

An investigation and analysis of the petroglyphs of Qoshadash, Sungun, Varzeqan (NW Iran)

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Abstract: *As an earliest manifestation of the visual arts in human history, petroglyphs most probably represented the most universal means of message conveyance in antiquity. They undoubtedly have some bearing on understanding social relations, beliefs, culture and other aspects of human life as they reveal aspects of contemporary art and aesthetics. A profusion of petroglyphs have been recovered throughout the world. In Iran, the Qara Dagħ region of Azerbaijan is among the major districts with abundant evidence of such art. Archaeological surveys in the area of the Sungun Copper Mine in Varzeqan County in the summer of 2022 identified three fresh petroglyph sites. Coming in a wide variety of human, animal and emblematic motifs, the portrayed images tend to reflect pecking technique, but rare instances of incising/engraving are also attested. Examining the petroglyphs from Qoshadash, one of the three recently discovered sites, the present paper sought to: 1) specify the existing motif types at the site, and 2) set out the comparisons with other sites. This descriptive analytic work drew upon data from both field and library research. Typologically, human, animal and geometric motifs were identified, and parallels in motif design occurred with different regions of Iran and the Caucasus.*

Rezumat: *Ca cea mai timpurie manifestare a artelor vizuale din istoria omenirii, petroglifele au reprezentat probabil cel mai universal mijloc de transmitere a mesajelor din antichitate. Ele au, fără îndoială, o anumită influență asupra înțelegerii relațiilor sociale, credințelor, culturii și a altor aspecte ale vieții umane, deoarece dezvăluie aspecte ale artei și esteticii contemporane. Numeroase petroglife au fost recuperate în întreaga lume. În Iran, regiunea Qara Dagħ din Azerbaidjan este printre principalele regiuni cu numeroase dovezi ale unei astfel de arte. Sondajele arheologice din zona minei de cupru Sungun, districtul Varzeqan, din vara anului 2022 au identificat trei noi situri cu petroglife. Conținând o mare varietate de motive umane, animale și simboluri, imaginile portretizate tind să reflecte tehnica de ciocănire, dar sunt atestate, de asemenea, mai rar, incizarea/gravarea. Examinând petroglifele din Qoshadash, unul dintre cele trei situri descoperite recent, lucrarea de față încercă: 1) să specifice tipurile de motive existente și 2) să stabilească comparațiile cu alte situri. Această lucrare analitică descriptivă s-a bazat pe date atât din cercetările de teren, cât și din bibliografie. Din punct de vedere tipologic au fost identificate motive umane, animaliere și geometrice, iar comparații în ceea ce privește forma acestora s-au realizat cu cele din diferite regiuni din Iran și Caucaz.*

Keywords: Northwest Iran, Sungun, rock art, petroglyph, typology.

Cuvinte cheie: Nord-vestul Iranului, Sungun, arta rupestră, petroglife, tipologie.

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◆ Introduction

As a subclass of rock art, petroglyphs were frequently used by different cultures as a medium to express thoughts and beliefs (S. Sheikh Akbarizadeh *et alii* 2013, p. 196), and rituals and religions specific to each culture (D.L. Gillette *et alii* 2014, p. 1), and as an important part of rock art and a branch of the disciplines of art and archaeology is of particular importance all over the world (M. Naserifard 2016, p. 16). The northwest quadrant is among the Iranian regions with known evidence of rock art, and there the Qara Dagh region, especially the Qara Su River basin, is deemed an important petroglyph center (M. Kazemi, R. Rezaloo 2018, p. 9). Relevant investigations at Sungun (J. Rafifar 2006), Shaharyeri (Sh. Hourshid 2007), Dowzdaghi (M. Kazempur *et alii* 2016), Sheikh Madi (M. Kazemi *et alii* 2016), Mashiran (A. Binandeh, P. Fatahzadeh 2015), Khanim Alilou (S. Sattarnejad, S. Abdollahi 2020), and Dava Darasi Horand (S. Sattarnejad *et alii* 2020), Ghafeleghtar (S. Abdolahi *et alii* 2021) have recorded an assortment of human, animal, symbolic and plant representations. Despite their diversity, they exhibit shared morphology, content, and meaning (H. Mollasalehi *et alii* 2007).

