

RECENT RESEARCH DEVELOPMENTS IN ROCK ART RESEARCH IN THE MIDDLE EAST, CAUCASUS AND NEIGHBOURING AREAS

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Within the extensive area stretching from Egypt to Iran (and the associated regions), rock art represents several traditions which exhibit remarkable chronological sequences spanning from the last phases of the Paleolithic until the modern era. The body of associated rock art research in these regions is comparatively small and the number of ongoing projects are few. There is a clear need for diffusing the results of the ongoing research and our hope is that this session can stimulate discussion among scholars on the various themes emerging from such investigations and promote interest in future projects.

Given this, we would like to invite scholars to present papers focusing on new discoveries, the investigation of the chronological sequences, the similarities of styles and of associated themes within this geographical area.

Comparison of Iran's rock art signs and stonemason signs

There are some images in the rock art of Iran of which their use and meaning is unclear. Some rock art researchers believe that these signs are tribal symbols and in Saudi Arabia, people called these kinds of symbols Wusum. In Iran, there are similar images within rock art that are also found in stonemason imagery. The stonemason's signs are carved on rectangular stones in Achaemenid, Sassanid, Safavid and post Safavid mosques, places and bridges. These images consist of a circle, rectangular, line and a curved line, so they are not varied. In this paper it is suggested that the usage of these signs is also similar; and the people whom use these signs had a similar goal. Their goal is that of introducing themselves to other people, but in rock art that goal may be more for a territorial demarcation and the stonemason's goal is to declare the artisan of a particular stone or to declare the work of a particular team.

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Keywords: signs, rock art, stonemason, Iran, tribal symbols





Fig.1 - Some of the tribal symbols in Meymeh Plain. (photo Ali Aarab) Fig.2 - Some stone mason's marks in Chehel Sotoun place

Gobustan Rock Art Recording Project

The Gobustan Rock Art Cultural Landscape, which was included in the World Heritage List of UNESCO in 2007, is located in a favorable landscape 60 km south of Baku. Archaeological research, which first began in Gobustan in 1939, is still in progress today. The rock art database establishment project was initiated in 2016 and Jingirdagh-Yazilitepe was chosen as the first area of research. As a result of the survey, man-made cupules, cup marks of different sizes and forms, and scientifically important complexes with petroglyphs have been registered in the area called "Sona Gaya", located between the Cingirdagh mountain and the Toraghay mud volcane. This paper covers the initial results of the documentation project conducted in Jingirdagh in 2016-2017, including newly recorded petroglyphs and newly recorded engraved rocks.

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Keywords: Gobustan, Jingirdagh, rock art database, petroglyphs, fieldwork Recent research of rock-art in eastern piedmont of the Kugitang Mountains (South Uzbekistan) This paper focuses on the recent research of rock-art in south Uzbekistan. Except for one case represented by a site with rock paintings in a small shelter Zaraut Kamar, there was no rock-art known in this area four years ago. In 2015 during the Czech-Uzbekistani archaeological expedition, the first stones with petroglyphs were discovered and subsequently this phenomenon became an object of research. The discussed rock-art lies in the Surkhandarya Province in the steppe landscape of the piedmont of the Kugitang Mountains. The petroglyphs being studied are depicted on the loose lying stones which have a black patina. Based on the stylistic and iconographic analogies, it is possible to date most of petroglyphs to the Late Bronze Age and Early Iron Age, with some cases overlapping into the Medieval Period. The data presented here summarizes the results of three seasons of research (2015–2017). Over 170 stones with petroglyphs were collected. The most common representations identified were animals, then human figures, vehicles and geometric patterns. The motifs represented are similar to other sites with rock-art in Central Asia and this current research help to fill the gap in the knowledge of this topic.

