



## Newfound Petroglyphs of Qonaq Qiran, Ardabil, NW Iran

Zahra Almasipeyman<sup>1</sup>, Hassan Derakhshi<sup>\*2</sup>, Hamid Reza Ghorbani<sup>3</sup> and Hossein Alizadeh<sup>4</sup>

<sup>1</sup>Department of Archaeology, Science and Research Branch, Islamic Azad University, Tehran, Iran.

*\*Corresponding Author;* <sup>2</sup> Department of Archaeology, Shoushtar Branch, Islamic Azad University, Shoushtar, Iran.  
E- mail: derakhshi\_h@iau.ac.ir

<sup>3</sup> Department of Archaeology, Art University of Isfahan, Isfahan, Iran.

<sup>4</sup> Department of Archaeology, Miyaneh Branch, Islamic Azad University, Miyaneh, Iran.

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### Abstract

Petroglyphs, as one of the earliest forms of art, are highly valued evidence in fields such as archaeology, art history, and anthropology. A significant number of petroglyphs have thus far been identified and documented throughout Iran, with Northwestern Iran, particularly the eastern part of the region (Ardabil province), standing out in this regard. This province is home to a large collection of petroglyphs, most notably concentrated in Mashkinshahr County, at such sites as Shahar Yeri, Sheikh Madi, Ahoor Darasi, Moshiran, and Khanum Alilu. During a recent survey at the Qonaq Qiran village, Ardabil County, a total of 50 petroglyphs were identified and documented. The present descriptive-comparative study utilised field and library research to classify these petroglyphs typologically and to attempt relative dating. The recorded motifs were categorised into three general groups: human figures, animals, and symbols. They were thus comparable with the known depictions in northwestern Iran and other regions. Considering the archaeological context of the regional landscape, a tentative dating of this rock art site was suggested for the first millennium BCE.

**Keywords:** Northwest Iran, Petroglyphs, Archaeology, Comparative Studies.

**Article Type:** Review Article

### Introduction

The village of Qonaq Qiran is located in the Central District of Ardabil County (Figure. 1), approximately 27 km northwest of Ardabil City. This region is characterised by foothill terrain and a cold and dry climate. The region's lavish pastures and warm winter quarters offered an ideal setting for prehistoric rural communities engaged in pastoralism and farming. Archaeological investigations have uncovered ruins of forts dating back to the Bronze and Iron Ages in this village. The toponym Qonaq Qiran derives from Turkish, with "qonaq" meaning "guest" and "qiran" figuratively meaning "killer", seemingly bearing a certain historical implication.

The petroglyph site lies some 500 m northwest of the village and 200 m south of Qaleh Khosrow, at a longitude of 4259202, latitude of 39s0244943, and an altitude of 1255 m above sea level. The site is perched on a slope hemmed in by rocky mountains, a short distance from the south bank of the Qarasu River (Figure. 2). The present study draws on both field and library research. As regards the fieldwork, the petroglyphs at Qonaq Qiran were visited and investigated, placing emphasis on the meticulous documentation of the number of depictions, their types, dimensions, and aspects of the rocks on which they were found. Additionally, the study considered the creation methods, motif types, and the size and depth of the engravings. As part of the



library work, drawings of the representations were first made using AutoCAD, followed by descriptive and comparative analyses. This paper tries to answer two key questions: 1) To which period(s) do the petroglyphs in question belong?, and 2) At which sites one can find comparanda? At a starting point for these enquiries, it is hypothesised that based on the cultural evidence- particularly pottery sherds found in the vicinity of the site- a relative dating to the Iron Age appears plausible. Furthermore, the petroglyphs at Qonaq Qiran share notable parallels in depicted scenes, landscapes, and styles with many known sites in northwest Iran.

