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The Impact of Climate Changes on the Life Style of Hunter Communities in Bastak Region, Hormozgan Province (Case Study: Rock Paintings of Eshkaft-e-Ahou)

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Abstract: The rock paintings of Iran are extremely significant and after five decades of research on them, nearly twenty different regions have been identified in different parts of the Iranian plateau. Each of these regions has its own unique local style. One of the most important areas is the "Eshkaft-e-Ahou" site, which has been identified for nearly two decades, but unfortunately, no research has been conducted on it. This research, using field and library methods, describes and compares the motifs of this site, and at the end, after investigating the climatic texture of the region, the authors have tried to reconstruct the life style of the creators of the paintings. This area is located in a very impassable region and in the highest area of the Gav-Bast Mountains. In order to reach the site, one must ascent a long distance with a steep slope of the mountain. Due to the characteristics of the motifs of this place and the potential for shelter, it is possible to determine that a small population of hunters have used this place. This rocky shelter is considered a very inappropriate place in contrast to today's concepts of settlement definitions.

Keywords: Pictographs, Rock Art, Eshkaft-e Ahou, Bastak, Hunter Communities.

Introduction

To investigate the motif of climate and its relationship with settlements the human plays an important motif in archaeological studies, because that climate is an important factor in how to cover the plant, animal, and water resources has been considered, and

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in fact, the climate of different areas, landscapes Natural areas are created that are important factors in primitive and traditional communities for the provision of resources and housing. In other words, since the beginning of human existence, he remains dependent on climate and Environment and has achieved the advancement of science and technology for optimal exploitation of the climate. The most important example can be traced to the impact of the environment on the progress of human understanding in the optimal exploitation of the climate of Southern Mesopotamia, which led to the formation of the world's First Civilization (Algaze 2018: 67-89). The land of Iran is part of the belt of the Old World's arid lands, and this greatly affects the climatic relations of this land and the weather of different regions. On the other hand, the presence of high mountains almost completely prevents the entry of humid Mediterranean air into the Iranian Plateau, thereby creating a dry climate in large parts of the Central Asia. The outer walls of the mountains, on the other hand, have considerable amounts of annual rainfall. It is said that in Iran there are four seasons simultaneously (Maki 2017: 29). Different climatic regions Iran have long determined the conditions for human settlement. The Eshkaft-e Ahou area of Bastak in Hormozgan is no exception. According to today's definitions of suitable climate for habitation, this area is one of the most inappropriate areas, which in order to understand, it is necessary to observe and search the entire climatic potential of the region from the perspective of a small predator cortex living in Bastak area.

Aims and necessity of research

In this study, the authors are trying to reconstruct the lives of the people who created this artwork by examining and describing the colorful drawings of Eshkaft-e-Ahou area.

Research questions and hypotheses

The most important questions raised in this research are:

Do Eshkaft-e Ahou paintings have historical value and background? What relative chronology can be attributed to the Eshkaft-e Ahou motifs? Do the Eshkaft-e Ahou paintings present a realistic picture of the lifestyle of the people who created this work?

In response, the authors believe that the paintings of Eshkaft-e Ahou have historical value, and given the location of Eshkaft-e Ahou and the study of climate and geomorphology. it is possible to determine that the creators of these motifs probably formed a small population of predators who were attracted to these areas of Bastak in the hope of finding prey during drought intervals. This style of life is very similar to the motifs drawn in the area of Eshkaft-e Ahou.

Historical background review of rock art in Iran

Research on colored rock art in Iran is new, after half a century, the discovery of the first color motifs in Iran, the work of registration and documentation is not finished, and

new sites are still found over time. The first review in the field of color paintings should be attributed to Clare L. Goff. In 1963, she visited the motifs of Mirmalas and Bard Sepid of Homian and took drawings and photographs, but did not publish a report on this until 1970 (Goff 1970). The first publication of Iranian Plateau paintings was published in 1969 by Hamid Izdpanah. He was able to find and introduce red and black motifs on the walls of several caves, including Homian, Mirmalas and Dousheh (Izadpanah 1969a, b, 1971). In the same year, McBurney excavated at the Homian and Mirmalas sites (McBurney 1969), and years later a Belgian Iranian delegation led by Marcel Otte and Laurence Remachel studied at Mirmalas and Homian for several years (Otte et al. 2003). Recently, Hassan Afshari surveys of kuhdasht, have been identified two areas at the Qalleh Sur and one area in Nouri and the number of Homian enclosures has reached 22 areas (Afshari and Bashtani, 2020). In 2004, Nowruzi identified the color motifs in the rock shelter of Abduzu in Fars province and in 2005 and 2009 with the cooperation of Taher Ghasimi published his report (Ghasimi et al. 2010). That the approximate dating of these motifs is attributed to the Neolithic to Chalcolithic period. In 2009, the color drawing of Narges-Lo-Olya in the North Khorasan province, was identified and introduced by Naseri Fard (Naseri Fard 2009). Ali Vahdati wrote a comprehensive book of these motifs and attributed the antiquity of motifs to prehistory (Vahdati 2011). Hassan Afshari examined and published the imprinted sites of Northern Khorasan in 1397 (Afshari 2021). Near Lake Kazerun, four caves have been found with debris of Neolithic period, in one of these caves, three artworks, in the only visible image, there is a fish-like motif drawn in red (Vahdati Nasab et al. 2008). In the year 2009, Kourosh Alamdari in the study of Kohgiluyeh and Boyer-Ahmad province found some colorful drawing that have not yet been reported of these motifs. Documentation of these two sites was published in 2015 by Esmael Hemati and Yaghoub Mohammadifar (Hemati et al. 2015). Recently, two enclosures have been found in Jahrom of Fars, where unique colors of geometric and incomprehensible motifs with red pigments can be seen (Fazel and Alibaigi 2012). Ms. Fereshteh Sarhadi was able to report on the colorful paintings of Pir Goran in Saravan of Sistan and Baluchestan province, mostly symbolic motifs drawn on a short stone slab (Sarhadi 2013: 1-8). In the same year, Abolfazl Aali found a number of color motifs with geometric shapes of Aq-Dash-Kandi in Zanjan province, which he believes resemble of pottery motif of Chalcolithic period found alongside color motifs (Aali 2013). Taher Ghasimi and Parsa Ghsimi found a number of colored motifs in the cave of Pir Bareh in Fars province (Ghasimi et al. 2013, 2016). In 2014, Ebrahim Karimi identified and published 5 nearby areas with colorful motifs from kuh-e-dunbe Isfahan. These motifs include a variety of images, such as hunting and pictorial (possibly fravahr's role), as well as a few syllables of Persian cuneiform, visible on the stone in red (Karimi 2014: 118-134) then Mir Eskandari and Mansouri in Kanani kuhdasht area obtained a number of colored motifs with the role of Oak (Mir Eskandri and Mansouri 2016).

In 2004, Ms. Fariba Karimi first researched the art of the Meymand rock and published images of the colorful paintings of Lashkur Guiyeh in her article in the Bastan Pazhohi Journal (Karimi 2004: 21). In 2006 Mohammad Nasseri Fard has done a thorough research on these color motifs and published their results in the book of Iranian petroglyphs (Naseri Fard 2009) and then Hassan Afshari and colleagues analytically examined Meymand color motifs (Afshari et al. 2019).

Among the sites found in Iran, the rock shelter Eshgafte-Ahou is of special importance and this area was first published in 2001 by Mohammad Baharloo (Baharloo 2001). The year later, Khaled Sadeghi dedicated his bachelor's dissertation to this area and attributed these designs to the prehistoric period (Sadeghi 2002). Asadi published an article using Sadeghi's dissertation (Asadi 2007). In 1390 Biglari and colleagues were found a Collection of stone tools of Neolithic and Epipaleolithic period in around this area (Biglari et al. 2007). But despite the research above, Unfortunately, today there is no new photography and complete documentation of it. In this study, the authors have written the above article in order to fully describe the patterns, study and analyze the residential texture as well as the relative chronology of this area. Unfortunately, today, due to the extent of human destruction, most of the motifs of the cave are not seen and the remaining motifs are being destroyed due to direct exposure to sunlight.

