

## **IFRAO Report No. 13**

### **MEMBERS' PROGRESS REPORTS**

#### **AARS (Association des Amis de l'Art Rupestre Saharien)**

The central interest of the AARS is the rock art of the Sahara, from the Atlantic to the Red Sea, and from Maghreb to Sahel. Its main objectives are to promote studies, diffuse information and disseminate documentation relating to rock art. AARS has more than 120 members in various European countries (Austria, Belgium, France, Germany, Italy, Poland, Spain, Switzerland, U.K.) and in north Africa (Algeria, Morocco).

Fifty to 60 people attend the annual meetings which are organised alternately in France, Germany and Italy. During these three-day meetings, 20 to 25 communications (with slides) are presented by AARS members, covering most parts of the Sahara and a large variety of topics (survey, discoveries, methodology, preservation, dating etc.). Beginning with 1993, the proceedings of the meetings should be published for internal distribution. In addition, a Newsletter is issued two or three times per year, giving information about AARS and rock art events, books, techniques, trips, seminars or conferences.

The CeSMAP (Centro Studi e Museo d'Arte Preistorica, Pinerolo) and the AARS are jointly preparing an international travelling exhibition on Saharan rock art, due to take place first in Pinerolo (Italy) in 1995. This exhibition (about 60 photographs and maps) is intended to then travel in Europe and U.S.A., but it may be available for other countries upon request.

One of the current objectives is to design a map showing the distribution of the animals (wild or domestic species) represented in Saharan rock art. This information, distributed over hundreds of publications and unpublished documents of AARS members, has not yet been assembled and such maps are only available for some animals and/or some limited regions, but not for the whole Sahara. This map is aimed at helping those working in other fields who are interested in the presence (or absence) of particular species during the Holocene period in relation to climatic oscillations.

Apart from the AARS publications, articles, monographs and theses are published individually by many members, both archaeologists and non-archaeologists. In addition, some members are interested in technical aspects, data recording and image treatment. Members are also involved in surveys in a few regions, particularly Morocco, Adrar des Iforas, Dakhleh oasis (Egypt) and central Sahara (Tassili-n-Ajjer and Fezzan). Finally, numerous trips are organised by individual members to visit rock art sites and for field research.

A. Muzzolini and Y. Gauthier  
President and Secretary respectively, AARS  
RAR 11-328

#### **ARAPE (Association pour le Rayonnement de l'Art Parietal Européen)**

The broad aims of the Association are to further research in rock art and to improve communication among rock art specialists. Irrespective of the research activities of its members, which include field trips, lectures, university courses, excavations, tracings and the like, its main activity consists in the publishing of the International Newsletter on Rock Art (INORA). Three issues of the Newsletter are produced per year, of thirty-two pages each, in February, June and November. It is concerned with rock art world-wide. All items are published in both English and French, as is the custom of ICOMOS. Contributions deal with recent discoveries, accounts of newly-published books, a forum for principles and practice, technical information, announcements and accounts of specialised meetings, and overall views of rock art in whole countries or large areas. So far, INORA has been produced for three years, 1992 to 1994, and nine issues have been published.

Jean Clottes  
Editor, ARAPE  
RAR 11-329

#### **AURA (Australian Rock Art Research Association)**

During the eleven years of its existence, AURA has established a solid publishing base specialising in high-calibre, refereed work in the field of rock art studies. So far, eight volumes of the Occasional AURA Publications have appeared, and AURA has been instrumental in the conception of several major volumes by other publishers in other countries. The journal of AURA, *Rock Art Research*, is also the official organ of IFRAO, and is read in about sixty countries. Three years ago, the publishing arm of AURA, Archaeological Publications, rescued an ailing archaeological journal, *The Artefact*, transforming it into Australia's international archaeology journal. The AURA Newsletter is also produced by AURA.

These endeavours to establish a viable scientific publishing base are a reflection of AURA's principal commitment: to provide an international forum for the dissemination of the most important research findings in rock art, with a special emphasis on Australia. The same objective is reflected in the staging of the AURA Congresses, which have been the largest academic events held in the discipline. In Australia, AURA's policies have led to an unprecedented flourishing of rock art studies.