In early 2022, three new petroglyph sites were identified in the course of archaeological surveys implemented in the environs of the Sungun Copper Mine in Varzeqan County. The present paper introduces and examines the petroglyphs that were recorded at one of these sites, namely Qoshadash. The main questions here are:

1. What motif types are present at Qoshadash?
2. At which petroglyphs sites do they find parallels?

A descriptive-analytical approach is adopted to investigate into the data that were collected through both field and library research. The importance of recording and examining these petroglyphs from Sungun in Varzeqan County of northwest Iran for completing the archaeological map of the country and analysis of the pre-Islamic rock art cannot be overemphasized. Understanding and explicating their character is thus an important step towards the reconstruction of the cultural background and settlement patterns of regional populations.

◆ Research method

This research involved both field and library methods. As part of the former, following their initial identification in the course of the systematic survey, the rocks containing petroglyph images were first numbered and the petroglyphs were documented in terms of motif distribution and frequency, motifs dimensions, involved techniques, motif type as well as photographing. As part of the latter, all available data was subjected to comparative study, analysis and interpretation.

◆ Research history

Iranian rock art has witnessed a growing scholarly attention in the recent centuries (M. Naserifard 2016). The Italian expedition (G. Dessau 1960), and C. McBurney (1969, p. 14-16) were among the first to introduce and study petroglyphs from Lorestan, Sistan and Baluchestan, and Mirmalas. In recent years, rock art studies have begun to cover different parts of the country, among which are those by Mohammad Rahim Saraf (1987) and Jamal Lahafian

(2013). With Northwest Iran being no exception (M. Kazemi, R. Rezaloo 2018), the investigations in Mahabad (Savujbulaq) (S. Mohammadi Qasirian, R. Naderi 2007), Qara Dagh Arasbaran (J. Rafifar 2006), Meshginshahr (Sh. Hourshid 2007; M. Kazemi 2014), Ahar (M. Kazempur *et alii* 2011), Navasar in Horand (K. Karimi 2016), Shahindezh (A. Binandeh 2016), Dava Darasi Horand (S. Sattarnejad *et alii* 2020), Khanim Alilou (S. Sattarnejad, S. Abdollahi 2020) are but few noticeable instances.

◆ Geographic location of Varzeqan County

Varzeqan County is located in northern East Azerbaijan Province, in the western part of the mountainous region of Gara Dagh (F. Allahyari 2009, p. 18) (fig. 1). It consists of the two districts of Central and Kharvana, which in turn each consist of four and three rural districts, respectively. A number of seasonal rivers, such as Ahar Chay, Agbulag Chay, and Joshun Chay, flow across the county which is characterized by a mountainous terrain. Tracing their formation back to the Eocene period, the Qara Dagh mountains are formed by different volcanoes that massively penetrated the Cretaceous limestones, which has a pleasant effect on the regional morphology. The region is a major center of copper and gold mining in Iran.

The archaeological survey of 2022 around the Sungun Copper Mine recorded several sites, including forts and cemeteries that date from the Bronze to the Iron Age (I and II) periods. An important identified site was Qoshadash, where large numbers of petroglyphs were attested.

