The Rock Art Society of India (RASI) was established in Agra on 24 February 1990. Since then it has played an important role in the promotion of scientific study, conservation, management and popularisation of Indian rock art, and in supporting similar endeavours of the other IFRAO member organisations. One can feel a considerable change in the attitude of Indian and overseas scholars to the rock art heritage of India. The Code of Ethics developed by RASI for dealing with rock art is gradually becoming popular among scholars. Slowly rock art is becoming a major concern to be taken care of by Indian scholars, national laboratories and government organisations. International rock art conferences, such as by the Indira Gandhi National Centre for the Arts in New Delhi (1993) and the symposium 'Rock art of Asia and the Pacific' in the World Archaeological Congress 3 (New Delhi 1994), along with the exhibition 'Rock art of India and the world' by the Indira Gandhi National Museum of Man and IFRAO may be seen in this perspective.

The decision taken by the Archaeological Survey of India (ASI) to propose the Bhimbetka complex of rock-shelters for World Heritage listing to UNESCO through the government of India was a major development in 1994. Dr R. C. Agrawal and his colleagues of ASI Bhopal Circle are preparing the proposal. RASI and IFRAO are playing crucial roles in this regard and are seeking help and support from all possible parties. Thanks are due to the generous co-operation and support from all Indian scholars and ASI authorities, especially Prof. B. B. Lal, Dr M. N. Deshpande, Dr K. V. Soundara Rajan, Prof. V. N. Misra, Dr D. P. Agrawal, Dr K. K. Chakravarty and others. R. G. Bednarik, Convener of IFRAO and a close friend of mine, has been an inspiring source throughout, having helped RASI in many ways besides providing guidance from time to time.

This change in attitude to the Indian rock art heritage has been achieved by RASI over the past five years. The publication of Purakala, the biannual journal of RASI, is its foremost achievement. It was begun in July 1990, and volume 5(2) is to appear shortly. Volumes 3(1-2), 4(1-2) and 5(1-2) are special issues on the rock art of Chambal valley, rock art and education (the proceedings of the Cairns 1992 symposium), and the conservation and management of Bhimbetka respectively. Purakala, a member of the family of IFRAO journals, is of the international standards of that family. It is distributed to scholars in India and is exchanged with other IFRAO members in academic exchange programs. Purakala is now well established, and is the only journal of its kind in Asia. It plays an important role in making Indian and other scholars aware of the rock art heritage of India, and of the efforts in its scientific study, conservation, management and popularisation. It also reflects the gradual clarification of regional characteristics of Indian rock art. Among the specific activities of RASI during the past five years, the following may be mentioned:

2. Workshop on a system for orientation and training in rock art for the young, Narsinghgarh 1992.
7. Six-week lecture and study tour of R. G. Bednarik to most major rock art sites and archaeological institutions in India in 1990; and Dr M. J. Morwood's tour to rock art sites of Fatehpur Sikari region, and DEI Agra in 1993.
8. RASI project 'Early art and archaeology of Fatehpur Sikari - Agra region', and exhibition of 57 exhibits and original antiquities on the same theme sponsored by Agra University. This was prepared by Dr Ashvini Kumar Sharma and Satya Narayan Maurya under the direction of the author.

In 1995, a RASI team will conduct analytical studies of rock art of Chaturbhujnath nala. The Second RASI Congress will be held in Orissa in November 1995.

Giriraj Kumar
All eyes on Italy in 1995

Rock Art Congress NEWS 95

30 August to 8 September 1995
Pinerolo and Turin, Italy

A final announcement with Registration Form and Hotel Reservation Form is enclosed in this issue of RAR. Your registration for what promises to be a very major academic event in international rock art studies is cordially invited.

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 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
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.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 Etnologia 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, Qu'bec, 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.

Rock Art Research
Moving into the Twenty-first Century
International conference by SARARA,
with the participation of EARARA, in 1996

This international conference will be held by the Southern African Rock Art Research Association (SARARA) in Swakopmund, Namibia, from 11 to 18 August 1996, with the participation of the Eastern African Rock Art Research Association (EARARA). The member organisations of IFRAO have voted in favour of adopting this conference as the official IFRAO Meeting for 1996.