### Petroglyphs

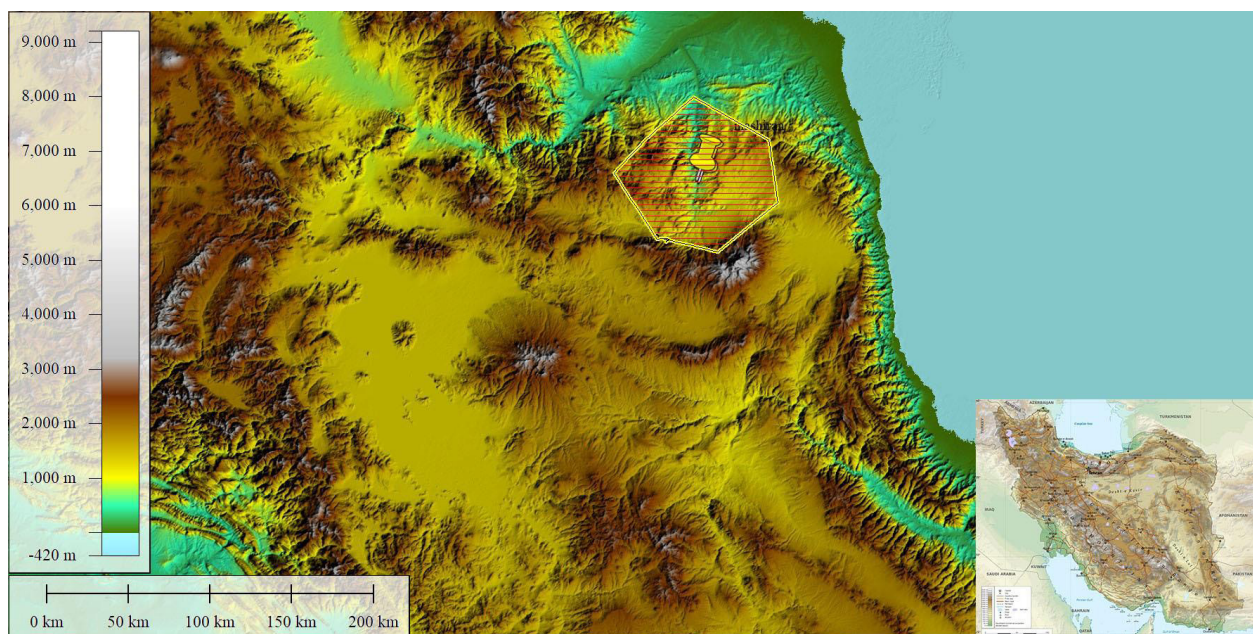
During our field survey, four rocks bearing representations were identified and documented at the site of Qonaq Qiran. These motifs fall into the three groups of animals (including goat, dog, and wolf), human figures, and signs. Each of these can be further divided into several subgroups. Animal figures, particularly goats, are the most frequently represented, which is consistent with findings from other areas, especially northwest Iran. Comparative studies (Satarnezhad *et al.* 2020: 60-61) reveal parallels between the representations at Qonaq Qiran and those identified in other parts of Northwest Iran. Qonaq Qiran's petroglyphs exhibit a series of peculiarities, consideration of which is vital to their correct analysis and interpretation.

The representations here seem to reveal a specific distribution pattern, an understanding of which is essential if one seeks to ascertain the reason behind their creation and chronology.

**Location of the Depictions:** Some factors such as access to water resources (the permanent river of Qarasu), natural supplies such as meadows and pastures (proper summer and winter quarters), proximity to nomadic migration routes, and the presence of granite rocks played a role in the genesis and distribution pattern of the petroglyphs in the Qarasu basin. The creators of these rock art images were particularly attentive to these factors, which also underpinned the sustenance of local communities.

**Techniques of Creation:** These petroglyphs were created using the pecking technique, which involves carving by making successive blows or by abrading and scratching the rock surface with a sharp object, either stone or metal. In general, the artists employed different techniques to create two types of representations: a) schematic depictions that only outline the body; and b) depictions where the entire surface is engraved with alternating strokes.

**Quality of the Depictions:** The workmanship, degree of erosion, and changes in the outer surface colour of the rocks with petroglyphs can serve as date indicators (chronological succession). At Qonaq Qiran, the depictions on some rocks exhibit



*Figure 1: Geographical location of the study area (After: Google Earth 15/08/2024 and modified by the Authors).*



Figure 2 : General view of the site, A: view from South, B: View from North.

disparities with the rest in quality and erosion degree, evincing a difference in their chronological sequence. In particular, severe erosion over time, due to natural and possibly human factors, has rendered some depictions difficult to identify, while others are readily discernible from a distance.

