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Challenges for heritage conservation and sustainable development in the 21st Century

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Challenges for heritage conservation and sustainable development in the 21st Century

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Foreword

Australia's heritage places have been shaped by natural and cultural processes and by historic events to endow Australians with an inheritance of heritage assets. Australia has biodiversity described as megadiverse, a continuous Indigenous culture spanning more than 60 000 years and a rich history of European settlement over the last two centuries. In addition Australia has become a home to migrants from a wide range of cultures leading to a richness in tradition and cultural diversity.

The importance of heritage conservation is apparent, however it must compete for government funding with issues such as unemployment, education and health care. It is important that we find ways to communicate both the intrinsic value of heritage and its economic benefits to the wider community. Heritage economics can facilitate such communication and may also lead to the development of new ways of ensuring the viability of heritage. The Australian Heritage Commission has already begun to examine some of these opportunities and has produced a regional heritage tourism strategy in response to the recommendations of the Regional Australia Summit Communique.

The Australian Heritage Commission has taken an active role in stimulating research and debate in the area of heritage economics. This publication explores a wide range of methodologies and covers subjects from metropolitan buildings to the cultural and natural values of Australia's alpine region.

It is my hope that this work will provoke debate and further research and that the field of heritage economics will increasingly contribute to the identification and ongoing conservation of Australia's heritage for future and current Australians.

Peter King
Chairman
Australian Heritage Commission

Cultural Heritage: an economic value not fully realised

Speech by Mr Bruce Leaver, Executive Director The Australian Heritage Commission to the ISEE 2000 Pre-Conference Workshop, Tuesday 4 July 2000

Good morning ladies and gentlemen, I am delighted to be with you today for this historic gathering-Australia's first Heritage Economics workshop.

In this room today are people who bring a variety of perspectives to the task of heritage conservation. Some see heritage conservation from an economic view. Some see it from a community view. Some are involved with heritage policy developers or Indigenous groups. Some see heritage conservation from a tourism perspective. But despite the diverse viewpoints we represent, we are all here to explore the potential for heritage places as we move into the next century.

And as we are about to spend today listening and discussing challenges for heritage conservation and sustainable development, we should have firmly in our minds just why it is worth making he effort to get it right.

Australia, after all is a land of outstanding heritage value:
it is the only developed country in the world with a biodiversity that is defined as megadiverse;
it is the home of the oldest continuous culture on earth, having been occupied by Indigenous nations for more than 60 000 years;
it has a rich and varied history of European settlement over the last 200 years; and
it has become the home of people from every culture in the world, with a consequent richness of tradition and cultural diversity.

Perhaps our biggest battle in efforts to conserve our rich cultural and natural heritage assets lies in a lingering perception that heritage conservation is a luxury that cannot be afforded by communities struggling with issues like unemployment, education and health care.

Yet heritage is a priceless asset that is vital to our sense of us as a nation. Having said that, we should not be precious about it. Heritage places also make an active contribution to the nation's economy. To be frank, we, as a nation, are crazy if we don't recognise, manage and protect those assets.

You'll hear me several times this morning, refer to "heritage assets". I call them that because that is what they are. They are undoubtedly of immense importance to Australians and are a vital part of our cultural landscape. But we need to explore ways of ensuring that they continue to be a part of our mainstream economy. We need to explore their economic potential, being careful always to do so in the context of conservation.

The Australian Heritage Commission has already begun to examine some of these opportunities and this end produced the document *Heritage Tourism: Bringing People to the Bush* in response to the Regional Australia Summit's call for a regional heritage tourism strategy to be developed. We have focused on regional areas because that is where much of the wealth of Australia's heritage assets can be found. Unfortunately, it is also where much of the nation's heritage assets are under threat.

When rural areas face the pinch, it becomes harder for people to maintain their community's heritage places. Buildings like banks, post offices and churches that tell of a town's past prosperity are in danger of being lost. It also becomes harder to promote and protect places that are special to Indigenous communities, or to interpret and conserve natural features.

Yet here and there we see examples of communities using their heritage to promote tourism and reinvigorate their local economies. WE believe that heritage tourism is one potential industry that can help ailing rural economies. It's no secret that tourism is not the largest contributor to foreign exchange earnings. It has overtaken traditionally important economic sectors such as agriculture, fisheries and mining. According to the 1997 International Visitor Survey, 30% of tourists visit historical sites.

Heritage tourism has the potential to deliver economic benefits to regional communities across Australia in terms of jobs and infrastructure. But there are a number of steps needed before that can happen in any

great numbers. Firstly, we must identify those assets. Secondly we must educate Australians about what is in their own backyards. After all, it is difficult for people to place any type of value on something, be it emotional or economic, if they do not know about it. Thirdly, we need to advise and empower communities to interpret and promote their heritage assets. If all elements are in place, it follows that heritage places will be conserved as part of looking after community "business" assets.

We've seen an example of this in Queensland. Warwick and it's surrounding region has some of the State's finest original sandstone and timber buildings as well as five national parks. In looking for new opportunities, the Southern Downs Tourist Association turned to heritage tourism and last year launched a *Cultural Heritage and Historic Building Trail Touring Guide*, presenting quality information and photographs of the region's heritage buildings. The guide was designed to encourage people to stay longer around Warwick and also link with other attractions and activities across the region. It was successfully promoted through the media and visitor networks and information requests concerning heritage locations and tours have increased by around 30%. This has flowed on to increases in bed nights, food, drink and fuel consumption in the region. The Tourism Association is now working closely with heritage advisers and the National Trust to identify and promote other heritage places, as well as ensuring conservation of those already featured in the *Guide*. The manager of the Southern Downs Tourism association, Denis Kenny, says the project has given people a sense that the region's economy is diversifying and that people have a tangible role to play in that.

Later this year we'll be releasing a set of practical guidelines that we've developed with Tourism Council Australia in consultation with industry. These heritage tourism guidelines will help support the development of sustainable heritage tourism businesses. They centre on the need for developing business fundamentals, knowing the product, developing partnerships, conserving heritage resources and developing a quality visitor experience. They

will also draw from already successful examples.

As you may have gathered from what I've already said, there are a number of initiatives around Australia that have brought heritage and tourism together in creative business ventures. State and local governments have also recognised the potential for economic benefits from natural and cultural heritage tourism and have made localised efforts to capitalise on a few of their heritage assets.

These initiatives are typically one-offs, uncoordinated, poorly funded and not integrated into wider regional planning and marketing. As a result, they fail to deliver the full economic benefits that could be realised, but the potential is there.

The key element her is change: a change of attitudes, a change of approaches and a change of culture. Heritage management in this country is also undergoing a change.

Traditionally, the Commonwealth's role has been to protect and manage World Heritage areas and to support the States and Territories in protecting their heritage places. For the past 25 years the Commission has also identified a wide range of cultural and natural heritage places that have national significance. These places have been included on a Register of the National Estate.

But there has always been a piece of the big picture puzzle missing. Unlike the US and Canada, Australia has had no mechanism for protecting heritage places of national significance. This means we have been unable to maximise the social and economic benefits of these places.

Since 1997 there has been an ongoing examination of Commonwealth and State roles and responsibilities for heritage management. This year, the Commonwealth has decided to move toward on heritage reform and is proposing to include a new heritage protection regime in the Environment Protection and Biodiversity Conservation Act. If successful, this new regime will specifically define Commonwealth roles and responsibilities for heritage. As part of this change, it is proposed that a list of places of national importance be developed. Under the new heritage regime, the Commonwealth will then have the power to protect and promote

these places using the full range of its constitutional; powers. This shift in legislation will provide an opportunity to fill the gap and have heritage protected through the States, at a national level and an international level.

It is in this environment of change that I am pleased to be speaking with you today. The opportunity to integrate our approaches is embodied in people like you. We need to draw on our collective knowledge to work with heritage and deliver effective outcomes for heritage conservation and sustainable development.

I'd like to thank the Australian and New Zealand Society for Ecological Economics for working with the Heritage Commission to make this workshop possible.

Congratulations also go to the International Society for Ecological Economics who will hold their Year 2000 Conference here at the ANU starting tomorrow.

I'd like to leave you with one thought from an anonymous author, but one that I thought had relevance for our discussion here today:

"The price is what you pay. The value is what you receive."

Thank you.

Conceptualising Heritage as Cultural Capital

David Throsby, Professor of Economics, Macquarie University

Abstract

This paper reviews recent developments in the theory and methodology involved in the evaluation of cultural heritage. Economists traditionally identify three types of capital: physical capital, human capital and natural capital. Recent suggestions that a fourth type of capital should be recognised, namely cultural capital, are reviewed. Cultural capital is defined as an asset embodying or yielding both economic and cultural value. The paper considers the means by which these types of value may be assessed and considers the implications of such assessment for investment decisions in heritage projects. The concept of sustainability in the management of cultural capital is also discussed, drawing parallels with the treatment of natural capital in ecological economics.

Introduction

Decisions about cultural heritage-what it is, how it should be conserved-are traditionally the province of art historians, conservators, archaeologists, museum directors, urban planners and similar professionals. When economists raise questions about the criteria on which these decisions are based, their intrusion is often resented.[i] One of the reasons for a mutual suspicion between economists and cultural experts in this field is the lack of a common discourse within which they can communicate. Conceptualising heritage as asset offers one means of bridging this disciplinary gap. Economists can respond readily to the interpretation of artworks, historic buildings, heritage sites etc. as capital assets and can bring a range of analytical techniques into play in evaluating their benefits and costs. At the same time heritage professionals are likely to find some resonances in the notion of heritage items as long-term stores and generators of cultural value.

This paper reviews the concept of cultural capital as it has recently emerged in economics, looking first at definitional issues and then at questions of value and valuation. Some parallels are drawn with the emergence of the theory of natural capital in ecological economics. In turn these discussions lead to a consideration of sustainability as it relates to cultural capital, seen again in parallel with the treatment of the natural environment. Finally, some questions of the appraisal of investment projects in the heritage field are raised.[ii]

Definitional issues

As noted above, it should not be difficult for economists to accept that tangible cultural heritage can be considered as a form of capital. Heritage items such as a painting by Rembrandt or a historic building can be seen as assets: both required investment of physical and human resources in their original manufacture and construction; both will deteriorate over time unless resources are devoted to their maintenance and upkeep; and both give rise to a flow of services over time that may enter the final consumption of individuals directly (for example, when people view the painting in a museum or visit the historic building), or that may contribute to the production of further goods and services (for example, when the painting inspires the creation of new artworks or when the historic building is used as a commercial office space). In other words, heritage items can be interpreted as capital assets with the standard characteristics of ordinary physical capital in economics.

Is it sufficient simply to classify tangible heritage as physical capital, or is there something else about heritage items that distinguishes them from other items of physical capital? Recently suggestions have been made that heritage items are members of a class of capital that is indeed distinct from other forms of capital; this class has been called *cultural capital*.[iii] The distinction lies in the type of value that is embodied in these assets and is yielded by the goods and services they produce. A historic building such as Notre Dame Cathedral or the Taj Mahal is not just any building; certainly it has the characteristics of an "ordinary" building as an item of physical capital, but in addition it has historical and other attributes that an "ordinary" building does not have. These attributes can be described as the building's "cultural value" and the same type of cultural value can be attributed to the flow of services it provides. This notion of the cultural value of certain goods and services

such as heritage can be set alongside the more familiar concept of their economic value. At a later stage in this paper we shall be more explicit about what comprises both economic and cultural value; for now it is sufficient to assume that cultural value can be measured according to a unit of account that plays a role comparable to that of a monetary scale in measuring economic value. It is also assumed that an item's cultural value is separate from, though not unrelated to, its economic value.

Accepting these interpretations, then, we can provide a formal definition of cultural capital as an asset that embodies a store of cultural value, separable from whatever economic value it might possess. The asset gives rise to a flow of goods and services over time that may also have cultural value (i.e. that are themselves cultural goods and services). The stock of *tangible* cultural capital thus defined comprises cultural heritage as specified above; *intangible* cultural capital exists in ideas, traditions, beliefs and customs shared by a group of people, together with intellectual capital existing as language, literature, music and so on. In this paper, we restrict attention only to tangible cultural capital.

Economic and cultural value

Cultural capital, like any capital item, exists both as a *stock* of assets and as a *flow* of capital services over time. The value of the capital may be assessed in terms of its asset value at a given point in time or as the value of the flow of services to which it gives rise. Either way, the particular characteristic of cultural capital is that it embodies or gives rise to two types of value, economic and cultural. Let us consider these two types of value in turn.

In regard to the economic value of heritage, a distinction is usually made, as with environmental assets, between use and nonuse value. *Use value* refers to the direct valuation of the asset's services by those who consume those services-the entry fees paid by visitors to historic sites, for example. *Nonuse value* refers to the value placed upon a range of nonrival and nonexcludable public-good characteristics typically possessed by cultural heritage. In brief, these nonuse values may relate to the asset's *existence* value (people value the existence of the heritage item even though

they may not consume its services directly themselves); its *option* value (people wish to preserve the option that they or others might consume the asset's services at some future time); and its *bequest* value (people may wish to bequeath the asset to future generations). These nonuse values are not observable in market transactions, since no market exists on which the rights to them can be exchanged.

Turning to cultural value, we note that any valuation of the item as a stock of capital would, in principle, account for this value separately from its economic worth. Similarly, the cultural value of the flow of services it produces could, again in principle, be identified. What are the dimensions of the cultural value that might be embodied in or produced by an item of cultural heritage? Whether the approach to assessing cultural value is absolutist or relativist[iv], certain elements might be identified as contributing to the aggregate cultural value of the item, including

- aesthetic value: beauty, harmony

- spiritual value: understanding, enlightenment, insight

- social value: connection with others, a sense of identity

- historical value: connection with the past

- symbolic value: objects or sites as repositories or conveyors of meaning

- authenticity value: integrity, uniqueness.
To illustrate, the cultural value of Uluru to both Indigenous and non-Indigenous Australians can be seen to comprise all six of these characteristics: it is a unique, beautiful and spiritual place, providing a sense of identity to both the traditional owners and to other Australians, with strong historical links and deep symbolic value within Aboriginal culture.

If the economic and cultural value of cultural capital can be separated, what is the relationship, if any, between them? Consider first the asset value of an item of tangible heritage such as a building of historical significance. The asset may have economic value that derives simply from its physical existence as a building irrespective of its cultural worth. But the economic value of the asset is likely to be augmented, perhaps significantly so, because of its cultural value. So, for example, individuals may be willing to pay for the embodied

cultural content of this asset by offering a price higher than that which they would offer for the physical entity alone. In other words, a heritage building may embody 'pure' cultural value, according to the assumed scale proposed earlier and also have an economic value as an asset derived both from its physical and its cultural content. Likewise, the economic and cultural value of the flow of services produced by the historic building would be likely to be closely related. Its use value, measured as the entrance fees paid by visitors, would be expected to be greater the higher the cultural value people place on the experience of visiting it, other things being equal. Its non-use values would be similarly related to the building's perceived cultural worth. Thus, the overall economic value of the flow of services provided by the asset would be expected to be closely correlated with its cultural valuation, even though those economic and cultural values can be separately defined.[v]

Parallels with natural capital

The concept of cultural capital as outlined above bears some similarities to that of natural capital as it has developed within ecological economics over the last decade or so. That is, tangible cultural capital that has been inherited from the past can be seen to have something in common with natural resources, which have also been provided to us as an endowment; natural resources have come from the beneficence of nature, cultural capital has arisen from the creative activities of human kind. Both impose on us a duty of care, the essence of the sustainability problem to be discussed further below. Further, a similarity can be seen between the function of natural ecosystems in supporting and maintaining the 'natural balance' and the function of what might be referred to as 'cultural ecosystems' in supporting and maintaining the cultural life and vitality of human civilisation. Finally, the notion of diversity, so important in the natural world, has a perhaps even more significant role to play within cultural systems. It is a characteristic of most cultural goods that they are unique and this applies particularly to tangible heritage. Thus cultural diversity is perhaps even more far-reaching than is diversity in nature. It has often been noted that diversity is a fundamental characteristic governing the functioning of culture in

society[vi]; hence much of the analysis of biodiversity might be applicable to a consideration of cultural heritage.

Apart from the matter of sustainability, there are two important issues raised by the debate over natural capital that are of relevance in the heritage context. The first relates to valuation of capital stocks. In natural capital theory, the valuation question has been a matter of considerable controversy. A recent attempt at quantifying global natural capital by Costanza *et al.* (1997) attracted much criticism from commentators such as El Serafy (1998) and Toman (1998), who objected to alleged double counting and to the apparently infinite price being placed on several items. Similarly, efforts to value the stock of cultural capital are likely to be fraught with danger and will be compounded by the fact that not only an economic measure but also some form of cultural valuation will need to be sought.

The second issue relates to the relationship amongst different forms of capital and the extent to which one is substitutable for another. In the natural capital debate, a great deal of attention has been devoted to the possibilities or otherwise for substituting physical for natural capital, with positions taken ranging from zero substitutability at one end through to perfect substitutability at the other. The likely consensus is that whilst some aspects of the services provided by natural capital may be able to be replaced by manufactured capital, there are other aspects that cannot. In the case of cultural capital, provision of many of the *economic* functions of cultural assets is readily imaginable through substitution by physical capital; the services of shelter, amenity etc. provided by a historic building could as well be provided by another structure without cultural content. However, since by definition cultural capital is distinguished from physical capital by its embodiment and production of *cultural* value, there would be expected to be zero substitutability between cultural and physical capital in respect of its cultural output.

Sustainability

A view of cultural heritage as capital invites consideration of the long term. As in the environmental sphere, a framework for consideration of the long-term maintenance of cultural capital is provided by the

concept of sustainability. The problem can be stated as follows. Cultural capital exists as a source of cultural goods and services that provide benefits both now and in the future. As individuals or as a society, we can allow cultural capital to deteriorate over time, we can maintain it, or we can augment it, in short we can *manage* it in a way that suits our individual or collective purpose. What principles should guide our management decisions? By articulating more precisely what sustainability entails when applied to heritage, such a set of principles emerges. We suggest six principles, dimensions, or criteria that might be taken to define sustainability in its application to cultural capital.

(a) *Material and nonmaterial wellbeing* The flow of goods and services produced from cultural capital provides both material and nonmaterial benefits for people as individuals and as members of society. A means of identifying the value of those benefits is provided by the specification of economic and cultural value as their twin components. A first criterion for judging sustainability, then, is the production of *material* benefits in the form of direct utility to consumers, deriving from these economic and cultural value sources. In addition, we also identify the more general class of *nonmaterial* benefits flowing from cultural capital, which we referred to earlier.

(b) *Intergenerational equity*. This principle requires the interests of future generations to be acknowledged. This might be pursued in several different ways. In quantitative terms, respect for intergenerational concerns might suggest adoption of a lower discount rate than might be otherwise accepted on time-preference or opportunity-cost grounds in the process of reducing both economic and cultural benefit streams to present value terms. In qualitative terms, the issue of fairness itself should be explicitly considered in terms of the ethical or moral dimensions of taking account of the likely effect of the project on future generations.

(c) *Intragenerational equity*. This principle asserts the rights of the present generation to fairness in access to cultural resources and to the benefits flowing from cultural capital, viewed across social classes, income groups, locational categories and so on. It can be suggested that in the cultural arena, matters such as the distribution of cultural resources, access to cultural participation, the provision of cultural services for minority or disadvantaged groups and so on, are all aspects of equity or fairness in the conduct of cultural life that may be overlooked in the pursuit of efficiency-related outcomes. The principle of intragenerational equity thus requires attention to these questions, if sustainable use of cultural heritage resources is to be achieved.

(d) *Maintenance of diversity*. We have noted already that, just as biodiversity is seen as significant in the natural world, so also is cultural diversity important in maintaining cultural systems. The diversity of ideas, beliefs, traditions and values yields a flow of cultural services that is quite distinct from the services provided by the individual components. Diversity is an important attribute of cultural capital particularly because it has the capacity to yield new capital formation. For example, to the extent that creative works are inspired by the existing stock of cultural resources, a greater diversity of resources will lead to the creation of more varied and more culturally valuable artistic works in the future.

(e) *Precautionary principle*. As a general proposition the precautionary principle states that decisions that may lead to irreversible change should be approached with extreme caution and from a strongly risk-averse position, because of the imponderability of the consequences of such decisions. In the natural world this principle is invoked in regard to decisions that might result, for example, in the

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extinction of species. Similarly, the destruction of an item of cultural capital may be a case of irreversible loss if the item is unique and irreplaceable such as is the case with a historic building; in such a case the precautionary principle would appropriately be applied if the item were considered of sufficient value to warrant it. The principle does not assert that irrevocable decisions are *never* to be taken in regard to cultural capital, but rather that it is appropriate to exercise a higher level of care in cases where irreversibility is involved, bearing in mind the other principles of sustainability that assist in determining the decision.

(f) *Maintenance of cultural systems and recognition of interdependence.* An overarching principle of sustainability is the proposition that no part of any system exists independently of other parts. In this respect it can be suggested that cultural capital makes a contribution to long-term sustainability which is similar in principle to that of natural capital. Neglect of cultural capital by allowing heritage to deteriorate, by failing to sustain the cultural values that provide people with a sense of identity and by not undertaking the investment needed to maintain and increase the stock of both tangible and intangible cultural capital, will likewise place cultural systems in jeopardy and may cause them to break down, with consequent loss of welfare and economic output. Thus this final principle, in essence, draws together the entire concept of sustainability when applied to cultural capital, providing an overall framework within which the other more specific principles can be seen to operate.

Heritage project appraisal

As noted in the Introduction to this paper, the concept of cultural capital provides a useful means for representing heritage in a way that links the concerns of cultural experts about the value of heritage with the

economist's desire for a rational approach to assessing it and also allows a range of analytical methods from capital theory to be applied to the evaluation of heritage decisions. For example, such decisions can be seen as investment projects involving, say, the restoration or re-use of a historic building, or the redevelopment of a cultural site, precinct, location, urban space, etc. The investment might be interpreted as maintenance investment (as in the case of restoration or preservation) or as new investment (as in a re-use or re-development project) or both. Either way the obvious methodology to call upon is provided by cost-benefit analysis, where the project's net benefits as assessed over time can be compared with its up-front capital costs, as an aid in deciding whether proceeding with the project is justified.

But it has to be remembered that the project under consideration here does not involve a piece of ordinary economic capital for which an assessment of economic costs and benefits could be regarded as a sufficient appraisal. The heritage project is concerned with an item of cultural capital yielding both economic and cultural value. Thus an evaluation of net benefit streams in both economic and cultural terms will be required. Because as noted earlier we would expect some correlation between economic and cultural value, undertaking an economic appraisal of the project should go some way at least to dealing with the cultural value question. But it is unlikely to be the whole story and, moreover, there may be individual projects where the expected positive relationship between economic and cultural value does not hold and may even be reversed. Hence we must entertain the likelihood that both an economic appraisal and some form of independent and systematic cultural assessment of the project will need to be undertaken.

We have drawn attention to use and nonuse values as being the principal forms of economic value likely to accrue to heritage projects. For many heritage projects the main use value is likely to be derived from tourism, whilst the most significant nonuse values are likely to be related to individuals' desires to see heritage assets preserved and not destroyed. Empirical studies is this area have not surprisingly focussed especially on identifying and measuring the nonmarket

benefits of cultural heritage, using and adapting methods that have been widely applied in the assessment of environmental amenity, such as hedonic pricing, travel cost estimation, discrete choice modelling and (especially) contingent valuation methods.[vii] In some empirical evaluations of heritage projects, some external benefits and costs have also been included. These sorts of economic appraisals can be carried through to the point of calculation of benefit-cost ratios, pay-back periods, internal rates of return and so on, and are subject to all the familiar problems of cost-benefit analysis such as choice of discount rate, etc.

A well-conducted economic appraisal will tell us something, perhaps quite a lot, about the cultural value of a project. Nevertheless, we can never be sure it is anything like the full story until we derive an independent assessment of components of cultural value. Suppose a unitary measure of cultural value were to hand, akin to the monetary metric used in an economic assessment, enabling expression of the benefits and costs of a heritage project in cultural terms. It would be possible in these circumstances to imagine carrying out a cultural cost-benefit analysis of the project using the same methods as for an economic appraisal. It need hardly be said that whilst such a proposition may be sound in a theoretical sense, providing a convenient closure to a fully articulated model of cultural heritage, it remains unworkable until its central measure of cultural value is defined. As noted above, such a single measure is very difficult to specify, given the multidimensional nature of cultural value. It would seem more sensible to continue to pursue the disaggregation of cultural value into some of its constituent elements, in the hope of treating specific criteria of value as components of a broadly conceived cultural cost-benefit appraisal, with the final choice between the different components being interpreted as a problem in multicriteria analysis.

Let us conclude by considering more closely how cultural value is comprised in a specifically heritage context. For simplicity, consider the heritage asset to be a building, a monument, a historic town centre, or a similar entity that we can refer to as the 'site', where the stakeholders can be referred to as 'the community' and where

the 'project' involves maintenance or restoration of the site. The components of cultural value of the site might be listed as follows:

(a)   *Aesthetic value*: the site possesses and displays beauty in some fundamental sense, whether that quality is somehow intrinsic or whether it only comes into being in the consumption of it by the viewer. Under the general heading of aesthetic value we might also include the relationship of the site to the landscape in which it is situated, that is, all the environmental qualities relevant to the site and its surroundings.

(b)   *Spiritual value*: spiritual value conveyed by the site may contribute to the sense of identity of the community as a whole and of the individuals in it. It may provide them with a sense of cultural confidence and of connectedness between the local and the global, i.e. it may help to define the notion of human civilisation and the civilised society. The realisation that similar spiritual value is created by other sites in other communities may promote intercultural dialogue and understanding.

(c)   *Social value*: the interpretation of culture as shared values and beliefs that bind groups together suggests that the social value of the heritage site might be reflected in the way in which its existence may contribute towards social stability and cohesion in the community. The site may impinge upon or interact with the way of living in the community, helping to identify the group values that make the community a desirable place in which to live and work.

(d)   *Historical value*: this value, however it is received, is unarguably intrinsic to the site and of all the components of cultural value it is probably the most readily identifiable in objective terms. Perhaps its principal benefit is seen in the way in which historical value assists in defining identity, by providing a connectedness with the

past and revealing the origins of the present.

(e) *Symbolic value*: the site conveys meaning and information, which helps the community to interpret its identity and to assert its cultural personality. The value of the site as a representation of meaning is important in its educational function, not just for the young but for advancing the knowledge base and level of understanding of the whole community.

(f) *Authenticity value*: the site is valued for its own sake because it is real, not false, and because it is unique. An important concomitant characteristic is integrity, variously defined in different circumstances; protection of the site's integrity, however interpreted, may be a significant constraint imposed on project decision-making when cultural value is taken into account.

It may be possible, in identifying the characteristics of the site that contribute to its cultural value, to devise simple ordinal or qualitative scales measuring the strength or importance of each attribute as exhibited by the site in question. If such judgements can be expressed as, or converted into, cardinal scores, they have the advantage that they can be combined, using any desired weighting system, to reflect the assumed relative importance of the individual criteria. Such an approach is clearly no more than an *ad hoc* means of giving formal expression to judgements that would otherwise be left simply to informal processes. Nevertheless, these methods might be a workable means of systematising an approach to decision making in regard to the cultural value of the site. In particular, they may be especially useful in comparing or ranking sites, given that the judgements on the various aspects of the cultural value of all the sites would be made in a consistent manner. Thus, for example, Lichfield (1988, Ch. 10) discusses a checklist with scores for evaluating the cultural quality of heritage buildings, whilst Nijkamp (1995) provides a hypothetical illustration of ascribing cultural value to a number of historic urban districts according to "profiles" reflecting socio-economic, geographical-environmental and cultural-architectural criteria.

Conclusion

In this paper, the concept of cultural capital has been reviewed as it relates to the interpretation of cultural heritage. We have drawn attention to the similarities between this approach to heritage and the way in which economists have conceptualised the environment, through the notion of natural capital, and we have indicated a further extension of cultural capital theory into the arena of sustainability. Throughout our discussion, the question of value has been in the foreground. Economists have come a long way in applying evaluation methods to cultural heritage, illuminating in the process not just the economic dimensions of heritage projects but also many of their cultural attributes and benefits. Nevertheless, as argued in this paper, theoretical and empirical completeness requires us to think more broadly about concepts of value, recognising both the strengths and the limitations of traditional economic concepts and methods. In this regard, the phenomenon of cultural value has been identified in this paper as being of critical importance. Some progress has been made in identifying it in theoretical terms; the challenge now is to make it operational.[viii]

Endnotes

[i] Recent forays by economists into the heritage field include Peacock (1995), and the collections of essays edited by Schuster *et al.* (1997), Hutter and Rizzo (1997) and Peacock (1998); for an oppositional view from a cultural professional, see Cannon-Brookes (1996).

[ii] For further detail on a number of issues discussed in this paper see Throsby (1995, 1997, 1999 and 2001 Chs. 2, 3, 5) and Klamer and Throsby (2000).

[iii] The use of this term in economics differs from the concept now widely used in sociology following Bourdieu (1986), where "cultural capital" refers to an individual's competence in high-status culture. Bourdieu's usage relates to characteristics of human beings, and as such is very close to the economic concept of human capital (Becker 1964).

[iv] For a defence of absolute values in the arts and letters, see Etlin (1996); for an account of relativism in concepts of cultural value see, for example, Connor (1992).

[v] The title of a recent World Bank report (Serageldin, 1999) is suggestive of the distinction between cultural and economic value; the report, called *Very Special Places: the Architecture and Economics of Intervening in Historic Cities*, explicitly identifies architectural and economic

values in the redevelopment of urban heritage in developing countries.

[vi] On cultural diversity and cultural pluralism, see the report of the World Commission on Culture and Development (1995) and contributions to the *World Culture Reports* of 1998 and 2000 published by UNESCO.

[vii] See, for example, Santagata and Signorello (1998), Maddison and Mourato (1999), Mourato and Danchev (1999), Pollicino and Maddison (1999), Cuccia and Signorello (2000) and Kling *et al.* (2000).

[viii] A number of these issues are being addressed in a research project originally entitled *The Economics of Cultural Heritage Conservation* being conducted by the Getty Conservation Institute in Los Angeles. Economists and conservationists are collaborating on developing ways of integrating economic and cultural value assessment into the evaluation of heritage projects, with particular reference to cultural capital and sustainability concepts. For some interim output from this project see Getty Conservation Institute (1999); see also Avrami *et al.* (2000).

Travel Will Change the World

Tor Hundloe, Professor of Environmental Management, The University of Queensland

Abstract

Tourism is the world's largest industry. Today 600 to 700 million tourists travel the world. By 2020, a fifth of the world's population will travel. People will learn about the culture of their host; their hosts will learn about the cultures of visitor. Religious, ethnic and tribal borders will eventually break down. This is the optimistic, and hopefully not utopian, vision of the author.

For the purposes of this paper, culture is loosely defined as "the complex of values, customs, beliefs and practices that constitute the way of life of a specific group" (Eagleton, 2000, p. 34). Culture with a capital C (the arts) is an element of culture so defined; while modern uses such as "police culture" and "café culture" are not. However, one must be careful that the broad definition makes it difficult to separate cultural capital from social capital and moral capital. The paper presents data on cultural and historical tourism to various countries and seeks evidence to either prove or disprove (the latter being the scientific method) the author's thesis.

One of the better known clichés is that 'travel broadens the mind'. My proposition is that this is, in fact, true and that travel can be an enormously important force for good, for improving relationships between people around the world, and for breaking down borders (Hundloe, 2000). While international trade (so-called "globalisation") helps this process, it does not touch the average citizen directly in the sense that people don't meet fact to face and exchange and share ideas, experiences, and aspirations.

Credit for the broadening-of-the-mind thesis can be traced back to the Enlightenment and Diderot's "Encyclopedie". The concept's history is not surprising. When the "Encyclopedie" was published in the late 1700s, the Grand Tour was today's equivalent of heritage-cultural-historical-educational tourism. In fact it was the only form of tourism. The masses, in terms of a moneyed merchant class and a proletariat, did not exist and hence there was no mass tourism. The few who could afford a Grand Tour had the equivalent of today's café culture. Coffee houses in London and Paris were the focal points of intellectual life.

The transition from the Grand Tour to modern cultural tourism (my abbreviation for the range of tourist categories mentioned above[iv]) took the best part of two hundred years. Only with the growth of a middle class and the development of train and plane travel was mass tourism going to be possible. This means that we progress slowly through the Industrial Revolution and the development of the steam driven train and building of rail lines. Nice, for example, became a holiday destination for the weather-weary northern Europeans, Niagra Falls the honey-mooners haven. It is interesting to note that in its hey-day, in the late 18th century, Niagra Falls was promoted as "the greatest natural wonder in the world". Today with well over 100 properties worldwide histed as World Heritage Areas for their natural values, Niagra Falls doesn't rate.

The "mass", mass tourism had to wait until the development of jet-powered passenger planes in the late 1950s and the economic boom in the industrialised world after the Second World War. Fifty years ago there were only 25 million international tourists. In 1999, the World Tourism Organization (WTO) estimated that there were 663 million people who spent at least one night in a foreign country.

As a digression, we need to recognise that numbers in this tourism business can be confusing and, sometimes, a trap. First there is the definitional matter of who is or isn't a tourist. Those in the tourism research field have agreed definitions, and it is important that all use the same

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[iv] Defining cultural tourism is a matter that has exercised the minds of a number of writers. Foo and Rossetto (1998) summarise the normal range of definitions. They note that cultural tourism is generally held to comprise heritage tourism, historical tourism and ethnic tourism. They point out that some definitions are so wide that all tourism can be deemed to be cultural tourism. The sub-categories are defined thus: heritage tourism focuses on learning and includes experiencing local traditions, customs, religious practices and celebrations; historical tourism emphasises the experiences of the past; ethnic tourism entails face-to-face experiences with local people by visiting, observing or participating in their activities.

definitions. Next there is the issue of counting people 'in transit' (so-to-speak) as tourists in the country were they stop-over; for example, a Norwegian on her way to Rhodes in Greece who spends a night in Paris counts as a tourist in France; and likewise an Australian stopping over in Singapore on his way to Phuket in Thailand.

And then there is the conflicting data on expenditure. Some count only the money spent in the country of destination, maybe adding in airfares if visitors have travelled with the national carrier, drawing some arbitrary boundaries around what is, or isn't, tourism expenditure. Others undertake relatively sophisticated satellite accounting. But then tourism blends into hospitality (is there a difference for our purposes?) and finally into every-day living expenditure: we have to eat and drink where ever we are.

Putting aside the problem of interpreting numbers, we can be reasonably confident that the estimate of 663 million tourists for 1999 is correct, and accept as a likely outcome the forecast of 1.6 billion tourists in 2020. That will mean that one fifth of the world's population will have the opportunity to learn about cultures different to their own. And, of course, their hosts will learn about the mores of their visitors.

Even if both visitors and hosts do not set out to learn anything about each other, they cannot but help to. Tourists who go from plane to bus, to hotel, to bus again for day-tours and back to the hotel, and so on make some contact, even if minimal with their hosts and must learn something. As a teacher I do not believe it is possible to expose someone to new experiences and stimuli without them acquiring some new knowledge, even if minimal from the first exposure.

Donald Horne in his 'The Intelligent Tourist' (1992, p369) supports my contention, but he views it as applying in the past, and present day mass tourism is no longer as edifying:

" for millions of mass tourists … sightseeing was a liberating and enlightening force … It could excite sharpness of perception. It could give new ways of looking at people and things … there was the chance to get out among people different from us, and places different from where we lived, and not see them as the alien 'other'"

What we shouldn't do is judge international tourism 20 years hence by what happens today. If we accept the fact that people progress (as suggested by Maslow's analysis) to become eventually mature, self-actualising tourists, those who presently hardly ventured out of the tour bus will be completely different people in 2020. Admittedly, there will be new tourists in 2020, as the middle-class expands world-wide, and some will only be starting out on their journey to become mature tourists.

Returning to the present, for the 663 million the major destinations are France, Spain, Italy, the United States and the United Kingdom. Paris, Madrid, Rome, New York and London get the lion's share, respectively. These are cities visited for their culture, their shopping, their excitement. To this list we could add Athens and Istanbul. In all these cities we find World Heritage properties, listed for their cultural significance. Some are obvious, for example: the Cathedral of Notre-Dame; the Banks of the Seine; the Monastry and Site of the Escurial, Madrid; the Historic Centre of Rome; the Properties of the Holy See; the Statue of Liberty; the Tower of London; the Acropolis; the Historic Areas of Istanbul. There are many, many more in these cities; and there are cities from all around the world that could be added to the list.

The official statistics do not provide evidence, other than in a very general way, on what reason people visit, say, Paris or Rome. Consequently, researchers have to do some digging so as to understand the psychological and motivational drivers of these tourists. As a digression, we need to recognise that if we are serious about obtaining a much better idea of what people are seeking when they travel, we ought to help travellers fill in their time on long haul flights by handing out a comprehensive survey form, to replace the present ones that limit the choice of responses to: visit friends or relatives; conference or convention; business travel; holiday; or something similar.

While the present data gathering system continues in use, the departure survey at airports is the best tool to obtain detailed information on what visitors did, what they saw and experienced, the level of

satisfaction obtained, time and money spent. Answers to the latter will be most useful to economists, as a starting point to obtain measures of relative importance of value to the tourist.

For much of cultural value to tourists (say, antiquities) there is only a nominal entry fee. Entry to the Acropolis in Athens is presently about the equivalent of AUD$10, to be raised to AUD$20 soon. Many other World Heritage sites in Greece, Turkey and Italy have considerably lower entry fees, with AUD$2 to AUD$5 being the common range.

I am willing to argue that fees to visit antiquities (and modern cultural sites) should be nominal. Human history, human cultural and human artefacts belong to humankind. I share this perspective with Donald Horne (1992, p.370) who writes 'I still have a 19th century liberal faith that the great repertoires of world culture are a common human possession that should be available to anyone for their enlightenment'. Any subsidisation of visitors should not be thought of as a normal subsidy, but rather a necessary investment (including maintenance) in cultural capital.

Here is, probably, the appropriate place to state that I am defining 'culture' (and consequently 'cultural capital') in broad terms: following Eagleton (2000, p34) culture is:

'the complex of values, customs, beliefs and practices that constitute the way of life of a specific group'.

Culture with a capital 'C' (the arts) is an element of culture so defined; while modern uses such as 'police culture' and 'café culture' are not. I recognise the problem with using such a broad definition: it could lead to everything that is not genetically transmitted being identified as culture. Furthermore, I am not able to separate cultural capital from social capital, or from what some call 'moral' capital. My difficulty arises because of the fact that values, customs and beliefs shape human institutions and human behaviour. Social capital is often associated with such things as the sense of community, notions of democracy, the crime rate, etc. and these influence the institutions we put in place and our practices, hence culture and society are so inter-related as to be indistinguishable.

In stating that antiquities, modern cultural sites, as well as World Heritage properties (such as those listed for both their cultural and natural significance) belong to humankind, regardless of what country they sit in and regardless of the 'specific group' (to use Eagleton's term) whose values, customs, beliefs and practices are represented, is to invite criticism from various quarters.

Probably the most vociferous are those who view World Heritage listing as a United Nation's (or World Bank, IMF, communist-Jewish) conspiracy to appropriate parts of countries—and eventually take-over the world. I am sorry to note this matter. I do so from personal experience as the manager of a World Heritage Area (the Wet Tropics) in Australia. My thesis is that parochialism, extreme-nationalism and a predisposition to believe in conspiracies is highly correlated with a lack of exposure to a wide-range of views that can be gained through reading and travel. That is, the people who think in terms of conspiracies would be likely to change their views if they were fortunate enough to travel and expose themselves to the real world. It is no accident that countries wishing to remain ideologically 'pure' close their borders and do not allow their subjects to travel abroad; nor are they keen on letting visitors in.

Back to the matter of fees to visit cultural sites, and data on tourists' expenditure. One can walk around Rome and visit fantastic ancient ruins, churches, museums and the Vatican. It is only if you include the foccacias, freshly-squeezed orange juice, coffee, and payment for use of the toilet that you can get a sum of money that registers.

Add to the hotel bill, breakfast (well, a croissant) and dinner with good Italian wine (the latter is certainly possible) and your visit to the Vatican starts to become a sum of money comparable to a visit to the theatre in London or New York. Apportion the airfare (or motor car costs if that has been your choice of travel through Europe) between the various tourist activities undertaken on the trip and the expenditure on culture will be a significant sum of money.

We must note that economists quite rightly do not recognise this expenditure as an indicator of real "economic value" of, say, a visit to the Vatican. Economic values

measured in terms of willingness-to-pay or willingness-to-accept compensation (for a loss, say, the destruction of a cultural site) are the appropriate measures and various techniques are available to estimate these values. These techniques are discussed in the following presentations. The conventional techniques used by economists involve interviewing tourists.

In addition to interviews, we can engage in some participant observation. This method used to be very popular with sociologists. As an economist, I believe participant observation plays a valid complementary role to interviewing. While there are protocols developed by sociologists and anthropologists to be followed in formal participant observation, there is nothing to prevent a tourist from being an intelligent, amateur participant observer. In fact Orvar Lofgren (2000) argues that the favourite activity of tourists is the study of other tourists. One shouldn't find it too difficult to obtain a reasonably accurate account of what our fellow tourists do.

Through participant observation we discover the amount of money people spend to see, for example, a wide range of ruins, churches, museums and graves in, say, Italy. A guided bus tour inclusive of accommodation, two meals per day and entry fees to cultural sites will cost in the order of AUD$200 per day. You will notice how much you and your fellow tourists pay for snacks, souvenirs and soft-drinks. Through conservations you will learn what they paid for airfares from, say, North America, northern Europe, Japan and Australia. Such observations will give you a reasonably accurate idea of the expenditure involved with visiting and learning about both the ancient and modern cultures of the place you are in.

You might have travelled to Turkey to visit Troy, the Agia Sophia and Gallipoli, but in doing so you will meet many modern Turks in hotels, shops and in the street. Even if there is no need to speak to them you will notice their life-styles, their habits, and will get an appreciation of their values and attitudes to everything from shopping, housing, religion, clothing and to other people. You will read local newspapers in your language (particularly if you read English or German) and through this further add to your knowledge of the place you are visiting.

What do you observe in any number of the great, old cities we have mentioned? Take Rome as an example, certainly no high rise; cobbled paths that are used as streets; ancient ruins; tiny cars; flash, small shops; chaotic traffic and a vibrant café society where arguments are pursued with robust vigour. The same goes for most of the great cities of the world—with apologies to New York, Sydney and maybe a couple of others.

Rome attracts 40, 50 or so million visitors annually—because it has no high rise buildings and freeways. The same applies to the other great cities I have mentioned. You do not need sophisticated questionnaires or participant observation to understand this fact.

However, if we put Rome (or Venice, Athens, Paris) in the hands of a modern transport engineer, he/she would be aghast at the time wasted due to traffic congestion. Put the city in the hands of a financial analyst and the foregone revenue from not selling airspace to those keen to build high rise would be questioned. Rome (and other similar cities) would be demolished and rebuilt as New York. True!

Now, even the most ardent supporter of heritage preservation (some one who fully appreciates the architecture and stories that can told about it), might after a night or two in your average hotel in Rome come to believe the destruction of the local hotel would be a godsend. You have paid good money for your three or four star hotel. Your room is on the top floor, the third; you are in luck, the hotel has a lift, somehow or other, after bashing your shins against your suitcase, you manage to arrange yourself and your one piece of luggage in the lift. Half an hour later the other family members will have arrived on the third floor. Your toilet and bathroom make the head of a 10 metre boat seem like a palatial bathroom.

However, you actually enjoy this experience. You can walk to World Heritage-listed ancient ruins, to splendid, centuries-old churches (even atheists think they are splendid), to magnificent museums. You pay for culture not only in lira but in what you trade-off compared to your normal accommodation standards.

The wise people who over the centuries have preserved Rome, Venice, Florence,

Madrid, Istanbul, Athens, Paris and London were not economists, but they knew what they were doing. Show me an economist who would condemn them and I would join the ranks of those who believe economists are philistines.

Most of the well-preserved, old cities in the world attract 40 to 60 million visitors per year. Heritage protection pays—if price is the paradigm that counts. And it is not just antiquities that attract and define cultural tourism. If you want to understand the history of modern shopping, you are likely to visit Paris. The French invented the department store in the late 19th century; a century or two earlier Paris gave birth to the Enlightenment.

Then there are the sculptured landscapes of both Europe and Asia. France subsidises its small farmers so that market forces (globalisation) does not force them to amalgamate into massive, industrialised farms with a monotonous landscape. Tourists to France are thankful. On theoretical economic grounds what the French do can be justified. Significant externalities, in terms of the satisfaction tourists get from viewing and experiencing the French countryside, are generated. Of course, one could attempt to pay for the subsidy by imposing a fee on the tourists.

Whether it be to see the Vatican City, the Acropolis, Borobudur Temple, Angkor, the Rice Terraces of the Philippine Cordilleras (all World Heritage-listed sites) or the French, English or Chinese countryside, cultural heritage is a basic ingredient of modern tourism. One cannot visit these, and any other of the approximate 600 World Heritage Areas (the bulk listed because of their cultural value), without learning something about old and new cultures.

It needs to be emphasised that the past and present are both culturally important. Pearce (quoted in Foo and Rossetto, 1998, p.8) states that cultural tourism 'is concerned with the social and physical structures of the past and present and in its broadest sense may be taken to mean everything about a place and its people'. According to my thesis, one's mind is broadened by tourism, and ethnic and religious differences are no longer quite as alien. (Recall 'alien' is the word Donald Horne also used). By this process, people learn to live peacefully.

I realise this is putting a very positive gloss on cultural tourism. It is only appropriate to consider the evidence of a negative nature. The strongest argument, and one heard often, is that mass tourism destroys cultures. Some, such as Martha Honey in her 1999 book *Ecotourism and Sustainable Development: Who Owns Paradise* argue that even small-scale tourism and some versions of eco-tourism can destroy local cultures. And there is the argument put very convincingly by David Lowenthal in his 'The Heritage Crusade and the Spoils of History' (1998) that promoting heritage destroys history—because both the promoter and the public do not want their heritage stories sullied by facts.

To make the case that tourism is a force for destruction, or at least not a force for good, requires establishing an analytical device that allows us to compare the 'with' and 'with-out' tourism situations. It is necessary to recognise that a whole range of things are occurring to cultures, to landscapes, to people as individuals, regardless of there being this thing we call tourism.

The evidence is that both natural systems and social systems, including cultures, evolve. It is to be expected that, notwithstanding anything humans do, some species will become extinct in the long term. Cultures, many of them at least, are changing much more quickly than natural systems.

It follows that the preservation of natural environments, particularly magnificent ones deemed important enough to be World Heritage Areas, is aimed at preserving ecological processes; not to fix for all time the exact assemblage of plants and animals that existed on the day a meeting of a small group of humans declared the heritage status of the area. So, it can be argued, should be the case for cultures.

There is a human tendency to be fascinated with radically different cultures. To be deemed different often means that they have not changed through time as much as the culture of Paris, Tokyo, Bangkok, Jakarta or Suva. Notwithstanding different religions, different skin colours and vastly different histories, the cultures in these cities today (and virtually any other major city in the world) are not significantly different to each other. On the other hand, the variety of cultures in the Thai highlands,

inhabited by 10 different hill-tribes, is radically different from that in Bangkok. The cultures of Indigenous Australians is vastly different from that in Sydney or Melbourne (both of which are home for a wide range of peoples from the four-corners of the world).

From a cultural heritage perspective the things we want to remain constant are those that help us understand human history. It is to experience such that we tramp around Greece, Italy, Turkey, China and many, many more places looking at antiquities. This is historical tourism: it is a component of cultural tourism.

Mindful of the fact that cultures change we have to somehow or other differentiate between those changes that, given certain criteria, are deemed to be negative as a result of tourism. Each of us probably has our preferred source of negative stories. I must admit that when I was working in south-east Asia in the mid 1980's, Pico Iyer's "Video Night in Kathmandu" struck a cord. I consider it a minor classic on the sociology of tourism, better than much of the formal, academic literature on the same subject. His true tales are about the "coka colonisation" of Asia; of the Philippino singers who can sing any pop song worth knowing and do so in Bangkok, Kuala Lumpur, Singapore and Jakarta.

From an Australian perspective there is Donald Horne's argument that rather than broadening the mind, today's mass tourism often narrows it. Horne (1992, p155) states that 'the tourist experience can be enlightening, silly, deadening or depraved, according to the circumstances'.

We do not have to appeal to Disney World (as Horne does) to make the point that pseudo-places and experience can too readily replace the real: take Hawaii, a working example of successful multi-culturalism in the USA, with 6 million visitors per year (many who go to roast like chickens on Waikiki Beach), and the artificial cultural shows put on of a night for tourists. The dancers grass skirts are brilliantly coloured, shiny synthetic materials. In other tourists areas of the Pacific you can experience something similar.

However, much of the research suggests that Hawaii makes a positive contribution to cultural tourism. It is not just visited for the three 's's': sun, sand and sex. Hawaii attracts visitors because of its Hawaiianness. As put succinctly in a quote in Gilbert (1997), p63): "What makes (Hawaii) unique? It is not its 'sand, surf, or turf' [nor] its 'beautiful scenery: Ultimately, the only thing unique about Hawaii is its Hawaiianness".

Survey data show that 19 percent of mainland US visitors to Hawaii come for historical activities as their primary reason; and 37 percent state that cultural activities was their principal motivation. More than 50 percent of all visitors (from Japan, the mainland, etc) take advantage of Hawaii's history and culture. Only Washington ranks ahead of Hawaii for its share of domestic tourists who take in historical or cultural activities. Cultural and historical tourism in USA is large with approximately one-third (60 million) of US adults reporting that they take either a historic trip, a cultural trip or both.

In terms of the impact on social-cum-cultural capital, a range of data that might measure the maintenance or depreciation of these forms of capital (for example, crime rates, social cohesion, participation in community associations) suggest Hawaii is one place in the USA where a relaxed Australian might wish to live. Tourism and the military are the corner-stores of the Hawaiian economy. If visitors can experience US citizens of Polynesian, Asian, African and European descent working together, playing sport together and being friends, this is an enormously powerful message.

Similar situations exist in other places that do not necessarily have the perfect tourist image. Take Bali, those with an eye for these things suggested Bali was being destroyed by tourism in the 1930s. The Australian surfers who 'discovered' it in the late 1960s spoilt it further, so the argument goes. Yet away from Kuta Beach and Nusa Dua much is still as it was before tourism came.

As Donald Horne (1992, p326) points out whether Bali has been spoilt depends on what you mean:

"If Bali is expected to perpetuate forever all the ways of life that prevailed at the turn of the century, well then, yes, it is 'spoilt', although not by tourism: it has television and schools and soccer fields … its

economy depends less on tourism then many other communities of two and a half million, and its cultural tradition is stronger".

Outside of Kuta and Nusa Dua much traditional Balinese (Hindu) culture exists—alongside the motorbikes and mobile 'phones. The hills of the Ubud district are the traditional culture centre of Bali. However, the mixing of the ethnic groups on Kuta Beach and in its coffee shops is a positive example of cultural exchanges in a modern setting. Go to Kuta Beach an hour or two before sunset and there will be masses of Balinese people (fully dressed except for the lads playing soccer) mixing with half-clad Australians, the occasional north American, Brit and so on. In the coffee shops there will be Christians from the US, atheists from Austria, Muslims from Iran mixing with the Hindus of Bali.

Bali is the safest place in Indonesia today—much safer than the capital, Jakarta, and a number of other provinces where either religious or ethnic conflict results in deaths on a regular basis. For all the obvious downsides of tourism in Bali, its social-cum-cultural capital has been strengthened by tourism.

Cultures change, they evolve. Intercourse between people from different cultures leads to change for the better. It is inevitable that human exchanges will lead to a loss of what some think of as "distinct" diversity of cultures. Go back in history 1000 years and the Vikings who raided, raped and pillaged much of the western world eventually settled in the United Kingdom, Ireland, Russia, France and as far south as the Mediterranean, and became farmers and traders in their new homelands. Their language added to the evolving languages throughout Europe. Was this transformation of the Vikings a loss of cultural diversity to be mourned, or a civilising process to be celebrated?

One does not want to fight or kill someone who one eats with at the dinner table, converses with over a coffee or shares the sunset with.

References
Foo, L.M. and Rossetto, A. (1998), *Cultural Tourism in Australia*, Occasional Paper No. 27, Bureau of Tourism Research, Canberra.

Gilbert, J. (1997), *Ecotourism Means Business*, GP Publications, Wellington, N.Z.

Horne, D. (1992), *The Intelligent Tourist*, Margaret Gee, McMahons Point.

Honey, M. (1999), *Ecotourism of Sustainable Development: Who Owns Paradise?* Island Press, Washington.

Hundloe, T. (2000), *What was the Commissioner doing at the Pink Pussycat?* Boolarong Press, Brisbane.

Löfgren, O. (1999), On Holiday: *A History of Vacationing*, University of California Press, Berkeley.

Lowenthal, D. (1998*), The Heritage Crusade and the Spoils of History,* Cambridge University Press, Cambridge, UK.

University of Hawaii at Manoa, (1998), *Repositioning Hawaii's Visitor Industry Products,* Center for Tourism Policy Studies.

The Role of Economics in Natural Heritage Decision Making

Mick Common, Graduate School of Environmental Studies, University of Strathclyde, United Kingdom

Abstract

It is useful, if artificial, to distinguish two sorts of decisions–whether an area should be accorded protected status, and if so how it should be managed. While economics offers some useful broad insights into the first sort of questions, there are serious limitations, at the level of principle and of practice, to the use of environmental cost benefit analysis as the primary vehicle for making this sort of decision. Given a decision for protection that permits multiple uses, those responsible for the management of the area have to decide on desirable use levels and on how to bring them about. The use of economics here faces similar problems to those attending the first sort of decision, but it is argued, economic analysis can legitimately have a larger role in this context.

Introduction

In order to fix ideas, I shall focus on a particular kind of natural heritage, an area of wilderness currently used only for low impact recreational activity. In this context, it is useful, though artificial, to distinguish two sorts of decision for which economic analysis could provide input. The first sort of decision is where there is some project proposed for the area, and the question is whether that project should go ahead or whether the area should be accorded protected status. The second sort of decision arises where protected status has been accorded, and concerns the management strategy to be followed given that status. Although the argument is developed here in a particular context, many of the issues that arise there also come up in other heritage decision making contexts.

The paper is organised as follows. First the essentials of the standard economic analysis, environmental cost benefit analysis (ECBA) used to address the question of whether protected status should be accorded are set out. The main objections to ECBA and the problems that attend its implementation are then reviewed.[i] Some alternatives to ECBA are then considered. This is followed by an examination of the principles that would determine the management strategy, given a decision for protected status, according to standard and alternative economic approaches. Information requirements for management under the alternatives set out are then considered followed by some concluding remarks, including some arising from the workshop proceedings.

The preservation decision–environmental cost benefit analysis

According to ECBA, the answer to the question 'should this project, which would reduce the heritage value of this area of wilderness, be allowed to proceed?' is 'no' if

$$[B_d - C_d] \bullet EC - C_{m,p} \quad (1)$$

where

$[B_d - C_d]$ is the present value of the stream of non-environmental benefits and costs associated with going ahead with the project

EC is the present value of the stream of environmental, or external, costs associated with going ahead with the project

$C_{m,p}$ is the present value of the stream of any management costs associated with preserving the area and maintaining its heritage values.

If (1) is not satisfied, the project should proceed. If (1) is satisfied, the decision is for preservation.

There is a considerable literature on the typology of the environmental costs that are not generally captured in market transactions. For present purposes, it will suffice to work with

$$EC = UV + PUV \quad (2)$$

Where

UV is Use Value–the costs associated with the project's impacts on the area that would be borne by actual and prospective recreational users of the area

PUV is Passive Use Value–the costs associated with the project's impacts on the area that would be borne, possibly by actual and prospective users as well as non-users, which are independent of any actual or prospective use of the area[ii]

This sort of approach was first fully articulated in Krutilla and Fisher (1975), a book that although now somewhat dated in many respects is still worth reading. It identifies a component of PUV, Quasi Option Value, which is a premium on preservation arising from the fact that development is irreversible and the future is not known with certainty. This premium exists even for a risk neutral decision-maker. Krutilla and Fisher also made the important point that, generally, we should expect wilderness to become increasingly scarce over time, so that its relative value would be increasing over time, ie if EC_0 is the current estimate for annual environmental cost, the ECBA should assume EC_t, t = 1, 2,....... (before discounting) to be increasing over time. For some assumptions about the rate of increasing relative scarcity, what this means is that in effect there will be a zero, or negative, rate of discount applied to environmental costs.

It is important to note that in ECBA, $[B_d-C_d]$ is project dependent, but EC is not. For two projects with the same environmental impacts, EC should be the same irrespective of the values of $[B_d-C_d]$ for the two projects. It is generally assumed that the costs that comprise EC bear upon individuals as consumers, rather than on production activities. The measure of EC is then the willingness to pay (WTP) by consumers to avoid the impacts associated with the project, or consumers' willingness to accept (WTA) compensation for suffering the impacts associated with the project. Which of these is appropriate depends upon the view taken about the implicit property rights–do consumers have a right to unspoiled wilderness, or do developers have the property rights? This turns out to be a very important practical question. The point I am making here, however, is that whether it is WTP or WTA that is considered proper, its magnitude is supposed to depend solely on the impacts associated with the project and not to be affected by any other characteristics of the project. For two projects with the same environmental impacts, EC is supposed to be the same even though, for example, project A has $[B_d-C_d]$ = \$1x10^6 and involves building a theme park while project B has $[B_d-C_d]$ = \$100x10^6 and involves producing a cure for cancer. Put the other way round, according to the logic of ECBA, an estimate of EC for given environmental impacts can be transferred across projects–once EC has been calculated for a given impact scenario it can be used for all preservation/development decisions to which that scenario applies.

Objections to environmental cost benefit analysis

The objections that have been raised to using ECBA for this type of social decision can be put into three categories–ethical, behavioural and practical.

The ethical position that underpins ECBA may be described as preference satisfaction based utilitarianism. Suppose that for some project and some wilderness area, where $C_{p,m}$ is zero, it turns out that $[B_d-C_d]$ is greater than EC evaluated as WTA. Then, the basis for making the decision this way is that this would mean that the gainers from the project could compensate those who suffered from it and still be better off, so that on this ethical basis there would be a social gain to proceeding with the project. Gains and losses here are evaluated according to the preferences of those experiencing the gains and losses–hence 'preference satisfaction based' utilitarianism. Fairly obviously, using this criterion for social decision making implies the assumption that the affected individuals are well informed about the matter under consideration as its consequences relate to their preferences. Many have argued that this is an empirically untenable assumption. But, even if we are prepared to assume adequate information, should we treat the material gains subsumed under $[B_d-C_d]$ as commensurable, according to individuals' preferences, with the environmental damage giving rise to EC? Should we, that is, for the purposes of social decision making treat, say, whisky as the same kind of thing as, say, the loss of a species, even if individuals seem able so to do. Sagoff (1988), for example, answers this question 'no'. He argues that this kind of problem is one to be decided by 'citizens' rather than 'consumers', and that whisky and species loss should not be treated as commensurable. These kinds of decisions

are, that is, to be made by some kind of political process, not by an extension of market criteria.

ECBA is intended to correct 'market failure'. Given complete markets with everything of any interest to anybody subject to costlessly enforceable private property rights, the equilibrium outcome would be a situation of allocative efficiency, in which no individual could be made feel better-off according to her own evaluation except at the cost of making some other individual(s) feel worse off. Economists recognise that there is not a complete set of markets. Where there is not, they want to move things in the direction that would obtain if there were. Clearly, the compensation test on which (1) is based, discussed in the preceding paragraph, does this in principle. In recent years sustainability has come to prominence as a criterion for policy evaluation. It reflects an ethical stance–that we should now take account of the interests of future generations. Common and Perrings (1992) show that correcting market failure has no necessary connection with sustainability. The, well-informed, preferences of the current generation may imply damage to the natural environment with adverse, perhaps catastrophic, implications for future generations.

Turning now to the behavioural objections, the methods by which economists would compute EC given an environmental damage scenario, and use it in ECBA, involve assumptions about individuals' preferences. Put simply, the assumptions are that individuals have preferences over environmental states that can be described in the same way, and satisfy the same conditions, as economists assume that individuals have preferences over marketed commodities.[iii] If these assumptions do not hold, then the methods for measuring EC are without behavioural foundation, and the whole ECBA procedure breaks down–this is not to say that a number for EC cannot be produced, of course. It is to say that it is not at all clear what that number means within the ECBA framework, so that its use in that framework is, strictly, illicit. Casual introspection suggests that it is unlikely that the typical individual has a preference system that embraces, say, whisky and, say, species loss in essentially the same way. There is quite a lot of evidence in the literature on 'valuing the environment' (estimating EC) that is consistent with the

hypothesis that many individuals do not have preference systems that treat environmental attributes and commodities as commensurable in the way that ECBA requires. Common *et al* (1997), for example, reports the results of experiments where some 25% of subjects produced results that definitely violate the standard assumptions, while a further 25% produced results that very likely do that. Common *et al* (1997) also found that when asked about how they thought wilderness preservation decisions should be made, most respondents opted for a political decision making procedure over an extended market procedure (cf Sagoff 1988).

As regards practicalities, suppose that we had no ethical objections to ECBA and were prepared to believe that the assumptions it makes about individuals' preferences were acceptable. The question that then arises is: can the techniques developed by economists over the last 30 years for measuring EC deliver? Do those techniques produce, within their own terms of reference, meaningful numbers? In considering this, I will look at the two most widely used techniques only.

The Travel Cost Method (TCM) can only be used in relation to the UV component of EC. It relies on actual behaviour, and the basic idea is that by looking at the amount of money that people are willing to spend to get to a wilderness area we can infer the value that they place on their recreational use of the area. The TCM is relatively uncontroversial within the economics profession, and it is generally taken that the numbers that it produces have validity for ECBA purposes. Randall (1994) pointed out that, in fact, the number produced by a TCM exercise depends on the conventions adopted for the measurement of travel cost by the analyst.[iv] Different analysts use different conventions, and there is no consensus as to the proper convention to use in any particular context. Even if all analysts always used the same convention, it would remain a convention, and the numbers for UV arising would reflect that convention. Common *et al* (1999) show, for a case where things are, compared with many TCM applications, fairly straightforward, that the UV number varies across plausible conventions by amounts that are significant for decision making purposes.

The Contingent Valuation Method (CVM) can be used to estimate both the UV and PUV components of EC. It relies on hypothetical behaviour–individuals are asked what they would be willing to pay/accept in order to prevent/allow some environmental damage scenario. The CVM is controversial within the economics profession, because it relies on conjectured behaviour in a hypothetical situation, rather than on observed behaviour in an actual situation. Some economists take the view that it is necessarily the case that 'if you ask a hypothetical question, you get a hypothetical answer'. Others take the view that with sufficient skill and care, and by learning from experience, procedures can be developed whereby hypothetical answers can provide information that is useful for social decision making. Rather than attempt to summarise experience with the CVM, and the basis for these opposing views, I will simply make what seems to me to be the most important point about the CVM in relation to ECBA by referring to the assessment of CVM reached by a distinguished panel in the USA. [v]

Given a background of controversy and the legal possibility that CVM estimates for PUV might be admissible evidence for assessing damages in court proceedings, the National Oceanic and Atmospheric Administration (NOAA) of the US Department of Commerce convened a panel of experts (lead by two Nobel laureates in economics) to advise on the reliability of the CVM. In its report, US Department of Commerce (1993), the panel laid down a set of guidelines for the conduct of CVM studies, and stated that, subject to these guidelines being followed, it was persuaded that a CVM application produced 'useful information'. As to how this 'useful information' was to be interpreted, the report stated that

The simplest way to approach the problem is to consider the CV survey as essentially a self-contained referendum in which respondents vote on whether to tax themselves or not for a particular purpose

Given the guidelines that the panel had specified, this seems to me to be a fair assessment of what the CVM results would mean–respondents would be indicating their willingness to pay higher taxes 'for a particular purpose'. However, if this is what CVM results are to be understood as

being about, then the results are not what is required as input to ECBA, however useful they might be for other approaches to policy formulation and social decision making. Recall that in ECBA, EC is supposed to be a monetary evaluation of a given scenario of environmental damage that is independent of the particular project or activity responsible for the damage.

What is involved here can be illustrated by reference to the CVM conducted following the grounding of the Exxon Valdez in 1989 that resulted in the spillage of 11 million gallons of oil into Prince William Sound in Alaska. This CVM essentially complied with the NOAA panel's guidelines. It asked a sample of US residents what they would be willing to pay, as a one-off tax levy, for a program intended to reduce the chance of such an accident in the future and to reduce the damage done by such an accident should it, nevertheless, happen again. For the US population as a whole, WTP for this program was estimated as $2.75 billion. This is clearly not a project independent assessment of the PUV on the part of US citizens in regard to Prince William Sound, or even of the PUV attached to the damage caused by the oil spill. It is an estimate of WTP for a particular public program intended to protect Prince William Sound from a particular threat. A different threat, with the same environmental implications, to be met in a different way, would, it can be assumed have produced a different answer.

If not environmental cost benefit analysis, then what?

While for some economists environmental valuation, estimating EC, has become an end in itself, it is not really the point. The real point is the taking of decisions about environmental protection, or otherwise, that are in some sense correct. Contrary to the impression given by some economists, and it has to be said others claiming different kinds of professional expertise, the matter of correctness will always be contentious. It must necessarily involve value-judgements (attitudes, opinions, prejudices) as well as assessments of fact and probability. One defence that is sometimes advanced for ECBA and environmental valuation is that it is democratic and anti-elitist–see, for examples, Beckerman and Pesek (1997), Carson (1998). Essentially the argument

here is that environmental decision making should not be left to experts, and that given that value-judgements as well as scientific assessments are involved, the views of 'the public' should be taken into account, which is best done by estimating EC.

Clearly, if one accepts arguments for democracy in general, one must also accept the argument for seeking to have decisions affecting the natural environment and its protection reflect the views of 'the public'. However, this does not necessarily imply ECBA and EC estimation as the sole, or even the primary, vehicle for incorporating such views into the decision making process. In fact, as noted above, at least as far as the NOAA panel is concerned what doing a CVM exercise is actually about is not as input to ECBA. It is about running a sample referendum on WTP for a particular program arising as a potential response to a particular decision making problem. There is no reason why CVM type exercises could not continue to be conducted, but set up and the results interpreted in this way.

In discussing the ethical objections to ECBA I noted the problem of information. Experience with the CVM has shown that WTP responses are influenced by the information provided in the damage scenario. Clearly, the same problem attends the conduct of sample, or indeed full scale, referenda. It has been argued, see, for example Schnieder and Volkert (1999) that holding referenda on environmental questions is desirable because so doing will arouse widespread interest and stimulate debate and information seeking and sharing. It is argued, see for example Sagoff (1998), that the preferences that should count in social decision making are socially constructed, and should therefore be the result of inter-personal deliberations, as well as simply exposure to information. This leads to an interest in inputs to decision making such as deliberative polling and citizens juries, experience with the latter being reported on in at least two papers (James and Blamey and Niemeyer and Blamey) being presented at the ISEE2000 conference. Multi criteria analysis is another route by which the views of 'the public' can be input to environmental decision making, and again there is at least one paper on this being presented at ISEE2000 (Proctor).

Principles for managing a protected area

Now turn to the question of how to manage an area, given that it has been accorded protected status. It simplifies without missing anything essential to continue to assume that only low intensity recreational use is allowed: Driml (1996), and see also Driml and Common (1995), presents essentially the same analysis as that which follows where commercial operations in the area are also accounted for.

The standard economic approach to this question is a natural extension of the ECBA approach to the preservation decision. The management plan is the solution to

$$\text{Max NPV} = \bullet_t \{U_t(V_t) + P_t(Q_t) - C_t(M_t)\} d^t \quad (3)$$

with $Q_t = f(V_t, M_t)$ and $V_t = g(Q_{t-1})$

where
V_t and M_t are the choice/control variables
V_t is visitor numbers in period t
M_t is management effort in period t
Q_t is environmental quality in period t
$U_t(V_t)$ is Use Value in period t
$P_t(Q_t)$ is Passive Use Value in period t
$C_t(M_t)$ is the cost of management in period t
d^t is the discount factor
NPV is the net present value of the protected area to the planning horizon T.

The important point about this formulation of the management problem is that it allows for trade-offs between Use Value and Passive Use Value. Depending on the relationships $Q_t = f(V_t, M_t)$ and

$V_t = g(Q_{t-1})$, and on how U varies with V and P with Q, a plan determined on this basis could entail declining Q and hence P(Q), compensated for by increasing V and hence U(V). In this approach, that is, Use and Passive Use Values are commensurable and substitutable. Put another way, on this approach environmental quality is treated as natural capital is in the so-called weak sustainability paradigm.

This is in contrast to what Driml (1996) calls an ecological economics approach to the question of managing protected areas. On this approach the management plan is the solution to:
$$\text{Max NPV} = \bullet_t \{U_t(V_t) - C_t(M_t)\} d^t$$
$$\text{ST } Q_t \bullet Q^* \text{ and } U_t - C_t > 0 \quad (4)$$
with $Q_t = f(V_t, M_t)$ and $V_t = g(Q_{t-1})$

Again, the choice variables are V_t and M_t. Here a constraint is imposed such that

environmental quality does not fall below some targeted standard: Use and Passive Use Values cannot be traded-off, are not commensurable. In this sense, under this approach the treatment of environmental quality as natural capital goes with the so-called strong sustainability paradigm. Note that there is also a constraint that in each period Use Value must exceed management costs, so that that the current flow of net benefits is non-negative. If a solution exists, it may be said to involve sustainable use–non-declining environmental quality is combined with an ongoing flow of net current economic benefit.

Alden (1997) also proposes an ecological economics approach to the question of managing protected areas. It is based on four guiding principles:
  a. Community control
  b. Non-declining ecosystem health
  c. Equity of access–minimal impact use to be free
  d. Least cost management

For comparison with the two approaches given above, Alden's approach can be stated as follows. The management plan is the solution to:
Min NPC = $\bullet_t\{C_t(M_t)\}d^t$
 ST $Q_t \bullet Q^*$ (5)
with = $f(V_t, M_t)$ and $V_t = g(Q_{t-1})$

Here NPC stands for net present cost. As compared with Driml's ecological economics approach, the non-declining environmental quality constraint is retained, but the requirement for a positive flow of current net benefits is dropped, and the criterion is cost minimisation rather than net benefit maximisation. Also, note that Alden requires that the allowable recreational use is on the basis of free access, whereas this is not a necessary feature of the Driml version. Several points arise. First, in both the standard economics approach and the Driml ecological economics approach, the problem was stated with V, visitation, as a control variable, but it was implicit that this control could be indirect and implemented by charging for access. Indeed, Driml argues that such control is desirable as there is raised thereby revenue that can defray management costs, which otherwise have to be met from general taxation revenue. In such circumstances, management costs compete with other demands on that

revenue, and there may well be a tendency to under fund with respect to the levels of management effort necessary to maintain environmental quality.

Alden implicitly addresses this, given his free access constraint, by setting the criterion as minimising cost. The question arises as to whether equity requires free access? It is not at all clear that it does. Typically, use of these areas involves, at least, travel costs–the basis for the TCM discussed above–that the better-off are more easily able to pay. If we wanted all to be equally able to make the allowed use of the area, we would have to consider subsidised travel, and possibly other expenses, for the less well-off. On the other hand, why should a concern for equity imply that all are equally able to make the allowed uses of protected areas? Why equality of effective access to wilderness, but not equality in the consumption of expensive clothes? The argument that wilderness access peculiarly should be equally distributed is really a form of paternalism, the implicit assumption being that wilderness experience is good for people in a way that wearing fashionable clothes is not. It could be argued, but is not by Alden, that there is a difference in that wilderness preservation actually requires widespread political support, as the production of fashionable clothes does not, and that to the extent that the less well-off cannot experience wilderness they are less likely to provide that support. But this seems to point to subsidising all of the costs of access rather than just making it free at the point of entry. Economists are, this last sort of consideration aside, right to argue that equity issues should be addressed by income and wealth re-distribution rather than paternalistic interference with consumption patterns.

It should also be noted that if entry charges are ruled out, the possibility of controlling V_t in that way is not available. This means that other means of controlling V_t have to be considered.

Information requirements for management

The approaches to management distinguished in the previous section have differing information requirements as set out in the following table, in terms of the relationships that managers would need to

have quantitative information about if they were to be able to adopt the indicated approach. were to be able to adopt the indicated approach.

Economic	U(V)	P(Q)	C(M)	f(V,M)	g(Q)
Ecological Economic: Driml	U(V)		C(M)	f(V,M)	g(Q)
Ecological Economic: Alden			C(M)	f(V,M)	g(Q)

As argued in section 3 above, there is reason to believe that the relationship between visitation and Use Value, U(V), can, at best, be known only imprecisely. The relationship between Passive Use Value and environmental quality, P(Q), is in my judgement essentially unknowable. On these grounds, both of the ecological approaches have advantages over the standard economics approach–proactive management requires only that managers set the standard of environmental quality that is to be maintained. Of course, this is itself a matter involving judgement, but it at least avoids the expenditure of scarce resources on the pursuit of the un-knowable and the questionably knowable. The Alden approach scores over the Driml approach in that it does not require knowledge of U(V)–focussing solely on environmental quality reduces information requirements. If access charging is to be used for revenue raising and/or rationing, as Driml envisages, then it is also necessary to know how V responds to the level of charge. Given no previous history of charging, estimating this relationship faces the same problems as discussed above in connection with the TCM for UV estimation. While there are many examples in the literature of the use of the TCM and the CVM, there appear to be few cases in which attempts have been made to estimate f(V,M) and g(Q) type relationships.

Driml (1996) applied the Driml ecological economics approach to the Wet Tropics WHA, and encountered serious problems in terms of the availability of information on the various relationships. The strategy adopted was to consider a series of discrete scenarios in terms of visitor projections, for each of which a corresponding estimate of the management costs required to maintain Q* was made. Based on a TCM study, U(V) estimates were made just for Australian tourists. Using elasticity of demand, with

respect to access charging, estimates also based on the TCM study, scenarios were constructed with various levels of access charge. The main results to emerge, with extensive sensitivity analysis in respect of the TCM based inputs to the exercise, were:

1. The U(V) was always large and greater than the management costs required to maintain Q*.

2. However, the actually projected management activities were insufficient to maintain Q*.

3. Low levels of access fee were sufficient to generate the revenue necessary to finance the management activity required to maintain Q*, and had small impact on the U(V) experienced by Australian tourists.

Conclusion - what can economists realistically offer natural heritage decision making?

In my judgement, the decision about protection is essentially a political decision. Economic analysis can provide useful inputs to the decision making process in terms of proper, as opposed to purely financial, assessments of the non-environmental costs and benefits of development and preservation. In some cases, it may be possible to make a decision on this basis alone–it may be the case, for example, that the net benefits of a proposed extractive development are less than the net benefits of preservation with low intensity commercial tourism, even when the relative levels of environmental impact are not accounted for. In so far as non-environmental economic analysis does not point to preservation, and environmental impacts have to be considered, those impacts can be cast in monetary terms only un-reliably in the case of UV, and not at all in the case of PUV. Which is not to say that asking the public relevant monetary questions may not be useful.

As regards the management of designated protected areas, economic analysis should not be seen as the way to determine management plans, though again it can provide some useful inputs. As in the case of the first type of question, the problems here are not just at the level of principle, but also at the level of practicability. Economic analysis can throw some light on

questions concerning the instruments for the control of permitted activities, such as, for example, rationing low impact recreational use. Economists have a presumption in favour of charging for use at the point of use, which raises revenue for management activity as well as rationing use. Arguments against this based on equity considerations do not really stand up. A more cogent argument against access charging as the means of controlling visitation is dependability. In the absence of actual experience with charging at different levels, estimates of the responsiveness of visitation rates to different charge levels are subject to the problem to which Randall (1994) drew attention. If, in order to maintain environmental quality, precise control of visitor numbers is needed, then direct control of visitation rates may be necessary.

Finally, I would add a comment arising from the workshop proceedings. During the course of the day, several contributors suggested that natural and cultural heritage decision problems were essentially similar, and that the tools that economists had developed for the former could readily be applied to the latter. I have already argued that the tools that economists have developed for making decisions about natural environment as heritage issues are both less appropriate and less reliable than many economists are wont to claim. I would also suggest that natural and cultural heritage are not really similar at all. Cultural heritage is the current manifestation of the human past, and consequently we are adding to the stock of it every day. Natural heritage is the current manifestation of past geological and biological processes, and the time scale on which it is added to is much longer than human time horizons. If anything, I think that this means that the problems, at least at the level of principle, about basing decisions about cultural heritage solely on standard economic analysis are less than the problems that attend so basing decisions about natural heritage.

References

Alden, D. 1997. Recreational user management of parks: an ecological economics framework, *Ecological Economics*, **23**: 225- 236.

Beckerman, W. and Pesek, J. 1997. Plural values and environmental valuation, *Environmental Values*, **6**: 65-86.

Carson, R. T. 1998. Valuation of tropical rainforests: philosophical and practical issues in the use of contingent valuation, *Ecological Economics*, **24**: 15-30.

Common, M. S. 1996. *Environmental and Resource Economics: an Introduction* (Second Edition). Longman, Harlow.

Common, M. S. and Perrings, C. 1992. Towards an ecological economics of sustainability, *Ecological Economics*, **6**, p7-34.

Common, M. S., Reid, I. and Blamey, R. 1997. Do existence values for cost benefit analysis exist?, *Environmental and Resource Economics,* **9**, p225-38. .

Common, M. S., Stoeckl, N. and Bull, T. 1999. The Travel Cost Method: an empirical investigation of Randall's difficulty, *Australian Journal of Agricultural and Resource Economics,* **43**, p457-478.

Driml, S. 1996. Phd thesis, Centre for Resource and Environmental Studies, Australian National University.

Driml, S. and Common, M. S. 1995. Economic and financial benefits of tourism in major protected areas, *Australian Journal of Environmental Management*, **2**, p19-29. (Reprinted in C. Tisdell (ed) *The Economics of Tourism*, forthcoming, Edward Elgar).

Krutilla, J. V. and Fisher, A. C. 1975. *The Economics of Natural Environments: Studies in the Valuation of Commodity and Amenity Resources.* Johns Hopkins University Press, Baltimore.

Perman, R., Ma, Y., McGilvray, J. and Common, M. 1999. *Natural Resource and Environmental Economics* (Second Edition). Longman, Harlow.

Randall, A. 1994. A difficulty with the Travel Cost Method, *Land Economics*, **70**: 88-96.

Sagoff, M. 1988. *The Economy of the Earth: Philosophy Law and the Environment.* Cambridge University Press, Cambridge.

Sagoff, M. 1994. Should preferences count?, *Land Economics*, **70**: 127-144.

Schneider, F. and Volkert, J. 1999. No chance for incentive-orientated environmental policies in representative democracies? A Public Choice analysis, *Ecological Economics*, **31**: 123-138.

US Department of Commerce, National Oceanic and Atmospheric Administration, 1993. Natural Resource damage Assessments under the Oil Pollution Act of 1990. *Federal Register* **58**(10), 4601-4614.

[i] For more detail on this, and further references to the original literature, see Perman *et al* (1999) chapters 14 and 15. See also chapter 8 in Common (1996).

[ii] PUV is also sometimes referred to as NUV for Non Use Value.

[iii] I have put things in this somewhat convoluted way so as to be strictly accurate in the following sense. In the domain of analysis of behaviour in regard to ordinary commodities economists proceed on the basis that that behaviour is based on preference systems that satisfy certain assumptions. In most of economics these assumptions are not thought to need direct empirical testing, and in fact they are generally referred to as axioms. In so far as some economists have – see for example the paper given by Jack Knetsch at the ISEE 2000 conference – tested these assumptions it has been found that they are, at best, imperfect specifications of the way people behave in choice situations. So, the assumptions made about environmental preferences are extensions of assumptions rather than of what is known about preferences in other contexts.

