

## **The Stylistic Characteristics of the Rock Arts in the Ruins of Kars-Sarıçayır**

**Asst. Prof.Sait Toprak**  
*Dokuz Eylül University, Faculty of Fine Arts,  
Department of Painting, Turkey,  
ORCID: 0000-0001-7820-4685*

**Abstract:** The Sarıçayır Ruins is an old settlement located within the borders of Ataköy, about 8 km south of the city of Kars. Unlike the drawings in the Borluk Valley and the surrounding areas, which mainly depict prey animals and hunting scenes, the main theme of the drawings in the Sarıçayır Ruins is war. Among the rock arts found in Turkey so far, no stylistic equivalent of the examples here has been found. Paintings in this region markedly differ from other paintings in the region with their unique design characteristics. Rock paintings depicting the theme of war as a whole in Turkey have first been encountered in this region. In the depictive content of the drawings made with the scratching technique, there are mostly the visual narrations of the mounted archers holding an arrow in their hands to throw it, and infantrymen. All of the warrior images, which are always shown in profile, are depicted in a naturalistic style, and it is understood that the theme of war, which is handled with a conscious drawing practice, is intended to be explained to the audience in a plain language without stylistic distortions. Almost all of the drawings are related to each other in a certain order and arranged in groups. In this study, the stylistic characteristics and contents of the rock drawings in the Sarıçayır Ruins were assessed.

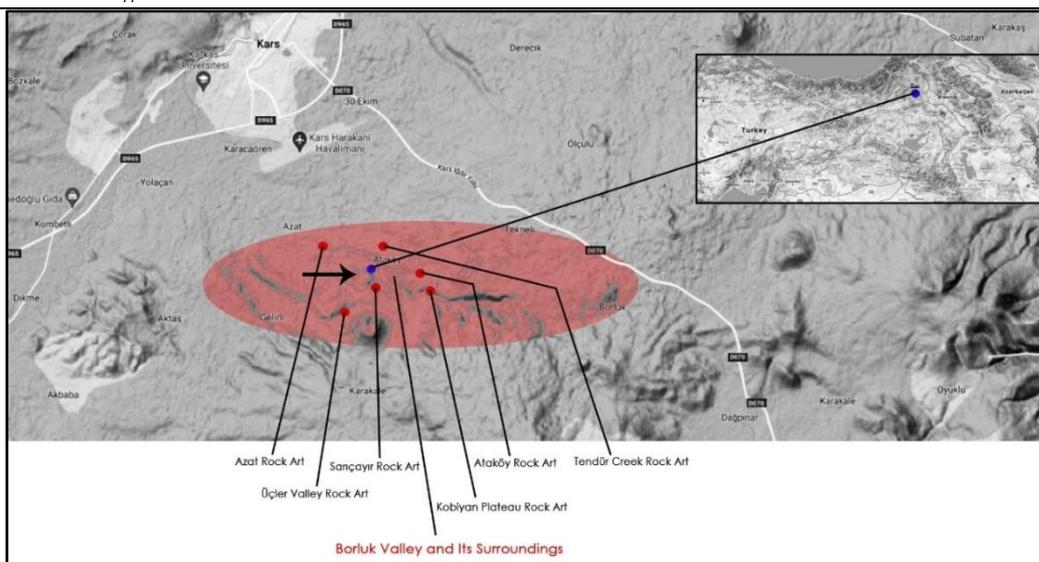
**Keywords:** The Ruins of Kars-Sarıçayır, Petroglyphs, Prehistoric Art, Mounted Archer and Infantryman Depictions

---

### **1. Introduction**

Although the first attempts to discover cave-rock arts in Turkey started eighty-three years ago (1938) (Anati, 1968: 22),<sup>1</sup> different studies on cave-rock art have been carried out during the last thirty years, and some progress on documenting the visuals in the field have been achieved. The studies conducted by Turkish and foreign researchers in this field in recent years have progressed to an extent that provides an overview of the rock arts in Turkey. However, in the literature, it has been seen that very few of the archaeological products in nearly seventy petroglyph sites discovered so far have been dated using scientific methods. On the other hand, extensive studies on rock arts have been executed in Central Asia (Rozwadowski 2004; Rozwadowski and Koško 2002; Frankfort 1998). In addition, scientific studies were carried out on rock paintings in India (Bednarik et al. 1991; Bednarik 1993; Chakravarty and Bednarik 1997; Chakraverty 2004), China (Bednarik and Fushun 1991; Fushun 1992; Anni and Ge, 2021), and the Arabian geography (Bednarik and Khan 2005) and Indonesia (Aubert et al., 2014). The most important factor hindering the progress of research on rock arts in Turkey is related to the inability to establish a precise and complete timetable for archaeological research due to the lack of laboratory facilities (scientific methodologies) for absolute dating. Since there is no safe and precise chronological framework, rock art researchers in Turkey interpret the visual data, which they document from the field, based on some estimations and probabilities, so most of them are, therefore, controversial. Details about the rock paintings in Turkey are essentially based on the descriptions of the stylistic (form, technique, method) characteristics of the drawings.