### Description of the Site

**Cluster A:** The petroglyphs on Rock A consist of 25 depictions carved on the eastern and western vertical walls of the rock. The motifs show a higher density in the middle part of the rock face. They all are engraved animal motifs, including ibexes, a dog, a wolf, and probably a snake. Some ibexes have abnormally large hooves and long tails that curl backwards, with relatively large horns. The mentioned wolf figure occupies the highest part of the southern side of the rock face, giving the impression of an ambush for prey. Due to erosion, some motifs are less eligible and partially lost because of fractures in the rock surface. In general, they were seemingly created during different periods.

**Clusters B and C:** These two groups are introduced and considered here as a single cluster due to their juxtaposition and lower density. The depicted figures are strictly of animal types, with no human figures present. Yet, here there are two ibexes portrayed in different poses: one appears to be leaping, while the other stretches its long neck upwards, seemingly grazing on a tree or bush. Another animal figure has a tail and head resembling those of a weasel.

**Cluster D:** This group of petroglyphs lies some 20 m west of Clusters B and C on a rock wall at the lower slope of the southern wall of the mountain atop which Qiz Qala perches. They occur 3 to 4 m above the riverbed.

Here human figures are portrayed next to ibexes. The cluster includes two ibexes, both worked in a similar style. Above the smaller ibex, a human figure is depicted holding a flame in his left hand. At the lower part of the rock, next to the larger ibex, there is a geometric pattern, which based on the rather vague surviving indications, is likely a tool held by a human figure that is difficult to discern due to severe erosion.

Rock B, which features representations from Cluster B, stands at a height of 18 m on the west bank of the Qarasu, between the other two rocks. A short distance away lies Rock C. The depictions on both rocks were effaced over time, but they are reminiscent of ibex and dog representations. The exact number of these depictions is difficult to determine due to the severe erasure. Rock D, meanwhile, features artwork on a wall that dominates the Qarasu area. This rock lies high in the mountains, and the intriguing feature of it is the presence of a representation of a human figure. The figure holds an ambiguous object that resembles a flame and is flanked by ibexes.

### Chronology and Style

About 50 depictions were recorded across four rocks with petroglyphs at the Qonaq Qiran petroglyph site. The depictions occur both

individually and in combination. The recorded representations were first classified into three groups: human figures, animals, and geometric-symbolic motifs, creating a framework for typological analysis. Finally, the exact numbers of representations were tabulated, and the relative frequencies of motifs within each group were worked out.

### Animal Figures

The animals depicted at Qonaq Qiran were portrayed in a stylised manner. Generally, the artists focused on species relevant to their subsistence and daily life. The pertinent motifs primarily feature ibexes (90%), and dogs (10%). The ibexes dominate the entire recorded assemblage at the site. In each depiction, the body is typically represented in outline, either with a lifted tail or not. The most obvious difference is in horn type. The horns exhibit three distinct types: very long semi-circular horns, short horns, and simple upturned horns (Figure. 3).

The ibex depictions find parallels at Leyqlan, Horand (Rafi'far 2004: 120), Qoshadash, Arasbaran (Sungun) (Rafifar 2002: 54), Dowzdaghi, Ahar (Kazempur et al. 2011: 386), Sheikh Madi, the Dash complex in Meshginshahr (Kazemi *et al.* 2016: 324), Khare Hanjir (Qasirian and Naderi 2007: 64), Aqrablou (Binandeh and Fatahadzadeh 2015: 4), Shahar Yeri (Horshid 2009), Arges-e Sofla, Hamadan (Beykmohammadi *et al.* 2013: 130), Azandaryan, Hamadan (Hemati Azandaryan *et al.* 2015: 204), Moshiran (Binandeh 2016: 4), and Gami Qaya (Aliyev 2007: 696).

### Human Figures

Human figures at Qonaq Qiran occur in both mounted and unmounted forms.

**a) Mounted Figure:** One depiction features a male figure on horseback engaged in combat with a wild animal. He wields a weapon, probably a sword, in his right hand. The rearing wild animal

