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ABSTRACT
One of the most important obstacles in the study of rock arts in Iran is the lack of an established chronological framework. Some researchers consider these motifs to be related to late Pleistocene and early Holocene periods (Izad Panah, 1348). However, recent field studies show more recent dates for rock arts. One of these studies concerns the Karaftou Cave in Kurdistan province which can serve as a chronological basis for the study of rock arts in the entire Kurdistan province. The Karaftou Cave is a complex of natural caverns whose entrance and some of its natural passageways have been manipulated during the Historical (Parthian) period (Bernard 1980; Gall 1978, 2010). The existence of a Greek inscription on the frontispiece of one of the rooms of the cave demonstrates that the cave was used as a temple for the Greek god Hercules (Gall 1978). Considering the similarity between the motifs of hunting or fighting horsemen in the Karaftou Cave with the motifs engraved on golden and silver vessels of Parthian and Sassanid periods along with other evidence such as the Greek inscription, the rock-cut architectural features, the pottery evidence, and other data obtained from the excavations, one can conclude that some of the motif complexes (especially those created in the man-made spaces of the cave) were probably made in the Seleucid-Parthian or Sassanid periods.

KEYWORDS
Kurdistan, the Karaftou Cave, rock arts, historical periods (Seleucid, Parthian and Sassanid)

HIGHLIGHTS
1. Kurdistan province, located on the north-west of Zagros, is one of the rich underexplored regions from the archaeological point of view
2. The Karaftou Cave is an example of a natural cave which as a result of the later habitation of human groups, some changes and transformations was made to it
3. Karaftou Cave art rocks were probably made in the Seleucid-Parthian or Sassanid periods

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OTHER LANGUAGES ABSTRACT: PERSIAN
چکیده: یکی از مهم‌ترین موانع در بررسی هنرهای صخره‌ای ایران، فقدان یک چارچوب زمانی مشخص است. برخی از محققین این نقوش را مربوط به دوره پلیستوسن پسین و اوایل هولوسن می‌دانند. با این حال، مطالعات میدانی اخیر تاریخ‌های جدیدتری را برای هنرهای صخره‌ای ای شناسان می‌دهد. یکی از این مطالعات مربوط به غار کرفتو در استان کردستان است که می‌تواند به عوامل مبنا نرمال و ملایری صخره‌ای صخره‌ای ای در کل استان کردستان باشد. غار کرفتو مجموعه‌ای از تاریخ‌های طبیعی است که ارثی و برخی از گذشته‌های طبیعی آن در دوره تاریخی (اشکانی) دستکاری شده است. وجود یک کتیبه یونانی در جلوی یکی از اتاق‌های غار نشان می‌دهد که غار به عنوان معبد خداوند یونانی هرکول استفاده می‌شده است. با توجه به شباهت نقوش شکاری و جنگ‌های ارمنی‌ها در غار کرفتو، همچنین شواهد دیگری مانند کتیبه‌های یونانی، ویرایش‌های معمول صخره‌ای، شواهد سفالی و سایر داده‌های به دست آمده از کاوش‌ها، می‌توان تحقیق گرفت که برخی از مجموعه‌های نقوش (با ویژه آنهایی که در فضاهایی دست ساز غار ایجاد شده اند) احتمالاً در دوره‌های سلوکی-اشکانی و ساسانی ایجاد شده‌اند.

کلید واژه: کردستان، غار کرفتو، هنرهای صخره‌ای، دوره‌های تاریخی (سلوکی، اشکانی و ساسانی)

استنباط: قسمی، طاهر، قسمی، آکام، قسمی، سوران (1402)، هنر صخره‌ای غار کرفتو و مناطق اطراف آن، شمال کردستان، سرزمین‌های کار، اریزون، 88-98. شناسه دیجیتال: 10.61186/jpat.2024.1.6
Geospatial Abstract

Declaration of Readiness for Cooperation
Yes ▶ No □
Prepare to share experiences
Yes ▶ No □

