III- back, near the edge of the coin. **Reverse:** IV- right, 3 o'clock. V- right, 2 o'clock. VI- left, 9 o'clock.

No. 5 (property No.11140) **Obverse:** I-back, right forearm. II- On the left foot. **Reverse:** III- right, 3 o'clock. IV- on the depression near the center, 3 o'clock.



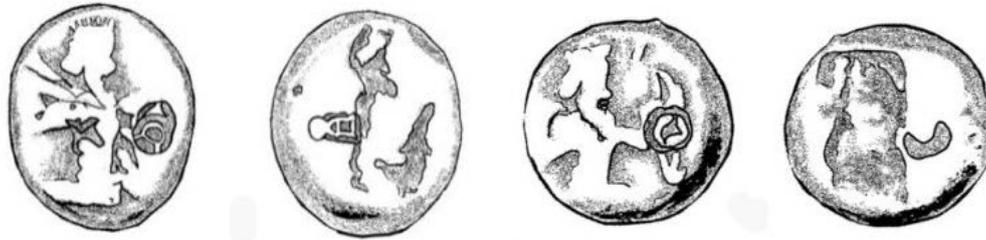


Fig. 5: Darius of coins, The Mazandaran Collection. (Drawing: Saman Soortiji)



Plate 1: Signs of the coins of Darius I. (Drawing: Saman Soortiji)

Coins of Xerxes (Fig.6 – Plate 2):

No. 6 (property No.11068) **Obverse:** I- in front of the crown and forehead. II- in front of the beard and part of the arm. **Reverse:** III- down, 6 o'clock. IV- left, 9 o'clock.

No. 8 (property No.11112) **Obverse:** I- in front of the abdomen and the surface of the spear. II- In front of the face. III- In front of the face. **Reverse:** no signs.

No. 9 (property No.11030) **Obverse:** I- Behind the head. II- On the chest. III- on the abdomen. IV- in front of the abdomen and on the bow. V- in front of the face, on the beard and left arm. VI- In front of the king on the bow. **Reverse:** VII -on the left anvil depression, 9 o'clock. VIII- Right, 9 o'clock.

No. 11 (property No.11011) **Obverse:** I- on the right thigh. II- in front of the abdomen, on the spear. III- on the abdomen. **Reverse:** no signs.

No. 12 (property No.10919) **Obverse:** I-Behind the waist. **Reverse:** no signs.

No. 13 (property No.11014) **Obverse:** I- in front of the king, on the abdomen and spear. II- in front of the face. III- Behind the thigh and on the heel of the right foot. **Reverse:** IV- right, 5 o'clock. V- center of the coin and on the recess.

No. 14 (property No.11098) **Obverse:** I- in front of the face. II- on the left arm in front of the chest. **Reverse:** no signs.

No. 15 (property No.11118) **Obverse:** I- in front of the chest, on the left arm. II- on the abdomen and spear. **Reverse:** III- left, 7 o'clock. IV- center. V- left, 8 o'clock.

No. 16 (property No.11035) **Obverse:** I- in front of the abdomen, on the spear. **Reverse:** II- left, 7 o'clock. III- left, 9 o'clock. IV- on the anvil depression, 12 o'clock. V- on the recess, 12 o'clock position.

No. 18 (property No.11146) **Obverse:** I- in front of the chest, on the right arm. **Reverse:** no signs.

No. 21 (property No.11026) **Obverse:** I- in front of the chest and face. **Reverse:** II- left, 8 o'clock.

No. 22 (property No.10972) **Obverse:** I- in front of the king on the left wrist and bow. **Reverse:** no signs.

No. 23 (property No.10965) **Obverse:** I-in front of the king on the left wrist and bow. **Reverse:** no signs.

No. 24 (property No.10968) **Obverse:** no signs. **Reverse:** I- left, 9 o'clock.

No. 25 (property No.11010) **Obverse:** no signs. **Reverse:** I- 9 o'clock. II- 3 o'clock.

No. 26 (property No.11134) **Obverse:** no signs. **Reverse:** I- On the recess of the anvil, 12 o'clock.

No. 27 (property No.11037) **Obverse:** no signs. **Reverse:** I- right, 9 o'clock position. II- 11 o'clock position.

No. 29 (property No.11044) **Obverse:** I- in front of the chest, on the spear. **Reverse:** no signs.

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No. 30 (property No.10934) **Obverse:** I- in front of the face. II- on the chest III- on the right shoulder, near the neck. IV- on the left thigh V- in front of the left arm and bow. VI- in front of the abdomen, on the spear. **Reverse:** VII- 2 o'clock position.

No. 31 (property No.11009) **Obverse:** no signs. **Reverse:** I- left, 2 o'clock position.

No. 32 (property No.10937) **Obverse:** I- in front of the king and on the forearm and left wrist. II-behind the waist. in the back of the waist. **Reverse:**IV- left, in the 10 o'clock position. V- left, in the 9 o'clock position.

No. 33 (property No.10944) **Obverse:** I- on the arm and forearm of the right hand. II- in front of the waist and on the left knee and spear. **Reverse:** no signs.

No. 34 (property No.11154) **Obverse:** I- on part of the face and left arm .**Reverse:** no signs.

No. 36 (property No.10969) **Obverse:** I- in front of the knee, on the bayonet blade. **Reverse:** II- right, in the 3 o'clock position.

No. 37 (property No.11093) **Obverse:** I- behind the right arm. II- in front of the face III- behind the waist. **Reverse:** no signs.

No. 38 (property No.11080) **Obverse:** I- in front of the face. **Reverse:** no signs.

No. 39 (property No.10928) **Obverse:** I- behind the shoulder, on the right arm. II- the back of the waist and the top of the right leg. III- on the chest and abdomen. **Reverse:** IV- center.V- right, 4 o'clock. VI- right, 1 o'clock.

No. 41 (property No.11057) **Obverse:** no signs. **Reverse:** I- left, 1 o'clock.

No. 42 (property No.10930) **Obverse:** I- in front of the chest and on the left arm. II- in front of the beard and in the range of the bow. III- in front of the chest and under the left forearm. **Reverse:** IV- left, in the 9 o'clock position. V- left, in the 8 o'clock position.

No. 43 (property No.11089) **Obverse:** I- on the chest. II- The back of the waist. III-below the waist and on the thighs. **Reverse:** IV- left, 8 o'clock. V- in the 9 o'clock position. VI- center, on the anvil depression.VII- down, 6 o'clock.

No. 44 (property No. 11078) **Obverse:** I- behind the waist. **Reverse:** II- right, in the 3 o'clock position.

No. 45 (property No.11077) **Obverse:** I- in front of the face and part of the nose and beard. II- on the chest. **Reverse:** III- right, in the position of 3 o'clock. IV- on the recess of the anvil and approximately in the position of 6 o'clock.

No. 46 (property No.11151) **Obverse:** I- in front of the face. II- above the head and on the crown. III- in front of the face in the position of the bow. **Reverse:** IV- near the center, in the 6 o'clock position.V- left, in the 9 o'clock position.