A Study of Iranian rock art

Unfortunately, the bulk of the rock paintings (color drawing) in Iran have changed and disappeared over time due to the geographical environment and climate. Due to the importance of some researchers to this art, the various sites of it have been found in Iran in the past few decades, but no comprehensive research has yet been conducted on them yet. In the review and studies in the field of color drawings, researchers at the side of motifs, have found evidence of stone tools and pottery in the prehistory, the Neolithic and Paleolithic periods and that can be found in areas: Abdozu shelter (Ghasimi et al. 2010), Halek (Vahdati Nasab et al. 2008), Tadavan in Fars Province (Fazel and Alibaigi 2012), Agh Dash Zanjan (Aali 2013), Houmian and Mir Malas in Lorestan province (McBurney 1969: 14-15) or in the cave of Dousheh in Lorestan, where an inscription with the Aramaic text (Izadpanah 1971: 246) has been obtained (now not available). There has been no comprehensive examination in other regions. Half of the motifs found in Iran are abstract motifs and the other half are realistic images. Abstract motifs such as: motifs found in the Bash Mahaleh of Farouj in North Khorasan (Afshari, in publication), Eshkaft-e Lashkorgoyeh is located in Meymand, Kerman (Afshari et al. 2019) and Pir-e-gouran is in Saravan, Sistan and Baluchestan (Sarhaddi 2013: 1-8) (Fig. 1).

Realistic motifs include the motifs of KouhDonbe motifs in Isfahan (Karimi 2014: 118-134); The motifs of Cheshmeh Sohrab cave (Afshari et al. 2019) Sange Mehrdad (Afshari and

Fig. 1. Motifs 1-1Bash Mahaleh, 2-1 Meymand, 3-1 Pir-e-gouran Saravan. Source: (Afshari, 2020)

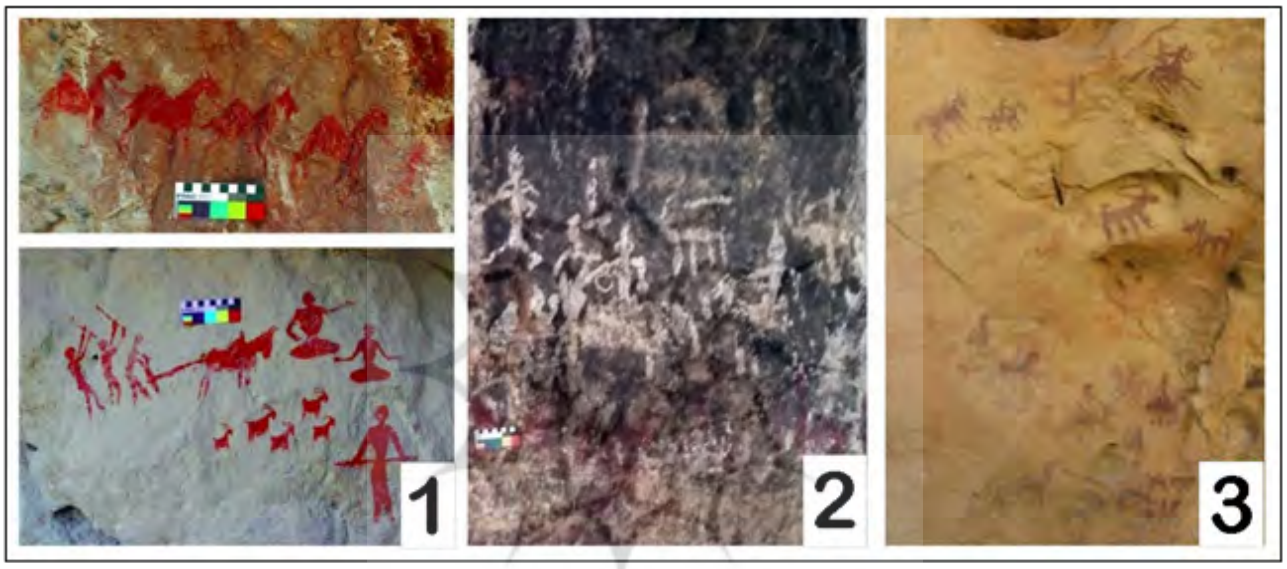

Fig. 2. Motifs 1-2 KouhDonbe (Image from Karimi, 2014), 2-2 Cheshmeh Sohrab, 3-2 Sange Mehrdad (Afshari, 2020)

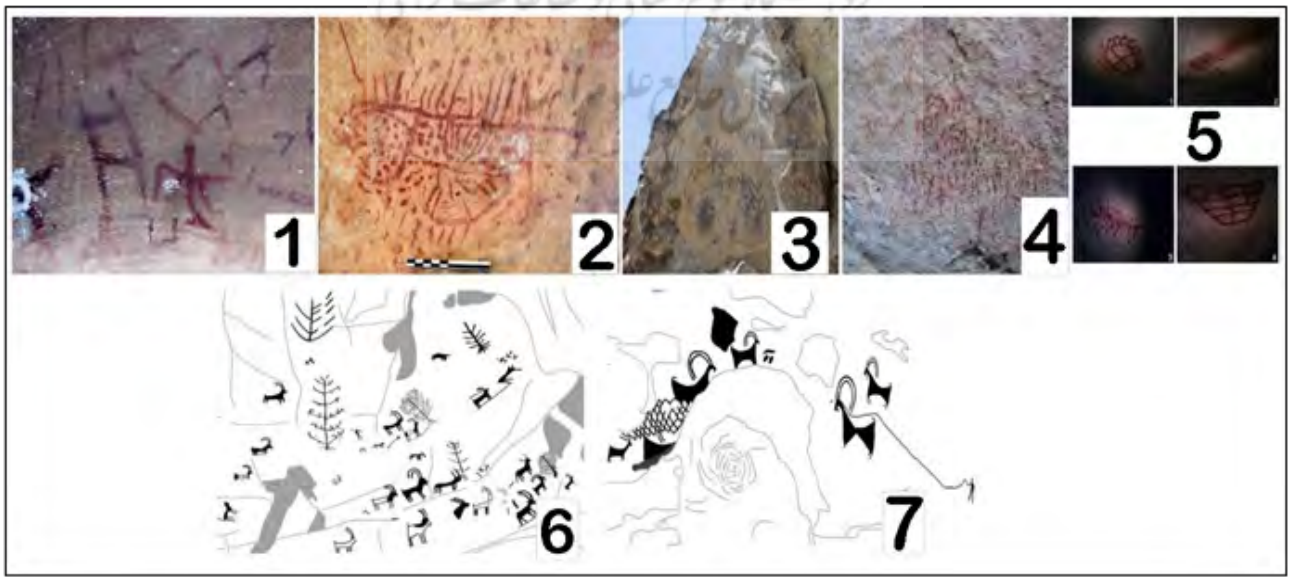

Fig. 3: Motifs 1-3 the Bash Mahaleh, 2-3 Abdozu, 3-3 Pirgooran, 4-3 Tang-e Tadavan, 5-3 Tang-e Teyhooee, 6-3 Nargesloo-ye-Olya, 7-3 Zineh Kanloo (Afshari, 2020)

Forouzan 2021) and the main motifs of Houmian in Kuhdasht, Lorestan (Fig. 2).

In some areas, the motifs are likely to be either single-period or if they are drawn in several different colors, they cannot date very different time periods. Such as: Bash Mahaleh, in Farouj, North Khorasan, Abdozu in Firoozabad Fars, Pir-e-gouran in Saravan, Sistan and Baluchestan, Tang-e Tadavan and Teyhooee in Fars, Nargesloo in Bojnourd, and Zineh Kanlu, whose motifs are very similar to each other and with the same color (Fig. 4).

In some areas, such as Houmian and Mir Malas, a few hundred motifs with different colors, styles and layers have been obtained from the rock surface, which may be due to the continued human movement along these intermediate valleys that have been drawn over several periods of time. According to the research of Goff and then McBurney's research in Houmian, a variation from the Middle Paleolithic to the Islamic and contemporary eras can be found (McBurney 1969: 15; Goff 1971: 133). The majority of these motifs are drawn in dark red (Ocher) and most obtained motifs are from the image of the goat, which is realistic or abstract in the image. Most of these images are probably drawn with the fingertips and, in a few cases, with sharp objects such as bone or sticks. The reason can be understood in the existence of some very subtle motifs.