Taher Ghasimi
INTRODUCTION

Kurdistan province, located on the north-west of Zagros, is one of the rich underexplored regions from the archaeological point of view. Our knowledge concerning the cultural continuity in this province, particularly with regard to its prehistoric periods, is little. In addition, the rock arts of this region have not been comprehensively and systematically investigated. As a result, the author, following his previous studies on Hawraman region in Kurdistan province (Ghasimi 2007a, 2007b, and 2007c) extended his studies to the rock arts of the Karaftou Cave in the north of Kurdistan. In this study, an attempt was made to record and study the motif complexes in the cave and in two nearby rock shelters in a systematic way. The investigated motifs are divided into human figures, animal motifs, compound (human-animal) and geometric or symbolic motifs. Among the collection of the rock art motifs in the Karaftou Cave, one can observe human motifs: stylized human figures such as human hand and hunting or fighting horsemen; animal motifs such as wild goat, red deer, horse, wolf; and geometric motifs: square, rectangle, lozenge, cross-like, sun-like, numerical signs and horseshoe-shaped motifs. From the pathological point of view, all the motifs of the Karaftou Cave have been severely damaged by natural (erosion) and human (surface damage, the visitors’ graffiti) factors. Three methods of engraving, pounding and pounding-engraving have been used to create the motifs in the Karaftou Cave. The motifs have been engraved on the limestone rock surface of the cave walls.

John Kormik, a British Army physician, is the first person who has been mentioned in the texts to visit the Karaftou Cave. Many researchers, while visiting the Karaftou Cave, have investigated and studied it (Bernard 1980; Gall 1978, and Stein 1940). Ker Porter made a map of the cave in 1818 which Stein completed and Van Gall corrected (Gall 1978, 2010; Stein 1940). Khaniaev also paid a visit to the cave in 1917 leaving an inscription in one of the front corridors near the entrance of the cave. In his visit to the cave, Rawlinson referred to 25 rooms of which only 9 rooms remain and the other ones have been destroyed by erosion (Rawlinson 1839). In 1968, in order to study the bats living in the Karaftou Cave, DeBlase from the University of Chicago studied this cave and also mentioned the motifs on the walls (DeBlase 1980). The cave and its surrounding areas were excavated and tested a team of archaeologists under supervision of Hassan Rezvani. These excavations led to the discovery of archaeological deposits in the cave and a nearby cave dating back to the 4th millennium B.C. to the Islamic period (Rezvani 2004).

In 1925, Karimi and Stein referred to a horse and horseman motif in the Karaftou Cave, engraved beneath the inscription which they considered as a monument commemorating Goodarz’s victories over Mehrdad (Karimi 1950). Sharifi-Far reported a motif on the walls of the cave in 1992 (Sharifi-Far 1992, pp. 29-32). In 1994, Eshtodan visited the rock art of the cave and described it in his dissertation, under the title “A Short Study of the Karaftou Cave” (Eshtodan 1994). In a paper in 2000, a reference was once again made to the motif of the horseman hunting a deer beneath the inscription (Azarshab 2000). In 2000 and 2004, these motifs were studied, along with some other rock art complexes in other areas of Kurdistan province (Lahafian 2004, 2010). In September 2005, the rock arts of this cave and those of its surrounding complexes were studied by the authors for 15 days and were reinvestigated for complementary studies in 2008 and 2009.

MATERIALS AND METHODS

Study Area

The Karaftou Cave is located 53 kilometers to the east of Saghez and 46 kilometers north-west of Divandareh cities (Figure 2A). According to geological and geomorphological studies, this region was under sea during the Cretaceous period and it was only at the end of this period that this land emerged from water by orogenic movements to be later evolved into the present-day landscape by erosional and karstification processes. The Karaftou Cave is an example of a natural cave which as a result of the later habitation of human groups, some changes and transformations was made to it. For instance,
spaces such as rooms, passageways and corridors were from the natural passageways. The entrance of the cave is 20 meters high from the cliff base and is 107 meters higher than the seasonal stream located in the south of the cave (Ghasimi 2006). In the past, the visitors had to pass a relatively difficult and rough path to reach the entrance of the cave. But currently and with the installation of a metal staircase, the visitors can easily reach the cave. The total length of the cave is 750 meters which is divided into several branches. The cave has handmade and natural parts. The hand cut parts of the cave consists of four floors connected by stone stairs carved to provide easy access to some of the rooms. The existence of the place of window latches and fastening and the entrance doors of the rooms are indicative of an advanced architectural practice. In addition, to provide lighting to the rooms, some windows have been made in the wall which is a highly significant thing in its own right. Above the frontispiece of one of the rooms on the third floor, a Greek inscription has been engraved which has been severely damaged. In this inscription, a god called “Hercules” has been mentioned. As a result, this cave is called the Temple of Hercules by some (Stein 1940; Gall 1978, and Karimi).

