Understanding Visitors' and Locals' Experiences of Rotorua Using Photographs of Landscapes and Q Method

John R Fairweather
Simon Swaffield
David G Simmons

Rotorua Case Study
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John R Fairweather
Principal Research Officer in the Agribusiness and Economics Research Unit, Lincoln University. Fairweat@lincoln.ac.nz

Simon R Swaffield
Professor of Landscape Architecture in the Environmental Management and Design Division, Lincoln University. Swafflies@lincoln.ac.nz

David G Simmons
Professor in Tourism, Human Sciences Division, Lincoln University. Dsimmons@lincoln.ac.nz

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</thead>
<tbody>
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<td>59</td>
</tr>
</tbody>
</table>
Acknowledgements

This research was funded by the Foundation for Research, Science and Technology; Output 8 Tourism. This report forms part of a series of seven constituent reports on Tourism in Rotorua, which in turn is one of four case studies in the programme ‘Improved Management of Tourist Flows and Effects’ (Contracts: LIN 504, 602, 803).

The support of Air New Zealand with discounted air travel in this Rotorua case study is also acknowledged.
The objective of this study was to develop an understanding of visitors' and locals' experiences of the Rotorua landscape using photographs of landscape and Q method. The interest in landscape experience reflects the central role that both passive and active involvement in landscape plays in the Rotorua tourism industry.

The use of photographs and Q Sort to investigate visitor experience of landscape has been developed and tested in a previous case study within the overall tourism research programme (Fairweather et al., 1998). This Rotorua-based study sought to understand the impact of tourism upon local communities, and so locals’ experience of the tourist landscape was also included. The selection of photographs for Q sorting was based on three sampling frames including landforms, features and attractions, and activities.

A total of 66 subjects were selected in a diverse, non-random sample with roughly equal proportions of both men and women, and overseas and domestic visitors. Each subject sorted the photographs into nine piles, ranging from those most liked to those most disliked, to create their own Q sort. All Q sorts were factor analysed to identify four factors or types of experience. Each factor is characterised by a selection of photographs from the overall range that are either particularly liked or disliked, together with others that are distinctive of that factor. Subjects’ attitudes, beliefs and expectations in making their selections were recorded in interviews and provide an additional basis for interpreting the different factors.

Factor 1, ‘Sublime Nature Experience’, identifies the characteristic experience of overseas and New Zealand people who seek interaction with nature, and value qualities of tranquillity, seclusion and spiritual values as opposed to commercial or urban experiences. Factor 2, ‘Iconic Tourist Experience’, identifies the experience of mainly overseas people who value the tourist features of Rotorua, such as Maori culture and geothermal sites, and like to see things that are interesting and accessible. Factor 3, ‘New Zealand Family Experience’, identifies the experiences of mainly locals who value activities for the family in a predominantly natural setting. Factor 4, ‘Picturesque Landscape Experience’, identifies the preferred experience of mainly overseas people who value pictorial qualities in landscape, including naturalness, colour, composition and variety, including buildings. A fifth factor also emerged from the analysis but is not easily interpreted, as it appears to conflate several disparate themes, including both Maori identity and visitors’ experience. It is unlabelled.

There were significant groupings of preferred experience which reflects both generic marketing of geothermal and Maori attractions and the presence of distinctive preferences attracted to new facilities and hydrological features. Some of the factors highlight the continuity in the aesthetic values that underpin Rotorua. Least preferred settings included exotic forestry and commercial signs, the former raising issues for the management of forestry. Comparisons to an earlier study of visitors in Kaikoura shows some similar factors. Finally, theoretical and policy implications are briefly noted.
Chapter 1

Introduction: Background and Research Objectives

The research presented in this report is part of a long-term programme of research on the social, economic and environmental effects of tourism in New Zealand, being undertaken in order to improve planning for tourism development. The first case study location for this programme was Kaikoura, a relatively small town with a usually resident population in 1996 of 2,208, but with a significant level of tourism activity. The second case study was Rotorua, a larger town with a usually resident population in 1996 of 64,509, and also with a significant level of tourist activity. The general strategy of the programme was to understand the effects of tourism in both breadth and depth, in order to be able to report generally on the effects of tourism as well as upon implications for the case study locations.

The primary objective of the research presented in this report was to develop an understanding of visitors' and locals' landscape experiences of Rotorua. Visitors were defined as any people visiting Rotorua who are normally resident elsewhere, and includes both New Zealand and overseas day and overnight visitors, the latter group usually referred to as tourists. Locals included both Maori and Pakeha people resident in Rotorua. Rotorua was defined broadly to include the basin around Lake Rotorua, but in this study all subjects were interviewed in the town itself. We sought to understand people’s landscape experience of Rotorua as fully as possible, in ways that reflect what people actually think, feel and say about their experience. Q method using photographs as stimuli was well suited to developing this understanding.

There is an extensive international literature on human experience of the environment, landscape perception and preference, and visitor experiences as preferences. However, whilst there are some consistent generic patterns emerging from empirical research, there are diverse theoretical interpretations of their significance (Uzzell, 1991). Furthermore, there has been remarkably little systematic research into either residents' or visitors' landscape perceptions and experience within New Zealand (Kearsley and Higham, 1997). Thus whilst the research design in this study was able to draw upon the existing international literature in determining the landscape variables which were likely to be of significance, there was little basis upon which to develop detailed hypotheses about the likely pattern of response in the case study context. The task we therefore set ourselves was to describe patterns of landscape experiences in depth, but not to attempt to describe or account for their incidence amongst the population as a whole. In this sense the research is qualitative in its focus, and exploratory and interpretative in its scope. There is clearly opportunity to use the results of this research in the development of more systematic and extensive research designed to profile landscape preferences and perceptions amongst the wider population of visitors and residents in New Zealand.
Photographs offer a valid and potentially productive approach to the investigation of landscape experiences. Our earlier report on visitor experiences of Kaikoura (Fairweather et al., 1998) provides a detailed account of tourism, landscape experience and Q method. We argued there that whilst there is now an extensive international literature on landscape perception, the majority of empirical work is based within the ‘psychophysical’ and ‘cognitive’ paradigms, using quasi-experimental methods to develop predictive models of preference (e.g., scenic beauty estimation); or to develop explanatory theories of preference. There is, however, increasing interest in landscape as a phenomenological experience, using a variety of methods, and also in interpretation of socio-cultural dimensions of landscape.

We also note that within New Zealand, there has been very little systematic research into landscape perception either of residents or visitors. The knowledge that is available derives either from broad-based attitudinal surveys using questionnaires, or is largely incidental to studies undertaken for other reasons. There is only very generalised knowledge of perceptions of the landscape and there is therefore a need to focus upon in-depth, qualitative, and interpretative understanding of landscape experience. Recent research in Kaikoura (Fairweather et al., 1998) has begun to address this deficiency. Our research approach uses photographs as surrogates for landscape experience, and we use Q method to identify the particular meanings and significance of the selected photographs. The responses are interpreted by reference to their socio-cultural context, both of the respondents, and of their experiences. Results from Kaikoura identified five different types of visitor experience. These included: The Eco-tourist Experience, the Maritime Recreational Experience, the Coastal Community Experience, the Picturesque Landscape Experience and the Family Coastal Holiday Experience. That research was based on visitors in one locality, and to develop a more comprehensive and robust understanding of visitor experience in New Zealand there is a need now to study other places. The research reported here does this by describing and interpreting locals’ and visitors' experience in Rotorua. Our approach thus complements existing tourist-based studies and further develops a new direction in tourism research in New Zealand, drawing from the experiential and socio-cultural paradigms of landscape perception research.

The report is organised as follows. In the next chapter we describe in detail both the method of selecting photographs and respondents, and the administration of the Q method. Chapter 3 presents the results of a survey of 66 people in Rotorua. Finally, Chapter 4 discusses the results in terms of research on destination image, discusses the salient points of each factor, makes general observations, including a comparison of the results with earlier research in Kaikoura, before addressing theoretical and policy implications.
Chapter 2

Method

2.1 Introduction

In this chapter, the elements of the method used in this study of visitors' and locals’ experience of Rotorua are described in detail, including: the selection of photographs, the sampling and location of interviews, and the Q sorting procedure.

2.2 Selection of Photographs

One of the most important dimensions of New Zealand as a visitor destination is its frequently spectacular natural landscape. Yet much of the visitor experience is located within modified landscape settings such as transportation corridors, productive landscapes, or urban areas. Access to natural settings also involves a range of built and managed facilities. In Rotorua, whilst the prime attraction for many visitors is a desire to experience and interact with the thermal and Maori attractions, most of their time is spent in relatively developed settings in the town. In developing the research design, particular attention was therefore paid to the inclusion of a full range of landscape settings, from ‘natural’ to ‘modified’. This had an added advantage of providing the opportunity for future cross reference to other PGSF funded research on perceptions of natural and modified landscapes being undertaken jointly by the authors with Forest Research Ltd.

In Q method, the aim is to include the widest range of possibilities or situations in the photographs being presented (Brown, 1980; McKeown and Thomas, 1988). The selection was therefore based upon a sampling frame of landscape categories derived from previous studies of landscape perception and experience. Three broad dimensions of the physical landscape emerge consistently from the literature as generic variables in landscape categorisation: landform and relief (including water), landscape cover (land use and vegetation), and cultural features (Schauman, 1988; Amadeo et al., 1989; Bishop and Hulse, 1994; Palmer, 1997). In addition, spatial arrangement of landscape elements is a key factor in preference, whilst familiarity and involvement (e.g., in activities within the landscape) are key determinants of individuals' experience and response (Kaplan and Kaplan, 1989).

In the Rotorua study, the variables selected to represent the landscape setting were derived from three sampling frames. The first was geographical, and aimed to provide a representative range of broad landscape settings across the study area. The second was focused upon particular features and attractions which are promoted to and/or visited by tourists. The third was a set of tourist and recreational activities available within the study area. The total set of possible images derived from these frames was over 100.

For the broader landscape settings, the study area was first divided into ten hydrological catchments, using a pre-existing framework adopted from Rotorua District Council and
Environment Bay of Plenty landscape assessment studies. Distinctive landforms were derived from the Lucas Associates Bay of Plenty study (plateau, crater rim/scars, terraces, lake edges, isolated hills, undulating country, flats), and their occurrence within different catchments recorded. Then the occurrence of five types of land cover was analysed (indigenous bush, scrub, pasture, exotic forest and urban). A number of key locations across the study area were then identified at which distinctive combinations of these factors occurred, and representative photographs obtained.

For features and attractions, an inventory of popular urban locations, natural sites, and notable attractions was developed from promotional literature and previous surveys, and the final selection aimed to encompass the full range of possibilities, rather than every attraction. Hence not all thermal areas were included in the final selection.

For activities, an inventory of possible activities on water, land, and with a cultural emphasis was developed, and again selection made to ensure a wide range of possibilities, without including every activity.

In selecting viewpoints which best represented these settings from the experience of the visitor no attempt was made to ‘randomise’ or to ‘standardise’ viewpoints. Views of landforms were taken from roadsides or lay-bys, using a telephoto lens. This contrasts with the more usual standardised 50mm adopted for many psychophysical studies. However, whilst 50mm corresponds to the total field of a passive eye, in this study the aim is to present to the subjects an image which represents one of a wide range of different landscape settings and experiences. Therefore we used a range of focal lengths to best express the particular experiences identified in the sampling frame. A number of these were 70mm. Views of land uses were also selected at ‘typical’ viewing locations, for example, roadsides. For cultural features and activities, views were selected which captured the essential quality of the location/activity, but omitted peripheral land uses. All photographs were taken on a fine day in summer.