In some cases, the image of a human riding a four-legged animal (perhaps a camel) can be seen, which can be assumed to be no older than historical times, but in some cases, there are motifs can be seen that do not have signs of domestication. Like the motifs of Es-

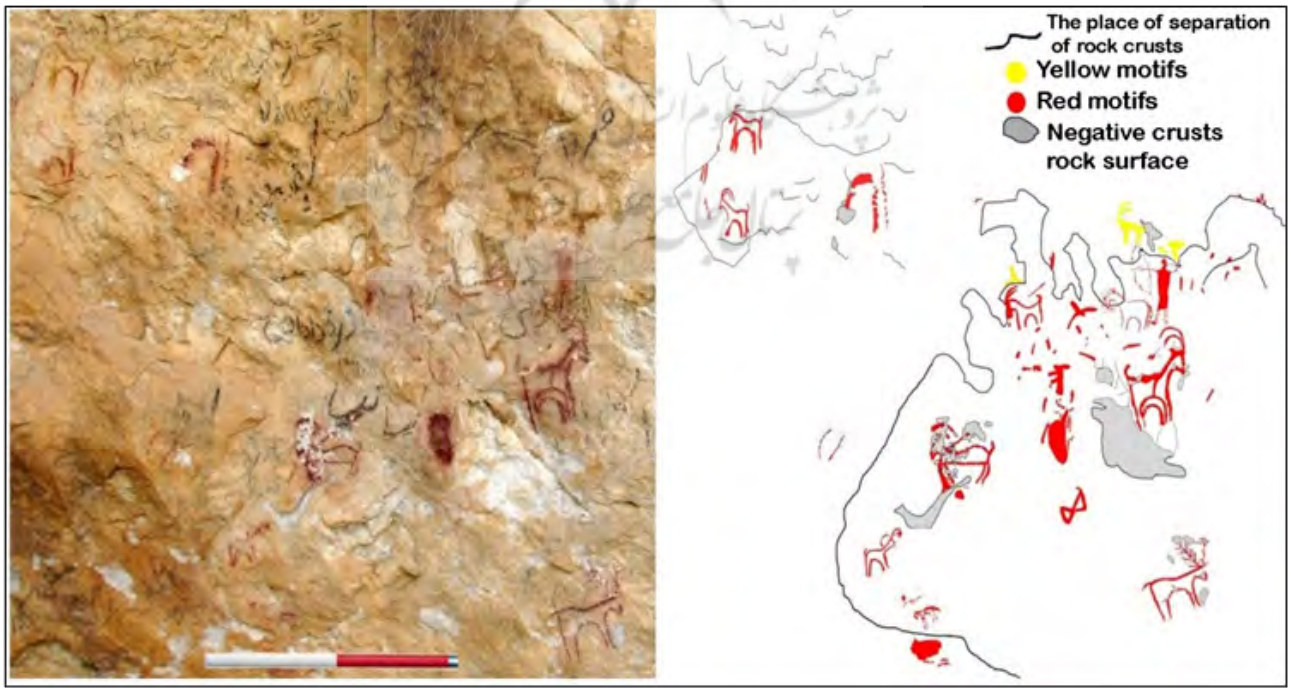

Fig. 4: The colorful motifs of the west Chowart (Afshari 2020)

Fig. 5: Color motifs of Mehrdad stone (Afshari, 2020)

hkaft-e Ahou (Fig. 8) in Bastak, Hormozgan (Sadeghi 2002) and west Chowartay in Houmian, which has a personal motif with the basic tools of archery and while hunting (Otte 2003) (Fig. 4). Of course, it is likely that this type of life was based on hunting in the historical era of this region and has no relation to the prehistoric era (Afshari & Asoudi 2018).

Some of these motifs are sacred to the residents of these places today, among which the motifs of Eshkaft-e Lashkorgoyeh in Meymand (Afshari & Taherabadi 2018) and Teke in Nargesloo village of Bojnourd. Now the people around this location are lighting candles and giving charity in these places to fix their needs. In some cases, such as Sange Mehrdad motifs, realistic motif has been drawn in the Houmian foothills and in remote area along the path of the nomadic road, which is the scene of nomadic migration. A number of humans riding a four-legged animal (horse or donkey) along with a moving camel or tied to the ground, with a number of goats and a domesticated dog which are seen as a nomadic migration in this area until just a few decades ago. Nearby these motifs, there are Cemetery with Pottery of the first millennium and the second millennium B.C. (Fig. 5).

Climate study of the location of the motifs of Eshkaft-e Ahou

According to the studies, the best place to live in Bastak city is a region that has an altitude of less than 500 meters from the level of sea, has a slope of less than 5 degrees and access to communication routes (Rahimi & Hassan Pour 2011: 26-12) In other words, the best potential for accommodation at an altitude of less than 500 meters and at a very low slope, but the Eshkaft-e Ahou rock shelter is nearly 2000 meters high and it is located at

the heights of the Gav-Bast mountains (the highest mountain in the region) and is very different to the standards of settlement.

From the authors' point of view, in order to understand the reason for this, it is necessary to fully understand the climate of the region from the past to the present. According to paleoclimatic experiments conducted in Fars province, it is possible to get the areas of this part of Zagros after the Holocene period has not undergone climate change. It was a warm dry area and only slightly changed temperature and humidity (Azizi et al. 2017: 222). Only in 3300 or 3200 B.C. with pollen experiments conducted in Fars province, we see drought and change of livelihoods inhabitants, some of the farming community have changed livestock and nomadic community (Khanipour et al. 2016: 67-69).

Bastak location: Bastak city is located in Hormozgan province. Since the city of Bastak is surrounded by strands and is completely closed, Hence, it has been called "Bastak" (Vosoughi 2020). Bastak city is also located in several directions at the height of the mountains and the most important peripheral mountains of the city are:

1. Hormozan mountain 687 meters high in 2 km east of Bastak city,

2. Gach mountain 885 meters high in 2.5 km south of Bastak city,

3. Gav-Bast mountain 1938 meters height in 5 km north and northwest of the city of Bastak (Organization of the Armed Forces 2002: 33; Abbasi 1993: 21).

Geomorphology: This region is based on geomorphology affected by geographical changes in the south and southeast of Iran. On the one hand, internal processes have led to the general structure of the general geomorphology of the city, and on the other hand, the influential factors of the exterior have changed the structure, which is the most important factor in the mountains located around the lowlands. These rough nesses are a continuation of the Zagros Mountains in the northwest and southeast. This mountain, in the last stage of Saani Pasadenin orogeny, the form evolved has spent most of Asmari limestones, salts and marls from Mishan and Aghajari formations. The degree of erosion of this organization has been very high (Organization of the Armed Forces 2002: 8-9).

Climate: Bastak city based on Demartin method, its dryness coefficient is less than 10, in other words, its climate is dry and due to the long distance to the Persian Gulf coast in the south, caused less humidity. According to annual temperature in 1995, the maximum absolute temperature corresponding to June was reported at 46.5 degrees Celsius and in contrast to the minimum absolute temperature corresponding to December at 6.7 degrees Celsius (Ibid, 33). According to statistics and temperature data, the autumn and winter seasons are not noticeable and the summer is warm and long in 8 months of the year. On the based of rainfall statistics of 1985-72, we find that the average annual rainfall in the region is 197.45 mm, and the maximum was in February with 59.1 mm and after in the months of December and March with 43.95 and 29.3 mm. In terms of rainfall distri-

bution, more than 55% of annual rainfall occurs in winter, 10% in spring, 23% in autumn and the rest in summer. In general, the weather in the region is evaluated as warm and dry due to little rainfall and high temperatures. Rainfall in this region is often irregular and dry periods are very long and in terms of climatic divisions is part of the desert climate. Annual rainfall changes, are not reliable and there is a risk of severe droughts and damaging storms (Ibid). Most of the days of the year too much heat and need 25 degrees, so that about 300 days of the year of overheating is desirable (Abbasi 1993: 20).