The second principal objective of AURA is to promote traditional indigenous custodianship of rock art in those regions where extant societies claim rock art as part of their cultural heritage. Recent developments in Australia have been momentous in this area, and we can optimistically anticipate a time when this objective can be deleted from AURA's agenda, having been fully realised.

Besides the AURA Congress, AURA has also held smaller symposia and field trips, including a successful rock art tour to China. AURA members attend all rock art conferences in the world, and collectively they account for a very large share of serious rock art research conducted in the world, with Australians now constituting only a minority of AURA's membership. AURA's publications are distributed free to many researchers in developing countries and in former socialist countries, as part of AURA's commitment to ensure that researchers in such countries are not disadvantaged excessively. AURA maintains various types of exchange and other institutional agreements with numerous agencies around the world.

Robert G. Bednarik  
Secretary and Editor, AURA  
RAR 11-330

#### **EARARA (East African Rock Art Research Association)**

So far, EARARA has concentrated, by way of public lectures and publications, on raising the awareness of both governments and the public at large, about the imminent threats to the rock art heritage as posed by vandalism and by bio-chemical factors. To this end, EARARA is preparing a newsletter which is expected to appear by about January 1994. EARARA would very much like to sponsor short field trips to rock art sites, but lack of finance has made this impossible. However, through a grant from the University of Dar es Salaam, the Chair, Dr F. T. Masao, has been able to conduct thirty days of extensive field work in Singida, in order to record as much of the vanishing rock art as possible. The findings are expected to be published in a monograph next year. Finally, EARARA has been planning for a pan-African conference on rock art which could have taken place in 1994, but since EARARA is conducting its International Rock Art Congress in Arizona this year it has been decided to defer the pan-African conference to 1996.

F. T. Masao  
Chair, EARARA  
RAR 11-331

#### **GE.FE.BI. (Gesellschaft für Vergleichende Felsbildforschung)**

The GE.FE.BI. (Society for Comparative Rock Art Studies) was formed in 1977 and merged with the Swiss Society for Comparative Rock Art Studies. Its aim is to analyse the rock art of the world, but especially the Indo-European material, with the purpose of recognising common archetypal manifestations. For over fifteen years, the Gesellschaft has conducted major field trips every second year, in Europe, Africa, and especially in India, to both known and new rock art sites and to megalithic structures. Its work has been reported at conferences in various countries, and it is reflected in a series of *Jahrbuch*, of which ten have so far appeared.

The Gesellschaft sees itself as a bridge between the exact scientific comprehension of the visible abstractions of rock art on the one hand, and the human desire to interpret such fascinating signs of prehistory, to construe the less obvious meaning, in order to ascertain our origins, what we are today and where our course might lead. The rise of today's many scientific rock art organisations derives its impetus from the desire to understand the signs. The GE.FE.BI. is not opposed to materialist science, but is perceived as a necessary supplement to illuminate alternative view points. Our appeal is directed to those scientists who use computers, to detect with their help archetypes in rock art assemblages, so that we see in rock art not just the metaphorical letters, but also the words and sentences they form.

Lothar Wanke

President, GE.FE.BI.  
RAR 11-332

### **RARAC (Rock Art Research Association of China)**

1993 has been a busy year for RARAC. It has held three rock art exhibitions: in Tianjin, Shandong and Beijing. The exhibitions were well promoted, and were announced in newspapers and magazines, as well as by radio and television. The members of RARAC have published three substantial books during 1993: *Masks in China's rock art*, *The rock art at Mt Helan and Mt North*, and *A history of the discovery of the world's rock art*. In addition, RARAC has published a mimeographed newsletter in 1993.

In the course of 1994, RARAC is planning to hold an exhibition of the world's rock art. It will include some of the Australian photographic material collected by Professor Chen Zhao Fu during the two AURA Congresses, in Arnhem Land, Kimberley and Laura. Three volumes of *The complete works of China's rock art* will be published during 1994. They are part of a series of six volumes, compiled according to geographical rock art areas. These books will be of large format and will each contain about 200 colour plates.

An international rock art conference is planned in 1995, to be held in the Altai District, Xinjiang Uygur Autonomous Region. If RARAC is to proceed with this plan, preparations will commence shortly.

