'FREEDOM'S RAMPARTS ON THE SEA':

THE POSTCOLONIAL NEW ZEALAND LANDSCAPE AND THE QUEST FOR SUSTAINABILITY

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Abstract

New Zealand's colonial legacy has had a major impact on the shape of its landscape. The European settlement of New Zealand transformed both the land itself as well as the tenure arrangements that had hitherto followed traditional Maori practices. The increasing political influence of the modem conservation movement in New Zealand has been mirrored by a parallel rise in Maori engagement with environmental issues. Land tenure claims brought by the Maori under the 1970's Treaty of Waitangi Act have enabled an alliance of Maori and environmental interests to be forged. This linkage however is very recent, and if the current unsustainable land use practices are to be mitigated in New Zealand, a synthesis of the essential elements in both cultural traditions is necessary.

Culture shapes how people identify and evaluate elements of their environment, and influences their behaviour and experiences. At a more pragmatic level, culture provides the social infrastructure and institutions that determine how renewable land resources are used and managed. The authors highlight the links between postcolonial culture and landscape management in New Zealand, contrasting Pakeha-Maori points of view

and attempting to mediate between these conflicting positions. These links are examined in the context of new social, economic and ecological forces that are shaping the country's postcolonial landscape.

Keywords

Postcolonialism, Landscape, Sustainability

Introduction

Is the postcolonial landscape of New Zealand appreciably different from the colonial landscape? The short answer is a cautious 'no'. That is, not in major structural terms so far as the type and proportions of land use categories are concerned. However, there is significant evidence of change in terms of gradual evolution reflecting the various consequences of globalisation; and transformations affecting New Zealand society, including the strengthening involvement of Maori in land management in the course of Treaty settlements over the past three decades (Meurk and Swaffield, 2000; Morad and Jay, 2000).

The colonial and the postcolonial landscapes of New Zealand are largely the outcome of primary production modes for an export-led economy. The present landscape has not substantially changed from the colonial period, but the proportions (of the different land-use types) have changed, and there has been greater intensification and differentiation of production landscapes. For example, for the pastoral sector the sheep farming acreage is down, while dairy, deer and forestry acreages have risen fairly sharply since the 1970s. Significantly, marginal areas have reverted from unimproved pasture to scrub (or *hieracium* in the South Island's high country), and there has been a lot of conversion from drystock to forestry during the 1990s.

Within the rural areas closer to the main urban centres, there has been conversion of land from rural to urban, but also intensification of production (Moran, 1997). As in other parts of the 'western world', there has been a steady convergence of urban and rural communities. The 'new countrysides' are increasingly linked to their urban counterparts by social, technological, and cultural linkages, which have served to downgrade the effect of physical distance, and increase the social and economic flows between city and countryside. Furthermore, socio-economic issues are now inexorably entwined with the 'structure' of the landscape, such that

landscapes have become a social product, the consequence of a collective human transformation of nature, not just objects that merely echo culture (Thompson-Fawcett and Bond, 2003: 153).

The Colonial Legacy

To understand the postcolonial landscape, we need to have a brief look at the colonial landscape and the factors that shaped it. In broad structural terms, the transformations of the New Zealand landscape prompted by European settlement were driven from the beginnings by the fact that the settler population was tied into agricultural and primary productions for an export market. The colonial landscape was a reflection of resource exploitation and wholesale landscape conversion from indigenous forest to agriculture.

During the early colonial periods, most of the legislation relating to land was designed to ease the exploitation of natural resources (e.g. the Goldfields Act 1856, which established a system for the allocation, recording and enforcement of property rights, and the Land Drainage Act 1908, which established drainage districts and boards with the power to construct and maintain drains and water courses). Similarly, legislation was also enacted to regulate the allocation and distribution of resources for further exploitation by settlers (e.g. the New Zealand Settlements Act 1863, by which the settler government confiscated some 3 million acres of Maori land). This trend also involved planning legislation (the 1926 and 1953 Town Planning Acts), which was largely concerned with urban settlements in its application, and was largely fashioned on British models (Memon, 1991).