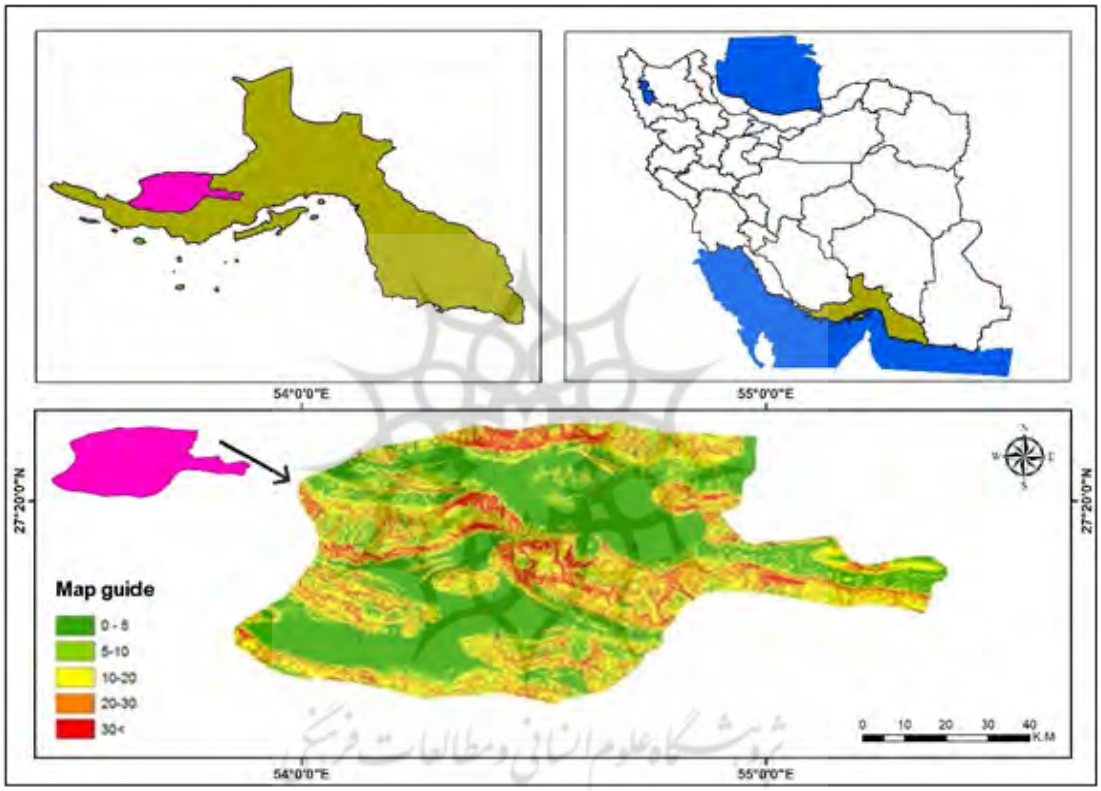

Fig. 6: Location of Bastak city and showing its natural slope (Authors 2021)

Eshkaft-e Ahou Area

Eshkaft-e Ahou is located at an altitude of 1900 meters from Gav-Bast Mountain. To reach this Eshkaft, you can climb the steep slope of the mountain in a straight line upwards, and with a curving movement, first to the left and then halfway to the right and the location of the Eshkaft. The high altitudes of the mountain, especially the small valleys that have a basin area, the vegetation of relatively large amounts of shrubs. The Eshkaft-e Ahou is located between one of these valleys with the mentioned geographical location. The dimensions of the Eshkaft-e Ahou shelter can be expressed in the width about 9 and 2.5 meters, respectively, and the height of the crater and nearly about 3 meters of internal depth, (Fig. 7). The place where the motifs were created is located under

the roof of the shelter. The paintings are depicted in a reddish-brown color (Fig. 8). The earth-colored place of the sketch of the motifs-stone- is a rock. The surface illustrated on it has many depressions, of course, the images are drawn only on smooth surfaces and there is no design inside the depressions (Sadeghi 2002: 4).

Description of Eshkaft-e Ahou motifs

The Eshkaft-e Ahou motifs are drawn in ocher red, which due to its special and unique style, similar to them has not been achieved anywhere in the Iranian plateau so far. These motifs are very abstract, but the creator of the work has paid special attention to all the details, for example, has drawn the details of the decorations around the head, waist and even the hands with special delicacy and precision. In general, the image of several human predators with primitive hunting devices such as archers, which is depicted hunting wild animals. Perhaps these motifs were drawn for ritual purposes because among these motifs there is the image of three palms is represented by this formality common

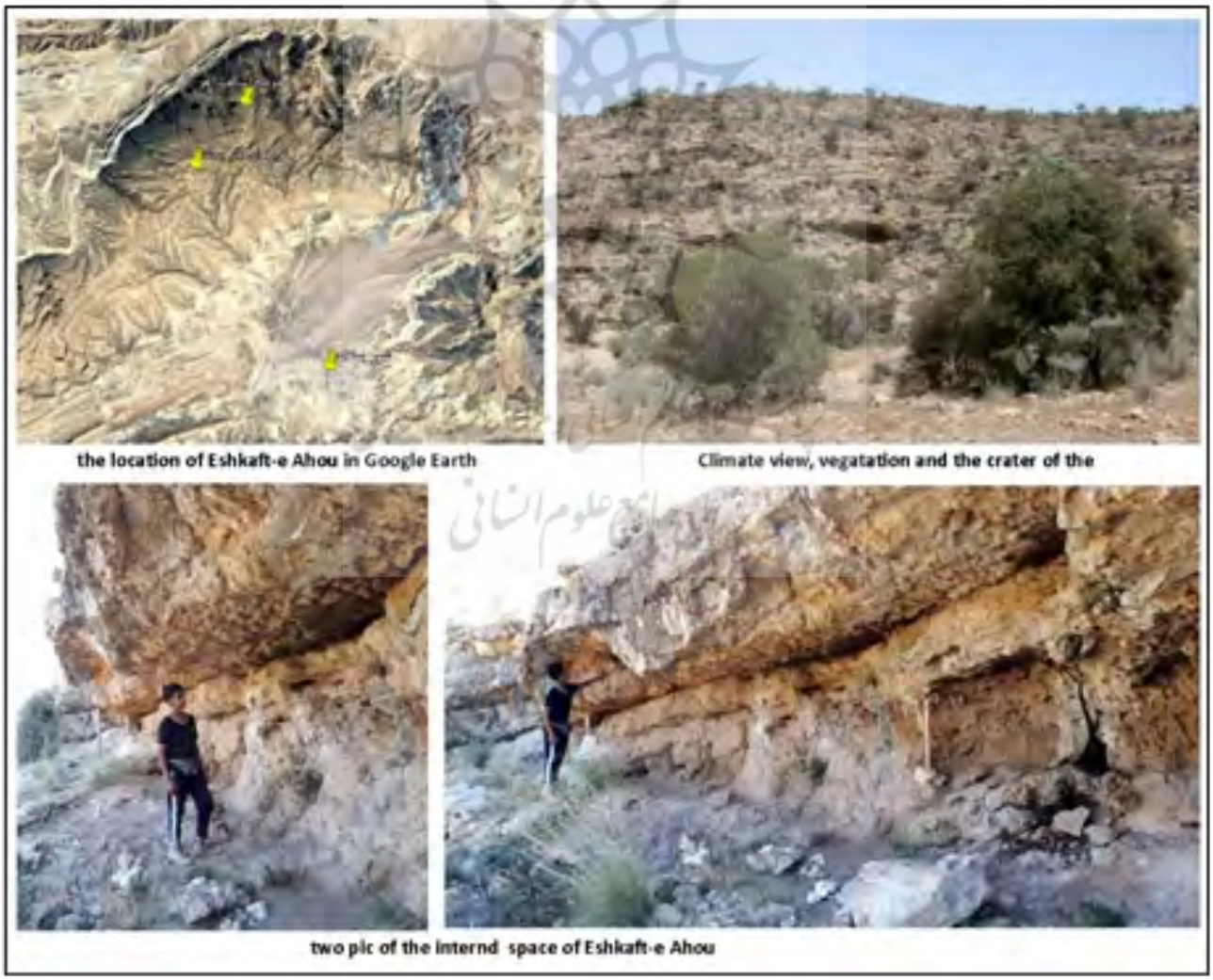

Fig. 7: Exterior view of the Eshkaft-e Ahou enclosure (Authors 2021; Alinia 2021)

