



AMRA Newsletter

THE NEWSLETTER OF THE AUSTRALIAN ROCK ART RESEARCH ASSOCIATION (AURA) INC.

Volume 24, Number 1

October 2007

24/1

The removal of rock art

ROBERT G. BEDNARIK

Introduction

There are many forms of rock art vandalism by professionals engaged in the study, recording or management of rock art. These have included inappropriate recording methods (see e.g. Bednarik 1990), inadequate excavations of sediments at rock art sites (e.g. effecting dust deposition on rock art panels, cf. Morwood 1994; or failing to recognise the petroglyph hammerstones in the deposit, cf. Bednarik 1998), and the practice of painting petroglyphs in striking colours (predominant in some Scandinavian countries; Löfvendahl and Magnusson 2000). But none of them has been as consequential for rock art as massive intervention (Bahn et al. 1995), such as its removal from the site. There are several reasons for this, and they are examined here.

Rock art, especially in the form of petroglyphs, has been removed from its site context for a variety of reasons. One of them is outright theft by such people as collectors or enthusiasts (Woody 2005). Land developers have cleared land of rock art in many cases. In numerous instances around the world, museums have in the past removed decorated boulders to exhibit them on their premises, but this practice has long been discontinued. In some instances such institutions overcame significant technical and logistic obstacles to detach whole panels of rock art from bedrock. For instance, Dr Emil Holub used sledgehammers, wedges, thermal shock (placing fires on the rock and then dousing them with water) and crowbars to detach and extract numerous slabs with petroglyphs in Orange Free State, South Africa. These were then shipped to a museum in Vienna (Fig. 1). A slab of granite weighing several tonnes has been detached with a diamond saw from

the Peri Nos 4 site on the eastern shore of Lake Onega, in Karelia, in the mid-20th century. It has since been housed in the Hermitage Museum in St Petersburg. A similar example of such extreme measures is the removal of a complex maze petroglyph (mistakenly described as a crocodile head; Mountford and Edwards 1962; but see Berndt 1987 for its correct meaning) from the Panaramitee North site, near Yunta, South Australia, now in the South Australian Museum in Adelaide.

These are relatively isolated cases, however, and it is unlikely that this kind of vandalism would be attempted by such agencies in the future. By far the greatest physical danger to rock art nowadays is from archaeologists who facilitate the destruction of rock art sites in the course of large



Figure 1. Rock art relocation in 1890, Free Orange State, South Africa (after Holub 1890).

development projects, such as dams, industrial facilities, harbours, highways and mining projects. In such clearing operations the removal is often performed by the consulting archaeologists themselves, sometimes against the express wishes of the traditional owners of the rock art in question, and always against the wishes of rock art researchers and heritage managers.

Removal of rock art

All rock art sites in the world consist of two principal components: the site and its cultural content. The two cannot be separated without totally destroying both the significance and the integrity of the cultural site because they are entirely interdependent. The site possesses no cultural significance without the rock art, and the rock art is of cultural significance only through its spatial association with the site. It is important to understand that, from the perspective of the producer or indigenous owner, the rock art itself, detached from its place, is devoid of cultural meaning or value; it has become a 'dead' artefact. This may be compared to uprooting a traffic sign from the roadside and placing it in a forest: while it remains a sign, it has lost all its intended significance and potency.

Anywhere in the world where rock art exists, its creators have placed petroglyphs or paintings at selected localities, thereby bestowing on them the status of sacred or cultural places. These sites may be associated with specific ceremonies, such as increase rituals, they may be initiation sites, burial sites, or in some other way have assumed a special significance to people. That ideological or religious significance is manifested by externalised features of ideological or cultural concepts, such as rock art or stone arrangements, but it is also universally expressed in other inherent features of the site, including natural formations, ambience, spatial relationships to other cultural or natural aspects of the site and its setting (landscape), Dreaming Tracks and similar concepts, and ultimately in the ontological construct the rock art bears witness to. All of these connections are irreversibly broken when the prime tangible component of a rock art site, the rock art, is removed. Lastly, the stories into which the rock art is woven obviously lose their relevance, because the rock art was a significant manifestation of their validity. Without it, there is nothing to bear witness to the creation myth usually engendered in such stories. The destruction of the site leads to the annihilation of the metaphysical world it is an externalisation of.