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Keywords: petroglyphs, Central Asia, Late Bronze Age, Early Iron Age, landscape, rock art

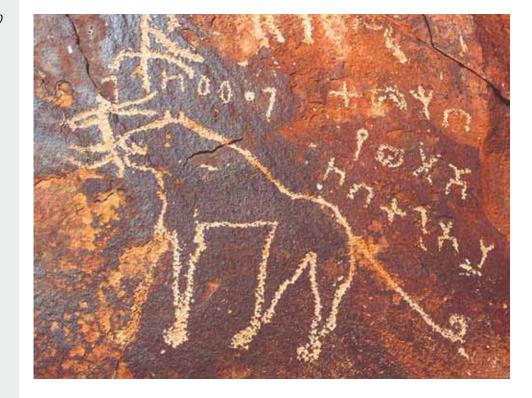


Fig.1 - Pashkhurt valley, Surkhandarya Province, south Uzbekistan. (photo Anna Augustinova) Fig.2 - Pashkhurt valley, Surkhandarya Province, south Uzbekistan. (photo Anna Augustinova)

Scientific research into Saudi Arabian rock art

A project begun almost 20 years ago not only led to the presentation of much testable data about Saudi Arabian rock art; it has coincidentally also resulted in the discovery of major rock art complexes. The massive Shuwaymis complex, the largest and most impressive Neolithic rock art concentration in the world, was discovered in 2001, and the al-Mismā rock art complex in 2017. The first is now inscribed on the World Heritage List, the second will remain inaccessible. The Deputy Ministry of Antiquities and Museums of the Kingdom of Saudi Arabia began a project introducing scientific methodology in its rock art survey program in 2001, now continuing under the auspices of the Saudi Commission for Tourism and National Heritage. This project has, among other results, yielded the first scientific and direct rock art age estimates reported from the Middle East. A preliminary chronological sequence of Arabian Peninsula rock art has been established on their basis and is briefly presented in this review paper. Currently the project is engaged in the submission of the Hima Cultural Precinct, comprising more than 550 sites, to the UNESCO World Heritage List.

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Keywords: Saudi Arabia, petroglyph, radiocarbon dating, microerosion analysis, OSL analysis

Fig.1 - Yatib site near Hail, Saudi Arabia. (© Robert G. Bednarik)

Rock Art in Israel: From Panels in the Desert to Megalithic Rock Art Monuments of Golan Heights The research of Israel's rock art is a rather new development. With Biblical Tels strewn throughout the country, scrolls and ostracons, few archaeologists were interested in the "mute" images found scattered on various boulders through the desert. In recent years the rock art research of the Negev has been rekindled with surveys being carried out, data collected and chronologies emerging. Until recently it was believed that the rock art was restricted to the Negev desert, though a number of new "accidental" finds from the north of the country present a new and much more diverse picture, one, amongst others, tied to megalithic monuments.

The rock art located in the lush northern part of the country and that found in the arid desert situated in the south were created by different cultures in different periods. Interestingly both traditions offer a link to the cultures of Transjordan, reflecting the movement of people and/or ideas. The research presented will offer a brief overview of the rock art in Israel, the research, new findings, chronologies and traditions.

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Keywords: Petroglyph, Negev Desert, Golan, Israel

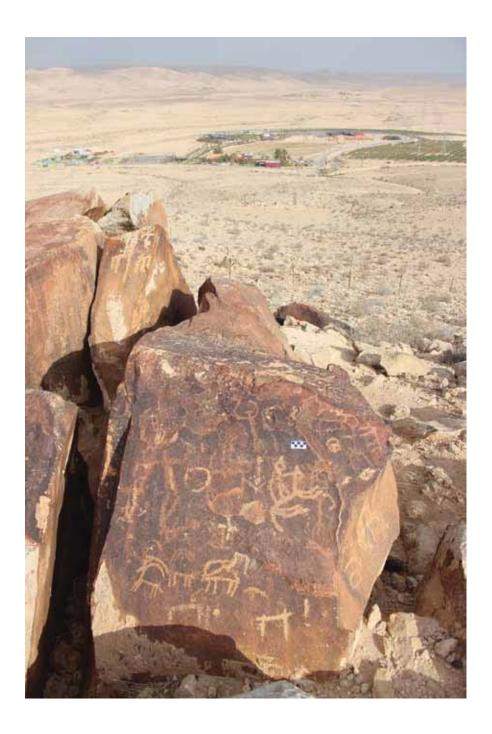


Fig. 1 - Har Michia, Negev Desert, Israel. (photo D. Eisenberg-Degen)