By the beginning of the 20th century the loss of forest and the widespread introduction of farming and attendant plants and animals had brought about major changes to the New Zealand landscape. Memon and Wilson (1993: 98) estimate that 75 per cent of New Zealand was covered by indigenous forests when human settlements began. This was reduced to 53 per cent by 1840, 25 per cent by 1920, and 23 per cent by the 1990s.

About 60 per cent of the area of New Zealand is currently in pasture, and the introduced (largely northern hemisphere) plants, which form the basis of these pastures, have generally required more soil nutrients than the local soils have been able to provide. High lime and fertiliser rates have been needed to make these plants feel at home, and it has taken a massive effort by the farming industry to transform and maintain the fertility of the country's soils. This degree of intervention has resulted in the

development of new soil ecosystems that form the basis of New Zealand's relative affluence. The new ecosystems are, however, strongly dependant on the continued importation of nutrients, predominantly phosphorous.

As Hewitt (1999: 2) noted,

> When we observe the boundary between native ecosystems and derived pastoral agro-ecosystems, we can readily appreciate the degree of changes that have occurred above ground, and we know about some of the more rapid changes that have occurred in the topsoils: changes to soil organic matter and nutrient levels. But we have no comprehensive understanding of the changes that have occurred below ground. What have we really done over the past 150 years to our soils? One thing we can be reasonably sure of, is that because many soil attributes adjust very slowly to changes above ground, it is likely that soils are still adjusting to changes in land cover that occurred last century and that consequential changes will continue.

In addition to the wholesale transformation of the physical landscape, the new arrivals to New Zealand's shores brought with them a host of intended and unintended visitors, including agricultural, horticultural and ornamental plants, farm livestock and domestic pets, but also rats and other pests. Rats, first introduced by Captain Cook in 1770, quickly spread to all corners of New Zealand, so that by 1870 visitors to Stewart Island reported them in abundance (King 1984: 69).

The impact of these immigrant plants and animals has been subtle but long lasting. They have brought about changes in the composition, structure, and function of indigenous vegetation and indigenous ecosystems, and the reduction of indigenous biodiversity (Morad and Jay, 2000). By the mid-20th century, their impact was more widespread. Rabbits in the South Island high country, together with sheep, had helped to create conditions that encouraged the spread of *hieracium* and other problem plants. The combined attack of goats, deer and possums had impoverished large areas of indigenous forest, while ibex, and other introduced alpine mammals had diminished the native biodiversity of large areas of alpine herb-fields.

In the words of Crosby (1986: 268) "the forces… reshaping New Zealand did not maintain their headlong pace and make a Europe out of New

Zealand, but they did confirm it as a Neo-Europe." This transformation of the colonial landscape, much of it unregulated, was often tolerated if not encouraged by government policies. According to Memon (1991: 26), "massive transformation of the rural landscape, consequent upon the development of a mono-cultural system of pastoral and forestry land uses, land clearance and land drainage, often promoted by generous central government subsidies and grants, took place outside the scope of the town and country planning process".

According to O'Connor (1993: 126), almost all land that could potentially be used for commercial agriculture had been cleared and transformed by the First World War, causing drastic loss of lowland indigenous ecosystems and species. Intensification of farming and forestry occurred at great pace from 1915 to 1945, as technological innovations in farming and transportation (aerial topdressing, refrigeration, the progressive development of efficient road and rail transport) helped to improve the efficiency of bulk commodity production of meat, wool and dairy products. Inappropriate land management on steep or unstable hill country caused widespread erosion and prompted the passage of the Soil Conservation and Rivers Control Act 1941. The period after World War II saw continued intensification, but also the beginnings of agricultural diversification into horticulture.