These principles are expressed in the concept of 'site fabric', which is embedded in the instruments governing the management and preservation of rock art or other cultural sites (e.g. the *Burra Charter*, see Articles 9.1, 10, 15.3; the *Venice Charter*, or the *IFRAO Code of Ethics*, see Articles 6.1, 6.2). As an 'immovable cultural heritage' feature, rock art, like all other cultural monuments, must not be moved from its site under any circumstances. Monuments may be replicated, especially for purposes of tourism, but the original must remain in its spatial context. It forms part of a 'cultural landscape', and its setting is an integral property of the monument.

Removal of the rock art from its often sacred context therefore not only renders it culturally degraded, it also defiles the site by robbing it of its defining content. A rock art site denuded of its rock art loses all of its significance. Moreover, this form of massive intervention also destroys the rock art site in the *scientific* sense, because most scientifically relevant variables are lost in the process of rock art removal. These might include orientation, other aspects of setting (e.g. astronomical, totemic), relationships to other rock art and other features of the site, to entities such as Songlines or Dreaming Tracks, and a host of other information about context, conservation and cultural significance.

Then there is the complex issue of conservation, one of the principal practical problems with relocation. Rock art exists generally only because it has managed to survive a series of natural degradation processes over often very long time spans. These taphonomic factors select in favour of those occurrences that are in relative equilibrium with their environment (Bednarik 1994). The fact that these cultural manifestations have survived, often for many millennia, does not necessarily suggest that they will continue to survive in a different environment. Two actual scenarios are mentioned to illustrate the point. First, at the Dampier Archipelago in Western Australia, 1793 petroglyph-bearing boulders were removed from their sites in the 1980s by the company Woodside Offshore Petroleum, numbered, and dumped in a compound a few kilometres away (Vinnicombe 1987: 19). One would expect that a storage site in such close proximity to the rock art sites should offer identical environmental conditions. This may be correct in most respects, but it was sufficient that just one variable was not considered. All of these petroglyphs had survived to the present because they were located on parts of boulder piles completely devoid of any vegetation. The region's arid vegetation is highly resinous and burns very well, which affects the survival of any rock art adjacent to vegetated areas. Woodside had deposited the relocated boulders in an area with sparse vegetation cover, and twenty years later, a grass fire raced through the compound. An investigation reported in June 2002 that this had caused considerable damage to the stored petroglyphs, through fire spalling of the boulders.

In this example, then, the lack of understanding the role of taphonomic variables in the preservation of rock art caused the disastrous damage. Another example refers to the placing of rock art within buildings, i.e. within a very different environmental regime. This can be achieved either by constructing a building over a rock art site (cf. Bahn et al. 1995; Bahn and Hygen 1996) or by relocating rock art and placing it within a building. The three examples cited by Bahn et al. (Peterborough in Canada, Besovy Sledki in Russia, Aspeberget in Sweden) provide ample evidence that the change from an open natural environment to an indoor environment can be disastrous for the rock art. Such massive intervention introduces a very different climatic and hydrological regime, which may be conducive to high relative air humidity and ambient carbon dioxide levels, greenhouse effects and the proliferation of microbiota, i.e. conditions the rock art has not had to cope with in the past (Bahn et al. 1995: 38).

Therefore removal of rock art not only destroys the site in both the cultural (from the perspective of the traditional owners) and the scientific sense, it can also create conservation problems. In addition, there are aesthetic issues to be considered as well: such an extreme measure obviously destroys the authenticity of the site, and therefore the value of the experience of visiting the site or viewing its former cultural content. This clearly reduces the tourist value of both former components, site and rock art.

