

Landscape assessment in New Zealand: background and current issues

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ONE RESULT OF THE GROWTH in environmental awareness in the latter half of the twentieth century has been the recognition in New Zealand legislation of a public interest in landscape. The focus of environmental and landscape management in New Zealand is the Resource Management Act 1991 (RMA91). The stated purpose of the RMA91 is the sustainable management of natural and physical resources, and this includes a concern for aspects of landscape quality. In particular, councils' preparation of district and regional plans under the RMA91 requires, amongst other things, protection of 'outstanding natural features and landscapes' from 'inappropriate subdivision, use and development' (RMA91 s 6(b)). As a consequence, councils have commissioned a large number of regional and district landscape assessments over the past decade, the results of which are now being translated into policy. Significant criticism has been expressed by some stakeholders – specifically landowners – of the outcomes of this process. Assessment of the effects of development on the landscape is also an important part of the resource consent process, and landscape assessment reports are frequently used by the Environment Court in its adjudication of resource consent cases. As a consequence, the practice of landscape assessment has come under increasing public, professional and judicial scrutiny.

This article reviews the background to and summarises a recent survey of current practice in New Zealand landscape assessment. Issues in landscape assessment practice are then discussed, drawing on three professional workshops held in late 1998.

Landscape assessment in the environmental policy cycle

Swaffield and O'Connor (1986) and Swaffield (1991, 1993) have traced the genesis of landscape concepts and concerns in New Zealand from the early days of European settlement, highlighting both the different strands of European and North American influence and the emergence of distinctive New Zealand perspectives. The continuing significance of early New Zealand ecological and geomorphological assessments, as well as the persistence of the European picturesque tradition (Bowring 1996), is particularly noteworthy. Important resulting features of New Zealand landscape assessment practice are the tensions between the perceptual and the biophysical dimensions of landscape, and between visual, geographical, ecological and experiential approaches to landscape assessment.

The movement for scenic beauty preservation in the 1960s (Salmon 1960) gave significant impetus to the development of visual landscape assessment and design in rural areas. Largely a reaction to the impact of hydroelectric projects and highway improvement, this early phase paralleled similar concerns over the scenic

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impacts of highways and forestry in the United States of America (Litton 1968), and of infrastructure development and urban expansion in the United Kingdom (Fines 1968). A major focus during this period was the expert evaluation of landscape as scenery, using principles derived from fine art.

Concern with the environmental impact of progress continued and grew in New Zealand in the 1970s, following a series of environment and development conferences. The establishment of the Commission for Environment led to the formalisation of environmental assessment and enhancement procedures (EAEP) for major projects, which led in turn to the implementation of a systematic framework of impact assessment (now expressed as the assessment of effects under the fourth schedule of the RMA91). Most landscape assessment at this time tended to be project-based and followed the EAEP, for example the response to the hydrocarbon projects in Taranaki.

The first main phase of comprehensive landscape assessment in New Zealand came during the late 1970s and, in particular, the early 1980s, under the patronage of large central government agencies (eg Ministry of Works, Department of Lands and Survey, New Zealand Forest Service). Studies typically comprised systematic resource inventory, valuation and evaluation stages, and focused on multiple-objective policy and management planning as an outcome. There was an obvious methodological influence from the American work of McHarg and Fabos and the British work of Weddle and Hackett. Two strands of assessment were already apparent (prefigured by Mabbutt 1968): a parametric approach, in which different biophysical and visual phenomena were separately mapped and valued before being synthesised; and a landscape approach, which emphasised delineation and comparative evaluation of homogenous areas of landscape character.

The parametric approach was well expressed in the 1984 Canterbury Regional Landscape Study (Ministry of Works and Development 1984), and reached its most comprehensive form in Jackman's publication *Our National Landscapes* (1986). One consequence of the parametric approach of the Canterbury Regional Study was a separating out of a distinct methodology for visual landscape assessment, subsequently published as the VAMPLAN method (Bennett 1985). An example of a landscape approach to assessment, based on areal character zones, was the South Westland Landscape Study (Smale 1984).

However, by the mid-1980s the broader policy context had shifted. The publication of the Canterbury Regional Study coincided with the election of the fourth Labour Government, and the commencement of a decade of legislative and administrative reform. By the end of the 1980s the shape, focus and ideology of central government had altered dramatically, with consequential changes at regional and local level. The major government agencies sponsoring the comprehensive landscape studies of the early 1980s were all disestablished, and the focus of professional landscape architecture shifted to the private sector. A new approach to public policy became dominant, with an emphasis upon procedural rationality, single-objective agencies and instruments, devolution of operational policy and responsibility, and much greater recognition of the primacy of private property rights in public policy.