[iv] In fact Randall went further and argued that what the TCM should use is the perceived cost of travel, which is not observable independently of asking travellers about it. Whatever the merits of this position, and if accepted it removes the main basis on which economists favour the TCM (that it uses actual observations on behaviour rather than introspection or hypothetical behaviour), such evidence as there is suggests that perceptions of travel cost are incoherent – see, for example, Common *et al* (1999).

[i] For an overview of experience with the CVM and references to other such reviews and assessments see Chapter 14 of Perman *et al* (1999).

Natural Heritage Valuation Methods: Applications to Cultural Heritage[*]

Jeff Bennett,# The Australian National University

Abstract

The situation facing decision makers with responsibilities in the natural heritage arena is strikingly similar to that facing those who determine policies for the management of cultural heritage. In both cases, information for decision making is derived from a complex mixture of market and non-market sources. The collection and integration of these data present significant challenges to the economics profession. In response to demands for these data from both public and private sector decision makers, economists working in the field of natural heritage protection have developed techniques that can be applied to estimate the values of both market and non-market impacts. Many of these techniques have also been applied to the estimation of values arising from cultural heritage protection. In this paper, a critical review of these techniques is undertaken. The debates that have occurred in the environmental economics literature as to the validity of the non-market valuation techniques would appear to be equally relevant to the case of cultural heritage applications.

A focus of the paper is the potential for cultural heritage applications of Choice Modelling, a non-market valuation technique that has been developed over the past five years in the context of environmental protection. A feature of Choice Modelling is its ability to yield a breakdown of the value a heritage protection proposal provides into its component parts–such as the so-called "use" and "non-use" values. Furthermore, Choice Modelling applications enable market data to be more accurately extrapolated to cover circumstances for which no data are currently available–such as is the case where a protection proposal will generate entirely new market conditions. It is concluded that these and other features of the technique provide it with some significant advantages over competing valuation techniques such as the Contingent Valuation Method.

Introduction

Over the past decade in Australia–and internationally - there has been an increasing demand for a greater degree of economic rigour in the assessment of proposals that involve impacts on the environment. The demand has come primarily from the public sector in response to growing voter concerns for the state of the environment. However, private sector demands have also emerged as shareholders and the broader community require greater corporate environmental responsibility.

In response to this demand growth, economists have devoted considerable effort to the task of developing and applying reliable and accurate estimates of environmental impacts that are appropriate for inclusion in benefit cost analyses of resource use proposals. Necessarily, this task has focussed on the estimation, in monetary terms, of environmental impacts that do not fall within the confines of market. Economists have taken two approaches to the task. They have investigated people's behaviour in markets that are in specific ways related to the environmental impacts of concern to infer values. Techniques that use this approach are called revealed preference techniques. The second approach has been to estimate non-market values by directly asking people about their preferences. Such techniques are known as stated preference techniques.

These efforts have not been universally successful or applauded. The non-market valuation task is technically challenging and mistakes have been made. Furthermore, attempting to value environmental impacts in dollar terms is confronting for some from a philosophical perspective.

None the less, the field of environmental, non-market valuation has evolved significantly in a surprisingly short period of time. Considerable progress has been achieved in coming to terms with the technical issues involved, even if the debate regarding the ethics of associating environmental impacts with money has not been resolved for all.

The question to be addressed in this paper is whether these techniques which have been primarily developed in the context of decision making involving natural heritage issues can be effectively transferred across for use in the assessment of proposals involving cultural heritage.

The paper begins with a broad ranging discussion regarding the features of natural and cultural heritage. Their similarities and differences, their substitutability and complementarity are noted. The techniques that have been developed to estimate natural heritage values are then outlined briefly. Some applications of the techniques that have been undertaken in cultural heritage settings are also reviewed and a critical assessment of the current standing of the techniques is made. The focus of the next section is a particular stated preference technique–Choice Modelling (CM). CM has, over the past five years, been the subject of an Australian development program that has centred on natural heritage applications. It is argued that the method has some particular features that make it attractive to those seeking to estimate non-marketed cultural heritage values. In the final section of the paper, some conclusions, particularly relating to the potential for non-market valuation in cultural heritage applications, are drawn.

Natural and Cultural Heritage

In order to assess the cultural heritage prospects of techniques that have been developed primarily in the context of natural heritage applications, it is useful to begin by comparing and contrasting the two types of applications.

The most obvious similarity between the two concepts is their sharing of the word 'heritage'. Both therefore involve the handing down of assets from generation to generation. Natural heritage includes therefore elements of the natural world that remain in a condition that was evident at some time in the past (both quantitatively and qualitatively). Cultural heritage is human focused. It relates to the creations of people, both in a physical form (buildings, art works, literature) but also in conceptual form (language, institutions, religion).

A sense of 'protecting' natural and cultural assets is implied by the term heritage. For an asset to be passed between generations, it must necessarily be maintained. However, that is not to imply that either natural or cultural heritage is static. Neither is simply a 'museum piece'. As Sowell (1998) points out, culture is continually evolving under the pressures of competition. Generation after generation develop new elements of physical and conceptual culture. Generation after generation decide what aspects of culture to accept or reject, to retain or discard. Similarly, the natural world is a dynamic place, even without the impact of people. The process of evolution–admittedly over very long time periods from an individual human perspective–ensures the selection of successful genetic material and the rejection of the uncompetitive remainder. Add in the impact of people and change is more dramatic. The pressures of competition are exacerbated. What this implies is that elements of both cultural heritage and natural heritage are unlikely to survive unless specific action is taken, perhaps not to

[v] The definition of natural is contentious in terms of the role of humanity as a part of or as separate from nature. For instance, basing a definition of Australia's natural heritage on the state of the environment pre-1770 is fraught with difficulties because that accepts Aboriginal impacts as "natural" but rejects European changes.

attempt to stop the processes of change that affect both but rather to preserve those "threatened" elements. Measures to ensure this "preservation" are therefore likely to have strong similarities across the two types of heritage.

Cultural and natural heritage therefore are similar in that they involve parallel features[vi]. However, they are also overlapping. Perhaps the most obvious intersection can be seen through the influence natural heritage has on cultural heritage. A good example of this is the first stanza of a piece of cultural heritage–a poem entitled "Bell Birds" by the colonial poet Henry Kendall:

By channels of coolness the echoes are calling,
And down the dim gorges I hear the creek falling;
It lives in the mountain, where moss and the sedges
Touch with their beauty the banks and the ledges;
Through brakes of the cedar and sycamore bowers
Struggles the light that is love to the flowers.
And, softer than slumber, and sweeter than singing,
The notes of the bell-bird are running and ringing.
    (Kendall 1903, p. 10)

The time spent by Kendall as a boy in the then remote bushland around Milton in NSW is apparent.

Indeed much of Australia's cultural heritage shows some influence of its natural heritage. The work of the Australian impressionists of the Heidelberg School - Streeton, Roberts and Condor - demonstrate the impact of the Australian bush on the early visual arts, an impact that is maintained through to the contemporary works of Authur Boyd. Boyd's paintings of the Shoalhaven River are an important element of Australia's

cultural heritage, just as his bequest to the nation of his property on the Shoalhaven, "Bundanon" is an important element of our Natural Heritage.

The influences are pervasive. The design of the Great Hall in the New Parliament House with pillars to resemble the tall trees of a eucalypt forest, the music of Peter Sculthorpe etc. Even the conceptual elements of our cultural heritage have antecedents in our natural heritage. The rigour of life in the Australian bush was an important driver of the institution of "mateship" which remains inherent in many current features of our society.

Perhaps the most striking example of the inter-linkages between culture and nature is found in the aboriginal culture. Young (1987) discusses the importance of "caring for country" to the aboriginal people of the Anmatyerre area in the Northern Territory. Their natural heritage is effectively an integral component of their cultural heritage. Aboriginal art and ceremonies reflect this close relationship. Hence, whilst for aboriginal people, their natural heritage influences their cultural heritage, it is also the case that their cultural heritage affects their natural heritage.

The same is also true for non-aboriginal Australians, although perhaps to a lesser degree for most. Our attitudes toward the significance of the natural heritage and hence the way we manage natural assets is influenced by our cultural heritage. Elements of our cultural heritage that reflect our natural heritage can alter preferences for nature. For example, listening to Don Burrows mimicking the morning chorus of birds in the forest on his flute may encourage people to seek the experience first hand or to want the forest protected so that the real birds survive.

What defines the difference between natural and cultural heritage when these inter-linkages are so strong? For example, is the experience of hiking to a stockman's hut in Kosciusko National Park one of natural or cultural heritage or must it be regarded as a complex mixture of the two. Certainly the debates regarding the management of these huts (notably, whether they should be

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[vi] The conceptual similarities between the pairing of man-made capital/natural capital and cultural heritage/natural heritage are also striking. It begs the question of how readily cultural heritage can substitute for natural heritage. See also Throsby (1999) for a definition of "cultural capital".

protected or destroyed) illustrates the complexity of the issues involved.

At a more practical level, the relationship between the two types of heritage is also clear. The shared (public good) characteristics of natural and cultural heritage mean that some elements of both will not survive without some form of collective action on the part of the community. Usually this has taken the form of government action, be it the public acquisition of assets (national parks/works of art) or the support of the private sector to undertake the protection works (tax deductibility for donations to the National Trust or Australian Bush Heritage).

The type of benefit-cost information that is useful in informing decisions regarding the use of public funds for natural heritage protection is therefore very similar to that required for cultural heritage policy determination. In both cases it is usual for the costs of protection to be well defined in dollar terms. The cost of purchasing a property for inclusion in the National Parks estate is determined in a market. Similarly, markets define the costs of a heritage-listed property[vii]. The challenges come in both cases with the estimation of the benefits that are provided by the two types of acquisitions. Many of these benefits lie outside the boundaries of market transactions and so require the application of non-market valuation techniques.

The Techniques

Non-market valuation techniques are designed to estimate the value of costs and benefits that relate to goods and services that are not bought and sold in markets. Their public good characteristics have precluded the formation of a market and so their values to people are not readily estimated via reference to the revelations of preferences that people make during

market transactions. The techniques use other ways of discovering peoples' preferences for and hence values of natural and cultural heritage. Two types of techniques have emerged: Revealed Preference (RP) techniques and Stated Preference (SP) techniques.

RP techniques work with the preferences revealed by people in markets for goods and services that have a specific relationship with the non-marketed impact. To estimate the value associated with visits to a natural heritage site, one RP technique, the travel cost method employs data on the costs incurred by people travelling to the site[viii]. To estimate the value a scenic vista of bushland provides for those living adjacent, another RP technique, the Hedonic Pricing Technique uses the market-determined price of houses with and without the view[ix].

RP techniques have the advantage of being market-based. The information they use relates to actual revelations of preferences. They have an objective foundation. However, their applicability is somewhat limited. They can be used only when the future changes under consideration are extensions of the past. RP techniques are retrospective and hence their results cannot be extrapolated into circumstances that are significantly different from the past. For instance, if a new visitor centre is proposed for a National Park, data relating to past visitation may be irrelevant. Furthermore, not all the non-marketed benefits provided can be related to goods that are marketed. For instance, many of the 'non-use' benefits of natural heritage (like the benefit received from knowing that a species or ecosystem remains protected from extinction) are unrelated to any marketed good or service.

Because of these limitations, SP techniques have been developed. This type of technique requires people to be surveyed. Questions are asked that are designed to draw out statements of peoples' preferences in ways that are consistent with the principles of benefit cost analysis and incentive compatible (ie truthful responses are obtained). Perhaps the best-known SP

[vii] Noting of course that National Parks usually thought of as natural heritage protection sites frequently contain important heritage sites. For instance Sydney Harbour National Park contains the historic Quarantine Station. Similarly, National Trust properties in the Blue Mountains of NSW also act to protect natural capital.

[viii] See Bennett (1996).
[ix] See Fraser and Spencer (1998)

technique is the contingent valuation method (CVM). In a CVM application[x], survey respondents are asked if they would be willing to pay some monetary impost in order to avoid some harm or to secure some gain.

Whilst SP techniques are sufficiently flexible to be applied in cases where entirely new circumstances are proposed and where no links to marketed goods exist, they have their own limitations. Some CVM applications have been controversial largely because their results are not based on the actions of people but rather their statements of intended actions[xi]. The development of RP techniques in natural heritage applications has been going on for almost forty years. Their reputations are now relatively well established and despite some vexing theoretical and practical issues, applications are wide spread. Applications to cultural heritage cases are less common[xii], yet there would appear to be no theoretical or practical reason why more such applications should not be carried out.

SP techniques have had a shorter period of maturation. Even the well-known CVM is still in a process of rapid evolutionary development given the challenges it has faced from critics. It has progressed from a bias prone format whereby survey respondents were asked directly their willingness to pay for an environmental improvement to one in which pre-specified amounts are put before sub-samples of respondents in a referendum style question[xiii]. This dichotomous choice (DC)

format is less taxing on respondents' understanding and is incentive compatible (Mitchell and Carson 1989).

Applications of the CVM for natural resource planning purposes have been less widespread than RP applications. The controversies that have surrounded a number of high profile cases (the mining of Coronation Hill in the Northern Territory and the grounding of the Exxon Valdez in Alaska) dampened the enthusiasm for the method in many policy-making circles. However, technical developments and applications in a wide variety of cases have proceeded. Confidence in the technique is growing.

Applications in the cultural heritage realm have been less frequent. Lockwood and Tracey (1993) attempted an application that straddled the interface between cultural and natural heritage when they surveyed people regarding the future management of the Victorian high country. This work sought to investigate the trade-offs people were willing to make between protecting the natural heritage of the area and maintaining the cultural heritage of the mountain cattlemen. Internationally, studies have sought to estimate the values of the built environment, particularly for tourists (Pagiola 1999)[xiv]

Another problem associated with the CVM approach is its cost. If a number of

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[x] See Bennett, Morrison and Blamey (1998).

[xi] Portney (1994) outlines the arguments for and against the use of CVM results.

[xii] Following a sequence of travel cost studies designed to estimate the recreational values of a range of National Parks, the NSW national parks and Wildlife Service undertook an application involving the visitors to the Hartley Historic Site in the Blue Mountains west of Sydney (Christiansen 1997).

[xiii] For instance: *If a referendum was held tomorrow in which you could vote for a (specified) environmental improvement funded by an increase in your taxes of $50 per annum, would you support the proposal?*

[xiv] More attention appears to have been devoted to studies of the economic impact of cultural heritage sites. Such studies typically use input-output analysis to estimate the amount of spending and/or employment in an economic region that is directly related to a tourist attraction. It must be recognised, however, that such estimates of impact are not estimates of the benefits that are generated due to the existence of the attraction. The economic benefit generated is defined in two parts. First it is the surplus enjoyed by the visitor above and beyond the amount spent (the consumer surplus). Second it is the excess of receipts over costs that is generated by the suppliers of the goods and services of the products consumed by the visitors (producer surplus). Impact studies are useful in planning for change. Their projections can be used to identify potential bottlenecks in the supply of goods and services. However they do not provide an assessment of whether proposed changes in resource management are advantageous to society (see Bennett 2000 and Hansen, Christoffersen and Wanhill 1998).

potential resource use futures are under consideration, separate samples of those people affected would need to be drawn and separate analyses performed for each sub-sample. Hence the amount of information generated per dollar of research cost is relatively high. This implies that only cases where large benefits can be expected from the provision of CVM generated information will applications be feasible.

To address some of the issues facing CVM, economists have not only sought to refine the method but have also sought alternatives. One development of this kind has been the adaptation of a preference revelation technique originally conceived in the marketing and transport economics literature. Known as Choice Modelling (CM)[xv], the technique is essentially an extension of the CVM and shares the same theoretical underpinning (Random Utility Theory). In a CM questionnaire, respondents are asked to make a sequence of choices between sets of resource use alternatives. Each of the alternatives is described to respondents in terms of a number of outcome characteristics or 'attributes'. The choice alternatives differ from each other in terms of the levels these attributes take[xvi]. By making the sequence of choices, respondents demonstrate their willingness to trade-off between the various attributes. In this way, the relative importance of the attributes, and hence alternatives (which are simply combinations of attributes at certain levels) can be discerned.

It is important that one of the attributes used to characterise the resource use outcomes is measured in monetary terms. The inclusion of a monetary attribute enables the trade-off information generated

by respondents to be used to estimate the monetary equivalents of the non-monetary attributes (known as the 'implicit prices' of the attributes) and of combinations of attributes forming particular alternatives. The information so provided is consistent with the theoretical principles underpinning benefit cost analysis.

The advantages of CM over the CVM are significant. The data collected with a CM application are far richer. They enable the component parts of potential resource use outcomes to be teased apart. In turn, this enables the policy maker to understand better the nature of the community's preferences for public goods. The process of designing improved outcomes is therefore streamlined. The 'deconstruction' of alternative value estimates also allows the 'reconstruction' of values for a whole array of possible future options. Unlike CVM, a single CM application is thus capable of yielding value estimates for a large number of alternatives. Its cost-effectiveness is therefore a great advantage, especially in policy circumstances where the potential options are not well defined at the outset of the investigation.

In addition, because CM applications yield not just one value estimate but rather a functional relationship between attribute levels, respondent characteristics and values, the prospects of "benefit-transfer" are greatly improved. Benefit transfer is the technique involving the use of non-market benefit estimates generated from one study (known as the 'source' case) in other studies (known as the 'target' cases). Clearly, for benefit transfer to be reliable there must be similarities between the circumstances characterising the source and target cases. Similarities in terms of the physical conditions pertaining, the socio-economic conditions of the people affected in each case and the nature and extent of resource use change under investigation. Where a single, say CVM derived value, is to be transferred across sites, the similarities must be very strong. Because CM applications yield value relationships, the parameters defining the relationship can be adjusted between the source and target cases. Hence the cases need only be similar in terms of

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[xv] Also known as Choice Experiments. See Bennett and Blamey (forthcoming).
[xvi] One of the choice alternatives in every question put before respondents is a "status quo" option. Generally, this option carries no additional financial burden and details the situation that would emerge if there were no change from the current resource use arrangements. Choices made by respondents are therefore always "anchored" to this status quo and benefit estimates derived are always relative to this constant base.

the attributes defining them and the range of the levels used in the CM questionnaires.

In a CM application the levels of the attributes used to describe the resource use alternatives are varied for each choice the respondent is asked to make. In this way, the respondent's focus is not concentrated on the monetary attribute as it is in a CVM application. This has a number of advantages. First, there is a greater realism in the choices presented to respondents. The two dimensional aspect of CVM (environmental improvement/financial penalty) is replaced with a more realistic multi-faceted choice. Second, the likelihood of any ethical qualms held by respondents regarding the monetisation of environmental effects impacting on willingness to participate in the survey is diminished. This is more the case when respondents are faced with choices that have some non-monetary cost associated with an environmental benefit alongside a monetary cost. For instance, a social disruption attribute may be included along with a financial cost for respondents to consider in their trade-off deliberations.

This is not to imply that CM is the 'Holy Grail' of non-market valuation techniques. It shares some of the weaknesses of the CVM and any other technique that involves surveying the general public. It has some of its own problems too. Questionnaire design is complex because of the additional cognition burden the technique places on respondents. Whilst CVM involves one 'valuation' question, CM questionnaires include six to eight trade-off questions. And then each CM trade-off question involves variation in four or five attributes across at least three alternatives.

A number of CM applications in natural heritage settings have recently been undertaken in Australia. These studies have sought to estimate values associated with the protection of stands of remnant vegetation in the Desert Uplands of Central Queensland (Rolfe, Bennett and Blamey 2000) and improvements in the condition and size of the Macquarie Marshes in Central Western NSW (Morrison, Bennett and Blamey 1999). Work in progress is

seeking to establish the values of attributes that define:

- the health of NSW river systems (Bennett, Morrison and Harvey 2000);
- alternative management strategies for privately owned wetlands in South Australia and NSW (Whitten and Bennett 2000); and,
- the non-market impacts of land and water resources degradation (van Bueren and Bennett 2000).

A similar interest in CM applied to cultural heritage issues has not been apparent. In the next section, the potential for the technique in such policy contexts is examined.

Choice Modelling and Cultural Heritage

The similarities between cases involving natural heritage to those confronting policy makers in the realm of cultural heritage indicate that there should be few differences between CM applications in the two different arenas.

The evaluation of proposals to protect heritage sites could well be advanced through the application of CM. For instance, limited funding may be available for the payment of subsidies to the owners of historic houses for restoration projects. Determining the priorities for action presents significant challenges. What is required is a way of determining the return to taxpayer funds that each proposed project yields. But the returns are largely non-marketed–the aesthetic appeal of walking past (or visiting) restored historic houses, the knowledge that a piece of the nation's history has been protected, etc. CM can help decision-makers gain an appreciation of the extent of those values, relative to the costs involved and thus establish an objective mechanism for setting spending priorities[xvii].

Such a CM application would involve members of the community being asked to choose between alternative historic site

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[xvii] Note that at the same time, the process also enables an assessment of whether spending on heritage restoration projects is able to compete against other calls for government spending.

restoration projects. These alternatives would be described using attributes such as:

- Era of the building
- Physical condition of the building
- Location of the site
- Visitation arrangements post-restoration
- Tax impost

With the information provided from the CM exercise, it would be possible to 'construct' historic sites using these attributes. The benefit generated from the alternatives could then be estimated and the priority setting process put into action.

The ability of CM to tease apart the component values of resource use options offers some specific advantages in addressing the nature of the similarities between cultural and natural heritage.

For example, consider a proposal to protect an area that contains aboriginal rock art and that also forms the habitat of an endangered species. Clearly, the benefits generated from the site are multifaceted. Both cultural and natural heritage benefits are provided. Use and non-use values[xviii] may also be available. However, different management strategies proposed for the site may indicate potential conflicts between these benefit types. For instance, opening up the site for visitors may compromise the ability of the area to act as a habitat for the endangered species. Increased visitor pressure may also cause damage to the artwork. Conversely, restricting access to protect non-use values may reduce use values. Similarly, conflicts may emerge between the cultural and natural heritage values. Managing the site for its natural heritage values may risk the integrity of the art.

What is required in such circumstances is first an understanding of the science involved: for example, what is the effect of

visitors on the breeding patterns of the endangered species? But this is not enough. Information regarding the values the community enjoys from the various possible management strategies is also required in order to determine which strategy is optimal. It is at this stage that CM can assist. The application would require the careful assessment of the attributes people are looking for when thinking about the site in question. A possible set of attributes to describe the management outcomes would include:

- Access for visitors to the rock art (use value: cultural heritage)
- Sighting of the endangered species (use value: natural heritage)
- Life expectancy of the rock art (non-use value: cultural heritage)
- Probability of extinction for the endangered species (non-use value: natural heritage)
- Management fee for the site

Using a CM application to estimate values for these attributes would enable policy makers to construct management plans that are specifically targeted at achieving the optimal trade-off between the competing interests.

What these two examples of potential CM applications demonstrate is the flexibility of the technique to address the valuation issue across a wide variety of circumstances as well as its ability to produce a rich data set on peoples' preferences that is useful in real policy making settings.

Conclusions

The similarities between natural and cultural heritage are strong. They frequently extend beyond features that are working in parallel to the situation where they are overlapping and almost inextricably linked. This may well prove advantageous to those concerned with policy making in the cultural heritage realm. Much of the developmental work that has been done on techniques to further the economic evaluation of proposals to protect natural heritage assets would appear to be readily adaptable to the case of cultural heritage assessment.

[xviii] Use values are enjoyed by people who experience the site first hand. Hence, tourists who visit the site would be said to enjoy use benefits. Non-use values do not involve direct contact. The knowledge that a site remains protected, even though a visit is neither taken nor contemplated – the existence value of the site – is a non-use value. See Pagiola (1996).

Particular note has been made in this paper of the prospects for Choice Modelling as a technique for estimating the non-marketed benefits and costs associated with cultural heritage protection. Recent developmental work on CM in the context of natural heritage protection has demonstrated the capabilities of the technique and the advantages it has relative to the most widely known and applied stated preference technique for estimating non-marketed values, the Contingent Valuation Method.

The way forward to transferring the CM 'technology' from the realm of natural heritage to cultural heritage applications appears to be clear. As Hansen, Christoffersen and Wanhill (1998) argue, it would appear that RP techniques are particularly limited in cultural heritage applications. Real estate markets are often 'thin' when it comes to heritage properties and visitation to sites is not always a major component of value. Hence, SP techniques may offer the most prospective avenue for exploration. It is argued in this paper that along the SP path, CM is the vehicle most likely to make the best progress.

In conclusion then, it is perhaps appropriate to once more contemplate the interaction between cultural and natural heritage, and particularly to contemplate the way we think about both elements of our society's welfare. At the end of the nineteenth century, it is interesting to note that one of Henry Kendall's contributions to our cultural heritage (the last stanza of Bell-birds) brought with it an expression of the value of our natural heritage.

Often I sit, looking back to a childhood
Mixt with the sights and the sounds of
the wildwood,
Longing for power and the sweetness to
fashion
Lyrics with beats like the heart-beats of
pashion –
Songs interwoven of lights and of
laughters
Borrowed from bell-birds in far forest
rafters;
So I might keep in the city and alleys

The beauty and strength of the deep
mountain valleys,
Charming to slumber the pain of my
losses
With glimpses of creeks and a vision of
mosses.
        (Kendall 1903, p. 11)

Bibliography

Bennett, J. (1996). "Estimating the Recreation Use Values of National Parks", *Tourism Economics* 2(4): 303-320.

Bennett, J. (2000). "On Values and their Estimation" *International Journal of Social Economics,* 27(7).

Bennett, J. and R. Blamey (eds) (forthcoming). *The Choice Modelling Approach to Environmental Valuation,* Edward Elgar, Cheltenham.

Bennett, J., M,.Morrison and R. Blamey (1998). "Testing the Validity of Responses to Contingent Valuation Questioning", *Australian Journal of Agricultural and Resource Economics*, 42(2): 131-48.

Bennett, J., M. Morrison and R. Harvey (2000). "A River Somewhere: Valuing the Environmental Attributes of Rivers", paper presented at the Conference of the International Society of Ecological Economics, Canberra.

Christiansen, G. (1997). *Economic Value of Recreational Use: Hartley Historic Site*, NSW National Parks and Wildlife Service, Hurstville.

Fraser, R. and G. Spencer (1998). "The Value of an Ocean View: An Example of Hedonic Property Amenity Valuation", *Australian Geographical Studies,* 36(1): 94-98.

Hansen, T., H. Christoffersen and S Wanhill (1998). "The Economic Evaluation of Cultural and Heritage Projects: Conflicting Methodologies", *Tourism, Culture and Communications,* 1: 27-48.

Kendall, H. (1903). *Poems of Henry Clarence Kendall,* George Robertson and Co, Melbourne.

Lockwood, M. and P. Tracey (1993). *Assessment of Non-market Conservation*

and Heritage Values Related to Cattle Grazing on the Bogong High Plains, Victoria, paper presented to the 37th Annual Conference of the Australian Agricultural Economics Society, Sydney University.

Mitchell, R. and R. Carson (1989). *Using Surveys to Value Public Goods: The Contingent Valuation Method,* Resources for the Future, Washington DC.

Morrison, M., J. Bennett and R. Blamey (1999). "Valuing Improved Wetland Quality Using Choice Modelling" *Water Resources Research*, 35(9): 2805-2814.

Pagiola, S. (1996). *Economic Analysis of Investments in Cultural Heritage: Insights from Environmental Economics.* World Bank Staff Paper, Washington DC.

Pagiola, S. (1999). "Valuing the Benefits of Investments in Cultural Heritage: The Historic Core of Split" paper presented at the World Bank Economists' Forum, Alexandria, May 3-4.

Portney, P. (1994). "The Contingent Valuation Debate: Why Economists Should Care", *Journal of economic Perspectives,* 8(4): 3-17.

Rolfe, J., R. Blamey and J. Bennett (2000)."Valuing the Preservation of Rangelands: Tree Clearing in the Desert Uplands Region of Queensland" *The Rangelands Journal,* 22(2).

Sowell, T. (1998). *Conquests and Cultures: An International History*, Basic Books, New York.

Van Bueren, M. and J. Bennett (2000). *The Non-market Costs of Land and Water Degredation*, May 2000 Indicative Report, Unisearch, Canberra.

Whitten, S. and J. Bennett (2000). "A Bio-economic Model of Wetland Protection on Private Lands", paper presented at the Land Summit 2000,University of Minnesota, St Paul.

Young, E. (1987). "Resettlement and Caring for the Country: The Anmatyerre Experience", *Aboriginal History,* 11(1-2): 156-170.

Cattle grazing in the Alpine National Park: preserving natural or cultural heritage?

Anthony Chisholm and Iain Fraser[*]

Abstract

The decision made in 1998 to continue cattle grazing, in the Alpine National Park (ANP) in Victoria has been contentious. There exists significant scientific evidence detailing the adverse environmental impact of grazing. However, when account is taken of cultural and heritage values arising from the cattle grazing tradition a simple choice is not obvious. This paper examines the cessation of grazing and alternative solutions that allow for the continuation of grazing, that recognise the complex economic, social and political dynamic of this issue. The potential of economic instruments in resolving this unique land use conflict is examined. It is argued that the compensation of graziers for a change in existing institutional alpine grazing arrangements can help to facilitate a resolution of the conflict.

Introduction

The Australian Alps National Park (AANP) system comprises an area of over 1.6 million hectares of national parks and reserves linking alpine and sub-alpine regions of Victoria, New South Wales and the Australian Capital Territory. The nine national parks and reserves, collectively referred to as the AANP are cooperatively managed under a Memorandum of Understanding first signed in 1986 and subsequently amended and resigned to incorporate the Alpine National Park (ANP), established in 1989, and Mount Buffalo National Park in 1998 (Australian Alps Liaison Committee, 2000). By far the largest national parks in the AANP system are the Kosciuszko National Park (690,000 ha.) and the ANP (648,000 ha.)

The ANP is a major part of the AANP and contains significant landscape attributes and biota. The Land Conservation Council (1979) identified over 1000 native flowering plant and fern species plus numerous and varied invertebrate populations. Currently, the ANP is the only part of the AANP in which grazing by domestic livestock continues. Conservationists and ecologists are concerned that the continuation of cattle grazing threatens the existence and integrity of many of the natural features of the ANP.

They argue that, continued cattle grazing reduces the structural and floristic diversity of the vegetation, impacting upon the summer display and luxuriance of the wildflowers, such notable feature of ungrazed high alpine plains. Indeed, the Land Conservation Council (1979) advocated the removal of cattle from these areas, whilst Bennett (1995) observed, 'Ecologists, while recognising the heritage of mountain grazing, say it is an inappropriate national park land use' (p. 33). But the graziers claim that the cattle do little if any environmental damage and that the continuation of grazing yields significant cultural heritage benefits for society. The conflict between conservationists and graziers came to a head in 1989 when legislation for creating the ANP was before the Victorian Parliament, and again in 1991 when annual alpine grazing licences were converted to 7 year licences. At the time of licence renewal, some areas of the Bogong High Plains were removed from grazing while grazing pressure on some other areas was reduced. Conservationists were again concerned in 1998 when all alpine graziers' licences were renewed for a further 7 years. In this paper we consider whether these land use decisions were appropriate, given the costs and benefits of alpine grazing.

[*] Emeritus Professor and Senior Lecturer, respectively, Department of Economics and Finance, School of Business, La Trobe University, Melbourne, Victoria 3083, Australia

Although there are numerous examples of resource use conflict analysis in the literature (Rhodes and Wilson, 1995; Brown, 1998; Skonhoft, 1998) there are particular features specific to this problem that make it unique. First, the decision to renew is important because the AANP has been identified for nomination to the World Heritage Convention. Conservationists argue that for a potential nomination to succeed, land use such as cattle grazing need to stop. This point is made by Mosley (1988), and Kirkpatrick (1994) who argue that the AANP is of outstanding international significance on the criteria used by the World Heritage Convention. But conservationists are of the opinion that cattle grazing is an incompatible activity as it significantly harms the integrity of the ANP. This land use conflict is therefore taking place over a tract of land that is considered by many to be unique by global environmental criteria. Second, alpine grazing is linked with significant cultural and heritage traditions (non-Indigenous/European). Alpine grazing has been practised for over 150 years and many of the graziers have a long association with the area. This, in combination with the strong cultural identity forged through poetry and high country imagery, place this land use firmly in the minds of many Australians. Intrinsically linked to this are the political realities that impinge on land use decisions. Third, the precise details in the grazing licence that allow a grazier to graze cattle in the ANP are interesting. To be able to operate a licence, a grazier needs to be an approved person. What exactly constitutes an approved person is important in seeking a solution to this conflict. The structure of the paper is as follows. We begin by providing an overview of alpine grazing and the scientific evidence detailing the impact of grazing. We then consider why the grazing licences were renewed despite the scientific evidence. The next section gives an evaluation of alternative management options that could have been implemented instead of the licence renewal. The final section provides conclusions.

An overview of alpine grazing

Grazing history and practice

The NSW high country was discovered by Europeans in 1824, well before the discovery of the Bogong High Plains in Victoria in 1851. Grazing by domestic livestock, particularly sheep, began in 1852. It became common practice to take livestock onto alpine plains during the summer to feed. As Hancock (1972) explains, 'graziers were looking to the high country to save them from disaster in years of drought" (p. 134). Hancock provides a comprehensive discussion of grazing history and practice in the NSW high country. In Victoria, the Bogong High Plains were discovered in 1851 and grazing by cattle commenced soon after (Carr 1962). By 1940, overgrazing in the Australian alps, in combination with regular burning-off by some graziers, and the widespread 1939 bushfires, had caused severe damage to the fragile alpine environment. These environmental conditions gave cause for much concern to conservationists in both Victoria and NSW.

In 1946 the Victorian government and graziers agreed to modify existing land use practises. Sheep and horses, which cause more damage to sensitive alpine vegetation, were banned and the burning of high plains vegetation curtailed. For cattle, the length of the grazing season was restricted; numbers reduced and specific dates set for entry and exit. From the 1950s to 1991 grazing was progressively withdrawn from some of the most sensitive high altitude areas of the ANP, many of which were clearly damaged. These areas include Mounts Bogong, Hotham, Loch and Feathertop, and the Bogong High Plains north of Rocky Valley reservoir. [xix]

In 1989 some 503,000 hectares of land in the ANP were licensed for grazing, but most of the area is woodland or forest with only limited grazing value. By 1995, 7,800 free ranging cattle were permitted in the ANP.

[xix] Interestingly, livestock grazing was terminated in all other parts of the AANP apart from the ANP by 1972.

The existing grazing licences were renewed annually until 1991/1992 when the licence period was extended to 7 years. Licence renewal has generally been without question and for this reason each grazier came to view their licence as private property; details can be found in the 1975 National Parks Act, Grazing Licence in the Alpine National Park, Section 32D, amended by the National Parks (Alpine National Park) Act of 1989. The licence details the number of cattle, the access dates (December to April), who is entitled to operate a licence, the cost of operation and the restrictions placed upon the exchange and future entitlement. At present graziers pay a fee of $5.00 per head each season.

To be eligible to own and operate a licence, a grazier needs to be deemed an approved person by the Victorian Government who receive advice from the Alpine Advisory Committee.[xx] Historically graziers belonged to the Mountain Cattlemens Association of Victoria (MCAV) and as such were automatically considered approved persons. There are currently around 60 members of the MCAV that hold licences to graze in the ANP. In addition during the period over which a licence operates, 'the licensee may apply to transfer to or assign to a member of the family of a Mountain Cattleman or any other approved person' (Clause 18, Grazing Licence). Transfer within the family can be defended on the basis of farming skills that are necessary to operate a grazing licence.

Environmental impacts of grazing

Scientific investigation of the Victorian alpine region began in the 1850s. However, the pioneering work in the 1940s and 1950s of Carr and Turner (1959) and of Costin (1957), and subsequent research, form the basis of scientific evidence about the impact of cattle grazing. Wahren et al. (1994) used 50 years of vegetation records from long term monitored plots to argue that cattle do have a substantial and lasting impact, with grazing altering the structure and composition of sub-alpine grassland and heathland vegetation, as well as significantly

influencing the natural regeneration of the ecosystems.[xxi]

An example of the effects of grazing identified by Wahren et al. (1994) is the impact on the occurrence of wildflowers in Pretty Valley grassland plots. Between 1947 and 1994, the frequency of the showy wildflower species, Celmisia and Craspedia, increased substantially on ungrazed plots. These findings were contrasted with grazed plots on which there was no change to the existing cover. Leptorhynchos, is abundant on grazed plots as it vigorously colonises bare, inter-tussock spaces that result from grazing, giving it an advantage over other species. If there was no grazing, Celmisia would replace Leptorhynchos. Ground cover is much poorer on grazed plots compared to ungrazed areas. Wahren et al. also found that cattle prefer to graze where herbaceous plants predominate, in the sphagnum mossbeds along drainage lines and these areas subsequently become trampled and badly damaged. Apart from their ecological significance, sphagnum mossbeds have a crucial role in catchment hydrology because of their retarding effect on the release of water to streams (this helps to prolong the spring and summer flowers), their promotion of early snow melt, and their action in filtering silt. Another biophysical hot spot is the snow patch herbfields, again prone to grazing related damage such as bare ground and poor quality cover. In the areas where snow patches remain for long periods of the year, the soil remains moist, the flora that grow are palatable and as a result are favoured by the cattle.

Wahren et al. (1994) also found that grazing does not reduce the likelihood of upland bush fires. Cattle mostly eat snowgrass and other herbs. Shrub cover has increased as a result, which does not reduce the risk of fire, but instead is more likely to enhance it. Fire prevention is spurious as a claim for the continuation of grazing. By producing bare

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[xx] The importance of the phrase, 'or any other approved person', will be considered in detail subsequently.

[xxi] We only cite Wahren et al. (1994) in this section for the sake of brevity. For more extensive evidence relating to the environmental impact of the cattle, readers are directed to: Australian Academy of Science (1957), Costin (1957, 1958, 1962), Carr and Turner (1959), Mosley (1988), Kirkpatrick (1994), Williams and Costin (1994), Bennett (1995), Williams et al. (1997), Wahren et al. (1999).

ground, which provides an opportunity for weeds to establish and spread, grazing has also been partly responsible for spreading weeds.

Fire and grazing in the alps

Large-scale fire is relatively rare in the alpine and sub-alpine landscapes of Australia. The likely frequencies in pre-European times being once or twice per century. In Victoria, extensive fires occurred in 1939, during which much of the Snow gum and parts of the treeless vegetation was burnt. Since 1939, in the Victorian Alps there have been only two extensive fires affecting treeless vegetation: on Mt Buffalo in January 1985, and the Caledonia Fire in January 1998. This latter fire, originating from human carelessness, burnt approximately 35,000 hectares of the ANP and state forest, including about 3,000 hectares of sub-alpine treeless vegetation which was burnt: heathland, grassland and wetland (Wahren and Papst, 2000).

The main impact of fire is removal of vegetation (including litter) causing extensive areas of bare soil. On the large high plains burnt in the Caledonia fire, almost all the heathland (both dryland and wetland) was incinerated, and most of the Sphagnum mossbeds were severely scorched. Although many of the subalpine plant species respond rapidly to fire by resprouting vigorously, excessive bare soil may persist for some years. Complete regeneration following fire in treeless vegetation is slow and recovery to pre-fire condition is likely to take a decade or more. This was shown by the studies of regeneration after the 1985 Mt Buffalo fires, where 15 years post-fire mossbeds still had not reached pre-fire condition (Wahren and Walsh 1999). During the recovery period, it is important that disturbance is minimised. For instance, the re-introduction of livestock will slow the rate of regeneration by trampling new growth and establishing seedlings, bare soil and litter, as well as selectively grazing the seed heads of herbaceous species (Wahren and Papst, 2000). To meet soil conservation and national park objectives, ecologists consider that grazing should not be permitted in burnt treeless vegetation for at least a decade.

Why does grazing continue?

Culture and politics

Given the extensive scientific evidence about the impact of cattle grazing on the alpine environment, it is necessary that we examine why grazing still continues. This is an important part of our analysis as it will be fundamental in relation to the form of the potential resolution conflict strategies proposed. First, however, to place matters in historical perspective it is necessary to briefly review aboriginal culture and land use in the Victorian high country.

Aboriginal alpine land use and culture.

It is known from evidence of stone artefacts that the Aboriginal people were living at least on the fringes of the Victorian alps 17,000 years ago. In Tasmania, where habitable high country caves are much more plentiful than in the AANP, there is evidence of aboriginal occupation dating back more than 30,000 years and sites containing evidence of rock art and associated rituals, dating back at least 21,000 years have been found (Flood, 1991).

The lifestyle of Aborigines in the alpine areas meant that they lived at lower elevations during most of the year, only venturing onto the high alpine plains for a few weeks each year to meet and feast on Bogong moths. The bogong moth (Agrotis infusa) migrates in its many millions each year from its breeding grounds in western New South Wales and southern Queensland to the high peaks of the Australian Alps. It appears most likely that the moth migrations began at the end of the last glacial period, 8000 – 10,000 years ago, as a way of adapting to increased heat. Archaeological evidence demonstrates that moth-hunting has an antiquity of at least 1,000 years, but this seems to be very much a minimum age (Flood, 1991). From October to March, the moth effectively hibernates in dry, dark crevices in the high Alps. The quiescent nature of bogong moths at this time, allowed aborigines to scrape them off the rock walls in large quantities and roast them. This provided a rich, high protein diet, enabling large gatherings of different tribes in the Alps each summer. Moth-hunting was an important enabling mechanism, allowing exchange and trade

and inter-tribal meetings and ceremonies to take place (Flood, 1987,1991).

Aborigines facilitated European access to high country grazing areas via their trails from Victoria to the northern slopes of the Great Divide (Mulvaney,1991, p11) and by leading European stockmen in at least one instance on the Victorian high plains (Carr,1962, p.285). Following the discovery of gold in 1852 '… an avalanche of Europeans and Asiatics poured into the [Victorian] high plains. The Aborigines were engulfed and simply disappeared' (Massola, 1962, p139).

Interestingly, given the relatively minimal impact of Aborigines in the Alps, this area represents a unique land type in Australia. Even before European settlement Aborigines had used fire to alter and manage (fire-stick farming) much of the Australian landscape. An exception to this is the high country, which places the AANP in another category of significance not previously noted.

Non-Indigenous (European) alpine grazing and culture

The non-Indigenous (European) high country cultural and heritage benefits that are the primary focus of this paper are now considered. The first important feature of alpine grazing is that it is a long and well-established part of the Australian and rural tradition (Johnson, 1975). The alpine grazing lifestyle acts to bind together the community (annual get-togethers, racing carnivals) and it gives the graziers a unique position in the alpine cultural mosaic. Allied to this, the historical significance and general lifestyle of the cattlemen has been celebrated and made famous in poems and songs by Banjo Patterson, and in films like 'The Man from Snowy River', all contributing to the creation of a tradition. An excerpt from the poem Pioneers by Paterson provides a nice example;

> They came of bold and roving stock that would not fixed abide;
> They were the sons of field and flock since e'er they learned to ride,
> We may not hope to see such men in these degenerate years
> As those explorers of the bush – the brave old pioneers.

> 'Twas they who rode the trackless bush in heat and storm and drought;
> 'Twas they that heard the master – word that called them further out;
> 'Twas they that followed up the trail the mountain cattle made,
> And pressed across the mountain range where now their bones are laid.

The importance of cultural heritage values from grazing cattle on high country has been identified by several authors. For example, Taylor (1992) argues that 'without tradition, cultural artefacts become curios, static remains without meaning.' (p. 58). As an example, Taylor analyses the withdrawal of cattle from Namadgi National Park in 1990. Taylor observes, 'The result is a cultural landscape separated from its historic traditions and from its cultural and intellectual background.' (p. 63). Griffiths (1991) provides a seminal exposition of the issue of the contrasting, and often conflicting, objectives of those interests promoting natural or cultural landscape preservation.

Films, videos, television and radio programs, and books about the cultural (or natural) alpine heritage both complement, and are a substitute for, the real landscape and real cultural traditions. It may be argued that films, videos and television are sometimes poor substitutes because they portray, cultural heritage through 'rose-tinted' glasses, or introduce elements of pure fantasy. However, if there is a demand for 'rose-tinted' cultural heritage, visual media productions that profitably satisfy this demand, unambiguously add social value in the absence of any negative externalities. A negative externality may be generated, for instance, if cultural heritage myths presented in the visual media cause the viewing public to have less of a sense of our true cultural heritage and history than they would have otherwise.

Bound up with the cultural heritage aspects of alpine grazing are the political realities of the situation. In creating the ANP a political deal was necessary and it was this that allowed for the continuation of cattle grazing in the ANP. In 1989 the then Labor Victorian Government passed the Alpine National Parks Bill introducing the ANP, but only with the support of the Liberals. The

Liberals have strong political ties with the MCAV. These ties have been publicly demonstrated. In 1984 some 300 graziers rode their horses onto the steps of Parliament House in Melbourne to gain support for the Liberal Party in the Nunawading bye-election.

Politics may also partly explain the attitude of the Victorian government to continued grazing in the ANP given the possible World Heritage nomination. The states frequently have diverging opinions compared to the Commonwealth Government. This has been clearly illustrated in relation to previous World Heritage listings. For example, the Northern Territory Government contested the listing of Kakadu National Park; the Commonwealth Government contested a plan by the Tasmanian Government to dam the Franklin River; and the Queensland Government legally challenged the right of the Commonwealth to nominate the rainforests of North Queensland as this would prevent logging. The possible nomination of the ANP, as part of the AANP, may therefore be being resisted by the Victorian Government, as it might result in a major redistribution of resource management powers away from the State. Although this line of reasoning is to a certain extent speculative, the continuation of grazing is a means by which the Victorian Government can diminish the likelihood of a nomination being forthcoming.

Economic uncertainty: to graze or not to graze?

Given the scientific evidence, it is reasonable to argue that cattle grazing on the alpine environment yields a negative externality (cost). This externality exists because graziers, as private economic agents, do not take account of all of the social costs of production, such as, for example, the loss of floral diversity, which is valued by society. Although the loss of floral diversity does not affect the private costs of graziers it does impose a cost on society.

Other impacts of over-grazing have been the exposure of fragile soils leading to severe erosion and subsequent downstream siltation, the impact of the changing floral composition on the timing of release of

water from the high country for hydro-electricity power generation and the introduction of aggressive weeds by the cattle (Wahren et al., 1994)[xxii]

If the external effects of cattle grazing on the environment are not fully internalised by the graziers then marginal social costs (MSC) will be greater than marginal private costs (MPC). However, there are significant non-market benefits (use and non-use) from cattle grazing as a result of culture and heritage. We assume that marginal social benefits (MSB) of grazing are greater than marginal private benefits (MPB) of grazing because the cultural and heritage values derived by society from continued grazing are higher than the private benefits derived by the graziers. The way in which we characterise benefits and costs means that MSB measures gross cultural and heritage benefits (plus private benefits), and MSC measures gross ecological/ environmental damages (plus private costs). The reasons for describing the benefits and costs associated with cattle grazing in this way is that if we employed a simple net benefit rule; as long as MSB>MSC we would keep cattle in the Alps.

In figure 4, on the vertical axis are the marginal (private and social) costs and benefits of alpine cattle grazing, and on the horizontal axis the number of cattle grazed. It is assumed that MSC are low at very low stocking rates because ecological damage is small. However, as cattle numbers increase, MSC rise more steeply until a

threshold is reached where higher grazing pressure destroys most of the original ecological and environmental attributes. The MSC function is thus of sigmoid shape. MPC are assumed to decline gradually reflecting the declining additional costs for each livestock unit, because of economies of scale in droving larger cattle flocks to the alpine country. The MPB function is assumed to become negative beyond point A. Beyond this point, the production attributable to the alpine grazing of an

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[xxii] Although most of the external effects of grazing can be reversed, as Williams et al. (1997) note, degraded flora has taken decades to recover and frequently requires active restoration that is time consuming and expensive.

additional livestock unit is more than offset by the negative impact of higher stocking rates on production per livestock unit. For illustrative purposes, the marginal benefits for cultural heritage of grazing larger numbers of cattle are also assumed to fall to zero when cattle numbers are at point A.

Figure 1 – Optimum Number of Cattle

The social optimum is where MSC = MSB and the number of cattle is Cs. Despite all of the available scientific evidence, which is far greater than for most natural resource problems, the true position of the cost and benefit functions is uncertain. That is to say, we have no clear guide as to the relative size of the costs and benefits. The position of the true MSC function may be to the left which in turn moves Cs leftward, cc even reducing the socially optimal number of grazing cattle to zero. Alternatively, the true MSB function may be steeper as the cultural and social benefits derived by society decline more steeply as cattle numbers increase. Again this would push Cs leftward.

$ Marginal Costs and Benefits

MSB

MPB

MSC

MPC

0   C_c   C_n   A

Number of Cattle

There have been efforts to evaluate the costs and benefits for the alpine grazing question. Lockwood et al. (1996) employed a Contingent Valuation (CV) survey to evaluate the non-market benefits that accrue from, either continued cattle grazing and the associated cultural and heritage values, or the environmental benefits from the termination of cattle to preserve the flora and fauna.

Well conducted CV surveys capture the values of a representative cross-section of the population, including those who do not directly participate in policy decision-making processes. Lockwood et al. argue that this is an important feature of CV because public participation in the ANP cattle grazing issue has been dominated by two opposing groups, namely the mountain cattlemen and the conservationists. Both groups have sought to influence government decisions by direct lobbying, use of the media, demonstrations and other means.

They split their sample and used two surveys, one in favour of continued grazing and the other in favour of the removal of the cattle. In general, Lockwood et al. found that "respondents generally approve of High Plains grazing" (p.365). They estimated that willingness to pay (WTP) each year for each household for five years for cultural and heritage preservation ranged between $81 and 106, whereas to stop grazing, estimates of WTP ranged between $5 and $37.[xxiii]

As Lockwood et al. (1996) note, the WTP estimates for the two scenarios considered, provide a benefit cost framework with which to judge the continuation of grazing or not (p. 364). By comparing the benefit estimates to see which is larger, it would appear that Lockwood et al. are justified in arriving at the following conclusion. 'These results provide support for the Victorian Government's management policies for grazing on the Bogong High Plains.' (p. 370)

However, these estimates of WTP for the continuation of grazing are likely to be too high; some fraction of heritage value identified and associated with grazing and the mountain cattlemen is likely to exist even if grazing were to stop. It is not obvious that cattle need to be grazed in the ANP for many practices and traditions associated with grazing to continue. If it is the accompanying activities (e.g. the annual horse race and carnival) that generate most of the non-market value derived, then it is not possible to argue in favour of the continuation of grazing. Alternatively, some cattle may need to continue to be grazed to preserve the cultural heritage, but the numbers of cattle required may be small. Until we are clear about the relationship between the number of cattle grazed and the resulting cultural heritage values, the optimal land use solution will remain unclear and we cannot be certain whether or not the cattle should remain or be removed from the alps, or their number substantially reduced.

Resolving the conflict

To resolve the conflict we now examine potential economic solutions to implement either the removal of all cattle or the continued existence of cattle grazing. Interestingly, in both cases a role for the use of compensation payments to the graziers is found to be a means by which to achieve a resolution of the conflict. The alternative institutional arrangements considered here raise questions about the renewal of existing licences in 1998.

The continuation of grazing

With the existing restrictive institutional arrangements in operation the available policy instruments to facilitate efficient land use appear to be restricted – adjust the number of cattle or change the cost of the licence.[xxiv] However, the prevailing quasi-

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[xxiii] Lockwood et al. conclude that the WTP estimate of 33 dollars to stop grazing, based on their logit multivariate model, seems the better estimate. Bennett (2000) examines the potential of an alternative stated preference method, namely choice modelling (CM) which appears to have some advantages for eliciting natural and cultural heritage values..

[xxiv] Various management solutions have been proposed (Van Rees, 1984); fencing areas, the development of watering points, and the strategic placement of salt. Although it is uneconomic to use fences to exclude cattle from sensitive areas such as mossbeds which are scattered across the high plains (Williams et al. 1997), strategically placed fences have been used successfully to exclude stock from large tracts of high plains country.

political nature of the grazing problem policy has made these two options difficult to implement. But with the continuation of grazing, it is desirable that the allocation and operation of the grazing licences is economically efficient. An institutional arrangement that may be able to deliver efficient land use, turns on being able to introduce flexibility with respect to licence exchange and the interpretation of what constitutes an approved person. By employing a more flexible interpretation it is plausible to argue that the likelihood of exchange (previously very limited) could be increased, with the result that the individual or individuals who value the grazing licence most highly, gain the right to graze.

With the existing licence arrangements the adverse impacts of grazing are kept to a minimum; there is as little disruption of the alpine environment as possible. Reference in the grazing licence to the protection of significant conservation values (I 23 – Protection of Significant Conservation Values) relates to the removal of cattle only when necessary; there is no mention of environmentally positive land management. Also, there is nothing in the licence that requires cattle be grazed; ownership is not dependent on use. Therefore, a licence holder who did not run any cattle would not contravene land management requirements. Finally, the licence makes no reference to the licensee being a grazier or owning a farm; they have only to be an approved person.

Precedents already exist for broadening the definition of what constitutes an approved person. In 1990 the Tom Groggin cattle station was granted a licence to graze cattle on the Davies Plains. In July of 1990, the cattle station was sold, licences included, to Colour Plate Pty Ltd. In October of 1990, Colour Plate was recognised as an approved person by the minister. A more recent example is the sale of Cobungra Station on December 1997. This station has the largest allocation of grazing licences anywhere in the Alps, and it has been purchased by BCR Management Assets.[xxv] The grazing licences

allocated to this station are still being used. The exchange of licences happened when the cattle station was sold. There would appear to be no prior reason, however, why exchanges could not simply be in relation to the grazing licences specifically. To ensure that exchange arrangements are efficient it is necessary to consider alternative reallocation arrangements.

The important decision in following this approach to introducing a greater role for market forces in the allocation of grazing licences, relates to the extent to which the definition of approved person is broadened. It is assumed that individuals or groups would need to seek and be given approval for operating a grazing licence. It is not envisaged that a free market come into being, but rather a less restricted group of interested economic agents (graziers, conservationists and cultural and heritage supporters) be able to gain the right to operate alpine grazing licences.

Exchange or re-allocation of grazing leases?

Negotiation and bargaining

The role of negotiation and bargaining as a means to resolve an existing environmental conflict or dispute has long been recognised (Coase, 1960; Porter, 1988; Kazmierczak and Hughes, 1997). Following Coase, if historical and legal processes associated with the grazing licence imply a property right, one means of exchange would be to allow negotiation and bargaining between interested parties, allowing the individual or group placing the highest value on the licence to purchase it.

There are several reasons to be cautious about recommending exchange based upon negotiation and bargaining. First it is unlikely that two individuals will be able to negotiate an efficient outcome all of the time. As a result of inefficiencies in the bargaining process, such as anticipatory strategic behaviour (Richer and Stranlund, 1997) or informational asymmetries (Fraser,

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[xxv] The chairman of BCR Assests has substantial interests in the Falls Creek Ski Company and Mt Hotham Skiing Company. The likely reason for

purchasing the cattle station is to facilitate skiing and other alpine tourist development, at least in the longer term. These activities are quickly becoming another contentious land use in the Australian Alps.

1995), the pursuit of individual objectives can prevent an efficient exchange from taking place (although the participating parties may wish to achieve a mutually advantageous agreement)

Furthermore, differences in willingness to buy and sell can influence the bargaining problem. If the grazier initially owns the licence, in an effort to derive as high a price as possible from selling the lease, the grazier might try to extract as much consumer surplus as possible from a buyer. The price paid in exchange would be a reflection of the willingness to buy the licence. Although the grazier will have a reservation value for the licence, the desire to gain an economic rent will force the realised price of the licence. This can be contrasted with the situation where a conservationist owns the licence. If a grazier wanted to purchase the licence, the price offered would now be a reflection of the grazier's willingness to sell. Also if the willingness of the conservationist to sell the licence is higher than the grazier's willingness to buy then no exchange will take place.[xxvi] Thus as Samuelson (1985) notes, the degree of efficiency of a bargaining agreement depends on the allocation of the property rights over the good in question and the actual bargaining process that is employed. As Samuelson rightly concludes, 'private bargaining cannot guarantee efficient solutions' (p. 337).

A second reason why a bargaining approach might not be used is that the licence will become valuable in its own right, a once-off creation of wealth which cannot be defended on the basis of equity or efficiency. There are two possibilities here depending upon the degree of flexibility introduced with the exchange of the licence. First, by making the grazing licence exchangeable only with the farm to which it is attached, the value of the licence will be capitalised into the value of the farm. Second, if the licence itself, the piece of paper, is exchangeable, its value is transferred into the paper entitlement.

Auctioning grazing licences

The right to exchange a grazing licence implies that property rights in the licences are already allocated. As noted above, this produces several undesirable effects. In response to this problem, Samuelson (1985) proposes that the initial allocation of the property right be determined via a bidding process such as an auction (sealed bid or open cry). The benefit of using an auction is that the individual or individuals who value the licence most will submit the highest bid. The government would receive a level of payment for the licence, which reflected the true private value of the winning bidder (McAfee and McMillan, 1987). This would remove the need to bargain and negotiate over grazing fees. The selection could include price and general land management plans.[xxvii]

The frequency of auctions needs to be considered. A single allocation of the licences via an auction may well lead to short-term efficiency gains, but over the longer run, inefficient operation of the leases may occur. It is therefore desirable on the grounds of dynamic efficiency that licences are assigned for a limited period only, allowing interested parties to bid at subsequent rounds. There is also no reason not to allow the exchange of leases between interested parties between the auction periods.

If an auction is to be used to allocate grazing licences, the existing right to the licence assumed by graziers will need to change. A change to the status quo of this kind will probably require financial compensation (incentives) as a means to achieve the desired outcome, because a new system of licence allocation is unlikely to be readily accepted by graziers.

Finally, it is possible to conceptualise the design of a comprehensive auction system for alpine licences. The alternative activities allowed in each alpine region, such as cattle grazing, eco-tourism, cultural heritage tourism, and wilderness conservation, would need to be clearly defined. Interested

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[xxvi] Bromley and Hodge (1990) examine this issue in relation to European agri-environmental policy.

[xxvii] Auction-type mechanisms have been employed in the UK and US to implement agri-governmental policy. See Smith (1995), Wu and Babcock (1996), Latacz-Lohman and Van der Hamsvoort (1998). Auctions have also recently been considered in relation to biodiversity provision in Victoria by Stoneham et al (2000).

economic agents would be permitted to bid for a category(s) of land use/management for which they had appropriate skills. If strict conditions with respect to auction design, information, and competitive bidding are met, a comprehensive auction of alpine licences would provide a Pareto efficient mix of alpine land use and conservation activities. In practice, imperfect information and other transaction costs may preclude attainment of a Pareto efficient allocation of alpine resources by means of an auction system.

The cessation of grazing and compensation

If grazing is stopped in the ANP, it is likely that the issue of compensation for the graziers, for the restriction of existing farming practices, will arise. This is because the change is a significant alteration to the status quo that has served the graziers so well. Without compensation it is highly unlikely that the graziers will agree to any change to existing arrangements. The importance of financial incentives in influencing and motivating environmental behaviour in Australia has been established by Carey and Wilkinson (1997).

Political Factors: PESTS and PERTS

The significance of political factors can be explained by using the operational paradigm of agricultural policy provided by Rausser (1982). Rausser neatly characterised agricultural policy into two types:-

1. PESTS (Political Economic Seeking Transfers)

2. PERTS (Political Economic Resource Transactions)

PERT policies are concerned with the optimal allocation of resources, whereas PEST policies transfer or redistribute income and wealth. A PEST policy is therefore typically the result of rent-seeking behaviour, generating social waste rather than social benefits. These two components can be characterised like an apple pie - the PERT expands the pie, but the PEST reduces the pie by socially wasteful rent seeking behaviour of economic agents. In terms of the alpine grazing issue, the PERT policy would be the decision to cease grazing and the PEST policy would be the payment of

compensation to the graziers to bring about change.

In a first best world PEST policies will bring about inefficient outcomes. However, in a second best world PEST policies can help to deliver Pareto improvements. Suppose a government undertakes a policy that aims to increase the level of a particular public good and hence the total level of economic welfare. If there are assumed to be two economic groups, graziers and conservationists, both can be made better off if there is some sharing of the available net benefits of policy implementation. The PERT policy makes one group worse off. The PEST policy, which might take the form of compensation payments, is used so that the group that is made worse off by the introduction of the PERT policy has no political incentive to block its introduction. This wealth transfer policy can be viewed as a form of rent-seeking activity and hence is inefficient. However, because of the net benefits of policy implementation, even after taking account of the PEST policy, a Pareto improvement can be achieved. This is exactly the situation being envisaged for the end of alpine grazing.

Why pay compensation?

Although compensation might facilitate the removal of cattle it is unclear if compensation is justified on other grounds. It is possible to rationalise why compensation might be paid in the latter context. First let us introduce the idea of the reference point (Hodge, 1989). This idea involves the determination of an appropriate point or benchmark by which to gauge the action of economic agents, like graziers, and the resulting restrictions imposed upon them. In terms of alpine land use, cattle grazing, has been a form of sanctioned economic behaviour over a long period of time.

The removal (sudden or phased) of grazing licences represents a significant change in the operational environment of graziers. The reference point can be thought of as defining the level of operational responsibility that graziers are expected to satisfy, in this case with respect to the alpine environment. In cases where there is a change in the desired actions of economic agents from

those deemed acceptable over a long period of time, some sort of payment or compensation is justifiable. The idea of the reference point helps to conceptualise the imposition of the restriction in relation to socially acceptable policy decisions. In Australia the idea of the reference point has been given strong support in the context of ecologically sustainable land management (Industry Commission, 1998).

Another argument used to justify compensation is fairness, Kahneman et al. (1986) link fairness into the idea of the reference point. Assume that the cattlemen have an entitlement (either implicit or explicit) to some level of grazing. Reducing or removing this entitlement is not fair given the reference point. The entitlement can arise from long term implementation of policy, and it is the removal of this right that requires a fair response from policy makers. Hence, the imposition of further grazing restrictions are beyond those deemed fair under the reference point. This line of reasoning provides a justification for the payment of compensation that is in keeping with Usher (1992). Usher distinguished between taking by government that should be compensated and the exercise of police power where no compensation is required. From an operational point of view the distinction between these two is the avoidance of victimisation of individuals in society by the government and rent seeking by individuals. Miceli and Segerson (1998) provide an alternative but similar rationale for why compensation needs to be paid.

However, the reference point is not immutable. Over a period of time there will arise disagreements about its position. The changing perception by the public to agricultural practices is an example of this. Over the last two decades, there has been growing concern about agricultural externalities resulting from intensification (for earlier research see Braden, 1982). There is also a desire to protect those remaining areas of environmental value, all of which means that the way the general public perceives agriculture has changed.

The role of the reference point can also be linked to expected returns from grazing and how this is reflected in property values. In a well-functioning land market, current land value is determined primarily by the present value of the expected future revenue stream, net of all payments to other factors of production associated with a land-based investment. Typically, land values will change through time as the flow of new information causes changes in expectations. Expectations may change as a result of unanticipated changes in product and factor markets and/or government policies, such as the removal of grazing licences.

A key feature of the compensation issue is the extent to which the past and current rights to grazing have been capitalised into the farmland values of a grazier's property. The degree of capitalisation of alpine grazing rights into farmland values, will depend on the probabilities that graziers' attach to their grazing being renewed; the expected prices (fees) of future grazing licences; the expected time span before renewal of grazing licences cease, if ever; and graziers' expectations about what compensation, if any, they will receive in the event of the government not renewing grazing licences. If the grazier's expectations are that government is certain (probability one) to renew grazing licences in perpetuity at a constant real price, or that full compensation will be paid to graziers if licences are not renewed, it is reasonable to assume that the benefits of the right to summer alpine grazing in perpetuity are fully capitalised into farmland values. In this case there is clearly a strong case for full compensation if grazing licences are withdrawn.[xxviii]

Usually, graziers will not know with certainty whether or not a government will maintain or change a policy influencing their utility/wealth at some time in the future. That is to say, probabilities less than unity, but greater than zero, will be associated with a given government policy remaining unchanged. The difficulty for determining fair compensation when government changes policy is that the above probabilities are unobservable. Given that a myriad of government policies change over time in

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[xxviii] Obviously the grazier's expectations need to be assumed to be reasonable. Reasonable expectations could be established by recourse to farm level financial records and agricultural market forecasts.

unanticipated ways that influence the well-being and wealth of people and firms, the case for compensation would appear to be weak except in the most clear cut of cases. It is important that policy makers recognise that the information they communicate to graziers (and other investors) about policy, influences expectations. For policies relating to such things as farm subsidies and alpine grazing licences, it is important from the perspective of both efficiency and equity that policy making is consistent, transparent and predictable. Changes in policy that are unanticipated result in socially inefficient resource allocation even when the affected parties expect full compensation. For instance, graziers who expect their licences to continue indefinitely are likely to make long-lived investment decisions that depend on the continuation of grazing rights. Unanticipated withdrawal of grazing rights will result in farm operations that have unproductive sunk costs.

Institutional mechanisms for compensation

This is not a straightforward question to answer especially in the light of the earlier PEST and PERT characterisation of policy. However, there are some economic principles that can be used to help in the assessment of mechanisms for compensation. In the GATT, for example, agri-environmental policy allows for payments to farmers equal to the profit foregone by taking the suggested environmental actions (Edwards and Fraser, 2001).

Mechanisms for paying compensation appear to exist in Victorian government legislation that deals with the environment. The Flora and Fauna Guarantee Act (1988) (FFGA) was introduced to establish a legal and administrative structure to enable and promote conservation. Native flora and fauna in danger of extinction and of particular significance are identified in the Act (schedules 1 and 2). To protect flora and fauna, the FFGA provides for 'Action Statements' which list intended management actions for government departments and the community. Two of the most fragile and vulnerable alpine plant communities, viz. mossbeds and snowpatches, are listed for

protection under the FFGA. In addition, soil erosion and vegetation damage and disturbance caused by cattle grazing in the alpine regions of Victoria are listed as a potentially threatening process under the FFGA. There would appear to be scope as part of Action Statements to offer compensation to graziers not to take cattle to their licence areas.

The FFGA also allows for the introduction of interim conservation orders (ICO) for a period of two years. If an ICO impinges upon the existing activities of a landowner or operator then compensation payments can be made. Thus, any curtailment of existing grazing licences might justifiably attract compensation payments. The importance of this is that there exists a piece of conservation legislation that allows for the curtailment of grazing and the use of compensation. In section 38 of the FFGA it is made clear that the FFGA overrides existing licence arrangements, such as the alpine grazing licences. The FFGA also provides some guidance on the appropriate amount of compensation. The profit-foregone criterion is implied in the legislation although the Victorian Director-General has the right to award as much as he or she sees fit (Section 43.8).

In a very recent development relating to compensation, Parks Victoria (which manages the ANP) has offered financial assistance (compensation) to graziers who are prepared not to take their cattle to licence areas burnt in the Caledonia fire. The payments will be based on the cost to graziers of obtaining alternative agistment for their stock in lowland areas over the next five summers. By December 2000, some graziers had accepted the offer of compensation, at least in principle.

The offer of financial assistance has been made to graziers by Victorian government agencies, presumably because it is considered to be the lowest cost and most practical way to exclude stock from alpine areas that have not recovered from the 1998 Caledonia fire. An attempt was initially made by Parks Victoria to construct fences to protect the most sensitive alpine areas (eg. mossbeds) affected by the fire, and utilise provisions under section I 23 of the Grazing

Licence, National Parks Act 1975, to exclude grazing of the areas. However, the fencing proved to be expensive and it became apparent that graziers would dispute the right of Parks Victoria to exclude their cattle from particular areas (within their grazing licence) by such action. The costs of collecting data pertaining to the biophysical state of the burnt areas and the administrative and legal costs necessarily incurred to resolve such disputes, under section 29 of the Grazing Licence, National Parks Act 1975, were likely to be considered to be too high. The offer of financial assistance by a government agency to compensate graziers for loss of alpine grazing access sets an important precedent for future compensation issues in general. This raises the question of why an attempt was not made to use the provisions of the FFGA Act 1988, to exclude cattle from sensitive areas burnt in the Caledonia fire, before making a decision to compensate graziers. The provisions in this Act have not been tested to date for alpine grazing. This is in contrast to the current situation for ski resort works, where permits with strict conditions are required to minimise the disturbance of sensitive alpine plant communities.

Finally, it is important to note that cattle are 'free-roaming' and contiguous grazing licence areas are not enclosed. In other words, the summer alpine grazing resource is to some extent common property. This has significant implications for any voluntary compensation system. No guarantee can be given to a grazier that if he were to accept compensation for not grazing cattle, that cattle owned by another grazier with a contiguous licence who did not accept compensation would enter the former grazing area. Indeed, superior edible plant growth on any licensed area from which the licence holder's cattle had been removed would attract cattle from contiguous areas. Consequently, there is a reduced incentive for an individual grazier to unilaterally accept an offer of compensation.

Profit foregone.

Profit foregone is the difference between the net income earned from the existing pattern of use of farm resources and the net income earned from the next best alternative use of farm resources. In relation to cessation of alpine grazing, the next best alternative may be to maintain the same number of cattle and replace the feed lost from alpine grazing with purchased stock feed or agistment. Alternatively, the next best alternative may be to reduce cattle numbers significantly and introduce new or expand existing farmland activities. Finally, some graziers who are perhaps older, or who place a particularly high individual value on the alpine grazing tradition, may decide that the best course of action is to sell their property and invest the proceeds elsewhere.

An ideal economic measure would be a grazier's net utility foregone, rather than net income foregone. The net utility measure would capture net income foregone, together with any differences in 'psychic income' associated with different farmland uses and practices and other investment opportunities outside agriculture. Positive psychic incomes are associated with income earning activities that are valued for their 'lifestyle' attributes per se. For instance, suggestive evidence for positive psychic incomes would exist if some graziers were found to be willing to accept lower financial rewards consistently from the existing pattern of use of their assets in farming, including their own labour and management skills, than they could obtain from an alternative pattern of asset use in, or outside, agriculture. A Contingent Valuation survey could also be used to attempt to determine whether there were significant differences in 'psychic incomes' between an existing pattern of farmland asset use and the next best alternative use. However, a CV survey seeking to determine 'psychic incomes' derived by mountain cattlemen would be fraught with difficulties. The graziers have a strong incentive to exaggerate psychic income from their high country grazing activities in order to maximise their compensation.

The issue of whether the cessation of grazing is to be long lived or short term also needs to be decided. This can have implications for the form and size of the payment. In terms of an ICO, the FFAG specifies a period of up to 2 years in duration. But what happens after 2 years is up? Should a further ICO be introduced or should the landowner be able to pursue their preferred land use activity? If the ICO produces a one-off loss of production

possibilities, should the compensation payment cover this?

The above difficulties aside, a simple measure of the profit foregone from the cessation of alpine grazing could be obtained by first estimating the agistment rates, per head of livestock, for 16 weeks summer grazing each year. The current local agistment rates for cattle grazing are $55-60 per head for 16 weeks summer grazing. For simplicity we assume that the per head cost of transport to the agistment areas equals the per head cost saving from not droving the cattle to the high country. Graziers also save $5.00 per head per annum from no longer paying alpine grazing licence fees. Cattle, summer grazed on the high country, are assumed to attract a small price premium. Taking the above factors into account, $60 per head seems a reasonable estimate of the current net cost of 16 weeks summer agistment.

If all 7,800 cattle were removed from the ANP, then the profit foregone in 2000/2001 would be $468,000. As the graziers would expect to earn a stream of income into the future from alpine cattle grazing, it is important to base any profit foregone estimates on a discounted stream of revenues. For illustrative purposes we assume a five year, ten year, twenty year and in perpetuity planning horizon. The results are shown in Table 1, assuming discount rates of 5 and 10 percent.

Table 1 – Estimated Profit Foregone if All Cattle Were Removed From the ANP ($Millions)

Discount Rates	Years			
	5	10	20	Perpetuity
5%	2.026	3.614	5.832	9.360
10%	1.569	2.349	2.929	4.680

To place the compensation estimates in context we can use the willingness to pay estimates to remove the cattle from the high country of Lockwood et al. (1996). Assuming one million households in Victoria, then even for the lower bound estimate of Lockwood et al, $5 per annum for 5 years, this yields a present value WTP to stop grazing which is around ten times the size of the compensation. These results would appear to provide at least cursory evidence that expected reasonable compensation payments be significantly less than the estimates of willingness to pay to remove the cattle from the ANP.

Compensation by another name

In both the scenarios we have analysed, the allocation of grazing licences and the cessation of grazing, the need exists for compensation payments as a means to resolve the existing land use conflict. However, although compensation may well be able to bring about change in alpine land use, there seems to be little political conviction in following this approach. Governments are dissuaded from this action by fear of the precedent set in employing compensation and the resulting budgetary implications.

An alternative means to bring about the same result and avoid the negative connotation of compensation, is to consider payments as something provided for a good produced, not compensation for a right removed. The political imperative is to couch the financial incentive in terms of proactive rather than reactive land use management. In this context the introduction of Landcare to provide the means for resolving the conflict. Australia has initiated a national Landcare program using financial incentives to encourage groups of local land users to manage their land cooperatively in an agriculturally sustainable manner (Curtis and De Lacy, 1996). Landcare is a self-help approach to sustainable farming that encourages groups of farmers and landowners to manage their land in a way that ensures sustainability. If the graziers could form a Landcare group, maybe this could provide the means to protect the most environmentally sensitive areas of the high country. Although there has been some

interest shown in forming a Landcare group, on the whole it is a concept the graziers have shown little inclination to follow as a means of compromise.

Conclusions

Livestock grazing in the ANP has been substantially reduced since the 1940's in terms of both number of stock and area grazed. However, the ANP remains the only national park within the AANP system in which livestock grazing continues The impassioned criticism of this activity by ecologists provides us with a classic example of a land use conflict albeit with several unique features. The decision to renew grazing licences in 1998 was therefore controversial. In this paper we have shown how economic principles can be brought to bear in an effort to resolve such conflict.

Unlike many land use conflicts, there exists extensive scientific evidence detailing the precise impact of the cattle on the high country. However, even with all the available scientific evidence we cannot unambiguously state that cattle should be removed from the ANP. This is because there are significant cultural heritage benefits associated with the high country grazing. Lockwood et al. (1996), do provide estimates of these economic values but their results need to be treated cautiously. Their estimates of the benefits society derives from high country cultural heritage significantly exceed their WTP estimates to stop grazing. However, some cultural heritage values associated with alpine grazing and the mountain cattlemen are likely to survive even if cattle grazing were to stop in the ANP. The relationship between the value society places on high country cultural heritage and the actual *number* of cattle grazing is currently unknown.

It is possible that society would continue to benefit from a large fraction of the overall cultural heritage benefits even if alpine grazing were to cease. This would imply that people place most value on the historical alpine cultural heritage portrayed in poetry, films and other high country imagery together with high country heritage relics and places such as huts, ruins and droving tracks. Annual get-togethers of graziers and alpine

horse racing carnivals also help preserve high country cultural heritage values with minimal damage to the natural heritage. Furthermore, it is conceivable that the cultural heritage benefits, directly attributable to 'present day' alpine grazing, rather than the above factors, could be largely maintained by a few 'symbolic' droving and mustering activities involving the movement of only a small number of cattle to and from the high country summer grazing areas. There is clearly the need for more research like that of Lockwood et al., but with far more emphasis placed upon the delineation of cultural heritage benefits, and how they relate to the number of grazing cattle versus other forms of alpine cultural heritage, the values of which are largely independent of current alpine grazing practices. There are clear public policy benefits from undertaking this research since the size and nature of the cultural heritage values are likely to have a dominating influence in determining an optimum economic (social) solution. The economic value of the ANP for cattle grazing is found to be small compared with the estimates (Lockwood et al, 1996) of both the benefits derived from the cultural heritage and the WTP to stop grazing.

Given our inability to answer definitively whether or not cattle should be removed from the ANP, we have analysed alternative institutional arrangements that would help resolve the current conflict. First, if grazing is to continue, a more flexible interpretation of approved persons is necessary. A broader definition provides a vehicle for conservationists to express their preferences for cessation of grazing – they can buy grazing licences. It is assumed that a more competitive market for grazing licences would yield a more efficient pattern of ownership, reflecting willingness to pay. An auction is the preferred means of allocating the grazing licences.

Second, with the cessation of grazing, the payment of compensation both in relation to fairness and simple political expediency has been examined. Importantly, there would appear to be scope within the FFGA to offer compensation to graziers to not take cattle to their licence areas. To illustrate the expected magnitude of the necessary compensation payments to bring about a resolution to the grazing conflict we have included some numerical calculations. The estimates of compensation, calculated as profit foregone, are found to be significantly less (10 percent) than society's willingness to pay to stop high country grazing as estimated by Lockwood et al.

Existing evidence of the use of compensation as a means to facilitate a resolution to a land use conflict is mixed (Fraser, 1995). In a very recent development, Victorian Government agencies have offered financial assistance (compensation) to graziers who are prepared not to take their cattle to licence areas burnt in the 1998 fire for a period of five years, on the basis of the cost of obtaining summer agistment for their stock in lowland areas. It remains to be seen whether or not the offers of financial assistance being made will be accepted by all graziers whose licensed grazing areas have been affected by fire.

Over time, government policies change in predictable and unpredictable ways. In the context of alpine grazing, the case for compensating graziers for not renewing their grazing licenses is strongest when graziers have reasonable expectations that government is almost certain to renew grazing licenses in perpetuity, or that full compensation will be paid to graziers if licenses are not renewed. In these circumstances, the benefits of the right to summer alpine grazing will be fully capitalised into land values. In practice, graziers are likely to attach probabilities of less than unity to the above expectations and as a consequence some fraction of the (in perpetuity) benefits from alpine grazing will be capitalised into land values. The problem for determining appropriate compensation, is that the grazier's expectations are not directly observable. However, given the long history of alpine grazing and the past nature of licence renewal, it seems likely that graziers hold high expectations of renewal or compensation.

A further reason for government to be very cautious about offering compensation, is that there are a myriad of ways that government policies change over time somewhat unpredictably which influence the incomes and wealth of people. Each time a

government offers compensation it is likely to stimulate rent-seeking (PEST) activity by other individuals and groups seeking to be similarly compensated. In the Caledonian fire case, the government agencies appear to be aware of this problem insofar as the offer refers to *financial assistance, not compensation* in return for forfeiting the right to alpine grazing.

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References

Australian Academy of Science (1957). A Report on the Condition of the High Mountain Catchments of New South Wales and Victoria. Canberra.

Australian Alps Liaison Committee (2000). 1999-2000. Annual report. Australian Alps National Parks.

Bennett, B. (1995). Herefords or herbfields. ECOS 83, 29-35.

Bennett, J. (2000). Natural heritage valuation methods: application to cultural heritage. Paper presented to the workshop Heritage Economics: challenges for heritage conservation and sustainable development in the 21st Century, Australian Heritage Commission, Canberra.

Braden, J.B. (1982). Some emerging rights in agricultural land, American Journal of Agricultural Economics, 64, 19-27.

Bromley, W.D., and Hodge, I. (1990). Private property rights and presumptive policy entitlements: reconsidering the premises of rural policy. European Review of Agricultural Economics 17, 197-214.

Brown, K. (1998). The political ecology of biodiversity, conservation and development in Nepal's Terai: Confused meanings, means and ends. Ecological Economics 24, 73-88.

Carey, J.W. and Wilkinson, R.L. (1997). Perceived profitability and farmers' conservation behaviour. Journal of Agricultural Economics 48, 13-21.

Carr, S.G.M. (1962). The discovery of the Bogong High Plains. Proc. Roy. Soc. Vict. **75**: 285-289.

Carr, S. G. M. and Turner, J. S. (1959). The ecology of the Bogong High Plains. Australian Journal of Botany **7,** 12-63.

Coase, R. (1960). The problem of social cost. Journal of Law and Economics 3, 13-21

Costin, A.B. (1957). High Mountain Catchments in Relation to Land Use. Soil Conservation Authority of Victoria.