Therefore, the creator or custodian of the art, the traditional owner, the scientific investigator, the rock art conservator and the tourism industry all oppose the removal of rock art strenuously. Where the rock art is part of a major monument of international significance, still another perspective also has to be considered. Such a cultural resource is not the property of the state in question, it forms part of the collective heritage of human society. It is not the prerogative of the state to permit its destruction through separating site and rock art, nor do the purported rights of a developer have precedence over the rights of humanity to have its ancient cultural heritage preserved. The destruction of such sites constitutes an illegal act against humanity (in accordance with the Unesco *Declaration concerning the Intentional Destruction of Cultural Heritage*), and where it is sanctioned by a state, that state acts criminally.

The destruction of rock art sites by archaeologists

The in situ destruction of rock art and its scientific potential by archaeologists has been extensively discussed elsewhere. Here we are concerned primarily with the destruction of rock art sites through the relocation of their rock art content. The practice of removal to museums has been mentioned, but it is relatively isolated and seems to have been eradicated. In stark contrast is the practice of relocation to facilitate development, which has noticeably increased in recent times. One of the most debated instances was the proposal by Electricidade de Portugal in 1995 to clear the lower Côa valley in northern Portugal of petroglyphs. Here it was suggested to consolidate fragile schist outcrops by injecting resin, sawing them from the bedrock and lifting them from the valley with helicopters. The feasibility of this was demonstrated by transporting an undecorated rock of more than three tonnes. Consulting archaeologists had initially concealed the existence of the rock art so as not to jeopardise the large Côa dam project, and a public campaign to preserve the rock art sites was led by the Portuguese representative of IFRAO, Mila Simões de Abreu. It succeeded in orchestrating the electoral defeat of the recalcitrant national government in October 1995 (Arcà et al. 2001; Bednarik 2004a) and in securing the preservation of the valley's petroglyphs.

This is not, however, an isolated case. Archaeologists have been involved in the removal of rock art since the 19th century, and in a variety of roles. In some cases (e.g. the removal of the panels now in the Witwatersrand archaeology department, or the Ardegães de Águas Santas cupule rock now serving as an ash tray in the atrium of the Faculty of Sciences in Porto University), the relocation was planned and executed by the archaeologists themselves. In others,

removal was recommended, facilitated or conducted by them. In one unusual case, the perpetrators of the removal, two non-archaeologist rock art thieves, were successfully defended in court by academics (see Dorn 2005 for the defence of their actions; cf. Woody 2005 for a critique of it). This is a particularly unsavoury aspect of American rock art protection, which deserves brief mention. Three boulders with petroglyphs had been stolen at night from a USDA Forest Service Land reserve near Reno, Nevada. The Chairman of the Washoe tribe called this an 'unutterable crime against the eternal and unseen', and his group, as well as the Reno-Sparks Indian Colony, the Forest Service and the Nevada Rock Art Foundation pooled their resources to offer a substantial reward for leading to the arrest of those responsible. Two men were promptly apprehended, the rocks were found in their possession, and they were judged guilty of theft of government property. However, to convict them also of the greater charge of unlawful excavation of archaeological material, it had to be demonstrated to the jury that the rock art was over 100 years old. Ronald Dorn was asked by the prosecution to provide an expert opinion on the age of the petroglyphs, but for reasons only known to him, both he and David Whitley ended up being expert witnesses for the defence. The two 'world-renowned' (Associated Press 1 June 2004) rock art dating experts succeeded in creating adequate doubts in the minds of the jurors, that the petroglyphs are over a century old, to acquit the thieves on the charge of removing archaeological resources. Dorn testified that he could not discount the possibility that the rock art was more recent. This is despite the fact that for many years he has presented, and vigorously defended, numerous claims of having dated rock art, including supposedly 40 000-year-old petroglyphs in South Australia's Olary district.