Within each sampling frame are many sub groups and at least one photograph of each was taken, resulting in more than 100 photographs with potential use in the study. Our earlier experience with photographic Q sorting (Swaffield and Fairweather, 1996) suggested that a modest number would be best, especially since each respondent would be requested to undertake more than one Q sort. The number of photographs in the final selection was 30. Selection was guided by existing survey material which indicated the most popular attractions and activities, and by an analysis of the geographical settings to identify particularly distinctive areas, and complementary and overlapping characteristics. Clearly this meant that not all possible locations or attractions within the study area were included in the final set of photographs. However it did present a diverse set of possible types of landscape experience, which is the key objective. The final set of photographs covered each sub group of each main category and some photographs covered more than one sub group. Table 1 shows the complete list of 30 photographs and for each of the main categories gives the characterisation, the key descriptive elements and a working title for each photograph. The number for each photograph was randomly allocated. Figure 1 shows all the photographs in numerical order and in colour; the figure is located at the end of the report so that it can be folded out and used in conjunction with the interpretation of results.
Table 1  
Classification of Photographs

<table>
<thead>
<tr>
<th>No.</th>
<th>Characterisation</th>
<th>Location</th>
<th>Descriptor Used in Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>A. LANDSCAPE SETTINGS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Lake and regenerating bush</td>
<td>The Blue Lake</td>
<td>Blue lake, regenerating indigenous</td>
</tr>
<tr>
<td>9.</td>
<td>Indigenous bush and pasture</td>
<td>Mamakau plateau</td>
<td>Pasture and bush, Mamakau Plateau</td>
</tr>
<tr>
<td>10.</td>
<td>Lake and tall indigenous bush</td>
<td>Lake Okataina</td>
<td>Lake Okataina</td>
</tr>
<tr>
<td>12.</td>
<td>Regenerating indigenous bush</td>
<td>Lake Okataina road</td>
<td>Native bush, regeneration</td>
</tr>
<tr>
<td>13.</td>
<td>Exotic forest and pasture</td>
<td>Mature forest by SH5, with some clear cut</td>
<td>Exotic forestry with clear cut</td>
</tr>
<tr>
<td>14.</td>
<td>Hill and suburb</td>
<td>Ngongotaha, with houses in foreground</td>
<td>Ngongotaha Hill, bush and urban edge</td>
</tr>
<tr>
<td>16.</td>
<td>Slopes of caldera, pasture</td>
<td>Hamurana, to Lake Rotorua</td>
<td>Hamurana to Lake Rotorua</td>
</tr>
<tr>
<td>21.</td>
<td>Lake and exotic forest</td>
<td>Blue Lake</td>
<td>Blue Lake, exotic forest</td>
</tr>
<tr>
<td>26.</td>
<td>Mixed exotic forest</td>
<td>Whakarewarewa Forest</td>
<td>Whakarewarewa Forest, mixed species</td>
</tr>
<tr>
<td>28.</td>
<td>Mountain and lake</td>
<td>Mt Tarawera across Lake Tarawera</td>
<td>Mt. And Lake Tarawera</td>
</tr>
<tr>
<td>29.</td>
<td>Lake edge with houses</td>
<td>Gisborne Point, Lake Rotoiti</td>
<td>Lake Okareka, with housing</td>
</tr>
<tr>
<td>30.</td>
<td>Lake edge and pasture</td>
<td>Lake Rerewhakaaitu, towards Mt Tarawera</td>
<td>Lake Rerewhakaaitu to Mt. Tarawera</td>
</tr>
<tr>
<td></td>
<td><strong>B. URBAN FEATURES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Urban park</td>
<td>Government gardens; Prince’s Gate</td>
<td>Prince’s Garden, entrance to Government Gardens</td>
</tr>
<tr>
<td>8.</td>
<td>Commercial streetscape</td>
<td>Fenton St and advertising signs</td>
<td>Commercial Fenton St.</td>
</tr>
<tr>
<td>15.</td>
<td>Downtown</td>
<td>Cafés and sidewalk</td>
<td>Café street scene</td>
</tr>
<tr>
<td></td>
<td><strong>C. ATTRACTIONS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Historic site</td>
<td>Buried village sign and map</td>
<td>Buried Village</td>
</tr>
<tr>
<td>4.</td>
<td>Recreation site</td>
<td>Skyline gondola and luge</td>
<td>Skyline Skyrides</td>
</tr>
<tr>
<td>17.</td>
<td>Geyser</td>
<td>Whakarewarewa/MACI</td>
<td>Whakarewarewa Geyser</td>
</tr>
<tr>
<td>20.</td>
<td>Forest walk</td>
<td>Redwood walk</td>
<td>Redwood Grove</td>
</tr>
<tr>
<td></td>
<td><strong>D. NATURAL SITES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>Thermal area</td>
<td>Waiotapu</td>
<td>Waiotapu thermal area</td>
</tr>
<tr>
<td>23.</td>
<td>Rapids</td>
<td>Okere Falls</td>
<td>Okere Falls</td>
</tr>
<tr>
<td>24.</td>
<td>Waterfall</td>
<td>Tarawera Falls</td>
<td>Tarawera Falls</td>
</tr>
<tr>
<td>27.</td>
<td>Mud pools</td>
<td>Waiotapu</td>
<td>Mud pools</td>
</tr>
<tr>
<td></td>
<td><strong>E. WATER ACTIVITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Hot pools</td>
<td>Polynesian Pool with bathers</td>
<td>Polynesian Pools</td>
</tr>
<tr>
<td>18.</td>
<td>Water sports</td>
<td>Boat and recreational group, Blue Lake</td>
<td>Blue Lake, recreation</td>
</tr>
<tr>
<td>11.</td>
<td>Adventure sports</td>
<td>Raft, Okere River</td>
<td>Rafting, Okere Falls</td>
</tr>
<tr>
<td></td>
<td><strong>F. LAND ACTIVITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Farm show</td>
<td>Rainbow Springs, sign</td>
<td>Rainbow springs</td>
</tr>
<tr>
<td></td>
<td><strong>G. CULTURAL ACTIVITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Marae experience</td>
<td>Meeting house and welcome</td>
<td>Marae</td>
</tr>
<tr>
<td>7.</td>
<td>Colonial heritage</td>
<td>Museum in government gardens</td>
<td>Museum</td>
</tr>
<tr>
<td>25.</td>
<td>Shopping</td>
<td>‘NZ Shop’ sign</td>
<td>Souvenir shopping</td>
</tr>
</tbody>
</table>
One problem that emerged with the photographs selected was that two of them used signs to represent settings that were difficult to present in other ways. During the interviews it became apparent that some subjects responded to the sign only, rather than to the setting to which it referred. To clarify the intent of the image, a handwritten note was added at the bottom saying ‘Buried Village not the sign’ and ‘Shopping for gifts not the sign’. These amendments made a slight improvement. However it is not recommended that signs are used in this way in future studies.

2.3 Selection of People and Location of Interviews

The main aim was to obtain a diverse, non-random sample that included approximately even proportions of both men and women, and New Zealand and overseas subjects. To ensure that a wide variety of people were included the following groups were identified as likely to be important. The domestic groups included the following: locals, local tourist operators, Maori and New Zealand subjects. The overseas groups included people from: Asia, Europe, United Kingdom, North America, and Australia. Interviewee selection endeavoured to obtain about ten subjects for each of the above groups, but some of the groups had slightly fewer than ten and there were only four Australians. While there may well be large numbers of all main groups of overseas subjects going to Rotorua in the course of a year it was quite noticeable in the field that there were preponderances of some groups but not others. The North Americans available during the field visit were mainly Canadians.

A total of 66 visitors was interviewed and Table 2 shows the composition of the sample. There were 29 visitors from New Zealand and 37 from overseas with 40 men and 26 women. Included in the table are the data from the Tourism Rotorua database showing the distribution of overseas visitors for 1998. While it was not important to match this distribution, the sample here included representatives from all the main visitor groups.

<table>
<thead>
<tr>
<th>Type</th>
<th>Male</th>
<th>Female</th>
<th>Sum</th>
<th>%</th>
<th>Country</th>
<th>Male</th>
<th>Female</th>
<th>Sum</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>9</td>
<td>6</td>
<td>15</td>
<td>52</td>
<td>Europe</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td>19</td>
<td>13</td>
</tr>
<tr>
<td>Visitor</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>28</td>
<td>UK</td>
<td>6</td>
<td>3</td>
<td>9</td>
<td>24</td>
<td>13</td>
</tr>
<tr>
<td>Maori</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>21</td>
<td>Canada</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Australia</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>11</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Asia</td>
<td>6</td>
<td>5</td>
<td>11</td>
<td>30</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>13</td>
<td>29</td>
<td>100</td>
<td></td>
<td>22</td>
<td>15</td>
<td>37</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Male</td>
<td>38</td>
<td>58</td>
</tr>
<tr>
<td>Total Female</td>
<td>28</td>
<td>42</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>100</td>
</tr>
</tbody>
</table>
Interviews occurred in Rotorua during April, 1999. Subjects were approached at a number of locations in and around Rotorua, including both attractions and places of accommodation. The main attractions visited were: the downtown restaurant area near the lake (Tutaneki St.) especially outside the ice cream parlour, the Thermal Village, the Maori Art and Crafts Centre, the Polynesian Pools, the Agridome, a Chinese restaurant and the Public Library. The main places of accommodation visited were: the Centra Hotel, the YHA, a backpackers, some motels and a motor camp. Some specific visits were made to tourist industry people and these interviews occurred in their offices.

Interviews were easier to obtain in the evening at the places of accommodation when people had time to consider giving an interview. The YHA provided a convenient place because it had large dining tables which facilitated Q sorting with photographs. To balance out the types of accommodation, the Centra Hotel was also used as a base for interviewing. While it had tables and was otherwise convenient it was harder to get people there with time or inclination to give an interview.

It was particularly difficult to arrange interviews with Asian subjects. While there were many at the Centra Hotel, they were involved in group activities and did not have free time and in some cases, would not be able to speak good English. The Agridome was used as a starting point for contacts with Asian visitors, in particular the translators of which there were some for Japanese, Chinese, Taiwanese and Korean languages. However, while the translators could speak English very well, they were not typical subjects because they had been in New Zealand or other countries for a number of years in order to learn English. Asian visitors frequent specific restaurants at night so with the permission of one restaurant owner a number of interviews were arranged with translators coming in with the groups. Some of these people were less familiar with New Zealand and therefore give a Q sort more typical of overseas visitors.

A final point needs to be noted. Even such a simple classification as ‘overseas’ or ‘New Zealand’ can be difficult to apply. One person had been away only for a few years and yet had grown up in Rotorua. Another had been overseas many years but now was living in Rotorua and had strong Maori connections.

### 2.4 Q Sorting Procedure

After requesting permission to join the subject, the interviewer explained that the focus of the research was on experience of Rotorua as indicated by the photographs. Our plan was to have each subject to do two Q sorts:

1. What, for them, they liked and disliked, that is what was their preferred experience.
2. What, for them, was natural and unnatural.

In addition, those subjects involved in the tourist industry were asked to complete a Q sort for what they considered visitors to Rotorua liked. This was done to assess industry views of visitor experiences and then compare these with results from the study. After completing the first Q sort each subject was asked to identify all the photographs which typified Rotorua.
No mention was made of the intention to do two Q sorts, and each subject was asked first to sort the photographs into three piles: those which represented experienced of Rotorua that they liked, those that they did not like, and those that they neither strongly liked or disliked. When the initial sort into three piles was completed, the interviewer asked the subject to select the one photograph which represented the experience they like the most, then the next two, then the next three, etc. Then the focus shifted to the dislike pile and the same procedure was repeated. The photographs in the neutral pile were used to complete the Q sort.

The Q sort distribution consisted of nine piles of photographs with the number in each pile running in the following sequence, which approximates a normal distribution:

<table>
<thead>
<tr>
<th>Number in pile:</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>5</th>
<th>8</th>
<th>5</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>-4</td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>+1</td>
<td>+2</td>
<td>+3</td>
<td>+4</td>
</tr>
</tbody>
</table>

Each pile was assigned a score, ranging from -4 to +4, and this score was assigned to each photograph in the pile. Appendix 1 shows in full the record sheet.

On completion of the first Q sort the subject indicated which settings he or she thought were typical of Rotorua and these were recorded with circle around each photograph number. Then the subject explained why the six top and six bottom-ranked photographs were chosen and these comments were recorded on the record sheet.

While we emphasised during the Q sort that it was the subject's experience that was of interest, it became apparent that some subjects did not have first hand experience of all the settings in the photographs. Locals were familiar with most of them but visitors were not. This was expected since some visitors may have only recently arrived in Rotorua and not had time to visit all the major attractions. However, this lack of direct familiarity did not inhibit Q sorting or the expression of views about the landscape experiences represented in the photographs. Thus the Q sorts are based are both ‘real’ and ‘imagined’ experience. This mix is quite congruent with the approach in this study which focuses upon the subjects’ constructed experiences of landscape. In this context the beliefs, values and expectations that inform subjects’ choices are as much a part of the overall ‘type’ of experience, as are remembered aspects of a visit to a particular site. These together make up the subjective landscape experience of the subjects and this is what we are trying to identify.

To put it another way, the landscape concept upon which the study is based draws upon the notion that landscape is a social and cultural construction through which experience is structured (Cosgrove, 1984). Subjects’ selections of photographs express their preferred way of experiencing the Rotorua landscape. In earlier research using the same method for visitors to Kaikoura this issue of real versus imagined experienced was examined by noting which places in the photographs the subjects had actually visited. We found that there was no correlation between the way factors were constructed and places actually visited. Direct experience of a particular setting did not significantly change the way visitors conceptualised their overall preferred experience of the destination.
The interviewer next asked the subject to do a second Q sort in terms of what they thought was natural and unnatural. Again, comments were recorded for the six top and bottom-ranked photographs. For some visitors this request led them to ask the interviewer what was meant by natural and it was explained that whatever they thought was appropriate was what was expected. At the close of the interview, some background descriptive data for each visitor were recorded (see Appendix 1). Although two Q sorts were undertaken by each subject, the results reported here are derived only from the ‘like’ Q sort.

The subjects responded very well to the request to sort photographs. Both Q sorts were easy for the subjects to do and it gave them an ideal opportunity to express their preferences for the different landscape experiences of Rotorua. Each was told to focus on the experience represented by the photograph and not to judge the photograph itself. This focus worked well with only a few comments being made about the composition of the photograph, for example. Occasionally, subjects referred to photographic qualities when explaining why they liked a photograph but typically they spoke about their thoughts and feelings relating to their experience of what was in the photograph. Further, the two Q sorts worked well with the subjects able to do the subsequent Q sorts more easily then the first because they were more familiar with the photographs.

2.5 Conclusion

In summary, while there were some initial issues to be resolved in its application, the Q sort method appeared to work well, providing the potential for a detailed interpretation of locals' and visitors' experiences.
Chapter 3

Results

3.1 Introduction

The 66 Q sorts completed in response to the ‘like’ instruction to sort photographs according to respondents’ preferences were correlated and rotated using the varimax option of the PQmethod computer programme (version 2.06) suitable for personal computers. Five factors were extracted and they accounted for 64 per cent of the variance of the rotated correlation matrix. For the 30 photographs in the Q sorts the standard error of a factor loading is $\sqrt{n} = 0.18$, and at the 0.01 probability level a loading has to be at least $0.18 \times 2.58 = 0.47$. Only loadings that were ‘pure’, that is, for which there was a significant loading on only one factor, were used in the specification of the factors.

