

# Rock art and landscape

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## RATIONALE

Landscape is an important aspect of rock art research, and the two are naturally entangled even today. Rock art sites have opportunities lost to many other archaeological sites. The fact one may still observe and interpret the images in its surrounding landscape. The sources of error are our modern experiences of the landscape and its lost relations in which they have altered. Even though, there are aspects of the landscape that could transcend and the panel surface itself still contain aspect that were very much present when the rock art was made.

In this way, we can interpret lost relations and landscapes in many ways and at different scales or levels. At the macro level; overall surrounding landscape, the location of the rock art panel in relation landscape features such as the sea, rivers, outcrops, mountains etc. Or at det micro level; the panel's topography, cracks or clefts, curving, orientation etc. and the placement of the figures according to such.

The landscape can provide us with information and contextualize important aspects with regards to interpretations according to our theoretical or methodological approach to the rock art.

In this session we want to enlighten this aspect of rock art research and encourage you to present different ways of seeing rock art and landscape as an important and intertwined duality.





# The temporality and changeability of rock art

Heidrun Stebergløkken \*, Astrid J. Nyland \*\*

## SUMMARY

Temporality and changeability are in this paper considered vital characteristics of rock art, expressed through shifting light and moving bodies. Demonstrating deliberate use of non-quantifiable elements such as light is challenging. Nevertheless, there are rock art sites where its importance is apparent. For example, the results of a 3D scan of the site Hammer IX in Central Norway show how the same lines make out both an elk head and a whale. Whereas in Vingen in Western Norway, 77 panels positioned across a scree slope, non-corporeal elements appear to be as important as the motifs. Shifting light is a prerequisite landscape agent as it enables dynamic interpretations of rock art panels as micro landscapes. Approaching, or acknowledging, rock art as non-representational, we consider the involvement of intangible elements as part of the constant knowledge production, shaping of realities, or worlding in Donna Haraway's terms. Within this theoretical framework, we discuss the making and use of rock art as a meaning-making and storytelling practice in Late Mesolithic and Early Neolithic Norway. The authors published an article; "Changing perceptions of rock art: storying prehistoric worlds" in *World Archaeology*, March 2021 (<https://doi.org/10.1080/00438243.2021.1899042>). In the XXVIII Valcamonica Symposium 2021, we wish to present and discuss our results further.

## RIASSUNTO (TEMPO E CAMBIAMENTO NELL'ARTE RUPESTRE)

Questo articolo affronta i concetti di "temporalità" e "cambiamento" come caratteristiche vitali dell'arte rupestre, espressi attraverso i movimenti della luce e il modo con cui essa colpisce le rocce incise. Dimostrare l'uso deliberato di elementi non quantificabili, come la luce, è impegnativo. Tuttavia, in alcuni siti di arte rupestre la sua importanza è evidente. Ad esempio, i risultati di una scansione 3D del sito Hammer IX, nella Norvegia centrale, mostrano come le stesse linee possano comporre sia una testa di alce che una balena. Mentre a Vingen, nella Norvegia occidentale, 77 pannelli posizionati su un pendio ghiaioso, dimostrano come gli elementi non corporei possano essere importanti quanto le incisioni. La mutevolezza della luce è un agente paesaggistico prerequisite che consente interpretazioni dinamiche di pannelli di arte rupestre come micro paesaggi. Avvicinandoci, o riconoscendo, l'arte rupestre come non rappresentativa, consideriamo il coinvolgimento di elementi intangibili come parte della costante produzione di conoscenza, modellazione delle realtà o mondi nei termini proposti da Donna Haraway. All'interno di questo quadro teorico, discutiamo della creazione e dell'uso dell'arte rupestre come pratica di creazione di significato e narrazione nella Norvegia del tardo mesolitico e del primo neolitico. Gli autori hanno pubblicato un articolo; "Cambiare le percezioni dell'arte rupestre: raccontare mondi preistorici" in *World Archaeology*, marzo 2021 (<https://doi.org/10.1080/00438243.2021.1899042>). Nel XXVIII Valcamonica Symposium 2021, desideriamo presentare e discutere ulteriormente i nostri risultati.

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## The rock paintings are found on small vertical cliff walls in the area named Steinberget (Stone rock) on the northern part of Espedalsvatnet lake

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### SUMMARY

The site location displays similar characteristics with rock painting sites in large parts of Northern Europe both in content and location at the lake cliff situated along water systems. New digital documentation methods reveal figures ranging from representations of elk and human figures down to what appears as small dots.

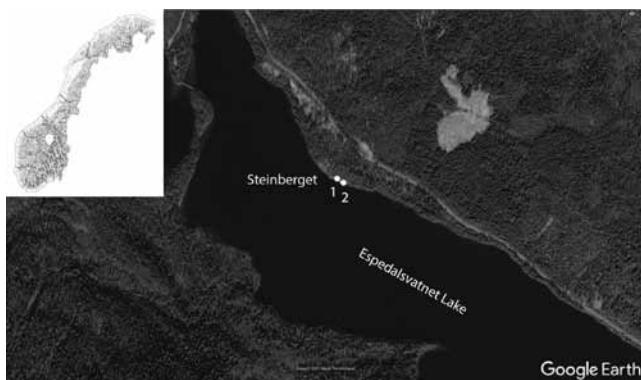
The rock art is discussed in relation to scales of landscape from the actual rock outcrops to the wider landscape context. Further the temporality and the changing landscape will be discussed in relation to fluctuating water levels and seasonality. Opposed to most rock painting sites in Northern Europe, Steinberget is one of the few sites where only minor changes to the landscape context are observed. The seasonal fluctuating water level has been documented over the last 40 years giving the site a unique record to investigate how the fluctuation affects the rock art. The lower part of the rock art is eroded / washed away by water and new figures superimposition the older figures arguing for a long period of use and remaking of rock art in prehistory.

At the latter part of the paper, the relation to other rock art sites will be briefly discussed when it comes to motif, location, and the chronology of the site.

RIASSUNTO (LE PITTURE RUPESTRI SI TROVANO SU PICCOLE PARETI VERTICALI NELLA ZONA DENOMINATA STEINBERGET, LETTERALMENTE ROCCIA DI PIETRA, NELLA PARTE SETTENTRIONALE DEL LAGO ESPEDALSVATNET)

Queste pitture rupestri si trovano su piccole pareti verticali a strapiombo sul lago Espedalsvatnet, nella zona denominata Steinberget (roccia di pietra). Per posizione e scelta del sito si notano similitudini con altre pitture rupestri del Nord Europa: il paesaggio, la posizione a picco sulla scogliera del lago, concomitanza con sistemi idrici. I nuovi metodi di documentazione digitale hanno permesso di identificare figure di alci e sagome umane dove fino ad ora si vedevano solo punti e macchie.

L'articolo vuole approfondire il contesto in cui l'arte rupestre si cala: dalla forma del supporto al più ampio contesto paesaggistico. Inoltre, verranno analizzati i mutamenti del contesto legati alla stagionalità e alla fluttuazione del livello dell'acqua. Contrariamente alla maggior parte dei siti con pitture rupestri nel Nord Europa, a Steinberget si osservano solo piccoli cambiamenti nel contesto paesaggistico. Il livello di mutamento stagionale del livello dell'acqua è stato documentato negli ultimi 40 anni, rendendo questo sito unico per indagare il rapporto fra fluttuazione idrica e arte rupestre. Le porzioni inferiori delle rocce con arte rupestre sono erose dall'acqua e le figure sono come slavate. Figure più recenti si sovrappone a quelle più antiche. Il tutto testimonia una lunga fase di produzione e rifacimento dell'arte rupestre nel corso della Preistoria. Nell'ultima parte dell'articolo sono presi in esame in modo sintetico, e in relazione ad altri siti di arte rupestre, alcuni interrogativi quali il motivo della scelta del sito, la posizione e la cronologia delle istoriazioni.



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# Hidden Messages – Rock Art in Special Landscapes in Central Norway

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## SUMMARY

What elements and qualities in a landscape may suggest communication with something other-worldly? Messages can be delivered orally, they can be sung, read and illustrated. Rock art as visual culture is a medium consciously used for function and communication. This article features rock art from different contexts in Central Norway. The rock art's common feature is that the art appears to be purposely placed where it is seen by few, where it is unavailable, or where it disappears at given times. By using a phenomenological framework in combination with landscape analyses, this study explores the various ways in which this phenomenon in rock art reveals communication between people and other worlds. The landscape plays a central role as the rock art and its surrounding landscape are intertwined. The landscape analyses are rooted in a phenomenological approach, with use of sensory methods. The landscape is also analysed on two levels: micro landscape and macro landscape. The analyses are used to open the discussion on the interpretation of 'hidden' rock art.

**Keywords:** rock art, landscape, phenomenology, sensory archaeology

## RIASSUNTO (MESSAGGI NASCOSTI – ARTE RUPESTRE IN PAESAGGI SPECIALI NELLA NORVEGIA CENTRALE)

Quali elementi e caratteristiche di un paesaggio possono suggerire la comunicazione con qualcosa di ultraterreno? I messaggi possono essere trasmessi oralmente, possono essere cantati, letti e illustrati. L'arte rupestre come cultura visiva è un mezzo utilizzato consapevolmente per uno scopo e per la comunicazione. Questo articolo presenta arte rupestre proveniente da diversi contesti nella Norvegia centrale accomunati da una precisa scelta del luogo e della posizione, collocata per essere vista da pochi, non è fruibile o rimane celata in determinati momenti. Utilizzando un quadro fenomenologico in combinazione con l'analisi del paesaggio, questo studio esplora i vari modi in cui questo fenomeno rivela un intento di messa in comunicazione tra le persone e altri mondi. Il paesaggio gioca un ruolo centrale in quanto l'arte rupestre e il paesaggio circostante sono intrecciati. L'analisi del paesaggio è fondata su un approccio fenomenologico, con l'utilizzo di metodi sensoriali. Il paesaggio inoltre è analizzato su due livelli: micro paesaggio e macro paesaggio. Le analisi servono a aprire la discussione sull'interpretazione dell'arte rupestre "nascosta".