Chen Zhao Fu  
President, RARAC  
RAR 11-333

### **Soci,t, Pr,historique AriŠge-Pyr,n,es**

This Society has been in existence for forty-seven years. It is mainly focused on the AriŠge and the French Pyrenees, but its specialty is prehistoric and tribal rock art world-wide. It arranges public lectures intended for the general public as well as specialists, and it publishes a yearly scientific journal, in French (generally between 200 and 250 pages per volume, or more). The papers published deal with prehistory in the Pyrenees and rock art anywhere in the world, but most papers have been on Europe and North Africa. This journal, the *Bulletin de la Soci,t, Pr,historique AriŠge-Pyr,n,es*, is widely read since it is sent to specialists, universities and museums in sixty-four countries, on all continents. One of its specialties is its Preface, each year by a different archaeologist, in which the authors express their personal points of view about research.

Jean Clottes  
Editor, Soci,t,  
RAR 11-334

### **SIARB (Sociedad de Investigacin del Arte Rupestre de Bolivia)**

The Bolivian Rock Art Research Society was founded in January 1987. Its main objectives are recording and investigation of rock paintings and petroglyphs, protection and conservation of rock art sites, as well as publication of scientific reports and a public education campaign. The Society has registered 300 sites in all departments of the country, though mainly in the Andean region. Rock art in Bolivia has a very long tradition, apparently beginning in the Palaeo-Indian period and up to the Colonial and Republican periods. Numerous sites are still worshipped by present-day indigenes who regard them as sacred places.

Research and documentation projects are under way in several regions of Bolivia. Excavations at a rock art site in the Dept. of Cochabamba were planned to take place in 1994, in collaboration with the archaeological museum of the University of Cochabamba. SIARB is trying to develop a policy for the conservation of sites, taking into account experiences abroad and local conditions. SIARB's Code of Ethics obliges its members to respect the integrity of sites and to not reveal their exact locations to the public, and it bans all potentially destructive recording methods. An efficient low-cost site protection project has been completed in Torotoro, and SIARB tries to create awareness for the need of protecting sites among local villagers. The Society works with government agencies to improve the administration of the few existing archaeological parks with rock art.

A public education campaign has been organised by SIARB, featuring two major expositions on Bolivian rock art, one of which toured seven cities. SIARB has published a flyer on rock art for children, another on the rock paintings of Qala Qala, and a booklet on rock art of the Dept. of Santa Cruz for the public. A series of slides for use in schools has been prepared. Lectures on rock art are frequently held in La Paz. In 1993, the Bolivian post office issued a series of nine stamps on rock art in collaboration with SIARB (see front cover of RAR 10/2). In 1994, SIARB inaugurated an exposition of posters of world rock art in the National Museum of Art, La Paz.

SIARB has organised three international conferences which took place in Cochabamba (1988), La Paz (1989) and Santa Cruz (1991). The fourth SIARB conference will be held in 1997 in the historic city of Sucre, with a special section on the dating of rock art. SIARB publishes the annual *Boletín*, with Spanish text and detailed English summaries. In addition, a series of occasional papers called *Contribuciones al Estudio del Arte Rupestre Sudamericano* is published, of which three volumes have so far appeared.

Matthias Strecker  
Secretary and Editor, SIARB  
RAR 11-335

### **Comments on the Minutes of the Third Business Meeting of IFRAO**

A. Muzzolini, IFRAO Representative of AARS, has provided the following comments:

Item 5.1, Exchange of publications: AARS finds it too expensive to provide a copy of its publication to each of the twenty-three other affiliates.

This point has been informally raised before, by another affiliate. Members will need to weigh the benefits against the costs and make their own decisions accordingly. Members who believe that it is of benefit to incorporate in their libraries a set of publications produced by each IFRAO member are strongly urged to maintain such publication exchanges on an individual and voluntary basis.

Item 5.2, Copyright: AARS cannot dispose of copyrights, particularly on behalf of authors. This applies to text as well as images.