New discoveries and new approaches in the study of rock art on the Western Shore of the Caspian Sea Gobustan's archaeological sites represents striking examples of the organization and transformation of a landscape into a ritual space, on the one hand, and on another into a space for living, and eventually into the space that today yields the traces and cultural links to our ancestors in the form of signs left by them in the landscape and, to some degree, within the oral tradition. All these layers make up the Cultural Landscape of the Archaeological complex of Gobustan. For the purpose of drawing up the basic documentation of an archaeological complex for Gobustan, a digital data base was created in 2004, the first in Azerbaijan and the Caucasus, recording petroglyphs, caves, settlements, barrows and burials. In recent years, 3D Modelling technology has been used as a modern method for the documentation of the petroglyphs of Gobustan. Radiocarbon dating of the occupation layers of caves was also necessary for a complete and detailed study of these petroglyphs. As such, in 2010, research on the dating of occupation layers of caves and shelters began. The use of new methods (night photography) and programs (3D modeling) have enabled us to discover and register more than 200 new images from the rocks of Gobustan.

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LEWY X 6

Гора Беюкдин; камень 65(И.Джафарзаде, 1973)

Гора Безокдині; камень 65(М.Фараджева, 2005)

Key-word: 3D modelling, Gobustan, rock art, Ana zaga, rock art database







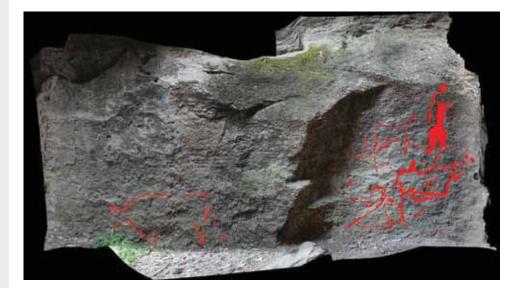


Fig. 1 - Gobustan, Beyukdash Mountain, upper terrace, stone 65. New petroglyphs
Fig. 2 - Gobustan, Kichikdash Mountain.

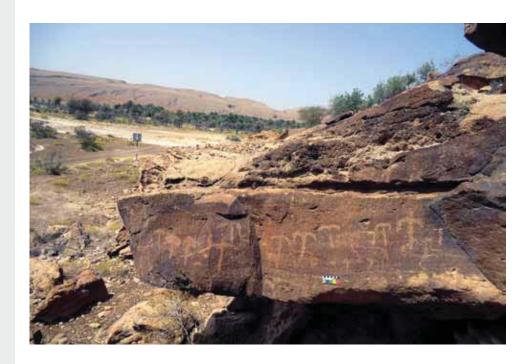
Fig. 2 - Gobustan, Kichikdash Mountain, stone 19. New petroglyphs

Fig.3 - Gaya arasi Stone 8

The motif of the T-shaped figure in the rock art of Oman

The T figure is a common subject in the rock art of Northern Oman and is known in other area on the Arabian Peninsula (Northern Galilee, southwest Saudi Arabia, UAE, and Yemen). It consists of a capital T-shaped engraving that can occur in isolation, in association with other similar figures or attached at the waist of human figures. Because of its simple form, it may represent several different things and since the beginning of research, its interpretation has intrigued scholars. Rudolf Jäckli, one of the first scholar studying Omani rock art, thought that this figure could be the depiction of a very stylized human, but he also mentioned the interpretations proposed by others: a palm tree or a battle-axe. We think that the T-shaped figure should instead be interpreted as a dagger, like already previously recognized by L. Newton, J. Zarins and before by E. Anati. The chronology of this figure is confirmed by its presence in the Yemenite warrior stele and on the engraved blocks of the Omani al-Khashbah 1 tower dated to the 3rd Millennium BCE. Its presence in rock art can probably be interpreted as part of some male rituals associated with the initiation of the youth

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Keywords: Northern Oman rock art, T-shaped figures, 3rd Millennium BCE, daggers