**Parole chiave:** arte rupestre, paesaggio, fenomenologia, archeologia sensoriale

Rock art is often found in open areas suited for large groups of people to gather. This article focuses on rock art that appears to have been purposely hidden. There are several ways in which rock art can be perceived as hidden and this might tell us something about the intended receiver of the art. By approaching the rock art landscape from a phenomenological perspective, it may be possible to discern the hidden purpose behind the art. The landscape is also analysed by looking at the micro and macro landscape and what the rock art is directed towards in order to view the rock art in relation to the landscape it has always been a part of. As humans, we sense the world the same biologically. Influences such as sound, touch and light all play a role in the overall experience of a place. A landscape's agency affects our understanding by hindering or enhancing our senses, bodies and emotions. Rock art in the landscape can make 'demands' to us – we might have to climb, crawl, look up or look down in order to see it. By using the human body to experience rock art and landscape, one can address the relationship between structure and topography. The subject-

ive element in an experience is not superficial and one can see the landscape as a meeting place between humans and other worlds (TILLEY 2008). For rock art in situ it is possible to use visual archaeological landscape analysis (ALAV) to read the landscape room. The landscape's topographical elements become walls and floors which can help archaeologists envision how the landscape might have been structured in the past (GANSUM, JERPÅSEN, & KELLER 1997). The method benefits from having an interdisciplinary perspective, such as ethnography (SOLLI, GJERDE, & JERPÅSEN 2010). By breaking the landscape into macro landscape (large topographical elements surrounding the rock art) and micro landscape (the rock surface or the rock art's immediate surroundings) every aspect of the landscape is taken into consideration (GJERDE 2010).

A total of seven rock art sites in Central Norway were chosen for the analyses. The sites were distributed over three contextual groups: 1) graves, 2) caves and 3) sites along routes of travel. The different contexts underline the variation in the rock art material and the sites show the representation of unavailable and ex-

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cluding rock art regardless of context, period and geography. This phenomenon of rock art is not exclusive to Central Norway, but can be found throughout the world.

The grave contexts consist of two Bronze Age chambered cairns located by the Trondheim fjord. One in the inner part of the fjord, Steine at Byneset in Trondheim (fig. 1), and one by the fjord mouth towards open sea, Rishaug, at Agdenes in Orkland (fig. 2). Both cairns had decorated grave chambers. Unfortunately, both cairns were destroyed and only fragments of the decorated chambers remain. Both cairns would have had sea view, but were more isolated in the landscape in the sense that they were not particularly visible coming from land. Along the coast of Central and Northern Norway, there are a number of painted caves. They all feature monotone human figures that are placed in the deepest darkness of the caves or in the breaking between light and dark (BJERCK 2012). The featured caves are the Solsem cave at the island of Leka and the Fingal cave at the Gravvik peninsula. The caves are only a few kilometres away from each other in a straight line and they are both dated to late Neolithic/early Bronze Age. Both caves have steep entries, making it difficult to get into the cave space. The caves appear as portals in the solid rock (fig. 3). Entering these caves demands physical and mental will from humans. In caves, taking the darkness, fear and the lack of senses into account is essential when interpreting the space (BJERCK 2012). Like graves, the paintings in the caves are directed towards a dark, closed and dead room. In addition, the uniformity of the painted human figures underlines the specific message in the cave (HELSSKOG 1999)(fig. 4). The travel contexts consist of three different sites connected to travel and transport routes. The first is Honnhammer in Tingvoll, where numerous Stone Age rock paintings have been found on cliffs plummeting into the Tingvoll fjord (fig. 5). The paintings are difficult to see from land, but are visible from boat. Placed on steep cliffs, the paintings are unavailable and access to them could easily have been controlled either physically, mentally or socially (NYLAND 2011). The second is Selbustrand, a site where the rock art has been dated to the Bronze Age and is carved on boulders along the shoreline of the lake called Selbusjøen in Selbu. The boulders are flooded most of the year and are only available in the spring. Again, the rock art is barely visible from land and the art is clearly directed towards the water. Even the footprints carved on the boulders stand as if looking out over the water (fig. 7). The third and last site is Bøla in Steinkjer, in particular the full-sized carved reindeer dating from the Stone Age. The reindeer has been carved in a waterfall connected to the Bøla river. Where it stands, the waterfall ran in part over the reindeer making it look as if it was coming out of the waterfall (NORBERG 2020) (fig. 8). The waterfall and the reindeer create an audiovisual impression which enhances the general experience of the landscape and the rock art.

The chosen rock art sites show how rock art may have been deliberately placed in special landscapes and that

the sites have been visited repeatedly. These factors indicate a religious connection to the site and they prove that the sites have not merely been places of passage. Despite the varying contexts of the sites, there are some similarities between them.

#### TRAVELLING IN DANGEROUS PLACES

There are no functional reasons for placing rock art in dangerous places such as steep cliffs or in caves (HELSSKOG 1999). Placing rock art in physically restrictive sites must have had a purpose. For instance, the rock art at Nämforsen and Norrfors in Sweden is located on small slippery islands in the middle of a roaring river. Just getting to the islands to make the rock art would have posed great risk. In other words, the power of the rock art might be linked to the danger of its placement (GOLDHAHN 2002). This could be the case of the Bøla site, the Honnhammer site and the caves in Central Norway. These sites are all placed in landscapes that pose danger whether by loud noise, flow of water, steep cliffs over water or dark and narrow caves (fig. 9). It seems unlikely that the people who created the rock art in these sites were unaware of the danger imposed by these special landscapes and one should acknowledge humans' will to expose themselves to danger just because it is dangerous (SOGNNES 2007). This adds another layer of interpretation to the rock art as it is located in landscapes that demand courage and willpower from the creators of the rock art. These people have been drawn to landscapes that evoke strong feelings such as fear, claustrophobia and fear of heights. In addition to this, the landscapes may challenge the senses in that one might lose one's sight in the caves or one might get closed in by unrelenting noise from a waterfall. By overcoming these types of landscapes, one can emerge on the other side as reborn. There might have existed an idea that a more profound form of communication was achievable in places where the landscape presented an obstacle for humans to overcome.

#### THE INFLUENCES OF WATER AND SOUND

In Central Norway, the sites of Bøla and Selbustrand are examples of rock art that is greatly affected by the changing seasons and weather. Both seasonality and water levels decide whether or not the rock art can even be seen. Variations in seasons can be regarded as activation/deactivation of a site's significance. For example, a site could be activated or deactivated depending on whether it was available by foot or boat. Once activated, the site might have been reserved for certain members of society who could have had exclusive rights to sanctify the site with rock art (Ljunge, 2010). Various bodies of water have been viewed as points of contact between the human world and other dimensions. Amongst the Sámi people it was believed that one could reach the underworld through the bottom of the holy lake Savio. The presence of gods, spirits and passages to other worlds in the landscapes where the humans resided, makes it probable that communication between the profane and the sacred was as essential as eating and sleeping (HELSSKOG 1999). The Sámi

beliefs that natural formations in the landscape, such as mountains, waterfalls and lakes, were imbedded with immaterial powers are thought to be remnants from beliefs stretching thousands of years back in time. Powerful natural formations were the homes of spirits and other mythical creatures. These formations were also used for sacrificial rituals and they were marked with stone circles or wooden figures. This praxis might be seen at the Bøla and the Selbustrand sites, only here they were marked using rock art (NORSTED 2006). For both these sites, the sound of water is another factor to consider when interpreting the rock art. At Bøla, there is a great amount of noise emitting from the waterfall where the reindeer is carved. At Selbustrand, the melting of the ice in the spring creates loud rumbling. When the lake is free of ice, a constant lapping of water almost sends the observer into a meditative state. These aspects must be included in the interpretation of both the rock art and the landscape as the sensory impressions affect the overall understanding of the art and the place. At Bøla, the noise from the waterfall completely encloses the observers as they stand with the rock art in a room walled by sound. The volume will drain anyone of energy after a couple of hours. The relationship between sound and landscape creates a liminal sphere which might have represented the relationship between the profane and the sacred (GOLDHAHN 2002). Liminal spheres that contrast land and water, summer and winter, the wild and the domestic, the quiet and the loud, not only mark the physical change in the landscape but mark the change in the individual's or the group's cultural/psychological stage. Even though the Bøla reindeer and the rock art at Selbustrand are covered by water at certain times of the year, the knowledge of the rock art's whereabouts could have been sufficient in communicating with spirits and beings from other worlds. In other words, the communication was always open.

#### ON THE BRINK OF OTHER LANDSCAPES, AND OTHER WORLDS?

Rock art sites which are located on the brink to other landscapes, like liminal zones, can be interpreted as especially powerful places for humans to communicate with other-worldly spirits. Liminal zones in the landscape are places where worlds meet and might be the reason why these places were adorned with rock art. In shamanistic cultures there existed religious practices connected to experiencing other realities. This is made possible by the help of human or animalistic spirits. The shaman's travels to other worlds come from the cosmological view that there were three levels of worlds: a world above, a human world, and an underworld. Openings in the borders between these worlds were designated places for a shaman to see the other dimensions. The cosmological view would have been rooted in the known world, meaning that for example the underworld could be under water or inside solid rock (NORSTED 2006). Several cultures across the world have had the belief that rocks have been inhabited by other beings. Among Algonquian peoples there existed an idea that rock art by water was inhabited by

small, hairy and humanlike creatures called Memegwashio. The Memegwashio would seal their magical portals in the rock by a handprint in blood. Similarly, the Sámi people believed certain mountains and rocks were holy and inhabited by other beings. In Finnish folk poetry there are mentions of snakes and deer living inside rocks (LAHELMMA 2010).

By laying the dead in burial cairns one has ensured that the dead become part of the landscape in their own topographical element. The inside of the cairn is private and appears as a transition between the living world and the realm of the dead. Rock art in the privacy of a grave chamber might therefore have been part of burial rituals to help the dead into their new state. The Bronze Age burial cairns in Norway were all placed by water which in itself symbolize a liminal zone. The transition between land and water is an undefinable place that can be connected to both life and death and these associations might be the reason why the burial cairns were placed like this in the landscape – as a transition from life to death (WRIGLESWORTH 2002). Like the grave chambers, the caves are separate rooms, or landscapes, within the macro landscape. The cave entries, like those at the Solsem cave and the Fingal cave, make up an obvious portal into another world within the mountains. In order to explore the insides of the caves, one has to physically cross the threshold of the cave doors. Caves may have been believed to be passages to the underworld in the shamanistic cosmos. The walls, ceiling, floor and rocks within the cave were given more meaning. Not only could humans have hallucinatory travels to the underworld, but physical travels into the darkest depths of the caves (CLOTTES & LEWIS-WILLIAMS 1998; OUZMAN 1998). Certain special members of society, like shamans, might have been the only ones given access to caves whereas other members of society might have been kept out. The caves could have been either public or private, which means the rock art would also have been either public or private. Cave rooms that require crawling or that have uneven floors are contributing factors to whether the cave was public or not. The entries might have been public, but in the case of Solsem and Fingal there is no rock art at the entrances. It is more physically demanding to reach the rock art in these caves and it is therefore natural to assume that the rock art was reserved only for a certain group of people. Rock art placed in the innermost and darkest part of a cave, i.e. the rock art that is both difficult to reach and to see, could signify communication with spirits or creatures of the underworld rather than other humans (COONEY-WILLIAMS & JANIK 2018; JANIK & KANER 2018). The uniformity of the human figures found in the Solsem and Fingal caves give a haunted expression and the feeling of being watched (fig. 10). Mixed with the loss of senses and heightening of other senses, the cave room becomes an other-worldly experience.