No. 48 (property No.11156) **Obverse:** I- the back of the shoulder and the right arm. II- on the chest. III- the back of the waist and the right leg.**Reverse:** no signs.



**Fig. 6: Xerxes' of the coins from the Mazandaran Collection in the Type 2 subdivision.
(Drawing: Saman Soortiji)**

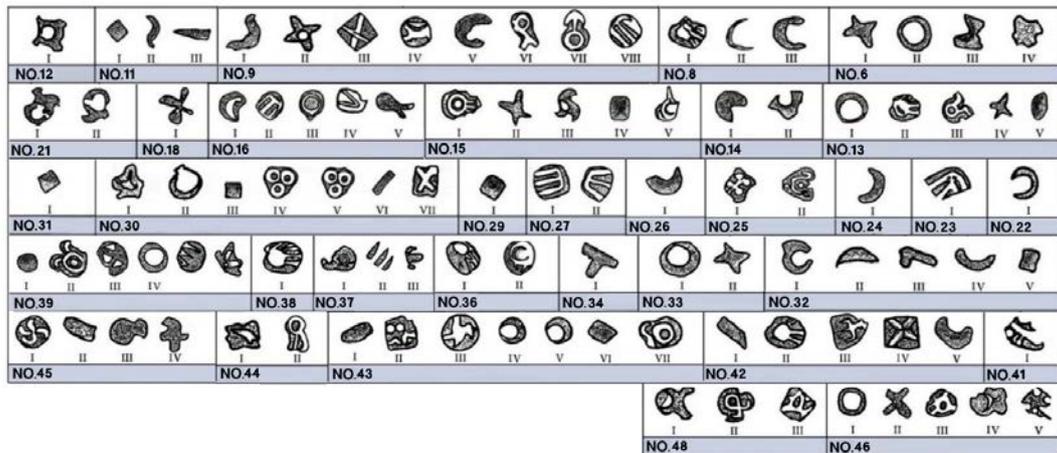


Plate 2: Signs of the coins of Xerxes. (Drawing: Saman Soortiji)

Coins of Artaxerxes I (Fig. 7- Plate 3):

No. 49 (property No.11065) **Obverse:** I- in front of the abdomen, above the knee and part of the spear. **Reverse:** II- lower, anvil depression, 6 o'clock. III- top left, 10 o'clock. IV- left, 9 o'clock. V- near the edge, 8 o'clock. VI- down, on the recess of the anvil, 6 o'clock position - above the sign number II.

No. 50 (property No.11051) **Obverse:** I- behind the waist. **Reverse:** II- down, at 5 o'clock.

No. 51 (property No.10986) **Obverse:** I- on the left knee. **Reverse:** II- in the 9 o'clock position.

No. 52 (property No.11129) **Obverse:** I- in front of the neck in the range of the bow. **Reverse:** II- left, in the 10 o'clock position. III- left, 9 o'clock IV- near the edge at 9 o'clock.

No. 54 (property No.11138) **Obverse:** I- on the chest. II- on the waist and above the left knee. III- in front of the chest, on the left forearm, in the range of the bow. **Reverse:** IV- down, in the 6 o'clock position. V- left, 9 o'clock.



Fig. 7: Artaxerxes I of the coins from the Mazandaran Collection. (Drawing: Saman Soortiji)

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Plate 3: Signs of the coins of Artaxerxes I. (Drawing: Saman Soortiji)

Coins of Darius II (Fig. 8 – Plate 4):

No. 55 (property No.11084) **Obverse:** I- in front of the face. II- in front of the abdomen and on a part of the spear. **Reverse:** III- left, in the position of 8 o'clock.

No. 56 (property No. 11019) **Obverse:** I- In front of the chest, on the left forearm and bow. **Reverse:** no signs.

No. 57 (property No.10932) **Obverse:** I- on the waist. II- on the chest. III- on the face. **Reverse:** IV- top, 12 o'clock. V- right, 2 o'clock.



Fig. 8: Darius II of the coins from the Mazandaran Collection. (Drawing: Saman Soortiji)



Plate 4: Signs of the coins of Darius II. (Drawing: Saman Soortiji)

Coins of Cyrus the Younger (Fig. 9 – Plate 5):

No. 58 (property No.11061) **Obverse:** I- behind the king, tangent to the elbow. **Reverse:**II- in the 1 o'clock.

No. 60 (property No.11071) **Obverse:** I- below the waist and on the thigh of the right leg II- behind the shoulder and on the end of the spear. III- on the chest. **Reverse:** no signs.

No. 61 (property No.11049) **Obverse:** I- behind the waist. II- in front of the face. **Reverse:**III- left, in the position of 10 o'clock.



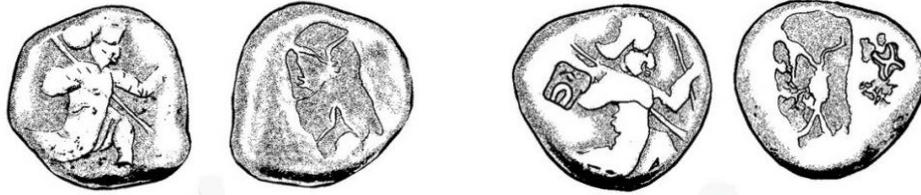


Fig 9: Coins cautiously assigned to Cyrus the Younger. (Drawing: Saman Soortiji)



Plate 5: Signs of the coins of Cyrus the Younger. (Drawing: Saman Soortiji)

Coins of Artaxerxes II-Type I (Fig. 10 – Plate 6):

No. 64 (property No.10985) **Obverse:** I- in front of the face. II- in front of the left foot in the range of the bow. **Reverse:** III- down, in the 7 o'clock position.

No. 65 (property No.11063) **Obverse:** I- on the chest. **Reverse:**II- right, at 4 o'clock.

No. 66 (property No.10925) **Obverse:** I- in front of the left elbow and on the bow. II- below the left elbow and in front of the chest. **Reverse:** III- left, 10 o'clock.

No. 67 (property No.11066) **Obverse:** I- opposite and below the left elbow, in front of the chest. **Reverse:** II- right, 4 o'clock. III- left, in the position of 8 o'clock. IV- left, in the position of 9 o'clock.

No. 68 (property No.11054) **Obverse:** no signs. **Reverse:** I- right, in the 4 o'clock position. II- right, in the 3 o'clock position.



Fig. 10: Artaxerxes II- Type I, of the coins from the Mazandaran Collection. (Drawing: Saman Soortiji)



Plate 6: signs of the coins of Artaxerxes II-Type I. (Drawing: Saman Soortiji)

Coins of Artaxerxes II-Type II (Fig. 11 – Plate 7):

No. 70 (property No.10921) **Obverse:**I- in front of the chest, on the elbow of the left hand and bow. **Reverse:**II- left, 9 o'clock.

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No. 71 (property No.10935) **Obverse:** I- in front of the chest and on the left wrist. II- the back of the neck and close to the edge. III- on the abdomen. IV- in front of the abdomen, on the left forearm. V- opposite the face. **Reverse:** VI- left, in the 10 o'clock position. VII- right, in the 4 o'clock position.