It is not currently possible to propose a chronological dating of the rock drawings in the Sarıçayır Ruins because no archaeological excavations have been made in the area, there are no archaeological findings that can be associated with the rock drawings, and laboratory studies have not been conducted yet. Likewise, based on the analysis of style and theme contents on the rock surface, it is not possible to determine during which period the drawings were made and by which groups of people. But for now, evaluations can be made precisely in the context of the form and content characteristics of these drawings belonging to our prehistoric ancestors. In addition, some comparisons with other Prehistoric Age rock paintings found in the region so far can be made.



**Image 1:** Rock Art Sites around the Borluk Valley and Sarıçayır Ruins.



**Image 2.** The view of the rocks with the rock arts of the Sarıçayır Ruins from Borluk Valley.

## 2. Location of the Sarıçayır Ruins

The Sarıçayır Ruins<sup>2</sup> is an old settlement located within the borders of Ataköy,<sup>3</sup> about 8 km south of Kars.<sup>4</sup> It is approximately 200-250 m away from Ataköy and Harmantepe<sup>5</sup> which are located to the east of the rock arts (Image 2). It is approximately 350-400 m high from the bottom of the Borluk Valley between Ataköy and the Sarıçayır Ruins and is located on the upper part of the western slope. It is 250 m away from the ruins of an old settlement, which is located in the immediate area (north and west) of the cliffs where the drawings were

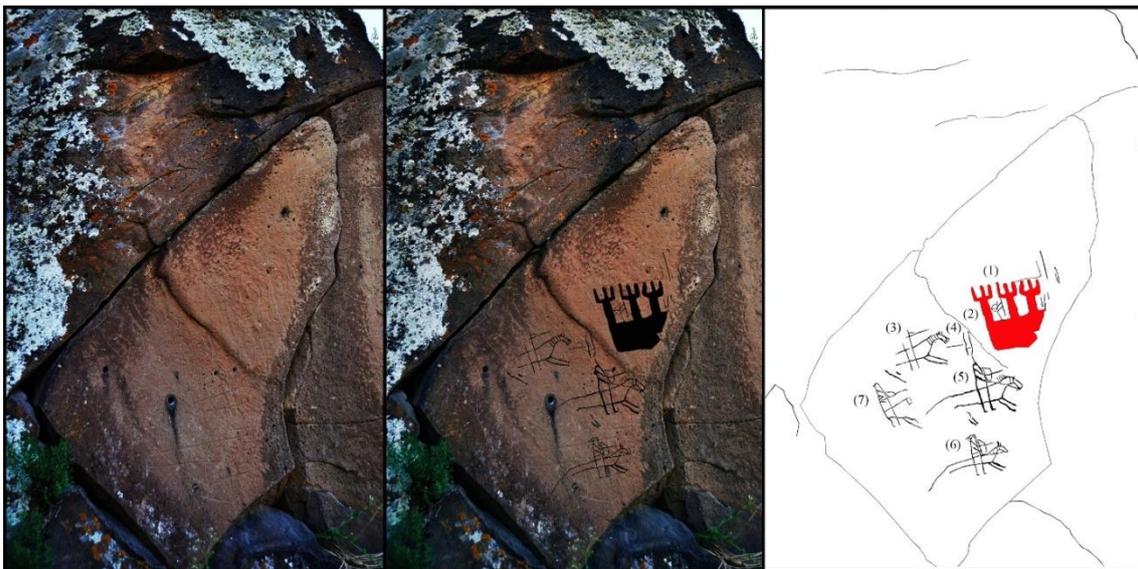
made and named after it. It is 3.5 km from Azat village in the west, 150 m from Sarıçayır Valley in the north, and 2 km from Üçler Hill (2229 m) which is the highest hill in the area. It is approximately 3.5 km from Kemerlikaya Hill (2155 m) in the east, and 3.8 km from the area where the rock arts are located on Kobiyan Plateau. Since the region has a harsh climate, there are no forests and gardens in the surrounding area. Snowfall, which starts in mid-October, can continue until the end of March. The surrounding hills are used as pasture, and the flatlands are used as agricultural land. The altitude of the cliffs on which the rock paintings are located is 1910 m above sea level.

### 3. Stylistic Characteristics of the Drawings of the Sarıçayır Ruins

Thirty-one rock drawings (15 mounted archers, 9 infantry archers, 6 anthropomorphic figures, and 1 mountain goat), which this study focuses on, were scratched into the western flat surface of the monolithic but later dispersed andesite rock, which is 3.70 m high and 3.40 m wide, narrowing upwards and forming a triangular shape (Image 2). The drawings made only on the rock, which is the widest and highest among the rocks in a row and suitable for the drawing, were examined in five separate sections due to the distributions of arts on the surface. Some drawings have been exposed to various factors, which have caused abrasion, especially rain and snow, and they have consequently been irreversibly erased. Some of them have been damaged due to recent scratchings. Most of the discovered/identified drawings have survived to the present day with their original forms, and the contents of many of them can be read. There is patina on the rock surface. However, it is not dense enough to cover the drawings. Lichen cover is visible on the rock surface but does not completely cover the area where the drawings are present. Almost all of the drawings are related to each other in a certain order and arranged in groups. Geometric motifs and dye residuals were not found in the analyzed rock mass and the surrounding rocks. Although there are flat surfaces suitable for drawing on the rocks around the area where the drawings are present, no other drawings were found on these areas.