Costin, A. B. (1958). Grazing Factor and Catchment in the Australian Alps. CSIRO Div. Plant Ind. Tech. Paper 10. Canberra.

Costin, A. B. (1962). Ecology of the High Plains. Proceedings of the Royal Society of Victoria 75, 327-337.

Curtis, A., and De Lacey, T. (1996). Landcare in Australia: does it make a difference? Journal of Environmental Management 46, 119-137.

Edwards, G., and I.M. Fraser (2001). Reconsidering agri-environmental policy permitted by the Uruguay round agreement. Ecological Economics (Forthcoming).

Flood, J. (1987). Moth hunters of the south-eastern highlands, in Australians: A Historical Library, Australians to 1788, eds D.J. Mulvaney and J.P.White, Fairfax, Syme and Weldon, Sydney, pp.274-91.

Flood, J. (1991). Aboriginal Cultural Heritage of the Australian Alps; an Overview.pp83-87, in Cultural Heritage of the Australian Alps, Proceedings of the 1991 Symposium. Australian Alps National Parks.

Flora and Fauna Guarantee Act (1988) Act Number 47/1988, Anstat Pty Ltd, Melbourne, 3002.

Fraser, I.M., (1995). An analysis of management agreement bargaining under asymmetric information. Journal of Agricultural Economics 46, 20-32.

Fraser, I.M., Chisholm, A.H., (2000). Conservation or cultural heritage? Cattle grazing in the Victoria Alpine National Park. Ecological Economics 33, 63-75.

Griffiths,T.R. (1991). History and natural history: Conservation movements in conflict? in Mulvaney, D.J. (ed.), The Humanities and the Australian Environment, Australian Academy of the Humanities, Canberra.

Hancock, D.K. (1972). Discovering the Monaro. Cambridge University Press Cambridge.

Hodge, I.D. (1989). Compensation for nature conservation. Environment and Planning A 21,

1027-1036.

Industry Commission. (1998). A Full Repairing Lease, Inquiry into Ecologically Sustainable Land Management. Report No. 60. Industry Commission, Canberra.

Johnson,Dick. (1975). The Alps at the Crossroads; the Quest for an Alpine National Park in Victoria. Victorian National Parks Association.

Kahneman, D., Knetsch, J.L., and Thaler, R. (1986). Fairness as a constraint on profit seeking: Entitlements in the market. American Economic Review 76, 728-741.

Kazmierczak, R.F. and Hughes, D.W. Jr. (1997). Reasonable value and the role of negotiation in agriculture's use of the environment. Review of Agricultural Economics 19, 108-121.

Kirkpatrick, J.B. (1994). The International Significance of the Natural Values of the Australian Alps. Australian Alps Liaison Committee, Canberra.

Land Conservation Council. (1979). Final Recommendations. Alpine Areas. Land Conservation Council, Melbourne, Victoria, Australia.

Latacz-Lohman, U., and Van der Hamsvoort, C.P.C.M. (1998). Auctions as means of creating a market for public goods from agriculture. Journal of Agricultural Economics 49 (3), 334-345.

Lockwood, M., Tracey, P., and Klomp, N. (1996). Analysing conflict between cultural

heritage and nature conservation in the Australian Alps: a CVM approach. Journal of Environmental Planning and Management 39 (3), 357-370.

Massola, Aldo. (1962). The Aboriginals of the Victorian High Plains. Proc.Roy.Soc. Vict: 75,pt 2;319-325.

McAfee, R.P., and McMillan, J. (1987). Auctions and bidding. Journal of Economic Literature, 25, 699-738.

Miceli, T.J., and Segerson, K. (1998). Compensation for Regulatory Takings: An Economic Analysis With Applications. JAI, Greenwhich, CT.

Mosley, G. (1988). Australian Alps World Heritage Nomination Proposal. Victorian National Parks Association, Melbourne, Victoria.

Mulvaney, J. (1991). The Alpine Cultural Heritage in Perspective. pp 9-17. in Cultural Heritage of the Australian Alps, Proceedings of the 1991 Symposium. Australian Alps National Parks.

Porter, R.C. (1988). Environmental negotiation: its potential and its economic efficiency. Journal of Environmental Economics and Management 15, 129-142.

Rausser, G.C. (1982). Political Economic Markets: PERTs and PESTs in Food and Agriculture. American Journal of Agricultural Economics, 43-60.

Rhodes, T.C., and Wilson, P.N. (1995). Sky islands, squirrels, and scoopes: the political economy of an environmental conflict. Land Economics 71, 106-121.

Richer, J., and Stranlund, J.K. (1997). Threat positions and the resolution of environmental conflicts. Land Economics 73, 58-71.

Samuleson, W. (1985). A comment on the Coase Theorem. in Alvin, R. (ed), Game Theoretic Models of Bargaining. Cambridge University Press, New York, pp.321-340.

Skonhoft, A. (1998). Resource utilisation, property rights and welfare- wildlife and the local people. Ecological Economics 26, 67-80.

Smith, R.B.W. (1995). The conservation reserve program as a least-cost land retirement mechanism. American Journal of Agricultural Economics 77, 93-105.

Stoneham, G., M. Crowe, S. Platt, V. Chaudhri, J. Soligo and L. Strappazzon. (2000). Mechanisms for Biodiversity Conservation on Private Land. Agriculture Division and Parks, Flora and Fauna Division, Department of Natural Resources and Environment, Melbourne, Victoria.

Taylor, K. (1992). Cultural values in natural areas. In Scougall, B (Ed.), Cultural Heritage of The Australian Alps, Proceedings Symposium, Jindabyne, NSW, 16-18 October.

Usher, D. (1992). Victimisation, Rent Seeking and Just Compensation. Discussion Paper No 92-1. Department of economics, The University of British Columbia, Vancouver, Canada.

Van Rees, H. (1984). Behaviour and Diets of Free- Ranging Cattle on the Bogong High Plains Victoria. Department of Conservation, Forests and Land, Melbourne.

Wahren, C.-H.A., Papst, W.A., and Williams, R.J. (1994). Long term vegetation change in relation to cattle grazing in sub-alpine grassland and heathland on the Bogong high plains: an analysis of vegetation records from 1945 to 1994. Australian Journal of Botany 42, 607-639.

Wahren, C.-H. A. and Papst, W.A. (2000). Early Post-Fire Regeneration In Sub-alpine Heathland and Grassland at Wellington and Holmes Plains, Alpine National Park. Report to NRE and Parks Victoria. La Trobe University, Department of Agricultural Sciences.

Wahren, C.-H. A., Papst, W. A. and Williams, R. J. (1999). Post-fire Regeneration in Victorian Alpine and Subalpine Vegetation. Proceedings of the Australian Bushfire Conference, Albury. Charles Sturt University.

Wahren, C.-H. A. and Walsh, N.G. (1999). Impact of Fire in Treeless Subalpine Vegetation Mt Buffalo National Park. Report to Australian Alps Liaison Committee. La Trobe University, Department of Agricultural Sciences.

Williams, R.J. and Costin, A.B. (1994). Alpine and subalpine vegetation. In 'Australian Vegetation' 2nd Edition. Ed. R.H. Groves. Cambridge University Press.

Williams, R.J., Papst, W.A., and Wahren, C.-H.A. (1997). The Impact of Cattle Grazing on Alpine and Subalpine Plant Communities of the Bogong High Plains. Victorian Department of Natural Resources and Environment, Melbourne.

Wu, J., and Babcock, B. (1996). Contract design for the purchase of environmental goods from agriculture. American Journal of Agricultural Economics 78, 935-945.

Regional economic impacts of tourism in heritage mining towns

Professor Trevor Mules, Tourism Program, University of Canberra, Australia

Abstract

Mining played an important role in the economic development of Australia during the mid to late 1800's. In many cases, when the minerals ran out so did the people, leaving behind communities where economic development stood still for over a century. The result was a number of towns possessing well preserved buildings and streetscapes of the 1850's to the 1890's.

These constructs have developed as tourism attractions for people; particularly Australians interested in the past. In many cases the towns in question are in rural regions, and tourism offers the prospect of economic growth to balance the regional economic decline.

This study measures the economic impact of tourism activity in three historical mining towns, namely Maldon (Victoria), Burra (South Australia), and Charters Towers (Queensland). These three were chosen for the study because of their high potential for further development as cultural heritage tourism attractions.

Sample surveys of visitors were carried out in the three towns over the period February to May 2000 using local people as paid interviewers. At least five hundred interviews were conducted in each town, with information being sought on tourist behaviour, impressions, and opinions as well as expenditure.

Expenditure details were collected according to category of expenditure, and regional input output models were used to estimate the multiplier effects of the expenditure on each host region. The results provide useful benchmark data should the towns be placed on a National Heritage Register. The economic value through tourism of such listing could then be measured.

Introduction

This study reports on the economic value of cultural heritage tourism at three Australian historical mining towns where tourism development has occurred in a variety of ways. The towns all feature assets that were legacies of mining booms in the previous century. Visitor surveys conducted in each place estimated the expenditure by tourists and the associated economic impact. Data were also gathered on various characteristics and attitudes of tourists to heritage tourism.

There is a well established body of knowledge of the value of tourism to *natural* heritage places. Studies such as McDonald and Wicks (1986), and Pearson, Russell and Woodford (2000) have detailed the economic impact of visitor spending that is related to visitation to places of natural heritage. However, the area of cultural heritage has been somewhat neglected, and is only just beginning to receive attention.

An increasing focus upon the importance of cultural heritage tourism has been brought about by the release of the Commonwealth Government's draft strategy "A National Strategy for Australia's Heritage Places" (1999). This document highlighted a number of case studies that illustrated the interest in visitation to places of cultural heritage significance. The document also raised issues such as the sustainability of cultural heritage tourism, and the capacity of the tourism industry to generate sustainable economic growth.

Many of Australia's cultural heritage assets are located in non-metropolitan regional Australia where the contribution of cultural tourism to economic growth is of great importance, and of policy significance. In addition, although Australia's non-Indigenous

cultural assets are only 200 years old, they represent important icons and appear to contribute to a sense of national identity.

Early European development in Australia was based around three main industries, namely prisons, farming, and mining. Many of the constructed assets in these industries have survived and are now tourist attractions in places such as Port Arthur, the Victorian goldfields, and the Cockle Train in South Australia[xxix]. In each case tourism has become an important reason for the continued preservation and maintenance of the asset, as well as an important source of revenue for such maintenance.

More important to this study is the money that is brought into a regional economy by the tourists who come to see the preserved heritage. Expenditure by visitors on accommodation, meals, site entry fees, shopping, petrol and other transport, puts income into the hands of local businesses and their employees. Such regional economic development is valuable at a time when traditional farming industries may be in decline, or in regions where global economic adjustment has resulted in closures of banks, transport, or other local industries.

Sustainable regional economic development requires that tourism numbers to such places and their expenditure is sustained, that is that the attractions are maintained, that visitors are satisfied with their experience, and that resources are devoted to informing potential visitors about the attractions on offer. Sustainability requires that tourism to such places leaves the assets so that they are able to be enjoyed by future visitors.

Resources for maintenance and for promotion must be found wherever possible from the expenditure of the visitors. This adds to the sustainability of the total product, and reduces the regional dependence on Government budgets that are becoming increasingly tight.

While this study does not canvass the techniques that might be used to tap into tourism expenditure for the purposes of

financing preservation of cultural heritage assets, it does illustrate the potential for such revenue.

As discussed above, mining is one of three industries that were pivotal to early European economic development of Australia. Mineral booms of the mid 1800's attracted large numbers of new settlers into regions across the nation. The wealth from mining helped finance the construction of residential and commercial buildings in towns that today have populations less than they were in the boom times. Many of these buildings, and the diggings, railway lines, mining plant, and streetscapes that were installed at the same time have been left intact and have become tourism attractions.

In this study, three heritage mining towns were chosen in consultation with the Australian Heritage Commission. One advantage of choosing mining towns for the study is that of homogeneity, ie. visitors' motivations, expectations, and attitudes would not vary between the places because of the industrial background. One could imagine that a study that included a former penal colony alongside a former river grain port might experience some differences due to the different industrial backgrounds.

The three towns eventually chosen for study were:

1. Maldon, a former gold mining town in Victoria,

2. Burra, a former copper mining town in South Australia, and

3. Charters Towers, a gold mining town in North Queensland.

All three once boomed as a result of mineral wealth that has long since run out. All three have well preserved buildings and other reminders of the boom times, that have been preserved and that now attract tourists interested in experiencing part of Australia's historical development.

Visitor surveys were conducted via face to face interviews in the towns during the first six months of 2000. Local people were employed as interviewers, and were trained by researchers from the University of Canberra. In each case the local visitor centre assisted with the recruitment of

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[xxix] This is claimed to be Australia's first railway line and was originally horse drawn and used for grain transport.

interviewers and the management of the interview process. The visitor centre received a fee for this service.

Completed questionnaires were sent to the University of Canberra for editing and computer entry and analysis. Because interviews commenced in Maldon before the other towns, there were more completed questionnaires from Maldon (746) than for Burra (261), and Charters Towers (368). However, daytrippers comprised 64% of visitors to Maldon, leaving some 246 in the survey who stayed in Maldon overnight, compared with 123 overnighters in Burra, and 225 in Charters Towers[xxx].

Questionnaires were almost the same in each case, except for a few location specific issues. They covered aspects of visitor characteristics, visitor behaviour and expenditure, attitudes to various heritage issues, and questions of satisfaction.

Visitor Characteristics

The pattern of visitor groups size is very similar for the three towns, with two persons being the dominant size, as shown in Figure 1. There is also a minor mode size at four persons in each town. Charters Towers has slightly more singles and slightly less 6+ groups than the other two towns.

There are some very interesting comparisons between the three towns in terms of how people/visitors found out about the destinations, as shown in Table 1. For Maldon, "friends" is clearly the dominant information source, while for the other two towns the category "always known is dominant. Travel guidebook is a significant source for Charters Towers but not for Burra or Maldon. The web is not particularly significant as an information source in any of the towns. Of the three destinations, Charters Towers seems to have a more even spread of sources and is less dependent on one particular source than Maldon and Burra.

Figure 1 - Size of Visitor Groups
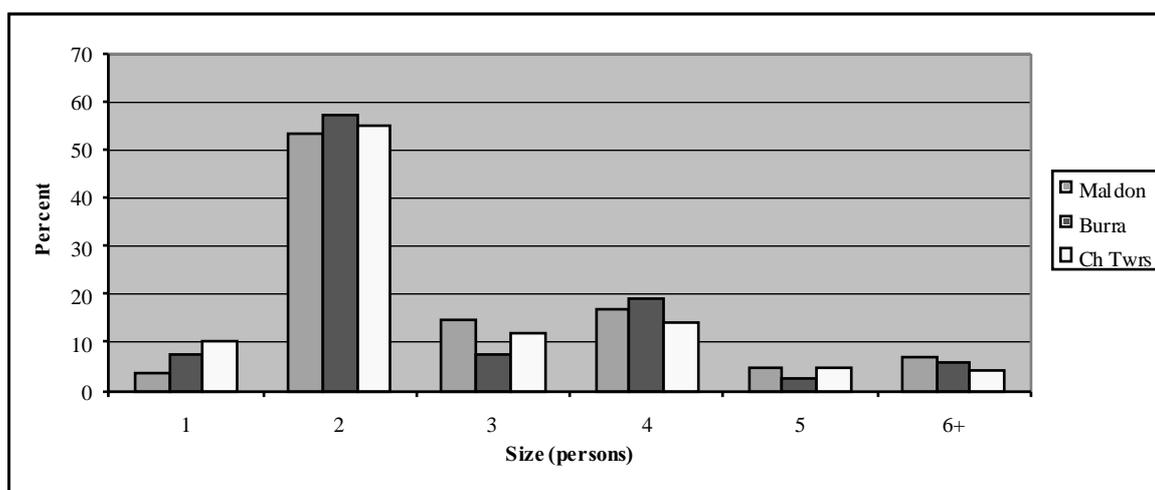
[xxx] At the time of writing, some questionnaires for Burra and Charters Towers were still being entered into the database. This report is therefore preliminary and will become final upon inclusion of the remaining data.

Table 1 - How Visitors Found Out About the Destination

Information Source	Percent		
	Maldon	**Burra**	**Charters Towers**
From friends	63	19	37
Newspaper story	9	2	1
Magazine article	6	1	3
State Tourist Authority	6	4	5
Local Tourist Authority	7	3	8
TV program	5	2	3
Radio program	1	1	2
Web/Internet	1	2	3
Motoring association	2	2	4
Travel guide book	6	8	28
Always known/previous knowledge	1	56	46

Figure 2 - Visitors' Age
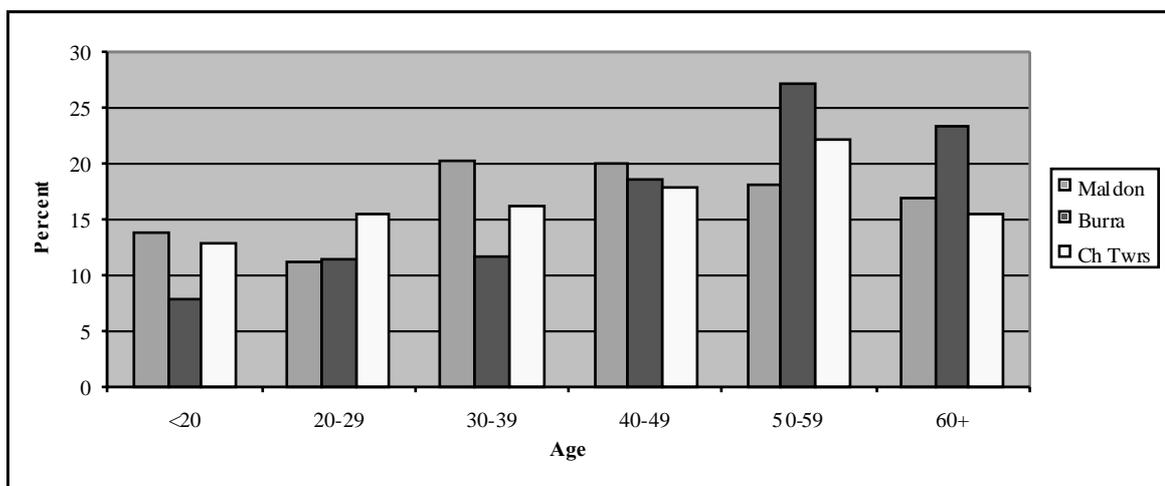
Visitors' age is displayed in Figure 2 and shows Burra with an older age profile and Maldon with a younger profile. Charters Towers profile tends to be quite middle aged, around the 40-60 bracket.

Table 2 shows the gender of visitors, with the patterns being very similar at each place with a significant female majority. Thus the dominant form of visitor for Burra is older females, for Charters Towers it is middle aged females, and for Maldon a slight emphasis towards younger females. Some interesting differences emerge from a comparison of the origins of visitors shown in Table 3. Charters Towers appears to be more successful in attracting international visitors, but this may be related to the fact that more international visitors go to Queensland and to north Queensland than to Victoria and South Australia. Maldon has a strong reliance on visitors from Melbourne, whereas Burra relies almost equally on Adelaide and other States as sources. Maldon is less successful at attracting visitors from NSW than both Burra and Charters Towers.

Table 2 -Gender of Visitors

Gender	Percent		
	Maldon	**Burra**	**Charters Towers**
Female	55	55	52
Male	45	45	48

Table 3 - Origins of Visitors

Origin	Percent		
	Maldon	Burra	Charters Towers
Overseas	6	4	17
Nearest large city	47	33	10
Elsewhere in State	34	29	45
NSW	7	12	13
Other States	6	22	15

Finally in this section, visitors' leisure activities are compared in Table 4. While the patterns are broadly similar, visiting heritage buildings is a more popular activity with Burra visitors than with those to the other places, possibly because Burra has had a history of preservation of heritage assets and involvement in promoting cultural heritage tourism. Relative to the other towns, Maldon visitors do not appear to be as interested in reading about either Australian history or general history. This is perhaps a function of the high daytrip from Melbourne component in Maldon's visitor profile.

Table 4 - Visitors' Leisure Activities

Leisure Activity	Percent		
	Maldon	Burra	Charters Towers
Country Drives	88	91	76
Going to a restaurant	81	79	69
Cinemas	65	59	67
Visiting heritage buildings	60	73	66
Visiting a national park	59	66	65
Bushwalking	48	51	59
Reading Australian history	42	53	58
Visiting a museum	41	59	56
Reading general history	39	58	51
Theatre, opera, ballet	26	37	29
Popular concerts	25	30	27
Overseas holidays	20	17	25

Visitor Behaviour

All three destinations had a predominance of daytrippers, as is shown in Figure 3. This was especially marked for Maldon.

Of the three destinations it appears that Charters Towers is most successful at having visitors stay for multiple nights, with 6.5% staying 5 or more nights, compared with only 3% for the other two destinations. This phenomenon is possibly a function of location as well as the range of attractions.

Figure 3 - Number of Nights Stayed
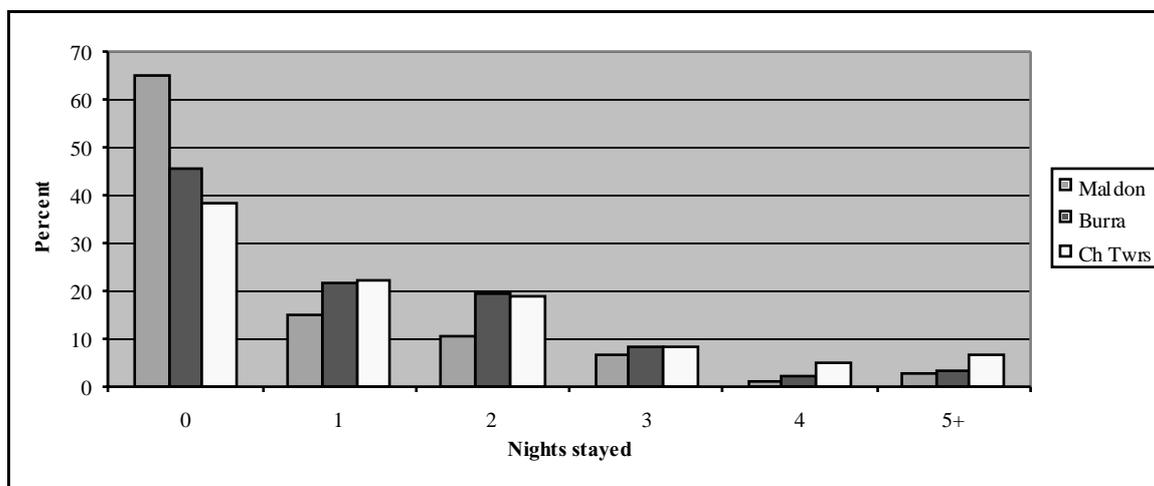
Table 5 - Types of Accommodation Used

Accommodation	Percent		
	Maldon	**Burra**	**Charters Towers**
Caravan Park	25	23	40
Friends/relatives	22	14	24
Hotel/Motel	19	22	28
Guest House	16	na	na
Other	13	5	2
Serviced Apartment	2	na	na
B & B	na	15	5
Farm Stay	2	1	na

The caravan park is clearly a very popular form of accommodation for this tourism activity, particularly for Charters Towers. Staying with friends and relatives is least used in Burra. Table 6 summarises the main reason for visit in each case. The heritage attractions were the main single reason for Maldon and Burra, but having a holiday was the main reason for Charters Towers. Education was an important component of the 'other' category for Burra (10%), but not for the other two. Caution should be exercised with this finding, as it may be a case of sampling variability.

Heritage Issues

A key aspect of this study is the interest that visitors have in various attributes of cultural heritage. In particular, there is interest in knowing whether visitors' preference is for information, entertainment, authenticity, and education. In advance of the study, there was an expectation that visitors may also be interested in destinations where children's entertainment is available. Of course it is worth noting that since these destinations are not Disneyfied, there may be an element of self selection in that visitors who have a need for children's entertainment are more likely to be found at other destinations that have such facilities.

Table 6 - Reason for Visit

Reason for Visit	Percent		
	Maldon	**Burra**	**Charters Towers**
To see heritage sites	28	26	22
Holidays	9	17	30
Short break	27	10	3
Visit friends/relatives	12	12	14
Side trip	na	na	14
Other	24	37	18

Table 7 - Important Attributes in Heritage Mining Areas

Attribute	Score		
	Maldon	**Burra**	**Charters Towers**
Having children's entertainment available	2.74	3.22	2.96
Helping my children learn more about Australia	3.06	3.89	3.52
Having a guide explain things	3.32	3.78	3.71
Learning about the history of mining	3.47	3.94	3.86
Having interpretive information available	3.90	4.34	4.28
Being able to interact with exhibits	3.97	3.99	4.06
Learning about what life was like back then	4.17	4.54	4.37
Learning more about Australia's past	4.22	4.62	4.42
Learning more about Australia's heritage	4.24	4.48	4.42
Experiencing a different environment	4.34	4.40	4.43
Seeing an aspect of Australia's heritage	4.49	4.45	4.52
Seeing well preserved old buildings	4.61	4.61	4.59

In Table 7 the mean score for each attribute in each destination is shown. The attributes were ranked on a scale of 1 to 5, where 5 was 'very important' and 1 is 'not at all important'. The patterns are very similar in each destination with "seeing" attributes being more important than 'learning' attributes. There is clearly not a strong demand for children's entertainment, nor for having a guide. While there is some emphasis on interaction, it is less important than seeing and learning. The evidence from Table 7 is that cultural heritage is equated with "preserved old buildings". That is it is seen as a tangible thing rather than an intellectual or abstract concept such as lifestyle, commercial organisation, or social behaviour. Again there may be a case of self-selection at work in that the chosen places for the study all feature strong themes of well preserved buildings and streetscapes rather than themes of lifestyle or social and commercial behaviour[xxxi].

The pattern of "likes", shown in Table 8, is similar at all three destinations. Good information, good amenities, and friendliness are clearly important and rank above cafes, crafts, and a developed attraction. Authenticity is very popular among Maldon and Burra visitors, but less so with visitors to Charters Towers.

[xxxi] It is also not a simple function of the type of information provided to tourists, for all three places have literature and information on the nature of life

The pattern of "dislikes" is shown in Table 9. It does appear as if Maldon and Burra visitors had little to complain about from visits to other heritage places, with their biggest complaint being too much commercialisation. Charters Towers visitors were more concerned that they had elsewhere experienced an unfriendly welcome and/or inadequate information.

It would be dangerous to draw too many conclusions about general tourism and places of cultural heritage significance form this information, because of the fact that all three samples were drawn from people who were already displaying an interest in this form of tourism by virtue of the place they were visiting. However, good information and good amenities appear to be desirable characteristics of a successful tourism destination based upon cultural heritage attractions.

Since the provision of information is a keenly felt issue with visitors, it is of interest to observe the pattern of ratings of information types shown in Table 10. It seems clear that people would find brief summaries of a place's heritage attractions more useful than a star ratings system, or a designated list such as a national register. This is common to all three locations.

and work for the miners and their families in the 1800's.

Table 8 - What Visitors Liked at Other Heritage Places

Attribute	Percent		
	Maldon	Burra	Charters Towers
Friendly welcome	54	64	64
Good information	64	68	59
Good visitor amenities	69	63	56
An authentic experience	68	64	52
Well developed attraction	40	53	44
Peaceful surroundings	58	51	40
Nice cafes	51	37	35
Shopping for crafts	38	26	29

Table 9 - What Visitors Disliked at Other Heritage Places

Attribute	Percent		
	Maldon	Burra	Charters Towers
Unfriendly welcome	16	12	64
Inadequate information	27	20	59
Poor visitor amenities	39	22	56
Not an authentic experience	21	18	52
Poorly developed attraction	14	18	44
Overly commercial	61	47	40
No cafes	13	10	35
Too crowded	48	31	29

Table 10 - Ratings of Useful Information Types

Information Type	Percent		
	Maldon	Burra	Charters Towers
Brief summaries of each location's offerings	90.6	84.7	77.0
Designated list of Australian National Heritage Places	74.1	53.6	67.5
Indication of how much time should be	50.0	52.1	36.3

spent			
A heritage ratings system (4 stars etc)	46.8	29.5	36.6
Availability of a trained guide	31.8	37.2	42.3
Other	11.1	6.9	8.1

The question of who should pay for the preservation of cultural tourism assets was framed in terms of different options. This question is topical because of the perception that Governments may not be willing to pay and that other funding options may be necessary. The responses to funding options are shown in Figure 4. The options were:

Option 1	A well maintained area, good signage and other information, a $10 per year heritage tax, minimal commercialisation.
Option 2	A well maintained area, good signage and other information, no heritage tax, substantial commercialisation.
Option 3	Area in gentle decay, minimal information, no heritage tax, no commercialisation.
Option 4	Area in gentle decay, good signage and other information, a $10 per year heritage tax, no commercialisation.

Figure 4 - Popularity of Funding
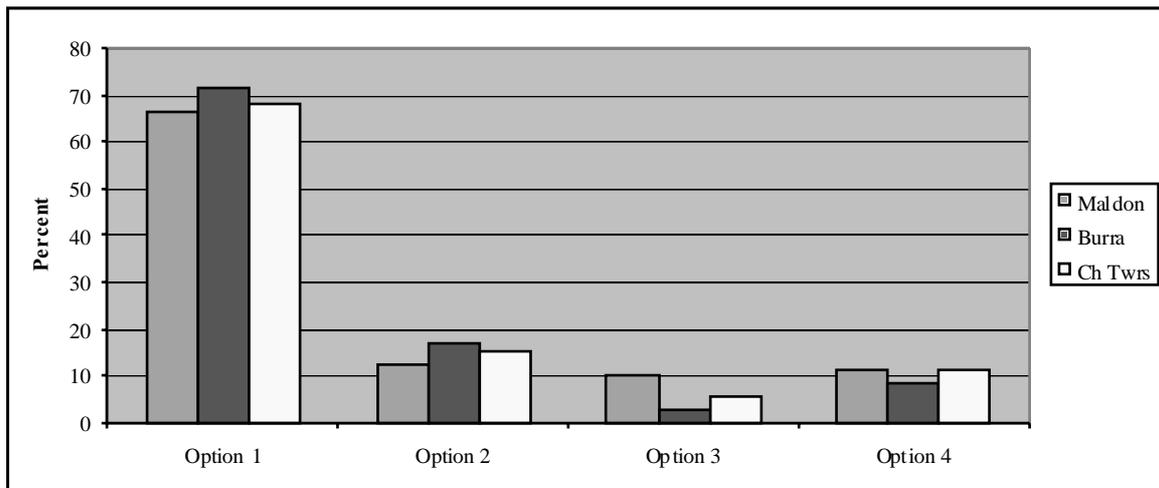
It is clear that the target group displays a strong preference for option 1, in which the area is well maintained, with good information, minimal commercialisation, and preservation paid for by the taxpayer. However, this is not to say that the taxpayer in general would be of the same view.

Nor is this a test of the "feral" option, in which the area is allowed to go into gentle decay, because none of the places surveyed were of this type. All of the surveyed towns have well preserved heritage assets, and good visitor centres with free information. The survey respondents would have most likely been people who were attracted to that type of place, rather than to a decaying place, or to a highly commercial place.

Visitor Satisfaction

All three destinations were accorded very high ratings in the survey in terms of overall visitor satisfaction. This is shown in Figure 5. Clearly visitors to each of the study destinations are going home contented with their stay, and as such should be valuable ambassadors for the towns.More detail is available on aspects of visitor satisfaction by

comparing the survey responses to various attributes. This is shown in Table 11, where satisfaction is ranked on a 5-point scale with a score of 1 indicating very poor, a score of 5 indicating very good, and a score of 3 indicating average. There is very little difference between the scores, and in most cases it is not sufficient to be statistically significant.

The worst rated aspect is signage within Charters Towers with a score of 3.63 which is just above average. This is not a poor enough rating to be of major concern by itself, but it tends to be noticeable amongst all of the highly rated aspects of Charters Towers.

While the measurement of visitor satisfaction is a developing area in tourism research, it does seem from Table 11 that the three study towns have little to worry about on the attributes selected. A fuller study of this issue would need to use focus groups to develop a more comprehensive list of attributes, and then use a survey instrument specifically designed for the measurement of satisfaction.

Figure 5 – Overall Satisfaction
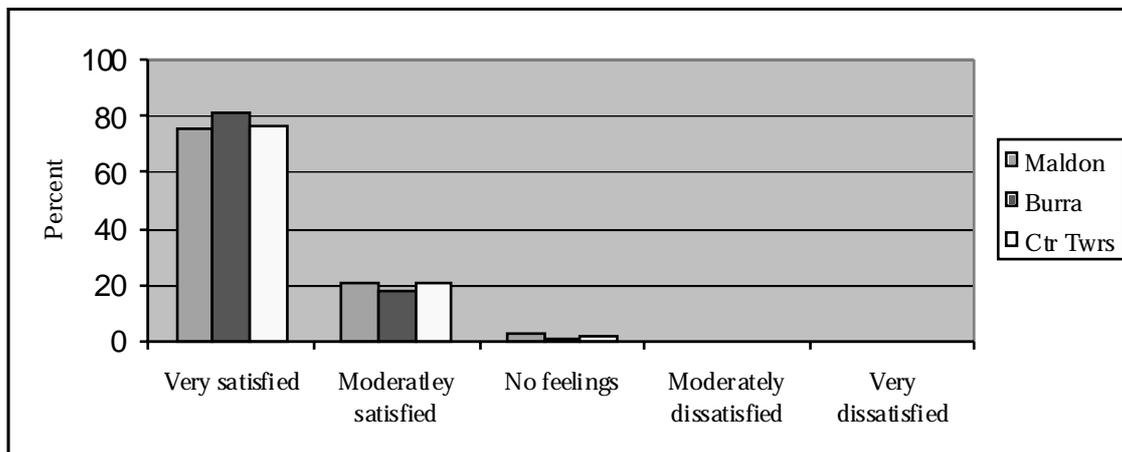
Table 11 - Visitor Satisfaction Ratings

Attribute	Score		
	Maldon	**Burra**	**Charters Towers**
Maintenance of the attractions	4.2	4.28	4.44
Signage within the area	3.9	4.30	3.63
Signposting to the area	4.1	4.28	3.96
Access to places of interest	4.3	4.41	4.27
Authenticity of places of interest	4.4	4.54	4.50
Historical information available	4.2	4.51	4.42
Interest value in places accessible	4.4	4.58	4.41
Parking availability	4.4	4.73	4.22

Visitor Expenditure and Economic Impact

Mean expenditure per person is shown in Table 12. The differences in the overall or total means are partly due to the differences in the proportions of daytrippers at each location, since daytrippers do not spend on accommodation. Hence Maldon, which has a high proportion of daytrippers, has as a consequence a lower overall average spend. The economic impact of cultural heritage tourism on Maldon could be increased if some daytrippers could be encouraged to spend one overnight stay.

Table 12 - Mean Expenditure per Person $

	Maldon	Burra	Charters Towers
Daytrippers	48.17	45.99	59.83
Package tourists	148.30	120.36	127.02
Overnight stayers	194.30	177.91	233.40
TOTAL	**99.4**	**113.94**	**164.92**

All categories of expenditure for Charters Towers are higher than for the other two locations, an outcome that may be a feature of higher prices at Charters Towers because of the distance factor. By the same token, overnight stayers spend less per person in Burra than the other locations, possibly a reflection of South Australia's famous low prices.

Further insights into the expenditure behaviour of visitors are given in Table 13, which shows the allocation of aggregate expenditure across categories. It should be born in mind that these figures are a function of both the distribution of visitors across the three categories of Daytripper, Package Tourists, and Overnight Stayers, the real expenditure behaviour of visitors in each

place, and the costs of goods and services in   each place.

Table 13 - Mean Expenditure on Each Category $

	Maldon	Burra	Charters Towers
Accommodation	20.76	31.09	32.86
Meals, beverages	28.56	29.74	36.73
Transport	10.64	18.80	38.81
Site entry	4.36	6.24	7.36
Other entertainment	0.76	2.64	7.61
Shopping	32.76	24.40	37.75
Other	1.56	1.02	3.79
TOTAL	**$102.06**	**$125.44**	**$164.92**

The high expenditure on transport in Charters Towers stands out as an interesting feature of the data in Table 13. In all three places there is a significant proportion of expenditure on shopping, illustrating the importance of tourism to the retail sector in general.

The aggregate economic impact of tourism in each of the three locations on each region was estimated on an annual basis using the most recent visitation figures for a full year. The economic impact depends upon the mean expenditure per visitor, the total number of visitors in a year, and the economic structure of each region.

The latter was accounted for in each case using regional input output models and their associated multipliers for Gross Regional product (GRP), and employment. GRP is the regional equivalent of the national income measure Gross Domestic Product. In each case there is a high leakage of economic impact from the local region on account of the goods and services that are produced in other regions. The economic impacts shown in Table 14 refer to the wider economic regions in which each of the towns are located, not to the towns themselves.

Table 14 - Economic Impact of Tourism

	Maldon	Burra	Charters Towers
Annual visitor numbers	41,868	34,040	17,065
Aggregate expenditure $	4,272,981	4,269,814	2,814,391
GRP impact $	3,820,880	4,587,942	2,009,782
Employment impact (jobs)	310	316	40

The available economic models are not capable of telling us what the economic impact of tourism is on the host towns themselves. The above impacts refer to quite large geographical regions, which are defined by the Australian Bureau of Statistics as Statistical Divisions.

With its smaller aggregate number of visitors, Charters Towers has the lowest total expenditure, even though expenditure per person is high in Charters Towers. Clearly the tourism strategy for Charters Towers is to attract more visitors.

In all regions except Burra, the leakage of activity caused by goods and services supplied by other regions means that the impact on regional incomes (GRP) is less than the visitor expenditure. In other words the tourism economic multiplier is effectively less than one. This is a common outcome, even at the State level, and sometimes at the National level.

Nevertheless, the $4 million or so of economic impact from tourism to Maldon and Burra is clearly significant in the context of regional economic development. In each case the impact is worth about 0.05% of the total economic activity of the region. More significantly perhaps is the potential for this flow of money to provide a source of funds to pay for the preservation of the heritage assets. The challenge is for local tourism and National Trust managers to cooperatively find ways of tapping into this revenue source[xxxii].

Summary and Conclusions

This study has provided some benchmark data on the value of tourism at regional locations possessing heritage attractions. The locations were all part of the history of Australia's mining development of the 1800's and in each case the legacy of the mining boom has been assets, mostly buildings and

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[xxxii] The Burra Passport has been used in Burra for many years as a way of both giving valued information to visitors and of earning revenue for the National Trust. It is sold at the Burra Visitor Centre for $10 per person and provides visitors with a key to various heritage attractions as
well as interpretive information.

other historical constructions of interest to visitors.

Visitors to such locations have shown clear preferences for well maintained attractions with good amenities and information. The most valuable information to them is in the form of brief summaries of the offerings at each location.

Most visitors are over 40 years of age, and reside within the same State as the attraction being visited. There is a slight predominance of females over males in the visitors. The most popular form of accommodation was the caravan park. The most popular reason for the trip was to see the heritage sites in Maldon and Burra. In Charters Towers it was "holidays", with seeing the heritage sites a close second. Visitors were more likely to go for a country drive or to a restaurant than on an overseas trip or to a concert.

Survey results suggest there was an aversion to too much commercialisation. There was a clearly expressed interest in authenticity, but without guides or interaction–people wanted to be able to 'do their own thing'. Seeing things was more important than learning about them, and there was more interest in tangible things like buildings than in cerebral things such as the nature of society in 1850 Australia. This suggests that the demand is more for heritage than it is for culture, although a more sophisticated study would be needed before these could be separated.

In each of our study towns the visitors injected millions of dollars into the local economies, an impact more keenly felt and appreciated in the towns than in their broader region. The study has been able to identify strategies in each town for increasing the economic impact. For Maldon this was to convert daytrippers into overnight stayers, for Burra to raise the daily visitor spend, and for Charters Towers it was simply to increase the numbers of visitors.

While brief summaries were the most highly sought information type, there was a significantly strong demand for National Listing of places of cultural heritage significance, with between 53% (Burra) and 74% (Maldon) voting for this as a form of information. While there is a dearth of

published research on the question of the impacts of National Listing, it does appear from our surveys that this would be a highly desirable form of information for people when planning trips to locations of cultural heritage significance. Further research is needed before this effect could be quantified.

Recommendations

This study has only scratched the surface of the subject of tourism to places of cultural heritage significance. It is recommended that similar studies to this be carried out at locations where agricultural development was the historical source of economic growth. Comparisons can then be made between mining locations and agricultural locations.

It is also recommended that research be carried out on the economic impact of such tourism on the smaller scale towns, as opposed to the broader Statistical Divisions that have been necessarily the geographical region of economic impact in this study. More sophisticated testing of visitor satisfaction and motivation is also recommended.

The results of this study do suggest three activities for enhancing the regional economic impact of cultural heritage tourism:

- Provide brief summaries of each location's offerings,
- Consider establishing a National List of places of cultural heritage significance,
- Work with the tourism industry to encourage more overnight stays in cultural heritage locations.

References

Australian Heritage Commission (1999) *Draft Heritage Tourism Guidelines*, Australian Heritage Commission and Tourism Council Australia.

McDonald and Wicks (1986) "The regional economic impact of tourism and recreation in national parks" *Environment and Planning*.

Pearson, Leonie, Iean Russell and Keith Woodford (2000) *Economic Impact of Noosa National Park on the Sunshine Coast and Noosa Economies*, School of Natural and Rural Systems Management, Occasional Paper Volume 7, Number 1, University of Queensland.

The Loss of Regional Heritage and the Development of Regional Heritage Tourism in Western Countries: a Re-occurring Paradox?

Professor R.W. Butler, School of Management Studies, University of Surrey, Guildford, U.K.

Abstract

It is paradoxical that during a period in which the rural heritage and landscape of many western countries is changing radically and even disappearing, tourism based on perceptions of that heritage has grown tremendously. The paper briefly examines these changes in the rural landscape and the replacement of many traditional activities and lifestyles with activities associated with leisure and tourism. While many of these activities were thought to be compatible with the traditional rural milieu and what was perceived to be the rural idyll, in reality tourism and leisure have themselves caused significant change in rural ares. The most recent forms of tourism and leisure activities practised in may rural areas in western countries have little in common with anything rural beyond the location. The paper explores some of the issues and difficulties posed by this pattern of development, and reflects on the likely implications for the future. Some specific research and policy implications are suggested in conclusion.

Introduction

The rural (regional) landscape of most western countries has changed greatly over the past century, and the rate of change has been particularly rapid through the last five decades of the twentieth century (see for example, Bowler, Bryant and Nellis, 1992; Butler, Hall and Jenkins 1998; and Ilbery, 1998). The literature on rural change is abundant and will not be reviewed here, as the focus in this presentation is on the relationship between rural heritage and rural tourism. Two particularly good summaries of the economic and social changes in rural areas in western countries are found in the chapters by Marsden and Phillips in Ilbery, 1998). While the traditional activities of rural areas have declined in both relative and absolute importance in terms of economics and employment, activities related to leisure and its associated elements of tourism and recreation have increased in significance in many areas, and have now become one of, or the major economic element in a large number of regions. The forms of recreation and tourism that have developed are, in many cases, based on traditional images and functions of rural areas despite the fact that these traditional elements are rapidly disappearing. This is a major paradox, that is at the focus of this paper. The perceived images and mythologies of the rural idyll are becoming established more strongly in the mind of the leisure users of rural areas at a time when they are becoming more and more divorced from the realities of rural life in most western countries. While tourism, as an industry and as an activity, is often based on fictional representations of locations and activities, illustrated best perhaps by the large theme parks such as those of the Disney Corporation, the major promotional aspect of rural tourism and recreation until recently has been that of reality, the opportunity to experience a lifestyle of the past and to enjoy a nostalgic experience in a "real" setting. As will be discussed below, in the last couple of decades even that perception has changed. The rapid redevelopment and re-focusing or re-imaging of rural areas has resulted in new and often problematic activities appearing in rural areas that are not always compatible with either traditional rural activities and lifestyles, or what had become traditional rural tourism and recreation activities. This dynamic situation is made more complicated by the fact that the economic structures that have existed in rural areas do not easily fit these new forms of activity, and the labour force and skills that exist in rural areas are not easily adjusted to the demands of tourism and recreation in the 21st century.

The use of rural areas for first leisure and over the past century or so, tourism, has been a common practise in most western countries, although urban residents have traditionally engaged in much of the leisure activity in rural areas. For centuries the

urban elite, however defined, have viewed and used rural areas as their pleasuring grounds, while for an equal length of time most rural residents have sought their leisure in urban places including village or town churches, taverns and other places of entertainment. This second paradox notwithstanding, much of the population of most, if not all, developed countries have tended to view rural areas as an attractive temporary setting for many forms of leisure and more lately, tourism. The temporary aspect of this use is an important consideration, as most of the population of these countries live in non-rural areas and can only utilise these locations during periods of leisure time. Much of many visitors' first hand experience of rural areas is from inside a car or other means of transport, although some may spend longer periods of time in rural areas, and even eventually live there (Butler, 1984).

As urban areas grew rapidly in the nineteenth century during the industrial revolution, gaining access to rural areas became more difficult for many people, and the concept of bringing the countryside into the town in the form of large urban parks gained favour. Once access was provided to rural areas, first by rail (and in some locations by boat), and then by car, however, leisure and tourism use of rural areas began to increase rapidly. In the New World, the pattern was similar to that in the Old, but with some significant differences (Wall and Marsh 1982). In areas such as Canada and Australia, with no history of extensive permanent agricultural settlement and land use, the non-urban areas took on a different significance and meaning. (This aspect will not be dealt with in any detail here as it is a topic to be discussed in other papers.) Initially these areas were 'terra incognito', peopled by 'savages' and strange mammals, relatively, sometimes absolutely, inaccessible, and certainly not conducive for pleasant bucolic leisure. As clearance and agricultural development took place, these areas became both a working landscape and a buffer zone between the wilderness, the outback or the bush, and the urban centres. The settled agricultural lands were not viewed as leisure landscapes, and, it will be argued, have never been viewed as such until relatively recently. Only over the last few decades or so have rural areas begun to be attractive in themselves for leisure activities for large numbers of people.

This paper will review the changes that have occurred in recent years and will then discuss the problems and conflicts that have emerged as a result of the use of rural areas for tourism and recreation in western countries. It concludes with a discussion of the problems posed by attempting to integrate tourism into the rural landscape in the absence of knowledge about the phenomenon and its effects. It is necessary as a preamble however, to discuss briefly the conceptual background and definitions of tourism and other forms of leisure in rural areas.

Defintions And Terminology

The terms leisure, recreation and tourism are sometimes incorrectly treated as synonymous. Leisure is often accepted as being a state of mind, of freedom from obligations, and put in the context of time. Recreation can be taken as activity or inactivity engaged in on a voluntary basis during leisure time for the purpose of pleasure. Tourism is a form of recreation but involves travel, and definitions often include a minimum time spent and/or distance travelled. The difference between recreation and tourism may appear a matter of degree, and indeed at times it may be difficult to separate one from the other (Butler 1999). The actual activity engaged in may be identical, the only difference between a hunter who is a tourist and one who is a recreationist may be the length of time spent in the area or from how far away they have come. To a dead animal the difference may not be significant. However, to researchers the difference can be more important, involving aspects such as motivation (Pearce, 1988), behaviour (Pearce, 1982), and spending and travel patterns (Wall, 1989). The emphasis in this paper will be on tourism rather than leisure or recreation, which reflects the recent trend in several countries to promote rural tourism as distinct from leisure or recreation in rural areas. Rural areas in this context will be taken to be settled areas beyond the limits of urban developments, and, in effect, rural areas approximate closely agricultural lands, past and present. It is recognised that in the Australian context tourism in such areas has become designated as 'regional tourism' but in a

global context this is a phrase that is misleading and in this paper the terms rural and countryside will be used instead.

Conceptual Development

The literature on rural tourism is still relatively sparse and conceptual models and theories lacking. Despite the unsatisfactory nature of much of the review and content of Owen's evaluation of 'Rural leisure and recreation research' (1984), his conclusion on the absence of theoretical work still stands. Many of the references in the earlier rural tourism literature are case studies with little theoretical foundation (Chon and Evans, 1989; Hermans, 1981; Kousis, 1989; Perdue et al., 1987) or focus on specific problems (Gartner, 1987; Gilbert, 1989). Some take a broader perspective, focusing on issues and process (Chow, 1980; Middleton, 1982) for example, but very few attempt as wide an examination as Bouquet and Winter (1987). Even in such a case, theory and concepts are not the main focus, but rather implied through a collection of separate papers. There is, therefore, a lack of theory and models placing rural tourism in a conceptual framework. Gilbert (1989, 40) does provide a definition of rural tourism development as a concept that 'encompasses the connotation of achieving an improvement in both the welfare of the community and the environment of the rural area', but takes this aspect no further. Smith (1978) in a classification of types of tourism placed aspects of tourism in rural areas under 'Cultural Tourism' 'To visit and have links with rural societies', but again, this aspect was not pursued. Pearce (1988) also places another aspect of tourism in rural areas, farm tourism, within the general category of Cultural Tourism, and although he does not elaborate on that decision, he does present some interesting conceptual discussion on tourist behaviour and interaction with hosts.

It is necessary to conclude perhaps, that rural (regional) tourism is best viewed at this time as one aspect of tourism, with little deep theoretical significance. As Wall (1989) notes tourism is often defined on the basis of the consumers, ie, it is what tourists do, rather than on the basis of its products, as is more common for most industries. In the case of rural tourism, it is further defined in terms of where the activity occurs, namely in rural (or regional) areas, as compared, for example, to

urban tourism. Unfortunately such a definition says nothing about motivations, behaviour, effects, requirements or relationships, or how it compares to other elements of tourism, recreation and leisure. Some of these items will become more explicit as the phenomenon is examined.

The Evolution Of Tourism In Rural Areas

Leisure in rural areas, for the local population was closely related to the social elements of life, namely, births, marriages and deaths; to rural activities in the form of bees and fairs in particular; and to the church in the form of religious camps and revival meetings (Armitage 1977; Wolfe 1962). Non-rural residents made use of rural areas for day activities such as hunting, fishing, swimming, riding and picnicking, but few stayed in rural areas as tourists. There were some early travellers, normally driven by curiosity to see rural life, but their rural sojourns did not attract great attention. Perhaps the major aspect of change in the use of rural areas in the context of leisure and tourism is that it is only in recent decades that the rural (as opposed to non-urban) characteristics of these areas become of real significance to the use of such areas for tourism and recreation.

The idea of specifically developing tourism and recreation in rural areas was recognised at various times by different levels of government, especially after the Second World War, when such activities were being promoted as agents of economic development. However, the specific tourist attractions were rarely seen as integrated into the rural setting or related in any way to other forms of rural life. The 1970s saw a resurgence in interest by the public sector in stimulating rural tourism and recreation. While legitimate concerns were raised over the likely impacts of large scale urban pressures on rural areas, some of the conclusions, for example that expected improvements in urban areas would reduce demand, were less realistic (Chou, 1975). Many of the countries becoming involved in providing opportunities for tourism and recreation in rural areas were doing so without well-founded policies or programs.

Graham (1975) and Balmer and Crapo 1975, for example, made good critiques of the absence of clear policies relating to tourism and recreation in rural areas in Canada. The latter note that 'The lack of a clearly defined national policy regarding leisure, recreation and tourism has necessitated the development of independent policies by the individual federal departments' (p. 6) and point out that 'the existence of such a policy void is not a new discovery' (p. 6). Graham echoes this sentiment with respect to the provincial level when he notes 'There is no formula for the role or place of tourism and recreation in rural areas' (1975, p. 28) and that there was 'a formidable and confusing maze' (p. ii) of delivery systems.

In the 1980s rural areas in many countries began to receive vastly increased numbers of visitors, some en route to other destinations, some beginning to utilise rural areas either on day outings or while at cottages and resorts. Two major concerns arose from this increased pressure. One was the loss or alienation of land, especially waterfront property from the traditional agricultural sector to non-residents, in some cases out-of-country tourists, an issue of particular concern in some European Union countries. The second major concern was with abuse of rural property in the form of trespass and problems of landowner liability (Butler and Troughton, 1985). Rural property owners in many areas have experienced problems of trespass, disturbance and vandalism because of increased recreational and tourism use of rural areas.

In recent years there has been little attention paid at the federal level to tourism in rural areas. In 1990 the Federal Government published the first tourism policy for Canada (Tourism Canada, 1990), entitled Tourism on the Threshold. It identified Canada's 'four distinct tourism experiences' - touring, outdoor adventure, city experience and resorts - (p. 16-17) and a Federal Tourism Agenda for the 1990s (p. 31). Nowhere in the document was there a reference to rural Canada as an entity, nor a reference to rural tourism. While the policy did recognise, albeit briefly, the need to retain the integrity of environmental and cultural resources and encourage operations along the principles of Sustainable Development (p. 26), it essentially argued for promotion of what Canada currently offers to the international market. The only factor likely to cause a change in policy in favour of rural tourism is one of politics, namely, if the development of tourism in rural areas should be seen as an effective economic stimulus for areas facing economic problems, and be viewed as widely attractive by rural residents.

Urban residents have often tended to assume that much of the non-urban landscape is essentially 'empty', and that there isn't really anyone there. This allows them to assume that they may use such areas for their own purposes, which often seem to include garbage disposal, nuclear power production and waste disposal, senior citizen retirement homes, and most recently, leisure. If they use leisure facilities in rural areas these tend to be viewed as 'islands', and this mentality is not confined to the users only. Major efforts have been made to protect and preserve the environment within parks and conservation areas, but much less effort is made to protect or even maintain the environment (in the broad sense) outside the boundaries of these areas. The private second home, holiday residence or cottage is often zealously but individually guarded and protected, but the use associated with it may, and often does, have negative effects on the surrounding area. The absence of a clear understanding of tourism itself by many decision makers, elected officials and entrepreneurs has meant it has often been encouraged and supported in ignorance of its likely effects.

Rural Heritage And Rural Tourism

The rural heritage of most western countries has been inextricably linked to agriculture and agricultural pursuits. Grufudd (1994:247) notes that "the promotion of the rural is as much to do with the transmission of 'enduring values' as with narrow environmental concerns, values which remain heavily promoted in the tourist and industrial place marketing". He goes on to argue that the origins of such values and the myths associated with them go back two centuries or more in western Europe, to the Picturesque and Romantic movements in art and literature. The combination of poetry such as that of Wordsworth and the other 'Lake poets' (Coleridge and Southey in particular), and the pastoral scenes of Constable and

others did much to anchor in many peoples' minds a strong if not necessarily accurate image of rural areas, particularly in England. Dewailly (1998) has shown clearly that not all of these images were authentic or correct, but they were strong images and their influence can still be seen clearly today. The overall rural image, the bucolic myth or rural idyll, however we may term it, is a powerful marketing tool. It represents a unique blend of nostalgia, heritage, nature, wholesomeness and 'traditional values' (Butler, Hall and Jenkins 1998) which is still popular, not only on calendars and Christmas Cards, but also for selling clothing, property, equipment.

There has been a major shift in the appreciation of rural areas as a setting for leisure and tourism in post-war years, however. The rejuvenation of resorts, the revitalisation and 'boutiquification' of rural communities (Hinch and Butler, 1988) the rise of environmental concerns and related desires for fresh and organic products, and the trend to shorter and more frequent vacations among other factors have piqued interest in rural areas as tourist destinations in their own right. This trend may not be long term, indeed, given the propensity of modern tourists and recreationists to change preferences and habits frequently and rapidly it is highly unlikely to be a permanent shift in focus, but in the short term at least, is likely to have increased impacts upon rural areas.

Hopkins (1998) has presented an articulate brief review and illustration of the commodifying of the countryside and marketing of the myths of rurality for leisure and tourism. The images used, the products produced and sold all relate to nostalgia and past perceptions of rural areas and rural lifestyle, or the 'rural idyll'. As he discusses, not all of these images are correct, and a considerable number of them owe more to a long lost British rural heritage than to a New World countryside setting in the 21st century. Similar comments are made by Janiskee and Drews in discussing the role and use of rural festivals in creating and maintaining the image or rural areas, where increasing significance has been placed on serving the needs of visitors to the areas, often at the expense of 'authenticity' in the festivals being held. Butler and Smale (1993) noted the large number of festivals in rural areas which had developed in Canada and the fact that the themes of many of these, along with the regularity of timing

owed more to market research than historical fact.

The rural heritage of many areas which is being celebrated and 'preserved' at the present time does not date back to the pre-industrial revolution period, but barely to the nineteenth century. Many of the symbols and imagery stem from the post-enclosure period and were reinforced during the industrial revolution (Butler and Hall 1998) and depict a rosy and contented image of rural life and heritage. Such imagery ignores much of the hardship such as poverty and displacement which occurred in that period, and evokes comparisons with the 'noble savage' image of North American and other Indigenous peoples which was often used to help justify the establishment of areas such as national parks and reserves (Butler and Boyd 2000).

Much of the rural heritage that is upheld today owes much to the media, not just the literary and artistic forms of the late eighteenth and nineteenth century, although a great deal originates there, but to the television and film media of the 20th century and advertising in general. Television programs such as *All Creatures Great and Small* chronicling the stories of a rural veterinarian or *Heartbeat,* which succeeds in not only capitalising on rural imagery but also 1950s and 60s nostalgia also, are typical of programs which have generated considerable interest in rural areas and created a specific type of rural tourism, namely to see rural places in the visual media. At the same time, rural heritage is used in advertising to sell everything from cars (especially off-road vehicles) to food, some of which might have had only brief contact with rural areas, and from air fresheners to clothing, with the implications, often incorrectly, that country areas smell nice and last for ever. These somewhat cynical comments serve a useful purpose, namely to re-emphasise that the rural image that is often portrayed in the media, including the tourism promotion media, is neither necessarily historically or currently accurate, but like most advertising, is selective and in some cases, newly created. (An enterprising rural house builder in Ontario in the 1990s advertised his

developments as 'Tomorrow's heritage available today').

Irrespective of the accuracy and merits of the rural heritage that is being used to promote rural areas and rural tourism, the fact remains that it works. In many western countries the divorce from rural areas still appears to represent a divorce from one's roots, and the city somewhere that one has to go to work, but a place that lacks the virtues and nostalgic advantages of rural areas. (This is a theme common to many country and western songs, where the urban setting and people are normally dangerous, dishonest and lacking the virtues of good ol' country folk and country communities.) The paradox referred to earlier, however, is that much of the recent tourism development in rural areas really has little to do with either the real or imagined rural heritage, and this point is explored below.

The Changing Nature of Tourism and Recreation in Rural Areas

The final comment in the previous section highlights a major problem facing many rural areas in western countries, and that is that as agricultural and other 'traditional' activities decline or change significantly, so in reality does much of the justification for 'traditional' rural tourism. By this is meant tourism which is based on the old image of rural areas, farming, particularly mixed farming, which produces a varied landscape with non only farm animals but wildlife and vegetation, rather than a monoculture of cereals or other crops, in a landscape devoid of unproductive vegetation or 'pests'. Increasingly 'pests' has come to include most visitors, whereas in past times a low number of casual visitors were regarded positively by many rural residents (with the common exception large estate owners and managers). The supposed hospital image of rural residents, the quaintness of their lifestyle and the difference in culture and appearance of communities have all begun to disappear, even where they did exist.

Thus not surprisingly, a great deal of the rural tourism which has emerged in the last twenty years is of a different form. This has been discussed in more detail elsewhere (Butler 1998) and will be summarised only briefly here. The key factor is that the rural *location* or *setting* is what has become important to

much of this new tourism, rather than the heritage attributes or rurality of earlier times. The modern rural tourist is often in rural areas because they are not urban areas and thus a range of activities can be engaged in which cannot be undertaken in urban areas. The list of more traditional activities such as walking, visiting historic sites, fishing, and nature study still go on in rural areas and are related to the heritage, but new activities such as off-road vehicle use, endurance sports, paragliding and snowmobiling owe more to the geography of rural ares than the cultural heritage. In some cases they may conflict very directly with aspects of rural life and rural heritage and with the more traditional forms of rural tourism and leisure. The newer activities can also be characterised as differing in attributes to the more traditional forms, the latter being more passive, non-mechanical and non-competitive, with a reliance on rural attributes, while many of the former are highly active and competitive, rely on technology and for them the rural landscape and heritage is almost irrelevant.

Between these two extremes lie a third range of forms of rural tourism. These include activities such as wine and food tourism (Hall and Macionis 1998), festival and special events tourism, and special interest tourism in such traditional activities as food production, quilt making and other disappearing crafts. Many participants in these recent activities, however, rely on car transport and spend relatively little time in the countryside, per se. The contact is with points or specific attractions, or driving from destination to destination to purchase rural products, either literally or metaphorically. This latter group of activities, however, does have links with some aspects of rural heritage, even if, in some cases, they have resurrected or reconstituted the rural heritage in a new form in order to enjoy it.

Conclusions

It is essential that residents in rural areas, which are exposed to tourism, be made aware that tourism is more complex and problematic than is generally thought. There are crucial differences between expectations and realities of tourism in rural areas. Under the traditional

expectations little planning for tourism is done, assumptions are made as to its role and effects, and positive outcomes are expected. In reality tourism is a major economic force, the second largest industry in the world and one extremely difficult to plan and control. It has a wide variety of impacts seldom appreciated by decision-makers, and is capable and often guilty of changing, and sometimes destroying the environment, physical and human, which has been its rationale (Butler, 1990; Mathieson and Wall, 1982).

If expectations are not tempered with reality, frustration and disappointment can, and frequently do result. It is essential that if tourism is to be introduced to, or allowed to permeate an area, that it be planned for and integrated into the normal pattern of activity. This is perhaps obvious and easily stated, but rarely successfully achieved in the long term. Tourism is a dynamic, highly competitive and very fragmented industry, and notoriously difficult to control. The issue of capacity, or limits to the level of development, is crucial to the continuing survival and well being of destination areas (Hohol, 1984). While the concept of a fixed number of visitors is unrealistic there is little doubt that too much tourism can be more harmful and disruptive than too little.

Of almost equal importance is the nature of the tourism that is developed in rural areas. Some forms may be compatible with traditional activities, eg. farm vacations, but even in this case problems can arise between hosts and guests (Pearce, 1982, 1988), and scale is of particular significance. Other forms may be unrelated to traditional activities, eg. commercial development, theme parks, water parks or marinas, but able to exist as separate entities divorced from the traditional patterns of activities but providing tax revenue and employment, albeit at the cost of loss of land, increased visitation and service costs at least. The chances of conflict between tourism and other activities still remains high, to a large degree because of the lack of understanding of the complexity of tourism.

One crucial issue is that of control, and another is that of purpose. Control of tourism is critical, whether it rests with the local community or not may determine the integration or dominance of tourism in the area. That is not to say that local control will

necessarily result in appropriate tourism development, nor that local control may be permanent. The Costa Brava of Spain is a good example of local control which has resulted in major change in a rural area, with what is generally regarded as less than satisfactory results in the long term. However, if local control is absent or lost the chances of development not being compatible with local preferences and needs is much greater.

Purpose is also of considerable importance, ie, whether rural tourism development is seen as buttressing traditional rural communities and helping them survive, or whether it is seen as providing leisure and commercial opportunities for non-residents. A combination of both is clearly possible but requires integration, planning and management, factors that are frequently missing in the context of tourism development. Fundamental to the success of rural tourism in a symbiotic relationship with traditional rural activities is an appreciation of the nature of

tourism and the varying viewpoints of the actors involved. These viewpoints include not only the economic ones of entrepreneurs, residents and government and the pleasure viewpoint of tourists, but also more intangible viewpoints such as one of environmental concerns held by some residents and tourists, and many non governmental organisations, another of mental or spiritual concerns often held by ecclesiastical organisations and academics, and annoyance, often expressed by residents and tourists if reality does not match expectations. Some of these issues are well articulated by Mormont (1987) in his discussion of tourism and rural change. If tourism in rural area is to achieve a positive long term relationship with traditional elements in rural areas and move someway to be sustainable (Aronsson 1994: Augustin 1998), then much more careful study will be needed before development occurs, and procedures for integrating and controlling tourism put into place (Slee et al 1997: Stabler 1997). Encouraging tourism development in rural areas simply because it is economically feasible should not be acceptable if tourism is meant to do more than provide economic returns for mostly

non-rural entrepreneurs and leisure opportunities for the urban populations.

References

Armitage, J. 1977 *Man at Play* London: Frederick Warne

Aronsson, L 1994 *Sustainable tourism systems: The example of sustainable rural tourism in Sweden* in Bramwell, B., and Lane, B. eds 1994 *Rural Tourism and Sustainable Rural Development* Clevedon: Channel View Publications 77-92

Augustin, M. 1998, *National Strategies for Rural Tourism Development and Sustainability: The Polish Experience,* Journal of Sustainable Tourism 6 (3) 191-209

Balmer, Crapo, Associates, 1975, *Federal Programs Affecting the Development of Recreation and Tourism in Rural Areas,* Canadian Council on Rural Development, Ottawa.

Bowler, I.R., Bryant, C.R., and Nellis, M.D. 1992 *Contemporary Rural Systems in Transition, Volume 2, Economy and Society* Wallingford: CAB International

Bouquet, M. and Winter, M. 1987. *Who from their Labours Rest? Avebury,* Aldershot.

Bramwell, B., and Lane, B. eds 1994, *Rural Tourism and Sustainable Rural Development* Clevedon, Channel View Publications

Bunce, M.F. 1984. *The Shaping of Rural Canada.* In: Bunce, M.F. and Troughton, M.J. (eds.) *The Pressures of Change in Rural Canada,* York University Geographical Monograph No. 14, Downsview, Ontario, pp. 1-10.

Butler, R.W. 1978. *The impact of recreation on life styles of rural communities,* Wiener Geographische Schriften 51/52, pp. 187-201.

Butler, R.W. 1980. *The Concept of a Tourist Area Cycle of Evolution - implications for management of resources,* The Canadian Geographer 24(3), pp. 5-12.

Butler, R.W. 1984. *The Impact of Informal Recreation on Rural Canada.* In: Bunce, M.F. and Troughton, M.J. (eds.) *The Pressures of Change in Rural Canada,* York

University Geographical Monograph No. 14, Downsview, Ontario, pp. 216-241.

Butler, R.W., Hall, C.M., and Jenkins, J. eds 1998, *Tourism and Recreation in Rural Areas* Chichester, Wiley

Butler, R.W., Hall, C.M., and Jenkins, J.M. 1998 Introduction in Butler, R.W., Hall, C.M., and Jenkins, J.M. eds *Tourism and Recreation in Rural Areas* Chichester: Wiley 3-16

Butler, R. Rural Recreation and Tourism in Ilbury, B, ed, *The Geography of Rural Change* Harlow: Longman 211-232

Chon, K-S and Evans, M.R. 1989. *Tourism in a rural area - a coal mining-county experience,* Tourism Management Vol. 10, No. 4, pp. 315-321.

Chou, P.H.N. 1975. *Trend of Urban Demand for Tourism and Recreation in Rural Areas,* Canadian Council for Rural Development, Ottawa.

Chow, W.T. 1980. *Integrating Tourism with Rural Development,* Annals of Tourism Research Vol. VII, No. 4, pp. 584-607.

Countryside Commission. 1980. *The Public on the Farm.* Countryside Commission, Cheltenham.

Davidson, G. 1984. Current Issues in Rural Planning Policy. In: Bunce, M.F. and Troughton, M.J. (eds) *The Pressures of Change in Rural Canada,* York University Geographical Monograph No. 14, Downsview, Ontario, pp. 328-348.

Dewailly, J-M, 1998 *Images of heritage in rural areas* in Butler, R.W., Hall, C.M., and Jenkins, J.M. eds *Tourism and Recreation in Rural Areas,* Chichester: Wiley 123-139

Gartner, W.C. 1987, *Environmental Impacts of Recreational Home Developments,* Annals of Tourism Research Vol. 14, No. 1, pp. 38-57.

Gilbert, D. 1989, *Rural Tourism and Marketing, Tourism Management* Vol. 10, No. 1, pp. 39-50.

Gilg, A.W. 1978, *Countryside Planning,* Methuen, London.

Graham, W.W, 1975, *Provincial Programs Affecting the Development of*

Recreation and Tourism in Rural Areas, Laurentian Institute, Ottawa.

Grufudd, P. 1994, *Selling the countryside: representations of rural Britain* in J.R.Gold and S.V. Ward eds,Place Promotion: *The Use of Publicity and Marketing to Sell Towns and Regions,* Chichester: Wiley 247-263

Hall, C.M., and Lew, A.A. eds 1998 *Sustainable Tourism: A Geographical Perspective*, Harlow: Longman

Hall, C.M. and Macionis, N, *Wine tourism in Australia and New Zealand*, in Butler, R.W., Hall, C.M., and Jenkins, J.M. eds *Tourism and Recreation in Rural Areas,* Chichester: Wiley 197-224

Hermans, D. 1981. *The Encounter of Agriculture and Tourism - A Catalan Case*, Annals of Tourism Research Vol. VIII, No. 3, pp. 462-479.

Hinch, T. and Butler, R.W. 1988. *The rejuvenation of a tourism centre:* Port Stanley, Ontario, Ontario Geography 32, pp. 29-52.

Hohol, F. 1980, *Communities in Transition*, Elmira and St. Jacobs, Ontario. Unpublished Masters thesis, Wilfrid Laurier University, Waterloo.

Hopkins, J. 1998, *Commodifying the countryside: marketing myths of rurality,* in Butler, R.W., Hall, C.M., and Jenkins, J.M. eds *Tourism and Recreation in Rural Areas*, Chichester: Wiley

Janiskee R.L. and Drews, P.L 1998, *Rural Festivals and community reimaging,* in Butler, R.W., Hall, C.M., and Jenkins, J.M. eds*, Tourism and Recreation in Rural Areas,* Chichester: Wiley 157-176

Ilbery, B, *Dimensions of Rural Change in Ilbury*, B, ed, The Geography of Rural Change Harlow: Longman 1-10

Ironside, R.G. 1971, *Agricultural and Recreational Land Use in Canada: Potential for Conflict or Benefit?,* Canadian Journal of Agricultural Economics Vol. 19, No. 2, pp. 1-12.

Kousis, M. 1989, *Tourism and the Family in a Rural Cretan Community*, Annals of Tourism Research Vol. 16, No. 3, pp. 318-332.

Lee, A.G. and Kreutzwiser, R.D., 1980. *Landowner Attitude Toward Sport Fishing Access Along the Saugeen and Credit Rivers*, Department of Geography, University of Guelph, Guelph.

Marsden, T., *Economic Perspectives in Ilbury*, B, ed, *The Geography of Rural Change,* Harlow: Longman 13-30

Marsh, J. and Wall, G. 1982, *Recreational Land Use: Perspectives on its Evolution in Canada,* Carleton University, Ottawa.

Mathieson, A. and Wall, G. 1982, *Tourism - Economic, Social and Physical Impacts,* Longman, London.

Middleton, V.T.C. 1982. *Tourism in Rural Areas*, Tourism Management Vol. 3, No. 1, pp. 52-58.

Mormont, M. 1987. *Tourism and Rural Change: The Symbolic Impact*, In: Bouquet, M. and Winter, M. (eds.) *Who from their Labours Rest?* Avebury, Aldershot, pp. 35-44.

Nelson, J.G. and Butler, R.W. 1974. *Recreation and Environment* in: Manners, I. and Mikesell, M. (eds.) *Geographical Perspectives on Environment*, Association of American Geographers, Washington D.C., pp. 190-210.

Owens, P.L. 1984. Rural Leisure and Recreation Research: A Retrospective Evaluation, Progress in Human Geography 8(2) pp. 157-188.

Page, S. J. and Getz, D. eds 1997, *The Business of Rural Tourism: International Perspectives,* London: International Thomson Business Press.

Pearce, P.L. 1982, *The Social Psychology of Tourist Behaviour,* Pergamon Press, Oxford.

Pearce, P.L. 1988, *The Ulysses Factor* Springer Verlag, New York.

Perdue, R.R., Long, P.T. and Allen, L. 1987. *Rural Resident Tourism Perceptions and Attitudes*, Annals of Tourism Research Vol. 14, No. 4, pp. 420-429.

Phillips, M., *Social Perspectives in Ilbury*, B, ed, The Geography of Rural Change Harlow: Longman 31-54

Pigram, J.J. 1993, *Planning for tourism in rural areas: bridging the policy implementation gap,* in Pearce, D.G. and Butler, R.W. eds *Tourism Research: Critiques and Challenges,* London: Routledge 156-174

Slee, W., Farr, H., and Snowdon, P. 1997 *Sustainable Tourism and the Local Economy,* in Stabler, M.J., ed 1997*, Tourism and Sustainability: Principles to Practice.* Wallingford: CAB International 69-88

Smith, V. 1978, *Hosts and Guests: The Anthropology of Tourism.* Blackwell, Oxford.

Stabler, M.J., ed 1997 *Tourism and Sustainability: Principles to Practice,* Wallingford: CAB International

Swinnerton, G.S. 1982, *Recreation on Agricultural Land in Alberta,* Environment Council of Alberta, Edmonton.

Taylor, G.D. 1975, *Social Implications of Recreation and Tourism for Rural People,* Canadian Council for Rural Development, Ottawa.

Tourism Canada. 1990, *Tourism on the Threshold,* Ministry of Supply and Services, Ottawa.

Troughton, M.J. 1975, *Agriculture and the Countryside,* in: Troughton, M.J., Nelson, J.G. and Brown, S., *The Countryside in Ontario,* University of Western Ontario, London, pp. 45-77.

Troughton, M.J., Nelson, J.G. and Brown, S. 1975, *The Countryside in Ontario.* University of Western Ontario, London.

Wall, G. 1989, *Tourism in Ontario,* in: Mitchell, B. (ed.), *Ontario: Geographical Perspectives on Economy and Environment,* University of Waterloo, Waterloo.

Wall, G. 1989, *Outdoor Recreation in Canada,* Wiley, New York.

Weaver, D.B., 1997, *A regional framework for planning ecotourism in Saskatchewan,* The Canadian Geographer 41 (3) 281-293

Weaver, D. B., and Fennell, D. A. 1997, *The Vacation Farm Sector in Saskatchewan: A Profile of Operators,* Tourism Management 18: 357-365

Wolfe, R.I. 1977. *Second Homes Purpose Built for an Inessential Purpose,* in Cappock, J.T. (ed.), *Second Homes - Curse or Blessing,* Pergamon, London, pp. 184-211.

Wolfe, R.I. 1962, *The Summer Resorts of Ontario in the Nineteenth Century,* Ontario History LIV(3), 150-160.

BTR Research Relevant to Heritage Tourism: Past Findings and Future Potential

Dr Peter Robins, Bureau of Tourism Research, Canberra

Abstract

Using information from BTR occasional papers (in particular papers 25 and 27 on eco-tourism and cultural tourism respectively) a profile of international heritage tourists is developed. This profile is then applied to time-series data from BTR's International Visitor Survey to identify significant trends and developments in heritage tourism by overseas visitors.

International heritage tourists are identified and categorised by a number of demographic and other factors, including, but not limited to, age, sex, country of residence, duration of stay in Australia, main purpose of trip and itemised expenditure. These characteristics are then examined and comparisons made over the course of the nineties and inferences made about international heritage tourism to Australia in the future.

No profile of a domestic heritage tourist exists to provide a benchmark, so the international profile is used as a starting point to identify heritage tourists from data in BTR's new National Visitor Survey (NVS).

The NVS sample of 80,000 domestic households provides a good source of information on domestic overnight and day trip heritage tourism for 1998 and 1999, using similar factors to those for international visitors. Due to lack of time-series data, inferences cannot be made for domestic heritage tourism at present.

Needs for additional survey data and analytical research are identified and proposals made for meeting those needs.

Introduction

Heritage activities and attractions form an important and growing part of the tourism industry. Information presented in this paper is intended to explore trends in the wide variety of activities that collectively make up heritage tourism and to demonstrate the importance of natural and cultural attractions to the tourism industry. Although little data exists on the economic significance of heritage tourism, the value of some activities can be estimated.

The following section of this paper provides background information on the Bureau of Tourism Research. Subsequent sections examine the inbound and domestic markets for heritage activities and provide indicative information on the economic impact of some aspects of heritage tourism for the inbound market.

About the BTR

The BTR is a non-statutory, intergovernmental agency, funded jointly by the Commonwealth, State and Territory governments. BTR supports the Australian tourism industry through research. BTR's core activity is the conduct of two major travel surveys. In addition BTR undertakes analytical research and forecasting work.

International Visitor Survey (IVS)

The IVS is a survey of around 20,000 international visitors per annum, conducted at Australia's major international airports using computer-assisted personal interviewing techniques. The interviews are conducted throughout the year in airport departure lounges immediately prior to the visitors' departure from Australia. The survey provides detailed information about the characteristics and travel behaviour of international visitors to Australia on a quarterly, rolling annual and calendar year basis.

National Visitor Survey (NVS)

The NVS is a survey of around 80,000 Australian residents each year conducted using computer-assisted telephone interviewing techniques. The survey is conducted throughout the year and provides detailed information about the characteristics and travel behaviour of Australian residents. It collects details of travel overseas as well as travel within

Australia. Information related both to day trips and to trips involving overnight stays away from home is included in the survey results.

The NVS began in January 1998, replacing the Domestic Tourism Monitor (DTM) survey that had been conducted for several years. The NVS provides more comprehensive and more reliable data about travel by Australians than its predecessor.

Supplementary Surveys

For both the IVS and NVS, BTR provides a service to clients, on a fee for service basis, which allows additional questions to be added to the surveys on specific topics. This service enables cross classification and analysis of the additional data items with those already covered in the main survey questionnaire.

Analytical studies

BTR uses data from the surveys to study niche tourism markets, prepare estimates of the economic contribution of tourism to the Australian economy, prepare estimates of international and domestic tourism regional expenditure and undertake case studies of the importance of tourism within specific regional economies.

This work is either undertaken by arrangement with the funding partners, or is independently commissioned by industry or other government agencies.

Forecasting unit

The BTR also manages a forecasting unit that prepares forecasts of international and domestic tourist activity for the Tourism Forecasting Council (TFC). The final output is published by the TFC in *Forecast* magazine.

Other services available from the BTR

These include a statistical enquiry service, a website that provides essential industry statistics free of charge and consultancy services.

BTR surveys and Heritage

The two surveys are designed to be reliable for all major items for all States and Territories, and also for all large tourism regions. The surveys are not specifically designed to measure demand for heritage

tourism or its economic contribution, however, both surveys collect information on activities undertaken by tourists. This activity data provides a very useful starting point for research into tourism associated with Australian heritage.

Participation in selected activities has been used in this study to identify heritage tourists. These activities are:

- visiting national parks, or engaging in bushwalking, rainforest walks etc in other areas

- visiting botanical or other public gardens

- attending performing arts or concerts

- visiting museums or art galleries

- visiting art/craft workshops/studios

- visiting an Aboriginal site or community or viewing Aboriginal art/craft and cultural displays

- visiting historic or heritage buildings, sites or monuments

- visiting wildlife parks/zoos.

Participants in these activities will be referred to as heritage tourists for the purposes of this paper.

Some activities that may be included in a broad definition of 'heritage' have not been included as they either overlap with the included categories, or may include non-heritage components. For example 'visiting the outback' will often include a visit to a national park, and 'other outdoor activities' may include many activities that are not conducted in heritage areas.

This approach defines heritage tourists according to their behaviour. It does not focus on the quality of the experience, or the motivation of the participant. In adopting this definition it is recognised that many tourists participate in heritage activities as part of a wider tourism experience and are not exclusively heritage tourists. The definition can, however, be applied to BTR data to estimate demand for heritage experiences and attractions.

Background/Related studies.

BTR has undertaken various niche market studies that capture elements of heritage tourism.

- *The Nature of Ecotourism* and *Profiles and Motivations of Nature Based Tourists* provide detailed profiles of these markets. These reports draw on a wide range of sources and present the results of an IVS supplementary survey.