The point is valid not only for AARS, but presumably for all IFRAO members: they cannot ignore copyright laws in their respective countries. The waiving of copyright was originally intended for very short items (under 500 words), and primarily for unsigned announcements. If in any doubt, members still need to contact copyright holders. However, it is stated quite categorically that no part of the IFRAO Reports is copyrighted in respect of IFRAO members: every section, or the entire reports, may be re-published by any IFRAO member without permission. Submission of any item to this column is deemed to confer copyright to IFRAO collectively.

### **Agenda for the 1995 IFRAO Meeting**

Turin, Italy

Bearing in mind the various problems of previous IFRAO Meetings it is suggested that this conference should not coincide with events or proceedings of the host congress that are likely to be of interest to delegates. It may also be of benefit to spread proceedings over several days, in separate sessions of just a few hours each. Alternatively, if the proceedings are conducted as a continuous program, they should take place on the days subsequent to actual congress proceedings to avoid distracting IFRAO delegates. It is suggested that the following agenda will involve about sixteen hours of conference time, and the IFRAO Meeting should be planned on that basis.

The 1992 IFRAO Meeting (Cairns, Australia) was preceded by an open consultation session, which was available as a forum for raising and discussing any matter concerning the discipline. This was so poorly attended that it was adjourned without a single constructive suggestion. It is therefore proposed that the 1995 meeting be restricted to the business meeting of Official IFRAO Representatives. The agenda of that meeting will be as follows:

1. Apologies and declaration of proxies.
2. Confirmation of the minutes of the previous meeting (Flagstaff 1994).
3. Matters arising from these minutes.
4. Constitution: consideration and ratification of draft constitution as gazetted.
5. Reports from member organisations.
6. Unresolved or ongoing business previously debated:
  - 6.1. Establishment of a universal and general code of ethics (inclusive recording methods, sample removal etc.).
  - 6.2. Computerised data-sharing systems and bibliographies.
  - 6.3. International keyword system (initiated by CeSMAP).
  - 6.4. Dissemination of IFRAO Standard Scale and promotion of digitised systems based on it (initiated by AURA).
  - 6.5. Future strategies in the discipline (education, conservation, heritage nominations, standardisation etc.).
  - 6.6. Copyright and exchange systems among IFRAO members.
7. New business.
8. General matters.
9. The 1996 IFRAO Meeting.

10. Adjournment.  
IFRAO Convener

## **Rock Art Congress NEWS 95**

30 August to 8 September 1995  
Pinerolo and Turin, Italy

This is expected to be the largest academic event in rock art studies before the end of this millennium. The Congress is organised by the Centro Studi e Museo d'Arte Preistorica (CeSMAP), Pinerolo, a founding member of IFRAO. The venue will be the Royal Castle of Valentino (Faculty of Architecture), Turin.

The Turin congress is supported by the Italian Central Office, by regional government agencies, by the EEC, the European Authority, and the International Federation of Rock Art Organizations (IFRAO).

Program: the Congress consists of sixteen academic symposia, as well as debates, films and displays, field trips to rock art sites, exhibitions (e.g. 'Rock art in the Alps', 'Rock art in Europe', 'Rock art in the Sahara', etc.), and several special events, including the 1995 IFRAO Meeting, opening plenary session, cocktail party and concert, farewell dinner etc.

Contributions: Prospective participants are encouraged to submit abstracts (in English) for any of the following symposia.

### Thematic areas and symposia

#### Thematic area A: Rock art studies

- 1A - New approaches
- 2A - Semiotics, signs and symbols
- 3A - Rock art and music-archaeology

#### Thematic area B: Rock art and presentation

- 4B - Mass media
- 5B - Museology and museography
- 6B - Management

#### Thematic area C: Rock art and conservation

- 7C - Ethics
- 8C - Preservation and restoration
- 9C - Rock art and archaeological excavation
- 10C - Dating, recording and computer science

#### Thematic area D: Rock art in the world

- 11D - Rock art of the circum-polar countries
- 12D - Rock art and Mediterranean Sea
- 13D - Rock art of the Sahara
- 14D - News of the world
- 15D - Christian manifestations in rock art
- 16D - Rock art and ethnography

Field trips: numerous field trips will be conducted, both during and after the academic program: to post-Palaeolithic rock art sites in the Alps, Mount Bego, the Rock Cavour Park, western Alps, Savoy, Val d'Aosta stelae, Val Camonica, Carchenna etc. Tours will be conducted on the subjects of prehistory, ethnography and history in Italy, to Turin, Milan, Venice, Florence, Naples, Rome.