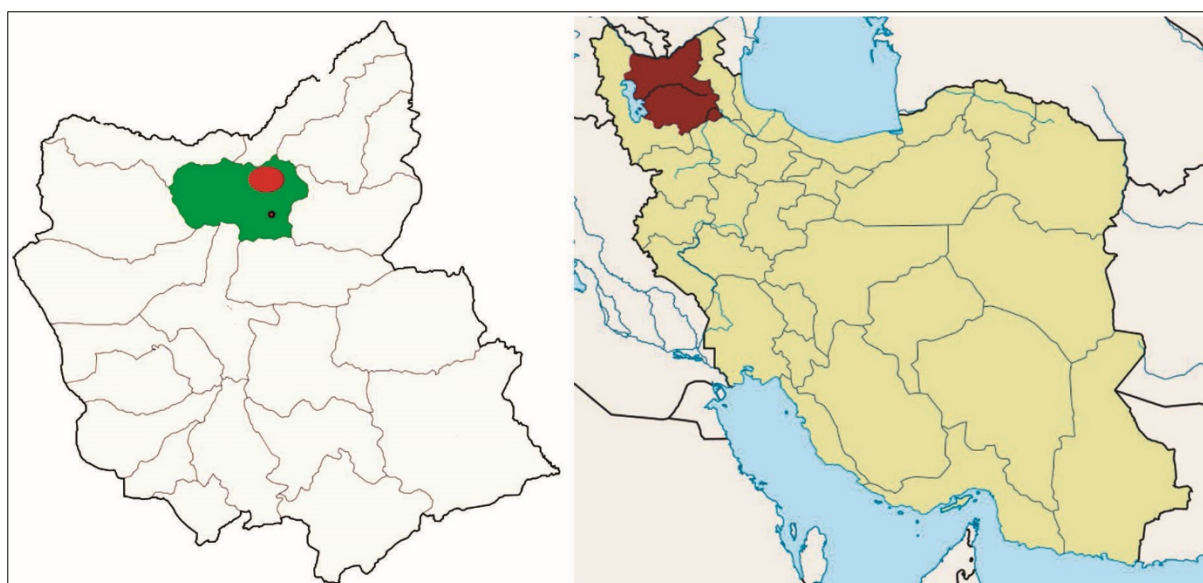


Fig. 1. Location of the study area.
Amplasarea zonei de studiu.

◆ Petroglyph site of Qoshadash

This rock art site is located at 4297300 N and 0743965 E, at an altitude of 1300 m. Pastoralism, in particular goat and sheep raising constituted the major local subsistence mode. The petroglyphs of Qoshadash were depicted on black rocks located on the steep terrace dominating the old nomad route familiarly known as 'el yoli'. Made on a series of black rocks

running about 100 m north-south and 700 m east-west, the images form a relatively large complex (fig. 2). In cases the motifs were virtually lost to erosion and weathering. In general, the legible instances include animal and human motifs, with those interpreted as goats (ibexes) predominating. The 50 images so far deciphered are divided between five humans, 40 ibexes, and five deer. Although for the most part the pecking technique was involved, on other rare occasions incising/engraving was evident. The motifs show variation in dimensions, and range in depth from 1 to 3 m. Some examples were nearly of the same color as — and thus almost indistinguishable from — the rock surface.



Fig. 2. General view of the site of Qoshadash, Varzeqan County, East Azerbaijan, Iran.
Vedere generală a sitului Qoshadash, district Varzeqan, estul Azerbaidjanului, Iran.

◆ **Motifs classification and typology**

In total, 60 images were found at Qoshadash depicted on four discrete slabs, both singly and combined. The identified motifs were first sorted based on three variables into four general categories of human, animal, and geometric-emblematic motifs, a categorization that would later underpin their typological classification. Note that the assemblage is splittable into several subgroups by type and style (fig. 3). The categorization was followed by a comprehensive enumeration of the existing motifs to find out the relative percentages of each group in the whole assemblage.

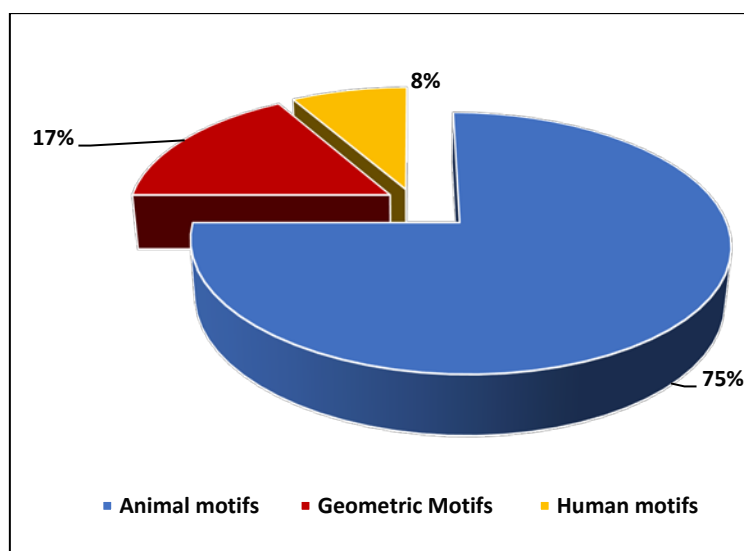


Fig. 3. Pie chart of the thematic typology of the motifs.
Diagramă a tipologiei tematice a motivelor.