- *Cultural Tourism in Australia* examines the characteristics, behaviour and motivations of international visitors to Australia who visit cultural attractions

- *Rural Tourism in Australia* outlines the characteristics of visitors to rural regions, identifies their reasons for travelling to rural Australia and gives an assessment of industry performance.

- *Valuing Tourism: Methods and Techniques* is a handbook for those seeking to improve their knowledge of how to assess the impact of tourist activity on specific developments, proposals or marketing plans.

- *Cultural Tourism in Australia: Visual Art and Craft Shopping by International Visitors, 1997*, commissioned by the Department of Communications, Information Technology and the Arts, investigates expenditure by inbound tourists on entertainment, souvenirs, performing and visual arts.

Profile of the international heritage tourism market

The table overleaf details participation in those activities which have been used to identify heritage tourists

A number of observations can be made from Table 1:

- 2.7 million, or 72 per cent of all inbound tourists, participated in heritage activities during their visit.

- Heritage tourists are more likely to be aged in their 20s, although there is an increase in participation among inbound tourists over 60 years.

- Women have a higher propensity to participate in heritage activities.

- The majority of participants in all activities are visiting Australia on holiday.

- Participation increases with duration of stay but decreases among tourists who visit Australia more than once.

- There are some interesting differences in participation between markets. For example:

  - New Zealanders comprise 17 per cent of all visitors to Australia but only 9 per cent of visitors to National Parks and 8 per cent of visitors to wildlife parks and zoos.

  - Japanese visitors have a low propensity to attend performing arts but are a strong market for wildlife parks and zoos.

Europe is a very important source market for heritage activities and attractions, especially for Aboriginal product.

The following table (Table 2) shows participation in selected heritage activities over a number of years. Results for 1997 have not been presented as the questionnaire was changed that year to collect data for regional locations. There may also be a slight anomaly between figures for 1998 and 1999 and the earlier series

Table 1 - Participation of international visitors in selected activities by age, sex, purpose of visit, visit number, visit duration and country of residence, 1998 (per cent)

		National parks	History and heritage	Aboriginal sites/ displays	Botanical gardens	Museums and galleries	Wildlife parks/zoos	Performing arts	Art and craft workshops	All heritage visitors	All visitors
Age (years)	15 to 19	4	4	4	4	5	4	5	3	4	4
	20 to 29	30	29	31	28	28	33	31	26	29	27
	30 to 39	19	21	19	20	20	20	17	18	20	21
	40 to 49	15	15	14	16	16	15	16	17	17	19
	50 to 59	16	15	16	16	16	15	18	20	16	16
	60 or more	15	15	17	16	16	13	13	17	14	13
Sex	Male	47	48	46	46	47	45	46	40	48	51
	Female	53	52	54	54	53	55	54	60	52	49
Country of origin	New Zealand	9	10	6	10	11	8	13	15	13	17
	Japan	21	21	13	20	14	28	6	11	21	18
	Other Asia	21	20	11	23	22	21	18	14	23	24
	North America	13	14	18	12	15	12	20	13	12	11
	Europe	31	30	48	30	33	27	36	41	27	24
	Other Countries	4	5	4	5	5	4	7	6	5	6

Table 1 (Continued)- Participation of international visitors in selected activities by age, sex, purpose of visit, visit number, visit duration and country of residence, 1998 (per cent)

		National parks	History and heritage	Aboriginal sites/ displays	Botanical gardens	Museums and galleries	Wildlife parks/zoos	Performing arts	Art and craft workshops	All heritage visitors	All visitors
Purpose	Holiday	66	65	74	59	59	70	50	62	61	54
	VFR	20	17	13	23	21	16	23	24	21	20
	Business	5	7	3	7	6	4	7	3	8	11
	Other	10	11	9	11	13	10	20	11	10	14
Number of visits	First visit	60	64	70	57	59	67	50	52	55	48
	Second visit	13	12	12	13	13	13	13	13	13	13
	3 or 4 visits	13	11	8	14	14	10	16	15	14	15
	Five or More	14	13	10	16	14	10	21	19	18	24
Duration	0- 9 nights	38	43	23	41	32	46	22	26	46	51
	10- 39 nights	44	41	54	42	46	39	47	52	40	35
	40- 99 nights	10	9	13	10	12	8	15	13	9	8
	100+ nights	7	7	10	7	10	7	16	10	6	6
	Visitors (000's)	1 812	1 291	489	1 706	1 056	1 607	421	360	2 767	3 859

Source: BTR International Visitor Survey, 1998 (unpublished data).

Table 2 - Participation of international visitors in selected activities over time ('000 visitors)

	1993	1994	1995	1996	1997	1998	1999
National parks	1237	1544	1700	1622	np	1812	1894
Historic/heritage	1193	1235	1085	1270	np	1291	1257
Aboriginal sites etc	232	238	374	557	np	489	445
Art/craft workshops or studios	313	291	432	443	np	360	356
Botanical or other gardens	786	923	1401	1718	np	1706	1880
Art galleries or museums	671	878	865	1056	np	1056	1065
Zoos, animal or marine parks	1429	1594	1712	1832	np	1607	1700
All visitors	2783	3105	3422	3830	3974	3859	4143

Source: BTR International Visitor Survey, various issues.
Note: Many visitors attended more than one heritage activity or attraction.
np = not presented due to a change in interview technique

The table suggests that the degree of participation in activities associated with Australia's heritage is increasing. However it should be noted that the total market is also expanding at a similar rate.

Economic impact of heritage tourism - inbound

There are not sufficient data to prepare a full estimate of the economic contribution of heritage tourism, however, an estimate of the direct contribution of selected attractions can be derived by combining participation data from the IVS with expenditure data collected by the BTR in 1997. This collection was part of a study into tourist shopping on visual arts and crafts commissioned by the Department of Communications, Information Technology and the Arts (DoCITA).

Table 3 - Estimated expenditure on entry fees and shopping by international visitors, 1996.

	Number of visitors	Average expenditure $	Total expenditure $ million
Entry fees			
National parks	1 621 822	3.29	5.3
Historic sites or houses	1 269 556	1.83	2.3
Aboriginal sites/cultural displays	556 652	nr	nr
Museums or art galleries	1 055 524	7.10	7.5
Animal parks, zoos etc	1 832 389	10.99	20.1
Performing arts	449 462	26.64	12.0
Adventure activities	497 877	94.1	46.9
Other tours and paid activities	932 539	nr	nr
Total entry fees			94.1
Purchases of art and craft			
Aboriginal art and craft	1 134 085	130	148
Other art and craft	1 358 759	97	132
Total art and craft	1 499 918	187	280
Total observed expenditure			375

Source: BTR 1999a.
Note: Estimate does not include expenditure incurred as part of a package.
nr = not recorded

The Table 3 shows the magnitude of direct expenditure generated by some heritage-related activities. Inbound tourists spent over $94 million on entry fees and $280 million on art and craft.

Although the level of visits to Aboriginal sites and attractions by inbound tourists is relatively small, this segment generates considerable income.

Profile of the domestic heritage tourism market

Although the inbound market is growing at a faster rate, the domestic market still represents almost three quarters of tourist activity in terms of visitor nights.

The following table (Table 4) gives a profile of domestic participants in activities associated with Australia's heritage.

Table 4 - Participation of Australian travellers in selected activities while on overnight trips, 1998 (per cent)

		National parks	History and heritage	Aboriginal sites/ displays	Botanical gardens	Museums and galleries	Wildlife parks/zoos	Performing arts	Art and craft workshops	All heritage activities	All visitors
Age (years)	15 to 24	18	11	20	15	10	15	22	8	17	20
	25 to 44	42	37	34	38	34	51	33	36	40	41
	45 to 64	29	34	36	32	37	23	32	39	30	28
	65 or more	11	17	10	15	18	10	13	17	12	10
Sex	Male	48	45	47	37	43	42	43	37	46	54
	Female	52	55	53	63	57	58	57	63	54	46
Purpose	Holiday	75	69	69	54	65	66	67	69	68	44
	VFR	18	22	16	37	24	27	21	24	23	33
	Business	4	7	10	7	8	4	8	6	6	19
	Other	2	2	5	3	3	3	5	2	3	4
Duration	1 night	15	13	9	15	13	11	34	17	18	30
	2 nights	24	17	9	19	17	17	20	23	23	26
	3 nights	15	14	9	15	15	12	12	14	15	14
	4-7 nights	26	29	29	27	29	29	18	26	26	20
	8+ nights	20	26	44	24	26	30	16	21	18	10
	Total (000's)	10,069	3,912	517	2,183	3,192	1,536	1,820	2,258	18,085	73,811

Source: BTR National Visitor Survey, 1998 (unpublished data).

There are some differences and similarities between the profiles of inbound and domestic tourists who visit heritage attractions or participate in heritage activities:

- Approximately 25 per cent of all domestic overnight tourist trips involved a heritage activity.

- Domestic heritage tourists are more widely distributed across age categories.

- Both domestic and inbound groups are more likely to be females and are unlikely to be business travellers.

- Participation by both international and domestic tourists increases with duration of trip.

Approximately 15 per cent of all day trips involved a heritage activity. The profile of tourists on day trips who participate in heritage activities shows a similar distribution, except for a higher propensity to participate among holiday tourists.

The NVS is a relatively new survey which replaced the Domestic Tourism Monitor in 1998. Unfortunately data are not yet available to prepare a time series giving trends in the domestic market.

Economic impacts of domestic heritage tourism

As the NVS does not collect expenditure data against these activities, and no other data are available, it is not possible to prepare reliable estimates of the economic contribution of domestic heritage tourism. This would require the collection of additional data on tourist expenditure.

Conclusion

Although it has not been possible to estimate the contribution of heritage tourism to Australia's economy, it is clear there is considerable interest in heritage activities. Demand from international tourists has grown with the total market and participation in at least one of the selected activities in 1998 is estimated at:

- 72 per cent of all inbound visitors,

- 25 percent of all domestic overnight trips, and

- 15 per cent of all domestic day trips.

This adds to a total of 43.8 million trips that include a heritage activity undertaken by

tourists in Australia in 1998. Many trips involved more than one heritage activity.

It is, however, reasonable to assert that the economic contribution of heritage tourism is significant. From survey data we are able to identify over $94 million spent on entry fees and activities by inbound tourists; a figure which does not take account of all heritage activities, and does not include any heritage expenditure which might have been included in a package tour.

These direct benefits from entry fees and tours do not fully represent the importance of heritage attractions and activities to Australia's tourism industry as the availability of such attractions underpins demand for the full range of tourism facilities and services. Some regions, and in particular many rural areas, are highly dependent on heritage attractions. For example, the Ayers Rock Resort relies on the presence of Uluru, Broome benefits from its pearling history and the tourism industry at Dubbo benefits greatly from the zoo.

In preparing this paper BTR has been asked to make three recommendations for policy and research. In response, BTR would prefer to focus on one recommendation only: that serious consideration be given to the collection of data and the development of reliable estimates of the economic impact of heritage tourism activities, at both national and regional levels. Reliable estimates would assist in effective policy development, raise awareness in tourism and in government of the economic benefits which accrue from Australia's heritage assets, and provide a benchmark against which to assess future industry performance.

References

Bureau of Tourism Research 1995, Occasional Paper Number 21 *The Nature of Ecotourism*, BTR, Canberra.

Bureau of Tourism Research 1998a, Occasional Paper Number 25 *Profiles and Motivations of Nature Based Tourists*, BTR, Canberra.

Bureau of Tourism Research 1998b, Occasional Paper Number 27 *Cultural Tourism in Australia*, BTR, Canberra.

Bureau of Tourism Research 1999a, *Cultural Tourism in Australia: Visual Art and Craft Shopping by International Visitors, 1997*,

Department of Communications, Information Technology and the Arts, Canberra. (Also available at www.dcita.gov.au)

Bureau of Tourism Research 1999b, Occasional Paper Number 28 *Valuing Tourism: Methods and Techniques*, BTR, Canberra.

Bureau of Tourism Research 2000, Occasional Paper Number 30 *Rural Tourism in Australia*, BTR, Canberra.

Articulating the Heritage Tourism Resource in Coastal Towns: a Case Study of Noosa

Daniel O'Hare, BTP (Hons) NSW MA (Urban Design) OxfPoly PhD Oxford Brookes, School of Planning, Landscape Architecture, and Surveying, Queensland University of Technology

Abstract

Despite a wealth of coastal cultural heritage recorded in the registers of the National Trust, State heritage bodies and the Register of the National Estate, only a handful of coastal towns in Australia have capitalised on their heritage for economic purposes such as tourism. One of the key requirements, if the cultural heritage of places is to be drawn on for economic purposes, is for there to be a clearly articulated idea of what the place's heritage assets are. This paper draws from detailed case study research on the popular Queensland resort of Noosa, demonstrating how this place has articulated and successfully capitalised on its heritage tourism resource through a very public debate over several decades.

Introduction

There is a wealth of coastal cultural heritage recorded in the registers of the National Trust, State heritage bodies and the Register of the National Estate, yet only a handful of coastal towns in Australia have capitalised on their heritage for economic purposes such as tourism. Among the well-known examples are Goolwa and Robe (SA), Queenscliff and Port Fairy (Victoria), Broome and Fremantle (WA). Particular elements of the cultural heritage are highlighted in some towns, for example Tathra Wharf (NSW) and the historic port area of Townsville (Queensland). In other coastal places, the cultural heritage has been swept away to make way for tourism development, the most notorious example perhaps being the development of a casino in Cairns' Anzac Park in the mid-1990s.

This paper focuses on the community's articulation of heritage in the economically successful beach resort of Noosa on Queensland's Sunshine Coast. The focus is therefore oriented towards the heritage of a *tourism* landscape, in contrast to the working heritage of coastal hinterland towns such as Central Tilba in NSW. Noosa, like many small coastal settlements in Australia, owes much of its history of development to the growth of a beach holiday culture in Australia and internationally.[xxxiii] I have argued

elsewhere that Noosa is an exemplar in terms of how it has converted cultural capital into economic success as a tourist resort (see O'Hare 1997a, 1997b, 1998, 1999). Here, I will argue that Noosa's economic success is related to its success in defining what sort of place it is, and what sort of place it wants to be. In Noosa, this process has been conducted in a very public debate over several decades. Closer study of how tourism development conflicts have been resolved - or not - in such a place can be expected to provide insights for other small coastal settlements seeking to articulate and exploit their heritage for the economic purpose of tourism.

The case study combines data from tourist guides and brochures with conversational interviews and the more formal sources of documentary research, published literature and field survey. The combined methods interpret the tourism landscape by examining the interplay between individual experiences, the formal documented story of the place, popular and marketing images, and the physical landscape, over time.

The placename, Noosa, in this paper refers to a network of contiguous small coastal towns, including Tewantin (the original town on the Noosa River); Noosaville (established by the 1880s as a holiday area on the Noosa River) and Noosa Heads (at the beach).

[xxxiii] Noosa also has a 'working heritage', as its original settlement of Tewantin was established in the 1860s as the port for the Gympie goldfields, for logging and milling of the local timbers and for the opening up of farming in the district. Noosa's reputation as a place for leisure dates from the same period (O'Hare 1997b).

Broadening our understanding of heritage: the cultural landscape

This paper is based on a cultural landscape approach to the understanding of heritage (O'Hare 1999). The cultural landscape is the environment as modified and interpreted by humankind. A cultural landscape evolves from the interactions between the natural and built components of the environment over time. Places consist of a cultural overlay on the natural landscape, so that the local and regional heritage derives from the historical interactions between the natural and cultural components of the landscape. A cultural landscape approach to heritage conservation focuses on the social and historical meanings of the broader environment, rather than the special heritage building or precinct.[xxxiv] The concept is not just a way of viewing special or unique places, but extends to cover the everyday places where people live, work or travel.[xxxv] The cultural landscape approach acknowledges the continuity and dynamism of history, rather than segregating heritage as 'the past'.

The cultural landscape concept provides an integrating framework for valuing and constructing the environments we inhabit, a means of overcoming distinctions between heritage and new development, nature and culture, monuments and vernacular elements, built fabric and context. Mediation between these polarities occurs through everyday planning and development decisions, rather than being restricted to specific heritage conservation activities.[xxxvi]

The tourism landscape is a cultural landscape where tourism is both an element and an agent of change. This paper focuses on the coastal resort town as a tourism landscape.

The myths of tourism landscapes

An important set of myths underpins the construction and interpretation of Noosa as a distinctive cultural landscape of tourism. The term 'myth' has the primary definition in the *Concise Oxford Dictionary* (Allen 1990:784) of 'a traditional narrative ... embodying popular ideas on natural or social phenomena....' In this paper, the term is used in the sense of 'an intellectual construction which embodies beliefs, values and information, and which can influence events, behaviour and perception' (Short 1990:xvi). The term 'myth', as used here, does not imply mistaken or misleading beliefs.

The Noosa narrative: articulating the myths of a living heritage

The Noosa narrative is a dialogue that regenerates the myths by which the cultural landscape is shaped and understood. The narrative, the Noosa story, is not told by a single narrator, although single narrators have played major roles, particularly Nancy Cato in her book of the same name (1979, 1982, 1989). The same key terms and ideas or conceptions of Noosa appear repeatedly in the documentary and interview sources researched in the case study. The catchcry that 'no buildings are taller than the trees' has overflowed from the community dialogue into planning instruments and on into the ephemeral tourism literature because of its appeal to tourists who share the myths.

Articulate, well connected (and, more recently, wealthy) people have been able to effectively envision and shape Noosa's cultural landscape. Their effectiveness has been assisted by the fact that many of these people came from the same places that the tourists came from during the period of most significant growth, that is from Melbourne and Sydney in the 1970s and 1980s. Because many influential people are well

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[xxxiv] See J Russell 1990 The cultural dimensions of Australia's environment, *Historic Environment* 7(3&4):15-20; and J Russell 1997 Towards more inclusive, vital models of heritage: an Australian perspective, *IJHS* 3(2): 71-80. In the latter, Russell advocates a social and environmental relations model of heritage, rather than a "special things" heritage model.

[xxxv] JB Jackson 1984 *Discovering the Vernacular Landscape*. New Haven: Yale University Press; DW Meinig (ed) 1979 *The Interpretation of Ordinary Landscapes*. New York: Oxford University Press.

[xxxvi] Cultural landscape making as a continuous, ongoing, process is rarely acknowledged when cultural landscapes are seen primarily as "windows into the past" rather than as dynamic living landscapes - for example, refer to the otherwise excellent cultural landscape research reported in K Taylor and C

Tallents 1996 Cultural landscape protection in Australia: the Wingecarribee Shire Study, *IJHS* 2(3) 133-144.

travelled, their knowledge of the places that international tourists come from might be expected to positively influence the resolution of the effects of tourism on the local tourism landscape. Original 'locals', on their own, may have lacked the perspective, know-how, and influence to avert detrimental changes to the local environment.

The choice of Noosa as a holiday place for state, national, and sometimes international politicians, senior bureaucrats, business and media personalities, has meant that these people have been directly influenced and motivated to influence others, in an effort to avoid fouling their own nest. One report even suggests that the then Federal Treasurer Paul Keating's 1988 Christmas holiday in a booming Noosa led to the sudden rise in interest rates that caused the severe recession Australia 'had to have' in the early 1990s (Kelly 1994:376).

Myths, and the construction and reconstruction of a narrative embodying these myths, have affected the shaping of the Noosa tourism landscape. In Noosa, the developing narrative of the place has been used for four decades to guide present and future tourism development and conservation decisions. Landscape myths, as part of Noosa's cultural capital, are maintained and renewed in a community story telling process. In this process, a dialogue has been maintained between several myths. The history of Noosa's transformation as a tourism landscape demonstrates that the narrative has formally and informally guided the form of development. When seemingly unconnected development proposals and public space changes have been proposed, this narrative has provided a context for the conduct and resolution of the debate. The outcomes of this process have ranged from those that reinforce the Noosa narrative and its constituent myths, to those that modify the myths in ways that are nevertheless connected to the continuation of the main themes of the narrative.

The following sections explore the expression of Noosa's nature myth, through the heritage of community activism that extended the area's National Parks and led to a prohibition on high-rise development.

Origins of the National Park (1879-1962)

Noosa's national parks have developed, over many decades, as a major resource for nature conservation and for recreation for tourists and the residents of the region. Most of the information in this section comes from an unpublished book manuscript supplied by Dr Arthur Harrold (nd c1993), a co-founder of the Noosa Parks Association, together with a 1990s summary of the conflicts over national parks proposals (NPA nd), and interviews with community leaders and planners (O'Hare forthcoming).

The Noosa National Park occupies land reserved by State and local government in the early years of European settlement of the Noosa district. In 1879, an area of approximately 300 hectares near the Noosa headland was gazetted as the Noosa Town Reserve, at the time of the survey of the town of Noosa Heads. Within this Reserve, Noosa's first national parks were gazetted in 1930 as two small areas of 28 and 12 hectares respectively, covering the two main pockets of rainforest in the Reserve (Harrold nd).

In 1949, a Noosa National Park of approximately 245 hectares was opened, taking in most of the area of the Noosa Town Reserve, but excluding the foreshore, which was designated as an Esplanade. Public perception did not recognise the exclusion of the foreshore from the National Park, and tourist guidebooks from the period clearly imply that the National Park extends to the shoreline. In two of these, the National Park is described as having a three-mile ocean frontage (Penrod 1955; QGTB 1958).

In 1952, six hectares of urban zoned land at the Hells Gates headland, acquired by Noosa Shire Council for non-payment of rates, were added to the National Park, bringing its area to approximately 250 hectares (Harrold nd). In 1962, the Council supported an attempt by the development company TM Burke Pty Ltd to acquire about 20 hectares of vacant Crown land at Alexandria Bay to develop a luxury hotel (Harrold nd). At the same time, the Council proposed that a foreshore road be built along the Esplanade. These proposals stimulated the formation of a

significant community based conservation organisation in Noosa.

Formation of the Noosa Parks Association, 1962

The attempts to alienate the foreshore adjacent to the landlocked Noosa National Park in 1962 spurred a decision by Dr Arthur Harrold 'and a few friends' to form the Noosa Parks Association (Harrold nd:4). Their initial campaign was to lobby for the inclusion in the National Park of the areas most visited by tourists - that is, the foreshore and the Paradise Caves headland. The Association noted at its inaugural meeting that most visitors to Noosa were unaware that the coastal walking track was outside the Park boundaries (Harrold nd), a view supported by the tourist guides cited above. With the threats to the foreshore and adjacent areas, the Association's membership grew to 150 members by 1963, with members resident locally, elsewhere in Queensland, and interstate (Harrold nd). By the mid-1990s, membership numbers had reached 800 and the Association held a majority of seats on Noosa Shire Council, including the position of Mayor for the nine years to 1997.

The Association's success and longevity may be related to its acknowledgment of economic as well as environmental values. The President's Reports of the early 1970s describe the Association as being 'at the forefront of any movement aimed at keeping a balance between this development and the conservation of those things that make Noosa ... green, beautiful and attractive to tourists because tourism cannot survive in a despoiled environment' (McNiven 1973). The Report for 1987 argues that the natural environment is the basis of Noosa's 'vulnerable tourist potential and lifestyle', and therefore of the area's future prosperity and welfare (Fearnley 1987). The campaign for the National Park, 1962-1980s

While the Parks Association argued that the proposed foreshore road would impair the tourism attractiveness of the only undeveloped headland between Brisbane and Noosa, the Council argued that tourists would be attracted by 'one of the best scenic drives in Australia'. In late 1964, the Council decided by a narrow vote to commence the roadworks. The Noosa Parks Association

successfully lobbied the Minister for Lands, and State Cabinet decided to close the Esplanade and include the land in the National Park for its conservation values and tourism utility (Harrold nd). The legal expansion of the National Park formalised the public perception that the Park included the foreshore. The debate was kept alive in the mid-1970s by a further unsuccessful attempt by Council to have the Esplanade returned for the purpose of road building.

The small size of the local community in the 1960s and 1970s meant that everyone knew everyone else, and local people knew when celebrities and government leaders were holidaying in Noosa (interviews with tourists and local residents). This informality was exploited by the Noosa Parks Association in its campaign to expand and safeguard the National Park. Lobbying tactics included showing the land to visiting ministers and departmental directors during the intervening period. That Noosa was the holiday spot chosen by so many powerful people, meant that these people gained personal experience of, and affection for, the area's natural qualities. Through constant lobbying over many years, small but significant areas were added to the park.

The problem of 20 hectares of urban land owned by TM Burke, in the southern part of the current National Park, was resolved in the period between 1972 and 1984. The Noosa Parks Association proposed a land swap, and in 1973 the State Government offered to exchange the land for a much larger area further south. (Harrold nd; Gloster 1997). This land was finally incorporated in the National Park in 1984 after numerous delays.

Expanding the Green Belt through Strategic Alliances, 1980s-1990s

From its inception in 1962, the Noosa Parks Association had a 'dream' of an extensive National Park 'green belt' surrounding Noosa (NPA nd c1993:i). At various times, other community environment groups supported the Association, including the Noosa River Protection Committee and the high profile Cooloola Committee. In 1986, a Noosa-Coolum Green Belt Committee was formed with the aim of promoting a recreational green belt stretching from Noosa to the coastal town of Coolum, just to the south of the Noosa Shire boundary (NPA nd c1993).

The National Park grew gradually, with sections often having an insecure interim legal status as Water Reserves or State Forestry Reserves or as Council Reserves and Environmental Parks. Each extension was fought for. In these efforts, the Noosa Parks Association was frequently in direct competition with mining companies, development companies (particularly TM Burke) and State Government departments.

The last section of the green link to the southern boundary of Noosa Shire - a 60 hectare area of wildflower heath on the Marcus High Dunes - was a controversial issue in 1993-94. An environmental assessment (NSC 1995) and a public rally involving over 2000 people in 1994 helped to persuade Noosa Shire Council and the Queensland Government to support the extension of the National Park. Noosa Shire Council's Marcus Development Control Plan (DCP) designates the area as National Park, and the State Government gazetted it as National Park in 1995 (NSC 1995; Summers 1995 interview). The preservation of the Marcus High Dunes is of regional and national significance because most similar areas between Brisbane and Noosa are built on. The National Coastal Zone Inquiry, in 1991, expressed concern that 'an almost uninterrupted ribbon of urbanisation is fast developing from the south coast of New South Wales right up to Hervey Bay in Queensland' - a distance of approximately 2000 kilometres (Resource Assessment Commission 1991, cited in NSC 1995:2-5).

These incremental additions, hard-won over several decades, have increased the size of Noosa National Park from 245 hectares to approximately 2200 hectares (Gloster 1997). In the same period, the Association, together with other community environment organisations, has successfully lobbied for the creation and expansion of the nearby Cooloola National Park to approximately 70000 hectares (see Gloster 1997 and O'Hare forthcoming).

The following sections examine the expression of Noosa's nature myth in the development of the urban areas as tourism landscapes.

No high-rise: Noosa as a village in the trees

Tourist brochures and published guides are quick to point out that there are no high-rise buildings at Noosa (Ogilvie 1991; Bowen 1992; and most brochures from the 1980s and 1990s). Some brochures attribute the lack of high-rise buildings to an 'edict that no building shall be higher than the trees' (for example Sunshine Coast Tourism Promotions 1984: 101; 1989). This point was also mentioned consistently by interviewees. This section of the paper demonstrates the pervasiveness of the anti-high-rise ethos that surrounds Noosa's image and identity. The lack of high-rise development is more complex than the 'enlightened planning edicts' claimed in the tourist guides. The absence of high-rise development at Noosa can be attributed to a complex interaction between a number of factors including community activism, the inherent instability of the Hastings Street sand spit, the severe subtropical cyclones of the early 1970s, and the economic boom and bust cycle.

Although the ban on high-rise has been formalised in local planning controls, the move was led by community activism, and helped in fortuitous ways by the combination of the severe storms of the early 1970s and the arrival of the economic slump that ended the long post-War boom. The coincidence of the latter two factors helped to prevent the erection of a nine-storey beachfront tower approved in 1969, despite a 'deluge' of objections and a draft town plan prohibiting high-rise development (Cato 1979). Local

residents formed the Noosa Planned Progress Committee and challenged the approval in the Court of Local Government Appeal (Cato 1979). The residents lost the court case and were ordered to pay substantial costs. The developers did not act on their approval immediately, and severe storms followed in the succeeding summers. The company then delayed construction due to the effects of the national property crash of 1973 (Gloster 1997). By the time the recession had ended, the approval had lapsed and the 1972 Town Plan restricted further applications for high-rise development.

With high-rise development no longer a threat, the Planned Progress Committee ceased to exist (Cato 1979). It had, however, provided a strong focus of community political support for the introduction of the ban on high-rise development. The case was important in clarifying local attitudes to high-rise development. The protests and court case, though legally unsuccessful, signalled to Noosa Shire Council, developers, and investors that development proposals would be closely scrutinised by an articulate and well organised community.

By 1991, the Planning Scheme was amended to prevent the approval of any building taller than four storeys (NSC 1991a). The Local Planning Policy on building height notes that"[t]he low rise building form on almost all development in Noosa has been seen through tourist surveys as being one of the major elements of attraction to the area" NSC 1991a:1). Lack of high-rise development is now well accepted by Noosa's tourism development industry (Playford 1995 and Starkey 1996 interviews). Confirmation of this can be seen in the 1996 development of six $2.8 million apartments in a 3 storey building on the old Noosa Court motel site in Hastings Street. The height limit has not retarded property values and investment motivations.

The 'Noosa style': heritage as process rather than product

In architecture and urban design, the evolution of a Noosa style has been attributed to three nationally known local architects - Gabriel Poole, Lindsay Clare and John Mainwaring - and to two sympathetic local property developers (Poole, in Jarratt 1993/94: 15,16). Gabriel Poole describes the Noosa style as 'creating architecture which has been thought out for this climate, architecture that actually works', rather than the problem of 'people coming up from down south and building without thinking' (in Jarratt 1993/94: 15). Poole states that he and Mainwaring created the Noosa style, 'a concept that came from the ideas of developers like Brian Coutts and Ken Morrison who liked the *Mediterranean influence* that I found attractive at the time' (Poole, cited in Jarratt 1993/94: 16, emphasis added). The Hastings Street DCP study in 1983 supported the so-called Mediterranean design approach because of its appropriateness to 'the climate, the strength of the sunlight, the colour of the sea and the resort atmosphere' (NSC 1983: B49).

The Noosa style is not solely explained by the Mediterranean influence. John Mainwaring has helped to define the Noosa style through articles in the glossy *Noosa Blue* magazine and through his role as a co-editor of the regional domestic design magazine, *Casa*. Mainwaring acknowledges the lighter fibro and plywood external cladding used by fashionable Brisbane architects Froud and Job on houses at Noosa's Little Cove in the 1960s (Mainwaring 1992b: 41). Those houses reinterpreted the simple vernacular 'weekenders' that became common in Australian coastal towns during the twentieth century. Mainwaring's own house at Noosa Waters 'recognised the significant elements and materials of the past and has deliberately transformed this vernacular archetype into a contemporary architectural form' (Wilson, in Boddy 1994: 18).

Halse Lodge, the former Hillcrest guest house, is one of the last examples of the early twentieth century Queenslander style of resort architecture remaining at Noosa Heads, while more humble examples survive along the river in Gympie Terrace, Noosaville. Mainwaring (1991; 1992a), in his role as local National Trust branch president, argued for the conservation of the remaining examples because of their contribution to the sense of place. These buildings are built from the locally available timber, with corrugated iron roofs (because this material was easy to freight to remote places, as Noosa was until

recent decades). The buildings incorporate verandahs for outdoor living, and cross ventilation for the hot humid conditions. Mainwaring argues for using these buildings as a guide for designing in harmony with the local environment, climate and contemporary way of life. This would not mean building replicas - indeed, it is no longer economical or feasible to use quality timbers, and the extensive forests of the region are now depleted (Mainwaring 1991: 34). 'Clearly the future of the Queenslander lies not only in recycling and restoration, but in how architects, developers and councils meet the challenges of abstracting the ideas contained in these old wonders into new housing concepts' (Mainwaring 1991: 36).

The Noosa style as an expression of the nature myth

Casa is one of the few publications in which the Noosa style is defined. The philosophy of the magazine is closely related to Noosa's nature myth: 'We are for anything that *preserves or complements the natural environment*, against anything that threatens it or detracts from it.' (*Casa* 1:1 p1, emphasis added). The Noosa style is an important element of the nature myth, and vice versa. That the Noosa style incorporates a sensitivity to the natural environment, and the laid back lifestyle which that environment enables, is clear in another article in *Noosa Blue* (Jarratt 1992). This article, based on interviews with three interior and landscape designers, summarises their design approach in terms of 'easy living, and creating a balance between living needs and the built environment' (Jarratt 1992: 37). The design outcomes of these attitudes are the creation of open spaces for air circulation, and north and north-easterly building orientation for optimal breeze and solar access. Building materials and finishes use the surrounding natural colours to capture 'the feeling of sun, sand, sea and light' (Hall, in Jarratt 1992: 37). The use of Indigenous plants, and the informality of built form are aimed at supporting 'a carefree, low maintenance lifestyle' (Mitchell and Hall, ibid).

'Lightness and shade' are key qualities of contemporary architect-designed buildings on the Sunshine Coast (Boddy 1994).

'Lightness and Shade' was the title of a Queensland University of Technology architectural photography exhibition held at the Queensland State Library in 1994. Seven of the sixteen featured buildings are in Noosa. The catalogue details how the aspect, form, and materials of these buildings relate to the local topography, climate and relaxed lifestyle. Mediation of the bright sunshine, shade, shelter from subtropical rain, airflow to control humidity, orientation to views and breezes, together with opportunities for outdoor living, are cited as determinants of form. The development of a regional architecture is attributed to 'respect for the natural environment' (Hurst, in Boddy 1994: 14). The noted Sydney architect Glenn Murcutt's adage of 'touching the ground lightly' is adopted as a continuation of the tradition of the elevated early Queensland house, while merging the buildings with nature (Teng, in Boddy 1994:24; Woolley 1996). Contemporary Sunshine Coast architecture touches the sky lightly, with curved roof forms echoing the local hills or the surf (Boddy 1994: 14,24), while being an effective means of meeting Noosa's height restrictions (Mainwaring 1993 interview).

Unlike the Mediterranean strand of 'Noosa style', the materials used in these buildings are lightweight, like the traditional Queensland 'timber and tin'. Corrugated metal roofing is used in new ways, and the range of wall materials is broadened to include contemporary equivalents of 'weekender' fibro, such as plywood and cement sheeting. Metal and timber pergolas, timber slats and battens, louvred timber screens and lattices reinterpret traditional elements, while formalising the patterns and rhythms seen in the dappled shade of the Indigenous vegetation.

Heritage as a product: lessons from Noosa's hinterland

Part of Noosa's advertised tourist 'product' is its hinterland. In the early 20th century, the hinterland was a landscape to be looked at, passively, on the coach or car trip from the Cooroy Railway Station to the coastal landscape of leisure. The brochures of the time noted the visible carving of a productive landscape, via logging and farming, out of

dense bushland (QGITB 1917). The hinterland is now an active day-trip destination for the coastal resorts. Among the tourist attractions now promoted in the hinterland are craft and produce markets in Eumundi, scenic drives on the Blackall Range, and 'cottage towns', a neologism that refers to 'some of Australia's loveliest and most preserved little towns' (Tourism Noosa 1995:50).

The tourist brochures provide heritage signposts with little or no heritage interpretation. Visitors are directed to 'the historic Appollonian Pub' at Boreen Point, but they are not told that this 1870s goldrush pub was relocated from Gympie in 1990. The 'true village charm' of the mountain village of Montville consists of 'a pleasant blend of Tudor, Irish and English cottages, Swiss and Bavarian chalets, an old mill water-wheel, and old Queenslanders' (Tourism Noosa 1995:44). The brochure's enthusiasm for the eclectic overlay on a stunningly sited vernacular Queensland village, suggests that heritage is a standard tourist product to be applied in any setting. Although such shallow and misleading approaches to heritage marketing may offer economic benefits, they have very little to do with heritage.

Weaving the heritage of the past into the Noosa narrative

The belated local acknowledgment of heritage tourism has led to a new awareness of the heritage of the coastal towns. Now that it is sharing in the change brought by Noosa's development, Noosaville (on the river) is beginning to be promoted for 'the demure charm of yesteryear' (Tourism Noosa 1995:25), a reference to a nostalgic resort character noted in by several interviewees in the research behind this paper (O'Hare 1997b). Tewantin is re-presented as 'historic Tewantin [retaining] its original charm with its 'Old Queenslanders' and Memorials' (Tourism Noosa 1995:5). This is a revival of the tourist promotion of the Noosa area around the 1920s, when Tewantin was noted for the patina of half a century of development (QGITB 1917, 1927).

Conclusion: the value of articulating the myths of heritage places

The Noosa case provides evidence that community heritage values are articulated through informal narrative processes. These landscape narrative processes are an important part of a broader, longer-term, semi-formal process of urban design and planning. Professional urban design/planning workshops, heritage studies and the resultant statutory instruments and projects are not isolated, periodic, occurrences. Rather, they are part of an iterative process in which urban design both draws on and contributes to a landscape narrative. Environmental management becomes a process of identifying and mobilising myths, to assist in integrating tourism driven change. The informal is incorporated in the formal; the formal becomes taken up in the informal. The cultural landscape approach discussed here offers a means for heritage managers to access the everyday, and the extraordinary, informal narrative of places.

The cultural landscape narrative enables developments and changes to be tracked over long periods of time. The completion of a national park green belt in 1995 was a realisation of ideas sown by the Noosa Parks Association, which fought for over thirty years to keep the nature myth alive in the public mind. The securing of a significant break in otherwise continuous suburban development from Noosa to the Gold Coast was an important achievement in relation to a growing national narrative on the importance of having 'natural' breaks in coastal development, rather than a continuously urbanised coastline. The prohibition on high-rise development in Noosa, only ruled out legally in 1991, formalised a strong informal sanction that had been 'in place' since the great high-rise battle of Hastings Street in 1969-70.

In planning practice and heritage management, the narrative of a tourism landscape must be sought out, interpreted, and engaged with, in devising 'appropriate' design and conservation guidance for managing its inevitable transformation. The examples in this paper reveal ways in which

myths flow between formal and informal channels.

The Noosa example presents an alternative– or supplement - to expert heritage studies, as well as showing a way of accessing the heritage values held by the community. A cultural landscape approach to heritage interpretation and management avoids the creation of an artificial separation between past and present. It is therefore able to engage directly with contemporary influences such as changing economic pressures and opportunities.

The constant retelling of the narrative of the place strengthens an attitude of making choices rather than passively accepting all changes. The local history of development debate can be drawn on as the basis of a process for deciding heritage management for integrating anticipated or desired changes in areas coming under pressure - both before the changes become visible, and as change occurs. This approach could forestall conflict. Yet the Noosa case demonstrates that conflict can also be helpful, because it helps to articulate the qualities that are valued in a cultural landscape.

Areas for further research

There is a need for refinement of methodology for interpreting the narratives of cultural landscapes, and for demonstrating how this can be transformed directly into strategies for heritage management. It is likely that such work will draw on participatory community consultation methods. The scope for fully operationalising such methods needs further investigation.

One of the most urgent research needs is for comparative studies of how different places have dealt with their heritage for tourism purposes. For example, it would be useful to compare the effects of the subtle approach to heritage taken in Noosa, with the effects of a more explicit heritage marketing emphasis taken in places such as Maryborough (Queensland).

It would also be beneficial to compare the economic issues of heritage management in coastal resorts at different stages of tourism

development–for example Surfers Paradise, Noosa and the Town of 1770.

Australia has many appropriate potential case studies to compare the heritage-economics relationship in places with weak development controls, with those with strong controls (including heritage conservation provisions).

References

Allen, M (1990) *The Concise Oxford Dictionary*, 9th edition, Oxford University Press, Oxford.

Boddy, A (1994) Lightness and shade, exhibition catalogue, School of Architecture, Queensland University of Technology.

Bowen, J (1991) *The Queensland Experience: a comprehensive guide to enjoying the Sunshine State*, Simon and Schuster, Sydney.

Casa: Sunshine Coast houses and gardens Vol. 1 No.1 (1993) Noosa Blue Publishing, Noosa.

Cato, N (1979) *The Noosa Story*, Jacaranda Press, Brisbane (with later editions in 1982 and 1989).

Fearnley, JRP (1987) President's Annual Report, Noosa Parks Association.

Gloster, M (1997) *The Shaping of Noosa*, The Blue Group, Noosa Heads.

Harrold, A (nd, c1993) Unpublished manuscript on the development of Noosa National Park, courtesy of the author.

Jackson, JB (1984) *Discovering the Vernacular Landscape*, Yale University Press, New Haven.

Jarratt, J (1992) Noosa Style, *Noosa Blue* No.8:37-39.

Jarratt, P (1993/94) The Casa interview: Gabriel Poole, *Casa: Sunshine Coast houses and gardens* 1(1):13-18.

Kelly, P (1994) *The End of Certainty: power, politics and business in Australia*, 2nd edition, Allen and Unwin, St Leonards.

McNiven, WMD (1973) President's Annual Report, Noosa Parks Association.

Mainwaring, J (1991) Queenslanders: old and new, *Noosa Blue* No. 3: 30-35.

Mainwaring, J (1992a) Nostalgia: Halse Lodge, *Noosa Blue* No. 5: 38-40.

Mainwaring, J (1992b) The Wallace Estate: new life for an ageing icon, *Noosa Blue* No.9: 26-29.

Mainwaring, J (1993) interview with the architect.

Meinig, DW (ed)(1979) *The Interpretation of Ordinary Landscapes*, Oxford University Press, New York.

Noosa Blue magazine, Blue Group (various issues, 1992-97).

NPA (nd) The Cooloola Conflict and South of the River, unpublished report, Noosa Parks Association.

NSC (1983) *Hastings Street Development Control Plan*, Noosa Shire Council, Tewantin.

NSC (1991a) Local Planning Policy No. 11: Building Height, adopted 7 February, Noosa Shire Council, Tewantin.

NSC (1991b) *Noosa Hill Development Control Plan*, Noosa Shire Council, Tewantin.

NSC (1995) *Marcus Development Control Plan*, Noosa Shire Council, Tewantin.

Ogilvie, WL (1991) *Homestay Eastern Australia*, Sydney's Good Accommodation and Travel Guide Pty Ltd, Bathurst.

O'Hare, D (1997a) Interpreting the cultural landscape for tourism development, *Urban Design International* 2(1):33-54.

O'Hare, D (1997b) Tourism and Small Coastal Settlements: a cultural landscape approach for urban design. Unpublished PhD thesis, Oxford Brookes University, Oxford.

O'Hare, D (1998) Coastal tourism as comparative consumption of cultural landscapes, in N Ravenscroft, D Philips and M Bennett (eds)(1998) *Tourism and Visitor Attractions: leisure, culture and commerce,* Leisure Studies Association, Brighton.

O'Hare, D (1999) Making heritage in an Australian coastal tourist resort: constructing a cultural landscape through a comparative narrative, *International Journal of Heritage Studies* 5(2):82-95.

O'Hare, D (forthcoming July 2000) Community leadership in planning for sustainable coastal tourism: a case study of the Queensland resort of Noosa, Building the Sustainable Millennium conference,

Queensland University of Technology, Brisbane.

Penrod (1955) *Penrod's Guide to Queensland's North Coast Shore and Mountain Resorts: Brisbane to Gympie* (2nd Edition), Penrod Guidebook Co, Brisbane.

Playford (1995) Interview with the Mayor, Noosa Shire Council.

QGITB (1917) *From Noosa to the Tweed: mountain and seaside resorts of southern Queensland*, Queensland Government Intelligence and Tourism Board, Brisbane.

QGITB (1927) *From Noosa to the Tweed: mountain and seaside resorts of southern Queensland*, Queensland Government Intelligence and Tourism Board, Brisbane.

QGTB (1958) *Guide to Queensland, the Sunshine State of Australia: a tourists' paradise*, Queensland Government Tourist Board, Brisbane.

Russell, J (1990) The cultural dimensions of Australia's environment, *Historic Environment* 7(3&4):15-20.

Russell, J (1997) Towards more inclusive, vital models of heritage: an Australian perspective, *International Journal of Heritage Studies* 3(2):71-80.

Short, JR (1990) *Imagined Country: environment, society and culture*, Routledge and Kegan-Paul, London and New York.

Starkey, A (1996) Interview with local architect-developer.

Summers, Paul (1995) Interview with the Deputy Shire Planner.

Sunshine Coast Tourism Promotions (1984) *Discover Queensland's Sunshine Coast*, SCTP, Maroochydore.

Sunshine Coast Tourism Promotions (1989) *Discover Queensland's Sunshine Coast 1989/90*, SCTP, Maroochydore.

Taylor, K and C Tallents (1996) Cultural landscape protection in Australia: the Wingecarribee Shire Study, *International Journal of Heritage Studies* 2(3):133-144.

Tourism Noosa (1995) *Noosa: the guide*, 4th edition, Wordsworth, Noosa Heads.

Woolley, J (1996) *Abode of Our Dreaming*, University of Southern Queensland Press, Toowoomba.

Indigenous Heritage Tourism and its Economic Value in Australia

Heather Zeppel, Lecturer, Tourism Program, School of Business, James Cook University, Cairns

Abstract

Indigenous culture and heritage are a major tourist attraction in Australia. The income generated from the sale of Aboriginal arts and crafts is AUD$200 million per annum, with half derived from tourist sales. In addition, Aboriginal cultural tourism generates $5 million, while mainstream tourism enterprises owned by Indigenous organisations are worth $20-$30 million per annum (National Aboriginal and Torres Strait Islander Tourism Industry Strategy, 1997). The tourist consumption of Indigenous cultural products and heritage sites generates several economic values. These include Commodity Values of portable Indigenous cultural products (eg. art, craft, souvenirs) and amenity values associated with leisure and recreation on Aboriginal lands, at scenic localities and rock art sites. There are further marketing values associated with the tourism promotion of Indigenous heritage and cyber-values from placing Indigenous cultural products on the Internet. In addition to economic value, growing Indigenous concerns with copyright and cultural or intellectual property issues in Indigenous heritage tourism also need to be addressed.

Introduction

Indigenous culture and heritage are a major tourist drawcard in Australia. Tourist marketing of Indigenous cultural heritage includes dance performances, cultural centres, museums, Aboriginal arts and crafts, rock art sites, and cultural tours. This representation of Australia's Indigenous heritage to visitor markets is being undertaken by state and federal tourism and heritage agencies, cultural organisations, commercial tour operators and a growing number of Aboriginal land councils involved in tourism ventures. Yet Indigenous heritage remains undervalued as a cultural and tourism resource in Australia. (Langton, 1994) This paper focuses on the economic value of Indigenous heritage tourism in Australia. It reviews Indigenous cultural heritage attractions and resources then it discusses the wider economic value of Indigenous heritage using key cultural indicators. This paper suggests the tourist consumption of Indigenous cultural heritage generates several economic values. These include commodity values, amenity values, marketing values and cyber-values associated with the use and presentation of Indigenous heritage in tourism. Such economic values primarily derive from non-Indigenous interest in Indigenous heritage.

Indigenous Heritage Tourism

Heritage tourism allows visitors to 'experience the special values offered by Australia's natural, Indigenous and historic heritage' (Australian Heritage Commission, 1999). Indigenous heritage tourism then includes visitation to Aboriginal sites and landscapes, displays of Aboriginal artefacts, dance performances, art and crafts and Indigenous cultural or environmental knowledge. There is a growing visitor demand for Indigenous culture, with these experiences increasingly provided by Aboriginal communities. ' Around 557,000 international visitors, or 15 percent of the total, visited Indigenous sites and attractions in 1996, up by more than 45 percent from 380,000 in 1995' (Office of National Tourism, 1998). Aboriginal people are increasingly presenting their own cultures as a tourist attraction in Australia. There are around 200 Indigenous tourism businesses in Australia, with a current estimated value for Aboriginal cultural tourism of AUD$5 million a year (ATSIC, 1997). Mainstream tourism enterprises owned by Aboriginal organisations generate $20-$30 million per annum (ATSIC, 1997). These Aboriginal-owned tourism enterprises are challenging the Aboriginal-themed attractions or tours offered by non-Indigenous operators (Office of Northern Development, 1993).

For the majority of visitors, however, the encounter with Aboriginal culture involves buying Aboriginal art or viewing rock art sites. The current income from selling Aboriginal arts, crafts and souvenir products is AUD$200 million per annum, with half of this amount estimated from tourist sales (ATSIC, 1997; Office of National Tourism, 1998). Tourist contact with rural Aboriginal communities is also increasing, with four-wheel-drive tours visiting remote areas in the Kimberley, Central Australia and Cape York (Altman, 1996). Aboriginal art tours fly visitors directly to Aboriginal communities in Arnhem Land, East Kimberley and the Western Desert region to purchase paintings from well-known Aboriginal artists. In the Northern Territory, Aboriginal land owners derive income from licensing, leasing, rent and tourism concessions operating on Aboriginal lands (Sykes, 1995; NTTC, 1996). These include safari tours visiting Aboriginal rock art sites in Arnhem Land and on Aboriginal pastoral properties. National Parks, such as Uluru, Kakadu and Nitmiluk in the Northern Territory, and Mutawintji in western NSW, are a key focus for Indigenous heritage tourism (Mercer, 1996).

Worldwide, Indigenous cultural heritage is a growing tourist attraction (Zeppel, 1998a, b). Much of this Indigenous heritage is linked to specific places or cultural landscapes. Tangible features linking Indigenous cultures to 'heritage' landscapes include archaeological remains, rock art sites, museums, cultural centres and the ongoing presence of Indigenous peoples in homeland areas. Indigenous links to cultural landscapes are also celebrated in dance performances, contemporary artworks, stories and festivals. This paper focuses on how Indigenous cultural heritage is economically valued as a tourist attraction in Australia. It presents a preliminary analysis of the various components of Indigenous heritage tourism and suggests ways the economic benefits of Indigenous heritage can be assessed to reflect social and cultural values. Indigenous heritage is socially constructed as a tourist attraction by heritage agencies and the tourism industry (Zeppel, 2000). A key element of this process involves redefining Indigenous heritage for tourism through heritage listing and new cultural products such as Aboriginal heritage trails.

Indigenous Cultural Heritage Attractions

Tourist encounters with Indigenous cultural heritage and Indigenous landscapes include archaeological sites, museum displays and new heritage trails or boardwalks. These Indigenous sites ('old heritage') built cultural attractions ('collected heritage') and tourist trails ('new heritage') comprise various forms of Aboriginal culture, history and 'heritage' (see Table 1). Archaeological remains provide in-situ evidence of Indigenous occupation, food gathering, tool technology, artwork, burial rites, and ceremonial or ritual use of the land (Flood, 1990). Most of these Aboriginal archaeological sites are listed by state museums and heritage agencies or in the Register of the National Estate. The main sites accessible to visitors include Aboriginal rock art sites, ochre quarries, middens, bora rings, contact sites and occupation sites. The cultural and heritage significance of these Aboriginal sites is promoted and managed by National Park agencies, heritage organisations (eg. NSW Heritage Office, 1998) and by Aboriginal groups.

In Australia, the Register of the National Estate lists places with special cultural and 'heritage' values to Aboriginal people. Most of these listed Indigenous places comprise art sites, archaeological sites, occupation sites and areas with spiritual significance (see Table 2). Other historic contact sites (eg. massacre sites, missions, reserves, Aboriginal burials) are also listed.

Table 1 - Indigenous Cultural Heritage Attractions in Australia

'OLD HERITAGE' Archaeological Sites	'COLLECTED HERITAGE' Museums/Cultural Centres	'NEW HERITAGE' Heritage Trails/Art
Rock Art Sites	State & Regional Museums	Regional Heritage Trails
Stone Tools	Indigenous Art Galleries	Botanic Garden Trails
Middens	National Park Cultural Centres	National Park Trails
Occupation Sites	Visitor Interpretive Centres	Nature Reserve Trails
Burial Sites	Aboriginal Cultural Centres	Aboriginal Heritage Trails
Ochre Quarries	Aboriginal Keeping Places	Bush Food Walking Trails
Fish Traps	Indigenous/Tribal Museums	Aboriginal Murals & Art
Bora Rings	Aboriginal Cultural Parks	Protest Sites & Memorials
Historic Contact Sites	Aboriginal Mission Buildings	Musical Concerts & Festivals
Spiritual/Mythological Sites	Aboriginal Libraries & Archives	Aboriginal Councils, Offices

Table 2. Indigenous Places Listed in the Register of the National Estate, 1994

Type of Indigenous Place	Number	Percentage
Art Sites*	196	24.7%
Site Complexes*	106	13.4%
Spiritual/Mythological Sites	83	10.5%
Occupation Sites	82	10.3%
Shell Middens	58	7.3%
Stone Arrangements	53	6.7%
Historic Contact Sites	41	5.2%
Scarred & Carved Trees	41	5.2%
Quarries	34	4.3%
Burials/Cemeteries/Graves	29	3.7%
Grinding Grooves	19	2.4%
Ceremonial Sites	18	2.3%
Fish/Eel Traps	18	2.3%
Wells	11	1.4%
Hunting Hides/Traps	3	0.4%
Organic Resource Area	1	0.1%
Total	**793**	**100%**

*Art sites and site complexes frequently include large numbers of individual sites.

Source: Purdie, R. (1997). *The Register of the National Estate: Who, What Where?* Department of the Environment, Canberra, p. 31.

In May 1997, there were 1,479 Indigenous heritage sites and places listed in this Register (Australian Heritage Commission, 1997). Places of more recent heritage significance include Aboriginal protest sites. The Aboriginal Tent Embassy Site in Canberra was listed on the Register of the National Estate in 1995. These Aboriginal protest sites represent 'new heritage' areas. However, most listed Aboriginal heritage sites focus on rock art sites, past ways of life and mythological sites ('old heritage') - of most interest to non-Indigenous researchers and visitors (Purdie, 1997).

Indigenous Heritage: Collected & New

Cultural institutions that gather and display Aboriginal artefacts, art and history (ie. 'collected heritage') are key venues for presenting Indigenous cultural heritage to visitors. These popular venues include museums, Aboriginal cultural centres, art galleries, interpretive centres and new Indigenous cultural parks. With this 'collected heritage,' various aspects of Indigenous cultures are brought together in a new location and venue. Museums and cultural centres both comprise reassembled collections of Indigenous artefacts. State museums display artefacts from many different Indigenous groups while Indigenous cultural centres, keeping places and museums are located in homeland areas and display artefacts from one main culture group (Zeppel, 1998c). These Indigenous attractions include the Brambuk Living Cultural Centre (Victoria), Tjapukai Aboriginal Cultural Park (Qld) and Gavala Aboriginal Art Centre (Sydney, NSW).

New heritage attractions are boardwalks or trails presenting archaeological sites, reconstructed dwellings, new Aboriginal artwork, Indigenous history or Indigenous use of plants. These heritage trails feature new ways of presenting Indigenous art and cultural heritage to visitors, mainly through murals, brochures and interpretive signs. The Central Desert Aboriginal mosaic in front of Parliament House, Canberra is 'new heritage.' The Aboriginal Art Trail at Mt Coot-tha in Brisbane, with Aboriginal motifs painted on rocks, is also a form of 'new heritage' where images and elements of

Aboriginal culture are placed in new urban settings (Jacobs, 1996). The Bataluk Cultural Trail in East Gippsland, Victoria, features archaeological sites (axe grinding grooves, middens, scarred trees), Dreamtime stories, caves, Ramahyuck mission, Aboriginal Council buildings, Krowathunkoolong Keeping Place, and a list of Aboriginal massacres from 1840 to 1850. Indigenous cultural knowledge and key sites are presented in a new Cultural Trail format.

Indigenous Heritage Resources

Indigenous heritage resources embody both tangible and intangible aspects of Indigenous culture. This includes both fixed and portable Indigenous heritage items as well as Indigenous cultural and environmental knowledge about landscapes, sites and objects. Fixed or in-situ Indigenous heritage includes rock art sites and archaeological sites and recognised Indigenous cultural landscapes (eg. Uluru, Kakadu, Mutawintji). Portable or movable Indigenous heritage includes artefacts, arts and crafts, music and dance including Indigenous performers or artists. The intangible aspects of Indigenous heritage are made visible through performance and storytelling while Indigenous cultural knowledge held by elders is recorded in various new media (tape, CDs, photography, video, books, brochures, computer, Internet). The conversion of Indigenous cultural knowledge to new forms (displays, tours, and printed material) is a key feature of Indigenous heritage tourism. This has led to growing Indigenous concerns with copyright and cultural or intellectual property issues with regard to the use of Indigenous cultural heritage in tourism (eg. Indigenous art, design, stories, dance, music, imagery etc). (Janke, 1999)

Indigenous heritage places have a range of different values recognised by Indigenous and non-Indigenous communities (Australian Heritage Commission, 1998). Hence, there are traditional and contemporary values associated with Indigenous heritage places, objects and cultural knowledge. These diverse values for Indigenous heritage include:

Contemporary Values: Scientific, Environmental, Aesthetic, Recreational, Economic;

Traditional Values: Spiritual, Cultural, Community, Social, Historical, & Ceremonial.

The traditional cultural values of Indigenous communities are overlain by new values associated with contemporary use of Indigenous heritage places and objects for scientific, cultural and tourism purposes. Indigenous heritage places, objects and traditional cultural knowledge now have significant economic value as key resources for heritage tourism. According to Throsby (1999), both economic and cultural values are a part of heritage assets ('cultural capital'). While Throsby discusses just tangible heritage items, this paper also considers the intangible aspects of Indigenous cultural heritage as a tourist resource.

In economic terms, Indigenous heritage has four main types of 'capital' or resources:

Physical capital (Indigenous landscapes, sites, artefacts),

Human capital (Indigenous people & new cultural attractions),

Natural capital (Indigenous environment, use of natural resources),

Cultural capital (Indigenous arts & crafts, music & dance, knowledge)

To these can be added the core aspect of Indigenous heritage–spiritual 'capital'–where creation (Dreaming) beliefs are embodied in natural landscapes and creative expressions. Indigenous heritage values primarily derive from spiritual and cultural links to sites and landscapes. In terms of Indigenous heritage tourism, the main focus is on Indigenous 'cultural capital' since this involves portable cultural forms more valued as a tourist or consumer item. The Indigenous heritage realised as physical, human and natural capital is largely under valued until new economic benefits are derived through tourism. For example, Aboriginal ownership of selected National Parks has increased recognition of Indigenous landscapes, the Indigenous environment and Aboriginal people themselves.

Economic Value of Indigenous Heritage Tourism

The tourist consumption of Indigenous cultural products and heritage sites, then, generates several economic values. These include **Commodity Values** of portable Indigenous cultural products (eg. art, craft, souvenirs, music, dance). Aboriginal arts and crafts are the main Indigenous heritage commodity, worth around $200 million a year with half of this amount generated through tourist sales. In contrast, Aboriginal cultural tours generate $5 million per annum. These figures derived from the *National Aboriginal and Torres Strait Islander Tourism Industry Strategy* (ATSIC, 1997) have not been updated. Nor is a breakdown provided on the amount earned by Indigenous artists and crafts people versus the amount earned by art traders and non-Indigenous owners of Aboriginal art galleries. The importation and production of Aboriginal-style souvenir items also reduces the money earned by Aboriginal communities from making and selling arts and crafts.

Amenity Values are associated with tourism and recreation in Aboriginal National Parks and on Aboriginal-owned lands, especially at rock art sites. These amenity values of Aboriginal lands are becoming more important in northern and central Australia (Holmes, 1996). The Northern Land Council in Darwin earns around $40,000 per annum in royalty fees from tours and safari camps operating in Arnhem Land. Entry fees are charged to Kakadu and Uluru National Parks, while paid permits are issued for camping, fishing and whale watching on Yalata Aboriginal Lands in South Australia. In the Kimberley region of Western Australia there has been controversy over tourist access to Aboriginal rock art sites on privately owned pastoral property (Trotter, 1997). In the Northern Territory, tour groups mainly visit rock art sites in National Parks and on Aboriginal-owned pastoral properties. In Mutawintji National Park, in western New South Wales, tourists pay a small fee to join an Aboriginal-guided tour of rock art sites. The economic benefits of rock art sites have not been calculated for National Parks.

There are further **Marketing Values** associated with the tourist promotion of

Indigenous people, heritage and cultural activities by government and commercial tourism agencies. The music of Yothu Yindi has featured in international television advertisements for the Australian Tourist Commission while Bangarra Dance Theatre performed at the closing ceremony of the 1996 Olympic Games in Atlanta. This use of Indigenous music and dance benefits the mainstream tourism industry in Australia with little benefit for Aboriginal-owned tourism operations. Images of Aboriginal art, rock art sites and cultural landscapes (eg. Uluru) are widely used in tourism promotion with little or no return to artists, communities or traditional landowners. The economic benefits of using Indigenous images and music for tourist promotion have not been calculated.

Finally, **Cyber-Values** refers to reproducing Indigenous heritage (images, knowledge) and selling Indigenous cultural products via 'web pages' placed on the Internet. Both Indigenous and non-Indigenous companies or individuals selling Aboriginal cultural products or tours complete this Internet marketing. Indigenous-owned websites claim ownership of the cultural information and images presented on the Internet. The economic value of Indigenous cultural heritage on the Internet has not been assessed. This includes the cost of building and updating Indigenous websites for Aboriginal Land Councils and tourism ventures.

Indigenous Heritage Indicators

Several key indicators can be used to assess the economic value and importance of Indigenous heritage places as a tourist attraction. These key indicators for Indigenous heritage and culture are included in the report, *Environmental Indicators for National State of the Environment Reporting–Natural and Cultural Heritage* (Pearson *et al.*, 1998). Indicators relevant to the economic value of Indigenous heritage are listed below.

- Number and distribution of Indigenous heritage places and objects.

- Number of Indigenous heritage sites impaired by visitor use.

- Funding for heritage agencies responsible for Indigenous heritage.

- Funding for collaborative studies of Indigenous heritage places.

- Area and proportion of lands preserved for Indigenous heritage values.

- Number and total area of protected lands or Indigenous heritage places under

  a) Indigenous control,

  b) joint management,

  c) designated Aboriginal Lands.

- Number of heritage places where Indigenous people are involved in heritage management.

- Number of heritage agencies incorporating consultation or referral to Indigenous custodians or Indigenous community groups.

- Number of Indigenous staff or custodians employed by heritage agencies.

- Number of Indigenous communities establishing 'keeping places', cultural centres, site/place databases, heritage tours, trails/walks.

- Funding for maintenance of traditional cultural knowledge about heritage places and objects important to Indigenous communities.

- Investment in Indigenous heritage tourism by Aboriginal agencies and groups.

These key indicators provide a guide to the amount of government funding and level of Indigenous involvement in managing and preserving Indigenous cultural heritage. The extent of government and community investment in heritage attractions and visitor facilities can also be used to gauge the economic value of Indigenous heritage tourism.

Valuing Public Collections of Indigenous Heritage

Public museums and art galleries in Australia hold significant collections of Aboriginal artefacts, art and other historic material on

Aboriginal cultures. These Aboriginal collections are promoted as a key tourist attraction in State museums and art galleries. The Museum of South Australia recently spent $20 million upgrading its permanent display on Australian Aboriginal Cultures and Aboriginal guides interpret this exhibit. However, the Djamu Gallery in Sydney, a part of the Australian Museum, closed in June 2000 after operating just 17 months with the loss of 6 Indigenous staff members. Poor visitor attendance and the cost of running the Gallery were cited as reasons for closure. At the same time, the Powerhouse Museum in Sydney opened Bayagul, a new permanent exhibition on contemporary Indigenous art, music, media and cultural achievements.

The economic value of Indigenous art and heritage collections in State museums and art galleries can be assessed in various ways. This includes the public cost of owning, displaying and adding to Indigenous collections and also the educational use of these collections. Other important aspects include the employment of Indigenous curators and performers and funding for community members to access the artefacts held in museums.

The sale of Aboriginal arts, crafts, books and souvenirs in the giftshop and use of the museum or gallery by Aboriginal performers and artists are other value-added features. Key factors in the economic valuation of Indigenous heritage collections are listed below.

- Assessed monetary value of Indigenous art and heritage collections.

- Cost of storing, preserving and maintaining Indigenous collections.

- Cost of purchasing Aboriginal art and artefacts for collections.

- Cost of permanent or temporary displays of Aboriginal collections.

- Amount of corporate sponsorship of Indigenous collections or exhibitions.

- Cost of curatorial staff for Indigenous collections.

- Cost of collecting or research trips to expand Indigenous collections.

- Money spent on education/tourism programs for Indigenous collections.

- Employment of Indigenous curators, guides, dancers, storytellers.

- Funding for Indigenous community members or artists to visit collections.

Other factors include the use of Indigenous art, artefacts or performers for promoting the museum or art gallery. Similarly, cultural information about Indigenous collections or exhibitions is also included on state museum or gallery websites. Links with Indigenous groups featured in the collections (community visits) also extends their heritage value.

Table 3 - **Heritage Projects Funded in 1999/2000 by the NSW Heritage Office**

Type of Heritage Project	Funding
Community Building Projects	**$905,200**
Local Government Building Projects	$763,500
Main Streets & Precincts	$592,000
Local Government Heritage Management	$563,520
Religious Buildings	$549,085
Private Buildings	$273,250
Heritage Support Agencies	$249,500
Movable Heritage	$207,500
Education & Promotion	$207,000
Aboriginal Heritage	**$171,884**
Industrial Heritage	$156,000
Landscape	$112,500
Cemeteries	$ 67,000
History Projects	$ 52,000
Pipe Organs	$ 50,000
Conservation Management Plans	$ 46,000
Ethnic Heritage Projects	$ 38,500
Thematic Studies	$ 14,000
Archaeology Projects	$ 8,500
TOTAL	$5,026,939

Public Cost of Indigenous Heritage Management

The economic value of Indigenous heritage can also be assessed by the amount spent on research, listing and management of Indigenous heritage places by government-funded agencies. These agencies include: Australian Heritage Commission, State heritage (eg. NSW Heritage Office), National Parks and State Forests, and research bodies such as the Australian Institute of Aboriginal and Torres Strait Islander Studies and Indigenous heritage research conducted by Museums and Australian Universities. The number of Indigenous people employed in heritage research and management is a key factor. Money directed to Aboriginal Land Councils for heritage protection and research is a crucial feature, compared to allocations for government agencies managing heritage sites.

The amount spent on Indigenous heritage compared to European or built heritage is revealing in terms of what is most valued (socially and economically) as 'heritage'. In 1999/2000 the NSW Heritage Office allocated $5 million for 327 heritage projects. In this list, Aboriginal heritage ranked 10th in heritage projects for NSW (see Table 3). Of the total amount, just $171,884 (.3%) was allocated to 17 Aboriginal heritage projects. Yet New South Wales is the state with the highest population of Indigenous people (101,485). Half of the NSW Indigenous heritage funding was allocated to Aboriginal oral history ($87,034), with the other half devoted to site surveys ($47,050) and Aboriginal site development including tourism ($37,800). The importance placed on recording Aboriginal cultural knowledge (intangible heritage) is a recent trend in the heritage field.

The Office of National Tourism also funds Indigenous heritage tourism projects through its Regional Tourism Program. In 1998/99, 23 regional projects received funding for tourism facility and industry development ($1.45 million in total). Four Indigenous tourism projects received funding of $302,000, with

$170,000 going to Aboriginal Land Councils in Eden NSW (Moneroo Bobbera Keeping Place) and the Kimberley WA (Mimbi Caves Tourism Infastructure Development). Other Indigenous tourism grants went towards a Lonely Planet *Guide to Aboriginal Australia* ($100,000) and an Indigenous ecotour ($32,000) in Mount Tomah Botanic Garden (Blue Mountains NSW).

Discussion

In Australia, the economic values of Indigenous heritage have increased through tourism. This is particularly evident in tours visiting Aboriginal cultural landscapes and rock art sites. Aboriginal National Parks and homeland areas are a key focus for Indigenous heritage tourism. The growing tourist interest in Indigenous art and heritage has seen a dramatic rise in new cultural attractions, Aboriginal tours and portable cultural objects, particularly Aboriginal arts and crafts. Australian tourist promotion continues to use images of Indigenous people and cultural activities, which benefits the mainstream tourist industry. The intangible aspects of Indigenous cultural and environmental knowledge are also more valued, with this traditional knowledge and oral history increasingly being recorded. Indigenous 'cultural capital' is being converted into new forms for the purpose of heritage tourism. Indigenous heritage interpretation includes books, brochures, signs, displays and cultural centres as well as by cultural tours by Aboriginal guides. Web pages on the Internet are a new way of presenting Indigenous cultural information by public agencies and Aboriginal groups.

Recognising the economic value of Indigenous heritage tourism requires three key steps:

- Economic valuation of Indigenous heritage needs to work for and with Indigenous groups and Indigenous heritage agencies (eg. Australian Heritage Commission),

- Identify and evaluate different aspects of Indigenous heritage 'capital' or resources,

> *Commodity Values* (Indigenous Cultural Products)

Amenity Values (Aboriginal Lands & National Parks, Rock Art Sites)

Marketing Values (Indigenous Heritage in Tourism Promotion)

Cyber-Values (Indigenous Cultural Information on the Internet)

- Economic assessment must consider cultural and intellectual property issues in regard to the use of Indigenous heritage for tourism (both tangible & intangible aspects).

Conclusions

This paper focused on the economic value of Indigenous heritage tourism in Australia. It reviewed Indigenous cultural heritage attractions and resources then discussed the wider economic value of Indigenous heritage as a tourist attraction. The tourist consumption of Indigenous cultural products and heritage sites generates commodity values and amenity values from direct use plus marketing values and cyber-values from indirect tourism uses. Such economic values derive from non-Indigenous interest in Indigenous cultural heritage, especially Aboriginal art. The economic benefits of Indigenous 'cultural capital' though are mainly associated with tangible forms of Indigenous heritage. The intangible aspects of Indigenous heritage, especially Indigenous images and traditional cultural knowledge, are grossly undervalued as a tourism resource. Adopting a holistic approach to economic valuation, using key heritage indicators, should heighten recognition of the 'real' value of Indigenous culture. Funding for the social maintenance and presentation of Indigenous heritage in terms acceptable to Indigenous communities should then follow.

References

Altman, J. C. (1996). Coping with Locational Advantage: Tourism and Economic Development at Seisia Community, Cape York Peninsula. *Journal of Tourism Studies,* 7 (1): 58-71.

ATSIC (Aboriginal and Torres Strait Islander Commission) (1997). *National Aboriginal and Torres Strait Islander Tourism Industry Strategy.* Canberra: ATSIC.(http://www.atsic.gov.au/programs/noticeboard/Industry_Strategies/tis/contents.asp)

Australian Heritage Commission (1997). *The Aboriginal and Torres Strait Islander National Estate.* Background Notes. Canberra: AHC. (http://www.ahc.gov.au)

Australian Heritage Commission (1998). *Protecting Local Heritage Places: A Guide for Communities.* Canberra: Australian Heritage Commission.

Australian Heritage Commission (1999). *Draft Heritage Tourism Guidelines: Best Practice for People involved in Tourism and Heritage Places.* Canberra: Australian Heritage Commission and Tourism Council Australia.

Flood, J. (1990). *The Riches of Ancient Australia: A Journey into Prehistory.* St Lucia: University of Queensland Press.

Holmes, J. (1996). From Commodity Values towards Amenity Values in the Northern Frontier. *Journal of Australian Studies, 49*: 97-104.

Jacobs, J.M. (1996). Indigenous Tourings. In *Edge of Empire: Postcolonialism and the City.* London: Routledge, pp. 142-149.

Janke, T. (1999). *Our Culture Our Future: Report on Australian Indigenous Cultural and Intellectual Property Rights.* Canberra: AIATSIS and ATSIC. (http://www.icip.lawnet.com.au/)

Langton, M. (1994) *Valuing Culture: Recognising Indigenous Culture as as a Valued Part of Australian Heritage.* Key Issue Paper No. 3. Council for Aboriginal Reconciliation. Canberra: AGPS.

Mercer, D. (1994). Native Peoples and Tourism: Conflict and Compromise. In W. F. Theobald (Ed.) *Global Tourism: The Next Decade.* Boston: Butterworth Heinemann, pp. 124-145.

NSW Heritage Office (1998). *Living With Aboriginal Culture.* Parramatta: NSW Heritage Office. (http://www.heritage.nsw.gov.au)

NTTC (Northern Territory) Tourist Commission (1996). *Aboriginal Tourism Strategy.* Darwin: Northern Territory Tourist Commission.

Office of National Tourism (1998). *Aboriginal and Torres Strait Islander Tourism.* Tourism Facts No. 11 June 1998. Canberra: Office of National Tourism. (http://www.tourism.gov.au/FactsandFigures/abandtorrestourism.html)

Office of Northern Development (Ed.) (1993). *Indigenous Australians and Tourism: A Focus on Northern Australia.* Darwin: Office of Northern Development.

Pearson, M., Johnston, D., Lennon, J., McBryde, I., Marshall, D., Nash, D. & Wellington, B.(1998). *Environmental Indicators for National State of the Environment Reporting - Natural and Cultural Heritage.* Canberra: Department of the Environment.

Purdie, R.W. (1997). *The Register of the National Estate: Who, What Where?* Australia: State of the Environment Technical Paper Series (Natural and Cultural Heritage).Canberra: Department of the Environment.

Sykes, L. (1995). Welcome To Our Land. *The Geographical Magazine,* 67 (10): 22-25.

Throsby, D. (1999). Cultural Capital. *Journal of Cultural Economics, 23:* 3-12.

Trotter, R. (1997). Land Rights, Tourist Rights: Whose Rights? *Media & Culture Review, 1*: 1, 10.

Zeppel, H. (1998a). Selling the Dreamtime: Aboriginal Culture in Australian Tourism. in D. Rowe & G. Lawrence (Eds.), *Tourism, Leisure, Sport: Critical Perspectives.* Sydney: Hodder Headline, pp. 23-38.

Zeppel, H. (1998b). Land and Culture: Sustainable Tourism and Indigenous Peoples. In C. M. Hall & A. Lew (Eds.), *Sustainable Tourism: A Geographical Perspective.* London: Addison Wesley Longman, pp. 60-74.

Zeppel, H. (1998c). New Meeting Grounds: Aboriginal Cultural Centres in Australia. In J. Kandampully (Ed.), *Advances in Research: Proceedings of New Zealand Tourism and Hospitality Research Conference 1998. Part 1.* Canterbury: Lincoln University.

Zeppel, H. (2000). Discovering Aboriginal Australia: Making and Using Heritage Landscapes for Indigenous Tourism. In B. Boyd & M. Cotter (Eds.) *Heritage Landscapes: Understanding Place & Communities.* Lismore, NSW: Southern Cross University Press.

The Economic Benefits of Heritage Restoration

David Cotterill, Sinclair Knight Merz; Tomas Nohel, Heritage Victoria
Paper Presented by: David Cotterill, Sinclair Knight Merz

Abstract

With limited state budgets, heritage conservation has to compete for funding alongside other essential community services. In order to secure funding Heritage Victoria and SKM Economics prepared a study to identify and quantify the benefits of heritage conservation. The study was based on evaluation of the $16 million Government Heritage Restoration Program undertaken by the Victorian Government between 1994 and 1998. The results led to Victorian Government establishing new $15 million Public Heritage Program to run over three years from 1999 to 2002.

While the study considered the broader benefits of heritage restoration, because of the need to justify funding compared with the provision of other services, it put more emphasis on establishing the quantifiable economic benefits of restoration.

This paper is based on the study and identifies benefits of heritage restoration as the catalyst for economic development, extension of economic use and the attraction of increased visitation and patronage.

Introduction

The discussion in this paper is based on the work undertaken to evaluate the Victorian Government Heritage Restoration Program[xxxvii] and draws on the findings published in a paper on the Economic Benefits of Heritage Restoration presented at a Queensland Heritage Council Conference on Sustainable Heritage in June 2000[xxxviii]. That paper provides additional background on the benefits of heritage restoration identified in the program evaluation which are summarised in this paper. This paper puts more emphasis on the process and rationale of measuring the economic benefits of heritage restoration developed in the evaluation.

Government Heritage Restoration Program

In 1994 the Government recognised the critical conditions of some of the state owned historic assets and allocated $16 million over four years to improve their condition. The initiative, called the Government Heritage Restoration Program (GHRP), was aimed at preservation of the assets and protection of their intrinsic values. It had the following three major objectives - to:

- Stabilise and secure government owned heritage assets;

- Create awareness by Asset Managers of the benefits of restoration;

- Support managers of the assets to achieve right outcomes.

The Government Heritage Program provided the funding to stabilise over 160 structures across Victoria and worked with more than 30 individual Government agencies and Departments. At the conclusion of the program Heritage Victoria commissioned a project seeking an independent review of the program. The review involved interviews with stakeholders and case studies of an indicative number of restoration projects. The review identified a comprehensive list of perceived benefits of the program. The list of the benefits was then used by the consultant (SKM Economics) to consider performance measures and guidelines for monitoring a broader based program of rehabilitation of heritage buildings/structures and to develop a framework for general evaluation of conservation projects.

[xxxvii]Economic Evaluation of the Government Heritage Restoration Program
Sinclair Knight Merz Prepared for Heritage Victoria 1998
[xxxviii]The Economic Benefits of Heritage Restoration:
David Cotterill Sinclair Knight Merz and Tomas Nohel Heritage Victoria – presented at the Queensland Heritage Council Sustainable Heritage Conference June 2000

The Findings on Benefits of Heritage Restoration from the GHRP Evaluation

The evaluation of the GHRP was largely qualitative in nature based on interviews with the key Departmental and Agency heritage asset managers. In initial discussions across departments and agencies a number of common benefits were identified which were then tested through case studies of specific heritage sites and buildings.

The main common benefits noted were that access to the GHRP assistance:

- enabled repairs and maintenance to be done that wouldn't otherwise be done or enabled programd repairs and maintenance to be brought forward to stop continuing deterioration. A number of asset managers indicated that without the funding, buildings could have deteriorated to the stage that they were abandoned;

- provided a catalyst for additional funding for upgrading the premises so that the overall project costs included a mix of departmental/agency and GHRP funding;

- encouraged the Department/Agency to retain the building and continue to use it;

- enabled the building to be upgraded so that normal Departmental repairs and maintenance was able to maintain the property. In many cases the initial upgrade provided encouragement to continue restoration and upgrading of the building;

- funded restoration that opened opportunities for additional uses.

These and other benefits were explored in more detailed discussions with three departments and two agencies responsible for a significant number of heritage listed sites and structures. The agencies and the proportion of funding from the program were:

- Department of Justice (11.3%)

- Department of Education (11.5%)

- Department of Natural Resource and Environment including Parks Victoria (11.1%)

- The Public Transport Commission (12.3%)

These five bodies accounted for nearly half the funding (Figure 1) from the GHRP and just over 70% of the total projects funded. The findings in terms of issues and benefits are summarised by agency in the earlier paper[xxxix]. The broader key benefits are indicated below.

Summary of Benefits

The key benefits of the GHRP identified in the qualitative interviewing and case studies vary by type of project and include:

- the continued use of buildings such as courthouses, schools, railway buildings and other government buildings as part of the Department/Agency business functions. This continued use provided a number of benefits including:

- savings in providing alternative accommodation;

- improved working environment;

- reduced costs to the public by not having to travel to the next nearest location;

- continuing benefits to the regional economy;

In most cases the GHRP provided funds that would not have been available otherwise to undertake basic conservation and restoration to bring the building to a level that it could continue to be maintained from Departmental/Agency allocations;

- in some cases, conservation repairs and maintenance were carried out earlier than they would have been under the Departmental/Agency cyclic maintenance program so that the risk of further deterioration was minimised;

- the restored building encouraged pride from Departmental/Agency staff and across the community. The buildings

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[xxxix]   Ibid

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became seen as a community asset rather than a cost;

- in some cases, conservation led to improvements in Departmental/Agency functions such as increased patronage for V/Line Passenger;

- the projects provided a demonstration to Departmental/Agency staff and the community on what can be done which, therefore, led to a higher priority for heritage conservation;

- alternative uses were found for some redundant buildings which were able to be leased to provide income for the Department/Agency. In some cases the new use also assisted them in carrying out their core business more effectively;

- the enhanced buildings encouraged Departmental/Agency managers to consider additional uses for them to 'show them off' or to provide improved public access.