In 1991, following several years of debate, the government repealed a number of land management statutes, and much of the former activity dictated by these statutes was consolidated into the RMA91 (the RMA91's detailed provisions and

implications for landscape assessment are reviewed in subsequent articles in this volume). One major effect of this was councils' preparation of a new generation of district and regional plans and policies focused upon the purpose of the new Act. District and regional councils throughout New Zealand had to pay renewed attention to landscape issues and, as a consequence, during the early to mid-1990s they commissioned landscape assessment studies to help them form policy and prepare plans. At the same time, requirements for assessing the overall effects of development at project level were strengthened under the RMA91, and this has led to an increasing number of site-specific landscape assessments.

In the past decade, digital technology has also become more widely available and understood. Although there were pioneering studies using geographic information systems and digital terrain modelling in the late 1970s and 1980s (notably Jackman 1986), the use of these technologies has become both more widespread and more routine in the 1990s. Similarly, some practices have adopted visualisation technology and remote sensing. Nevertheless, much landscape assessment in the late 1990s still relies primarily upon non-digital technology.

One major outcome of the administrative reforms of the 1980s was the establishment of the Ministry for the Environment, which has subsequently introduced and maintained an extensive programme of national policy initiatives. Important current areas of activity are the implementation of an overall environmental strategy for government, a national indicators programme to monitor the state of the environment, and a biodiversity strategy. In all of these cases the policy emphasis is on closer links between central government priorities and operational management by agencies at both local and regional level. The purchaser-provider model promoted by government has been widely adopted by public agencies and, in accordance with this model, there has been a devolution of management responsibility, including increasing reliance on the private sector in 'partnership' with government.

Since the introduction of the RMA91, the juridical determinations of the Environment Court have set precedents for clarifying the definitions and interpretations of the requirements of the Act. This is set to continue as the latest district and regional plans are notified and tested through appeal. Government has also initiated a review of the RMA91, following a provocative 'thinkpiece' by McShane (1998), and subsequent discussion documents. One important focus of McShane's critique is the interpretation by planners and other professionals of the way in which development activity should be managed and controlled. At the same time, there have been widely published public and political challenges by landowners to the way that the requirements of s 6(b) have been implemented (ie the identification and designation of those 'outstanding natural features and landscapes' that warrant 'protection ... from inappropriate subdivision, use and development') and how such protection as specified in the section might be expressed in policy and practice.

As a consequence, the current practice of landscape assessment has come under significant scrutiny by both government and a range of interest groups. Some policy analysts are reported to have gone so far as to suggest that recent negative publicity concerning problems in preparing district plans (for example, the Far North District Plan) has 'set back' landscape advocacy and policy by 10 years (Rackham pers comm). There is undoubtedly an urgent need for the landscape architecture profession to review carefully its landscape assessment

procedures and practice, and if necessary to adopt improved guidelines for practice, if it is to regain credibility and policy relevance.

Current profile of activity

One of the implications of the disestablishment of major public agencies since the mid-1980s has been a rapid growth in the use of consultants for landscape architectural work. Furthermore, while there has also been a significant increase in landscape architects employed by local government, many of these are effectively sole practitioners, and much local government landscape architecture work is contracted out. In order to gain a quick overview of current landscape assessment experience and practice, a short questionnaire was sent to the consultants who were members of the New Zealand Institute of Landscape Architects (NZILA). The results, although only indicative, provide some insight into current practice. The following discussion summarises the replies from 21 practices around New Zealand.

There is clearly a wide range of experience, with some respondents reporting no experience in landscape assessment, and others undertaking hundreds of assessments over a three-year period. As such, there is no 'typical' level of experience.

The current focus of landscape assessment is on the assessment of effects for resource consent applications and/or site selection and design. This undoubtedly reflects the current advanced stage in the policy cycle of most district and regional plans – background work such as landscape assessment having been undertaken during the mid-1990s. However, a significant number of district and regional assessments have been completed within the last three years.

The predominant approach adopted by NZILA consultants in their assessments is either visual assessment only, or a combined visual/biophysical assessment. Very few respondents reported using experiential or solely biophysical approaches to assessment.