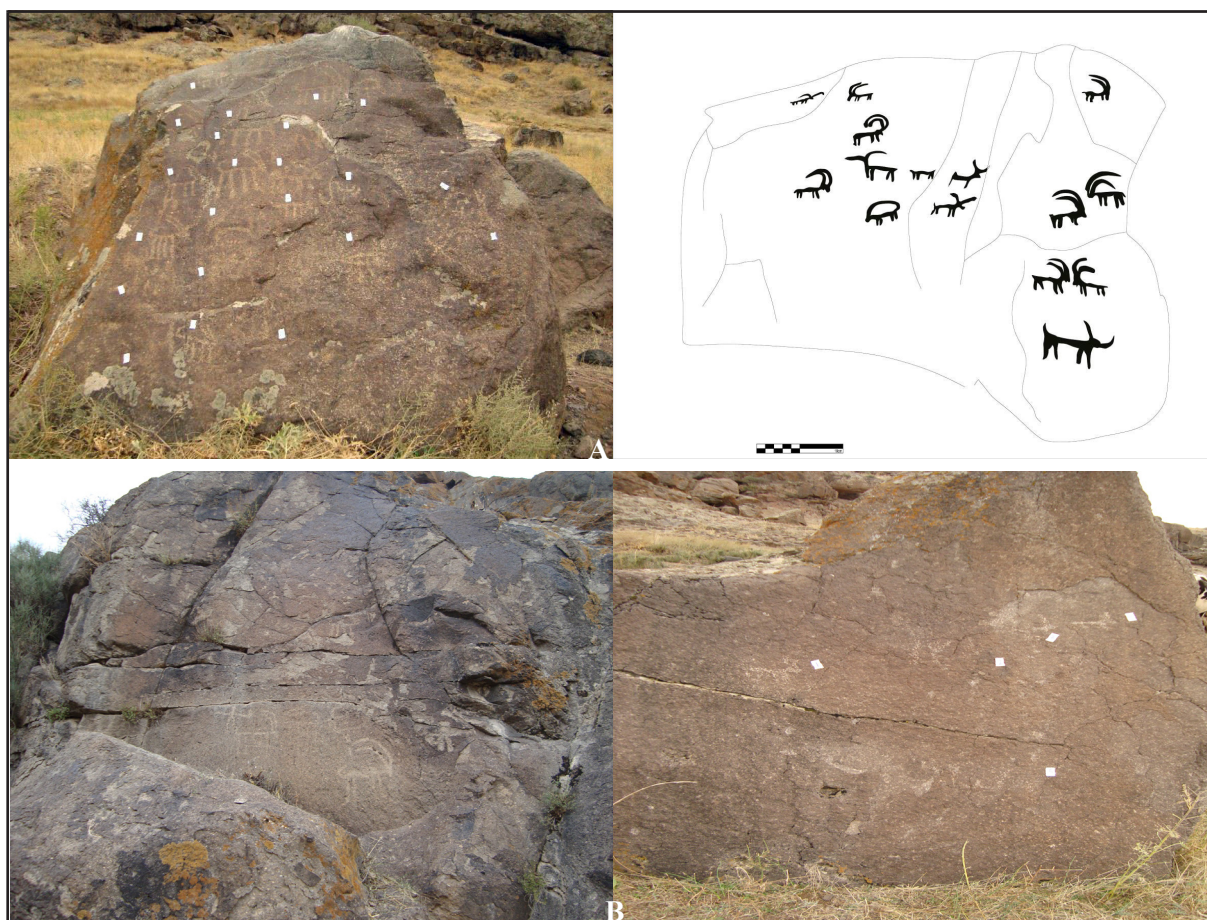


Figure. 3: Naqshmaye goat in Qonaq Qairan collection, A: stone image, B: animal pattern design

is positioned in an attacking posture in front of his horse (Figure. 4). Parallels for this scene can be found at the Kal Changal petroglyph site. The presence of both a weapon and a horse in this depiction aids in dating a number of the scenes.