No. 72 (property No.10945) **Obverse:** I- on the left forearm and bow. II- on the abdomen. **Reverse:** III- right, in the position of 3. IV- left, 10 o'clock.

No. 73 (property No.10931) **Obverse:** I- on the left arm and shoulder. **Reverse:** II- in the center and on the anvil depression.

No. 75 (property No.11006) **Obverse:** I- on the chest II- on the abdomen. III- in front of the abdomen on the left thigh. IV- in front of the chest. **Reverse:** V- left, in the position of 8 o'clock.. VI- top, 12 o'clock. VII- center. VIII- left and at 9 o'clock.

No. 76 (property No.10953) **Obverse:** I- in front and on the face. II- in front of the abdomen and under the left arm. III- on the chest **Reverse:** IV- right, in the position of 3. V- top, 11 o'clock. VI- left, 10 o'clock. VII- left, 9 o'clock.

No. 77 (property No.11056) **Obverse:** I- on the chest II- opposite, on the thigh of the left leg III- opposite, on the left leg. **Reverse:** no signs.

No. 78 (property No.11050) **Obverse:** I- behind the waist and on the king's dagger. **Reverse:** no signs.

No. 79 (property No.11021) **Obverse:** no signs. **Reverse:** I- left, in the 9 o'clock position.

No. 82 (property No.11122) **Obverse:**I- Behind the waist. II- in front of the face. III- in front of the abdomen and above the left knee. **Reverse:** IV- right, in the 5 o'clock position. V- in the center.

No. 83 (property No.10994) **Obverse:** I- i on the chest. II- behind the king and on the right arm. III- in front of the shoulder, on the left arm **Reverse:** IV-center.

No. 84 (property No.11042) **Obverse:** no signs. **Reverse:** I- top, at 10 o'clock. II- top, at 12 o'clock. III- cener.

No. 85 (property No.11141) **Obverse:** I- in front of the face and part of the nose and beard. **Reverse:** II- leftt, at 10 o'clock. III-center. IV- leftt, at 10 o'clock.

No. 86 (property No.10941) **Obverse:** I- in front of the chest and on the left arm and part of the beard. II- on the waist III- on the back of the shoulder, on the right arm. IV- behind the waist and on the dagger -V behind the king and on the toe of the right foot. VI- on the chest. VII- Behind the king and on the right arm. **Reverse:** VIII- right, at 3 o'clock. IX- leftt, at 9 o'clock.

No. 87 (property No.11069) **Obverse:** I- on the chest and left arm **Reverse:** II-center. III- right, at 1 o'clock. IV- leftt, at 10 o'clock. V- leftt, at 10 o'clock.

No. 88 (property No.11139) **Obverse:** I- behind. II- in front of the shoulder, on the left arm. **Reverse:** III-center. IV- leftt, at 10 o'clock.

No. 89 (property No.11031) **Obverse:** I- the back. II- in front of the neck and on the left forearm and bow. III- on the chest and abdomen. **Reverse:** IV- downt, at 6 o'clock.

No. 90 (property No.11095) **Obverse:**I- on the right arm **Reverse:** no signs.

No. 91 (property No.11013) **Obverse:** I- in front of the face and part of the bow. **Reverse:** II- center. III- leftt, at 9 o'clock. IV- right, at 1 o'clock.

No. 92 (property No.10980) **Obverse:** I- on the chest. II- In front of the chest on the left forearm and bow. **Reverse:** III- right, at 4 o'clock. IV- right, at 5 o'clock.

No. 93 (property No.11081) **Obverse:** no signs. **Reverse:** I- at 9 o'clock.

No. 94 (property No.11135) **Obverse:** I- behind the shoulder and on a part of the right arm. **Reverse:** II- top, at 9 o'clock.

No. 95 (property No.11100) **Obverse:** I- in front of the chest and on the left arm. **Reverse:** II- down, at 6 o'clock. III- leftt, at 9 o'clock. IV- at 10 o'clock. V- right, at 1 o'clock.

No. 96 (property No.10975) **Obverse:** I- in front of the chest and under the arm and left elbow. II- in front of the abdomen in the arc range. **Reverse:** III- at 9 o'clock. IV- left, at 7 o'clock. V- center.

No. 98 (property No.11123) **Obverse:**I- on the chest. II- on the mouth, beard and left shoulder. **Reverse:** III- almost centered and inclined to the 9 o'clock position.

No. 99 (property No.11148) **Obverse:**I- on the chest. II- in front of the waist, on the left knee. III- on the neck. IV in front of the chest, on the left elbow. **Reverse:** no signs.

No. 100 (property No.11003) **Obverse:**I- on the chest.**Reverse:** no signs.

No. 101 (property No.11034) **Obverse:** I- in front of the face and part of the nose. **Reverse:** no signs.

No. 102 (property No.11033) **Obverse:** I- behind the waist, on the right arm. II- in front of the face. **Reverse:** no signs.

No. 103 (property No.11022) **Obverse:** I- in front of the chest, abdomen and part of the left arm. **Reverse:** II- right, at 9 o'clock. III- top, at 1 o'clock. IV- left, at 3 o'clock.

No. 104 (property No.10942) **Obverse:** I- in front of the abdomen. II- in front of the chest, below the elbow. III- on the chest. **Reverse:** IV- at 6 o'clock. V- at 9 o'clock. VI- left, tangent to the previous sign at 10 o'clock.

No. 105 (property No.11085) **Obverse:** I- behind. II- on the chest. **Reverse:**III- in the 10 o'clock position. IV- in the 6 o'clock position. V- in the 10 o'clock position. VI- in the 1 o'clock position.

No. 107 (property No.10949) **Obverse:** I- the top of the crown. II- above the crown III- behind the waist and on the right elbow. IV- in front of the face **Reverse:**V- down, at 6 o'clock. VI- in the 8 o'clock position. VII- in the 11 o'clock position.

No. 109 (property No.11108) **Obverse:**I- **Reverse:** II- left, at 9 o'clock. III- almost in the center. IV- left, at 9 o'clock. V- down, at 6 o'clock. VI- right, at 3 o'clock. VII- left, at 7 o'clock. VIII- right, at 3 o'clock.

No. 110 (property No.11088) **Obverse:** I- in front of the chest, on the left arm. II- on the chest and abdomen.**Reverse:** III- left, at 10 o'clock.

No. 111 (property No.11028) **Obverse:** I- on the face, neck and chest. **Reverse:** II- almost in the center. III- left, at 9 o'clock. IV- right, at 2 o'clock.

No. 112 (property No.11128) **Obverse:** I- in front of the chest. II- on the chest. III- on the waist. IV- in front of the left knee. **Reverse:** V- left, at 8 o'clock. VI- center.

No. 113 (property No.11143) **Obverse:** no signs. **Reverse:** I- top, at 12 o'clock.

No. 114 (property No.11045) **Obverse:** I- in front of the chest and on the left arm. II- on the chest. III- in front of the face. IV- opposite, on the left wrist. **Reverse:** V- top, at 5 o'clock. VI- left, at 11 o'clock.

No. 115 (property No.11067) **Obverse:** I- in front of the face, on the nose and part of the beard. II- on the chest **Reverse:** III- right, at 3 o'clock. IV- right, at 2 o'clock. V- in the 10 o'clock position.