The Case for Further Funding

The evaluation recommended the development of a new funding program. However, any new grants program would clearly have to compete for funds against a range of other government programs.

To compete successfully it was decided that the aim should be to evaluate heritage restoration, as far as possible, on a 'hard-nosed' economic basis and put heritage asset management on a similar basis to the management of other government assets.

It was decided that the evaluation required a comparison of restoring or not restoring the heritage property and that the appropriate evaluation methodology was, in this case, a cost-benefit analysis, comparing the net benefits of restoration with the net benefit of not restoring the property.
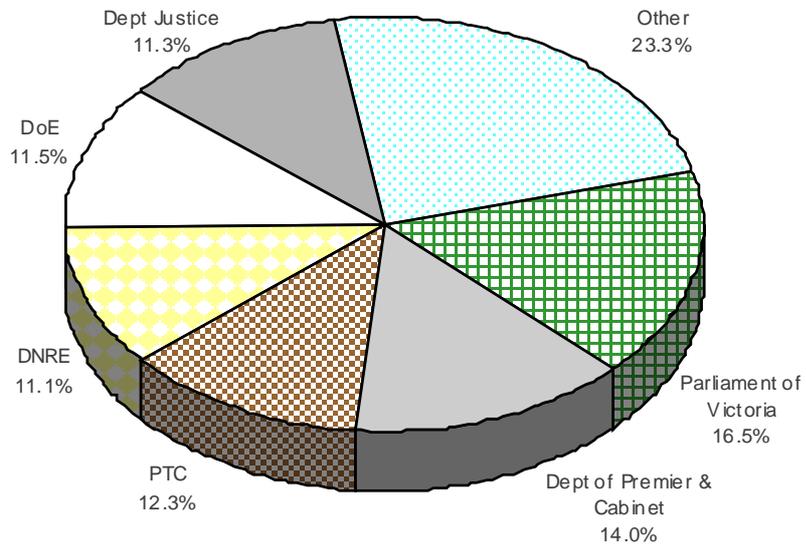
Consideration was given to a multi-criteria analysis to include social and environmental as well as economic aspects. However, it was decided to concentrate on the economic impact in terms of the formal evaluation. While this was of concern to some heritage advisers, it was noted that the benefit-cost approach allowed

consideration, at least in theory, of some social and environmental benefits and costs, and secondly that there was scope for expert review and opinion on the broader social, environmental values.

On this basis, there was a need for the program to demonstrate the 'economic value' of heritage restoration. The evaluation had shown, albeit qualitatively, that heritage restoration has a clear economic benefit and the issue was to value these benefits. Heritage restoration provides three potential economic benefits:

- a 'priced' use benefit related to the use of the heritage asset that either directly increases income such as entrance fees, leases or licences for use or reduces costs including reduced need for alternative construction or for rented accommodation or cost savings in on-going repairs and maintenance through having 'done the job' properly to start with. There could be other additional benefits that could be priced related to reduced 'contingent' liabilities or risks associated with accidents from damaged fabric and to the differential costs of travelling to the next nearest location if a building is closed;

Figure 1: Distribution of GHRP Funding by Ownership

Dept Justice 11.3%
DoE 11.5%
DNRE 11.1%
PTC 12.3%
Dept of Premier & Cabinet 14.0%
Parliament of Victoria 16.5%
Other 23.3%

- an' unpriced' use benefit related to the benefits visitors get that they do not pay for, such as the pleasure of visiting and walking around a heritage site, taking photographs, picnicking in the grounds and so on. Even where some of the benefit is 'captured' in use fees such as admission charges or car parking charges, most visitors will receive additional benefits. This is the consumer surplus which equates to the additional amount that an individual would be prepared to pay above what they do pay to visit the site;

- the non-use values that related to the existence of the heritage place. These are the values that result from the knowledge that the heritage place exists and can be visited in the future, or the option value to a person knowing that the heritage place remains and that further decisions on its future can be made if and when more information becomes available.

Priced use values can be measured directly in financial terms as an incremental income or reduced costs.

Unpriced use values can be valued based on a range of techniques including the travel cost method that essentially uses the cost of a visitor travelling to a destination as a proxy for the consumer surplus of that destination. Travel time methods can also be used to value part of the incremental costs of not restoring a building if, for example, a courthouse is closed witnesses, police, plaintiffs etc may have to travel distances to the next nearest Court at a cost. The cost of this travel can be estimated using standard travel time valuation methods.

Existence values are often not valued. In some cases, hedonistic methods can be used such as valuing a view as the difference between the values of similar houses with and without the view. The main approach to valuing existence value is to use a contingent valuation survey method. Such surveys tend to be expensive and are still subject to some scepticism in Australia. A common and cheaper alternative to a full contingent valuation survey is to use the benefit transfer approach. This approach 'transfers' the estimated or derived value of the benefit of

a project to a similar project. A problem with this is that cases may not be sufficiently similar to justify use of the approach.

Given the need to justify a new heritage restoration program against a range of other demands on the public purse, we decided to emphasise the more tangible and measurable economic benefits to justify a new program.

Potential projects for funding could be ranked on the basis of their use benefits including quantification of 'unpriced' uses where possible together with a qualitative assessment of non-use or existence benefits.

Valuation of the use benefits included such elements as:

- cost of purchasing or renting alternative accommodation and any other property acquisition and relocation costs;

- differential property use costs such as heating, lighting, minor maintenance etc;

- differential costs related to users such as additional travel time and costs to an alternative location;

- new income streams such as admission charges, car park fees, hire charges for events or function less any incidental costs of collection, administration or operations associated with these;

- lease income from any part of the building that could be leased less any incremental costs of establishing or operating the lease.

These are all 'priced' items that can be measured and offset directly against the costs of conservation and restoration to the stage that the heritage building can continue to be used or can be used again. These are the direct 'value' to the user or owner of the building (the 'producer' value).

On this basis the 'value' of a conservation project could be expressed as the Net Present Benefit

$$NPB := \sum_{i=1}^{n} \left[\frac{(Pi + Ui + Vi + Li) + \sum_{j=1}^{m} CS_n}{(1+d)i - 1} \right] + E - \sum_{i=1}^{p} \left[\frac{Ci}{(1+d)i - 1} \right]$$

(NPB) as follows:

Where:	P =	Differential Property Costs
	U =	Differential Use Costs
	V =	Differential Visitor Income
	L =	Differential Lease Income
	CS_j =	consumer surplus for Visitor j
	n =	the period between major construction projects
	m =	the visitors in each period
	E =	the present value of the existence cost
	C =	the conservation project cost by period over the project period I to p
	d =	the discount rate
	p =	conservation works period.

A benefit cost ratio could be derived by dividing the first two expressions related to benefit by the last related to cost. Table 1 below indicates approaches to measuring the elements in the formula.

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Table 1: Possible Measurement Approach element

	Measurement Approaches	Comment
P	Estimated Values from Real Estate Agents, Property Managers etc	
U	Estimated values from Property Managers	
V	Estimates based on income generated by similar venues, use of regional tourism visitor figures etc.	
L	Estimates based on information from key informants, such as real estate agents, property managers.	
CS	Based on travel cost method (see Appendix D).	Potentially quite expensive.
	Requires good survey of visitors to site including information on visitor origin, reasons for the trip and total costs of getting to the venue.	Could undertake surveys for a typology of sites and structures and use their results in 'benefit transfer' assessment for similar sites.
E	Contingent valuation surveys.	Potentially very expensive, see comments above.

Consideration was given to the unpriced use items such as the value that visitors get in addition to any admission fees or above any cost of getting to the venue (the consumer surplus of users) together with existence or option value. These items would usually be assessed qualitatively although in some cases could be estimated in financial terms. The 'values' would be assessed over the estimated life of a major conservation/restoration project in present value terms to provide a Net Present Value and could be expressed as a benefit/cost ratio.

Based on the review of the GHRP, it is likely that in many cases the 'priced' user benefits P, U, V and L will provide a positive net present value and provide a sufficient value to prioritise project funding. However, in some cases the heritage place may be of sufficient existence value or attract a sufficient number of non-income producing visitors that a qualitative or quantitative assessment of the consumer surplus will alter the project priorities. For some Departments/Agencies such as Parks Victoria, where the conservation projects tend to be for heritage structures without a significant 'priced' use, and where the 'value' relates to visitors to the interpreted site, this could be the norm rather than the exception.

Important heritage structures in remote locations with limits in on-going use (perhaps because of low population densities) and limited visitation may also need to rely on a qualitative estimate of their existence value or could be subject to a more formal 'valuation' using a benefit transfer approach.

Based on this, consideration was given to undertaking a contingent valuation study to estimate the existence value of specific categories of rural heritage structures which could be used to 'weight' appropriate submissions. This work would be undertaken for categories of structures where a number of similar structures were located in more rural and remote locations such as schools, courthouses and railway properties. The aim was to establish and value a typology of heritage structures and places that was sufficiently robust to provide reasonable indications of 'value' for a range of similar structures and places by the benefit transfer approach.

The evaluation of the full producer and consumer surplus elements demonstrates the public benefits of the conservation project whereas relying on the priced use elements is essentially the private benefit to the building owner. In evaluating the overall benefit of a funding program as distinct from establishing criteria for assessing project submissions, an assessment of the broader public benefit would be necessary. However, in terms of establishing the value of restoration compared with non-restoration to the building owner (the Government Agency), a value that compares the net benefits of all users of the building under both the restoration and non-restoration option would provide an appropriate basis for evaluation of restoration versus non-restoration.

Structures and places with limited uses and users but which were considered to be very significant in heritage terms would be agreed qualitatively in the short run but subject to more formal assessment of their non-priced use and existence values in the longer term, either through the transfer of typical benefits from the proposed typology study or by a separate contingent valuation study.

To test the approach, a benefit-cost assessment using the priced use benefits was made for a selection of the case studies undertaken in the evaluation.

The assessments estimated the reduced costs and additional income attributable to the restored heritage place compared with non-restoration. The estimates included new income such as visitor fees (admission, car parking etc) or new lease or rental income. Differential costs included savings in lease or rental costs from the agency, construction cost savings where the alternative was a new building and savings in operations and maintenance costs. Where the alternative to restoration involved relocation of the building or service, estimates of the increased travel costs of affected parties were made. This was relevant in both Court and School restorations where the alternative was closure. Care was taken to ensure that income and cost estimates were incremental and that double counting was avoided.

The results of these case study benefit-cost analyses were a range of discounted benefit-cost ratios ranging from a low of 1.69 to a high of 7.20.

Table 2 - Case Study Discounted Benefit-Cost Ratios

Case Study	B-C Ratio
Kyneton Court House	7.20
Castlemaine Court House	3.74
Taradale Primary School	2.01
Beechworth Primary School	1.77
Seymour Railway Station	3.03
Warragul Railway Station	1.69
Walhalla Tourist Attraction	5.19

The results demonstrate the potential direct economic benefit from heritage restoration and access to heritage restoration funding.

In a number of studies based on the contingent valuation method, the existence value is estimated to be significantly greater than the use values, potentially reinforcing the benefits of restoration.

Based on these findings the submission for a new program proposed that the selection and evaluation of projects for funding should include an assessment of the net benefit and benefit-cost ratios for each project.

Given the comment above on the existence value, this approach may not allocate funds to the projects with the highest overall value. However, as it was expected that the resources provided would not enable every heritage place to be restored and as eligible projects would need to be on a heritage register and protected, it was considered that any misallocation would be limited.

In addition:

- it was agreed that any program funded would allow discretion for Heritage Victoria to propose projects deemed to have 'special merit' for evaluation. These projects were subject to the same evaluation process as the others but the approach assured that they were considered;

- it was proposed to fund a project to investigate and determine the broader non-use values of heritage places for inclusion in subsequent programs.

The proposed non-use value study proposal is:

- to develop a typology of heritage places;

- to undertake a contingent valuation study to develop values for these typical buildings. As noted above, the aim is to make these studies robust so that the results can be used to reflect the existence value of other similar places. That is, to provide a robust table of values by heritage place category for use on a benefit transfer basis for other evaluations.

This study has not commenced at this stage. However, it is considered that the development of these values to include with the use value, is important for efficient asset management.

Public Heritage Program

The newly developed framework for evaluation of the conservation projects was presented to all stakeholders and senior staff of the State Government. It was endorsed in principle and applied in practise to prepare a bid to the former Budget and Economic Review Committee for funding of the new Government initiative 'Public Heritage Program'(PHP). The new initiative supports the new management role of Heritage Victoria while assisting government agencies (State and local level) to recognise, maintain and capitalise upon state-wide heritage assets as part of an economically valuable and cultural resource.

The program was supported by the Department of Infrastructure and has obtained 3-year $15 mill funding ($5 mill per year) with the aim to:

- provide capital funds for urgent repairs, restoration and refurbishment of important historic places, assist with the identification and assessment of cultural heritage resources, and provide professional advice to local government on the management of heritage places.

- build on the achievements of the Government Heritage Restoration Program (GHRP) and associated initiatives while providing a more strategic and integrated approach to heritage planning, management and conservation. It is more comprehensive than the GHRP through the inclusion of municipal as well as state government-owned buildings and places.

- continue to fund heritage places requiring urgent works

- increase the number of key heritage places, especially in regional Victoria, which undergo value-adding restoration and refurbishment to provide high economic return in the form of reduced property costs and increased revenue

- provide high community and cultural benefits, particularly in rural and regional areas

Selection Criteria of PHP

One of the primary aims of Heritage Victoria through delivery of this program is to increase general awareness about heritage conservation, to promote quality heritage services and to highlight government's commitment to works to protect our heritage.

While funds are provided for urgent and essential works, these do not replace regular Departmental and Agency provision for proper maintenance and management strategies that limit additional costs for the upkeep and care of heritage. The program aims to show that responsible care for a heritage place is smart business. With that in mind, the following selection criteria have been developed:

- Other Resources (preference given to applications that contain significant financial and other support from other State government programs or from Commonwealth, local government, the private sector, community or other sources including in-kind support).

- Property Management Structure (demonstrate an on-going structure to manage the place)

- Community Support (detail the level of support for the project including support from within the agency and from the broader community)

- Conservation Management Plan (preference given to projects that have developed a conservation plan or propose to do so in parallel with project implementation on the basis that this provides better asset management for heritage sites and structures)

- Project Management Structure (evidence of realistic budget for the project, financial and project management capacity of the applicant)

- Evaluation measures (detailed below)

Evaluation Measures

The Public Heritage Program is a conservation initiative and the projects are not ranked only on basis of their economic benefit. The selection criteria for the program were based on the objectives of the program. They support appropriate asset management while ensuring correct conservation philosophy is applied. As noted above the Public Heritage Program's objective is to improve the management of heritage assets.

However, too often clients apply for funding without any strategy in place as for a future management including use and on-going operational costs. Quite often the clients are not aware of the real benefits of the exercise undertaken beyond outcomes of capital works eg. weather-proofing etc. The evaluation framework is used as one of the selection criteria in the new program. Its aim is to ensure that grant recipients (clients) are clear on a future direction for the place. It is client's responsibility to indicate the benefits of the program using the program's guidelines. The guidelines include examples of the benefit and can be used as a blueprint for project evaluation. Reading the guidelines enables to the client to review list of additional conservation benefits beyond scope of the one individual project. It only includes measurable benefits and may not reflect the true overall benefit of the project, but even that is most of the time enough to justify the expenditure while clearly formulating project strategy.

A funding applicant is required to list performance measures relevant to the project. Performance measures may be qualitative or quantitative. All projects should demonstrate at least one and preferably all of the following:

- quantified benefits in terms of reduced costs and/or new income opportunities;

- potential positive employment outcomes;

- enduring value or on-going benefits to a community or communities within Victoria;

- opportunities for broad community involvement and participation in the project.

Conclusion

A key benefit from the process of evaluation of the earlier GHRP and the establishment of the new program is a heightened awareness of the benefits of heritage restoration and a greater willingness to define and attempt to quantify the benefits in economic terms.

Additionally, the evaluation framework, based on the identified benefits, has proven to be useful asset management tool. Being incorporated into the program's selection criteria it makes each individual applicant think about the real benefits of the conservation beyond capital works implementation.

References

Economic Evaluation of the Government Heritage Restoration Program Sinclair Knight Merz Prepared for Heritage Victoria 1998

The Economic Benefits of Heritage Restoration: David Cotterill, Sinclair Knight Merz and Tomas Nohel, Heritage Victoria– presented at the Queensland Heritage Council Sustainable Heritage Conference June 2000

The economic rationale for adaptive reuse-case study of the North Head Quarantine Station

Simon McArthur, Creative Director, Mawland Hotel Management

Abstract

This paper will provide a cultural tourism developer/operator's perspective on generating economic returns from cultural heritage, and the need to develop economically orientated tools to assess the condition and resources to conserve and present the significance of a heritage site. Specifically, this paper will briefly outline the economic arguments and assessment processes that led the NSW National Parks and Wildlife Service to tender out a 45 year lease for the Quarantine Station in Sydney to Mawland Hotel Management. Mawland's proposed adaptive reuse of the site has been designed to generate sufficient wealth to better conserve the site and increase public access, interpretation and marketing. The Proposal will also return a profit share to the National Parks and Wildlife Service for the conservation of other cultural heritage sites within Sydney Harbour National Park. The Environmental Impact Assessment of the Proposal required Mawland's consultants to identify the condition of the site, past spending on conservation, public access and interpretation, and the economic impacts resulting from the Proposal. This exercise should provide some ideas and lessons to enhance the economic management of other heritage sites.

Introduction

The Burra Charter recognises a range of ways that cultural heritage is valued, including physical, use, associations and meanings (Marquis-Kyle and Walker 1992). The significance of cultural heritage drives the way in which heritage is managed, but in broad terms heritage management objectives are typically based around:

- conserving significance;
- providing for public access (be it physical, cultural or language-based);
- interpreting significance;
- generating a positive profile for management; and
- undertaking the above in a financially viable way (Hall and McArthur 1996).

In reality, these objectives are rarely all achieved at any one site. Typically there are tradeoffs between objectives that result in some objectives being better met than others. These tradeoffs occur because of the influence of issues and subsequent evolutions in management approaches. One of the fundamental issues is economically based; the securing of sufficient funds to conserve and present the significance of heritage.

Very few people would suggest that there are enough resources to adequately conserve and present our cultural heritage. As we discover more and more heritage, we need more and more resources to manage it all. If the resource base fails to increase at the pace of new heritage sites and the increasing expectations of stakeholders, then we can expect an ever increasing deficit. There is an increasing realisation among heritage managers that many heritage assets are deteriorating faster than conservation efforts will ever be able to keep up with, and that this condition is limiting public access to heritage, and interpretation of its significance.

The use of grants and sponsorships

One way that heritage managers and stakeholders have tried to meet resourcing deficits has been to access grants and sponsorships from the private sector. Unfortunately, most grants are very small, are one-off rather than ongoing, and require the project to be substantially altered to reflect the objectives of the grant program. Competition for grants has intensified and most recipients now find that the grants are no longer sufficient to meet their needs–some applicants are even questioning whether the effort to win a grant is a worthwhile investment in precious human resources. Sponsorships reflect similar issues and limitations, and opportunities vary with the economic climate and competition. Importantly, sponsorships require a more entrepreneurial culture than most heritage managers and stakeholders struggle to provide.

The conversion of public sector services into businesses

In order to generate profits to offset deficits in public sector funding, some public sector heritage management agencies have converted existing services into tourism businesses, or established new tourism

businesses. Common examples include the conversion of guided tour services to tour businesses, and the introduction of retail outlets, cafes, function centres, conference centres and accommodation, all run by the public sector as businesses. The establishment of public-sector-run businesses confuses the core business of the agency, competes with the private sector and rarely generates strong ongoing funding (McArthur 2000a). The limited financial performance is largely due to a lack of capital and entrepreneurial expertise, public sector-based business systems and culture.

The role of the private sector in meeting resource shortfalls

The private sector is increasingly being viewed as one alternative way to resource the conservation and presentation of heritage (McMillan 1997). This is typically being undertaken through the issuing of licenses to provide services, or leases to consolidate or establish infrastructure and services. Common examples of service licensing include the provision of interpretive tours and special events, and the running of cafes within existing heritage buildings, museums and visitor centres. Common examples of the leasing of sites are leases for restaurants and tourist accommodation.

Not only are tourism operators enthusiastically responding to opportunities generated by heritage managers, they are also stimulating their own initiatives, such as the recent and successful Bridgeclimb operation (Sydney Harbour Bridge). However, there have been varying levels of operator success in the trend of converting many of these opportunities into viable businesses. For example:

- some of the most viable adaptive reuses are not considered acceptable by heritage organisations;

- some of the most ideal adaptive reuses from a heritage perspective, are also the least profitable;

- with a limited supply of niche tourism markets wanting and prepared to pay for heritage tourism, there will inevitably some flattening off of demand for some adaptive reuse, particularly the ideal uses; and

- there are limits on the number of times that some adaptive reuses should or can be implemented - cafes should not

be the economic solution for every heritage site in need of additional resourcing.

The other factor limiting the support that the private sector can make towards the conservation and presentation of heritage, is the poor economic assessments undertaken to establish a need, and the subsequent fuzzy conditions written into leases and licenses–particularly the short periods that most leases and licenses are offered for. The shorter the tenure, the lower the investment security, and the lower the commitment to innovation and quality.

Therefore, the private sector that is involved in heritage tourism is very keen to see a greater and more effective use of economic tools within cultural heritage management. These tools are needed to establish a clear need for involving the private sector and a partnership based on a tangible deal. This paper will now identify seven areas of economic reform that would greatly assist greater involvement and support from the private sector in the conservation and presentation of cultural heritage.

The need for greater use of economics in heritage management

This paper proposes seven economically-orientated reforms for the Heritage Commission to consider in preparing its strategy on economic research and policy development, from the perspective of a private developer / operator involved in adaptive reuse.

1. A crude tangible comparative measure of significance, as a kind of score for comparative evaluation

2. A simple way to document the condition of heritage, particularly in relation to significance

3. A tool to undertake financial assessments for catch-up works and a sliding scale that represents the financial impact of delay

4. Provide a tool to undertake financial assessments for funding maintenance, with and without catch up works

5. Provide a system that delivers tangible evidence of why funds should be allocated to one heritage site or program over another

6. A more user friendly way to use and present the results of the Cost Benefit Analysis

7. A cost effective tool to measure the economic contribution of cultural heritage to the local economy

While there are positive reforms occurring, there is little to no coordination of this work, no reward to assist the pioneers, and no incentive to attract more effort. The remainder of this paper will draw on Mawland's recent experience in gaining a conditional agreement to lease the Quarantine Station at North Head, and in preparing an Environmental Impact Assessment for the Proposal. After an initial background to the Quarantine Station, each reform will be briefly explained and then demonstrated through reference to the Quarantine Station case study.

Background to the case study of the Quarantine Station

Brief history

Sydney's Quarantine Station is nestled between North Head and the coastal township of Manly. The 50 hectare site comprises over 60 separate buildings of high conservation significance, and contains evidence of at least 5,000 years of Aboriginal occupation (NSW National Parks and Wildlife Service 2000). The Quarantine Station was established in the 1830s to protect Sydney residents from disease that arrived on immigrant and merchant shipping. The three functions of the Station were to sterilise passengers and cargo, hospitalise the sick and accommodate all other passengers until they were proven disease free. The operation was tightly controlled to minimise the spread of disease, and passengers were accommodated at a level that reflected the class of ticket that they had purchased to travel to Australia.

Problems conserving the site

The operations of the Quarantine Station began winding down in the 1930s, and in 1984 the operation ceased and the site

became part of the Sydney Harbour National Park, to be managed by the NSW National Parks and Wildlife Service). Unfortunately, the combination of a coastal location, a large number of buildings and light weight construction materials generate the need for expensive and continual maintenance, requiring resources that are beyond those of the Service. As a result, despite significant conservation works, the heritage resource is continuing to deteriorate.

Funding for conservation has come from small annual state government allocations, one-off grants and small contributions from two businesses run by the National Parks and Wildlife Service–a conference and functions business and a tours business. Unfortunately, these sources do not provide sufficient revenue to conserve the buildings, landscape and archaeological sites, which have subsequently deteriorated and lost some of their significance. Indeed, funding has always been so limited that to minimise further deterioration, public access has been limited to guided tours and the small conferences and functions. For 13 years, this problem has been so profound, that the National Parks and Wildlife Service has been trying to lease the site to the private sector, so that it can provide more funding

for conservation, greater public access and better interpretation. The government also want to reallocate the scarce resources that are being invested in the Quarantine Station into the many smaller heritage projects that are receiving little to no funding.

The Mawland Proposal

A Conditional Agreement to Lease for the Quarantine Station has been signed between the NSW National Parks and Wildlife Service and Mawland Hotel Management (Mawland 2000). Some of the key elements of the head lease proposal put forward by Mawland are identified in Table 5.

Table 5 - Key elements of the Mawland head lease proposal

Attractive elements for the NPWS	Attractive elements for Mawland
▪ $6 million up front conservation work, within five years of the lease being signed	▪ Exclusive access to a unique heritage site, close to the city centre
▪ Guaranteed ongoing maintenance to a schedule agreed with by NPWS and monitored through an environmental monitoring program	▪ A 45 year lease, subject to conservation work
▪ Profit share for reinvestment in local heritage sites within the Sydney Harbour National Park	▪ A relatively small investment in that neither land or buildings need to be purchased
▪ Expanded visitor access by water, visitor access within the site by shuttle, and increased equity of access through specialised facilities and services for people with mobility disabilities and non-English language	▪ Marketing with the NPWS to add authenticity and ethical positioning of the operation
▪ Expanded and innovative interpretation techniques, directed by an interpretation plan and evaluated by a performance monitoring system	▪ Consolidated positioning of the company as a leader in adaptive reuse, visitor management and interpretation
▪ Ongoing presence on the site, including the provision of NPWS guides for tours	▪ Box seat for other leasing opportunities undertaken by the NPWS

Source: McArthur (2000b)

The Proposal is quite conservative in that it requires no new buildings and does not propose to demolish any buildings. The proposal seeks to reintroduce visitor access by water with the use of a heritage vessel to transport people between Manly Wharf and Quarantine Wharf, the return of the Sydney Ferry Summer Service and the introduction of several private Sydney Harbour cruise vessels. The five businesses proposed are:

▪ visitor centre, retail outlet and museum;

▪ 4 interactive tours and various occasional specialised tours;

▪ 150 seat restaurant alongside Quarantine Wharf;

▪ 90 room, 3 star heritage hotel, functions and conference centre; and

▪ overnight education study centre for schools.

The Proposal is currently being assessed through an Environmental Impact Statement (Manidis Roberts Consultants, in progress). If a favourable determination occurs, a lease could be written in July and Mawland could be on-site as an operator in September 2000. The renovation work required to establish the businesses will be staggered over a three year period, with all of the businesses functioning within the first year.

Evidence of the need for economic reforms and a response at the Quarantine Station

Tangible comparative measure of significance

While statements of significance are starting to be written to capture the full dimensions of heritage, there are few cases where the statements are accompanied a way of showing relativity. This relativity could contrast variation across different:

▪ dimensions of significance (physical, use, association and meaning);

▪ parts of a heritage site; and

▪ alternative yet similar sites.

While this may seem an anathema to purists, practitioners need to be able to contrast and compare when deciding how to allocate precious resources, what to make publicly accessible and what to interpret.

The NSW National Parks and Wildlife Service have implemented this approach within the recently produced Conservation

Management Plan for the Quarantine Station. The Plan includes a matrix showing comparative significance across the dimensions of heritage and the precincts across the site (NSW National Parks and Wildlife Service 2000). This matrix is the first part of the Plan to be used in planning and decision making; it meets a real need.

Tool to document the condition of heritage

The second potential reform is a simple way to document the condition of heritage, particularly in relation to its significance. Condition is needed to assist determine what is needed to maintain significance, and what share of scarce resources are therefore required. Another valuable result of this reform would be to generate projections of the condition of the heritage over time, which then provides the opportunity for longer term budgeting and strategies to secure the resources needed. The reform could begin as a simple

benchmark that could be gradually integrated into a monitoring system that checks on condition–an increasingly popular requirement of leases for adaptive reuse.

Condition was poorly documented in the Quarantine Station Conservation Management Plan, and had to be done as part of an Environmental Impact Assessment (Manidis Roberts Consultants, in progress). Table 1 provides a summary of the condition assessment made across precincts. Table 1 reveals that the condition of the site varies dramatically across the precincts, and suggests that all precincts need major catch-up works not only to arrest existing deterioration, but to re-establish the cultural landscape and significance of the site. This information has been critical in determining the cost of catch up works and benchmarks for monitoring condition against the investment in conservation works over the lease period.

Table 1 - Indicative condition of the Quarantine Station by precinct

Precinct	Buildings	Other site elements
Wharf	▪ Roofs have many holes letting water inside buildings, spouting is rusted and collapsing from framework, paint is peeling off everywhere. ▪ Roof top asbestos is untreated. ▪ Moveable heritage in A6 and A9 has seized up and rusted.	▪ Wharf needs stabilisation work. ▪ Slipway is collapsing into the sea. ▪ Funicular rails are detaching, funicular to First Class collapsed and covered by vegetation. ▪ Inscriptions are being split by vegetation and faded by weather. ▪ Power, water and sewer are disconnected. ▪ Precinct fencing has collapsed and almost gone.
Hospital	▪ Roofs have holes letting water inside buildings, spouting is rusted and collapsing from framework, paint is peeling off everywhere. ▪ Timber buildings require some woodwork replaced. ▪ Brickwork in A2 is collapsing. ▪ Wooden verandahs are rotting. ▪ Some sandstone foundations have almost worn away.	▪ Road edges are collapsing and eroding, and the road contains several potholes. ▪ Vegetation has grown over road verges, limiting access for service and fire protection vehicles. ▪ Power, water and sewer disconnected. ▪ Cyclone fence is rusting and will collapse within the next few years. ▪ Much of the laboratory equipment is either missing or needing repairs and cleaning.
Isolation	▪ External paint is peeling off everywhere and allowing timber to dry and split. ▪ A/C sheeting is collapsing from framework. ▪ Buildings lack fire protection systems.	▪ Road edges are collapsing and eroding. ▪ Vegetation has grown over road verges, limiting access for service and fire protection vehicles.
Third Class / Asiatic	▪ Some buildings require roof and spouting repairs, internal and external painting. ▪ Services to several buildings are poor and most lack fire protection systems. ▪ Building P22 needs urgent repairs and repairs to woodwork.	▪ Second cemetery is losing spatial definition vegetation has covered several gravesites. ▪ Remaining grave stones and moveable heritage items are poorly stored in A20 ▪ Precinct fencing has collapsed and has almost disappeared. ▪ Original funicular route and sites of past buildings are being invaded by bushland. ▪ Road edges are collapsing and eroding and banks are eroding from rabbit burrows.

Table 1 (Continued) - Indicative condition of the Quarantine Station by precinct

Precinct	Buildings	Other site elements
First Class	- All buildings require roof and spouting repairs, internal and external painting. - Buildings P1, P2 and P3 urgently require external and internal repairs. - Many communal facilities are disfunctional and inaccessible. - Services to several buildings are poor and most lack fire protection systems.	- Cultural landscape significantly lost due to loss of original landscape features and bushland invasion (original vistas from accommodation blocks have disappeared). - Precinct fencing has completely disappeared. - Bushland below ridge is significantly compromised to weed invasion. - Undefined car parking is creating erosion and reducing the visual amenity of the site.
Second Class	Most buildings require internal and external painting.	- Precinct fencing has completely disappeared. - Invasive bushland has hidden archaeological evidence of former buildings and diminished original cultural landscape. - Undefined car parking is creating erosion and reducing the visual amenity of the site.
Administration	- All buildings require roof and spouting repairs, internal and external painting. - Building S9 is unsafe to enter. - Building A25 needs urgent curatorial work to return it to an impression of its use as a post office. - Services to several buildings are poor and most lack fire protection systems.	- Moveable heritage in A20 needs urgent curatorial work, upgrading inventory and a safer storage building. - Precinct fencing has completely disappeared. - Cultural landscape around cottages (particularly gardens) is overgrown or stripped to grass.

Source: Manidis Roberts Consultants (in progress)

To add value to this process, the assessment identified all of the major conservation work known to have been undertaken in each precinct. This assessment revealed that that conservation work had not been evenly spread across the various precincts. Indeed, most conservation work had been undertaken to arrest critical deterioration, to assist run the on-site conferences and functions business in the First and Second Class Precincts, or to assist run the on-site management administration and residential occupancy in the Administration Precinct. It would be extremely valuable if these two assessments could be combined to attempt to identify any relationship between conservation work undertaken and the condition of the site.

Financial assessments for catch-up works

With an assessment of the condition of the site and the resources spent on conservation, a follow-on reform is a tool to easily determine the approximate cost of catch-up works to return the site to its full significance. Some may argue that this exercise is academic because such funding will never eventuate, but conversely, without this information organisations have limited capacity to argue and lobby for more funding or alternative mechanisms to attract funding. It would be extremely valuable if this exercise was done across different areas of a heritage site, or different elements of physical heritage (such as buildings, landscape, moveable heritage and archaeological sites).

The NSW National Parks and Wildlife Service prepared estimates to undertake the immediate conservation work required at the Quarantine Station. Table 2 provides an itemised costing and forecasts a total

cost of just over $6.4 million. This estimate has been used as fundamental evidence of the need for leasing the site to the private sector, who could operate it profitably enough to fund all of the works. The identification of catch-up costs was made under the assumption that work was completed within the next five years. However, funding is often delayed or spread over longer periods of time. Therefore, cost estimates for large conservation projects become far more powerful when an assessment of the cost of delaying the work is also made. Table 3 presents a crude attempt at this exercise, and revealed that if the work was not undertaken within five years, further deterioration combined with inflation would increase the cost to approximately $10 million by the year 2005, and $15 million by the year 2009. The annual forecast of the impact of delay will become a critical political tool for when opponents of the leasing concept attempt a common tactic of delaying the process to frustrate the public-private sector relationship enough to have it disengage.

Table 2 - Cost estimates for immediate and essential conservation and maintenance work at the Quarantine Station

Precinct and other costs	Cost estimate ($)
Building conservation within the Wharf Precinct	400,000
Building conservation within the Hospital Precinct	250,000
Building conservation within the Isolation Precinct	300,000
Building conservation within the 1st Class Precinct	600,000
Building conservation within the 2nd Class Precinct	350,000
Building conservation within the 3rd Class / Asiatic Precinct	760,000
Building conservation within the Administration Precinct	300,000
Building conservation on former staff cottages	150,000
Landscape conservation works	350,000
Bush regeneration and biodiversity conservation	130,000
Conservation of Indigenous heritage	55,000
Conservation of moveable heritage and artefacts	180,000
Conservation of inscriptions	125,000
Workshop construction	150,000
Upgrade electrical supply	375,000
Upgrade water supply	200,000
Upgrade fire protection system	250,000
Upgrade sewerage system	150,000
Upgrade stormwater management system	40,000
Consolidate roads	65,000
Consolidate wharf	180,000
Construct day visitor carpark	100,000
Construct conference visitor carpark	60,000
Construct conference and functions carpark	30,000
Conservation assessments	150,000
Impact monitoring system	80,000
Plan preparation, designing, documentation, work supervision	620,000
TOTAL	**$6,400,000**

Source: Manidis Roberts Consultants (in progress)

Table 3 - Conservation costs if capital injection is delayed and current maintenance budget continues

Year	Maintenance budget	Capital conservation cost	Total cost
2000	$300,000	$6,400,000	$6,700,000
2001	$300,000	$7,040,000	$7,340,000
2002	$300,000	$7,744,000	$8,044,000
2003	$300,000	$8,518,400	$8,818,400
2004	$300,000	$9,370,240	$9,670,240
2005	$300,000	$10,307,264	$10,607,264
2006	$300,000	$11,337,990	$11,337,990
2007	$300,000	$12,471,789	$12,771,789
2008	$300,000	$13,718,968	$14,018,968
2009	$300,000	$15,090,865	$15,390,865
Total @2009	$3,000,000	$15,090,865	$18,090,865

Source: Manidis Roberts Consultants (in progress)

Assumptions: Capital costs increase by 10% per year

Maintenance budget is as high as $300,000 because of delay in capital conservation works (it would otherwise drop after this injection)

Financial assessments for funding maintenance

The third form of potential economic reform could be to provide assessments for funding basic maintenance costs, with and without catch-up conservation work. This reform is needed to further reinforce the advantages in undertaking catch-up works when they are needed, and to determine the capacity to accommodate additional heritage sites and programs. Like capital works, it would be extremely valuable if this exercise was done across different areas of a heritage site, or different elements of physical heritage, or even better, across the main dimensions of significance (physical, use, association and meanings).

The NSW National Parks and Wildlife Service did not provide estimates on what should be spent on maintaining the Quarantine Station after catch-up works, instead suggesting that the site had to be kept in good condition. However, the private sector must forecast all costs many years in advance in order to assess the viability of a proposal. As a result, Mawland had to then derive maintenance estimates for themselves, and concluded that annual costs would be between

$100,000 to $300,000 per year, broken down as follows:

- at least $90,000 per year for conserving the buildings regularly used by the current on-site business operations including tours, conferences and functions;

- at least $110,000 per year for conserving other buildings, archaeological sites, moveable heritage and the cultural landscape; and

- at least another $100,000 per year for other conservation management costs including the maintenance of services, mowing, bushland management and environmental monitoring.

An assessment of conservation maintenance costs without the catch up capital injection was also undertaken and suggested to increase by approximately 10% per year.

Economic evaluation of alternative options

The fourth form of economic reform is more assessments of the economic merits of choosing one alternative way of funding heritage management over another. As the deficit between demand and supply for

limited resources increases, so does competition for whatever resources are left. This competition will result in some heritage being resourced at the expense of other heritage. Furthermore, as alternative options for funding the conservation and presentation of heritage are explored, greater accountability is required to prove the merits of each and maintain stakeholder support for the managing authority. Ideally, these economic assessments would be undertaken against management objectives that have been written in a clear and tangible form. Another aspect to the reform would be to have the results of the assessments reported and publicly accessible prior to follow on stages, such as an Environmental Impact Statement.

The economic merits of four potential alternatives to the current economic situation at the Quarantine Station were investigated by the NSW National Parks and Wildlife Service. This assessment looked at:

- expanding their current on-site businesses so that they could generate sufficient profit;

- accessing not for profit funding and sponsorships;

- allocating multiple leases for specific functions or areas; and

- allocating a head lease for the whole site (Manidis Roberts Consultants, in progress).

After investigation, the second option was dispensed as being unlikely to generate the funds required. A Cost Benefit Analysis was then used to assess the merits of the other options, and this revealed that the only viable options were the leasing ones, preferably to an appropriate cultural tourism operator (NSW National Parks and Wildlife Service 1997). This assessment led to a tendering process, and an assessment of tenders submitted then confirmed that multiple leases or licenses would not generate sufficient capital, because they each attract individual operating expenses that reduce their viability, and because they may compete with each other for visitor's spending. The assessments therefore were fundamental to the NSW National Parks and Wildlife Service pursuing a head lease as the only viable solution for the Quarantine Station.

User friendly presentation of Cost Benefit Analysis

The fifth economic reform is presenting the results of each Cost Benefit Analysis in a more user-friendly manner. The Cost Benefit Analysis is a useful tool to determine the economic viability of alternatives, but its basic terminology is poorly understood in the heritage management sector and general community For example, it would be very useful to replace or put in front of the technical terms some user-friendly terms. It would also be useful to use scales (such as 1 to five) to reflect what is a poor result versus what is a good result. It is also important to identify the principal causes of a good or poor result. Finally, it be valuable to see more use of the Cost Benefit Analysis in reviewing existing situations, rather than in purely assessing alternatives, as this would increase each stakeholder's familiarity with the tool.

A Cost Benefit Analysis was used to assess the economic impacts of the Mawland Proposal. The detail remains commercial-in-confidence, but it can be acknowledged that the benefits measured were the revenue from the proposed operations (tours, accommodation, restaurant and education) and the costs measured were:

- works to buildings and other structures, including the Wharf;

- works to archaeological sites, such as inscriptions, historic structures and objects, archaeological building sites and Aboriginal sites;

- works to moveable heritage, such as archives and records, headstones, artefacts furniture and medical equipment;

- upgrading of services, particularly sewerage, water, power, fire protection and roads, the provision of new services to the site, and reticulation works within the site;

- landscaping works to reinstate the diminished cultural landscape;

- improvements to visitor access to and within the site, including facilities for people with disabilities;

- improvements to and expansion of interpretive and educational programs;

- improvements to visitor facilities such as toilets and safe walking tracks for the tours;

- Mawland operating and maintenance costs (including wages, cleaning and catering);

- National Parks and Wildlife Service costs of relocation, construction and fitout of new facilities, redundancies, site clean up; and

- National Parks and Wildlife Service on-site presence and operations such as administration and conservation plan monitoring and management

In line with New South Wales Government guidelines, the evaluation period for the cost benefit analysis was set at 20 years. A discount value of 7% was applied to enable future benefits and costs to be evaluated at a common base year. Table 4 shows the results of the Cost Benefit Analysis, and the following text was written into the Environmental Impact Statement. The Cost Benefit Analysis assessed the viability of the Proposal by:

- measuring its benefits against its costs;

- using a sensitivity analysis;

- using a benefit cost ratio; and

- determining an internal rate of return.

While the current situation generates $15 million in benefits, the Proposal was found to generate $94 million in benefits. The fact that the Proposal generated $14.7 million more in benefits than costs suggests it is economically viable. This viability was then tested using a sensitivity analysis with discount rates of 4% and 10%. The result of the sensitivity analysis was a net present value of $23.4 million from a 4% discount rate and $12.2 million from a discount rate of 10%. The Benefit Cost Ratio divided the present value of benefits by the present value of costs. A Benefit Cost Ratio with a value greater than one indicates that the project has economic merit. On this basis, the Proposal performs highly with the incremental Benefit Cost ratio scoring 1.27. The internal rate of return is the discount rate at which the present value of benefits equals the present value of costs. As a benchmark, an internal rate of return of more than 7% indicates an economically worthwhile project. The incremental internal rate of return of the Proposal is significantly higher, at 40 %. These results confirm strong viability of the Proposal, even with substantially modified economic scenarios..

The information presented to the community is provided in the following text, and is backed up by Table 4.

The Cost Benefit Analysis confirmed that the Proposal is viable, even if economic conditions were to deteriorate significantly. The Analysis identified that the Proposal will generate six times more economic value (benefit value) than the current situation ($94 million versus $15 million). The strong economic performance (large net present value) comes from the expansion of accommodation and the introduction of the restaurant, which combined, account for three-quarters of the economic performance (Manidis Roberts Consultants, in progress).

Table 4   Cost Benefit Analysis of the current situation against the Mawland Proposal

Cost Benefit Analysis	Current Situation	Proposed Situation
Total Capital Costs	$0	$13m
Present Value of Costs	$17.3m	$79.4m
Present Value of Benefits	$15.2m	$94.1m
Net Present Value	**- $2.1m**	**$14.7m**
Incremental Net Present Value	$16.8m	
Incremental Benefit Cost Ratio	1.27	
Incremental Internal Rate of Return	40.4%	

Source: Manidis Roberts Consultants (in progress)

The purpose of providing the text and table is to demonstrate that it is possible to provide a user-friendly account of a cost benefit analysis.

Economic contribution of cultural heritage to the local community

The final suggested reform is an economic multiplier that only requires basic information relevant to heritage management and heritage tourism. While a Cost Benefit Analysis remains one of the most useful tools to compare alternatives and assess the viability of the preferred alternative, its detail is typically commercial in confidence to present and it will always be a challenge to explain. To get a proposed alternative through the political environment needs a simple way to forecast the basic economic contribution to the local/regional economy. The input/output model is a complex and expensive alternative. A more manageable alternative may be standard multipliers that use information such as salaries and contracts. This information is made more realistic if projected over a 10 or 20 year period, and is made more relevant if measured against common management objectives, such as contribution to conservation, public access and interpretation of significance.

Mawland attempted to compare the economic impact of its Proposal against the current situation and then forecast the result in 20 years time. Table 5 shows the crude estimates that were generated, but the power of the simplistic information that results. The power of this information rests with its easy adoption by senior managers and Ministers, which often outweighs the rigour of more complex models.

Table 5   Comparison of economic impact of the current situation versus the proposed situation

Economic indicators	Current situation	Proposed situation	Incremental Economic impact (difference between the current and proposed situation in 20 years)
Conservation and maintenance of the site	▪ $625,000 per year (including salaries) = **$12.5 million** over 20 years	▪ **$10 million** capital injection over next three years ▪ $500,000 per year = **$10 million** over 20 years (inc. salaries) for ongoing conservation and maintenance	▪ **Additional $8.5 million** capital injection and ongoing maintenance
Contribution to conservation of other parts of Sydney Harbour National Park	▪ Ad hoc, averaging $10,000 per year = **$200,000** over 20 years	▪ Annual guaranteed base rent payment plus percentage of profit ranging from between $300,000 to $1 million per year = between **$6 to $20 million** over 20 years	▪ Up to an **additional $19.8 million** in contribution to conservation of Sydney Harbour National Park
Improving public access	▪ Ad hoc, averaging $7,000 per year = **$140,000** over 20 years	▪ **$2 million** capital investment over three years ▪ $500,000 per year ongoing = **$10 million** over 20 years	▪ **Additional $11.8 million** in improving public access
Improving interpretation	▪ Approximately $400,000 per year = **$8 million** over 20 years	▪ **$3.6 million** capital injection over three years ▪ $1.1 million per year ongoing = **$22 million** over 20 years	▪ **Additional $17.6 million** in improving interpretation
Employment	▪ 27 full time and part-time staff ▪ 7 staff reside in the Manly area	▪ 100 full time and part-time staff ▪ Up to 60 staff members will be sourced from local and regional areas ▪ 3 NPWS jobs made redundant, 24 transferred	▪ **100 new jobs** ▪ Up to 60 from local region ▪ 3 NPWS made redundant
Salaries	▪ $650,000 per year = **$13 million** over 20 years	▪ $ 3.5 million per year = **$70 million** over 20 years	▪ Additional $2.85 million per year = **$57 million in** additional salaries over 20 years
Contracts	▪ up to $400,00 per year = **$8 million** over 20 years	▪ $2 million per year = **$40 million** over 20 years	▪ $1.6 million per year additional contracts = **$32 million** additional contracts over 20 years
Economic contribution to NSW economy	▪ **- $2.1 million** per year (Net Present Value)	▪ **+ $14.7 million** per year (Net Present Value)	▪ **+ $16.8 million** per year (Incremental Net Present Value)

Assumptions:
1) The figures in Table 5 do not include CPI increases for current or proposed scenarios for the purpose of this comparison.

2) The spending by National Parks and Wildlife Service is based on averaged figures from the past 16 years.

Conclusion

The capacity of the public sector to adequately conserve and present the full significance of our heritage is diminishing. Adaptive use that is conceived, implemented and operated by the private sector, is increasingly being considered as one of the only long term solutions. However, this solution requires the public sector to be able to determine a clear economic case for change that quells public concern over private involvement in public assets. This case needs to then be capable of determining the financial aspects of a deal with the private sector, such as the investment in conservation, public access and interpretation of significance.

To prepare such an economic case requires specific tools to evaluate the condition of the heritage against the work and costs to date, as well as assessments of the cost of catch-up works and maintenance. The NSW National Parks and Wildlife Service and Mawland Hotel Management have developed several tools as part of an Environmental Impact Assessment for the adaptive reuse of the Quarantine Station. However, these tools should already be in existence, as part of responsible and accountable management. The reality across the broader heritage management sector, is that these tools are being developed on the hop as part of the assessment of private sector involvement.

The ongoing capacity to conserve and present our heritage is dependent on substantially improving the way we monitor and forecast the associated costs. At present there are too few simple tools to do this, and too few readily accessible case studies to learn from and improve on. Herein lies a challenge for the public and private sector to overcome together.

References

Hall, C.M. and McArthur, S. 1996, *Heritage management in Australia and New Zealand, the human dimension*, Oxford University Press, Melbourne.

Manidis Roberts Consultants (in progress), *Environmental Impact Statement for the adaptive reuse of the Quarantine Station, Sydney Harbour National Park*, Surry Hills, NSW.

Marquis-Kyle, P. and Walker, M.., 1992, *The illustrated Burra Charter, making good decisions about the care of important places*, Australia ICOMOS, Canberra.

Mawland, 2000, www.q-station.com.au Public information on the proposed adaptive reuse of the Sydney Quarantine Station, Mawland Hotel Management, Crows Nest, NSW.

McArthur, S. 2000a, 'Differentiating the roles of the ecotourism industry and heritage managers', in *Proceedings of the 1999 National Ecotourism Conference, Kingfisher Bay, Fraser Island*, Ecotourism Association of Australia, Brisbane. www.btr.com.au

McArthur, S. 2000b, 'The private sector's role in managing historic public assets', paper presented to the 2000 Conference Urban Planning and Heritage in Sydney, IIR, Sydney.

McMillan, S. 1997, 'Balancing the books–economic returns and corporate citizenship' in *Business with style, adapting heritage buildings for commercial use*, Seminar Proceedings, NSW Heritage Office and National Trust, Sydney.

NSW National Parks and Wildlife Service, 2000, *North Head Quarantine Station Conservation Management Plan*, prepared by Peter Freeman Pty Ltd, Donald Ellsmore Pty Ltd, Robert Boden & Associates, Haglund and Associates, Guppy & Associates for the NSW National Parks and Wildlife Service, Hurstbridge, NSW

NSW National Parks and Wildlife Service, 1997, Tender documentation to lease the Quarantine Station, Sydney Harbour National Park, unpublished document, Hurstbridge, NSW.

Valuing the Public Benefits of Heritage Listing of Commercial Buildings

Dr. Peter Abelson, Macquarie University

Abstract

This paper reviews the main methods of valuing the benefits of heritage listing of commercial buildings to the community and examines the application of these valuation methods to seven listed properties in Sydney. The main public benefits considered are benefits to businesses and residents in the precinct, to tourists and other visitors to the area, and to the general public. The main valuation methods considered are stated preference, hedonic property valuation, travel cost method and economic impact analysis. Of these methods only stated preference techniques have much general application and these techniques require careful implementation and considerable resources. These general observations are confirmed by detailed analysis of the valuation issues that arise for seven heritage listed commercial buildings in Sydney. The paper concludes with a suggested approach for valuing the public benefits of these or other heritage listed commercial buildings in a large city.

Acknowledgment

Associate Professor Peter Abelson
Senior Lecturer
Department of Economics
Macquarie University, Sydney

Introduction

This paper examines how the public benefits of heritage listed commercial buildings in a large city can be valued for practical purposes. The aim is to elicit the value of the heritage component rather than to value the whole building. There is an extensive literature on how to value heritage and related goods such as culture and the environment. However few studies have attempted to estimate the public value of heritage and these few applications deal almost exclusively with stand out heritage items. Little attention has been given to the important issue of how to value individually the many heritage buildings that contribute to the urban mosaic in many cities.

The paper starts with a discussion of the nature of the public benefits of heritage buildings and possible valuation methods, including stated preference, travel cost, hedonic property values and economic impact analysis. The third section examines these valuation methods in more detail and concludes that some form of stated preference analysis is the most

suitable valuation method for most purposes. However, we also note some significant limitations of stated preference methods. Thus far, the paper traverses well-trodden territory, but we have to trail the foothills before we can tackle the mountain.

The fourth section of the paper outlines the heritage environment in Sydney and describes seven listed buildings for which the New South Wales Heritage Office asked the writer to estimate a public value. This turns out to be an ambitious request. The last part of the paper discusses how these buildings might be valued, but does not propose any simple solutions.

Public Benefits of Heritage Buildings and Possible Valuation Methods

What do we mean by public benefits? In one sense, all benefits are private because all benefits accrue ultimately to individuals. However, there is a common distinction in economics - that between internal and external impacts - on which we draw here. In the case of heritage buildings, the internal impacts are those experienced by

the owners and users of a building. These internal effects we will refer to as private benefits or costs. In practice most private benefits (and costs) of a heritage building accrue to the owner who can charge occupiers or visitors for use of the property. These private effects are an important part of the whole picture of heritage impacts, but they are not the main concern of this paper.[xl]

The public benefits of a heritage building are the external benefits that cannot be appropriated by the owner. These may include benefits to:

- owners of other commercial properties in the precinct,

- owners of residential properties in the precinct,

- tourist visitors to the area (ie. those who visit the precinct for the prime purpose of tourism),

- other visitors to the area (ie. those who are in the area for working, shopping or other purposes),

- the general public (people who value a heritage listed building who neither own a local property nor visit the area).

The external benefits are especially significant for listing a heritage building. If the private benefits of heritage are large enough, the owner will generally retain the heritage building or at least the essential heritage features.[xli] Thus, these external (public) benefits provide the main justification for a heritage listing.

Note also that these five sets of benefits have a common feature: they depend on the values that individuals attach to the heritage property itself. In other words they are based on consumption values. They do not include parties who may benefit from the renovation and maintenance of heritage buildings. Many producer groups (including specialised construction firms, as well as some professionals, skilled tradespeople and unskilled workers) may benefit from the

creation of extra work in the heritage sector. Moreover, in so far as these groups gain extra income from this work; there may be multiplier income and employment benefits. Heritage listing may also affect government income (positively or negatively).

In a full cost-benefit analysis, the net benefit of any public policy decision is the sum of consumer and producer surpluses. Equivalently, this is the sum of private plus public benefits less costs. It follows that, if a heritage listing does increase the incomes of workers in this sector, this increase would be part of the net benefit of the policy decision. However, heritage listing is generally driven by consumer valuation of heritage rather than by producer surpluses. Moreover, as discussed in section three, it is important to distinguish between the justifiable inclusion of producer surplus in a cost-benefit analysis and the inflated claims of economic benefits that frequently arise in economic impact analyses. Accordingly, in this paper, we focus mainly on the benefits listed in the five dot points above.

Before we line up the valuation methods that quantify these benefits, a brief note too on the principle of economic valuation. In economic evaluation, the value of a benefit is the maximum amount of money that someone is willing to pay for a benefit and not be any worse off than before.[xlii] For business, the implication is straightforward: the increase in income is the measure of benefit. For consumers, valuation is more complicated because the maximum amount that someone is willing to pay for something is often a notional concept rather than a directly observable expenditure.

There is an additional complication if someone loses some property, or simply a property right. In this case, the standard economic principle is that the value property or property right lost is the minimum that the owner of the property or property right would be willing to accept for the loss and be no worse off than before.[xliii] The willingness to accept value (for a loss of

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[xl] Another economist, Col Dominy, is examining the private costs and benefits of the seven buildings listed in this paper.

[xli] The qualifier 'generally' has to be added because not all property owners would retain heritage features even if they were profitable, either because the owner held a different view of the market or because of an owner preference for a new building.

[xlii] This is known as the principle of 'compensating variation'. There are alternative measures of benefit, but this is the most common one.

[xliii] This is also part of the principle of compensating variation. The common feature of the principle is that each individual should be as well off after a change in policy as before it.

property) may be much higher than the willingness to pay value (for a gain of the same property). There is an extensive literature on when to use willingness to pay values or willingness to accept values. Notwithstanding general acceptance of the concept of willingness to accept values, most valuations in environmental, cultural and heritage studies are willingness to pay valuations for three reasons. The most influential reason is that willingness to pay values, though often difficult to estimate, are a great deal easier to estimate than willingness to accept values. Second, for small expenditures, there tends to be little difference between willingness to pay and to accept values. Third, the allocation of property rights for public goods is not always clear. People have a right to enjoy old buildings, but they also have a right to new ones. Accordingly, but not without some reservations, we will focus on willingness to pay methods of valuation in this paper.

What valuation methods, then, may be used to estimate values for the five benefits listed in dot form above?

Benefits to owners of other commercial properties in the precinct

These benefits can be estimated directly in two main ways:

(a) by estimates of changes in the income of local property owners over time discounted to the present, or

(b) by estimates of changes in the capital or rental value of the properties. If changes in rental values are estimated, these too should be converted to present values. The present value of estimated income or rent streams should provide equivalent capital values.

Alternatively, local property owners may be asked how much they would be willing to pay for conservation of a local heritage building. As discussed in section 3, this question can be asked in several ways. In this paper, this approach is describes as the *stated preference* method. This distinguishes this general valuation approach from *revealed preference* methods that derive valuations from observations of behaviour in either market or non-market situations.

Benefits to owners of residential properties in the precinct

These benefits should be reflected likewise in rental or capital values of local residential properties. Again, local property owners can be asked how much they would be willing to pay for conservation of a local heritage building.

Benefits of tourist visitors to the heritage building or precinct

Tourists may gain more pleasure from their visit as a result of the enhanced environment. Some of these benefits may show up in increased expenditure and therefore in increased revenues of local property owners. But some benefits will accrue to tourists as consumer surpluses (the difference between what tourists are willing to pay for the experience and the prices they actually pay). These benefits can be estimated in two main ways. One is the travel cost method. This method derives estimates of the consumer surpluses of tourists from an analysis of travel expenditures. The other method is again the stated preference approach - asking tourists what they would be willing to contribute to conserve a heritage building.

Benefits of other visitors to the Heritage building or precinct

Other visitors to the area may also gain enhanced pleasure from the existence of a heritage building although the experience is quite incidental to the purpose of the visit. In this case, asking these visitors what they would be willing to contribute to the conservation of a building is the only way in which their valuations can be elicited.[xliv] The travel cost method cannot be used for such an incidental experience.

Benefits to the general public (non-use or existence benefits)

Some people may value a heritage renovation even without owning local property or visiting the area as tourists. The only way to value non-use benefits is by one or other stated preference method. Of course, identifying the appropriate

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[xliv] Workers in a heritage precinct may not receive a benefit because in a competitive market they would receive lower wages and all the benefits would do to the property owner.

population to survey (be it local, regional, national or international population) is complicated when there is no revealed preference behaviour, but this is a problem with this category of benefits, not with the use of stated preference valuation methods.

Valuation Methods in more Detail

Estimates of the **net income** impact of a heritage building on local commercial properties require data on revenues and costs of these properties with and without the local listed heritage building. This is rarely practical for individual properties. It might occasionally be possible to estimate the net income effect for a precinct based on aggregate precinct expenditure and costs (for example for the Rocks area in Sydney). However, I am not aware of any such studies. Indeed, heroic

assumptions would be required to identify the effects of heritage listing on *net* precinct income. More often, studies focus on aggregate expenditure and ignore costs of any kind (see below) which is a different kind of valuation approach and usually an incorrect one.

The **property value (hedonic pricing) method** is more promising. This method analyses how specific attributes of goods, such as the heritage aspects of a building, are valued. Essentially, the analyst compares the prices of houses with different characteristics (size of land, number of rooms, distance to the CBD, quality of view, and so on). Using multiple regression analysis, it is possible to show how house prices change with variations in these characteristics. Real estate agents may also be able to identify the value of specific characteristics, but their judgements are unreliable because the comparisons on which they are based are usually weakly defined.

Table 1 summarises the main possible valuation methods for each form of public benefit. It turns out that there are four main methods: the net income or property value method, the travel cost method, and the stated preference method (and its various sub-methods). The only method that can be used for all forms of public benefit is the stated preference method, which is one reason why it is often the preferred approach.

There have been several studies of the impacts of heritage listing on property values. Hough and Kratz (1983) found that new office buildings with architectural awards in Chicago attracted a significant price premium, but that older heritage buildings did not (possibly because of a partial loss of property rights). Moorhouse and Smith (1994) found that house prices in Boston were significantly affected by architectural styles (Neo Grec, Italinate, Victorina Gothic and so on) but that rows of houses with similar styles of any kind tended to sell at a discount.

Table 1 - Public Benefits and Possible Valuation Methods

Public benefits	Possible valuation methods
Local commercial properties	Net income, property value or stated preference
Local residences	Property value or stated preference
Tourist visitors to the precinct[a]	Travel cost method or stated preference
Other visitors to the precinct[b]	Stated preference
The general public[c]	Stated preference

(a)   People visiting the site or precinct primarily as tourists.

(b)   People visiting the site or precinct for any non-tourist purpose.
(c)   People who value the site or precinct but who do not own property in the precinct and who do not visit the site. These benefits are sometimes called non-use benefits.

In Sydney, Penfold (1994) found that house prices in conservation areas rose at a similar rate to house prices in other areas. However, the hedonic price method is generally of little use for our purpose - to estimate the impact of a heritage listing on the value of other local commercial or residential properties. These values are affected by many variables. Our fieldwork in Sydney indicated how difficult it would be to isolate the effect of a heritage building on other properties, especially commercial properties. None of the hedonic price studies cited above, or other studies that I have seen, attempt to estimate the external price impacts of a heritage building. Hedonic pricing is generally data intensive. Moreover, the method is difficult to apply ex-ante before a major property is heritage listed.

The **travel cost method** is based on the observation that visits to a site tend to fall with distance (trips costs) to the site. Data on trip visits and costs can be used to generate a demand curve for the site, ie. a schedule that shows the number of people who would be willing to pay various prices for access to a site. The classic procedure is to establish the number of per capita visits per zone as a function of transport costs and then, through a series of fictitious prices, to estimate the demand curve. Martin (1994) used the travel cost method to estimate the demand for museums in Quebec; however, the travel cost method has two significant limitations. It is very difficult to apply when trips have multiple purposes because the attribution of the costs of travel becomes arbitrary. Also a major component of trip costs is the cost of travel time which is difficult to value. In addition, the travel cost method requires substantial data. Finally, in common with other revealed preference measures, preferences are revealed only after a heritage building is renovated. Decision-makers need data before renovation, when the listing decision has to be made.

There are three main forms of **stated preference approach**: the contingent valuation method, stated choice and referenda. In **contingent valuation** studies, people are asked what they would be willing to pay for a specified good. The form of the question varies. Sometimes people are asked an open-ended question: what they would be willing to pay without any guidance as to a possible figure? In other cases, respondents are presented with a range of possible payments to chose from. In still other cases, respondents are presented with a figure and invited simply to say yes or no.[xlv] In **stated choice** studies, people are invited to chose between nominated options, nearly always including a monetary element in one or more options. The analyst can then work out the implied monetary trade off.

In **referenda**, voters may be asked to approve a certain expenditure or policy. In Colorado, for example, people have been asked a series of referendum questions in which voters are asked whether they would rather have a lump dollar amount added to their taxes or a particular type and amount of a public good (Kling et al, 2000). Of course, both stated choice and referenda involve choices. The main difference between them is that a stated choice study is often hypothetical and, in any case, not binding, whereas a referenda may be binding.

Of these three stated preference approaches, the contingent valuation (CV) method has been the most commonly used for valuing culture and heritage, although the number of case studies is still small and the studies are recent. Hansen (1997) describes a CV study of willingness to pay for the Royal Theatre in Copenhagen. The aim was to estimate the total value of the Royal Theatre to the Danish population and to determine whether the value of the Royal Theatre's non-market benefits could justify the public grants given to the theatre. The sample comprised 1843 interviews by telephone. Two question formats were used: direct open-ended questions and 'spend more–the same–or less' questions. Half the sample was told that all Danes pay on average $16 a year to the Theatre

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[xlv] This is known as single-bounded dichotomous choice. Sometimes a follow-up question is asked. If a respondent answers 'yes' to the first question, he/she is given a higher price to respond to. If 'no', he/she is given a lower price to respond to. This is known as double-bounded dichotomous choice.

through taxes. The results indicated that the Danish population is willing to pay for the theatre subsidy. Although theatre goers were willing to pay more than non-theatre goers, the latter (70 per cent of the population) were also willing to contribute significantly to the theatre. The main concern about the survey was the sensitivity of responses to information provided about the size of the current subsidy. Respondents who were told the subsidy had a lower willingness to pay than respondents who were not told. Hansen concludes that the CV method worked well for this well-known Danish icon. However, he considers that method is too resource intensive and expensive, and the results too uncertain, to be employed routinely on less high profile activities.

Pagiola (1999) reports a CV study of the value of cultural heritage assets in Split, a UNESCO listed World Heritage City located on Croatia's Dalmation coast. Much of the historic part of the city is in very poor state and in urgent need of repair. It is anticipated that the costs of repair would be at $12.0 million (the figures in this study are in US dollars). Some of these costs would be recovered in the development of commercial space. However, there would also be substantial benefits to residents and visitors and to others (non-use benefits). Hedonic price methods were considered but not adopted because the property market in Split was too thin and regulated and because it would not provide information before a decision was made about the benefits of the investment after it had been implemented. The travel cost method was rejected because it would not measure the benefits of residents, people visit Split for many reasons, and it would not pick up the expected benefits after the heritage was renovated. For the CV study, the sample included 400 tourists and 100 residents. Tourists were asked if they would pay a specified tourist tax (four different levels were used). Residents were asked if they would vote for a specified annual tax in a referendum. In both cases, four different levels of tax were specified for different respondents.[xlvi] The mean tourist WTP figure was $44; the mean resident WTP amount was $168. The estimated total

present value of the benefits was about $60 million, providing a net present value in the order of $48 million. Pagiola concludes that the results are robust. But he warns that they are site specific and that they cannot be transferred directly to other sites.

Still in Europe, Cuccia and Signorello (2000) undertook a CV study to estimate the willingness of visitors to pay for visiting Noto, a city in the south of Sicily that is famous for its built cultural heritage. The heart of its heritage is in two main streets that are no longer the centre of daily life. In a similar study design to Pagiola (1999), 560 tourists were asked whether they would be willing to pay for access to the historical centre, with a follow question depending on their first answer. Ninety respondents (16 per cent of the sample) indicated that, on principle, they would be unwilling to pay any price for access. The results indicate that both Italians and other nationalities are willing to pay an average entry fee of about $8 (Australian). This seems a rather low figure. However, apart from the issue of protest responses, the authors have no reservations about the survey or its results and recommend the approach.

Moving to the United States, Kling et al. (2000) estimate the public good value of preserving a local historical landmark, namely an historic hotel in the medium sized town of Fort Collins. The authors again use CV, remarking that it is 'virtually the only valuation method applicable when non-use values are important'. They also use a referendum–style dichotomous choice question. In the valuation question, people were asked either whether they would be willing to vote yes to a one-time property tax for the stated purpose or whether they would vote yes to spending part of a revenue surplus on the building rather than receive a tax rebate. Respondents were also given two different amounts of historical information (high and low) about the building. The survey was mailed to 501 households. Although 252 surveys were returned, 40 had no useable information for one or more variables and 35 were rejected as protest votes, leaving only 177 useable responses. The resulting willingness to pay figures were more than double for the rebate hypothesis than for the extra tax option and were also much higher for households who were given more information about the building. For

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[xlvi] In each case, the double-bounded dichotomous choice method was used, with respondents given follow-up figures to respond to.

the short description, the mean WTP was $86 for the tax payment vehicle and $195 for the rebate vehicle. For the long description, the mean WTP was $126 for an additional tax and $434 out of a potential rebate. In total, the city's households value the public good aspects of the restoration at between $2.5 million and $13 million, which exceeds the city's likely financial commitment.

These CV studies demonstrate the practicality of CV studies for major stand-alone heritage buildings or areas. However, as Hansen notes, the method may not be practical for smaller buildings or areas. And, as Pagiola remarks, the results cannot be routinely transferred to other buildings and cites. The studies also illustrate the sensitivity of the results to the payment vehicle assumed and the information provided.

More generally, several major reviews have highlighted substantial problems in the use of CV methods. The most authoritative review was conducted by the high level panel, including several Nobel prize-winning economists, set up by the U.S. Department of the Interior to examine the CV studies made in the aftermath of the Exxon Valdez oil spill in 1989 (NOAA, 1993). Hausman (1993) contains a particularly critical assessment of CV with contributions from many leading economists. Likewise, Knetsch (1994) provides some cautionary remarks. The following are some main concerns.[xlvii]

- **Information**. CV results are very sensitive to the information provided. This was very apparent in Australia's largest CV study— the CV study for preservation of Coronation Hill within the Kakadu National Park (Imber et al., 1991). It is essential to provide an accurate description of the expected effects of the choice being proposed.

- **Part-whole problem**. Respondents often fail to distinguish between the benefits of part of an environment (eg. one lake or one building) and the benefits of the whole environment (the set of lakes or buildings). CV surveys that deal with only one building could be misleading. Valuing one heritage listing at a time could produce a

significant over-valuation of the heritage stock in the city.

- **Budget constraint**. It is important that respondents be reminded of all their possible payments and of their budget constraint,

- **Non-market nature of the good**. Individuals are not familiar with the notion of valuing and paying for heritage. Respondents have to be introduced carefully to the notion of contributing to heritage.

- **Validation**. It is difficult to test whether the answers provided to hypothetical payment questions are realistic and valid.

- **Thoroughness**. CV surveys are not easy or quick. They should generally be carried out in person rather than by mail or telephone.

Finally, note the context for the valuation of heritage. As the studies by Pagiola (1999) and Kling et al. (2000) bring out, the general purpose of valuation is to determine whether the benefits of heritage conservation exceed the cost. The cost includes renovation and maintenance expenditures and may include reduced revenues because land or property is not used as intensively as it could be. In cost-benefit analysis, the costs of renovation and maintenance reflect the value of output foregone due to using resources in renovation and maintenance. If nominal payments to labour exceed the value of output displaced, labour should be costed at a shadow price that represents its opportunity cost. This ensures that any extra income generated by working in the heritage sector is included in the estimated net benefit of the project.

However, some analysts value heritage using economic impact analysis (EIA). In EIA, the local economic benefit is the product of total expenditure on local inputs and a local production multiplier. For example, suppose that government (or the owner of a heritage building) spends $10 million on a heritage renovation, of which $5 million are spent on local labour and other local inputs. This $5 million would in turn generate further local expenditure and production. Because the multiplier equals $1/(1-MPP)$, where MPP is the marginal propensity to produce, the multiplier here

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[xlvii] Abelson (1996) provides an overview of the issues in contingent valuation.

equals is $1/(1-0.5) = 2$. The total local impact on output and incomes would then be $5.0 million $\times 2$ = $10 million. Sanderson (1994) uses the EIA method to estimate the economic effects of historic preservation in Rhode Island. In Australia, the Urban Consulting Group (1995) appeared to recommend the use of EIA for estimating the economic effects of heritage listing.

The problem with EIA here is that expenditure on anything may generate some local output and income. For any given multiplier, it is immaterial whether government spends $10 million on a hospital, on a heritage project, or in digging holes and then covering them up. Spending money on heritage means not spending it on hospitals or on digging holes. The important issue is which of hospitals, heritage or holes in the ground will provide the greatest social benefits. Similar arguments apply to private expenditures. In EIA, all expenditures are beneficial. Indeed, the higher the expenditure, the greater the benefit. There is no concept of opportunity cost. It is therefore not generally a useful method for assessing the value of a heritage listing.

In conclusion, the benefits of heritage listing are principally the general enhancement of the city environment for visitors, local residents, and the public at large. These benefits are generally small per individual but enjoyed by a large number of people. There are few discrete large benefits to specific community groups. The only valuation method that can attempt to identify these general and diffuse benefits is the stated preference approach, usually by some form of contingent valuation. Other valuation methods have limited application. However, CV methods require considerable resources and it has yet to be shown that they can be used for large numbers of individual buildings in a complex city.

Heritage Building in Sydney: Seven Case Studies

Early this year, the New South Wales Heritage Office asked the writer to estimate the public value of seven heritage buildings in Sydney that are listed as being of state significance. Six of the buildings are located in Sydney's Central Business District, which is managed by the Sydney City Council. The seven buildings are:

- The General Post Office at 1 Martin Place,

- Westpac Bank building, 341 George Street, at the west end of Martin Place,

- Wales House, 66 Pitt Street, at the junction with O'Connell Street,

- Liner House, 13-15 Bridge Street, southern side,

- The Parcels Post office / Medina apartments, Railway Square, close to Central Station,

- The Strand Arcade, from 412-414 George Street through to 191-195 Pitt Street,

- 60 Macquarie Street, Parramatta.

The buildings represent a cross section of adaptive uses. Two are used as offices (Liner House and 60 Macquarie Street, Parramatta), one is a continuing retail use (Strand Arcade), one building has been converted to a hotel (Wales House) and another to serviced apartments with some retail (Parcel Post office). The GPO has been converted to a mix of uses, a hotel, offices, retail and a continuing post office. The bank building at 341 George Street has not been renovated.

It was soon apparent, on inspection of the buildings, that there is no quick way to estimate this public value and that, in the first instance, it would be necessary to establish how to estimate this public value, which is the focus of this paper.

But, first, the city context should be understood. The City of Sydney's Local Environmental Plan contains three heritage schedules (City of Sydney, 2000). Schedule 1 lists 443 heritage buildings and sites in the city, of which the NSW Heritage Office registers 220 as being of state significance. The attached figure shows this Schedule. Schedule 2 lists 48 building elements in the city. Schedule 3 lists 64 archaeological, townscape and landscape items.

The scope and richness of heritage in Sydney raises several issues. First, can an individual building be valued in isolation from its precinct? If not, people need to be informed about the relationship between the building and its precinct. Second, is it possible to distinguish the heritage value of one building from the heritage value of the whole city? This is a 'part-whole issue'. As Knetsch (1994) demonstrates, CV surveys

that deal with only one item at a time (in this case a building) can be seriously misleading. Thirdly, there is the issue of the budget constraint. Supposing that someone values conservation of a representative state listed building at $50 and conservation of a City Council listed building without state significance at $25. The implication would be that he would value the total building heritage in Sydney at $16,575, i.e. (220 buildings × $50) plus (223 buildings × $25). This may be realistic. But the important issue is that individual valuations of the whole and the part should be consistent.[xlviii]

Let us now briefly consider the seven case studies. In particular we consider two issues. First, what is the nature of the public benefit due to the heritage in each case? Is there a benefit to local property owners, to tourists or other visitors, or to the general public (a non-use value)? Second, what valuation issues arise in each case?

The **GPO** is arguably Sydney's premier built heritage building. In the words of Ann Lumley, 'The whole building was intended to be an inspiring symbol of the city, the colony and its place in the British Empire'.[xlix] Completed in 1874, on the site of the former colonial post office, the GPO was at the heart of the business district: the home of the post, the telegraph and the telephone on which both the economy and much social life depended. The Clock Tower was the most famous meeting place in Sydney. The building itself is considered the finest example of the Victorian Italian Renaissance Revival style in Australia. Its long public colonnade is a rare architectural element in Australia. It is the largest and most impressive post office building in New South Wales and possibly in Australia. It is the most admired monumental sandstone street facade in Sydney.

The GPO was closed in 1988. After the Newcastle earthquake in 1990, the government spent $38 million to make the

GPO earthquake proof. In 1999, the dramatically redeveloped building was reopened with the retention of the facade, a five star hotel with 417 rooms including 59 heritage rooms, a modern office block, retail fronting on to Martin Place, and a post office in the original location fronting on to George Street. Because of its location, the hotel is especially popular with business people, but it does not draw many pure tourists.

In regard to the public benefit of the heritage of the GPO building, three issues would need to be considered. First, many people, usually over 40 years of age, would regard this building as 'priceless' and could be unwilling to place monetary figure on its conservation. Second, on the other hand, many people under 40 have not experienced the importance of the GPO as the heart of commercial and social life in Sydney and would be unaware of its long historical importance. Their WTP answers could be very sensitive to the information provided to them. Third, the renovation is so powerful and effective that many people, including the writer, would have had difficulty imagining how successful the renovation would be and so, even though favouring conservation, may have undervalued it.

The **Westpac Bank building** in George Street, at the western end of Martin Place, stands on a site that provided the Head Office of Australia's largest private bank from 1853 until 1970. The current building was constructed between 1927 and 1934. Together with the adjacent former Commercial Banking Company building to the south, the building forms an important focus and closure to the western end of Martin Place and relates well to the heritage buildings close by in Martin Place that are clad in similar sandstone and granite materials. The building itself is regarded as a fine example of the Renaissance Commercial Palazzo style of architectural design from the 1920s. It contains a stunning banking chamber the length of the ground floor with few columns, and notable for lavish use of marble, scagliola and pressed metal. The building exemplifies the power, optimism and opulence of the banks in the 1920s.

This building is unlike the others in this sample because it has not yet been renovated. However, it is quite easy to

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[xlviii] However an important practical distinction may be made between the valuation of the whole heritage which is part of our wealth (including non-financial wealth) and what we are willing to pay out of our income to conserve a particular building. See the conclusion of this paper for discussion of this.
[xlix] Quoted in *No.1 Martin Place: The Story. Meet Me Under the GPO Clock*, No.1 Martin Place (1999).

imagine what it would look like after renovation because the opportunities for external alteration are minimal. An important issue in valuing the building would be the presentation of information on its historical features. Another key feature is its relationship to Martin Place and its importance in this precinct. A third issue might be the role of the bank. Banks are not popular in Australia and some people might consider that the bank, not they, should pay for conservation of the building.

The **Wales building** (66 Pitt Street) also has an important history.[1] The site of the building was the home of the Sydney Morning Herald from 1856 to 1955. The present building was designed for, and fulfilled, this purpose from 1927 to 1955. The exterior of the building is a fine example of the inter-war commercial Renaissance Palazzo style, then popular for office buildings of this type. The building with its rounded corner treatment on the prominent narrow-vee site provides a strong visible element in the townscape. The building is now being converted into a five-star hotel that retains some internal building details and historical references to the Fairfax eras. The hotel will open up the building to more visitors than before. But the prime public benefit will be the preservation of the urban landscape for the every day visitor to the area. It will not be in itself a tourist attraction. The strength of the external architecture, and the minimal change to it, would have made this a relatively easy building to value before the conservation was undertaken. But the valuations may again depend on the amount of historical information that is provided to the respondent.

Liner House in Bridge Street is a very different kind of building as can be seen in the attached figure (taken when the building was new). Liner House was completed in 1961 and represented a major departure from the sandstone buildings that line the southern side of Bridge Street. Liner House was awarded the Sir John Sulman medal for the most meritorious building constructed in NSW in 1961. Lucas et al (well-known heritage architects) describe the building as, 'an outstanding and relatively intact example of an international style,

curtain walled office building, distinguished particularly by the quality and consistency of its design, the fineness of its finishes, and its sensitivity to its contemporary neighbours and streetscape'. To the popular mind this could be regarded as a controversial view. Today the building appears to this writer to be tired and rundown and out of place with the handsome sandstone buildings on either side. I suspect that without quite strong advocacy of its 1960s architectural merits it would not score very highly in a survey of public opinion about its value.[li]

The same would not, I suspect, be true for the old **Parcels Post building** in Railway Square. The State Projects heritage group describes this building as having historical, aesthetic, technical and landmark significance. Its historical significance lies in its role as the major parcel office from 1913 to the 1960s. The handsome building combines Chicago School design with Italianate details. It is an early example of the use of a partial steel framework, encased in concrete, to maximise internal floor areas. The building is prominently located when viewed from two of Sydney's major streets (George and Pitt Street) and is an important part of the Railway Square precinct, which contains several buildings in similar materials and style. The Parcels Post building has now been renovated as serviced apartments along with some public facilities and retail at ground level. On the southern side, three new office blocks will be built. These may well benefit from the visual amenity provided by the renovated Parcels Post building. In this case, important valuation issues appear to be the location of the building and the close architectural relationship of the building to the precinct.

The **Strand Arcade** consists of five-storey buildings to George and Pitt Streets connected by a three-storey section on the middle. It stands at the heart of Sydney's retail centre. Built in 1891-2, the arcade was remodelled in 1969 and reconstructed in 1978 after severe fire damage. The

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[1] The Bank of New South Wales owned this building after the Fairfaxes.

[li] Before seeing this building, my partner on the field trip was firmly of the view that valuations of heritage should be left to the experts who would be better able to judge the value of conservation, especially before it occurs, than the uninformed and inexpert public. After seeing this building my partner was equally adamant that heritage decisions should not be left to the experts!

reconstruction recreated the Victorian features of layout, materials (timber, tiles and glass), colour and detail. For this, it won a Royal Australian Institute of Architecture Merit Award. The finished product, together with the Queen Victoria building a few hundred metres up George Street, is one of very few examples of Victorian retail style anywhere in the world. It stands in strong contrast to the chrome, stainless steel and marble of modern shopping centres.