At the Honnhammer site, some of the paintings are available from land whilst others are situated on cliff walls that plummet into the fjord below. Honnhammer I is reached by foot. The paintings are on a rock

wall beneath an overhang which creates the appearance of a rock portal (fig. 6). In this case, the rock art is painted on the wall of the landscape room and, in addition to this, the paintings seem to be within a portal of stone. Honnhammer I also has another intriguing element: the rock art has been painted on top of a zoomorphic rock formation. The formation appears to be a deer head, but it requires the correct light in order to be clearly visible. The special aspects to Honnhammer I could be clues to the purpose of the place. Even though the rock art is available from land, it is not given that anyone could take part in the ceremonies or rituals that took place there. In Aboriginal rock art there are examples of motifs only a few initiated people were allowed to paint. Even if the rock paintings were washed away, their descendants would still act as if the rock art lived on inside the rock (GOLDHAHN *et al.* 2021). Two aspects are relevant for the material from Central Norway: 1) that rock art can live on within the rock and in the memory of a society even when the art in a way disappears, and 2) that it is plausible that some rock art was reserved for some special members in a society and that they were given access to certain landscape rooms. This could be the case for many rock art sites. A site's function as a ritual place may have turned the entire rock art area off limits. This would have made it possible for a selected few to control the access of the place. When the rock art was placed in inaccessible places, like the rock art on the cliffs at Honnhammer, controlling access would have been even more achievable (NORSTED 2006).

Many cultures have associated water with a cosmological world. Among the Sámi people it was believed that one could reach the underworld through water and that in an animistic world the surrounding nature is filled with spirits and other-worldly beings that are unlike humans. Mountains, waters and animals have souls and can be the physical renditions of spirits. These could choose to help the humans or not. Rock art may therefore have been an attempt to please these spirits who were essential to the survival of a human society (HELKOG 1999; NORBERG 2020). The Bøla site might have been just this, but it might also have been a site of seasonal rituals. The deep carvings of the Bøla reindeer suggest that it was carved at multiple occasions, for instance at certain times of the year for hunting purposes. In shamanistic societies, sacrifice could have played a part in the hunting rituals. By sacrificing part of the hunted game to spirits who guarded the prey, one ensured that the prey was honoured and new animals were born. The spirits who guarded the prey could reside inside rock and could take the shape of the prey, like a reindeer (NORSTED 2006). Actions are rooted in cosmological, religious and ideological ideas. Rock art could have been attached to different aspects within a society such as a person, a particular ritual or communication. Rock art might have been the primary in ideas and rituals and humans were simply vessels for placing the rock art in the landscape (SYVERTSEN 2002).

## CONCLUSION

In the graves, the rock art is hidden in closed chambers, immortalised in the landscape. The rock art's surroundings are a stark contrast to the open rock art sites. The rock art in the graves are turned inwards toward the dead in complete darkness. Similarly, the rock art in caves is also directed to the darkness. In addition, the caves offer a landscape room that puts humans to the test both physically and mentally. The rock art sites by the travel routes show other meanings of hidden rock art. Whether the environment features unavailable terrain, submersion or discomfort, the rock art sites all have a form of excluding factor. The chosen rock art sites in this article are found in special landscapes which may indicate its use, but to whom or what is the rock art directed towards? Rock art that is placed in graves or in the inner and darkest parts of caves do not seem primarily to have been communicating with living humans. At the sites by travelling routes, the rock art is directed at water. At sites like Selbustrand and Bøla, the water even takes the rock art away at certain times of the year. A seasonal re-encounter with the rock art might have been activating or deactivating the site as a ritual scene. The rock art is placed at transitional places in the landscape, especially the transition between land and water. These places could be associated with both life and death. The fascination of water, unknown depths, and a place where humans could not live might have strengthened the ideas that water contained special powers within a landscape. Other worlds could exist in water or in rock, and openings at their borders could have been viewed as a way to communicate with the beings within. Special qualities in a landscape contribute to the possible meeting between the natural and the supernatural. The qualities can include elements that activate other senses than the visual of the landscape and rock art. Sites where sound can create separate aural rooms help to ground distinctions between the profane and the sacred. The psyche is equally tested at sites where sound is not present, leading one to create illusions oneself. A phenomenological approach and landscape analyses give more layers to the interpretation of rock art and may bring us closer to its creators.

## ACKNOWLEDGEMENTS

I wish to thank Heidrun Stebergløkken for encouraging me to participate in the symposium.



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Fig. 1 - The remainders of the grave chamber at Steine. (Photo: Ane Aasmundstad Sommervold).



Fig. 2 – From the grave chamber at Rishaug. (Photo: Ane Aasmundstad Sommervold).



Fig. 3 – The entrance to Solsem cave. The entry appears as a dark chasm in the otherwise solid rock wall. There are 21 human figures painted in the cave. (Photo: Arve Kjersheim from Lødøen, 2010, p. 26)

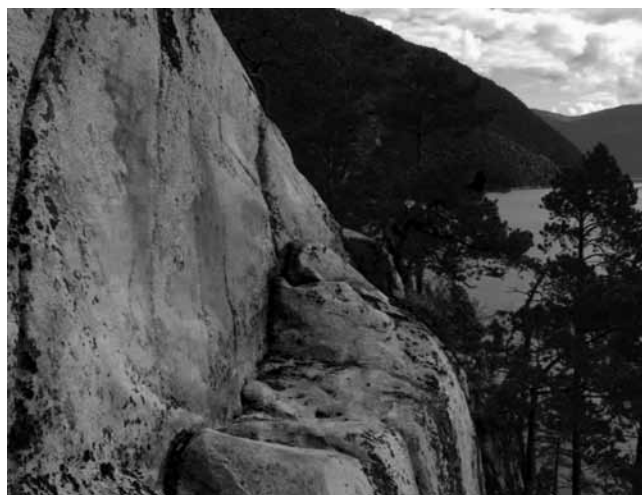


Fig. 4 – Some of the human figures found in the Fingal cave. There are 48 figures in total. (Photo: Bernt Kjørsvik).



Fig. 5 – One of the panels at Honnhammer. (Photo: Eva Lindgaard from Sauvage & Stebergløkken, 2017, p. 13).



Fig. 6 – Honnhammer I is underneath an overhang, creating something like a doorway in the rock. The zoomorphic formation is difficult to discern just under the painted deer to left. (Photo: Åge Hojem & Raymond Sauvage from Sauvage, Hojem & Lindgaard, 2015, p. 20).



Fig. 7 - Imprints of feet emerged along the shore of Selbustrand in the spring. (Photo: Heidrun Stebergløkken).



Fig. 8 - The Bøla reindeer in 1907 when the waterfall still ran naturally. Today the waterfall is blocked by a concrete wall. (Photo: Gustaf Hallström from Norberg, 2020, p. 161).



Fig. 9 - The Bøla site flooded, emitting tremendous noise and danger. (Photo: Odd Bratberg).



Fig. 10 - The human figures in the Fingal cave make an eerie impression. (Photo: Arve Kjersheim from Norsted, 2008, p. 29).



## Coastal landscape and shore-bound rock-carvings a maritime perspective from the south-west coast of Norway

Wenche Brun \*

### SUMMARY

The majority of the rock art sites in Rogaland (south-west Norway) are located in maritime surroundings: islands, strait and inlets, small tongs and stripes of lands. The fiords separate the inland and the mainland from the open North Sea. Numerous panels of rock carvings appear close to the shoreline along the fiord-system surrounding the city of Stavanger. Actually, most of the rock art, with few exceptions, relate to water, sea and ocean.

With a maritime perspective, a discussion concerning the shoreline and the seascape might add value to more traditional and well-established agricultural frameworks of interpretation. In this area, the variation of shoreline between bronze age and today is relatively minor compared to elsewhere; there is no need "to look for the lost sea" (Ling 2014). The panels are situated roughly in their original topographical context, with just a few metres in variation.

Looking at the shore-bounded rock-art panels with a maritime view might offer a wider dimension to the established interpretations, contextualizing the concept of maritime networks within short and far distances. The sea is dominating in this area, and the distribution of rock carvings as well as the motives in many ways implies extensive maritime territories. By exploring the panels and the relationship between them and the surrounding seascape with a maritime view might open for a further discussion of both practical and more mythical aspects of the shoreline, the act of journey, departure and arrival.

**Keywords:** maritime landscape, seascape, rock art, Stavanger area, south-west coast of Norway

### RIASSUNTO (PAESAGGIO COSTIERO E INCISIONI RUPESTRI LUNGO IL LITORALE: UNA PROSPETTIVA MARITTIMA DALLA COSTA SUD-OCCIDENTALE DELLA NORVEGIA)

La maggior parte dei siti di arte rupestre di Rogaland (sud-ovest della Norvegia) si trova in un ambiente marittimo: isole, stretti e insenature, piccole lingue e strisce di terra. I fiordi separano l'entroterra e la terraferma dal Mare del Nord. Numerosi pannelli con incisioni rupestri sono situati vicino al litorale, lungo il sistema di fiordi che circonda la città di Stavanger. In realtà, la maggior parte dell'arte rupestre, con poche eccezioni, è in relazione con l'acqua, il mare e l'oceano.

Con una prospettiva marittima, una discussione riguardante il litorale e il paesaggio marino potrebbe aggiungere valore ai più tradizionali e consolidati quadri interpretativi agricoli. In questa zona, i cambiamenti della linea costiera tra l'età del bronzo e oggi sono stati relativamente minori rispetto ad altrove; non c'è bisogno di "cercare il mare perduto" (Ling 2014). I pannelli sono collocati grosso modo nel loro contesto topografico originario, con una variazione di pochi metri.

Guardare ai pannelli di arte rupestre che si trovano lungo la costa in relazione al mare potrebbe dunque offrire una dimensione più ampia alle interpretazioni già consolidate, contestualizzando il concetto di reti marittime a breve e a lunga distanza. Il mare è dominante in questa zona e la distribuzione delle incisioni rupestri, così come i motivi, implicano in molti modi ampi territori marittimi. Esplorando i pannelli, le relazioni tra loro e il paesaggio marino circostante da una prospettiva marittima potrebbe aprire una più ampia discussione sugli aspetti sia pratici che più mitici della costa, sull'atto del viaggio, della partenza e dell'arrivo.