Three distinct methods are currently being used; the most frequently cited was assessment that follows the EAEP. However, several practitioners also reported undertaking landscape assessment with a strong focus on design outcomes, while others adopted discursive methods of assessment focusing on issues.

According to respondents, valuation of landscape is dominated by a qualitative, expert approach. Only a few respondents reported incorporating public consultation or community survey into their approach. The range of criteria used as a basis for qualitative evaluation was very wide, with no consistency across practices. Fourteen different criteria were cited, with each one typically being used by only 1–3 respondents.

With regard to translating the results of assessment into practice, respondents reported that they were frequently involved in using their assessment results in design, but were only occasionally or infrequently involved in translating the results into policy or management. Similarly, design input was the most frequently cited 'successful' outcome. These responses reflect the project emphasis of most current work.

Respondents said that the main venues for public presentation of the results of assessment were council hearings and the Environment Court. Community presentations and media were mentioned as occasional venues, but several respondents reported never using media to disseminate their work.

There was a range of problems reported, including inconsistency within the profession and the inability to influence other professionals in interpreting the findings of assessment. Ideas suggested most frequently for improving landscape assessment were: ensuring consistency in terminology and approach, establishing guidelines for best practice, and encouraging greater public involvement.

Overall the survey confirms several features and areas of concern to landscape architecture. It is clear that the recurring tension over the scope of 'landscape' continues to be an issue, although as Tasker notes in a later article in this issue, recent Environment Court decisions now provide some guidance on the definition and parameters of this term. The EAEP approach is emerging as the most typical procedure used by landscape architects, and it ensures that landscape assessment links with other dimensions of the RMA91. Three areas of particular concern are connected to the current adverse publicity of landscape assessment: first, the apparent inconsistency between practices in their approaches and definitions; secondly, the continuing, sole emphasis in a significant number of studies on expert valuation, with little public input; and thirdly, the apparently low level of involvement of the authors of studies with the translation of their assessment recommendations into policy.

It must also be noted that there are significant exceptions to the preceding overview. Two of the consultancy practices most heavily involved in regional and district scale assessments both report significant levels of community consultation as part of their standard procedures. Nevertheless, there are significant differences of opinion between experienced practitioners on a number of procedural aspects, which contributes to the continuing diversity of approach to landscape assessment practice.

Current issues

As part of the preparation for the 1999 NZILA conference – the focus of this issue of Landscape Review – three professional development workshops were held in late 1998, in Christchurch, Wellington and Auckland, with participation from over 70 practitioners. The main focus of the workshops was to identify current issues in landscape assessment. In this section, the results of the questionnaire survey are incorporated with the outcomes of the three workshops to identify six key issues in current landscape assessment in New Zealand.

POLICY RELEVANCE

Many practitioners have doubts about the effectiveness of assessments in influencing policy. There are two dimensions to the problem: the level of involvement of landscape architects in preparing policy based on landscape assessments, and the adequacy of the assessments in addressing the purpose and principles of the RMA91.

While landscape assessment (and the landscape architecture profession) appears to have been a primary focus of public criticism as the cause of problems in policy formation and plan preparation, landscape practitioners express concern that their role is typically limited to undertaking only the initial assessment. Many of the respondents to the practice survey reported low levels of input into policy formation. The critical step of translating assessments into policy has mostly been undertaken by groups of professionals who not only have little understanding of the assessment process, but who have not consulted with landscape architects in

interpreting its outcomes. Examples cited by McShane and others focus on difficulties caused by the policy prescription applied in plans, yet the 'landscape' assessment is blamed for resulting problems.

The point of contention, therefore, is often not the identification of particular landscape qualities, but the rules proposed in order to protect those qualities. Furthermore, where there is criticism of the basic assessment (for example, the geographical extent of landscape designated as outstanding in a district) it appears likely that the criticism is itself underpinned by an anticipation that the resulting policy rules will be inflexible and prescriptive. In different circumstances, communities and landowners frequently praise and value their own landscapes, and may well regard them as outstanding, provided this recognition does not lead to significant constraint on their freedom of action. In other words, it may well be the formal delineation of outstanding landscapes, and the associated rules, that create the opposition, rather than a fundamental difference in perception of the quality of the landscape in question. This requires further investigation.

