INTRODUCTION

The entry of cultural landscapes on the Register of the National Estate and the Registers of the individual National Trusts has not proved as rapid or as comprehensive as the entry of individual sites such as buildings or industrial archaeology. To some extent this reflects a lack of a consistent methodology despite the relevance of the Burra Charter and Guidelines, but it is also a result of the lack of a clear philosophical base for the work to be undertaken. In this article I will look at the present situation with landscape assessment, and discuss the relationships between the assessment of landscapes and individual sites. Finally, I will discuss the implications for the management of cultural landscapes.

The traditional assessment of landscapes has been limited to the purely visual characteristics. An attempt was made to remove subjectivity by quantifying the scenic quality of any area, and by searching for reproducibility, that is, the expectation that such a method will achieve the same result for all people who use it. A variety of methods were used.

None of the methods used so far have met with a substantial degree of approval. This result is almost inevitable given the changing philosophical views underlying the 'scientific' method and the general acceptance of the subjective component of any method.¹

There is, however, a more fundamental problem with any attempt to quantify landscape quality. This problem is that any approach or method which is based on visual criteria alone misunderstands, or fails to consider, the essential nature of "landscape". Such an approach focuses on the symptoms rather than the underlying factors which are the basis of the existing form. In some ways the aesthetic assessment is the cumulative effect of all these forces, but in other ways it is only a naive part of the whole and more importantly, provides no real assistance as to the management of the land to preserve the values which it apparently recognises.

This separation between cause and effect is mirrored in the distinction between assessment and implementation. The history of the development of the Blue Mountains provides clear evidence of these mistaken perceptions. To many the primary concern is to protect the visual integrity, which means essentially to protect the view from the popular lookouts. The underlying problem, however, is the extension of development along ridges which cannot support that development. Until this issue is addressed the Mountains will continue to be degraded.

A second school of landscape appreciation has its origins in historical geography. This approach has been popularised overseas by the writings of Hoskins and Jackson, and in Australia by Jeans and Spearitt.² This approach is directed toward an understanding of the physical and cultural factors which have worked together to create the landscape we see. An eloquent essay by Meinig separates the many layers of meaning which can be perceived by different observers.³ This understanding is important because it allows a fuller interpretations of the landscape, and facilitates communication between observers by forcing the recognition that no one view is correct or complete. It is important also in the way perception leads to actions, which can result in changes to the landscape. The perception that Australia was a vast land full of promise, both for us and predatory neighbours, resulted in acts to subdivide and populate the interior lands, and policies promoting immigration. Perceptions as to the quality of the land based on inappropriate criteria resulted in clearing and overstocking. The mismanagement continues still.

The historical geographic approach has not been applied to any extent in Australia for the identification of landscapes suitable for inclusion on the Register of the National Estate. However a recent preliminary thematic survey of the north coast of N.S.W. using this approach provided evidence for a number of definable landscape units important to the history of the region.⁴ The initial assessment was confirmed in part by inspection of Landsat information for the area and by inspection of part of the region. These landscape units had not previously been considered for inclusion on the Register. Some excellent regional studies have been published which attempt to line the historical sequence with the physical evidence remaining.⁵

The historical geographic approach can be reformulated to interpret the landscape as a result of forces, whether natural or human. In particular these would include economic, political and technological forces. This approach is seductive because it begins to recognise the dynamic which is the reality of landscape; hydrodynamic forces change the course and shape of rivers, economic forces such as depressions change the way the land is used or settled. There are, however, at least two problems with this approach:
The first problem is a general theoretical one and is true for all landscape planning. The so-called McCarg overlay technique, which was first used in the 19th Century, is not "ecological" as is often claimed because it is static, mapping results not causes. The second problem is more philosophical. Can history, in the sense we are dealing with here, occur without participants? The beginning, and the relocation, of the sugar growing areas in New South Wales during the 19th Century illustrates the interaction between natural "forces" (in this case areas without winter frost) and the people who misunderstood the land because they perceived of it as tropical. Their learning process is demonstrated by the gradual northward shift of growing areas. Despite the lack of an agreed theoretical basis for the assessment of landscapes, the development of the Burra Charter and the cognate conservation guidelines has provided a systematic framework for the assessment and conservation of places of cultural significance. The definition of place includes landscapes, but so far the primary application has been limited to individual sites.

