

**International Congress: Archaeology and Rock Art — 25 years SIARB
La Paz, Bolivia, 25–29 June 2012**

Bolivian Rock Art Research Society (SIARB), National Museum of Ethnography and Folklore (MUSEF), PIEB and International Federation of Rock Art Organisations (IFRAO)
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Rationales of sessions

1 - Dating and chemical analysis of rock art

Marvin Rowe (U.S.A., marvinrowe@gmail.com) and Alice Tratebas (U.S.A., Alice_Tratebas@blm.gov)

This symposium will address the growing subjects of dating and chemical analysis in rock art. Both have been used in rock art studies for several decades, but new studies are emerging. Most current techniques for dating and chemical analysis require sampling of the art, but recent advances in instrumentation are allowing some new chemical analyses to be done in situ and non-destructively.

Although direct dating investigations of rock art have been underway for over two decades, adequate testing and verification are still needed for most dating methods. Studies to investigate the factors which may affect accuracy of dating results still require extensive research (such as post-depositional alterations, climatic factors, fire effects and others). For dating rock coatings on petroglyphs, varnish micro-lamination has been blind tested and verified in the scientific literature. Dating pictograms with charcoal pigments has had some success although more independent analyses are needed to test the results. For inorganic pigments, techniques are developing, but there is no standard dating technique for inorganic components of pigments that has been verified.

Developments in chemical instrumentation have opened the organic analysis of some paint vehicle/binders for study. So far there are few definitive studies, but we eagerly await new results. Chemical studies of inorganic paint components have also been used to study paint formulas and source mineral components of paint. Some new instruments are portable and non-destructive and thus obviate the need for taking samples. These instruments may not produce accurate results for techniques that require assessing suitability of the sample in the laboratory. Considerable research is needed on rock art dating and chemical analysis, and we look forward to seeing new techniques yielding new results. We welcome papers on all aspects of rock art dating and chemical analysis.

2 - Scientific study of rock art

Robert Bednarik (Australia, robertbednarik@hotmail.com) and Dánae Fiore (Argentina, danae_fiore@yahoo.es)

This symposium will strive to address all aspects of scientific rock art research, i.e. any work that yields testable propositions about rock art. Topics may include non-archaeological or direct dating; the science of rock art recording and conservation; questions of the technology or production of rock art, such as forensic studies; physico-chemical analytical methods that can facilitate rock art research; or the taphonomy of rock art and its implications. Specific subjects likely to be covered include microscopy of tool marks and traceological analysis; geochemical and geophysical aspects of rock art studies, such as weathering and patination phenomena; digital image analysis and manipulation or other developments in recording techniques; nano-stratigraphy of accretionary deposits, including paint residues; tools and materials used in rock art production and their sourcing; scientific aspects of rock art conservation, and the standardisation of scientific methods of rock art analysis. Presentations on any of these subjects, or on similar aspects of the scientific study of rock art, are cordially invited from rock art scientists.

3 - Aesthetics and rock art

Thomas Heyd (Canada, heydt@uvic.ca), John Clegg (Australia, john.clegg@sydney.edu.au) and Chris Chippindale (U.K., cc43@cam.ac.uk)

Archaeology studies the past, as determinable in the material record, while 'rock art' consists of humanly made marks on (or with) relatively stationary rock. Interpretation of rock art may seem difficult, or even impossible, due to differences across time and societies. It is, however, inevitable because as soon as we say

‘This is a picture of an animal’ or ‘This is an anthropomorph’, we are interpreting. Furthermore, as soon as we feel or say ‘This is a handsome or elegant or incomplete figure’, we are making aesthetic judgements. Anthropology of art confirms that aesthetic ideas, ideals and judgements are universal in human cultures, and we have no reason to believe earlier human societies were different in this regard.

We seek papers that explore the aesthetic dimension to the archaeological study of rock art. Particular questions of interest:

- ⊖ How can a good approach to aesthetics provide insights into rock art? What are its pitfalls, its virtues?
- ⊖ How can exploring aesthetic judgement and choice help us recognise motifs, figures and/or scenes? How can it help us understand better the function of pictures and figured sites?
- ⊖ Can exploring aesthetic interest help explain previous viewers’ uses of such images, assemblies or sites?

4 - Management and conservation of rock art sites

Valerie Magar (Mexico, valerie.magar@gmail.com) and Freddy Taboada (Bolivia, taboadatellez@yahoo.com)

Rock art sites are of increased interest for conservation professionals, due to their importance for understanding the cultural evolution of numerous groups worldwide, and because of their fragility and vulnerability, often being exposed to weathering. They are also highly visible.