Using these criteria meant that there were a total of 48 subjects (73 per cent) whose Q sorts were used to define the factors, the others either not having a significant loading or having multiple loadings. Table 3 shows the key results of the factor analysis and shows how Factors 1 and 3 are the main ones with 18 and 13 subjects respectively loading on them. There are three other factors with either seven or three subjects loading on them. These results show a broad range of viewpoints among the subjects. This is confirmed by other results which show that there were no consensus photographs, that is, a photograph which every subject rated similarly. In contrast, there are from six to twelve distinguishing photographs for each factor, that is, photographs which have a score statistically significantly different from all other factors.

<table>
<thead>
<tr>
<th>% Explained Variance</th>
<th>Factor No.</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>No. Subjects</td>
<td>18</td>
<td>7</td>
</tr>
</tbody>
</table>

Table 3 shows the correlations between factors and indicates that Factor 1, Factor 3 and Factor 5 have some similarities because they have higher correlation coefficients than the others.
Table 4
Correlation Between Factors

<table>
<thead>
<tr>
<th>Factor</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.23</td>
<td>0.32</td>
<td>0.62</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0.43</td>
<td>0.05</td>
<td>0.38</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0.34</td>
<td>0.32</td>
<td>0.55</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0.05</td>
<td>0.32</td>
<td>0.40</td>
<td></td>
</tr>
</tbody>
</table>

Table 5 shows some demographic information for those subjects who loaded on a factor. As a general introduction to the character of the factors the table shows that Factors 1 and 3 comprise mainly New Zealand people, while Factors 2 and 4 comprise mainly overseas people. The asterisks indicate that the subject was a translator.

Table 5
Demographic Profile for Each Factor, Showing Age

<table>
<thead>
<tr>
<th>Factor</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>41</td>
<td>27/25</td>
</tr>
<tr>
<td>2</td>
<td>36/27/48</td>
<td>19/55</td>
</tr>
<tr>
<td>3</td>
<td>36/27/48</td>
<td>19/55</td>
</tr>
<tr>
<td>4</td>
<td>36/27/48</td>
<td>19/55</td>
</tr>
<tr>
<td>5</td>
<td>36/27/48</td>
<td>19/55</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>26/27</td>
<td>35/27</td>
<td>38</td>
<td>43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>48</td>
<td>47</td>
<td>26</td>
<td>43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>57</td>
<td>45/25</td>
<td>24</td>
<td>43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U K</td>
<td>63/67</td>
<td>58/56</td>
<td>47</td>
<td>76**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>33*</td>
<td>34</td>
<td>30*</td>
<td>23/31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Korea</td>
<td>26*</td>
<td>33*</td>
<td>30*</td>
<td>23/31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>27*</td>
<td>27*</td>
<td>27*</td>
<td>27*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: 1. Subjects under Factor 4 aged 35, 27, 58, 56, 47 and 48 were selected from multiple loading cases to increase the number of quotations from three to nine in order to match the numbers for the other factors. They are not otherwise included in the sums and totals.
2. The single asterisks indicate subjects who were translators.
3. The double asterisk indicates that the person was living in Rotorua but was from the UK.
4. The two cases with a negative sign after the number indicates that the subject had a negative loading on that factor.
The following sections present more detailed results for each factor. Factors are considered in the order that the computer programme presented them, that is, from Factor 1 to Factor 5. This is not meant to imply that factors with fewer visitors loading on them are less significant. The aim is to develop an interpretation based on photographs liked, photographs disliked and the distinguishing photographs. We simplify the presentation of each factor interpretation by treating each factor as a distinctive way of seeing the world. In a sense, this personifies in one voice the common features of the factor. This is justified since the factors are based on human perceptions. In some cases the top six photographs in the individual’s Q sort were not in the top six for the factor and no comments were available. Factors with fewer people loading on them provided fewer comments.

3.2 Factor 1: Sublime Nature Experience (regardless of origin)

Factor 1 accounts for 21 per cent of the total variance among the rotated factors and comprises 18 subjects, seven from overseas and eleven from New Zealand. The overseas visitors included people from Europe including the UK, Australia and Canada, while the New Zealand subjects included people who were locals, subjects and Maori.

The six top-ranked photographs and their respective scores were:

23. Okere Falls (+4)
20. Redwood Grove (+3)
24. Tarawera Falls (+3)
17. Whakarewarewa Geyser (+2)
27. Mud Pools (+2)
22. Waiotapu Thermal Area (+2)

These six photographs show natural features of bush and stream, large trees and thermal activity. There are signs of man's activity in four of them, including people and a hotel building. These photographs suggest strong natural elements but not devoid of human influence. The following analysis presents the comments made by those people who loaded significantly on Factor 1. The comments begin with photographs that were liked.

Photograph 23: Okere Falls (+4)

Subject 3:  “These are natural – its Rotorua.” (LocF27)
Subject 9:  “I like the tranquility and solitude. There are nice walks. Can do it when I like. Peacefulness, escape, isolation. I go regularly.” (LocF55)
Subject 15: “I like bush. I spent a lot of time as a deer culler and in Search and Rescue, that is, real bush not pine forest.” (VisNZM62)

1 The notation for each subject identifies either local or visitor (and, if a visitor, if NZ or overseas), male or female and age. Translators are identified with Tr, Maori with M.
Subject 16: (LocF23) “I’ve been to the bush, outdoors – not touched.”

Subject 20: (VisOM26) “This is pure nature.”

Subject 21: (VisOM27) “This nature, most untouched.”

Subject 44: (VisNZM48) “I like the natural beauty.”

Subject 45: (VisNZF43) “This is just lovely. There is bush and water – there could be trout. I could be sitting there.”

Subject 46: (VisNZF41) “I like the bush, the clean water and the fish.”

Subject 47: (VisNZM43) “I like water and native bush. It is powerful and untouched.”

Subject 48: (LocFM31) “This is natural. It is a representation of the past. There are water and native trees. I don’t know what that (structure) is, though.”

Subject 50: (VisOF33) “I like nature. This says nature and it relaxes me. I go this, hardly any people, it is nice.”

Subject 56: (VisOF57) “This is the place I like to walk. It is easy to walk in New Zealand, there are good tracks.”

Subject 58: (VisOM48) “I like the ruggedness, the water, the coolness, isolation, seclusion. I could live there.”

Subject 61: (VisOM63) “This is a trout stream. I used to be a fisherman.”

Photograph 20: Redwood Grove (+3)

Subject 3: (LocF27) “These² are natural – it’s Rotorua.”

Subject 9: (LocF55) “This is spectacular and unique – It is what Rotorua is all about.”

² In some cases subjects referred to a number of photographs at once in which case the same comment is used for a number of photographs.
Subject 15: (VisNZM62)
“I like the bush again – apart from the track, has ferns etc.”

Subject 16: (LocF23)
“This is native, beautifully, calm. I used to run there a lot.”

Subject 21: (VisOM27)
“This is nature, most untouched.”

Subject 45: (VisNZF43)
“I just love it – the walks, the trees. It’s really nice – good feelings.”

Subject 46: (VisNZF41)
“I like the quietness, naturalness, the huge trees – they are awe inspiring.”

Subject 47: (VisNZM43)
“I like trees. These are huge and very nice; big and awe inspiring.”

Subject 48: (LocFM31)
“Trees represent strength and the age of the land. It is the past and in a natural environment. It has a spiritual essence.”

Subject 49: (LocFM35)
“Relaxing – good to take the kids.”

Subject 56: (VisOF57)
“There is nothing else like this – this is awesome.”

Subject 58: (VisOM48)
“This is cool, inviting and natural. There are no people. There is a blend between man made access (and the forest) but it is not dominating.”

Subject 61: (VisOM63)
“I’m from British Columbia. I like big trees. Are these Kauri?”

Photograph 24: Tarawera Falls (+3)

Subject 3: (LocF27)
“These are natural – it’s Rotorua.”

Subject 8: (LocM41)
“This is a beautiful spot. It is attractive and distinctive. I’ve been there twice.”

Subject 9: (LocF55)
“I like the tranquility and solitude. Peacefulness, escape, isolation.”

Subject 16: (LocF23)
“This is untouched nature.”
Subject 44: (VisNZM48)  “I like the natural beauty.”

Subject 45: (VisNZF43)  “(Same as photographs 23 and 20). It reminds me of the West Coast.”

Subject 46: (VisNZF41)  “This is typical New Zealand – very green, rugged and with water.”

Subject 47: (VisNZM43)  “I like water and native bush. It is powerful land untouched.”

Subject 48: (LocFM31)  “(Same as photograph 23). Beautiful.”

Subject 49: (LocFM35)  “(Same as photograph 20). Part of Mt. Tarawera. When driving up it’s a nice change. Suddenly you see it.”

Subject 56: (VisOF57)  “This is natural, special, beautiful.”

Subject 58: (VisOM48)  “(Same as photograph 24). I like the ruggedness, the water, the coolness, isolation, seclusion. I could live there.”

Subject 61: (VisOM63)  “This is picturesque – with rushing water. I like the blue.”

Photograph 17: Whakarewarewa Geyser (+2)

Subject 8: (LocM41)  “I’m fascinated by geothermal activity.”

Subject 9: (LocF55)  “This is spectacular and unique. It is what Rotorua is all about.”

Subject 15: (VisNZM62)  “I like the volcanic fierceness, the unpredictability. I don’t like the smells. The sheer power of it.”

Subject 49: (LocFM35)  “This is part of Rotorua – where my kids are. It gives them an idea of power. Education for my kids is important.”

Subject 56: (VisOF57)  “Rotorua is a special place with geysers. They are awe inspiring.”
**Photograph 27: Mud Pools (+2)**

- Subject 9: (LocF55) “This is spectacular and unique. It is what Rotorua is all about.”
- Subject 21: (VisOM27) “This is nature, most untouched.”
- Subject 45: (VisNZF43) “I like to see the boiling mud, it’s incredible.”
- Subject 46: (VisNZF41) “This typifies Rotorua. It is unusual. There are few places in the world like this.”
- Subject 48: (LocFM31) “(Similar to photograph 23). This has been around for many years. It is a resource for our people.”
- Subject 56: (VisOF57) “(Same as photograph 17). This is unique – there are few places in the world like this.”
- Subject 58: (VisOM48) “These are extraordinary geological features I’ve not seen before.”

**Photograph 22: Waiotapu Thermal Area (+2)**

- Subject 9: (LocF55) “This is spectacular and unique. It is what Rotorua is all about.”
- Subject 44: (VisNZM48) “I like the thermal attractions.”
- Subject 45: (VisNZF43) “(Same as photograph 27). I like to see the boiling mud, it’s incredible.”
- Subject 48: (LocFM31) “(Similar to photograph 23) but changed by people, tracks, bridges and money.”
- Subject 49: (LocFM35) “This relates to my history and what I am giving to my kids.”
- Subject 58: (VisOM48) “(Same as photograph 27). These are extraordinary geological features I’ve not seen before.”
The six bottom-ranked photographs and their respective scores were:

8. Commercial Fenton Street (-4)
25. Souvenir shopping (-3)
3. Prince’s Gate, entrance to Government Gardens (-3)
13. Exotic forestry with clear cut (-2)
15. Café street scene (-2)
4. Polynesian Pools (-2)

For these six photographs four show man-made structures and one shows exotic forestry with a clear-cut hill. Four of the photographs show commercial activity, three as shopping and one as recreation.

**Photograph 8: Commercial Fenton Street (-4)**

Subject 8: (LocM41) “I don’t like fast food – it has no appeal. I rarely go by choice although I occasionally go with the kids.”

Subject 9: (LocF55) “This is commercialisation and we have never had McDonalds. I don’t like that kind of food.”

Subject 15: (VisNZM62) “This could be anywhere.”

Subject 16: (LocF23) “I’m not a fan of town – cluttered signs.”

Subject 17: (VisOM27) “Typical commercialisation of civilisation.”

Subject 44: (VisNZM48) “This is visual pollution.”

Subject 45: (VisNZF43) “I only go because Hannah always wants it, and she succeeds sometimes.”

Subject 46: (VisNZF41) “Visual pollution and All-American.”

Subject 48: (VisNZM43) “These are the places I hate. Reminds me of the USA.”

Subject 49: (LocFM31) “This shows outside influences on our people; then as adverse effects on health.”

Subject 49: (LocFM31) “My kids would rather go to this. Driving at night there are all these neon signs.”
Subject 56: (VisOF57)  “This is a nightmare. If this was the first impression, it would create a bad image.”
Subject 58: (VisOM48)  “This is crass commercialism.”