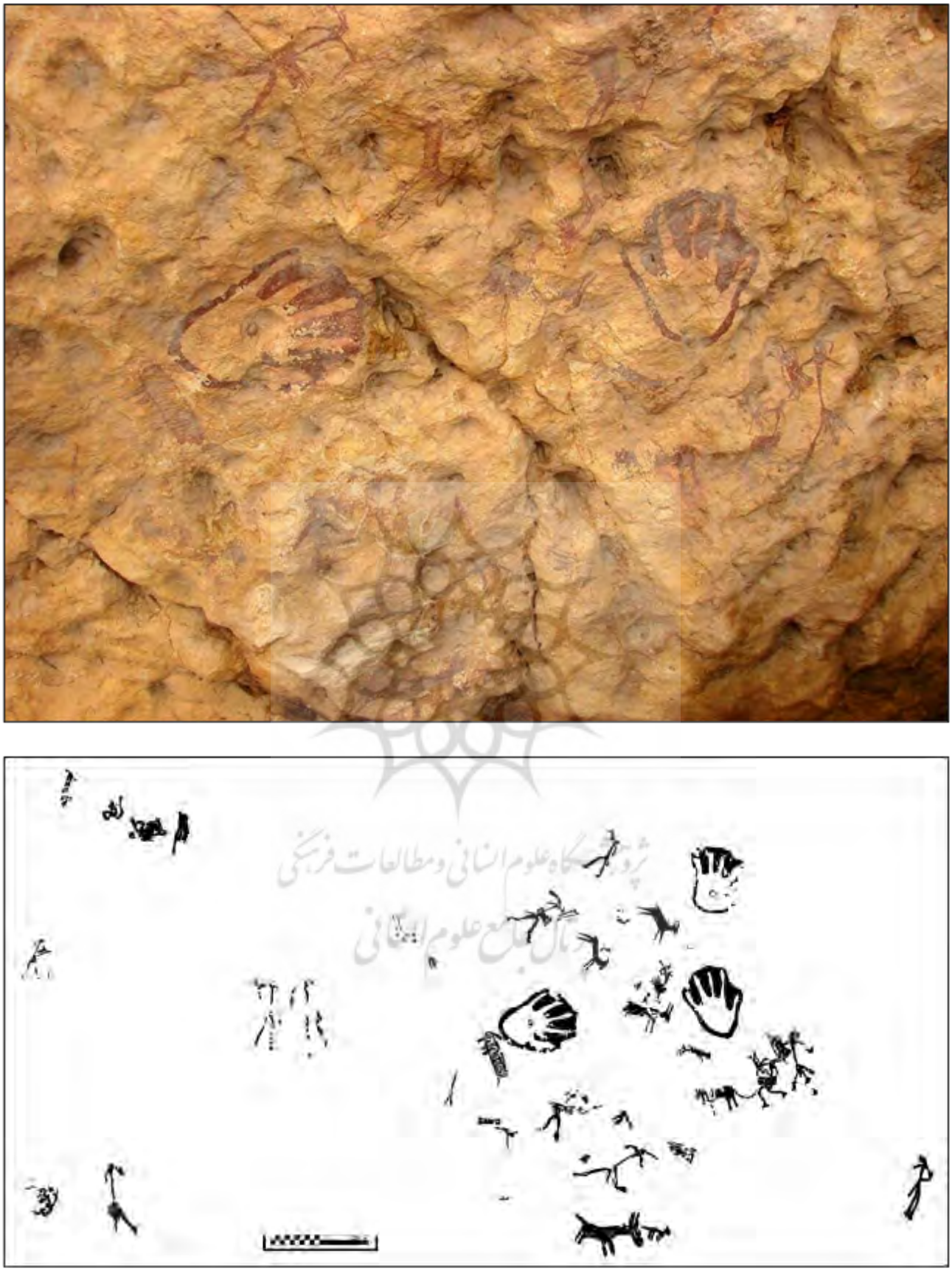

Fig. 8: Overview of the motifs of the Eshkaft-e Ahou enclosure (Authors 2020)- Some cast designs have been reconstructed from the design (Sadeghi 2002)

in rock art around the world (Fig. 9), which are drawn in various ways. In the most commonly used method, the artist may use his hand as a stencil and put a powdered dye into the mouth or straw tube, and create the image by blowing in the straw around his fingers and hands.

In some cases, the artist may have designed his hand around his finger and hand after placing the hand with a piece of bone or fingertip, or in some cases, the artist may have painted his hand on the surface of a rock or canvas and recorded the effect of his hand. Hand-drawing is one of the most common styles of rock art, showing the abundance and multiplicity of designed hands women, children and men have applied this method in a relatively identical way around the world to capture the image of their hands. But what does it really mean? Can these images be considered as the artist's self-conscious signa-

Fig. 9: Examples of palm designs obtained from different parts of the world (Authors and Bradshawfoundation site 2020)

ture at the foot of the drawn images? Has he tried to conquer and overcome the spirit of a creature stronger than his manpower by designing and drawing hands? and has done the ritual of stamping[2]? Given the multiplicity and abundance of this art and the scattering around the world at different periods, obviously, the tradition of drawing hands has different meanings and, based on a general understanding shows ritual concepts around the world (Dobrez 2014: 367-341).

The visible motifs are as follows (Figs. 10 and 11):

1. The left palm is 15.5 by 17 centimeters high, with a colored spot in the middle.
2. The image of the left palm, which has a dimension of 13 at 14 centimeters in height.
3. The image of the left palm is 15 by 14 centimeters high, with a colored spot in the middle.
4. The human motif is not so visible due to the deposition of details, but can be recognized by a cover on the head and waist. Its dimensions are 7 by 13 centimeters high.
5. The human motif of the hunter with a four-piece cover on the head and an arc in the left hand with decorations on the wrist. Given the shape of the limb, probably the arrow in the hand was chasing the hunt, and maybe animal number 15. The dimensions are drawn 8 by 14 centimeters in height.
6. The human motif of the hunter with a bow in the left hand and an arrow in the right hand with a decorated cover on the head and a quiver tied on the waist, which is accompanied by decorations hanging on the waist and running towards the hunt (maybe motif 14 or 15). This motif has 6 by 10 centimeters in height.
7. The motif of the human hunter who took the bow and arrow in the right hand and accompanied the motif of No. 8 chasing the hunt is the motif of 19, possibly wild cat. It has a four-piece ornament on the waist and in the area of the leg has a sideways that probably indicates decorations or some kind of hunting armor. The Shape of the legs is triangular and probably has a specific object on the feet. There is a three-piece cover on his head perhaps long hair woven into several bunches. The dimensions of this motif are 7 by 14 centimeters.
8. The human motif is a hunter, placed in front of motif 7 with a bow in his right hand and a cover on his head and a arrows and decoration on the waist, the motif of the hunting animal 19 chases. This human motif of the object has three phones decorated with decorations. the figurative form of the limb indicates show steps toward hunting. The dimensions of this motif are 7 by 12 centimeters in height.
9. Perhaps the very abstract motif of the human form displayed only two legs and the trunk. The dimensions are 2.5 by 7.5 centimeters in height.
10. The human motif that is unrecognizable due to the loss and loosening of the surface of the rock (design canvas) and the quivering is seen next to the legs of

the hunter's legs. The dimensions are 7 by 7 centimeters.

