



## Hunting in the Forest Steppe: An Examination of the Painted Panel at Takke Rock-Shelter, Bojnord, Northeastern Iran

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(261-281)

### Abstract

The mountainous region of Northern Khorasan, north-eastern Iran is rich in rock art complexes including several petroglyphic and rock-painting sites. The rock paintings at Takke rock-shelter near Bojnord is one of the four recorded pictographs in the Atrak River Basin depicting a hunting scene. The panel shows a human with a spear accompanied by several dogs pursuing various species of wild animals in a hilly and wooded landscape. Most of the animals are depicted between the trees on steep footpaths. The Takke pictograms are the only identified rock paintings in Iran and the neighboring regions depicting a dog-assisted hunting scene in a forest zone characterized by several species of plants and animals. The plant and animal diversity in the panel as well as certain landmarks such as animal tracks could perhaps be interpreted as an attempt to illustrate features of the natural local landscape which is a rare phenomenon in the corpus of Iranian rock art. On stylistic grounds, the Takke pictograms appear to date between the Late Chalcolithic to Early Bronze Age. Located in the foothills and upland zone suitable for nomadic hunting groups, mobile pastoralists, and herding population, the pictograms of Takke, like other rock art complexes of Northern Khorasan, appear to linked to pastoral models of subsistence during prehistoric period.

**Keywords:** Khorasan, rock-paintings, Chalcolithic era, Bronze Age, hunting scene, plant diversity, nomads.

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## 1. Introduction

In the past few decades, a great number of petroglyph sites have been documented in eastern Iran mainly in the mountainous regions of Northern Khorasan (Vahdati, 1389/2010; 2012), in the historical district of Kuhistan in southern Khorasan (Labba Khaniki, 1376/1998; Sadeghi et al., 1394/2016; Ghorbai and Heydariyan, 2018), and in the province of Sistan-Baluchistan in southeastern Iran (Sarhaddi, 2013; Shirazi, 2016). Despite the rising number of studied petroglyphic complexes in the Iranian plateau in general and in eastern Iran in particular, only a small number of rock painting sites have so far been identified throughout the country. This is perhaps mainly due to the vulnerable nature of rock paintings which are susceptible to a wide range of climatic conditions and human actions resulting to deterioration and complete obliteration of open air rock paintings. However, a small number of rock paintings are discovered in Iran mostly occur in caves or in sheltered overhangs which provide protection from various atmospheric effects such as direct sunlight or moisture. The majority of Iranian rock paintings sites have been found in a series of caves and shelters in Zagros Mountains. These are including pictograms discovered in Mir Malas, Dosheh, and Houmian valleys in Kuh Dash region, Luristan (Izadpanah, 1969; Goff, 1970; Adeli et al., 1380/2001; Otte et al., 2003; Remacle et al., 2006), rock paintings at Cheshme Shorab cave in Dinvar, Kermanshah (Biglari et al., 1386/2007), pictograms of Agh Dash rock-shelter in Zanjan (Aali, 2017), rock paintings at Shamsali and Gorgali rock-shelters at Kohgiluyeh Bouyeri Ahmad province (Hemati Azandaryani et al., 2015), pictograms of Abdozou (Ghasimi et al., 2010), Tang-e Tayhouei cave, Tang-e Tadavan (Fazel and Alibaigi, 2012), Pir-Barreh (Ghasimi et al., 2016), and Halek 4 rock-shelter (Vahdati Nasab et al., 2008) all in southern Zagros mountains in Fars, and the rock paintings at Eshkaft-e Ahoi rock-shelter in Hormozgan (Sadeghi, 1381/2002). There are also a number of rock paintings at Kuh-e Donbeh Mountain near Isfahan (Karimi, 2014), but occurrence of unusual elements such as Old Persian cuneiform signs and other unprecedented compositions suggest that they are all actually of doubtful authenticity.

Compared to western Iran, the number of rock paintings sites in eastern Iran is still smaller. Altogether, four rock painting sites have so far been discovered in the region including the pictograms of Pir-e Goorān near Nāhook village, Sarāvān in Iranian Baluchistan (Sarhaddi, 2013) and four small corpora of rock paintings in the mountains of Aladagh in the Artak River Basin, northeastern Iran (Vahdati, 2010; 2021/in print). The rock paintings of Atrak river basin include pictograms of Zeynekānlu, Mardkānlu, and Bāsh Mahalle all located on the northern slopes of Shah-e Jahan Mountain, some 30 km to the southwest of Fārouj, and a corpus of paintings of Takke rock-shelter near village of Nargeslou in the vicinity of Bojnord of which the latter case is subject of present study.

## 2. Takke Rock-shelter

The rock-shelter of Takke is located approximately 200 m to the south of mountain village of Nargeslou-ye 'Olya on the northern face of Ala-Dagh Mountain range, an eastern continuation of the Alborz Mountain system. The village is located some 20 km to the west of Bojnord, the capital city of Northern Khorasan Province at 37°29'57.56"N, 57° 4'46.45"E, at an altitude of 1115 m above sea level. (Fig. 1). The

prevailing climate of the region is known as a local steppe climate with an average annual precipitation of 275 millimeters. The mountain area around Bojnord, as many remnants prove, until the recent past was covered with juniper-forest accompanied by other shrubs and trees such as wild pistachio, almond, berberis, hawthorn, etc. and still affording important pastures flushing in spring (Bobek, 1968: 287). The main source of livelihood in this upland zone is breeding of sheep and goats, growing of walnuts and fruit-trees in the ravines, and scattered farming with pulses and legumes on the hilltops. The rock-shelter of Takke is one of several grottos and cavities formed by water erosion on the steep rocky walls of the gorge of Cheylagh stream, a tributary of Atrak, that carve a deep ravine in a wide band of limestone outcrop to the south of the village. Takke rock-shelter is located on the right bank of the gorge, opening to the west and overlooking the river valley (Fig.2). It is situated some 40 meters above the riverbed, but easily accessible by the lateral inclined layers of rocks that compose the massif, providing ascent in steps. The shelter is about 13 m long, 3.5 m deep, and more than 3 m height at the entrance (Fig.3). Concave wall of the shelter abuts an inclined floor in a way that the internal living floor is very restricted, but a small flat area is available in front of the shelter. There is no evidence for the use of rock-shelter as a permanent habitation place either in the form of depositional layers or other archaeological remains, suggesting a temporary use such as a lurking place for hunting possibly by mobile groups. The only archaeological signature in the entire surroundings has been found in a site named *Ojaghlar* some 2 km to the south of the shelter. Clandestine digs at the site brought to light remains of stone architecture, sherds of grey and orange coarse ware, and few stone tools (Fig. 4) probably dating back to the Bronze Age and later periods.