The Strand Arcade is especially attractive to 'destination' merchants and shoppers who specialise in fashion and jewellery. Of all the buildings on our list, the Strand Arcade is most likely to have a positive impact on local property values by acting as a strong shopping magnet. Together with the local shops, many of which have heritage features, there is an ambience of colour and vibrancy in and around the Strand Arcade. However, so many factors affect property values in this precinct that I suspect it would be impossible to determine through statistical analysis whether the Strand Arcade, and more particularly the *style* of the arcade itself, has any impact on revenues or property rents in the precinct. I suspect that a contingent valuation survey would also find it difficult to determine which attributes of the Arcade have most value and whether these values enhance local business. This would be particularly true of valuation surveys before the Arcade was reconstructed because of uncertainty about the appearance after renovation.

The final case study is **60 Macquarie Street**, Parramatta. This is an attractive three-storey Georgian house with several original features such as fireplaces, ceilings and staircase, built in 1842 by Houison, one of the first architects in the colony. It is located close to the centre of the Parramatta CBD and stands opposite the handsome Leigh Memorial Uniting Church with features from 1821. The old building at 60 Macquarie Street has now been converted into offices, with a large office block immediately behind on the same site. Jones Lang Lasalle, the property manager, considers that 60 Macquarie Street adds significantly to the local streetscape value, but that it does not have any impact on local property values and that it does not itself attract tourists to the area.

Table 2 shows the apparent main public beneficiaries of the heritage features of each building. This is of course quite distinct from the locational advantage of each site.

The following main conclusions can be drawn about the beneficiaries of these heritage buildings.

- The heritage features of the study sites have limited impacts on the trading conditions of neighbouring properties. The Strand Arcade is a possible exception. The GPO building may also enhance trading around Martin Place, although not necessarily more than would a modern building with similar trading businesses inside.

- The sites have little direct impact on local residential values. However, the enhanced style and history embodied in the heritage listed buildings very likely have an indirect impact on the quality of the city and hence on CBD residential property values.

- Only two sites, the Strand Arcade and the GPO, appear to be tourist destinations in their own right. However, all other buildings (with the possible exception of Liner House) appear to the writer to contribute substantially to the local precinct quality. Thus all sites enhance the overall quality of the city and the general visitation experience.

- Many members of the public may consider that the heritage of these buildings is important and should be conserved even though they may not actually visit the site.

This site-specific discussion confirms our earlier general conclusion that the only practical way to value these public benefits is likely to be through some form of stated preference survey.

Conclusion: The Valuation of Heritage Buildings in Sydney

The review of site-specific valuation issues also confirms some of the difficulties that we are likely to encounter in a CV study of heritage values.

- There is a significant part-whole valuation problem. The individual buildings are part of a rich urban

mosaic in Sydney. It may not be easy to identify the value of an individual building separately from the value of the whole.

- A related issue is that some buildings may be considered more valuable as part of a precinct than as stand-alone buildings. For example, the Westpac Bank building in George Street is enhanced by, and enhances, Martin Place. Also, handsome though it is, the Parcels Post Office building appears to the writer to be more important as part of Railway Square (Central Station, the old Dental Hospital, the Sydney Institute) than as a stand-alone building.

- A theme through all the case studies is the crucial importance of information. Information will decisively affect valuations. But it may be difficult to distinguish between the provision of objective information and advocacy argument.

- A related issue is what exactly is being valued in each building? This problem arises most strongly when a building may also have a use value, as the Strand Arcade has for shoppers, which is largely independent of its heritage quality.

- Ideally, individuals' valuations of heritage are required *before* a heritage building is restored. However, many people who are not trained in architecture may find it difficult to visualise how a run-down building could be restored. The stunning redevelopment of the GPO is perhaps an example of this.

Table 2 - Study Sites and Public Beneficiaries

Site	Precinct	New use	Local Businesses	Local Residents	Tourists	Other Visitors	General Public
GPO	Martin Place	Hotel, office, and retail	Yes	No	Yes	Yes	Yes
341 George St.	Martin Place	Banking[a]	No	No	No	Yes	Yes
Wales House	O'Connell St	Hotel	No	No	No[b]	Yes	Yes
Liner House	Bridge St.	Offices	No	No	No[b]	Yes	Yes
Parcels Post buildi	Railway Square	Apartments	Minor	Minor	No[b]	Yes	Yes
Strand Arcade	George and Pitt Streets	Retail	Yes	No	Yes	Yes	Yes
60 Macquarie St.	Parramatta	Offices	No	No	No	Yes	Yes

(a) Original use has not changed.

(b) It is assumed that people do not visit these precincts for tourism purposes. However, these buildings do add to the general tourism character of Sydney.

- The general public is not familiar with the notion of valuing and paying for heritage. This may arise as a special problem where the owner is seen as the responsible party, as it might for example with the Westpac bank building in George Street. Respondents have to be introduced carefully to the notion of contributing to heritage.

It may be noted that some of these problems may be compounded in public valuations of lesser heritage buildings. The case study buildings are easily recognised major structures. Many decisions, possibly including more difficult ones, concern lesser buildings. For example, the nondescript corrugated iron shed behind the Parcels Post building is heritage listed. The public might find this more difficult to value than the Parcels Post Building.

Given these difficulties, how might we proceed to obtain public valuations of public benefits? The first step is to decide the objective(s): what do we want to value and why? Do we want to obtain an estimate of the total value of heritage in Sydney? Is this a sensible question? Or, do we want to estimate the value of adding one or more heritage buildings to the heritage stock? If we are concerned with current decision making, presumably we should be concerned with the value of the marginal building(s) that might be

heritage listed or de-listed. We may then not need to know the value of the whole heritage stock or even be concerned about a possible inconsistency between marginal and total valuations. Nevertheless, we cannot be unmindful of the criticism of CV that respondents often do confuse the part with the whole or ignore budget constraints.

Second, the relevant heritage authority should commission a series of in-depth focus groups to determine people's attitudes towards heritage, the issues that concern them, attitudes towards valuation questions, the role of information in valuation and so on. In the literature that I have quoted and seen, there is no reference to focus group market research. This is a striking omission. In my view, this type of research is necessary for an understanding of complex issues before large-scale surveys are undertaken.

The third step would be a citywide CV survey of the values of selected heritage buildings. This would of course be prefaced by pilot surveys that tested the main features of the survey format, such as the question(s) to be asked and information to be provided. A feature of the citywide CV would be the integration of marginal valuations of heritage buildings with an appreciation of the total heritage picture

and budget constraints. Almost certainly the survey process should test for the effects of providing varying levels of information.

To be useful, I believe that the survey valuation approach would have to be extensively researched and piloted. There do not appear to be simple short-cut approaches to valuing built heritage in a large city.

References

Abelson, P., 1996, *Project Appraisal and Valuation of the Environment*, MacMillan, London.

City of Sydney Council, 2000, *Central Sydney Heritage Local Environmental Plan, 2000*, City of Sydney Council, Sydney.

Cuccia, T., and G. Signorello, 2000, 'A contingent valuation of willingness to pay for visiting a City of Art: the case study of Noto (Italy)', Eleventh Biennial Conference of the Association for Cultural Economics International, Minneapolis.

Hausman, J.A., (ed.), 1993, *Contingent Valuation: A Critical Assessment*, Elsevier Publishers, Amsterdam.

Hansen, T.B., 1997, 'The willingness-to pay for the Royal Theatre in Copenhagen as a public good', *Journal of Cultural Economics*, 21, 1-28.

Hough, D.E. and C.G.Katz, 1983, 'Can "good" architecture meet the market test?', *Journal of Urban Economics*, 14, 40-54.

Imber, D, Stevenson, G. and L.Wilks, 1991, *A Contingent Valuation Survey of the Kakadu Conservation Zone*, RAC Research paper, no. 3, Resources Advisory Commission, Canberra.

Kling, R., Review, C., and K.Sable, 2000, 'Estimating the public good value of preserving a local historic landmark: the role of non-

Substitutability and information in contingent valuation', Eleventh Biennial Conference of the Association for Cultural Economics International, Minneapolis.

Knetsch, J.L., 1994, 'Environmental valuation: some problems of wrong questions and misleading answers', *Environmental Values*, 3, 351-68.

Martin, F., 1994, 'Determining the size of museum subsidies', *Journal of Cultural Economics*, 18, 255-70.

Moorhouse, J.C., and M.S. Smith, 1994, 'The market for residential architecture: 19th century row houses in Boston's South End', *Journal of Urban Economics*, 35, 267-77.

No.1 Martin Place, 1999, *No.1 Martin Place: The Story. Meet Me Under the GPO Clock*, No.1 Martin Place, Sydney.

NOAA, 1993, 'Report of the NOAA Panel on contingent valuation', *Federal Register*, 58, 4602-4614.

Pagiola, S., 1999, 'Valuing the benefits of investments in cultural heritage: the historic core of Split', World Bank Economists Forum, Alexandria.

Penfold, V., 1994, *Heritage Control and Property Values: A Study of Four Sydney Conservation Areas*, School of Town Planning, University of New South Wales.

Sanderson, E.F., 1994, 'Economic effects of historic preservation in Rhode Island', *Historic Preservation Forum*, Fall, 22-27.

Urban Consulting Group, 1995, *Economic Effects of Heritage Listing*, Australian Heritage Commission, Canberra.

Urban Heritage Revitalisation–Adaptive Reuse in the Wider Policy Context

Roz Hansen, Director, Hansen Partnership Pty Ltd, Planning & Development Management Consultants, Adjunct Professor, Faculty of Arts, Deakin University,

Abstract

The concept of adaptive reuse of heritage places is instrumental in ensuring the future maintenance, care and well being of these places. For many years, the focus has been mainly on how to achieve appropriate adaptive use with minimal impact on original fabric and protection of the overall integrity of the place. However, in the last decade or so several local planning authorities have formulated and implemented planning and development policies and programs which actively promote this concept as an integral part of injecting life and vitality into our urban environments. These policies generate considerable direct and indirect social, cultural and economic benefits for communities, as well as financial rewards for the owners of these heritage places.

The use of planning policy to encourage adaptive use of heritage places is successfully being undertaken in the City of Melbourne. A selection of heritage places that have been reinvented and revived as a result of this approach will demonstrate the links between policy and practice. The key ingredients of the Melbourne City Council's approach will be identified for future policy makers seeking to maximise the benefits of adaptive use of places of cultural heritage significance.

Introduction

Norman Tyler in his book 'Historic Preservation–An Introduction to its History, Principles and Practice' discusses the revitalisation of downtown areas or Central Business Districts in the USA in the context of urban planning. He states:

> *'The goals of city planners and preservationists sometimes are at odds. Planners look for ways to encourage growth in their community, while preservationists are out in front of bulldozers trying to stop new development. Or so it seems…………*
>
> *Not surprisingly, it can be difficult for city officials to resolve this dilemma. Growth is good. It leads to a larger tax base, which is always a priority. Although preservation of existing historic structures may be considered important, it is typically seen as a secondary goal.*
>
> *If cities are to rely on growth as a yardstick of health, growth must be seen in terms of the quality of life rather than simply physical and economic growth. And isn't quality-of-life directly tied to a community's image of itself? And isn't that image, to a lesser degree, a recognition of and respect for its heritage? Growth is good, and historic preservation should be seen as an important component of it.'*

For some time now each of the Australian capital cities has been on a roller coaster of national and international competitiveness– to attract more growth and investment; increase employment opportunities; entice more tourists and aggressively market their CBD areas as vibrant, lively and exciting places to live, work and visit. Although interstate rivalries still prevail amongst some sectors of the political and business worlds, each capital city has endeavoured to 'brand' its CBD to capture the type of investment opportunities which, at the government level, are seen as intrinsic to its capital city's sustainability.

The Melbourne City Council has been working closely with the Victorian State Government for several years now in marketing the competitive strengths of the City. This partnership between State and Local Government has been underpinned by the Capital City Policy adopted in 1994

and currently under review. The policy commits the City to:

> ' Expanding its international role and profile as representative of Victoria and to stimulating innovation, creating wealth built on its strengths, establishing the highest standards of design and public safety for its citizens, protecting and enhancing its natural, cultural and social environment and heritage, and engaging all Victorians in its future.'

The policy identifies key commitments to be pursued jointly by state and local government such as:

> ' Outstanding levels of innovative contemporary art and design, and more emphasis on public places and urban heritage, will create added incentive for visitors to come into the City.'

City Plan–Council's Municipal Strategic Statement

Accompanying the Capital City Policy initiative, the State Government has required each municipality to review its planning scheme and, in particular, insert a stronger strategic planning and policy content into these use and development control documents.

In March 1999 Melbourne City Council had its municipal strategic statement or MSS *City Plan* gazetted by the State Government. *City Plan* sets out Council's strategic directions for ensuring the City's future vitality and prosperity. *City Plan* adopts six key themes that form an integrated planning strategy for the City.

They are:
- *Prosperous City*
- *Innovative City*
- *Culturally Vital City*
- *People City*
- *Attractive City*
- *Sustainable City*

Each of these themes incorporates the retention, restoration and adaptive re-use of Melbourne's heritage places within the CBD as key components of *City Plan* and,

my paper will demonstrate how this important policy document has achieved this outcome.

Prosperous City:

A vibrant and prosperous City economy relies on a high quality, high amenity and attractive urban environment. An urban environment that offers a sense of place, a richness of built form and architectural excellence, is a city that has character and charm.

Whilst the City of Melbourne must provide a modern, efficient and cost effective infrastructure base to attract new business investment, and maintain its current business mix, it also relies upon a retail and entertainment core which

- is comfortable, safe and compact for pedestrians to use;
- offers a diversity of retail, entertainment and dining venues set in attractive streetscapes, arcades and laneways; and
- operates flexible trading hours based on a 7 day week city experience.

The City's fine collection of 19th and early to mid 20th century buildings, many of which are clustered in the retail and entertainment core of the CBD, have contributed significantly to the economic well being of Melbourne as a whole. In recent years many of the arcades, little streets and lanes have been revitalised. This process has incorporated the heritage qualities with tailor-made urban design improvements to create a 'sense of place'. The marketing and 'imaging' of these spaces is as much reliant on the types of businesses as its physical, environmental and cultural qualities.

More particularly, the Melbourne City Council has worked closely with these businesses and property owners to upgrade and enhance the public domain to create spaces that are distinctive and different. By establishing a diversity of places to cater for the various customer groups, Council has successfully attracted more people to the CBD for work and leisure pursuits, who, in turn, contribute to the economic base of the City.

One of the actions under the theme of Melbourne as a *Prosperous City* is:

' developing urban design policies and guidelines to promote distinctive and marketable character precincts.'

For example, the retail and café businesses in little streets such as Degraves Street and Centre Place target the growing tertiary student population of the CBD. The above ground levels of the early 20th century buildings abutting these little streets have been converted to serviced apartments, warehouse and studio flats. In contrast, the elegant Victorian arcades such as the Block Arcade maintain a more affluent profile commensurate with the prestigious and stylish appearance of the space and its high quality retailing.

City Plan also identifies several precincts which have a significant number of heritage places which offer diversity of built form, activities and location including:

- Queen Victoria Market
- Chinatown
- Bourke Hill

These precincts, like the retail core of Melbourne's' CBD, make a substantial contribution to creating a *'sound local economy with strong and sustained levels of activity.'* Within this context, it is noticeable that it is the cultural heritage buildings and spaces that characterise these precincts to make them much valued and special places within the City environment.

Another initiative adding value to these heritage places is the range of programs and activities offered to the public including special events, festivals, sensual experiences and dining delights. It is this layering of initiatives and actions which creates a very dynamic CBD with the built environment as the 'stage' within which this all happens.

Clearly this differentiation within the market place can become a powerful tool which is reflected in the built form, the specific functions of the space, and a greater socio-economic mix in the people who live, work and visit the CBD. There is little doubt that the historic built form 'adds value' to the place, as well as creating a different experience to the regional shopping centres scattered throughout Melbourne suburbia.

Innovative City:

With the pace of globalisation comes the desire of cities such as Melbourne to enhance its profile, both nationally and internationally, as a centre for innovation. Within this context *City Plan* promotes Melbourne as a 'University City' with two universities, the city campuses of three other universities and five TAFE institutes. Several of these tertiary institutions own and occupy heritage places of state or regional significance.

The recent purchase of the Capitol Theatre in Swanston Street and the former Melbourne Magistrates Court complex at the corner of Russell and La Trobe Streets demonstrates that the value of the asset stretches beyond that of a Central City location to one which invokes a sense of history and tradition. Perhaps 10 or even 20 years ago these institutions would simply not have contemplated these buildings in their property portfolios and yet today there is definitely a change of approach and direction which embraces our city's heritage as part of their future 'heritage'.

The Innovative City theme also embraces Melbourne's multi cultural identity. The City of Melbourne is not only the host of many events and festivals which have become icons in their own right (Moomba, Lygon Street Festival, Melbourne Cup, and more recently the Grand Prix), but they reflect the social history of the City and the people who have shaped its built form and character.

Several of the CBD theatres are heritage places, some of which have undergone substantial renovation and upgrading in recent years – The Princess, The Regent, The Forum and Her Majesty's. These places provide the venues for the creative and artistic flair of Melbourne as a City renowned for its performing and visual arts and as a destination for international artists, shows and celebrations.

Fortunately 'Innovation' has gone beyond that of the tangible to include a change of attitude as to the way we convert heritage places to new uses. Melbourne City Council has clearly been a trailblazer in allowing greater flexibility in the way we alter, adapt and extend heritage buildings to ensure their future use and maintenance. Heritage Victoria too has been instrumental in 'loosening' the control noose to encourage more innovative and creative ways of recycling heritage places.

Accompanying the resurgence in city living in Melbourne has been the push to apply for roof top extensions on several of the city's heritage buildings. This trend has generated considerable debate about:

- How many additional storeys, if any, should be allowed?

- What design should they take–historicism versus modernism?

- Is a setback of this new built form required to minimise its bulk and mass when viewed from the public realm, and if so, what is the distance of this setback?

- Should the choice of building materials match those used in the heritage building or should it adopt a more modern palette of materials, colours and finishes?

To assist in answering these questions the Melbourne City Council has relied upon the advice of its heritage advisers and urban designers. A draft set of guidelines have been applied to assist in advising the developer as to what is appropriate and acceptable in the design of the roof top extensions. In many respects the answers to the above questions involve a balancing act between heritage and development.

The Council's draft guideline document states that:

> '*Architects, not surprisingly, argue that additions can add to the value/significance of buildings–this seems reasonable within certain bounds of urban design outside Urban Conservation Areas (now referred to as Heritage Overlay Areas), but within heritage precincts or with respect to notable buildings the argument cannot always be maintained or is not always appropriate.*'

A recent example addressing the issue of additions to rooftops of heritage buildings is the former Port Authority building in Market Street, Melbourne. This former government owned building had been sitting vacant for several years until the Walker Corporation purchased the premises in the late 1990s.

The Walker Group sought to convert the building to residential apartments with a desire to add another two floors on the roof. A previous owner had attempted to gain approvals for another 6 storeys on the roof but eventually sold the premises as a result of very strong opposition from both Heritage Victoria and MCC.

The Walker Corporation was required to present an economic argument as to why the additional two levels of apartments were required in the development scheme. They were able to successfully argue, amongst other factors, that the cost of the works required to the existing building to convert it to residential use and provide a future for the property hinged on the approval of these additional two levels of high quality residential development. The additions on the roof would be seen from the street due to the local topography and the siting and design of these new floors. However, after further discussions and massaging of the new building envelope, Heritage Victoria granted approval. All of the apartments have been sold, and gradually the building is being occupied by its new resident population.

It was proposals such as the additional floors to the former Port Authority building which triggered the need for guidelines to assist owners in designing and siting new built form on the roof tops of heritage buildings. As stated in the MCC draft guidelines regarding this specific development proposal:

> '*In these instances, the additions could be seen as part of the adaptive reuse process, where the significance of the site overall was protected through the change of use and the associated changes. The role of adaptive reuse as a conservation intervention is a consideration for heritage buildings, but in good conservation practice is conditional that the heritage significance of the site is not compromised.*'

What is fundamental to this approach is a sound appreciation as to why the place is of cultural heritage significance. What are the key ingredients of that 'significance' and will the proposed development undermine that significance?

Too often the planner has translated the issue of significance into a streetscape or urban character argument instead of focusing on the very essence of why the place has been identified and protected

under the planning scheme. This confusion is currently causing immense problems in Melbourne (both in the Central City and metropolitan wide contexts) where local communities are opposing demolition of buildings under the guise of heritage where, in many instances, the real reasons are those of urban character.

Fortunately, in the case of the Melbourne City Council a more creative, and some may say, courageous attitude to allowing new levels on the rooftops of heritage buildings has occurred. We can argue for hours as to whether or not we like the overall design of these additions but what has been demonstrated is a willingness to allow such additions in specific cases.

Culturally Vital City

A key outcome identified under this theme of the City Plan is more public information about, and access to the City's heritage assets. Remembering that these assets are not just of the built form but include its 19th century parks and gardens, the Council's planning strategy aims to

The 'memory of a place' or event is fundamental to our sense of belonging. The more accessible our heritage places are to the public, the more chance we have of ensuring their long term retention and care as they become indelible parts of our memory and life experiences. The MCC has and continues to work with the performing arts and cultural organisations to make its heritage places accessible for a wide range of events. By injecting life and vitality into these heritage places Council has reinforced the 'memory of the place' in the minds of many Melbournians and visitors to the City.

People City:

It may be somewhat trite to say that people are central to the vitality and energy of a city, but *City Plan* aims to provide a City which is 'welcoming, livable, attractive' and offers a supportive environment.

A new and exciting dimension which was not fully appreciated or defined in the preparation of the Capital City Policy has now established itself as a major factor in the revitalisation and preservation of the Melbourne CBD and fringe areas.

Demographic and lifestyle changes within the metropolitan community are driving the

- *Open more of its own heritage assets for the public to enjoy and appreciate;*

- *Work with the various heritage agencies to publicly interpret the City's heritage assets;*

- *Stage civic and cultural activities, where possible, in heritage places.*

A greater understanding and appreciation of the City's rich heritage and cultural make-up is perhaps best celebrated when the two are merged together in the organisation of events and activities. Fortunately many of these heritage places are well suited to cultural events and performances. The success of outdoor performances of Shakespeare's Midsummer Night's Dream in the Botanical Gardens, the telling of the Ned Kelly story at Melbourne's Goal and, the recent conversion of the former Customs House as the Immigration Museum of Victoria are exemplary of the marriage between cultural heritage places and creating a culturally vital and living city.

desire for people to live within or on the fringe of the CBD itself. The residential boom of the 1990s, which is continuing through to this millennium, has actively contributed to not only the retention of many historic places but successful adaptive use of such places as residential apartments, hotels, serviced apartments and home business ventures.

The City of Melbourne has achieved

- approximately 28% of all metropolitan development in the period from 1990/91 to 1996/97; and

- an increased share of residential development in metropolitan Melbourne from approximately 2.5% in 1990/91 to almost 30% in 1996/97 or an average of 20% over this period.

When examined in the context of Residential Redevelopment (being defined as the conversion of sites such as ex-office buildings and warehouses to a residential use in established urban areas), Table 1 highlights the impressive results achieved within the City of Melbourne.

Although a considerable proportion of this growth in the residential sector is in the form of new multi storey apartment buildings in locations such as Southbank

and more recently Docklands, a substantial proportion is also within recycled buildings dating from the late 19th to early to mid 20th centuries. The Housing Monitor database established by MCC indicates that in the period 1992 to 1997 approximately

- 55% of residential developments in the City of Melbourne as a whole were new buildings;

- 21% were conversions of existing buildings; and

- 24% were conversions with substantial new additions.

Note that these figures include planning applications/approvals by MCC and some may not have yet proceeded to the construction stage eg. former Southern Cross Hotel site.

This resurgence in recycling of Central City buildings in Melbourne has been facilitated by a more proactive and flexible planning and building approval system. The Melbourne City Council has been instrumental in providing policies and programs to assist the revitalisation of the CBD.

For example, the *Postcode 3000 Program (*which operated from 1992-1995) aimed to achieve the following objectives:

- *save the development industry time and money in the development process;*

- *help residential projects succeed in the marketplace;*

- *substantially shorten the time taken to get development approvals;*

- *promote the city as a place to live;*

- *encourage building recycling; and*

- *provide specialist advice on both the conversion of existing buildings to residential use and on new residential and mixed use developments.*

The Program operates through four levels of activity as indicated in Table 2. In particular, building conversion projects, which often involve heritage buildings, have been assisted under the Postcode 3000 Program by;

- the application of more flexible building regulations such as a new emphasis on life safety rather than property protection and significant concessions

for buildings under 25m high where sprinklers exist or new technology residential sprinklers are proposed (not all buildings under 25m high require sprinklers);

- provision of pre-development advice to achieve efficient design;

- a commitment to the granting of building regulation dispensations where structural and fire safety requirements are not prejudiced;

- pre-application advice from Council on local issues, design , project layout and general planning policy considerations which support the development;

- commitment to reducing the turn around time for planning permit approvals; and

- sponsor planning scheme amendments where a building may need a change of zoning to facilitate its adaptive re-use for residential purposes

Table 1 - Redevelopment Dwellings in the Pipeline

Municipality & Sub-region	Approval stage			Dwelling type		Total	Sites		Completed**
	Mooted	Planning	Construction	Detached	Attached		Total	Total area (ha)	Total dwellings
Melbourne	1749	5013	5692	20	12434	12454	168	50	4207
Docklands	0	6000	0	0	6000	6000	1	134	218
Melbourne	**1749**	**1103**	**5692**	**20**	**18434**	**18454**	**169**	**184**	**4425**

** developments fully completed from 1995 onwards
'Residential redevelopment' is defined as: " the conversion of sites such as ex-office buildings and warehouses to a residential use in established urban areas.'
Source: Residential Redevelopment in Melbourne, 4ᵗʰ issue, DOI

Through initiatives such as Postcode 3000 Melbourne City Council has been able to realise several of its strategic goals including:

- Boosting the City's resident population with flow-on benefits to the businesses and services located within the Central City and environs. Table 3 shows the marked increases in resident population levels;

- Achieving a wide range of housing options from high quality, luxurious apartments to medium priced multi storey apartments, studio and warehouse loft apartments, student accommodation and serviced apartments;

- Attracting a diverse Central City resident community so that city living is not an experience exclusive to the rich and affluent, but provides for a wider socio-economic mix, household type and age structure; and

- Improving the amenity, safety and access within the City as integral to maintaining Melbourne's international reputation as one of the world's most livable cities.

A host of heritage buildings have been upgraded and converted to residential use in the last 5 years or so. It has included former office and commercial buildings, as well as warehouses and factories. As the trend has gained momentum, the quality and design of the conversions has improved to better fit within the 'skin' of the older built form.

In a concerted effort to promote the adaptive re-use of these heritage places the Council has also waived some of the standard planning requirements for residential use such as no on-site car parking; little or no outdoor open space; and reduced setback distances to address issues such as visual and acoustic privacy between apartments etc.

The Postcode 3000 Program has convincingly demonstrated that local government can be both an innovator and a facilitator of adaptive use of heritage buildings which also supports the achievement of other policy objectives.

Although the program officially ceased at the end of 1995, the reality is that the program continues in terms of Melbourne City Council's more flexible and innovative approaches to adaptive use of heritage places and commitment to increasing its city resident population levels.

It is recognised in *City Plan* that these and other initiatives provide civic, cultural, social and economic benefits for the City of Melbourne. The concept of city living gains momentum every year–old and new buildings contribute to this significant city development trend and the net benefits for Melbourne's CBD as a whole are considerable.

Table 2 - Postcode 3000 Program–Levels of Activity 1992-1995)

Financial Incentives	Technical Support	Street Level Support	Promotion
▪ Fee Relief en space fees to pay on any type of residential development (cost saving of approx. 5% of value of the land) nance based refunds on permit fees for planning, subdivision, building approvals & site services for residential developments ▪ Special treatment of Council rates during the period of construction, through project review & supplementary valuations ▪ Designated Post Code 3000 Projects (that is, projects with more than 20 residential units and located in the CBD) to get automatic incentives	▪ Housing Development Advisory Services giving specialist advice and support for building conversions and new development ▪ Production and release of 'Building Recycling Guidelines for Residential and Mixed Uses' ▪ Commitment from MCC to streamline approvals ▪ Development of the 'City of Melbourne Housing Preference Register' to help identify demand and assist in the marketing of projects ▪ Production of 'Market Reports' using data from the 'Housing Preference Register'	▪ Limited capital works at street level to support private development projects ▪ On-street parking 'Resident Priority Parking Scheme' in selected locations ▪ Off-street parking Development of 'Resident Rate Parking Scheme' for selected parking buildings and operators	▪ Public relations & media program to support initiatives in city living ▪ Production of regular 'Project Newsletters' targeted to registrants on the housing Preference Register ▪ 'Information Packs' for Key Groups lending institutions investment groups property owners developers prospective residents ▪ Demonstration Projects

Source: 'Live it up ' Postcode 3000 kit, City of Melbourne and State Government of Victoria

Table 3 - Estimated Resident Population at 30 June

Melbourne (City)	1994	1998	1999	% growth, 1994-99
Inner	1,459	3,977	4,729	224.1
Southbank–Docklands	993	2,388	3,197	222.0
Remainder	33,134	38,197	39,583	19.5
Total Melbourne City	37,580	46,560	49,508	31.7
MSD	3,213,021	3,367,005	3,417,218	6.4

Attractive City:

Two of the main aims identified in *City Plan* under the theme the *Attractive City* which involve the city's fine collection of heritage places are:

> *'To conserve and enhance Melbourne's architectural heritage and historic character, and enliven it by adaptive re-use and innovative promotions.'*

> *'To maintain and enhance the City's parks, gardens and boulevards as the signature for Melbourne's livability, providing City residents and users with sanctuary, visual pleasure, and a range of recreation and leisure opportunities.'*

The importance of the public realm has been central to the promotion of Melbourne City as an attractive city. Over the last 5 years or so significant capital expenditure by both state and local governments, as well as the private sector, has been has been spent on the upgrading and enhancement of many of the City's heritage assets. These include:

- Restoration of the former Customs House and conversion to the Immigration Museum of Victoria;

- Restoration of the Regent Theatre in Collins Street;

- Stone restoration and cleaning of the façades of Parliament House and the Old Treasury Building;

- Restoration and upgrading works to the State Library;

- Restoration works to several other public buildings throughout Victoria, especially in regional centres and small towns.

Heritage places are given prominence in the marketing and promotion of the City. In many respects, it is these places which distinguish Melbourne from other cities at the national and international level. As City Plan acknowledges, these places influence decisions by businesses and tourists to come to Melbourne to spend money, employ people and contribute to the local and state economies. An attractive city with a sense of history and tradition is a marketable commodity now in the global economy and Melbourne City, through policies such as City Plan, aim to increase its market share.

Sustainable City:

Benchmarking has become a technique for helping to evaluate the performance of cities such as Melbourne in terms of its competitiveness and livability. As stated in the Benchmarking Melbourne Urban Indicators Status Report of July 1998 prepared by the City of Melbourne:

> *' The globalisation of the economy has intensified competition not just between countries, but also between cities, as the latter are the focus of knowledge-based industries on which prosperity and employment increasingly depends. These industries value the liveability, as much as the cost of competitiveness, of potential urban locations. This means that benchmarking against successful cities is an essential tool for effective and progressive urban management. Benchmarking cities can reveal not only Melbourne's relative performance compared with other cities,*

but also from which cities Melbourne can learn to do things better.'

Professor Peter Hall presented a paper at a conference in Melbourne in July 1998 on *Benchmarking Cities*. His paper Remaking Cities: Urban Innovation and Urban Regeneration discusses some of the ingredients of the creative city in the 21st century. Hall had this to say about *cultural sustainability*:

> '*By cultural sustainability we mean a recognition of the values and norms of particular social or cultural groups and giving parity of esteem to them, thus encouraging cultural diversity and choice, freedom of expression and openness, and as a consequence the capacity to allow for personal growth and development; an appreciation and respect for the distinctiveness, identity, uniqueness and specificity of a particular place as well as an understanding of its cultural resources expressed through its heritage and traditions as well as its modern incarnations.*'

Much of our local identity and sense of belonging is encapsulated and celebrated in our cultural values, traditions and places of cultural significance. To date the efforts to benchmark cities in the context of 'cultural sustainability' are perhaps a little rudimentary and unsophisticated. Although attendance levels at cultural and performing arts events are some of the urban indicators being used, I would like to see the City's performance in the areas of restoration and revitalisation of its heritage places and precincts be tested, as well as perhaps an assessment of the capital investment spent on buildings works involving heritage places.

City Plan links sustainability with environmental management and offers the following explanation as to Council's understanding of a sustainable city:

> ' *Sustainable development is a continuous process rather than a precise goal. It is a concept that forces us to look at many dimensions of the City and its activity. The notion of sustainability includes managing natural resources, but is also includes the concept of quality of life–that is, satisfying a multitude of different personal needs for safety, health, agreeable streets and landscapes, culture, recreation and so on. The sum of these factors may be just as important to sustainability as environmental management.*'

Protection and management of the City's heritage places and precincts is recognised as part of Council's environment management responsibilities. In essence, conservation of the city's natural and built form resources is fundamental to providing a livable, attractive and internationally competitive city. Melbourne has and continues to rank highly in the stakes for the most livable city in the world.

Call it environmental vitality, sustainable development or just plain 'quality of life'–an essential ingredient of these concepts is the 'sense of place' which is largely derived from its cultural heritage–both tangible and intangible.

Whilst the design of cities such as Melbourne has become an important focus in the planning, administration and management of the City as an entity, it can neither be denied or forgotten that the quality and diversity within the built and natural forms is intrinsic to the city's social, economic, environmental and cultural well-being. Many of Melbourne City's heritage places shape the identity and image of the CBD–they provide valuable images to market and promote the city to tourists and business investors.

As *City Plan* acknowledges in both its content and strategic directions, Melbourne's enduring strengths include its historic buildings and streetscapes, as well as its parks and gardens, many of which date from the late 19th century. These elements are seen as important economic assets, which appear time and time again in the marketing, promotion and 'selling' of the City of Melbourne at the national and international level.

If we are serious about objectively measuring our performance on the issue of sustainability then I believe we need to include in this process a city's performance in the areas of retention, restoration and adaptive use of these heritage assets. The benchmarking approach does not go far enough in putting 'cultural sustainability' high on this agenda.

Conclusions & Recommendations

For the strategic planning of a CBD to have force and effect, it must prepare and implement a comprehensive 'package' of policies, programs and actions that integrate the past with the present and the future.

Melbourne City Council, through the implementation of *City Plan* and other programs such as *Postcode 3000*, is delivering impressive results in the retention, restoration and adaptive re-use of its heritage assets under its key themes of the *prosperous, innovative, culturally vital, people based, attractive and sustainable city.*

If asked what are some of the key ingredients that make it work in the City of Melbourne then I would offer the following advice:

- A sound understanding that Central City areas need well-researched and practical policies which are multi faceted and inter-dependent. By identifying the key themes which influence the future social, economic, environmental and cultural well-being of Melbourne's CBD, the Melbourne City Council has created a strategic policy document which can be tested and monitored for its performance and, altered when required;

- A commitment to developing partnerships between state and local government, business and resident groups and other stakeholders in the preparation and implementation of policies and programs which generate net gains for our cultural heritage;

- An ability and willingness to think 'outside the square' to new ways of recycling heritage places and revitalising heritage areas or precincts. Melbourne City Council works with the owners of heritage places in finding practical and workable solutions to the issues of adaptive re-use and additions, alterations and extensions to these places;

- A competent and talented team of professionals in the fields of planning, architecture, urban design, art and culture, and financial

management to generate and implement the ideas and actions contained in the strategic vision or plan which will ensure the long term protection, care and use of our heritage places;

- A sound appreciation of the importance of an integrated and holistic approach to the planning and development process where cultural heritage is integral to our quality of life and ability to manage our resources wisely and for future generations' enjoyment; and

- A budget to translate policy into the programs and actions necessary to realise the strategic vision within the timeframes set by the government agency.

If asked what are some of the research or policy recommendations that the Australian Heritage Commission could follow-up as a result of this paper on adaptive re-use of heritage places and the role of policy, I offer the following suggestions:

(1)   Research into the concept of *'cultural sustainability'* and how it can be measured as part of the benchmarking program now in operation in some of Australia's capital cities.

(2)   A more holistic approach to what constitutes Conservation Policy. I do not wish to get into a heated debate about the merits or otherwise of the ICOMOS Burra Charter other than to say that I find it still biased towards fabric and the built form and, failing to incorporate into the policy structure a sound appreciation of social and economic considerations. If we are pursuing the concept of cultural capital then we need to review the AHC policy framework to better reflect the importance of this capital to our nation's long term well being and identity.

(3)   Financial assistance to small communities (urban and rural) in undertaking not only the necessary buildings and works for the adaptive re-use of some of their abandoned 'public' or 'community' owned heritage buildings/places for other uses, but the establishment of local community enterprises to run these places as small profit centres. It is apparent that much of the success

of adaptive re-use is driven by communities who not only live and breathe the commitment to restore, maintain and use these places, but experience the sense of pride and worth which is generated from these grass roots initiatives.

References

City of Melbourne, *City Plan*, March 1999

City of Melbourne, *Benchmarking Melbourne Urban Indicators Status Report*, July 1998

City of Melbourne, *Draft Guidelines on Roof Top Additions in the CBD*, undated

City of Melbourne, *Housing Monitor* newsletters

Hall, Peter, *Remaking Cities: Urban Innovation and Urban Regeneration*, Paper presented to the City of Melbourne's Benchmarking Cities 98 Conference: Innovating Cities, 22/23 July 1998

State Government of Victoria and City of Melbourne, *Creating Prosperity– Victoria's Capital City Policy*, 1994

Tyler, Norman, *Historic Preservation– An Introduction to its History, Principles and Practice*, W.W.Norton & Company, Inc, New York, 2000

Integrated Heritage Management: Dealing with Principles, Conflict, Trust and Reconciling Stakeholder Differences

C. Michael Hall, Centre for Tourism, University of Otago, Dunedin, New Zealand

Abstract

As with many other avenues of public activity heritage management is increasingly focussing on recognition of commercial and economic values. This paper does not focus on the means by which the economic valuation of heritage can be undertaken, rather it concentrates on the way in which economic values need to be communicated to heritage stakeholders as one component of the valuation process in order to achieve effective heritage management strategies

The role of economics

Economics has an important role to play in the processes of heritage conservation. However, to generalise, we would note that its contribution has been piecemeal, isolated to specific sites and issues and, even then, has been much misunderstood and undervalued. Indeed, the conservation movement has often shied away from economic analysis except with respect to very general claims regarding the economic benefits of conservation for visitation, including tourism and retailing. Moreover, our understanding of the economics of heritage conservation is also filled with very substantial mistrust about the way in which economic research is utilised when it is conducted, and in how economic experts choose to side in policy and planning debates between opposing stakeholders, particularly with respect to planning hearings. In this it would be true to say that those with an interest in the economic evaluation of heritage and concerned over economic values have often been their own worse enemy, failing to adequately communicate their methodologies, results and assumptions to stakeholders in a language that can be readily understood.

This paper does not intend to provide an overview of the economics of heritage conservation. Instead, it provides a brief overview of the way in which economic research needs to become integrated into the broader processes of heritage management and, in particular, how it should be incorporated into the communication strategies of heritage managers.

The 'undeniable truths' of heritage conservation

Economic values are but one set of values surrounding the conservation of 'the things we want to keep'. Historically, attention of public sector heritage managers has been focussed on environmental and cultural values and they have only a poorly developed understanding of the significance of economic values. Possibly, this is a consequence of their own training and education in which physical conservation and concentration on heritage itself has ignored the broader context within which heritage occurs. It is possibly also a reflection of the organisation cultures within which heritage management occurs. However, in recent years a substantial set of new pressures has begun to affect the manner in which heritage management and conservation operates:

• demands for smaller government concentrating on 'core' activities;

• the development of a user-pays philosophy;

• recognition of the significance of the tourism dollar for business and regional development;

• the emergence of public-private partnership; and

• greater limitations on government expenditure.

These pressures have all affected the manner in which heritage conservation and management operates. From the new context within which heritage conservation occurs, several significant principles can be identified which McMillan (1997) has labelled somewhat provocatively as the 'undeniable truths' regarding heritage conservation. Several principles can be identified

• *That the choice for heritage conservation has both a value and a cost*

While much heritage literature and the activities of heritage groups has focussed on the values of heritage, relatively little attention as been given to the costs. As McMillan (1997:4) recognised, '…there is a financial cost in pursuing heritage conservation. Someone has to pay that cost'

> The community exercises choices regarding the quality and nature of heritage conservation. These decisions however, are not without cost.

Heritage regulations, rightly, provide the opportunity to introduce a range of controls over public and private properties. These stem from 'freezing' a property, through inclusion on the National estate, to permitting substantial alteration and change while conserving identified important elements (McMillan 1997: 3)

• *In the longer term viability means commercial rates of return*

If capital cannot be applied to achieve a return on equivalent applications - the opportunity cost of heritage conservation, then in the long term, support for conservation of a particular site by the public and/or private sectors will dwindle. In the current political climate there is clearly a threshold on how much government, whether local or national, will continue to subsidise heritage conservation activities or restrict private sector activities without there being an adequate return to either directly the government stakeholders or indirectly to the wider region.

• *Facilitation is productive while confrontation leads to little real progress in conservation*

Creative outcomes can now be achieved through cooperation and understanding of the mutual needs of stakeholders. Indeed, one of the basic needs for many heritage management agencies is to recognise the range of stakeholders that may exist for a particular site. As Strong (1997: 1) recognised, 'I think we must remind ourselves frequently that heritage only has legitimacy if it represents the values of the community. The whole community, not just the

heritage mafia or the local historical society, but all those ordinary people who appreciate these reminders of the past as they go about their daily business'. Indeed, Strong went on to note that 'Heritage identification and assessment is too important to be given to a group of experts. It should involve the whole community' (1997: 4).

• *Reducing uncertainty, reduces time and costs and increases viability.*

This fourth principle is extremely important for heritage conservation, particularly where the private sector is involved. Unfortunately, many heritage management agencies do not have a clear understanding of the economics of conservation, they do not have well structured strategic plans which are open for evaluation, neither do they have an appreciate of the effectiveness of the their expenditure in relation to their conservation objectives, if they have such objectives at all. Moreover, public heritage organisations typically do not have good estimates of forecasting expenditures and costs to meet objectives for given timelines. Indeed, their timeline often appears to be 'infinite'. They do not have good visitor records or details of expenditure patterns. They also fail to factor in costs of annual upkeep and maintenance. If they were operating on a commercial basis many of them would be bankrupt. From the private sector's perspective time is money, even a casual observer of the economic behaviour of investors and commercial operators realise that certainty is vital. However, heritage agencies trying to develop partnerships often seem to have no understanding of the needs of business.

These four principles are important bases for developing a framework for understanding heritage conservation and the need for understanding the needs of stakeholders. The importance of stakeholder perceptions of the economic value of heritage is dealt with further in the next section.

Improving the Heritage Conservation Process

Project-based planning probably represents the most immediate face of heritage conservation planning for most members of the general public. However, the efficacy and effectiveness of project planning will depend on the emphasis given to its various elements

by developers and the receptiveness of planning authorities to its usefulness as a planning tool. Furthermore, while such planning may be described as comprehensive in terms of the range of dimensions it covers it cannot be described as 'integrated' in that it does not provide for linkages and relationships with stakeholders in terms of the formulation, development, implementation and evaluation of the heritage conservation process. Moreover, it tends to be a 'one-shot' study, which although valuable for establishing baseline data, does not become part of an ongoing assessment and evaluation of the affects of heritage conservation on the location, and the community stakeholders selection of desired futures.

The involvement of people in the heritage planning and decision-making processes which affect their community is extremely important as activity is likely to foster 'sustainability', as participants will then be more likely to regard themselves as stakeholders in the implementation of programs. Nevertheless, governments will also need to use a range of instruments by which heritage management policies can be implemented. Table 1 presents a selection of growth management tools and techniques which can be applied to heritage conservation, while Table 2 illustrates potential direct and indirect tourism growth management strategy options in relation to heritage sites. However, there is no universally appropriate strategy available for managing heritage sites. Instead, strategies, tools and techniques will be selected according to local characteristics, the nature of the planning problem, the characteristic of the heritage resources and the stakeholder values which are attached to it, and the acceptability of such instruments. Nevertheless, there is a clear need to the change the thinking surrounding how to manage heritage sites with respect to the role of stakeholder relationships and collaboration in heritage conservation and cultural tourism (Hall and McArthur 1998).

Conflict in Heritage Conservation and development: Reconciling Stakeholder Differences

Opposition to the growth of tourism in an area or the establishment of specific tourism developments in relation to heritage sites often arises because access to common resources, eg., scenic qualities, water, air, public resources (the commons) is coveted by other users with different, and possibly incompatible interests. Opposition is often multifaceted and based on a range of concerns which may range from opposition on macro-level environmental grounds (eg., habitat destruction, air and water pollution and alterations in scenic values), social (e.g., loss of low-income housing, loss of sense of place, breakdown of communities and lack of employment opportunities to locals) and economic (e.g., failure to purchase locally, localised inflation and increases in rents and government taxes) to micro-level concerns which arise from jealousy and envy. Moreover, many of these elements are combined with respect to how resident's sense of place is affected by development. A sense of place arises where people feel a particular attachment or personal relationship to an area in which local knowledge and human contacts are meaningfully maintained. However, people may only consciously notice the unique qualities of their place when they are away from it or when it is being rapidly altered.

Change is a normal part of the human experience. However, tourism, as with much of modernity, may serve to hasten rates of change above those which are 'comfortable' for many people. New buildings, new economic structures and, perhaps most significantly of all, influxes of new people - the tourist and the people who serve them - can serve to dramatically alter the web of relations residents have with place, and therefore substantially affect tourism development and planning, and heritage conservation as well. As Millar and Aiken (1995: 620) commented, 'Conflict is a normal consequence of human interaction in periods of change, the product of a situation where the gain or a new use by one party is felt to involve a sacrifice or changes by others. It can be an opportunity for creative problem solving, but if it is not managed properly conflict can divide a community and throw it into turmoil'. Heritage managers therefore typically have to find accommodation between various

stakeholders and interests in tourism development, in an attempt to arrive at outcomes that are accepted by stakeholders including the wider community.

Conflict resolution is a process of value change which attempts to manage disputes through negotiation, argument and persuasion through which conflict is eliminated or at least minimised to the extent that a satisfactory degree of progress is made by the interested stakeholders. Substantial attention has been given to issues of conflict resolution in the field of resource and environmental management, however, relatively little attention to such issues has been forthcoming in heritage conservation.

Conflict resolution can take a number of forms ranging from information exchange, to mediation involving a neutral third-party, through to binding arbitration in which a decision-making function is mutually given to a third-party by the affected stakeholders. In all such situations two primary objectives will be sought. First, an agreed definition of resource use. Second, the creation of a working relationship between the affected parties which will provide for effective implementation of the resource use agreement and ongoing monitoring, evaluation and procedural mechanisms for dealing with new problems that might emerge.

Conflict resolution and mediation is clearly an integral component of heritage conservation, and its relation to tourism development in particular, with the assumption that the various groups and interest involved have doubts about their ability to achieve objectives. For example, Ostrom (1990) noted the following interrelated factors of sustainable development at the community level:

- clearly defined boundaries;
- harmony between appropriation and provision rules and local conditions;
- participation by all interested parties in changes that may affect them;
- accountable monitoring;
- graduated sanctions administered by an accountable authority;

- low cost and readily accessible mechanisms for conflict resolution;
- recognition by governments of the rights to organise; and
- for those regimes which are part of large systems of governance, appropriate licensing provisions, monitoring, enforcement, conflict resolution and organisational arrangements.

Much conflict resolution, particularly in terms of land-use planning, is based on the interests of the stakeholders engaged in conflicts. Such a process of consultation and bargaining assumes that stakeholders have clearly defined specific interests which are amenable to negotiation. According to Millar and Aiken (1995) the following are the necessary conditions for resolving an interest-based conflict:

- the parties to the conflict identify themselves and are represented;
- all parties can agree on the 'facts';
- there is an urgent need for all parties to arrive at an agreement;
- the parties want to resolve the matter as soon as possible;
- all parties are willing to be flexible; and
- all parties can be certain that the other parties will abide by the agreement once it is defined.

However, such interest-based approaches only work effectively in a limited range of situations. For example, when there are only a limited number of parties to the resolution process. As Powell (1990: 326) noted with respect to the creation of networks, 'The more homogenous the group, the greater the trust, hence the easier it is to sustain network-like arrangements'. Therefore the likelihood of interest-based approaches working can be expected to fall as

- the number of stakeholders increases;
- the size of social groups increases;
- the membership of social groups becomes more unstable;
- stakeholders become more geographical dispersed; and
- the diversity of participants increases.

Similarly, such an approach will work best in relation to a single project, issue or small site,

the more complex the conflict becomes the more difficult will be the possibilities for resolving conflicts based on interests. More significantly, an interest-based approach may do little to resolve conflicts and antagonisms that are rooted in deep-seated differences in values, ideologies and philosophies, 'for as long as the initial motives, understandings, and interests remain, so too will the conflict' (Millar and Aiken 1995: 621). For example, as often seem to exist between conservation groups and developers in tourism in areas of perceived high heritage value. Conflict management therefore needs to be able to develop structures that are able to deal with fundamental value differences in terms of issues of

- *appropriateness* - how appropriate is a certain type of development or use of technology in an area given its wider impacts?;

- *property rights* - what are the respective rights of neighbouring land uses and the rights of individual property owners in relation to wider public rights?; and

- *governance* - who sets the rules and regulations under which the parties operate and how are they enforced and changed:

Fundamental value differences are clearly not unique to tourism related development, and heritage conservation however little effort has been made to transfer the experience of conflict resolution in other areas of resource management and use to the complex set of stakeholder attitudes and relations which usually surround heritage conservation. Legal regulation is not sufficient to resolve value conflict in heritage planning and development. While 'winners' and 'losers' can be determined through legal processes, fundamental value conflict can continue and even made worse as 'losers' come to feel even further alienated from the 'rules of the game' which set the structures within which conflict resolution may occur (Hall and Jenkins 1995). For example, the agenda is often the subject of intense debate since some parties will work hard to add or delete issues of special concern. It is necessary, therefore, to seek to resolve

or manage conflict at a deeper level than that represented through mere legal solutions. This deeper level is best recognised as that of 'trust'.

Trust

Embedded in the continuation of a mutually satisfying relationship is a dialogue of trust. While trust is a future oriented concept, it is based on past performance. On-going interactions and flows of information over time have built up a bond of confidence that anticipated outcomes can be relied upon to be achieved. This is a significant departure from transaction cost economics, which assumes that the agent within the principal/agent relationship is not to be trusted. s Millar and Aitken (1995: 623) recognised, 'it is a general rule of all agreements that the formal particulars are only effective to the extent that the working relationship is based on trust'.

Trust is one of the basic elements of understanding cooperation and conflict among stakeholders in the heritage conservation process. Trust is 'confidence in the reliability of a person or system, regarding a given set of outcomes or events', which is based on 'faith in the probity or love of another, or in the correctness of abstract principles' (Giddens 1990: 34). It is the glue which holds communities and societies together. Trust creates the potential for voluntary collective action through fostering the assurance necessary for individuals to commit towards a common goal.

Trust is a 'collective attribute' based on the relationships between people within a larger social system rather than just the individual recipients. Trust is therefore a set of social expectations, including broad social rules of fair, right, and taken for granted assumptions over common understandings that are shared by everyone involved in economic and social exchange. The withdrawal of trust by one actor potentially having a domino effect on the system of interactions. Significantly, he likens this to a grid effect with highly sensitive configurations predisposed to breaking down at a single weak point. For networks then, the performance and position of the weakest element is important to the functioning of the total network.

Where trust is absent, cooperative or voluntary collective action is impossible, particularly in 'commons' situations which

rely on the 'curbing of opportunistic impulses toward individual exploitation' (Millar 1996: 207). Trust therefore provides for a sufficient number of reciprocal and cooperative actions to occur such that there will be a greater return to all stakeholders than what would be forthcoming through individual exploitation. Trust requires a sufficiently common set of values between stakeholders in order to operate. Therefore, attention in much conflict resolution and management in tourism development needs to be given to the social and political context within which development occurs and value conflict arises. To place the observations Millar and Aitken (1995; 623-624) within a heritage conservation context:

> In conflict situations, the social component is critical. The main purpose of [tourism] is to produce and ultimately sell a product, but in conflict situations we must be more concerned with how the local society and resource base are organized to accept such production… communities exist within a web of kinship, physical interdependency, and social obligation, and in this context, [tourism] cannot be separated from the social issues of property and morality.

For example, Millar and Aitken (1995) recognised that in many communities faced with new patterns of resource development and use, there was a two-part morality of neighborliness in which while there was a recognition that everyone has the right to make a living, there is also a belief that everyone who is affected by developments should have the right to be consulted. Where such consultation does not occur and where sufficient resentment is reached, extra-legal means may be used to oppose new developments, including damage or destruction of property.

In the majority of societies, the turmoil that may be created by such developments has clear limits of political and social acceptability. When these limits are reached then government action and intervention becomes the order of the day, particularly as government usually seeks to minimise conflict and encourage consensus. However, the institutional

arrangements of government, particularly at higher levels, may be at odds with conflict resolution at the community level. Not because government necessarily wants to be, indeed new government structures may be established so as try and promote conflict resolution, but because the inherently bureaucratic nature of government is often at odds with the social characteristics of a community. For example, as Bingham (1986: 115) recognised.

> A general problem, particularly for public agencies and corporations, is that often the individuals with decision-making authority who can speak for the organization are not the same as those with specific technical expertise on the issues. Also, in large organisations, it is often not possible for the policy makers to spend their time to be present personally in all negotiations.

'Operating within the community setting, the ethics of a bureaucracy can lead to mistrust and conflict. In a community, heterogeneity and autonomous decision-making, not conformity, are the hallmarks; custom and tradition, not just law and rational arguments, are the guiding principles' (Millar and Aitken 1995: 626). For example, in a study of public participation in natural resource management, Sewell and Phillips (1979) found that the managing agency provided pragmatic, agency oriented objectives while the community had a broader set of objectives for being involved in consultation. Specifically, the objectives from the management agency point of view were to develop programs with broad public acceptance, enhance performance and improve the image of the agency. In contrast, Sewell and Phillips found the objectives from the community's point of view were to influence the design and implementation of policy and reduce the power of bureaucracy and its planners.

While public participation is seen as a standard heritage conservation planning mechanism to deal with controversial issues, it should be noted that simply the hosting of a public meeting - a common consultation strategy, for example, will not by itself make it more likely that conflicts will be resolved. Indeed, they may well led to even greater conflict between parties and serve to reinforce rather than change positions and come closer to agreement. 'Public meetings

may help to identify conflicts, but they cannot resolve or manage them. While it is true they allow everyone to have his or her say, the root causes… are often neglected. In the end, the government is often left with the task of sorting out what it considers to be the relevant facts' (Millar and Aiken 1995: 627). The problem has often been a focus on the technique - the public meeting - rather than the process and what the hoped for outcome of the process actually is. Similarly, economic assessment of heritage conservation is often seen as an end in itself rather than a tool to be communicated to the public. Too often, processes have been interest based rather than values based. However, if long-term agreement and common-ground between stakeholders is sought then attention must be given to the values which are involved in the conflict. Public meetings, as with some other forms of public participation, may help in the identification of conflicts and opinions but they do not of themselves manage or resolve them (Hall and McArthur 1998). For example, decision-making processes should be structured around four principles:

- real and regular consultation - which seeks to be inclusive of all stakeholders and which begins early in any decision-making process;

- development of a common information base which is understandable to all major stakeholders;

- action plans must also involve multiple stakeholders - while more costly in terms of time and often money, savings can be gained in the longer term as parties to any agreement reduce the cost of regulation. Action plans should also seek to encourage ongoing dialogue in order to encourage further cooperation and anticipate difficulties in implementation and/or possible future potential conflict; and

- the use of a variety of effective mechanisms including mediation and zoning.

If the equity component of sustainability is to be treated seriously, then it therefore becomes vital that heritage planning, and public participation as a component of heritage conservation, addresses values and people's perception of the 'truth' rather than just be geared to short-term interest management which deals with the 'facts' as seen by the makers of the rules of the heritage conservation game. In particular, it becomes essential for economic researchers on heritage conservation effectively communicate their research results to stakeholders.

This does not mean that community-based heritage planning will automatically lead to either sustainable development or even a reduction in the amount of conflict surrounding heritage conservation. Instead, a local focus allows for the dynamics of the planning process to be altered as stakeholders face their interdependencies at a place-specific level. However, we should not romanticise the local, as so often seems to be the case in discussions of heritage conservation and tourism planning. As Millar and Aiken (1995: 629) recognised,

> Communities are not the embodiment of innocence; on the contrary, they are complex and self-serving entities, as much driven by grievances, prejudices, inequalities, and struggles for power as they are united by kinship, reciprocity, and interdependence. Decision-making at the local level can be extraordinarily vicious, personal, and not always bound by legal constraints.

Nevertheless, an integrated community-based approach does provides the possibility that the necessity to consult over the use of shared resources and the needs of neighbours opens the way of conflict resolution. Perhaps more significantly with a reduction in the extent of formal government procedures, a community-based process of management and conflict resolution provides for informality in personal relationships between stakeholders in which trust is able to develop and cultural heritage conservation occur inn a more sustainable manner.

References

Bingham, G. 1986, *Resolving Environmental Disputes: A Decade of Experience*, Conservation Foundation, Washington D.C.

Giddens, A. 1990, *The Consequences of Modernity*, Standford University Press, Standford.

Hall, C.M. 2000, *Tourism Planning*, Prentice-Hall, Harlow.

Hall, C.M. and Jenkins, J.M. 1995, *Tourism and Public Policy*, Routledge, London.

Hall, C.M. and McArthur, S. 1998, *Integrated Heritage Management*, Stationery Office, London.

McMillan, S. 1997, 'Balancing the books: Economic returns and corporate citizenship', mimeo of paper presented at Business With Style: Adapting Heritage Buildings for Commercial Use, New South Wales Government, Heritage Office, Sydney.

Millar, C. 1996, 'The Shetland way: morality in a resource regime', *Coastal Management*, vol.24, pp.195-216.

Millar, C. and Aiken, D. 1995, 'Conflict resolution in aquaculture: a matter of trust', pp. 617-645 in *Coldwater Aquaculture in Atlantic Canada*, 2nd ed., ed. A. Boghen, Canadian Institute for Research on Regional Development, Moncton.

Ostrom, E. 1990, *Governing the Commons: The Evolution of Institutions for Collective Action, The Political Economy of institutions and Decisions*, Cambridge University Press, Cambridge.

Powell, W. 1990, 'Neither market nor hierachy: network forms of organization', pp.295-336 in *Research in Organizational Behaviour*, Vol.12, eds. B. Straw and L. Cummings, JAI Press, Greenwich.

Strong, R. 1997, 'External Factors: State and local government controls; community expectations', mimeo of paper presented at Business With Style: Adapting Heritage Buildings for Commercial Use, New South Wales Government, Heritage Office, Sydney.

Table 1: Heritage conservation site management tools and techniques

Management Tools	Management Techniques
1.0 POLICY AND ASSESSMENT	- by-law requirements - comprehensive plans - regional plans - fair share low-cost housing - information services - employment/resident balances
2.0 IMPACT ANALYSES	- fiscal impact - social impact - cost/benefit analysis - environmental impact - carrying capacity analysis
3.0 REGULATORY SYSTEMS	
3.1 Environment Controls	- environmentally sensitive areas - special planning areas - pollution controls
3.2 Development Right Transfers	- development rates and location
3.3 Restrictive Covenants	- concession in landowners - initial land title documents
3.4 Zoning Uses	- conventional zoning - conditional zoning - planned unit development - special permits (e.g., historic districts)
3.5 Other Zoning Tools	- minimum floor areas/lot sizes - height restrictions - population density - performance standards - geographical constraints
3.6 Quota Systems	- development/building permits - utility connections
3.7 Short-Term Tools	- moratoria - creative foot-dragging - negotiation and permit review - off-site levy charges
4.0 CAPITAL EXPENDITURES	- land banking - development rights purchases - capital programming
5.0 REVENUE SYSTEMS	
5.1 Exactions	- land/money dedications - capital facility dedication - low/moderate income housing allocations
5.2 Tax and Fee Systems	- urban and rural service areas - utility fees - user rates - local improvement areas - development districts

Source: After Hall 2000

Table 7.3: Potential tourism growth management strategy options

Direct Strategies	Indirect Strategies

Enforcement
 • increased surveillance (formal, informal)
 • impose fines
 • establish by-laws
	Physical Alterations
	 • provide guidelines for:
	   - architectural design
	   - development
	   - landscape design
	   - access to infrastructure
	   - capacity

Zoning
 • separate incompatible:
   - activities
   - land uses
   - tourist groups
   - resident/ tourist groups
	Information Dispersal
	 • disseminate appropriate behaviour information
	 • advertise alternate locations
	 • distribute low impact activity guidelines
	 • distribute codes of ethics for tourists, residents, tourism operators

Use Rationing
 • limit use of:
   - specific facilities/sites
   - access routes
 • provide reservation use only
	Economic Incentives
	 • create:
	   - differential user fee structures
	   - differential utility fees
	   - local improvement areas

Activity Restrictions
 • restrict:
   - type of use
   - length of stay
   - timing of activity	

Source: after Williams 1993 in Hall 2000

Conserving Cultural Heritage Values in Natural Areas: the Australian Experience

Ms Jane Lennon, Heritage Consultant, Lennon & Associates, Commissioner, The Australian Heritage Commission

Abstract

Every day we forgo opportunities to enhance the quality of heritage resources when we apply blinkered and single discipline approaches to heritage management. It is obvious that in protected areas, where certain values may be overemphasised and specific heritage resources over-utilised to such an extent that they are being degraded, that by spreading the use between diverse values a sustainable process can be managed.

There is very little overlap in applying a multidisciplinary approach to assessing the significance of cultural values in natural areas on a regional basis. There has also been a lack of philosophical underpinning of scientific assessment so that identified natural values are seen as absolutes rather than as cultural constructs. This in turn is the product of our values which have also changed over the last 150 years of European occupation of this continent.

The paper will consider cultural values of natural areas as related to concepts of naturalness, Australian Historic Themes and their physical expression in natural areas, and land and resource use. It will examine briefly past practices and new approaches to integrate natural and cultural values through both emerging conceptual frameworks and their charters, principles and policies, and through some on-ground case studies. It will look in particular at current cultural heritage practice as it applies to natural areas

.

" The song is gone; the dance
is secret with the dancers in the earth,
the ritual useless, and the tribal story
lost in an alien tale.
Only the grass stands up
to mark the dancing-ring; the apple–
gums
posture and mime a past corroboree,
murmur a broken chant.."
(from *The Bora Ring*, by Judith Wright)

Lost songs and memories, forgotten places, minimal evidence all there in the landscape waiting to be deciphered! Cultural values in natural areas ranging from sweeping plains to the bush are important to this nation. Their identification and protection have been legislated for, yet they are ignored. Why?

- Until the 1990s cultural values were generally synonymous with historic values and related to historic places with built fabric, which is the domain of the architect, archaeologist and sometimes historians. In some areas cultural values also included social value. Over the last decade 'cultural values' in common terminology in Australia almost always refers to Indigenous values, while historic values and aesthetic/landscape values are referred to by those names whereas previously they were often lumped together under the term 'cultural values'.

- All too often cultural values are considered separately from natural values when conservation planing and management is undertaken. A multidisciplinary approach to heritage by land management authorities is not considered to be part of their core business. In contrast, internationally there is a trend towards an integrated approach to heritage identification, assessment and management. This is seen in the shift away from individual site or place management in isolation towards landscape and regional conservation planning and management processes. It is also seen in the current Commonwealth government commitment to introducing an integrated national heritage places strategy via new heritage legislation

following the enactment of the *Environment Protection and Biodiversity Conservation Act 1999.*

- Cultural values are also evident in the distribution and structure of natural areas (Lennon, 1988). Indeed, many of today's natural areas in Australia were largely "wastelands" remaining from nineteenth century imperial land settlement schemes. 'Useless' forests, scrubs and swamps are now valued as national parks and nature reserves. This history of abandonment and/or failed utilisation as a cultural value is mostly ignored by those demanding that natural values be managed as 'pristine wilderness'. Supporters and managers of natural areas have used and adapted the meaning of 'wilderness' as a means of reducing impact through visitation.

- Natural area managers and their scientific advisers generally regard evidence of historical processes as irrelevant to their tasks, although there has been a greater acceptance of some cultural values such as Aboriginal archaeology or aesthetics in the landscape. The irony is that most areas regarded as wilderness are Aboriginal cultural landscapes and also bear distinctive signs of European occupation or modification. And the current preoccupation with biodiversity largely ignores the fact that a major agent of change in creating a diverse biota has often been human!

- Stories about events and previous use of the land are being lost because of the management approach which focuses on capital works and retention/rehabilitation of natural values and features. Yet the cultural evidence remaining in land now included in natural area reserves such as patterns of roads, fences, tanks, sheds and yards, patterns of clearing, stumps and the uneven age structure of forests and the 'bush', can be used to illustrate previous occupation, peopling the continent, altering the landscape in the hope of profit and a secure way of life. This evidence can be used to understand

environmental patterns and rates of change and be interpreted to the public.

- In Australian rural areas one sees clearly the cultural landscape expressed in the physical patterns. Yet this quintessential Australian landscape character is most at risk because those who live in it generally change it to make a living, as seen in the drastic landscape alterations from sheep grazing to cotton growing. Or it changes in the face of development, such as new subdivision for rural residential allotments, or with decline and abandonment it is lost or recreated as a tourist commodity. The naturalness of the rural landscape is generally a creation of this century when regrowth of forest cover has softened the raw and savage clearing of the land last century for mining or farming.

Cultural values are considered by natural area managers as too warm and fuzzy, not scientific enough. For over 20 years there has been consistency in cultural values assessment by use of the Burra Charter to identify and assess such values. Cultural significance is the term used to refer to qualities and attributes possessed by places that have aesthetic, historic, scientific, social or spiritual value for past, present and future generations (Australia ICOMOS, 1999). These values may be seen in a place's physical features, but can also be associated with intangible qualities such as people's associations with or feelings for a place.

There has been an artificial separation of Indigenous and non-Indigenous interests in a place, which can exhibit multiple values for different social groups. However, the significance of Indigenous places is defined by Indigenous communities themselves and, as the values of different interest groups in a place may be incompatible from a management viewpoint, the separation of Indigenous from non-Indigenous values is entirely valid. For many Aboriginal people natural heritage is a meaningless distinction – they are interested in totality with the land, their nourishing terrain.

Natural heritage incorporates a spectrum of values, ranging from existence value at one end through to socially-based values at the other. The fundamental concept of natural heritage which most clearly differentiates it from cultural heritage is that of dynamic ecological processes and the ability of ecosystems to be self-perpetuating. At the cultural end of the spectrum, clear separation of cultural and natural values can be difficult, and more than one layer of values may apply to the same place. A mature forest for example may represent remnant natural values, yet it may also exhibit a physical structure resulting from cultural values applied through silvicultural treatments.

Terminology and perceptions are not shared by all and not easily understood by those unfamiliar with the breadth of heritage activities. The public service delivery of heritage conservation is driven by narrow legislation and portfolio priorities which inhibit cross-sectoral coordination. Administrative arrangements reinforce this and coordination of delivery to achieve integrated outcomes has not been a real concern.

Past approaches

Despite some ad hoc approaches to identification of cultural values –mostly historic sites on public land– by national park and forest management agencies there were few places recorded, much less conserved. The distribution of listed places on heritage registers is overwhelmingly urban based.

The Victorian Land Conservation Council established in 1970 had recommended a system of historic areas and reserves mostly located in the central goldfields (Lennon 1992a: app.2). In 1996 it undertook the first comprehensive study of historic places on public land, in south-western Victoria. Out of 2200 places identified, it made recommendations for the protection, management and future use of more than 700 places assigned to three categories representing State, regional and local levels of significance. It further recommended that specific historic places be protected in Historic and Cultural Features Reserves and

in management zones in parks and State forests. A wide range of heritage types were identified: goldmining, sawmilling, cemeteries and lone graves, monuments and memorials, roads and railways, outdoor recreation such as sports grounds, water supply systems and scientific research plots (Lennon, 1998).

Process following the 1992 National Forest Policy

Under the 1992 National Forest Policy, the Commonwealth, State and Territory governments agreed to a process for carrying out comprehensive assessments of the values of forest regions and explicitly recognised that cultural heritage was an important component of forest values (Commonwealth of Australia 1992: 8).

In 1992 the Australian Heritage Commission and the Victorian Department of Conservation and Natural Resources commenced an ambitious project to identify and assess all the national estate values of two forested regions: the mountain ash forests of the Central Highlands north-east of Melbourne and the mixed species forests of far-East Gippsland.

Previous studies of the cultural heritage of forests had been conducted for land management requirements with surveys, particularly of Aboriginal sites, being directed to discrete places which could be marked on the ground and then avoided in logging. Land managers in the past often requested an instant evaluation of a place from one site inspection, neglecting the documentary research, comparative examples, and community knowledge and memories, which are often essential to establishing the wider meaning of a place and its links with other sites in the area. Although the site approach provided adequate protection for known physical evidence of human use of the forests, it did not account for the more complex evidence of human interaction with the forests across an entire region.

The Victorian process had the benefit of existing cultural data which covered Aboriginal places, historic places, places of aesthetic value, some places of social value,

and forest disturbance histories. Surveys of old-growth forest involved the documentation and mapping of human-induced disturbances including forest clearance associated with past agricultural activity, grazing, logging and timber extraction, mining, roading and the establishment of settlements. Site data was systematically extracted from archives, compiled into textual databases and entered into a geographic information system (Woodgate *et al.* 1994: ch. 7).

The information collected about disturbance databases and for thematic forest histories supported the identification of cultural values in the forests. As the key disturbances were also representative of the major historical themes of each region, the data provided a contextual basis for documenting significant historical trends and identifying places of historical significance. Where physical evidence had disappeared or had been concealed by fire or other natural processes, the forest disturbance histories helped reveal them and confirm their presence in the forests; for example, the Carman's sawmill tramway (1919-1926) had become a walking track route in Kinglake National Park (Lennon 1992b).

The adequacy of the Comprehensive Regional Assessment process in achieving the national forest policy goals for cultural heritage

New understanding:

A key outcome of the regional assessment process was the realisation that there is no rigid distinction between cultural or natural heritage, either from an identification or management perspective. Today's forests, even those with old-growth and wilderness values, are landscapes with evidence of Aboriginal occupation, early timber-getting, pastoral and agricultural occupation, mining, supervised logging and silvicultural practices. These activities have in turn shaped the distribution and density of timber species in the forests (Lennon, 1998:42-3).

An increased data base:

Over 80 significant cultural places were identified in the East Gippsland forests, while there were more than 200 in the more historically complex Central Highlands. Significant engineering works, little known types such as World War II internment camps, Depression era 'susso' camps, protest/blockade sites, Aboriginal pathways, historic tracks and cultural landscapes were evaluated. Some already-known sites were able to be more thoroughly re-assessed given more detailed databases and a regional perspective, especially mining and sawmilling sites (Commonwealth of Australia 1996a: 22-25).

Problems in implementing cultural heritage protection:

An Independent Advisory Group charged with reporting on ecologically sustainable forest management in East Gippsland, found that, despite all the investigations, there are some deficiencies in the planning processes to protect natural and cultural heritage at the operational level. These occur where values are site-specific but the spatial extent of the values has not been identified (for example, Aboriginal archaeological sites or records of occurrence of target flora or fauna).

Non-timber values are a problem for forest management planners especially where the identification, assessment and protection processes are external to the forest management agency (Department of Natural Resources and Environment), as is the case with Aboriginal values. Training of field and planning staff in multi-disciplinary skills to assist in identifying and protecting heritage values is required on a regular and structured basis. There are no monitoring systems in place to ensure that operational plans comply with strategic plans in relation to cultural heritage sites and values, especially Aboriginal sites, or to report on the condition of natural and cultural heritage sites and their values (Commonwealth of Australia, 1996b).

The current comprehensive regional assessments are resulting in a much richer database of values found in the forests, but with the current downsizing and streamlining of field management, will these

values be managed, maintained and monitored?

Field staff need time and training to identify the components of their forest area systems and monitor changes in those components. Staff need to be employed for periods of time which allow them to build up detailed local knowledge and there needs to be a career structure to reinforce respect for and value field knowledge. Yet the current administration model is one of purchasers and contract providers which is economically rather than scientifically based. It may have an activity called monitoring but if contractors outside the area are employed to undertake this task, opportunities for local involvement and for extending local knowledge of changing conditions would be minimised.

Management of multiple values requires more inputs than the traditional administrative structures allow and this is a public collective task which requires bureaucracies to share information, ideas and resources to ensure the achievement of the national forest policy goals.

On ground management

Government agencies should be leading by example in showcasing integrated conservation in their own management of heritage places. But given the attitudes described above, problems of conceptual confusion, organisational downsizing and limited budgets, and jurisdictional constraints this is not happening.

> From an analysis of 10 natural areas ranging from World Heritage Areas to national parks and roadside avenues of honour, the main issues impacting on the protection and conservation management of cultural heritage values and places in natural areas, often protected areas, were found overwhelmingly to stem from the organisational culture. Generally staff were trained in the natural sciences and, with a penchant for 'green worship', were openly hostile to conservation of cultural values, except an acknowledgement of Indigenous values. There was a widespread belief that it is somebody else's business and

hence an unwillingness to adopt an inclusive and holistic view of the landscape (Lennon at al, 1999).

There are charters, principles and tools such as guidebooks and guidelines, but what is happening to conserve cultural values on the ground?

1. Uluru-Kata Tjuta National Park - a fascinating illustration of evolution in integration of natural and cultural heritage management.

The park is listed on the World Heritage List for both its natural and cultural attributes, and current management gives both these attributes serious attention. It was not always like this, and over recent decades it has been a highly contested place (Marcus 1988, Toyne 1994, Woenne-Green et al 1994).

The place contains some spectacular geological formations and desert scenery. Many particular parts of this 'country' are extremely important in Aboriginal culture. Other contemporary cultural groups also see special attributes in the landscape here. As well as the landforms, the park contains a range of significant biota and representative communities. The Uluru monolith, once referred to as Ayers Rock, is an extremely pervasive icon in contemporary Australian culture, its distinctive physical form having become a common image in advertising and other media.

The park was first established in 1958, by excision from an Aboriginal reserve which had been established in 1920 as a sanctuary for Indigenous people. By the time the park was created, various basic tourism facilities had already been built up in the area over the preceding decade. Needless to say, Aboriginal people were not consulted in any meaningful way about either the development of tourism infrastructure, or the excision of land from the reserve to create the national park. The evolution of management planning for the park through the published plans illustrates a major shift in addressing the validity of cultural values.

In 1994 Uluru –Kata Tjuta became the second national park in the world to be listed as a World Heritage cultural landscape. This honour provided international recognition of Tjukurpa as a major religious philosophy linking the Anangu traditional owners to their environment and as a tool for caring for country. Acceptance of this additional cultural attribute at World Heritage level further legitimised the expression of altered priority being made at park level. This is reflected in the 1999 draft plan of management which states that acknowledgment of the place as a cultural landscape is fundamental to the success of the joint management arrangement and it details how traditional owners and the Australian government work as partners by combining Anangu natural and cultural management skills with conventional park practices (Uluru–Kata Tjuta Board of Management and Parks Australia, 1999: 8-9). In addition, this plan is the first recognising the primacy of cultural practice in land management by the traditional owners of the place and the bilingual presentation of the plan highlights the fundamental concern of ensuring joint management.

2. Australian Alps National Parks–cultural landscapes in natural areas

The human response to the alpine environment has left distinctive patterns of evidence on the landscape, reflecting the unique combination of social, economic, political and technological influences. Identified site types include pastoral sites, border cairns, mining and pathways/routes (Scougall, ed, 1992). The lack of integrated data about Aboriginal occupation and use of the alpine areas hinders building a picture of continuity and extent of use from the Pleistocene era to the present.

Despite the staff workshops and studies identifying cultural values and their expression in the alpine park landscapes and the preparation of cultural landscape management guidelines, actual on-ground management continues in its more traditional mode of natural versus cultural programs. In the former, facility management, fire management and access predominate with pest plant and animal control following, whereas cultural values/place management, such as Aboriginal significance of places or hut restoration and site interpretation based on historical data, comes a long way behind in the resource allocation. Yet the alpine landscapes are clearly places of cultural values in natural areas. This historic evidence will provide opportunities for scientific monitoring of rates of environmental change in some prescribed precincts within the parks.

3. Wilsons Promontory National Park, Victoria

The 'cornerstone of the continent' with one of the largest wilderness zones in southern Victoria is a place with a fascinating history of prior uses reflecting how natural resources were harvested for various commercial uses which in turn are now reflected in the ecological patterns of the place. Sealing and on-shore whaling gave way to two phases of logging –50 years apart- then cattle grazing, tin mining during World War 1 'in the national interest' and commando training during World War 2 (Lennon, 1988).

Declared a national park in 1898 and, as one of the favourite holiday destinations of Victorians for a century, there is a great opportunity to inform the public on site about the fascinating interaction between human occupation and its ecological impacts. However the limited historical story is presented separately as just one interpretive program among many.

This approach is repeated in many national parks; integrating historical data into on ground monitoring of changes to the environment is just not happening.

A Way Forward–Some Solutions

1. Changes in organisational culture:

Within land management agencies widespread attitudinal change is required. This will result when senior management effectively recruits new employees skilled in cultural heritage assessment and management as agents of change. Cultural

heritage will be seen as a more valuable resource than it presently is and its advantage as a means of communication with the general public will ensure its viability.

2. Wider distribution of integrating principles

Integration of natural and cultural values is the direction taken by the international community in assessment of heritage values and this approach, which represents a major attitudinal change, will be followed by nations who are signatories to international conventions, treaties and agreements concerning heritage conservation and protection. This will filter down to other levels of government.

In August 1998 the National Heritage Convention agreed on a set of principles and standards for the protection of Australia's heritage which will help unify the way in which heritage places are conserved (See Appendix 1). Principle 6 states that: *Identification and assessment should be based on the full range and diversity of heritage values.* Accordingly, in natural areas cultural values must be considered as part of the planning process and vice versa.

The integrating principles for cultural and natural conservation as outlined in the Burra Charter and Natural Heritage Charter need dissemination in both popular and official publications so that there is a wider pool of people considering the impact of conservation in a holistic sense and not just from their agency or interest group's perspective.

3. Community partnerships and alliances:

There is growing understanding of the need or imperative for an integrated approach to management of our natural and cultural heritage places. But is it happening?

While problems remain, many sectors of society are striving vigorously to work together and solve problems in a way that provides greater protection for our heritage. There are many examples of community action–but often ad hoc and annual efforts grabbing whatever funding comes along

without the benefit of a coordinated implementation strategy.

At the local government level, there are encouraging indications of integration in the identification, assessment and protection of our heritage through new legislation, such as Queensland's *Integrated Planning Act 1997*. This Act states that the economic, social, cultural and physical wellbeing of people and communities is maintained by various means including the conservation and enhancement of areas and places of special aesthetic, historic, scientific, architectural, social, cultural or spiritual significance.

In urban areas many Shire Councils have Heritage Committees of knowledgeable local citizens to assist local government planners in their assessments of development applications in the historic built environment. This is not replicated in rural land management agencies, although for the natural environment local conservation committees have been very successful in tapping into Natural Heritage Trust funds for local conservation action.

