

5g

ROCK ART IN THE LANDSCAPES OF MOTION

Paweł Lech POLKOWSKI, *Poznań Archaeological Museum, Poznań, Poland*

Heiko RIEMER, *Institute of Prehistoric Archaeology, University of Cologne, Germany*

Frank FÖRSTER, *Ägyptisches Museum der Universität Bonn, Bonn, Germany*

Contact email: ppolkowski@o2.pl; heiko.riemer@uni-koeln.de; frankfoerster@gmx.de

During the last three decades of rock art research, the contextual importance of landscape has been emphasised a number of times. It seems to be an axiom now, that rock art should not be perceived as an isolated phenomenon but rather as a spatially embedded one. It is particularly a category of place which has become an interpretational tool for many scholars, allowing for considerations on rock art “fixity”. The images, albeit often difficult to date, are “fixed in place”, therefore researchers may focus on this alleged stability and spatial relationships the rock art has with other landscape features and agents.

However, one may argue that place is not as stable and fixed as it may seem at first glance. For instance, the loci are connected with paths and roads or actually form parts of these routes. A place then may constitute only a section of countless paths used by various agents. Features such as rock art, although immobile, belong not so much to a landscape of endurance and fixed relationships, as to a landscape of motion, full of ephemeral links and relations. We argue that to appreciate rock art in its landscape means also to appreciate the magnitude of agents active within it, and the overall dynamics they create. Motion affects rock art in a number of ways, from acting human agents to acting animals and weather phenomena. Hence rock art, apparently stable, is subjected to movements of those agents. One cannot approach rock drawings other than through movement, so if one side of a coin is a landscape of endurance, then the other side could be labelled a landscape of motion.

The following papers involve the analysis of rock art considered as an element of landscape of movement. There is no geographical and chronological limit for the case studies. We hope that the broad selection of approaches (e.g. functional, symbolic, relational) as well as various rock art traditions will help to show that rock art and movement are interrelated at manifold levels and in various scales. Some of the topics to be discussed throughout the session are as follows:

- A. Rock art and roads. On phenomena of producing/encountering rock art while moving from place to place (e.g. pilgrimage, military or trade expeditions, search for resources).
- B. In the living landscape. On agency of landscape and rock art (e.g. animism and rock art, rock art “biographies”).
- C. Rock art in pastoral communities. Nomadic ways of life, transhumance and the potential roles of rock art production.
- D. Movement of images. Large scale movements of motifs (distributional analyses of rock art motifs/traditions).
- E. Motion in rock art. Movement as depicted in rock art.

Introduction to the session “Rock art in the landscapes of motion”: the case of Egypt’s Western Desert

Paweł Lech POLKOWSKI, *Poznań Archaeological Museum*

Heiko RIEMER, *University of Cologne, Institute of Prehistoric Archaeology African Archaeology*

Frank FÖRSTER, *Egyptian Museum, University of Bonn*

Contact email: ppolkowski@o2.pl; heiko.riemer@uni-koeln.de; frankfoerster@uni-bonn.de

Keywords: Western Desert of Egypt, Dakhleh Oasis, Abu Ballas Trail, Wadi Sura, rock art, landscape

Starting from their own rock art research in Egypt, the chairmen will outline the scope and foci of the session and the various contributions to it, both thematically and geographically. The core of this introductory paper will consist of three case studies of rock art from the Western Desert of Egypt. We will begin with Dakhleh Oasis – a hub in a desert, where many routes merge, and rock art from various periods forms a huge palimpsest. The next part will be devoted to a specific long-distance desert (trade) route that connects Dakhleh with the border area between modern Egypt, Sudan and Libya: the pharaonic Abu Ballas Trail, where way-stations and resting places often show rock art left by travellers or watchmen. Finally, the prehistoric rock art imagery of the Wadi Sura region (Gilf Kebir, SW-Egypt) will be addressed, which exemplifies the artwork of highly mobile hunter-gatherer communities during their seasonal migrations.