**Parole chiave:** paesaggio marittimo, paesaggio marino, arte rupestre, area di Stavanger, costa sud-occidentale della Norvegia



Fig. 1 - The maritime landscape of Rogaland, south west Norway (Photo: Am, UiS)



Fig. 2 - The panel of Hodnafjell, Mosterøy with the view towards the North Sea (Photo: Am, UiS)

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# Downscaling Cosmological Landscapes: from Early to Mid-Holocene Rock Art in Northern Norway

Charlotte Damm \*, Jan Magne Gjerde \*\*

## SUMMARY

The rock art of northern Norway is well-known, not least due to the UNESCO World Heritage sites at Alta dating back to c. 5200 cal BC. It is perhaps less well-known that northern Norway also has earlier rock art dating back to c. 9000 cal BC. While the early phase of rock art is dominated by large, natural sized animals such as elk, reindeer, bear and whale in a naturalistic style, the later period in addition to animals have many humans, boats and geometric motifs. Although varying in size, the individual motifs are typically small (10-20 cm), and although identifiable to species the style is more schematic. The rock art now includes narrative scenes and compositions which display communal activities involving groups of people interacting, e.g. hunting and ritual activities. In this paper we will explore how the panels and motifs in the early and late period respectively relate to the landscape, and argue that there is a downscaling not just in the size of the motifs but also in the perception of the landscape. This downscaling is associated with changes in settlement and mobility patterns, from an early highly mobile mode of habitation to a semi-sedentary mode with increased regionalization.

## RIASSUNTO (RIDIMENSIONAMENTO DEI PAESAGGI COSMOLOGICI: L'ARTE RUPESTRE DELLA NORVEGIA SETTENTRIONALE DURANTE L'OLOCENE INFERIORE E MEDIO)

L'arte rupestre della Norvegia settentrionale è ben nota, non da ultimo per il sito Patrimonio dell'Umanità di Alta risalente al 5200 cal BC. circa. È forse meno noto nella Norvegia settentrionale si trova anche arte rupestre precedente, risalente al 9000 cal BC. circa. Mentre la fase iniziale dell'arte rupestre è dominata da raffigurazioni di grandi animali di dimensioni naturali come alci, renne, orsi e balene in stile naturalistico, nel periodo successivo oltre alle raffigurazioni di animali troviamo anche figure umane, barche e motivi geometrici. Anche se di dimensioni variabili, le singole figure sono tipicamente piccole (10-20 cm), e sebbene identificabili per specie lo stile è più schematico. In questa fase l'arte rupestre include scene narrative e composizioni che mostrano attività comuni che coinvolgono gruppi di persone che interagiscono tra loro, ad esempio attività di caccia e attività rituali. In questo articolo esploreremo come i pannelli e i motivi figurativi del primo periodo e di quello successivo si relazionano con il paesaggio, e sosteneremo che c'è un ridimensionamento non solo nella dimensione dei motivi, ma anche nella percezione del paesaggio. Questo ridimensionamento è associato a cambiamenti nei modelli di insediamento e mobilità, da una prima modalità di insediamento caratterizzata da una alta mobilità a una modalità semi-sedentaria con una maggiore regionalizzazione.



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# Spatial patterns of Rock Art at El Rum Oasis, Bayuda/Sudan

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## SUMMARY

Their distribution patterns are rather inhomogeneous, indicating their direct connection with different cultural-historical landscape elements and archaeological sites. This paper will focus on rock art sites of different periods (prehistoric, ancient, and medieval) entangled with the micro-oasis of El Rum, which is at the moment subject to comprehensive landscape-archaeological investigations. The paper will show the different spatial distribution patterns of rock art motifs, and their spatial correlation as well as functional contextualization with different land use strategies developing diachronically in and around the oasis of El Rum, and its immediate hinterland. Different rock art categories (in regard of their date as well as motifs) correlate with specific concepts of rangeland economies, forming a differentiated and integrated model of land and water resources management, closely entangling intensified oasis agri- and horticulture with pastoral production strategies making use of un-arable rangelands. Rock art depictions of different livestock, associated with long and middle range pastoral mobility, can be interpreted chronologically and functionally. The aim of this paper is to demonstrate the potential of rock art analysis for the general reconstruction of these subsistence and land use strategies in terms of spatial and landscape archaeology.

## RIASSUNTO (MODELLI SPAZIALI E ARTE RUPESTRE NELL'OASI DI EL RUM, BAYUDA/SUDAN)

Quando i modelli di distribuzione dell'arte rupestre appaiono piuttosto disomogenei, possono suggerire una loro connessione diretta con gli elementi del paesaggio storico-culturale e con i siti archeologici. Questo articolo si concentrerà sui siti di arte rupestre, di diversi periodi (preistorico, antico e medievale), della micro-oasi di El Rum, che è attualmente oggetto di approfondite indagini paesaggistiche e archeologiche. L'articolo mostrerà i diversi modelli di distribuzione spaziale dei soggetti di arte rupestre e la loro correlazione spaziale, nonché la contestualizzazione funzionale con diverse strategie di uso del suolo che si sviluppano diacronicamente all'interno e intorno all'oasi di El Rum e al suo immediato entroterra. Diverse categorie di arte rupestre (diverse per datazione e soggetto) si correlano con concetti specifici di economia dei pascoli, formando un modello differenziato e integrato di gestione della terra e delle risorse idriche, intrecciando strettamente l'agricoltura e l'orticoltura delle oasi con le strategie di produzione pastorale che utilizzano le terre non coltivabili. Le rappresentazioni di arte rupestre di diversi allevamenti, associati alla mobilità pastorale a lungo e medio raggio, possono essere interpretate cronologicamente e funzionalmente. Lo scopo di questo lavoro è dimostrare il potenziale dell'analisi dell'arte rupestre per la ricostruzione generale di queste strategie di sussistenza e di uso del suolo in termini di archeologia spaziale e paesaggistica.

## 1. INTRODUCTION

The Wadi Abu Dom is situated in the central Bayuda region in northern Sudan. During the archaeological survey project "Wadi Abu Dom Itinerary", altogether over 8300 archaeological sites were documented along the banks of the wadi and its immediate hinterland (KARBERG & LOHWASSER, 2018a).

Among the discovered archaeological features are 217 rock art panels. Their distribution patterns are rather inhomogeneous, indicating their direct connection with different cultural-historical landscape elements and archaeological sites (KARBERG, 2020). This paper will focus on rock art sites of different periods (prehistoric, ancient, and medieval) entangled with the micro-oasis of El Rum (Fig. 1 & 2), which is currently subject to comprehensive landscape-archaeological investigations (KARBERG *et al.*, 2020). The paper will show the different spatial distribution patterns of rock art motifs, and their spatial correlation as well as functional contextualisation with different land use strategies developing diachronically in and around the oasis of El Rum, and its immediate hinterland. Different rock

art categories (in regard of their date as well as motifs) correlate with specific concepts of rangeland economies, forming a differentiated and integrated model of land and water resources management, closely entangling intensified oasis agri- and horticulture with pastoral production strategies making use of un-arable rangelands. Rock art depictions of different livestock, associated with short- and middle-ranged (pastoral or non-pastoral) mobility, can be interpreted chronologically and functionally.

The aim of this paper is to demonstrate the potential of rock art analysis for the general reconstruction of these subsistence and land use strategies in terms of spatial and landscape archaeology.

## 2. METHODOLOGY

### 2.1 Geostatistics

Analysis of spatial clustering and patterns is mainly done with GIS-based kernel density estimation (CONNOLLY & LAKE, 2010, pp. 175-178). For general spatial distribution pattern analysis covering the whole course of the Wadi Abu Dom, spatial cells of 5000 by 5000 m

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proved useful. For more detailed investigations of smaller areas of interest (like the immediate vicinity of the oasis of El Rum) archaeological feature density was estimated in spatial cells of 350 by 350 m till 750 by 750 m. For indicating different relations of production in the archaeological record, it is assumed that indicators of social mobility can be correlated with pastoral production strategies (KHAZANOV, 1994, pp. 16-17), while indicators of sedentarism relate to agri- and horticultural production as major source of subsistence. Multi-room stone constructions and kraal-shaped clusters of round huts are estimated as indicators for sedentarism, while camp sites and solitary, open shelters are interpreted as temporary installations and therefore indicators for mobility.

### 2.2 Chronology

One major flaw of the data acquired in the Wadi Abu Dom Itinerary archaeological survey is the fact that – as usual in archaeological surface surveys – only a minor part of the documented archaeological record is clearly datable. In some cases datable surface finds are clearly related to anthropogenic installations (KARBERG & LOHWASSER, 2018a, pp. 43-47); in few cases test soundings revealed organic material capable of radiocarbon dating (KARBERG & LOHWASSER, 2018a, pp. 32-36). Most of this datable material indicates a peak of human activity in the lower Wadi Abu Dom in late antiquity (late Meroitic and Post-Meroitic period) and the Middle Ages (Christian medieval period until early Islamic Funj period). In some parts of the lower Wadi Abu Dom, comparably stable cultural landscapes can be reconstructed over longer timespans, while in other parts (especially at the fringe towards the middle Wadi Abu Dom) a fluctuating cultural landscape with regular shifts between agricultural and pastoral relations of production has to be considered (KARBERG & LOHWASSER, in print). Some of the rock art documented in the lower Wadi Abu Dom correlates to this rough dating estimations, since crosses and other Christian symbols obviously date to the Christian medieval period, while dating camel depictions to the same period corresponds to the general assumption that the introduction of *camelus dromedarius* as widespread domestic animal in north-eastern Africa took place at the fringe between late antiquity and the early medieval period. Besides these few chronological evidences, the – in general – still rather diffuse internal chronology of the majority of archaeological record documented along the Wadi Abu Dom causes some difficulties, which hopefully can be clarified by intensified field research in future. Nevertheless, the recognizable spatial patterns between the different categories of archaeological record imply their mutual structural interdependency.

### 2.3 Land cover analysis

For estimating stable or fluctuating land use strategies on a long-term basis, multispectral satellite data in context with geostatistical evidence from the archaeological record was used. The correlation between the development of irrigation schemes and wells dating at least from the medieval period was investigated re-

cently, and showed that the western part of El Rum Oasis (around the settlement of Umm Ruweim) had a comparably stable land use character over longer periods, while the eastern part (around Quweib and Umm Khafour) at the edge towards the rangelands of the middle Wadi Abu Dom has to be interpreted as a fluctuating cultural landscape (KARBERG, in print). Analysis of the development of land use patterns, especially irrigation schemes and natural pasture, was carried out using raster data cluster analysis using ERDAS Imagine software provided by the Institute for Geoinformatics of the University of Muenster, based on the standardized *Normalized Difference Vegetation Index* (TUCKER *et al.*, 2005).