11. The image shows archery and shooting in dimensions of 5 by 7 centimeters.
12. The human motif is running perhaps to the bow and arrow, which measures 5 by 14 centimeters.
13. Human motif with an unknown object in the hand and a cover wrapped over the head and waist. The dimensions are 6 by 12 centimeters.
14. The motif of an escaping deer-like animal which measures 8 by 7 centimeters in height.
15. The motif of an animal similar to a deer escaping from a hunter (motif No. 5), the dimensions of the motif are 8 by 7 centimeters high.
16. Image of an animal with relatively long horns at 10 by 6.5 centimeters high.
17. The motif of an unknown animal with a stretched body and perhaps a striped skin with short legs and long ears-dimensions-6 by 11 centimeters in height.
18. The motif of a four-legged running animal, the dimensions are 6.5 by 4 centimeters high.
19. The motif of cat-like is 15 by 6.5 centimeters in height.
20. The motif of the part of the carcass of the animal with only his tail and legs remaining, dimensions 4 by 3 centimeters in height.
21. The motif of the wild donkey behind the motif of 22 fleeing, its dimensions 10 by 13 cm centimeters high.
22. A motif of the wild donkey sphere in front of the motif of 21 on the run and in dimensions of 6 by 5 centimeters in height.
23. A quivere motif that dimensions is 6 by 5 centimeters in height.
24. An unknown motif with dimensions is 3.5 by 3 centimeters in height.
25. An unknown motif that dimensions is 6 by 4 centimeters high.
26. The sedimented motif is probably a human image and the dimensions are 3 by 7 centimeters high.
27. An unknown motif with dimensions is 4.5 by 6 centimeters in height.

Analytical review of motifs

Unfortunately, there is no definitive theory in the field of annuity, because among the motifs, there are no tools or technologies that can be attributed to a particular period. The only instruments in the hand are arrows and bow, which the invention of which dates back to the Epipaleolithic period (Sharif Kamali 2016: 180). There are motifs on the human body that are probably hunting covers or armor, unfortunately where the motifs are very abstract, there is no idea of how the devices are made and used. For example,

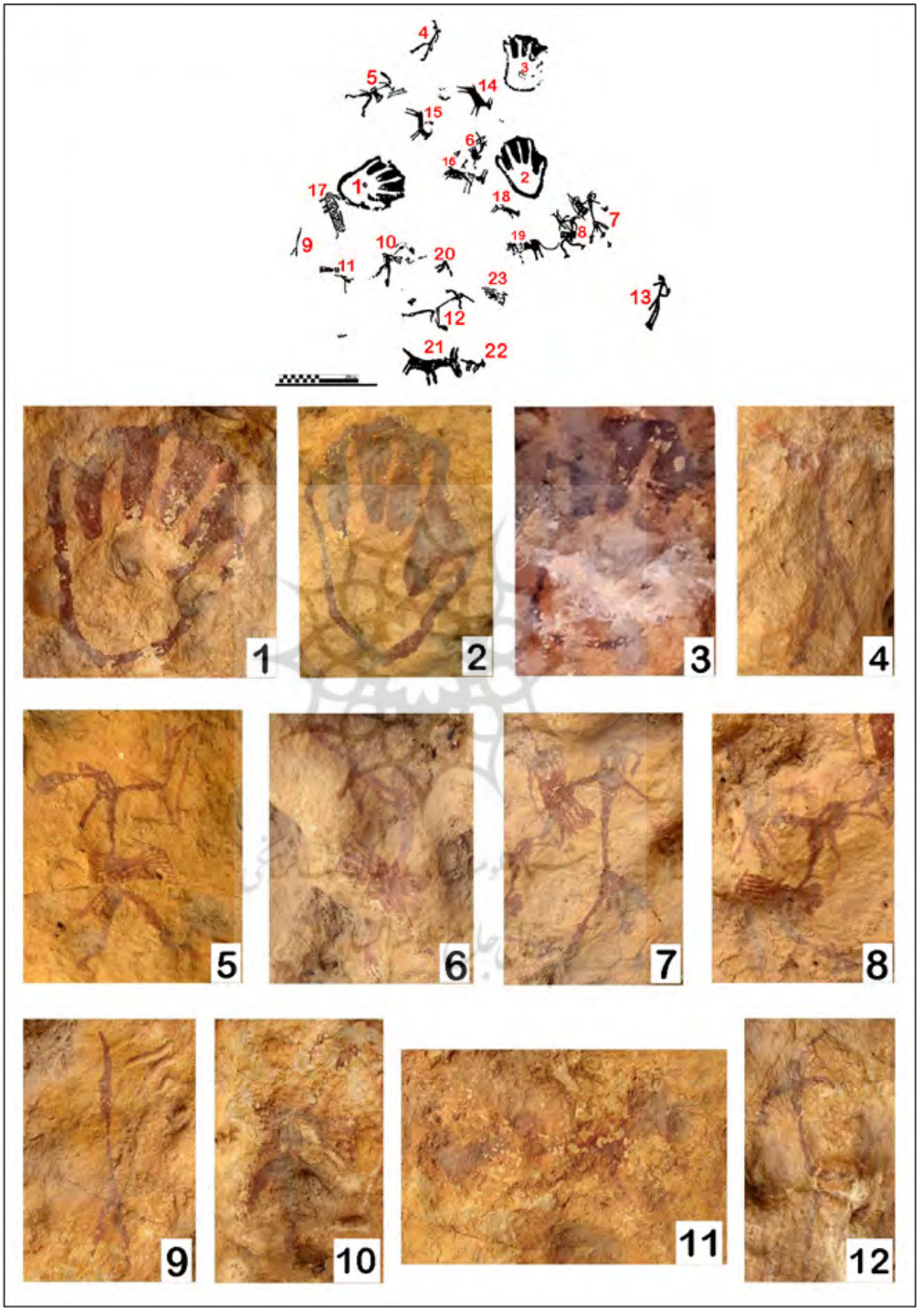

Fig. 10: Patterns of Bostak Eshkaft-e Ahou in Hormozgan (Authors, 2020)