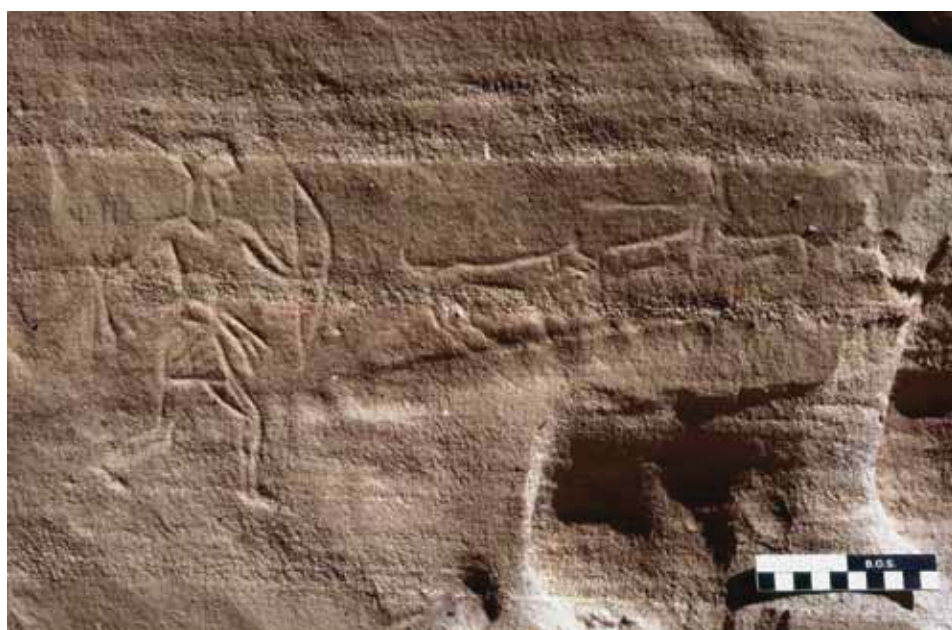


Fig. 1 - Hunting scene at Abu Ballas in Egypt’s Western Desert. (photo R. Kuper, Heinrich Barth Institute)

Fig. 2 - A boat and sandal drawings in Dakhleh Oasis. (photo P. Polkowski, The Petroglyph Unit of the Dakhleh Oasis Project)

Post palaeolithic rock art and landscape: the case study of Mount of Coto de Sabroso (Guimarães, North western Portugal)

Daniela CARDOSO, *Martins Sarmiento Society, Guimarães, Portugal; Landscapes, Heritage and Territory Laboratory - Lab2pt*

Georgios ILIADIS, *Cooperative Enterprise 'Ergo Culture Human Traces', Kavala, Greece*

Contact email: danyrest@gmail.com; gsiliadis@yahoo.com

Keywords: North western Portugal, Mount of Coto de Sabroso, landscape, Rock Art, biography of a place

The Mount of Coto de Sabroso is located at the right bank of the river Ave within the municipality of Guimarães in North western Portugal.

At the top of this mount there is an Iron Age settlement that was primarily investigated by Martins Sarmiento in the 19th century (Sarmiento, 1906a,b; 1933), studied and excavated during the 50s, 70s and 80s (Cardoso, M., 1930; 1950; 1958; Pinto, 1929; Hawkes, 1958; Soeiro *et al*, 1981) and since 1990 Sociedade Martins Sarmiento has been conducting the scientific investigation regarding the conservation of the site. In 2015, the rock art engravings within the mount have been identified and further studied by one of the authors of this paper (Cardoso, D., 2015). The rock art assemblage is mainly composed of abstract and geometric motifs; however, there are several engraved outcrops that display possible late imagery.

The aim of this paper is to analyse the spatial location of the engraved outcrops of Mount of Coto de Sabroso in terms of microscale and macroscale within the Ave basin and to raise questions about the association of rock art within its landscape.