The second dimension to the relevance of assessment to policy development is whether the assessments adequately address the underlying purpose of the RMA91, or whether they carry forward assumptions and ideologies from the earlier legislation. A frequent criticism of current planning (eg McShane 1998) is that planners have not refocused their activities and approaches on sustainable management, rather than on conventional prescriptive zoning and development control. Landscape assessments must also be examined to check whether they adequately address and anticipate the management of change. The key point of the RMA91 is that even the most explicit statement about landscape protection (in s 6(b)) does not require protection of existing landscape qualities from all change, but only protection from 'inappropriate subdivision, use and development'. The required outcome of assessment, in respect of this particular provision, is specifying what is or is not appropriate change for landscapes identified as outstanding, and developing policy to ensure that such change that does occur does not compromise the qualities that make the landscape outstanding. It is not intended to prevent change.

The challenge for assessment procedure is therefore to identify both landscape qualities that warrant protection and/or management, and the sensitivity and vulnerability of such qualities to the effects of change. The focus of subsequent policy and design should be on management of the relevant effects of change.

The Continuing Professional Development workshops held in 1998 highlighted the same concerns of participants: whether current landscape assessment practice focuses sufficiently on the effects of change on landscape quality, and how the findings of assessment are translated into policy and design practice. Several different positions emerged in discussion at the conference and are evident in the case studies in this issue of *Landscape Review*. For example, Lucas Associates evaluates landscape quality with a significant emphasis on underlying ecological patterns and processes, and identifies extensive landscape settings as being outstanding (sometimes even a whole district), but then emphasises design and management guidelines as the policy approach. In contrast, the study of the Hastings district by the Isthmus Group limits the 'outstanding' designation to tightly defined landscape features, with a strong cultural emphasis, but favours more prescriptive policy. The cases presented from

Boffa Miskell Limited tend to be based on landscape character zones, within which significant and sensitive landscape qualities are identified as needing specific protection.

SCOPE OF ASSESSMENT AND THE ROLE OF THE LANDSCAPE ARCHITECT

An important finding of the survey of practice was the continuing dichotomy between those practices and studies that interpret landscape issues as primarily visual and those that seek a more comprehensive scope. While few New Zealand landscape architects question the premise that landscape is more than purely visual, some argue that the particular expertise of the landscape architect is visual evaluation, and does not extend to biophysical science. This group of practitioners argues that landscape assessments carried out by members of the NZILA should be limited to that proven area of professional expertise, and perhaps even be termed 'visual landscape assessments' to clarify the distinction. Other landscape architects argue that landscape is more than simply visual, so landscape assessments should be comprehensive in nature, and thus professional landscape architects' expertise and advice should include the biophysical or at least the ecological dimensions of landscape. There was also some unease expressed about claims that landscape assessment should deal with the experience of landscape as opposed to the description of its visual qualities. Again, the debate revolves around whether landscape architects have sufficient expertise in interpreting non-visual dimensions and, in particular, whether this expertise will be recognised in a judicial setting.

As the concluding article in this issue notes, several recent Environment Court decisions have helped to define better the scope of 'landscape' under the RMA91. There is now precedent that biophysical patterns and processes are important contributors to landscape character, and that 'landscape' includes the experiential dimensions expressed in the term 'sense of place'. Landscape assessment practice will need to respond to this wider definition. However, as discussion at the conference made clear, it is important to distinguish between the expertise needed to interpret the significance of biophysical and ecological patterns and processes for landscape character and quality, and the scientific expertise needed to analyse biophysical and ecological phenomena in themselves.

One feature of a number of recent landscape assessments is the involvement of a team of experts, coordinated by a landscape architect. This highlights the importance of distinguishing between what is an appropriate procedure for landscape assessment under the RMA91, and the particular role of landscape architects in that procedure. One of the features of the early years of the landscape architecture profession in New Zealand was an attempt to define landscape broadly and to claim professional expertise over the whole landscape, in order to establish a significant planning role for the new profession (Swaffield 1993). One consequence of this has been a perceived connection between the activity of landscape architecture and the phenomenon of landscape. Put simply, landscape is what landscape architects do. Yet landscape has a much wider history and currency in New Zealand than the profession of landscape architecture (Swaffield and O'Connor 1986).