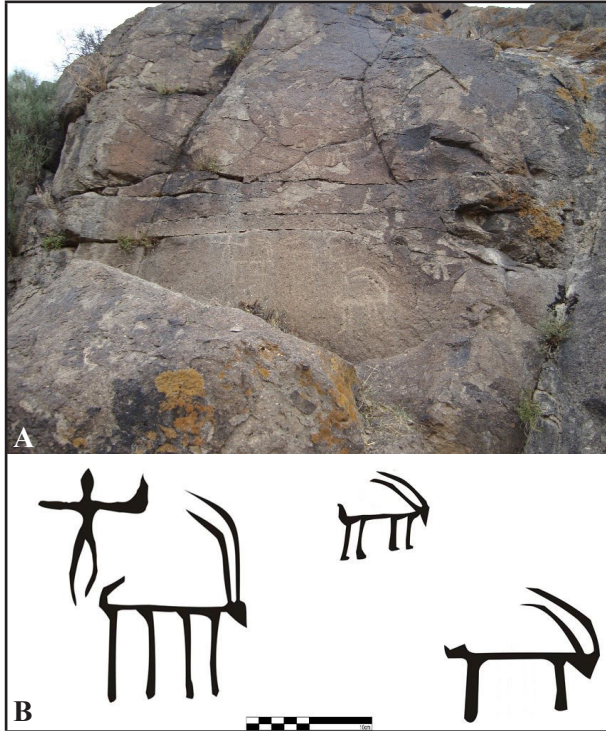


Figure. 4: The role of humans in Qonaq Qiran collection's Naqshmaye, A: stone image, B: animal and human pattern design

**b) Unmounted Figures:** These are schematic representations of unhorsed human figures, with both hands stretched upward. They lack any tools or weapons. Similar representations can be found at several sites, including Shahar Yeri (Horshid 2009: 82), Sheikh Madi in the Dash complex of Meshginshahr (Kazemi *et al.* 2016: 324), Arges-e Sofla (Beykmohammadi *et al.* 2013: 132), Qoshadash (Rafi'far 2003: 54), Duzdagh (Kazempur *et al.* 2011: 386), Moshiran (Binandeh and Fatahzadeh, 2016: 3), and Noghd, Meshginshahr (Kazemi and Rezaloo 2019: 253) (Table. 1).

In Iran, the lack of laboratory facilities makes it challenging to date rock art accurately. Most researchers rely on the relative dating approaches, and additional lines of evidence found around the petroglyph sites. Based on comparisons, the depictions at Qonaq Qiran are thought to parallel petroglyphs from the first millennium BCE in northwestern Iran. Archaeological evidence FROM nearby areas, most notably Qaleh Khosrow (which dates to the first millennium BCE), supports this relative dating (Figures. 5-6 and Table. 2).

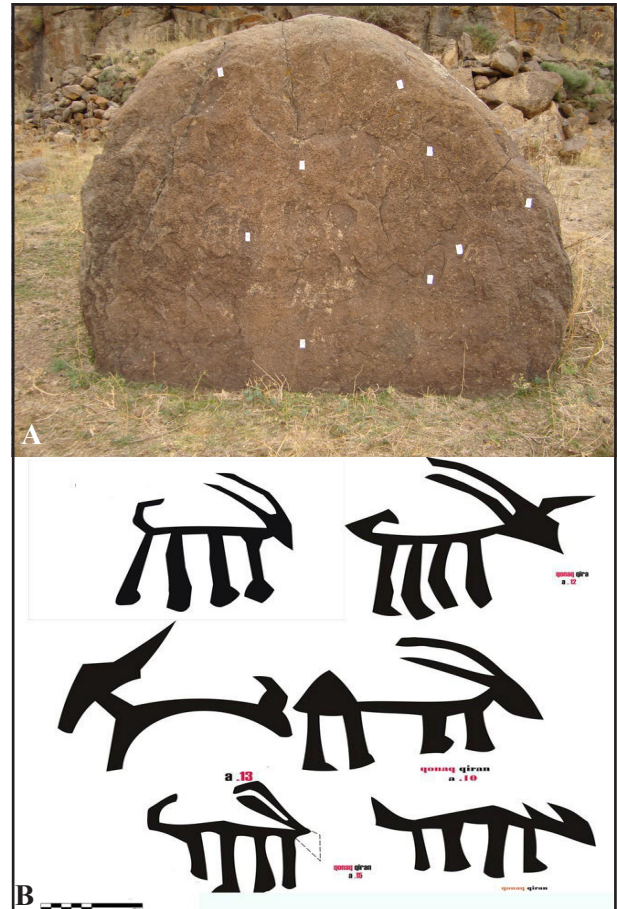


Figure. 5: Naqshmaye goat in Qonaq Qiran collection, A: stone image, B: animal pattern design