No. 116 (property No.11074) **Obverse:** I- on the neck and beard. II- on the chest. **Reverse:** III- right, at 2 o'clock. IV- left, at 8 o'clock.

No. 117 (property No.11091) **Obverse:** I- in front of the face, near the edge and the range of the bow **Reverse:** no signs.

No. 118 (property No.11110) **Obverse:** I- in front of the face and on a part of the beard. **Reverse:** II- right, at 8 o'clock. III- left, at 10 o'clock. IV- left, at 5 o'clock.

No. 119 (property No.11126) **Obverse:** no signs. **Reverse:** I- left, at 11 o'clock. II- left, at 10 o'clock.

No. 120 (property No.11114) **Obverse:** no signs. **Reverse:** I- right, at 5 o'clock. II- right, at 4 o'clock. III- right, at 5 o'clock. IV- center. V- left, at 9 o'clock. VI- down, at 6 o'clock.

No. 121 (property No.11025) **Obverse:** I- In front of the face and tangent to the nose. II- in front of the left knee. **Reverse:** III-center. IV-top, at 12 o'clock.

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No. 122 (property No.10970) **Obverse:** I- on the chest. II- on the face. **Reverse:** III-center. IV- left, at 11 o'clock.

No. 123 (property No.10974) **Obverse:** I- on the chest and part of the beard. II- In front of the chest, part of the left arm. III- in front of the chest and face and on the left arm. **Reverse:** IV- center. V- left, at 10 o'clock.

No. 124 (property No.10933) **Obverse:** I- in front of the chest, on the left arm. **Reverse:** II- center.

No. 125 (property No.10926) **Obverse:** I- on the back and on part of the king's hair. **Reverse:** no signs.

No. 126 (property No.11052) **Obverse:** I- in front of the face, on the left elbow and the range of the bow. II- on the abdomen and waist. III- in front of the chest, below the elbow of the left hand. **Reverse:** no signs.

No. 127 (property No.11137) **Obverse:** I- on the forehead and crown. **Reverse:** II- In the 9 o'clock position.

No. 129 (property No.10992) **Obverse:** I- in front of the face. II- on the forehead and face. III- on the back of the shoulder, on the right arm IV- on the back and on the waist. V- in front of the chest and on the left arm. **Reverse:** VI- center.

No. 130 (property No.11105) **Obverse:** I- on the face. II- in front of the face. III- on the chest. IV- on the abdomen. **Reverse:** V- left, at 9 o'clock. VI- left, at 11 o'clock.

No. 131 (property No.10967) **Obverse:** I- on the chest. II- behind the waist, on the dagger. **Reverse:** no signs.

No. 132 (property No.11158) **Obverse:** I- In front of the face. **Reverse:** II- left, at 9 o'clock. III- right, at 3 o'clock.

No. 133 (property No.10947) **Obverse:** I- behind the waist, on the dagger grip. II- in front of the face, on the left wrist and bow. III- on the chest. **Reverse:** IV- right, at 4 o'clock. V- center. VI-top, at 12 o'clock.

No. 134 (property No.11136) **Obverse:** I- on the back of the shoulder, on the right arm. II-on the abdomen. III- on the chest. IV- in front of the chest. V- opposite the face. VI- in front of the chest, on the elbow and left forearm, in the range of the bow. **Reverse:** VII- left, at 10 o'clock. VIII- center.

No. 135 (property No.10954) **Obverse:** I- behind, on the right arm. II- behind the waist, on the dagger. III- on the face. –IV behind. **Reverse:** V- right, at 3 o'clock. VI- right, at 5 o'clock. VII- left, at 9 o'clock.

No. 137 (property No.10996) **Obverse:** I- on the chest and abdomen. **Reverse:** II-center. III- In the 2 o'clock position.

No. 138 (property No.11064) **Obverse:** I-in front of the chest. II- on the waist. **Reverse:** III-center.

No. 139 (property No.11144) **Obverse:** I- in front of the chest, on the arm. **Reverse:** II- In the 3 o'clock position.

No. 140 (property No.11020) **Obverse:** I- behind, on the right arm. II- on the face. III- the back of the waist. IV- on the chest. V - in front of the face, chest and left arm. VI- on the left leg. **Reverse:** VII-center. VIII- left, at 9 o'clock.

No. 141 (property No.10984) **Obverse:** I- back of the waist, on the right arm. II- on the chest. III- on the abdomen. IV- on the waist.V- in front of the chest and abdomen. **Reverse:** VI- left, at 9 o'clock. VII- down, at 6 o'clock. VIII- right, at 5 o'clock. IX- left, at 9 o'clock.

No. 142 (property No.10939) **Obverse:** I- on the chest. **Reverse:** II- down, at 6 o'clock. III- left, at 9 o'clock. IV- right, at 3 o'clock. V- top, at 12 o'clock.

No. 143 (property No.10964) **Obverse:** I- in front of the chest, part of the left forearm. II- in front of the abdomen. **Reverse:** no signs.



Fig. 11: Artaxerxes II-Type II, of the coins from the Mazandaran Collection. (Drawing: Saman Soortiji)

| | | | | | | | |
|---------|--|---------|--|---------|--|---------|--|
| NO. 73 | | NO. 72 | | NO. 71 | | NO. 70 | |
| NO. 78 | | NO. 77 | | NO. 76 | | NO. 75 | |
| NO. 85 | | NO. 84 | | NO. 83 | | NO. 82 | |
| NO. 89 | | NO. 88 | | NO. 87 | | NO. 86 | |
| NO. 96 | | NO. 95 | | NO. 94 | | NO. 93 | |
| NO. 92 | | NO. 91 | | NO. 90 | | NO. 89 | |
| NO. 104 | | NO. 103 | | NO. 102 | | NO. 101 | |
| NO. 109 | | NO. 108 | | NO. 107 | | NO. 106 | |
| NO. 114 | | NO. 113 | | NO. 112 | | NO. 111 | |
| NO. 120 | | NO. 119 | | NO. 118 | | NO. 117 | |
| NO. 127 | | NO. 126 | | NO. 125 | | NO. 124 | |
| NO. 133 | | NO. 132 | | NO. 131 | | NO. 130 | |
| NO. 139 | | NO. 138 | | NO. 137 | | NO. 136 | |
| NO. 143 | | NO. 142 | | NO. 141 | | NO. 140 | |

Plate 7: signs of the coins of Artaxerxes II-Type II. (Drawing: Saman Soortiji)

4-6-3. coins of Artaxerxes II- Type III (fig. 12- plate 8):

No. 145 (property No.11131) **Obverse:** no signs. **Reverse:** I- top, at 12 o'clock.

No. 146 (property No.11116) **Obverse:** no signs. **Reverse:** I- down, at 6 o'clock. II- center. III- top, at 1 o'clock.

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No. 148 (property No.11130) **Obverse:**I- in front of the waist, on the left knee. **Reverse:** no signs.

No. 150 (property No.11002) **Obverse:** I- on the abdomen. II- in front of the chest, on the left arm. **Reverse:** III- left, at 8 o'clock. IV- left, at 9 o'clock.