The images are painted on the oval cavity under the overhang depicting a hunting scene showing a male hunter with a spear accompanied by dogs chasing wild animals in a forest steppe landscape. Since the majority of depicted animals (63%) are mountain goats with long horns, the rock-shelter is named *Takke* after the animal<sup>1</sup>.

Although the local people of Nargeslou and the nearby villages knew the rock paintings of Takke from long times before, it first came to the attention of archaeological community after a recent preliminary publication appeared in the Persian literature (Vahdati, 2010). This is a revised and extended version of the chapter on the paintings of Takke rock-shelter published in Persian aiming at bringing international attention to this important rock art complex in northeastern Iran.

### **3. Description of the Painted Panel**

The images of Takke rock-shelter are all silhouette drawings painted by brush using red mineral pigments, probably made of iron oxide or hydroxide. Due to a combination of natural factors and vandalism, various degrees of damages affected pictograms of Takke making part of it nearly vanished. However, a close examination of the paintings *in situ* and enhancement of the digital photos applying a decorrelationstretch (DStretch) plugin with the imaging program ImageJ allowed us to bring out more of the details of the depictions.

The paintings predominantly fill the concave roof and wall of the shelter depicting what appears to be a hunting scene: groups of animals are shown grazing in a wooded landscape and a male human figure holding a spear in the center assisted by dogs

pursuing wild games (Fig.5). The general panel orientation is following the natural micro-topography of the rock face with most of the animals are depicted diagonally along the natural tiny fissures and cracks on the rock face.

All the images are shown moving to right in "twisted perspective" with the animals have their bodies in profile while four legs and both horns are depicted. Most of the animal are shown on walking trails represented by straight horizontal or oblique lines, usually traced on the natural fissures of the rock face, replicating the actual hilly and mountainous landscape of the region. The figures, particularly the mountain goats, are painted in a naturalistic way and the whole composition shows a good degree of artistic maturity.

Altogether, some 37 images are portrayed in the panel which could be classified into four distinct groups: a) Animal figures, b) human image, c) Trees or bushes; and d) indiscernible images (Figs. 5-6). Among the animals, mountain goats (*Capra aegagrus*), a deer (*Cervus elaphus*), dogs (*Canis familiaris*), unidentified bovine or equine species, and a short, bulky animal possibly a wild boar (*Sus scrofa*) were identified. Among the animal images, the mountain goat is clearly outnumbered consisting 14 out of 22 animal depictions. The important role of mountain goat in Takke rock-shelter is also indicated by its central place and large size in the panel, distinguishing the animal from the others. The animal is characterized by large, reclined backwards horns, bearded throat, and in some cases with signs of male genital organ.

Human image is identified only in one case showing a man with a spear accompanied by two dogs followed by a smaller canine, presumably a juvenile dog.

Below is provided detailed information about the images presented in the panel:

From the left, on the foreground, a canine is shown, about 30 cm long and 17 cm height, moving right towards three mountain goats (Fig.6: C1). The canine is shown in profile with rounded ears, short snout, big head, sturdy body, having tail curled towards back, making its identification easy as a domesticated dog (*Canis familiaris*). Short snout, and up-turned curly tail are traits which are not present in wolves, providing clear evidence for identification of the canine as a dog. While we admit that identification of the dog breed is by no mean secure in rock art depictions, but the dog under discussion resemble to some extent the modern-day Central Asian shepherd dog breed (*Alabai*) normally bred for the purpose of protecting livestock from predators all over Khorasan.

Above the dog are shown three mountain goats, one above the other moving towards a large tree (Fig.6: B1). The smallest of the three animals is shown at the bottom, featuring a mountain-goat about 16 cm long and 18 cm height, with long horns, almost perpendicular to head and hooked at the end, bearded throat, and short upward tail standing on a track, a feature also represented on some of the Central Asian Bronze Age petroglyphs (Jacobson *et al.*, 2011: 117, 310: no.693). Above the animal are two larger mountain goats both moving right towards a large shrub or a tree, 77 cm long and 33 cm wide (Fig.6: B1). The plant is shown with a developed root system, spreading out wide around the main trunk that has long lateral branches and short twigs, beginning close to the ground level and continue to the top, forming a rather conical shape crown. This is most probably a representation of Persian Juniper (*J. excelsa polycarpes*) widely distributed in the mountains of northeastern Iran and Central Asia (Bobek, 1968, fig. 88). Another tree with a different shape, possibly from another species is depicted above

the former in a distance. The plants along with further six trees and bushes distributed in various parts of the panel possibly feature a sparse woodland.

To the right, towards the center of the panel, groups of mountain goats and other animals are shown around other trees and bushes, some approaching to or eating from leaves of the plants. At the back of the animals is depicted a standing man, 19 cm tall, holding a spear 13 cm long at the shoulder level (Fig.6: B1-2). The hunter appears to have something at the back similar to a backpack and shoes with turned-up toes resembling the traditional leather footwear (*Charogh*) still worn by some of the inhabitants of highlands in the Middle East, particularly in Iran and Turkey (Lloyd, 1967: 66-67). Next to the hunter, two hunting dogs are running towards large mountain goats feeding on a shrub or a small tree in the center of the scene (Fig.6: B2). These are followed by a smaller canine, presumably a young dog, with curled up tail, upward ears, raised neck, and small head looking far towards the mountain goats. The hunting-dogs, about 20 cm long and 8 cm height, are much smaller than the one shown on the far left (see above) and anatomically different, perhaps suggesting a different breed, very similar to Saluki or the Persian hound. These are depicted with long and narrow head, long upright ears, long and slender legs, narrow body, thin waist, and long tail slightly curling at the tip.

