

An Introduction to the Motifs of the Petroglyphs in Darreh Sabz, the Green Valley, Located in the Southeast of Kurdistan Province

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Abstract: Mountainous plains located in the middle of the Zagros Mountains in Ghorveh have attracted different ethnic groups and provided suitable opportunities for living and continuity the human life process since ancient times throughout history due to enjoying suitable environmental conditions. There is a site of rock art in the southeast of Kurdistan, located in the village of Zarrineh, called Darreh Sabz, the Green Valley. Some of its figures and motifs contain important elements comparable in terms of style and morphology to the lithographs of different regions in Iran and also other similar sites in Kurdistan. Some of these motifs and figures have been created on the rocks in overlapping intervals during several different periods. The petroglyphs found in Darreh Sabz, Green Valley, include human-like motifs in various combinations and poses, horse and rider, and motifs of animal figures including goats, rams, ewes, camels and other motifs in the form of graphic and abstract elements and also geometric shapes and symbols. Generally, the present survey is an attempt to introduce and examine the lithographic symbols of the Green Valley. This article is based on. To do this, the methodology used in this research is historical-analytical descriptive method which is based on field studies and library documents. In examining and analyzing the Green Valley rock arts, we have come across a number of questions including the form and the whole subject matter taken into account in creating the rock art drawings, their creators and artists and also the purpose of creating these drawings, motifs and figures on a rocky outcrop and out of sight of the general public in those periods of time. Based on the findings of this study, there are no images, figures and motifs without conveying some specific concept and meaning among the drawings of the Green Valley.

Keywords: Rock Engraving, Darreh Sabz, Green Valley, Petroglyph, Kurdistan, Iran

1. Introduction

Rock art is considered to be a general concept and working on rock is considered to be the media and a means to convey a specific kind of message. One of the special aspects of rock art is lithography. Considering various goals and motives related to the daily life needs and beliefs human beings have left patterns, motifs and figures that by carving on rocks during different periods of time.

The art and skill of carving and rock engraving contain a kind of organic and original similarity and unity, both in terms of form, i.e., morphology and content and meaning all over the world in spite of the perceptible diversity, style and differentiation and the long tradition and process [17]. The

oldest known rock art works date back to 15 or even 95 thousand years ago. These works of arts include cup marks and curved lines carved into the rocks of a pebble cave, and at the same time simple line marks on a large number of movable objects (bones, teeth, ivory and stones) which have been discovered in the habitats of the early humans. They were first found or excavated in the Central and Eastern Europe in the form of some specific shapes and patterns such as zigzags, crosses, arches, parallel lines and the like [5]. Nowadays, the engraving rocks and petroglyphs are considered to be a long history from the Paleolithic period up to the contemporary time. Considering the importance of clarifying the content, meaning and antiquity of these kinds of cultural data they are studied and surveyed from various

perspectives such as archeology, anthropology, art, and semiotics [20]. The most problematic concern regarding to these drawings is the lack of the absolute historiography and exact dating which forces the archeologists to classify them and attribute them to a specific period of time only through comparative and comparative chronology. [7]

Figures and patterns with special themes such as hunting scenes, animals, humans, symbols, geometric shapes and so on are seen on the rocks in Darreh Sabz, the Green Valley. The newly found rock art evidences have been identified near Shaban Kachal Mountain (Shavaneh Kachal) located in the southeast of Ghorveh (also Qorveh), Kurdistan. This area is 35 km away from Ghorveh located in a village called Zarrineh.

Ghorveh has a historical site has been surveyed archeologically during four periods and significant cultural artifacts and data have been obtained from various ancient sites. Based on the pottery pieces of ancient sites, settlement in this area has lasted at least since the Copper and Stone Age (Middle and New Phase) to the Islamic era (Qajar Dynasty) about 100 years ago [2, 6, 11, 22] The methodology in this review is a historical-analytical descriptive method based on conducting field studies, image preparation, comparisons with other drawings, motifs and figures and also library documents. In analyzing the Green Valley rock arts, we have encountered a number of important questions about the form, the subject, the creators and artists and also the purpose of creating the drawings, motifs and figures on out of sight of the general public in those periods of time.

2. Review of Literature

The first and foremost studies of the Iranian rock motifs were made by Italian researchers. When a group of geologists from Italy were working for the discovery and extraction of minerals in the region of Baluchistan, Iran in 1958, some rock arts were found and discovered accidentally in Gezo. These discoveries can be considered the first research on the rock arts in Iran [15]. The preliminary report of "Mack Borney" after examining and analyzing the drawings on the rocks found in Dusheh and Mirmalas in 1969, are considered to be the first preliminary report about the drawings, figures and motifs engraved on the rocks in Iran [8]. Taymareh region as the most important area for the petroglyph in Iran has a good collection of drawings whose rock arts were published in a comprehensive book in 1998 [9] There are 18 known art rock sites in Kurdistan based on the studies and researches done in this province. These rock arts have been created with two techniques of hammering and scratching on the rocks. The types of figures and images used in these sites are monograph and collection ones. In recent years there have been few studies in some regions in Kurdistan including the study of rock motifs in Oraman by Jamal Lahafian whose results have been published in some articles [13]. There are other studies such as a visit done by a group of archeologists including Marcel Otte from the University of Liege, Belgium, Fereydoun Biglari from the Paleolithic Research Department of the National Museum of Iran and Iqbal Azizi,