A METHODOLOGY OF ASSESSMENT

It is integral to any method that it begins with an idea as to what will be found. The traditional empiricism which was supposed to be indicative of the scientific method has long been forsaken for a more realistic and effective approach which recognises the human component of discovery. Any hypothesis, which is the starting point for inquiry, rests on many assumptions as to what is of value, and by so not a limitation but simply a condition which needs to be considered in the kinds of questions asked, and in how the results are interpreted. Two obvious ways in which hypotheses are formulated are the temporal sequence within one area or region, or the spatial (and temporal) changes which result from the application of a particular technology or factor.

Survey

The historical geographical approach intends to be analytical and integrative, and defines the spatial relationships and physical evidence related to particular themes. The historical character of the area now known as the Bolworra Flats, near Maitland in the Hunter Valley, resulted from a number of factors:

- prime agriculture land on the the river flats;
- head of navigation on the Hunter River at nearby Morpeth;
- intensive landuse patterns;

This more analytical approach can reveal patterns not easily discernible to those unfamiliar with an area. The pattern of settlement in the Southern Highlands of N.S.W. is defined primarily by the history of transport; important shifts in settlement patterns occurred over time due to the shifts in the location of the roads and then the railway. The timing of these shifts with other economic factors such as new technology and competition were important in defining the character of the area.

Mapping

Mapping can then be refined by the location of individual sites and areas from existing registers and field surveys. During field surveys it is important to gain the assistance of local people to identify sites and features of significance known to them, and to understand they way they perceive their environment.

As many factors as can be researched easily can be mapped and to a variety of scales. Mapping could include the biophysical factors such as rainfall, geology and soil types, natural vegetation, catchment areas and hydrology, and topography. Overlain on these factors are the cultural factors such as settlements, transport routes, subdivision patterns, land use at different times, individual sites of significance, technological patterns such as building materials, and horticultural elements. A visual assessment should also be made during the survey to define significant features and views which should be protected. This should take into account historical views recorded in paintings and photographs, and historically important views from items and places.

Synthesis

The advantage of this approach is that a comprehensive and comprehensible view is built up, a view which also begins to identify the elements and areas which contribute to the significance of the area. The essential aspect of something as integrated as landscape is to understand the interactions which have created the particular form which is now present. It is important to realise that these factors are not independent of each other and it is the particular interaction which generates the character of the area. The interaction of factors is likely to be unique for each area and it must bring into question the notion that particular generic landscape types exist, or indeed whether such a notion has any relevance to the conservation of these lands. While many areas might be classified as grazing land (etc.) each are likely to have unique characteristics which will separate them from each other.

The character of the area now known as the Bolworra Flats, near Maitland in the Hunter Valley, resulted from a number of factors:
early settlement due to proximity to Newcastle;
individual sites of significance and the relationship to the historic towns of Maitland and Morpeth;
historical events such as major floods will also have left evidence of the physical changes to the landscape, changes which may have been influenced by land use practices higher up the valley.

Some of these factors will be repeated for other such agricultural areas, but the uniqueness of the other factors define the "Bolworra Flats" and not just a generic landscape.

Boundaries
A major problem for any assessment is the definition of boundaries, as areas which are excluded by boundaries may be disregarded by those responsible for protecting the land. A further concern is the difficulty of defining precisely the actual boundary. There is no easy answer to this problem but the approach outlined above does allow a boundary to be defined which based on the inclusion of the sites and areas which define the cultural significance of the area. In a sense this becomes more like a zoning boundary which would define appropriate land use strategies rather than the all-encompassing boundaries which are often proposed. In some cases where there is a particularly homogenous unit where the relationship of the elements to the surrounding landscape is an integral part of the historical response to the land and setting the boundary is one which bedevils any assessment beyond the very structure-specific, but now which is integral to our understanding of landscape and how it should be managed.