◆ **Animal motifs**

The animal motifs are depicted in a schematic, stylized manner. The represented species generally relate to hunting, and the subsistence mode and daily life of the local people (fig. 4.). This group consists of 26 goats, five felines, and two indeterminate species (5%). Also attested are combined motifs in which the human figure is associated with symbolic motifs in hunting scene and sometimes in pasture, testifying to their particular role in the local subsistence that relied on hunting and pastoralism. Close affinities occur between these representations and the motifs from Yanik Tepe (C.A. Burney 2011, p. 109), Dinkha (O.W. Muscarella 1974, p. 8), Shahtakhti (Şahtaxtı) of Republic of Azerbaijan (T. Halilov 2013, p. 209), and Getashen of Armenia (K.K. Kushnareva, K.C. Kušnareva 1997, p. 100), attesting to possible interactions of the sedentary and nomadic groups of the region. Broad economic and social interactions of the Near Eastern nomads with sedentary farmer groups and urban centers is a well-established fact (S. Mamizadeh Giglo 2012, p. 37). These interactions are linked to ecological and geographic factors that compelled the autonomous, homogenous, and territorially related local communities to the shared use of regional resources, a fact that in turn laid the foundations for social, economic and political contacts (A. Alizadeh 2013, p. 60). At Qoshadash the depicted animals are species indigenous to the region, and human figures are in logical relation with these animals. In general, they come in two groups of domesticated and wild animals.



Fig. 4. Qoshadash: animal motifs.
Qoshadash: motive animaliere.

◆ Human motifs

Human motifs in the Qoshadash petroglyphs are generally portrayed schematically in frontal view. The popular themes consist of figures in hunting scenes or performing rituals (?) associated with animal and symbolic motifs. Taking second place in terms of frequency, human figures mostly represent males as is suggested by the markings meant to indicate male genitals. Merely a single figure is interpreted as female for the lack of these markings as well as a different manner of portrayal (fig. 5). In general, the Qoshadash human motifs find

parallels in style and form at Sheikh Madi (M. Kazemi *et alii* 2016, p. 21), the Dash complex of Meshginshahr (M. Kazemi *et alii* 2016, p. 324), Azandarian (Y Mohammadifar. I. Hemmati Azandarian 2014, p. 24), Arges of Hamedan (Kh. Beikmohammadi *et alii* 2013, p. 132), Arasbaran (J. Rafifar 2006, 54), Dowzdaghi (M. Kazempur *et alii* 2011, p. 386), Mashiran (A. Binandeh. P. Fatahzadeh 2015, p. 3), Gobustan (M. Farajova 2018, p. 6), and Gemikaya (T. Halilov 2017, p. 108).



Fig. 5. Qoshadash: Human motifs.
Qoshadash: motive umane.

◆ Geometric motifs

At Qoshadash occur simple geometric motifs in the form of circles, cruciforms and squares (fig. 6), which seem to communicate something about the culture, art and worldview of their creators. Such motifs are found in the pottery assemblages from Yanik Tepe (C.A. Burney 1962), Aqrab Tepe (O.W. Muscarella 1973), Dinkha (C. Hamlin 1974, p. 144), Haftavan (M.R. Edwards 1981), and Hasanlu (M.D. Danti 2013, p. 164), as are at such petroglyph sites as Qoshadash of Arasbaran (J. Rafifar 2006, p. 59), Mashiran (A. Binandeh, P. Fatahzadeh 2015, p. 3), Sheikh Madi (M. Kazemi, R. Rezaloo 2018), and Gobustan (M. Farajova 2018, p. 10). Symbols were used to convey beliefs in the same way as language, and the difference between symbol repertoires used in different societies derives from their varying experiences (R. Moshiri 2001, p. 5) or archetypes (C. Jung 1999, p. 134). Such geometric symbols at Sungun are not difficult to interpret. In particular, the cross sign at Gobustan associated with ritual dance symbolizes the structure of creation and refers to resurrection, which seems to reflect shamanistic ideas.