The objectives of the southern African rock art conference will be to focus on new and innovative approaches to rock art studies and to assess the latest technologies that will carry our discipline decisively into the twenty-first century. The preliminary program is as follows:

1. Recording methods: new and safer copying methods, advances in photographic techniques, digital recording.
2. Dating: latest methods, accuracy.
4. Environmental issues and site management: conservation and preservation, protection of rock art, visitor control, the role of government in protection programs.
5. Education.
6. Aesthetic considerations.

Papers are now invited, maximum presentation time 20 minutes, to be followed by 10 minutes of question and discussion time. SARARA will have first publication rights on papers unless special arrangements are made.

The conference will feature displays of posters, photographs, rock art recordings, plans and models of conservation programs, and publications. A number of pre- and post-conference tours lasting from five to ten days will be available, to major rock painting and petroglyph areas in Namibia and South Africa. EARARA plans to organise a tour to rock art sites in Tanzania.

For details and registration forms, please contact SARARA, P.O. Box 81292, Parkhurst 2120, South Africa.

The Hell's Canyon saga continues

ROBERT G. BEDNARIK

The archaeological controversy concerning the petroglyphs at Canada do Inferno (Hell's Canyon) in the C’a valley of northern Portugal (Bahn 1995; Bednarik 1994, 1995a; Clottes 1995; Simees de Abreu 1995) continues to widen. It has become a major political, economic, cultural and scientific issue. Our call for official expressions of condemnation from IFRAO member organisations has resulted in swift responses from most member associations, among them letters of censure from Professor Dario Seglie (Chairman, IFRAO), Dr Paul G. Bahn (Vice-President, Australian Rock Art Research Association), Angelo Fossati (President, Societ… Cooperativa Archeologica ‘Le Orme dell’Uomo’), Dr Michel Lorblanchet (Chair, Groupe de reflexion sur le m,thodes d’,tude de l’art parietal pal,olithique), Professor Ben Swartz (President, American Committee to Advance the Study of Petroglyphs and Pictographs), William Hyder (President, American Rock Art Research Association), Dr Giriraj Kumar (Secretary, Rock Art Society of India), Roy Querejazu Lewis (President, Sociedad de Investigacion del Arte Rupestre de Bolivia), Dr Fidelis Masao (Chairman, Eastern African Rock Art Research Association), Shirley-Ann Pager (President, Southern African Rock Art Research Association), Professor Lawrence Loendorf (Chairperson, ARARA Conservation Committee), Professor Jack Steinbring (Chairman, Rock Art Association of Manitoba), Alfred Muzzolini (President, Association des amis l’art rupestre saharien) and Robert G. Bednarik (Convener, IFRAO). In addition to these official reactions, many protest letters from individual members of IFRAO organisations have been received in Portugal. There have also been admirable individual actions of international support, such as Angelo Fossati’s collection in Italy of tens of thousands of signatures for a petition. The affair has been reported in many of the world’s leading newspapers and mass-circulation magazines (e.g. Time, New Scientist), in some cases in a commendably sustained fashion. The Times, in particular, has been foremost in its critique of the Portuguese government. Its editorial of 11 March 1995, entitled ‘Dam folly: the Portuguese Government must end its cultural vandalism’, elicited an angry response from that government. The Sunday Times has featured at least three articles on the issue, and the New York Times had a major story on it. Across Europe, numerous papers reported the Portuguese vandalism in C’a valley, among them Le Monde, El Pais, Dal Giornale, de Volkskrant and many others.

