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WAIHEKE ISLAND

PERCEPTIONS OF THE ENVIRONMENT

A thesis presented in partial fulfilment of the requirements for the degree of

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ABSTRACT

The need for the sustainable management of resources has been recognised since the early 1980s. However, the concept that the physical landscape is also a resource which needs to be managed and quantified is more recent. New Zealand is one country where sustainable management is paramount, as the natural landscape has become the country's greatest asset. Mechanisms to quantify the aesthetic quality of the landscape are now regarded as essential management tools. Research, however, has shown that it is peoples' perception of the landscape which truly reflects its value.

The focus of this research was therefore to quantify the residents' and visitors' perception of the Waiheke Island environment. The diversity of landscapes and stunning natural beauty of Waiheke made it the ideal choice for a study on visual perception. Part of the research design included identifying the differences in perception between Waiheke residents, New Zealand domestic visitors and international visitors. Previous research had confirmed that there were differences between locals and visitors; however the individual groups were not clearly defined.

The research design was a combination of quantitative and qualitative research methods which generated data with both richness and depth. The Q sort method with photographs was well suited for this type of research, with visual stimuli allowing for subjective judgements to be made. Participants' personal values and opinions were also sought as part of the interview process, to add depth to the Q sort data. The scale of the research was larger than similar studies, with a total of 82 interviews undertaken, of which a significant number where residents of the Island.

The results of this study confirmed that the environment was perceived differently by the population groups. International visitors in particular showed a high preference for the natural landscape. The inclusion of public preferences in the planning process was also supported by this research. A higher level of community involvement will ensure the effective implementation of management strategies in the future. This study reinforces the use of Q sort method as a research tool for understanding peoples' perception of the environment, which can be useful in developing planning strategies.

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CHAPTER ONE

1.0 INTRODUCTION

New Zealand comprises of a myriad of 'little landscapes', each reflecting a changing natural environment. It is the diversity of the landscapes and New Zealand's 'clean and green' image, which have become the major tourism draw cards for this country. The 'sublime' physical landscape is the country's greatest natural resource and continues to set New Zealand apart as a tourist destination. Bell and Lyall (2002) define 'sublime' as "an abstract quality in which the dominant feature is the presence or idea of transcendental immensity or greatness: power, heroism, or vastness in space or time" (2002, p.4). The physical landscape is therefore not a static arena but dynamic in nature, which makes objective measurement obsolete (Bell & Lyall, 2002). Its value as a natural resource will only increase as global pressures on other wilderness areas in the world, leads to degradation of those resources (Bell, 1996).

Fairweather and Swaffield state that "tourism as a phenomenon is intimately grounded within the experience of landscape" (2002, p.283). However, the perceptions of both international visitors and New Zealanders alike are changing, with the increased global awareness of environmental issues. They now expect to see 'environmentally friendly' tourism operations and sustainable management of resources, as part of New Zealand's 'clean and green' image. This need to understand visitor's expectations and perceptions has prompted research into landscape evaluation and assessment. It is only through understanding what motivates both visitors and New Zealanders that proper management of resources can be achieved (Kearsley, Coughlan & Ritchie, 1998).

The importance of understanding the perceptions of both domestic travellers and local communities within New Zealand has become a crucial part of the overall picture. Many of New Zealand's most scenic locations are also home to thriving communities (Swaffield & O'Conner, 1986). The sublime physical landscape may support a tourism industry in the area, but it is just one part of the picture for local residents. However, the physical attributes of the location, that the community appreciates, can be a double-edged sword. Visualise an island, which boasts ninety-six kilometres of coastline, forty kilometres of beautiful beaches, natural harbours, and an uninterrupted view of the

Pacific Ocean, clear all the way to Chile. Now add to that picture, Auckland, a major destination city, situated a mere twenty kilometres to the east, literally thirty-five minutes away by ferry. The location is Waiheke Island and the paradox between its role as 'Jewel' of the Hauraki Gulf verses 'marine' subdivision of Auckland becomes apparent.