archeology expert of the Cultural Heritage Organization of Kurdistan Province from the rock arts in Bardmir and Martash in Oraman in 2004, a survey done on the rock motifs of different regions of Kurdistan Province by Taher Ghasimi [10], and also a description and analysis done on the rock motifs of Zafarabad Dehgolan [21]. Before the introduction of Darreh Sabz in Zarrineh, the two regions of Mamajegh and Kalfar, located 38 km northeast of Ghorveh, have monographs and a set of complementary motifs [14]. In fact, the motifs used in the Green Valley are among the collection types.

3. Darreh Sabz, Green Valley, Lithographs

This site was accidentally identified by one of the authors in 2016 during an archeological study in the western Chahardoli, one of the districts of Ghorveh [14]. This site is located near the Shaban Kachal Mountain (Shavaneh Ka Chal) branched from the Parishan heights. It is 5 km from the village Zarrineh to the newly found complex of the rock arts located in a valley called Darreh Sabz, the Green Valley. The figures and drawings have been carved on the rocks mainly made of iron. Due to the existence of high amount of iron in this type of rocks, the color of the created designs and figures is completely different from the color of the rocks. Some of the rock art figures and motifs identified in this site contains some important elements with distinctive and special artistic features which are comparable and similar to those found and seen in the rock art motifs in the regions such as Kelfar, Mamajegh (Ghorveh), Saral (Divandarreh), Zafarabad (Dehgolan) and Karfto Cave (Divandarreh) in Kurdistan and other parts of Iran. The rock arts of Darreh Sabz have been located in 4 points spread in a vast area covering more than 10 hectares and includes more than 70 rocks on which patterns, figures and motifs have been formed. It is considered to be one of the livestock and hunting areas (environmentally protected area) located in Parishan heights in Ghorveh. According to archeological studies, the nearest ancient site to this collection of the rock art is the Bahrami hilly rock arts, dating back to the Parthian period and the Sassanids dynasty. [1]

There are rock arts including petroglyphs, pictures and images of humans, some naked in various combinations and different poses including hunting, horse and horseman and animals such as mountain goats with different horns, camels (with one or two humps) and other animal like and human like figures in the abstract and graphic forms showing a fusion of realism and fantasy on the vertical and slopping surface of the rocks in different directions at the site of Darreh Sabz, Green Valley. Most of the motifs and figures found in this area have been engraved by carving in a series of strokes and creating sharp scratches on the body of a rock or a smooth stone. Some of the designs have been created by creating lines in the margins of the rock and leaving the space inside empty. Some other designs have been done in the same way but in a way that the whole surface of the pattern and a

thin layer of the rock have been carved. The figures have been mostly carved and engraved by using tools to knock and hit a stone on the other one and their features include: 1. confusion of the designs and patterns 2. width and roughness of the pattern lines 3. repetition of the errors in creating patterns 4. absoluteness and non-abstraction of the patterns. Lithographs have been mostly created through negative engraving in single rocks, valleys and some mountains. Some of the lithographs created on the surface of the rocks are related to two or three different time periods in the site of Darreh Sabz and also other neighboring sites. There are special elements such as overlapping, covering one layer over the other and layer differences in identifying different phases of the newly found rock arts in this area in Ghorveh, Kurdistan (Figure 1).

Rock arts have been combined in various artistic ways in Darreh Sabz, the Green Valley. The artists of that period had created an image of a goat as an art rock by using different styles familiar to them. There are a few examples of the carved or engraved goats created in an abstract style in Darreh Sabz, Green Valley, collection among the rock arts. The figure of the mountain goat has some varieties in terms of drawing styles which can be seen in drawing of the horns enjoying some great immersion and exaggerations and also the animal's body with noticeable elongation and even its neck creating an image of some kind of mythical animal in the viewers' minds (Figure 2).



Figure 1. Overlapping and covering one layer over the other and layer in different periods of time (Authors: 2016).



Figure 2. The figure of a mountain goat creating an image of some kind of mythical animal in the viewers' minds (Authors: 2016).

The other notable animal motifs in the Green Valley are the figures of camels and horses (Figure 3).



Figure 3. The figure of a camel with two humps (Authors: 2016).

The camel figures that can be seen in two parts of the site have been drawn in the form of one and two humps. But the figure of the horse can be seen both individually and also along with the rider who is hunting.

There are other figures in the Darreh Sabz, the Green Valley, including human motifs which can be seen as an individual person and also a riding horseman while hunting (Figure 4).