No. 152 (property No.11012) **Obverse:** I- on the abdomen **Reverse:** II- left, at 9 o'clock. III- left, at 7 o'clock.

No. 153 (property No.11104) **Obverse:** I- in front of the face, part of the beard. II- in front of the chest and abdomen. III- on the neck and chest. **Reverse:** no signs.

No. 154 (property No.11102) **Obverse:** no signs. **Reverse:** I- left, at 9 o'clock.

No. 155 (property No. 10993) **Obverse:** I- behind the head and right arm. II- behind the waist, on the right leg and dagger. III- Behind the waist, on the dagger. IV- in front of the chest on the left arm. **Reverse:**V- left, at 8 o'clock.

No. 156 (property No.10929) **Obverse:** I- on the chest, shoulders and beard. **Reverse:** no signs.

No. 157 (property No.11157) **Obverse:** I- on the face. **Reverse:** no signs.

No. 158 (property No.11039) **Obverse:** I- on the mouth, beard and left arm. II- behind. III-in front of the face. **Reverse:** IV- In the 4 o'clock position. V- left, at 3 o'clock. VI- right, at 9 o'clock.

No. 159 (property No.11062) **Obverse:** I- on the chest. **Reverse:** II- left, at 9 o'clock. III- left, at 10 o'clock.

No. 161 (property No.11079) **Obverse:** I- in front of the face and on the left wrist and bow. **Reverse:** no signs

No. 162 (property No.11027) **Obverse:** I- in front of the chest and under the left arm. **Reverse:** no signs.

No. 163 (property No.10943) **Obverse:** no signs.**Reverse:** I- right, at 2 o'clock. II- left, at 8 o'clock.

No. 164 (property No.11125) **Obverse:** I- behind the shoulder, on the right arm. II- in front of the face, on the left elbow and the range of the bow. **Reverse:** III-center. IV- left, at 9 o'clock.

No. 165 (property No.10963) **Obverse:**no signs. **Reverse:** I- left, at 9 o'clock. II- top, at 9 o'clock.

No. 166 (property No.10959) **Obverse:** no signs. **Reverse:** I- left, at 10 o'clock.

No. 167 (property No.10995) **Obverse:** I- back, on the waist. II- on the chest. III- Behind the waist, on the dagger. IV- on the left waist and thigh. **Reverse:** no signs.

No. 168 (property No.10952) **Obverse:** I- in front of the chest, on the left arm. **Reverse:** no signs.

No. 169 (property No.11083) **Obverse:** I- in front of the face, above the left arm and bow. II- in front of the face, on the left elbow. III- in front of the abdomen, on the bow. **Reverse:** IV- right, at 3 o'clock.

No. 171 (property No.10955) **Obverse:** I- in front of the abdomen, knees and bow. **Reverse:** II- right, at 3 o'clock.

No. 172 (property No.11097) **Obverse:** I- in front of the chest, on the left elbow and bow. II- in front of the abdomen, above the left knee, on the bow. **Reverse:** III- right, at 5 o'clock.

No. 173 (property No.11132) **Obverse:** no signs.**Reverse:** I- left, at 9 o'clock.

No. 175 (property No.11090) **Obverse:** no signs. **Reverse:** I- left, at 9 o'clock. II- right, at 3 o'clock. III- center.

No. 176 (property No.11029) **Obverse:** I- In front of the chest, on the left arm. II- on the chest. **Reverse:** III- Down, at 7 o'clock. IV- right, at 5 o'clock. V- left, at 9 o'clock.

No. 177 (property No.11120) **Obverse:** I- on the chest. **Reverse:** II- left, at 10 o'clock.

No. 178 (property No.11150) **Obverse:** I- in front of the chest, under the left arm. **Reverse:** II- center.

- No. 179** (property No.11048) **Obverse:** no signs. **Reverse:** I- right, at 5 o'clock.
- No. 184** (property No.10977) **Obverse:** I- on the abdomen. II- in front of the face, top of the arm and left elbow. **Reverse:** no signs.
- No. 185** (property No.10976) **Obverse:** I- on the chest. II- on the face. III- In front of the face, on the left forearm and the range of the bow. **Reverse:** IV- right, at 5 o'clock.
- No. 186** (property No.11015) **Obverse:** I- the back of the head and part of the hair. II- in front of the face.
Reverse: III- left, at 11 o'clock. IV- left, at 9 o'clock. V- right, at 3 o'clock. VI- right, at 2 o'clock. VII- left, at 8 o'clock. VIII- right, at 1 o'clock.
- No. 187** (property no. 11113) **Obverse:** I-below the waist and on the right knee. **Reverse:** no sign.
- No. 188** (property no. 11005) **Obverse:** I- behind the chest, on the arm and right forearm II- on the chest and abdomen. **Reverse:** III-center. IV-top, at 11 o'clock.
- No. 189** (property no. 10958) **Obverse:** I- in front of the chest. II- on the chest. III- in front of the abdomen and in the range of the bow. **Reverse:** IV- right, at 4 o'clock. V- left, at 10 o'clock. VI- left, at 9 o'clock. VII- right, at 5 o'clock.
- No. 190** (property no. 10940) **Obverse:** I- behind the king on the right arm. II- behind the waist, on the dagger. **Reverse:** III- right, at 4 o'clock. IV- right, at 3 o'clock. V- top, at 12 o'clock.
- No. 191** (property no. 11040) **Obverse:** no sign. **Reverse:** I- left, at 8 o'clock.
- No. 192** (property no. 10922) **Obverse:** I- on the chest. II- on the abdomen. III- in front of the abdomen. IV- in front of the face and on the left arm. **Reverse:** V- at 3 o'clock. VI- down, at 6 o'clock. VII- left, at 10 o'clock.
- No. 193** (property no. 10927) **Obverse:** no sign. **Reverse:** I- center.
- No. 194** (property no. 11076) **Obverse:** I- in front of the abdomen and the left knee. **Reverse:** II-center.
- No. 195** (property no. 11082) **Obverse:** I- behind the shoulders and chest. II- in front of the chest, on the left arm. **Reverse:** III- right, at 5 o'clock. IV- left, at 9 o'clock.
- No. 197** (property no. 10978) **Obverse:** I- on the face and beard. II- on the chest. III- on the crown and face. **Reverse:** no sign.
- No. 199** (property no. 11087) **Obverse:** no sign. **Reverse:** I- down, at 6 o'clock. II- top, at 12 o'clock. III - right, at 5 o'clock.
- No. 200** (property no. 10998) **Obverse:** I- on the chest and abdomen. **Reverse:** II- at 12 o'clock. III-top, above the previous sign, at 12 o'clock.
- No. 201** (property no. 11072) **Obverse:** I- on the chest and left arm. **Reverse:** II- at 8 o'clock.
- No. 202** (property no. 10981) **Obverse:** I- on the nose, lips and front of the face. II- on the crown and forehead. **Reverse:** III- left, at 9 o'clock . IV- at 11 o'clock. V- left, at 8 o'clock. VI- near the center.
- No. 203** (property no. 11024) **Obverse:** I- in front of the face and above the left forearm. II- on the chest. III- on the abdomen. **Reverse:** IV- right, at 5 o'clock. V- at 10 o'clock. VI- left, at 10 o'clock.
- No. 205** (property no. 11121) **Obverse:** I- on the face. II- on the chest. III- in front of the face and part of the left arm. IV- behind the shoulder, on the forearm and right wrist. **Reverse:** V- center. VI- left, at 10 o'clock.
- No. 207** (property no. 10956) **Obverse:** I- in front of the face. II- behind the right shoulder. III- the back of the waist and right forearm. IV- on the face. **Reverse:** V- right, at 3 o'clock. VI- left, at 9 o'clock.
- No. 208** (property no. 11016) **Obverse:** I- in front of the face and in the range of the bow. II- in front of the chest, on the left arm. **Reverse:** I- left, at 9 o'clock. II- left, at 10 o'clock.
- No. 209** (property no. 10971) **Obverse:** no sign. **Reverse:** I- right, at 2 o'clock.