Much of the problem in the past has been due to the non-specific way in which the values of a landscape have been defined. The vaguer the reasons for registration the vaguer the boundaries for the landscape unit will be. The more clearly the significance and location of the thing which is to be preserved can be defined the more clearly boundaries can be located. There are often good reasons for non-specific listings because the precise definition of a landscape and its values is an extensive work of research, and circumstances may not allow sufficient time for all the necessary work to be done. In these circumstances an interim report should be prepared which clearly identifies the areas requiring additional research and the basis on which the preliminary assessment has been made.

DEFINING CULTURAL SIGNIFICANCE

Criteria
Cultural significance means aesthetic, historic, scientific or cultural value for past, present or future generations. Ultimately, the cultural significance of a landscape is based on what it reveals of the relationship of human beings to the land. There is no agreed set of criteria for the refinement of the definition of the cultural significance of a place, but Kerr discusses criteria which have been used for heritage studies under three broad headings:

* ability to demonstrate (e.g. a philosophy, a tradition, etc.);
* association links for which there is no surviving physical evidence;
* formal or aesthetic qualities.

The first two groups can obviously be expanded considerably and constitute, in a sense, the factors which would be mapped during the assessment phase. Subdivision patterns may demonstrate the result of the Land Acts, and the horticultural patterns may demonstrate the prevailing customs or land use of that time. Changing settlement patterns may demonstrate changing technology such as the advent of the railways or, more recently, the popular use of the motor car, or the changing economic climate. Place names often derive from people and events without there being any remaining physical evidence. The formal and aesthetic qualities are a result of the inter-relationships between the individual components and the physical setting.

The Jamberoo Valley, an important landscape in the Illawarra Region of N.S.W., derives its significance in part from the unity of its individual elements demonstrative of an important phase in the agricultural history of the state, and the strong physical relationship between the landscape of the valley floor and the encompassing escarpment and hills.

Assessment
A further consideration which is discussed by Kerr is the degree of significance. Landscapes represent an accretion of items and land uses over time and it is unlikely that they will conform to the more definable notions which can be applied to individual sites. It is unlikely that landscapes, in a generic sense, will be "rare"; individual sites within them may be rare or unique, but the overlay of land use, technology, and time will tend to provide strong similarity to other areas with similar histories and land uses. This collage of patterns and evidence makes the notion of "representative" difficult; in the broadest sense a landscape could be representative of a land use (a dairying landscape), but it will also be representative on many other processes and patterns. The Hunter, Hawkesbury and Shoalhaven Valleys have areas which are of the same "type", but the difference are great enough to warrant the inclusion of all three as being culturally significant.

Similarly, the concept of intactness which is discussed by Kerr is a difficult measure to apply. The Jamberoo Valley is largely intact as a dairy landscape, but current forces resulting from restructuring of the dairy industry in N.S.W. could result in a significant change in the character of the area despite the attempt to protect it by a Regional Environmental Plan. In a landscape, then, the
emphasis needs to be shifted to an approach which preserves all elements which contribute to cultural significance, rather the preservation of particular areas which are assessed as being rare, unique or intact.

Changes of some kind will be inevitable for all landscapes, even if some are given a temporary reprieve due to external circumstances. These changes will affect both the landuses and the individual elements, and we need to manage and direct the change in sympathy to the essential values of the area. If its significance is derived from the accretion of elements which demonstrate aspects of the relationship of the occupants to the land, then we need criteria which can be applied to assess the change. In many cases the development of appropriate design guidelines have been proposed, but they often represent an elitist taste rather than a genuine conservation policy based on the cultural significance of the patterns and elements which define the place. At their worst such design guidelines can replace conservation with a kind of kitsch.

A CONSERVATION POLICY?

Policy Development

An assessment of cultural significance must be translatable into a clear, workable conservation policy if it is to be of value. It is foolish simply to say that a landscape is culturally significant without providing guidelines for planning or development. The geographical approach, by defining the spatial form and relationships, begins to define the existing resources which need to be conserved. When this is complemented by the more structured cultural assessment of the Burra Charter and its guidelines a sensible conservation policy can be defined. Policies should attempt to preserve the fabric of the earlier occupances, creating what I think of as a matrix of possibilities defined by those elements and their specific interactions.