In front of the saluki-like dogs are two large mountain goats approaching a plant, clearly different from the presumed Persian juniper mentioned above. The plant has a straight trunk, looking like a dense, broadly pyramidal tree or shrub with numerous, thin and curved-up branches springing from near the ground and forming a fishbone structure (Fig.6: B2, top). The plant has a large crown and a low compact root system generally resembling a cypress tree, possibly a *Thuja orientalis* L. (locally called *Sarv-e Tabari*) that grows on gypsiferous formations on the steep dry slopes or even on the cliff-faces of Khorasan Mountains.

Above the cypress-like tree, a bulky, massively built animal with short legs, and narrow elongated head is moving towards a plant with sparse, short branches. The animal, possibly a wild boar (*Sus scrofa*) has a pointed head, short and robust trunk with comparatively narrower hindquarter marked by a small bulge at the back (Fig.6: A2).

Below the suid and the tree, a mountain-goat and a deer (*Cervus elaphus*) moving uphill on a steep footpath (Fig. 7). A small horizontal line, slightly longer than the mountain-goat's body abuts base of the horns, probably featuring a trail at the background. In front of the mountain-goat, the deer is represented in running position.

Below these paintings, a double curling motive resembling a pair of large mouflon horns is depicted in the center of the panel (Fig.6: B2, bottom). Exaggerated mouflon or ibex horns was a popular motif in the art of ancient Iran, frequently found in the form of ornamental objects, beads, pendants (Tosi and Karlovsy, 2003: 351-52; Schmidt, 1937: 189, fig.111), and occasionally painted on the Late Chalcolithic and Early Bronze Age pottery in such sites as Tall-i-Bakun A (Alizadeh, 2006: 183, figs. 25, 47.A-E, 48.E), and Jaffarabad IIIId (Dolffus, 1978: 167, fig. 19, n°9). The fact that in the Takke rock-shelter, mouflon horns are depicted in the center of the panel probably has a special meaning, now forgotten<sup>2</sup>.

Below the horn motif, a pack of animals and plants occupy lower part of the panel. Groups of mountain-goats and unidentified bovids or equids are depicted moving right towards plants of various shape and size. On the left, there are six mountain-goats of large size, all depicted with long, curving horns, bearded throat, and marked male

genital organ (Fig.6: C2). These are obviously larger in size than the other animals represented in the panel, but the largest mountain goats are largely obscured by smoke from fire made by vandals inside a narrow cleft in the rock. The largest discernable mountain goat is about 35 cm height and more than 30cm in length. To the right of the large mountain goats, an animal with long, hanging tail and large upward ears or horns is feeding on a tree (Fig.6: C2). Farther to the right, a group of four mountain-goats (Figs. 8-9) and another animal with long, hanging tail and large protruding horns or ears similar to the one just mentioned are shown approaching three plants of different species.

The paintings on the rock-shelter of Takke are stylistically similar, featuring a single thematic subject matter with a series of completely connected images clearly indicating their simultaneity. This panel is perhaps painted by a single artist, who had a distinctive painting style, using single set of tools and materials to convey to the audiences a specific theme or message about the hunting practice of his or her society.

#### 4. Discussion

It is true that rock arts have always been among the most difficult archaeological evidence to date, but at the same time determination of date of rock arts is a critical and basic building block of the study of such complexes. As R. G. Bednarik has correctly pointed out "without at least some idea of the age of rock art, this class of evidence is of no help to the archaeologist", because rock art can be linked to archaeological constructs only by its age (Bednarik, 2002: 1213).

Like many of the rock art sites, it is difficult to establishing a date for the rock pictograms of Takke. Unfortunately, we had no possibility to apply any of the chronometric methods such as AMS, C14, and XRF for a direct dating, instead manage to use the traditional stylistic-iconographic analysis to establish an approximate chronology for the panel.

In many rock art sites of the ancient Near East some images illustrate "datable" subject matter, providing a criterion for a relative dating. For instance, images of bow, horse, harness, and horsemen or guns in rock art complexes provides a *Terminus post quem* for the panel. However, in many cases, occurrence of later additions complicates the situation making any dating suggestion very difficult.

The fact that Takke rock paintings doesn't show any trace of later additions makes its relative dating slightly easier in the one hand, but absence of "datable" subject matter constitute a main impediment for such a dating on the other hand: the only weapon depicted in Takke is spear and the only domesticated animal is dog.

Spear is the oldest projectile weapon developed by early human for hunting during the Middle Stone Age/Middle Paleolithic period (Wilkins *et al.*, 2012: 942-943). Since early spears either as a thrusting or throwing hunting tools have to be used in a close distance it was dangerous for hunting large or ferocious mammals. The invention of more complex, elastic weapons such as bow which has a longer effective range and greater hitting accuracy was a significant point in human evolution, probably occurred in the later part of the Neolithic period. It is true that after the introduction of bow human continue to use spear both in hunting and combat, but since bow was much more effective than other early weapons and revolutionary to hunting subsistence economies,

one may assume that it soon become the dominant hunting tool both in practice and in the artistic representations of the hunting scenes.

The earliest known depictions of bow in Iran have been recorded on two Chalcolithic pottery sherds from Susa and Djowi (Zutterman, 2003: 122-123). During the succeeding Bronze Age, bow becomes very popular, being abundantly depicted on various types of material including potter, seals, metal vessels as well as rock arts. All of the Iranian rock painting sites featuring hunting scenes including Kuh Dasht complexes, Cheshme Shorab cave, Tang-e Tadavan, and Eshkaft-e Ahou show archers, implying the importance of bow in hunting practices. To my knowledge, pictograms of Takke is the only prehistoric rock painting of Iran featuring a hunting scene without the use of bow. Is this a negative evidence for the depiction of the painted panel prior to the invention of bow or its introduction to the region? What about the absence of images of mounted hunters in Takke? Horses were assisting humans in the hunt from the Late Bronze Age, and images of mounted hunters on the horseback are frequently depicted on the Iranian Bronze and Iron Age rock art complexes.