Pre-registrations and enquiries to: CeSMAP, Viale Giolitti 1, 10064 Pinerolo (TO), Italy  
Telephone 121-794382, Fax 121-76550

Professor Dario Seglie (Director, CeSMAP)  
Dr Piero Ricchiardi (President, CeSMAP)

### Call for papers

Abstracts of papers for the following symposia should be submitted to the chairpersons listed below:

1A - Rock art studies: new approaches. Abstracts of 100-150 words from Africa, the Americas, Asia and Australia to Robert G. Bednarik, AURA, P.O. Box 216, Caulfield South, Vic. 3162, Australia; from Europe, including Russia, to Francesco d'Errico, Department of Archaeology, Downing Street, CB2 3DZ Cambridge, United Kingdom.

7C - Rock art and conservation: ethics. Abstracts to François X. Soleilhavoup, Groupe d'Etude et de Recherche sur les Milieux Extrêmes (GERME), B.P. 132, F-93805 Epinay-sur-Seine-Cedex, France

10C - Dating, recording and computer science. Abstracts can be sent to either B. K. Swartz, Jr, Department of Anthropology, Ball State University, Muncie, IN 47306-0435, U.S.A. ¼ Tel. (317) 285-1577, Fax (317) 285-2163, E-Mail 01BKSWARTZ@LEO.BSUVC.BSU.EDU.; or to Mila Simoes de Abreu, Av. D. Jos, I, n. 53, 2780 Oeiras, Portugal ¼ Tel and Fax 351-(0)1-4421374 or 4101359.

14C - Rock art: news of the world 1995. Papers and abstracts can be submitted to either Paul G. Bahn, 428 Anlaby Road, Hull HU3 6QP, England ¼ Tel./Fax 44-482-52172; or Angelo Fossati, Cooperativa Archeologica 'Le Orme dell'Uomo', Piazzale Donatori di Sangue 1, 25040 Cerveno (Bs), Italy ¼ Tel. 39-364-433983, Fax 39-364-434351.

16D - Rock art and ethnography. Papers from Africa, the Americas, Asia and Australia can be submitted to Alicia A. Fernandez Distel, Centro Argentino de Etnología Americana, Av. de Mayo 1437 1º "A", 1085 Buenos Aires, Argentina. Papers from Europe, including Russia, can be submitted to Alberto Guaraldo, Instituto di Antropologia Culturale, Dipartimento Scienze Antropologiche, Archeologiche e Storica Territoriali dell'Universit..., Via Giolitti 21/E, 10123 Torino, Italy.

For full details concerning the above symposia, please consult AURA Newsletter 11/2 (September 1994).

8C - Preservation and restoration. Papers to Alan Watchman, Data-Roche Watchman, Inc., 1631 rue Eden, Ancienne-Lorette, Québec, Canada G2E 2N2.

13D - Rock art of the Sahara. Abstracts to A. Muzzolini, 7 rue J. de Ress, guier, 31000 Toulouse, France; or J. L. Le Quellec, Brenessard, 85540 St-Benoist-sur-Mer, France.

15D - Christian manifestations in rock art. Abstracts to Roy Querejazu Lewis, Casilla 4243, Cochabamba, Bolivia

## **COLOUR RE-CONSTITUTION ACHIEVED!**

Historical breakthrough in rock art research

The previous IFRAO Report, No. 12 (RAR 11[1]: 74-5), announced the release of the IFRAO Standard Scale, and explained its use and purposes. Copies of the Scale were included in that issue of RAR, and they have been or will be distributed with all other journals or newsletters of the organisations affiliated with IFRAO. Between June and December 1994, a total of 8000 copies of the Scale have been distributed, most of them through the established network of IFRAO. Further distribution continues, together with the wide dissemination of the explanatory texts. At the end of stage one of this ongoing project, 22 000 copies of the Scale will have been distributed world-wide, and the relevant guidelines will have been re-published dozens of times.