### 3. CATEGORIES OF ROCK ART AROUND EL RUM OASIS

The majority of rock art sites along the Wadi Abu Dom – 151 panels – is situated in the lower Wadi Abu Dom around the oases of El Rum and Ghazali (Fig. 3). The predominant motif categories consist of depictions of cattle, camels, human beings, crosses, and geometric motifs.

Most elaborate abstract geometric rock drawings concentrate at a narrow passage along a tributary khor; this rock art station most probably dates back to the Neolithic period (KARBERG, 2014). Since there are no indications that the role of the oases of El Rum and Ghazali as ecologically favoured zones date back to this time, this specific rock art station is not further integrated into the analysis this paper is based on.

Cattle depictions are predominantly (21 out of altogether 25 panels) found at on single rock outcrop at the southern bank terrace of the Wadi Abu Dom downstream the oasis of Ghazali; the other four rock art panels depicting cattle are situated in its immediate vicinity (Fig. 4 & 5). Camel depictions are more widespread within the whole Wadi Abu Dom, but also concentrate predominantly in the lower wadi. Most camel depictions are found along pathways leading from the Wadi Abu Dom southward towards Wadi Barkol (Fig. 6 & 7). Depictions of crosses and other Christian motifs (including short inscriptions, cf. TSAKOS, 2018) are distributed in two different ways along the lower Wadi Abu Dom: First, these Christian religious symbols are concentrated around the monastery of Ghazali, and obviously connected with the specific religious landscape defined by the monastery. This includes a small shelter (“Michael’s hermitage”) in some distance from the monastery, most probably the habitation site of an anchorite which depended to the monastic organization (KARBERG & LOHWASSER, 2018a, pp. 71-77; cf. also EGER *et al.*, 2019). Besides these concentrations of Christian rock art motifs clearly connected to monastic life at Ghazali, another agglomeration of cross depictions and some other Christian motifs (but without any accompanying inscriptions) is found south of El Rum oasis. Closely connected with camel depictions are rock drawings of human beings. Many of them form integrated scenes with the camels (human beings are depicting tending or riding the camels), but solitary depictions of human beings are also in many cases

closely related to camel depictions. Other depictions – like giraffes, dogs, bows, or sandal prints – are found only singularly within the rock art corpus of the Wadi Abu Dom. They can be compared to similar motifs in other regions (KARBERG, 2018), but their low distribution over the study area makes it inappropriate to incorporate them into a quantitative analysis.

#### 4. SPATIAL DISTRIBUTION OF ROCK ART

##### 4.1 *Distribution patterns*

Especially the depictions of camels and cattle, typical livestock associated with pastoral production modes, seems to imply that rock art in this part of the Sudan was primarily an artistic statement of mobile pastoral social groups. The spatial distribution patterns of rock art panels, however, seem to contradict this assumption to some extent.

During the survey in the Wadi Abu Dom, different archaeological features indicating either sedentary-agricultural or mobile-pastoral relations of production turned out to be clearly differentiated from each other. Temporary camp structures and long-term sedentary habitation sites correlate spatially to wells, irrigation schemes, or natural pasture. Spatial distribution patterns of both archaeological indicators define “land for mobility” and “land for settlement” in and around the lower Wadi Abu Dom. Compared to the distribution patterns of rock art depictions, the allocation of typical pastoral motifs like livestock with mobility indicators in the archaeological record could be expected. When analysing the data, however, it turns out that such an anticipated spatial allocation cannot be observed – on contrary, in many parts of the Wadi Abu Dom rock art – surprisingly especially motifs with a pastoral connotation like cattle and camels – are spatially correlated to archaeological indicators of sedentary-agricultural relations of production.

When spatially comparing the distribution of rock art in the whole of the Wadi Abu Dom with patterns of mobility and sedentarism in the archaeological record in general, it is obvious that the lower Wadi Abu Dom (with the oases of El Rum and Ghazali) is dominated by sedentarism indicators, while the middle and upper Wadi Abu Dom are dominated by mobility indicators with only some few regional clusters of archaeological features indicating sedentarism. Rock art clusters are, however, predominantly found in the lower wadi, with only one single larger cluster in the upper wadi south of the Jebel Sultaniya – interestingly not far away from a small cluster of permanent habitation sites dating to the medieval period (Fig. 8).

Also, when focusing on the lower wadi with its oases, no spatial correlation between rock art clusters and small-scale density kernels of archaeological mobility indicators are visible (Fig. 9). Indeed, rock art clusters are rather found in spatial context with specific path networks, and the course of the main wadi itself. Remarkably, the vast majority of rock art in the lower Wadi Abu Dom is found between the oasis of Ghazali and the western part of El Rum oasis (Fig. 10), where irrigation was more stable on a long-term basis as in

the eastern part of the oasis (KARBERG, in print). Additionally, the fact that the vast majority (97%) of rock art panels in the lower Wadi Abu Dom are found at the southern wadi bank or its hinterland – the areas north of the main wadi are almost empty of rock art.

When looking at different categories of rock art, specific spatial distribution patterns become even more obvious. First of all, the concentration of almost all cattle depictions at or at least around one single spot is obvious. This spot is not directly associated with the oasis of Ghazali, but situated west of it only 13 km away from the Nile. Camel depictions are in most cases not associated with dense kernels of archaeological features indicating pastoral mobility (as it might be assumed), but merely with linear path remains leading away from the oases of the lower Wadi Abu Dom. Christian motifs and depictions of human beings are either associated with the specific cult landscape around the monastery of Ghazali, or otherwise in most cases found in close relationship to camel depictions.

##### 4.2 *Alignment of rock art, other archaeological features, and cultural landscape elements*

The mutual alignment of spatial distribution patterns of the different categories of rock art with each other (Fig. 11) as well as with archaeological features indicating sedentarism and mobility show that in the Wadi Abu Dom rock art cannot be assumed to be a pastoral concept of art. On the contrary, no spatial relations between rock art (especially of motifs like cattle and camels which could have been associated with pastoral relations of production) and “zones of mobility” defined by dense kernels of archaeological features indicating mobility. This is true on a short-ranged as well as a middle-ranged level: When looking at the course of the Wadi Abu Dom as a whole, it turns out that most rock art is concentrated in the lower wadi dominated by oases, and declines rapidly in the middle and upper wadi which was in most periods dominated by pastoral relations of production (KARBERG & LOHWASSER, 2018b). On a short-ranged level, when analysing density kernels of mobility indicators on the basis of 750 by 750 m spatial cells and comparing them to clusters of rock art, also no direct alignment can be stated for the lower Wadi Abu Dom in particular.

Interestingly, especially cattle depictions do not correspond at all not only with general archaeological indicators of mobility (and therefore pastoral production), but also with archaeologically testified evidence for cattle keeping. In the pastoral society of late antiquity in the middle and upper Wadi Abu Dom, cattle keeping and beef consumption at least by a local elite can be derived from archaeozoological material from the elite settlement complex of El Tuweina (MORGENSTERN, in preparation). This pastoral cattle keeping system reconstructed from the archaeological record does not correspond to any cattle depictions in rock art in this part of the wadi. On the contrary, the only cattle depictions in the Wadi Abu Dom are neither aligned with the zone of pastoral economy nor with the oasis landscape of the lower wadi, but exclusively close to the wadi mouth into the Nile. This direct connection with



the immediate hinterland of the riverine zone might indicate that the cattle depictions do not result from a (oasis-based or pastoral) wadi economy, but was socio-economically connected to the riverine zone.

Concerning camel depictions, the close mutual alignment of density kernels of camel drawings with depictions of human beings as well as Christian motifs is evident. All these rock art conglomerates are neither spatially aligned with archaeological indicators of pastoral mobility, nor with areas of natural pasture deduced from multispectral satellite imagery analysis. Interestingly, the only major category of archaeological and landscape data to be spatially connected to this joint clusters of rock art depictions of camels, human figures, and Christian symbols are path relicts leading southward from the oases of the lower Wadi Abu Dom; the rock art clusters are situated near some passages through a rocky ridge delimiting the immediate hinterland of the wadi banks to the south.

Other clusters of rock art depicting Christian motifs and human beings are closely connected to the monastery of Ghazali, which can be assumed to be merely an exclave of Nile-valley based Christian culture, and not closely connected to the religious life of the indigenous inhabitants of the Wadi Abu Dom and the Bayuda rangelands in general (EGER *et al.*, 2019).

## 5. CONCLUSIONS

In general, the spatial distribution patterns of different categories of rock art in the Wadi Abu Dom do not indicate a close entanglement of this artistic genre with socio-economic patterns of the inhabitants of the wadi oases of the lower, or the pastoralists of the middle and upper Wadi Abu Dom. Cattle depictions are exclusively found in the immediate hinterland of the riverine cultivation zone of the Nile valley, downstream of the oases of the lower Wadi Abu Dom. This might indicate that these cattle depictions were not created by local inhabitants, but by Nile-valley based herders who drove cattle on a short-ranged level upwards from the cultivated land along the riverbanks in order to make use of the natural pasture of the immediate hinterland of the river. Socio-economic relations with the indigenous wadi dwellers remain unclear, further blurred by the indetermined date of the cattle depictions.

Camel depictions and directly associated drawings of human beings and Christian symbols are commonly aligned with linear pathway remains rather than archaeological pastoral mobility indicators or areas of periodic natural pasture. The linearity of these

pathways might indicate their role in middle-ranged communication, while network-shaped path remains closely associated with density kernels of archaeological features and zones of periodic natural pasture are to be connected with short-ranged, local communication patterns (KARBERG & LOHWASSER, 2018a, pp. 80-83; 102-104). The style and motifs of some of the camel depictions, indicating riders or cargo payloads, further indicate a connection of these rock art stations with middle-ranged communication patterns rather than a pastoral or semi-pastoral transhumant lifestyle of the local inhabitants (Fig. 12).

Finally, other clusters of Christian motifs and depictions of human beings associated with Christian inscriptions are connected to the specific cult landscape around the monastery of Ghazali, especially along the route between the monastic centre and religious satellite sites, i.e. "Michael's hermitage". Also in this case some connection with external cultural influences on the Wadi Abu Dom seems likely: First because some general indications that the monks inhabiting the monastery of Ghazali came from outside and were not recruited among the wadi dwellers (EGER *et al.*, 2019), and second because of the presence of Christian rock inscriptions among the rock art stations only in the vicinity of the monastery, while in other parts of the wadi inscriptions on rock or other material are lacking completely in the archaeological record, indicating that the local indigenous population was largely illiterate.

In all this cases, the spatial distribution patterns of rock art point to external sources (also giving an explanation for stylistic similarities between rock drawings in the Wadi Abu Dom and other rock art stations in some distance, cf. KARBERG, 2014). Rock art, in general, does not seem to be an artistic expression of the indigenous inhabitants of the Wadi Abu Dom and the central Bayuda, but introduced by outsiders.