This may seem an unusual case where rock art removal was defended by the rationalisations of 'experts', but it is being repeated, on a significant scale, at other localities. The most common pattern is the recommendation by archaeologists to move boulders with rock art in preference to recommending the relocation of proposed development projects to more suitable sites, and of sawing off rock art in cases where the rock mass concerned is too large to move with mobile cranes. The two most prominent recent examples are those of El Mauro in Chile (Bustamente 2006) and Dampier in Australia. In the first, a mining company wants to fill an entire valley with 1.7 billion tonnes of toxic mining sludge containing arsenic, cadmium, strontium and a host of other poisonous substances, one of the largest such sludge dams in the world. No consideration was given to the effects on the downstream communities at Caimanes (population 2000) and Los Vilos (population 9500), and the project would destroy the complexes of petroglyph sites at El Mauro and Monte Aranda. A consulting archaeologist, Andrea Seelenfreund, recommended that the dam not be built. So, the mining company, Los Pelambres, engaged another archaeological consultant, paid him one hundred times as much, and thus secured a report recommending the removal of the rock art. At the present time, the matter is in the Chilean courts.



Figure 2. Rock art relocation in 1980, Murujuga, Dampier Archipelago, Australia (after Vinnicombe 1987).

The Dampier vandalism

At Dampier, no rock art was removed prior to 1980 (except by pilfering); all rock art found earlier in the way of development was destroyed rather than removed. This is estimated to have been about 38 000 petroglyphs, which may sound much but is only a modest percentage of the reputedly largest rock art complex in the world (Bednarik 2007). However, since about 1980, consultant archaeologists introduced a practice of relocating petroglyph boulders small enough to be transported by the means available. Instead of recommending to their corporate masters to establish their industrial plants elsewhere (and there were always numerous alternative sites), these archaeologists became willing participants in the destruction of the sites. They often conducted or supervised this vandalism themselves, and did so without consultation of the relevant indigenous senior custodians or cultural management authorities (Fig. 2). In the initial onslaught, perpetrated for the Northwest Shelf LNG plant operated by Woodside Petroleum, 1793 boulders (Vinnicombe 1987: 19) bearing almost 2000 petroglyphs were lifted onto trucks and taken to a compound a few kilometres away, as noted above. Another 4776 petroglyphs were destroyed in situ, and 3327 were preserved in the area affected (DIA figures; cf. Hansard 2005; Bednarik 2006). In other words, a typical event of rock art destruction at Dampier, sanctioned and conducted by archaeologists generously paid by huge resources companies, would result in the destruction or relocation of 67% of the rock art of a given area. Since then, numerous further rock art removals have been conducted, some openly and some clandestinely. For instance, in 2003, 159 boulders decorated with about 170 petroglyphs (Fig. 3) were dumped near the east-west service corridor north of King Bay (Bednarik 2004b).

The most recent rock art vandalism at Dampier commenced on 6 February 2007 at Site A, Holden Point, south of Withnell Bay (named after a murderer of Aborigines; Bednarik 2006). It was conducted again by Woodside, this time with different consultant archaeologists acting on that company's behalf. Here is what the largest of the native title claimant groups stated on 7 February, through their Chairperson, Jill Churnside, of the Ngarluma Aboriginal Corporation:

Now we hear that a gleaming Woodside diamond saw has



Figure 3. Section of a pile of 159 boulders decorated with petroglyphs, dumped near King Bay, Dampier, in 2003 (photographed by the author).

come onto our Country to slice up our Ancestors' sites and pop them on another bit of land nearby. 'Desecration' is the only word for this step. The whole of the Burrup [Murujuga] rock art will lose its spirituality, the links to and between each and every rock. Our Ancestors produced each and every one of these engravings for a reason, a spiritual reason that it is not our right — nor that of any other person — to destroy. Our unending obligation to them, and to our current and future generations, is to do everything we can to stop this desecration. To cut off the face of a rock to shift the Ancestors' engraving on its front and dump it in some other place is taboo under our Law. The engraving was put on that rock, in that place, for a sacred reason and it is not our right, nor that of any other person, to destroy it in this way.