The session on conservation and management will welcome practical case studies in these fields undertaken in rock art sites around the world. There are still numerous unsolved questions regarding the alteration and decay mechanisms and processes at many sites and the effects of climate change that may aggravate many of these natural processes. We therefore invite the presentation of experiences, which result in proposals and strategies to face and mitigate such effects, as well as those considering the cultural impacts on the sites.

The session will also provide the opportunity of exploring existing management systems at various sites, including technical aspects such as documentation and monitoring of the sites, as well as aspects related with community participation, in the case of traditional communities with a cultural continuity, as well as in sites involving different stakeholders.

We expect participants to share problems as well as solutions, and tackle the numerous challenges still existing in the field of conservation and management of rock art sites.

5 - Rock art and indigenous communities

Pilar Lima (Bolivia, plimatbo@yahoo.es) and Patricia Ayala (Bolivia, payala_rocabado@hotmail.com)

What role do rock art sites play in the conception of the local population or communities? So far, this issue has been overlooked by investigators despite its importance, considering that a large percentage of rock art sites are within indigenous territories. Therefore indigenous people are responsible for their management and, in some cases, are responsible for the destruction of this heritage.

Local management or administration of sites should be strengthened in order to guarantee the long-term conservation of rock art. Various measures have been implemented for this objective, such as the creation of archaeological parks and site museums or the setting up of tourist business ventures managed by the local population or communities.

This session will inform about specific experiences and discuss whether they are adequate, on the national and international level proposing activities by investigators that allow them to deal with the preservation and presentation of sites in collaboration with the indigenous communities.

The session will welcome presentations by archaeologists and rock art researchers detailing their experiences of research and management practices of rock art sites. We also invite members of indigenous communities who have participated in conservation projects or the administration of rock art sites in their native territories.

6 - Archaeological context of North American and Mesoamerican rock art sites

Evelyn Billo (U.S.A., ebillo@aol.com) and William Breen Murray (Mexico, wmurray@udem.edu.mx)

While there are thousands of rock art sites in North America and Mesoamerica, and indigenous cultures with ties to some of them, there are many sites where the only link with the past is within the archaeological record. This session solicits papers that present research in what has been learned or proposed about the function of rock art in relation to its archaeological context and which adds to or complements information

derived from other sources, such as ethnography. Presentations on the value of identifying rock art elements as an aid to understanding and supplementing the archaeological record are especially encouraged.

Topics may include, but not necessarily be limited to, the archaeological evidence for a rock art site's place in:

1. The landscape (trails, springs, vision quests, spatial relation to habitation, fields)
2. Belief system (deities, cosmology, healing)
3. History (hunts, migrations, warfare, contact with Europeans)
4. Social structure (clan symbols, ceremonies, dances, competition)
5. Material culture (pottery, textiles, weapons, hides, tools)
6. Science (botany, astronomy, zoology)

7 - Rock art and archaeological cultures in present-day Central America: a link between Mesoamerica and Andean region

Martin Künne (Germany, kuenne@zedat.fu-berlin.de) and Lucrecia de Batres (Guatemala, luckybatres@gmail.com)

For a long time rock art research in Central America has been regarded as a marginal subdiscipline of archaeology. However, from the 1990s onward, the recording and interpretation of rock art sites has become a focus of scientific research. We now have a more detailed understanding of the context of the sites and may use new dating techniques and analytical approaches.

Based on systematic recording projects and within a framework of verifiable data, we wish to demonstrate that rock art, archaeological contexts and ritual landscapes are closely related. Hopefully this will lead to a more realistic approach to the social dynamics of ethnic groups that created rock art.

8 - Rock art, archaeology and the Caribbean

Michele Hayward (U.S.A., mhayward@panamconsultants.com), Racso Fernández (Cuba, itibacahubaba@yahoo.com.ar) and Franz Scaramelli (Venezuela, fscarame@gmail.com)

Rock art has long been a subject of investigation within the island chain and continental fringes of the Caribbean. Archaeology also enjoys an extensive research history in the area, but one which has not readily incorporated rock art findings or data. Recently, this situation has begun to change due to several factors including improvements in the chronological control over rock art, new efforts at synthesising different data sets and comparative studies, and an increasing sophistication in modelling past Amerindian cultures where rock art data has been or can be seen to be a critical element in the explanatory framework.

This session aims to highlight and encourage collaboration among investigators, who may focus on rock art or traditional archaeological subjects, but who also realise that the integration of each other's results can enrich both specialties. The diverse nature of research strategies within the region is also expected to be underscored, a legacy of former and continued Dutch, Danish, English, French, Spanish and American political and economic control. Specifically we invite researchers to address the following issues: the characterisation of Caribbean rock art and its differentiation from other South American regions; the status or development of broad rock art classification systems such as styles or traditions in the area, a commonly employed concept in archaeology; the integration of rock art studies with wider regional research interests in archaeology including pre-Historic political, exchange and religions developments; the nature of archaeological investigations and rock art studies in the area; and the structure of archaeological and rock art research and its relationship to regional or area-specific site (non-rock art and rock art) survey and documentation.