The general landscape of the region of the Karaftou Cave and its surrounding sites consists of some connected rolling hills interspersed by flat lands (Roustae et al. 2002). The most important heights and mountains surrounding the cave are Hezar Bagh (1985 meters) and Shah Neshin (2269 meters) in the north-west; Ghale Panjeh Karaftou (2190 meters) in the south; and Zard Kuh (2427 meters) and Abdolrazazgh (2464 meters) in south-west (Ghasimi 2006). Due to significant height of the area above sea level (2000 meters), the region receives frequent rainfall and snow during autumn, winter and spring seasons. This has led to the formation of vast and rich pastures, which, except for the winter, are considered as a good source to feed the livestock of the inhabitants of the region. Despite high amounts of rainfall in the region, surface waters are restricted to streams draining water from vast areas of the regions (Rezvani 2004). On the whole, the water resources of the region consist of underground and surface waters with no permanent river flowing in the area. Part of these surface waters make the branches of Qezel Ozan River which flows into the Caspian Sea. Some of its eastern basins originate from the heights of the region and, after joining each other, form Zayandeh Rud permanent river which later flows into the Lake Urmia. These basins also form the Bukan Dam basin (Najafi 1990).
Figure 2A: The map of the identified rock arts site locations in the study area. 2B: The plan of the Karaftou Cave and the location of the rock arts (the original map from the archive of the Cultural Heritage Office of Kurdistan province with changes.

Figure 3. The interior spaces of the Karafto Cave and the location of the Greek inscription on the frontispiece of the entrance door of the Temple of Heracles.
METHODOLOGY

After identification of each motif complex, to document the scene, they were first covered with polypropylene. Then, the motifs were one by one and with full details copied by marker and then photographed. It is worth mentioning that the reason for using polypropylene for copying the motifs was that the older motifs were hidden behind the modern graffities and carvings and only by taking photographs of them it was possible to document them (Figure 5A).

![Figure 4](image)

**Figure 4.** A and B: the views of the Karaftou Cave, C: view of the first Karaftou rock shelter, D: view of the second Karaftou rock shelter.

The rock arts in the Karaftou Cave are divided into four petroglyph types including human figures, animal, compound forms (human-animal) and geometric or symbolic motifs. They have been created by three methods:

1- The first group consists of those motifs that have been made by engraving. These motifs have been made in a linear and stylized manner. For instance, the eastern and western walls of the window on the first floor and the motifs of the western wall of the room on the second floor have been made by this method (in the researcher’s opinion, most of the motifs that have been made by this method are the oldest engraved motifs in the Karaftou Cave).

![Figure 5](image)

**Figure 5.** one of the stages of registering and recording the motifs of the cave, B: the stylized human figures of the western wall of the Temple of Hercules on the third floor, C: the motifs of galloping or fleeing wild horses on the northern wall of the terrace of the fourth floor and D: the horseshoe-shaped motif, the first Karaftou rock shelter.
The second group consists of those motifs that were made by pounding method. In this method, some volume has been imparted to the motifs such as the motifs on the northern wall of the terrace of the fourth floor.

![Image](image_url)

**Figure 6.** A, B and D: human hand motifs in the Karaftou cave, C: image of the human hand motif in the Karaftou first rock shelter.

The motifs belonging to the third group were made by engraving-pounding technique. By this technique, the illustrator drew the main lines of the motif by engraving them first and then filled the lines by pounding strokes so that the motifs are semi-embossed (a little volume can be observed in the motifs) such as the frontispiece of the entrance of the first floor and the southern wall of the Temple of Hercules on the third floor.

These petroglyphs have been created on different parts of the cave which has been described by the researchers in twelve groups (Figure 2B). The first motif complex consists of those motifs that have been engraved on the frontispiece of the entrance of the first floor (Figure 13D). Engraving-pounding technique was used to make the motifs of this scene. These motifs include horse and horseman (2 instances) and wild goat (1 instance) made in profile. The uppermost motif in this complex is the motif of the horseman-with-bow shooting an arrow backwards against the horse’s movement direction (Figure 14:48). Beneath this motif, another horseman sitting uprightly on his horse, resting one of his hands on his back and taking the bridle by the other can be seen (Figure 14:54). In addition, on the right side, a fleeing goat is seen (Figure 14:15). Generally speaking, it seems that the subject of this complex of motifs is the wild goat’s hunt by the horseman hunter.