Photograph 25: Souvenir Shopping (-3)

Subject 8: (LocM41)  “I don’t spend time at souvenir shops. They are OK in themselves.”
Subject 9: (LocF55)  “This is commercialisation – it is necessary and I do it overseas.”
Subject 15: (VisNZM62)  “I look in them but don’t like the signs or the shop – tacky souvenirs!”
Subject 16: (LocF23)  “The sign explains nothing. I don’t like souvenir shopping – they provide overcharged presents.”
Subject 20: (VisOM26)  “This is commercial.”
Subject 21: (VisOM27)  “Need it but not so much.”
Subject 45: (VisNZF43)  “I don’t need to buy gifts.”
Subject 46: (VisNZF41)  “Not a big thing for us – plastic tikis etc.”
Subject 48: (VisNZM43)  “I’m thinking of the buildings, the sign, there is nothing natural except the sky. I don’t come to Rotorua for this.”
Subject 49: (LocFM31)  “This is part of tourism – some impacts are positive and some are negative. Our people are either involved or not involved. There is misrepresentation of things Maori that are on display. It is an intellectual property issue.”
Subject 49: (LocFM35)  “I don’t like the whole commercialisation of it. It is getting better but still tacky.”
Subject 56: (VisOF57)  “I’m not into souvenir shopping. You can see it anywhere.”
Subject 58: (VisOM48)  “This is crass commercialism. It’s a rip off.”
Subject 63: “Advertising – I never buy a postcard.”
(VisOM63)

Subject 66: “This is the great New Zealand trap.”
(VisOM67)

**Photograph 3: Prince’s Gate, Entrance to Government Garden (-2)**

Subject 8: “I’m neutral on this. It is an icon but its nothing special to me.”
(LocM41)

Subject 15: “Nothing! It’s Victorian nothing.”
(VisNZM62)

Subject 16: “This is a waste of space. I don’t know why it is there – it’s an eyesore.”
(LocF23)

Subject 20: “There is too much traffic.”
(VisOM26)

Subject 45: “I don’t know why I don’t like it. It has no appeal.”
(VisNZF43)

Subject 46: “These are very ugly gates – the architect must have had a bad day plus the Maori carvings are bright red – unusual.”
(VisNZF41)

Subject 48: “This is man made.”
(VisNZM43)

Subject 49: “The carvings out the front, this whole government gardens‘; thing again, set in Victorian past. [Is the colour red appropriate?]³ The red is OK.”
(LocFM31)

Subject 56: “I’m not sure what it is: lots of traffic, too civilised and busy. [How about the structure?] The structure is OK.”
(VisOF57)

**Photograph 13: Exotic Forestry with Clear Cut (-2)**

Subject 16: “The mountain top is bare – I don’t like it.”
(LocF23)

Subject 20: “This is cutting wood – it is against nature.”
(VisOM26)

Subject 21: “This is destroying nature. I see it in Germany but there is no natural forest anymore. We have it there but I don’t like it.”
(VisOM27)

³ The square brackets are used to indicate a question put to the subject.
Subject 44: (VisNZM48)  “I don’t like the clear-fell and loss of vegetation. Forestry is important. It looks rugged.”

Subject (VisNZF43)  “They’ve cut down those trees – it looks bare and horrible.”

Subject 48: (VisNZM43)  “The trees have been removed.”

Subject 49: (LocFM31)  “I see this and clear cut areas, they don’t look nice. [Are you concerned with land?] No, they have to do this, there is no pretty way of doing it.”

Subject 50: (VisOF33)  “It doesn’t pay much – just pine trees. Trees are felled and looks like the moon. [As in Europe?] Like in Europe. I prefer a mixture, the monoculture is not good for this environment.”

Photograph 15: Café Street Scene (-2)

Subject 9: (LocF55)  “I don’t go on holiday to eat. I just don’t do it.”

Subject 16: (LocF23)  “I’m not sure about this one – I don’t go (to them).”

Subject 20: (VisOM26)  “This is commercial. [Do you use it?] Yes, but it’s not the reason I am here.”

Subject 46: (VisNZF41)  “I quite like this but it is not the reason we come. It is nice to have it but it's garish.”

Subject 48: (VisNZM43)  “There is nothing distinctive here.”

Subject 49: (LocFM31)  “This is part of the impact of tourism on the city, having to cater for the needs of other people.”

Subject 50: (VisOF33)  “I like sitting outside but don’t like the cars going through.”

Subject 56: (VisOF57)  “It could be a café anywhere. It is not special.”

Subject 66: (VisOM67)  “This is filling the sidewalks with stuff.”
Photograph 5: Polynesian Pools (-2)

Subject 44: “I don’t like the falsity of the whole thing and it costs. [Have you been there?] I’ve not been there.”
(VisNZM48)

Subject 45: “It’s a rip off. When you go with family you can’t take your kids into certain pools.”
(VisNZF43)

Subject 46: “This is a contrived situation. We went to a hot pool in the bush at Kerosine Creek.”
(VisNZF41)

Subject 48: “This has artificial rocks – it is touristy.”
(VisNZM43)

Summary for Factor 1

The main themes from the comments listed above about Factor 1 are listed below.

Positive:

- Nature, natural, natural beauty, native, untouched, no people, bush, native bush.
- Solitude, escape, relaxation, quietness, tranquillity.
- Clean water, coolness, trout.
- Isolation, seclusion, calm, good feelings.
- Spectacular, unique, awe inspiring, awesome, powerful.
- Trees as strength, age, spiritual.
- Beautiful, attractive.
- Walking.

Negative:

- Commercialisation, cluttered signs, visual pollution, American, neon lights, traffic.
- Nightmare, falsity, contrived, artificial.
- Not distinct, nothing, eyesore, waste of space, ugly.
- Outside influences, adverse affects on health.
- Tacky souvenirs, don’t go, overcharged, rip-off, trap.
- Bare mountain, against nature, monoculture, nothing natural except the sky.

These themes show that Factor 1 is responding to nature. The bush and trees, including the redwoods, generate positive feelings of peace and quietness combined with feelings of awe and power. These positive themes show an appreciation of nature as sublime, that is, exalted, grand, noble or awe inspiring (Concise Oxford Dictionary, 1990). The concept of sublime is well established in landscape aesthetics, and derives particularly from the 18th century English debate over categories of landscape experience, summarised in terms of the Sublime, the Beautiful, and the Picturesque (Gilpin in Andrews, 1994). Appreciation of sublime nature was fundamental to 19th century tourism development, and it is significant that the terminology as well as the overall type of experience remains potent and relevant to
contemporary visitors and locals. Not surprisingly the least-liked photographs in this factor represent experiences that are the opposite of sublime nature, that is of commerce, work and the trappings of the city.

Table 6 shows the distinguishing photographs for Factor 1, that is, those photographs which were placed in distinctive position compared with all other factors. The table shows the scores each factor assigned to each distinguishing photograph.

Table 6
Distinguishing Photographs for Factor 1

<table>
<thead>
<tr>
<th>No.</th>
<th>Photograph</th>
<th>Factors (Scores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.</td>
<td>Tarawera Falls</td>
<td>3 0 2 1 1</td>
</tr>
<tr>
<td>22.</td>
<td>Waiotapu thermal area</td>
<td>2 3 0 0 0</td>
</tr>
<tr>
<td>28.</td>
<td>Mt and Lake Tarawera</td>
<td>1 -3 0 -1 0</td>
</tr>
<tr>
<td>1.</td>
<td>Blue Lake, regenerating bush</td>
<td>1 -3 -1 -1 0</td>
</tr>
<tr>
<td>7.</td>
<td>Museum</td>
<td>0 1 3 3 1</td>
</tr>
<tr>
<td>3.</td>
<td>Prince’s Gate, entrance to Govt Gardens</td>
<td>-3 0 0 0 1</td>
</tr>
</tbody>
</table>

Table 6 shows that the Tarawera Falls, which appears to be the most sublime of all the 30 photographs, receives a higher score in Factor 1 than that given by all the other factors. Waiotapu thermal area is another characteristically “sublime” setting which is rated more in this factor. Its lower score of two possibly relates to the many visitors shown on the site, which may detract from its relative attractiveness. The similarly “sublime” views of Mt Tarawera and the Blue Lake both distinguish this factor, but are not strongly preferred. The Museum features as a distinguishing setting because it is neutral in this factor, whereas it is positively rated. Prince’s Gate, which is clearly a human artefact, is distinguished by virtue of the strength of negative response.

3.3 Factor 2: Iconic Tourist Experience

Factor 2 accounts for 11 per cent of the total variance among the rotated factors and comprises seven subjects, six from overseas, and one from New Zealand. However, this New Zealander was negatively loaded on the factor, meaning that he strongly disliked the settings highly ranked by the other subjects who constituted this factor. He clearly rejects the classic tourist experience of Rotorua. The overseas visitors included subjects from Canada, Asia and from Australia, but not Europe.

The six top-ranked photographs and their respective scores were:

6. Marae (+4)
22. Waiotapu Thermal Area (+3)
17. Whakarewarewa Geyser (+3)
27. Mud Pools (+2)
5. Polynesian Pool (+2)
2. Buried Village (+2)
These six photographs show Maori and geothermal features typical of Rotorua. Three of them include people, either as part of the attraction (as in photograph 6) or as visitors (photographs 22 and 5). Five of the photographs contain built structures. Together, these photographs illustrate some of the main tourist attractions of Rotorua, the ones typically used in advertising and promotions.

**Photograph 6: Marae (+4)**

Subject 10: (VisOM45) “I missed Maori at the museum in Auckland. I want to experience culture and food like Captain Cook. Plus singing from the heart in ethnic shows.”

Subject 32: (VisOF30) “I like the different culture.”

Subject 36: (VisOF47) “I like to learn about Maori society and beliefs, we went to a Maori village.”

Subject 37: (VisOM25) “I like the culture, don't experience much at home. I'm curious and have general interest. Some similarity to Mohawk culture, they were feared. New Zealand different from North America.”

Subject 38: (VisOF24) “I like culture, it is different from home. There is fierceness and cohesiveness of the group.”

**Photograph 22: Waiotapu Thermal Area (+3)**

Subject 10: (VisOM45) “Again this is different, it's a natural area. There are mineral deposits. One of these got covered up by Tarawera.”

Subject 32: (VisOF30) (Similar to photograph 17) “Distinct geothermal and volcanic feeling.”

Subject 36: (VisOF47) “Geothermal is unique to this area and I enjoy it.”

Subject 37: (VisOM25) “Accessibility - I like accessibility to something unique that I can't see at home so easily.”

Subject 37: (VisOF24) “I like the unpredictability, it may change whenever.”
Photograph 17: Whakarewarewa Geyser (+3)

Subject 10: (VisOM45) “I was keen to see this. Just one thing I wanted to see. It's a natural phenomenon, only a few places in the world have this. Never heard of it until I got to Australia.”

Subject 32: (VisOF30) “I like the distinct geothermal and volcanic feeling.”

Subject 36: (VisOF47) “I like the geyser etc.”

Subject 37: (Same as photograph 22) “There are some in the US but there's far to go.”

Subject 38: (VisOF24) “I like the naturalness and unpredictability. It is uncontrollable and untouched.”

Photograph 27: Mud pools (+2)

Subject 32: (VisOF30) “You never see this in Hong Kong. It is fascinating and interesting.”

Subject 36: (Same as photograph 22) “I like the look of it.”

Subject 37: (Same as photograph 22) “This is neat.”

Photograph 5: Polynesian Pools (+2)

Subject 10: (VisOM45) “This is second best to the geyser. Dipping in the water will do this. There is no healing although it may draw toxins out. I like to compare this to Canada, I go to Banff every year and do it.”

Subject 33: (VisOF28) “You can't see this in Malaysia. I go a bit, it is relaxing.”

Subject 37: (VisOM25) “This looks really relaxing, I went to it.”

Subject 38: (VisOF24) “I like the warm water and the tropical paradise look of it.”
Photograph 2:  Buried Village (+2)

Subject 38:  “This is a natural phenomenon of a volcano just covering everything.”
(VisOF24)

The six bottom-ranked photographs and their respective scores were:

8.  Commercial Fenton Street (-4)
1.  Blue Lake, regenerating indigenous (-3)
28.  Mount and Lake Tarawera (-3)
14.  Ngongotaha Hill, bush and urban edge (-3)
29.  Lake Okareka, with housing (-2)
21.  Blue Lake, exotic forest (-2)

These six photographs show a mix of built structures and natural areas. The three photographs with built structures include one of the downtown scene and two showing urban housing. The three more natural photographs all show lakes in the foreground. One of these photographs shows mature exotic forest.

Photograph 8:  Commercial Fenton Street (-4)

Subject 10:  “This is a trick picture from California right?”
(VisOM45)

Subject 36:  “This reminds me of cost and nagging children which equals pressure.”
(VisOM47)

Subject 37:  “This is like any other place and a lot like home, all very north American.”
(VisOM25)

Subject 38:  “This is crass commercialism. The epitome of North American fast food. Concrete and neon.”
(VisOF24)

Photograph 1:  Blue Lake, regenerating indigenous (-3)

Subject 32:  “This is very common in the world.”
(VisOF30)

Photograph 28:  Lake and Mount Tarawera (-3)

Subject 32:  “This is very common in the world.”
(VisOF30)

Subject 38:  “Not interesting. I have no interest in it. I did not go to the buried village.”
(VisOF24)
Photograph 14: Ngongotaha Hill, bush and urban edge (-2)

Subject 10: “These are plain old houses with huge fences.”
(VisOM45)

Subject 36: “This is suburbia encroaching onto bush.”
(VisOF47)

Subject 38: “Not unique, just houses.”
(VisOF24)

Photograph 29: Lake Okareka, with housing (-2)

Subject 32: “There is nothing special here.”
(VisOF30)

Subject 36: “It looks reedy. In some places in Australia they clear them out because you can't fish.”
(VisOF47)

Subject 37: “It's not that interesting beachwise - swamp in front of homes.”
(VisOM25)

Subject 38: “It's not unique, just houses.”
(VisOF24)

Photograph 21: Blue Lake, exotic forest (-2)

No comments given.

Summary for Factor 2

The main themes from the comments listed above about Factor 2 are listed below.

Positive:
- Maori, culture, society, food, singing, curious.
- Natural, naturalness, geothermal, uncontrollable, different, distinct, unpredictable, volcanic, fascinating, interesting.
- Accessibility, not far away.
- Relaxing, tropical paradise (the hot pools).