Public education and community involvement in conserving cultural values in natural areas are required–partnerships with Landcare, CWA, school groups, national park associations, National Trusts. Generic local management guidelines are available to community groups through the Australian Heritage Commission's 1998 publication, Protecting *Local Heritage Places –A guide for communities.*

In addition, the concerns of Indigenous people regarding natural heritage and wilderness management as a European construct need to be appreciated. In 1998 a widely representative meeting of Indigenous people produced a set of broad principles for wilderness management, the Malimup Communique. It is a step forward towards combining social justice and cultural survival with long term protection of some of our most valued wild places. Underlying the Communique is a commitment that Indigenous use of wilderness areas will be agreed with relevant park management agencies and impacts of this use will be monitored by all stakeholders. This

commitment will be achieved by joint management.

Alliances need to be made with groups or businesses which use heritage resources for their own viability such as, tourism industry groups using cultural or natural heritage as part of their marketing or branding strategies; resource user groups who could pay a levy or community service contribution in proportion to their 'harvest' of heritage resources.

Monitoring

There is value in adopting consistent indicators to measure the state of and impacts on cultural values in landscape systems (Lennon, 1997:25-6). The main pressures on the cultural landscapes of the Central Victorian goldfields for example, arise from altering the physical evidence of previous activities such as new mining at historic mine sites, transformation of farmland to rural residential units, township expansion and tourist developments and physical decay of the surviving elements.

Indicators for State of Environment reporting are practical and, as the statistics for them have been collected since the 1960s for most municipalities, they should allow a clearer scrutiny of any trends. In addition, state-wide heritage legislation will enable an integrated overview of protection and management of heritage places. Statistics provide data for establishing benchmarks of how features of the cultural landscape are being managed. These data, as with the property valuation study in Maldon, assist analysis of the impact of heritage controls on the landscape. The patterns of forest, linear remnants along roads and stream reserves, and farmland and villages are the result of historical processes. Monitoring the integrity and condition of these patterns of evidence will give us some indication of the stability of the cultural values expressed in the rural landscape.

Future research directions

The Australian Heritage Commission should provide leadership in policy development for conservation of cultural values in natural areas by evaluating some of the approaches already tested. These could include:

1. Publication of regional studies already completed which illustrate the integration of all heritage values in the identification and assessment processes.

2. Using the data gathered from regional studies to promote a new appreciation of the interdependence of all heritage values in understanding landscape processes in regional tourism programs as well as in planning schemes, property and public land use management plans.

3. Conducting market research in several RFA areas to see whether tourist operators are using all the new data in their programs and products offered.

Conclusion

- Cultural values are essential components of natural areas;

- Australia has a fascinating history of human impact on environmental systems in this, the only nation to occupy an entire continent;

- Knowledge of this must be better integrated into environmental assessments, planning and on-ground management.

- This requires changing organisational cultures and publication of monitoring which illustrates to the wider public the rate of current loss of knowledge, data and places.

References

Australian Heritage Commission, 1998a, *National Heritage Convention Key Outcomes*, Canberra, pp. 14-19.
Australian Heritage Commission, 1998b. *Protecting Local Heritage Places: A guide for communities*, Australian Heritage Commission, Canberra.

Australian Heritage Commission, 1998c. *Malimup Communique.*

Australian Heritage Commission and the Australian Committee for IUCN, 1996.

Australian Natural Heritage Charter, Australian Heritage Commission, Sydney.

Australian Heritage Commission and the Australian Committee for IUCN, 1998. *Natural Heritage Places Handbook: Applying the Australian Natural Heritage Charter to conserve places of natural significance,* Australian Heritage Commission, Sydney.

Australian Heritage Commission and Department of Conservation and Natural Resources Victoria 1994. *Method Papers: East Gippsland and Central Highlands Joint Forest Projects*, v.2, *Cultural Values, Victoria*.

Australia ICOMOS, 1981, revised 1999. *Australia ICOMOS Charter for places of cultural significance (The Burra Charter)*, Canberra.

Australia ICOMOS 1981, revised 1988.*Guidelines to the Burra Charter: Cultural significance, Conservation policy, and Undertaking studies and reports*.

Commonwealth of Australia 1996a. *Comprehensive Regional Assessment East Gippsland, National Estate Report*. Canberra: Joint Commonwealth and Victorian Regional Forest Agreement (RFA) Steering Committee.

Commonwealth of Australia 1996b. *Comprehensive Regional Assessment East Gippsland, Independent Advisory Group Report on Ecologically Sustainable Forest Management Systems and Processes*. Canberra: Joint Commonwealth and Victorian Regional Forest Agreement (RFA) Steering Committee.

Department of Communication and the Arts 1996. *Guidelines for the Protection, Management and Use of Aboriginal and Torres Strait Islander Places*.

Davey, Adrian G. 1998. *National system planning for protected areas*. IUCN Gland Switzerland & Cambridge UK. World Commission on Protected Areas [WCPA] Best Practice Protected Area Guidelines Series No. 1. 71 pp.

Etherington, N. Brock, P. Dallwitz, J. Stannage T. Gregory, J. (Centre for

Western Australian History) with Jane Lennon, 1995. *Australian Heritage Commission Principal Australian Historic Themes Project, vol.1, Presentation and Discussion of a Thematic Framework,* Australian Heritage Commission, Canberra.

Griffiths, Tom . 1992. *Secrets of the Forest: Discovering history in Melbourne's Ash Range.* Allen & Unwin, St. Leonards.

IUCN 1994. *Guidelines for protected area management categories.* IUCN Commission on National Parks & Protected Areas, with the assistance of the World Conservation Monitoring Centre. IUCN, Gland Switzerland & Cambridge UK. 261 pp., in three languages.

Johnson, Chris 1992. *What is Social Value?: A discussion paper.* Australian Government Publishing Service, Canberra.

Lennon, Jane. 1988.Timeless Wilderness? The Use of Historical Source Material in Understanding Environmental Change in Gippsland, Victoria, in Frawley, K. and Semple, N. (eds.), *Australia's Ever Changing Forest*, Canberra, pp.425-57

Lennon, Jane. 1991. DCE's Wrecks and Ruins in the Bush -Legacy of Industrial History. *Historic Environment* 3: 49-63.

Lennon, Jane. 1992a. Appendix 2, in *Our Inheritance, Historic Places on Public Land in Victoria.* Melbourne: Department of Conservation and Environment.

Lennon, Jane. 1992b. Kinglake National Park, in Griffiths, T. *Secrets of the Forest.*

Lennon, Jane. 1993. Conservation Advice for Cultural National Estate Values in East Gippsland and Central Highlands, Victoria. 2 vols, Unpublished report to the Australian Heritage Commission. 99pp.

Lennon Jane and Mathews, Steve 1996. *Cultural Landscape Management, Guidelines for identifying, assessing and managing cultural landscapes in the Australian Alps national parks*, Australian Alps Liaison Committee, Canberra, 89 pp.

Lennon, Jane. 1997. *Case Study of the Cultural Landscapes of the Central Victorian Goldfields,* Australia: State of the Environment Technical Paper Series

(Natural and Cultural Heritage), Department of the Environment, Canberra.

Lennon, Jane. 1998. History, Cultural Heritage and the Regional Forest Assessment Process, *Australian Journal of Environmental Management*, vol. 5, no. 1, pp. 38-46.

Lennon, Jane , and Brian Egloff, Adrian Davey and Ken Taylor, 1999. Cultural Values in Natural Areas –a discussion paper, unpublished paper for Australia ICOMOS, 73pp

Marcus, Julie 1988. The journey out to the centre: the cultural appropriation of Ayers Rock. Pp. 254-274 in: Rutherford, Anna, ed. 1988. *Aboriginal culture today.* Dangaroo Press, Sydney. [Also published as *Kunapipi* **X**(1&2)]

Marquis-Kyle, Peter and Meredith Walker 1992. *The Illustrated Burra Charter: Making good decisions about the care of important places*, Australia ICOMOS, Sydney.

Scougall, Babette. 1992. *Cultural heritage of the Australian Alps: Proceedings of the symposium held at Jindabyne, New South Wales, 16-18 October 1991.* Australian Alps Liaison Committee, Canberra.

Tasmania Parks and Wildlife Service, 1997. *Tasmanian Wilderness World Heritage Area, Management Plan 1997 Draft*, Hobart.

Toyne, Phillip 1994. *The reluctant nation: environment, law and politics in Australia.* ABC Books, Sydney. 228 pp.

Uluru–Kata Tjuta Board of Management and Parks Australia, 1999. *Uluru–Kata Tjuta National Park Draft Plan of Management*, Commonwealth of Australia, 188 pp.

Woenne-Green, Susan; Johnston, Ross; Sultan, Ros & Wallis, Arnold, nd c. 1994. *Competing interests: Aboriginal participation in national parks and conservation reserves in Australia.* Australian Conservation Foundation, Fitzroy. 408 pp.

Woodgate, P.W., Peel, W.D., Ritman, K.T., Coram, J.E, Brady,A., Rule, A.J. and Banks, J.C.G. 1994. *A Study of the Old-Growth Forests of East Gippsland.* Melbourne: Department of Conservation and Natural Resources, Victoria.

APPENDIX 1: Australian Heritage Places Principles

(Australian Heritage Commission, 1998)

Preamble

Australia's heritage, shaped by nature and history, is an inheritance passed from one generation to the next. It encompasses many things , the way we live, the traditions we hold dear, our histories, stories, myths, values and places. The diversity of our natural and cultural places helps us to understand our past and our relationship with the Australian landscape. Heritage recognises the indivisible association of culture,nature,country,place,religion for Aboriginal and Torres Strait Islander peoples.

Vision

Recognising the diversity of country and cultures in Australia and the unique relationship of Aboriginal and Torres Strait Islander peoples with country, Australia should act as a community that respects, sustains and celebrates its diverse heritage, which connects us to the past, present and country for all generations.

Principles

Principle 1

Recognising our responsibilities to past and future generations, the Australian community will conserve its heritage through cooperation and respect between all communities and governments.

Principle 2

All levels of government and government agencies must demonstrate leadership in protecting, conserving, promoting and managing heritage values.

Principle 3

Recognising that Indigenous peoples are owners and custodians of their heritage and have consequent obligations, the heritage of all Australians should be managed in accordance with evolving traditions, customs and laws.

Principle 4

Communities should be actively involved in all processes of identification, protection and use of heritage places, other than where this would be inconsistent with the conservation of heritage values.

Principle 5

There should be a comprehensive inventory of heritage places accessible to the general public, subject to confidentiality to protect heritage values or customary rights.

Principle 6

Identification and assessment should be based on the full range and diversity of heritage values.

Principle 7

Determination of significance should be based solely on heritage values and be separate from management decisions.

Principle 8

The fundamental aim of conservation is to sustain heritage value with the least possible intervention. Where the use of a place involves a risk of significant irreversible damage to heritage values, lack of scientific certainty should not be used as a reason for allowing that use.

Principle 9

The uses of heritage places should, as far as practicable, be limited to those which are compatible with the heritage values of the place. Where there is a conflict between heritage and other values, prudent and feasible

management options must be sought and considered.

Principle 10

The effective identification and conservation of heritage places is dependent upon relevant research, education and presentation which respects the heritage values of the place and the sensitivities of communities.

Principle 11

Conservation of heritage should be adequately resourced, recognising the rights, responsibilities and capabilities of governments, owners, custodians, communities and interested parties, and respecting cultural and gender requirements.

Principle 12

Planning processes and decisions must include conservation management planning for heritage.

The role and relevance of Indigenous cultural capital in environment management in Australia and the Pacific

Padma Lal and Elspeth Young, Graduate Studies in Environment Management and Development,
National Centre for Development Studies, The Australian National University

Abstract

Reconciling natural and cultural heritage with economic development is a prime challenge for contemporary and future societies. Striving for such reconciliation is essentially the same as striving for sustainability — the process that dominates the implementation of the philosophy of sustainable development. There is a fundamental interrelation between natural capital, human-made capital and cultural capital. Human-made capital is a result of the interaction between natural and cultural capital, and thus (Berkes and Folke 1994) is never value neutral.

One of the challenges faced by resource managers in situation where Indigenous values of cultural capital are strong is how to adequately take into account their worldview of resources, resource ownership and value systems, which are essentially different from those of the modern resource managers. The challenges are particularly evident when trying to develop natural resource management systems that not only adequately reflect, but also build on, Indigenous cultural values, including those about communal property rights.

In this paper, we first explore the characteristics of Indigenous cultural capital, which expresses a holistic view of the environment encompassing utilitarian and non-utilitarian goods and services and the ecosystem. The paper then provides an economic and social interpretation of the composition and 'ownership' of cultural capital, and then discusses the implications of this in the use and management of natural resources. Examples are drawn from Australia and the Pacific to illustrate key points. Lastly, the paper suggests an approach that recognises Indigenous cultural value systems, and incorporates these in the design of management systems to meet the sustainable economic development challenges of today and the future.

Introduction

The maintenance and sustenance of the cultural heritage value of land and sea is often at odds with the demands of market-based economic development, which generally emphasises individual ownership of natural resources as a means to generate the highest returns net of costs. This rift is particularly acute when a government's emphasis on encouraging economic development increases individual expectation of improved material well-being. To increase personal wealth under the economic paradigm, individuals must focus largely on profit maximization, often compromising time and resources necessary to maintain or improve communal well-being and cultural values. Such tension is common in many Indigenous communities living in Australia and the Pacific.

Dealing with these problems essentially entails finding an acceptable balance between economic capital development and cultural considerations. Whilst this difficult task presents a challenge to all societies, it is arguably more demanding in developing countries that are striving to achieve acceptable living standards and nutritional levels in the face of above-average rates of population growth. It is particularly important, and also more difficult, when the communities have an articulated goal of maintaining their cultural heritage values.

One approach designed to grapple with this problem is the encouragement of resource uses within a holistic framework that recognises heritage and cultural values. For example, many recent community-based management and integrated conservation and development strategies have been aimed at generating much-needed monetary income through local community-based uses of natural resources. All such approaches, however, present their participants with dilemmas — whether the emphasis should be placed more on economic gain than on the conservation of heritage values, and whether

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the development approach used enables people to make an informed choice about the matter. These dilemmas accord closely with those posed by the philosophy of sustainable development, whereby development occurs in response to economic, social and ecological opportunities and constraints, within the context of equity both within and between generations.

Determining the characteristics that establish the balance between these different demands requires identifying a system appropriate for assessing such a holistic approach. One such system combines the ideas of natural capital (non-renewable and renewable resources and environmental services), cultural capital (people's behaviour, knowledge and values that affect their use of natural capital) and human-made capital (production, education, skills etc). This reflects the concept that human-made capital is a product of the

interaction between natural and cultural capital, in turn impacting on natural capital and affecting cultural capital (Berkes and Folke, 1994: 132). Human-made capital is also, as they further emphasise, never neutral in its value. And, as they also imply, the three-way relationship between natural, cultural and human-made capital closely parallels sustainable development model such as that presented by Barbier (1987).

Natural, cultural and human-made capital together form a complex interacting system that needs to be deconstructed for a full understanding of the processes involved. This paper does not attempt such an analysis. Instead, we focus primarily on cultural capital, which, although recognized as an important determinant of the outcome of man-made — natural capital interaction, commonly receives limited analytical attention.

Figure 1: Relationship between natural capital, cultural capital and human-made capital

(Source (Berkes and Folke, 1994: 132)
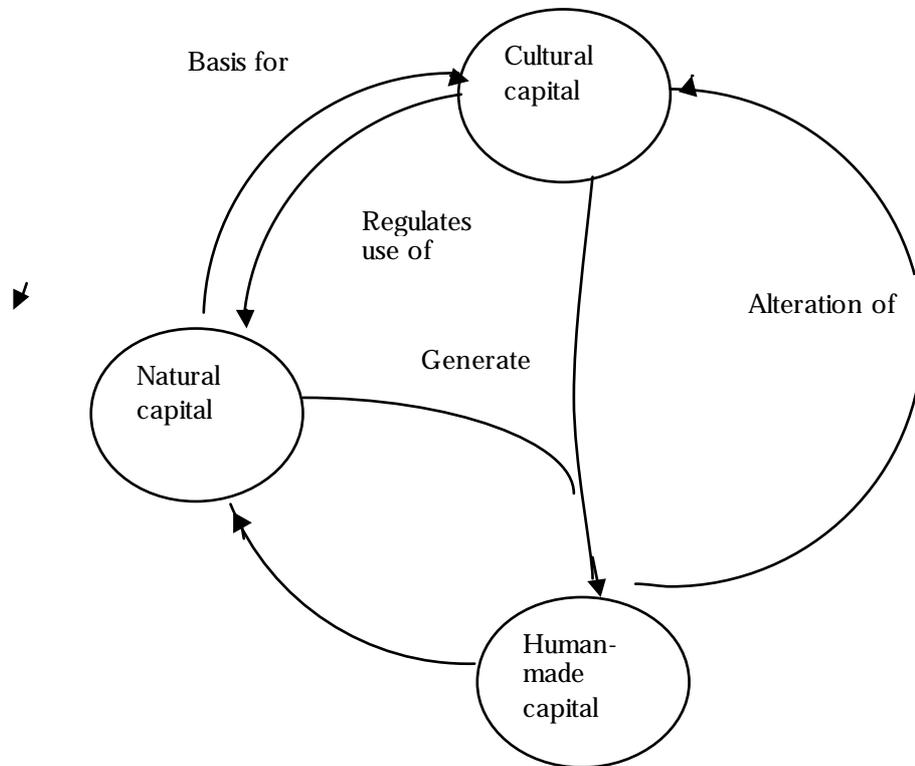
Cultural capital — concepts of *vanua* and *country*

While cultural capital has been defined in many ways (eg. Berkes 1994; Throsby 1999), here we adopt Throsby's definition in which culture is seen as 'a set of attitudes, practices and beliefs that are fundamental to the functioning of a particular society's values and customs…' (Throsby 1995: 202). Culture in this [constituent] sense is expressed in a society's values and customs, environmental philosophy and ethics, beliefs and how people view the world and the universe, or cosmology (Skolimoski 1981). An essential element of culture is 'its role as an expression of group or collective aspects of peoples' behavior, as demonstrated in their activities and belief systems' (Throsby, 1999: 6). This includes traditional concepts such as

country and *vanua*, which encompass a great diversity of values that significantly affect the contemporary management of the environment.

The characteristics of cultural capital, and particularly the valuation of cultural goods, are particularly significant in examining how Indigenous peoples use their surroundings. Our discussion draws on examples of Indigenous cultural valuation from Australia and the Pacific, both including Indigenous minorities living in an industrialised society, and including Indigenous majorities in their own independent nation.

Indigenous Cultural Capital in Australia and the Pacific.

Australia

Australian Indigenous people, both Torres Strait Islanders and Aborigines, clearly articulate the existence of inseparable links that bind them to the region they see as their customary territory. Describing this relationship as between 'people and land' does not accurately reflect the depth of that meaning.

> *'No English words are good enough to give a sense of the links between an Aboriginal group and its homeland. Our word 'home', warm and suggestive though it be, does not match the Aboriginal word that may mean 'camp', 'hearth', 'country', 'everlasting home', 'totem place', 'life source', 'spirit centre' and much else all in one... When we took what we call 'land' we took what to them meant hearth, home, the source and locus of life, and everlastingness of spirit.'* (Stanner 1979:230)

Such a meaning interweaves the value of land for sustenance with its cultural meaning and value, expressing this in spatial and temporal dimensions. A journey within one's land is at the same time a journey that traces one's belief systems and those of one's ancestors. These perceptions are very different from the common non-Indigenous definition of land — 'the solid substance of the earth's surface' (Macquarie Dictionary 1997). This dichotomy generates misunderstanding and leads to conflict. In its baldest sense, non-Indigenous people see land primarily as a commodity, to be valued in monetary terms and available for trading for profit; Indigenous people see land as a vital element of their lives, valued in cultural and economic terms and, regardless of its physical appearance, the most attractive place on earth for those who sprung from it.

As the above quotation also illustrates, for Indigenous Australians, the term land is defined very widely. It includes both land and sea and their resources such as plants and animals; and, as they also stress, it implies the total integrated system including the concept of duty of care resting with everyone for the maintenance of these resources. The contemporary Indigenous Australian expression for this total system is *'country'*.

> *'Country is the place that gives and receives life... People talk about country in the same way that they would talk about a person: they speak to country, sing to country, visit country, worry about country, feel sorry for country, and long for country. People say that country knows, hears, smells, takes notice, takes care, is sorry or happy...Country is multi-dimensional — it consists of people, animals, plants, Dreamings; underground, earth, soils, minerals and waters, surface water, and air. There is sea country and land country; in some areas people talk about sky country.'* (Rose 1996:7).

Journeys through 'country' are more than journeys through a natural landscape; they are also journeys that are circumscribed by and demonstrate the 'Law' of 'country'. The term Law encompasses people's spiritual beliefs concerning their role in managing 'country' and the regulations that, through these beliefs, have been set in place to enable them to fulfil that role. Knowledge of the Law, for both men and women, is associated with traditional learning, gained as part of the process of growing up and handed down through ceremonies marking people's transition through successive stages of life. Initiation ceremonies for adolescent boys, for example, are commonly referred to as 'Making Young Men', and women's mourning as elements in these ceremonies expresses their sorrow at losing their sons as boys. Law and culture are therefore inextricably linked in the concept of 'country'. As Kimberley people attending the Crocodile Hole development workshop a decade ago explained:

> *'Culture is a map. The land is a map. It is recorded on the land...as we travel across the land, we follow the Law. Culture/Law tells us of our relationships to land and to our*

responsibilities to one another'
(Kimberley Land Council 1991).

Country as a concept thus has Indigenous cultural values attached to it. These include spiritual beliefs, concepts of ownership of 'country' and the property rights that these entail, behavioral norms and other elements of institutional structures that are applied to the stewardship of country, and Indigenous knowledge systems that explain ecological processes operating within country (for example Rose 1996; Williams and Baines 1993). Such values pervade all activities that relate to using country; notably they imply a duty of care and a fundamental need to look after country according to the Law.

Individual elements of *country*, too, may have specific cultural values attached to them. Animals such as kangaroos, for example, are spiritually valued because, for many Australian Indigenous groups, they are ancestral beings linked to the Dreamtime and travelling across geographical space along tracks that still explain the relationships between people and their country. Knowledge of these spiritual values, the Law, determines ownership of country — who holds that knowledge, who may acquire it in the future, and how that knowledge is translated into property rights. Ceremonial practices concerning kangaroos celebrate that knowledge and graphically demonstrate the identity of the responsible people to all. Hunting kangaroos within specific country involves complex beliefs and practices determining the granting of permission to hunt by the traditional owners of kangaroo Dreaming who hold that knowledge; the guardians, who take responsibility for checking that the activity accords with all necessary regulations (for example giving preference to hunting males rather than females with young); who is involved in the practice of hunting; and more obscurely, the relationship between the hunters and the animals. Distribution of the meat of the animal occurs within a strictly-controlled system that incorporates the owners (who may not be able to consume the kangaroo because of their relationship to the animal) and guardians of kangaroos, and those who assisted the hunt by providing other technological input (e.g. rifles or vehicles).

These cultural values and practices are completely interlinked with the detailed ecological knowledge that those involved hold. Such values also differ according to aspects such as gender or age. Men, as the hunters in the customary sense, generally hold much more detailed knowledge of practical aspects of kangaroo hunting and exert strong control over the distribution of the meat. Many of their ceremonial practices focus on places and activities from which women are excluded. But women from the same ancestral lines, like the men, celebrate their kangaroo origins in ritual, song, dance and painting, often in their own exclusionary framework within which the men are unwelcome. Age, because of its link to knowledge, also affects the values that individuals place on kangaroos. Such practices have been fundamental to all processes concerning the proof of traditional ownership of land that is inevitably included in all Indigenous land claims processes in Australia.

In terms of resource tenure, *country* can be defined as a region that provides the basic needs of those who sprung from it–food, water and other necessities. While Indigenous people clearly recognised its bounds, these bounds are not visibly marked on the ground and, when resources are scarce, Indigenous people identifying with different countries would share these resources as needed. Not surprisingly, such sharing was more common in the arid and semi-arid regions of Australia's interior than in the northern region where water and food supplies were more predictable (Young 1999a). Such sharing was essentially a form of trading, whereby vital resources were traded between Indigenous groups, with exchanges always anticipated in time of need.

The Pacific

Indigenous peoples in the Pacific also articulate a similar concept of complete integration of human beings and the geographical spaces that provide their sustenance. This relationship, which is essentially an all-encompassing customary ownership, is variously termed *vanua* (Fiji), *enua* (Cook Islands) and *fanua* (Funafuti). In New Zealand, the Maori call it *whenua*. As Batibasaqa et al. (1999) comment, *vanua* is

'an environment in its totality, including natural and human aspects'. It is seen as an integrative concept bringing together ecological, geophysical, social, spiritual and economic dimensions.

Vanua includes physical elements such as soils, rocks, vegetation, rivers, seas and animals, that together form a series of unique environments and landscapes. The *vanua* concept also includes social and cultural dimensions (Ravuvu 1983; Batibasaqa et al. 1999). It is about people. It refers to regional groupings of Fijian social units, *yavusa*, or the people from a common territory, who often share a common dialect, history and cultural icons. It defines social structures within Fijian society and establishes customs and protocols about the manner in which people interact with each other and their environment. It also includes strong spiritual dimensions, in which people recognize that gods and spirits are embedded within nature and hold beliefs about the powers these gods and spirits have over humans and the physical environment.

The notion of resource ownership, including the nature of individual and group ownership and systems of inheritance on the one hand and, on the other hand, the social relationships (Hviding1996), is also a key element of *vanua*. Traditionally, resource tenure generally 'reflected a household's need to hunt, gather food, and collect building materials in the forest, have access to different types of soils for a variety of crops, to fresh water sources, and to areas of lagoon and reef for fishing and gathering shellfish' (Ward 1985: 39.).

On many high islands, each household may hold a sequence of ecological zones, extending from forested ridges to fertile soils in the valleys, and outwards to coastal beaches or sandy shores to lagoons or reefs. For example, in the Cook Islands, the islands are divided into seven wedge-shaped districts, with boundaries that radiate from the centre to the outer edges of the fringing reefs. Similar access to resources by each lineage group of wedge shaped portions from coast to the highest part of the interior 'like slices of a cake' can be found in many Pacific Islands (Brookfield 1979: 166).

In some cases there is evidence of traditional Pacific societies recognizing spatial (perhaps ecological) links within the systems. Under the traditional tenure system in Fiji, for example, coastal mangrove subsystems and the adjacent coastal lagoons and coral reefs were all considered part of the '*qoliqoli*' (the fishing area) (Lal 1983) and which, together with the *veikau* or the forest land, formed the physical dimension of *vanua* (Ravuvu 1983). In general, such a pattern of resource-holding appears to have been devised, while recognizing the connectivity between the land and coastal resources, to provide opportunities for crop diversification; to minimize the risks of crop failures, and to ensure high resilience of households in the face of natural hazards.

Where, on the larger Pacific islands such as mainland New Guinea and the two main islands of Fiji, people's customary territories could not encompass all these aspects, desired goods were traded between different groups. Coastal people in Papua New Guinea (PNG) traded fish for forest fruits and tubers, and bird of paradise plumes from the interior mountain ranges of PNG were exchanged for a range of coastal valuables including shell money. Similarly, in Fiji, people along the coast would trade marine fish with inland communities who had access to freshwater fish and root crops.

These key characteristics of cultural constructions also suggest that traditional societies recognised that both individuals and society itself had responsibilities — the duty of care — for the environmental and social consequences of their reproductive and consumptive behaviours, and that these had to be upheld if society were to function well. In Fiji, as Tuvuki (1995) describes, v*anua* also explains the manner in which members of the community are expected to interact with each other and the environment. *Vanua* defines the duty of care that people have towards the environment and future generations — *levwe ni vanua, gonedau, matisau, turaga ni vanua*. It also defines how sacred this responsibility is — *na tabu kei na mana ni vanua*. *Vanua* embraces the concern for the wellbeing of future generations and requires people to have a sense of responsibility and stewardship for resource-use generation —

na kena taqomaki na yau bulame baleti no noda kawa.

These are all key elements that, in recent times, have been identified as part of the economic and ecological sustainability (Costanza et al. 1993; Jansson and Jansson 1994; Young 1992).

Country and vanua: continuity and change

Many of these fundamental elements of the cultural concepts *country* and *vanua* closely parallel those identified by other Indigenous groups throughout the world. Such fundamental elements have recently also been expressed in the key Indigenous environmental ethics identified by the IUCN Inter-Commission Task Force on Indigenous Peoples (IUCN 1994), including:

- respect for nature, such as sacred areas;
- morality in nature, from some of the people's rules;
- restraint in resource exploitation;
- mutual cooperation;
- mutual exclusion, as suggested by territorial cults;
- intergenerational communication; and
- sociocultural continuity.

Indigenous concepts of property rights are embedded in Indigenous *country* and *vanua*. These concepts are applied to the land, the sea and the natural resources that stem from these media. Pacific and Australian coastal dwellers, who traditionally used their inshore fishing and seafood harvesting areas communally under sustainable management regimes, exerted property rights that appeared to be very similar. However, the uses and management of the Pacific and Australian land areas presented a stark contrast — Pacific cultivation landscapes patterned with intricate terracing and mounding systems with gardens linked to complex irrigation systems; and Indigenous Australian landscapes, lightly used by hunters and foragers who left little visible trace of their presence. Many other changes have also occurred. Colonisation, modernisation, globalisation and foreign religious influences have weakened or diluted these traditional concepts, both in the Pacific (Ward 1995; Ward and Kingdon 1995a, Overton and

Scheyvens 1999) in Australia Coombs et al. 1989). Such forces have, in particular, exerted strong influences on the ownership of territory and natural resources, and on the dynamics of resource tenure.

In Fiji's precolonial period, resources were owned by different units of Fijian societies; *vanua*, *mataqali* or *itokatokas*. *Vanua*, the largest unit, consisted of 'agnatic descendents of common ancestors or ancestral gods living in the same area.' Each *vanua* would have one or more *yavusa*, the members agnatically related. A *yavusa* comprised several *mataqalis* whose members were in turn related to the descendent of their *yavusa*'s founder. One or more extended families, *itokatoka*, form a *mataqali* (Ward 1995: 200).

The British colonial government that formalized land ownership in Fiji recognized communal ownership at the *mataqali* level. The ownership of coastal resources and rivers, water and soil below, consistent with the British legal system, rested with the Crown (France 1969). However, Indigenous Fijians continued to enjoy fishing rights, with the government formally declaring that these were only ususfructus rights and not compensable rights (Lal 1983). As a result, the ecosystem concept implicit in the traditional *vanua* system was replaced by a piecemeal administratively-convenient ownership and management regime under the colonial government. Consequently, land, and coastal resources such as mangroves and associated fisheries, are now managed independently of each other but with some recognition of the traditional ownership/ custodianship.

Colonial government also introduced a level of rigidity in land tenure and communal ownership was declared as unalienable. While this protected the Indigenous populations becoming deprived of their heritage, its rigid structures have caused numerous economic and social problems in Fiji. Similar changes have occurred in Australia, where the western notion of private has been imposed over the Indigenous concept of *country* — which has had a marked effect on the political processes of both colonial and post-colonial periods in the region. In Australia, the invisibility of

property rights provided the original, and the continuing, justification for the principle of *terra nullius*. This prevented Indigenous people from looking after *country* properly (ie exercising their duty of care), and also undermined the flexibility that was fundamental to how *country* was defined.

In recent decades, however, there has been a resurgence of interest in land rights and assertion by Indigenous groups of their identify and traditions and traditional value system, largely in response to economic and political changes. Inevitably this has resulted in conflict, the resolution of which is a vital part of contemporary efforts both to improve productivity and economic growth in Fiji (Lal 2000) and to support reconciliation in Australia (Young 1999b).

In both Australia and the Pacific, Indigenous property rights are currently often described as being held under common property regimes. This type of regime, in which people share the resources of bounded areas and assume common responsibility for their management, can be applied to both land and sea regions and is conventionally contrasted with private property, state property and open-access property (Berkes 1989; Ostrom 1990).

Concepts such as *vanua* and *country*, with their integration of people and landscape, clearly accord with these ideas of common property. Changing economic circumstances have, in both regions, put these common property regimes under pressure. In the Pacific, the capacity of communal property regimes to foster economic development through cash cropping, commercial fishing and other resource-using activities has been strongly questioned, and a need to replace such regimes with forms of private property is frequently stated.

In Australia there is a similar debate although, since it is only within recent decades that land rights legislation has given Indigenous groups the chance to reassert their common property regimes, the history of the debate is somewhat different. The push for privatisation (or individualisation), which is enshrined in current concern over uncertainties resulting from the complexities of resolving overlapping property rights

identified following the recognition of Native Title, remains strong.

Throughout the world, the incompatibility of common property and more individual forms of property rights is now being questioned. Resources can and are used both individually and communally within areas specifically recognised as being common property of particular groups. The mix of individual or communal use varies with time, according to people's needs. Moreover, land and resource use under common property regimes can, as discussed below, foster economic development, with individuals accessing communally- owned resources for private benefits as well as for communal well-being. As a result, the application of the broad concept of common property has been questioned in the contemporary Pacific.

Ward and Kingdon (1995b), for example, suggest that, in Indigenous Pacific societies, the term 'common property regime' is too restrictive because it implies that it is the only system in place. As they point out, 'the ways in which the "customary" land tenure and usage is now held by owners or users have changed to a much greater degree than is commonly acknowledged'. Such changes have included the acceptance of individualistic approaches along with the broader communal property systems conventionally described for Pacific Island societies. And, as Ward's (1995) longitudinal analysis of Samoan land-use changes has demonstrated, these changes cannot be entirely attributed to the effects of economic development. Such adaptations, which persuade Ward (1997) to plead that Pacific Indigenous land-holding regimes be described under the broader term 'customary tenure' rather than as common property regimes, demonstrate that custom is essentially dynamic rather than static and that it responds to transformations in population growth, population distribution, resource availability and use, and many other social and political factors.

The term 'common property regime' is also often criticised because it is applied too loosely. A particular problem is its confusion with the concept of open access. This reflects the lack of recognition of the existence of community regulatory systems within common property regimes. Kurien's

(1999:3) argument in favour of using the term community property rights (COPR) for 'property which has been in history and tradition held in trusteeship and stewardship by a group that has related to it for their survival and livelihood and through this interaction evolved advantageously into a coherent ecosystem community' is one attempt to clear up this confusion. As Kurien claims, this community property right 'does not usurp the crucial role played by individuals. It only circumscribes it within the confines of collective norms.' This interpretation, which is, we would argue, essentially the same as that suggested by Ward and Kingdon (1995b), is particularly appropriate in Asian-Pacific societies because they demonstrate such characteristics. We therefore adopt Kurien's concept of COPR as a useful expression of contemporary Indigenous property right regimes in the Pacific. Some basic parallels can also be drawn with Indigenous Australia.

Today, although many of the elements of *country* and *vanua* have been diluted and distorted, much of their core has survived, including the notion of mutual cooperation, reciprocity and social obligations to maintain community cohesiveness and communal well-being. These core components of Indigenous cultural capital have much merit and are highly relevant as we seek a more holistic system of resource management. In fact, many western countries, including Australia, are currently considering redefining the concept of duty of care in an effort to increase individual's and society's responsibility towards sustainable resource use and management (Hajkowicz and Young 2000).

Concepts of vanua and country — an economic interpretation

Values associated with the traditional concepts of *vanua* and *country* are multiple-faceted, ranging from, as discussed above, those that define the rules of interaction with other people and between people and nature to social beliefs. Indigenous cultural capital also encompasses a vast array of activities that can be categorised as both communal and private. Communal activities include those that are seen as essential for the

sustainability of the community as a cohesive group and are supportive of each other in all aspects. Many communal activities rely on shared practices that often involve a high level of organization, underpinned by traditional rules of obligations and reciprocity. In Indigenous societies such communal activities would often be associated with ceremonies for births, deaths, initiations and marriages. They may involve working in gardens, particularly when new areas were required for cultivation, hunting, using traditional techniques such as burning off the *country*, conducting fish drives to supply fish for large communal occasions, and, in less traditional situations, working for schools or church groups.

However, working in gardens, helping with the communal cooking, or conducting ceremonies at the time of deaths, births or marriages does not necessarily mean that the products of such activities are communal property (Ward 1995: 45). While much of the work is done on a reciprocal communal basis, such products often remains in the control of individual family units.

Within these systems, the need to curtail individual activity for the communal good is recognized. But, at the same time each household is engaged in private activities to meet their own basic needs for food, shelter and clothes. These activities include gardening, fishing, hunting and foraging, making mats, tapa cloth, coconut oil and a whole variety of containers and implements required for survival. And in the modern economic context, individuals are also engaged in private activities either working for wage or producing goods for sale, thus generating income.

Vanua or *country* can therefore be seen to provide three functions — economic, ecological and cultural (Fig.2), giving three different types of value.

Firstly, it provides direct individual utilitarian or consumptive values associated with products produced for the family's own use or to meet social obligations in time of birth, death or marriage. These products can be regarded as having direct economic value, reflected in the market value, regardless of whether the products are harvested from the land and the seas, gathered from the

foreshores or grown in garden plots. In many urban areas, such social obligations are fulfilled by taking gifts purchased from local markets. Where the products are obtained from their own gardens, etc, and not purchased, they still do have a shadow value.

Secondly, *vanua* or *country* provides non-use values associated with maintaining the traditional culture of values and cosmological and religious beliefs, within the wider kinship systems and ecological context. In this context, society places value in maintaining a set of attitudes, practices and beliefs that are fundamental to the societal functioning, and also has 'lifestyle' values. Such values cannot be maintained or enhanced purely by using market goods and services, but require actual input of time from individuals who acknowledge an acceptance of their duty and obligations. This is time that could be directed towards economic wealth-creating activities.

Thirdly, *vanua* and *country* also encompass the respect for underlying ecological processes.

In economics, the concept of total economic value (TEV) (Barbier 1994) captures only some of these values, the direct and indirect use and non-use values, the option value, and the bequest values. This concept captures some of the ecological functions, the indirect use values such as flood control, or the nutrient-filtering services of mangroves, which are of benefit to humans, but may not include the primary values of the ecological systems. or this reason, UNEP has extended the concept by adding the value of the 'ecological glue', the primary ecological functions, or ecological process value (EPV), to TEV, to form what they call the total environmental value (Perrings 1995: 830). This may also capture some of the cultural values of goods and services that could be purchased or for which close substitutes can be found. However, as discussed above, not all aspects of cultural capital can be seen to have economic values.

Values associated with a set of beliefs, a sense of belonging, community cohesiveness, or anything that contributes to the shared elements of human experience, are not captured. This includes any activity that contributes towards this cultural glue that binds individuals together as a community, defining the manner in which people engage and interact with each other, and with the environment. It also defines the manner in which every individual has a duty and responsibility, and duty of care, towards the sustainability of the environment. It is within this cultural context that people then pursue their individual interests. This contrasts with the dominant paradigm where, in the extreme case, individuals pursue their own private goals without regard for the social good.

Drawing on *vanua* and *country*, UNEP's concept of total environmental value can be extended to include the value of cultural glue. Total environmental value is thus defined as the sum of the TEV, EPV and cultural function values (CFV) (Fig. 2).

Private or cultural goods

For many members of Indigenous societies there is a tension developing between satisfying their individual and communal needs and aspirations. In modern market-based society, this is heightened by increasing materialism and demand for money to acquire material goods (Ravuvu 1983; Ward 1985; Ward and Kingdon 1995; Hviding 1996; Carrier 1981).

Thus, while communalism and reciprocity were, and still are, core principles of many Indigenous groups in the Pacific and in Australia, the pressures of market economics have led to changing aspirations, forcing people to choose between private, or economic, goods and cultural goods. A 'good' is defined as any product (either discrete items such as agricultural crops). It could also refer to participation in communal activities that help to maintain cohesiveness, sense of belonging and relationships of trust. In one world, reciprocity and social obligations are the key foundation of their culture and well being, and, in the other, individualism and the goal of profit maximization are paramount, with individual economic welfare determined by the amount of personal income generated.

In Sasa village in Fiji, for example, according to one of the villagers, community rules at times meant that the people could only have

less than three days per week for commercial
fishing, with the remaining time spent on
activities to fulfill their communal duties and
other social obligations (Fong 1994: 27).
Such tensions have often been the primary
cause of the unviability of many government-
initiated and/or externally-funded
development projects aimed at encouraging
the increased involvement of Indigenous
Fijians in the commercial sector. Indigenous
Australians have also often commented that
they are under similar obligations, with major
demands being placed on their time for
important ceremonies, which is usually at
odds with the goal of profit maximisation.

Figure 2. Total environmental value of *vanua* and *country*.


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                        ┌──────────────────┐
                        │   Vanua -        │
                        │   country        │
                        └──────────────────┘
           ┌───────────────────┼───────────────────┐
           ▼                    ▼                    ▼
  ┌─────────────────┐  ┌─────────────────┐  ┌─────────────────┐
  │ Economic        │  │ Cultural function│  │ Ecological      │
  │ functions       │  │ – cultural glue  │  │ functions       │
  │                 │  │                  │  │ – ecological glue│
  └─────────────────┘  └─────────────────┘  └─────────────────┘
           │                    │                    │
           ▼                    ▼                    ▼
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| Economic values in terms of goods and services harvested, extracted, used for subsistence or commercial purposes | Defines social norms, rules of engagement with each other and with the nature, cultural beliefs, etc | Underlying ecological processes, such as photosynthetic processes, dynamic food chain linkages, etc |

| Total economic value (TEV) = direct and indirect use value; bequest value, and option value – measured in financial terms | Value of the cultural glue, measured in terms of cultural 'mana' or cultural function value (CFV) | Intrinsic value of the ecological glue measured in terms of ecological 'mana' or ecological process value (EPV) |

Total environmental value = TEV + CFV + EPV

Economic model

This tension between the two worlds can be explained using the joint production paradigm of microeconomics. In this paradigm, an individual has, for example, two inputs: man-made capital (K) and labor (L), and produces two goods:, private goods (Y) and cultural goods (X). Private goods have economic price, P_Y , whereas cultural good are valued in terms of cultural *mana* (P_x),. The relative importance placed by individuals on enhancing private benefits compared with maintaining or enhancing shared values, beliefs and the underlying institutional fabric of their society determines the emphasis placed on their investment in the different activities.

The choices made by individuals regarding the balance between private and cultural goods can be discussed using a utility theory. Suppose individuals consumed both economic (private) goods (Y) and cultural goods (X) to maximize their utility. The marginal value of economic (private) goods (P_y) would be measured in monetary terms, whereas community goods (largely cultural values) would be measured in terms of cultural units (*mana*) (P_x), which are the value that individuals place on maintaining or enhancing the cultural capital, *vanua / country*. The cultural scale would be similar to the role played by the monetary scale in economic value (Throsby 1999: p 6).

Following Layard and Walters (1978:7-18), the relative value of the two types of goods, economic (private) and cultural, would determine the level of private goods and cultural goods consumed by individuals. At the margin, the rate of substitution between

the two, $MRS_{yx} = \dfrac{U_x}{U_y} = \dfrac{P_x}{P_y}$, determines the level of consumption of the two goods, with U_x is the level of utility or 'happiness' derived by an individual from the consumption of an additional unit of cultural good X and U_Y being the level of utility or 'happiness' derived by an individual from the consumption of an additional unit of private good Y.

Now consider that the two goods are produced by the same person by deciding on the amount of his/her time (labour) is allocated to the production of the two goods. Suppose the person allocates L_y hours of labour to producing private goods, Y (= $Y(L_y, K_y)$) and L_x hours of labour to producing cultural goods, X (= $X(L_x, K_x)$); then $L_y + L_x$ equals the total time available for productive activities. Efficient production conditions (Layard and Walters 1978: 14-15) require that individuals will produce that combination of private and cultural goods suggested by the following equation:

$$MRT_{yx} = -\frac{dx}{dy} = \frac{Y_l}{X_l} , \text{where } Y_l \text{ and}$$

X_l equal the marginal product of labor in Y and marginal product of labour in X, respectively, and MRT_{yx} is the marginal rate of transformation of Y into X as the amount of time invested in the two goods changes.

This product-mix condition requires that the subjective value of cultural goods (X), in terms of the value of private goods (Y), should equal its marginal cost. This can be illustrated (Fig. 3) by a product frontier curve that maps out the level of private and cultural goods produced by an individual.

Figure 3. Product-mix space–product frontier transformation curve.

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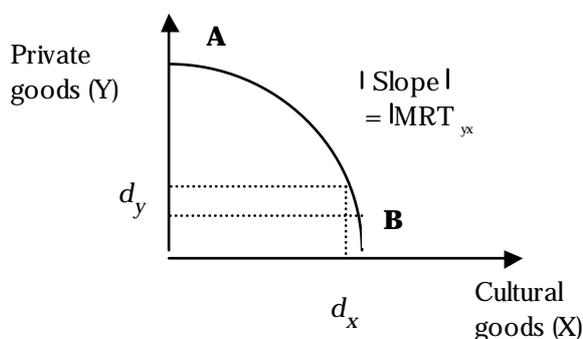
This suggests that, if an individual places a relatively high value on maintaining the cultural fabric of the community, on the 'B' end of the product frontier curve (Fig. 3), than he or she will need to be compensated by a large quantity of economic (private) goods (d_y) to acheive a small incremental gain in cultural values (d_x).

The relative value of economic (private) goods and cultural goods will then determine at which point along the curve AB an individual is likely to be. If they place an emphasis on cultural goods and values, then they are most likely to be operating on the right hand side of the utility curve (B); on the other hand if they place higher value on economic (private) goods, they are likely to be operating on the left hand side of the product transformation curve (A).

Such choices may change over time and with occasion, and are affected by the dynamics of the social and political circumstances that circumscribe people's lives. Thus, before colonisation and the introduction of market economics, individuals would have maximized their utility by producing mainly cultural goods, with private goods produced only for basic sustenance. Now, with the greater emphasis on profit maximisation and individual wealth creation, individuals tend to operate more at the other end of the production frontier. In Indigenous societies, cultural obligations tend to pull people towards supplying more cultural goods, which is often at odds with individuals working to maximize their own material wealth. The relative value of cultural and private goods is thus be defined within socio-political, ecological and cultural contexts.

Cultural capital and contemporary natural resource management

For a well-functioning society, considerations of the production of economic (private) and cultural goods are vital if sustainability is to be achieved. We now present case studies that illustrate, in practical terms, the range of contemporary choices that Indigenous peoples in Australia and the Pacific are making. These case-studies identify many of the key characteristics already described for *vanua* and *country*, particularly respect for the environment, duty of care, restraint in resource exploitation, mutual cooperation, reciprocity and inter-generational and intra-generational equity.

Australia: using the Indigenous rangelands

Following the Native Title Legislation, Aboriginal rights to both land and seas have been recognized. Through the implementation of land rights legislation under Commonwealth and State Governments, and the granting of other forms of property tenure including leasehold, Indigenous people now own over 14% of the continent. While this is only part of *country*, it is within these regions that adaptations of natural resource management through the application of Indigenous understanding of cultural capital are now occurring most prominently. These areas therefore provide graphic illustration of some of the preceding ideas concerning the nature of that cultural capital, its interaction with concepts of community property rights, and the significance of this in terms of natural resource management. The discussion here focuses specifically on Australia's rangelands, largely arid and semiarid areas that cover 70% of the continent.

One quarter of the rangelands are now 'owned' and managed by Indigenous peoples. As Figure 1 shows, a large part of these Indigenous rangelands lies within the most remote and most arid interior. As is well-documented (Meggitt 1957; Myers 1986), traditional Indigenous use of rangeland country focused on obtaining basic sustenance for small, semi-nomadic groups who ranged primarily within their own territories (countries). Members of each group, generally extended families directly linked to common ancestors, conducted their foraging and hunting activities largely in a cooperative manner with a basic gender division in terms of both the technical component of the activity and the resource being sought. Women and younger children, the main foragers, provided the bulk of fruits and vegetables, while men hunted larger animals such as kangaroos or emu. But the division between vegetable and meat procurement was not absolute —

women, for example, were the main contributors of small game such as goannas, an arid zone staple; and men would also forage for fruits and vegetables, particularly when these were plentiful. Fresh water was, of course, the most vital resource, and both men and women held highly detailed knowledge of the location of water sources, and of how to tap into these.

Harvesting the resources of *country* was, for all groups, conducted within what were perceived as the bounds of sustainability. And all the essential elements of sustenance were obtained according to the beliefs and regulations that formed the Law, a spiritual and practical institutional system that ensured that natural resources were used and managed in the proper way. An array of ceremonial practices, conducted by both large and small groups of people, provided visible evidence of the upholding of the Law.

European settlement in Australia had a marked impact on Indigenous peoples and on their traditional way of life. The impacts were numerous, but the three highlighted here are :

- the introduction of the non-Indigenous economy, emphasising monetary rather than non-monetary values;

- the insertion of a system of legally-acknowledged individual property rights, vested in non-Indigenous settlers and claimed according to the tenets of *terra nullius*; and

- the changes in lifestyle forced upon the Indigenous people as a result of forced assimilation policies, including coercing people to leave *country* and resettle in government and mission communities to facilitate administration and their incorporation into mainstream non-Indigenous society.

Not surprisingly, these changes undermined traditional Indigenous resource use and management practices, to the extent that in many parts of the rangelands these became largely invisible. Indigenous cultural capital was, as a result, suppressed, although it did not, however, disappear without trace.

Contemporary Indigenous use of the semi-arid rangelands reflects not only these previous eras but also the events of the last 30 years, the modern period marked by the emergence of policies of self-determination rather than assimilation. This has been accompanied by the recognition of basic rights of Indigenous people, as citizens, as the first peoples of Australia with customary claims to its lands and seas, as the custodians of complex systems of ecological knowledge set within a deeply spiritual framework, and as a highly disadvantaged section of the Australian population on every socio-economic and demographic indicator.

While recognition of these rights has not led to practical solutions for many of the identified disadvantages and problems, it has resulted in much greater Indigenous visibility. Indigenous acquisition of significant parts of the rangelands is but one, albeit very important, expression of these changes. One significant component of this has been the purchase, commonly through government funding, of a large number of rangeland pastoral leases for Indigenous groups who identify these areas as *country*. The subsequent valuation of these leases, and the relationship of this to their management, provides a graphic illustration of the themes explored earlier in our model of cultural capital.

During the last 20 years, over 50 rangeland pastoral properties, primarily focusing on extensive cattle grazing, have been acquired by Indigenous groups. This has been possible largely by means of government-funded purchase through the Aboriginal Land Fund Commission, the Aboriginal Development Commission and, recently, the Indigenous Land Corporation (Palmer 1988). Purchase applications have been supported both on socio-cultural and economic grounds — both proof of traditional ownership of the land and an intention to run the lease as a commercial cattle property. However, social reasons often took priority in Indigenous eyes (Young 1988).

The location of many of these properties in extremely remote areas near the pastoral frontiers, degradation through years of over-grazing, deficiencies in infrastructure and capital investment, and lack of working capital inevitably undermined their economic

prospects (Palmer 1988; Young 1995). Conventional commercial pastoralism on these properties, many of which are now home to at least 200 Indigenous people, was always going to be a struggle. Nevertheless, most people were initially pressured, both by government authorities and by the consultants contracted to advise on management, to adopt non-Indigenous management approaches. These were dominated by economic valuation of the activity and assessed according to standard monetary valuation. Failures were common, and were almost universally attributed to the lack of financial and entrepreneurial know-how, and lack of commitment of the Indigenous owners. Economic failure also led to threats to withdraw the lease, unthinkable for Indigenous people for whom the purchase was actually the legal acknowledgement of their role in looking after *country* — their duty of care.

Many Indigenous leaseholders did, however, have a choice. Growing political awareness, focused on Indigenous land rights and support for self-determination through policies of the 1970s Whitlam government, increasingly encouraged them to move away from the conventional path. This choice reflected their own valuation of the land — a set of values that combined cultural and economic perceptions of the natural resources that they were managing. Freedom to exercise this choice was most pronounced in the Northern Territory where, under the 1976 Aboriginal Land Rights Act, people could claim on the basis of traditional ownership to have their leases converted to inalienable Aboriginal freehold tenure.

It is on these former pastoral leases that the influence of Indigenous cultural capital is now most evident. Over the last two decades the uses and management of these areas of land have changed to reflect the choices made by different groups of people. Some have run their 'properties' primarily as large-scale cattle enterprises, while others have reduced their herds to small numbers of stock maintained largely as 'killers', animals available for providing meat for the Indigenous community. In other cases, the cattle have been hunted down for food and have now disappeared altogether.

In every case these activities are combined with subsistence hunting and foraging and the deliberate maintenance of cultural practices related to the land. In all cases many of the cultural values of *country* are visibly expressed; but interaction with the cash economy is also apparent. Thus, for example, killers obtained for the community are shared between all family units; but sometimes, following agreement within the group, nominal cash payment is required. And individual family units or other more distinct groups may be given permission to take killers, again on the basis of an agreed cash payment. In the case of the more commercially-oriented enterprises, cash earned from cattle sales is normally ploughed back into the enterprise, to pay for improvements as well as recurrent costs. Lack of understanding of the need for this has often caused tension–community members not directly involved in running the enterprise sometimes believe that profits are far larger than is the case, and accuse directors of the business of siphoning off the benefits.

The balance between cultural and economic values of pastoral enterprises is unpredictable, both in terms of time and space, as the strategies adopted can have some environmental benefits (and thus long-term economic benefits) as well as social benefits. In the former Utopia cattle station to the north-east of Alice Springs, for example, a significant reduction in stocking rates has led to a marked regeneration of natural vegetation and the rehabilitation of wildlife habitats, with a resultant improvement in the potential of the *country* for subsistence hunting and foraging. Here most of the Alyawerre people have abandoned the former centralised settlement in favour of a number of outstations located in the traditional *country* of each group concerned. At the same time many have used painting as a source of income, and have established reputations as artists both nationally and internationally (Northern Territory Department of Primary Production 1983).

To the north-west of Alice Springs, at Yalpirakinu, formerly Mt Allen cattle station, population dispersal has also occurred following the successful completion of the land claim, but here small-scale commercial

pastoralism has been retained along with subsistence hunting and foraging and arts and crafts. The central settlement has survived, albeit with a smaller population than before (Young 1999b). Indigenous owners of other former pastoral leases in the Northern Territory, for example Alcoota and Mistake Creek, have placed a much stronger emphasis on the commercial management of the herd, proudly proclaiming that their first goal is to run a good enterprise; cultural considerations come second.

Outside the Northern Territory, the opportunities for Indigenous groups to choose how to balance economic and cultural goods are much more limited because people do not hold the same degree of control over country. In Western Australia's Kimberley region, for example, all these properties are still held as pastoral leases and their Indigenous owners are pressured into running them, as far as possible, commercially. For many this is quite inappropriate. Some groups, including a number around Fitzroy Crossing and along the Gibb River Road, have met the challenge with some innovative measures such as intensification of production into smaller numbers of larger, more valuable animals of breeds such as *droughtmaster* or *brahmin*, or through restricting commercial cattle management to the more accessible parts of properties, leaving the remainder for subsistence, thus maintaining their cultural values.

Pacific: the management of coastal fisheries in Fiji

It is generally recognized that there is no universal panacea for the problems of equitable and economically-efficient fisheries management. Traditional tenure systems found in the Pacific are recognised as offering many innovative ideas to the world about small-scale fisheries management worldwide (Hviding and Ruddle 1991). In this case study, we draw attention to the complexity of managing fisheries resources where the law of the land does not fully recognize Indigenous claims over the resource, and where the owners themselves are not necessarily the primary user of the resource.

Traditionally, as discussed above, Indigenous Fijians identified with *vanua*, which treated land-coastal areas as a continuum. Under colonial government, the land-sea resources were divided between terrestrial areas and coastal waters, with the high water mark being the boundary. Indigenous ownership of all land that had not been sold during a brief period in Fiji's colonial history is undisputed: today over 82 % of the land belongs to Indigenous Fijians. On the other hand, the nature of tenure over aquatic resources remained unresolved until recently (Fong 1994).

The coastal region, as of 1994, was divided into 406 customary fishing rights areas, *qoliqoli* (Waqairatu 1994). *Qoliqoli* could cover parts of foreshores below high water mark, as well as rivers, creeks, ponds and lakes. Under the traditional kinship system, specialists of various crafts and vocations meant that only the *gonedau* fished (Veitayaki 1995). Totemic and other taboos, such as those that restrict particular clans, families, age groups or sexes from eating certain types of fish, were also common. Moreover, certain fish were identified to be for different clans, which members strictly followed. In Gau and other places, most marine fishes were for the warrior class, while freshwater fish were reserved for chiefly clans (Veitayaki 1995).

These *qoliqoli* could belong to the larger social units of *vanua*, *yavusas*, or *mataqali*. In some cases, *itokatoka* and even smaller divisions may also be found. Much of the fragmentation took place recently, when the government began recording Indigenous claims over coastal waters. Having seen the level of royalty payments realized by chiefs of *qoliqolis*, a number of other families than staked claims over some areas, suggesting some breakdown in the traditional social structures and system of *vanua*.

In some cases, fishing areas have been combined in larger units, comprising a number of *vanua*s together to 'better control [of] the resources', to increase the area available to the people to fish in and also to increase the potential for trade with inland villages for root crops and freshwater prawns. The chief of Sasa village declared that it would be *vakaloloma* (shameful), if each

coastal village 'kept its fishing ground and some had to go without fish' (Fong 1994: 15). This illustrates that traditional concept of *kana veicurumaki,* or sharing of food, land and sea resources. Macuata, Mali and Sasa combined to form the Macuata-Mail-Sasa, and this was possible because of close family ties between the chiefs of the three areas.

Each customary marine-rights 'owner' is recognized to have fishing rights, which legally are recognized to be only 'rights of use' (Lal 1983; Baines 1985). Under the Fisheries Act, any member of a rights-holding unit may fish for subsistence purposes without obtaining the permission of the fishing-rights owners. But if fishing was for commercial purpose, using gear other than hook and line and fish traps, a licence had to be obtained from the government. The government could not, however, issue licences or permits to fish under the Fisheries Act without consulting with the customary fishing-rights owner. At some stage, it then became the practice for the government to issue the permit upon receipt of the chief's letter of consent (Fong 1994: 20).

Traditionally, villagers could fish in areas not belonging to them after obtaining permission through the presentation of whales teeth or kava (Kunatuba 1983). This, in recent years, changed to monetary payments, with the same rule applying to non-Indigenous commercial fishermen.

The 'royalty' or 'goodwill' payments in monetary terms, although not a statutory requirement, have, since the early 1970s, become widespread. The amounts and approach seem to be at the whim of the chiefs, and at times at the whim of the fishermen. The amount has varied for non-Indigenous people from $F150 (Fijian) in Macuata-Mali-Sasa *qoliqoli,* payable either in cash and or as *sevusevu of yagona,* food and cigarettes, to $F1000-2000 in other fishing-rights areas. At the same time, in Macuata-Mali–Sasa, only $F70 was required of non–Indigenous people considered to be *vasu* (a relationship between a man and his sister's sons as a result of marriage), and Indigenous Fijians belonging to the *qoliqoli* were required to pay $F50. The key reason for asking the lower rates for the other non-Fijian races was that they can be called upon to contribute to the needs of the *vanua* (in church building or for other communal purposes) (Fong 1994). In any one year, total royalty payments received for a customary rights area could be large: Macuata-Mali-Sasa received over $F16 000 in 1993.

Breakdown of customary practices

Despite the presence of a traditional *vanua* system recognizing the oneness of people and the environment, and environmental ethics and responsibility towards the environment and towards each other, in practice this was generally not recognized by the state. Indigenous owners of the *qoliqoli* had the rights to fish but the right to 'manage' was vested in the state, except for the management of fishing by *qoliqoli* members for non-commercial purposes.

Fishing by *qoliqoli* members within their own waters was controlled through traditional means. Chiefs could also declare *tabu,* or prohibition, declaring certain portions of fishing grounds to be closed to fishing for certain periods of time, bans on fishing of certain species of particular cultural significance in anticipation of increased fishing pressure in time of ceremonial needs such as marking weddings or lifting the mourning periods after the death of, particularly, a member of the chiefly family or the chief. For those disobeying these village regulations, moral pressure was exerted, and the people were pressured into asking for forgiveness in the traditional way by hosting a feast, *lovo,* presenting a *tabua,* etc. (Fong 1994: 38). Although a system of strict sanctions and fines, *ore,* were available, these were rarely used.

The commercial fishing is managed by the government under the Fisheries Act, mainly by using a licensing system and size and gear limitations. It has, however, been argued that the government's push for economic development meant that very little attention was paid to the actual management of the resources. If anything, the government, as custodians of the nation's resources, has in the past encouraged degradation of coastal regions by, for example, approving mangrove reclamation (Lal 1990).

While fisheries regulations are monitored and enforced by Fisheries Officers, in some cases local fish wardens may be employed on a voluntary basis. None of the stakeholders: the traditional owners, local communities or commercial fishermen are involved in any form of decision-making. The only exception is the chiefs representing the *qoliqoli*, as seen above, whose letter of consent is required before a commercial licence can be issued. However, the customary owners do not have absolute control over the use and management of resources within the *vanua*.

Where irreversible degradation has occurred in the past, the customary fishing-rights owners could not claim any compensation for the loss of the physical elements of their *vanua*, because the government had ruled that their rights were only use rights. Consequently, the traditional owners, for example, could not adequately exercise their 'ownership' rights and demand adequate compensation for the loss of mangroves due to reclamation or waste disposal. The *qoliqoli* owners received compensations of orders of magnitude lower than what could be legitimately claimed for in terms of, at least, direct goods lost through reclamation (Lal 1990). Nor could the owners claim adequate 'royalty payments'. In some areas, the 'royalty' payments demanded were less than one per cent of the net expected revenue, after taking into account bad weather and poor fishing. One could argue that the coastal resources could have been better managed had the customary rights been recognized as being part of the *vanua*, and/or that they were compensable rights.

Recent developments

More recently, the traditional fishing-rights owners have started exerting their rights and have, in many cases, gone to the other extreme. Chiefs of many customary Right areas have banned commercial fishing in their water after observing a deterioration of the resources. In Kaba, communities became fed up with the piecemeal and poorly-planned fisheries, and declining catches, and declared that all 17 commercial licences will not be renewed (Veitayaki et al 1996). Similarly, the *qoliqoli* owned by the then high chief of the land banned all commercial exploitation of fisheries in his waters, by noting that, as

recorded by Veitayaki (1999), 'commercial fishing would make a mockery of the traditional use of customary fishing grounds'. However, by taking such measures, people are forced to operate on the 'A' end of the production frontier curve (Fig. 3), because the community is losing much-needed income. This suggests that the chief has opted to forgo many of the benefits that could be generated from allowing the production of economic goods in favor of cultural goods. This, in itself, goes against Indigenous Fijians' desires.

On the other hand, at the instigation of external donors, many of the customary rights holders have been encouraged to engage in income-generating activities or have implemented community-based conservation projects. By 1997, one marine conservation project has been implemented, together with another 16 that have been set up in countries such as Kiribati, Samoa, Solomons, Tonga, Tuvalu, Vanuatu and Palau (Veityaki 1999). However, numerous projects have faced many difficulties because they relied largely on voluntary communal efforts, assuming that communities still place relatively higher value on communal goods than private goods. A lack of consistency in individual involvement is the main cause of difficulty, suggesting that individuals are placing more emphasis on producing private goods (part 'A', Fig. 3) than to generating cultural goods.

Such conflicts over time and resources are enhanced by other factors such as differences in expectations about social obligations under kinship relations, social standing and allegiances. Other problems include differences in opinion about what is considered to be a fair contribution of time and resources towards the production of cultural goods, what may be equitable sharing of private benefits, and a lack of effective enforcement of social obligations. Other problems noted by Veitayaki (1999) include: a lack of communal sense, lack of trust, a lack of common vision, and a lack of motivation.

In conclusion, this case study illustrates that, without careful consideration of the complementarity between economic values (derived from private and public goods) and cultural values, as well as the possible

tensions engendered by demands upon an individual for generating private or cultural benefits, ecologically and socially sustainable resource management may not be achieved.

Recognizing that the western paradigms of resource management together with the traditional concepts of country and vanua can help chart out a sustainable and equitable resource-management system, we list the following key guiding principles for their integration.

- a recognition that everyone: owners, users and the state, has the duty of care or responsibility towards the environment.

- a recognition that there are three types of functions, and respective value systems: economic (measured in monetary terms), ecological or process (measured in terms of ecological manas), and cultural (measured in terms of cultural manas).

- a recognition that total environmental value is comprised of total economic value, ecological process value, and cultural function value.

- A recognition that cultural functions define social norms, rules of engagement with others, and with the nature, cultural beliefs, etc, including the duty of care.

- a recognition that market values are determined within an institutional context that defines the rules of engagement and expectations and norms. These cultural functions define the overall constraint within which economic activities are carried out.

- a recognition of the need for a clearly-recognised resource/ecosystem tenure system that closely reflects the ecological boundaries of a system

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References

Baines, G. B.K. 1985 'A traditional base for inshore fisheries development in Solomons Islands. In Ruddle, K. and Johannes, R.E., eds. *Traditional Knowledge and Management of Coastal Systems in Asia and the Pacific UNESCO-ROSTSEA, Jakarta* pp 39-52.

Barbier, E., 1987. Conservation of sustainable economic development. *Environmental Conservation,* 14(2): 101-11.

Barbier, E., 1994 Valuing environmental functions : tropical wetlands *Land Economics* 70(2): 155-173.

Batibasaqa, K., Overton, J. and Horsley, P., 1999. *Vanua*: land, people and culture in Fiji. In: Overton, J., and Scheyvens, R., eds., 1999, *Strategies for sustainable development: experiences from the pacific*. Sydney: University of New South Wales Press; pp 102-106.

Berkes, F., ed. 1989 *Common Property Resources. Ecology and Community Based Sustainable Development.* Earthscan: London.

Berkes, F. and Folke, C. 1994 *Investing in cultural capital for sustainable use of natural capital,* In : Jansson, A., Hammer, M., Folke, C. and Costanza, R., eds., *Investing in Natural Capital – the ecological approach to sustainability,* Island Press, Washington DC, 128-150

Brookfield, M. 1979 'Resource use, economy, and society: island at the cross roads' In Brookfield, H.C. ed., *Lakeba: Environmental Change, Population Dynamics and resource Use*, Island Report No. 5. UNESCO, Canberra.

Carrier, J.G., 1981. Ownership of productive resources on Ponam Island, Manus Province. *Journal de la Societe des Oceanistes,* 72-73: 206-217.

Constanza, R., Waigner, L., Folke, C. and Maler, K.G., 1993. Modelling complex ecological economic systems: towards an evolutionary dynamic understanding of people and nature. *Bioscience,* 43: 545-555.

Coombs, H.C., MaCann, H., Ross, H. and Williams, N.M. 1989 *Land of Promises: Aborigines and Development in East Kimberly,* CRES/AIAS, Canberra.

Folke, C., Hammer, M., Costanza, R. and Jansson, A.,1994.Investing in natural capital - why, what, and how? In Jansson, A., Hammer, M., Folke, C. and Costanza, R., eds., *Investing in Natural Capital - the ecological approach to sustainability.* Island Press, Washington DC, pp 1-21.

Fong, G. M., 1994. *Case study of a traditional marine management system: Sasa village, Macuata Province, Fiji.* Food and Agriculture Organization of the United Nations (FAO), ed., *FAO Field Report RAS/92/TO5 No. 94/1.* Rome, FAO.

France, P. 1969 *The Charter of Land: Custom and Colonization in Fiji* Oxford University Press, Melbourne.

Hajkowicz, S. and Young, M., 2000 An economic analysis and cost sharing assessment for dryland salinity management: a case study of the Lower Eyre Peninsula in South Australia. A report to Primary Industries and Resources, South Australia. Policy and Economics Research Unit, CSIRO Land and Water, Adelaide.

Heywood, V.H., ed., 1995. *Global Biodiversity Assessment.* UNEP and Cambridge University Press.

Holling, C.S., 1994. New science and new investments for sustainable biosphere. In Jansson, A., Hammer, M., Folke, C. and Costanza, R., eds., *Investing in Natural Capital - the ecological approach to sustainability.* Island Press, Washington DC, pp 57-73.

Hviding, E. and Ruddle, K., 1991. *A regional assessment of the potential role of customary marine tenure in contemporary fisheries management in the South pacific.* Forum Fisheries Agency, FFA Report 91/71, Honiara.

Hviding, E., 1996. *Guardians of Marovo Lagoon: practice, place and politics in maritime Melanesia, Pacific Islands Monograph Series 14.* Honolulu, University of Hawaii Press.

IUCN, 1994. *Indigenous Peoples and Sustainability - a guide for action.* IUCN's Inter-Commission Task Force on Indigenous People's and the Secretariats of IUCN in collaboration with the International Institution for Sustainable Development, IUCN.

Jansson, A., and Jansson, B-O.,1994. Ecosystem Properties as a basis for

sustainability. In: Jansson, A., Hammer, M., Folke, C. and Costanza, R., eds., *Investing in Natural Capital - the ecological approach to sustainability.* Island Press, Washington DC, 74-91.

Kimberly Land Council, 1991. *The Crocodile Hole Report,* Kimberly Land Council, Derby.

Kunatuba, P., 1983 Traditional knowledge of marine environment of Fiji and traditional sea tenure and conservation in Fiji. Institute of Marine Resources, University of the South Pacific, Suva, Fiji.

Kurien, J. 1999. 'Community property rights: reestablishing them for a secure future for small scale fisheries' Unpublished paper, Fish Rights '99, Perth, November 11-19.

Lal, P.N., 1983. Institutional Aspects of Mangrove Management in Fiji. In Lal, P.N., ed., *Proceedings of the Interdepartmental Workshop on Mangrove Resource Management.* Suva, Fiji.

Lal, P. N., 1990. Conservation Or Conversion Of Mangroves In Fiji - An Ecological Economic Analysis, Occasional Paper, Vol. 11 Environment and Policy Institute, East West Centre, Honolulu. Also published as Ecological Economic Analysis of Mangrove Conservation–A Case Study from Fiji UNDP/UNESCO Mangrove Ecosystems Occasional Papers No. 6.

Lal, P.N., 2000 'Land, Lome and the Fiji Sugar Industry' In Lal, B.V. *Before the Storm: Elections and politics of development.* Asia Pacific Press, Canberra (in press).

Layard, P.R.G. and Walters, A.A., 1978. *MicroEconomic Theory* McGraw-Hill, New York.

The Macquarie Dictionary, 1997. Third edition. Australia, Macquarie University.

Meggitt, M. 1962. *Dessert People* Angus and Robertson, Australia.

Munro-Faure, P. W., 1991. *The Marine Resource and its Management: Attitudes and Approaches to the Leasing and Licensing of Tides and Submerged Lands.* University of Reading, UK, College of Estate Management, 125 pp (unpublished manuscript).

Myers, F. 1986. *Pintupi Country, Pintupi Self,* AIAS, Canberra.

Ostrom, E. 1990. *Governing the Commons,* Cambridge University Press, Cambridge.

Overton, J. and Scheyvens, R., eds., 1999. *Strategies for sustainable development: experiences from the pacific.* Sydney, University of New South Wales Press.

Palmer, I. 1988. *Buying Back the Land,* Australian Institute of Aboriginal Studies (AIAS) Press. Canberra.

Perrings, C., 1995. Economic values of biodiversity. In: UNEP *Global Biodiversity Assessment.* Cambridge, UK, UNEP and Cambridge University Press, pp 823-914.

Ravuvu, A. D., 1983. *Vaka I Taukei: the Fijian Way of Life.* Institute of Pacific Studies, University of the South Pacific, Suva.

Rose, D.B. 1996. *Nourishing Terrains: Australian Aboriginal Views of: Landscape and Wilderness,* Australian Heritage Commission, Canberra.

South, G.R., Goulet, D., Tuqiri, C. and Church, M., eds., 1994. *Traditional Marine Tenure and Sustainable Management of Marine Resources in Asia and the Pacific* Suva, Fiji, International Ocean Institute (South Pacific).

Stanner, W.E.H., 1979. *White man got no Dreaming: essays 1938-1972,* ANU Press, Canberra.

Stoneham, G., Crowe, M., Platt, S., et al., 2000. *Mechanisms for biodiversity conservation on private land.* Melbourne, Victorian Department of Natural Resources Management.

Throsby, D., 1995. Culture, economics and sustainability. *Journal of Cultural Economics* 19: 199-206.

Throsby, D., 1999. Cultural capital. *Journal of Cultural Economics* 23: 3-12.

Tuvuki, S.W., 1995. An analysis of the environmental planning framework for coastal developments in Fiji's Coral Coast tourist region. Massey University, US. unpublished MPhil thesis.

Veitayaki, J. V., 1995. *Fisheries Development in Fiji: The Quest for Sustainability.* Suva, Fiji. Institute for Pacific Studies and the Oceans Resources Management Program, The University of the South Pacific.

Veitayaki, J.V., 1999. Customary marine tenure and the empowerment of resource owners in Fiji. A paper presented at Pacibus Maximus, November Conference, Suva, Fiji.

Veitayaki, J., Bidesi, V.R., Mathews, E. and Ballou, A., 1996. Preliminary Baseline Survey of Marine resources of Kaba Point, Fiji. *USP Marine Studies Technical report 96/1*, Suva Fiji.

Waqaraitu, S., 1994. The delimitation of the traditional fishing grounds: the Fiji experience, In: South, G.R., Goulet, D., Tuqiri, C. and Church, M., eds., *Traditional Marine Tenure and Sustainable Management of Marine Resources in Asia and the Pacific.* Suva, Fiji, International Ocean Institute (South Pacific), pp 79-84.

Ward, R.G., 1995a 'Land, law, custom: diverging realities in Fiji' In Ward, G.E. and Kingdon, E., eds., *Land, Custom and Practice in the South Pacific.* Melbourne: Cambridge University Press, pp 198-249.

Ward, G.E. 1995b. 'Deforestation in Western Samoa, *Pacific Viewpoint*, 36(1): 73-93.

Ward, G.E. and Kingdon, E., eds., 1995. *Land, Custom and Practice in the South Pacific.* Melbourne: Cambridge University Press.

Williams, N.M. and Baines, G., eds., 1993. *Traditional Ecological Knowledge* Centre for Resource and Environmental Studies, ANU, Canberra.

Young, E., 1988. 'Land use and resources: a black and white dichotomy' In Heathcote, R.L. and Mabutt (eds), *Land, Water and people: Geographical Essays in Australian Resource Management,* Allen and Unwin, Sydney.

Young, E. 1999a. Reconciliation or exclusion? Integrating Indigenous and non-Indigenous land management concepts for Australian Native Title era, *Asia-Pacific Viewpoint* 40(2): 159-171.

Young, E. 1999b. Hunter-gatherer concepts of land and its ownership in remote Australia and North America. In Anderson, K. and Gale, F. *Cultural Geographies* Longman, Melbourne

Value conflicts between natural and cultural heritage conservation-Australian experience and the contribution of economics

Michael Lockwood & Dirk H.R. Spennemann,lii Johnstone Centre and School of Environmental & Information Sciences, Charles Sturt University

Abstract

Conflicts between natural and cultural heritage conservation occur across several domains. People disagree over the definitions of terms such as 'natural', 'cultural', and 'wilderness'. There are a range of views on matters of principle, such as whose heritage should be considered, and whether non-negotiable standards should apply to some conservation issues. Clashes of culture occur between various stakeholders: Indigenous and non-Indigenous Australians, 'mainstream' and minority groups, and amongst professionals from different disciplinary backgrounds. The aspirations and behaviour of traditional owners, environmentalists, recreationists, traditional users, and those who have links with previous uses and sites, can lead to a range of management issues. On public land, management agencies face the difficult task of allocating scarce resources, and are sometimes are forced to decide between natural and cultural heritage. They may also have to address conflicting management objectives.

We discuss each of these domains, and give examples of where such conflicts have influenced Australian cultural and natural heritage conservation. We then identify where economic methods and instruments have the potential to contribute to their resolution. Economics is not very useful for resolving conflicts over definitions, principles, or cultural differences. These matters must be resolved through the various participatory, deliberative, democratic and judicial processes. Economics can be used to justify public investment in heritage management, assist resource allocation and land use decisions, demonstrate the contribution heritage makes to an economy, optimise resource utilisation and establish sound pricing policies for heritage resources. Suitable economic methods for these purposes include non-market valuation and benefit cost analysis, regional economic analysis, cost effectiveness analysis and marginal cost pricing. We suggest education, research and advocacy roles for the AHC in relation to heritage economics and dispute resolution.

Introduction

People project value onto their environment, employing various overlapping and often competing notions of importance, significance, utility, recreation, beauty, history, comfort, ambience, and so forth. These values are cultural constructs that differ widely between cultural groups and between members of a single group. Further, such values change, both over the life span of an individual as a result of his or her experiences, and from generation to generation. At the same time, individuals hold different values with varying strengths of conviction. Subjective valuation, revaluation and ultimately prioritisation occur consciously and subconsciously on a continual basis. This fluidity of projected values, both on an individual and a collective level, occasions protracted and at times bitter conflicts, with continuously shifting ground rules.

Many environmental issues involve competing claims between heritage conservation and various forms of development such as logging, mining, agriculture and urbanisation. Less well appreciated is the fact that even within the field of heritage conservation, conflicts also arise. These may be caused by different agendas and objectives within the conservation movement, and in particular between the conservation of natural and cultural heritage. Conservation of heritage can also conflict with some recreation uses of natural areas. With respect to cultural heritage, visitors can damage sites, or gain inappropriate access to culturally sensitive areas. Conservation of cultural heritage sites or practices can conflict with the provision of opportunities for 'wilderness'

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lii In some sections of this paper, we have drawn on material prepared by Julie Collins, and edited by Michael Lockwood, that will appear as a Chapter in the forthcoming book Worboys *et al.* (2000).

recreation. Of course, the notion of wilderness has been criticised because it tends to deny the fact that all Australian landscapes are, to some extent, the product of, or have been influenced by, human activities. Nonetheless, some people desire recreation experiences in settings that are devoid of any evidence, at least to recreationists, of human influences.

We will examine the various forms of conflict between cultural heritage conservation and both the provision of recreation opportunities and the conservation of natural heritage. On private land, the restoration of landscapes, though activities such as re-establishing native vegetation, is often in conflict with conserving evidence of land settlement processes. However, we will focus on conflicts in those places where natural heritage is most in evidence - protected areas managed by public sector agencies.

Many protected areas possess both natural and cultural heritage values. Four of Australia's World Heritage properties, for example, are listed for both natural and cultural values: Tasmanian Wilderness, Willandra Lakes, Kakadu National Park and Uluru-Kata Tjuta National Park. In 1994, Uluru-Kata Tjuta became the second national park in the world to be listed as a cultural landscape.

Conflict in such areas occurs over matters of definition, over matters of principle, and between cultures. Conflicts can arise because of different stakeholder aspirations and behaviours. Management objectives that seek to maintain or enhance natural and cultural heritage values can also be in conflict. Nature conservation values can be adversely affected, or perceived to be affected, by historic features related to past European activities, current activities that have links to traditional European practices, or activities of Indigenous peoples. Cultural heritage values can be degraded or destroyed by attempts to protect or enhance natural ecosystems.

The characteristics of these various forms of conflict determine the extent to which economics can be useful in assisting their resolution. We will discuss how economics has little to contribute to resolving matters of principle or definition. It may have a role in addressing clashes of culture. Its main application is in dealing with conflicting management objectives.

Matters of definition

The *Australian Heritage Commission Act 1975* (Cwth) stipulates that 'the National Estate consists of those places being components of the natural environment of Australia or the cultural environment of Australia, that have aesthetic, historic, scientific or social significance or other special value for future generations as well as for the present community'. More recently practitioners have come to realise that such values are can not only 'be seen in a place's physical features, but can also be associated with intangible qualities such as people's associations with, or feelings for, a place' (Lennon *et al.* 1999, p. 8).