Fig. 1 - Shenah, Quatarah, Sultanate of Oman. Group of T-shaped figures overlapping animal figures of previous chronology. (photo A.E. Fossati)
Fig. 2 - Wadi Aday, Sultanate of Oman. T-shaped figures associated with a schematic human figure and a circle with internal dot. (tracing by A.E. Fossati)

Petroglyph Clusters and Cognitive Maps in the Wādī Raghwan, Ma'rib Governate, Republic of Yemen

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Keywords: Arabia, camel caravans, wusum, cognitive maps, rock art

Over 200 individual examples of petroglyphs were discovered during the Wadi Raghwan Archaeological Project, which focused on a semi-arid zone approximately 800 square kilometres in size, to the northwest of the city of Ma'rib. These examples can be broken down into several categories of iconography: Zoomorphs, isolated or in combinations, in both naturalistic and schematic representations; Anthropomorphs, both isolated and in combinations, all of which are schematic; Geometric symbols (including wusum), isolated or in combinations; and "Doodles"; and Cupules (cup marks). They occur in nine concentrations within the landscape, while dense concentrations are found in three locations and are associated with graffiti. When the iconographic study is correlated with locations and graffiti, three associations emerge: clusters with both Ancient South Arabian script and Arabic graffiti, suggesting specific activities such as accessing water, stone quarrying and camel caravan stop-over points; a likely ritual context within a hidden valley; and graffiti associated with "cognitive maps". While numerous examples exist of graffiti associated with rock art, and of likely ritual contexts, the specific iconography and script associations here are unusual; associations with camel caravan traffic locations and cognitive map depictions in rock art are not commonplace in Arabia.

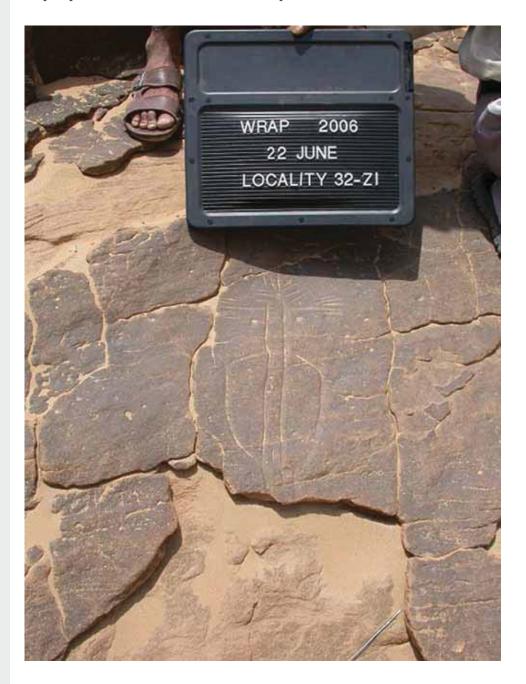


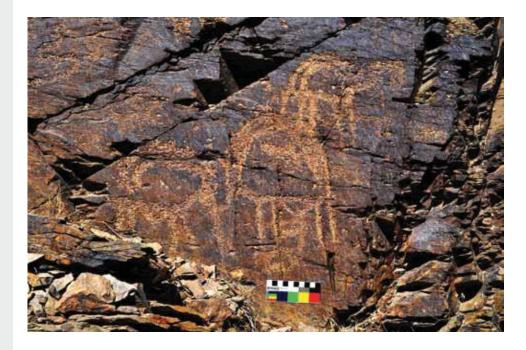
Fig. 1 - Locality A 32-21, Wādī Raghwan, Republic of Yemen. (photo William D. Glanzman, © 2006 W. D. Glanzman)

Mor-Siāh and Qale-Yāvar: two clusters of petroglyphs in the Qameshlu National Park, central Iran Two clusters of rock art, including more than a hundred petroglyphs, are identified from the Qameshlu National Park in central Iran. As in other parts of the country, the ibex motif and hunting themes are the most common characteristics of the rock art in the region. Geometric markings also form a part of the rock art in the Qameshlu area, and all panels are made on the schist rocks, mostly situated along seasonal water courses. The Qameshlu National Park is the habitat of various species such as, deer, and ibex whose images can be abundantly seen in the rock art of the region. Although superimposition of depictions indicates that the petroglyphs were made in different periods, the hunting potential of the area as well as the archaeological and historic evidence suggest that a percentage of the petroglyphs, including hunting scenes, are likely to have been made by hunters probably during the centuries of Islamic rule.