Already in the first few months the Scale has been available, I have received several requests for it from specialists in other disciplines, to whom I have provided a few hundred copies so far. They include people in such fields as museology, conservation science and archival recording. Numerous further fields may find the adoption of our calibration standard useful in the future, particularly in view of the latest development as reported below.

Various colour scales have of course been available for many years, and a very few rock art photographers have even used them. They all have certain limitations, and future developments in the discipline will inevitably demand standardisation and simplification. Most importantly, a minimum standard must be universally available, and at no cost to researchers in developing countries. This is the single most important precondition of creating global records of rock art that will facilitate colour re-constitution and calibration in the future.

The enormous potential of the IFRAO Scale as a tool of research, archival storage and conservation has just been dramatically demonstrated by a historical breakthrough. In the course of an extensive collaborative program with the Indira Gandhi Rashtriya Manav Sangrahalaya (National Museum of Man, Bhopal, India), in November and December 1994, I soon found that the excellent computer facilities of that museum were more than adequate to experiment with the most important proposed application of the IFRAO Scale ¼ the possibility of colour re-constitution. It would be a very great help to the discipline to have comprehensive guidelines about the most effective use of the Scale for this

particular purpose. But to design such guidelines it was essential to conduct a pilot project, and to try out practical applications of the envisaged technology. I proposed to the Bhopal Museum of Man to conduct such experiments, which was most enthusiastically welcomed by Dr K. K. Chakravarty, the Museum's director.

On 8 December 1994, Kulasekaran Seshadri, computer modeller and in-charge of the Museum's computer centre, became the first person to attempt to re-constitute the true colour properties of a rock art photograph. The four pictures he worked with initially had been taken by me only a few days previously, at one of the most important rock art sites in the world, Bhimbetka.

The effect was dramatic and the result simply overwhelming. Like every student of rock art (or indeed, most photographers of any subject), I had always known that colour photography is a subjective method of recording colour, but I had not suspected the distortion to be as great as it is in most cases, or the effect of correction to be as dramatic as indeed it is. Photographs that appeared to be of excellent colour fidelity were shown to be most unreliable on the subsequent days of experimenting, and photographs that might pass visual field comparison with the original art still required considerable correction.

For a week we conducted numerous experiments and Seshadri, an unusually talented computer operator (who is also a gifted artist), produced one breakthrough after another, day in and day out. For instance, we discovered that we could achieve 50% to 80% colour re-constitution in photographs bearing only a black and white scale. Under some conditions, even photographs without any scale lend themselves to limited re-constitution, and the basic process applies also to monochrome photographs. It soon became clear to us that the field worker requires sound guidelines before the discipline embarks on ambitious programs of creating large calibrated archival records.

This series of experiments is therefore being continued as a matter of urgency, and we expect to finalise and release comprehensive guidelines by March 1995. These will be promptly circulated, while scientific and technical reports can be expected at the earliest possible time (mid-1995). They will provide to the discipline full details of this technology, of the software being developed, and of the optimum conditions for its use.

With this development begins a new phase in rock art studies. As from now, un-calibrated photographic records are not only a superseded method of recording rock art, photographs as such are now relegated to the role of an intermediate, provisional form of data recording: photography permits the recovery of much more information than is perceptible to human vision, and this additional but coded information can be de-coded by the computer. From now on, taking a photograph of rock art for its own sake is like excavating stone tools for their collector's value: an unscientific, self-centred pursuit of very limited utility to the discipline. It will soon become the preserve of rock art dinosaurs, who I expect will maintain that they photograph rock art for their own personal enjoyment, and that they do not care what researchers of future generations will think of them.

With the introduction of colour re-constitution we are taking a decisive step in making rock art research a fully scientific pursuit. Until now, we have been content with collecting our photographic recordings, films and videos without, in most cases, rendering them susceptible to scientific manipulation and study. We have been wasting an awful lot of film in the process.

Robert G. Bednarik

RAR 11-336

Photographing or filming rock art without a calibration standard is a waste of film!