Thanks to its rock drawings, unique depictions, and drawing language that forms integrity within itself, the Sarıçayır Ruins allows us to reach some information about the lives of the early communities that lived in and around the Borluk Valley.

While some distinctive character traits are seen in the depictions of the warriors, it is broadly understood that the war activities of the warriors belonging to a certain community are shown. It can be understood that the main purpose of the illustrator person was to describe the important issues in the period s/he lived in and to convey real issues in the society, such as war and defense, to the audience. When the repertoire of the rock arts in the Borluk Valley and its surroundings is examined (Özbek and Yükmén, 1998; Belli 2006; Bingöl, 2016; Toprak, 2021a; Toprak, 2021b; Toprak, 2021d), it is seen that the war phenomenon is the main theme only in the rock drawings of the Sarıçayır Ruins.



**Image 3:** Left Depiction Area of the Upper Part of the Rock Mass (Part I).

#### 3.1. Part I

Three figures with anthropomorphic appearance and with arms open to both sides at shoulder level and folded at the elbow are depicted with a vertical line with the scratching technique from the front to the top right

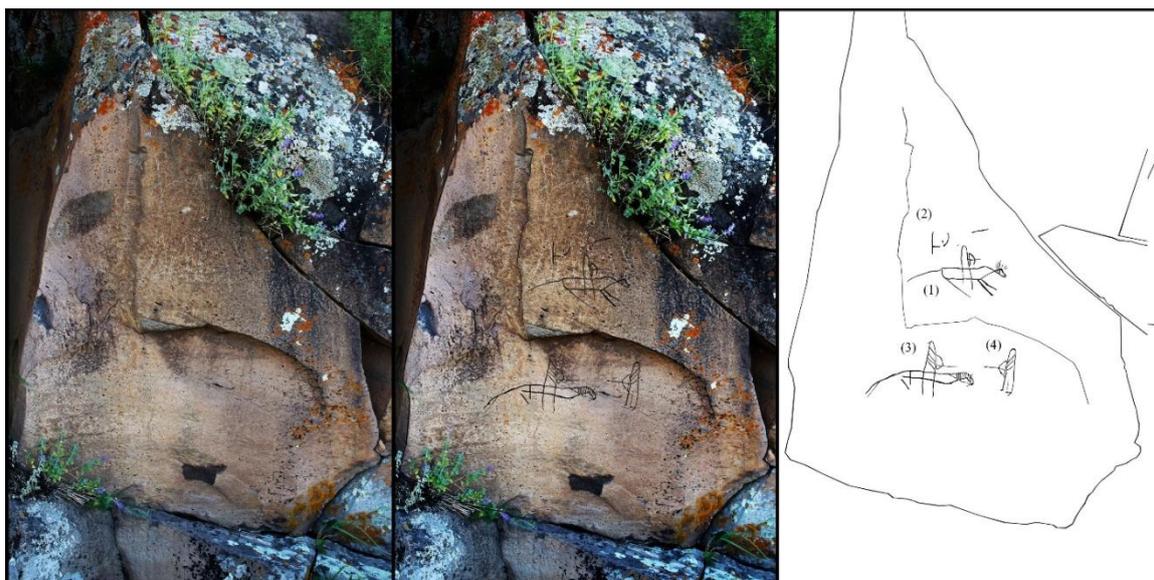
part of the depiction area on the left side of the upper part of the rock mass (Image 3/1). There is no obvious item representing the head in the stylized depiction. These drawings have a different character from the other drawings found here in terms of style and content. The depictions have similarities with painted human figures in Van-Kızların Cave (Belli, 1979), Gülnar-Akyapı Cave (Girginer and Durukan, 2017) in terms of position characteristics, and with Adilcevaz-Alihger Mountain Cave (Çavuşoğlu, 2020) in terms of human figures made with dye, and with Digor-Alem (Toprak, 2021c) in terms of human figures in rock paintings made with engraving technique. The average dimension of the drawings is 6 cm in width and 13 cm in height, and they were created with thicker contours than other drawings. The anthropomorphic figure on the left was engraved on the arrow in the hand of the infantry archer figure immediately to the right (Image 3/2), indicating that the trio group in question was engraved onto the surface later. In the lower-left part of this trio anthropomorphic group, four-horse figures, right-facing, were drawn in profile with the scratching technique. The horse figure at the top of this group of four is 18 cm in width and 10.5 cm in height along with the human figure on it (Image 3/3). The upper part of the horse is thought to have been erased due to natural causes. Right opposite this horseman description, the figure, which has some deleted parts but most likely represents an infantry with its bow, is shown 6 cm in width and 6.5 cm in height (Image 3/4). A horse figure, which is more prominent and well preserved than the other examples, was drawn just below the right of this double depiction, with a width of 27 cm and a height of 14.5 cm and with a human figure on it, facing right in a running position (Image 3/5). The anthropomorphic figure on the horse holds his bow forward with one hand, and while he is about to throw his arrow, the other hand holds the reins of the horse. Details such as the horse's mane, ears, hooves, bridle, and rein are included in this and many other examples of horsemen, where the outlines of the body are carefully depicted with the scratching technique. Its body is in harmony with the movement of the front legs extended forward. Although the body of the figure on the horse is shown in a voluminous and realistic way, its head is represented by a vertical thin line upwards. It is not yet known for what purpose the head was depicted like this. The voluminous body of the figures in this and all other examples indicates that they wore a long dress. The horse figure just below this horseman is 24 cm in width with its tail and 11 cm in height with the human figure on it and is depicted facing left with similar drawing characteristics (Image 3/6). The head structure of this horseman figure, unlike the other example, is symbolized by long hair or something tied to its head. The back part of another drawing of a horse at the left end of the depiction area has been erased as a result of the erosion of the rock surface, and only the front parts can be seen (Image 3/7). The depiction of four horsemen, made in a similar style and technique, was probably drawn as parts of the same event. In each of the four examples of horsemen in the depiction area, the representation of the legs of warrior figures on the horse is formed by two parallel vertical thin lines extending from the shoulders of the horse to the underbelly, and the feet of the warrior are facing in the direction that the figure faces. In addition, all the horsemen are depicted as standing and walking. Intersecting lines imply that the horse warrior figure was made after the horse drawing. Since the person who made the drawing did not know the relationship between the foreground and the background, s/he also showed both feet of the figure on the horse, that is, the left leg should not have been visible on the other side of the horse. Considering all the items in the depiction area, it is striking that there is significant combat mobility.