The rapid transformation of the New Zealand landscape during the first century of European settlement did provoke calls for the 'preservation' of the natural environment by both Maori and Europeans. The consequences for native animals had been sufficiently great that by end of the 19th century a number of forward-thinking individuals began to voice concern for the survival of native animals. The Scenery Preservation Act of 1903 owed its enactment to the Christchurch MP Harry Ell who was keen to protect the Banks Peninsula's reserves. The Land Act of 1892 was the first law providing provisions for areas of scenic value. This was followed shortly by the Tongariro National Park Act 1894, which had a direct Maori input when Te Heuheu Tukino, the chief of Ngati Tuwharetoa, gifted the land to the Crown, and declared the Tongariro site "a tapu place of the Crown, a sacred place under the mana of the Queen". By 1907, 353 reserves had been created, with the Egmont and Arthur's Pass national parks added in the first decades of the 20th century. The Abel Tasman National Park followed in 1942, Mount Cook in 1953, Fiordland in 1953, Urewera in 1954 and Nelson Lakes in 1956 (McKinnon 1997: Plate 62).

The colonial legacy had equally important consequences for the urban New Zealand landscape, especially as New Zealand experienced an "implicit urban bias in perception of the role of planning [which] was evident from the very early days of European settlement in the new colony" (Memon 1991: 20).

Also, the colonial period saw Maori occupation and control of land reduced by one means or another to the point where Maori were invisible throughout most of the country except in marginal areas such as Northland and the East Coast of the North Island. For most of the colonial period the Maori voice was marginalised and effectively silent.

The Postcolonial Landscape

The postcolonial turning point for the New Zealand landscape may have been brought about by the Local Government Act 1974. The significance of this Act stems from two major factors. First, it follows Britain's joining of the European Common Market in 1973. Another significant development involves making provisions for elected regional councils, whose boundaries followed river catchments - hence heralding the advent of the postcolonial landscape, at least in administrative terms. The introduction of the regional councils in 1989 was followed by New Zealand's major postcolonial environmental legislation, the Resource Management Act 1991, which completed the process of embracing a new postcolonial era for the New Zealand landscape.

A decisive moment for Postcolonial New Zealand might have been the election of the Labour Government in 1984 (Le Heron and Pawson, 1996). Although social and economic changes had been building up over the previous decade and a half, the election of the Labour Government brought about the beginning of a series of major changes in policy that affected every aspect of New Zealand life, including Maori involvement in environmental policies (Robinson and Tranter, 2000).

The Resource Management Act 1991, in conjunction with the reorganisation of local government brought about by the Local Government Amendment Act 1989, have been important pieces of legislation for the postcolonial New Zealand landscape. The development of the Resource Management Act came as a reaction to the colonial legislation of the previous decades, and under the influence of strong environmentalist and neo-liberal philosophies. Its key impact has been that it has brought about a rationalisation of environmental management,

with better integration between land and water, and more attention to sustainable management of natural and physical resources.

The Resource Management Act requires consideration of Maori cultural, historical, spiritual, and physical values in environmental and social planning. Such consideration extends to wahi tapu (sacred sites), marae (meeting houses), and natural resources such as geothermal areas and indigenous flora and fauna (Moller et al., 2000). The presence of this body of legislation and of a growing capacity among Maori to be involved in the process of formulating land management policies, means that Maori concepts of land tenure and sustainable management are receiving increasing attention in New Zealand (Crengle, 1993).

Landscape managers are now required by law to consider the cultural values and concerns of Maori in relation to land, and Maori are developing an increasing capacity to be involved. This process is likely to increase as the legislation becomes entrenched, and will have flow-on implications for environmental planning requirements as the concerns of Maori become recognised in devising regional plans for biodiversity conservation and landscape protection (Pawson, 1996).

Concern for Maori sensibilities has involved the incorporation of Maori terms within the body of environmental legislation. The Resource Management Act was enacted "to promote the sustainable management of natural and physical resources". Among the principles articulated by the Act is that all persons exercising functions under it, "shall recognise and provide for... the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, wahi tapu (sacred sites) and other taonga (treasures)". They must have particular regard to the exercise of kaitiakitanga (guardianship) and must, "take into account the principles of the Treaty of Waitangi" (Morad and Jay, 1997: 45).