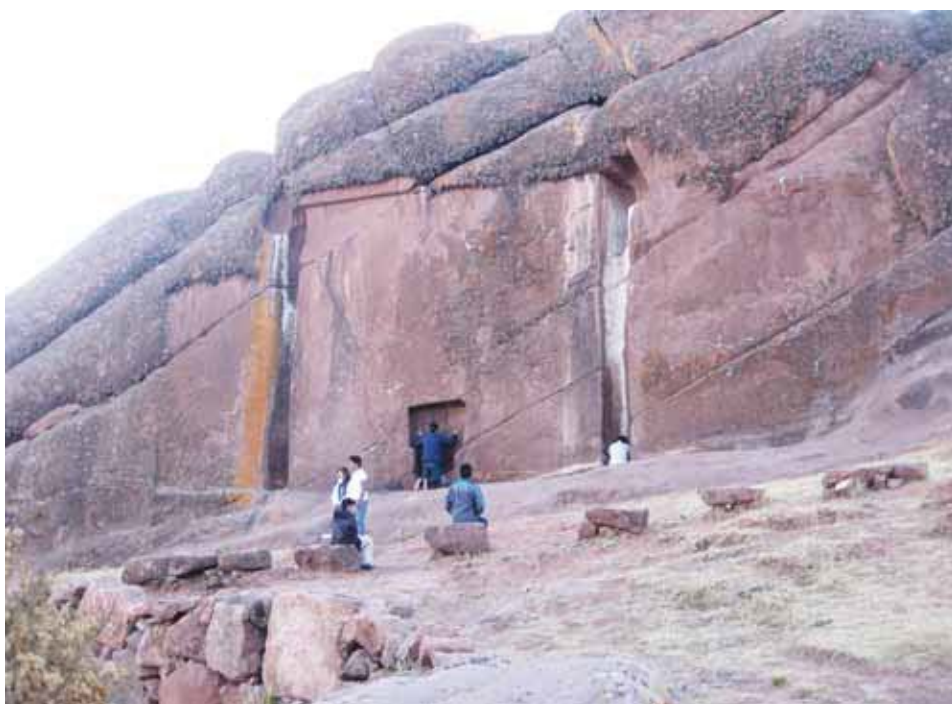
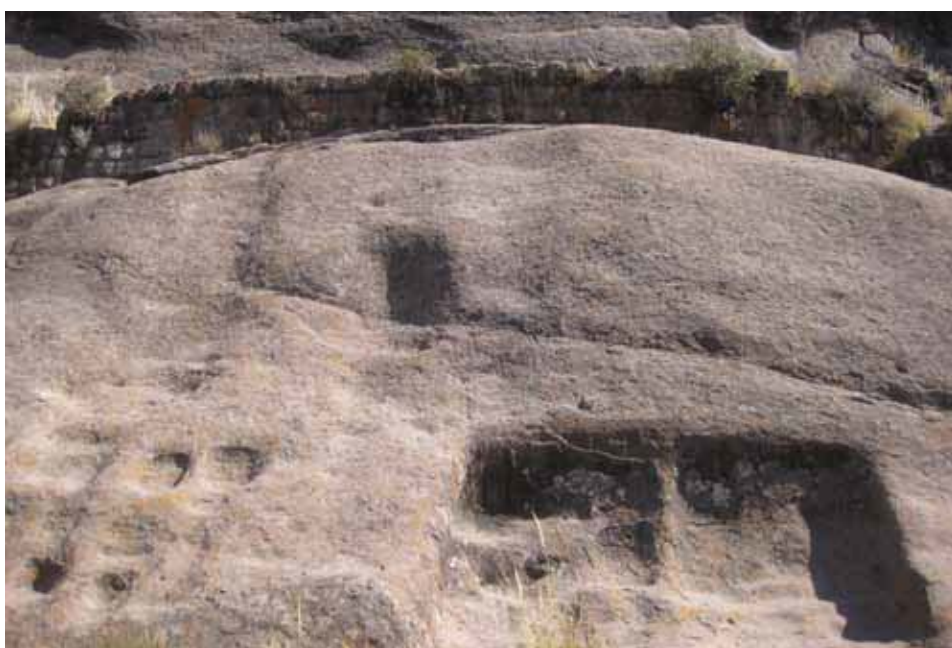
Rock Art on the Inka Pilgrimage Route in the Titicaca Basin

Jessica Joyce CHRISTIE, *East Carolina University, USA*
Contact email:
christiej@ecu.edu

Keywords: Inka, Peru, rock sculpture, pilgrimage, landscape, contemporary reuse

This paper will discuss a specific type of Inka rock art (large niches) in relation to the pilgrimage road and to a living, agentive landscape in the southern Titicaca Basin, Peru. The Inka were interested in the Lake Titicaca region for economic and ideological reasons and integrated it around A.D.1450. The main transport and pilgrimage route was the Kollasuyu road, leading from Cusco to the southeast. Stations along this road are marked by rock art: Bebedero with the common geometric seats and platforms and Kenko and Altarani with the uncommon large niches in cliff walls directed toward the lake.

Firstly, these rock art sites may have been stopping points on the state-directed pilgrimage to the Island of the Sun. Secondly, I argue that the large niches indicate a local interaction between the Inka and Lupaqa people. These niches are Andean wak'a/shrines which cut into the living substance of the stone mountain; as wak'a, they are static and movable in the sense that their essence can be reproduced somewhere else. The notion of the niches as doors into a spiritual realm might be local as residents continue to make offerings and share stories of the niches as empowered agents.



Towards a Phenomenology of Rock Images

Gernot GRUBE, *Cluster of Excellence Image Knowledge Gestaltung, Humboldt-University, Berlin, Germany*
Contact email:
gernot.grube@gmx.net

Keywords: phenomenology, historical consciousness, space-time relationships, sedentariness, symbolic form

At the centre of a phenomenological investigation of rock images are space-time relationships and the relationship between movement and locality. This includes, among others, the following aspects: a) That it has been possible to solve the paradox, i.e. to establish movement in the picture, without “erasing” it. b) That a symbolic form, not easily integrated into the nomadic way of life, was employed, in stark contrast to the handy (portable) figurines. c) That through these rock images, Upper Palaeolithic individuals produced something that branched out of the traditional mobile way of life, generating signs of “crystalized” identities, with a sense of history. The scene of the hunting lions in the Salle du Fond of the Chauvet Cave (fig. 1), for example, gives an excellent impression on how to sense movement, as it moves through the pictorial expression on static ground. At the heart of my contribution, basic principles of a Phenomenology of Rock Art are presented, and more importantly, the hypothesis that a settled way of life of agricultural societies was preceded by the locality of the rock images as a symbolic-cognitive preparation for sedentariness.