## ACKNOWLEDGEMENTS

The author expresses his gratitude to Angelika Lohwasser (project director of the Wadi Abu Dom Investigations at the University of Muenster), Jana Eger-Karberg for providing her expertise on the medieval period in the region, Torsten Prinz, Judith Verstegen, and Sven Oliver Pagel for their assistance in using ERDAS Imagine software and discussion on land use analysis, as well as Fawzi Bakhiet, Julia Budka, and Cornelia Kleinitz for many fruitful discussions on rock art issues.

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Fig. 1 - The oasis of El Rum. Photo: Baldur Gabriel

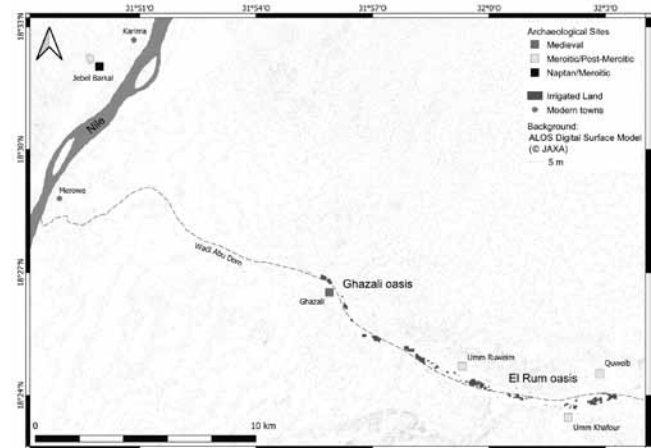


Fig. 2 - The lower Wadi Abu Dom (topographical overview). Map: Tim Karberg; Data Source for topographic contour lines: ALOS DSM © JAXA

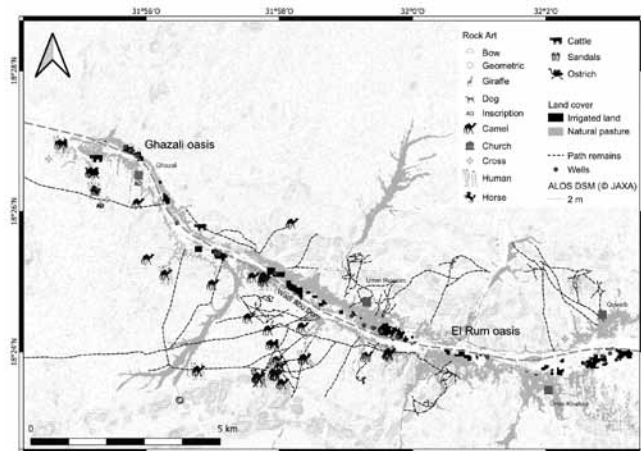


Fig. 3 - Rock art and land cover in the lower Wadi Abu Dom. Map: Tim Karberg; Data Source for topographic contour lines: ALOS DSM © JAXA



Fig. 4 - Cattle depictions west of Ghazali. Photo: Tim Karberg

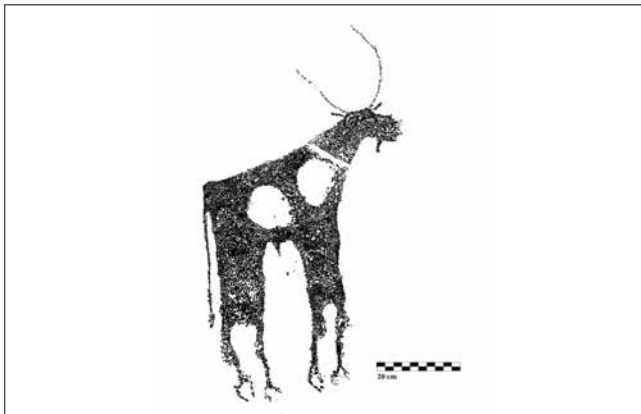


Fig. 5 - Cattle depiction west of Ghazali. Drawing: Tim Karberg



Fig. 6 - Camel depictions south of El Rum. Photo: Laura Haupt



Fig. 7 - Camel depictions south of Ghazali. Photo: Tim Karberg

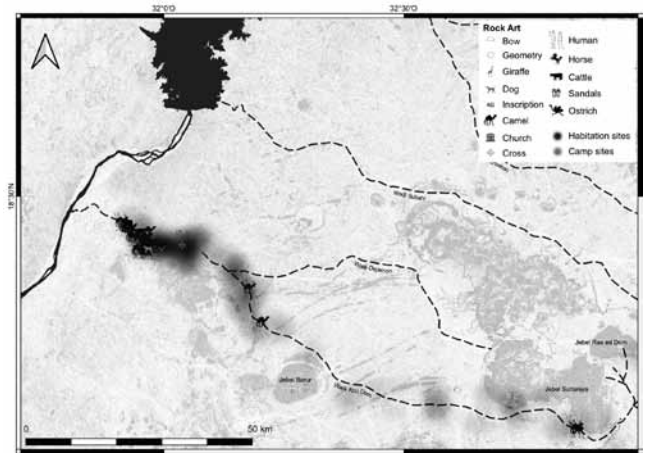


Fig. 8 - General distribution of rock art in relation to archaeological features indicating sedentarism (habitation sites) and pastoral mobility (camp sites). Map: Tim Karberg; Data Source for topographic contour lines: ALOS DSM © JAXA

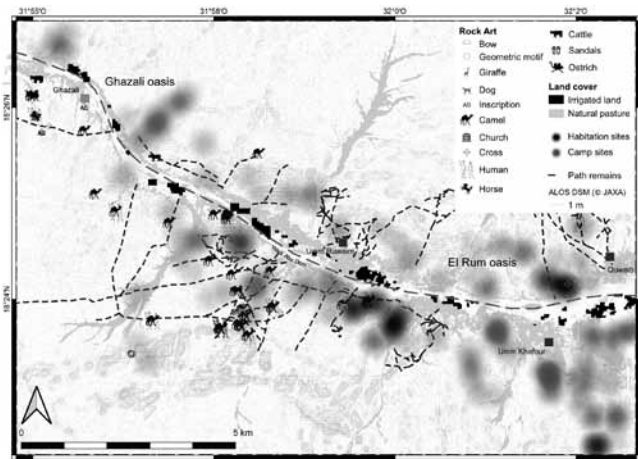


Fig. 9 - Distribution of rock art in relation to archaeological features indicating sedentarism (habitation sites), pastoral mobility (camp sites), path remains, and land cover in the lower Wadi Abu Dom. Map: Tim Karberg; Data Source for topographic contour lines: ALOS DSM © JAXA

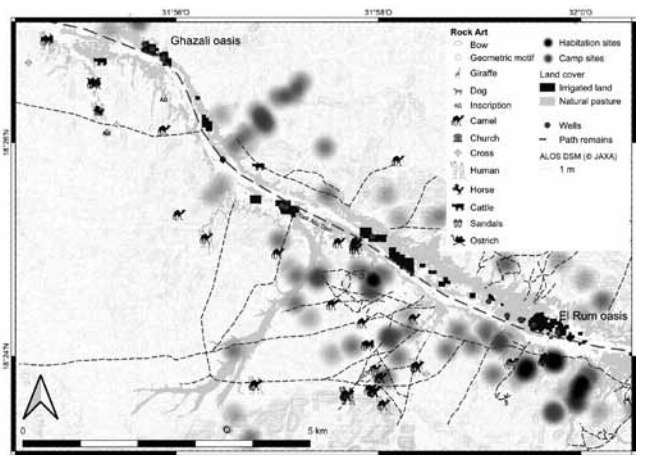


Fig. 10 - Distribution of rock art in relation to archaeological features indicating sedentarism (habitation sites), pastoral mobility (camp sites), path remains, and land cover between Ghazali and the western part of El Rum oasis. Map: Tim Karberg; Data Source for topographic contour lines: ALOS DSM © JAXA

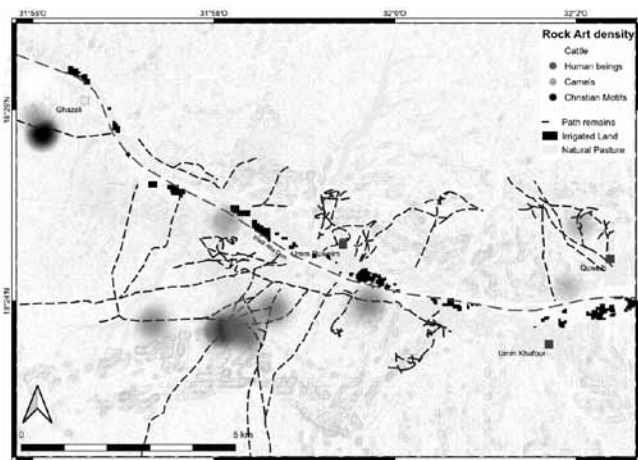


Fig. 11 - Rock art kernel density analysis in relation to path remains and land cover in the lower Wadi Abu Dom. Map: Tim Karberg; Data Source for topographic contour lines: ALOS DSM © JAXA



Fig. 12 - Modern camel mobility around El Rum. Photo: Angelika Lohwasser



# Arte rupestre, medio ambiente y paisaje cultural en el departamento Amazonas, Perú. Un estudio de caso: los grabados rupestres de Carachupa

Daniel S. Castillo Benítez\* y María Susana Barrau

SUMMARY (ROCK ART, ENVIRONMENT AND CULTURAL LANDSCAPE IN THE AMAZONAS DEPARTMENT, PERU. A CASE OF STUDY: THE ROCK ART OF CARACHUPA)

In this paper we present a case study research performed on the rock art engraving site of Carachupa, within the systematic investigations carried out on the rock art of the department of Amazonas-Peru, from 2018 onwards. These studies were conducted in the context of a general inventory of said cultural evidence, promoted by the Research Institute of Archeology and Anthropology "Kuelap" (INAAK), of the National University Toribio Rodríguez de Mendoza de Amazonas. In short, we adhere to a paradigm that takes as its basic reference axis the research through general inventories of the natural and cultural landscape, whether at the local or regional level, as a tool that optimizes the weighting of the flow of information from a critical and heuristic perspective. The result of this work is integrated into a solid and first-hand database, essential to evaluate the spatial, temporal and cultural dimensions of the rock art expressions under study. It is a holistic perspective that intersects the information obtained, highlighting the interactions and convergences that marked the evolution of the socio-cultural groups studied.