The Portuguese go-vernment is under still considerably greater pressure at home, all of which is in some way attributable to IFRAO Representatives Dr Mila Simees de Abreu and Ludwig Jaffe. What may have been the world’s first public demonstration in sup-port of rock art conservation was held in Vila Nova de Foz C’a, the town nearest to the site (P. G. Bahn, pers. comm.), with the slogan ‘The engravings don’t know how to swim’. Students at the local high school of that town have collected almost a million signatures for a petition to save the rock art. A civic action group, the Movimento para a salvaguarda de Arte Rupestre do Vale do C’a, has been established in Portugal to prevent the construction of the dam. Recently, Simees de Abreu and Jaffe, as general co-ordinators of the campaign to save the rock art, led a protest fast outside a historical building in Lisbon, and police trying to break it up by force faced massive public opposition. While the rock art remains the main issue, other environmental and economic concerns have been voiced, including the destruction of the valley’s natural ecosystem and substantial archaeological heritage, the diversion of water resources, the damage to the region’s important port wine industry (the dam will flood up to 1600 hectares of first-class vine-growing land), as well as the loss of habitat of an endangered species of eagle. The former Secretary of State for Energy, Nuno Ribeiro da Silva, who rejected the project repeatedly while he was in office, argues that the dam is not needed for projected electricity requirements. Now a report by Unesco has recommended to the Portuguese government that construction of the dam be deferred, and there is great domestic as well as international political pressure on the government to comply.
The issue has become an important test case in more than one sense. For instance, it concerns the question of the independence of technical consultants and government agencies that ostensibly represent scholarly interests. It also concerns scientific aspects themselves: if the C’a petroglyphs were not Palaeolithic (Bednarik 1994), how would this affect other undated rock arts claimed to be Palaeolithic? (This could render it doubly important to preserve the rock art for future study.) Then there is the issue of who should exercise administrative control over archaeological properties of global significance in countries whose state-run archaeological agencies are antiquated, incompetent or academically corrupt? The credibility of archaeology as a discipline is at stake in this very public controversy, and scholars of integrity have no choice but to demand the most rigorous remedial action.

Portugal's eighteen university professors of prehistory have petitioned the Attorney General to deploy legal means of stopping the dam. The intensive media attention has had some welcome if unexpected effects. For instance, the Portuguese may be said to have become the most rock-art conscious nation on earth during the past few months. In this sense alone, the campaign has been an outstanding success. The Portuguese Archaeological Association, which had been practically dormant over recent years, has acquired a new lease of life through this issue, strongly supporting IFRAO in the confrontation, as do other organisations. To save the reputation of the discipline it is essential that scholarly societies campaign against an inept technocratic administration. Since the scandal was first announced in November 1994, there has been no bloodletting in the culprit organisation, the Instituto Português do Patrimônio Arquitetónico e Arqueológico (IPPAR), which seems more concerned about closing ranks than with its public credibility.

Meanwhile, construction of the dam is continuing. IPPAR, an organisation that lacks any understanding or knowledge of rock art and the modern methods of its study, is recording the rock art in Hell's Canyon, still excluding outside researchers from this work in the same clandestine fashion that has characterised its work for years. There are unconfirmed reports of latex moulds being taken by a French firm, there has been talk of using physical enhancement (organic white paint and soot!), and a Swedish firm has undertaken trials of sawing the petroglyph-bearing rock type. An inspection by Alan Watchman to check the prospects of finding datable material in accretionary deposits has not resulted in the detection of any such residues, nor would the results derived from them be particularly helpful in direct dating (Bednarik 1995b). No other measures have been taken to attempt dating of the C’a rock art, or of any other of the open air sites attributed to the Upper Palaeolithic.