1.1 Background to Waiheke Island

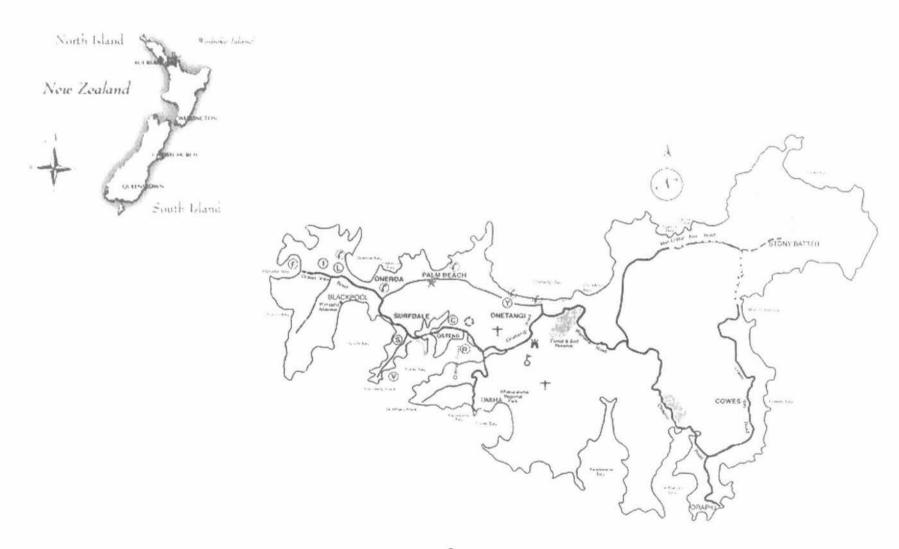
This paradox creates a range of complexities for the management of Waiheke Island. It is therefore important to appreciate the nature of the Island for the context of this research.

Topography

Waiheke or 'cascading waters', is the second largest island after Great Barrier in the Hauraki Gulf Region, with an area of 9,324 hectares, or ninety-two square kilometres. Judging by the length of the beaches and coastline as mentioned above, Waiheke sounds physically big. However, total length of the Island is only twenty-six kilometres, with a maximum width of just nineteen kilometres. This tapers down to a mere one kilometre in some places, and the highest point on the Island is just 230 metres (Picard & Picard, 1993). In general, Waiheke enjoys a maritime climate when compared to Auckland. The Island has less rain, a lower humidity factor, and temperatures averaging four degrees higher than in Auckland. All of these factors, combined with such diverse landscapes, and favourable weather patterns, make Waiheke both a popular holiday destination and residential location.

The location map and detail map of Waiheke Island is shown in Figure 1.1

Figure 1.1 - Location map and detail map of Waiheke Island



Chronological History

Historically, ownership of this 'Jewel' of the Gulf, with its considerable attributes has been a highly sought after prize, by both Maori and European alike, for generations. Pre-colonial occupation, of Waiheke or Te Motuarairoa, the 'long sheltering island', as it was originally known, was highly contested by two Maori tribes, the Ngati Paoa and Ngati Maru (Monin, 2001). Each tribe wanted the outright control of the Island. However, it was the Ngati Paoa who assumed possession of Waiheke Island in the early 1830s. They were finally able to relight the 'fires of occupation' (ahi ka), after the decision of Ngati Maru not to return themselves "to avoid rekindling the earlier troubles between the two tribes" (Monin, 2001, p.73). Ironically, these two tribes have now joined forces, along with the Ngati Rongo U, Ngati Tamatera and Ngati Whanaunga. The combined group make up the "five related iwi of Marutuahu Confederation" of the Hauraki Gulf Region (Monin, 2001, p.8).

Waiheke Island has therefore witnessed many different phases of Maori occupation over the centuries (Monin, 1992). However, apart from a few archaeological sites, there is little physical evidence left on Waiheke of these occupations. In contrast, the arrival of the European or 'Pakeha' in the early 1800s dramatically changed the physical landscape and the repercussions are still evident today. By the mid 1800s, the early settlers had literally 'stripped' the pristine native bush and forests for timber, which impacted on the whole environment. Colonisation of places like Auckland meant there was an ever-increasing demand for building materials, especially the Kauri trees. The need to trade in such commodities as building supplies, was why "Hauraki was the first region in New Zealand to experience extensive, sustained Maori-European contact" (Monin, 2001, p. 38).

The coming of the 'Pakeha' therefore signalled a new era for Waiheke Island. The actual landscape had undergone a dramatic transformation. Some parts of the Island had changed from pristine forest to virtually barren land in less than fifty years. However, more changes were to come, with the Island again being transformed into pastoral land between 1850 and 1920. The establishment of sheep farming on the Island was a natural progression in terms of development. The real money, however, was in farmland subdivisions, particularly in

west Waiheke. The settlements of Oneroa, Ostend, Onetangi, Palm Beach and Surfdale were amongst the first to be established, and were a direct result of 'farmland subdivision'.