**Image 4:** Right Depiction Area of the Upper Part of the Rock Mass (Part II).

### 3.2 Part II

Some drawings in the depiction area on the right side of the upper part of the rock mass have been erased due to the erosion of the rock. Three mounted infantry and two infantry archer figures drawn on top of each other at the bottom of the surface can be seen, and the main subject here is the war moment of the mounted infantry and archer figures moving to the right and left. The drawings in this piece, which were separated due to the wide crack, may have been made as a continuation of the drawings on the left; In other words, the drawings in question may have been drawn as part of the same event. Two horses in the upper part of the depiction line are shown facing left, while one horse in the lower line is shown running and facing right. The horse figure at the top is 26 cm in width with its tail, and 14 cm in height with the partially erased figure on the horse (Image 4/1). The horse figure just below it was drawn with a width of 23 cm and a height of 10 cm (Image 4/2). It is seen that the hair of the well-preserved horseman figure was clearly drawn, and the horseman was depicted just as he was about to throw his arrow at the infantry figure coming towards him. An infantry archer figure drawn for the same story on the front of this horseman depiction is 9 cm in width and 9 cm in height, facing right, walking in the direction the horse comes from (Image 4/3). An infantry archer figure (with long hair) facing right is depicted in profile at the top of the lower line (Image 4/4). Some drawings (5x5 cm circle) were made on the left side of this figure. However, some parts of the drawings have been erased; So, it is not fully understood how these drawings relate to other figures in the composition and how they are shaped in the drawings. Just below this figure, a horse figure, 29 cm in width and 13 cm in height, was drawn larger than the other examples in the depiction area (Image 4/5). The horse's tail was scratched with several lines widening downwards. Here, the figures drawn in different sizes do not intersect with each other. They were scratched side by side, on top of each other, and together. The figures were drawn at different levels, and some of them are large and mobile, which gives the composition a significant dynamism.



**Image 5:** Left Depiction Area of the Lower Part of the Rock Mass (Part III).

### 3.3. Part III

In the depiction area on the left side of the lower part of the rock mass, there are two horsemen and an infantry archer. Like the drawings in the upper depiction area, the drawings here are also depicted in a state of war and in motion. The upper horse figure is 21.5 cm in width with its tail and is 11 cm in height with the human figure on it, facing right (Image 5/1). The front legs are in an attacking position orienting forward and the one foot in the back is also mobile like the front legs, which gives the figure an important realism. A large part of the drawing just above this horseman is erased, but when the few remaining drawings are examined, it is estimated that this drawing belongs to an archer infantryman holding a bow (Image 5/2). Based on the traces of this figure, it can be concluded that similar figures may have been drawn to the eroded rock surface. In the lower part of the depiction area, a mounted archer and an infantry archer are depicted pointing their bows at each other. The horse figure is 28 cm in width with its tail and 14 cm in height with the human figure on it and is shown as running to the right as above (Image 5/3). It is seen that the horse was drawn with a long tail, with most of its fore and hind legs missing. The horseman holds the reins of the horse with one hand. The infantry figure is, on

the other hand, 10 cm in height and 7 cm in width with its bow, and is drawn to the left, opposite the horseman (Image 5/4). Only the tip of the arrow in the hand of this infantryman is emphasized in a triangular shape.