In the Mulgoa Valley, the visual relationship between the properties "Fernhill", Cox's Cottage and St. Thomas's Church are integral to the settlement of the valley and the layout of the buildings and landscape and any new development should not break the visual connection. It is unfortunate that despite protection by the Heritage Act, the N.S.W. Labor Government did nothing to prevent development at Fernhill which degraded the heritage values of the landscape.

The translation of the statement of significance into a conservation policy has particular problems for landscapes:
- it is not always clear for whom the landscape is being protected, as the "public" is a very nebulous and ill defined client;
- the future of the area can be influenced by broad-scale forces far beyond the control of the immediate planning authorities;
- the physical condition of individual elements can vary greatly and the response of individual land owners to the conservation of these elements will differ;
- particular problems relating to landuse may take many years to develop and to correct;
- the perception by the people in rural areas of the need for planning controls is less than in city areas, and relates very much to a mistaken understanding of the "rights" of the individual landowner;
- landscapes, no matter how modified, are still part of the natural environment and will continue to change unless they are actively managed to maintain the forces which created the particular character we now value;
- a landscape is not destroyed in the sense that a building can be. The original fabric can, and often has been, degraded or modified so greatly as to destroy most of the original significance but it remains a landscape none the less;
- it is foolish to expect to return landscape to an earlier period, or to "enhance" the value of an area as is often proposed by the Department of Environment and Planning in N.S.W. The elements from which it derives it's values can be protected, but any development can either respect or destroy the existing values while adding new values representing a new period. The greatest concern is often for visual intrusion but this is more often based on aesthetic prejudice than reasoned consideration of the heritage values which will be affected. If an area is significant for the unusual integrity of its elements it is appropriate to seek to protect that integrity, but it should be better argued than as to whether we "like" it or not.

Retaining Cultural Significance

The landscape can be threatened in many ways. Subdivision of land for new uses may destroy important parts of the original subdivision pattern. Changing uses, even if only different types of agriculture, can result in the destruction of fences, hedges and particular patterns of landuse. In defining guidelines for heritage areas greater attention is usually given to the buildings, whereas it might be the practical aspects of land use which are most important. The three Hume properties near Yass and Gunning ("Humewood", "Collingwood" and "Frankfield") have been described as being totally different. This may be true in regard to the design of the buildings, but for rural people the landscape would be more important, and it is striking to me that in terms of aspects of the layout of the properties they are almost identical!

The relationship of buildings to the land can be more important than the buildings alone, and demonstrate important aspects of the management of land and the properties. It could be said that an assessment which ignores the land demonstrates the architectural prejudices of heritage studies in the 1980s!
LANDSCAPES AND BUILDINGS - THE PROBLEM OF CONSERVATION

The problems of methodology can be overcome to derive a reproducible and comprehensible method for the assessment of landscapes which will satisfy the requirements of the Australian Heritage Commission. The real question is the protection of landscapes, and the relevance of registration to the statutory planning process. Registration assumes that there are representative examples of any particular type of landscape which are worthy of preservation, and while there is no doubt value in registering landscapes of exceptional significance it is important to promote the protection of cultural values where they occur, even in landscapes which might otherwise be considered ordinary.

The debate over appropriate methods of conservation of buildings mirrors the conflict in the conservation of lands. The various heritage registers in Australia have attempted to protect sites and buildings and it is instructive to consider the difference and similarities between landscapes and buildings.

Landscapes cannot be destroyed in the same way that buildings can. Even if the fabric of a landscape is destroyed there is still a landscape, albeit different, which needs to be managed and protected for its other values. Ironically of course, some landscapes which have been devastated by past occupations are now regarded as important items of our heritage. Some of the mining landscapes throughout Australia which provide evidence of such occupations can now often be placed in this category.