I have examined samples of the rock in question, and it is obvious that its structure renders the plan of sawing off panels of petroglyphs technically impracticable. The freshly broken schist is of a dark-grey colour (Munsell 7.5R 5/0 to 7.5R 6/0). Its distinctive lamination is locally characterised by a variety of crystalline minerals including quartz and staurolite, which should render microerosion dating possible. The rock's pronounced cleavage tendency has resulted in the development of innumerable parallel weathering fissures which are perpendicular to the rock faces and contain alteration products, notably iron salts. If a petroglyph on a C’a schist panel were sawn off it would inevitably disintegrate into a large number of lamellar fragments of roughly the thickness of a finger. To prevent this, the rock structure would first have to be stabilised, presumably by vacuum-assisted injection of synthetic material. Not only is this unlikely to be successful in such a dense, metamorphosed rock, some of the great variety of minerals present in the fissures are likely to reject the consolidation agent, at least in the long term. The logistics of conducting the envisaged salvage operation in this inaccessible site seem incredibly difficult. Before attempting such an operation, its feasibility must be satisfactorily demonstrated to independent specialist observers. On the basis of the limited information available it would seem that the two options currently entertained by IPPAR, sawing off or inundation, seem about equally certain to result in the total loss of the rock art. While sawing off would bring about fairly instant destruction, inundation involves the prospects of water damage, chemical and kinetic erosion, followed by the ultimate burial under many tens of metres of river sediment.

The cynicism of ‘the authorities' in all of this is breathtaking. One version circulated to the media is that the petroglyphs will be better off under water, at least there would be no vandalism possible then, and there is always a chance that they might survive prolonged inundation reasonably well. Even if they would, who is going to pay for excavating them late next century? The sedimentation rate of the C’a is estimated to be 1.5 metres per year, which means that the dam will be abandoned in seventy years or so, becoming silted up by then. The cost of excavating the rock art would be much greater than the cost of the dam itself (US$300 million), it would involve the excavation of thirteen kilometres of valley to a depth of 100 metres or so (a task I estimate would involve the removal of over 300 million tons of silt and gravel). Is the construction authority suggesting that it undertakes to meet the eventual cost of reclaiming the site? If not, then the argument of the art being ‘recoverable' is an exercise in blatant cynicism, and based on the belief that archaeologists and the public are too ignorant to think that far. We should regard it as a foregone conclusion that nobody will ever see the petroglyphs again if they are allowed to be submerged, because their recovery, even if they did survive inundation and sedimentation, is simply not a realistic option.

The Hell's Canyon scandal can be resolved satisfactorily by adequate international pressure. This discipline owes its Portuguese representatives, Simeões de Abreu and Jaffe, its unqualified support in their selfless, utterly dedicated struggle to save this site. The issue of the C’a petroglyphs has already galvanised the discipline into taking decisive action. There are precedents for this kind of confrontation between powerful electricity utilities and conservationists in various other countries, and we know that even the most powerful vested interests can be defeated in a democracy. In 1983, a federal government of Australia lost office over a similar issue, the Franklin dam in Tasmania,
when that three-billion dollar project (which also threatened archaeological sites) was soundly rejected by the public of Australia. The C"a valley issue is similarly winnable: it involves an indecisive government, a conspiracy of power-hungry technocrats, a mostly supportive public, and a highly motivated and dedicated campaign leadership. What is required from the international discipline, represented by the twenty-four members of IFRAO, is systematic lobbying: protest letters need to be received by the Portuguese government, and perhaps we should petition the Portuguese embassies in our various countries where such embassies exist. It seems also advisable to write to Swedish embassies, protesting about the proposed involvement of a Swedish company in cultural vandalism in Portugal, pointing out perhaps the less than encouraging examples of other sites where the sawing-off of rock art was attempted in the past. In Portugal, letters can be addressed to The President of the Republic of Portugal, Dr M rio Soares, or alternatively The Prime Minister of the Republic of Portugal, Mr Anibal Cavaco Silva, and should be sent via:

The IFRAO Representative of Portugal
Dr Mila Simoes de Abreu
Av. D. Jos, 1, n. 53
2780 Oeiras
Portugal
FAX  351-1-4120402

IFRAO members will be aware that this issue does not concern only the rock art in one remote valley in Portugal: it affects all rock art in the world. A defeat of the Portuguese rock art vandals will have profound effects elsewhere, and governments and technocrats in the democratic countries of the world would take note of such an outcome. Hence we will all benefit from a favourable outcome in Portugal, and we have a moral obligation to stand up and be counted.

REFERENCES

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All illustrations from Hells' Canyon, C"a valley, northern Portugal, by M. Simoes de Abreu and L. Jaffe, APAAR.