**Image 6:** Middle Depiction Area of the Lower Part of the Rock Mass (Part IV).

### 3.4. Part IV

In the middle depiction area at the bottom of the rock mass, a horseman and an infantryman holding a bow were drawn opposite each other. Among the drawings, which are evaluated as two compositions due to the crack on the rock surface, a horse in the upper drawing line is 21 cm in width with its tail and 9 cm in height with the human figure on it and was drawn in profile, facing right (Image 6/1). The neck of the horse expands with parallel lines towards the body, and the ears are pointed forward perpendicularly. Its front and hind legs, which extend side-by-side to forward while running, are shown as in all other horse examples. The body part is in harmony with the legs stretched forward. The hooves of the front and hind legs, drawn as a straight line, were not scribbled. The archer infantry figure is 10 cm in height and 5 cm in width with its bow and was drawn directly opposite the horseman, facing left (Image 6/2). Some of the drawings may have disappeared because the upper part of the rock on which this composition was made was broken. In the lower drawing line, a horse figure and three archer infantrymen were scratched opposite each other. The horse figure is 9 cm in width with its tail and 9 cm in height with the human figure on it and is depicted running with the left-facing profile. The body part of the horse figure is smaller than the others and was drawn differently (Image 6/3). All four feet of the horse were drawn forward, which gives the horse significant mobility. In addition, the ears are raised forward and clearly depicted. Likewise, the head structure of the horseman figure is shown differently from that of other archer infantrymen. In front of this horseman figure, three infantrymen are realistically depicted facing to the right, in succession and in close measurement (6 cm in height and 2 cm in width), and these figures were drawn smaller than the other infantry figures (Image 6/4). In the composition with the infantry figures and horsemen in question, a moment of conflict between people is described (as can be understood from the arrows that people point towards each other). Most of the third figure from the left is erased. It is possible that the anthropomorphic figures, which stand out as the main indicators of the rock surface, are different from ordinary individuals in the communities that lived here in the past, and are important representatives and more experienced people in their field. Three anthropomorphic figures lined up side by side between these three infantrymen were drawn in a similar position with the scratching technique (6/5). The examples depicted in a position similar to the anthropomorphic figures in Part I were engraved on the surface with finer contours. Three anthropomorphic figures, which are lined up side by side (symmetrically) with arms open to both sides at shoulder level and folded from the elbow upwards, have a long wavy thin line on their heads. The line figure on the head was also found in the painted rock arts of Latmos (Bindokat, 2006) and the engraved rock arts of Kars-Alem (Toprak, 2021c). No distinctive shape depicting the head is shown. The average dimensions of the figures depicted from the front are 3 cm in width and 10 cm in height. The erasure of the arrow of the warrior on the right indicates that the anthropomorphic figures in question and mounted archers and infantry archers were later added to the depiction area. It can be easily determined that these anthropomorphic figures were drawn with a different depiction and drawing method than other horseman and infantry drawings.



**Image 7:** Right Depiction Area of the Bottom of the Rock (Part V).

### 3.5. Part V

Two mounted archers (drawn with a thicker line compared to other similar examples), two infantry archers, and a mountain goat were drawn on the depiction area to the right of the lower part of the rock mass. The upper horse figure is 21.5 cm in width with its tail and 11 cm in height with the human figure on it (Image 7/1). It was also drawn in profile, facing right, towards the mountain goat (8 cm in width and 6 cm in height with horns) in front of it (Image 7/2). Although similar examples of mounted archer figures in Kars and its surroundings have not been encountered until now, a plain mountain goat motif, which has turned into a collective image, is frequently encountered. The horse figure just below this double depiction is 20 cm in width with its tail, and 13 cm in height with the human figure on it, facing right (Image 7/3). In the depiction of the two archer infantrymen drawn in different sizes in the lower right corner of the depiction area, it is seen that another moment of conflict is depicted (Image 7/4). In the whole rock mass, a mountain goat was drawn only in this depiction area. The mountain goat figure, drawn too plainly, may have been drawn by other hands.

## 4. Discussion and Conclusion

Despite the efforts to identify and document Prehistoric rock paintings in Turkey, some uncertainties and difficulties regarding dating and the lack of an organized research program are going on. One of the most important problems regarding the rock drawings found in Kars and its surrounding areas including the Sarıçayır Ruins is the dating problem.

Unlike the paintings, which mainly depict prey animals (deer, mountain goat, wild sheep, wild cattle, etc.) in the Borluk Valley and the surrounding areas, the main theme of the drawings of Sarıçayır Ruins is war. No stylistic equivalent of the examples here has been found among the rock paintings discovered in Turkey so far. The examples on this site are distinctly different from other paintings in the region with their unique design features. With these drawings, the rock paintings depicting the theme of war as a whole have been witnessed for the first time in Turkey.