Negative:
- American, commercial, concrete, neon.
- Stress.
- Common plain, suburbia, houses.
- Not interesting, no interest.
These themes reflect what one might expect of an overseas tourist going to Rotorua would want and that is experience of Maori culture and geothermal activity because both of these are interesting and accessible. These tourists want to see and experience something new and interesting because they are curious about and interested in learning, to some degree at least. What they do not want are experiences that remind them of home, or are mundane or part of their everyday life.

Table 7 shows the distinguishing photographs for Factor 2. Photographs 6, 22 and 5, showing Maori and geothermal features, were among the most liked for Factor 2 and in nearly all cases none of the other factors like them to the same extent. Photograph 19, Rainbow Springs, is liked a little while all other groups do not like it, and it is another mainstream tourist attraction. The scores for photographs 20 and 21 show how Factor 2 is only lukewarm to the Redwood grove and dislikes the Blue Lake, unlike all other factors. It seems that nature walks are not so important to Factor 2 but that it likes the well-advertised mainstream attractions.

<table>
<thead>
<tr>
<th>No.</th>
<th>Photograph</th>
<th>Factors (Scores)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>6.</td>
<td>Marae</td>
<td>-1</td>
</tr>
<tr>
<td>22.</td>
<td>Waiotapu thermal area</td>
<td>2</td>
</tr>
<tr>
<td>5.</td>
<td>Polynesian Pools</td>
<td>-2</td>
</tr>
<tr>
<td>19.</td>
<td>Rainbow Springs</td>
<td>0</td>
</tr>
<tr>
<td>20.</td>
<td>Redwood grove</td>
<td>3</td>
</tr>
<tr>
<td>21.</td>
<td>Blue Lake, exotic forest</td>
<td>1</td>
</tr>
</tbody>
</table>

3.4 Factor 3: New Zealand Family Experience (in a natural setting)

Factor 3 accounts for 15 per cent of the total variance among the rotated factors and comprises 13 subjects, five from overseas and eight from New Zealand. The overseas visitors included subjects from Australia, United Kingdom and Asia. However, few were tourists. The two translators had been in Rotorua for six months and six years respectively. The 23 year old male was based in Rotorua and had been eight months in New Zealand, and the 41 year female was the mother of a family of four who had emigrated to New Zealand a few months earlier and now lived in Rotorua. The 26 year old Australian female was a visitor to Rotorua. Thus of the five ‘overseas’ people loading on Factor 3 only one was a genuine visitor and the others now lived locally. The New Zealand subjects loading on Factor 3 included eight locals and no visitors or Maori.
The six top-ranked photographs and their respective scores were:

20. Redwood Grove (+4)
5. Polynesian Pools (+3)
7. Museum (+3)
18. Blue Lake, recreation (+2)
23. Okere Falls (+2)
24. Tarawera Falls (+2)

The photographs show places that are attractions providing activities for the family. They include two bush and river scenes so that there is a balance of built structures and natural places.

**Photograph 20: Redwood Grove (+4)**

Subject 1: (VisOF19) “I’m from Rotorua and growing up I spent time in the forest. It is familiar to me.”

Subject 5: (LocM36) “The scenery is appealing and there are no buildings.”

Subject 13: (LocM27) “It is the experience factor. There is tranquillity and it has an aura as part of something older and bigger than you. You are removed but it is still close. Every time I go there I have this experience. [Do you go often?] I don't go a lot.”

Subject 18: (LocM48) “I love the tranquillity and peacefulness.”

Subject 19: (LocM46) “I like the enjoyment of walking amid nature.”

Subject 26: (LocM27) “This is one of our best, greatest assets for tourism and residents. This is nice and relaxing to walk, jog or bike and is great for the family. I go with family and hosting travel agents. You can walk or have breakfast in the forest.”

Subject 30: (TrM33) “These are big trees I've never seen before and there is a path, I want to walk through and breathe the fresh air.”

Subject 31: (TrM27) “This is green and peaceful and unspoiled. [Do you go often?] Not often but it a chance to go I do go, and take friends. I don't go by myself.”

Subject 35: (LocFM69) “I go through it a lot. It is peaceful and I can take the dogs.”
Subject 53: (VisOM23)  “The Redwoods are interesting. Good example to visit and see how they run a forest and do research. I am a joiner by trade and I like to see where woods come from.”

Subject 60: (VisOF41)  “I don't know what's at the end, it is mysterious.”

Subject 65: (VisOF26)  “It is pretty and I have good feelings about it.”

**Photograph 5: Polynesian Pools (+3)**

Subject 4: (LocF55)  “I like the relaxing hot pools and surroundings. I don't do it a lot.”

Subject 5: (LocM36)  “This has everything - scenery, cleanliness, privacy or to meet someone. I don't go, it costs $25!”

Subject 13: (LocM27)  “This is pure relaxation. I've been there heaps of times. Spa atmosphere.”

Subject 18: (LocM48)  “This appeals to me but not the people. I know the product, it is relaxing. I go regularly for business, not as much as I would like to. I like the idea of going.”

Subject 19: (LocM46)  “I like the relaxation, the activity and the enjoyment. I don't do it a lot because I have my own spa. Hard to get away from here.”

Subject 26: (LocM27)  “There's a lot of hot water at Rotorua and I missed this at Queenstown. Grown up with it, it represents all the hot water areas in this region. I go to one of them often.”

Subject 30: (TrM33)  “This is a special picture because there's no place like this in Korea. I enjoy it, I have a monthly ticket. Public bathing is not so acceptable in Korea. Young Korean people tend to hide their bodies and go to a private spa.”

Subject 60: (VisOF41)  “This is fun. I've not been to this one but have been to the one at Hanmer.”

Subject 65: (VisOF26)  “This is just luxury, total relaxation.”
Photograph 7: Museum (+3)

Subject 1: (VisOF19)  “I live overseas now and this symbolises Rotorua for me. Our main history is here.”

Subject 13: (LocM27)  “This is a great complex. Had a lot to do with it and have had good experiences there with launches and art exhibitions, cinema etc. It is the jewel in the crown.”

Subject 18: (LocM48)  “This is not seen elsewhere in the world. I loved the Edwardian style plus the green in front.”

Subject 26: (LocM27)  “This is a great asset for Rotorua and the building represents Rotorua at a glance, and the bowling green in front.”

Subject 30: (TrM33)  “I haven't seen this before, it makes me feel comfortable so that I would like to go inside. I'm curious to go in.”

Subject 35: (LocF69)  “I like the architecture and the old English style.”

Photograph 18: Blue Lake, recreation (+2)

Subject 1: (VisOF19)  “I have done this a lot at the Blue Lake. It is familiar to me and I love the water. It's a nice mixture. We've had races and triathlons at the blue lake.”

Subject 4: (LocF55)  “It's a great lake. It's a really good place to go with the family, and I've been many times.”

Subject 5: (LocM36)  “This is good for a family outing.”

Subject 18: (LocM48)  “This is a family thing. I do it regularly although not as much as I would like. It is enjoyment for the family.”

Subject 19: (LocM46)  “This has recreation, boating and relaxation.”

Subject 31: (TrM27)  “This is the family by the lake. It is a good place when it is fine weather.”

Subject 35: (LocF69)  “This brings back memories of family activities.”

Subject 5: (LocM36)  “Good scenery with rivers is hard to find.”
Subject 13: (LocM27) “The experience of doing white-water rafting but not like photograph 11 with the raft showing visibly. I like the removed component, it is the river more than the rafting.”

Subject 18: (LocM48) “I like the native bush and the prehistoric river look, the natural setting.”

Subject 35: (LocF69) “I like to walk along beside the river and listen to the water.”

Subject 53: (VisOM23) “This is beautiful river and bush.”

Subject 60: (VisOF41) “This is nice to look at and it has water movement. Being there and seeing it is great.”

Photograph 24: Tarawera Falls (+2)

Subject 19: (LocM46) “I like the beauty of nature. I will go there sometime.”

Subject 53: (VisOM23) “This is a natural phenomenon. Wanted to go there.”

Subject 60: (VisOF41) (Similar to photograph 23) “Being there and seeing it.”

The six bottom-ranked photographs and their respective scores were:

26. Whakarewarewa Forest, mixed species (-4)
13. Exotic forestry with clear cut (-3)
  9. Pasture and bush, Mamakau Plateau (-3)
14. Ngongotaha Hill, bush and urban edge (-2)
25. Souvenir shopping (-2)
12. Native bush, regeneration (-2)

These photographs show mostly natural settings that have been modified to some degree. Photograph 26 and 13 show exotic trees while photographs 9, 12 and 14 show native bush although in the case of 9 and 14 juxtaposed with farmland and housing respectively. Photograph 25 illustrates a commercial setting clearly directed at overseas visitors.
Photograph 26: Whakarewarewa Forest, mixed species (-4)

Subject 1: (VisOF19) “This is not very nice, trees don't look healthy. I have no real memory of it. Is it by Tarawera?”

Subject 5: (LocM36) “This is too bland. The trees are planted and it's not natural.”

Subject 13: (LocM27) “This could be anywhere, I know it's Whaka. These trees are not spectacular.”

Subject 19: (LocM46) “This is a nothing photo.”

Subject 30: (TrM33) “I have seen this many times in Korea. It is a normal mountain. Are these diseased trees? They have changed colour, something funny here. Nothing special.”

Subject 31: (TrM27) “The trees don't look useful. Pine trees are OK but this is wasting land.”

Subject 35: (LocF69) “This is boring. Are they exotics? It's got nothing.”

Subject 53: (VisOM23) “This is just forest, it is a nothing picture. You see photograph 26 all the time. Photograph 20 in comparison shows a path going into it.”

Subject 60: (VisOF41) “Yuck! I never want to be there. Looks dead. There is nothing there. It's boring.”

Subject 65: (VisOF26) “I haven't been there: I don't like eucalypts.”

Photograph 13: Exotic forestry with clear cut (-3)

Subject 1: (VisOF19) “I don't like this, the forest's been cut over.”

Subject 4: (LocF55) “I don't like the scenery. It looks like it is burnt.”

Subject 13: (LocM27) “There is a bit of colour but the logging is of concern. It is left as barren.”

Subject 18: (LocM48) “It is an issue for me seeing clear fell close to the road. They should leave three rows of trees. Hearing that people object to this. Looks bad for tourists.”
Subject 19: (LocM46)  “I don't like the barrenness of the hilltop, it doesn't look nice. It will be OK in 3-4 years. I don't object to logging.”

Subject 30: (TrM33)  “Something has happened to the top, that is, someone has purposely made the mountain look like that. But I can see this in Korea too.”

Subject 31: (TrM27)  “It is untidy on top. I don't see this at home I'm from the city.”

Subject 35: (LocF69)  “I can feel my feet getting filled up with grass seed. It's dry, hot and dusty. [Are the pines all right?] The logging is OK.”

Subject 53: (VisOM23)  “There is forestry. It's boring. I have no great concern with clear felling. It's OK. It's an industry.”

Photograph 9: Pasture and Bush Mamakau Plateau (-3)

Subject 1: (VisOF19)  “This is boring. I have spent little time on farms and have no attachment to land.”

Subject 5: (LocM36)  “This is bland and has no interest.”

Subject 13: (LocM27)  “This could be anywhere, its OK as is.”

Subject 30: (TrM33)  “This is just the usual scenery in NZ and other places.”

Subject 53: (VisOM23)  “This is just nothing. There are 2 million of these in New Zealand.”

Photograph 14: Ngongotaha Hill, bush and urban edge (-3)

Subject 4: (LocF55)  “All the scenes are - all yuck.”

Subject 5: (LocM36)  “This is ugly, it looks like my backyard. It's messy.”

Subject 18: (LocM48)  “This is suburban. The fence looks yucky. Nothing for me. Messy.”

Subject 26: (LocM27)  “This of Pukuhangi Road and it’s a residential area. I live nearby, ordinary, its home.”
Subject 31:  (TrM27)  “It is the usual view.”
Subject 65:  (VisOM67)  “It's just a backyard.”

Photograph 25: Souvenir shopping (-2)
Subject 1:  (VisOF19)  “This has no appeal. I live here.”
Subject 5:  (LocM36)  “This is boring and probably not visible at a person's height. I do go shopping for souvenirs.”
Subject 18:  (LocM48)  “This is an unfair shot and I am responding to the sign. OK with shopping if they are NZ owned shops.”
Subject 26:  (LocM27)  “Souvenir shopping is expensive and for international guests. It's not what I do. I would do it overseas.”
Subject 35:  (LocF69)  “The whole town exists for the tourists and I'm not so keen on them. They can come but we overexpose ourselves.”
Subject 53:  (VisOM23)  “I don't like shopping in Rotorua at all. It is too expensive and hard to find parking. I'm speaking not as a tourist who has just come for 2 weeks because I'm working here for a while.”
Subject 65:  (VisOM67)  “This is boring, shops are everywhere.”

Photograph 12: Native Bush, regeneration (-2)
Subject 4:  (LocF55)  “All these scenes are yuck.”
Subject 30:  (TrM33)  “This is the usual bush and I prefer the sea rather than mountains or hills.”
Subject 35:  (LocF69)  “You couldn't walk through it or in it. It's a barrier.”

35
Summary for Factor 3

The main themes from the comments listed above about Factor 3 are listed below.

Positive:
- Tranquillity, aura, larger than you, peacefulness, mystery.
- Walking, amid nature, jog, bike, breather fresh air, racing, triathlon, recreation, boating, white water rafting.
- Go with family, take dogs, family outing, family activities.
- Green, peaceful, unspoiled, attractive, good feelings, no buildings, appealing scenery.
- Relaxing, luxury, enjoyment, hot water, fun.
- History, symbol, represents Rotorua, Edwardian style, architecture.
- Comfortable, curious.
- Natural setting, beautiful river and bush, water movement, beauty of nature, natural.