Figure 4. A collection of motifs of human, animal and mythical characters on the body of a smooth rock in Darreh Sabz, the Green Valley (Authors: 2016).

There are also some religious and mythological motifs in Darreh Sabz, the Green Valley, among them an image of a single broken cross and also one enclosed in a circle are noticeable. (Figure 5) Each figure is a symbol for some special purpose representing a specific person, concept and event and the creator influenced by the original mental images in his own mind has created a symbol of an animal or a person.



Figure 5. An image of a single broken cross in Darreh Sabz, the Green Valley (Authors: 2016).

Other examples of these figures and motifs can be seen in other sites in Ghorveh, including Mamajegh and Kalfar [14] and also in other parts of Iran, including rock arts in different sites of Taymarch region [9] Ojeimam Hamedan [19] Lakh Mazar Birjand [12] Arkas B Malayer [7] Azandarian Hamedan [16] which are comparable to the ones existing in Darreh Sabz, the green Valley.

4. Chronometric Dating

The absolute chronometric dating of rock carvings, motifs and figures depends on two preconditions; First, the physical connection between the rock motifs and the dating criterion must be explicit and indisputable. Second, the hypotheses about the temporal relationship between rock motifs and the criterion of absolute dating (i.e., color, fractured surfaces and hit impact on the rock to create rock arts) must be scientifically testable and experimental [3, 4]. Chronology or chronometric dating as one of the most important issues remains unclear and unanswered not only about newfound rock motifs, but also in other parts of Iran [18]. One of the basic strategies of chronology of rock engravings and petroglyphs is the archaeological survey and outlook of the places and contexts where these motifs have been placed. To do this, it is possible to look at the stagnant lithographic radii of the areas under the archeological study and also use the advantages of the study of the similar rock art works of the neighboring lithographs. Considering the type and material of the rock on which drawings has been carved, and the amount and conditions of the erosions, the depth of the carving on the stone surface, the geographical and climate factors, and the place where the site contains the motifs (rock shelters, caves or area open), having sufficient knowledge about the type and texture of the sediment accumulation covering the surface of the rock and the formation of the sedimentary layers on the rock surface and paying attention to other factors can be very beneficial in the study of chronology [15]. The existence of the ancient Bahrami hill, located near the introduced motifs in the Green Valley of Zarrineh, can be mentioned as an old habitable area in the mentioned village, dating back to the Parthian and Sassanid eras, which can help to determine the date of the Green Valley motifs. Another common method in the historiography and typology of petroglyphs is to use self-portraits. As mentioned earlier, 18 sites have been identified and introduced in Kurdistan Province. The Green Valley lithographs are more comparable to the lithographs of Mamajegh and Kalfar regions located in the northern part of Ghorveh and in the Zafarabad, Dehgolan. By observing the specific and historical signs that are present in the designs (line, the figures and images of the tools and fittings, special animals such as horses, etc.) and attributing these objects and elements to some specific periods of time in history based on their uses in those historical periods, some special dating can be specified to the lithographs found in Darreh Sabz, the Green Valley.

The most important problem in the study of rock motifs in Iran is the issue of absolute chronology of the rock arts

resulting in not having the correct sequence of the chronology of the rock motifs. Although it is basically very difficult to date the rock carvings exactly and it encounters many problems, in the case of the lithograph in particular, a relative date can be obtained by considering the archaeological evidences which we mentioned some of these documents and evidences through the article. Considering the fact that climate change happens at a very low rate and also climate change has a direct impact on increasing and decreasing vegetation, animal species, human habitats and so on in an area and accepting the reality that the rock motifs obtained from the Green Valley represent the motifs of animals such as horses and mountain goats, which, firstly, live mostly in areas with lower population density (away from population centers) and in greener areas, and secondly, attention to the point that this region has been one of the centers with high population density since ancient times, and at least the existence of a large population center in the Parthian period can be speculated according to the artifacts obtained from this period (the existence of the ancient hill Bahrami, which is registered in the list of the national monuments of the country) in this region, it can be concluded that these motifs are historically at least older than the Parthian period, or that at the same time this animal species lived in this area.

5. Conclusion

According to the researches that have been done in the northeast and southwest of Ghorveh during the last few years, more than 200 boulders, with hundreds of figures, related to different periods have been identified so far. In this article, some of the significant figures and designs of the southeastern region of Ghorveh, introduced as a newly discovered region of the rock arts, have been surveyed and studied. There have been great natural and human-made destructions and damages to the rock arts of Darreh Sabz, the Green Valley, considering the existence of some of the memories written by the local people during the last two decades as the human damages and also the natural damages including acid rains resulting from air pollutions occurred since they were created.

This historical area enjoys new subjects to be studied and surveyed historically, archeologically and anthropologically. Therefore, it is highly recommended to the interested students, experts and archeologists to study the petroglyphs in Darreh Sabz, the Green Valley, from different perspectives especially the sociological and also anthropological aspects.

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