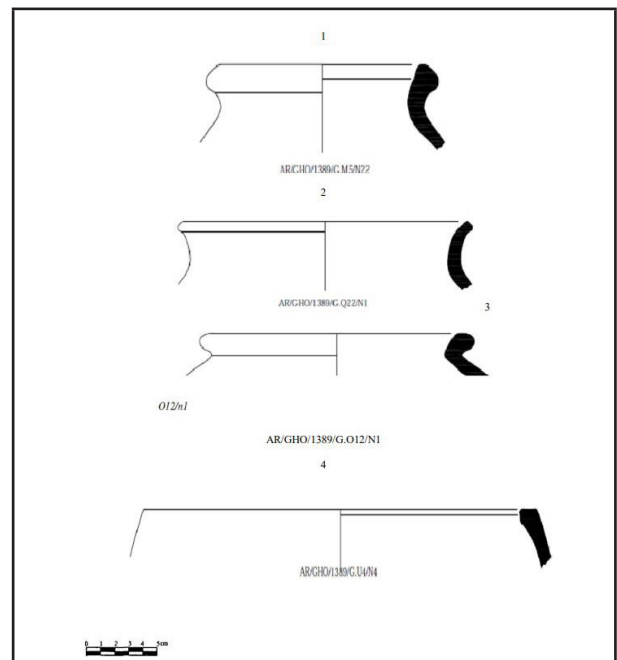


Figure. 6: The image of the terracotta fragments of the surrounding area (After: Valadbeygi 2017: 150)

Table.1: Comparative analysis of the petroglyphs





No.	Site	Motif	Date	Source
1	Khani, Alilou		First millennium BCE	(Satarnezhad <i>et al.</i> 2020)
2	Aghrabloo		First millennium BCE	(Maroufi Aghdam <i>et al.</i> 2021)
3	Navasar		First millennium BCE	(Satarnezhad <i>et al.</i> 2020)
4	Chakhir Chiman		First millennium BCE	(Abdollahi <i>et al.</i> 2021)

Table.2: Comparative study of the petroglyphs

No.	Fragment	Ext. color	Manufacture	Comparanda	Date
1	Rim	Grey	Wheelmade	Geoy Tepe (Brown 1951: pl xlll. 28); Dinkha II (Muscarella 1974: 90, Figure. 44); Hasanlu IV (Young 1965: 53–85, Figure.7); Haftavan IV (Burney 1972: pl. Va); Masjed-e Kabud (Hojabri Nobari 2005: 274); Shahar Yeri (Pourfaraj 2007: 337)	Iron II-I
2	Rim	Grey	Wheelmade	Geoy Tepe B, Hajji Firuz (Muscarella 1974: 74); Masjed-e Kabud (Hojabri Nobari 2005); Shahar Yeri 2007: 376)	Iron II-I
3	Rim	Grey	Wheelmade	Hasanlu IV (Young 1965: 85, Figure.7); Kurgans of Jafarabad, Khoda Afarin (Irvani Ghadim & Mamizadeh Giglu 2013: 143–155); Karagunduz cemetery (Köroğlu and Konyar 2008: 138); Catak, Turkey (Kuvanç <i>et al.</i> 2016: 186)	Iron II-I
4	Rim	Grey	Wheelmade	Khurvin (Young 1965: 85, Figure. 9); Haftavan V (Burney 1970: 170); Dinkha III (Muscarella 1974: 45–47)	Iron I

Generally speaking, studies on the weathering of rock surfaces can help cross-check the dates suggested for petroglyphs. Yet, a comparative analysis of the material culture from the immediate surrounding environs and other petroglyphs attested in the vicinity of defensive structures- such as those at Shahar Yeri in Mashkinshahr (Hurshid 2009: 82), Qoshadash in Arasbaran (Sungun) (Rafi'far 2003: 54), Qaleh Jugh in Jolfa, and Gillar Hassan in Mashkinshahr- suggests that in the first millennium BCE, petroglyphs were commonly produced next to these defensive structures throughout the region. Their spatial proximity might posit a significant relation between the authors of these rock arts and the builders of the forts, an intriguing subject that warrants further independent enquiries. However, recent investigations have demonstrated that the regional Iron Age sites typically lacked permanent settlements, with the primary subsistence system relying on pastoralism. Given the mountainous terrain of the considered regions, small animals such as goats and sheep predominated, contributing to the prevalence of a nomadic life. This lifestyle is associated with extremely flimsy architecture, meaning that permanent settlements are nearly nonexistent. Also, in this way of life, cemeteries are much more common than occupational areas. As the artists who created the petroglyphs were likely part of these nomadic groups, one might attribute the chronology and authorship of these depictions to the Iron Age communities that were somehow related to the neighbouring forts. Moreover, the occurrence of related petroglyphs in other swathes of northwestern Iran, particularly in the foothills of the Sabalan mountains (Hurshid 2009: 82), lends further support to this Iron Age attribution.