The definition of conservation in the Burra Charter is sufficient to describe the process of managing a cultural landscape. It is defined as "all the processes of looking after a place so as to retain its cultural significance. It includes maintenance and may according to circumstance include preservation, restoration, reconstruction and adaptation and will be commonly a combination of more than one of these." Restoration and reconstruction would normally only be applied to the individual elements in the landscape rather than the total landscape. The intrusive impacts of new technology will often be the same, eg. the introduction of power to the place will require some disruption of the fabric whether it is a building or a landscape. The fact is, of course, that buildings and landscapes both evolve and that inevitable change (or decay) is the cause of much debate.

In buildings we have the debate between "invisible" and "honest" mending. Do we retain the original fabric as a veneer sustained by modern technology, or do we do what the original builder might have done and simply replace the old piece with a new one? These questions are really cultural rather than technical, and the Japanese, who have retained a more active tradition of craft skills, might regard the question as nonsensical. Where a tradition of craft skills exists surely one should replace the element, although it may be appropriate to preserve and display the original material. If has been said that conservation tells us more about the people who conserved the building than the people who built it.

Similarly, how does one repair a landscape? This is again a cultural question rather than a technical one, particularly where the damage was caused by the cultural tradition which created the landscape we are trying to save! To what extent do we hide the reconstruction works rather than accepting that in adopting a responsible attitude to land management we are sustaining a landscape which will demonstrate the values of this (sometimes/rarely) more ecologically aware society? The Macdonald Valley is an important historic landscape based on the original transport routes to the north of Sydney but the Macdonald River is now choked with silt; remedial dredging has been proposed to re-establish the transport function of the river although it is not clear to what extent the siltation has been caused by recent European settlement. Should the river be dredged to return it to its "original" status or left as the new landscape in some of balance with the altered valley around it? Decisions have already been made to destroy the historical landscapes of the Hawkesbury Valley for construction materials and to leave the Macdonald Valley free of dredging.

Article 16 of the Burra Charter states that "The contributions of all periods to the place must be respected. If a place includes the fabric of different periods, revealing the fabric of one period at the expense of another can only be justified when what is removed is of slight cultural significance." A clear example of this would be the removal of the new stone wall and plantings at "Fernhill" which have been added in contravention of the Permanent Conservation Order which covers the property. In most cases the distinction is not going to be that clear cut, and is certainly not always going to be practical for financial reasons. It is the accretion of elements in response to changing cultural and environmental forces which has produced the particular landscape and it is the separation of the values of the individual elements that is the difficult task.

The goal of landscape planning for areas of cultural significance is clearly to maintain the fabric and to guide appropriate adaptation. Articles 20 and 21 state that "Adaptation is acceptable where the conservation of the place cannot otherwise be achieved, and where the adaptation does not substantially detract from its cultural significance. Adaptation must be limited to that which is essential to a use for the place determined [by the Conservation Policy]." If Registration is going to be useful in preserving the landscape it must be translatable into practical guidelines for the conservation of the culturally significant elements. The conservation policies for landscapes will need to be adaptable. If the landscape
is to be conserved for future generations then the policy must attempt to be proactive, determining the areas which require protection, guiding development which is considered appropriate to the areas which can accommodate change with least disruption of the existing fabric. Ultimately, our greatest responsibility is to manage the land in a way which retains its ability to support all species in the long term, as well as to retain the elements which are important for us.

If there are similarities between landscapes and buildings it is appropriate to consider the implications that might arise for building conservation from the conservation of landscapes. The primary consequence is the change of perception from the protection of the exceptional to the protection of the ordinary which contributes in an overall sense to cultural significance. This cumulative effect has been recognised in the definition of urban conservation areas but is often regarded as being of lesser significance than the significance of individual buildings. The fiasco of the Grosvenor Place development shows how little some people regard the cumulative contribution of individual elements. Martin Place has been degraded by both major developments such as the M.L.C. Centre, which ignores the unity of scale and detail which is an integral part of the urban pattern, and by the accretion of minor elements of the Plaza.

The loss of vernacular architecture throughout the state, but particularly in coastal areas, is representative of the view that only the "important" buildings like the QVB need to be saved. Such vernacular buildings are often neither unique nor rare, although they are rapidly becoming so, and are lost without thought to redevelopment.