**Key words:** Cultural landscape, rock art engravings, Carachupa, Amazonas, Peru

## RESUMEN

En el contexto de las investigaciones sistemáticas del arte rupestre del departamento Amazonas, iniciadas en 2018 por iniciativa del Instituto de Investigaciones en Arqueología y Antropología "Kuelap" (INAAK), de la Universidad Nacional Toribio Rodríguez de Mendoza de Amazonas, presentamos el caso de los grabados rupestres de Carachupa. El artículo analiza en detalle estas expresiones rupestres, y las enmarca en el espacio natural y paisaje cultural. Además, evaluamos los aspectos espaciales, temporales y culturales del sistema representado, que exhibiendo cierta diacronía en la ejecución, construye el relato de una configuración territorial. La misma enlaza en primer término, a un sector del medio natural que fue percibido y simbolizado, de forma tal que se integra al conjunto del paisaje cultural, y a los grupos de descendencia o linaje que marcaron el territorio estableciendo relaciones de poder, ya sea por el lugar de origen, residencia, vínculo, o aprovechamiento efectivo de los recursos naturales. Los grabados rupestres de Carachupa articulan lo local y regional, en un sistema que exhibe a grupos humanos que coexistiendo, convergiendo o interactuando, representan un corpus de información significativa, que empleamos en la construcción de la memoria de las sociedades pasadas en el distrito de Lonya Grande y áreas vecinas.

**Palabras clave:** Paisaje cultural, grabados rupestres, Carachupa, Amazonas, Perú

## INTRODUCCIÓN

La investigación de caso recayó sobre el sitio de grabados rupestres Carachupa, que por su ubicación, con una vista panorámica de excelencia, construcción, acceso, acústica, y excepcional percepción y simbolización del espacio eco-regional y del paisaje cultural, incorporando la marcación de límites territoriales, sin lugar a dudas configura el mejor punto de partida para dar a conocer el arte rupestre del departamento Amazonas.

## ESPACIO Y TERRITORIO EN LOS GRABADOS RUPESTRES DE CARACHUPA

El sitio está ubicado en las coordenadas 17 M 0783564 y 9322706, a una altitud de 1313 msnm., en el sector superior de una elevación que presenta una excelente vista del cerro Cuaco, conocido por la riqueza de las expresiones rupestres que alberga en aleros rocosos. Una saliente rocosa de forma casi cuadrangular (fig 1), compuesta por rocas calizas de origen sedimentario, conforma un abrigo en el sector inferior, que mide 3.10

m de largo por 1.80 m de alto. Una sucesión de rocas señalan la entrada (fig 2), que es angosta y orientada al norte. El soporte con arte rupestre está orientado hacia el este, y un estrecho pasillo y bloques de piedra a modo de mesa, lo separan de un espacio de menor altura, que sin lugar a dudas se empleó como lugar de descanso o albergue. El espacio plástico presenta sectores vandalizados. De izquierda a derecha percutieron un motivo antropomorfo esquemático, de cabeza y cuerpo alargado, que lleva ambos brazos dirigidos hacia la derecha, y las piernas separadas y arqueadas; le sigue un motivo lagartiforme con la cabeza romboidal rellena al igual que el cuerpo cuadrangular, ambas extremidades arqueadas hacia los lados, y una cola larga; entre ambos y por debajo destacan dos cuerpos serpentiformes, uno alargado de base triangular, y otro en forma de U con un apéndice ascendente grabado. A la altura del lagarto agregaron una imagen serpentiforme vertical y corta, así como una forma en U invertida, y un ofidio horizontal que describe un semicírculo que encierra un punto central relleno

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y termina en dos extensiones. Por último, grabaron un ofidio que se desplaza en forma vertical, de cabeza triangular y cuerpo anguloso y alargado, que limita la representación de una mano izquierda rellena, cuyos dedos índice y medio se prolongaron hacia la derecha y entran en un área fracturada, en la que pueden distinguirse una sucesión de tres cúpulas oblicuas, líneas sub paralelas que las conectan con otro sistema de depresiones talladas conectadas por líneas semejantes a la primer serpiente/río (fig 3).

Por debajo de la agrupación reseñada, destaca la figura del más antiguo de los chamanes representados en el sitio, tal como lo atestigua el estudio de pátina realizado. El motivo serpentiforme es básico para comprender la forma en que construyeron la figura y el anexo sobre la izquierda. A partir de la percusión de dos líneas verticales paralelas que se abren en el extremo superior, definieron el cuerpo y máscara del personaje, que decoraron a partir de una línea grabada que corre de derecha a izquierda, baja en 90° y termina en la cabeza triangular de un ofidio, que se encastra con otro dispuesto paralelo al anterior hasta alcanzar el límite derecho. Por debajo la talla conforma sobre la derecha una forma cuadrangular, con un ojo en positivo. Le sigue una figura elíptica tallada, que limita la máscara. El cuerpo está compuesto por diez segmentos grabados, del 3° al 6° superpusieron un diseño no identificable, y el 7° describe un escalón de 90° que define un espacio más amplio, ligeramente cuadrangular sobre la derecha, con un centro en positivo. Los miembros anteriores están levantados en señal de invocación, mientras que los posteriores se presentan en forma de L invertida, el izquierdo unido con un trazo perpendicular a una cúpula elipsoide ubicada entre ambos. El lado izquierdo de la figura, tanto en la porción superior como inferior se proyecta en formas serpentiformes, en el primer caso termina en una cabeza triangular que se superpone a un dibujo similar que corre ondulado hacia abajo, terminando en una cabeza engrosada, al tiempo que sobre la parte media del cuerpo recibe a otro ejemplar de cuerpo escalonado, con la cabeza dirigida hacia el brazo del chamán. El lado inferior describe un semicírculo y sube en un motivo ofídico que alcanza la altitud de la cabeza de la primera, y lleva anexada una forma serpentiforme en semicírculo, otra horizontal y la última escalonada (fig 4). El conjunto muy probablemente represente el diseño del manto del chamán (Barrau y Castillo 2017:91-92; Castillo y Barrau 2012:147). Por debajo, el grabado de una mano izquierda rellena cierra el conjunto, exhibiendo un amplio retoque, que incluye en el dedo medio la adición de un segmento ofídico, de cabeza triangular rellena.

Junto a la máscara del oficiante grabaron un lagarto de gran tamaño, de cabeza romboidal rellena al igual que el cuerpo de forma cuadrangular, con los miembros anteriores y posteriores indicados, al igual que una larga cola. El miembro superior derecho está atravesado por un segmento corto, y el izquierdo se superpone a una línea vertical grabada, que se inicia por encima de la cabeza del animal, atraviesa cinco depresiones

circulares y adiciona dos segmentos transversales cortos, que enfrentan a una talla oblicua de igual tamaño. La misma termina al superponer a una mano derecha rellena a la altura del dedo anular, y alcanzar una fractura próxima a la base del soporte.

Hacia la derecha y arriba, diseñaron a un lagarto superpuesto en parte a la imagen del segundo chamán, lleva los miembros superiores levantados en actitud de adoración, el izquierdo limitando una representación en apariencia zoomorfa, el miembro inferior izquierdo está flexionado, mientras falta el derecho, y exhibe la cola respectiva. Por encima y hacia el mismo lado grabaron una serpiente que describe con el cuerpo dos ángulos rectos y uno obtuso. El chamán presenta una máscara semicircular sin decorar, lleva los brazos levantados en actitud de adoración, y en el torso dos cúpulas horadadas. La línea que limita al cuerpo por la izquierda, describen un miembro inferior flexionado que adiciona un motivo no figurativo, y además está superpuesta por al dedo anular de una mano izquierda rellena, con evidencia de re grabado, que a su vez se superpone a un motivo serpentiforme ondulado, que corre paralelo a dicho miembro y parte de la mano. En el medio grabaron una cúpula elipsoide, tres cúpulas circulares y un motivo no figurativo, quizás el esbozo de una mano. El miembro inferior derecho está intersectado por una forma serpentiforme en S, que desciende encerrando al conjunto mencionado, y termina en una cabeza triangular. Junto al cuerpo grabaron una cúpula elíptica, un motivo no figurativo con tres prolongaciones ofídicas, dos cúpulas por encima, y una línea oblicua corta. Por debajo realizaron un diseño serpentiforme vertical, con la cabeza triangular dirigida en tal sentido, junto a un motivo no figurativo compuesto de seis apéndices serpentiformes unidos en un tallado amplio y central que semeja una mano (fig 5). Por debajo inicia una secuencia de cúpulas que solas o unidas, con extensiones rectilíneas o en sucesión, construyen un conjunto que se destaca por el tallado extenso de la roca, que por debajo define áreas cuadrangulares, la primera con siete cúpulas inscriptas, y la siguiente con tres cúpulas dispuestas en triángulo equilátero. El tallado que cierra al conjunto corresponde a la cabeza y cuerpo ondulado de un ofidio dirigido hacia abajo (fig 6). A ambos lados, los motivos en positivo llevan un orificio horadado cuadrangular, y otro circular por la izquierda, y uno solo por la derecha.

La comprensión del sistema representado se facilita al observar el grabado de una serpiente de cabeza triangular, que inicia un recorrido vertical en la porción superior del espacio plástico, asimilando por la izquierda a una forma similar que limita un sector irregular, con un diseño ofídico anguloso inscripto. Además, por la derecha y a la misma altura, se visualiza otra área análoga sin grabados, en el punto de unión con el recorrido de la segunda serpiente que nace ligeramente por debajo. Ambos motivos definen en positivo el cuerpo y cabeza triangular de un ejemplar afín, y se unen y separan por debajo de dicho espacio, dirigiéndose la primera hacia abajo, para describir un

semicírculo y recibir a dos apéndices con extremos redondeados, y un tercero de aspecto ondulante que vuelve a conectarlos. En este contexto, el área exterior y adyacente a la primer serpiente, se empleó para continuar con el grabado de la secuencia de cúpulas hacia el sector derecho; treinta y seis ejemplares de mayor o menor diámetro describen un área triangular, con un tallado serpentiforme inscripto. El conjunto representa a la cabeza ofídica de mayor tamaño representada en el soporte. La misma exhibe en la porción superior una extensión/tocado que termina en forma semicircular, un espacio logrado por el grabado de la primera serpiente enlazando dos cúpulas. Además, el ángulo superior derecho de la figura conforma el área de reunión/apareamiento de las tres serpientes/río tratadas en el estudio, motivo superpuesto a la cabeza de un diseño lagartiforme (fig 7).