The advent of World War II brought the next significant change to the Island. The army built large concrete gun emplacements, as well as a network of tunnels at 'Stoney Batter', a hill on the eastern end of Waiheke. These defence structures have now become one of the major tourist attractions on the Island. Other tourist activities include horseback riding, golf and fishing pursuits, along with a variety of marine related sports. Scenic bush walks are also popular, especially in places like the Whakanewha Regional Park near Rocky Bay.

Over the last decade, Waiheke has taken on more of an 'urban look' due to an increase in both sub-division and general development on the Island. However, Waiheke's diverse topography restricts the usual resident population of approximately 7000 to small concentrated pockets at the western end of the Island. The northern side of the Island features Oneroa, the main rural service town, and gateway to the ferry terminal. The two small townships of Onetangi and Palm Beach are also located on this side of the Island. The southern side of the Island has the residential areas of Surfdale, Ostend, Kennedy's Bay, Blackpool, and the more isolated community of Rocky Bay. The eastern side of the Island in contrast, is still predominantly pastoral, and is reminiscent of the remote 'Scottish Highlands'.

Seasonal Variation

The western end of the Island is therefore more developed and attracts both international tourists and local holidaymakers alike. In the summer, or 'high season,' the population can swell to over 32,000 people. Therefore, the same facilities and services, which in reality can barely cope with just over 7000 residents, must now deal with nearly five times as many people. Oneroa, the hub of the local business community for retail shops and support services, is unable to cope with such big influxes of people. The 'downtown' area becomes so heavily congested over summer, that many of the Island residents actually avoid the area during the 'high season', especially on the weekends. The winter brings a reprieve from the onslaught of visitors; such is the marked seasonal variation experienced on the Island.

Ferry Services

Two ferry companies service Waiheke Island and provide both commercial and domestic transportation all year around. Subritzky Line, based in Half Moon Bay, operates a car and passenger ferry service. The Fullers Group operate out of Auckland Central and provide mainly a passenger service, with up to 19 ferry trips daily to the Island. Fullers also bring the bulk of the day-trippers to the Island, mainly due to their convenient downtown location and Devonport connection services. With literally an hourly service running through peak periods of the day, both Island commuters and visitors have plenty of options available to them. During the summer, day-trippers normally catch the 9 or 10 am sailing, spend between 6 to 8 hours on the Island and take the late afternoon sailing back. Due to the popularity of these sailing times, the wharf area is often congested. Island commuters also experience similar peak time congestion, as part of their daily routine.

Regional Implications

The close proximity of Auckland has had other ramifications beyond just the impact of visitor numbers over the summer to the Island. This 'Jewel' of the Hauraki Gulf, for all intends and purposes, has become part of the inner city zone. The fact, that Auckland City Council has jurisdiction over Waiheke Island has been a point of contention for several Island residents. The inner city zoning has resulted in a general reduction in the disparity of the overall 'cost of living', in comparison with the Greater Auckland Area. Rates have increased and now match some inner Auckland suburbs. As the vast majority of Waiheke residents still rely on tank water and maintain their own septic tank systems, these rate increases have met with some resentment. Considering the revenue generated from rate collection, the upgrade of amenities on the Island seems comparatively slow, another point noted by the local community.

Future Development

However, the true dilemma facing Waiheke residents involves how to retain the enviable 'lifestyle' and upgrade these amenities, without encouraging yet more people to come. Another option taken by some local residents was to face the inevitable, relocate to places like Great Barrier Island, and literally start again. These were just some of the issues that the Auckland Region Council hoped to address in the adoption of the 'Essentially Waiheke – A Village and Rural Communities Strategy' in October 2000. The strategy was part of a fifty-year regional plan which aimed at greater local involvement in the planning process. The 'Essentially Waiheke' Strategy comprised of five central principles: environmental protection; economic development and employment; strong communities; location and principles to protect and enhance Waiheke's character.

The implementation of these management strategies was essential, with projections made as part of the 'Essentially Waiheke' Strategy, estimating the Island population will reach 10,000 people by the year 2006. The projected figure would be approximately 1.5 times the present resident population. The long-term goal of these strategies was to ensure a sustainable future for the Island:

"where opportunities for development are facilitated and the Island's community values and outstanding natural environment are respected and nurtured"

('Essentially Waiheke' - A Village and Rural Communities Strategy, 2000, p.1).