Considering the artistic activity of the drawings, it can be observed that the artist who made the drawings was a good observer and knew the formal aspects of the images s/he dealt with. The war scenes throughout the rock surface are brought to life in the eyes of the viewer in a realistic style, like a cartoon narrative. It is observed that in the depiction of horseman and infantry figures, a specific (conscious) language and symbolic content are taken into account, away from anonymous characteristics. The prominent character in the horseman and infantry warrior iconography is that the outer contours of the bodies of the figures were formed with a thin and shallow scratching technique and always equipped according to the battle position and that the warriors were shown holding a bow with one hand and the reins of the horse with the other. It is seen that the figures have voluminous bodies, so they are thought to be clothed. Although the human figures are depicted in similar styles, the head structures of some figures are depicted with a vertical straight line, some with long hair (?), and some without any characteristics. It is thought that by specifying such a feature, some differences between the warriors may have been expressed. The arms were usually scratched down from the shoulder and forward from the elbow, and the details of the hand holding the bow were not emphasized. The legs are indicated by two parallel straight lines

going from the shoulder down to the horse's abdomen, and the feet are pointed in the direction the figure faces. It can be said that the depictions represent the period in which some warriors acted together in groups and fought together. The depictions of the mounted archers and infantry archers pointing their arrows towards each other in the same composition may also be a reflection of a conflict between people. There is no significant difference in form and detail between the mounted archer and infantry archer figures.

The artist designed the animal bodies in a proportional, natural, and realistic way. As in the animal paintings of Dereçi and Kobıyan Plateau, the interior details are not included in the animal drawings here, and the animal figures are indicated with general outlines. However, head details, especially details such as the mane, bridle, and bit, were included. While it is seen that details, such as hooves, were tried to be drawn in some horse depictions, but there is no stirrup and saddle. It can be deduced that the explored drawings were scratched according to the plainness and visibility of the rock, that the depictions on the rock surface were conveyed by considering different parts of a certain story, and that the figures were configured into the depiction area accordingly.

Although there are many smooth rock blocks in the area where the rock arts were made, only the surface of the rock in a certain area was scratched, which supports the idea that this was an important area for the people who lived here in the past.

Although there are some obvious problems in drawing patterns in the rock arts of the Sarıçayır Ruins, it can be said that the language of pictorial expression is developed when considered in terms of Prehistoric Age art. When the details of the depictions are examined, it is noteworthy that the figures have anatomical problems. The most obvious example of this is that the legs of the running horses are not depicted as bent from the joint, but are depicted straight. Another obvious problem is that the horseman figure on the running horse is shown in a walking position and motionless. In addition, since some information about perspective and perception on the object (e.g. front-back relationship) was not known at that time, it was observed that some figures were scratched on top of each other, with the lines of figures at different distances intersecting each other.

Considering the time phenomenon in the drawings, it is seen that the mounted archers and infantry archers are depicted in a certain time period of the conflict. However, the combat scene is generally limited to showing the mounted archer and the infantry archer opposite each other, and similar compositions are repeated in each part of the rock mass. Although the images of the mounted archers come to the fore throughout the depiction, it should be noted that infantry archers are often the important figures of the same composition.

Most of the rock arts found in the Sarıçayır Ruins depict the war scenes in a naturalist style with the scratching technique that makes the facial features clear; However, there are also anthropomorphic figures depicted from the front in a schematic style through the scratching technique. The schematic style drawings (anthropomorphic figures) were made at a later stage than the naturalistic style (warriors) drawings, which can be easily understood from their implemented forms, styles, intellectual aspects, and image properties in the drawings in Part I and Part III (Images 3/1-6/5). Therefore, it can easily be pointed out that the drawings in different styles were made by different hands.

The Sarıçayır Ruins, which are not related to the world of hunter-gatherers, show that the people of the community, who have drawn the rock arts, domesticated the horse and used it as an effective tool in their daily lives, and that their warrior characteristics had developed (they had extensive experience, skill, and technology in warfare).

The drawings were analyzed for the first time in this study and have not been dated so far.<sup>6</sup> However, considering the typological and iconographic characteristics of the drawings in question (even though they have some technical and stylistic differences), they are thought to have been made in a near period with the drawings of the Borluk Valley [Kobıyan Plateau] (Özbek and Yükmén, 1998), Başköy (Ceylan, 2015), Dereçi (Üngör, 2016), Doyumlu (Günaşdı, 2016) and Üçler Valley (Toprak, 2021a) in the immediate vicinity. On the other hand, the examples in the Borluk Valley, which are the closest to the aforementioned drawings, show significant differences both in terms of technique (most of them were made with the engraving technique) and in terms of subject (most of them consist of animals, such as mountain goats, wild sheep, and deer, which were the food source of hunter-gatherer communities). It is, therefore, possible that these arts were made by different people in different periods.

In a conclusion, as an outcome of the discovery of the rock drawings in the Sarıçayır Ruins, it is seen that especially the Borluk Valley and the surrounding areas are important centers in terms of rock painting and that there are some detectable data on the cultural interaction and development between the communities that lived in the region at different periods. It has been seen that this region is not only a central location for prehistoric people as a living place, but also has an important location in terms of the development of prehistoric art.