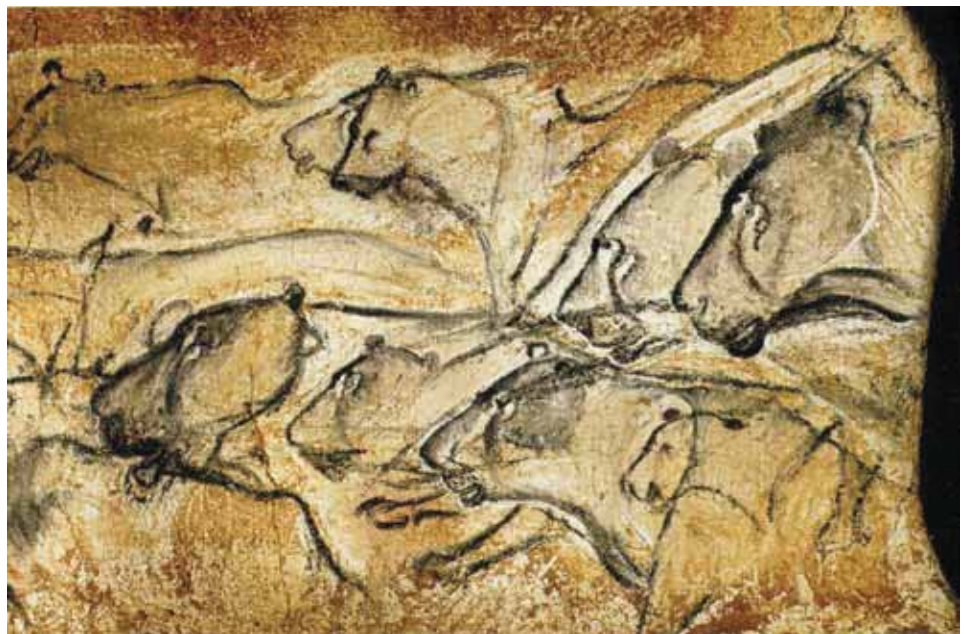


Fig.1 - Hunting Lions. (in Brunel *et al.*, 2015)

Rock art across landscape: a history of Ladakh through its rock carvings

Tashi L^DAWA, *Leh Degree College, Kashmir University, Ladakh, India*

Viraf MEHTA, *anthropologist, independent researcher, Delhi*

Quentin DEVERS, *archaeologist, French National Centre for Scientific Research, Paris*

Contact email: qdevers@gmail.com

Keywords: Ladakh, landscape, spatial analysis, trade routes, Protohistory

The history of Ladakh before the 10th century is very fragmentary. We have close to no historical records, and little archaeological research has been carried out. Rock art forms the most abundant material at our disposal for the study of the ancient history of the region. Over the past two decades, the authors have carried out systematic surveys throughout the territory and brought together a corpus of over 360 rock art sites. This corpus opens up new perspectives for understanding Ladakh's past, by looking at the spatial distribution of the motifs. For instance, a clear differentiation between eastern and western Ladakh can be observed through the style of the carvings. Within these two coherent regions, differences of motifs can be observed whether found along trade routes, within pastoral landscapes, at military sites, near mining centers, at river crossings, etc... These variations in styles and motifs often coincide with differences observed in surrounding archaeological evidence, such as fortifications, and make for a powerful tool to reconstruct the past occupation of the territory. We will look at these territorial variations through a rich panorama of evidence, combining rock art images and detailed maps of the region.



Fig.1 - Mangbor, Ladakh, India. (photo © Quentin Devers)

Fig.2 - Gya Chu, Ladakh, India. (photo © Quentin Devers)

Resilient landscapes / mutant landscapes. Reflections on a model for heritage preservation

Mário MONTEIRO BENJAMIM,
*CHAIA - Centro de História de
Arte e Investigação Artística,
Portugal*

Contact email:
mariobenjamim@mb-
arquitectos.pt

Keywords: landscape, Tagus
Valley, rock art, intervention
model, rock art

The research carried out over the last four years aimed to establish strategies to showcase the rock art of the Tagus Valley, submerged by the construction of the Fratrel dam in 1974. The adopted strategies to achieve this are part of an operation whereby the engravings are effectively integrated into the contemporary landscape, promoting new ways of use. In this context, a research model was developed based on the architectural project, a theoretical model, which also integrated a transdisciplinary landscape reading system, rooted in praxis, to give emphasis on specific sites and the rock art's capacity of reflecting elements of place, revealing the long and intimate relationship of the people who inhabited it and shaped themselves in the natural environment. Our focus goes through reading the singularities of the place, reinterpreting the timeless signs of landscape construction from prehistoric man to the present time. It is between the two rock art composition periods that the exercise reflects itself in seeking to form continuous and dynamic bridges between form and space, between content and established goals.