Negative:
- Not nice, not healthy, diseased, dead, yuck, bland, not spectacular, nothing, boring, could be anywhere, usual scenery, ordinary, usual, no appeal, can’t walk through it.
- Been cut over, burnt, logging, barren.
- Yuck, ugly, my backyard, suburban.
- Expensive, not what I do, overexposed.

Factor 3 responds positively to nature and in some ways is similar to Factor 1 but not with same emphasis to indicate that the experience of the sublime is so important. Rather, it is the experience of recreational activity with a nature setting, as the generous list of activities clearly indicates. While perhaps not all the people loading on Factor 3 go to these natural places with family, some do and they also visit attractions like the Polynesian Pools or the Museum because these are convenient and practical to visit with the family. Factor 3 dislikes landscape settings that appear to be damaged in some way, even though the evaluation may not be particularly well informed, showing that they enjoy their activities in what they perceive to be a healthy natural setting. They also dislike familiar suburban and backyard scenes because that is what they are seeking to get away from in visiting Rotorua attractions.

Table 8 shows the distinguishing for Factor 3 and indicates their preference for activities that also include Skyline Skyrides, rafting, Marae visits and taking coffee downtown. All these activities are the sort of thing that a local family may do. Since they are mainly locals they do not like souvenir shopping (photograph 25). Finally, settings that appear to offer no activity value and are visually boring are not liked, and while they are not well liked by the other factors either, the lack of activity value makes them less liked for this factor.
Table 8
Distinguishing Photographs for Factor 3

<table>
<thead>
<tr>
<th>No.</th>
<th>Photographs</th>
<th>Factors (Scores)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Polynesian Pools</td>
<td>-2</td>
</tr>
<tr>
<td>18</td>
<td>Blue Lake, recreation</td>
<td>-1</td>
</tr>
<tr>
<td>4</td>
<td>Skyline Skyrides</td>
<td>0</td>
</tr>
<tr>
<td>11</td>
<td>Rafting, Okere Falls</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>Marae</td>
<td>-1</td>
</tr>
<tr>
<td>15</td>
<td>Café street scene</td>
<td>-2</td>
</tr>
<tr>
<td>25</td>
<td>Souvenir shopping</td>
<td>-3</td>
</tr>
<tr>
<td>9</td>
<td>Pasture and bush, Mamakau Plateau</td>
<td>-1</td>
</tr>
<tr>
<td>13</td>
<td>Exotic forestry with cutover</td>
<td>-2</td>
</tr>
</tbody>
</table>

3.5 Factor 4: Picturesque Landscape Experience

Factor 4 accounts for eight per cent of the total variance among the rotated factors and comprises three subjects from overseas (Germany and Japan). Of all the five factors in this analysis, Factor 4 has the lowest number of significant loadings and therefore fewer people from which to gain comments on individual photographs. For this particular factor we have used an additional six subjects who, while having a significant loading on the factor, also loaded on other factors, i.e., they were multiple loaders, but their comments are still relevant to the interpretation of this factor. With the inclusion of these additional subjects there is a total of nine subjects, eight of whom are from overseas, including three from Germany, three from the UK and two from Japan.

The six top-ranked photographs and their respective scores were:

10. Lake Okataina (+4)
7. Museum (+3)
23. Okere Falls (+3)
20. Redwood Grove (+2)
30. Lake Rerewhakaaitu to Mt Tarawera (+2)
16. Haumurana to Lake Rotorua (+2)

These six photographs show mainly scenes that appear to be natural, four of which include water. However there are signs of significant modification in five of the six photographs (photographs 7, 20, 30, 16) and the remaining two photographs (photographs 10 and 23) also have some signs of modification. Three photographs (10, 30 and 16) show landscapes that are varied or have a distant perspective with a mix of water and sky.
Photograph 10: Lake Okataina (+4)

Subject 7: (VisOM35)  “This is nature.”
Subject 11: (VisOM34)  “In Japan there is not much sand and the toi toi near the water is interesting too.”
Subject 12: (VisOF38)  “I like the ocean and the trees.”
Subject 23: (VisOM58)  “This is beautiful, I like to go there and be near the water. The trees look more natural where there is mixtures.”
Subject 29: (TrF30)  “I like the blue skies and the lake or sea with its blue colour and the green of the forest.”
Subject 57: (VisOM56)  “I like the nice combination of shore and land and hills, it looks attractive.”

Photograph 7: Museum (+3)

Subject 11: (VisOM34)  “I have never seen such a building in Japan, this is interesting.”
Subject 21: (VisOM27)  “It is a nice building, I like it.”
Subject 22: (VisOF47)  “It is the Museum, I would like to go to it.”
Subject 23: (VisOM58)  “This reminds me of England. The style is Victorian - mock Tudor i.e. kitsch.”
Subject 29: (TrF30)  “I like the Tudor style and no clouds in the sky.”
Subject 57: (VisOM56)  “This is an interesting building, I like buildings. It looks Colonial and is someone's idea of mock Tudor. This is still attractive to me. I like seeing buildings because they always differ whereas if you see one dolphin you see them all, and there will be a reaction away from this kind of attraction as people get familiar with marine animals.”
Photograph 23: Okere Falls (+3)

Subject 12: (VisOF38) “Flowing water for me is very important! Bush and trees around.”

Subject 21: (VisOM27) “Nature most untouched.”

Subject 29: (TrF30) “The stream is very beautiful.”

Subject 53: (VisOM23) “This is wild, verdant, full of action, but surrounded by unchanged bush. It is a dramatic subject with a static frame.”

Subject 63: (LocM48) “I’m an outdoors person and used to go hunting a lot. I can get away from urban presence here.”

Photograph 20: Redwood Grove (+2)

Subject 7: (VisOM35) “This is big nature. Are they Kauri?”

Subject 21: (VisOM27) “This is nature, most untouched.”

Subject 22: (VisOF47) “This is an idyllic walk in the woods.”

Subject 23: (VisOM58) “I like the scale and size of the trees, they sum up what New Zealand is like, i.e. forests in a natural setting.”

Subject 29: (TrF30) “I like the sunshine through the trees. It is like Hanmer Springs maybe?”

Photograph 30: Lake Rerewhakaetu to Mt Tarawera (+2)

Subject 11: (VisOM34) “This is our own nature without mankind.”

Subject 12: (VisOF38) “I like the blue water.”

Subject 29: (TrF30) “I like the blue sky and the water. There is always a blue sky in New Zealand in summer.”
Photograph 16: Haumurana to Lake Rotorua (+2)

Subject 11:  “I like the green and blue and white colours, with the hills going up and down. There are many trees and little houses and they are matching and fitting in together.”
(VisOM34)

Subject 63:  “I live in this type of area, it is a nice rural view. There is nobody there and this is the strong appeal of Rotorua to me as a place to work.”
(LocM48)

The six bottom-ranked photographed and their scores were:

26. Whakarewarewa Forest, mixed species (-4)
27. Mud Pools (-3)
8. Commercial Fenton Street (-3)
18. Blue Lake, recreation (-2)
11. Rafting, Okere Falls (-2)
13. Exotic Forestry with clear cut (-2).

These photographs show a mix of natural and mostly modified scenes, although the mud pools (27) is perhaps not unnatural. Both 26 and 13 feature introduced species.

Photograph 26: Whakarewarewa Forest, mixed species (-4)

Subject 11:  “This is too simple. [Because of all the trees?] Yes. [So what is the problem?] There are no fascinating elements about a tree. If it is a beautiful tree or situation it is good but these are ordinary trees.”
(VisOM34)

Subject 12:  “I don't know about these trees, they look ill.”
(VisOF38)

Subject 23:  “This looks dreary, dead. They are planted by man.”
(VisOM58)

Subject 29:  “There are many clouds and the mountains are not green.”
(TrF30)

Photograph 27: Mud Pools (-3)

Subject 11:  “It is all grey in colour. It is boring.”
(VisOM34)

Subject 23:  “It looks awesome but I dislike the colour. It is scary and creepy.”
(VisOM58)

Subject 29:  “It is grey, what does it mean?”
(TrF30)
### Photograph 8: Commercial Fenton Street (-3)

Subject 7:  
(VisOM35)  
“This is the normal thing that you see anywhere.”

Subject 21:  
(VisOM27)  
“This is typical commercialisation of civilisation.”

Subject 22:  
(VisOF47)  
“You see this anywhere! There is no culture.”

Subject 23:  
(VisOM58)  
“I hate all the signs, they are hideous!”

Subject 29:  
(TrF30)  
“I think of Rotorua as a countryside town but this is from other countries.”

Subject 57:  
(VisOM56)  
“This could be the USA etc. It could be anywhere. It's not England.”

Subject 63:  
(LocM48)  
“This is symbolic of any city, an almost inevitable clutter of signage. It's the inevitable part of business. A down-side of city living. It is a bit stark in this presentation. It is cleaner than in Asia.”

### Photograph 18: Blue Lake Recreation (-2)

Subject 7:  
(VisOM35)  
“The swimming in the lake is OK but it's the machines on a beautiful lake I don't like. OK for paddling but motor power is not good on a lake.”

Subject 11:  
(VisOM34)  
“This is complex - it is people and boats, photograph 16 is natural, this is artificial.”

Subject 22:  
(VisOF47)  
“This suggests whining children at the beach.”

Subject 63:  
(LocM48)  
“I like this but it's better if you took all the people out. It would have higher appeal of the lakes. Remove the people, leave the boat and move it up.”

### Photograph 12: Native bush, regeneration (-2)

Subject 11:  
(VisOM34)  
(Same as photograph 26) “Too simple, there are no fascinating elements.”
Photograph 13: Exotic forestry with clear cut (-2)

Subject 7: 
(VisOM35)
“I don't like the cutting of the forest.”

Subject 12: 
(VisOF28)
“The clear felling. People here are putting in trees for growing and cutting. It's not what I expect in New Zealand.”

Subject 21: 
(VisOM27)
“This is destroying nature. I see it in Germany but there is no natural forest anywhere. We have clear felling also in Germany but we don't like it.”

Subject 63: 
(LocM48)
“The aspect of the forest is OK but then the bald hill. To the uninitiated may equal disease or erosion possibilities. There is a need for Fletchers to put up a sign saying it is sustainable and replanted.”

Summary for Factor 4

The main themes from the comments listed above about Factor 4 are listed below.

Positive:
- Interest, attractive, novelty, different, mixtures, combination, action.
- Water, ocean, blue water.
- Colour, blue skies, green, white clouds, no clouds, sunshine through the trees, hill and trees and houses fitting in, rural view.
- Building, inviting, interesting, Victorian mock Tudor, kitsch, colonial.

Negative:
- Not fascinating, too simple, normal, see everywhere, no culture, from other countries.
- Trees are dead, ill, planted, don’t like cutting, clear felling, destroying nature, bald hill.
- Cloudy, mountains are not green, grey in colour, scary and creepy, meaningless.
- Hideous signs, don’t like machines, artificial, too many people.

Factor 4 also likes nature as does Factor 1 and Factor 3 but in a distinctive way. Here the focus is not related to sublime feelings or as a place for family activities but the pictorial and scenic qualities of the landscape. Factor 4 finds interest in combinations and composition of the elements in the photograph (trees, sky, water) including colours. There is appreciation of architecture so that the older building of the Museum is liked, as are the rural scenes with the houses fitting in. These values are characteristic of an appreciation of the picturesque. The picturesque view of landscape was a reaction to formality, proportion and order and instead emphasised landscapes as looking like a painting and as having an aesthetic quality located between the sublime (awe inspiring) and the beautiful (the serene). It is marked by ‘pleasing variety, irregularity, asymmetry and interesting textures’ (Encyclopaedia Britannica CD ROM 2.0). It is not surprising then that the least liked photograph was described as not fascinating, simple or normal, and for some it was the colour that was off putting.
Table 9 shows that among all factors it is only Factor 4 that strongly likes Lake Okataina with its colours, movement and variety, and they are quite happy with the experience of seeing it rather than going to it. Photographs 14 and 29 show bush and housing that are acceptable to this factor because of their pictorial qualities but not to any others. While the mud pools have appeal to the factors that seek sublime or iconic experiences, they do not appeal to Factor 4 because of their dark and uninteresting appearance.

### Table 9
Distinguishing Photographs for Factor 4

<table>
<thead>
<tr>
<th>No.</th>
<th>Photograph</th>
<th>Factors (Scores)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>10.</td>
<td>Lake Okataina</td>
<td>0</td>
</tr>
<tr>
<td>14.</td>
<td>Ngongotaha Hill, bush and urban edge</td>
<td>-1</td>
</tr>
<tr>
<td>29.</td>
<td>Lake Okareka with housing</td>
<td>-1</td>
</tr>
<tr>
<td>27.</td>
<td>Mud pools</td>
<td>2</td>
</tr>
</tbody>
</table>

3.6 Factor 5: (Not Labelled)

Factor 5 accounts for nine per cent of the total variance among the rotated factors and comprises seven subjects, four from overseas and three from New Zealand. One of the overseas subjects from the UK was living as of right among Maori in the Thermal Village and perhaps his sentiments are more correctly seen as male Maori. Of the three New Zealand subjects, two were Maori men.

The six top-ranked photographs and their scores were:

   20. Redwood Grove (+4)
   17. Whakarewarewa Geyser (+3)
   6. Marae (+3)
   4. Skyline Skyrides (+2)
   21. Blue Lake, exotic forest (+2)
   2. Buried Village (+2).