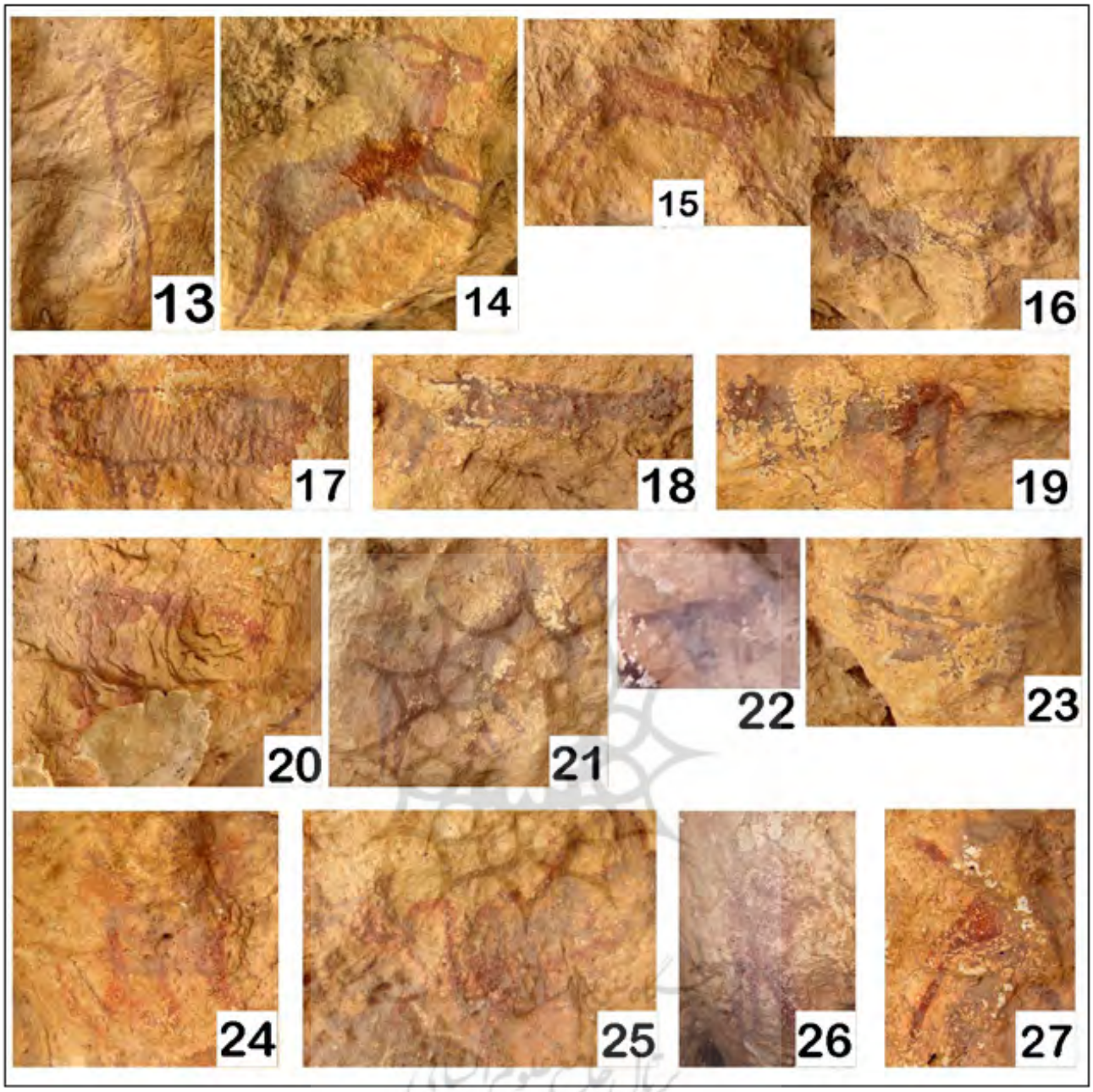

Fig. 11: Patterns of Bostak Eshkaft-e Ahou in Hormozgan (Authors, 2020)

in the hands of the Hunter (motif 5) an object similar bracelet covers her wrists, head-gear (motifs 4, 5, 6, 7, 8 and 12) and waist decorations (motifs 5, 6, 7, 8) is seen on some motifs, triangular design is probably emphasize the cover on the foot, perhaps the only wooden board that is tied to the foot with a string of plant fibers. Considering that so far, several colored motifs have been identified in Iran, none of which are similar to Eshkaft-e Ahou, and the authors consider the closest area in terms of the proportionality of the subject and appearance of the motifs, and only comparable and suitable examples for relative dating can be traced to the similarity of archers and ornaments around the head and waist of hunters of Catal Hoyuk the Neolithic painting. Catal Hoyuk is located

on the Konya plain in central Turkey with a climate on the plain and fertile soil and along the Charshambachay River on the southern corner of the Anatolian bed (Firoozmandi 2014: 60). Catal Hoyuk murals between 7400 and 6000 B.C. are scared. Catal Hoyuk tepe for the first time in the years of 1961-1965 was excavated by James Mellart (Mellarts 1967). Catal Hoyuk murals are a decorative layer on the interior of the house, generally decorated with reliefs, animal horns and paintings, and paintings are painted in red flowers and items in black and white (Firoozmandi 2014: 69).

Similarities between Eshkaft-e Ahou motifs and Catal Hoyuk

The color motifs are similar to the images of hunting in the Eshkaft-e Ahou Rock shelter in Bastak city of Hormozgan province with the three-layer color motifs of Catal Hoyuk. The motifs of Eshkaft-e Ahou exhibit abstract images of primitive humans hunting animals. In terms of appearance and even drawing technique (some parts of the human body are profiled and others are sketched treble) the use of red mold (due to the availability of other colors) is the most commonly used color is ocher red color. Drawing tools and covering of the hunters have the greatest similarity (Fig. 12, 3 and 4). Drawing palms colored in red color with is relatively identical appearance are similar in both enclosures (Fig. 12, No. 1 and 2). The general concepts of hunting between peoples of both societies are the same (Fig. 12, No. 7 and 8) and given the same apparent similarities between the motifs of Eshkaft-e Ahou and the Catal Hoyuk enclosure, it is possible to imagine that the pattern of people creating the motifs Eshkaft-e Ahou in livelihood and primitive lifestyle, it was similar to the Chattalhoyuk people. There is no definitive theory about the timeframe of drawing these images and the need for a series uranium laboratory. Perhaps the peoples living in Eshkaft-e Ahou at the time of historical era had chosen relatively early life due to some livelihood restrictions, but in the context of the historical authenticity of the motifs, the authors believe that there is no doubt about the historical background. Design and tools have been frequently observed in the past (Catal Hoyuk).

Similar bow and arrow and quivere depicted in Eshkaft-e Ahou have also found among the early communities of South Africa (Fig. 13), that cannot be answered the reason for this similarity with the cultural association. The answer goes back to the archetypes of primitive humans (Golbu & Afshari 2019), which is rooted in the environment residence fairly the same, and follow a pattern of subsistence.

Investigating the relationship between climate and residence in Eshkaft-e Ahou area

According to the description provided has not been actions long-time climatology in the case of the city of Bastak, but due to the inter mediary longtime climatology Fars, we find that there has been no specific climate change in the region since the Holocene (Azizi et al. 2017: 222). According to the climate, the best residence in the city of Bastak is at a

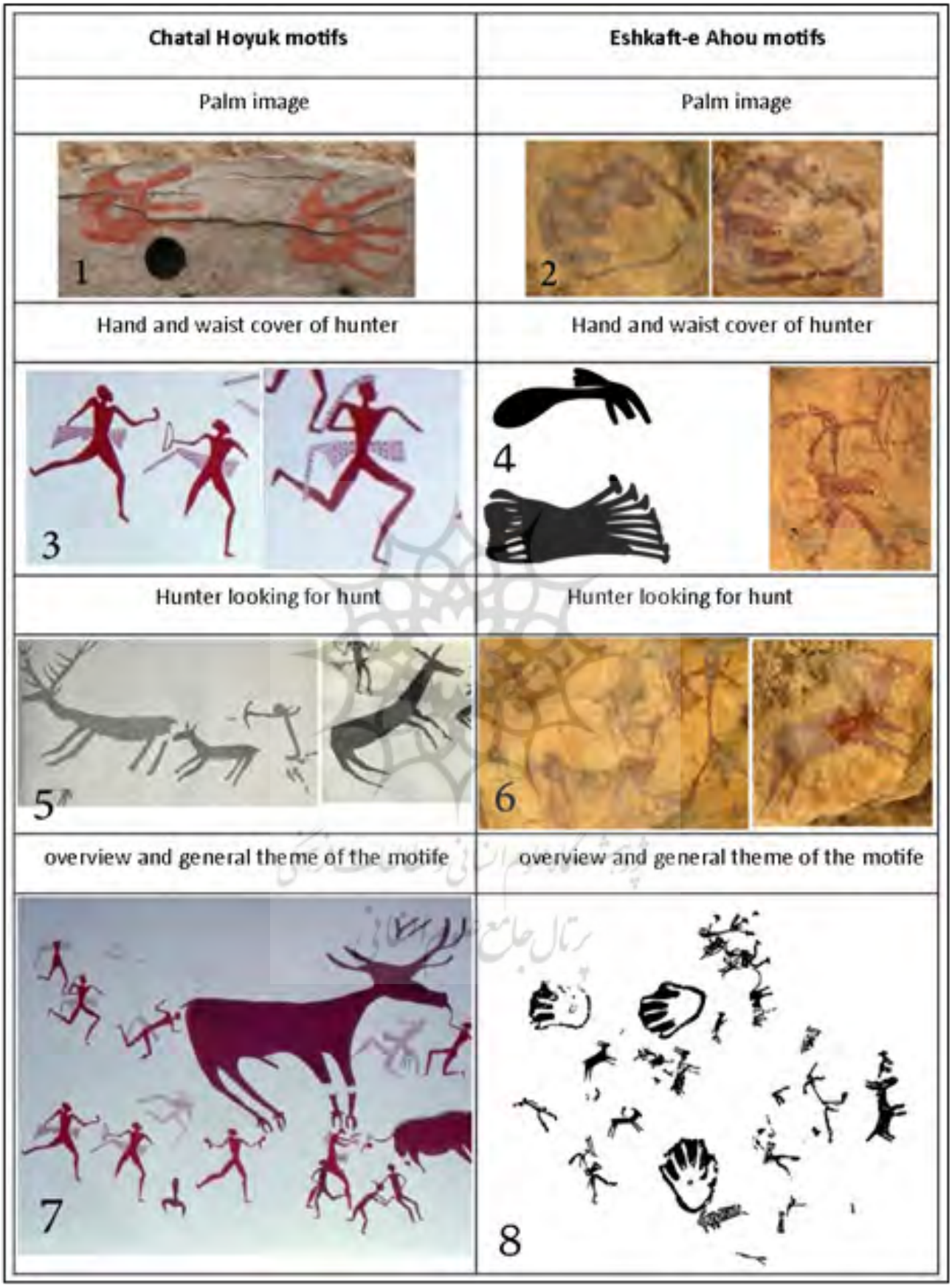

Fig. 12: The motifs were obtained with hunting images from Catal Hoyuk (No. 1, 3, 5 and 7) and compared with the color motifs in the Eshkaft-e Ahou antlers (No. 2, 4, 6 and 8) (Authors 2021; Compilation from Hodder 2011; Mellart 1967)