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- No. 210** (property no. 11149) **Obverse:** I- on the waist. **Reverse:** no sign.
- No. 212** (property no. 10991) **Obverse:** no sign. **Reverse:** I- left, at 10 o'clock. II- approximately at 12 o'clock and close to the center.
- No. 214** (property no. 11004) **Obverse:** I- behind the waist, on the dagger. II- in front of the face, part of the nose and mouth. **Reverse:** no sign.
- No. 215** (property no. 10960) **Obverse:** I- in front of the face. II- in front of the chest, on the left arm. **Reverse:** III- left, at 11 o'clock. IV- left, at 10 o'clock. V- left, at 8 o'clock.
- No. 217** (property no. 11103) **Obverse:** I- front of the face, part of the left arm. II- in front of the face. **Reverse:** no sign.
- No. 218** (property no. 10999) **Obverse:** I- in front of the face, on the left arm. II- in front of the chest, on the left forearm. III- behind the waist, on the dagger. **Reverse:** IV- top, at 12 o'clock. V- left, at 9 o'clock.
- No. 219** (property no. 11060) **Obverse:** I- on the chest. II- in front of and on a part of the abdomen. **Reverse:** right, at 5 o'clock.
- No. 220** (property no. 10938) **Obverse:** I- on the chest. II- on the hair. III- on the shoulders. IV- on the chest. V- in front of the chest, on the left arm. **Reverse:** VI- right, at 2 o'clock. VII- center. VIII- left, at 10 o'clock. IX- top, at 1 o'clock.



Fig. 12: Artaxerxes II-Type III, of the coins from the Mazandaran Collection. (Drawing: Saman Soortiji)

| | | | | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | | | | | | | | |
| NO.157 | NO.156 | NO.155 | NO.154 | NO.153 | NO.152 | NO.150 | NO.148 | NO.146 | NO.145 |
| | | | | | | | | | |
| NO.168 | NO.167 | NO.166 | NO.165 | NO.164 | NO.163 | NO.160 | NO.159 | NO.158 | NO.158 |
| | | | | | | | | | |
| NO.184 | NO.179 | NO.178 | NO.177 | NO.176 | NO.175 | NO.173 | NO.172 | NO.171 | NO.169 |
| | | | | | | | | | |
| NO.189 | NO.188 | NO.187 | NO.186 | NO.185 | NO.185 | NO.185 | NO.185 | NO.185 | NO.185 |
| | | | | | | | | | |
| NO.199 | NO.197 | NO.195 | NO.194 | NO.193 | NO.192 | NO.191 | NO.190 | NO.190 | NO.190 |
| | | | | | | | | | |
| NO.205 | NO.203 | NO.202 | NO.201 | NO.200 | NO.200 | NO.200 | NO.200 | NO.200 | NO.200 |
| | | | | | | | | | |
| NO.215 | NO.214 | NO.212 | NO.210 | NO.209 | NO.208 | NO.207 | NO.207 | NO.207 | NO.207 |
| | | | | | | | | | |
| NO.220 | NO.219 | NO.218 |

Plate 8: signs of the coins of Artaxerxes II-Type III. (Drawing: Saman Soortiji)

4-7-1. Coins of Artaxerxes III-Type I (Fig. 13 – Plate 9):

No. 221 (property no. 10919) **Obverse:** I- in front of the crown. **Reverse:** II- left, at 8 o'clock.

No. 222 (property no. 11109) **Obverse:** I- on the chest. **Reverse:** II- center.

No. 223 (property no. 10966) **Obverse:** I- behind the waist, under the right arm. **Reverse:** no sign.

No. 225 (property no. 11119) **Obverse:** I- behind. II- in front of the neck and face. III-behind. IV- in front of the face and crown. **Reverse:** V- right, at 5 o'clock. VI- left, at 8. o'clock.VII- right, 2 o'clock.



Fig. 13: Artaxerxes III-Type I, of the coins from the Mazandaran Collection. (Drawing: Saman Soortiji)

| | | | | | | | | | | | | |
|--------|--|--|--|--|--|--|--------|--|--------|--|--------|--|
| | | | | | | | | | | | | |
| NO.225 | | | | | | | NO.223 | | NO.222 | | NO.221 | |

Plate 9: Signs of the coins of Artaxerxes III-Type I. (Drawing:Saman Soortiji)

4-7-2. coins of Artaxerxes III- Type II (fig. 14- plate 10):

No. 226 (property no. 11127) **Obverse:** I- in front of the face, on the left arm. **Reverse:** II- left, at 10 o'clock. III- center.

No. 228 (property no. 10983) **Obverse:** no sign. **Reverse:** I- at 8 o'clock. II- at 4 o'clock.

No. 229 (property no. 10987) **Obverse:** no sign. **Reverse:** I- right, at 2 o'clock.



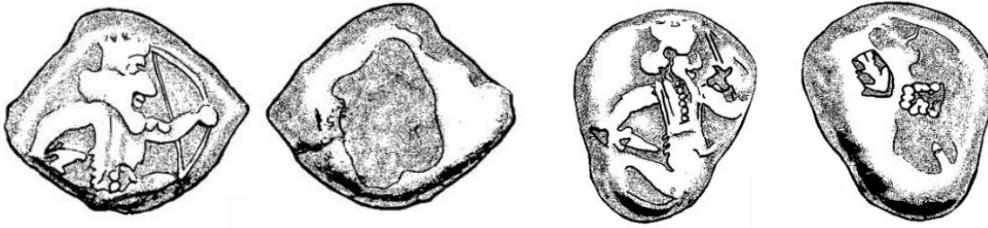


Fig. 14: Artaxerxes III- type II, of the coins from the Mazandaran Collection. (Drawing: Saman Soortiji)

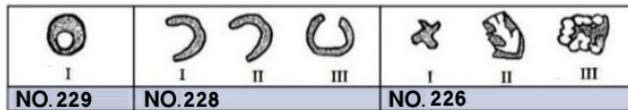


Plate 10: Signs of the coins of Artaxerxes III-Type II. (Drawing: Saman Soortiji)

Unrecognizable coins (Fig. 15 – Plate 11)

The main design or the figure of king on these coins is highly eroded and unrecognizable, however, its sign as a king is at least obvious. It means the signs were engraved after minting, typically after a long time interval. This is another reason to deny the signs as mint marks. However, there are no signs on 45 coins of the total 240 coins in the collection.