Fig.1 - Fratrel Dam, Tejo River. (photo
M. Monteiro Benjamim)

Fig.2 - Engravings, Ocreza River. (photo
M. Monteiro Benjamim)

Podomorphs, shoeprints, pilgrimages and celestial cults in the Bronze Age of Northwest Iberia

José MOREIRA, *Landscapes, Heritage and Territory Laboratory (Lab2PT), University of Minho, Braga, Portugal*

Ana M. S. Bettencourt, Manuel Santos-Estévez

Contact email:
bettencourt.ana@gmail.com

Keywords: footprints and shoeprints, paths, pilgrimages, movement and celestial cults, podomorphs

Although often recorded in the Northwest of Portugal, footprints and shoeprints are among the least studied engraved motifs of the Bronze and the Early Iron Ages in this region. Thus, this paper aims to present the results of a study of more than three dozen loci where more than two hundred podomorphs and shoeprints were recorded. The spatial analysis of the data made it possible to verify that these motifs were often interlinked with natural paths of circulation between valleys and certain levels on the slopes of the hills, easily accessible and easy to maneuver around before the steep ridge. They also interconnect with well-irrigated, easily accessed water sites, which came from the mountain tops. On a smaller scale of analysis, it was possible to verify that outcrops with more footprints and shoeprints, being those more highly frequented, were sites where engravings were made on inclined surfaces. In spite of the many interpretations that can be made regarding these motifs, we believe that they can be related to pilgrimages from medium and low-income places, essentially carried out by children and young adults (due to the dimensions of the motifs), perhaps as rites of passage, where upward movement and celestial cults would be significant.



Fig.1 - The engraved boulder of Penedo de São Gonçalo, Felgueiras, North Portugal. (photo José Moreira)

Patterns of Movement: mapping prehistoric cup-marks across the English Lake District

Kate SHARPE, *Durham University*

Contact email: kate.sharpe@durham.ac.uk

Keywords: cup-marks, Cumbria, movement, quarry, stone axe, Neolithic

Since 1999, 46 cup-marked panels (28 sites) have been identified in the Lake District, Cumbria in NW England. Unlike those in neighbouring uplands, most are located close to the valley floor, and consist largely (with one exception) of simple cup-marks, with few of the elaborate motifs found elsewhere in Britain. They lie in open-air contexts, on substantial, glacially-smoothed outcrops with no archaeological associations. Most are close to the lakes which occupy long, glacial valleys, radiating from the central massif. Around these summits a ribbon of fine-grained andesitic tuff once drew the attention of Neolithic stone-workers. Intensive quarrying and tool production activities saw axe-heads 'roughed out' at source then moved to lower ground for 'finishing'. Evidence indicates small settlements along the western coastal plain and in the Eden Valley to the east, and valley routes connecting these lowland sites with the central quarries appear punctuated by the cup-marked outcrops, which also occur at the junctions of natural route-ways between the valleys. This paper introduces this distinctive new rock art corpus and presents a case for a relationship between the carved panels and the movement of Neolithic people around this dramatic landscape, with reference to the axe-production processes at its heart.



Fig. 1 - View over cup-marked outcrop, 'Barber's Rock', and Crummock Water towards the central fells of the English Lake District. (photo Kate Sharpe)

Affective movements: rock paintings, soots, and the practice of marking landscapes

Andrés TRONCOSO, *Department
of Anthropology, Universidad
de Chile*

Francisca MOYA, *Centro de
Estudios Arqueológicos e
Históricos Ayken*

Contact email: atroncos@gmail.
com; franmoya.c@gmail.com

Keywords: rock art, Chile,
Sooth, affects, history,
relationality

Tim Ingold has proposed that the world we inhabit is always in movement, engaging multiple beings, phenomena, substances, and things. This movement produces a historical meshwork or field of relations where the rhythms and characteristics of many non-human beings and substances affect human practices and therefore, our lives. Rock art, as a material phenomenon is part of this reality: rock engravings and paintings move through history affecting and being affected by these elements. Considering the above, we discuss how the practice of rock painting by hunter-gatherers in north-central Chile during the Late Holocene was affected by the movement of a particular substance: smoke and the soot adhered onto the rock surfaces, in particular within residential camps. Here, we propose that the movement of smoke near rock paintings and its solidification as soot over the images set in motion the re-painting of the images, to maintain its visibility. The re-application of paint also re-activated some places across time and history, as they were painted for hundreds of years. In order to bring about these discussions, we combine the results of regional studies of rock art, and the direct dating and microstratigraphic studies of both paintings and soot. Our research has been funded by Fondecyt Grant 1150776.