El segundo ofidio tiene cabeza triangular y diseño ligeramente ondulado, nace junto a un tallado oblicuo y elíptico que une dos cúpulas, observándose hacia arriba dos alineaciones semejantes. Ya adelantamos información sobre el recorrido de este ejemplar en su interacción con el primero, e incluimos las referencias necesarias en relación con el tercer motivo análogo. A partir del segundo punto de reunión de las serpientes 1 y 2, se proyecta dentro del área un segmento transversal que termina en una cúpula. En el sector proximal tallaron un motivo vertical, apenas ondulado, con un juego de seis extensiones cortas a los lados, la mayoría dirigidos hacia arriba. Por encima y sobre la derecha, grabaron una línea transversal corta adosada a cúpulas, y otro ejemplar similar con un segmento vertical y dos extensiones en la base, la derecha superpuesta a la tercera serpiente, mientras que junto a la izquierda dispusieron un motivo serpentiforme con la cabeza orientada hacia el diseño de una cúpula con ocho extensiones y dos figuras afines. Por debajo del conjunto una línea grabada transversal separa un sector sub triangular, conformado por el recorrido del ofidio que describe media elipse, terminando a la altura de la primera imagen reseñada. Tal espacio lo ocuparon con dos cúpulas equidistantes y una de mayor tamaño y regrabada por debajo. Una línea tallada surge a partir del ángulo inferior de esta figura, se ensancha y conecta con el surco que une a las serpientes 1 y 2, definiendo así un motivo insular con cúpulas anexadas. A partir de este punto la línea corre en semicírculo hacia arriba, casi paralela al primer ofidio, y se unen por un grabado transversal que define una imagen serpentiforme inscripta. Además, esta línea se suma al derrotero de la primera en la definición de una extensión peninsular, motivo similar a un tumi invertido, que es el centro de reunión de estas representaciones. Además, describe un círculo que expone un espacio circular en positivo, resaltando en oposición a la cúpula ubicada a la misma altura, sobre la derecha. A continuación, el trazo desciende, pasa por el área de unión/reproducción del sistema de ofidios representado, superpuesto a la cabeza de un diseño lagartiforme, para luego subir y bajar en forma paralela al tercer ofidio, con cuatro segmentos tallados uniéndolos en el tercio inferior (fig 8).

El tercer motivo serpentiforme es de mayor longitud, también de cabeza triangular, la lleva dirigida hacia abajo y enfrentando a otra similar, que lleva un segmento perpendicular que termina en un círculo tallado con una pequeña extensión hacia abajo. Al lado grabaron a un zoomorfo cuadrúpedo de perfil, de cuerpo y cuello alargados, con cabeza triangular dirigida hacia la derecha, y por debajo y en tal sentido, agregaron un diseño antropomorfo esquemático de frente, de simetría bilateral y apariencia lagartiforme, con los brazos levantados en señal de invocación y los miembros inferiores flexionados. Ambos diseños corresponden al componente más tardío registrado en el sitio. Junto al último grabaron una mano izquierda rellena, seguida de dos motivos ofídicos, el primero serpentiforme y corto, mientras el segundo más anguloso y largo, recibe en el desplazamiento a tres segmentos sub paralelos, los dos primeros unidos por un trazo transversal que limita una forma elipsoide, y se proyectan hacia la izquierda en una forma sub globular rellena. Otra forma elíptica está descrita por la unión del segundo y tercer segmento en una forma cuadrangular tallada. Por arriba se observa una sucesión de cúpulas y por debajo el grabado de un círculo relleno con una extensión mínima hacia arriba, conectada por un segmento cuadrangular con una forma análoga de mayor tamaño. En el sector hacia la derecha se suman algunas cúpulas, y el grabado de un pie derecho relleno superpuesto a un diseño anterior, es de grandes dimensiones y tiene los cinco dedos bien tallados (fig 9).

A la izquierda y a la altura del pie observamos una mano derecha rellena, con una cúpula entre los dedos pulgar e índice, tres próximas a la serpiente/río, y una superpuesta por la palma. Por debajo ejecutaron un diseño serpentiforme anguloso, que une dos cúpulas, se superpone a otra y corre en parte paralelo al ofidio/río. Al seguir el curso de este motivo guía, observamos dos cúpulas anexadas al mismo, de la primera surge un segmento que se abre en una figura cuadrangular, con dos apéndices en el ángulo inferior derecho, una cúpula central inscripta, y un motivo ofídico de cabeza elíptica que surge del sector medio del lado superior, y corre paralelo a la segunda mano descrita. Todo el conjunto se origina en la extensión del tallado del dedo pulgar de una mano derecha rellena, que es de menor tamaño y está ubicada sobre la derecha. A partir de la segunda cúpula mencionada, iniciaron un tallado que describe un semicírculo hasta alcanzar la altura del diseño cuadrangular, y continuar en forma de L invertida paralela a la mano tratada, y terminar describiendo un motivo en U a la altura del sector medio del dedo meñique (fig 10). Además, este dedo se extiende en una guarda geométrica de seis ángulos rectos, que se observa cerrada en formas cuadrangulares por una línea grabada posterior. El último segmento es paralelo al extremo distal de un diseño ofídico que sube, describe un ángulo recto, bordea al pie y sigue paralelo al mismo hasta el final. Esta imagen a la altura de la base del pie recibe a un segmento que divide el espacio y termina en una cúpula. Por encima grabaron dos cúpulas, un rectángulo relleno al medio, un segmento curvilíneo corto que acompaña en parte al conjunto,

y algunas cúpulas dispersas sobre la derecha (fig 11). Si regresamos al motivo serpentina 3, observamos que el ciclo de representaciones culmina con el grabado de un par de pies (fig 12), con una cúpula al medio en el sector inferior, el primero unido por un segmento a los ofidios 2 y 3 presenta cuatro dedos, y probablemente corresponda al izquierdo, mientras el segundo, se trata de un pie derecho con los 5 dedos indicados. De la extensión de uno de estos dedos construyeron una forma ofídica que describe una elipse abierta, con una cúpula y un tallado casi triangular inscriptos, corre transversal de derecha a izquierda, hasta terminar en la cabeza triangular de un ofidio, que se une a otra similar que describe una L invertida y alcanza el sector medio del primer pie. También destacamos que una sucesión de cúpulas acompañan el recorrido de las serpientes/cursos de agua. Por último, indicamos que por encima de los conjuntos reseñados, un ofidio grabado próximo al borde del soporte corre en semicírculo e intersecta a otro, para subir en ángulo recto y terminar el diseño en una cabeza triangular.

ETNICIDAD, COSMOVISIÓN Y TERRITORIALIDAD. CONCLUSIONES Si bien Carachupa es un lugar sin restos culturales asociados en superficie, alejado de los circuitos conocidos de asentamiento, intercambio o enterratorio, presenta una vista panorámica excepcional del entorno espacial, en particular destacamos al cerro Cuaco, un santuario de arte rupestre. Además, la presencia del cerro Condorpuna que integra la cordillera central y el corredor montañoso Vilaya, Condorpuna, Shipago, cobra significación en este estudio, al considerar que divide las cuencas hidrográficas de los ríos Utcubamba/Marañón, y es cabecera de cuencas de varias quebradas que proveen de agua al espacio regional. Esta condición coloca al cerro Condorpuna en el centro del sistema representado, si bien por convención al dar a conocer las expresiones rupestres, seguimos el sentido de izquierda/derecha y arriba/abajo.

El sitio de arte rupestre Carachupa presenta una conformación natural de excelencia para la función que revistió en la antigüedad, de buena acústica, constituyó un espacio sagrado destinado a actividades rituales, que por las condiciones del lugar, fueron de acceso socialmente restringido a oficiantes y chamanes. En el petroglifo plasmaron una construcción simbólica singular, que exhibe un discurso visual y narrativo que hunde sus raíces en los procesos cognitivos, o la forma en que sucesivos grupos sociales percibieron y conceptualizaron el espacio natural y el paisaje cultural, según la ideología/cosmovisión dominante. En síntesis concibieron para el área, la primera representación conocida de un sistema de relaciones espaciales.

De hecho, al integrar las representaciones de manos y pies en relación con las serpientes/ cursos de agua, expresaron una construcción social del paisaje, simbolizando la aprehensión efectiva de un territorio por parte de uno o más grupos de descendencia o linaje, señalando el lugar de origen, pertenencia, vínculo, asentamiento, o aprovechamiento de los recursos naturales (Barrau y Castillo 2020:76-91).

Asimismo, es notable que la percepción de movimiento esté limitada a la secuencia de cúpulas y la red hídrica, que circula la energía e información que unía a estos grupos de descendencia, que quizás pertenecían a un mismo linaje. Las dinámicas sociales pueden apreciarse en la superposición o adición de motivos al diseño original, variabilidad estilística que construye una perspectiva ligeramente diacrónica, que confirma la perduración temporal del sistema de creencias, el cual concibió al nudo de las serpientes/río en la porción central del sistema representando, como el afianzamiento de la reproducción grupal. Por otra parte, si bien la profundidad y ancho de las líneas grabadas varía en consonancia con los componentes temporales identificados, es notable una perspectiva visual en negativo del primer conjunto grabado. Por otra parte, es interesante observar los sectores insulares generados por la red mencionada, que construye el eje del sistema representado.

Al considerar la memoria de los grupos sociales involucrados en su relación con el paisaje cultural, retomamos los conceptos de etnicidad, cosmovisión y territorialidad, y sumamos el aporte de Hocquenghem (1983; 62-63), que basándose en la información etnológica de la ceja de selva, al referirse a la relación entre los ancestros míticos y las serpientes, sostiene que el agua que corre y forma un río, el agua ligada con el dueño del trueno, es una serpiente, al igual que el relámpago y el arco iris, y es sustancia vital de los ancestros, es el agua de vida, de regeneración, y la serpiente un animal que se transforma simboliza la inmortalidad. La autora sostiene la existencia de una relación estrecha entre los objetos alargados y los ancestros míticos, los objetos delgados, largos, que rodean, delimitan, juntan, unen, y que por su forma son considerados serpientes, se asemejan a los ancestros fundadores de linajes que definen sus descendientes y los reúnen en una sola comunidad unida por lazos de parentesco, y destaca que estos objetos intervienen en todos los ritos que establecen, refuerzan y reafirman a la comunidad, permitiendo su reproducción a nivel ideológico, y que esto ocurre en la estación húmeda, cuando el agua asegura la reproducción de estas sociedades a nivel material.

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Fig. 1 - Vista general del alero rocoso



Fig. 2 - Vista del alero y detalle de la entrada



Fig. 3 - Primer sector, los chamanes y motivos asociados



Fig. 5 - Detalle del segundo chamán



Fig. 4 - Detalle de los chamanes, motivos asociados y superpuestos





Fig. 6 - Los chamanes y la relación espacial con las serpientes/ríos



Fig. 7 - Chamanes, serpientes/ríos y manos en el control territorial



Fig. 8 - Manos y pies en la aprehensión del territorio



Fig. 9 - Vista general del territorio



Fig. 10 - Detalle de manos, cúpulas, y cursos de agua



Fig. 11 - Detalle del pie de mayor tamaño y definición



Fig. 12 - Detalle de los pies de menor tamaño y definición