No. 232 (property no. 11106) **Obverse:** I- center. II- Right, inclined to the center. III- left. **Reverse:** IV- right, at 5 o'clock. V- left, at 9 o'clock.

No. 233 (property no. 11147) **Obverse:** I- on the left arm. II- on the chest and waist. **Reverse:** no sign.

No. 234 (property no. 10988) **Obverse:** I- opposite the face. II- on the heel of the right foot. III- on the chest. IV- on the waist and thigh of the left leg. **Reverse:** V- top, at 11 o'clock.

No. 235 (property no. 10924) **Obverse:** I- behind the king and on the left arm. II- on the crown. III- on the shoulder and right arm. IV- on the right forearm. **Reverse:** V- at 9 o'clock. VI- at 3 o'clock. VII- center.

No. 238 (property no. 11046) **Obverse:** I- behind the waist, on the right arm. II- on the chest. III- in front of the chest and on the left arm. **Reverse:** no sign.

No. 239 (property no. 11047) **Obverse:** I- right. II- top, left. III- center. IV- left. **Reverse:** V- center. VI - left, at 9 o'clock.



Fig. 15: Of the unrecognizable coins, from the Mazandaran Collection. (Drawing:Saman Soortiji)

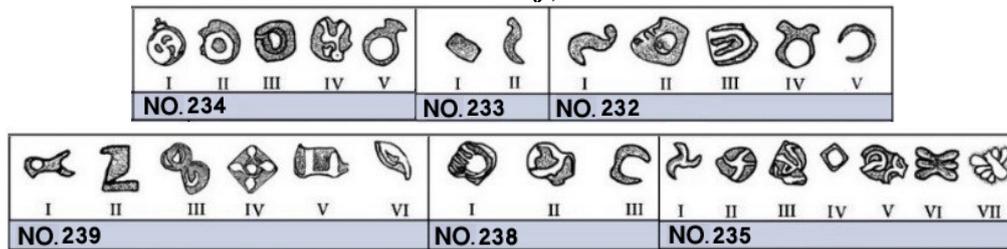


Plate 11: Signs and icons on unrecognizable coins. (Drawing:Saman Soortiji)

Investigation and analysis of the signs of the Achaemenid coins from the Mazandaran Collection

Coins have conceptual implications, in addition to their economical function. “As an official manifestation of power, coins are minted to propagate and present political ideas and/or ideological concepts” (Lukonin 1389: 86). The definition, which the authors wonder if includes the Achaemenid coinage, and the main and secondary designs of the coins. Bablon, who has conducted most of the research on Achaemenid coinage, suggests the signs are “mysterious signs”, with uncertainty about representation of mintmarks. It would be necessary to use research on later coins for greater understanding. For example, during the Parthian period, the beginning letter of any mint represents mint marks, just like the Achaemenid satrap coins. The location of identification letters gradually becomes more organized, where mintmarks are positioned under the throne or the bow (Bayani 1353: 13). If the organisation of Parthian coins resulted from earlier experimentations, one can suggest that some of the signs on the Achaemenid coins were mintmarks, however, some of the coins have no signs, whereas a few signs are positioned directly on the face or body of the king, despite enough space being available for them to be located elsewhere. Considering the position of the king, such distortions could be reasonable. Therefore, this could strengthen the possibility of a transitional context of evident and understandable concepts or conveyance of hidden and mysterious messages, despite the simple and small forms of the designs.

For example, during the Achaemenid period, the kings’ death did not cause the coins to fall out of economic circulation, indeed, the previous regent’s coins were used alongside newly minted coins. Probably, the design that appears on the king’s face, chest, or abdomen, convey the earlier king’s death and, at the same time, the reign of a new king. However, there are exceptions, for example, there is not any sign directly on the body or the main design of the king within the corpus of Darius’ coins in the Mazandaran Collection. To explain the conveyance of concepts and messages of icons, Alipoor (1387: 25) analyzed designs according to Saussure’s (Saussure 1378: 58) theory, and also the theory of Charles

Sanders Peirce, suggesting these marks may have been iconic systems including languages, and codes. Accordingly, one can understand the implications, historical, and cultural information about the contemporary society that made these coins. Also, Sojudi believes that “every piece of art has another semiotic function, which is communicational function” (Sojudi 1382: 6). Understanding these icons and messages demanded knowledge of the codes. There would thus be a correlation between “signifier and signified”, which was interpreted considering the appropriate codes (Zamiran 1382: 131, 152). For example, in the coins with an archer king that faces to the left, the bow signifies the icon and the signified is the outer universe. It means the king, as an obvious conceptual category, has the other implicit meaning that is Sovereignty over the people and the representative of the gods on earth. Considering the present paper, one can use the graphics, indices, and iconic explanations to compare the case study collection (Alipur 1387: 25) (Table 2).

Table 2: Iconic level of Achaemenid coins (Alipur, 2008: 25)

| Graphic level | Index level | Iconic level |
|----------------------|----------------------------|---|
| Archer king | The warrior king | The king sovereignty |
| Looking to left side | Part of the king’s garment | Denticulate walls of a sacred place |
| Looking to left side | Looking to left side | Public support against devil powers |
| bow | Hunting and war instrument | Anahita the goddess of water and creation |
| arrow | Hunting and war instrument | Tishtar goddess of rain |
| crown | Part of the king’s garment | Mithra the goddess |

The right side, in all religions, is the location of the good and the gods, while the left side represents the location of evils and hell (Chevalier and Gerberan 1382: 184). Anahita means powerful and fresh waters that is indicated with a crescent icon and is the originator of all waters, the source of all fertilization (Hook 1359: 38-40). The figure of Anahita, or the divine mother, with her dependent goddesses always relates to the moon, because menstruation coincides to the moon phases (Hall 1380: 280), and concavity, convexity, and bow are of the main icons of water, which are also signs of the goddess Anahita (Eqtedari 1354: 98). As the explanation of Tir, Tishtar is the brilliant and magnificent star, the first star and the origination of all waters, the source of rain and fertilization (Heinz 1368: 35-36). The goddess’ signs are arrows, triangular arrowheads, and stars (Bahar 1352: 76). However, Tir was worshiped as the goddess of writing and calligraphy that manifested in cuneiform letters as triangles, wedges (Eqtedari 1354: 975). Crown signs indicate solar gods and sun (Cooper 1379: 198). Some

scholars relate Mithra to the sun who gradually replaced by the sun (Cooment 1380: 27).