The only domesticated animal depicted in Takke is dog. Bioarchaeological evidence show that dog was domesticated long before it appeared in the figurative art (Dayan, 1994), but the earliest dog depictions have been found on the Late Neolithic pottery vessels from Tepe Sabz in Deh Luran and Chogha Mish in Khuzistan, two small-scale agricultural villages in southwestern Iran (Hole and Wyllie, 2007: 175-176). The use of dogs in hunting is also evidenced on the prehistoric painted potteries from Tall-e Bakun A (Alizadeh, 2006: 75, figs. 26, 39 f, 44, 45, 49), Suasa (Hole and Wyllie, 2007: 178, fig. 2), and Tepe Qabrestan (Majidzadeh, 1999: fig. 1). While several painted pottery vessels from Susa show dogs attacking wild games, one painted sherd from Susa settlement depicts an individual holding a leash attached to a dog (Hole and Wyllie, 2007: 179, fig.5) indicating that dogs were used as hunting aids from the Neolithic period. Another early example of dog depiction is recorded on a Late Chalcolithic or Early Bronze Age small pottery jar from Tepe Qabrestan in Qazvin plain showing three male hunters each flanked by two dogs, wearing bells, with the leashes fastened to their waist (Majidzadeh, 1999: 81, fig. 1). Such a composition could also be seen in the glyptic art of the late 4th-early 3rd millennium BC of western Iran and Mesopotamia such as a seal impression from Jemdet Nasr period, ca. 3100–2900 BC, now in the Metropolitan Museum of Art showing a male figure guiding two dogs on a leash and hunting boars in a reed marsh (Benzel *et al.*, 2010: 58, fig. 24).

Moreover, pictorial evidence for dog-assisted hunting strategies have frequently been found in the rock art complexes of Iran and the neighboring regions, some of which are assumed to be the earliest evidence of domesticated dogs. The most famous site for rock paintings in Central Asia is the Zaraut-Kamar rock-shelter located in southern Uzbekistan depicting dogs in a bull and goat hunting scene claimed to be first painted during the "Stone Age", in particular in Mesolithic times, with further additions in later phases (Formozov, 1965)<sup>3</sup>. Another early example of hunting scenes that show dogs partaking in hunting has been found in the petroglyphic complexes of Shuwaymis and Jubbah, in northwestern Saudi Arabia, where bowmen are accompanied by pack of dogs sometimes on leash (Khan, 2013: 451, 453). One panel in Shuwaymis shows a hunter drawing his bow to kill an equid while accompanied by 13 dogs with two of them have their leashes fastened to the hunter's waist, recalling very similar scenes depicted on the late Bronze Age petroglyphs of Central Asia<sup>4</sup> (Jacobson, 2011: 104: 173: no. 173), as

well as the dogs on leash painted on the pottery jar of Tepe Qabrestan. These engravings are assumed to be the earliest depiction of the domesticated dogs attributed to the 8<sup>th</sup>-7<sup>th</sup> millennium BC, predating the spread of pastoralism in the region (Guagnin *et al.*, 2017). However, none of these presumed earliest pictorial evidence of dogs assisting human in hunting have yet been dated with scientific, chronometric techniques and still remain subject to controversies.

Depictions of dog in hunting scenes also abundantly reported in many petroglyphic sites of the Iranian plateau including petroglyphs of Saravan and Makran districts of Sistan and Baluchistan (Shirazi, 2016: 26; Sarhaddi, 2013), Jajarm (Vahdati, 2011: 181), Qom (Mohammadi Ghasrian, 2007/1386: 89, fig.7), Qazvin (Mollasalehi *et al.*, 1386/2007: 45, fig. 1:2 13-15), Arak (Pourbakhshandeh, 2007: 47, figs. 7, 8, 10), Isfahan (Khosrowzadeh *et al.*, 2017: 220, fig. 7), Yazd (Shahrzadi, 1376/1998: 13-136), Hamedan (Beigmohammadi *et al.*, 1391/2013: 128, 131, fig. 5), Kermanshah (Shidrang, 1386/2007: 55), Azerbaijan (Mohammadi Qasrian & Naderi, 1386/2007: 62, fig. 2, 4), and other regions variously dated from the Bronze and Iron Ages to the historic periods and the Middle Ages. Contrary to the petroglyphs that represent an enormous amount of dog depictions in the hunting scenes, dog representations in the Iranian rock paintings is very rare, with few examples being recorded only<sup>5</sup> in the rock paintings of Kuh Dash area, Luristan, where the animal is shown helping human in hunting mountain goats and cervids, on foot or by horse, using bow and arrows, swords and lances, elements used to date the painted panels from the Early Iron Age to the Sassanian period (Remacle, 2007: 13, fig. 5) with some later additions in Islamic era.

The hunter in Takke rock-shelter is portrayed with no specific hairstyle or garment that could be used for dating, but his footwear tipped up at the toes is distinctive and could be compared to several examples in the art of ancient Near East. This type of footwear with turned-up toes, still well in use until 20th century in highlands of Khorasan (Beyhaqi, 1992) and normally made from single piece of leather, frequently depicted in the art of Ancient Near East. This type of footwear is depicted on the Iranian and Mesopotamian glyptic art (e.g. Ward, 1910: 70, fig. 186), as well as on various types of art works of the Hittite Kingdom (Gurney, 1969). Shoes with turned-up toes occur in the Mesopotamian and the Iranian art of the 4th millennium BC. The hunter depicted on the aforementioned small pottery jar of the Late Chalcolithic/Early Bronze Age from Tepe Qabrestan is shown with shoes upturned at the toes (Majidzadeh, 1999: 81, fig. 1). A pair of copper statuettes of a striding horned figure from Iran (or Mesopotamia), one housed at the Brooklyn Museum and the other at the Metropolitan Museum of Art showing a male figure, the so-called "mouflon-genie", wearing similar upturned shoes attributed to ca. 3100-2900 B.C (Amiet, 1980, pl. 26; Benzel *et al.*, 2010: 54-55) indicating such shoes have long been existed in the Iranian plateau and the neighboring regions.