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Keywords: Iran, Qameshlu, petroglyph, ibex, hunting, rock art, Mor-Siāh, Qale-Yāvar



A New Discovery
in the Eastern
Mediterranean: Hand
Stencils of Doğu
Sandal Caves, Mersin
Province in Turkey

Sandal Valley of the Middle Taurus Mountains, Mersin Province, Southern Turkey. Although the red colour of some paintings is be visible in six different caves, only two of these caves have some discernable figures. Approximately 60 residues of paintings have been located, which are in the shape of hands and were likely made with a technique which sprayed red paint as well as a hand printing technique. These caves contain 37 hand stencils and 20 hand print figures in total. In addition to the hand figures, schematic human, animal and geometrical figures have been discovered in the caves. A human figure has been located on a hand stencil. This figure has both arms open, like the ones seen from the Neolithic Age. That is the reason why we think that there must be two separate painting layers in the caves. It is unfortunate that there is no archaeological material that has been found in the caves. Suggesting a chronology is quite difficult without analysing the residues. However, our preliminary assumption is that they may belong the pre-Neolithic period judging by the symbolism and schematic characterizations. On the basis of their characteristics, it seems that they are unique for Anatolia as well as the Eastern Mediterranean.

This research concerns the new discoveries of rock paintings located in Dogu

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Keywords: rock painting, hand stencils, handprint, Middle Taurus, Eastern Mediterranean, Dogu Sandal Valley



Image and inscription: on the relationship of inscriptions and petroglyphs in pre-Islamic Arabia

Thousands of carved images and inscriptions have been discovered across the Arabian Peninsula since the second half of the 19th century. While the rock art of Arabia has been dated back to the Neolithic period and continued until the eve of Islam, the written record started at the end of the second millennium BCE. Scholars distinguish between Early North Arabian inscriptions (dated from 8th century BCE to 4th century CE) such as Thamudic, Dadanic-Lihyanite, Safaitic and Hismaitic and Ancient South Arabian Inscriptions (dated from ca. the beginning of the first Millennium BCE to the eve of Islam). Both inscriptions and images, which appear together in many ancient Arabian monuments, were used to transfer information to their viewers. The inscriptions were in many cases used to convey and clarify the meanings being expressed through the associated images. After presenting a general view of the associated inscriptions and images of pre-Islamic Arabia, with examples from Yemen, Oman, Saudi Arabia and Jordan, this paper focuses on the topic of the relationship of some inscriptions to the carved images and the value of these inscriptions for understanding the related images.

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Keywords: inscriptions, Arabian Peninsula, early North Arabian inscriptions, ancient South Arabian inscriptions

Fig. 1 - Al-'Ula, Saudi Arabia. (photo Mohammed Maraqten)

Archaeological fieldwork in the Suren Mountain ranges and its foothills (2016-2017 Seasons) The Sharezur plain in Iraqi Kurdistan is bordered from the east with a rough mountain range called Suren. This mountain range also marks the Iraqi-Iranian border.

This paper presents the results of fieldwork conducted by the author in the Suren range and its foothills. During this fieldwork several archaeological sites have been recorded for the first time including several rock art sites, a number of caves, a rock-cut-tombs, etc. The recorded archaeological sites are dated to different periods of the first millennium BCE to early in the first millennium AD. The research presented focuses on the rock art discovered. The rock art researched includes a large panel of horsemen and other animals.

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Keywords: rock art, rockcut-tomb, Suren mountain, Zagtros, Kurditstan-Iraq





Fig.1 - Suren Mountian. (photo DLshad Marf)

Fig.2 - Suren Mountian. (photo DLshad Marf)

Bedouin Tribal Signs ("Wusum") in the Central Negev Rock Art: An Indicator of Spatial Behavior

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Keywords: Wusum, Bedouin, tribal symbol, Negev, spatial analysis



Bedouin tribal symbols (single: Wasm, plural: Wusum) form part of the of the Central Negev petroglyph complex. The Bedouin wusum, composed of geometric motifs, form the last phase of the Negev Rock Art chronology, a tradition that has lasted through to present times. The wusum were originally used as animal brands, signs indicating livestock ownership. Wusum were also used as a form of signature, representing the family or tribal entity.