These six photographs include mainly modified outdoor scenes with no interest in the strongly natural places such as the bush and stream photographs. The closest to this is photograph 20, the redwood grove. There is obvious interest in things Maori since photograph 6 is included with a score of +3 and the Buried Village with a score of +2.

**Photograph 20: Redwood Grove (+4)**

Subject 17: (VisOF43) “Keen on water, lakes and forests, and thinking of great walks through the forest. I've not been to this yet.”

Subject 24: (VisOF31) “These are natural and take thousands of years to grow. NZ should keep these and not cut them.”
Subject 34: (LocM64)  “In the last two weeks I have been through with my sister from Scotland.”

Subject 41: (LocMM19)  “This is peaceful and calm. I can think about everything, go running and feel good.”

Subject 42: (LocMM42)  “It is awesome to stand under these.”

Subject 43: (VisO?M76)  “This is the Redwoods walk and FRI. [Do you like them?]. They convey a period of time because the trees are so big and tall.”

**Photograph 17: Whakarewarewa Geyser (+3)**

Subject 24: (VisOF31)  “This is typical Rotorua. It is dynamic and powerful and is moving and in action.”

Subject 41: (LocMM19)  “This is home for me, it's where I'm from. I swim there on the right hand side. All memories of when I was young.”

Subject 42: (LocMM42)  “This is nature at its best (like photograph 20). It is awesome to stand under this.”

Subject 43: (VisOM76)  “This is the Prince of Wales Feathers from our side.”

**Photograph 6: Marae (+3)**

Subject 24: (VisOF31)  “These are New Zealand native people, interesting culture. Some similarities to Japanese culture, more like inu.”

Subject 41: (LocMM19)  “This is our gathering place. It is spiritual, it is the focus of Maori.”

Subject 43: (VisOM76)  “This is Maori in general, wherever you go.”

**Photograph 4: Skyline Skyrides (+2)**

Subject 17: (VisOF43)  “I like the lake and view, not the fun. And the sky is good. We intend to go when it's fine.”

Subject 34: (LocM64)  “I have many stimulating and happy memories for the family, do it for celebrations.”

Subject 41: (LocMM19)  “I like the view plus the fun aspects.”
Subject 42:  “My brother works there but the centrepiece is the mountain that it's on. It's important in Maori culture.”  
(LocMM42)

Photograph 21: Blue Lake, exotic forest (+2)

Subject 17: “I'm keen on water plus lakes plus forests and thinking of the great walks through the forest. I've done the Kepler, the Routeburn, and the Able Tasman walks.”  
(VisOF43)

Subject 24: “There is a lot of green.”  
(VisOF31)

Subject 41: “It is so peaceful and the colours are nice with the green and the blue.”  
(LocMM19)

Photograph 2: Buried Village (+2)

Subject 17: “When you visit a country you should see some culture or historical things. Nature has done this. Have not been but think I will enjoy it.”  
(VisOF43)

Subject 24: “I can see where I am.”  
(VisOF31)

Subject 42: “This is where my family came from. It has spiritual meaning - it's your heritage.”  
(LocMM42)

The six bottom-ranked photographs and their scores were:

25. Souvenir shopping (-4)
15. Café street scene (-3)
8. Commercial Fenton Street (-3)
26. Whakarewarewa Forest, mixed species (-2)
19. Rainbow Springs (-2)
9. Pasture and bush, Mamakau Plateau (-2)

These six photographs show a balance of downtown and outdoor scenes. Clearly there is an antipathy to commercial scenes and an aversion to natural settings modified by productive activity (26 and 9).
Photograph 25: Souvenir shopping (-4)

Subject 17: (VisOF43) “I don't do this. Sometimes buy them but it's not what I do on my holidays.”

Subject 24: (VisOF31) “You see this anywhere. It does not attract me. I never shop, I'm too poor.”

Subject 34: (LocM64) “This turns me off. It's quite out of character. It's commercial, boring and of no interest. When people try to sell to me it turns me off.”

Subject 42: (LocMM42) “I never do this. I avoid it at all costs.”

Photograph 15: Café street scene (-3)

Subject 24: (VisOF31) (Same as photograph 25) “See this anywhere. Does not attract me. I never shop, I'm too poor.”

Subject 34: (LocM64) (Same as photograph 25) “I don't enjoy shopping. I feel my feet getting tired.”

Subject 41: (LocMM19) “This is in town, it is smelly, busy and noisy. I don't go but I do go to that particular restaurant for Indian food.”

Subject 42: (LocMM42) (Same as photograph 8) “It's commercial, I never do it, I avoid it at all costs.”

Subject 43: (Vis?OM76) “I don't like the umbrellas. They are gaudy, but the rest is OK.”

Photograph 8: Commercial Fenton Street (-3)

Subject 17: (VisOF43) “I see Burger King and McDonalds and I don't like it. I'm also a vegetarian.”

Subject 34: (LocM64) (Same as 15) “I don't enjoy shopping. I feel my feet getting tired.”

Subject 41: (LocMM19) “This is town and it smells. I go for McDonalds. I go to eat there but don't like it, and I go for videos.”

Subject 42: (LocMM42) “I don't like the commercialisation.”

Subject 43: (Vis?OM76) “This has a multitude of bloody rubbishy signs. Too many poles sticking up.”
Photograph 26: Whakarewarewa Forest, mixed species (-2)

Subject 24: “It looks like the trees have nearly died.”
(VisOF31)

Subject 41: “It looks dull, the colour is dull.”
(LocMM19)

Subject 43: “This advertises the fact that possums have attacked the trees. I don't like it at all.”
(Vis?OM76)

Photograph 19: Rainbow Springs (-2)

Subject 17: “The sign tells me it was to do with fishing but I'm a vegetarian and don't go to zoos.”
(VisOF43)

Subject 41: “This is boring.”
(LocMM19)

Photograph 9: Pasture and bush, Mamaku Plateau (-2)

Subject 24: “There is nothing interesting here. You see it anywhere.”
(VisOF31)

Subject 42: “This just shows what man has done.”
(LocMM42)

Summary Factor 5

The main themes from the comments listed above about Factor 5 are listed below.

Positive:
- Experience of forest, natural, peaceful, calm, awesome, water plus forests, green.
- Powerful, dynamic, moving, awesome.
- Memories, familiarity,
- Culture, interest.
- Lake and view, sky.
- Spiritual gathering place, heritage.

Negative:
- Don’t do this (shopping), see everywhere, turn off, commercial, avoid it, gaudy, too many signs.
- Dull, dead, boring, common, man-made.
These themes show elements already seen in the other factors and there is little that is distinctive or strongly thematic. Factor 5 does not appear to have any distinctive pattern or coherence that we can identify and we do not attach any label to it because of this. Table 10 shows the distinguishing photographs for Factor 5 and we do not provide any further interpretation.

### Table 10
**Distinguishing Photographs for Factor 5**

<table>
<thead>
<tr>
<th>No.</th>
<th>Photograph</th>
<th>Factors (Scores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td>Marae</td>
<td>-1  4  1  0  3</td>
</tr>
<tr>
<td>4.</td>
<td>Skyline Skyrides</td>
<td>0   1  1  -1  2</td>
</tr>
<tr>
<td>29.</td>
<td>Lake Okareka, with housing</td>
<td>-1  -2  -1  1  0</td>
</tr>
<tr>
<td>15.</td>
<td>Café street scene</td>
<td>-2  -1  1  -1  -3</td>
</tr>
</tbody>
</table>

### 3.7 Comparisons Across All Factors

In these factor analysis results there were no consensus photographs, that is, photographs which received similar scores which were not significantly different, statistically, from any of the other factors. However, we can identify photographs that received scores that were similar across all factors and these indicate where there was some agreement. The top six photographs are shown in the Table 11.

### Table 11
**List of Photographs Receiving a Similar Score**

<table>
<thead>
<tr>
<th>No.</th>
<th>Photograph</th>
<th>Factor Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Buried Village</td>
<td>0  2  0  0  2</td>
</tr>
<tr>
<td>13.</td>
<td>Exotic forestry with clear cut</td>
<td>-2  0  -3  -2  -1</td>
</tr>
<tr>
<td>16.</td>
<td>Hamurana to Lake Rotorua</td>
<td>1   0  -1  2  0</td>
</tr>
<tr>
<td>19.</td>
<td>Rainbow Springs</td>
<td>0   1  -1  -1  -2</td>
</tr>
<tr>
<td>30.</td>
<td>Lake Rerewhakaaatu to Mt Tarawera</td>
<td>0   0  2  1</td>
</tr>
<tr>
<td>12.</td>
<td>Native bush, regeneration</td>
<td>1  -1  -2  0  -1</td>
</tr>
</tbody>
</table>

The table shows that very few of these similarly-scored photographs received a high score whether positive or negative. In other words, there were no settings which were regarded by all subjects as representing strongly favourable experiences. The photograph of production forestry with an area of clear cut is disliked by four of the five factors.
3.8 Conclusion

The results identify five factors or preferred types of experience, four of which were able to be interpreted in detail. There were few overlaps between the factors, as indicated by the absence of consensus photographs. The distinctive viewpoints for each factor were matched to some extent by some distinctive demographic features of the subjects who made up the groups.
Chapter 4

Discussion and Conclusion

4.1 Summary of Findings

The research reported here aimed to determine locals’ and visitors’ responses to the Rotorua landscape. It achieved this by identifying their preferences for different types of landscape experience of Rotorua, and providing an understanding and interpretation of that experience. Four clearly different and distinctive categories of response have been identified and interpreted, each of which represents a different characteristic experience of Rotorua. The salient features and structure of these responses relate to the expectations of the visitors and to their socio-cultural characteristics, but the nature of the relationship varies across factors.

The Sublime Nature Experience of Rotorua is common to some overseas visitors, New Zealand locals and New Zealand visitors, both male and female, with a range of ages. These subjects were interested in the experience of sublime nature, particularly as expressed by the geothermal areas, waterfalls, and the redwoods. There were two distinctive types of experience that were sought particularly by overseas visitors. The first, the Iconic Rotorua Experience, highlights features that have been portrayed in promotional literature - the Rotorua of Maori culture and spectacular geothermal activity. This was preferred by younger males and females from several Pacific Rim countries. The second distinctive experience sought by overseas visitors was the Picturesque Landscape Experience which emphasises aesthetic appreciation of variety, contrast and composition, irregularity, and interesting features in both natural and architectural settings. This was preferred by middle-aged males and females mainly from Europe. The New Zealand Family experience values family-based activities in a natural setting. The experience of natural places was appreciated, but there was more emphasis upon recreational activities than the experience of nature itself. This experience was expressed mainly by current residents of Rotorua, both male and female, of a range of ages. While we report the factor results with reference to demographic characteristics, the latter are indicative only and not presented as population characteristics, because the sample is small and non random.

4.2 Interpretation

The four factors collectively embrace all the key aspects of the destination images of Rotorua identified by Kearsley at al. (1998), which themselves reflect the dominant marketing for the destination - particularly geothermal sites and Maori culture. However they also reveal some potentially significant groupings of preferred experience. The clear distinctions between Factors 1 (Sublime Nature), 2 (Iconic Tourist), and 3 (Picturesque Landscape), all of which included significant numbers of overseas visitors, suggests that despite the generic marketing, different visitors seek different types of experience. Some seek the unique experiences by which Rotorua is promoted, and which presumably therefore attracted these particular visitors (Iconic Tourists). Others however seek experiences that are more generally characteristic of
New Zealand, either expressed as sublime nature, or picturesque landscape. In the case of sublime nature, the preferred experiences included one thermal site, and hence overlapped in part with the generic destination image. In the case of the picturesque landscape experience, none of the top six preferred experiences included explicit geothermal activity, or Maori culture.

The domestic visitors from outside Rotorua loaded entirely on Factor 1 (Sublime Nature), whilst the locals identified with both Factor 1 (Sublime Nature) or Factor 3 (Family Recreation). Whilst one geothermal site featured in Factor 1, the important experiences in Factor 3 were the hot pools and Marae, which were complemented by largely active recreational settings and experiences (water sports, Skyline Skyrides, rafting, and the cafés). The fact that no New Zealand visitors loaded on to Factor 3 is surprising since it is likely that some of them would go to Rotorua for activities like boating and fishing. This odd finding may stem from the low number of New Zealand visitors (eight) and if more had been included we would expect some to identify with Factor 3.

The broad appeal of Factor 1, Sublime Nature, with 18 subjects from a range of sources, highlights the continuing importance of the experience of nature as a primary attraction of Rotorua. It also expresses the continuity of the historically significant role of geothermal features. Similarly the inclusion of the Marae setting as a distinguishing and positive feature in three of the five factors confirms the continuing central role of Maori culture in the tourism industry. What is perhaps equally significant is the confirmation of the important role played by newer and more generic recreational attractions such as the Skyline Skyrides and rafting. The recurring presence of water in many of the preferred experiences also confirms that Rotorua relies significantly on its natural hydrological assets to complement the geothermal attractions. Of the 16 distinguishing and positively rated settings and experiences for the five factors, seven featured lakes or waterfalls.

The identification of a ‘Sublime Nature’ factor, and a ‘Picturesque Landscape’ factor also highlights the major continuity in the aesthetic values which underpin tourism in Rotorua. The images and comments upon them made by visitors and locals in 1999 would appear to echo those of tourists 100 years ago or more, and express similar sentiments in similar ways. The spread of subjects in Factor 1 in particular also indicates that these aesthetic responses are common across a range of cultures and groups. This can be interpreted in two contrasting ways. Sociobiologists and environmental psychologists such as Kaplan and Kaplan (1989) argue that such consistency expresses underlying preferences for particular environments, derived from evolutionary adaptation. Cultural critics (e.g., Cosgrove, 1984) argue that they reflect the hegemony of particular learned values, resulting from their promulgation over succeeding generations, and reinforcement through advertising and design. In all probability, there are elements of both. The important feature for tourism planning is the continuity through time, and consistency across visitors.

