This symposium was held in the city of Santa Cruz, Bolivia, from 25 to 28 June 1991, organised by the Sociedad de Investigación del Arte Rupestre de Bolivia (SIARB), the Bolivian Culture Institute, the National Archaeological Institute, and the Casa de Cultura (cultural community centre) of Santa Cruz. The 100 participants came from various South American countries, from North America and from Europe. For most of the Latin American researchers attendance involved a considerable sacrifice, as for those whose costs were not subsidised, the travel expenses amounted to more than a month’s salary. Yet in spite of these economic difficulties the symposium was well attended by colleagues from Argentina, Brazil, Peru, Chile and Colombia.

The copious program consisted of three sections of paper presentations, various expositions of rock art documentation, an exhibition of publications, and presentation of video films.

Section 1 of the academic proceedings, Management and conservation of rock art sites, was co-ordinated by Nicholas Stanley Price of the Getty Conservation Institute, U.S.A., who gave a brief introduction stressing that measures for protection and conservation of any archaeological site must form part of a more general plan of management of the site and its surrounding area. Papers presented by Ian N. Wainwright (Canada) and Antoinette Padgett (U.S.A.) also reflected the viewpoints of North American professionals whose work practices are beyond the means of the average Latin American researcher, who has to manage without sophisticated equipment and lacks access to suitable laboratories. But both talks served their purpose of outlining the principal objectives and methods of site protection and conservation. Wainwright gave a summary of the work of the Canadian Conservation Institute since 1972, including stereophotogrammetry and digital image processing. Padgett, a graduate from the diploma course in rock art conservation held in Canberra, Australia, in 1989, reported about a follow-up course she directed in California in April/May 1991. Fellow students of the Australian course were instructed in the subjects of rock weathering, archaeology and anthropology of rock art, research planning, analytical techniques, conservation procedures and rock art recording.

Erica Bolle (Argentina) presented the rock art conservation project at Cerro Colorado, Córdoba, conducted in collaboration with A. E. Charola (ICCROM Argentina), Carlos Weber (Chile) and Mark Wypyski (Metropolitan Museum of Art, New York). Finally, Omar Claure, Leo Ticlla and Fernando Huaranca explained Bolivian projects. While Claure outlined the protection of the sculptured rock of Samaipata (Dept of Santa Cruz) by the construction of a fence and custodial supervision, Ticlla concentrated on the technical aspects of conservation of Samaipata. Huaranca presented a plan to protect rock paintings in the region of Torotoro (Dept of Potosí), by impeding access to the site through filling in holes in a vertical cliff with natural stones of local origin. This low-cost proposal does not interfere with the natural setting of the site and Huaranca, an architect with experience in ecological work, proposes to use plants to conceal the remedial work. His project shows that with ingenuity the integrity of a site can be maintained even if funds are lacking.

During the symposium a comprehensive bibliography on rock art protection and conservation was presented, compiled by N. Stanley Price, D. McCarthy, M. Streccker and L. Aramayo [a copy has been deposited in the AURA Archive].

Section 2 of the Symposium, New studies of Bolivian rock art, was co-ordinated by Roy Querejazu Lewis. The eight presentations dealt with sites in different Departments (provinces). Rock art in the Dept of Santa Cruz was discussed by Matthias Streccker (The study of the sculptured rock of Samaipata by Hermann Trimborn, published in 1967 in Germany, was recently translated into Spanish by Streccker), Omar Claure addressed sites in the Andean zone of Santa Cruz, and Erica Pia spoke about the Stylistic sequence of rock art in the east of Bolivia. Carlos Kafler's investigation, Pre-Hispanic petroglyphs of Capinsal, consists of careful documentation and analysis of geological characteristics, carving techniques, petroglyph depth and superimpositions, to elicit a relative chronology. Juan Carlos Jemio and Roberto Mantilla explained their documentation of rock art in the Dept of Tarija, an initial phase of a project by the Bolivian Culture Institute and SIARB. Freddy Taboada gave an update of his long-term investigation of Colonial rock art of Chirapaca, Dept of La Paz, where he recently found a location where ritual offerings are still being performed by present-day Aymara Indians. M. Streccker discussed rock art in the region of Betanzos, Dept of Potosí, where a great stylistic range exists among paintings and petroglyphs which apparently span several millennia. They begin with hunting scenes, followed by representations of the ceramic-agricultural period, up to Colonial times. Finally, Querejazu Lewis talked about rock art as part of the popular Andean religion. He demonstrated that many sites in the Bolivian
highlands, which in pre-Hispanic times formed part of the wak’as (sacred places and objects) of the Andean pantheon, maintain their ritual character. At Korini 3, a site with pre-Hispanic and Colonial rock paintings in the Dept of Oruro, he was shown a ritual offering (mis) in a buried wooden box, below a huge blood stain on the centre of the rockshelter, where according to informants a bull had been sacrificed.