**Notes:**

<sup>1</sup>Since 1938, when Swiss Anthropologist E. Pittard reported the discovery of the first known cave art in Turkey near Adıyaman, archaeologists have found prehistoric rock paintings, cave drawings and examples of portable art (art on small portable objects) in various parts of Anatolia (Anati, 1968: 22).

<sup>2</sup>The name *Sarıçayır Ruins* was used as stated by the residents of the villages Ataköy and Azat.

<sup>3</sup>The name of the village, which was *Ayrivanin* in 1918 records, meaning *cave village* in Armenian, was used as Mağaracık (cavern) from 1968 to 1990. The name of the village, which is still used as Mağaracık among the people, was changed to *Ataköy* in 1995.

<sup>4</sup>“Kars, which is located in the northeast of Turkey and has been inhabited since the earliest ages of human history, has a geopolitical importance that connects Anatolia and the Caucasus due to its geographical location” (Bingöl, 2016: 348). The geography of Kars, which is located on a significant part of the territory known as the Caucasus, is a region that is surrounded by mountains with an average altitude of 3000 m, receives abundant summer rains, has very lush meadows in the season, and is extremely suitable for animal husbandry (Atalay and Mortan 2011:518-523; Ketin, 1983: 502; Sevindi, 1999: 10). In Kars, there is a climate with long and harsh winters and moderate and even cool summers (Tüysüz, 2006: 37). In the Kars region, where mountainous areas have very high altitudes, the height of the “V” shaped valleys is too high compared to other regions. Of course, the most important of these are the valleys through which the river Aras and the river Kars flow. The average altitude of the Kars Plateau, which is shaped by the mountainous areas and deep valleys surrounding it, is between 1800-2000 m (Şaroğlu and Yılmaz 1986: 83-89).

<sup>5</sup>*Harmantepe Höyük* is located in Ataköy, 8 km south of Kars city center. Harmantepe Höyük has 50 x 40 m dimensions and is 10 m high from the ground. When conducting a research in the region, İ. Kılıç Kökten found many rock shelters and caves around the village. Stone tools belonging to the Chalcolithic Age were found in the drilling excavations he made. There is a road formed by carving the rocks descending from Harmantepe Höyük to Borluk Stream. Harmantepe Höyük is in a position dominating the valley. The foundations of the remains of a wall were found in the middle of Harmantepe Höyük. Harmantepe Höyük, which was settled in accordance with the natural structure, has the feature of being a castle ruin. In the western part of Harmantepe Höyük, there are ruined architectural remains in the valley. The data about stoneware obtained during the research are dated to the Early Bronze Age (Ceylan, 2015: 179; Karageçi, 2015: 109).

<sup>6</sup>It is thought that the dating problem of the paintings can be solved by using archaeometric methods or by detailed excavations to be carried out in the future.

### **Acknowledgement**

I would like to thank Gökhan Çalkın, a resident of Azat Village, who guided us during our fieldwork in the Sarıçayır Ruins, Mehmet Berzan Kumaraslan, Gül Işıklar Toprak and Prof. Dr. Vedat Baran, the Dean of the Faculty of Fine Arts at Kafkas University, Turkey.

### **References**

- [1]. Anni, J. and Ge, C. (2021). The 2018 Expedition To Anshan Cupule Sites, Northeast China. *Rock Art Research*. Vol. 38, Number 1, pp. 1-7.
- [2]. Anati, E. (1968). Anatolia's Earliest Art. *Archaeology*. Vol. 21, (1): 22-35.
- [3]. Atalay, İ. and Mortan, K. (2011). *Türkiye Bölgesel Coğrafyası*. İstanbul: İnkılap Kitapevi.
- [4]. Aubert M., Brumm A., Ramli M., Sutikna T., Saptomo E.W., Hakim, B., Morwood, M. J., van den Bergh, G.D., Kinsley, L. and Dosseto A. (2014). Pleistocene cave art from Sulawesi, Indonesia. *Nature*. Vol. 514: 223-227.
- [5]. Bednarik, R. G. (1993). Paleolithic art in India. *Man and Environment*. Vol. 18, (2). 33-40.
- [6]. Bednarik, R. G. and Fushun, L. (1991). Rock art dating in China: Past and future. *The Artefact*. 14. 25-3.
- [7]. Bednarik, R. G., G. Kumar and G. S. Tyagi (1991). Petroglyphs from central India. *Rock Art Research*. 8. 33-35.
- [8]. Bednarik, R. G. and Khan, M. (2005). Scientific studies of Saudi Arabian rock art. *Rock Art Research*. 22. 49-81.
- [9]. Belli, O. (1979). Van Bölgesinde Boyalı Mağara Resimleri: Kızların Mağarası. *Arkeoloji ve Sanat*. 1-2, 19-27.
- [10]. Belli, O. (2006). Kars-Borluk Vadisi Kayaüstü Resimleri. *Arkeoloji ve Sanat*. 122, 11-22.
- [11]. Bindokat, A. P. (2006). *Tarih öncesi İnsan Resimleri, Latmos Dağları'ndaki Prehistorik Kaya Resimleri*. İstanbul: Vehbi Koç Sadberk Hanım Müzesi.
- [12]. Bingöl, A. (2016). Yüzeysel Araştırmaları Işığında Borluk Vadisi Kaya Üstü Resimleri. *Sutad*. Bahar 2016; (39): 347-355.