### **The Hell's Canyon petroglyphs in Portugal**

ROBERT G. BEDNARIK

Canada do Inferno, or Hell's Canyon, is located on the C<sup>a</sup> river, a tributary of the Douro river in the north-eastern corner of Portugal. A hydroelectric dam, planned as a holding reservoir for a smaller dam built twelve years ago, has involved an environmental impact study since 1989. Numerous petroglyphs were known to exist in the valley, and in the course of the survey it was found that a number of them appear to be of the Upper Palaeolithic. The archaeological team from the government's Instituto Portug<sup>es</sup> do Patrim<sup>onio</sup> Arquitect<sup>onico</sup> e Arqueol<sup>ogico</sup> (IPPAR) failed to disclose the discovery to the scientific community. Its director visited the site a year ago and the find was deliberately concealed while the state-owned electricity utility, Electricidade de Portugal (EDP), constructed the dam. Two days before the petroglyphs were to become inundated by the rising water, the archaeologist in charge of the survey contacted the IFRAO Representative of Portugal, Dr Mila Simoes de Abreu (Associa<sup>ç</sup>ao Portuguesa de Arqueologia e Arte Rupestre) at night, requesting an urgent inspection of the site to authenticate his findings. Simoes and Ludwig Jaffe (IFRAO Representative of Societ... Cooperativa Archaeologica Le Orme dell'Uomo, Italy) promptly examined the site on the following day, 8 November 1994. The discoverer requested that they remain silent about the find until after he published a book about it. When they demanded that the discovery be announced at once he became agitated and made a series of threats.

None of this had the intended effect. Simoes and Jaffe immediately disclosed the find to the President of Portugal, to the Vice-President and to the Director of IPPAR. A full-scale scandal developed, with the eager participation of the mass media. Scholars from Portugal and abroad (especially representatives of IFRAO) began pleading with the Portuguese government and the agencies involved to save the site from inundation. Simoes and Jaffe have co-ordinated these efforts admirably and have successfully demanded that an international commission be appointed to resolve the controversy. They have the backing of the local scholarly community and, it seems, the press and the public. The true reasons for the cover-up still remain to be established, and leading scholars in Portugal are demanding a parliamentary enquiry. In an effort to defuse the issue, the EDP is now organising an on-site consultation of several international specialists at the end of January 1994, to help determine an acceptable strategy.

The principal importance of the C<sup>á</sup> river gallery, which is located near Vila Nova de Fozc<sup>á</sup>, is in the fact that it is not a cave site. One of the most serious errors of Pleistocene palaeoart studies has been the confirmationist assumption that the rock art of Ice Age Europe was endemic to caves, and therefore had to be explained in those terms (generally ritualistic). This monumental blunder was, as I have claimed for decades, attributable to taphonomic illiteracy: the proof that it was a non sequitur was always available, but remained ignored for a century, and a caricature of Pleistocene art was developed as a result of this trend (see AURA Newsletter 11/1: 3). The Hell's Canyon site is several kilometres long, on a series of schistose cliffs, comprising hundreds of animal figures. These petroglyphs are patinated and weathered. However, the proposition that they are of the Pleistocene is so far based purely on stylistic speculation (which some specialists no longer accept as a valid dating criterion), and the animal species reportedly depicted include none that did not exist on the Iberian Peninsula during Historical times: aurochs, horse, ibex and deer. Objective dating of this art is clearly and urgently required.

Assuming the petroglyphs are of Palaeolithic age, the site would be more important than any other of its kind presently known. The reason for this is not its size, but simply because it demonstrates dramatically the validity of the taphonomic model of Pleistocene rock art. Several open petroglyph sites supposedly of the Palaeolithic have been found in recent years, in the Pyrenees and on the Iberian Peninsula, and one characteristic most of these petroglyphs seem to have in common is that they are on schist. If one were as taphonomically illiterate as the people who believe in the 'cave art' concept one would say that this open art should be called 'schist art': according to their logic, there must be some connection between this art form and its consistent occurrence on schist. And if we found Palaeolithic art on the underside of toadstools, we shall be obliged to call it toadstool art. Speleocrats may be offended by such flippancy, but until such time as they acquire taphonomic literacy (see Antiquity 68: 68-74) the only way of dealing with them effectively is to satirise their logic.