The second complex consists of those motifs drawn on the western wall of the lighting window of the first floor (Figures 8 and 23A). Engraving and engraving-pounding techniques were used to make the motifs of this scene. Except for the horse and horseman (2 instances) and horse motifs (2 instances) that were made by engraving-pounding technique, all the other motifs were made by engraving technique. These motifs include horse and horseman (2 instances) (Figure 14:49-50), horse (2 instances) (Figure 14:37-38), wolf (2 instances) (Figure 14:43-44), lozenge (12 instances) (Figures 15 and 16:92-103), square (Figure 15:82), circle (Figure 15:83), triangle (Figure 16:107) and
horseshoe. At the bottom of this scene, the motif of two horsemen can be seen. It seems that the leading horseman is shooting an arrow backwards while the following horseman is shooting an arrow forward. By displaying this scene, the illustrator may have meant to show a battlefield where horsemen are shooting arrows at each other by their bows.

![Image](image1)

**Figure 7.** Parthian soldiers shooting arrows backwards, A: horsemen motifs on the western wall of the lighting window on the first floor. B: the horse and horsemen motifs on the southern wall of the room of the Temple of Hercules on the third floor. C1: Parthian horse archer shooting arrows backwards against the movement direction of the horse (Zutterman, 2003, Fig. 7.3.). C2: the figure of horseman found in the buildings of A Hatra, (Ricciardi, 1996, fig.5). D1: the scene of hunting a lion by Ardashir II (379-383 A.D.) (Herman, 1994 p 9). D2: the scene of hunting a lion by Shapour II (309-379 A.D.) on a plate in Armitage Museum (Herman, 1994, p 9).

The third complex consists of engraved motifs on the eastern wall of the lighting window of the first floor which were created by engraving method. These motifs include circle (2 instances) (Figure 15:84-85), and lozenge (3 instances) (Figure 16:104-106). At the uppermost part of this scene, a lozenge with 21x28 cm dimensions has been drawn. Another lozenge can be seen beneath this which is the largest lozenge in the cave with 62/5x40 cm dimensions. At the lower part of the motif, another lozenge with 31x16 cm dimensions is observed. The illustrator may have meant to illustrate a fertility symbol. At the left side of this scene, the motif of two circles has been drawn (Figure 13I). Lozenge and triangle shapes were female symbols (fertility symbol) in different cultures or played the role of protection and exorcising evil spirits (Cooper 1993, p 325).

It is worth mentioning that during excavations at the Karaftou Cave, a pottery sherd of the Seljukid period was found on which connected lozenges had been painted (Hamzehlo and Mir Eskandari 2002, pp. 278-305). In addition, there are hanging triangles on the pottery vessels discovered from Kul Tarikeh Cemetery (850-550 B.C.) (Rezvani and Roustaei 2007, pp. 139-184).
The fourth complex of motifs, are those created on the western wall of the corridor of the first floor (Figure 11A). Engraving technique was used to create these motifs. In this scene, there are such motifs as circle (3 instances) (Figure 15:86-88), human hand (9 instances) including 3 instances of right hand (Figure 15:73-74 and 62) and 5 instances of left hand (Figure 15:70-72, 75-76) and one deformed (a three-fingered) hand (Figure 15:78).

Figure 8. Numerical signs engraved in the site of Karafou (A: the terrace of the fourth floor, B: the first rock shelter, C: the second rock shelter and D: the rock fragment with rock art from Kul Tarike Cemetery (850-500 B.C.) (Rezvani and Roustaei: 2007 pp 139-184).

The fifth complex of motifs, are those engraved on the eastern wall of the corridor of the first floor including three right-hand motifs. Engraving technique was used to create these motifs (Figures 13C and 15:63-65). It is worth mentioning that human hand petroglyphs have been found in Iran from Baluchestan (Heydari 2002, pp. 29-48), from the region of Gazo 40 kilometres north-east of Khash city (Dessau 1960, pp. 258-266) and from the basin of Hormozgan’s Gabrik Dam (Darabi, 2007). The pictograph types of the human hand motifs have also been found from the rock shelter of Eshkat-e Ahou at Hormozgan (Sadeghi 2002, Biglari et al. 2013).