In the extensive Section 3 (co-ordinated by Carlos J. Gradin, Argentina), 23 papers were given, dealing with new studies of rock art in other South American countries (Colombia, Peru, Brazil, Argentina and Chile). An address by Juan Schobinger (Argentina) covered North, Central and South America, providing a vision of the most ancient American art (a summary of a book Schobinger is currently writing). For lack of space, only a few of the other talks are mentioned here, which showed that rock art research is on a solid footing in Brazil, Argentina and Chile.

Luis Briones Morales (Argentina) presented the investigation of recently discovered geoglyphs and petroglyphs at Cerro Colorado, north Chile. Martha Locks presented the research by various Brazilian investigators (including Maria de Conceição Beltrao, Darlan Pereira Cordeiro and Rosa Maria Mendonça de Magalhaes) in the State of Bahia where rock paintings claimed to depict the deer species Blastoceros dichotomus provide indications that enable us to reconstruct former environmental conditions; in the region of Lagoa Santa, Minas Gerais, deer bones were excavated which could possibly be related to rock paintings at the same sites. Alence Motta Baeta explained the research in Minas Gerais, directed by Andrés Prous (French Archaeological Mission) where 500 rock art sites have been investigated and two phases have been defined: the ancient ‘Planalto’ tradition, and the earlier ‘Ballet’ stylistic unity which can be associated with the ‘Noreste’ tradition of Piauí. This raises the important problem (as pointed out by Juan Schobinger in the discussion following the talk) of how it is possible that the Noreste tradition in Piauí can be one of the oldest rock art styles, as maintained by Niño Guidon. Motta Baeta reasoned that it took a long time till this style arrived in Minas Gerais.

Carlos J. Gradin detailed his studies of rock art in Patagonia (over a period of 30 years!) which enabled him to define a solid chronology spanning the stylistic developments of 10 000 years. María Mercedes Podestá and Marisa Pia Falchi investigated rock art of the formative period (with 14C dates of excavated pigments dating from 6600-3000 B.C.) and of the late agricultural-ceramic period (A.D. 1000-1480) in the region of Antofagasta de la Sierra, Argentina. María Isabel Hernández Llosas summarised the findings at Humahuaca, Argentina, where rock art sites with pre-Hispanic and Colonial indigenous motifs were inhabited in Colonial times.

A publication containing the symposium program, list of participants and Spanish summaries of talks was distributed (edited by M. Strecker). Some of the papers presented will be published in the forthcoming issues of SIARB Boletín and SIARB Contribuciones.

After concluding the academic program, two groups guided by Querejazu Lewis and Claude visited rock art sites in the Andean zone of the Dept of Santa Cruz: El Buey, Toro Muerto, Peña Escrita, Almacigal and Samaipata.

SIARB plans to hold its IVth International Rock Art Symposium in 1997 in the historic city of Sucre, Bolivia, and has applied to IFRAO to host the 1997 IFRAO meeting during this symposium. In the meantime, two meetings of rock art specialists are likely to be organised in other South American countries: in 1993 in Salta, Argentina, and in 1995 in Arica, Chile. During the recent symposium, Gradin proposed a closer collaboration among South American colleagues with the setting up of a federation of several institutions and research centres in different countries. María Mercedes Podestá (SIARB representative for Argentina) was nominated as co-ordinator of this project and will also assist in preparing the meeting planned to take place in Salta in 1993.

RAR 8-226

INTERNATIONAL ROCK ART CONGRESS IN U.S.A. - 1994

A major international rock art congress is to be held in the U.S.A. in 1994, under the auspices of ARARA (American Rock Art Research Association), with the support and co-operation of numerous organisations in the United States and abroad, including ACASPP, RAAC and rock art groups in Mexico. Sixty-four ARARA members have volunteered to serve on the 1994 Conference Committee. The Steering Committee for this event has been established and the following sub-committees have been formed, with the Chair names included where established:

Mary Gorden, Conference Chair
Sue Ann Sinay, General Organisation
Steven Stoney, Site Management
Diane Hamann, Program
Kay Sanger, Publications
Joyce Alpert, Tours
Donna Gillette, Registration
A. J. Bock, Finance
Other sub-committees cover Publicity, Grants and Sponsors, Transportation, Special Events and Leisure Activities, Exhibits and Vendors.
Several sites are under consideration for this important international event, and eleven U.S. cities have been invited to present bids. There are many cities in the United States which offer the appropriate facilities, with access to large concentrations of rock art and other attractions of interest to the international community. The presentation of scientific papers will be the focus of the congress, however. These papers will cover many aspects of rock art research with several symposia running concurrently. ARARA will publish all papers presented which meet a specific pre-congress publication schedule.