9 - Archaeology and rock art of the Amazon basin (South American lowlands)

Edithe Pereira (Brazil, edithepereira@museu-goeldi.br) and Kay Scaramelli (Venezuela, kfscarame@cantv.net)

Rock art of the Amazon region presents unique challenges and opportunities for research. On the one hand, the limited access to many areas of the basin has impeded systematic survey, while at the same time prevented the damage to the rock art that often accompanies mass visitation to sites. On the other hand, the continued presence of indigenous peoples in the area offers a privileged vantage to the investigator regarding the utilisation and signification of rock art contexts in the present. Although there are very few communities who still produce rock art, these sites figure prominently in myth, ritual and oral tradition of both indigenous and Creole inhabitants of the region. Nonetheless, many of these sites have considerable chronological depth,

and the images have been produced, reproduced and reinterpreted over time. The presence of different styles and traditions, superimposed or isolated, and associated or not to other archaeological evidence, may be a key to the complex processes of the peopling of the tropical lowlands of South America. With these issues in mind, we propose a session that will address the following themes:

1. The definition of themes, styles, horizons and traditions of Amazonian rock art.
2. Inter and intra-regional comparison aimed at the construction of relative chronologies.
3. The role of rock art sites in indigenous and Creole traditions.

We propose to divide the session into two parts; one, dedicated to the presentation of papers on the suggested themes and two, a workshop dedicated to the construction of a regional synthesis.

10 - Archaeology and rock art in the Andean Formative period

Peter Kaulicke (Peru, pkaulic@pucp.edu.pe)

The Peruvian Formative period tends to be dominated by the Chavín style, which is derived from the art in stone at the site of Chavín de Huántar, located in a mountain range in northern Peru. The centrality of Chavín conditions and obscures the investigation of cultural manifestations outside that site. There are many sites with contemporaneous rock art styles on the north coast and, to a lesser extent, on the central and southern coast, with a potential that has so far scarcely been investigated. The following topics may be considered in contributions to this session:

1. The spatial distribution of rock art sites may be compared to other types of sites ('ceremonial centres', funerary areas, domestic sites etc.) and, in that way, will contribute to the distribution and definition of regional styles from the Early Formative or Late Archaic periods till the Late Formative period.
2. By establishing the context of the rock art, it may be possible to include the sites in networks and define their role within the respective social world.
3. Architectural modifications around rock art may permit a relative chronology of the art production and its use to be established.
4. All this also contributes to a more precise definition of concepts of cultural landscape.

The examples given should be seen as advances towards the research objectives, but not necessarily as specific contributions.

11 - Inca rock art: evaluations and possibilities

José Berenguer (Chile, jberenguer@museoprecolombino.cl), Andrés Troncoso (Chile, atroncos@uchile.cl) and Rainer Hostnig (Peru, rhostnig@speedy.com.pe)

In recent years a number of investigations took place in the Cuzco region, as well as in other regions of the former Tawantinsuyu, and, as a result of this new research, different authors have presented their vision of supposed Inca rock art. However, so far no agreement has been reached about this issue.

On the one hand, one might question the absence of Late Horizon (Inca period) rock art in the sequence of rock art defined for some regions; on the other, the absence of a clear visual reference to rock art which occurs in all the spaces of the Inca empire (in contrast to architecture, road systems, ceramics, textiles etc.) raises doubts about the possibility of defining Inca rock art.

The objective of this session is to engage in a discussion about the possibilities of defining the characteristics of Inca rock art. We suggest that researchers critically explore approaches that may lead to an appropriate methodology which allows to define rock art production during this period, and also present evidence for such definition. Besides, they should discuss dynamics of rock art in different provinces of the Tawantinsuyu. We especially welcome papers which compare two or more regions or provinces, and those which discuss rock art of two or more periods of the local or regional sequences.

We think that another central issue of this session should be the use of terminologies used by specialists to describe rock art production during this period distinguishing between what might be called Inca rock art, associated with members of the Tawantinsuyu, and that which refers to rock art produced *during* the Inca period. While the first case is directly related to the dynamics of agents, technologies and state policies, the second considers the dynamics of visual communication systems of local communities *through* the respective period, assessing which Inca design elements, composition or technologies are adopted by the

local populations; we should also discuss whether it is possible to define basic visual systems which expanded throughout the empire.

Therefore it is evident that this session does *not* wish to simply present rock art sites belonging to the Inca period. The objective is rather that, based on these data, the authors of presentations discuss the reality of rock art in the Tawantinsuyu based on theoretical terms, methodologies or social dynamics.