One of the reasons for the long neglect of the Canada do Inferno petroglyphs, according to their discoverer, is that the people responsible for the administration of IPPAR are mostly 'architects' rather than archaeologists. It is clear that this is not a problem endemic to Portugal, it is found in all countries that possess major architectural monuments which are managed together with the archaeological heritage. Examples where this is prominently the case are Mexico (INAH) or India (ASI), and it is a fairly common practice in many other countries. It results in severe neglect of rock art, which is traditionally near the bottom end of the pecking order within archaeology itself. And where archaeology is the poor relative of the architectural marvels of past civilisations (the source of tourism income), rock art is of little concern to its managers. Thus the C<sup>á</sup> valley scandal shows that there should be a major global reassessment of such management practices, but it also offers a constructive solution. In the Portuguese case, administrative complacency and ignorance were challenged by two individuals of integrity and conviction, representatives of the international community of specialists. As a discipline, we should learn from the example of Simoes and Jaffe, and strengthen a global role of IFRAO as an independent local watchdog in such matters. This is not to suggest that IFRAO Representatives should pursue a role in the administrative machinery; rather, they should remain independent of it, being answerable only to the scholars they represent and to their own consciences. However, they should be empowered to examine all aspects of these agencies, which are after all publicly funded.

Another interesting lesson to be learnt from the Hell's Canyon controversy concerns the discoverer's principal motivation in keeping the find secret. Apparently it was he who, as a student, first reported the Mazouco site in 1981, only to see his professor getting the credit for this find. Mazouco is a site of only three animal figures on a schist cliff above the Douro river, in the same part of Portugal, which are also attributed to the Palaeolithic. This experience, no doubt, has had a lasting effect on the young man. Again, this is a very common feature of archaeology, a discipline in which most important finds are not reported by those who bring them to light, but by those who have academic power. This raises interesting ethical questions: most archaeologists, surely, are servants of the public, in one form or another. Should they have the same privileges as independent, self-funding or 'gentleperson' researchers, in terms of 'intellectual property'? In practice it is very common that those employed by the state appropriate credit for the finds of people such as 'amateurs' and students, who are all too often without realistic recourse. It would seem that this state of affairs has significantly contributed to the present controversy, and it might be premature to apportion blame all too readily.

Concurrent with the discovery of Mazouco in Portugal it was recognised at some Spanish rockshelters and caves in the Nalçn valley of Asturias that apparently Palaeolithic art seemed to extend to exterior panels. The large assemblage of supposedly Palaeolithic engravings at Fornols-Haut in the French Pyrenees was found on another outcrop of schist a few years later. In 1986, a single Palaeolithic petroglyph at an open site was reported from Piedras Blancas

near Escullar, in Almería, on Spain's south coast. At another Spanish site, Domingo García in Segovia, only one percussion petroglyphs (a horse figure) had been reported to be Palaeolithic in 1982, but in 1994, eighty-two more figures were announced (AURA Newsletter 11/1: 3). Another open air site is now known quite close to Hell's Canyon: Siega Verde is just sixteen kilometres away, reportedly consisting of 400 figures (P. G. Bahn pers. comm.).

With Canada do Inferno, the grand total might not yet match that of all engraved animal figures found in European caves, but it is getting close (and it already does exceed that of Pleistocene animal pictures in Spanish caves)! When we consider that the ability of a petroglyph to survive over such a long period in a cave is thousands of times greater than its ability to survive outside, we get an inkling of the taphonomic distortion that has gone on. When in addition we consider the distortion we must expect as a result of the faulty paradigm that has guided Pleistocene art studies in south-western Europe until recently (by the expectation of finding for such art only in caves, or by accepting it only if it conforms with misguided projections of what such art should be) then we begin to realise that a monumental blunder has once again occurred in the discipline. Altamira in reverse?

RAR 11-337

Abraded petroglyph on schist, said to be of the Upper Palaeolithic and thought to depict an aurochs. Canada do Inferno, C<sup>o</sup>a river, north-eastern Portugal. (Photograph by M. Simoes de Abreu and Ludwig Jaffe, APAAR.)