This reflects the unanimous opposition of all the Dampier title claimants to the continuing development of industry at Dampier, most strongly voiced by another group, the Wong-Goo-Tt-Oo, through Traditional Custodian Wilfred Hicks. The fundamental issue is that the removal of rock art affects not just individual petroglyphs, but the fabric and syntax of the whole, of an intricately interconnected embodiment of cosmology. One would have thought that this is known to the archaeologists operating at Dampier, but it is either not, or they consider their own lucrative contracts with the resources industry more important than the destruction of indigenous culture, or the destruction of humanity's collective heritage. It must be appreciated that just one of them, Woodside, has paid about \$5 million between 2002 and 2006 to archaeologists (Laurie 2006), and this company alone has been underwriting many more millions of dollars of such work between 1978 and 2002. Dampier is the most lucrative piece of archaeological real estate in Australia, if not the world, and yet archaeologists have produced nothing of substance about their tens of millions of dollars worth of contracts. Most of their reports are either unavailable or well hidden from 'outsiders', and Laurie (op. cit.), a journalist, has been baffled by the secretiveness of archaeologists concerning Dampier.

The poor academic standard of most of the Dampier archaeological work has long been of concern to me (see

Bednarik 2007), so I resolved to explore the issue a little further. The managing director of a company of archaeological consultants destroying Dampier rock art sites (who cannot be named as he favours litigation over academic debate) helped in this by placing self-serving propaganda on an archaeological web-based discussion forum. His several published comments, which he has forbidden me to quote verbatim, demonstrate an amazing ignorance about various aspects of his 'research'. For instance, he repeatedly claimed that a site photograph an advocacy organisation had used on its web-page was not taken in the area of his activity (Dampier Site A), which he claimed to be intimately familiar with, having worked there for five years. He staked his academic reputation on this false claim, which seems to imply that he is unfamiliar with the small area he claims to have surveyed for years. He asserted that the campaign to save the Dampier rock art had no support from the local indigenous groups, which is an outright lie: all native title claimant groups of the area are opposed to the ongoing destruction, all have spoken out against it, and appeals and objections have been lodged by Aboriginal groups from the area on numerous occasions. He claimed the name Murujuga was 'dredged up' by non-Aborigines, which is patently false; he stated an incorrect land area of the main island, Murujuga; and he admitted that he had no idea how much rock art had been destroyed there. In short, his knowledge concerning the Dampier Archipelago, its rock art, the indigenous concerns and many other matters directly related to his consultancy was entirely inadequate for his highly paid role. This example, I believe, explains the remarkably low academic calibre of the work of most archaeologists connected with Dampier. It is notable that there are very few primary sources available about this work, many of the reports are merely desktop commentaries, the authors of which have copied the inadequate work of others.

The ongoing destruction of Dampier rock art sites by archaeological consultants is conducted under conditions of complete exclusion, to prevent any recording of the vandalism occurring. The current phase of Dampier rock art site destruction commenced under stringent security arrangements akin to those relating to nuclear or highly sensitive security installations, excluding the media and



Figure 4. *Rock art relocation in 2007, Holden Point Site A, Murujuga, Dampier Archipelago (identity of photographer withheld to protect him/her against certain retaliation).*

all 'outsiders'. One of the supporters of our campaign, the National Trust of Australia, tried unsuccessfully to secure documentary photographs with telescopic lenses. I used a simpler technique: having members of the workforce (many of whom find the vandalism sufficiently offensive to accept the risk of detection and sacking) take a large number of digital photographs with a tiny camera. The images were sent to me by e-mail, and some were immediately placed on the Internet. Thus the security precautions by the rock art vandals had been in vain, and the removal of rock art at Dampier in 2007 has been recorded (Figs. 4 to 6), and will continue to be recorded.