12 - Archaeology and rock art of the Titicaca lake basin

Mark Aldenderfer (U.S.A., maldenderfer@ucmerced.edu), John Janusek (U.S.A., john.w.janusek@vanderbilt.edu) and Matthias Strecker (Bolivia, siarb@accelerate.com)

Over the past ten years considerable progress has been made in archaeological investigations in the Lake Titicaca basin. From settlement pattern surveys and extensive excavations, we now have a more complete understanding than ever before of regional pre-History and cultural evolution from the Archaic into the Colonial epoch. One of the most important and interesting types of data that has been the focus of extensive research by a number of investigators has been rock art. In this session, we wish to explore how studies of rock art can contribute to a deeper understanding of regional pre-History. We argue that there needs to be a more systematic approach to rock art that does not see it in isolation from the peoples that produced it. To do this, we wish to explore the following broad themes:

1. The context of the production of art within settlement systems
2. The changes in these contexts over time and how these changes are reflected in rock art
3. The ways in which styles of art reflect changing cultural traditions and their meaning
4. Comparisons of art styles among various cultural traditions in the basin

13 - Archaeological research and rock art in Bolivia

Claudia Rivera (Bolivia, clauri68@yahoo.com) and Sonia Alconini (U.S.A., sonia.alconini@utsa.edu)

In the last twenty-five years, archaeological research in Bolivia has produced important new results. A new generation of archaeologists is being formed in Bolivia and new research has been conducted in numerous regions that were previously little known in southern Bolivia and the Chaco; at the same time, investigations in the Lake Titicaca basin, the Cochabamba valley and the tropical lowlands of Moxos have been intensified.

In many of these studies, particularly in regional surveys, rock art sites have been registered that were integrated with the investigation of settlement patterns, cultural landscape, exchange networks, territory boundaries and resources, as well as specific iconographic studies. In this context, the session on archaeology and rock art in Bolivia endeavours to present important new studies that incorporate rock art in archaeological research on different topics and generate discussion on theoretical and methodological aspects.

14 - Archaeology and rock art in desert regions

Marcela Sepúlveda (Chile, marcelaasre@gmail.com), Carlos Aschero (Argentina, ascherocarlos@yahoo.com.ar) and Jean-Loïc Le Quellec (France / South Africa, JLLQ@rupestre.on-rev.com)

In this session we will present different studies of rock art related to desert environments and discuss the strategies of placement, selection of rock surfaces or materials and production techniques of these representations (paintings, petroglyphs and geoglyphs). Based on this approach, we intend to discuss the results of research regarding the reconstruction of social phenomena in the respective regions.

We understand the term 'desert regions' in a wide chronological and spatial sense considering current desert regions and those that result from a process of desertification over time. In relation to the 'social phenomena', we intend to interpret different social dimensions related to rock art and their possible connection with processes of diverse temporal dimensions that happened in the desert regions: defining territory, demarcation of particular spaces, ceremonies related to specific cults, among others. Presentations might also refer to other forms of expression of the material culture in these regions, such as funerary practices, for example, and their relation to rock art.

Finally, we also wish to include aspects related to the methodological strategies of rock art research: documentation and analysis, analysis of conservation problems etc. Interpretative and comparative approaches are welcome.

15 - Round table: rock art and the tentative list of World Heritage sites in Latin America and the Antilles

Nuria Sanz (France, *n.sanz@unesco.org*) and Mercedes Podestá (Argentina, *mercedespodesta@yahoo.com*)

In 2010, the UNESCO list of World Heritage sites included 890 sites, which had been registered over 35 years of the existence of the World Heritage Convention. Only 36 of them were considered because of the value of their rock art representations, undoubtedly a very small selection of rock art sites.

Rock art possesses outstanding universal values. The registered distribution of sites is an example how Article 7 of the Convention may be applied internationally. By analysing the forms of rock art and defining the values of rock art representations which have been produced over thousands of years of human presence, they are no longer considered a subjective self expression of its creators. They are now seen as manifestations of cultural experiences and collective symbolism shared by groups of people. Rock art is present worldwide, in many cases with an enormous concentration of figures and spanning long periods of continued use of the sites. A significant number of sites have been important for regional communities for centuries or even millennia. They may be valued according to their quantity, quality, duration and expansion.

For more than ten years the World Heritage Committee has expressed its preoccupation concerning the problems of unequal selection of themes, geographic or chronological distribution of sites enlisted in the World Heritage List. Rock art is among those sites that should be considered more for the list in all regions on an international level. This session dedicated to World Heritage and the Tentative List will help to identify preferences and criteria among rock art specialists aimed at preparing a regional plan of action according to the wealth and diversity of rock art manifestations in Latin America and the Caribbean. We hope that the regional investigators will present new outstanding sites with a view to contributing to the current debate and the preparation of the proposed plan of action.