The sixth complex of motifs are those made on the western wall of the altar room on the second floor. Engraving technique was used to create these motifs. In this scene, there are 21 red deer motifs (Figures 14:16-36), 2 unidentified carnivorous animal motifs (Figure 14:45-46), one wild goat motif (Figure 14:7) and 2 instances of circle motif (Figure 15:89-90) (Figures 9B and 9D). This complex is one of the most fully motif-populated scenes identified in the cave. Linear and stylized methods were used for creating these motifs. In these motifs, animal bodies have been drawn in a linear way and their feet have been drawn by vertical lines. In red deer motifs, the horns have been drawn long and paired and smaller horns have been orderly drawn on them. On the whole, there are 21 red deer motifs of which the largest is 41/5x36/5 cm (Figure 14:7) and the smallest is 13/9x14 cm (Figure 14:24). Meanwhile, at the upper and middle parts of these motifs, an altar has been beautifully carved and engraved which is attributed to the Ilkhanid Period. A ledge can be seen at the bottom of it
(Figure 11C). What is notable about this part of the cave is that a red deer horn was discovered in the excavations of the Karafou Cave. Considering the red deer motifs drawn on the wall of the altar room, radiometric dating of the red deer horn discovered along with detailed osteological studies could prove some relevance to the motifs on the wall of the altar room (Figure 9C).

Figure 9. Image of the red deer, B and D parts: the red deer motifs in the cave, C: photo of the red deer horn found in the Karafou Cave in recent excavations.

The seventh complex of motifs has been drawn on the western wall of the hall. Its motifs consist of three complex groups from the end of the hall to the entrance door of the temple which have been drawn a few meters away from each other (Figures 10D & 13A & 13F). The motifs on the western wall of the hall on the third floor are categorized into the three groups of human figure motifs, animal motifs and geometric or symbolic motifs including wild goat (14 instances), horseshoe (3 instances), right hand (2 instances) and the standing hunter hunting with bow (1 instance) motifs.

The first scene of this complex of motifs has been drawn on the right side of the western wall of the hall on the third floor where the floor of the hall collapsed. The motifs of this scene have been drawn by stylized or linear method and display a hunting scene where a hunter is hunting wild goats with his bow. The motifs of this scene consist of six wild goats (Figure 14 (10-14)), one standing hunter hunting with his bow (Figure 14(10-14)) and one circle-shaped motif (Figure 13F). It is necessary to remember that the documents for the use of bow and arrow have been previously documented on the rock arts of other regions of Iran such as the Eshkat-e Ahou in Bastak of Hormozgan (Sadeghi 2002; Biglari et al. 2013), Mirmalas and Hamian of Koohdasht (Izadpanah 1969a, pp. 6-11, 1969b, pp. 13-59; McBurnry 1970, pp. 185-186; Garzhgian et al. 2001, pp. 84-110; Otte et al. 2003, pp. 3-10, and Remacle et al. 2006, pp. 13-27), the Cave of Cheshmeh Sohrab of Kermanshah (Biglari et al. 2007, pp. 50-54), and the Maiwaleh of Kermanshah (Shidrang 2007, pp. 57-62) etc.
Figure 10. A: Drawing of the motifs on the northern terrace of the fourth floor including horse and horsemen motifs, horseshoe-shaped motifs and numerical signs motifs. B: Human hand motifs (the upper and middle drawings) on the eastern wall of the hall on the third floor and human hand and circle motifs (the lower drawing) on the frontispiece of the small entrance of the Temple of Hercules on the third floor. C: Horse and horseman motif of the southern wall of the Temple of Hercules on the third floor. D: Drawing of wild goat motifs on the western wall of the third-floor hall.

Eight wild goat motifs are seen in the second scene of the western wall of the hall on the third floor (Figure 10D). The motifs of this scene have also been drawn by stylized or linear method (Figures 14(1-5, 8-9) and 16(10)). In the third scene of the western wall of the hall on the third floor, two human right-hand motifs (Figure 15(68-69)) and two horseshoe motifs can be seen (Figure 13A).

On the eastern wall of the hall on the third floor and above the frontispiece of the temple the eighth complex of motifs has been created (Figure 6B). The motifs of the frontispiece of the temple room on the third floor where the inscription of
Hercules is also located include circle and human left-hand motifs (Figures 15-66-67, 77 and Figure 10B).

The ninth complex of motifs has been drawn on the western and southern wall of Hercules Temple on the third floor (Figure 5B and 13H). The first motif that draws one’s attention to itself is the stylized image of a human being with open hands (cross-like) and a crown-like object on his head (Figure 15b86b). An almost similar instance of this image has been found in the Strait of Qarqab-Gheido (located in the historical region of Teimareh) which Morteza Farhadi introduced as “the winged human” (Farhadi 1998, p 177). A similar form of this motif has also been found in Sina Desert (located in the east of Egypt) which has been known as an extraterrestrial being (Anati 2004, pp. 23-40). Beside this motif, the stylized figure of another human being sitting in reverence can be observed (Figure 1579). It seems that the purpose of the illustrator in drawing this motif was to show a great personality (a ruling, religious, mythical or extraterrestrial figure) who has held the reverent man in the shadow of his power and protection (Figure 5B and 13H).