Summary

It has always been appreciated that archaeological work in most cases is based on destruction, as expressed by pioneer archaeologist Sir Mortimer Wheeler: 'every excavation is like a book whose pages become blank as soon as they are read just once'. The dead hand of archaeology destroys much of what it touches: all archaeological sites it excavates, all sediments it removes, the sacred belief systems it affects through academic appropriation, the ontological legitimacy of the cultures it exposes, the alternative views of the human past it contradicts (cf. Frankel 1993). Archaeology

Please visit the Save the Dampier Rock Art site at
<http://mc2.vicnet.net.au/home/dampier/web/index.html>
 and sign the Dampier Petition. Thank you!



Figure 5. Petroglyph boulder ready for lifting by crane, February 2007, Holden Point Site A, Dampier.

also destroys the value of the rock art it touches: through its improper recording methods, its destruction of research potential because it is ignorant of future (and even most present) methods of rock art science, through excavating rock art sites without appropriate precautions (e.g. dust control) and specialist expertise (e.g. of technology, or of identifying the tools used in the execution of the rock art), and even through imposing etic interpretations by aliens on the intricate meanings of the rock art. Finally, some archaeologists are implicated in the destruction of rock art sites, through various measures of massive intervention, inappropriate site management measures, and particularly through the removal of rock art from its sites, for a variety of reasons.

The worst of these offences is the removal of rock art to facilitate industrial or other development projects by enormously powerful players, such as governments and multinational companies of huge resources. It robs the rock art of its site, and the site of its rock art. It is an act of colonisation, of ultimate cultural usurpation, and of selling humanity's cultural heritage to the highest bidder. It is therefore equivalent to cultural theft, and is a case of *pathological archaeology* (Chaloner 2004; Escobar 1991; Houtman 2006, 2007; McNamara 2007; Moore 1999; Price 2000, 2005; Ritter 2003). In the case of Dampier, it is also the continuation of the process begun in 1868, with the series of police massacres that almost completely extinguished the Yaburrara, the makers of that corpus of rock art. I consider it to be a crime against humanity as much as the destruction of stone statues in Afghanistan — which is in fact the very event that prompted the Unesco *Declaration concerning the Intentional Destruction of Cultural Heritage*.

REFERENCES

ARCA, A., A. FOSSATI, L. JAFFE, M. SIMÕES DE ABREU and R. G. BEDNARIK 2001. Damned dams again: the plight of Portuguese