Changing Demographics

Waiheke Island has not only changed in terms of its physical landscape, but there has also been a marked change in the basic demographics as well. It is therefore important to gain a perspective of the demographic history of the Island, to acquire a 'feel' for the 'Waiheke of old'. The brief synopsis that follows highlights the ten-year period between 1986 and 1996 as it was a transitional time on the Island. Statistical information used in this section was part of a survey released by the Auckland Region Council in 2000. The primary source of data used in the survey were figures obtained from Statistics New Zealand. The usual residential population of Waiheke's major rural towns: Onetangi, Ostend, and Oneroa were used to generate all figures and percentages shown. Detail is provided in Appendix A.

The employment profile of the Island offers a good barometer of the changes that have transpired. An upward trend was noted in the 'change of gainfully employed' figures from 1986 to 1996. In that 10-year period, there was a 96% increase recorded for Oneroa, 53% for Ostend, and a massive 140% for Onetangi. The intermediary changes were also significant with a 62% increase shown for Oneroa, 41% for Ostend, and 50% for Onetangi in the 1991 to 1996 period. What these figures failed to show was that employment opportunities were lacking on the Island. In reality, only 38% of Oneroa population were actually 'gainfully employed in 1996, up from 27% in 1986. Ostend fluctuated between 28% and 32% during the ten-year period, with Onetangi going from 26% in 1986 to 40% in 1996.

These figures also reflect Waiheke's alternative lifestyle era, where a significant number of residents were not actively in the workforce. Some residents simply opted out and others were ruled 'unfit' to work for various reasons. The 'labour force status' figures collected in 1996 illustrated that point, with 43% of Oneroa's population not in the labour force and a further 4% unavailable for work at all. Another interesting statistic to emerge in relation to Waiheke's employment figures was the change in occupational status of the residents of the Island. Based on the Oneroa population, the 1986 figures showed only 4% were listed as 'Administrators and Managers', which increased to 15% in 1996. The same trend emerged in the 'Professional and Associated Professional' category, with the figure going from 10% in 1986 to 27% in 1996. These figures give some indication of the number of Waiheke residents who were commuting daily to work in the Auckland Central Business District.

Conversely, Waiheke has seen a decline in the 'Service and Sales Workers' category with figures dropping from 25% in 1986 to 15% in 1996. This trend continued in the 'Tradesmen / Machine operators' category with 39% listed in 1986 dropping to 23% in 1996. All other occupational categories remained relatively constant over the corresponding period. The upward movement in the 'professionally' orientated workforce appears to have been at the detriment of the more 'manual' occupations.

Job flexibility was also crucial to maintain a decent standard of living, due to seasonal nature of the tourism industry on Waiheke. The employment profile of the Island residents again reflects the changes that have occurred and the impact of development that has taken place.

1.2 Overview

Waiheke Island offers a myriad of landscapes with sandy beaches, rocky headlands, sheltered bays, and natural anchorages. The landscape bears the scars of invasions, colonisation, pastoral farming and now the effects of intensive subdivision. However, without proper planning, the changes that Waiheke Island has witnessed in the past will pale in comparison to what may happen. According to projections made as part of the 'Essentially Waiheke' Strategy, the Island population will reach approximately 10,000 people by the year 2006. The effective implementation of these strategies needs to be based on sound research. An examination of the environmental impacts of development is one obvious area the Regional Council will need to address. However, it is important to ascertain how the local residents perceive the future of Waiheke Island, and what role tourism will play. By quantifying these values and expectations, and using appropriate management strategies, the future development of the Island will be sustainable.

This research addresses this component, and assesses the perceptions of both local residents and visitor to the Waiheke Island landscape. The specific research question is:

What are the perceptions of residents and visitors to the Waiheke Island environment?

This will be achieved through an examination of the following objectives:

to quantify residents' perceptions

to quantify visitors' perceptions

to enhance the quantitative data obtained by more in-depth qualitative method

1.3 Structure of the Report

This first section has provided a background to Waiheke Island and highlights the importance of both maintaining the quality of the environment and understanding how people feel about their environment. The next chapter examines the literature on the perception of beauty and how it applies to the aesthetics of the landscape. Following this, the methodology used in the research is reviewed with both qualitative and quantitative methods discussed. The results and discussion chapters will be then examined, with the final chapter containing the conclusions and recommendations.