Rather than limiting consideration of landscape assessment to those areas recognised by the Environment Court as being the primary expertise of landscape

architects, it may be more productive for the profession to develop landscape assessment procedures that address the requirements of the legislation and to recognise that individual landscape architects may undertake one of several roles within those procedures. It is appropriate for experienced practitioners, possibly with multiple qualifications, to assemble multidisciplinary teams to undertake comprehensive assessments. Their role may be both project management of the assessment and the interpretation of the contributions of different disciplines for overall landscape quality. Other landscape architects may focus more narrowly on providing formal visual assessments, but this narrower focus should not be taken to mean a limitation of landscape assessment as a whole. Similarly, landscape architects whose expertise is primarily in visual assessment should not claim wider expertise by virtue of their professional affiliation. The Environment Court procedures ensure that any such claims will be challenged and, if found wanting, will be rejected by the Court.

One consequence of identifying a range of possible roles for landscape architects within landscape assessment is the need to provide a series of professional development opportunities by which individual professionals can increase the scope and complexity of their particular approaches. Secondly, a diversity of roles will require increased collaboration between landscape architects with complementary skills.

The question of scope and focus of assessment was developed further in the workshops at the conference, which highlighted differences in requirements between urban and rural settings and at different scales of application (from national to regional, district, community and project). Scale of assessment is closely linked to the role of any particular assessment in the wider resource management process, but arguably all assessments must have the potential to be interpreted at a different scale to that at which it was undertaken. This is because the significance of a particular development can only be assessed in relation to a broader setting, while the primary purpose of regional and district assessments is to provide precisely that context for the assessment of individual proposals.

The distinction between urban and rural assessments is significant in the way that patterns and characters of artefacts (buildings, roads etc) become the main influences on urban landscape character, as opposed to the dominance of landform and vegetation patterns in rural assessment. A question raised in several workshops was whether this difference of emphasis required fundamentally different procedures, that is, whether the basis for landscape classification and evaluation needed to be different in urban and rural settings, or whether both approaches could be encompassed within a single conceptual framework. In the last article in this issue, a common framework is proposed that enables different techniques to be used in rural and urban settings.

The considerable diversity of emphasis and interpretation of, and some uncertainty over, basic concepts of assessment revealed in the preceding discussion was identified by many participants in the workshops as a problem. In particular, they considered that the use of different definitions and criteria for evaluation by different landscape witnesses in resource management hearings or the Environment Court resulted in confusion and, ultimately, loss of credibility for the profession. This point of view is also expressed later in this issue by Roger Tasker, a member of the Environment Court, who suggests that contrasting

evidence that is difficult to compare can result in a landscape issue being 'cancelled' out, even when there is clearly substance in the issue.

Given the range of possibilities being presented to the Court, and the existence of different court circuits, there is a potential risk of inconsistencies or ambiguity in definition becoming entrenched in the public record, as has happened, for example, in regard to interpretation of natural character (Maplesden 1997). As a consequence, one of the primary needs identified by the workshops was to develop a set of definitions that could be promulgated and used widely in the profession. The emphasis of assessment evidence could then be on interpretation and evaluation of particular qualities and effects, rather than on redefining basic terms of reference. One of the aims of the NZILA conference was developing such a framework, which is presented in the final article of this volume.

METHODOLOGICAL INCONSISTENCY

A closely related concern for participants at the workshops was the apparent inconsistency of method used across landscape assessments. The range of approaches was confirmed by the survey of practices reported above, and is further illustrated by the case studies in this issue. Differences in approach are related in part to differences in scope and application: visual versus comprehensive, urban versus rural, project versus policy. However, they also appear to reflect differences in individual experience and in beliefs about appropriate assessment. The Hastings study completed by the Isthmus Group and the studies reported by Allan Rackham of Boffa Mitchell Limited can be used to highlight contrasts of emphasis between methods. In presenting the Hastings study, Gavin Lister argues that the first step in the study should be to acknowledge presumptions about what is likely to be an 'outstanding' landscape. The subsequent steps then challenge and, if necessary, modify this initial view. In contrast, Allan Rackham argues for a systematic narrowing of focus, from an initial 'without prejudice' description of all landscape in the study area, via a series of classification, interpretation, valuation and evaluation steps, to identify landscapes worthy of the designation 'outstanding' within the terms of the study.

The first approach is discursive, drawing upon conventions of scholarship within the humanities. The second tends more towards empirical science. This difference was also expressed in the survey responses in the contrast between the approaches based on EAEP and the survey-analysis-design approach (itself heavily influenced by the empirical science model), and a discursive, issue-based approach. This tension has the potential to carry over into the formulation of expert evidence based on landscape assessment, as expert evidence is accepted in a number of styles by the Environment Court, depending on the conventions of the discipline involved. Can or should landscape architects agree on a standard convention, or will several conventions have to be acknowledged in any framework?