In the middle of nowhere: geoglyphs, caravan routes, and the symbolic demarcation of travelling territories in northern Chilean Atacama Desert

Daniela VALENZUELA,
*Departamento de Antropología,
Universidad de Tarapacá, Arica,
Chile*

Paz CASANOVA, *Independent
researcher conservator, Arica,
Chile*

Marta CRESPO, *Independent
researcher archaeologist,
Madrid, Spain*

Luis BRIONES, *Museo Municipal
de Pica, Pica, Chile*

Persis B. CLARKSON,
*Department of Anthropology,
University of Winnipeg, Canada*

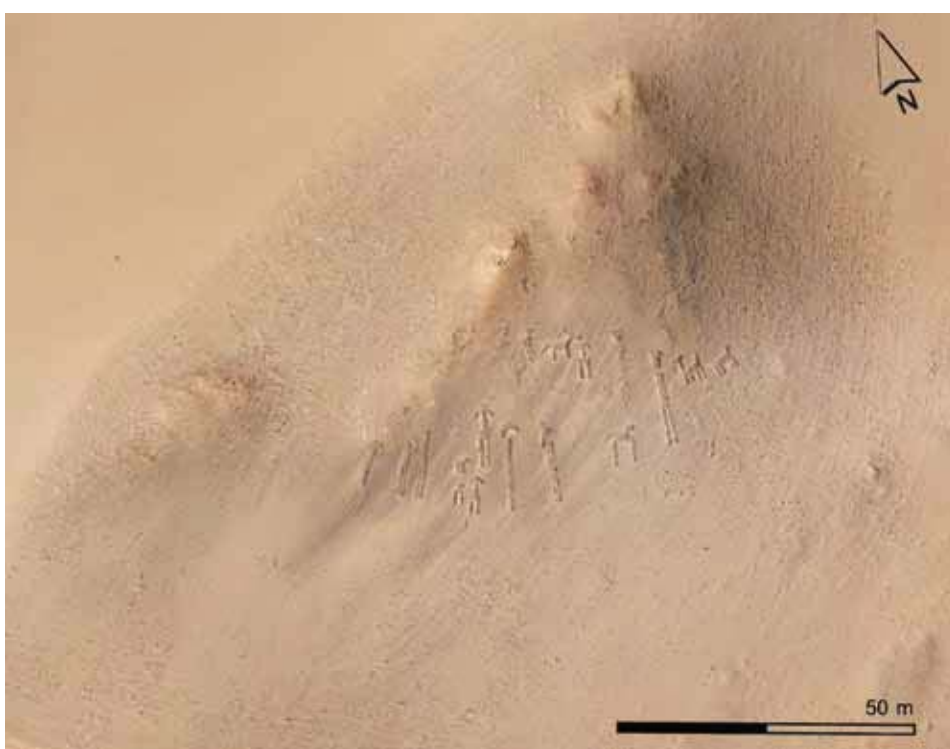
Contact email: dani.valenzu@
gmail.com; pazcasanov@gmail.
com; marta.crespo57@gmail.
com; p.clarkson@uwinnipeg.ca

Keywords: Atacama Desert,
geoglyphs, caravan routes,
mobility, visual images

Fig. 1 - Geoglyphs in Quebrada Tiliviche,
directly associated with caravan
tracks. (photo Marta Crespo FONDECYT
1151046)

Fig. 2 - Geoglyphs in the Lluta valley,
anthropomorphic and animal motifs.
(photo by Marta Crespo FONDECYT
1151046)

The Atacama Desert in northern Chile is a vast hyperarid area containing extremely circumscribed resource locations which were substantial nodes that concentrated most human activity. Throughout this wide area, pre-Columbian people created and depicted an incredible number of large figures on the surface of the earth, known as geoglyphs, most of them significantly related to long-distance caravan trade (Fig. 1). However, within these widespread spaces, geoglyphs are heterogeneously distributed in association with critical resources, geographic features, archaeological structures and caravan routes. They also show differences in technique and form (Fig. 2). We explore these spatial, morphological and technical differences to discriminate possible synchronic and/or diachronic “travelling territories”, i.e. fixed or mobile routes symbolically and materially demarked by visual images of animals, humans and geometric signs. In other words, visual images are examined as a proxy of the intensity and redundancy in the use of particular long-distance trade circuits linking socio-ecological spaces. This paper is a result of FONDECYT project 1151046 Chile.



The dance of the lines. Techniques, movements, and rhythms in rock art

Francisco VERGARA MURUA,
*University College of London,
Anthropology*

Contact email: francisco.
vergara.15@ucl.ac.uk

Keywords: rock art, engraving,
movement in art creation,
Cuesta Pabellón, Chile

There is no rock art without movement. Present at multiple scales – from the very act of pecking, or painting, in the processes of selecting the rocks, in crossing along a site – the movements are a central element from which rock art emerge. How were these movements? What do they inform us about the societies which produced rock art? In order to answer these questions, this paper employs rhythms as an analytical category. It focuses on the rhythm of manufacture, embracing with that the gestural cadences involved in the creation of the motifs. It is argued that to engrave a line is also to dance it, to follow it in an ordered way with the body. Through repetitive acts of engraving, these movements become incorporated into the site and were danced by the following generations who visited and engraved the site again and again. As such, moving along a rock art site can be conceived as dancing the line and letting oneself go with it. To illustrate this argument, this paper shows the results of the analysis of the petroglyphs in Cuesta Pabellón, a rock art site located in the semi-arid region of Chile.