One problem that arises, however, is that there is no certain border between the categories and signs, and every given sign could be a composition of the three groups. Chandler says, “being iconic sign of a graphic or an icon depends on the application of the sign” (Chandler 1994). Because the contemporary coin producers used them for the conveyance of political messages and manifestations of the ruling class, in addition to their economic application, the iconic level of the signs would be more obvious (Alipur 1387: 27). As, to an extent, we know the iconic possibilities of the signs and probable reasons of the coinage, we should mention that the signs in the collection, out of the main designs or the body and the king’s armor, which are unexplainable, regarding variety and number, however, there are designs that directly engraved on the face or chest of the king. If one intends to describe the issue according the model, the location of the designs probably is the expression of death of the king and removal of his sovereignty, at the same time, a message that implicates reign of a new king. Considering the classification of the signs on the coins of the Mazandaran Collection, one can suggest that designs that directly coined on the face are generally smaller and more plain, while the signs on chest and abdomen are bigger and more complex. It means mints using small dies, probably announced the new reign by the command of the new king who preserved the honor of the late king. All of the examples with engravings on the face, abdomen, and chest are as following (Plate 12):

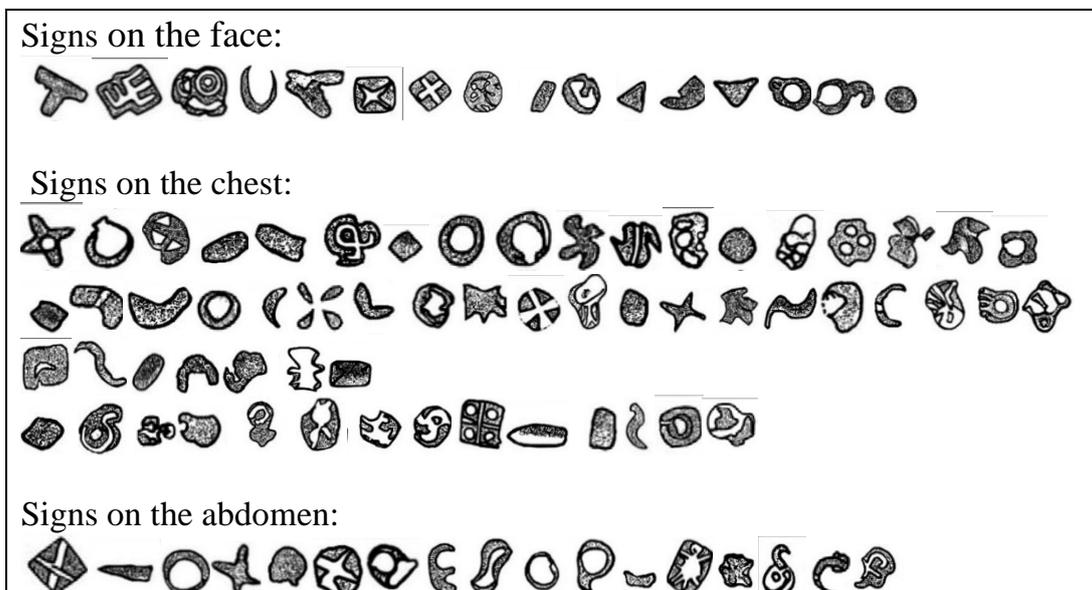


Plate 12: position of engravings on the coins, Mazandaran (Drawing:Saman Soortiji)

If one suggests the signs as icons and mintmarks, it should be explained that some of the coins have no signs. It means engraving signs were not common, or the Achaemenid mints never obliged to use mintmarks.

Conclusion

The timing of the case study collection ranges from 338 to 522 BCE, i.e., a 184-year period covering the reign of seven kings. The variation and abundance of the signs in this collection are considerable. The number of signs and icons on the obverse and reverse of a given coin vary from one to nine. In total, 567 various signs were recognized that vary from plain designs including circles, crescents, or concave squares to more complex designs such as geometrical designs and zoomorphic designs such as one-hump camels, turtles, ducks, hens, roosters, and so on. The conclusions indicate signs that these marks are similar to known samples, whereas there are the others that lack any similar sample.

Most numismatists have suggested that these signs are mint-marks, considering that satrapy coins have signs, abbreviations, and inscriptions as mint-mark, or the regularity of location of letters and images in later coins resulted from earlier coins. However, the conclusions drawn here suggest the signs, at least in the royal coins, are not necessarily mint-marks, for 45 coins have no sign at all. The main figure of king is eroded on some of the coins, however, and there are very obvious signs on the same coins. Therefore, it would be concluded that they are later engravings on earlier coins, which could not represent mint-marks. The signs, cautiously, can be suggested as the signature and confirmation of a financial manager who certified the weight and purity of the coins, or a hidden message for people, while death of king did not cause removal of coins from circulation.

According to the shortage of resources, it is premature to suggest further interpretation of the signs beyond the discussion above, despite no definitive assessments having been reached here. We hope that future research and excavations can make use of the database we have presented here to reveal other aspects of Achaemenid culture and civilization.

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بررسی و معرفی علائم سکه های شکل هخامنشی، از مجموعه موزه مازندران

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چکیده

این مقاله به بررسی و معرفی علائم ضرب شده بر ۲۴۰ عدد از سکه‌های شِکِل "شاهنشاهی هخامنشی" که در مخزن گنجینه‌ی مازندران نگهداری می‌شود، پرداخته است. تحقیقات پرسنل نیروی انتظامی بیانگر آن است که این مجموعه توسط حفاران غیرمجاز از حوالی بندر عسلویه (بدون ذکر محل دقیق) به دست آمده است. بررسی‌ها گونه‌های مختلف از سکه‌های هفت شاه را در فاصله سال‌های ۵۲۲ ق.م تا ۳۳۸ ق.م در بازه‌ی زمانی حدود ۱۸۴ سال معرفی کرده است. از بین ۲۴۰ عدد سکه‌ی منتخب، ۱۹۵ عدد آن‌ها دارای علائم است. بعضی دارای ۱ علامت و تعداد اندکی تا ۹ علامت مختلف دارند. سکه-شناسان و باستان‌شناسان برای آن‌ها کاربردهای مختلفی قائل شدند که نشان ضرابخانه، تأیید عیار و وزن از آن جمله است. اما آیا این تعاریف، شامل مجموعه مورد بررسی نیز می‌شود؟ چرا تعدادی از سکه‌ها فاقد علامت است؟ نتایج بررسی سکه‌ها منجر به شناسایی ۵۶۷ علامت در انواع ساده تا طرح‌های هندسی و نقوش جانوری شده است. در این مجموعه، علائمی است که از بسیاری جهات، به نمونه‌های شناخته شده شباهت دارد اما در عین حال علائمی وجود دارد که فاقد نمونه‌های مشابه است. این علائم لزوماً معرف محل ضرب نیست زیرا نسبت به تصویر شاه که در مواردی بسیار سایش یافته، از وضوح عالی برخوردارند و مشخصاً با فاصله زمانی زیاد بر سکه‌ها حک شده‌اند و همچنین ۴۵ عدد از سکه‌ها هم اساساً فاقد علامت است. یکی دیگر از نتایج این مقاله، موضوع انتقال مفاهیم به واسطه‌ی این نقوش در قالب پیام‌های مستتر و رمز گونه مثل فوت شاه و در عین حال روی کار آمدن شاه جدید است.

واژه‌های کلیدی: هخامنشی، سکه، شکل، علائم، مجموعه موزه مازندران.