It should be noted that the international trend in scholarly analysis of landscape assessment is to recognise the legitimacy of a range of approaches. Despite earlier attempts by Zube, Sell and Taylor (1982) and Daniel and Vining (1983) to focus future work on particular models of assessment (an interactive and a psychophysical/cognitive model, respectively), in practice there has been a

widening of possibilities (for example Uzell 1991). Hence the categories identified by Zube, Sell and Taylor, and by Daniel and Vining, have been extended rather than narrowed. Burgess (1996) believes that current research in the United Kingdom is increasingly favouring qualitative, interpretative approaches, although in New Zealand there continues to be an apparent desire for greater quantification by a number of commentators.

The RMA91 is profoundly ambivalent in its stance. Although overall there is a strong tendency towards instrumental rationality in the legislation (Murray and Swaffield 1994), which would appear to favour the more technical model of assessment, there is also recognition of discursive approaches in regard to provisions for consideration of Māori issues. The format of the Environment Court, based on legal advocacy, appears to accept that evidence is essentially discursive in nature.

One possible way forward is to identify best-practice procedures for a range of possible approaches. However, this could create some difficulties given the small size of the profession, the close association of individual practices with some approaches and the business advantages that flow from this.

COMMUNITY INVOLVEMENT

A significant omission in many assessments is any form of systematic community involvement. The majority of respondents to the practice survey cited expert-based evaluation as the basis for their approach, with only a few explicitly reporting that community survey or consultation was an integral part of the landscape assessment. A few practices emphasised community involvement, although in most cases the methods used were based on key informant interviews or focus groups rather than a more systematic survey. Typically, consultation is undertaken as part of the wider planning process to which the landscape assessment contributes, so that communities have an opportunity to respond to the assessment once it has been incorporated into a draft district or regional plan. Increasingly, given the potentially contentious nature of landscape provisions, councils are releasing landscape assessments and/or landscape policies as non-statutory discussion documents. In some cases (eg Canterbury Regional Landscape Study) the council subsequently decided not to incorporate the findings into a formal plan. In other cases, draft plans have been withdrawn following political controversy.

Given the apparent political loss of confidence in landscape assessments due to a belief that inappropriate landscape designations and policies are being imposed on communities and landowners, the question of community involvement in the assessment process is a central issue. There is no shortage of information about methods of community involvement: there is a range of well-developed social science techniques and an extensive international literature on how to apply these techniques to landscape issues. However, few landscape architects use systematic survey in their procedures.

One reason given for this is that clients are frequently unwilling to budget for consultative processes. This was recognised by Daniel and Vining (1983) who noted the high use of expert-only assessments. Anecdotal evidence also suggests that some local-body politicians may oppose methods that appear to bypass them and approach their constituents directly. Yet several factors challenge the presumption that an unwillingness on behalf of the clients to support community

surveys is the primary reason for the predominance of expert studies. First, a number of larger councils undertake community surveys as a regular part of their wider activities. Secondly, the costs of a survey can be over-emphasised. Given the necessary skills, there are a range of techniques that can be undertaken at modest cost, frequently by using existing communication channels such as the local media, or by working through community groups such as landcare groups. Thirdly, councils should be aware that expert-only studies can be a false economy if the consequence is that subsequent plans attract such opposition that they must be withdrawn.

A more likely explanation is that many New Zealand landscape architects appear to work within a landscape assessment paradigm that assumes landscape qualities and values are largely objective, that is, they reside in an independently observable landscape rather than in the way we perceive and conceive of landscape. This underpins their reliance on expert methods. Others, while recognising that landscape values (if not qualities) are human constructs, work on the basis that these values can be best identified through expert interpretation (ie the environmental critic approach advocated by Carlson 1977). The predominance of either an objective landscape paradigm or an environmental critic approach fits well with the prevailing technocratic practice of resource management, in which public involvement is usually structured as a reaction to policy proposals rather than as part of the analysis process, and may explain the low priority frequently placed on community survey.