![Figure 11. A: Drawing of human hand and circle motifs on the western wall of the corridor on the first floor, B: Drawing of the motifs on the western wall of the lighting window of the first floor, C: Drawing of red deer, wild goat and two carnivorous animal motifs on the western wall of the altar room on the second floor.](image-url)
There are three motifs on the right side of the southern wall of the temple room (Figure 10C). At the right side of the wall there is the image of a horseman with the bridle in his hand (Figure 15:56). At the left side of this scene, two other horses have been drawn (Figure 14:40–41). At the left side of the southern wall and in the space between the two lighting windows, some other motifs could be observed (Figure 13G and 7B). At the upper part of this space there are two motifs: one is that of a horse (Figure 14:39) and the other is that of a horseman with his horse (Figure 15:55). Beneath these two motifs, two horsemen are observed (Figure 15:51, 53). In this scene, the horsemen are shooting arrows to each other backwards against the movement direction of their horses. The author considers this figure to be a dramatic movement. It seems that the purpose of the illustrator in displaying this scene was to show one of the war techniques of the Parthians (shooting arrows backwards while retreating). Parthian feigned retreat and Parthian shot (shooting arrows backwards while retreating) is well-known in Roman literature (Figures 7B, C, and D) (Herrmann 1977, p 51). In addition, two human right-hand motifs have been drawn on the eastern wall beside the lighting window.
Figure 13. A: Human hand and horseshoe-shaped motifs on the western wall of the third floor hall. B: Drawing of galloping or fleeing horses motifs on the northern wall of the terrace of the fourth floor. C: Drawing of the human hand motifs on the eastern wall of the corridor of the first floor. D: Compound (horse and horsemen) and the wild goat motifs on the frontispiece of the entrance door of the first floor of the Karaftou Cave. E: Drawing of Symbolic motifs, F: Drawing of wild goat, hunter and circle motifs on the western wall of the third floor hall. G: Horse and horsemen motifs and the horse motif of the southern wall of the Temple of Hercules on the third floor. H: Stylized human figure motifs on the western wall of the Temple of Hercules on the third floor, an extraterrestrial being with open hands (cross-like) and a crown-like object on his head and the stylized motif of a human figure sitting in reverence. I: Drawing of the eastern wall of the lighting window, including the geometric motifs (lozenge and circle) on the first floor.

The tenth complex of motifs can be observed on the northern terrace of the fourth floor (Figures
10A and 8A) which consists of five horse and horsemen motifs (Figure 15 (52,57,59-61)), three horseshoe motifs and one numerical sign motif (Figure 16(108)). On the uppermost part of this scene, a horse and horseman motif is seen. It seems that the horseman in this motif is holding the bridle with his both hands (Figure 15(57)). Beside the horse and horseman motif, there are 36 small and shallow circles with an approximate diameter of 1 to 2 cm which orderly stand beside each other in four rows of nine circles each (Figure 16(108)). In the author’s opinion, the purpose of drawing these small, shallow circles has been to show a kind of numerical sign. Beneath this motif, a galloping horseman motif is seen. In this motif, the horseman is holding the bridle with one hand and with the other he is holding a claw-like object for fighting (Figure 15(52)). On the right side of this scene, the figure of two horsemen and two horseshoe-shaped motifs have been drawn (Figure 15(60-61)). On the right side of this motif, there is the motif of another horseman who has been drawn in the reverse movement direction of the other horsemen. It seems that the illustrator intended to display the movement direction of the horseman downward (Figure 15(59)). The notable point in this scene is that the horsemen motifs have been drawn in different movement directions.

On the northern wall of the terrace of the fourth floor, the eleventh complex of motifs has been created by pounding technique. In this scene, the motifs of galloping or fleeing horses are seen (Figures 5C, 13B and 14(42)). On the western side of the terrace entrance of the fourth floor, the twelfth complex of motifs has been drawn including three horseman motifs, three geometric cross-like motifs (Figures 13E and 16(128-130)). In this part, the figures of cross-like or sun-like motifs draw attention to themselves. Instances of these motifs have been found in the Marankhash motif complex in the Hawraman region in Kurdistan and also in Saimali Tash area in Kyrgyzstan (Fromkin 1970). It is worth mentioning that the cross motif is known in all cultures as a life-giving or sun symbol.