Images of mountain-goats in association with or feeding on trees is a favorite theme in the art of ancient Near East, frequently shown on the painted pottery, metal vessels and other media from the Chalcolithic period to the Middle Ages. In particular, the mountain-goat feeding on a tree depicted at Takke (shown in Fig. 8) is resembling the mountain goat painted on a pottery beaker from Shahr-e Sukhte late II-early III (c. 2500 BC), famous for being the world's earliest animation shown on a pottery vessel.

Another interesting aspect of the painted panel in Takke is the unique representation of trees and bushes painted with various shapes and sizes so far never documented in the rock art of Iran and Central Asia, clearly indicating diversity of plant species in the region. Representation of animals on steep footpaths and the plant diversity in the panel could also be interpreted as an attempt to illustrate features of the natural landscape which is a rare phenomenon in the Iranian rock art. The hilly and spare woodland shown on the Takke rock-shelter recalls natural landscape of the region of Bojnord which is part of the Alborz steppe forest ecoregion stretching across northern Iran from Azerbaijan to Northern Khorasan on the border of Turkmenistan (Bobek, 1968: 287).

Such an environment with steep lands and long winters unsuits large scale cultivation but, fosters a wide range of human response including hunting-gathering, semi-nomadic or transhumant pastoralism, small-scale cultivation of cereals, and growing fruit-trees on the slopes and in the ravines. This mode of subsistence heaves thinner archeological signature compared to permanent sedentary life that possibly explains the sparse ancient settlement pattern across the highland zone surrounding Nargeslou.

It could be assumed that depiction of a hunting scene in Takke rock-shelter demonstrates the continued importance of hunting, possibly along with herding and agriculture in local subsistence of the upland zone of Atrak during the Chalcolithic and Bronze Age.

To sum it up, the rock paintings at Takke rock-shelter seemingly illustrates the primitive man's everyday life, hunting mountain goats, deer, wild boar, and other games in their natural habitats, probably reflecting the actual physical environment and dominant subsistence mode. The absence in the panel of any domesticated animal, except for dogs, and of developed hunting tools such as bow, as well as the lack of any elements indicating a herding or farming economy gives at a first look the impression of a pre and/or early-Neolithic society, but the quality of paintings, its artistic maturity and the lack of actual archaeological evidence indicating pre-Neolithic human presence in the region incline us to suggest a later date for the rock-paintings. Moreover, it is now increasingly evident that over emphasis on the traditional methods such as iconographic, stylistic, and thematic analysis could easily lead to sensational, unsubstantiated claims regarding the age and the concept of rock art (Bednarik, 2002).

Stylistic analysis combined with sparse archaeological data from the region suggest a Late Chalcolithic to Early Bronze Age date range for pictograms of Takke. Obviously, this chronology is provisional and could be revised in future with the application of scientific methods. However, considering the general rarity of pictograms in the corpora of Iranian rock art, whatever date we presume for the rock paintings at Takke, is it undoubtedly an exceptional rock art site, deserving detailed study and urgent physical protection and preservation plans.

### **Acknowledgements**

The author would like to thank Prof. Andrzej Rozwadowski from Adam Mickiewicz University in Poznań, Poland, and Dr Marjan Mashkour from French National Centre for Scientific Research (CNRS) for critically reading the manuscript of this paper and providing invaluable comments. All errors and misinterpretations are the author's responsibility.

## Footnote

<sup>1</sup> The "ibex" or mountain-goat is also named *Tau-tokke* by the Tatars of Central Asia seemingly of the same root with *Takke* in Khorasani dialect.

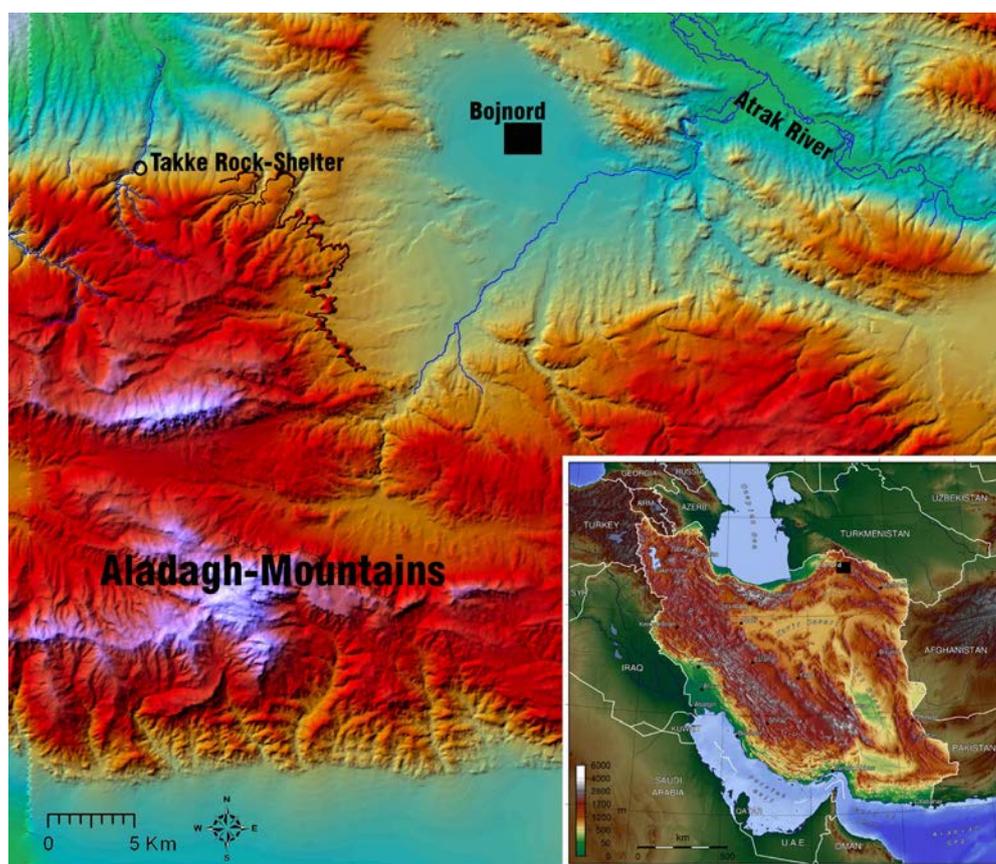
<sup>2</sup> In this connection, it is interesting to note that until the beginning of 20<sup>th</sup> century the horned skull of animals, particularly mouflon, applied on the entrance of traditional houses in certain rural districts of Iran as emblematic of protection against the evil's eyes, indicating the powerful symbolic meaning of the mouflon horns.