However, some critics argue that, although the Resource Management Act does incorporate some indigenous values and approaches to land management, and provided for increased involvement of Maori, the practice of environmental management since the introduction of the Act has not significantly increased involvement by Maori (Horsley, 1989). As argued by Matunga (2000), Maori continue to be marginalised by the power structures that operate through the administrative and political structures that are responsible for implementing the Act. This is also the case with the Conservation Act 1987, which incorporated the requirement to be "so interpreted and administered as to give effect to the principles of the Treaty of Waitangi". While the Department of Conservation is

responsible for implementing the Conservation Act, and giving effect to the principles of the Treaty, this has not resulted in great changes to the way that conservation priorities are assessed and administered.

The effect of globalisation is another major aspect of the postcolonial management of the New Zealand landscape (Liepins and Bradshaw, 1999). Such consequences are evident in a number of emerging patterns of land use:

* There has been diversification in the structure of rural agriculture, with more horticulture, viticulture and deer, as well as diversification by individual farms. Farms depend on income from a wider range of sources than previously, and there is more likelihood of an off-farm income being contributed by one or other partner. Drystock farms have seen diversification into forestry, grazing of dairy heifers, tourism, and off-farm employment (Vile, 2000).

* Regional differentiation involving parallel processes of intensification and extensification (Moran, 1997). As in Europe, there is evidence of a combined process of greater intensification of land use in certain parts of the country (e.g. Waikato, Canterbury), combined with farm abandonment or extensification in marginal areas (e.g. Northland, East Coast, southern King Country and a number of isolated rural areas throughout the country). One important social consequence of the latter trend is a blurring of town and country in those areas close to cities; and corresponding population decline in the more remote parts of the country, in such areas as Taumaranui.

Globalisation has increased the demand for economic efficiencies in the areas of production advantage (at the expense of ecological efficiencies), but may have also accentuated social and economic deprivation in less favoured areas (Smith, 1996). It looks as though globalisation may be making the quest for sustainability harder for New Zealand environmentalists. Furthermore, a major impact of globalisation has been the increasing exposure of the New Zealand environment to the introduction of exotic species. Recent invasions by economically damaging pests such as the varroa bee mite (and possible risks posed by the outbreak of foot and mouth disease in the UK) are vivid reminders of the potential dangers of globalisation to the New Zealand environment (Bradshaw and Cocklin, 1998).

Conclusion

In conclusion, the evolution of New Zealand's post-European colonial landscape was shaped by the nation's mercantile involvement in a global capitalist system of trade and primary production for export. Land development in the 19th century brought about a rapid transformation from a predominantly forested landscape to a pastoral landscape of European production-focused agriculture. Both the indigenous people and the indigenous ecosystems were pushed to the margins.

Broadly speaking, the postcolonial landscape continues to reflect the basic forces that shaped its colonial predecessor, as the New Zealand environment remains strongly influenced by the activities of farming and forestry that are driven by a globalised export-based economy. However, as we enter the 21st century there are changes emerging in the nature of the social, economic and ecological forces moulding the landscape:

- The Maori voice became louder and stronger in the second half of the 20th century, and is inducing adjustments in the way that land and water are managed. Equally, the relationship between town and country is less a difference between urban and rural than a gradation between (affluent) centres and (impoverished) peripheries.

- Tourism has established itself as a major 'consumer' of New Zealand's scenic alpine and geothermal landscapes. With 1.8 million international visitor arrivals in 2000 (MoT, 2001: 5), it currently accounts for 9.3 per cent of gross domestic product and 16 per cent of foreign exchange earnings (MoT, 2001: 1).

- Changes in the nature of trade and travel to New Zealand are providing greater opportunities for alien plants, animals, fungi and bacteria to penetrate, disrupt and re-arrange the colonial pastoral landscape as well as pre-colonial remnants.

Thus while the fundamentals of New Zealand's landscapes remain - its substructure of soils, geology, topography and climate; its embattled native ecosystems and species, and its production focused agriculture and forestry - change is gathering momentum in accord with new forces that are increasingly evident nationally and globally.

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