The official language will be English, however, translators will be provided. ARARA and supporters will sponsor individuals from economically disadvantaged countries to ensure their attendance. These individuals must demonstrate that all other means available to them for funding have been exhausted. ARARA plans to encourage native peoples to become involved in all aspects of this congress - especially in field trips to rock art sites.

A bid to host the 1994 IFRAO Meeting at this congress has been presented to the IFRAO Convener, and to the present IFRAO Chairperson, Shirley-Ann Pager, during the recent IFRAO Meeting in Natal. This 6-page document provides extensive details about the proposed organisation of this major event, detailing the roles of the various sub-committees and providing a complete list of all Steering Committee members and their contact addresses. Shirley-Ann Pager has called for a postal ballot on the issue, noting that IFRAO members attending the Natal meeting have decided that the American event would be the obvious choice for the 1994 IFRAO Meeting. IFRAO members have now voted to accept ARARA's bid. Consequently the 1994 IFRAO Meeting will be held in the United States, together with the international congress now being planned.

All IFRAO members are urged to publicise and promote this event by whatever means available, and to ensure attendance of their representatives in 1994.

**Notices**

The proposal of an IFRAO Standard Scale, by R. G. Bednarik in IFRAO Report No. 6, has attracted several supportive comments, but only one detailed response. Paul A. Peterson, of Petaluma, California, provided the following comments:

1. The same three-colour scale could be added parallel to the smaller, millimetre bars so that it would show up in close-up shots (see figure).
2. The printing date could be significant since all dyes, including inks, fade with time. The printing/revision date could be included in one corner of the scale.
3. Plastic scales last longer and are washable, however, they tend to reflect light and would probably be more expensive to produce. If printed on paper, the stock should be thick enough to resist curling, bending, getting blown away etc.
4. Ideally, a scale should have a self-adhesive backing with glue strong enough to stick to rock surfaces and not wear out after repeated uses, along with a convenient carrying case to protect it when not in use.

Response by R. G. Bednarik

It is so self-evident that Points 1 and 2 are improvements of the concept that no further comment is required, and they should be incorporated. Concerning Point 3, the surface must be matt and least-reflective. Finally, the fixing of the scale is an old problem, where researchers must use their good judgement. Two small pads of double-sided adhesive tape, which is commercially available, can be placed on the back of the scale, which can then be used on stable rock. Friable rock, especially weathered sandstone, is not suitable for this, because grains from the rock surface are likely to remain on the adhesive. On very soft or porous rock, particularly in limestone caves, I use two thin steel pins, and this also works on very stable surfaces with fine fissures. In all other cases, or wherever there is any danger of affecting the surface near a motif, the scale will need to be hand held. Under no circumstances should scales be attached over, or very close to, a rock art motif, by whatever means, as they could then create a conservation hazard or a research problem.

**ETCHED IN TIME** - An exhibition on the petroglyphs of Val Camonica, Italy, conducted by the Societ... Cooperativa Archeologica Le Orme dell'Uomo.

This exhibition is currently being held in a number of cities. It consists of illustrative panels and casts. There are 35 panels measuring 90 by 80 centimetres that require a display space of roughly 70 metres along walls or partitions. The first panels deal with the environment, research history, engraving techniques and research methods.
The panels following the map of Val Camonica lead the visitor through a cultural and chronological sequence, beginning with the images made by epi-Palaeolithic hunter-gatherers, followed by imagery of Neolithic proto-cultivators and Copper, Bronze and Iron Age metal users, and concluding with Roman and Mediaeval figures. Casts show the true size and nature of the petroglyphs and portray hunting scenes, symbols, zoomorphs and anthropomorphs.

Two publications by Società Cooperativa Archeologica Le Orme dell'Uomo serve as appropriate reading material: *Etched in time*, and *Rupestrian archaeology, techniques and terminology - A methodological approach: petroglyphs*. Ludwig Jaffe

Petroglyphs on Naquane Rock, Val Camonica, Italy (recording by M. de Abreu, A. Fossati and L. Jaffe).