### Analysis of Qonaq Qiran Petroglyphs

The available information and evidence for analysing and interpreting rock-cut representations are relatively limited, resulting in many pertinent interpretations being merely subjective opinions. However, such depictions on rocks were created with specific purposes in defined geographic locations, rather than being produced haphazardly by shepherds (Mohammadi Qasrian and Naderi 2007: 16). Therefore, along with reflecting the thoughts of their creators, these artworks were influenced by other factors such as beliefs and shamanic practice (Yates and Minhire 1991), ritual-religious dances (Fayaz and Izadi Jeyran 2011), the demarcating of

seasonal migration boundaries, etc. (Gardner 1986: 31). Hence, interpretations regarding the functions and purposes behind the creation of petroglyphs must consider the geographic setting of the findspot, their relative importance or distinction, connections to settlement centres, the type of the depicted motifs, their frequency, their narrative aspects, and their connections to the native culture (Mohammadi Qasrian and Naderi 2007: 16).

This study investigates the relationship between the depictions at Dava Darasi and the burial sites and settlements in the region. The results showed that the Qarasu basin is rich in Bronze, especially in Iron Age sites, including cemeteries and fortifications. The regional cultures of the Bronze and Iron were part of a broader culture sphere encompassing large parts of eastern Anatolia, northern Iraq, southern Caucasia, and northwest Iran (Kushnareva and Kušnareva 1997: 44). The pertaining groups were generally nomadic pastoralists who were also familiar with agriculture (Burney 1994: 47). Excavations reveal a significant increase in livestock populations, particularly sheep and goats, in this timespan (Aliyev 2007: 89). Studies reveal that more than 80% of the rock depictions feature goat, highlighting their dominance among the nomadic communities in the region. A comparative study of species composition between two pastoral groups, i.e. nomadic pastorals and sedentary pastorals, showed a higher frequency of goats than sheep among the former (Kafilzadeh *et al.* 2002: 202). A series of unique properties such as greater agility than sheep (Ray 2012: 49), versatility (in terms of milk, meat, and fibres), higher resilience to harsh environmental conditions, and contentment (Badiei 1999: 256), the ability to thrive on low-quality forage like twigs and bushes that other livestock cannot utilise, and ultimately, relatively lower raising costs, have made this species to particularly allure to human groups as a beneficial and productive animal (Papi 2019: 1). Thus, the subsistence of nomadic communities relies on access to pastures, agricultural grazing, and by-products such as chaff and stubble, necessitating seasonal movement between summer and winter quarters to procure the required fodder (Kafilzadeh *et al.* 2002: 202). Given these attributes, herding goats in the present-day Meshginshahr region prove to be much more efficient and economical. The goat petroglyphs on the regional rocks most plausibly indicate the territories of indigenous nomads.

Semiotic and content analyses of the petroglyphs at Qonaq Qiran demonstrate that most of the attested motifs are related to a nomadic lifestyle centred on animal husbandry, with no evidence of agricultural communities depicted. Additionally, the depictions were generally made along the riverbanks and pathways used for grazing, serving to convey messages in abstract forms to other social groups living in the area. Ethnological studies indicate that even contemporary nomads still use many primitive methods such as low stone piles, to mark the boundaries of their pastures.

### Conclusion

As a part of the pre-Islamic art of northwestern Iran, the petroglyphs of Qonaq Qiran have remained hitherto unknown and unpublished until now. This original research demonstrated that petroglyphs can be categorised into three general classes: animals, human figures, and symbols, with the animal class (particularly ibexes) dominating in frequency. The figures were frequently portrayed in profile. A comparison of the represented animals with the species currently inhabiting the region reveals that the ancient artists were inspired by their surrounding landscape. The groups responsible for these rock arts practised a subsistence system based on pastoralism. Available ethnoarchaeological data shows that local people's subsistence had continued to partially rely on animal husbandry, especially goat breeding, up until recent decades. An outstanding problem with these petroglyphs is their chronology. The current complete lack of archaeometry and laboratory studies on these petroglyphs excludes any absolute dating. Based on descriptive-comparative studies and the surrounding archaeological landscapes, a date in the first millennium BCE appears the most plausible.

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