<sup>3</sup> Based on ethnographic evidence, Rozwadowski believes that some of the geometric images painted at Zaraut-Kamar may be related to recent ethno-historic times (i.e. late 19<sup>th</sup>-early 20<sup>th</sup> century) rather than the deep past (Rozwadowski and Lymer, 2012: 152; Jasiewicz and Rozwadowski, 2001: 11).

<sup>4</sup> Hunting scene is a common theme in Central Asian petroglyphs, sometimes showing dogs assisting human in hunting. For instance, in Tsagaan Salaa II petroglyphic site, NW Mongolia, several dog assisted hunting scene are documented in one case showing a hunter accompanied by 26 dogs attaching a moose, while two of dogs are hold by the hunter with their leashes fastened to his waist (Jacobson, 2011: 104, 173: no 130) resembling the hunting scene mentioned from Shuwaymis.

<sup>5</sup> The nannies suspicious to dog in Tang-e Tadvan and Eshkaft Ahou doesn't show physical characteristics that could be identified as such

## Attachments



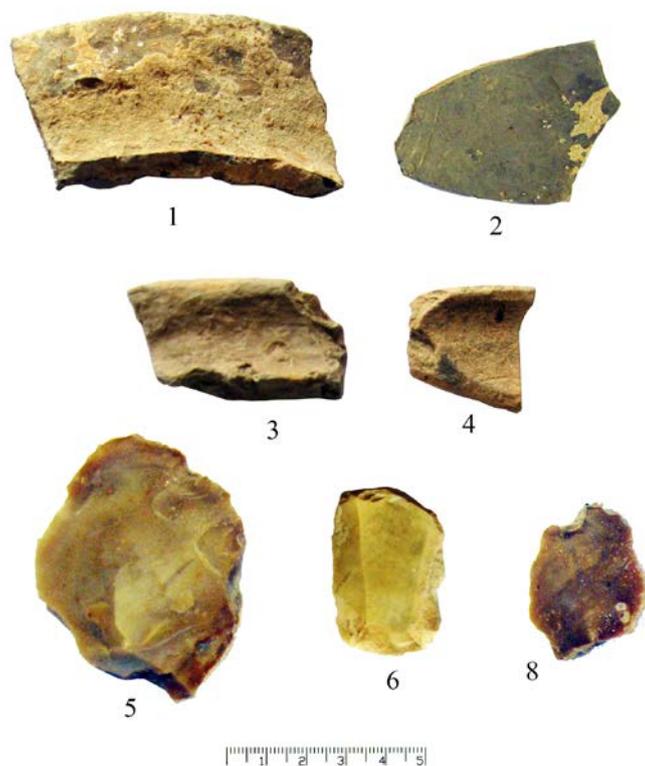
**Figur 1. Location of Takke rock-shelter in northeastern Iran**



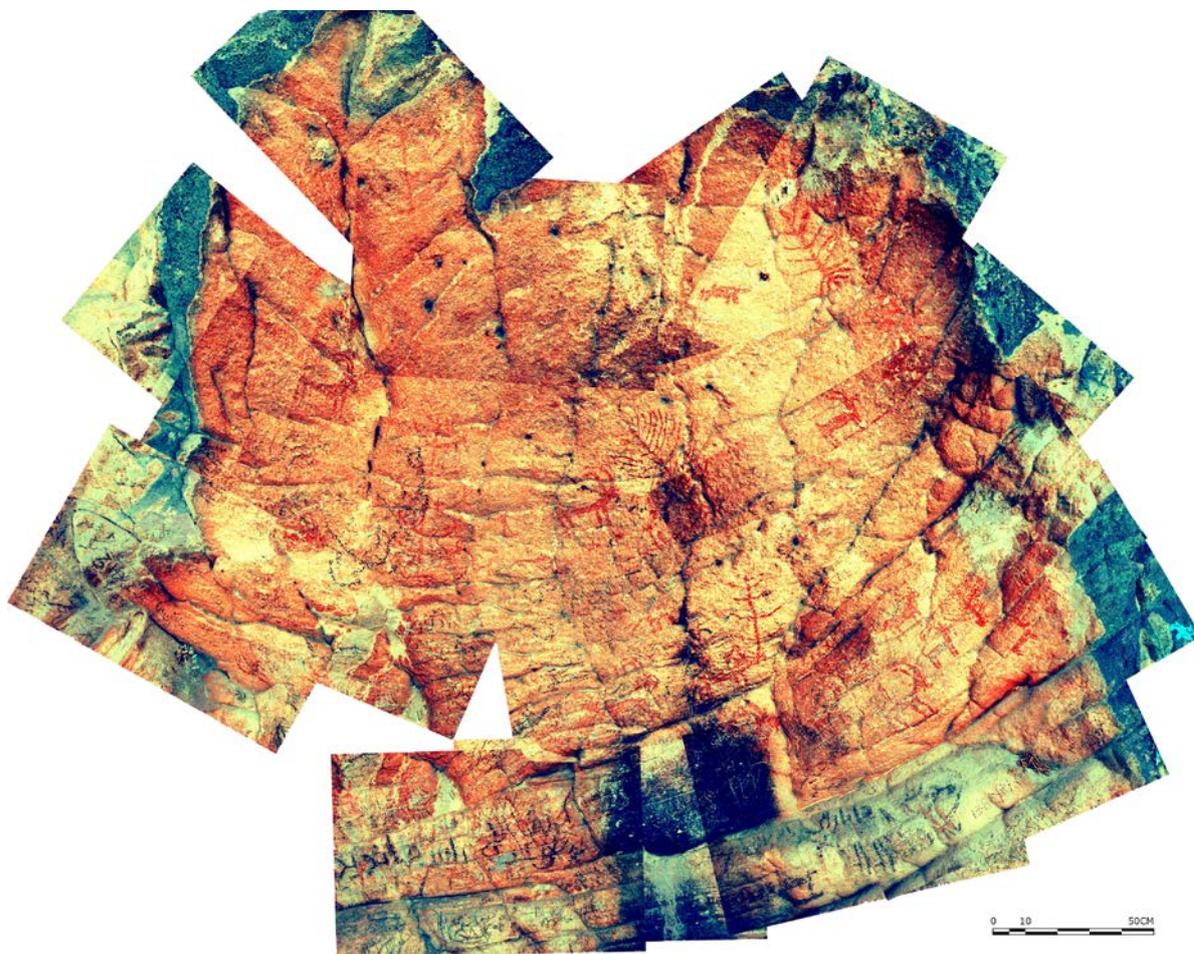
**Figur 2. General view of Takke rock-shelter as seen from a grotto on the river gorge**