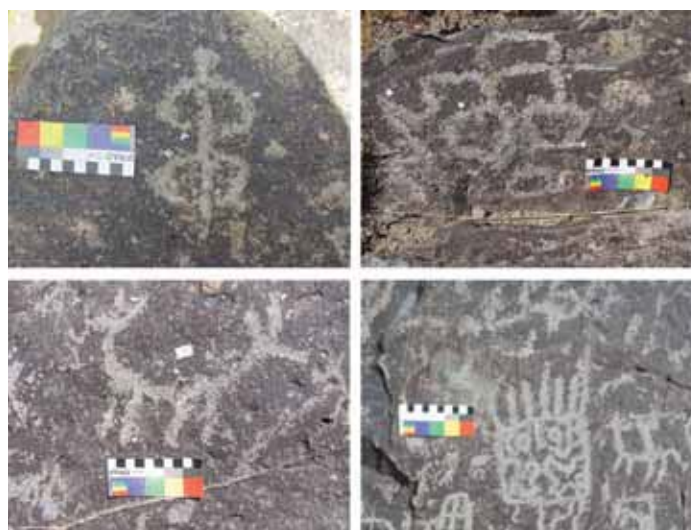
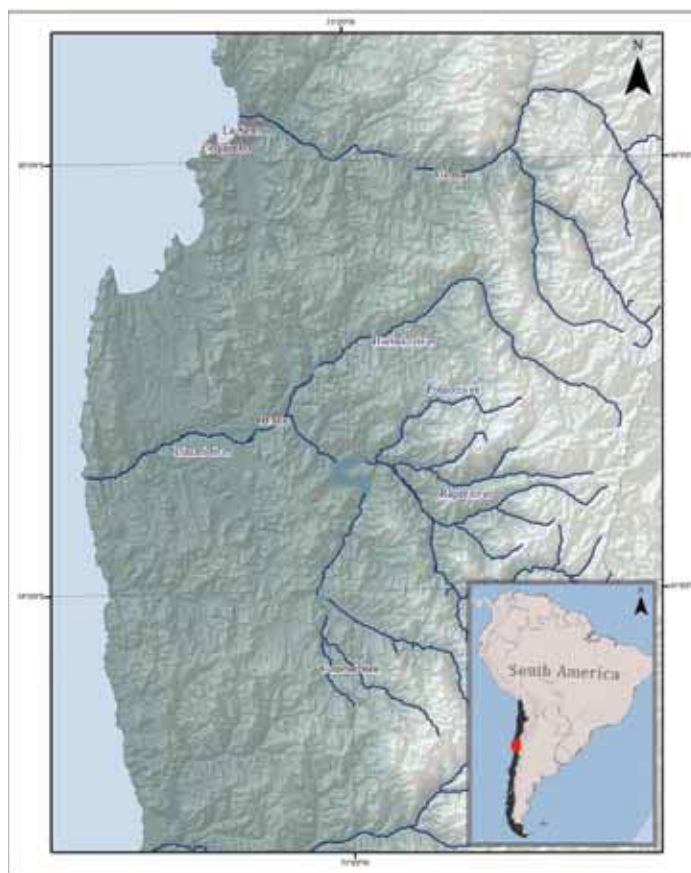


Fig.1 - Central area of the semi-arid region of Chile and the Limari Valley.
Fig.2 - Iconographical variability of Diaguita rock art

Understanding the spatial organisation of rock art sites by 'least-cost path' modelling

Oliver VOGELS, *University of Cologne, Institute of Prehistoric Archaeology; African Archaeology*
 Contact email: oliver.vogels@uni-koeln.de

Keywords: rock art, optimal-route analysis, hunter-gatherer, Namibia

Archaeological sites plotted on a map often reveal a network of human occupations that may, for example, reflect strategies of resource exploitation. Movements of people in prehistory, however, leaves little trace. The paths between the sites – the connections in the network – are elusive and often the space between the sites on the archaeological map remains empty. Today, Geo-Information-Systems (GIS) software allows for the modelling of routes over digital topography and environment. Such 'least-cost paths' (LCP), albeit based on the assumption that human mobility favours cost reduction, allows us to formulate new hypotheses on the relationships between human occupation, mobility and the natural or social environment. During the past forty years 840 rock art sites have been recorded in the mountain range of the Brandberg/Dâureb in Namibia. Least-cost analyses are of particular importance not only for modelling probable routes from site to site, but these LCP calculation also reveal the spatial organisation of the sites. For instance, 626 of 817 smaller sites are located in close proximity to modelled routes from outside the mountain to sites above 1500 m a.s.l. with more than 250 depictions (n = 23). These observations call for an explanation of the network of rock art sites that goes beyond the prevailing ideas about seasonal mobility strategies.