height of 500 meter above sea level with that its slope is less than 5 degrees, and along communication roads (Rahimi & Hassan Pour 2011: 12-26). But the area of Eshkaft Ahou with an altitude of nearly 2000 meters is located in the mountains of Gav-Bast, and the settlement in the Bastak plain, which is located in the city of Bastak is classified as warm and dry areas according to the coefficient of land by Demartin method. In this area, 8 months of the year are summer and peak heat to near 47 degrees Celsius, and due to the distance of the sea, there is no moisture (Organization of the Armed Forces 2002: 33). The sum of these factors has caused the formation of vegetation proportional to the hot and dry area. The climatic feature of the region is that in exceptional cases, due to the presence of altitude, the temperature decreases and rainfall increases, and in nature more vegetation is growing, which causes the abundance of pastures more and better for wild animals and herbivores at the desired height. These changes have probably been an important factor in the past for moving herbivorous animals to this area, and it is not far from assuming that human predators in Bastak region in the past ages have trampled several kilometers of steep mountain slopes in the hope of finding prey.

Conclusion

A thorough scientific study of the findings of rock art offers valuable information about the state of lifestyle of past peoples, which unfortunately, does not exist in written historical sources of such information, and the location of them can only be traced to oral history and some artistic and archaeological data. One of the important areas that gives us valuable information about the past is the color motifs of Eshkaft-e Ahou. This area is located at the height of the Gav-Bast mountains in Bastak city of Hormozgan province of Iran, which contains images of the scene of hunting animals by possibly predators with basic tools. The motifs are painted in ochre red, on the roof of this rocky shelter and in a place in a relatively unfavorable climate for habitation. For hours on the steep slope of the Gowbast mountain, it must be navigated upwards to access this area. In this study, the authors with regard to the climatic conditions, water and air, geomorphology and vegetation of such a probability that increases with altitude in hot and dry area, the temperature decreased and naturally found more fertile vegetation than the lowlands. It is found that this phenomenon, its causes and factor movement and migration each year, animal, plant eater, to the highlands of this region to find fodder have been better. In spite of such a climatic chain, it is obvious to the authors that the Hunter man, who spent his livelihood by hunting, was attracted to this area by the nobility to the existence of richer pastures in highlands and to covet prey at this height of the plain. This style of life of the ancient peoples of the region is very similar to the paintings drawn in the Eshkaft-e Ahou shelter, and to examine the originality of these motifs, whether in the field of technology of hunting devices, such as the appearance of quivering and bows, or

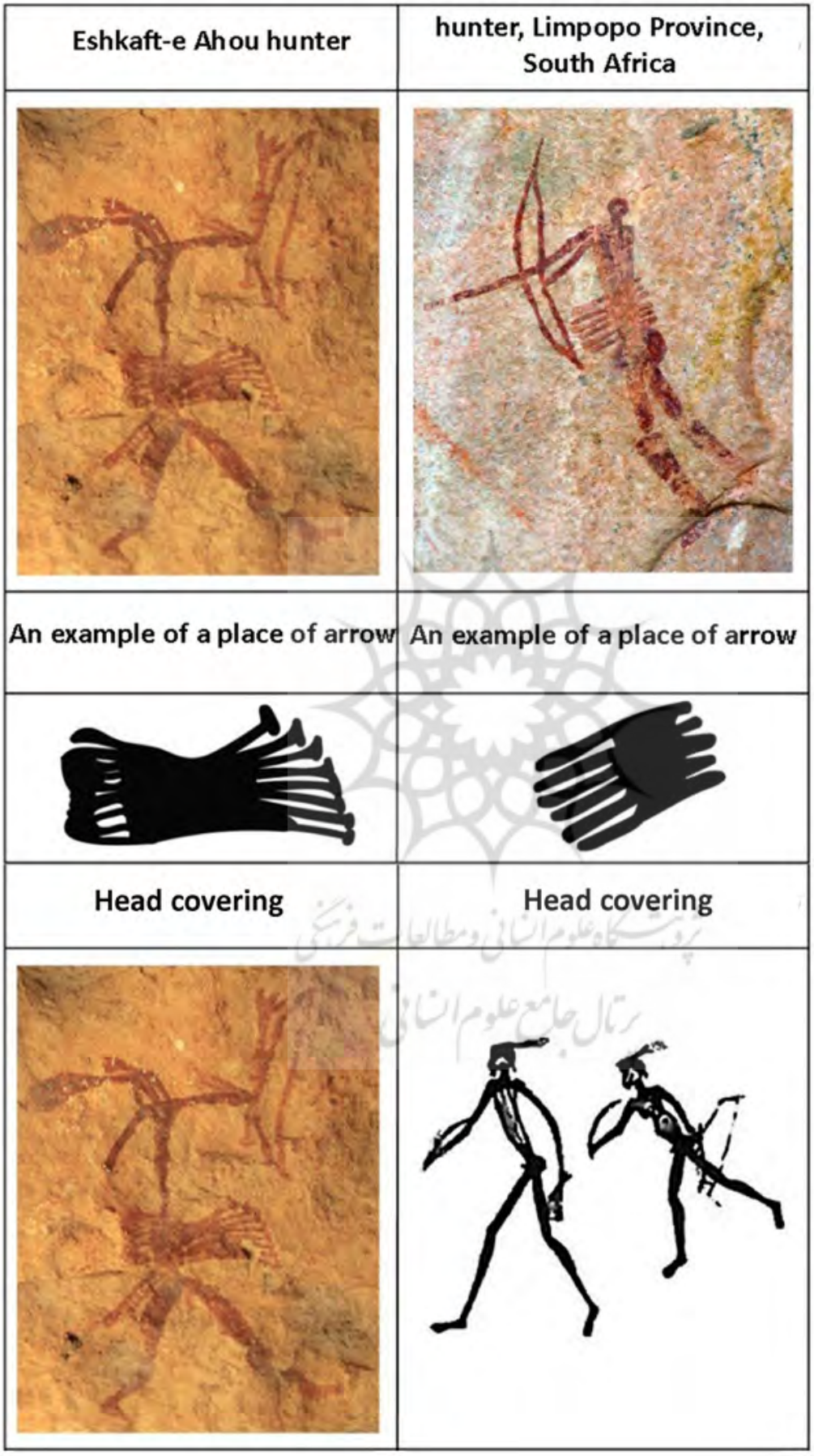

Fig. 13: Comparison of cover type and hunting tools between Eshkaft-e Ahou motifs and color motifs found in South Africa (Authors 2021; Eastwood et al. 2010).

in the theme of hunting. These images can be compared with the paintings of the Neolithic period of Catal Hoyuk. The study of the similarities does not confirm the cultural relationship between the two sites, but reinforces the belief that primitive humans have benefited from relatively similar archetypes due to the environmental possibilities of living. In the field of precise chronology, despite the archaeological study and the discovery of the collection of stone tools of Epipaleolithic period in around this area, but until the anniversary of the Uranium laboratory series method, the motifs cannot be attributed to a specific time frame. Perhaps these early hunting communities have been present in these areas with the basic tools of archery, from the Epipaleolithic period to the historical era and have hunted animals, or perhaps they have settled in this area only in a certain period of time that we are unaware of.

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Description

1- Paleogeography

2- Sealing ritual

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