Ultimately, the future of our heritage depends on education. Until the general public understands the value of the cultural heritage and can see that a rational approach which respects the existing values and recognises the need for new development is possible then that heritage will remain under threat. Registration by the Heritage Commission, or Classification by the National Trust, must be accompanied by an active programme of education and assistance to local government and individuals or the effort to identify heritage sites and areas will be lost.

CONCLUSION

I have attempted to show that there is an appropriate methodology for the assessment and registration of "cultural" landscapes, and that the methodology is compatible with the Burra Charter. There are, however, more general conclusions I would like to emphasise form the discussion:

* landscape is anchored in human understanding and action, and that everything around us is part of our cultural landscape;
* landscape is, then, a unity, not dichotomies such as "natural" versus "cultural";
* landscape is a place for living, in the broadest sense, then and now;
* landscape is dynamic because the things which give it shape and content are dynamic, but we sometimes give the impression we think we can hold back change and preserve a static thing we call the "cultural" landscape.

It must be recognised, however, that the cultural/scenic landscape is often a repository of intellectual baggage primarily associated with an educated appreciation of what is attractive and is based on a romantic rather than realistic views of the way in which the landscape is managed and created. The landscape was not created with our aesthetic values in mind; is it realistic then to attempt to preserve it solely on the basis of aesthetic values? The landscape was generated by the use of technologies which had a particular basis, whether technical or cultural, and although we might now recognise that the reasons for its use were short sighted, the landscape must be seen in that context.

Despite the applicability of the Burra Charter and its guidelines to both sites and landscapes in terms of assessing and conserving cultural significance, the need remains to manage and design the future landscape of an area. This need runs the risk of an excessively interventionist approach, or one that does not have regard for the cultural values of the area. Achieving this goal will require a definition of the cultural significance of the area and a very clear policy for its conservation within the context of overall environmental management. All landscapes are in some way unique, all landscapes regardless of their heritage values require protection and management. If the cultural values are to be given the respect they deserve they must be as credible as the other tools and criteria of landscape planning.

In N.S.W. it was intended that the Heritage Act and the Environmental Planning and Assessment Act be utilised together to provide a range of protective devices which can cover the variety of situations from sites to large areas. The Heritage Act has been more widely applied to sites than landscapes, and the heritage schedules of local environmental plans have mostly been site specific. The Act allows the use of Environmental Protection Zones within Local Environmental Plans to cover large areas, but these have been used mainly for areas with valuable natural resources. The Department of Environment and Planning itself seems either unsure or unconvinced of the use of such zones for cultural heritage areas, and in the recent Regional Environmental Plan for the Jamberoo Valley and the Draft Plan for the Mulgoa Valley, relied on agricultural zoning to protect heritage values. The use of such an approach is inconsistent for at least two reasons:

* the identification of the zones is not based on heritage criteria and is unlikely to assist the council
responsible for applying the zoning;
* future agricultural use allowable under the zoning may not be compatible with the conservation of the heritage values of the area and there would no facility under that zoning for the council to prevent the change in use. Such a situation would require recourse to the Heritage Act which would occur too late in the planning process and would, probably justifiably, be seen as unreasonable.

David Lowenthal has commented on the difference between something being authentic and something being historical. While one must accept that it is impossible to regain any true sense of authenticity it does not justify an editorialised approach to what is regarded as worthy of preservation. In preserving houses, or parts of houses, in the absence of an understanding of the contributory landscape we can make a mockery of the origins of those houses and the way in which they were sustained. Unless we sustain the factors which created the landscape then that landscape will change and we cannot realistically presume to preserve a landscape by intervention. It is clear then that in a situation like Australia where things are on such a large scale that this pastoral romantic ideal, divorced from the historical and economic forces and the technologies which shaped the landscape, is not viable in any broad sense. The real danger for any landscape, whether it be "natural" or "cultural", is that in preserving it for reasons which are ill-considered or ill-defined we will lose the values which really matter and preserve only the trivial. The "cultural" landscape is perhaps a useful concept for defining a way of assessing human impacts and developing appropriate conservation policies, but it must be used in the context of managing the total environment. If this concept does not aid our understanding and management then it should be dispensed with.

REFERENCES