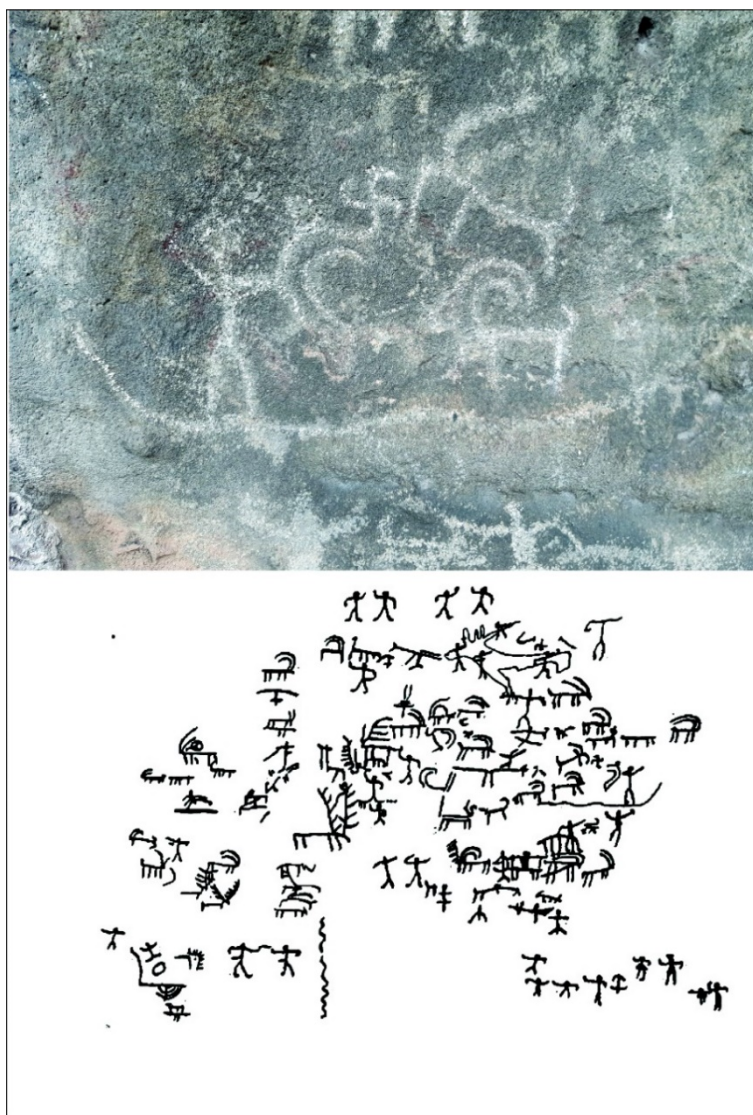


Fig. 6. Qoshadash: Geometric motifs.
Qoshadash: motive geometrice.

◆ Relative chronology

The chronology of rock art is now anchored in laboratory experiments and absolute dating in such quarters of the world as East Timor (M. Aubert *et alii* 2007), South Africa (A.L. Watchman, A.D. Mazel 2003), New Zealand (G. Regan *et alii* 2019, p. 132) and Australia (B. David *et alii* 2013). Yet, in Iran we sadly have to simply rely on relative chronology due to the lack of required technology and high costs of such experiments. Thus, a relative date between the Late Bronze Age and the earlier half of the first millennium BC can be proposed for the petroglyphs at Qoshadash based on such criteria as the comparisons of artistic, cultural and ecological elements (T. Qasimi 2019, p. 36), examination of the motifs in terms of style, theme, technique, and rate of weathering (S. Mohammadi Qasrian 2017, p. 15-17), proximity (K. Arab, Sh. Hourshid 2017, p. 131), and archaeological landscape (Kh. Beik Mohammadi *et alii* 2012, p. 136).

The chronology provided for these motifs is based on the pottery fragments left in the site (fig. 7) as well as the comparison of Songun motifs with sites including Qoshadash of Arasbaran (J. Rafifar 2006, p. 59), Mashiran (A. Binandeh, P. Fatahzadeh 2015, p. 3), Sheikh Madi (M. Kazemi, R. Rezaloo 2018), Dava Darasi Horand (S. Sattarnejad *et alii* 2020), Khanim Alilou (S. Sattarnejad, S. Abdollahi 2020) are presented (tab. 1).