Rock Shelter I

The Karaftou rock shelter I is situated at the base of a limestone ridge in which the Karftou Cave is located. The the rock shelter is about 150 meter above the seasonal stream bed in the south of the Karaftou Cave and it faces the south (Figures 4C and 12A). The approximate area of the floor of the shelter is 88 square meters and it has a horizontal oval-shaped opening. The shelter has a length of 20 and a maximum width of 7 meters. The maximum height of its overhang is 6.50 meters. The bedrock is exposed in floor of the shelter. The water sources near the rock shelter include a seasonal stream to the south of the shelter which flows from the south-east to the west. There are several springs near the rock shelter too. The nearest spring is located in front of the Karaftou Cave.

The engraved motifs of this rock shelter have been created on the walls and the floor of the shelter (Figure 4C). The dimensions of these rock arts are 5x4 meters. A sharp tool has been used to create these engravings which include 75 instances of symbolic motif (frequent horseshoe-shaped symbols), 3 instances of animal motifs (Figure 16(109)), 2 instances of human hand (Figures 6C and 16(111-112)), 3 instances of rectangle-shaped geometric motifs (Figure 16(113-115)) and 1 instance of possible numerical signs (Figures 8B and 16(120)). On the floor of the shelter, three oval-shaped holes whose interior have been polished can be seen. In Iran, instances of horseshoe-shaped motifs have been reported from the region of Gotvand (Bard-e Pazani) located in the north of Khuzestan province (Azizi Kharanghi et al. 2007, 2011, pp. 9-19). Similar (frequently horseshoe-shaped) motifs have also been discovered in Australia (Farhadi 1998, p.39). Meanwhile, there are 7 horseshoe-shaped motifs in the Karaftou Cave.

Rock Shelter II

The Karaftou rock shelter II is located near the rock shelter I. Its opening faces south. The approximate area of the floor of the shelter is 46 square meters and it has a horizontal oval-shaped opening. The shelter has a length of 16 and a maximum width of 5.36 meters. The maximum height
of its overhang is 3.50 meters. The floor of the shelter consists of bedrock and its interior is well illuminated. Many motifs have been created on the walls and floor of this shelter on a surface area of 6.5x1.72 meters (Figure 4D).

Figure 14. The drawings from 1 to 50
Figure 15. The drawings from 51 to 100
These motifs have been created by engraving technique with a sharp tool. These motifs include 38 horseshoe-shaped symbols, 4 circles (Figure 16:123-126) 4 zoomorphic motifs (Figure 16:121-122), and a group of cup marks (small shallow circles which have been created in a parallel manner adequately distanced from each other (Figure 16:127) and Figure 8C). Considering the fact that horseshoe-shaped motifs, human hand and numerical sign motifs have been made both in the rock shelters and in the Karafou Cave, one can suggest that these motifs most probably belong to the same time period.

**Relative chronology of Karafou Rock Arts**

Evidences for relative dating of the Karafou Cave site include the fighting horsemen’s shooting arrows, the rock cut architecture and the changes made to the natural structure of the cave, the Greek inscription and the data collected from archaeological excavations.

In the Karafou Cave there are horsemen motifs in which the horsemen are shooting arrows backwards. This manner of shooting arrows is one of the techniques (shooting arrows backwards while retreating) attributed to the Parthians. This is comparable to a Parthian hunting archer motif on the silver-plated, gilded bronze roll discovered in China (Herrmann 1977, p 50). This manner of
archery is also observable on Sassanid’s art works including Shapur II’s semi-gilded silver plate (ibid, p 9), Khusraw I or Qobad’s silver plate (ibid, p 133), Khusrau II’s relief on Taq-e Bostan in Kermanshah (ibid, p 151), the rock arts discovered from Hawraman (Ghasimi 2007a, pp.70-81, 2007b, pp. 18-19 and 2007c, pp. 89-106) and also on the Kushan relief of Uzbekistan’s Khalkhian Palace (from the second half of the first century B.C) (Tasoub 2006, p 246). 

Stony architectural structures of the Karafaou Cave consisting of rooms, corridors, entrance doors, windows, lighting windows, stone stairs, and circle holes created on the floor and cradle- and arch-shaped roofs, are indicative of architectural features from the historical period. Some people believe that the Karafaou Cave is the only rock architecture of the Hellenistic period (323-27 B.C.), based on its architectural form, which was created by the Parthian king Goodarz II (4th to the first half of 3rd centuries B.C.) in 50 B.C. before 45 A.D., all the rooms engraved in rock (except those of the Karafaou Cave) had burial purposes (Heydari 2000, pp. 317-322). On the frontispiece of one of the rooms on the third floor, a Greek inscription, which has been greatly damaged during time, has been engraved. Hercules has been mentioned in this inscription; hence, it has been called the Temple of Hercules by some. This is the translation of an excerpt from the inscription: “Hercules inhabits there; may no evil enter it. This is the house of Hercules. Whoever enters it will be safe”.