The wusum, engraved throughout the Negev, affirm the existence of Bedouin groups (extended families and tribes) in the region. By conducting spatial analysis research on the data base derived from the rock art surveys of different areas of the Negev Desert, it may be possible to detect ancient social territorial boundaries and reach a more in-depth understanding of the Bedouin tribal spatial dynamics.





The "hunters cave" of Boyuk Das. A systematic study

Ovçular cave, is a small sheltered area on the upper terrace of Böyük Daş in Gobustan. Literally it means the "hunters' cave" due to a hunting scene found on an engraved boulder just in front of it, R.45.

The site is composed of at least two main rocks, called Rock No. 45 and 46, and four "secondary" panels and rocks, Rocks No. 45a, 46a, b and c. The figurative record includes dozens of zoomorphic and anthropomorphic figures, included the famous "domesticated bull" and the "Yalli dancers", together with geometric and linear designs

In 2015 the site was systematically documented and the subsequent research and results form the basis of this current paper.

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Keywords: Gobustan, upper Palaeolithic, Böyük Daş, Caucasus, Ovçular cave

Duduk Mountain Ethno Photographic **Study**

My paper focuses on presenting the Duduk Mountain to the world both visually and through documentation. According to my artistic view, I visualised the loneliness of stones through their matching iron rust color. The experience of acquiring images and post-shooting operations such as, depth of field, lens, color, exposure, setting the flash, bouncing lights, season selection, necessary equipment etc., was obtained from photo documentation during visits to Ankara Gudul Duduk Mountain Rock Art sites in 2013 and 2015.

Thirteen different sites have been identified with signs or rock engravings as well as artifacts. Collective memory is mirrored in the images on the rock. Having one of the earliest civilizations in history, Turks also engraved rock pictures in the locations they migrated.

Anatolia, which gifts different knowledge layers to the memory of history, overlaps with the other cultural heritage areas of the world and transforms into a different civilization by changing shape in its past layers of time.

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Keywords: Anatolia, Ankara Gudul, Duduk Mountain, Rock Painting, Photo Documenting



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Fig.1 - Asmaliyatak, Duduk Mountain. (photo Cem Kagan Uzunoz, © Atalarimi Aramaya Geldim Photo Book, Istanbul Aydin University Press 2017, ISBN 9786054303816)

Fig. 2 - Yandaklidere, Duduk Mountain. (photo Cem Kagan Uzunoz, © Atalarimi Aramaya Geldim Photo Book, Istanbul Aydin University Press 2017, ISBN 9786054303816) Recent developments in rock art research in Armenia: the Ughtasar Rock Art Project One of the first projects to bring modern technology to rock art recording in Armenia, the Ughtasar Rock Art Project team is currently analysing the data collected during our recently completed survey of c1000 carved rocks within a naturally bounded landscape set within a remote caldera high in the Syunik Mountains of southern Armenia. This paper will focus on the latest results of our research including the investigation of various themes, for example hunting, humans physically attached to animals and more generally the apparent relationships between animals and humans, their distribution and context within the landscape. This research will also look at how these themes compare and contrast with those found in the rock art traditions of neighbouring regions within the Southern Caucasus together with Iran and Anatolia.

The striking predominance of the wild mountain goat in Armenian rock art and in rock art sites and other forms of material culture over a vast geographical area from Egypt to Central Asia will be discussed. How may the Project's on-going research into this intriguing phenomenon help to inform us about the life-ways and worldviews of those who created the rock art over the course of millennia?

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Keywords: Ughtasar, Armenia, petroglyphs, landscape, mountain goats



Fig.1 - Rock 25, Ughtasar. (photo Chris Musson, © Ughtasar Rock Art Project) Fig.2 - Rock 58, Ughtasar. (photo Chris Musson, © Ughtasar Rock Art Project)