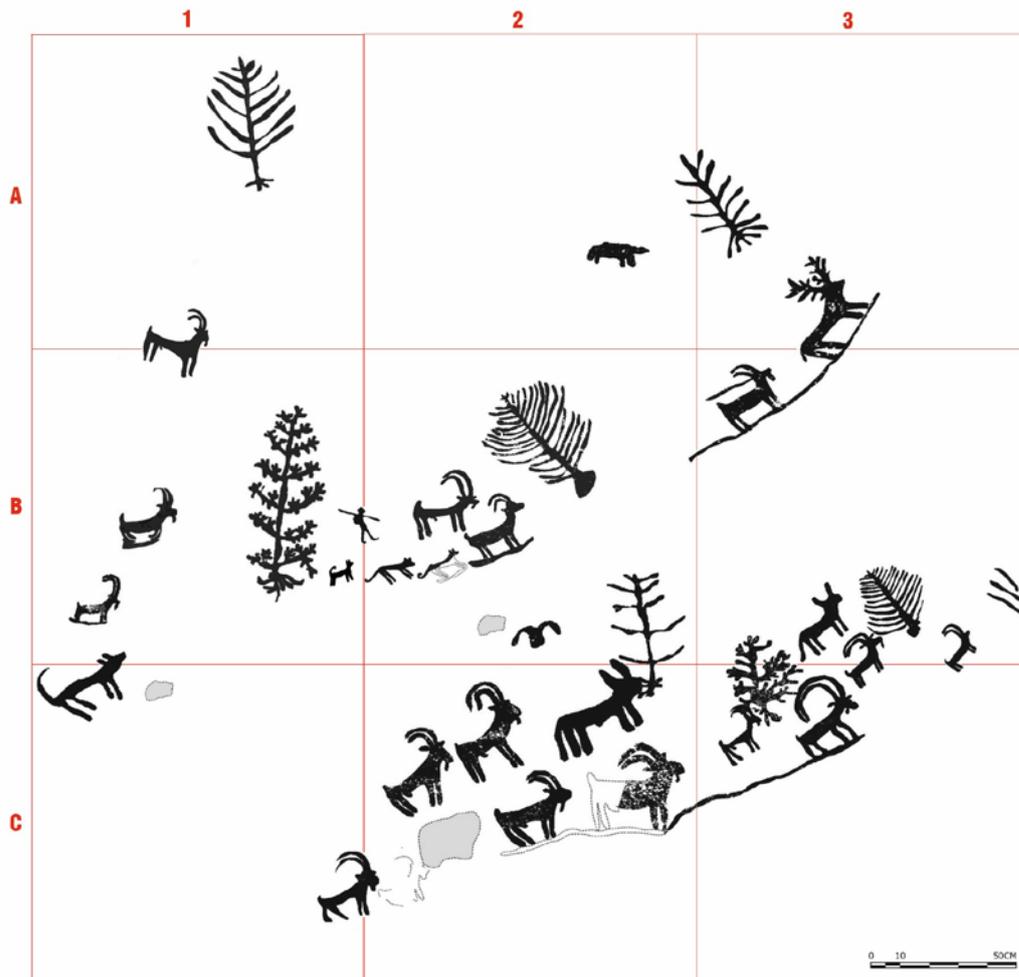
**Figur 3. Rock-shelter of Takke as seen from south west**



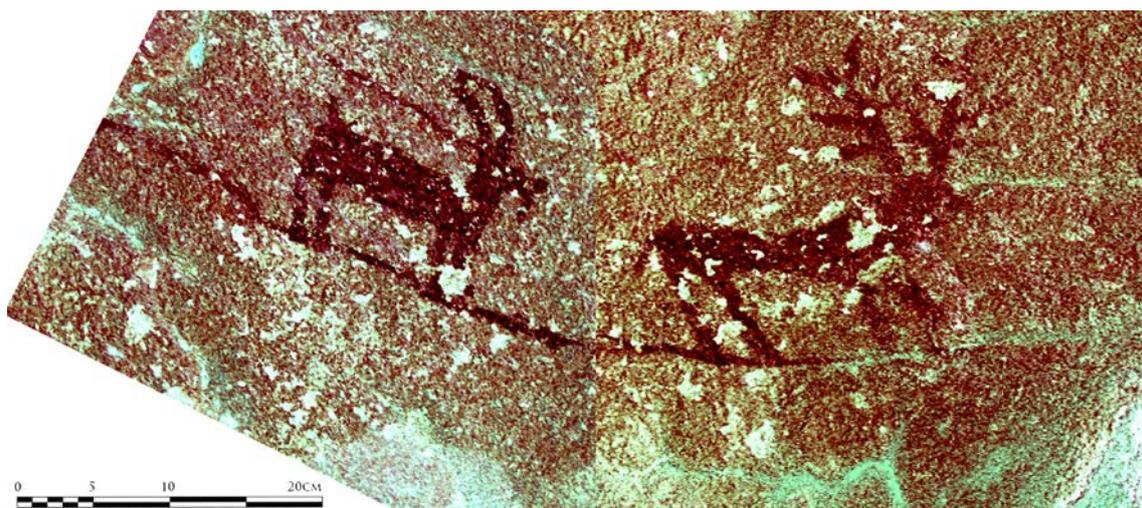
**Figur 4. Pottery sherds and stone tools found in the surroundings of Tekke rock-shelter**



