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CONTENTS

pp.61-62

Problems and Prospects of Preserving the Portable Scientific and Technological Heritage: Introduction

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INTRODUCTION. It was fitting that the Royal Society of New South Wales as the premier scientific society in Australia should have taken the initiative in conjunction with the National Trust of Australia (New South Wales) and the Museum of Applied Arts and Sciences to organise the seminar on the "Problems and Prospects of Preserving the Portable Scientific and Technological Heritage".

The objectives of the seminar were:

a. to serve as a forum for the discussion of issues concerning the preservation of the scientific and technological heritage,

b. to bring to the attention of policy makers some of the problems associated with the preservation of heritage, and

c. to discuss issues arising from legislation and costs associated with the preservation of heritage.

While some of the issues and problems in preserving our scientific and technological heritage were raised in the papers defined at the seminar, many others were highlighted in the discussions throughout the various sessions at the seminar. Since this was the first attempt to bring together people with cannon interests in the preservation of the scientific and technological heritage in New South Wales it was not possible to cover all aspects of this fascinating, complex and important subject.

We were nonetheless pleasantly surprised and encouraged to note the overwhelming response to the seminar. It is intended to arrange another seminar on the same topic probably next year and to cover a much wider range of topics than had been possible at the present seminar.

The papers for the seminar were divided into three sessions:

1. scientific heritage

2. technological heritage

3. legislation and costs

No seminar such as this could afford to neglect the issue of legislation, particularly its limitations and the costs involved in implementing it. A set of papers on the technological heritage investigated issues arising from industrial sites and artefacts, and the role of museums in preserving and documenting the industrial heritage. The papers on the scientific heritage were concerned with the preservation of scientific artefacts and archives especially in relation to scientific and technological institutions. These institutions have a tendency to discard obsolete equipment or drastically modify them for other purposes and hence add to the loss of the scientific heritage for future generations. Over the last few years, in a number of cases, scientific artefacts of significance were thrown away by organisations which reorganised themselves and moved to new premises.

The conversion of a scientific institution into a museum of astronomy posed new challenges and since this was the first time such a project had been undertaken in Australia, it should provide several lessons for others in the field. I hope the experience gained on this project will be of use to the group involved in the conservation and restoration of Tebbutt's Observatory in Windsor.

The preservation of the scientific and technological heritage has its special problems which are compounded by the rapid obsolescence that is built into the scientific and technological enterprise. In a sense one should be collecting today for tcmorrow. Where the objects are small, portable and collectable they do not pose any major problems. The real problem comes when faced with industrial complexes with large machines (mills, blast-furnaces, steam engines, etc) and structures. Another development that has created a problem and an issue is the recent interest in industrial environments and the argument that many historical engineering items can only be appreciated in the context of their utilisation. In essence this means that although the ultimate objective might still be to preserve artefacts, they should be exposed in their original contexts. It may, therefore, be desirable because of the complexities of the issues involved, to set

up a specialist committee of scientists and engineers within the Heritage Council to provide guidelines for assessing the issues which arise in the preservation of the scientific and technological heritage of New South Wales.

One of the last but by no means the least important items on the agenda of the seminar was the passing of resolutions. In our deliberations and the passing of the resolutions we bore in mind the constraints imposed by resources and the economic situation we are living in.

On behalf of the Royal Society of New South Wales, I thank the members of the Organising Committee, the staff of the National Trust and the staff of the museum of Applied Arts and Sciences for all the assistance they gave us in organising this seminar. I also wish to thank the Honourable Minister for Planning and Environment and Minister for Heritage, Mr Bob Carr, for not only gracing the occasion with his presence but also delivering the opening address and declaring the seminar open. It is a credit to the Minister that he accepted the resolutions passed at the Seminar and had them included in the Heritage (Amendment) Act 1987 assented to on 3rd April, 1987.

Return to Top

pp.63-65

Opening Address, 2nd August, 1986

THE HONOURABLE R. J. CARR,
MINISTER FOR PLANNING, AND ENVIRONMENT AND MINISTER FOR HERITAGE

A little over a month ago, I was strolling through the Iron Bridge Gorge Museum in the United Kingdom. It is located in the valley that saw the first industrial revolution, it was indeed the silicon valley of the 18th century; the valley where the first experiments were made in producing iron with coal instead of charcoal. Visitors came from all over Europe to look at these industrial processes. According to the paintings that record the spectacle, they were dark satanic mills, vast works spewing out flames and black smoke into the atmosphere of a once idyllic valley. That museum, probably the leading industrial museum in the United Kingdom, records these processes. It houses and preserves all sorts of small enterprises as well as major industrial establishments, processes, equipment, ceramic works and even blacksmiths' shops. It reminded me that heritage is about more than conserving the graceful historic country mansion; about more than protecting outstanding features of the natural environment. Of course, it is relatively easy to create public interest in these two areas of heritage. I have to say, however, that it is much harder to interest people in saving swamp lands for example, than it is in saving the most glamorous rainforests. In the built environment, some parts are also more immediately attractive and suitable for a conservation case than other parts. Anzac House, for example, which the Heritage Council sought to have protected with a Conservation Order and which the Royal Australian Institute of Architects was very keen to save, probably commends itself less to the public (as does the first Qantas House, which is in the same category) than our built environment of the early 19th century. Nevertheless, the built environment and natural environment are areas of well worn conservation arguments. It is harder to interest people in the portable, scientific and technological heritage. Yet in France, the boats of Breton fishermen are regarded as part of the nation's cultural heritage and are protected accordingly. In Denmark, you

can see a museum that features radio equipment used by the Danish resistance. Those examples suggest that the portable, scientific and technological heritage cover a wide range.