However, in popular and in some professional use, cultural heritage has generally been more narrowly applied to specific places or artefacts. Environmental management has tended to maintain a sharp distinction between 'natural' and 'cultural' heritage. Conservationists and heritage professionals apparently have little doubt about what constitutes natural heritage and what is cultural heritage. This seems to hold particularly true for the natural scientists among the conservation profession: the natural environment is just that, and the cultural environment is that part of the world shaped by people. Such views are overly simplistic, site specific, and do not regard cultural heritage places in the their spatial and geographical contexts.

The dichotomy between natural and cultural heritage is deeply ingrained in the institutional structures and staff of many conservation agencies. While non-Indigenous resource management agencies have tended to make a distinction between 'cultural' and 'natural' heritage, Indigenous people often make no such distinction. The 'uninitiated' public may also blur the difference between them (cf Harris 1995, Spennemann *et al.* 2000).

Ongoing connections between people and land have not been well recognised. This is despite the fact that whole environments may embody evidence of past land management practices. Some forests in south-eastern Australia, for example, while they possess natural values, can also be considered as cultural landscapes arising from early timber harvesting and clearing activities. 'Cultural landscapes' is seen by some as a more appropriate term for the vast majority of Australian places (Ghimire

& Pimbert 1997, Australian Conservation Foundation 1998).

The concept of wilderness poses serious philosophical problems. The perception of 'wilderness' is subjective, depending on the life-experience of the person. True wilderness is an area devoid of all traces of human intervention. In Australia, parts of the landscape have been classified as 'wilderness', even though such areas were inhabited and managed by Indigenous Australians for millennia (Langton 1996), The European history of past utilisation, and the cultural values associated with such evidence, has also been largely ignored or set aside. Yet wilderness areas have been designated by governments and management agencies, which then raise expectations that traces of European sites need to be removed.

Australian is one large cultural site: land and sea on which a succession of generations of Aboriginal people, as well as a handful of generations of people of European descent, have created a vast cultural landscape. Cultural landscapes have been defined by Lennon & Mathews (1996, p. 4) as 'a physical area with natural features and elements modified by human activity resulting in patterns of evidence layered in the landscape, which give a place its particular character reflecting human relationship with and attachment to that landscape'.

Landscapes have historic significance when they, or their components, have strong links or associations with important historic themes, and where the evidence assists in understanding the past (Lennon & Mathews 1996). The significance of cultural landscapes can be established at national, state, regional or local scales.

For example, English style settings were established in and around historic buildings built last century at the Yarrangobilly Caves in Kosciuszko National Park. These areas are now managed as early recreational cultural settings by the NSW National Park & Wildlife Service (NPWS). The coal and oil-shale mines of Newnes, within the Wollemi National Park in NSW, are managed as an old industrial setting. Old mining sites, whaling sites, emergency airstrips constructed in the Northern Territory in World War 2, and many other features are now managed as cultural

landscapes within protected areas (Worboys *et al.* 2000).

In the past, protected area managers frequently demolished European heritage items in newly gazetted national parks. The wholesale destruction of the town of Kiandra in Kosciuszko National Park, or the demolition of Zanci Homestead in Mungo National Park spring to mind. Today, the situation is less extreme, but problems remain. Cultural perspectives come into play, for example, in the seemingly harmless concept of a 'weed' in a national park. While a weed is nothing but a plant growing 'out of place' the term immediately conjures up the mental image of 'pest species' coupled with a need for 'containment' and ideally 'eradication.' What is often forgotten is that these 'weeds' may well be tracer plants of prior human occupation. The Australian Alps are full of isolated apple, plum and walnut trees, hawthorn and briar rose bushes, as well as jonquils and daffodils. It is usually parks policy to eradicate these species and thereby remove a layer of history. Such actions may well be appropriate, if adequate consideration has been given to the relative significance of the natural and cultural heritage values involved. Our concern is that such consideration is the exception rather than the rule.

Much of the conflict of definition can be sheeted home to conflict or lack of communication within organisations tasked with the protection of heritage assets. Since the 'Age of Enlightenment', Western society has pursued and valued 'objective' science as the discoverer and provider of knowledge, and has consequently vested great authority in both science and scientists. The institutional culture of many conservation agencies projects this positivist attitude onto the management of the natural components of heritage and regards biodiversity and natural heritage management issues as 'hard science' and thus imbued with a high level of credibility and authority, while cultural heritage aspects are often merely tolerated, sometimes belittled, and on occasion totally ignored. Jeanette Hope has demonstrated the bias against cultural heritage and a marginalisation of women within the NSW NPWS (Hope 1993), though it should be recognised that reforms have since been made within the service. Nonetheless, the problem remains: how can balanced

management decisions be made, and how can natural and cultural heritage priorities be discussed on an equal footing if the organisational culture is already strongly biased? Interestingly, similar questions arose in the treatment of cultural heritage sites following natural disasters, where the institutional culture of the emergency services tended to disregard cultural heritage as an issue (Spennemann & Look 1998, Spennemann 1999). In that case, institutional education was the key (Look & Spennemann 2000, Tweedy 2000).

As long as the conceptual dichotomy between 'natural' and 'cultural' heritage is perpetuated, conflict will arise. It has been noted by many cultural heritage professionals that while almost all cultural heritage managers also tend to be ardent (natural heritage) conservationists, the opposite can only rarely be said. There needs to be cultural heritage awareness training of the wildlife biologists and vegetation managers to level the playing field. While this is occurs in some undergraduate and postgraduate degree courses, more needs to be done for existing staff in the agencies. Only when both sides are fully cognisant of the other's objectives and value systems can solutions to conflicting values be found.

Clashes of culture and principles

Some conflicts are essentially clashes of cultural constructs about how we perceive the past, and which elements of the past we deem important. A good example is the discussion about the treatment of Aboriginal human remains by the archaeological and anthropological profession, which caused much heartache to the Aboriginal communities and resulted in verbal, but open conflict in the 1980s. Issues of human dignity and ancestral spiritual needs conflicted with Western concepts of scientific inquiry and the archival perpetuation of 'evidence' (Langford 1983, Webb 1987, Mulvaney 1991).

While the specifics of the debate have been resolved in favour of the traditional owners and custodians, and while an increasing number of human remains have been returned from national and overseas collections, the ethical issues still reverberate. They have resurfaced in the controversy about whether Aboriginal

custodians ought to be allowed to repaint rock art, which may well be thousands of years old, with modern acrylic paints (Bowdler 1988, Lambert 1989), and are now being revisited in the arena of Aboriginal archaeology and the control of excavated artefactual materials (Allen 1995, Harris 1995).

Internationally, legislated national parks and other protected areas are the primary method used to preserve endangered species, habitats, and ecosystems. The first national park, Yellowstone was established in 1872 in the USA. The inhabitants of the area, mainly Crow and Shoshone Indians, either left for reservations after intense pressure, or were driven out (Ghimire & Pimbert 1997). In contrast, many European countries maintain a long established order of land tenure and rights of access has generally been respected. For example, British national parks recognise existing rights and maintain established patterns of land use by rural communities. However, European colonial powers transferred very little of this respect for traditional rights to their colonies. International conservation organisations and national governments have also denied the rights of Indigenous people to their traditional lands and resources, at times turning local people from hunters and cultivators into 'poachers' and 'squatters' (Colchester 1997).

Common to these conflicts is a clash of cultural values, and in particular the fundamental question of whether Indigenous communities have the right to cultural self-determination and the associated right to manage their own heritage as *they* see fit (Fourmile 1989). Empowerment of Aboriginal communities in Australia to be actively involved in determining the future of their own cultural heritage has led to the recognition by heritage professionals that community values (social values, spiritual values, ethnic values) need to be taken into account when assessing a site (Jonas 1991). Since then, heritage management authorities have prescribed that Aboriginal community input is required before research projects are allowed to go ahead, and before decisions on the preservation or destruction of sites are made. Here, Aboriginal community values are given preference over scientific values.

If we, in keeping with the Draft United Nations Declaration on the Rights of Indigenous Peoples (UN 1998),[liii] affirm the right to cultural self-determination and hence the right of Indigenous Peoples to manage their own heritage, as the authors do, then we also have to accept that some values are essentially non-negotiable. This, however, has several implications for the management of cultural and natural heritage in general.

The cultural significance assessment of heritage places, as practiced in Australia and in many other countries, tries to evaluate a site against a number of criteria (such as those of the Australian Heritage Commission (AHC)) and then rank a place as being of national, state, regional or local significance. Traditionally, protection regimes tended to follow these rankings, with the least amount of scrutiny and protection awarded to sites of local significance. In terms of the axiom of the inalienability of sites under the tenet of cultural self-determination, Indigenous sites of essentially local or regional significance are afforded a protection that surpasses non-Indigenous sites deemed to be of national significance.

In the cultural heritage arena, places are ascribed cultural significance according to their aesthetic, historic, scientific, and social value (Pearson & Sullivan 1995, Kerr 2000). While the assessment of scientific and historic value, aided by guidelines, has long been the prerogative of historians, architects and archaeologists, and while architects and art historians have assessed aesthetic value, the assessment of social value has often received only cursory treatment[liv]. Yet it is that value, which the

local community holds and which determines a community's support for heritage management actions. Studies have shown that professional and community values can differ widely (Spennemann 1992, Snelling & Schapper 1993, Spennemann *et al.* 2000), and that sections of the community are unequally represented in heritage decisions (Bulbeck 1988, Bickford 1993, Johnson 1993).

The historic foundation of the heritage movement in Australia was rooted in the interests of archaeologists, architects and historians. These groups sought to preserve parts of Australia's heritage for future generations for archival and demonstration purposes, or for reasons of future scientific investigations (Davison 1991, Smith 1996). That history was male, white, Anglo-Celtic and generally affluent. The assessors' bias was compounded by 'natural selection' where the places of the socio-economically weak were usually made of less durable materials and thus dropped out of the tangible record (Spennemann & Look 1994). Recent years have seen a shift in this respect, with other viewpoints forcefully put forward (Bulbeck 1988, Bickford 1993, Johnson 1993, Smith 1996). Yet, despite attempts such as Chris Johnson's treatise on social value (Johnson 1992), the bulk of heritage places considered have been Anglo-Celtic.

Drawing ethnic communities into the heritage assessment process has been notoriously difficult (Canning 1999). New initiatives, such as the NSW Heritage Office's Ethnic Communities Consultation Program, if successful, can change this. It follows, however, that if the Indigenous Peoples of Australia shall be empowered to determine the future of their heritage, then all numerically small ethnic communities should have a similar right to self-determination of their cultural identity and its manifestation in the environment. This raises the issue of the 'Balkanisation' or fractionation of heritage. In this, then, heritage management firmly enters the arena of the debate on the relative merits of assimilation and multiculturalism. Conceptualising this issue to the bitter end,

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[liii]Part 3 article 13" Indigenous peoples have the right to manifest, practice, develop and teach their spiritual and religious traditions, customs and ceremonies; the right to maintain, protect, and have access in privacy to their religious and cultural sites; the right to the use and control of ceremonial objects; and the right to the repatriation of human remains. States shall take effective measures, in conjunction with the Indigenous peoples concerned, to ensure that Indigenous sacred places, including burial sites, be preserved, respected and protected.

[liv]While guidelines to assess social values have been proposed (Johnson 1992), the assessment of social value has often received only cursory treatment. A review of 72 shire heritage plans completed for NSW has shown that the value discussion was dominated by the assessment of

historic and aesthetic value. Less than 1% of the total number of pages discussing the four core values was devoted to social value (Canning 1999, Canning & Spennemann in press).

we will create a multitude of spatially local, culturally ethnic and even spiritually diverse heritages that will compete with each other for public attention and limited funding.

If we were to grant every community the right to self-determine the future manifestation of its own heritage, then we will also run the risk that the past will be glorified and nostalgia will dominate (Bickford 1981, Lowenthal 1985). Dissonant heritage sites (Tunbridge and Ashworth 1996) will simply disappear in a climate of political streamlining to a contemporary ideal. In the final extreme, the right to entertain non-negotiable values will be claimed which not only create friction with rival development and land use interests, but can also create friction between competing ethnic communities in their attempts to protect their own heritage.

As Ah Kit (1995, p. 36) pointed out: '[A]ustralian history has been a history of colonialism and if we are to ever become a mature nation and grow out of the colonial era, we have to recognise the heritage of the people who were the victims of colonialism, as well as the heritage of the colonisers'. But how are we to prioritise potentially conflicting heritage approaches say in an Aboriginal mission, where, in an extreme, both the Aboriginal people affected by the mission and the religious denomination formerly running the mission could argue for non-negotiable values. Policy decisions for affirmative action disfavouring competing Anglo-Celtic interests, for example, have been publicly argued for (Spennemann 1993).

Respect for Indigenous resource use within protected areas is one of the most fundamental and controversial issues for policy makers (Collins *et al.* 1997). The vision of protected area proponents in the 1960s, 70s and into the 80s was dominated by exclusion of human evidence and influence. 'A national park must remain a primordial wilderness to be effective. No men (sic), not even native ones, should live inside its borders' (Grzimek & Grzimek 1977, p. 177). Protected areas have focussed on preserving endangered species, habitats, and ecosystems (Stevens 1997). There are fundamental differences between Indigenous and non-Indigenous conceptions of nature (Morrison 1997). Protected area

management has tended to reflect these differences.

'We didn't even know the parks existed until the authorities started sending our people to prison for hunting...I am a traditional healer in this region...but now I can't get some drugs because I'm not allowed to gather medicine in the park. When people decided that we should not get anything from the park, did they not know that we do not have a hospital? ... If you were in my place, would you let the person die, or would you go to that park and gather the medicine?' (Njiforti & Tchamba 1993, p. 173).

Indigenous people hold particular relationships to land inherited from parents (Goodall 1996). These relationships generate obligations to care for the land by ritual and through land management. 'Caring for country' means, amongst other things, that custodians will protect the land, plants, animals and people from unauthorised use, and they will manage it in such a way as to maintain its productivity. Country cared for in the proper way is 'quiet', in contrast to 'wild', uncared for country (Aboriginal and Torres Strait Islander Commission 1995, Head & Hughes 1996).

Some conservationists fear that 'unscientific' management of protected areas by Indigenous people may result in degradation arising from actions such as hunting and the introduction of animals such as dogs (Martin 1992). 'The fear seems to stem from the idea that if we had control of such areas, we would lock them up; shoot everything that moves; (and) chop anything that swayed' (Wallis 1994).

If we affirm the right of Indigenous peoples to cultural self-determination, we have to accept that Australia's Indigenous peoples manage their own heritage and thus their on past on their terms. This may well imply that some values are essentially non-negotiable and this most likely will imply a paradigm shift in how we as a nation go about managing (or interfering in) other peoples' identities as manifested in their cultural sites. At present, notwithstanding all protestations by managers and politicians pointing to 'consultation', Australian heritage management of Indigenous places is essentially is that of a colonial power. Hand-backs of parks and the resultant joint management still requires

communities to largely play by the colonisers' rules. The final decisions rest with non-Indigenous people. There is the fear that total and unequivocal hand-over of control will dramatically change the approach to heritage management. Indeed, if we consider post-colonial nation states in the Pacific, this has occurred (Spennemann 1992, Spennemann & Meyenn 1996, O'Neill and Spennemann in press). Is this detrimental? Is this tolerable, and who are we to say and comment? For self-determination of Australia's Indigenous peoples to become a reality, we have to unequivocally and unreservedly surrender the decision making power to truly independent Aboriginal and Torres Strait Islander Heritage bodies, outside the organisational conservation agency structures (as in the case of NSW).

As Indigenous decision-making is not as hierarchical in the Western corporate fashion, but decidedly more consultative of their community members, fully autonomous Indigenous control over heritage matters will doubtlessly increase the amount of time required to reach decisions on issues. The complexity is compounded by the dichotomy between the local and the dispossessed 'urban' communities, who by virtue of their kinship ties will have a say on matters in spatially remote areas. Another issue inherent in Indigenous decision-making is that the composition of the apparent stakeholders and their representatives is more fluid. The solution rests in a continuous and perpetual dialogue on all matters concerning natural and cultural heritage, rather than engaging in task-based negotiations. Such prolonged decision-making is likely to set up conflict situations in management agencies which, being driven by triennial political cycles, are under pressure to achieve outcomes.

Conflicts over management objectives

Cultural evidence in land now reserved as protected area can include mining and logging equipment, roads and tracks, railways, fences, sheds, yards, tree stumps, particular vegetation ages and structures, and so on. Natural area managers are increasingly recognising their responsibilities in relation to cultural heritage conservation. Even so, nature conservation and recreation values may still be emphasised to such an extent that cultural heritage is degraded. This

emphasis is manifested in the allocation of resources, as well as decisions that are made when natural, recreation and cultural objectives are in conflict. Some of the potential conflicts between the three categories of objective are indicated in Table 1. Exotic plants with cultural significance can be removed, timber or metal artefacts displaced or destroyed, past building sites 'rehabilitated'.

Protected area management agencies routinely engage with a range of stakeholders, including environmentalists, recreationists, traditional owners, traditional users, and those who have links with previous uses and sites. These stakeholders often make conflicting demands. Recreationists may desire access to sites that Indigenous people consider inappropriate. Environmentalists may object to traditional owners hunting or taking medicinal plants. Recreation activities can also damage sensitive cultural sites such as sand middens. Protected area management agencies have tended to be more responsive to those stakeholders who supported the establishment of protected areas in the first place. It must be noted that this emphasis is also consistent with the charter that most agencies have been given by their respective governments. Not surprisingly, agency staff also tend to have a primary interest in the conservation of natural heritage, so that cultural heritage concerns have often been marginalised with the organisations.

In many protected areas, priority is given to managing visitor services, facilities and activities; fire management; and pest plant and animal control. In crises such as a wildfire, heritage considerations understandably take a back seat, which frequently results in irretrievable loss of heritage items. All too often, a misinterpretation of the values and priorities held by the other profession, caused by a lack of collaborative planning and prioritisation, is at the root of the problem (Spennemann & Look 1998, Spennemann 1999).

Not all sites can be protected. For many cultural heritage sites, degradation is continuous, and so remedial investment must be ongoing. Conservation of some types of sites is more costly than for others. Cultural heritage conservation must also compete with other management

imperatives such as recreation service
provision and nature conservation. In day-
to-day management, works associated with
Aboriginal places, historic site protection,
or interpretation of cultural values often
receives a small share of available resources
(Case study 1). In some cases, this may be
appropriate. However, often the rationale
for such decisions is unclear. In some cases,
it appears that management decisions have
been influenced as much by the
predispositions and expertise of agency
staff, as by a full consideration of the issues
at hand.

Table 1 Potential conflicts between cultural heritage, nature conservation and recreation objectives

	Cultural value (evidence of past practices and lifestyles)	Potentially conflicting nature conservation or recreation objective
European settlement	• building sites, rubbish dumps • medicinal, culinary and ornamental plants	• rehabilitation of disturbed sites • removal of introduced plants • recreation in settings with no evidence of human use
Mining	• quarries, open cuts etc	• rehabilitation of disturbed sites • recreation in settings with no evidence of human use
Logging	• access tracks, sawdust heaps, discarded equipment	• rehabilitation of disturbed sites • recreation in settings with no evidence of human use
Grazing	• huts, fences, stockyards • modified landscapes • 'living history' activities such as mustering • knowledge that an historic activity continues	• restoration of vegetation communities • significant species conservation • recreation in settings with no evidence of human use
Indigenous peoples' use of cultural areas	• continuation and evolution of traditional culture and practices	• conservation of archaeological sites in an unchanged condition
Indigenous peoples' use of natural areas	• continuation and evolution of traditional culture and practices	• conservation of significant species

Case study 1: Wet Tropics of North Queensland (adapted from Lawson 2000)

The international significance of the ecological and evolutionary values associated with the wet tropical rainforests of north Queensland were formally recognised in 1988 when approximately 900,000 ha of the region were placed on the World Heritage List. Lawson (2000) noted that the complexity and diversity of the region's natural environment is matched by the complexity of its Indigenous and Western land tenure, management regimes and socio-political context. The Wet Tropics World Heritage Area (WTWHA) poses a major management challenges, with approximately 900 different parcels of land (including numerous freehold blocks), 16 resident Aboriginal language groups, 80% of the region potentially claimable under the *Native Title Act 1993*, an expanding tourist industry, a large number of rare and threatened species, and several state, Commonwealth, and local government management interests. The region's many traditional land owning groups maintain that their cultural survival is inextricably linked to achieving a meaningful and equitable say in management of the region. For example, without the removal of restrictions that frequently prevent traditional custodians from meeting their spiritual, cultural and land management responsibilities, the complex matrix of Rainforest Aboriginal cultural landscapes will probably disappear.

The often poor relationship between Rainforest Aboriginal people and WTWHA management agencies has been the product of a number of factors. Firstly, the region has to date been listed for its natural values only. Consequently, the management of the region's cultural heritage has run a poor second to those listed natural values that have attracted a greater level of statutory protection and management effort. Secondly, any statutory and policy provisions to have regard to Aboriginal interests tend to be described in rather vague 'parenthood' statements that provide little in the way of clear direction for day-to-day managers already struggling with heavy work loads and inadequate resourcing. Understandably, the result has been that priority has been given to those tasks with which managers are more familiar.

Aboriginal interests are often relegated to the 'too hard' basket or 'tacked-on' when time or funding permits. Finally, a number of Aboriginal reserves were included within the WTWHA boundaries despite cogent opposition from the relevant trustees. This has left a degree of mistrust in government process that taints consultation even today.

Managers may also fail to recognise the extent of cultural heritage within their jurisdiction, and thereby specify objectives that do not address all relevant heritage conservation issues. For example, as noted above, managers may not recognise that the natural area under their jurisdiction is a cultural landscape, and so neglect to incorporate this into their management objectives. Environmental rehabilitation can obscure or destroy historic patterns of past land use that are still evident in the landscape. Information about previous land use is often lost when management focuses on retention or rehabilitation of natural values and features. Attempts to restore vegetation or other environmental components to some former condition can destroy historic material. Management that neglects or under-emphasises cultural heritage values can lead to actions that cause damage to, or complete loss, of these values.

Perhaps as recognition of such issues, in 1997 the NSW NPWS established an Aboriginal Heritage Division to provide direction, guidelines and policy for Aboriginal heritage management across NSW, in partnership with local Aboriginal communities. The Tasmanian Parks and Wildlife Service has now also developed an Aboriginal Heritage Section. Its key roles are to cultivate, within the wider community, and in partnership with the Aboriginal community, appropriate management and conservation of Aboriginal heritage; and to transfer a viable conservation system to a representative Aboriginal organisation.

The IUCN (1994) advocated that the needs of Indigenous peoples should be taken into account in establishing management objectives for protected areas (Case study 2). The Royal Commission into Aboriginal Deaths in Custody (1991) identified Aboriginal involvement in protected area

management as a significant way of supporting Indigenous culture, through links to traditional lands and application of traditional knowledge.

Case study 2: Great Barrier Reef
(adapted from Smyth 2000)

In Australia, recognition of Indigenous peoples' rights and interests in the management of protected areas in the sea has lagged behind such recognition on land. In the mid 1970s, when Kakadu and Gurig National Parks in the Northern Territory were being established as Australia's first Aboriginal owned and jointly management national parks, the Great Barrier Reef Marine Park (GBRMP) was being established under Commonwealth legislation that contained no recognition of Indigenous interests. Consequently, the initial management arrangements established for the GBRMP provided no meaningful involvement of Aboriginal traditional owners over whose sea country the marine park had been established.

In 1998, the Federal Court in Darwin found that the Aboriginal Traditional owners of Melville Island continue to hold native title rights to the sea surrounding the island, and that these rights include subsistence hunting and fishing, access to their marine clan estates and protection of their cultural sites in the sea. However, the court also found that marine native title is not exclusive, does not include commercial rights to marine resources, does not give native title holders the right to control access by others, and that native title must yield to other legal rights such as commercial and recreational fishing. Aboriginal claimants and government have appealed this decision, and a further determination is expected from the full bench of the Federal Court in the near future. Native title to the sea legitimises the special status gradually being accorded to Aboriginal people associated with marine protected areas.

The GBRMP, and other marine protected areas in Australia, were established on the basis that the sea is an open common, owned and managed by the government on behalf of all Australians. In contrast, Aboriginal groups associated with the GBRMP consider much of the area to be their traditional clan estates for which they have both customary ownership and management responsibility. In addition, the consultative mechanisms established by the Great Barrier Reef Marine Park Authority (GBRMPA) did not adequately address the requirements for communication with the diversity of Aboriginal peoples and cultures associated with the marine park. In the first 15 years or so of operation, GBRMPA dealt with Aboriginal groups as 'stakeholders' whose primary interest in the marine park were restricted to traditional fishing and hunting. For most of this period, Aboriginal interests were represented on the GBRMPA Community Consultative Committee by a non-Aboriginal officer of the Queensland Government's department responsible for Aboriginal affairs. From the late 1980s and throughout the 1990s, because of research supported by the GBRMPA and through the consistent lobbying of Aboriginal groups and organisations, there developed an increasing awareness among the officers and board members of the GBRMPA of a more substantial relationship between Aboriginal people and the GBRMP. Significant measures were taken to improve communication between GBRMPA and coastal Aboriginal groups and to develop mechanisms for their involvement in the planning and management of the marine park.

However, many protected area managers are uneasy with broad endorsements of Indigenous people's resource use within protected areas. Understandably, there has been an unwillingness by nature conservation agencies to relinquish their authority over protected areas and to risk perceived threats to management standards. Concern is expressed regarding changes in resource use due to more sedentary settlement patterns, population growth, cultural change leading to a decline in conservation values, and the use of modern technology, in particular guns, motor vehicles and boats (Collins *et al.* 1997).

Such concerns have led to several forms of conditional recognition of Indigenous land use within protected areas. Generally, only 'traditional' uses are authorised. Determining what constitutes a 'traditional' use is not straightforward (Birckhead 1992). Both the House of Representatives Standing Committee on Environment, Recreation and Arts (HORSCERA 1993) and the Australian Law Reform Commission (ALRC 1986) recognised Indigenous rights to land and resources, but considered that the interests of conservation represented a legitimate limitation on these rights. The Australian Law Reform Commission also argued that the purpose of the activity should determine if an activity is traditional, not the technology involved (ALRC 1986). Some management agencies allow the use of firearms and vehicles when this is associated with a traditional activity (Lewis 1992). Restricting land use to traditional practices restricts self-determination and avenues of development (Stevens 1997). Commercial use of wildlife can be consistent with conservation objectives, as well as bringing economic benefits to local communities (Wilson *et al.* 1992, English 1997).

Co-management arrangements between agencies and Indigenous communities can provide for control of cultural sites, support traditional management practices, and allow income from tourism to be retained within the local community. There is a growing interest, particularly from international tourists, in visiting sites with a strong cultural emphasis, such as Uluru-Kata Tjuta and Kakadu. Tourism can lead to negative impacts on sites, but if managed carefully, can bring significant economic benefits to Indigenous people. In many areas, Aboriginal people have had little control over the numbers of tourists visiting significant sites. However, the traditional owners at Mutawintji Historic Site and National Park in NSW have succeeded in controlling access to, and interpretation of, significant sites, while at the same time providing themselves with employment opportunities (Case study 3).

Case study 3: Aboriginal ownership of national parks (adapted from Sutton 2000).

NSW legislation, passed in 1996, enabled the return of some national parks to their traditional Aboriginal owners. The Aboriginal owners then lease the lands back to the NSW NPWS, and the area is jointly managed through a board with a majority of traditional owners. The legislation also provides for an annual rental that helps ensure that the lands are managed to meet Aboriginal interests. The first park to be handed back was the 76,000 ha Mutawintji National Park in far west NSW.

Non-Aboriginal people have been visiting Mutawintji since the 1880s, for picnics, swimming and to view the Aboriginal rock art. As well as painted and stencilled art in rock overhangs, the area contains the largest collection of rock engravings in south-eastern Australia. Under NPWS management a campground, walking tracks, rangers' residence and visitor centre were established.

In 1983, the local Paakantji, Malyangapa, Wilyakali, Pantjikali and Wanyaparlku tribes became aware that the NPWS had purchased the two sheep stations surrounding the existing historic site and intended to have a large area gazetted as a national park. Concerns about management of the area led a large contingent of local Aboriginal people to 'blockade' the entrance to the historic site. Changes that were made because of this action and subsequent initiatives included:

- closure of public access to Snakes Cave (a traditional men's initiation site) and Mushroom Rock (a traditional women's birthing site);

- relocation of the campground near Snakes Cave to a more appropriate site;

- realignment of walking tracks to prevent disturbance to archaeological sites;

- establishment of the Mutawintji Culture Centre; and

- establishment of the locally run company Mutawintji Heritage Tours.

The Indigenous Protected Area concept is showing promise as a means of integrating cultural and nature conservation objectives (Szabo & Thackway 2000). In 1998,

Nantawarrina in the Flinders Ranges was the first Indigenous Protected Area proclaimed in Australia. Fencing and feral animal control has been undertaken to protect important natural values. Visitor management strategies have been prepared, and the area has been listed on the register of Australia's protected areas. Nantawarrina has challenged a number of conventional notions about protected area management, including recognition of the capacity of Indigenous people as managers of protected areas; acceptance of the utilisation of biodiversity; and the recognition of cultural values of lands as equivalent to biodiversity values in protected areas (Szabo & Thackway 2000).

Economic methods and their application to analysing conflict and informing policy

The preceding discussion has indicated the complexity of conflicts between natural and cultural heritage conservation. Economic methods are too limited and specific to encompass the entire domain of this complexity. In particular, economics is not very useful for resolving conflicts over definitions, principles, or cultural differences. These matters must be resolved through the various participatory, deliberative, democratic and judicial processes that are either already well established, or evolving to meet this need.

Part of the underlying reason for economics' silence in these areas is that such matters often involve competing interests that cannot be traded off against each other. The methods of natural and cultural resource economics require that individuals are willing to make trade-offs between competing values. However, issues related to matters of definition are most appropriately addressed through consideration of facts and through professional adjudication. Matters of principle or cultural difference often entail consideration of non-negotiable rights. In neither case do the methods of economics provide the necessary structures to achieve an effective resolution.

On the other hand, a particular group can capture a political process, so that it serves the interests of this group rather than the public good. This group could comprise experts whose entrenched professional

values may weigh more in the decision making process than the views of the community (Throsby 1997). Heritage assessments, for example, are generally carried out by cultural heritage professionals, often with little explicit recognition of any values that may be held by the wider community. This practice is based on the implicit assumption that heritage professionals have the same value system as the community they serve, and that, therefore, they can develop plans that adequately represent the community's interest. This is unlikely to be the case, given that such values are projected by the valuer, whose own value system is determined, *inter alia*, by ideological influences such as education, life experience and social-economic circumstances. One of the strengths of economic analysis is that it can generally incorporate the preferences of all stakeholders, albeit that these preference have to be expressed in a certain form.

Economic analyses assume that stakeholders have preferences concerning the issue at hand, and that these preferences meet a set of conditions determined by economic theory. Certain personal, social and moral values may not be expressed in a way that is consistent with all these conditions. Moral concerns, for example, may cause people to refuse to make trade-offs between their income and a non-market good. Moral concerns may be important with respect to both natural and cultural heritage. Some people may consider that we have a duty to protect the natural ecosystems based on their intrinsic value. Other people may regard the cultural heritage in moral terms. Nonetheless, many people are probably willing to make trade-offs between environmental quality and their personal wealth on the one hand, and between cultural heritage and their wealth on the other. Given this, economic methods can still be used to provide useful data for informing policy decisions.

Economic methods can be used to justify public investment in heritage management, assist resource allocation and land use decisions, demonstrate the contribution heritage makes to an economy, optimise resource utilisation and establish sound pricing policies for heritage resources.

Assisting decisions in relation to competing objectives

Economics can help a public sector management agency make decisions that maximise the benefits obtained from investment of public funds. Environmental economists see a part of the solution to environmental problems in terms of ensuring that the environment is properly valued to reflect the relative scarcity of natural resources and assets. The same could be said for heritage resources. It is in the area of competing management objectives, and specific proposals that are designed to address these objectives, that economics can make an important contribution. Economists can potentially assist policy and decision making by analysis the economic implications of proposals, or by contributing to the development of proposals related to the provision of heritage goods.

A key means of judging the relative economic merits of alternative proposals is social benefit cost analysis (BCA). Such analyses involve identification and measurement of all economic benefits and costs, aggregation of these over a given time period using a discount rate to reflect the social time preference for money, and assessment of the results against criteria such as net present value or rate of return.

There are several difficulties in applying BCA to heritage resources. BCAs employ a discount rate that reflects the community's or the investors' time preference for money. It is usual to discount future benefits and costs back to present values using a discount rate. The higher the discount rate, the lower future benefits and costs are valued relative to the present. The use of a discount rate effectively devalues the claims of future generations, and does not address situations where some assets may become more valuable over time due to their greater scarcity or antiquity.

Both natural and cultural heritage affect future generations. If natural or cultural capital is allowed to degrade, future generations will be denied the opportunity to gain benefits from them. If our generation choses to invest in their preservation, both current and future generations benefit. However, there are opportunity costs associated with such investment. Within a protected area, these costs include diversion of funds from other management tasks such as provision of visitor services or control of weeds and feral animals. Since we cannot afford to protect all sites, there is the problem not only of how to chose between sites based on current generations preferences, but also of how to take into account the preferences of future generations. These intergenerational considerations are important aspects of sustainability (Throsby 1997), and raise issues about matters such as the appropriateness of discounting future values.

Despite such limitations, BCA can provide useful advice to decision makers on the relative economic merits of different policy options. To our knowledge, no complete BCAs have been conducted on issues that involve conflicts between cultural heritage conservation, nature conservation and provision of 'wilderness recreation opportunities. To incorporate all components of economic value, a BCA must take into account both market and non-market costs and benefits. An analysis that includes consideration of both these value components is sometimes termed an extended BCA.

Economists use two classes of techniques to measure these various economic values - revealed preference and stated preference methods (Freeman 1993). Conventional revealed preference approaches have relied on measurements based on behavioural expressions of value. People reveal the value they place on a good or service through transactions they make in a market. For some goods, such as recreation undertaken in protected areas, direct markets may not exist, but visitors still reveal their value though their willingness to spend time and money in order to gain access to a site. Such revealed preferences for recreation can be measured using indirect market methods based on travel cost method.

Economists have also developed methods based on what people say about, for example, their willingness to pay (WTP) for nature conservation, rather than what they reveal through their behaviour. Such stated preference methods are particularly important with respect to protected areas, because many of the potential benefits

provided by such areas are not revealed in markets, and cannot be recovered through indirect market techniques. At present, the most significant stated preference technique is contingent valuation (CV). Other stated preference techniques that have been explored include contingent rating, contingent ranking, paired comparisons and choice modelling (Mitchell & Carson 1989, Morrison *et al.* 1996).

We will illustrate the use of non-market valuation methods in addressing land use conflicts between natural and cultural heritage conservation by way of two Victorian case studies - one concerning grazing on the Bogong High Plains (Case study 4), and the other timber harvesting in East Gippsland (Case study 5).

Case Study 4: Bogong High Plains grazing

The Bogong High Plains covers some 120 square kilometres of predominantly treeless vegetation in the Victorian Alpine National Park. European exploration of the area in the 1830s was followed by grazing of cattle, sheep and horses in the 1850s. Cattle and horses were grazed annually from that time, while sheep were taken there in drought years. Stocking rates were sometimes high, with nearly 40,000 sheep taken to the area in the summer of 1902. Heavy stocking, as well as annual burning to promote feed growth, contributed to massive deterioration of the vegetation cover and soils (Johnson 1974). Cooperative activity in the 1940s between government departments and graziers led to the banning of sheep and horse grazing, as well as the restriction of stock numbers. Grazing on the majority of exposed mountain peaks was stopped in the 1950s, and grazing was withdrawn from further sensitive areas in 1991. Since 1992, several thousand head of cattle have been permitted to graze in areas of the High Plains under a leasing system. Lease areas are not transferable beyond the immediate family.

Despite extended planning and decision making processes conducted by the former Land Conservation Council (LCC) and the Department of Conservation and Natural Resources, the issue of High Plains grazing remains contentious. Representative

conservation groups such as the Victorian National Parks Association and Environment Victoria continue to express opposition to the grazing based on its environmental effects. Supporters of grazing object to any reduction in the number of grazing leases.

Botanical research has indicated that some conservation values are compromised by the grazing of cattle on the High Plains. Wahren *et al.* (1994) reviewed evidence from nearly 50 years of data on the impacts of cattle grazing on soil erosion, vegetation structure, and species diversity. They concluded that grazing has had a substantial effect on the structure and composition of subalpine grassland and heathland. For example, grazing has inhibited the regeneration of a number of palatable herbs such as *Craspedia*. Loss of vegetation cover and subsequent erosion of soil is also a problem, particularly in exposed sites. Creek and pond areas suffer greater levels of trampling as cattle go to drink, and sensitive sphagnum bog communities may be badly affected. The visual impact of cattle on the High Plains, and the pollution of water catchments are also of concern.

On the other hand, the grazing is a traditional activity in the area, and the heritage values with which it is associated are commonly used as justification for continued grazing. Alpine graziers have a strong sense of identification with the High Plains. Many of the families that graze cattle at present have had a long association with the alpine area. The use of traditional grazing practices and the atmosphere associated with some of the activities such as the end of season muster are described by Johnson (1974), and have been popularised in films such as 'The Man from Snowy River'. The continued practice of grazing and presence of cattle on the High Plains provide a tangible link with the past. The imagery and sense of history evoked by seeing cattle or cattlemen, or merely by knowing that grazing is still practiced in a traditional fashion, is important to some people.

The two sets of competing values (pro-nature conservation and pro-heritage conservation) may have economic aspects insofar as people are willing to pay to secure their preferred option. Such values

can only be assessed using stated preference surveys such as CV.

The non-market benefits of continued grazing that might motivate a respondent's willingness to pay are:

- non-use value of heritage (the knowledge that grazing continues in the traditional manner providing a link with history);

- use value (benefits derived from using the area while knowing that cattle are still grazed, or from seeing the cattle, which may include visual appeal of cattle); and

- indirect use value (value derived from reading about, seeing pictures in books or films).

The non-market benefits that might motivate a respondent's willingness to pay for stopping grazing are:

- non-use value (knowledge that the High Plains environment is protected from damage by grazing); and

- use value (additional utility High Plains users may derive from their use if the cattle were not present).

Lockwood *et al.* (1996) used two independent CV surveys - a 'stop grazing' version and a 'continue grazing' version - to measure these values. Each version established a contingent market in which respondents could choose to purchase, depending on the version, either the certainty that grazing would continue or the discontinuation of grazing.

The survey was administered by mail, and sent to two random samples of 555 addressees selected from telephone listings across Victoria. The two versions of the surveys presented identical background information on the issue, including a description of the High Plains and alpine grazing, the associated heritage values, and the possible environmental effects. Attitudinal and demographic questions were included to facilitate interpretation of willingness to pay results and check for sample representativeness.

The response rates were 62.5% for the 'continue grazing' version and 64.0% for the 'stop grazing' version. Respondents

generally approved of High Plains grazing, with 73% of respondents to the 'continue grazing' version and 69% of respondents to the 'stop grazing' version expressing support for continued grazing.

The survey found that the values for heritage conservation which were greater than those for the competing value of preserving the natural environment. The 'continue grazing' version estimated the average household WTP for maintaining gazing to be $86. The 'stop grazing' version estimated the average household WTP for removing cattle to be $5. Median willingness to pay for both versions was zero–that is, less than half the respondents had any WTP.

The WTP for the 'stop grazing' scenario was correlated with responses to questions concerning an expectation that they will visit the area in the future, a view that there should be more parks, and that bushwalking was an important aspect of their use of the BHP. The WTP for the 'continue grazing' scenario was correlated with responses to attitudinal questions concerning 'preserving heritage' and 'history of grazing'. However, it is possible that the latter respondents, rather than valuing the cultural heritage benefits described in the scenario, are responding to the concept of continued grazing on a symbolic level. Some heritage values associated with the mountain cattlemen could survive discontinuation of grazing on the Bogong High Plains.

Such problems could potentially be overcome by the use of another stated preference method - choice modelling (CM). In CM, participants are presented with several sets of choices each involving two or more options. Participants are asked to select their preferred option in each choice set. Options are typically defined in terms of salient attributes, including a dollar willingness to pay. Choice models produce estimates of the values of changes in individual attributes within an option, as well as the value of aggregate changes. The analysis of the results of the CM provides a reflection of the trade-offs that each individual makes between the attributes. Application of CM to the BHP issue could establish the relative important of the various attributes that constitute the heritage value of BHP

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grazing. Bennett (2000) examines the potential of CM for cultural heritage applications.

To date the issue of Bogong High Plains grazing has been tackled directly through the political process, and through the deliberations of the now disbanded LCC. The current extent of High Plains grazing is a result of government acceptance of LCC recommendations made in 1979 and 1983. The management plan for the Alpine National Park, which also involved extensive public participation, generally reinforced these recommendations. However, this public participation was dominated by mountain cattlemen on one hand, and conservationists on the other. These groups have attempted to influence government decisions through direct lobbying, demonstrations, media activity, as well as participation in the LCC and management planning processes.

Neither the LCC nor the broader government deliberations were able to capture a representative cross section of relevant community values. CV surveys of representative populations capture the values of people who do not directly participate in current decision making procedures. The data is also more useful than a simple referendum poll, in that CV records both the direction and strength of a respondent's preferences.

Of course, CV should be used as a complement for the existing processes of land use decision making, not as a substitute. As an economic valuation technique, CV has nothing to say about non-economic values which may be motivated, for example, by ethical concerns for cultural heritage conservation or the intrinsic value of native plants. It is of interest to note that more than 50% of respondents had no willingness to pay for either scenario, despite strong expressions of concern for both cultural heritage and nature conservation in the attitudinal questions. This suggests that many peoples' values associated with the issue may be not be captured using an economic methodology such as CV.

Case study 5: Timber harvesting in East Gippsland

Economics generally assumes that consumers get utility from the outputs of an economy, and that society's value of inputs is merely derived from the demand for related outputs. Thus, the economic value of inputs such as timber or minerals is largely related to the demand for output they create. While conventional economic theory suggests that public WTP for an activity that produces goods they would not consume is equal to zero, it is possible that inputs may also have some economic value beyond their derived demand value - a non-market economic value of an input that is additional to the value of both the commodity it produces and any direct or indirect employment or regional economic development associated with its production.

Passmore (1974, p. 39) described two important traditions in Western culture, both of which consider the human race to have particular moral responsibilities towards nature. The first emphasises the need to conserve the earth's fertility, by culling and pruning and good management. The second looks to the perfection of nature by humans. These moral responsibilities suggest the existence of a resource use ethic. Some people might hold such beliefs, considering they to have a moral responsibility to use and manage natural resources independent of the net utility of the goods produced.

A non-market WTP may derive from a conviction that natural resources must be used and not 'wasted', even if doing so confers no direct market economic advantage either to society or to particular individuals. It may also relate to the value people place on traditional use of an area, regardless of the value of the outputs from this use. Lockwood *et al.* (1994) termed such a value an 'intrinsic production value' and tested for its existence in the context of a study into the non-market value of reserving national estate forests in south-eastern Australia from timber harvesting.

To measure both the preservation and possible non-market intrinsic production values a series of CV surveys were conducted that determined the magnitude of Victorians' WTP for protecting areas of south-eastern Australian native forest in national parks. The key issue examined was whether East Gippsland unreserved national estate forests should be placed in national parks or be available for timber production. As well as

measuring community WTP for reserving East Gippsland national estate forests in national parks, Lockwood *et al.* (1994) also tested for any WTP to ensure logging of these forests, and estimated the proportion of this WTP which might be attributed to an intrinsic production value.

The mean WTP for continued logging was $38, and the median was zero. Respondents allocated 29% of their WTP to the opportunity cost of unemployment and 30% to the non-market value of 'just knowing the forests are used for logging'. This figure is about 4% of the mean WTP for reserving the same areas in National Parks of about $255 (Lockwood *et al.* 1994).

Justifying public investment

Natural capital is the stock of environmental components, dependent on natural processes for their distribution and abundance, that provides goods and services in support of socio-economic activity (van den Bergh 1996). Extending this notion, Throsby (1997, p. 15) described cultural capital as the capital value that can be attributed to a place 'which is additional to the value of the land and buildings purely as physical entities of structures, and which embodies the community's valuation of the asset in terms of its social, historical or cultural dimension'. Like other forms of capital, natural and cultural capital can degrade if they are neglected, and can be enhanced or created by judicious investment.

Both natural and cultural assets are, at least in part, public goods, so that their supply must, again at least in part, be funded by government. The public sector is required to provide those social goods and services required by the community where the market is an inefficient producer, and to manage situations where externalities arise that affect social welfare. This conclusion is supported by economic theory, and by most natural and cultural resource economists (Throsby 1997).

Government instruments that are typically applied in relation to public goods include setting standards, prescribing behaviour, limiting land use, establishing decision processes, establishing infrastructure and institutions, direct government ownership and operation, defining property rights, providing information, designating,

classifying or labelling goods to indicate their status, as well as voluntary measures directed at other governments, the private sector and individuals such as strategies, guidelines, codes of practice, charters, grants and tax incentives (Young *et al.* 1996, James 1997, Throsby 1997, Miles *et al.* 1998). Economic analysis can be used to explore the implications of such interventions in terms of their economic efficiency, cost effectiveness, or contribution to employment and economic development. Methods directed towards the latter two ends are briefly considered in the next subsections.

Considering the efficient supply of public goods, it is well known that markets under supply public goods such as biodiversity conservation and some cultural heritage items over which individual property rights cannot meaningfully be allocated. Under supply of public goods constitutes a failure to maximise economic welfare. However, intervention must lead to improved allocation outcomes over those of the free market and the ensuing benefits should exceed the cost of such intervention, including those of enforcement and market distortions (Panayotou 1992). It is therefore important that policies designed to provide economic incentives and establish cost-sharing arrangements are based on assessment of all economic benefits and costs of heritage conservation. Quantification of the relative economic benefits of natural and cultural heritage protection can help an agency argue for and justify allocation of public money to the maintenance and enhancement of heritage assets. Again, BCA can be used for this purpose.

Demonstrating economic impact

Moves towards greater market orientation in the public sector, including heritage conservation, have led to pressures for evaluation of the extent that heritage tourism contributes to local economies, as well as improved cost recovery, usually through imposition of user charges (Hansen *et al.* 1998). Economic impact analysis examines how a policy will affect important components of an economic system, such as employment, economic growth, or the revenues of particular industry sectors. It can be used to assess how much additional economic activity is generated by an

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investment of public funds at a local, regional or national level. An analysis of the importance of a project for attracting visitors and their expenditure needs to taking into account factors such as how the project displaces visitors and their spending from other regional attractions. Cost per job created is one measure that is used for assessing the cost effectiveness of public investments (Hansen *et al.* 1998).

A technique used to measure how an allocation of resources would affect regional income, expenditures and employment is called Input-Output analysis. For example, the regional economic impacts of the Dorrigo and Gibraltar Range National Parks in northern NSW were assessed by Powell & Chalmers (1995) using Input-Output analysis.

Optimising resource utilisation

Economics can assist in optimising returns on investment, as well as ensuring the sustainability of resource production. To give two examples, economic and biological information, together with traditional ecological knowledge, can be used to develop harvesting regimes for native species that satisfy both nature conservation and cultural objectives. Cost effectiveness analysis can be used to establish the least expensive way of achieving a given outcome.

For cultural heritage sites, managers have to make a choice between conserving it its present state, slowing its deterioration, restoring it to some former state, or changing it some new state, which may involve adaptive re-use. Adaptive re-use of a site can be an economically viable alternative to letting it degrade. The old shearers' quarters at Kinchega National Park, for example, has been turned into tourist accommodation. Coolart Homestead, an historic farm site managed by Parks Victoria, has been refurbished to cater for nature conservation activities that take place in the surrounding landscape. At Coolart, the conservation plan provides for adaptive re-use that does not diminish the general form and character of the buildings, or of the wider site (Grinpukel 2000). Investment analysis, which is similar to BCA, except that only direct financial expenditure and revenue are considered, can indicate whether such projects could

enable a site to be self funding, or at least less expensive to manage.

Pricing visitor services

Economic principles can be used to help determine who should pay for the provision of natural and cultural heritage. The full cost of providing services to specific identifiable beneficiaries should be recovered by way of charges to them. The costs of providing public benefits that are unable to be attributed and charged to specific beneficiaries should be treated as community service obligations and funded collectively, usually through tax revenue. Where costs are subsidised by government, they should be defined explicitly so that unsustainable precedents are not established.

Visitors may enjoy a range of economic benefits from heritage resources. Visitors derive use value from facilities such as walking tracks and visitor centres. Non-visitors may value the existence of the resource, without necessarily needing to access the site. Businesses may offer services directly associated with the resource such as tours, and regional businesses and local communities may gain benefits from visitors purchasing fuel, food, accommodation and other services.

Economic analysis can help an agency to identify appropriate pricing polices for providing such visitor services related to natural and cultural heritage. Managers should be able to justify their pricing of visitor goods and services so that decisions are neither arbitrary nor inequitable (Loomis & Walsh 1997). Ultimately, the question of whether to charge fees for using natural and cultural areas is a political one. It can depend on management objectives, as well as legal and administrative constraints. Objectives for developing a user pays policy may include: equitable provision of visitor opportunities; cost recovery; generation of profit; and management of visitor impacts to reduce or redistribute numbers, reduce congestion, user conflicts and environmental damage (Lindberg 1998).

There is an important philosophical difference in paying for the product rather than for the right to enter a protected area (SECARC 1998). It may be appropriate to use economic principles to set charges for

value-added services. Where user charges can be justified, the economically efficient solution is to adopt a policy of marginal cost pricing. Demand and supply functions have been used, for example, to estimate an efficient price for recreation in Queensland's Girraween National Park (Beal & Harrison 1997). Costs can be calculated to include both the direct costs of providing facilities and services, and external effects associated with rectifying any environmental impacts of the visitor activities. However, such marginal cost pricing may not cover the average total costs faced by an agency. Effective competition among private suppliers would tend to drive user fees to minimum cost levels, but protected area agencies tend to have a different cost structure. Charging a price equal to the average total cost will ensure that an agency does not make a loss, but this may not produce an efficient amount of visitor services (that is, net benefits may not be maximised).

There are also a number of other issues to consider in pricing visitor resources. Should the present generation of users contribute towards rehabilitating damage arising from past visitor use? How do managers prevent a focus on user pays diverting attention away from core non-commercial management functions? Should user charges be retained for the management of that particular park? Clearly, establishing a visitor pricing policy is a complex task. It is not surprising therefore, that many agencies are having difficulty grappling with these complexities. In particular, some agencies seem reluctant to use economic expertise to help them establish sound pricing policies. Economic understandings of visitor demand can assist a manager to improve their decisions.

Implications for the Australian Heritage Commission

Cultural heritage is the visual manifestation of the identity of a cultural group and its constituent individuals. Thus, to a large degree, cultural heritage policy making has much overlap with contemporary social policy. The way we see and treat our natural environment is also a social construct, determined by the values we bring to it.

The way we phrase approaches to public decision-making influences the outlook of present and future generations. The current trend to call rate payers 'customers' rather than 'citizens,' for example, sets up a semantic field whereby the obligations of the council to the individual are reinforced, while the obligations of the individual to the community are entirely removed. That interest in community service seems to be dropping is not surprising. This goes hand in hand with the current trend to regard heritage places as assets to be managed in manners almost akin to the corporate car fleet or rented office space for the administration. While this may appear as semantic hair-splitting, we have to be conscious that such terms can create and perpetuate unintended outcomes. Economic methods can make a powerful contribution to addressing some types of heritage conflicts, but care should be taken that their application does not result in the commodification of nature and culture. There are a number of areas, particularly in relation to non-negotiable values, where economic methods simply cannot function.

Given this, the AHC may wish to consider the following education, research and advocacy roles in relation to heritage economics and dispute resolution.

1. Conflicts over definitions, principles, or cultural differences must continue to be resolved through participatory, deliberative and democratic and judicial processes. We have highlighted several features of such conflicts, in particular the imbalance that exists between the status of cultural and natural heritage values. The AHC has a significant role in facilitating and contributing to the debate about such matters. The AHC could further encourage, through targeted education programs, a more balanced and informed approach amongst decision makers and park professionals in heritage management agencies.

2. Research is needed into how we might better address conflicts that involve competing non-tradeable values. Such research might also address the time pressure implications of a genuine commitment to fully engage with Indigenous peoples. We have indicated that economics cannot effectively

address such conflicts. However, there may be other formal methods that could augment the various processes that are currently used. Citizens' juries, for example, are one approach that may merit further investigation. Though perhaps too much to ask, it would be particularly useful if an approach could be developed that was accepted by all stakeholders.

3. Economic methods directed towards assisting resource allocation and land use decisions, optimising resource utilisation and establishing sound pricing policies for heritage resources, are of more use to protected area management agencies, than to an organisation such as the AHC. Though more research is always useful, the greater challenge is helping management agencies to make effective use of the available tools. We do not see a significant role for the AHC in these areas, unless it is one of advocating to management agencies the advantages of using economic methods for the purposes listed above.

4. The AHC may wish to fund, or advocate the use of, economic methods to justify public investment in heritage management, and demonstrate the contribution heritage makes to economies. Continued data collection and dissemination in these areas would be a useful contribution to the conservation of natural and cultural heritage in Australia.

References

Aboriginal and Torres Strait Islander Commission 1995, *Recognition, rights and reform: a report to government on native title social justice measures*, Commonwealth of Australia, Canberra.

Ah Kit, J. 1995, Aboriginal aspirations for heritage conservation, *Historic Environment*, 11: 34-36.

Allen, J. 1995, 'A short history of the Tasmanian Affair', *Australian Archaeology* 41: 43-48.

Australian Law Reform Commission 1986, 'The recognition of traditional hunting, fishing and gathering rights', **in** *The recognition of Aboriginal customary laws Vol. 1. Report No. 31*, AGPS, Canberra.

Australian Conservation Foundation 1998, *Draft policy: wilderness and Indigenous cultural landscapes in Australia*, ACF, Melbourne.

Beal, D.J. and Harrison, S.R. 1997, *Efficient pricing of recreation in national parks: a Queensland case study*, Paper presented to the AARES conference, Gold Coast.

Bennett J. 2000, *Natural heritage valuation methods: application to cultural heritage*, paper presented to the workshop Heritage economics: challenges for heritage conservation and sustainable development in the 21ˢ Century, AHC, Canberra.

Bickford, A. 1981, 'The patina of nostalgia', *Australian Archaeology*, 13: 1-7.

Bickford, A. 1993, 'Women's historic sites', **in** du Cros, H. and Smith L.J. (eds), *Women in archaeology. a feminist critique*, Research School of Pacific Studies, Australian National University, Canberra.

Birckhead, J. 1992, 'Traditional Aboriginal land management practices at CSU - the cultural politics of a curriculum innovation', **in** Birckhead, J., De Lacy, T. and Smith, L. (eds), *Aboriginal involvement in parks and protected areas*, Aboriginal Studies Press, Canberra.

Bowdler, S. 1988, 'Repainting Aboriginal rock art', *Antiquity,* 62: 517-523.

Bulbeck, C. 1988, *The stone laurel: of race, gender and class in Australian memorials*, Institute of Cultural Policy Studies, Griffith University, Brisbane.

Canning, S. 1999, *'Contested space'–the role of social value in the assessment of cultural significance*, B.App.Sci (Hons) Thesis. School of Environmental and Information Sciences, Charles Sturt University Albury.

Canning, S. and Spennemann, D.H.R. (in press), 'Contested space: social value and the assessment of cultural significance in New South Wales, Australia' **in** *Heritage landscapes: understanding place and*

communities, Proceedings of the Lismore Conference.

Colchester, M. 1997, 'Salvaging nature: Indigenous peoples and protected areas', **in** Ghimire, K.B. and Pimbert, M.P. (eds), *Social change and conservation: environmental politics and impacts of national parks and protected areas,* Earthscan Publications, London.

Collins, J., Klomp, N. and Birckhead, J. 1997, *The recognition of Aboriginal and Torres Strait Islander hunting, fishing and gathering rights in Australia: a review of legislation, policy, international and common law,* Johnstone Centre, Charles Sturt University, Albury.

Davison, G. 1991, 'A brief history of the Australian heritage movement', in Davidson G. and McConville C. (eds), *A heritage handbook,* Allen & Unwin, Sydney.

English, A.J. 1997, 'Terrestrial hunting and gathering by Aboriginal people in New South Wales: an assessment of law and policy', *Environmental and Planning Law Journal,* 14(6): 437-455.

Fourmile, H. 1989, 'Aboriginal heritage legislation and self-determination', *Australian Canadian Studies* 7: 45-61.

Freeman, A.M. 1993, *The measurement of environmental and resource values: theory and methods,* Resources for the Future, Washington.

Ghimire, K.B. and Pimbert, M.P. 1997, 'Social change and conservation: an overview of issues and concepts', **in** Ghimire, K.B. and Pimbert, M.P. (eds), *Social change and conservation: environmental politics and impacts of national parks and protected areas,* Earthscan Publications, London.

Goodall, H. 1996, *From invasion to embassy: land in Aboriginal politics in New South Wales,* Allen & Unwin, Sydney.

Grinpukel, J. 2000, 'Adaptive re-use of Coolart homestead', **in** Worboys, G., Lockwood,. M. and De Lacy T. *Protected area management: principles and practice,* Oxford University Press, Melbourne, (in press).

Grzimek, B. and Grzimek, M. 1977, *Serengeti shall not die,* Fontana, London.

Hansen, T.B., Christoffersen, H. and Wanhill,. S. 1998, 'The economic evaluation of cultural heritage projects: conflicting methodologies', *Tourism, Culture & Communication,* 1: 27-48.

Harris, K. 1995, *The identification and comparison of non-market values: a case study of Culcairn Shire (NSW),* Honours Thesis, Charles Sturt University, Albury NSW.

Harris, M. 1995, 'Scientific & cultural vandalism: the Academy's failure to accept the validity of the return of Aboriginal cultural heritage material', *Alternative Law Journal,* 21(1): 28-32.

Head, L. and Hughes, C. 1996, 'One land, which law? Fire in the Northern Territory' **in** R. Howitt, Connell, J and Hirsch (eds), *Resource nations and Indigenous peoples,* Oxford University Press, Oxford.

Hope, J. 1993, 'Double bind: women archaeologists in the New South Wales National Parks Service', **in** du Cros, H. and Smith L.J. (eds), *Women in archaeology. a feminist critique,* Research School of Pacific Studies, Australian National University, Canberra.

HORSCERA 1993, *Biodiversity, the role of protected areas.* AGPS, Canberra.

IUCN 1994, *Guidelines for protected area management categories,* IUCN, Gland.

James, D. 1997, *Environmental incentives: Australia's experience with economic instruments for environmental management,* Environment Australia, Canberra.

Johnson, C. 1992, *What is social value?,* Technical publications series No. 3. Australian Heritage Commission, Canberra.

Johnson, C. 1993, 'Gaps in the record: finding women's places' **in** du Cros, H. and Smith L.J. (eds), *Women in archaeology. a feminist critique,* Research School of Pacific Studies, Australian National University, Canberra.

Johnson, D. 1974, *The alps at the crossroads,* Victorian National Parks Association, Melbourne.

Jonas, W. 1991, *Consultation with Aboriginal people about Aboriginal*

heritage: report to the Australian Heritage Commission, AGPS, Canberra.

Kerr, J.S. 2000, *The conservation plan (5th ed)*, National Trust of Australia [NSW], Sydney.

Lambert, D. 1989, *Conserving Australian Rock art. A manual for site managers*, Australian Institute of Aboriginal Studies Report Series, Aboriginal Studies Press, Canberra.

Langford, R. 1983, 'Our heritage–your playground', *Australian Archaeology* 16: 1-6.

Langton, M. 1996, 'Art, wilderness and *terra nullius*', **in** *Ecopolitics IX Conference papers and resolutions*, Northern Land Council, Darwin.

Lawson, B. 2000, 'Bama involvement in the management of the Queensland Wet Tropics World Heritage Area', **in** Worboys, G., Lockwood,. M. and De Lacy T. (eds) *Protected area management: principles and practice* (website), URL: http://www.nrsm.uq.edu.au/iucn/

Lennon, J. and Mathews, S. 1996, *Cultural landscape management: guidelines for identifying, assessing and managing cultural landscapes in the Australian alps national parks,* Jane Lennon & Associates, Melbourne.

Lennon, J., Egloff, B., Davey, A. and Taylor, K. 1999, *Conserving the cultural values of natural areas: a discussion paper*, Jane Lennon and Associates and University of Canberra, Canberra.

Lewis, H.T. 1992. 'The technology and ecology of nature's custodians: anthropological perspectives on Aborigines and national parks', **in** Birckhead, J., De Lacy, T. and Smith, L. (eds), *Aboriginal involvement in parks and protected areas*, Aboriginal Studies Press, Canberra.

Lindberg, K. 1998, 'Economic aspects of ecotourism', **in** Lindberg, K., Epler-Wood, M. and Engeldrum, D. (eds), *Ecotourism: a guide for planners and managers, Vol. 2,* Ecotourism Society, Bennington.

Lockwood, M. Tracey, P. and Klomp, N. 1996, 'Analysing conflict between cultural heritage and nature conservation in the Australian alps: A CVM approach', *Journal of Environmental Planning & Management*, 39(3): 357-370.

Lockwood, M., Loomis, J., and De Lacy, T. 1994, 'The relative unimportance of a non-market willingness to pay for timber harvesting', *Ecological Economics* 9: 145-152.

Look, D.W. and Spennemann, D.H.R. 2000, 'Disaster preparedness for cultural properties', *Cultural Resource Management* 23(7) in press.

Loomis, J.B. and Walsh, R.G. 1997, *Recreation economic decisions: comparing benefits and costs (2nd ed)*. Venture, State College.

Lowenthal, D. 1985, *The past is a foreign country*, Cambridge University Press, Cambridge.

Martin, R. 1992, 'Of koalas, tree-kangaroos and men', *Australian Natural History,* 24(3): 22-31.

Mitchell, R.C. and Carson, R.T. 1989, *Using surveys to value public goods: the contingent valuation method*, Resources for the Future, Washington.

Miles, C.A., Lockwood, M. and Walpole, S. 1998, *Incentive policies for remnant native vegetation conservation*, Johnstone Centre Report No. 108, Johnstone Centre, Albury.

Morrison, J. 1997, 'Protected areas, conservationists and Aboriginal interests in Canada', **in** Ghimire K.B. and Pimbert M.P. (eds), *Social change and conservation: environmental politics and impacts of national parks and protected areas*, Earthscan, London.

Morrison, M.D., Blamey, R.K., Bennett, J.W. and Louviere, J.J. 1996, *A comparison of stated preference techniques for estimating environmental values*, Choice Modelling Research Report No. 1, University of New South Wales, Canberra.

Mulvaney, D.J. 1991, 'Past regained, future lost: the Kow Swamp Pleistocene burials', *Antiquity* 65: 12-21.

Njiforti, H.L. and Tchamba, N.M. 1993, 'Conflict in Cameroon: parks for or against people?', *Indigenous peoples and protected areas: the law of the mother*, Earthscan, London.

O'Neill, J. and Spennemann, D.H.R. (in press), 'The management of German colonial heritage in post-colonial Micronesia', *Cultural Resource Management* 24(3).

Panayotou, T. 1992, 'The economics of environmental degradation: problems, causes and responses', **in** Markandya, A., Richardson, J (eds), *The Earthscan reader in environmental economics*. Earthscan Publications Ltd., London.

Passmore, J., 1974, *Man's responsibility for nature: ecological problems and Western traditions*, Duckworth, London.

Pearson, M. and Sullivan, S. 1995, *Looking after heritage places: the basics of heritage planning for managers, landowners and administrators*, Melbourne University Press, Melbourne.

Powell R. and Chalmers, L. 1995, *Regional economic impact Gibraltar Range and Dorrigo National Parks*, NSW NPWS, Sydney.

Royal Commission into Aboriginal Deaths in Custody 1991, *National report: overview and recommendations*, AGPS, Canberra.

Senate Environment, Communications & the Arts References Committee 1998, *Access to heritage: user charges in museums, art galleries and national parks*, Commonwealth of Australia, Canberra.

Smith, L. 1996, 'Significance concepts in Australian management archaeology', **in** Smith, L. and Clarke, A.(eds), *Issues in management archaeology*, University of Queensland, Brisbane.

Smyth, D. 2000, 'Indigenous peoples and marine protected areas', *in* Worboys, G., Lockwood, M. and De Lacy T., *Protected area management: principles and practice,* Oxford University Press, Melbourne, (in press).

Snelling R. A. and Schapper, J. 1993, 'Historic landscapes: a comparison of the attitudes of the broader community & heritage experts towards historic landscape conservation,' *Historic Environment*, 10(4): 13-19.

Spennemann, D.H.R. 1992, World War II remains on Central Pacific Islands:

perceptions of heritage versus priorities of preservation, *The Pacific Review* 5 (3): 278-290.

Spennemann, D.H.R. 1993, 'Multicultural resources management — a Pacific perspective', *Historic Preservation Forum*, 7(1), 20–26.

Spennemann, D.H.R. and Meyenn, R.J. 1996, *Melanesian cultural heritage management identification study: strategic issues document*, Report No. 61, Johnstone Centre, Albury.

Spennemann, D.H.R. 1998, 'Cultural heritage management of unexploded ammunition', *Cultural Resource Management* 21(8): 48-51.

Spennemann, D.H.R. 1999, 'Cultural heritage conservation during emergency management: luxury or necessity?', *International Journal of Public Administration* 22(1): 745-804.

Spennemann, D.H.R. and Look D.W. 1994, 'Writing conservation management plans: concepts and considerations for conservation management plans'*,* **in** Look, D. and Spennemann, D.H.R. (eds), *Conservation management of historic metals in tropical environments,* War in the Pacific National Historical Park, Guam.

Spennemann, D.H.R. and Look, D.W. 1998, 'From conflict to dialogue, from dialogue to cooperation, from cooperation to preservation', in: Spennemann, D.H.R. and Look, D.W. (eds), *Disaster management programs for historic sites*, Association for Preservation Technology, Western Chapter and Johnstone Centre, Charles Sturt University, San Francisco and Albury:

Spennemann, D.H.R., Lockwood, M. and Harris K. 2000, 'The eye of the professional vs. opinion of the community: implications for heritage planning', *Cultural Resource Management* 23(8) in press.

Stevens, S. 1997, *Conservation through cultural survival. Indigenous peoples and protected areas,* Island Press, Washington.

Sutton, M. 2000, 'Aboriginal ownership of national parks and tourism', **in** Worboys, G., Lockwood, M. and De Lacy T. (eds), *Protected area management: principles*

and practice (website), URL: http://www.nrsm.uq.edu.au/iucn/

Szabo, S., Thackway, R. 2000, 'Indigenous peoples managing Indigenous protected areas - Nantawarrina, South Australia', **in** Worboys, G., Lockwood, M. and De Lacy T. (eds), *Protected area management: principles and practice* (website), URL: http://www.nrsm.uq.edu.au/iucn/

Throsby, D. 1997, 'Seven questions in the economics of cultural heritage', **in** Hutter, M. and Rizzo, I. (eds), *Economic perspectives on cultural heritage*, Macmillan, London.

Tweedy A.R. 2000, 'Beyond disaster response: a public policy challenge for the new millennium', *Cultural Resource Management*, 23(7) in press.

Tunbridge, J.E. and Ashworth, G.J. 1996, *Dissonant heritage :the management of the past as a resource in conflict*, Wiley, New York.

UN 1998, *Draft United Nations declaration on the rights of Indigenous peoples*, URL: http://www.hookele.com/netwarriors/dec-En.html

van den Bergh, J.C.J.M. (1996) *Ecological economics and sustainable development: theory methods and applications*, Edward Elgar, Cheltenham.

Wahren, C-H. A., Papst, W.A. and Williams, R.J. 1994, 'Long-term vegetation change in relation to cattle grazing in subalpine grassland and heathland on the Bogong High Plains: an analysis of vegetation records from 1945 to 1994', *Australian Journal of Botany,* 42: 607-639.

Wallis, A. 1994, 'Aboriginal involvement in national park management', **in** S*urviving Columbus: Indigenous peoples, political reform and environmental management in North Australia*, North Australia Research Unit, Australian National University, Canberra.

Webb, S. 1987, Reburying Australian skeletons, *Antiquity* 61: 292-296.

Wilson, G., McNee, A and Platts, P. 1992, *Wild animal resources: their use by Aboriginal communities*, Bureau of Rural Resources, Canberra.

Worboys, G., Lockwood, M. and De Lacy T. 2000, *Protected area management: principles and practice*, Oxford University Press, Melbourne, (in press).

Young, M.D., Gunningham, N., Elix, J., Lambert, J., Howard, B., Grabosky, P. and McCrone, E. 1996, *Reimbursing the future: an evaluation of motivational, voluntary, price-based, property right, and regulatory incentives for the conservation of biodiversity*, Department of the Environment, Sport and Territories, Canberra.

Opportunities and needs: A research agenda for Heritage Economics Research

Mike Young, Workshop Chair and President Australia New Zealand Society for Ecological Economics

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Heritage Economics

This agenda arises from comments and papers presented to Australia's first heritage economics workshop. Heritage economics is a new field of research. It seeks to contribute to the improved management, development and conservation of heritage values. Heritage values are usefully partitioned into natural heritage values and cultural heritage values. Typically, Indigenous values are seen as a subset of a wider set of cultural values. Another subset of values are the suite of values typically represented by historical buildings, sites and precincts.

Conceptually, economics has much to offer to those responsible for the management development and conservation of all these heritage values. The harsh reality is that budgets are limited and that the value of gross benefits associated with a project do not always exceed the costs. Economic analysis can also be useful in finding more cost effective and efficient ways to implement projects.

At present, the number of economists active in the general area of heritage economics is relatively few. The closest sub-disciplines are probably ecological economics, development economics and the economics of tourism. Throsby's paper suggests that the small number of people currently interested in heritage economics is due, in part, to a lack of a common language. He suggests that the solution lies in the development of models that envision heritage values as 'assets' of value to society. Economists are interested in ways and means to understand, manage and increase the value of assets. Their skills in analysing the value of tangible assets like buildings and expected income streams from tourism are strong. Typically, economists are much less experienced

skilled in analysing intangible concepts and processes. Nevertheless, techniques are being developed and are being used.

Many of the techniques developed by economists interested in the economics of tourism are directly transferable to heritage economics. Resource, environmental and ecological economists all make a distinction between market and non-market assets. To make progress in this new field, however, it is necessary to further classify these assets into those that are tangible, partially tangible or intangible. Table One summarises the state of methodological development associated with each cell in the resultant matrix.

Core areas for research

Papers presented at the workshop suggest a rich set of research challenges and opportunities that could deliver short and long term benefits to the Australian Heritage Commission and other people interested in the management, protection and development of heritage economics. They include research on

- Valuation - especially the development of techniques that can be used to help evaluate policy choices;

- Instrument choice - what policies are available to heritage managers, how effective are they and how can interaction among them be managed to maximum advantage;

- Regional development opportunities - how to quantify and evaluate the relative benefits of alternative heritage policies and development strategies on the contribution they make to an economy and to society;

- Conceptual models of the heritage conservation and development process -

lv   Policy and Economic Research Unit, CSIRO Land and Water, PMB 2, Glen Osmond, SA 5064

how should changes in heritage values across space and through time be modelled;

• Trading off cultural, economic and natural heritage values - how does one (or can one) advise people about choices among strategies that trade off cultural gains for economic gains.

Valuation issues

Economic analysis typically focuses on the value of changes at the margin. Typically, one or more alternatives are compared with a baseline scenario. As indicated in Table One, however, the development of techniques capable of valuing intangible values, especially those associated with intangible cultural assets is still in its infancy. How, for example, does one trade-off market development opportunities with values that are central cultural image and identity? For issues like these existing methods need further testing and alternative ones need to be explored. To illustrate the extent of the challenge, consider the contrast between the Gold Coast and Noosa in Queensland. The cultural and natural heritage values at each location are different. How does one make choices between decisions that are likely to result in developments of the form found along Queensland's Gold Coast versus those at Noosa? O'Hare's research suggests that these choices have irreversible long-term consequences for a region and a nation. Perhaps a new methodology is needed.

Papers presented at the workshop by Common and by Bennett reveal tensions among alternative valuation techniques. Common is critical of contingent valuation techniques, while Bennett argues that by moving from contingent valuation to choice modelling many if not all the criticisms of contingent valuation techniques are overcome. Heritage managers, like the Executive Director of the Australian Heritage Commission – Bruce Leaver - point out that they consider it would be easier to compete for scarce government resources if they could show that there is a significant positive return to increased investment in heritage conservation and development. Common suggests that the focus should be on estimation of opportunity costs and commercial benefits. He is of the view that other (non-economic)

processes should be used to guide decisions that affect intangible values.

An important valuation issue is the spatial extent of the population whose values are included in the analysis. From a local perspective, a decline in the quality of a natural asset, such as an estuary, is likely to cause people interested in estuary fishing to go to another region. One local economy declines but another expands as fishers relocate. At the National level, there is little real loss. Methods that provide appropriate guidance need careful assessment.

Models of the development and evolution of heritage values

In his paper to the workshop, Butler presented a model of the development and evolution of heritage values in regions where Indigenous values are not an issue. The model is a heritage adaptation of the phases that characterise the development of tourism. The Butler model presents one perspective that is worthy of application to Australian conditions. In some circumstances, especially when Indigenous cultures are involved, other models may be more appropriate. Models like Butler's need to be developed for the many different situations that characterise the development and conservation of heritage values. The ideal model would be one that can cope with issues as difficult and contentious as those associated with the development of National icons like Uluru/Ayers Rock. Can one, for example, increase the capacity of Uluru/Ayres Rock to accommodate international tourists without compromising the Indigenous values associated with the site? Testing of existing models and the development of new ones could provide significant insights into the choices available to local government and/or local communities.

Table 1 – Assessment of the nature

of some key methodological challenges associated with heritage economics

	Market values	Non-market values
Tangible assets (eg Buildings, national parks etc that can be)	Well developed and non-controversial	Techniques being tried debated and tested
Partially tangible assets (eg A sense of place that attracts tourists)	Techniques that rely on revealed preference techniques	Techniques being tried for natural heritage but application to cultural assets is at very early stage of development
Intangible assets (Cultural heritage of value to a community of people)	Techniques still regarded as controversial. No clear consensus as to methodology.	A new area involving very difficult concepts.

One of the biggest challenges for heritage economics is to find ways to evaluate changes in values that alter underlying or fundamental cultural values. Some of these changes are not exogenous to the policy options available. Should, for example, a community encourage people to visit them or should they discourage this so that they retain their current set of cultural values? Traditional cost-benefit analyses are not well suited to the analysis of such issues. Instead, we need methodologies that enable assessment of the consequences and merits of changing cultural values. In particular, there is a need for people to develop models that enable development of models of cultural sustainability. At the workshop, papers on the assessment of cultural issues in developing countries presented by Lal and Young suggest that insights in to this issue may come from the literature on development. It is possible, that these models may, with little development, be applicable to the analysis of options for towns that have the option to develop or protect heritage values.

Another issue is the interaction of natural and cultural values. At the workshop Lennon suggested that natural and cultural values are interdependent. Improvements in one, lead to improvements in the other. If this is the case, then how does one determine the optimal investment to make?

Data collection issues

In Australia, and many other countries, there are very few integrated data sets enabling people to model and analyse

heritage management and development alternatives from an economic perspective. As suggested by Robins, there is considerable opportunity to use and improve existing data sets. The Bureau of Tourism Research is the one of the main repositories for this information. One of the biggest deficiencies is the dearth of time-series data that is internally consistent. Without such data, it is very difficult to test models such as those that have being developed by Butler. Indeed, Hall's paper identifies lack of data as one of the biggest impediments to the application of heritage economics to real world problems. To some extent, this can be overcome by collecting the necessary data. This is possible for location specific studies but is much more difficult for state and nationwide studies.

Another issue is the need for partitioned data sets that enable differentiation of cultural values from tourism values, natural heritage values, etc. How much, for example, does an additional restored building add to the heritage value of a town. Is it just the increase in the value of that building that needs to be assessed or does restoration of one building increase the value of all other buildings? Data that tracks the impact of restoration activities like this is virtually non-existent. Papers by Cotterill, by Hansen, and, also, by McArthur suggest that data on the private and public benefits of restoration could have a dramatic impact on heritage policy.

There is also a need for data organised in a manner that enables comparison among

regions. A related issue is the need for access to data on market trends. Hundloe, for example, argues that global stocks of quality heritage assets are diminishing. At the same time, as wealth increases, people can be expected to spend more money on visits to observe, experience and enjoy these assets. This means that we can expect the value of those assets that remain to increase in value more quickly than many other goods. Data on the extent and significance of these trends is necessary. If his observation is correct, then the return to investment in heritage conservation activities will be much more attractive than it otherwise would be.

Instrument choice

An important policy issue is the question of how costs of restoration and development should be shared between society and private investors. What obligations do the owners of heritage assets have to maintain them for society?

Across Australia and internationally, a wide array of incentive instruments are being used to protect and enhance heritage values. Comparative analyses of the relative effectiveness of these instruments is needed and, also, guidelines on the most effective ways to utilise them in concert with one another.

Chisholm's paper suggests that research on alternative property right arrangements could pay dividends. What is the best way to define access rights? Should people have exclusive rights or should they be required to offer all people a right to access to an important area? What type of tenure arrangement should be offered and what conditions should be attached to the arrangement offered? How secure is it? What charges should be paid?

Chisholm also suggests a need for more research on the issue of when and how much compensation should be paid. He perceives that this instrument may have an important influence on the aggregate stock of heritage assets available to a nation. If compensation is offered, then individuals may be more inclined to maintain that which remains.

A related issue, is the economics of listing and classifying assets. Both Mules' and Abelson's papers suggest that the economic returns that result from a heritage listing are

poorly understood. The design of such classification systems is important. The simpler they are the more the likelihood that they will be widely appreciated and valued.

Trading off values

How does one (or can one) advise managers about choices among strategies that trade-off cultural gains for economic gains? Lal and Young, plus others participating in the workshop, like Lockwood, suggest that economic theory, as presently developed, is better at assessing some issues than others. Is it, for example, valid to conceive a production process that produces two assets? The first product is culture. The second product is natural heritage. Can an indifference curve be drawn in a manner that indicates the willingness of one or more people to trade-off cultural improvement for improvement in the quality of the natural environment?

Returns on investment

Finally, there is the question of how much money should be invested by communities, State and Commonwealth governments in heritage programs. The Natural Heritage Trust is being used as a catalytic investment in the protection of Australia's natural resources and its environment. The Nation has no equivalent Cultural Heritage Trust, but does have an Australian Heritage Commission. Is the amount that the nation investing in heritage conservation optimal or should we invest more? Zeppel's research on Indigenous heritage tourism suggests that, as a Nation, Australia may be under-investing in the development of Indigenous values for economic as well as cultural reasons. In other areas, we may be investing too much.

In helping to decide how much investment to make, Mules suggests that more effort should be devoted to the development of input-output models enabling the flow-on benefits of policy alternatives to be investigated. Ideally, these models should enable influences on cultural, natural and historical assets to be analysed independently. If Common's advice is taken, the focus should be on commercial benefits, opportunity cost and cost-effectiveness. If Bennett's advice is taken, these models should be extended to enable assessment of all values including those that

are partially intangible. With time and progress, it may also be possible to value those dimensions of heritage that are completely intangible.

Concluding comments

From the above, it can be seen that the emerging suite of economic research issues associated with the protection, management and development of heritage are challenging. Moreover, in a society where resources are scarce, it is important to deliver these services in an efficient manner. As demonstrated by the papers presented to the workshop, considerable progress has been made and much more progress can be made. The areas that offer greatest promise appear to be those associated with valuation, analysis of alternative strategies, and analysis of instrument choice. The greatest intellectual challenge is to find ways to evaluate trade offs among cultural and natural values. Underlying all of these research opportunities is the search for information on the likely returns to increased investment in the Nation's heritage. As heritage becomes scarcer and populations increase, significant increases in values can be expected - provided, of course, that quality is maintained.