The reflexive relationship between tourism promotion and experience also requires comment. The emergence of an ‘iconic tourist’ experience, and the comments which underpin the factor, reinforces the close link between the promotion, expectation and response to tourist experience, that is attracting increasing theoretical interest (e.g., Cloke and Perkins, 1998). Theoretical issues will be discussed in the following section, but is clear that at an empirical level there is a significant group of visitors who judge their experience in Rotorua by
reference to the expectations they bring with them. The close match of the distinguishing features of this factor with the destination image identified by Kearsley et al. (1998) illustrates the link. But in addition to setting up expectations of sought for experiences, the negative comments on some typical local settings draws attention to the fact that destination image also sets up criteria for negative evaluation. The promotional image is largely skewed towards a set of favourable experiences. When visitors encounter settings or experiences that differ markedly from their expectations, their evaluations can be very negative – perhaps more so than if their expectations had not been so positively framed by the promotional literature.

Analysis of most and least preferred settings and experiences across the five factors is revealing. Table 11 indicated six photographs with similar scores across all factors. Most were in the mid range (i.e., some negative, some neutral, and some positive scores) which only indicates that although they may be statistically similar, they do not figure significantly in subjects’ evaluations. One however that was consistently poorly rated was the image of exotic forestry with some clear cut, visible from State Highway 5. Two other settings stand out as being notably preferred or disliked across all factors. The image of commercial signs on Fenton Street was always rated as negative, whilst the Redwood Grove was always rated as positive. Interestingly, a longer distance view of Whakarewarewa forest, which includes the Redwood Grove and eucalypts, was the second most disliked image among photographs receiving similar scores.

Several observations can be made. First, comments on these images indicate the potential for some types of variation in image composition to influence response. The view of Fenton Street down a footpath (photograph 8) included a number of large commercial signs, which attracted consistent adverse commentary. Although both visitors and locals may frequent Burger King or MacDonalds, they do not appear to respond positively to their appearance in a suite of images of Rotorua landscape experience, as they are seen to be “crass commercial”, “American”, and “visual pollution”. But a number of subjects acknowledged that their children would be attracted to this location. In the case of Whakarewarewa forest (photograph 26), the presence of a large proportion of Eucalyptus trees in the forest gives the image a grey appearance, which subjects interpreted as evidence of disease. The experience within the forest, on the other hand, at the Redwood Grove, was highly rated.

Second, the negative comments about clear cut forestry (relating to photograph 13) expressed two linked sentiments: first, that clear cutting was seen as an unnatural process, and second (for those from overseas) that it did not fit their image and expectation of New Zealand. It should also be noted that in the image the area of clear cut was quite modest: the majority of the image comprised mature exotic trees with pasture in the foreground, and a blue sky. Pictorially, it is a not unattractive scene. But the small area of clear cut attracted consistently negative comment and scoring.

Third, despite the emphasis in several factors and within comments upon ‘natural’ qualities, and the dislike of exotic forestry operations, the image most preferred across all factors featured an exotic tree stand - the Redwood Grove at Whakarewarewa forest (photograph 20). Another popular image (photograph 21) showed a view across the Blue Lake to mature exotic plantations at the back of Whakarewarewa (and close to the area of clear cut discussed.
above). The comments indicate that many locals and visitors do not or cannot distinguish between exotic and indigenous species in situations where commercial management is not apparent or visible.

With increasing afforestation in tourist areas, and extensive mature forests, the strongly positive and negative reactions to images featuring exotic forests in different ways reinforces the need for additional research into tourists’ and locals’ perceptions of forest management.

Finally, the results from this survey can usefully be compared with those from an earlier Q sort survey of Kaikoura visitors. The focus in Kaikoura was entirely upon visitors, rather than locals, but included NZ visitors who were bach owners in the area. While the sample designs varied it is still possible to make some comparisons. There are a number of significant and notable parallels between the two sets of findings, but also some contrasts. They can be summarised as follows:

<table>
<thead>
<tr>
<th>Rotorua Factors</th>
<th>Kaikoura Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Similar</strong></td>
<td></td>
</tr>
<tr>
<td>Sublime Nature</td>
<td>Eco tourist</td>
</tr>
<tr>
<td>Iconic tourist</td>
<td></td>
</tr>
<tr>
<td>Picturesque landscape</td>
<td>Picturesque Landscape</td>
</tr>
<tr>
<td>New Zealand family</td>
<td>Family coastal holiday</td>
</tr>
<tr>
<td><strong>Dissimilar</strong></td>
<td></td>
</tr>
<tr>
<td>(No equivalent)</td>
<td>Coastal Community</td>
</tr>
<tr>
<td>(No equivalent)</td>
<td>Maritime Recreation</td>
</tr>
</tbody>
</table>

Both the Sublime Nature experience in Rotorua, and the Ecotourist experience in Kaikoura are characterised by a desire for active contact with, and experience of, distinctive natural qualities in the destination. In Rotorua, this focuses upon geothermal areas, lakes and waterfalls, and apparently ‘natural’ forests. In Kaikoura, it was marine mammals, the coastal environment and the mountain backdrop. In both cases, subjects rejected visible signs of commercial activity. In Kaikoura, this experience largely corresponded with the ‘iconic’ promotion of the destination, and so there was no separate iconic factor: sublime nature, as an ecotourist experience, is iconic Kaikoura. In Rotorua on the other hand, there was a clear distinction between the sublime experience and the iconic experience, which included a discrete, Marae-based Maori cultural experience. In Kaikoura the Maori dimension recognised by visitors was a part of the Whale Watch ecotourist experience, whereas the Marae was not evaluated as part of a preferred experience.

A second area of broad equivalence was in the picturesque landscape experience. In both Rotorua and Kaikoura there was a distinctive factor which focused upon a more passive appreciation of landscape as scenery. Comments in both studies revealed the close linkage and continuity of this factor with established picturesque values. They both excluded the iconic experiences associated with the more active sublime/ecotourist experience. In Rotorua the picturesque also embraced old cultural elements, specifically the museum. In Kaikoura, on the other hand, the old building of Fyffe House did not feature, and was specifically excluded. A colonial whaling relic appears to fall into a different aesthetic category for visitors than a NeoGothic tourist feature, despite its formal picturesque qualities.
The third area of similarity was the family holiday experience. Both Rotorua and Kaikoura are destinations for New Zealand family holidays, expressed as factors which feature recreational opportunities. In Kaikoura they were focused upon the coast, notably fishing and diving, whereas in Rotorua they emphasised particular attractions such as Skyline Skyrides, the hot pools, and water sports. Both also include ‘iconic’ experiences. The match is not perfect because the Kaikoura study did not include locals and the Rotorua study may not have included sufficient New Zealand visitors. However, it seems reasonable to speculate that in both places there would be both locals and New Zealand visitors that would pursue recreational activities and therefore identify with the family factor.

Of the two Kaikoura factors without obvious equivalence, the absence of a Maritime Recreation experience in Rotorua probably also reflects differences in sampling frames, as one might expect a ‘lake experience’ factor in Rotorua had a larger sample of locals or New Zealand visitors been included. An equivalence or otherwise of the Coastal Community factor is more difficult to interpret. It probably expresses elements which in Rotorua become combined with other factors, but may also reflect the differences in the destinations basic features, as it is clearly related to experiences within a smaller sized community, with no direct equivalence possible in Rotorua.

4.3 Implications

The Rotorua findings and their comparison with the earlier Kaikoura study have a number of theoretical and policy implications. Two theoretical dimensions can be identified. First, the close relationship between major factors, particularly the ‘iconic’ experiences and the way in which both destinations are marketed, highlights the central role of placemaking in contemporary tourism development in New Zealand (LeHeron and Pawson, 1996; Pawson and Swaffield, 1998; Cloke and Perkins, 1998; Ateljevic, 1998; Schöllmann, 1998). For a significant number of visitors, their experiences were clearly pre-structured by promotional material (see Moran (N. D.)), as their comments frequently drew comparison between images presented to them and their expectations of what makes Rotorua, or Kaikoura, distinctive. Tensions begin to emerge when the experience diverges significantly from the expectations. Nonetheless, it is notable that in Rotorua there is major continuity between earlier phases of place promotion and currently preferred experiences. What appears to be happening however is that several distinct tourism circuits are appearing within Rotorua, as identified by Ateljevic (1998). The scale and complexity of the destination allows visitors and locals to construct different experiences, with some shared features, but also with quite different elements. The distinction between sublime, iconic and picturesque experiences is particularly significant, and warrants further exploration.

The second theoretical issue is the distinction between the sublime nature and picturesque landscape experiences, which suggests an interesting perspective upon the debate between tourism as performance or gaze (Perkins and Thorn, 1998). These two models have been presented as alternatives, with Perkins and Thorns arguing that performance is a more appropriate metaphor for tourism in New Zealand than is the gaze. These findings suggest that whilst there is considerable empirical support for the significance of performance, or at least active involvement as a fundamental aspect of tourist experience, it would be premature to dismiss the salience of the gaze. Nor can it be said, on the basis of these findings, that the
gaze is solely an imported trait. Subjects expressing classic picturesque sensibility came from both overseas and within New Zealand. Furthermore, the range of experiences identified within the factors suggests that there is no simple dichotomy. Perhaps if a metaphor is sought, then the experience of the Elizabethan theatre is more helpful, in which some of the audience become active participants, some choose to remain detached spectators, and others move between the two. Furthermore, watching others in the audience perform becomes part of the experience.

There are two clear policy implications from the study. First, the features within different factors confirm the existence of partially overlapping tourism circuits, in which some attractions or locations are shared between diverse experiences, whilst others are solely linked to particular experiences. The design and management of shared features must accommodate a wider range of expectations than those more oriented towards particular experiences. Whilst perhaps self evident to operators, planning for this level of differentiation is frequently not explicit at the broader scale. It corresponds in broad terms to the notion of the Recreation Opportunity Spectrum, but needs to extend beyond the more conventional zoning of parks, or the conservation estate, into the management of the entire destination. And what is perhaps not often recognised, is that ‘shared’ features must be managed to meet the highest expectations placed upon them, rather than more typically the lowest. This presents particular design challenges.

The second policy implication is that whilst different preferred experiences can be identified, they do not typically correspond directly with particular market sectors. The makeup of subjects in the Rotorua factors was diverse in age, gender and origin. Thus whilst the outlines of a destination image can be derived from broad surveys, there is significant variation in the way individuals interpret that image. In this study, there was no simple one-to-one relationship between type of subject and preferred experience.

Finally, there are some implications for future research. There was a notable contrast between some international visitor responses to material evidence of development and commercialisation of tourism, and that of some domestic visitors. Comments were almost entirely negative from all groups about concentrations of advertising signs etc., but were more diverse about the presence of cars and pleasure boats for example. There is much higher acceptance amongst some New Zealanders of the material trappings of outdoor leisure activity, than was expressed by some overseas visitors. This difference could be examined further. Further, the recognition of distinct New Zealand family experiences in both Kaikoura and Rotorua confirms that there is a domestic family holiday experience, as would be expected, but which has received little formal attention to date.
4.4 Conclusion

We have identified four distinctly different types of preferred landscape experience for Rotorua, amongst visitors and locals. The types each focus upon a different set of preferred landscape settings, attractions and activities, although there are some settings that are positively evaluated by all subjects, and others that are consistently given negative evaluations. The four themes give more detail and richness to the destination image for Rotorua identified in previous work. We have argued that these different types of experience represent distinctive but overlapping tourist circuits in Rotorua, and that some settings must be managed to accommodate a range of expectations, whilst others can be more tightly focused. Three types of experience show strong similarities with themes that were identified within a similar study of Kaikoura, and suggest generic tourist expectations across destinations. Several theoretical and policy implications have also been identified.

Some limitations of the results must be noted. The sampling approach does not attempt to provide a statistically representative sample, hence no predictions can be made from these results to the whole population. However we are confident that the main themes represent important types of tourist experience. In selecting the theoretical samples, and in comparing the results with Kaikoura, it appears that the local category may not be fully explored, and additional interviews with a more diverse group of locals may be useful. Some possible age and gender distinctions may also warrant exploration in the next case study. Overall however, the main factors are robust.
Figure 1
Photographs Used for Q Sorting
Figure 1
Photographs Used for Q Sorting
References


Appendix 1
Interview Recording Sheet

YOUR EXPERIENCE OF ROTORUA

Subject No: ___________  Date: ___________  Location: ___________

First sort: most like to least like

DISLIKE  LIKE

1  2  3  5  8  5  3  2  1

NB: Please indicate those places that you think typify Rotorua
YOUR EXPERIENCE OF ROTORUA

Second sort: most natural to most unnatural
YOUR EXPERIENCE OF Rotorua

Third sort: what you think visitors to Rotorua prefer
Background Data

Which country are you from?__________________ City______________________

Mode of travel____________________________ Town________________________

Direction______________________________ Rural Place______________________

Are you travelling through New Zealand? ☐ Or just visiting Rotorua? ☐

If travelling, how many days are you travelling in New Zealand for? _____ (days)

What day of your trip is it? ___ (No.)

What is the total number of days you have spent in Rotorua? ____ And will spend? ____

Type of accommodation__________

Gender:__________ Age:__________ Occupation:__________________________

Main recreational/sporting activities:________________________________________

Actually done in Rotorua:__________________________________________________