In New South Wales, the Heritage Council has been actively working for conservation of various items and collections of portable heritage since its inception in 1978. Wherever possible the Council strives to keep these objects in situ and maintain the relationship between them and their cultural context. This has been achieved through negotiation, legislative control, research studies and acquisition. Let me touch on some examples.

Historic pipe organs form an important category of the portable heritage and in recognition of this the Heritage Council has formed a pipe organ advisory panel to give advice on the conservation of these musical instruments. The Walker and Son pipe organ at the Pitt Street Uniting Church and the Charles Richardson organ at the Balmain Presbyterian Church are two examples where small financial grants have been used by the local parishioners for essential conservation to maintain the instruments as working artefacts.

Indeed, collections of portable relics exist all over the State. Coppabella Station, at Tumbarumba, contains a complete mid-19th century blacksmith's shop. The Department of Environment and Planning has been advising the sympathetic owners of the site on the long term care and management of the collection.

Chaffers Tannery at Chatswood, Sydney, is a similar example. This 1885 industrial site was the last of the tanneries which once characterised the Chatswood area. Heritage Conservation funds provided for the detailed recording of the place, its contents and the industrial processes employed there. The business has since moved and the owners will keep and house the most significant pieces of equipment in the new factory, maintaining a link with the past.

Eveleigh Railway Workshops, Redfern, is the home of an outstanding collection of engineering heritage items relating to the production and maintenance of steam locomotives in New South Wales. The collection includes timber patterns from a locomotive, components, stampers, lathes and steam engines. Critics of the industrial relations practice of the State Rail Authority will argue that these are all in good condition because very little work has been performed with them. A National Estate Grant is currently being used to cempile an inventory of the collection and make recommendations for its care, control and management.

In Mungo National Park, in the south west of New South Wales, I can recall seeing a 19th century shearing shed, preserved and in very good condition. In order to maintain its oleaginous authenticity, shearing is conducted there once a year; a necessity to keep the timber oiled and maintain it in that pretty harsh climate. I suppose the difficulty in deciding when we have enough old shearing sheds preserved to give us a representative sample is a little like United Kingdom heritage experts talking about the Yorkshire Barns – there are so many of them dotted over the landscape, it would be an extravagant effort to preserve and restore them all. When do you have a representative sample?

In other areas, funding has been provided by the Department of Environment and Planning to purchase part of the contents of historic Rouse Hill House, which is now administered by the Historic Houses Trust. The contents are vast and various. I would think that whoever is in charge of arranging the presentation is going to have one of the most difficult jobs ever presented in this area. The State Goverment has also provided funding for a detailed research study on one category of portable relics, utilitarian glass, which will be completed by the end of

the year. We have acquired the site of the first male orphanage at Fairfield, in Sydney's west, to protect the relics associated with this important welfare institution.

As far as the protection of portable heritage is concerned, I am currently reviewing the Heritage Act which was passed in 1977. One of the aspects being given particular attention is the question of tighter controls for the removal or movement of relics, to complement the recent Federal Protection of Moveable Cultural Heritage Bill, 1985 and the National Parks and Wildlife Act which protects aboriginal relics.

The significance of historical archaeological relics has been recognised by the State Government and is illustrated by our commitment to conserve the First Government House site. I look forward to being able to make available sufficient funding for the final phase of the archaeological project: the research and analysis of the thousands of artefacts which have the potential to reveal much more information on the site's history. The question of the long term storage, curation and management of archaeological artefacts needs careful consideration and falls into an area where the Heritage Act stops short. The Museum of Applied Arts and Sciences is, I think, the most appropriate institution to accept this responsibility and through the new Ministry of Heritage I will be initiating discussions on this question between the Heritage council and the Museum.

Today's seminar promises to be very interesting and it should help to focus attention on this area of cultural heritage and the problems and prospects of its conservation. I think it is very topical and there is no doubt that we are now moving out of something we can call the industrial age and into a system of economic organisation which has very different characteristics. It is therefore important for us to act now and conserve our industrial archaeology, because otherwise, with the restructuring and shake out of the manufacturing industry, we stand to see a lot of these processes, and a lot of this equipment, lost for all time. In decades from now there will be an enormous fascination with the ingenuity used by Australians to grapple with technological problems and the problems of scientific and technological challenges presented by our unique environment.

While interest in it may not be apparent at this time, it is important that informed people, like those of you here, lead public debate and act now before we lose slabs of this heritage. I note that the speakers and participants today represent all of the government and academic institutions concerned with portable heritage. I congratulate those responsible for organising this seminar, and I am sure that the mutual exchange of ideas will be an important first step in a number of achievements in this area. It gives me a great deal of pleasure to declare the seminar open.

Return to Top

p.66

Resolutions — Portable Scientific and Technological Heritage

This meeting believes there is rising concern among associations, professional people and significant parts of the community about the disappearance of the portable scientific and technological heritage. It believes there is danger that "by inaction we will further maim or nation life" (Beaglehole)

For this reason sixty five participants from some 30 institutions and professional organisations atttended this seminar.

The Minister's attention is directed to the following points arising from the papers read which were for the focus of disussion at the Meeting:

1. That in his review of the NSW Heritage Act the Minister make provision for protection of portable items of scientific and technological heritage.

2. That this heritage must be seen to include both artefacts and archival material.

3. That such provision be extended to include all portable heritage items.

4. That particular attention be given to retention of these items in situ as a first option.

5. That a single authority be responsible for coordination, registration and management of these items.

6. That attention be given to increase public awareness in this field.

7. That institutions and individuals represented at this Meeting request the opportunity for continuing dialogue.

The Meeting requests that the Minister take account of the concern of this professional group and formally addresses the issues raised in the attached proceedings, which will shortly be published, by means of legislation as appropriate.