- rock art. *Rock Art Research* 18: i-iv.
- BAHN, P. G., R. G. BEDNARIK and J. STEINBRING 1995. The Peterborough petroglyph site: reflections on massive intervention in rock art. *Rock Art Research* 12: 29–41.
- BAHN, P. G. and A.-S. HYGEN 1996. More on massive intervention: the Aspeberget structure. *Rock Art Research* 13: 137–138.
- BEDNARIK, R. G. 1990. Sobre la práctica de tizar los petroglifos. *SIARB Boletín* 4: 24–26.
- BEDNARIK, R. G. 1994. A taphonomy of palaeoart. *Antiquity* 68(258): 68–74.
- BEDNARIK, R. G. 1998. The technology of petroglyphs. *Rock Art Research* 15: 23–35.
- BEDNARIK, R. G. 2004a. Public archaeology and political dynamics in Portugal. *Public Archaeology* 3(3): 162–166.
- BEDNARIK, R. G. 2004b. IFRAO's Dampier Campaign. *Rock Art Research* 21: 207–210.
- BEDNARIK, R. G. 2006a. *Australian Apocalypse. The story of Australia's greatest cultural monument*. Occasional AURA Publication 14, Australian Rock Art Research Association, Inc., Melbourne.
- BEDNARIK, R. G. 2007. The science of Dampier rock art — part 1. *Rock Art Research* 24: 209–246.
- BERNDT, R. M. 1987. Panaramittee magic. *Records of the South Australian Museum* 20: 15–28.
- BUSTAMANTE DÍAZ, P. 2006. Rock art destruction at El Mauro, Chile: one of the world's largest mining waste dams. *Rock Art Research* 23: 261–263.
- CHALONER, T. 2004. The Aboriginal Heritage Act 1972: a clash of two cultures; a conflict between two laws. A parliamentary internship, a co-operative arrangement between The Hon. Robin Chapple MLC of the WA State Parliament and Murdoch University.
- DORN, R. I. 2005. Why testify for the defense? *La Pintura* 31(2): 8–12.
- ESCOBAR, A. 1991. Anthropology and the development encounter: the making and marketing of development anthropology. *American Ethnologist* 18(4): 658–682.
- FRANKEL, D. 1993. The excavator: creator or destroyer? *Antiquity* 67: 875–877.
- Hansard 2005. *Questions on Notice, Tuesday, 16 August 2005*. Legislative Council of Western Australia, pp. 3917c–3918a/1.
- HOLUB, E. I. 1890. *Von der Kapstadt ins Land der Mashukulumbe: Reisen im südlichen Afrika in den Jahren 1883–1887*. Hölder, Vienna.
- HOUTMAN, G. 2006. Double or quits. *Anthropology Today* 22(6): 1–3.
- HOUTMAN, G. 2007. Response to Laura McNamara. *Anthropology Today* 23(2): 21.
- LAURIE, V. 2006. Burrup treasure is history in the taking. *The Australian*, 31 October, p. 10.
- LÖFVENDAHL, R. and J. MAGNUSSON 2000. Research and development — degradation and care. In K. Kallhovd and J. Magnusson (eds), *Rock carvings in the borderlands*, pp. 47–72. Interreg IIA Project, Bohuslän/Dalsland and Østfold.
- MCMNAMARA, L. A. 2007. Culture, critique and credibility. *Anthropology Today* 23(2): 20–21.
- MOORE, P. 1999. Anthropological practice and Aboriginal heritage: a case study from Western Australia. In S. Toussaint and J. Taylor (eds), *Applied anthropology in Australasia*, pp. 229–254. University of Western Australia Press, Nedlands.
- MORWOOD, M. 1994. Handy household hints for archaeological excavations at rock art sites. *Rock Art Research* 11: 10–12.

MOUNTFORD, C. P. and R. EDWARDS 1962. Aboriginal rock engravings of extinct creatures in South Australia. *Man* 61: 97–99.
 PRICE, D. 2000. Anthropologists as spies. *The Nation* 271(16): 24–27.
 PRICE, D. H. 2005. America the ambivalent: quietly selling anthropology to the CIA. *Anthropology Today* 21(5): 1–2.
 RITTER, D. 2003. Trashing heritage. *Studies in Western Australian*

History 23: 195–208.

VINNICOMBE, P. 1987. *Dampier Archaeological Project. Resource document, survey and salvage of Aboriginal sites, Burrup Peninsula, Western Australia.* Department of Aboriginal Sites, Western Australian Museum, Perth.

WOODY, A. 2005. Reply to Dorn. *La Pintura* 31(2): 12–14.



Figure 6. Mobile crane setting up to remove petroglyph boulders, February 2007, Site A at Holden Point.

About mastodons and mammoths

Associated Press reported on 4 September 2007 that underwater archaeologists say they may have discovered a granite boulder with a pre-Historic carving in Lake Michigan's Grand Traverse Bay, U.S.A. But the researchers are not certain that what they saw in the bay, north of Traverse City, is a petroglyph.

The markings on the boulder, 11 m below the surface of the lake, are said to resemble a mastodon, a Pleistocene species in the region. There are very few authentic petroglyphs in the state of Michigan, and until this rock marking is authenticated by credible rock art scientists, this report can only be regarded as sensationalist. Moreover, the LGM ice sheets extended to well south of the Great Lakes, so this find seems a little incongruous.