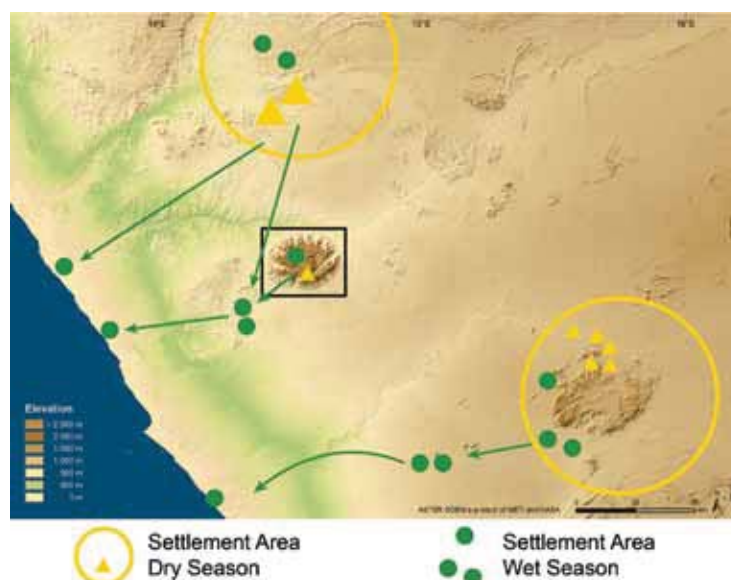
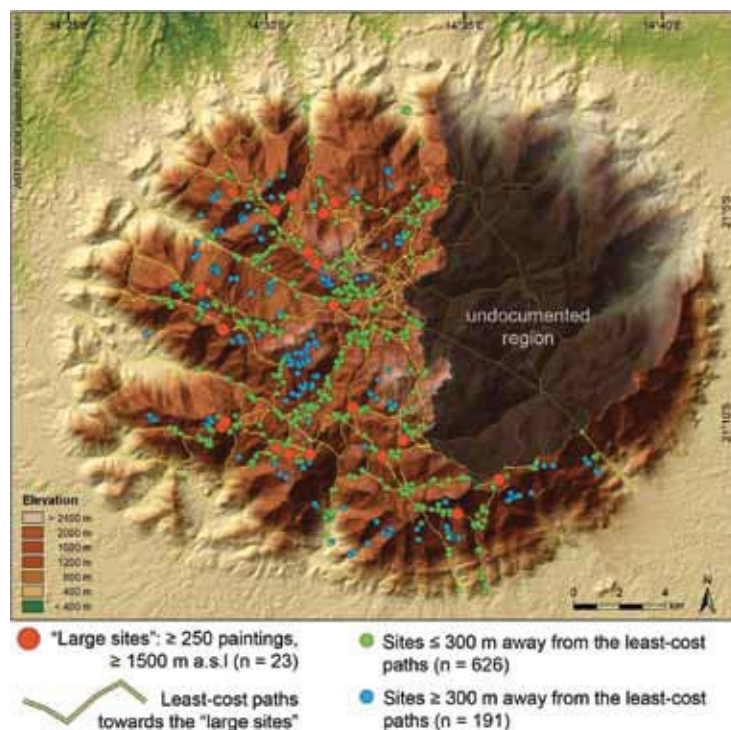


Fig. 1 - Least cost path analysis of a rock art region. Brandberg/Dâureb, Erongo Region, Namibia. (Oliver Vogels)
 Fig. 2 - Seasonal mobility in the Erongo Region. Erongo Region, Namibia. (Oliver Vogels, redrawn from Richter 1991, fig. 262)

Slow motion: Transport and oxen draught in the petroglyphs of Ughtasar, southern Armenia

Tina WALKLING, *Landscape
Research Centre, UK*

Anna KHECHOYAN, *Institute of
Archaeology & Ethnography
of the National Academy of
Sciences, Republic of Armenia*

Contact email: [tina_walking@
yahoo.co.uk](mailto:tina_walking@yahoo.co.uk)

Keywords: Ughtasar, Armenia,
petroglyphs, motion,
landscape, transport

Motifs directly relating to motion across the landscape are rare but notable within the corpus of c. 1000 carved rocks documented by the Ughtasar Rock Art Project team. At 'Ughtasar' located within the caldera of a remote strato-volcano high in the Syunik Mountains of southern Armenia are petroglyphs of wheeled vehicles, draught oxen and one unique ploughing scene. Although few in number, the transport motifs are varied and intriguing, their context and locations suggesting they are not simply straightforward representations of transport reflecting everyday life in the caldera. What can these images and their landscape settings tell us about the life-ways and worldviews of those who pecked them? How might the petroglyphs relate to the excavated finds of real wagons in the rich archaeological record of wheeled vehicles and depictions of them in the southern Caucasus and beyond? May the Ughtasar transport motifs provide clues to the likely chronology of some of the rock art?

The Ughtasar Project team is exploring a range of approaches in the attempt to shed light on these questions. In this presentation petroglyphs pertaining to motion will be examined at multiple scales within their context on the rock, in the landscape and within the wider region.



Fig. 1 - Rock 480 with wagon cum goat,
Ughtasar (©Ughtasar Rock Art Project)
Fig. 2 - Ploughing scene (Rock 15),
Ughtasar (©Ughtasar Rock Art Project)