According to Stein, the Karafaou Cave represents a Greek and Hercules-like Iranian god whose name has been mentioned in the inscription. In addition, this cave is the only temple that Taseh has mentioned in the “Mountain of Sombolobus” and believes that the Parthian king Goodarz II made it in 50 B.C. in rivalry with Mehrdad. Van Gall has the same Stein’s argument (Gall 1978, pp. 91-11, 2010, pp. 533-536).

As a result of several archaeological excavations in the Karafaou Cave and its surrounding sites, remains from the 4th millennium B.C. to the Islamic periods have been discovered. the Iron Age III (850-500 B.C.) burials were discovered at the Kul Tarike Cemetery (Rezvani 2004, pp. 83-110; Rezvani and Roustaei 2007, pp 139-184), and the Chalcolithic pastoral occupation (4th millennium B.C.) remains in the Kani Mikaeil Cave (Roustaei et al. 2002, pp. 58-77; Roustaei et al. 2002, pp. 935-936). The archaeological data from the cave itself (except for several stone flakes which cannot be attributed to any certain period), are all from the historical (Sassanid and Parthian) and Islamic (6th and 8th A.H.) periods.

In the Karafaou Cave, there are 36 small circular holes with an approximate diameter of 1 to 2 cm which, with a considerable order, stand beside each other in four rows of nine circles each (Figure 8). Similar motifs are present in the nearby rock shelter I and II. This indicates that these motifs might be created in the same time period. Some similar motifs were found on a rock close to Iron Age site of Kul Tarike Cemetery (850-500 B.C.) which is located five kilometers from the cave. In fact, this rock is a surface find and unfortunately, we do not know much about its original archaeological context (Rezvani, 2004, pp. 83-110; Rezvani and Roustaei, 2007 pp 139-184) (Figure 8D). It is most probable these cup marks were a type of numerical signs (Ghasimi 2006, p112).

In the past, during each occupation period at the cave, the new inhabitants of the Karafaou Cave destroyed the older strata in order to prepare it for the new settlement. Consequently, they removed the older surface deposits of the rooms and other occupation spaces of the cave and transported them to the natural spaces of the cave such as the corridors and the passageways. These operations have disturbed the archaeological deposits of the occupation spaces (personal communication with Hassan Rezvani 2006).

Conclusion
Recent archaeological discoveries in the cave and in its surrounding sites indicate that the Karafaou Cave was no doubt used in historic (Seleucid, Parthian and Sassanid) and Islamic (Seljukid and Ilkhanid) periods. Considering the proximity of this cave to the Iron Age III sites (like Kul Tarike
Cemetery and Ziwiye), one can conclude that this cave was most probably used in this period too. The motifs created on the walls of the hand-made parts of the cave were made after creating the artificial living spaces, rooms and lighting windows. These motifs are most probably more recent than the construction of the rooms and lighting windows and certainly the first and second rock shelters cannot be older than the mentioned periods. The direct absolute dating of petroglyphs remains a big problem not only in Iran but also in many countries. Sampling patina/varnish covering the outer surface of engravings for radiocarbon dating should prove promising providing the patina/varnish contains adequate organic material.

As a final note it is important to point out that most surfaces of the internal walls of the cave on which these motifs were created have been damaged since late 1900s by graffities made by visitors. As a result, it is difficult to distinguish their details and, therefore, it is probable that the authors may have missed some of the motifs created on the walls of the cave which urges for more detailed studies in the future.

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REFERENCE


Eshtodan, R. 1994.  A Concise Survey and Study of...
Karaftou Cave. Unpubl. M. A dissertation, Department of Archaeology, Faculty of Human Sciences, University Tehran Central Branch (in Persian).


Hall, J. 1917. Illustrated dictionary of symbols in Eastern and Western art. New York, IconEditions.


Ricciardi, V. R.1996. wall paintings from building a at Hatra, Iranica Antiqua XXXII:147-165


THE COUNSELING ENGINEERS OF MAHAB GOSTAR ZAGROS. 2003. Ministry of Jihad and