The question for the landscape architecture profession, in light of recent experience, is whether this technocratic practice can be sustained. For example, it is notable that in considering the treatment of amenity within the RMA91, Simon Upton, the current Minister for the Environment, expressed the view that while amenity derives from the natural and physical environment, amenity values reside in communities. This is analogous to some degree with landscape values and suggests that any assessment framework must include either explicit attention to community or a cogent explanation of why such attention is not needed. One question that has not been clarified from the recent discussion of amenity, however, is the differentiation between generic and local values. There is extensive international evidence, both empirical and theoretical, that certain structural qualities in landscape patterns and processes have cross-cultural value that transcend the particularity of individual communities, both human and biotic. For example, there is a well-established convention of scenic beauty that values relief, water and tall vegetation, and some authors argue that these are qualities appreciated by all humans, for evolutionary reasons. At the same time, there is plenty of evidence that particular communities have particular valued places, and that they tend to be more appreciative of and sensitive to landscape qualities with which they are familiar. This creates a more local set of landscape values. Landscape assessment must address both the generic and the particular.

This discussion therefore leads to two areas requiring further attention in the development of any overarching conceptual framework. First, the profession needs to consider how community involvement should be incorporated in any framework of best-practice, that is, at what point in the process it should be undertaken, and based on what techniques. Secondly, landscape architects need to review how the interpretation and valuation process within an assessment can

best address the different levels of generality at which different landscape values are expressed. On both these points, there is a wide range of possible positions.

EVALUATION CRITERIA

The interpretation and evaluation phases of any assessment explicitly or implicitly incorporate a set of criteria by which landscape qualities are valued and evaluated. The practice questionnaire revealed that a wide range of criteria is used by practitioners, with no consistent emphasis. Some practitioners addressed the structural qualities of a landscape, others the relational qualities, others the impact of change and yet others applied concepts of cultural value. Criteria that focus on the structure of a landscape included coherence, diversity, intactness and legibility, while relational qualities cited included rarity and visibility. Criteria emphasising the impact of change included absorption, vulnerability and sensitivity, and concepts of naturalness, heritage and unspecified 'quality' were also mentioned.

There are several key issues relating to choices of evaluation criteria:

- are they relevant to the purpose of the RMA91, and to its specific provisions?
- are they complementary and compatible with each other?
- do they deal with all the necessary dimensions of landscape within a particular application?
- are they clearly defined and well understood?

The selection of criteria will also significantly affect the outcome of assessment. Diversity in selection may be expected to lead to correspondingly diverse outcomes. If it does not (and this is a topic requiring further investigation) the process of applying the criteria comes into question. In any event, development of a more consistent framework will require some way of selecting and justifying evaluation criteria.

COMMUNICATION SKILLS AND TECHNIQUES

Participants at the workshops expressed some frustration at the difficulty of presenting landscape assessment results to the wider public. They asked the question: how can complex and subtle evaluations be presented simply and effectively? It is important that assessments be both accessible to multiple non-expert audiences, and sufficiently sophisticated to express fine distinctions that may be critical in an Environment Court hearing. Similarly, information must be presented at a range of scales (as discussed earlier in this article).

The question of communication was framed as a technical issue by most participants. However, it should also be acknowledged that much recent academic work on landscape in policy highlights the conceptually problematic nature of landscape representation. Different forms of representation (maps, photos, sketches etc) all carry particular values and ideologies with them: representation is not a neutral action. Hence there is tension in the selection of techniques in terms of their effectiveness in engaging different audiences, in how effectively they express the assessors' intended message, and in what other, perhaps unintended, messages or values they also express. As with the selection of criteria, this requires the landscape architect's particular deliberation.

Conclusion

This discussion of current issues in landscape assessment practice raises a number of questions about the future direction of landscape assessment in New Zealand. These include:

- What are the essential outcomes of landscape assessment under the RMA91? Are these adequately addressed by current procedures? How can landscape assessment be made more relevant to policy development and its public credibility enhanced?
- Can the range of current approaches and operational contexts be encompassed within a coherent and robust conceptual framework of concepts and definitions?
- Is it feasible to produce a more coherent set of evaluation criteria that are widely accepted by practitioners?
- Is it possible to achieve more consistency in methods? For example, is it possible to identify a set of best-practice guidelines and examples for landscape assessment?
- How can the community be involved effectively and efficiently in assessment?
- What are the most effective techniques for communicating the results of landscape assessment?

The 1999 NZILA conference focused on exploring the first two sets of questions and, in particular, the potential for the profession to develop a more coherent framework for assessment. The final paper of this issue summarises the results of this exploration. However, it is clear that there are a number of other aspects of contemporary landscape assessment practice that can also be improved or refined; responses to these other questions require practitioners' attention in other settings.

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