- [13]. Charavarty, K. K. and Bednarik, R. G. (1997). *Indian Rock Art in its Global Context*. Delhi: Motilal Banarsidass Publishers Private Limited.
- [14]. Charavarty, S. (2004). 130 Years of Rock Art Studies in India. *The Future of Rock Art a World Review*, Sweden. 23-39.
- [15]. Ceylan, A. (2015). Çıldır Başköy Kaya Resimleri. *Belgü, Ardahan Üniversitesi İnsani Bilimler ve Edebiyat Fakültesi Dergisi*. S.2. S.7-28.
- [16]. Ceylan, A. (2020). 2009 Yılı Erzurum, Erzincan ve Kars İlleri Yüzeysel Araştırmalarının Bir Değerlendirilmesi. *Kafdağı*. 5, 1, 2020, 30-65.
- [17]. Frankfort, H. P. (1998). Central Asian Petroglyphs: between Indo-Iranian and Shamanistic Interpretations, in C. Chippindale & P. S. C. Tacon (ed.) *The Archaeology of Rock Art*. Cambridge: Cambridge University Press.
- [18]. Fushun, L. (1992). A survey on the methods of dating rock art in China. *International Newsletter on Rock Art* 2. 15-20.
- [19]. Girginer, K. S. and Durukan, M. (2017). Mersin/Gülner Akyapı Mağarası'nda Bulunan Prehistorik Mağara Resimleri. *Olba*. 25, 1-15.
- [20]. Günüşdi, Y. (2016). Doğu Anadolu Kaya Resimleri Işığında Doyumlu Kaya Panoları. *Sutad*. (39): 391-407.
- [21]. Ketin, İ. (1983). *Türkiye Jeolojisine Genel Bir Bakış*. İstanbul: Teknik Üniversite Matbaası.
- [22]. Özbek, O. and Yükmek, B. (1998). Kars Borluk Vadisi Kaya Resimleri. *Arkeoloji ve Sanat*. S. 6, 30-37.
- [23]. Rozwadowski, A. (2004). Symbol through time: interpreting the rock art of Central Asia. Poznań: Institute of Eastern Studies, University of Adam Mickiewicz.
- [24]. Rozwadowski, A. and Koško, M. M. (2002). Spirits and stones: shamanism and rock art in Central Asia and Siberia. Poznań: Instytut Wschodni UAM.
- [25]. Şaroğlu, F. and Yılmaz, Y. (1986). Doğu Anadolu'da Neotektonik Dönemdeki Jeolojik Evrim ve Havza Modelleri. *Maden Teknik Arama Dergisi*. 107, Ankara: 83-89.
- [26]. Sevindi, C. (1999). *Sarıkamış'ın Coğrafi Etüdü, Erzurum*. (PhD thesis), Atatürk Üniversitesi, Sosyal Bilimler Enstitüsü.
- [27]. Toprak, S. (2021a). Kars-Üçler Vadisi Petrogliflerinin İkonografik ve Biçimsel Özelliklerinin İncelenmesi. *Turkish Studies*. 16(3), 1051-1073.
- [28]. Toprak, S. (2021b). Kars-Borluk Vadisi'ndeki Kaya Çizimlerinin Üslup, Teknik ve İkonografik Açısından İncelenmesi. *Akademik Sosyal Araştırmalar Dergisi*. S.116, s.359-389.
- [29]. Toprak, S. (2021c). Dığor-Alem Petrogliflerinin İkonografik ve Biçimsel Özelliklerinin İncelenmesi. Rabih Baalbaki Samira K. O. (Ed.). *Middle East International Conference On Contemporary Scientific Studies-V*, (469-495). Ankara, 2021.
- [30]. Toprak, S. (2021d). [Kars-Tendür Dere Kaya Çizimleri]. Unpublished raw data.
- [31]. Tüysüz, C. (2006). Doğunun Uygur Kenti Kars. *Kars-Beyaz Uykusuz Uzakta*. İstanbul: Yapıkredi Yayınları, 31-73.
- [32]. Üngör, İ. (2016). Orta Asya'dan Anadolu'ya Kayalara Yazılan Türk Kültürü (Dereçi Kaya Resimleri). *Sutad*. Bahar 2016; (39): 357-370 E-Issn 2458-9071.
- [33]. Çavuşoğlu, R. (13.08.2020). <https://www.trthaber.com/foto-galeri/2-bin-500-rakimli-dagdaki-magarada-bulunan-kaya-resimleri-arastiriliyor/27988/sayfa-1.html>, [Date Accessed: 24.07.2021].