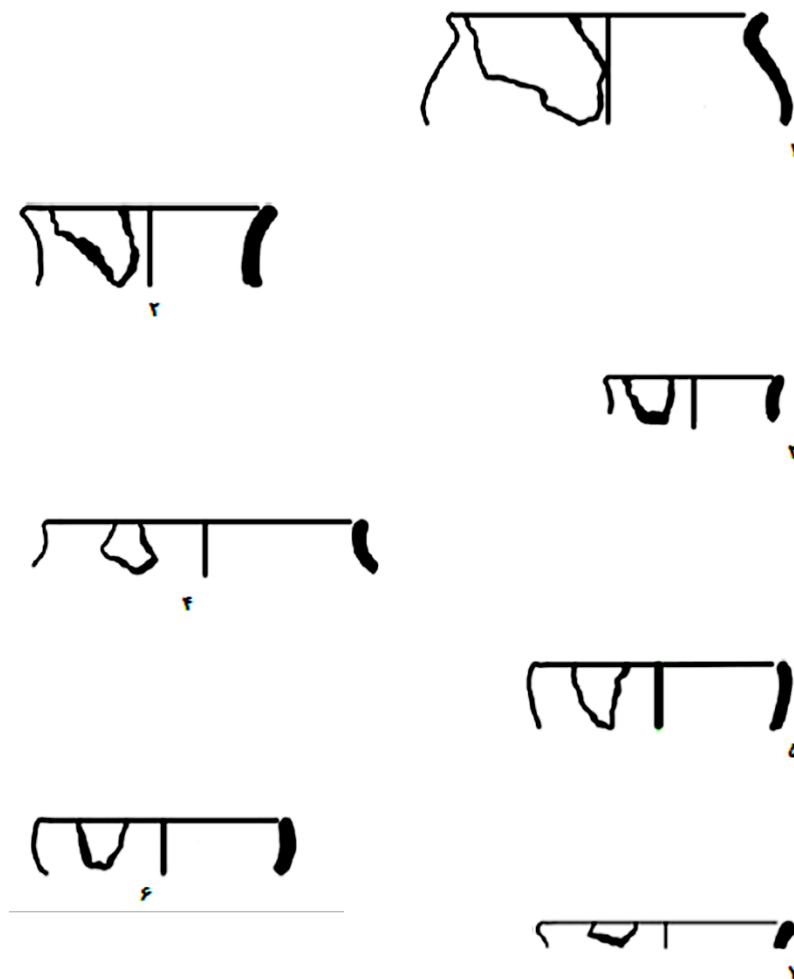
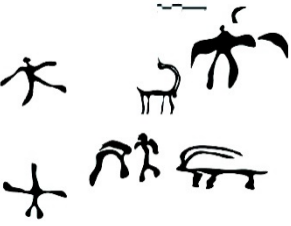



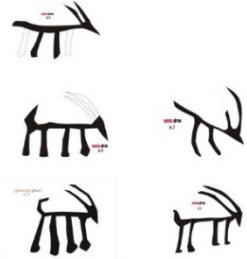



Fig. 7. Pottery shards from the region.
Fragmente de ceramică din regiune.

Area	Geographical location	Motifs	Suggested chronology	References
Songun	Varzeqan, Northwest of Iran		Late Bronze Age and the earlier half of the first millennium BC	authors
Dava Darasi	Horand, Northwest of Iran		Late Bronze Age and the earlier half of the first millennium BC	S. Sattarnejad <i>et alii</i> 2020
Mashiran	Meshginshahr Northwest of Iran		the earlier half of the first millennium BC	A. Binandeh, P. Fatahzadeh 2015
Sheikh Madi	Meshginshahr Northwest of Iran		Late Bronze Age and the earlier half of the first millennium BC	M. Kazemi, R. Rezaloo 2018
Khanim Alilou	Meshginshahr Northwest of Iran		the earlier half of the first millennium BC	S. Sattarnejad, S. Abdollahi 2020
Qoshadash of Arasbaran	Arasbaran Northwest of Iran		the earlier half of the first millennium BC	J. Rafifar 2006

Tab. 1. Comparison of Songun rock motifs with some sites in northwestern Iran. Comparație a motivelor de stâncă Songun cu unele situri din nord-vestul Iranului.

◆ Discussion and conclusions

The petroglyphs at Qoshadash form a part of the pre-Islamic rock art of northwest Iran. Their creation can be connected to such factors as the access to the permanent water source of the Qarasu River, pastures, seasonal migration routes, and sites not connected to permanent settlements. Based on field surveys, documentation, and enumeration, the petroglyphs are dividable into the three general categories of human, animal and geometric/emblematic motifs, of which the animal category predominates. The relative abundance of goats in these representations is in line with the local landscape and ecology, and might hint at the raising and breeding of the species by indigenous populations. While future osteological work in the nearby archaeological sites and studies on subsistence modes practiced by local groups will possibly shed further light on their subsistence system, ethnoarchaeological studies suggest that the local population partly relied on pastoralism, indicating the continuation of the pre-Islamic subsistence pattern up to recent times. Chronologically, the Qoshadash petroglyphs find parallels in the assemblages from both the nearby region and localities further afield, most notably Meshginshahr, Horand, Ahar, and Gobustan. While the lack of archaeometric and laboratory investigations excludes the possibility of absolute dating, on the basis of comparative studies and the regional archaeological landscapes, a general period spanning the second and first millennia BC appears a plausible date for this assemblage of rock art.

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