It follows a similar recent report of a mammoth petroglyph in an English cave, Gough's Cave, Cheddar, Somerset. Newspaper reports hailed it as proof of Pleistocene cave art, presenting it as an established fact. But when the actual published report (Mullan et al. 2006) is consulted, the picture is rather uncertain. The wall marking in ques-

tion occurs in a cave that has been subjected to extensive public visitation since the 1890s, and to blasting operations and repeated flooding. The report states that 'much of the rock surface in this cave has been modified since it was opened to the public'. More importantly, it does not claim that the 'mammoth' marking is anthropic. It clearly states that the markings interpreted as trunk, tusks and eye are all natural features on the rock. Only the line resembling the dome of the head and the sloping back is said to 'possibly' have been made by human hand.

However, if it is closely examined in the photographs, it does not resemble an engraved line. Its erratic course lacks the typical flow of an engraved line and it does not adequately approximate the shape of a mammoth, or resemble authentic Pleistocene images of mammoths. In anatomical terms, it would be extremely clumsy by any standards, and there are many other fortuitous markings in the cave. To select one of them as resembling, very vaguely, the back line of a mammoth because there are some nearby faint but clearly natural features reminiscent of other body parts of that animal, in the absence of any other proof, is not adequate evidence that this is a petroglyph.

Two years previously, a panel of authentic cave engrav-

ings had been reported from another cave in the region, just a few kilometres away (Mullan and Wilson 2004). It is clearly evident from the photographs that the geometric engravings in Avenine's Hole are anthropic, but here the authors attribute the rock art not to the Pleistocene, but to the early Holocene, by defining it as Mesolithic. Perhaps it is so, but that should not be regarded as demonstrated.

Certainly claims of Pleistocene rock art are nothing new from Britain, and it is noteworthy that all of those made since the early 20th century have been either refuted or remain highly controversial. That includes those concerning Church Hole. Perhaps it needs to be appreciated by aspiring 'discoverers of British Palaeolithic rock art' that their claims need to be presented with less zeal and fervency but with better documentation.

Robert G. Bednarik

REFERENCES

- MULLAN, G. J., L. J. WILSON, A. R. FARRANT and K. DEVLIN 2006. A possible engraving of a mammoth in Gough's Cave, Cheddar, Somerset. *Proceedings, University of Bristol Speleological Society* 24(1): 37–47.
- MULLAN, G. J. and L. J. WILSON 2004. A possible Mesolithic engraving in Aveline's Hole, Burrington Combe, north Somerset. *Proceedings, University of Bristol Speleological Society* 23(2): 75–85.

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23 to 26 May 2008

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AURA Treasurer's financial statement 2006/2007

ELFRIEDE BEDNARIK

Balance in hand on 30 June 2006: \$9579.67

INCOME:	\$	EXPENDITURES:	\$
Sales of books	8161.29	Postage	2699.05
Bank interest	398.15	Business Affairs Registration	129.00
		Printing of <i>Rock Art Science</i>	6234.61
		Customs fees	1048.31
		Brochures for <i>Rock Art Science</i>	451.00
		Telephone and faxes	146.50
		Stationery	825.44
		Bank and merchant account fees	659.63
		Subscription	45.00
TOTAL	8559.44	TOTAL	12 238.54

Balance in hand on 30 June 2007: \$5900.57

This annual result is excellent, bearing in mind that AURA now holds about \$15 000 worth of copies of *Rock Art Science* alone, plus a similar value of volumes of the *AURA Occasional Publications* series. This strong result is almost entirely attributable to the sales of R. G. Bednarik's *Australian Apocalypse*, which has been a runaway success,

with most copies of the first edition now sold. The cost of this 'bestseller' volume has long been recouped, and a second, updated edition will be required. Book sales also account for the high cost of postage and merchant account fees (for credit card payments).

AURA Newsletter

Editor: Robert G. Bednarik

Editorial address: AURA, P.O. Box 216, Caulfield South, Victoria 3162, Australia

Tel./Fax No.: (613) 9523 0549

E-mail: auraweb@hotmail.com

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