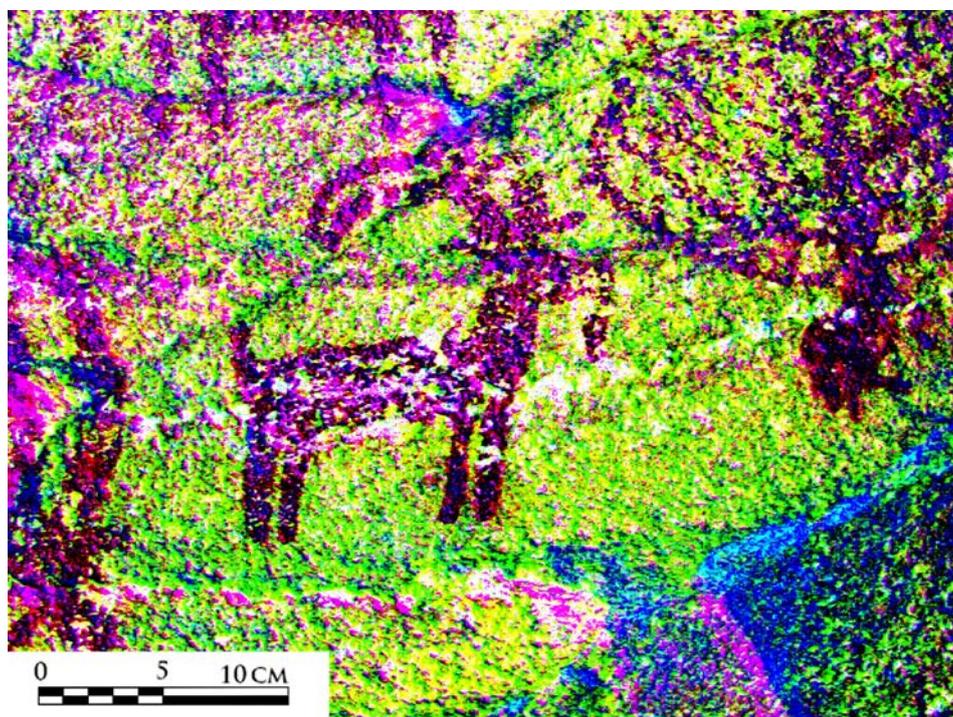
**Figur 5. Composite photo showing rock paintings in Takke rock-shelter (photo enhanced with D-Stretch, Photo by. Ali Razi)**



**Figure 6.** Drawing of the painted panel in Takke rock-shelter (drawing by Author)



**Figure 7.** A mountain goat and deer walking on track, Takke rock-shelter (photo enhanced with D-Stretch)



**Figur 8. Mountain goats approaching a bush in Takke rock-shelter (photo enhanced with D-Stretch)**



**Figur9. A mountain goat shown on track moving towards a plant (photo enhanced with D-Stretch)**

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## موضوع؟؟؟

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تاریخ دریافت: ۱۳۹۹/۰۷/۲۹؛ تاریخ پذیرش: ۱۳۹۹/۱۲/۲۰

### چکیده

در مناطق کوهستانی شمال خراسان، چندین مجموعه هنر صخره‌ای شامل چند مجموعه سنگ‌نگاره و رنگین‌نگاره وجود دارد. رنگین‌نگاره‌های پناهگاه صخره‌ای تکه در روستای نرگس‌لوی علیا از توابع شهرستان بجنورد، خراسان شمالی، یکی از چهار مجموعه رنگین‌نگاره شناسایی شده در دره رود اترک است که یک صحنه شکار را به تصویر کشیده است. در این تابلوی نقاشی، مردی به همراه چندسگ شکاری در یک محیط ناهموار و جنگلی بدنبال شکار گونه‌های مختلف حیوانات وحشی است. حیوانات اغلب در بین درختان و روی مسیرهای شیبدار مالرو در حرکتند. رنگین‌نگاره تکه تنها نمونه هنر صخره‌ای در ایران و مناطق همسایه است که در آن صحنه شکار به کمک سگان شکاری در یک چشم‌انداز جنگلی که مشخصه آن وجود گونه‌های مختلف گیاهی و جانوری است، ترسیم شده است. تنوع گیاهی و جانوری و نیز عوارض زمینی خاصی همچون مسیرهای شیبدار مالرو را می‌توان تلاشی برای نمایش چشم انداز طبیعی منطقه با تمام خصیصه‌های محلی آن تلقی کرد که در هنر صخره‌ای ایران پدیده نادری است. براساس ویژگی‌های سبک‌شناختی، این تابلوی نقاشی را می‌توان به اواخر دوره مس و سنگ یا اوایل عصر مفرغ تاریخ‌گذاری کرد. نقوش صخره‌ای تکه، همچون بیشتر مجموعه‌های هنر صخره‌ای شمال خراسان، در مناطق مرتفع کوهپایه‌ای و اقلیمی مناسب زندگی مردمان کوچنده شکارگر، دامپروران و رمه‌داران قرار گرفته و به نظر می‌رسد مربوط به شیوه‌های معیشت نیمه‌کوچ‌نشینی دوره پیش از تاریخ باشد.

**کلیدواژگان:** خراسان، رنگین‌نگاره‌ها، دوره مس و سنگ، عصر مفرغ، صحنه شکار، تنوع گیاهی، کوچ‌روها